



2021 | 2022
PRODUCT CATALOGUE



Dear Customers,

we have a reason to celebrate: It is now 80 years since our family business was established. We are proud to be Germany's first dowel manufacturer. To mark the occasion, we asked ourselves what has been driving us for all these years.

Actually, it's mainly that feeling you only know when you've assembled something yourself: the smile when it works. That it holds. Or as we say here in Baden-Württemberg: "*es hebt*".

However old the task is, the challenges of insulating with ever newer building materials that are ever lighter, to which you nevertheless want to attach an awning, canopy or similar. Even blocks are not what they used to be. Modern lightweight perforated bricks are intricate masterpieces that we carelessly drill into. But our TOX wall plugs will still hold.

We are proud of our many years of experience and know-how. We are also proud to be a family company with such a long history, that is continuously developing and will continue to support you actively tomorrow and in the future for all matters of fastenings. Our latest highlight: the multi-talented Thermo Proof Mini.

One thing will be particularly important this year: Sufficient thermal insulation. More and more people are turning to new external thermal insulation composite systems (ETICS) for their buildings, which are frequently supported by energy-saving incentives. This is an exciting growth market for us too! That is why we have developed five fastening solutions for light, medium and heavy loads for you: from house numbers to awnings. Depending on the product, attachments and insulation materials, the fasteners of our Thermo series hold both directly in the insulation and in the underlying substrate, thus bridging non-load-bearing ETIC systems. We provide the right solution for every substrate and for every project.

Because that is what has set us apart since 1941:
The dependability of our high-quality products.

Celebrate with us and be inspired.

Yours faithfully,

Leonard Diepenbrock
and family



There is a suitable dowel for every substrate

Fastenings on **thermally insulated facades**

Spaced mounting system

Thermo Proof Mini

186



Installation system

Thermo Proof 188



Special wall
plugs for
soft insulating
materials

Flashing strip fastening

Thermo Kappo 184



Insulation wall plugs 180

Thermo & Thermo Plus

Downpipe fastening

Thermo Vario 182



Installation system

190 **Thermo Proof Plus**

For light loads





For moderate loads

For heavy loads






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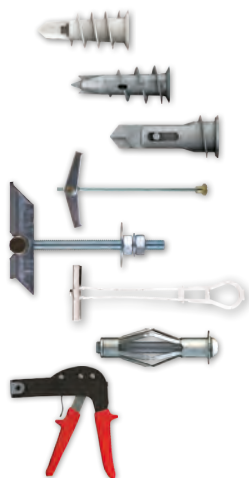
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Principles

In order to find the optimum fastening system for **your project**, you must first consider the following questions:

1. On which substrate is the fastening to be done
2. Where can the installation be done?
3. How can I drill into the building material?
4. How deep do you have to drill?
5. Do I have to clean the drill hole?
5. What types of installation are there?
6. How does a wall plug work?
7. What are the different types of plastic wall plugs?
8. Do I need an approved wall plug?

The following basics of wall plugs will help answer the questions.

1. On which substrate is the fastening to be done?

The type and condition of the substrate are decisive influencing factors for the correct choice of fastening system. The most commonly used building materials are:

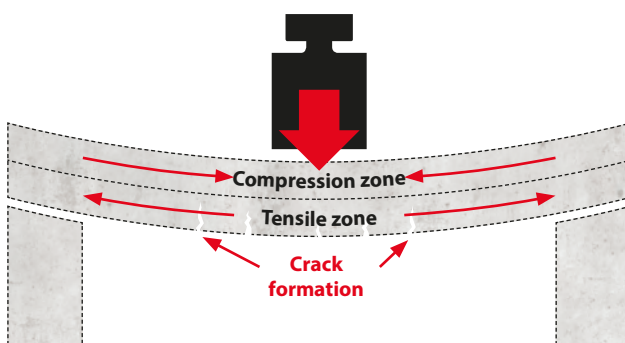


Concrete:

Is an artificial masonry, consisting of a cement, aggregate, water mixture. It can be divided into the groups normal and lightweight concrete. According to DIN 1045, concrete is designated with a C (Concrete) and two two-digit numbers. For example C20/25, this is a concrete that has a compressive strength of 25 N/mm² for a cube with a side length of 150mm. **Properties when drilling:** gives white to grey dust - very fine.

Cracked / uncracked concrete:

As a building material, concrete can absorb very large compressive forces but only very small tensile forces. If, for example, a concrete slab is loaded, stresses arise in the concrete and the slab bends. A compression zone is created in the upper area and a tension zone in the lower area.



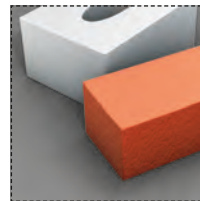
Since concrete cannot absorb high tensile stresses, the slab breaks apart. To prevent this, the concrete is given steel inserts (called reinforcement) which can absorb the tensile stresses. The concrete transfers the compressive stresses in the upper slab area and the composite of concrete and reinforcement transfers the tensile stresses in the lower area. Other causes of crack formation in concrete include: Dead load, wind and live loads, shrinkage of the concrete as it dries out, expansion in the event of strong solar radiation, displacement due to structural subsidence, swelling in the event of water absorption or a combination of the effects mentioned.



Solid masonry (with dense structure) / masonry brick / clinker:

Is a composite material made of masonry and mortar. Since the compressive strength of the masonry is often several times higher than that of the mortar, anchoring should be carried out in the masonry. The blocks used generally have no cavities and have a high compressive strength. Their perforated surface area is less than 15%.

Properties when drilling: provides the unmistakable red dust.



Solid lime sand brick:

Is an artificially produced masonry from a lime-sand-water mixture. Solid sand-lime bricks have a high compressive strength and are suitable for interior and exterior walls.

Properties when drilling: Continuous drilling progress; white, sandy drill dust

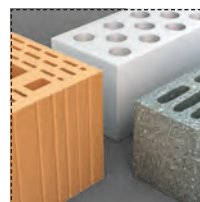


Cellular concrete

(solid brick with porous structure):

Has a low compressive strength and very many pores. Special wall plugs such as the cellular concrete wall plug

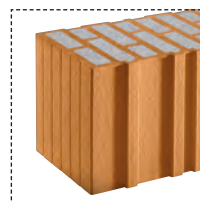
Ytox or the frame wall plugs **Apollo** and **Tetrafix XL** should be used for optimum fastening. **Properties when drilling:** Results in light grey, coarse-grained drill dust.



Masonry

(perforated block with dense structure):

Although often made of the same pressure-resistant material as solid masonry with a dense structure, they cannot absorb this pressure through their cavities. Therefore, wall plugs must be used for fastening, e.g. the **Bizeps** (can overcome cavities) or the **Tri** or **Trika** (ties in the cavity). Typical perforated bricks with a dense structure are, for example, horizontally and vertically-perforated bricks, perforated sand-lime bricks and hollow bricks. **Properties when drilling:** Noticeable cavities.



Perforated brick with porous structure (Poroton):

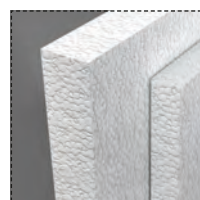
Due to their cavities and pores in the building material, these bricks have a low compressive strength, which makes it necessary to select the wall plug carefully. Wall plugs such as **Fassad**, **Bizeps** or fastenings such as the **Liquix** injection system are suitable.



Wallboards, plasterboards, gypsum fibreboards:

Are thin-walled boards with low strengths. Cavity wall plugs, such as the **Acrobat**, which connect positively behind the panel, are used here. DIN 18183 must also be observed here.

Properties when drilling: Cavity behind the boards; dust is white and fine.



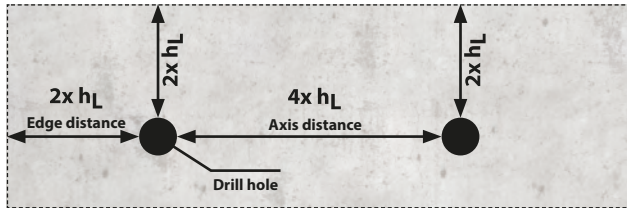
Insulation boards (polystyrene boards, rigid polyurethane foam boards, etc.):

Have a low compressive strength and very many pores. Insulation wall plugs such as the **Thermo** with large external threads are ideal for lightweight fastenings in these boards.

2. Where can the installation be done?

In order to ensure that the loads are held securely by the wall plug and that it does not chip or crack, wall plugs must be installed at certain distances from building material edges (edge distances) and at certain distances from each other (axis distances). In the case of steel and chemical wall plugs, these distances are usually regulated in the relevant approvals.

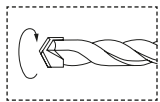
For plastic wall plugs, an edge distance of $2x h_L$ (h_L = anchoring depth) and a centre distance of $4x h_L$ can be assumed as a rule of thumb.



(edge and axis distances, h_L = anchoring depth)

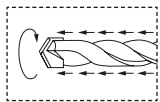
3. Choosing the right drill

To achieve optimum holding values, drills must be used which have the **test mark of the Prüfgemeinschaft Mauerbohrer**. In addition, the drill hole must be thoroughly cleaned after drilling. The following drilling methods are used for a wide variety of building materials



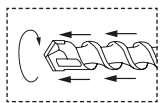
Rotary drilling:

Drilling with a normal drill, without hammering in cellular concrete, perforated brick and wall panels (so that the building material webs do not break and the drill hole becomes too large).



Impact drilling:

Drilling with impact drill (light blows) for substrates made of solid brick with dense structure (solid brick, solid lime sand brick, etc.).



Hammer drilling:

Drilling with a hammer drill (hard blows, greater drilling progress), for holes requiring high drilling quality. Suitable for substrates made of solid masonry with a dense structure (concrete, natural stone, etc.).

4. How deep do you have to drill?

With a few exceptions, the drill hole depth must be greater than the anchoring depth.

Especially with plastic wall plugs, the space is needed to accommodate the screw, which always protrudes from the tip of the wall plug.

The correct drill hole depth is indicated with the respective product.

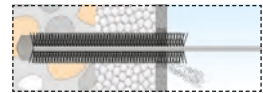
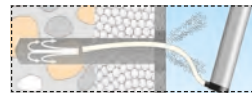
5. Do I have to clean the drill hole?

Optimum drill hole cleaning is an important factor in wall plug installation, as drill dust in the building material can reduce the holding forces of a wall plug by more than 50%.

Drill dust acts as a sliding layer in friction-fitting wall plugs, e.g. the **Barracuda** expansion wall plug. In the case of bonded wall plugs such as the **Liquix** injection mortar, the drill dust acts as a separating layer and prevents a firm bond between the injection mortar and the anchoring base. In order to ensure a secure fastening, cleaning of the drill hole is specified in the respective approval, especially for products with building authority approval.

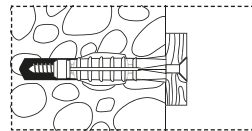
Optimal cleaning:

Optimal drill hole cleaning consists of a combination of multiple blowing out and brushing, e.g. with the **Taifun** blower and the **Brush** cleaning brush. Don't forget your safety goggles!



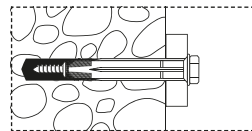
6. What types of installation are there?

For the installation of wall plugs, a distinction is made between three types of installation:



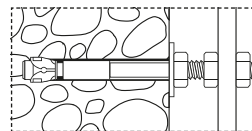
Pre-positioned installation:

The wall plug is flush with the anchoring base. The attachment is fitted onto the wall plug. The screw is screwed through the attachment into the wall plug.



Through installation:

Here the expansion part of the wall plug is inserted through the attachment into the anchoring base. The wall plug head thus rests against the attachment and at the same time limits the thickness of the attachment.



Spaced mounting:

Used to fasten the component to be installed at a certain distance from the anchoring base.

For this type of installation, metal wall plugs with internal threads are usually used to hold threaded rods with lock nuts. Spaced mounting is used, for example, to compensate for unevenness, for ceiling suspensions or with the **Thermo Proof** for insulation bridging.

The screw drivers required for mounting can be found on the respective product page.

Pozidriv (PZ)



Torx (TX)



Hexagonal (SW)



7. How does a wall plug work?

To ensure that the various forces acting on the wall plug can be safely transferred to the substrate, various load-bearing mechanisms are used.

Friction fit:

Here the expansion part of the wall plug is pressed against the wall of the drill hole.

Form fitting:

Here the wall plug geometry adapts to the shape of the substrate or the drill hole.

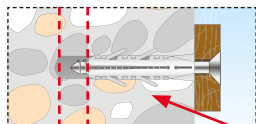
Bonding:

Here the wall plug is connected to the substrate by means of a mortar.

8. What are the different types of plastic wall plugs?

In order to obtain the maximum holding values for plastic wall plugs, a screw with the largest possible core diameter is used. In general, the core diameters of woodscrews are larger than those of chipboard screws.

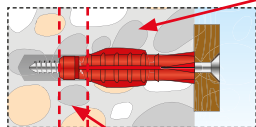
Plastic wall plugs are divided into 3 categories:



Expansion wall plugs (e.g. Barracuda)

are suitable for concrete and solid bricks and spread in the building material.

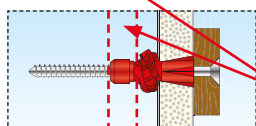
Expansion zone 1



All-purpose wall plugs (e.g. Tri)

are suitable for almost all building materials. They expand in concrete and solid masonry. In perforated bricks and wall panels, they work by tying. To enable tying, all-purpose wall plugs have a wall plug nut.

Nut area

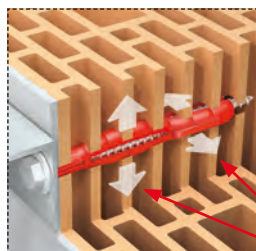


Multi-zone expansion wall plugs (e.g. Bizeps)

consist of two 2-way split expansion elements, which are offset by 90°. This makes them especially suitable for lightweight vertically perforated bricks, but they can also be used in solid bricks without any problems.

Expansion zone 2

Expansion zone 1



9. Do I need approved wall plugs?

To answer this question you need to ask yourself the following questions:

- Can a person come to harm if the fastening fails?
- Is a high economic loss to be expected in the event of a fastening failure?
- Is approval of the wall plug required in the tender or similar?

If you have answered yes to one or more of the questions, wall plugs approved by the building authorities must be used.

Technical Hotline

Your personal advice for all fastening problems!

For questions about the basics of wall plugs or general application technology, please contact our technical hotline on

+49 (0) 7576 / 9295-123

or by e-mail at

technik@tox.de

available from Monday to Friday, 07:00 - 17:00.



Safety and Holding Values

If failure of the fastening would endanger life and limb or cause great economic damage, approved wall plugs must be used.

The installation instructions (setting and anchoring depth, axis and edge distances, drill diameter, drilling depth, installation torque, attachment thickness, through hole in the attachment as well as other product-specific installation specifications) must be observed. These can be found on the packaging, in the TOX Catalogue and in the enclosed installation instructions.

The specified holding values are recommendations including a safety factor and are applicable when using the largest possible screw diameter, thread shape similar to DIN 7998. If smaller screws or screws with a different thread are used, the holding value may be reduced. For articles that come with screws, different values on the packaging may have to be followed.

The recommended loads only apply to installation in the building material, not for installation in joins and/or plaster. The building material itself must be load-bearing. The holding value data have been tested with representative examples of the respective building materials and apply to predominantly static loads.

For fastenings, the holding value specifications of the building material manufacturer must always be followed, irrespective of the wall plug holding force. For non-load-bearing partition walls, for example, the maximum light support loads are regulated in the DIN 4103-2 and DIN 18183-1 standards.

The installation of approved wall plugs shall be carried out in accordance with the European Technical Assessment by trained personnel under the supervision of the site manager. See also: "Instructions for the installation of wall plug anchorages" of the DIBt. Approved anchors are only approved as a unit/system. The replacement or modification of components is not permitted.

If you have any questions, please do not hesitate to contact us.

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Free delivery

Validity of the Conditions

- 1.1 Our supplies and services are provided exclusively on the basis of these terms and conditions of business. Deviating terms and conditions of business of the orderer which are not expressly recognised by us in writing shall not be valid. Our terms and conditions shall also apply if we carry out the supply without reservation in the knowledge that the orderer's terms and conditions are contrary to or deviate from our terms and conditions.
- 1.2 Agreements or ancillary agreements deviating from these terms and conditions must be made in writing.
- 1.3 Our terms and conditions of business do not apply to consumers. Subject to any subsequent amendments, they shall also apply to all future supplies.

Offer and Conclusion of Contract

- 2.1 Purchase orders/lists only become binding with our written confirmation. The same applies to supplements, amendments and ancillary agreements.
- 2.2 A contract of supply is concluded only with our written order confirmation, at the latest, however, with the dispatch of the goods. Transmission by remote data transmission shall be sufficient for that format. If we can prove by submitting a transmission report that we have sent a declaration by fax or other remote data transmission, it shall be assumed that the orderer has received the declaration.
- 2.3 Orders transmitted electronically shall only be deemed to have been received when they are retrieved and opened by us. We reserve the right to delete unopened orders.
- 2.4 The information, drawings, illustrations and performance descriptions contained in catalogues, price lists or the documents forming part of the offer are approximate values customary in the industry unless they are expressly designated as binding in the order confirmation. We expressly reserve the right to make technical alterations which, in our opinion, serve to improve our products.
- 2.5 We reserve the property rights and copyright to drawings, illustrations, computations and other documents. This also applies to such written documents that are designated as "confidential". The orderer requires our express written consent before passing them on to third parties.

Pricing

- 3.1 Unless otherwise stated, we shall be bound by the prices contained in our offers for 30 days from the date of the offer. The prices stated in the order confirmation plus the respective statutory value added tax shall be decisive. Supplies and services in excess of this will be invoiced separately.
- 3.2 Unless otherwise agreed, all our prices are ex works. Minimum Order Value: EUR 50 net value of goods. Orders from EUR 200 are delivered free of charge. For orders from EUR 100 to EUR 200 net value of goods, a flat rate of EUR 8.40 will be charged for delivery and packaging. For orders with a net value of less than EUR 100, delivery and packaging will be charged at a flat rate of EUR 8.40 and a surcharge of EUR 5 for low volume.
- 3.3 We reserve the right to change our prices accordingly for contracts with an agreed delivery period of between two and four months if cost reductions or cost increases occur after conclusion of the contract, in particular due to wage increases or changes in material or energy prices.
- 3.4 We reserve the right, in the case of contracts with an agreed delivery period of more than 4 months, to increase or reduce the prices in accordance with the changes in costs that have occurred, in particular due to wage increases or changes in the price of materials. We will notify the customer in writing of a corresponding change in price at least four weeks in advance. The customer shall then have the right to terminate or withdraw from the contract as of the date on which this price change takes effect.

Delivery

- 4.1 The start of the delivery time stated by us presupposes the clarification of all technical questions.
- 4.2 Compliance with our delivery obligation further presupposes the timely and proper fulfilment of the customer's obligation. We reserve the right to plead non-performance of the contract.
- 4.3 If the customer is in default of acceptance or culpably violates other obligations to cooperate, we are entitled to demand compensation for the damage incurred by us in this respect, including any additional expenses. Further claims or rights remain reserved.
- 4.4 If the conditions of 4.3 are met, the risk of accidental loss or accidental deterioration of the object of sale shall pass to the customer at the point in time at which the customer is in default of acceptance or debtor's delay.
- 4.5 We shall be liable in accordance with the statutory provisions insofar as the underlying purchase contract is a transaction for delivery by a fixed date within the meaning of Section 286 (2) No. 4 of the German Civil Code (BGB) or Section 376 of the German Commercial Code (HGB). We shall also be liable in accordance with the statutory provisions if, as a consequence of a delay in supply for which we are responsible, the customer is entitled to claim that their interest in the further performance of the contract has ceased to exist.

- 4.6 Furthermore, we shall be liable in accordance with the statutory provisions if the delay in supply is due to an intentional or grossly negligent breach of contract for which we are responsible; any fault on the part of our representatives or vicarious agents shall be attributed to us. If the delay in delivery is due to a grossly negligent breach of contract for which we are responsible, our liability for damages shall be limited to the foreseeable, typically occurring damage.
- 4.7 We shall also be liable in accordance with the statutory provisions insofar as the delay in delivery for which we are responsible is based on the culpable breach of a material contractual obligation; in this case, however, the liability for damages shall be limited to the foreseeable, typically occurring damage.
- 4.8 The enforcement of further damages caused by delay is excluded.

Shipping and Transfer of Risk

- 5.1 Shipment shall be ex works and (subject to any agreements to the contrary) without any obligation to choose the most favourable mode of shipment.
- 5.2 Even in the case of carriage paid delivery, the risk shall pass to the orderer as soon as the goods have been handed over to the shipping agent or loaded onto their vehicle, but at the latest when they leave our works, even by our own means of transport.
- 5.3 If the goods are ready for dispatch and if dispatch or delivery to a place or acceptance is delayed for reasons not attributable to the supplier, the risk shall pass to the orderer upon receipt by the orderer of the notification of readiness for dispatch. The supplier is entitled, but not obliged, to insure deliveries in the name of and for the account of the orderer.
- 5.4 In the event of damage in transit, the orderer shall immediately arrange for a statement of facts to be made with the competent authorities and notify the supplier.
- 5.5 Transport packaging and all other packaging shall (subject to) any agreements to the contrary and the regulations on the avoidance and recycling of packaging waste (BGBL. I 1998, p. 2379) was not withdrawn.

Minimum Order Quantity / Tolerances

- 6.1 Unless otherwise agreed, supply shall be made in the packaging units shown in the price list.

Retention of Title

- 7.1 We retain title to the supplied goods until all claims arising from the business relationship with the orderer have been settled.
- 7.2 The orderer is entitled to sell the goods subject to retention of title in the ordinary course of business as long as they meet their obligations from the business relationship with us in due time. However, they may neither pledge the reserved goods nor assign them as security and are obliged to secure our rights in the event of a credited resale of the reserved goods.
- 7.3 Enforcement of the reservation of title as well as the seizure of the reserved goods in the event of default in payment on the part of the orderer shall not be deemed to be a withdrawal from the contract unless the withdrawal is expressly declared by us in writing.
- 7.4 All claims and rights arising from the sale of goods to which we are entitled to ownership rights are hereby assigned to us by the orderer as security to the amount of the purchase price agreed between us and the orderer (plus value added tax). We hereby accept the assignment.
- 7.5 The processing or transformation of the goods by the orderer is always carried out on our behalf. If the reserved goods are processed with items not owned by us, we shall acquire co-ownership of the new item in the ratio of the invoice value of the reserved goods to the invoice value of the other processed items at the time of processing.
- 7.6 If the reserved goods are inseparably mixed with other items not owned by us, we shall acquire co-ownership of the new item or aggregate of items in the ratio of the invoice value of the goods subject to retention of title to the invoice value of the other mixed items. In this case, the orderer shall keep the co-ownership for us.
- 7.7 The orderer must inform us immediately of any compulsory execution measures by third parties against the reserved goods, the claims assigned to us or other securities, handing over the documents necessary for an intervention. This also applies to impairments of any other kind.
- 7.8 We undertake to release the securities to which we are entitled in accordance with the above provisions at the request of the orderer to the extent that the realisable value of the reserved goods exceeds the claims to be secured which have not yet been settled by more than 10%; the choice of the securities to be released is incumbent on us.

Warranty

- 8.1 The customer's rights in respect of faults presuppose that the customer has duly fulfilled its obligations to inspect the goods and give notice of defects in accordance with Section 377 of the German Commercial Code (HGB).

- 8.2 Insofar as the purchased item is faulty, we shall be entitled, at our discretion, to subsequent performance in the form of remedying of the fault or supply of a new fault-free item. In the event of subsequent supply, we shall bear the necessary costs only up to the amount of the purchase price.
- 8.3 If the subsequent performance fails, the orderer shall be entitled, at their discretion, to demand withdrawal from the contract or a reduction in the purchase price.
- 8.4 We shall be liable in accordance with the statutory claims if the customer asserts claims for damages based on intent or gross negligence, including intent or gross negligence on the part of our representatives or vicarious agents. Insofar as we are not accused of intentional breach of contract, the liability for damages is limited to the foreseeable, typically occurring damage.
- 8.5 We shall be liable in accordance with the statutory provisions if we culpably breach a material contractual obligation. This is the case if the breach of duty relates to a duty on the fulfilment of which the customer has relied and was entitled to rely. In this case, however, the liability for damages is limited to the foreseeable, typically occurring damage.
- 8.6 Insofar as the customer is entitled to claim compensation for damage instead of performance, our liability shall be limited to compensation for the foreseeable, typically occurring damage, also within the scope of 8.3.
- 8.7 Liability for culpable injury to life, limb or health remains unaffected; this also applies to the mandatory liability of the Product Liability Law.
- 8.8 Unless otherwise stipulated above, liability is excluded.
- 8.9 The time limit in the case of recovery from a supplier according to Sections 478 and 479 of the German Civil Code (BGB) remains unaffected; it is five years, calculated from the supply of the faulty item.

Recourse

- 9.1 As soon as the orderer learns of the enforcement of shortcoming rights with regard to the goods supplied by us from a consumer or an intermediary, they must inform us of this within a period of five days. If the orderer allows this period to elapse, any recourse claims against us shall be excluded.
- 9.2 If the newly manufactured item has been sold on by the orderer to a consumer or an intermediary and if the last seller has had to take back the goods or accept a reduction in the purchase price in accordance with Section 478 of the German Civil Code (BGB), the purchaser shall also have these warranty rights against us. No other warranty right may be enforced against us if we would be unreasonably disadvantaged as a result. However, a recourse claim against us shall be excluded to the extent that the orderer or an intermediary has not been held liable themselves or has not been held liable in full in accordance with Section 437 of the German Civil Code (BGB).
- 9.3 If the orderer enforced claims for reduction against us as a creditor under a right of recourse in accordance with Section 478 of the German Civil Code (BGB), the purchase price shall be reduced in the ratio resulting from Section 441 (3) of the German Civil Code (BGB), limited by the amount of the reduction actually previously credited to the respective end purchaser of our goods, if the above provision continues to apply. If, in a contractual relationship preceding the recourse relationship, there was no repayment in whole or in part due to a reduction, the recourse claim against us shall be excluded in whole or in part in the corresponding relationship. Clause 1 and 2 shall apply accordingly if the customer, as a creditor under a right of recourse, claims damages from us, inasmuch as the damage does not extend beyond the purchased item.
- 9.4 We are entitled to reimburse expenses within the scope of recourse in accordance with Section 478 the German Civil Code (BGB) only in the form of a credit note for goods.
- 9.5 In any case, reimbursement of expenses is excluded for such expenses which would not have been incurred if the orderer had taken sufficient and reasonable precautions for the subsequent performance.

Terms of Payment

- 10.1 Unless otherwise agreed, we grant a payment term of 30 days net after receipt of invoice for invoices, inasmuch as the customer is not in default with the settlement of claims.
- 10.2 The date of receipt of payment for all means of payment shall be the date on which we can dispose of the amount.
- 10.3 If only part of a supply of goods is faulty, the orderer remains obliged to pay the price for the fault-free part. In all other respects, the orderer may only offset claims which have become legally enforceable, are undisputed or have been acknowledged by us.
- 10.4 Payment of our invoices shall be made irrespective of the receipt of goods. The orderer's right to complain remains unaffected by this.
- 10.5 In the event of default in payment, we shall charge interest at a rate of at least 8 percentage points above the base rate during the period of default, unless we are entitled to charge higher interest for another legal reason. We reserve the right to claim further damages caused by delay.
- 10.6 In the event of delayed payment, we may, after written notification to the orderer, suspend the performance of our obligations until the payments have been received.
- 10.7 Bills of exchange and cheques shall only be accepted by agreement and only on account of performance, provided that they are bankable. Discount charges shall be calculated from the date on which the invoice amount is due. A guarantee for the correct presentation of the bill of exchange and for the raising of a bill protest is excluded.
- 10.8 If the orderer engages a central debt clearance company, the debt-discharging settlement of the invoice shall only take place when payment is credited to our account.

- 10.9 If the financial and credit circumstances of the orderer deteriorate with the result that our claim for payment is endangered, we shall be entitled to call in the entire remaining debt. In this case, we shall be entitled to demand advance payments or securities in an appropriate amount within a reasonable period of time and to suspend our performance until our demand has been met. In the event of refusal by the orderer or expiry of the deadline, we may withdraw from the contract and/or claim damages for non-performance.
- 10.10 In the case of sale against foreign currency, the amount to be paid in foreign currency shall be that which corresponds to the EURO amount at the time of invoicing. In this case, the orderer shall reimburse us for any exchange rate losses incurred as a result of late payment.

Sales Aids

- 11.1 Sales and presentation aids provided to the partner free of charge remain our property and can be reclaimed at any time. During the partner's use of the sales and presentation aids, any associated risk shall pass to the partner. They undertake to use the sales and presentation aids only for our goods and to pay compensation in the event of loss or damage for which they are responsible.

Total Liability

- 12.1 Any further liability for damages than provided for in 8 Warranty is excluded - regardless of the legal nature of the asserted claim. This applies in particular to claims for damages arising from debts on concluding the contract, from other breaches of duty or from tortious claims for property damage in accordance with Section 823 of the German Commercial Code (BGB).
- 12.2 The limitation according to 12.1 shall also apply insofar as the customer demands reimbursement of wasted expenditure instead of a claim for damages in lieu of performance.
- 12.3 Insofar as our liability for damages is excluded or limited, this shall also apply with regard to the personal liability for damages of our officials, employees, colleagues, representatives and vicarious agents.

Property Rights

- 13.1 The orderer undertakes to inform us without delay of any claims of third parties to industrial property rights in respect of the goods supplied and to allow us to take legal action at our expense. We are entitled to carry out changes at our own expense on the basis of third party property right claims, even in the case of goods that have already been delivered and/or paid for.

Secrecy

- 14.1 Unless expressly otherwise agreed in writing, the information on which this contractual relationship is based shall not be deemed to be confidential.

Applicable Law, Place of Jurisdiction, Partial Invalidity and Transferability of Contractual Rights

- 15.1 These terms and conditions and all legal relations between the contracting parties shall be governed by the laws of the Federal Republic of Germany. The application of the United Nations Convention on Contracts for the International Sale of Goods of 11 April 1980 (CISG - "Vienna Sales Convention") is excluded.
- 15.2 Our registered office shall be the place of jurisdiction for all legal disputes, also in the context of a bill of exchange and/or cheque process, insofar as the partner is a registered trader, a legal entity under public law or a special fund under public law. We are also entitled to take legal action at the registered office of the partner.
- 15.3 Should a provision in these terms and conditions or a provision within the framework of other agreements be or become invalid, this shall not affect the validity of the remainder of the contract. In this case, the contracting parties shall be obliged to replace the invalid provision with a provision that comes as close as possible to the invalid provision in terms of its economic effect.
- 15.4 The contractual rights of both parties may only be transferred by mutual agreement.



A

Page

Air conditioner												188	Thermo Proof
Advertising sign	30	Barracuda	22	Tri	34	Bizeps	30	Barracuda	172	Spagat Plus	180	Thermal	
Awning	58	S-Fix Pro 1 A4	74	Liquix Pro1			74	Liquix Pro1			190	Thermal Proof Plus	

B

Bathroom cabinet (heavy)	30	Barracuda	22	Tri	34	Bizeps	108	Pirat Barbossa-L	172	Spagat Plus		
Bathroom cabinet (light)	108	Pirat Barbossa-L	112	Pirat Bill-L	112	Pirat Bill-L	108	Pirat Barbossa-L	174	Acrobat		
Bathtub handle	30	Barracuda	22	Tri	34	Bizeps	30	Barracuda				
Bidet (stand-alone)	136	Toilet										
Billboard	56	S-Fix Pro	74	Liquix Pro1			74	Liquix Pro1			188	Thermal Proof
Blinds	30	Barracuda	22	Tri	22	Tri	30	Barracuda	174	Acrobat	180	Thermal

C

Cable duct	30	Barracuda	28	Deco	22	Tri	30	Barracuda	162	Spiral		
Calendar	30	Barracuda	22	Tri	22	Tri	30	Barracuda	28	Deco		
Canopy	74	Liquix Pro 1	74	Liquix Pro 1	74	Liquix Pro 1	74	Liquix Pro 1	74	Liquix Pro 1	190	Thermo Proof Plus
Clock	108	Pirat Barbossa-L	112	Pirat Bill-L	112	Pirat Bill-L	108	Pirat Barbossa-L	112	Pirat Bill-L	180	Thermal
Clothes line	114	Pirat Lenny-0	114	Pirat Lenny-0	114	Pirat Lenny-0	114	Pirat Lenny-0	114	Pirat Lenny-0	180	Thermal
Coat rack	30	Barracuda	34	Bizeps	38	Ytox	30	Barracuda	172	Spagat Plus		
Cup holder	30	Barracuda	28	Deco	28	Deco	30	Barracuda	162	Spiral		
Curtain rail	30	Barracuda	34	Bizeps	38	Ytox	30	Barracuda	168	Spagat		
Curtain rod	30	Barracuda	22	Tri	38	Ytox	30	Barracuda	174	Acrobat		

D

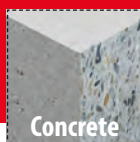
Doorbell sign	30	Barracuda	28	Deco	22	Tri	30	Barracuda	28	Deco	180	Thermal
Door sign	30	Barracuda	22	Tri	22	Tri	30	Barracuda	164	Spiral Plus		
Door transition strip	30	Barracuda					30	Barracuda				
Downpipe fastening											182	Thermal Vario

E

Exterior wall chimney											188	Thermo Proof
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F

Facade substructure (heavy)	154	Fassad XL					154	Fassad XL				
Facade substructure (light)	152	Fassad SK&KB	152	Fassad SK&KB	152	Fassad SK&KB	152	Fassad SK&KB				
Fan	22	Tri	34	Bizeps	34	Bizeps	22	Tri	174	Acrobat		
Fan heater/radiator	30	Barracuda	28	Deco	38	Ytox	30	Barracuda	174	Acrobat		
Fire extinguisher	30	Barracuda	22	Tri	34	Bizeps	30	Barracuda	174	Acrobat		
Flashing and aluminium strip											184	Thermo Kappo



Concrete



Perforated brick



Cellular concrete



Solid brick



Gypsum plasterboards



ETICS

Flat screen (TV)	30	Barracuda	22	Tri	38	Ytox	30	Barracuda	174	Acrobat		
Fly screen	30	Barracuda	28	Deco	22	Tri	30	Barracuda	162	Spiral	180	Thermal

G

Garden hose	28	Deco	34	Bizeps	38	Ytox	28	Deco	186	Thermo Proof Mini
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H

Handrail	30	Barracuda	34	Bizeps	38	Ytox	30	Barracuda	188	Thermal Proof		
Hanging lamp	108	Pirat Barbossa S	110	Pirat Will-S	110	Pirat Will-S	108	Pirat Barbossa S	102	Pirat Skippi-S		
Hammock	120	Pirat Sven-0	74	Liquix Pro1			120	Pirat Sven-0	188	Thermal Proof		
Heat pump									190	Thermo Proof Plus		
Hose holder									186	Thermo Proof Mini		
House lamp (hook mounting)	108	Pirat Barbossa S	110	Pirat Will-S	110	Pirat Will-S	108	Pirat Barbossa S	102	Pirat Skippi-S	180	Thermal
House lamp (screw fixing)	30	Barracuda	22	Tri	22	Tri	30	Barracuda	174	Acrobat	180	Thermal
House number	30	Barracuda	28	Deco	22	Tri	30	Barracuda			180	Thermal

K

Key box	30	Barracuda	22	Tri	22	Tri	30	Barracuda	162	Spiral
Knife holder	30	Barracuda	22	Tri	22	Tri	30	Barracuda	28	Deco
Kitchen gadgets	30	Barracuda	28	Deco	22	Tri	30	Barracuda	174	Acrobat
Kitchen roll holder	30	Barracuda	28	Deco	22	Tri	30	Barracuda	28	Deco

L

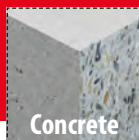
Lamp (hook mounting)	108	Pirat Barbossa S	110	Pirat Will-S	110	Pirat Will-S	108	Pirat Barbossa S	102	Pirat Skippi-S	180	Thermal
Lamp (screw mounting)	30	Barracuda	22	Tri	22	Tri	30	Barracuda	174	Acrobat	186	Thermo Proof Mini
Lifting platform	74	Liquix Pro 1										
Loudspeaker (bracket)	30	Barracuda	34	Bizeps	34	Bizeps	30	Barracuda	174	Acrobat		
Luminaire cable system	114	Pirat Lenny-0	114	Pirat Lenny-0	114	Pirat Lenny-0	114	Pirat Lenny-0	114	Pirat Lenny-0		

M

Mailbox										186	Thermo Proof Mini	
Mailbox	30	Barracuda	22	Tri	34	Bizeps	30	Barracuda	174	Acrobat	180	Thermal
Magnetic strip	30	Barracuda	22	Tri	38	Ytox	30	Barracuda	174	Acrobat		
Mirror	122	Look	122	Look	122	Look	122	Look	122	Look		
Mirror cabinet	30	Barracuda	22	Tri	34	Bizeps	30	Barracuda				
Mosquito net	22	Tri	22	Tri	22	Tri	22	Tri	28	Deco		
Motion detector	30	Barracuda	28	Deco	28	Deco	30	Barracuda	164	Spiral Plus	180	Thermal

N

Name sign	22	Tri	22	Tri	22	Tri	22	Tri	22	Tri	180	Thermal
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Concrete



Perforated brick



Cellular concrete



Solid brick



Gypsum plasterboards



ETICS

0

Outdoor camera

186 Thermo Proof Mini

Outdoor lamp (hook mounting)

108 Pirat Barbossa S

110 Pirat Will-S

110 Pirat Will-S

108 Pirat Barbossa S

102 Pirat Skippi-S

180 Thermal

Outdoor lamp (screw fixing)

30 Barracuda

22 Tri

22 Tri

30 Barracuda

174 Acrobat

186 Thermo Proof Mini

P

Panelling

30 Barracuda

22 Tri

34 Bizeps

30 Barracuda

174 Acrobat

Picture frame (large)

112 Pirat Bill-L

112 Pirat Bill-L

112 Pirat Bill-L

112 Pirat Bill-L

104 Pirat Leslie-L

Picture frame (small)

108 Pirat Barbossa-L

112 Pirat Bill-L

112 Pirat Bill-L

112 Pirat Bill-L

Pinboard

22 Tri

22 Tri

22 Tri

22 Tri

28 Deco

Pipe clip fastening

36 Tiger

36 Tiger

36 Tiger

36 Tiger

Poster

22 Tri

22 Tri

22 Tri

22 Tri

22 Tri

Pull-up bar

72 HAC

22 Tri

34 Bizeps

30 Barracuda

R

Radiator

30 Barracuda

34 Bizeps

38 Ytox

30 Barracuda

174 Acrobat

Roller shutter system

186 Thermo Proof Mini

S

Satellite dish

30 Barracuda

22 Tri

38 Ytox

34 Bizeps

188 Thermal Proof

Screen wall

30 Barracuda

22 Tri

22 Tri

22 Tri

Shelf

30 Barracuda

22 Tri

38 Ytox

28 Deco

174 Acrobat

Shelf / Shelving system

30 Barracuda

22 Tri

34 Bizeps

30 Barracuda

174 Acrobat

Sign

180 Thermal

Shampoo dish

22 Tri

22 Tri

22 Tri

22 Tri

28 Deco

Shower curtain

30 Barracuda

22 Tri

34 Bizeps

30 Barracuda

172 Spagat Plus

Shower screen (self-supporting)

30 Barracuda

22 Tri

34 Bizeps

30 Barracuda

172 Spagat Plus

Shower screen (side mounting)

30 Barracuda

22 Tri

34 Bizeps

30 Barracuda

172 Spagat Plus

Shutter

22 Tri

34 Bizeps

34 Bizeps

22 Tri

190 Thermo Proof Plus

Skirting board

30 Barracuda

22 Tri

22 Tri

30 Barracuda

162 Spiral

Skirting board (carpet, PVC)

30 Barracuda

22 Tri

22 Tri

30 Barracuda

162 Spiral

Smoke detector

30 Barracuda

22 Tri

22 Tri

30 Barracuda

164 Spiral Plus

Soap dish

22 Tri

22 Tri

22 Tri

22 Tri

28 Deco

Soap dispenser

22 Tri

22 Tri

22 Tri

22 Tri

28 Deco

Socket (surface-mounted socket)

30 Barracuda

22 Tri

22 Tri

30 Barracuda

164 Spiral Plus

Solar panels

190 Thermo Proof Plus

Spice rack

30 Barracuda

22 Tri

22 Tri

30 Barracuda

162 Spiral

Substructure panelling ceiling

146 Constructor

Substructure panelling wall

142 Attack

148 Apollo

148 Apollo

142 Attack

Suspended ceiling (Nonius hanger)

64 Top



Concrete



Perforated brick



Cellular concrete



Solid brick



Gypsum plasterboards



ETICS

Surveillance camera

30 Barracuda

22 Tri

22 Tri

30 Barracuda

174 Acrobat

186 Thermo Proof Mini

T

Tap

180 Thermal

Toilet paper holder

30 Barracuda

28 Deco

22 Tri

30 Barracuda

28 Deco

Toilet (stand-alone)

136 Toilet

Tool wall

30 Barracuda

34 Bizeps

34 Bizeps

30 Barracuda

174 Acrobat

Towel rail

30 Barracuda

22 Tri

22 Tri

30 Barracuda

22 Tri

W

Wall cabinet

30 Barracuda

22 Tri

34 Bizeps

30 Barracuda

174 Acrobat

Wall cabinet

30 Barracuda

22 Tri

38 Ytox

30 Barracuda

Wall cladding

30 Barracuda

22 Tri

22 Tri

30 Barracuda

174 Acrobat

Wall cladding
(substructure < 30 mm)

142 Attack

148 Apollo

148 Apollo

142 Attack

Wall cladding
(substructure < 50 mm)

142 Attack

148 Apollo

148 Apollo

142 Attack

Wall lamp

30 Barracuda

22 Tri

22 Tri

30 Barracuda

174 Acrobat

180 Thermal

Wall light

30 Barracuda

22 Tri

22 Tri

30 Barracuda

28 Deco

Wall plate

60 Slim Fix

Washbasin

124 Oase

124 Oase

124 Oase

124 Oase

128 Oase Spagat

Wall light

30 Barracuda

22 Tri

22 Tri

30 Barracuda

28 Deco

Water boiler (heavy)

72 HAC

68 Control

68 Control

74 Liquix Pro 1

Water boiler (light)

30 Barracuda

22 Tri

34 Bizeps

30 Barracuda

172 Spagat Plus

WC (stand-alone)

136 Toilet

Wind chimes

30 Barracuda

22 Tri

22 Tri

30 Barracuda

164 Spiral Plus

180 Thermal

Wind detector

186 Thermo Proof Mini

Window grille

30 Barracuda

34 Bizeps

38 Ytox

30 Barracuda

28 Deco

190 Thermo Proof Plus

Window installation

158 Window Pro

158 Window Pro

158 Window Pro

158 Window Pro

Wooden box

30 Barracuda

22 Tri

28 Deco

30 Barracuda

174 Acrobat

180 Thermal



THE ORIGINAL

www.YouTube.com/toxgermany

Features

- The original all-purpose wall plug - often copied, but never equalled
- Holds in almost all building materials
- Ties or expands automatically depending on the building material
- No turning in the drill hole
- Pre-positioned and through installation

Pack	Item No.	Type	Content Wall Plug	Content Screw	Wall plug Ø	Wall plug length	Screw Size	Drill Ø	Min. Drill hole depth	Min. Setting Depth	Fixture Thickness	Approval
	Tri		per pack	per pack	mm	mm	Ø mm	d ₀ Ø mm	h ₁ ≥ mm	h _{ef} mm	t _{fix} ≤ mm	ETA
	010 100 021	5/31*	100x	-	5	31	3.0 - 4.0	5	45	31	-	-
	010 100 041	6/36*	50x	-	6	36	4.0 - 5.0	6	50	36	-	-
	010 100 051	6/36*	100x	-	6	36	4.0 - 5.0	6	50	36	-	-
	010 100 061	6/51	100x	-	6	51	4.0 - 5.0	6	65	51	-	-
	010 100 071	6/51	40x	-	6	51	4.0 - 5.0	6	65	51	-	-
	010 100 081	7/36*	100x	-	7	36	4.5 - 5.0	7	50	36	-	-
	010 100 091	7/51	100x	-	7	51	4.5 - 5.0	7	70	51	-	-
	010 100 101	8/51	50x	-	8	51	5.0 - 6.0	8	70	51	-	-
	010 100 111	8/51	100x	-	8	51	5.0 - 6.0	8	70	51	-	-
	010 100 151	10/61	20x	-	10	61	6.0 - 8.0	10	85	61	-	-
	010 100 161	10/61	50x	-	10	61	6.0 - 8.0	10	85	61	-	-
	010 100 181	12/71	25x	-	12	71	8.0 - 10.0	12	95	71	-	-
	010 100 191	12/71	15x	-	12	71	8.0 - 10.0	12	95	71	-	-
	010 100 201	14/75	20x	-	14	75	10.0 - 12.0	14	100	75	-	-
	010 100 211	14/75	10x	-	14	75	10.0 - 12.0	14	100	75	-	-
	Tri + Screw		per pack	per pack	mm	mm	mm	d ₀ Ø mm	h ₁ ≥ mm	h _{ef} mm	t _{fix} ≤ mm	ETA
	010 101 231	6/36 S*	50x	50x	6	36	4.5 x 50	6	50	36	10	-
	010 101 241	6/51 S	50x	50x	6	51	4.5 x 70	6	65	51	15	-
	010 101 271	8/51 S	25x	25x	8	51	6.0 x 70	8	70	51	14	-
	010 101 281	10/61 S	20x	20x	10	61	8.0 x 80	10	85	61	12	-
	Tri		per pack	per pack	mm	mm	Ø mm	d ₀ Ø mm	h ₁ ≥ mm	h _{ef} mm	t _{fix} ≤ mm	ETA
	010 700 021	5/31*	24x	-	5	31	3.0 - 4.0	5	45	31	-	-
	010 700 051	6/36*	20x	-	6	36	4.0 - 5.0	6	50	36	-	-
	010 700 061	6/51	16x	-	6	51	4.0 - 5.0	6	65	51	-	-
	010 700 111	8/51	10x	-	8	51	5.0 - 6.0	8	70	51	-	-
	010 700 161	10/61	6x	-	10	61	6.0 - 8.0	10	85	61	-	-
	010 700 181	12/71	4x	-	12	71	8.0 - 10.0	12	95	71	-	-
	010 700 201	14/75	2x	-	14	75	10.0 - 12.0	14	100	75	-	-
	Tri + Screw		per pack	per pack	mm	mm	mm	d ₀ Ø mm	h ₁ ≥ mm	h _{ef} mm	t _{fix} ≤ mm	ETA
	010 701 021	5/31 S*	12x	12x	5	31	3.5 x 45	5	45	31	10	-
	010 701 051	6/36 S*	10x	10x	6	36	4.5 x 50	6	50	36	10	-
	010 701 061	6/51 S	8x	8x	6	51	4.5 x 70	6	65	51	15	-
	010 701 111	8/51 S	6x	6x	8	51	6.0 x 70	8	70	51	14	-
	010 701 161	10/61 S	4x	4x	10	61	8.0 x 80**	10	85	61	12	-
	010 701 181	12/71 S	2x	2x	12	71	10.0 x 90***	12	95	71	10	-

* only suitable for single sheet gypsum plasterboard

** Hexagonal woodscrew SW 13

*** Hexagonal woodscrew SW 17



Tri	Concrete C 20/25	Solid brick MZ 12	Vertically perforated brick \geq Hlz12 Bulk density 1 kg/dm ³	Hollow brick \geq Hbl2	Cellular concrete \geq PB2, PP2	Gypsum plasterboard 12.5 mm	Gypsum fibreboard 12.5 mm
5/31	25 kg	15 kg	15 kg	10 kg	7 kg *	6 kg	15 kg
6/36	50 kg	35 kg	25 kg	15 kg	10 kg *	10 kg	20 kg
6/51	60 kg	40 kg	25 kg	20 kg	10 kg	-	25 kg
7/36	60 kg	40 kg	25 kg	25 kg	10 kg *	10 kg	20 kg
7/51	60 kg	50 kg	25 kg	25 kg	10 kg	10 kg	20 kg
8/51	100 kg	80 kg	30 kg	25 kg	15 kg	10 kg	30 kg
10/61	150 kg	80 kg	35 kg	30 kg	20 kg	-	30 kg
12/71	160 kg	120 kg	40 kg	30 kg	25 kg	-	-
14/75	200 kg	140 kg	40 kg	35 kg	25 kg	-	-

- The specified holding values refer to screws with the largest screw diameter; thread shape similar to DIN 7998
- The anchoring depth of the wall plug must be observed
- Drilling method and drill hole cleaning must be adapted to the building material
- The recommended loads only apply to installation in the building material, not for installation in joints
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)
- For articles that come with screws, different values on the packaging may have to be followed

* Holding value applies to fastening in cellular concrete \geq PP4

Description & Area of Application

- 3-way split wall plug body without wall plug cap
- Anti-rotation locks on wall plug neck and wall plug body prevent rotation in the building material

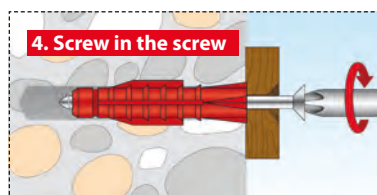
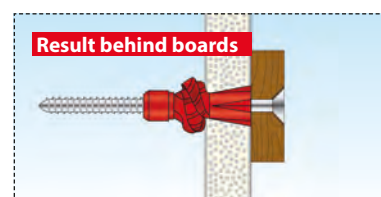
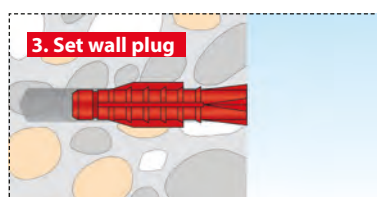
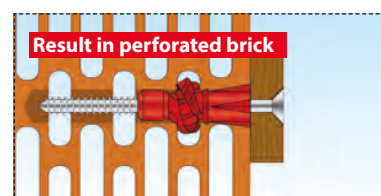
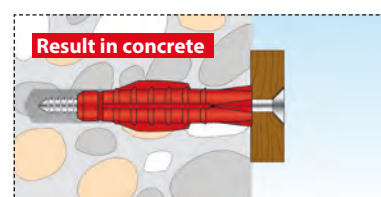
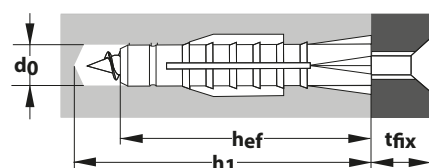
Tri + Screw:

- Countersunk screw with PZ driver



Processing & Installation

- Create drill hole in the size of the wall plug diameter
- Drill into perforated brick and gypsum plasterboard without hammering in a rotary motion so that the webs in the perforated brick are not broken
- When drilling into gypsum plasterboards, use a wood or metal drill bit
- Use hammer drilling into concrete and solid masonry
- Minimum screw length = wall plug length + attachment thickness + 5 mm
- Pre-positioned and through installation possible



All-purpose wall plug Trika


THE ORIGINAL
www.YouTube.com/toxgermany

Features

- Wall plug cap protects the surface and prevents slipping deeper into the drill hole
- Holds in almost all building materials
- Ties or expands depending on the building material
- Anti-rotation locks prevent rotation in the drill hole
- Suitable for pre-positioned installation

Pack	Item No.	Type	Content Wall Plug	Content Screw	Wall plug Ø	Wall plug length	Screw Size	Drill Ø	Min. Drill hole depth	Min. Setting Depth	Fixture Thickness	Approval
		Trika	per pack	per pack	mm	mm	Ø mm	d₀ Ø mm	h₁ ≥ mm	h_{ef} mm	t_{fix} ≤ mm	ETA
	011 100 021	5/31*	100x	-	5	31	3.0 - 4.0	5	45	31	-	-
	011 100 051	6/36*	100x	-	6	36	4.0 - 5.0	6	50	36	-	-
	011 100 061	6/51	100x	-	6	51	4.0 - 5.0	6	65	51	-	-
	011 100 081	7/36*	100x	-	7	36	4.5 - 5.0	7	50	36	-	-
	011 100 091	7/51	100x	-	7	51	4.5 - 5.0	7	70	51	-	-
	011 100 111	8/51	100x	-	8	51	5.0 - 6.0	8	70	51	-	-
	011 100 161	10/61	50x	-	10	61	6.0 - 8.0	10	85	61	-	-
	011 100 181	12/71	25x	-	12	71	8.0 - 10.0	12	95	71	-	-
	011 100 201	14/75	20x	-	14	75	10.0 - 12.0	14	100	75	-	-



Pack	Item No.	Type	Content Wall Plug	Content Screw	Wall plug Ø	Wall plug length	Hook	Drill Ø	Min. Drill hole depth	Min. Setting Depth	Fixture Thickness	Approval
		Trika + screw	per pack	per pack	mm	mm	mm	d₀ Ø mm	h₁ ≥ mm	h_{ef} mm	t_{fix} ≤ mm	ETA
	011 701 021	5/31 S*	10x	10x	5	31	3.5 x 45	5	45	31	10	-
	011 701 051	6/36 S*	10x	10x	6	36	4.5 x 50	6	50	36	14	-
	011 701 061	6/51 S	8x	8x	6	51	4.5 x 70	6	65	51	14	-
	011 701 111	8/51 S	6x	6x	8	51	6.0 x 70	8	70	51	14	-
	011 701 161	10/61 S	4x	4x	10	61	8.0 x 80	10	85	61	12	-

* only suitable for single sheet gypsum plasterboard

Pack	Item No.	Type	Content Wall Plug	Content Hook	Wall plug Ø	Wall plug length	Hook	Drill Ø	Min. Drill hole depth	Anchoring depth	Eye Ø	Approval
		Pirat	per pack	per pack	mm	mm	mm	d₀ Ø mm	h₁ ≥ mm	h_{ef} mm	a ≤ mm	ETA
	012 261 11	Will-S	20x	20x	8	51	5.0 x 86	8	70	51	14	-
	051 701 111	Will-S	2x	2x	8	51	5.0 x 86	8	70	51	14	-
	051 701 131	Will-O	4x	4x	8	51	5.0 x 86	8	70	51	14	-

Pack	Item No.	Type	Content Wall Plug	Content Hook	Wall plug Ø	Wall plug length	Hook	Drill Ø	Min. Drill hole depth	Anchoring depth	Hook length	Approval
		Pirat	per pack	per pack	mm	mm	mm	d₀ Ø mm	h₁ ≥ mm	h_{ef} mm	a ≤ mm	ETA
	051 701 121	Will-L	2x	2x	8	51	5.0 x 70	8	70	51	8	-
	012 261 26	Bill-L	20x	20x	8	51	5.0 x 66	8	70	51	5	-
	051 701 261	Bill-L	4x	4x	8	51	5.0 x 66	8	70	51	5	-
	051 701 221	Bill-XL	4x	4x	8	51	5.0 x 80	8	70	51	20	-



Trika	Concrete C 20/25	Solid brick MZ 12	Vertically perforated brick ≥ Hlz12 Bulk density ≥ 1 kg/dm³	Hollow brick ≥ Hbl2	Cellular concrete ≥ PB2, PP2	Gypsum plasterboard 12.5 mm	Gypsum fibreboard 12.5 mm
5/31	25 kg	15 kg	15 kg	10 kg	7 kg *	6 kg	15 kg
6/36	50 kg	35 kg	25 kg	15 kg	10 kg *	10 kg	20 kg
6/51	60 kg	40 kg	25 kg	20 kg	10 kg	-	25 kg
7/36	60 kg	40 kg	25 kg	25 kg	10 kg *	10 kg	20 kg
7/51	60 kg	50 kg	25 kg	25 kg	10 kg	10 kg	20 kg
8/51	100 kg	80 kg	30 kg	25 kg	15 kg	10 kg	30 kg
10/61	150 kg	80 kg	35 kg	30 kg	20 kg	-	30 kg
12/71	160 kg	120 kg	40 kg	30 kg	25 kg	-	-
14/75	200 kg	140 kg	40 kg	35 kg	25 kg	-	-

- The specified holding values refer to screws with the largest screw diameter; thread shape similar to DIN 7998
- The anchoring depth of the wall plug must be observed
- Drilling method and drill hole cleaning must be adapted to the building material
- The recommended loads only apply to installation in the building material, not for installation in joints
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)
- For articles that come with screws and hooks, different values on the packaging may have to be followed

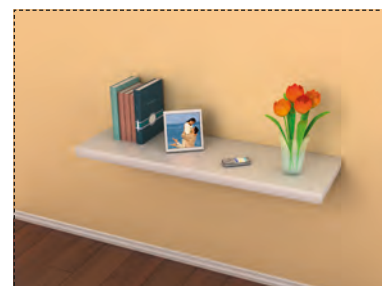
* Holding value applies to fastening in cellular concrete ≥ PP4

Description & Area of Application

- All-purpose wall plug for almost all building materials
- 3-way split wall plug body with wall plug cap
- Anti-rotation locks on wall plug neck and wall plug body prevent rotation in the building material

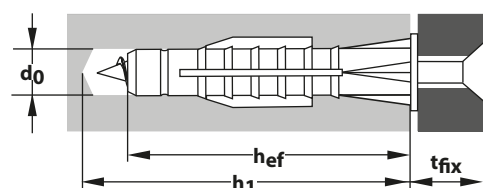
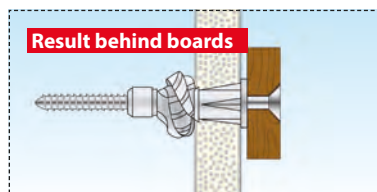
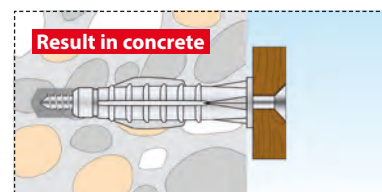
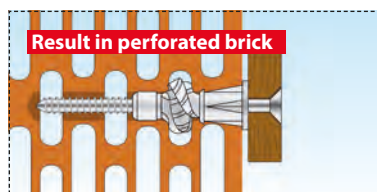
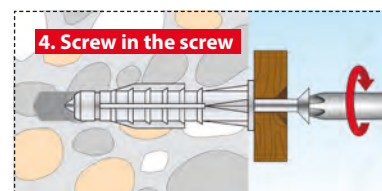
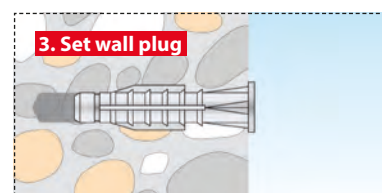
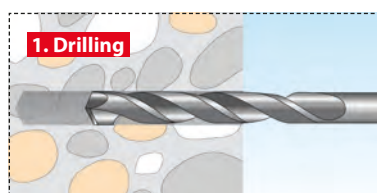
Trika + screw:

- Countersunk screw with PZ driver



Processing & Installation

- Create drill hole in the size of the wall plug diameter
- Drill into perforated brick and gypsum plasterboard without hammering in a rotary motion so that the webs in the perforated brick are not broken
- When drilling into gypsum plasterboards, use a wood or metal drill bit
- Use hammer drilling into concrete and solid masonry
- Minimum screw length = wall plug length + attachment thickness + 5 mm
- Pre-positioned installation




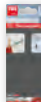
Frame wall plug Tetrafix XL


STRONG HOLD

www.YouTube.com/toxgermany

Features

- Extended shaft for special frame wall plug applications
- Deep anchoring in cellular concrete
- Holds in almost all building materials
- Ties or expands automatically depending on the building material
- Wide range of applications due to different shaft lengths
- Folding wall plug cap prevents slipping deeper
- Spiral shape enables high holding values

Pack	Item No.	Type	Content Wall Plug	Content Screw	Wall plug Ø	Wall plug length	Screw Size	Drill Ø	Min. Drill hole depth	Min. Anchoring depth	Fixture Thickness	Approval	
	Tetrafix XL		per pack	per pack	mm	mm	Ø mm	d0 Ø mm	h1 ≥ mm	hef ≥ mm	tfix ≤ mm	ETA	
	021 100 051	6/65	50x	-	6	65	4.0 - 4.5	6	75	35 {-}	30 {-}	-	
	021 100 101	8/80	50x	-	8	80	5.0 - 6.0	8	90	50 {70}	30 {10}	-	
	021 100 141	10/100	25x	-	10	100	6.0 - 7.0	10	110	60 {70}	40 {30}	-	
	Tetrafix XL + screw 		per pack	per pack	mm	mm	mm	d0 Ø mm	h1 ≥ mm	hef ≥ mm	tfix ≤ mm	ETA	
	021 101 051	6/65 S	50x	50x	6	65	4.5 x 70	6	75	35 {-}	30 {-}	-	
	021 101 101	8/80 S	25x	25x	8	80	6.0 x 90	8	90	50 {70}	30 {10}	-	
	021 101 141	10/100 S	25x	25x	10	100	7.0 x 110	10	110	60 {70}	40 {30}	-	
	Tetrafix XL		per pack	per pack	mm	mm	Ø mm	d0 Ø mm	h1 ≥ mm	hef ≥ mm	tfix ≤ mm	ETA	
	021 700 051	6/65	12x	-	6	65	4.0 - 4.5	6	75	35 {-}	30 {-}	-	
	021 700 101	8/80	6x	-	8	80	5.0 - 6.0	8	90	50 {70}	30 {10}	-	
	021 700 141	10/100	4x	-	10	100	6.0 - 7.0	10	110	60 {70}	40 {30}	-	
	Tetrafix XL + screw 		per pack	per pack	mm	mm	mm	d0 Ø mm	h1 ≥ mm	hef ≥ mm	tfix ≤ mm	ETA	
	021 701 051	6/65 S	6x	6x	6	65	4.5 x 70	6	75	35 {-}	30 {-}	-	
	021 701 101	8/80 S	4x	4x	8	80	6.0 x 90	8	90	50 {70}	30 {10}	-	
	{ } Cellular concrete												
Pack	Item No.	Type	Content Wall Plug	Content Hook	Wall plug Ø	Wall plug length	Hook	Drill Ø	Min. Drill hole depth	Min. Anchoring depth	Eye Ø	Useful length	Permis-sion
	Pirat 		per pack	per pack	mm	mm	mm	d0 Ø mm	h1 ≥ mm	hef ≥ mm	a ≤ mm	tfix ≤ mm	ETA
	051 701 411	Longbird-S	2x	2x	8	80	6.0 x 115	8	90	50 {70}	13	30 {10}	-
Pack	Item No.	Type	Content Wall Plug	Content Hook	Wall plug Ø	Wall plug length	Hook	Drill Ø	Min. Drill hole depth	Min. Anchoring depth	Hook length	Useful length	Permis-sion
	Pirat 		per pack	per pack	mm	mm	mm	d0 Ø mm	h1 ≥ mm	hef ≥ mm	a ≤ mm	tfix ≤ mm	ETA
	051 701 421	Longbird-L	2x	2x	8	80	6.0 x 97	8	90	50 {70}	5	30 {10}	-
{ } Cellular concrete													



Tetrafix XL	Concrete C 20/25	Solid brick MZ 12	Vertically perforated brick ≥ Hlz12 Bulk density 1 kg/dm³	Hollow brick ≥ Hbz12	Cellular concrete ≥ PB2, PP2	Gypsum plasterboard 12.5 mm	Gypsum fibreboard 12.5 mm
6/65	60 kg	50 kg	30 kg	30 kg	-	-	-
8/80	100 kg	90 kg	35 kg	40 kg	15 kg	-	-
10/100	120 kg	100 kg	35 kg	45 kg	25 kg	-	-

- The specified holding values refer to screws with the largest screw diameter; thread shape similar to DIN 7998
- The anchoring depth of the wall plug must be observed
- Drilling method and drill hole cleaning must be adapted to the building material
- The recommended loads only apply to installation in the building material, not for installation in joints
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)
- For articles that come with screws and hooks, different values on the packaging may have to be followed

Description & Area of Application

- All-purpose wall plug for almost all building materials
- Spiral expansion element
- Extra long shaft lengths for bridging thick, non-load-bearing layers
- Folding wall plug cap
- Anti-rotation locks on wall plug neck prevent rotation in the building material

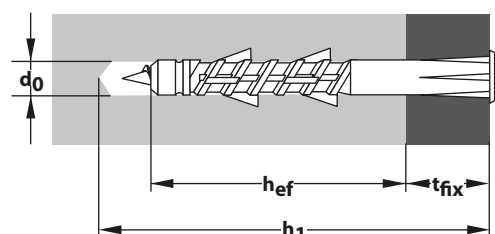
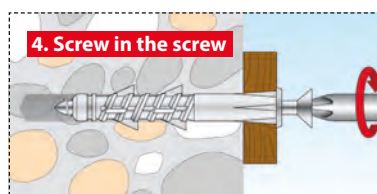
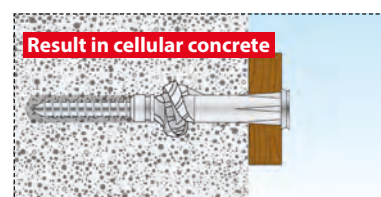
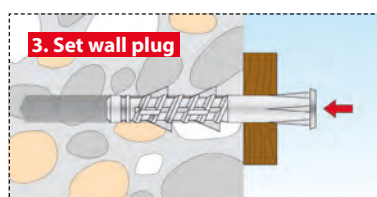
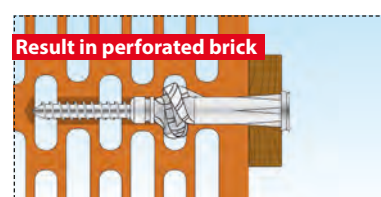
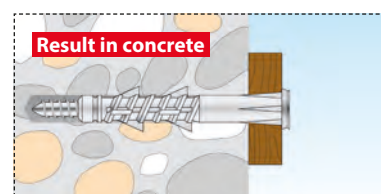
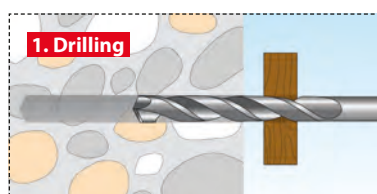
Tetrafix XL + screw:

- Screw with PZ driver



Processing & Installation

- Create drill hole in the size of the wall plug diameter
- Drill into perforated brick and gypsum plasterboard without hammering in a rotary motion so that the webs in the perforated brick are not broken
- Use hammer drilling into concrete and solid masonry
- Minimum screw length = wall plug length + attachment thickness + 5 mm
- Secure anchoring in perforated brick by tying
- Select the largest possible screw Ø for through installation
- Pre-positioned and through installation possible












Features

- Screws can be screwed in very easily due to the special geometry
- Wall plug cap protects the surface to prevent slipping deeper into the drill hole
- Ties or expands automatically depending on the building material
- Detachable wall plug cap for pre-positioned and through installation



 www.YouTube.com/toxgermany

Pack	Item No.	Type	Content Wall Plug	Content Screw	Wall plug Ø	Wall plug length	Screw Size	Drill Ø	Min. Drill hole depth	Min. Setting Depth	Fixture Thickness	Approval
	Deco		per pack	per pack	mm	mm	Ø mm	d ₀ Ø mm	h ₁ ≥ mm	h _{ef} mm	t _{fix} ≤ mm	ETA
	016 100 011	5/25*	100x	-	5	25	3.0 - 4.0	5	35	24	-	-
	016 100 021	6/28*	100x	-	6	28	3.5 - 5.0	6	40	27	-	-
	016 100 031	6/41	100x	-	6	41	3.5 - 5.0	6	50	40	-	-
	016 100 051	8/49	100x	-	8	49	4.0 - 6.0	8	70	48	-	-
	016 100 081	10/66	50x	-	10	66	6.0 - 8.0	10	80	65	-	-
	016 100 101	12/76	25x	-	12	76	8.0 - 10.0	12	95	75	-	-
	Deco		per pack	per pack	mm	mm	Ø mm	d ₀ Ø mm	h ₁ ≥ mm	h _{ef} mm	t _{fix} ≤ mm	ETA
	016 260 011	5/25*	120x	-	5	25	3.0 - 4.0	5	35	24	-	-
	016 260 021	6/28*	230x	-	6	28	3.5 - 5.0	6	40	27	-	-
	016 260 031	6/41	190x	-	6	41	3.5 - 5.0	6	50	40	-	-
	016 260 041	6/41	100x	-	6	41	3.5 - 5.0	6	50	40	-	-
	016 260 051	8/49	85x	-	8	49	4.0 - 6.0	8	70	48	-	-
	016 260 081	10/66	47x	-	10	66	6.0 - 8.0	10	80	65	-	-
	016 260 101	12/76	25x	-	12	76	8.0 - 10.0	12	95	75	-	-
	Deco		per pack	per pack	mm	mm	Ø mm	d ₀ Ø mm	h ₁ ≥ mm	h _{ef} mm	t _{fix} ≤ mm	ETA
	016 700 011	5/25*	25x	-	5	25	3.0 - 4.0	5	35	24	-	-
	016 700 021	6/28*	20x	-	6	28	3.5 - 5.0	6	40	27	-	-
	016 700 031	6/41	20x	-	6	41	3.5 - 5.0	6	50	40	-	-
	016 700 051	8/49	10x	-	8	49	4.0 - 6.0	8	70	48	-	-
	016 700 081	10/66	6x	-	10	66	6.0 - 8.0	10	80	65	-	-
	016 700 101	12/76	4x	-	12	76	8.0 - 10.0	12	95	75	-	-
	Deco + Screw		per pack	per pack	mm	mm	mm	d ₀ Ø mm	h ₁ ≥ mm	h _{ef} mm	t _{fix} ≤ mm	ETA
	016 701 011	5/25 S*	12x	12x	5	25	3.5 x 40	5	35	24	12	-
	016 701 021	6/28 S*	10x	10x	6	28	4.5 x 40	6	40	27	8	-
	016 701 031	6/41 S	8x	8x	6	41	4.5 x 60	6	50	40	15	-
	016 701 051	8/49 S	6x	6x	8	49	6.0 x 70	8	70	48	15	-
	016 701 081	10/66 S	4x	4x	10	66	8.0 x 80	10	80	65	5	-
	* only suitable for single-layer gypsum plasterboards											

Pack	Item No.	Type	Content Wall Plug	Content Hook	Wall plug Ø	Wall plug length	Hook	Drill Ø	Min. Drill hole depth	Anchoring depth	Eye Ø	Approval
	Pirat Lenny-S		per pack	per pack	mm	mm	mm	d ₀ Ø mm	h ₁ ≥ mm	h _{ef} mm	a ≤ mm	ETA
	051 701 311	Lenny-S	4x	4x	6	41	3.5 x 71	6	50	41	14	-
	Pirat Lenny-O		per pack	per pack	mm	mm	mm	d ₀ Ø mm	h ₁ ≥ mm	h _{ef} mm	a ≤ mm	ETA
	051 701 331	Lenny-O	4x	4x	6	41	3.5 x 71	6	50	41	14	-
	Pirat Lenny-L		per pack	per pack	mm	mm	mm	d ₀ Ø mm	h ₁ ≥ mm	h _{ef} mm	a ≤ mm	ETA
	051 701 321	Lenny-L	4x	4x	6	41	3.5 x 55	6	50	41	5	-



Deco	Concrete C 20/25	Solid brick MZ 12	Vertically perforated brick \geq Hlz12 Bulk density $\geq 1 \text{ kg/dm}^3$	Hollow brick \geq Hbl2	Cellular concrete \geq PB2, PP2	Gypsum plasterboard 12.5 mm	Gypsum fibreboard 12.5 mm
5/25	20 kg	10 kg	10 kg	10 kg	6 kg*	-	10 kg
6/28	40 kg	30 kg	15 kg	10 kg	6 kg*	-	20 kg
6/41	60 kg	40 kg	20 kg	15 kg	7 kg	10 kg	25 kg
8/49	100 kg	60 kg	25 kg	20 kg	10 kg	10 kg	30 kg
10/66	120 kg	80 kg	30 kg	25 kg	15 kg	-	30 kg
12/76	130 kg	100 kg	40 kg	40 kg	20 kg	-	-

- The specified holding values refer to screws with the largest screw diameter; thread shape similar to DIN 7998
- The anchoring depth of the wall plug must be observed
- Drilling method and drill hole cleaning must be adapted to the building material
- The recommended loads only apply to installation in the building material, not for installation in joints
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)
- For articles that come with screws and hooks, different values on the packaging may have to be followed

* Holding value applies to fastening in cellular concrete \geq PP4

Description & Area of Application

- All-purpose wall plug for almost all building materials
- 4-way split wall plug body for uniform force distribution
- Anti-rotation locks on wall plug neck prevent rotation in the building material

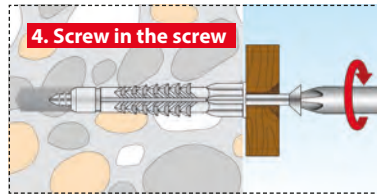
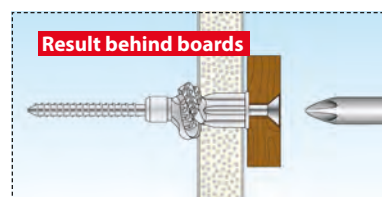
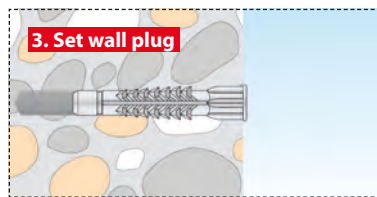
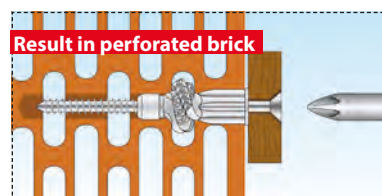
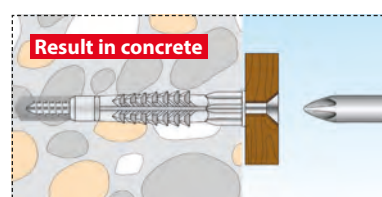
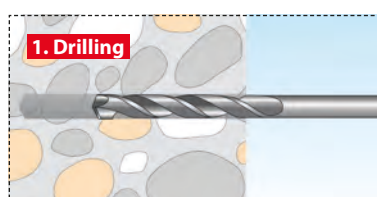
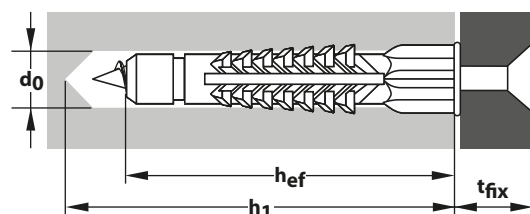
Deco + Screw:

- Screw with PZ driver



Processing & Installation

- Create drill hole in the size of the wall plug diameter
- Drill into perforated brick and gypsum plasterboard without hammering in a rotary motion so that the webs in the perforated brick are not broken
- When drilling into gypsum plasterboards, use a wood or metal drill bit
- Use hammer drilling into concrete and solid masonry
- Minimum screw length = wall plug length + attachment thickness + 5 mm
- Pre-positioned installation



Expansion wall plug Barracuda

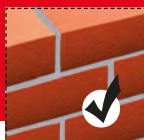


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Features

- Up to 30% greater holding values than other expansion wall plugs
- Several active rotation locks
- Also suitable for chipboard screws
- High material content for high holding values
- Secure screw guidance
- 100% nylon
- The flexible wall plug neck adapts itself to the drill hole

Pack	Item No.	Type	Content Wall Plug	Content Screw	Wall plug Ø	Wall plug length	Screw Size	Drill Ø	Min. Drill hole depth	Min. Setting Depth	Fixture Thickness	Approval
	Barracuda		per pack	per pack	mm	mm	Ø mm	d ₀ Ø mm	h ₁ ≥ mm	h _{ef} mm	t _{fix} ≤ mm	ETA
	013 100 021	5/25	100x	-	5	25	3.0 - 4.0	5	35	25	-	-
	013 100 041	6/30	100x	-	6	30	3.5 - 5.0	6	45	30	-	-
	013 100 061	8/40	100x	-	8	40	4.0 - 6.0	8	55	40	-	-
	013 100 081	10/50	50x	-	10	50	6.0 - 8.0	10	70	50	-	-
	013 100 101	12/60	25x	-	12	60	8.0 - 10.0	12	80	60	-	-
	013 100 121	14/70	20x	-	14	70	10.0 - 12.0	14	95	70	-	-
	013 100 141	16/80	10x	-	16	80	12.0	16	105	80	-	-
	Barracuda		per pack	per pack	mm	mm	Ø mm	d ₀ Ø mm	h ₁ ≥ mm	h _{ef} mm	t _{fix} ≤ mm	ETA
	013 700 021	5/25	36x	-	5	25	3.0 - 4.0	5	35	25	-	-
	013 700 041	6/30	24x	-	6	30	3.5 - 5.0	6	45	30	-	-
	013 700 061	8/40	12x	-	8	40	4.0 - 6.0	8	55	40	-	-
	013 700 081	10/50	8x	-	10	50	6.0 - 8.0	10	70	50	-	-
	013 700 101	12/60	4x	-	12	60	8.0 - 10.0	12	80	60	-	-
	013 700 121	14/70	2x	-	14	70	10.0 - 12.0	14	95	70	-	-
	013 700 141	16/80	2x	-	16	80	12.0	16	105	80	-	-
	Barracuda + screw		per pack	per pack	mm	mm	mm	d ₀ Ø mm	h ₁ ≥ mm	h _{ef} mm	t _{fix} ≤ mm	ETA
	013 701 021	5/25 S	12x	12x	5	25	4.0 x 40	5	35	25	10	-
	013 701 041	6/30 S	12x	12x	6	30	4.5 x 45	6	45	30	10	-
	013 701 061	8/40 S	10x	10x	8	40	6.0 x 60	8	55	40	14	-
	013 701 081	10/50 S	4x	4x	10	50	8.0 x 70*	10	70	50	15	-
* Hexagonal woodscrew SW 13												
Pack	Item No.	Type	Content Wall Plug	Content Hook	Wall plug Ø	Wall plug length	Hook	Drill Ø	Min. Drill hole depth	Anchoring depth	Eye Ø	Approval
	Pirat Barbossa S		per pack	per pack	mm	mm	mm	d ₀ Ø mm	h ₁ ≥ mm	h _{ef} mm	a ≤ mm	ETA
	051 701 011	Barbossa S	4x	4x	8	40	5.0 x 75	8	55	40	14	-
	Pirat Barbossa-O		per pack	per pack	mm	mm	mm	d ₀ Ø mm	h ₁ ≥ mm	h _{ef} mm	a ≤ mm	ETA
	051 701 031	Barbossa-O	2x	2x	8	40	5.0 x 70	8	55	40	14	-
	Pirat Barbossa-L		per pack	per pack	mm	mm	mm	d ₀ Ø mm	h ₁ ≥ mm	h _{ef} mm	t _{fix} ≤ mm	ETA
	051 701 061	Barbossa-L	4x	4x	8	40	5.0 x 53	8	55	40	14	-



Barracuda	Concrete C 20/25	Solid brick MZ 12	Vertically perforated brick ≥ Hlz12 Bulk density ≥ 1 kg/dm³	Hollow brick ≥ Hbl2	Cellular concrete ≥ PB2, PP2	Gypsum plasterboard 12.5 mm	Gypsum fibreboard 12.5 mm
5/25	40 kg	20 kg	-	-	-	-	-
6/30	70 kg	35 kg	-	-	-	-	-
8/40	90 kg	50 kg	-	-	-	-	-
10/50	200 kg	80 kg	-	-	-	-	-
12/60	220 kg	120 kg	-	-	-	-	-
14/70	230 kg	-	-	-	-	-	-
16/80	250 kg	-	-	-	-	-	-

- The specified holding values refer to screws with the largest screw diameter; thread shape similar to DIN 7998
- The anchoring depth of the wall plug must be observed
- Drilling method and drill hole cleaning must be adapted to the building material
- The recommended loads only apply to installation in the building material, not for installation in joints
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)
- For articles that come with screws and hooks, different values on the packaging may have to be followed

Description & Area of Application

- Expansion wall plug for solid building materials
- 2-way split spreader elements with rotation locks and flexible wall plug neck
- Halogen-free
- Can be used with wood, chipboard and hanger bolts

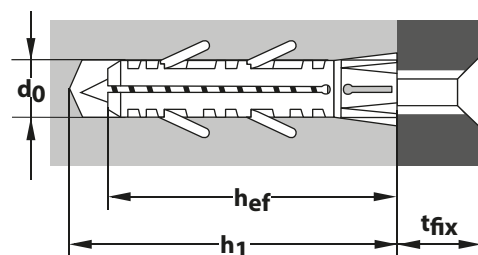
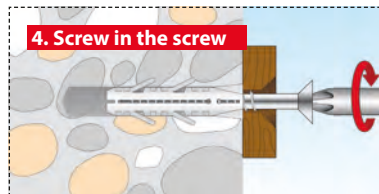
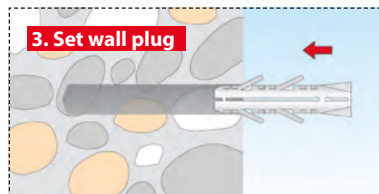
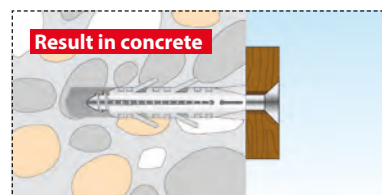
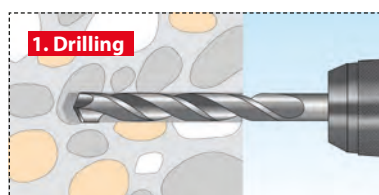
Barracuda + Screw:

- Screw with PZ driver



Processing & Installation

- Create drill hole in the size of the wall plug diameter
- Use hammer drilling into concrete and solid masonry
- Minimum screw length = wall plug length + attachment thickness + 5 mm
- Pre-positioned installation

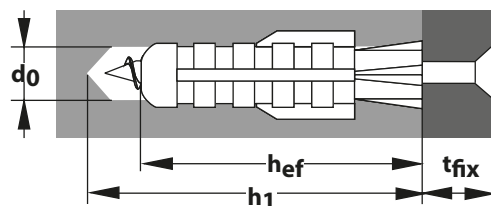



Features

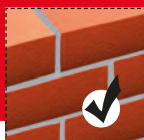
- Suitable for installation in tile grouting
- Valuable tiles remain undamaged
- Virtually invisible and can be removed again



**IDEAL IN
TILE GROUT**



Pack	Item No.	Type	Content Wall Plug	Content Screw	Wall plug Ø	Wall plug length	Screw Size	Drill Ø	Min. Drill hole depth	Min. Setting Depth	Fixture Thickness	Approval
		Grout	per pack	per pack	mm	mm	mm	d0 Ø mm	h1 ≥ mm	hef mm	tfix ≤ mm	ETA
	007 100 011	4/20	100x	-	4	20	3.0	4	30	20	-	-



Grout	Concrete C 20/25	Solid brick MZ 12	Vertically perforated brick ≥ Hlz12 Bulk density ≥ 1 kg/dm³	Hollow brick ≥ Hbl2	Cellular concrete ≥ PB2, PP2	Gypsum plasterboard 12.5 mm	Gypsum fibreboard 12.5 mm
4/20	20 kg	20 kg	-	-	-	-	-

- The specified holding values refer to screws with the largest screw diameter; thread shape similar to DIN 7998
- The anchoring depth of the wall plug must be observed
- Drilling method and drill hole cleaning must be adapted to the building material
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

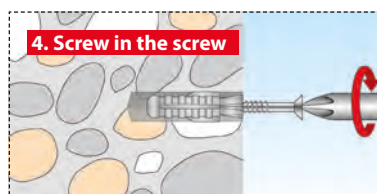
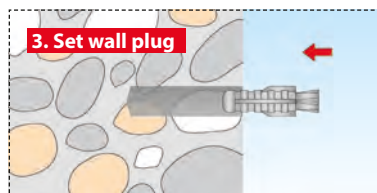
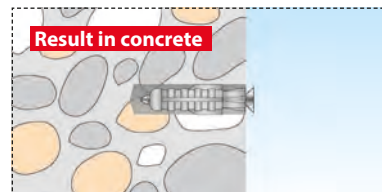
Description & Area of Application

- Expansion wall plug for solid building materials



Processing & Installation

- Create drill hole in the size of the wall plug diameter
- Use hammer drilling into concrete and solid masonry
- Minimum screw length = wall plug length + attachment thickness + 5 mm
- Pre-positioned installation

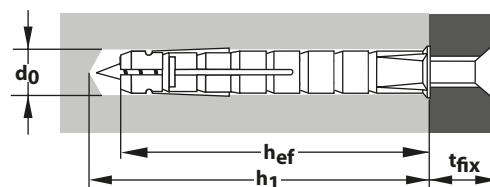




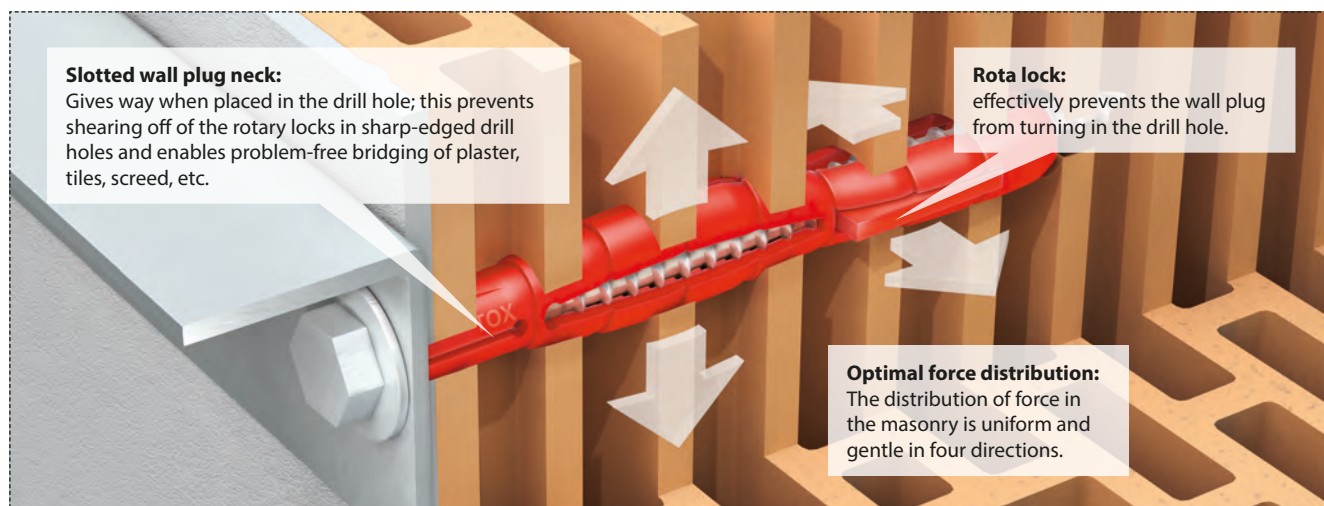
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Features

- Ideal for perforated brick (Poroton) and cellular concrete (Ytong)
- Extremely high holding values
- Spreads in several directions
- Rotors prevent rotation in the drill hole
- 100% nylon
- Long expansion range for secure anchoring
- Also suitable for metric threaded rods



Pack	Item No.	Type	Content Wall Plug	Content Screw	Wall plug Ø	Wall plug length	Screw Size	Drill Ø	Min. Drill hole depth	Min. Setting Depth	Fixture Thickness	Approval
	Bizeps		per pack	per pack	mm	mm	ø mm / M	d0 ø mm	h1 ≥ mm	hef mm	tfix ≤ mm	ETA
	009 100 13	6/70	50x	-	6	70	4.5 - 5.0 / -	6	80	70	-	-
	009 100 15	8/90	50x	-	8	90	5.0 - 6.0 / -	8	100	90	-	-
	009 100 17	10/90	25x	-	10	90	6.0 - 8.0 / M6	10	100	90	-	-
	009 100 19	12/90	25x	-	12	90	8.0 - 10.0 / M8	12	100	90	-	-
	Bizeps		per pack	per pack	mm	mm	ø mm	d0 ø mm	h1 ≥ mm	hef mm	tfix ≤ mm	ETA
	009 700 031	6/70	10x	-	6	70	4.5 - 5.0 / -	6	80	70	-	-
	009 700 051	8/90	6x	-	8	90	5.0 - 6.0 / -	8	100	90	-	-
	009 700 071	10/90	4x	-	10	90	6.0 - 8.0 / M6	10	100	90	-	-
	009 700 091	12/90	4x	-	12	90	8.0 - 10.0 / M8	12	100	90	-	-





Bizeps	Concrete C 20/25	Solid brick MZ 12	Vertically perforated brick ≥ Hlz12 Bulk density ≥ 1 kg/dm³	Hollow brick ≥ Hbl2	Cellular concrete ≥ PB2, PP2	Gypsum plasterboard 12.5 mm	Gypsum fibreboard 12.5 mm
6/70	150 kg	120 kg	30 kg	7 kg	15 kg	-	-
8/90	200 kg	120 kg	50 kg	20 kg	20 kg	-	-
10/90	250 kg	140 kg	60 kg	40 kg	25 kg	-	-
12/90	300 kg	160 kg	85 kg	40 kg	25 kg	-	-

- The specified holding values refer to screws with the largest screw diameter; thread shape similar to DIN 7998
- The anchoring depth of the wall plug must be observed
- Drilling method and drill hole cleaning must be adapted to the building material
- The recommended loads only apply to installation in the building material, not for installation in joints
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

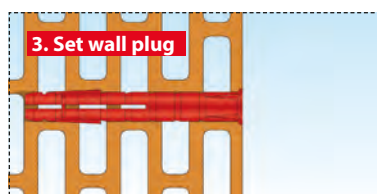
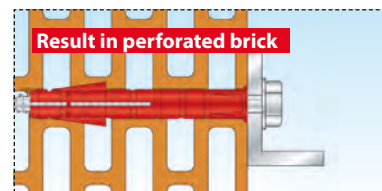
Description & Area of Application

- Multiple expansion by 2-way separated expansion elements which are offset by 90° with moving rotors and flexible wall plug neck
- Large anchoring depth



Processing & Installation

- Create drill hole in the size of the wall plug diameter
- Drill into perforated brick in a rotary motion without hammering so that the webs in the perforated brick are not broken
- Use hammer drilling into concrete and solid masonry
- Minimum screw length = wall plug length + attachment thickness + 5 mm
- Pre-positioned installation
- In solid masonry with a dense structure, the smallest possible screw Ø should be selected



Metal claw wall plug Tiger



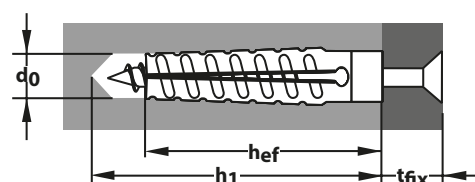
Features

- Optimal for gas pipes
- Ideal for ceiling mounting
- Can be driven into cellular concrete PP2
- Meets the technical regulations for gas pipes (TRGI 3.3.7.2)
- Secure screw guidance
- Suitable for wood, chipboard and hanger bolts



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**OPTIMAL FOR
GAS PIPES**



Pack	Item No.	Type	Content Wall Plug	Content Screw	Wall plug Ø	Wall plug length	Screw Size	Drill Ø	Min. Drill hole depth	Min. Setting Depth	Fixture Thickness	Approval
		Tiger	per pack	per pack	mm	mm	Ø mm	d0 Ø mm	h1 ≥ mm	hef mm	tfix ≤ mm	ETA
	039 100 011	6/32	100x	-	6	32	5.0 - 6.0	7 - 9	42	32	-	-
	039 100 021	8/38	100x	-	8	38	6.0 - 8.0	10 - 12	48	38	-	-
	039 100 031	8/60	100x	-	8	60	6.0 - 8.0	10 - 12	70	60	-	-
	039 100 051	10/60	100x	-	10	60	8.0 - 10.0	12 - 14	70	60	-	-





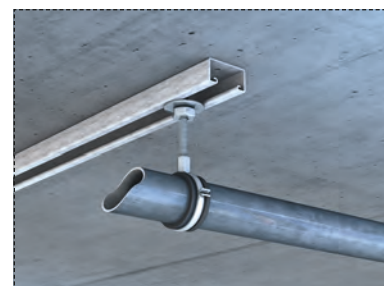
Tiger	Concrete C 20/25	Solid brick MZ 12	Vertically perforated brick ≥ Hlz12 Bulk density ≥ 1 kg/dm³	Hollow brick ≥ Hbl2	Cellular concrete ≥ PB2, PP2	Gypsum plasterboard 12.5 mm	Gypsum fibreboard 12.5 mm
6/32	40 kg	30 kg	30 kg	20 kg	15 (30) kg	-	-
8/38	60 kg	50 kg	30 kg	20 kg	25 (50) kg	-	-
8/60	80 kg	70 kg	30 kg	20 kg	35 (50) kg	-	-
10/60	100 kg	90 kg	30 kg	20 kg	45 (70) kg	-	-

() = PP6

- The specified holding values refer to screws with the largest possible screw diameter
- The anchoring depth of the wall plug must be observed, drilling method and drill hole cleaning must be adapted to the building material
- The recommended loads only apply to installation in the building material, not for installation in joints
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

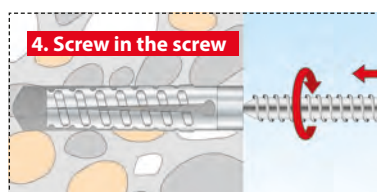
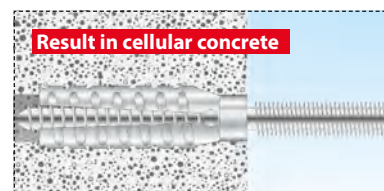
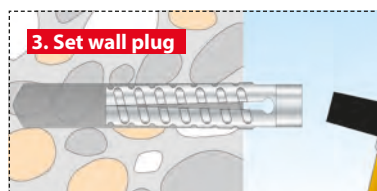
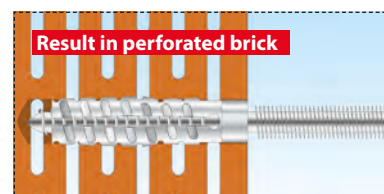
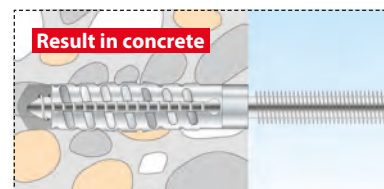
Description & Area of Application

- 4-part expansion element with external cogs and internal ribs
- Can be used in various substrates



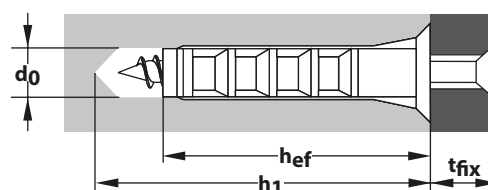
Processing & Installation

- Can be driven into cellular concrete PP2 without pre-drilling
- In concrete and solid masonry (building materials with high compressive strength), make the hole with the largest possible drill bit
- Minimum screw length = wall plug length + attachment thickness + 5 mm
- Pre-positioned installation





Features

- Highest holding values on the market
- No setting tool required
- Suitable for different screw diameters
- Very good anti-twist protection due to special outer contour
- Excellent screw guidance



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Pack	Item No.	Type	Content Wall Plug	Content Screw	Wall plug Ø	Wall plug length	Screw Size	Drill Ø	Min. Drill hole depth	Min. Setting Depth	Fixture Thickness	Approval
	Ytox		per pack	per pack	mm	mm	Ø mm	d0 Ø mm	h1 ≥ mm	hef mm	tfix ≤ mm	ETA
	096 100 041	10/55	25x	-	10	55	4.5 - 6.0	10	65	55	-	-
	096 100 061	12/60	20x	-	12	60	7.0 - 8.0	12	70	60	-	-
	096 100 081	14/75	10x	-	14	75	10.0	14	85	75	-	-
	Ytox		per pack	per pack	mm	mm	Ø mm	d0 Ø mm	h1 ≥ mm	hef mm	tfix ≤ mm	ETA
	096 700 041	10/55	2x	-	10	55	4.5 - 6.0	10	65	55	-	-
	096 700 061	12/60	2x	-	12	60	7.0 - 8.0	12	70	60	-	-
	096 700 081	14/75	2x	-	14	75	10.0	14	85	75	-	-



Ytox	Concrete C 20/25	Solid brick MZ 12	Vertically perforated brick Bulk density $\geq 1 \text{ kg/dm}^3$	Hollow brick $\geq \text{Hbl2}$	Cellular concrete $\geq \text{PB2, PP2}$	Gypsum plasterboard 12.5 mm	Gypsum fibreboard 12.5 mm
10/55	-	-	-	-	25 kg	-	-
12/60	-	-	-	-	30 kg	-	-
14/75	-	-	-	-	40 kg	-	-

- The specified holding values refer to screws with the largest screw diameter; thread shape similar to DIN 7998
- The anchoring depth of the wall plug must be observed
- Drilling method and drill hole cleaning must be adapted to the building material
- The recommended loads only apply to installation in the building material, not for installation in joints
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

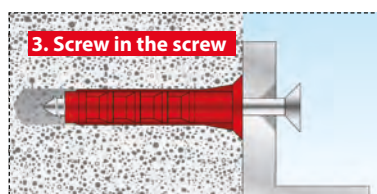
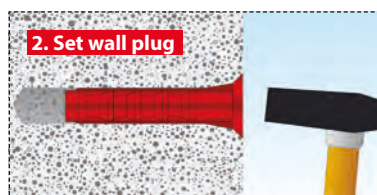
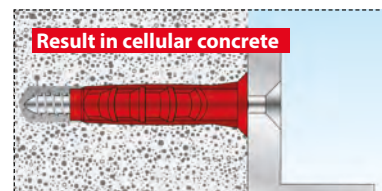
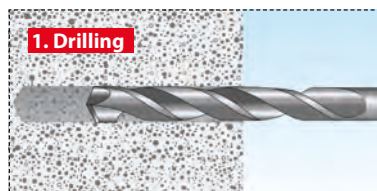
Description & Area of Application

- Triangular shaped wall plug with 3-way split expansion element and countersunk head
- Three-way split anchoring that is approximately form-fitting
- Ytox 10/55 can be easily driven into unrendered cellular concrete PP2

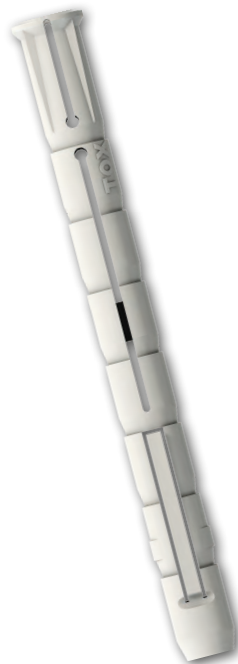


Processing & Installation

- Minimum screw length = wall plug length + attachment thickness + 5 mm
- Drill without hammering
- Pre-positioned installation



**IDEAL FOR
CRUMBLY
WALLS**

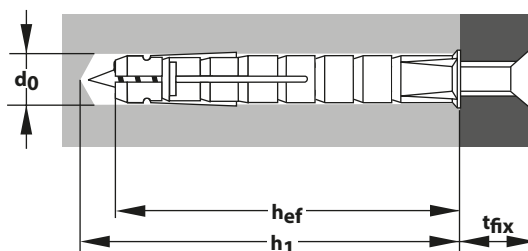


Features

- Ideal for crumbly and porous building materials
- All-purpose character: also holds in mixed masonry, as is often the case in old buildings
- Spreads in several directions and thus ensures secure anchoring and high holding values
- Extra deep seating in masonry
- Extending rotors prevent rotation in the drill hole
- 100% nylon
- **Altbaujoker + screw:** perfectly matched system



www.YouTube.com/toxgermany



Pack	Item No.	Type	Content Wall Plug	Content Screw	Wall plug Ø	Wall plug length	Screw Size	Drill Ø	Min. Drill hole depth	Min. Anchoring depth	Fixture Thickness	Approval
	Altbaujoker		per pack	per pack	mm	mm	Ø mm	d0 Ø mm	h1 ≥ mm	hef mm	tfix ≤ mm	ETA
	009 101 251	8/90	12x	12x	8	90	6x100	8	100	90	10	-
	009 101 271	10/90	10x	10x	10	90	7x100	10	100	90	10	-
	Altbaujoker		per pack	per pack	mm	mm	Ø mm	d0 Ø mm	h1 ≥ mm	hef mm	tfix ≤ mm	ETA
	009 701 251	8/90	2x	2x	8	90	6x100	8	100	90	10	-
	009 701 271	10/90	2x	2x	10	90	7x100	10	100	90	10	-



Altbaujoker	Concrete C 20/25	Solid brick MZ 12	Vertically perforated brick ≥ Hlz12 Bulk density 1 kg/dm³	Hollow brick ≥ Hbl2	Cellular concrete ≥ PB2, PP2	Gypsum plasterboard 12.5 mm	Gypsum fibreboard 12.5 mm
8/90	110 kg	80 kg	25 kg	15 kg	15 kg	-	-
10/90	220 kg	190 kg	60 kg	40 kg	30 kg	-	-

- The anchoring depth of the wall plug must be observed
- Drilling method and drill hole cleaning must be adapted to the building material
- The recommended loads only apply to installation in the building material, not for installation in joints
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

Description & Area of Application

- Multiple spreading by means of 2-way separated spreading elements offset by 90°
- Movable rotors
- Flexible wall plug neck
- Large anchoring depth

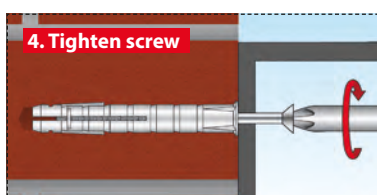
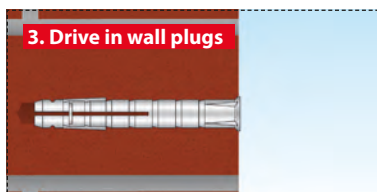
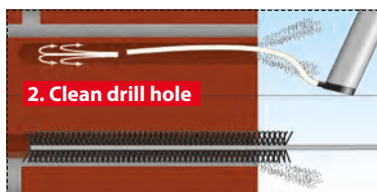
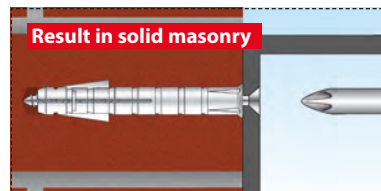
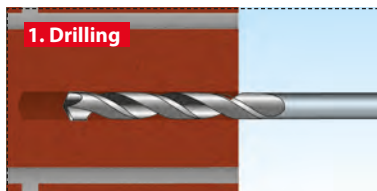
Altbaujoker + Screw:

- Screw with TX driver



Processing & Installation

- Create drill hole in the size of the wall plug diameter
- Drill into concrete and solid masonry with hammer drill, into perforated stone without hammering
- Pre-positioned installation

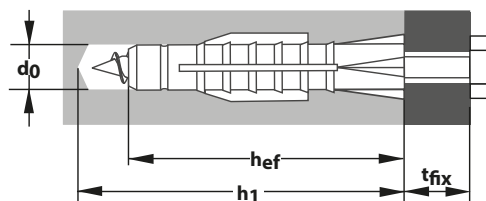


Features

- With original Tri wall plug
- High holding values in almost all building materials
- Secure tying in cavities
- Spreads reliably in solid masonry
- Anti-rotation locks prevent rotation in the drill hole
- Optimally aligned components



www.YouTube.com/toxgermany



Pack	Item No.	Type	Content	Wall plug Ø	Wall plug length	Screw Size	Driver	Drill Ø	Screw	Min. Drill hole depth	Min. Anchoring depth	Thickness Fixing
		System Trix	per pack	mm	mm	ø mm		d0 ø mm	mm	h1 ≥ mm	hef mm	tfix ≤ mm
	045 101 53	10/61	2x 2x 2x (16 x 8.4 x 1.4)	10	61	8.0 x 80	SW13	10	8.0 x 80	85	60	12
		System Trix	per pack	mm	mm	ø mm		d0 ø mm	mm	h1 ≥ mm	hef mm	tfix ≤ mm
	045 101 42	12/71	2x 2x 2x (20 x 10.5 x 2.0)	12	71	10.0 x 90	SW17	12	10.0 x 90	95	71	10

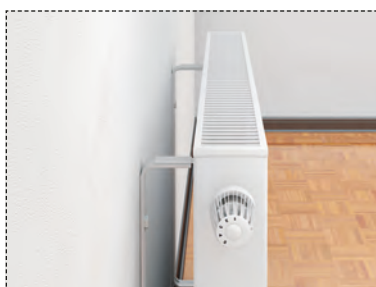


Tri	Concrete C 20/25	Solid brick MZ 12	Vertically perforated brick ≥ Hlz12 Bulk density 1 kg/dm³	Hollow brick ≥ Hbl2	Cellular concrete ≥ PB2, PP2	Plasterboard 12.5 mm	Gypsum fibre 12.5 mm
10/61	130 kg	80 kg	35 kg	30 kg	20 kg	-	30 kg
12/71	160 kg	120 kg	40 kg	30 kg	25 kg	-	-

- The specified holding values refer to screws with the largest screw diameter; thread shape similar to DIN 7998
- The anchoring depth of the wall plug must be observed
- Drilling method and drill hole cleaning must be adapted to the building material
- The recommended loads only apply to installation in the building material, not for installation in joints
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

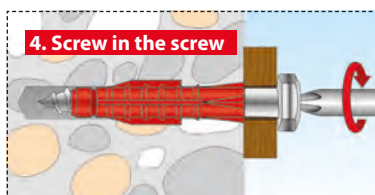
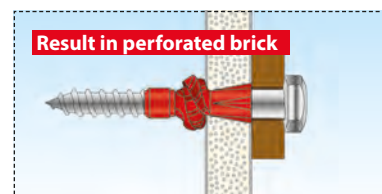
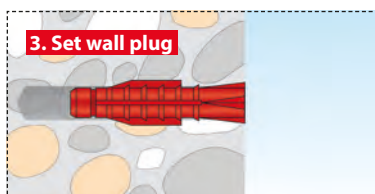
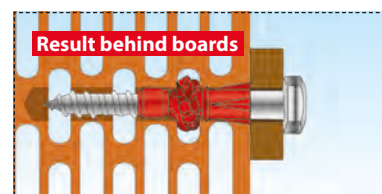
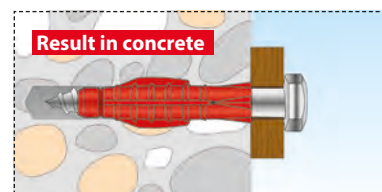
Description & Area of Application

- For fastening of: Radiators, boilers, hot water heaters, etc.
- For fastening in: Concrete, solid brick, perforated brick, porous concrete, gypsum plasterboard



Processing & Installation

- Create drill hole in the size of the wall plug diameter
- Drill into perforated brick and gypsum plasterboards without hammering in a rotary motion so that the drill hole is not too big and the webs in the perforated brick are not broken.
- When drilling into gypsum plasterboard, use a wood or metal drill bit
- Use hammer drilling into concrete and solid masonry
- Pre-positioned and through installation





System Fix

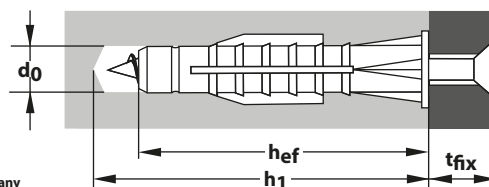
System Fix Plus


System Fix Pro


Features


- Optimally aligned components
- **System Fix and System Fix Pro** with coloured stickers for invisible screw heads
- With original Tri and Barracuda wall plugs


www.YouTube.com/toxgermany

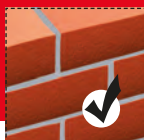
www.YouTube.com/toxgermany


Pack	Item No.	Type	Content	Wall plug Ø	Wall plug length	Screw Size	Drill Ø	Min. Drill hole depth	Min. Anchoring depth	Fixture Thickness
	System Fix		per pack	mm	mm	mm	d0 ø mm	h1 ≥ mm	hef mm	tfix ≤ mm
	013 701 641	Barracuda 8/40	10x Barracuda 10x screw 10x sticker Ø 13 mm (white) 10x sticker Ø 13 mm (chrome) 10x sticker Ø 13 mm (brown) 10x sticker Ø 13 mm (black)	8	40	6.0 x 60	8	55	40	14

Pack	Item No.	Type	Content	Wall plug Ø	Wall plug length	Screw Size	Drill Ø	Min. Drill hole depth	Min. Anchoring depth	Fixture Thickness
	System Fix Plus		per pack	mm	mm	mm	d0 ø mm	h1 ≥ mm	hef mm	tfix ≤ mm
	010 701 441	Tri 36	10x Tri 10x screw 10x sticker Ø 13 mm (white) 10x sticker Ø 13 mm (chrome) 10x sticker Ø 13 mm (brown) 10x sticker Ø 13 mm (black)	6	36	4.5 x 50	6	50	36	10

Pack	Item No.	Type	Content Wall Plug	Content Screw	Wall plug Ø	Wall plug length	Screw Size	Drill Ø	Min. Drill hole depth	Min. Setting Depth	Thickness Fixing
	System Fix Pro		per pack	per pack	mm	mm	ø mm	d0 ø mm	h1 ≥ mm	hef mm	tfix ≤ mm
	010 261 46	Tri 5/31	100x	100x	5	31	4.0 x 40	5	40	31	10
	010 261 45	Tri 6/36	70x	70x	6	36	4.5 x 45	6	45	36	10

* only suitable for single sheet gypsum plasterboard



	Concrete C 20/25	Solid brick MZ 12	Vertically perforated brick ≥ Hlz12 Bulk density 1 kg/dm³	Hollow brick ≥ Hbl2	Cellular concrete ≥ PB2, PP2	Plasterboard 12.5 mm	Gypsum fibre 12.5 mm
System Fix	50 kg	40 kg	-	-	-	-	-
System Fix Plus	50 kg	30 kg	20 kg	-	-	10 kg	-
System Fix Pro 5/31	25 kg	15 kg	15 kg	-	-	6 kg	-
System Fix Pro 6/36	50 kg	30 kg	20 kg	-	-	10 kg	-

- The anchoring depth of the wall plug must be observed
- Drilling method and drill hole cleaning must be adapted to the building material
- The recommended loads only apply to installation in the building material, not for installation in joints
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

Description & Area of Application

System Fix:

- Barracuda 8/40 expansion wall plug with galvanised screw (PZ 2) with countersunk head

System Fix Plus:

- All-purpose wall plugTri 6/36 and galvanised screw (PZ2) with countersunk head

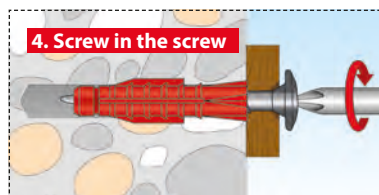
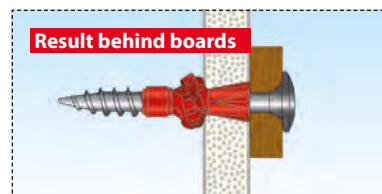
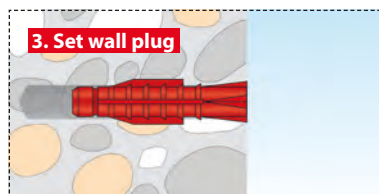
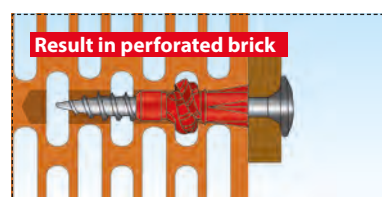
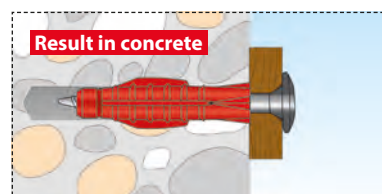
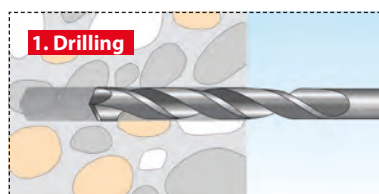
System Fix Pro:

- All-purpose wall plugTri and brass woodscrew (PZ2) with lens head



Processing & Installation

- Create drill hole in the size of the wall plug diameter
- Drill into perforated brick and gypsum plasterboards without hammering in a rotary motion so that the drill hole is not too big and the webs in the perforated brick are not broken.
- When drilling into gypsum plasterboards, use a wood or metal drill bit
- Use hammer drilling into concrete and solid masonry
- Pre-positioned and through installation



Features

Safe Fix:

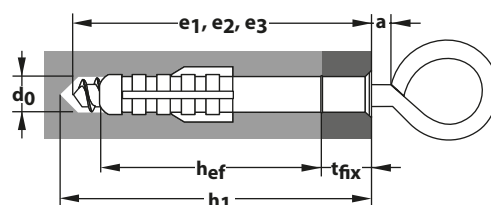
- Different wall plug shaft lengths for bridging non-load-bearing layers



Safe Fix Eye:

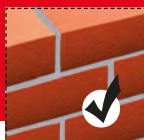
- Marking for easy inspection of the min. screw-in depth
- Welded eyelet prevents bending
- Optimally matched to Safe Fix

Safe Fix Cap:

- Secure & rapid closure of the drill holes



Pack	Item No.	Type	Content Wall Plug	Content Screw	Wall plug Ø	Wall plug length	Screw size	Drill Ø	Min. Drill hole depth	Min. Anchoring depth	Fixture Thickness	Approval	
	Safe Fix		per pack	per pack	mm	mm	Ø mm	d0 Ø mm	h1 ≥ mm	hef mm	tfix ≤ mm	ETA	
	060 100 021	14/70	20x	-	14	70	12	14	80	70	-	-	
	060 100 041	14/100	20x	-	14	100	12	14	110	70	30	-	
	060 100 061	14/135	20x	-	14	135	12	14	145	70	65	-	
Pack	Item No.	Type	Content Wall Plug	Content Screw	Screw Ø	Screw length	Eye Ø	min. Screw-in depth	Wall spacing	Min. Screw-in depth	Wall spacing	Min. Screw-in depth	Wall spacing
	Safe Fix Eye		per pack	per pack	mm	mm	mm	e1 ≥ mm	a ≤ mm	e2 ≥ mm	a ≤ mm	e3 ≥ mm	a ≤ mm
								when using Safe Fix 14/70		when using Safe Fix 14/100		when using Safe Fix 14/135	
	058 101 02	12 x 90	-	20x	12	90	23	75	15	-	-	-	-
	058 101 04	12 x 120	-	20x	12	120	23	75	45	105	15	-	-
	058 101 06	12 x 160	-	20x	12	160	23	75	85	105	55	140	20
	058 101 08	12 x 190	-	20x	12	190	23	75	115	105	85	140	50
	058 101 10	12 x 230	-	20x	12	230	23	75	155	105	125	140	90
	058 101 12	12 x 300	-	20x	12	300	23	75	225	105	195	140	160
	058 101 14	12 x 350	-	20x	12	350	23	75	275	105	245	140	210
Pack	Item No.	Type	Content Wall Plug	Content Screw	Cover cap Ø	Cover cap length	Approval						
	Safe Fix Cap		per pack	per pack	mm	mm	ETA						
	074 600 56	12 x 30	20x	-	12	30	-						



Safe Fix	Concrete C 20/25	Solid brick MZ 12+ KS 12	Vertically perforated brick ≥ Hlz12 Bulk density ≥ 1 kg/dm³	Hollow brick ≥ Hbz12	Cellular concrete ≥ PB2, PP2	Gypsum plasterboard 12.5 mm	Gypsum fibreboard 12.5 mm
14/70	330 kg	330 kg	-	-	-	-	-
14/100	330 kg	330 kg	-	-	-	-	-
14/135	330 kg	330 kg	-	-	-	-	-

- The anchoring depth of the wall plug must be observed
- The recommended loads only apply to installation in the building material, not for installation in joints
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

Description & Area of Application

Safe Fix Eye:

- Galvanized 12 mm eyebolt with 24 mm eye diameter
- High quality welding prevents bending of the eye
- Screw-in markings for easy visual inspection of the setting depth

Safe Fix:

- 14 mm special expansion wall plug optimally matched to Safe Fix Eye
- Available in 3 different lengths

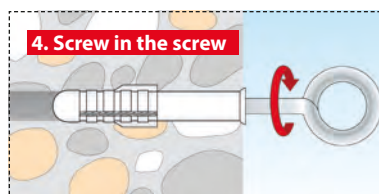
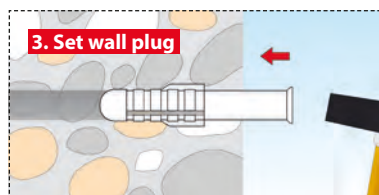
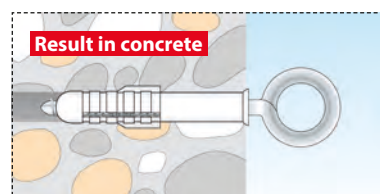
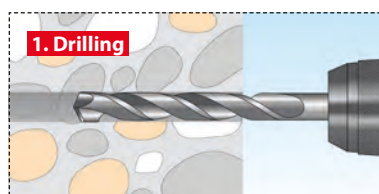
Safe Fix Cap:

- Made of transparent plastic for inconspicuous closure of drill holes



Processing & Installation

- The Safe Fix Eye may only be screwed into the Safe Fix once
- The marking grooves on the Safe Fix Eye scaffold screw mark the minimum screw-in depth

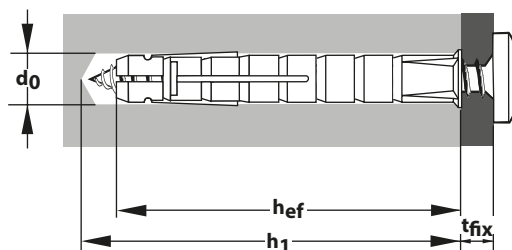


Features

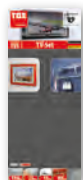
- Ideal for perforated brick (Poroton) and cellular concrete (Ytong)
- Extremely high holding values
- Spreads in several directions
- Rotors prevent rotation in the drill hole
- 100% nylon
- Long expansion range for secure anchoring
- Including optimally adjusted flat head screw



www.YouTube.com/toxgermany



Pack	Item No.	Type	Content Wall Plug	Content Screw	Wall plug Ø	Wall plug length	Screw Size	Drill Ø	Min. Drill hole depth	Min. Setting Depth	Fixture Thickness	Approval
	TV Set		per pack	per pack	mm	mm	ø mm	d0 ø mm	h1 ≥ mm	hef mm	tfix ≤ mm	ETA
	009 701 051	8/90	4x	4x	8	90	6x100	8	100	90	10	-





Bizeps	Concrete C 20/25	Solid brick MZ 12	Vertically perforated brick ≥ Hlz12 Bulk density ≥ 1 kg/dm³	Hollow brick ≥ Hbl2	Cellular concrete ≥ PB2, PP2	Gypsum plasterboard 12.5 mm	Gypsum fibreboard 12.5 mm
8/90	110 kg	80 kg	25 kg	15 kg	15 kg	-	-

- The anchoring depth of the wall plug must be observed
- Drilling method and drill hole cleaning must be adapted to the building material
- The recommended loads only apply to installation in the building material, not for installation in joints
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

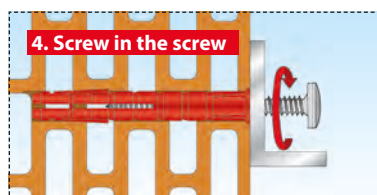
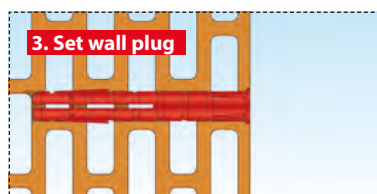
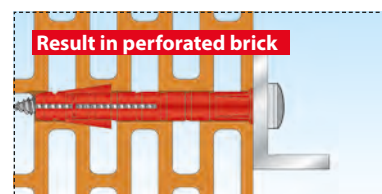
Description & Area of Application

- Multiple expansion by 2-way split expansion elements which are offset by 90° with moving rotors and flexible wall plug neck
- Large anchoring depth



Processing & Installation


- Create drill hole in the size of the wall plug diameter
- Drill into perforated brick in a rotary motion without hammering so that the webs in the perforated brick are not broken
- Use hammer drilling into concrete and solid masonry
- Pre-positioned installation



Features

- Rapid change bit holder
- Holds screws and bits completely securely by magnetism
- Bits with colour coding help to select and differentiate the driver
- Sturdy plastic box with easy-to-use belt clip
- Good bit overview even when attached to the belt
- There are two each of the most common bits
- Including adapter for 1/4" attachments



Pack	Item No.	Content
	Bit Set Clip On	per pack
	097900 02	<ul style="list-style-type: none"> 1x rapid change bit holder 1/4" 1x PH1, 2x PH2, 1x PH3 1x PZ1, 2x PZ2, 1x PZ3 1x3mm, 1x4mm, 1x5mm, 1x6mm 1x3mm, 1x4mm, 1x5mm, 1x6mm 1x TX10, 1x TX15, 1x TX20, 2x TX25, 1x TX30, 1x TX40 1x TX10, 1x TX15, 1x TX20, 2x TX25, 1x TX30, 1x TX40 1x 1/4"

Description


- Bit holder has a characteristic compact design
- A strong magnet holds the screw via the bit (one-hand operation)
- Easy and rapid change of bits, suitable for 1/4" bits of shape C 63
- Bit-Box is a 32-piece, sturdy, handy plastic box with belt clip

Tool carrying case **TOX-Box**



Features

- An orderly workplace
- Everything at your fingertips

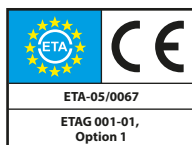
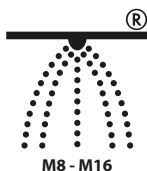
Pack	Item No.	Content
	TOX Box	per pack
	097 900 62	1x

Description

- TOX-Box made of impact resistant plastic
- External dimensions 30 x 40 cm



Feuerwiderstandsklasse
R120
Detailliertes
siehe Prüfbericht

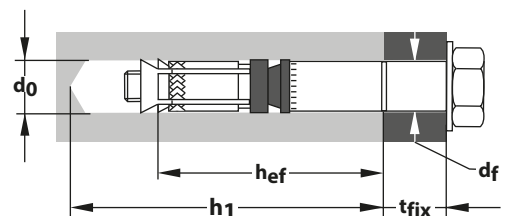


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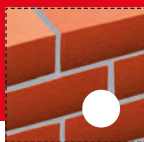
Features

- Strong hold even with hollow layers
- Approved by the building authorities
- For cracked and non-cracked concrete
- Tested to fire resistance class R120
- Small axis and edge distances
- Earthquake tested C1



Pack	Item No.	Type	Content anchor	Wall Plug	Wall plug length	Driver	Drill Ø	Min. Drill hole depth	Min. Anchoring depth	Fixture Thickness	Torque Tightening	Approval
	Dual Force 1		per pack	M	mm		d0 / df ø mm	h1 ≥ mm	hef ≥ mm	tfix ≤ mm	Tinst Nm	ETA
	032 100 02	10/10	50x	M6	75	SW10	10 / 12	65	50	10	15	■
	032 100 12	12/10	50x	M8	85	SW13	12 / 14	80	60	10	30	■
	032 100 13	12/30	50x	M8	105	SW13	12 / 14	80	60	30	30	■
	032 100 22	15/15	25x	M10	106	SW17	15 / 17	95	71	15	50	■
	032 100 24	15/45	25x	M10	136	SW17	15 / 17	95	71	45	50	■
	032 100 34	18/40	20x	M12	147	SW19	18 / 20	105	80	40	80	■
	032 100 44	24/50	10x	M16	180	SW24	24 / 26	130	100	50	160	■

Pack	Item No.	Type	Content anchor	Wall Plug	Wall plug length	Driver	Drill Ø	Min. Drill hole depth	Min. Anchoring depth	Fixture Thickness	Torque Tightening	Approval
	Dual Force Bolt 1		per pack	M	mm		d0 / df ø mm	h1 ≥ mm	hef ≥ mm	tfix ≤ mm	Tinst Nm	ETA
	033 100 03	10/30	50x	M6	97	SW10	10 / 12	65	50	30	15	■
	033 100 12	12/10	50x	M8	90	SW13	12 / 14	80	60	10	30	■
	033 100 13	12/30	50x	M8	110	SW13	12 / 14	80	60	30	30	■
	033 100 14	12/50	25x	M8	130	SW13	12 / 14	80	60	50	30	■
	033 100 22	15/15	25x	M10	111	SW17	15 / 17	95	71	15	50	■
	033 100 23	15/25	25x	M10	121	SW17	15 / 17	95	71	25	50	■
	033 100 24	15/45	25x	M10	141	SW17	15 / 17	95	71	45	50	■
	033 100 33	18/20	20x	M12	132	SW19	18 / 20	105	80	20	80	■
	033 100 34	18/40	20x	M12	152	SW19	18 / 20	105	80	40	80	■



Dual Force 1 + Dual Force Bolt 1	M6	M8	M10	M12	M16
Effective anchoring depth	50 mm	60 mm	71 mm	80 mm	100 mm
Permissible central tension load of a single wall plug without environmental effects N_{zul}					
cracked concrete C20/25	240 kg	570 kg	760 kg	1230 kg	1710 kg
uncracked concrete C20/25	760 kg	950 kg	1430 kg	1720 kg	2400 kg
Permissible shear load of a single anchor without environmental effects V_{zul}					
cracked concrete C20/25	1000 kg	1590 kg	2050 kg	2450 kg	3430 kg
uncracked concrete C20/25	1010 kg	1710 kg	2750 kg	3430 kg	4800 kg
permissible bending moment M_{zul}	7 Nm	17 Nm	34 Nm	60 Nm	152 Nm
Component dimensions and installation characteristics					
minimum axis distance s_{min} for edge distance c	50/80 mm	60/100 mm	70/120 mm	80/160 mm	100/180 mm
minimum edge distance c_{min} for axis distance s	50/100 mm	60/120 mm	70/175 mm	80/200 mm	100/220 mm
Minimum component thickness h_{min}	100 mm	120 mm	140 mm	160 mm	200 mm
Drill core diameter d_0	10 mm	12 mm	15 mm	18 mm	24 mm
Drill hole depth $h_1 \geq$	65 mm	80 mm	95 mm	105 mm	130 mm
Through hole in the component to be connected $d_f \leq$	12 mm	14 mm	17 mm	20 mm	26 mm
Torque when anchoring T_{inst}	15 Nm	30 Nm	50 Nm	80 Nm	160 Nm

- When sizing, the entire declaration of performance of the Dual Force 1/ Dual Force Bolt 1 must be observed
- The partial safety factors of the resistances and a partial safety factor of $\gamma_F = 1.4$ are to be considered
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

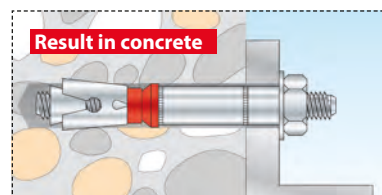
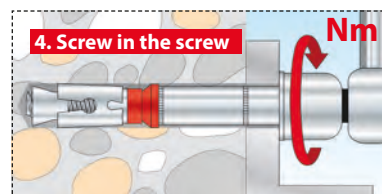
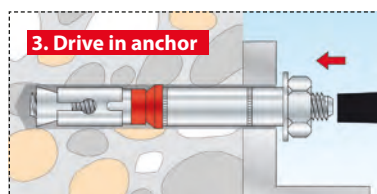
Description & Area of Application

- Heavy duty anchor made of galvanised steel with hexagonal head screw
- The red plastic ring is used to compensate for hollow layers, ensures that the attachment is permanently braced against the substrate and prevents the anchor from rotating during installation
- Dimensions \geq M8 suitable for fastening sprinkler systems



Processing & Installation

- Use only in dry indoor areas
- The specified torque must be observed
- Through installation





www.YouTube.com/toxgermany

Features

- Approved by the building authorities
- Impact protection protects the thread
- Immediately load-bearing
- Two setting depths
- Setting depth marking for visual inspection of installation

Pack	Item No.	Type	Content anchor	Wall Plug	Wall plug length	Driver	Drill Ø	Drill hole depth	Anchoring depth	Fixture Thickness	Torque Tightening	Approval
		S-Fix Plus galvanised	per pack	metric	mm		d0 / d1 ø mm	h1 max / min mm	hef max / min mm	tfix min / max mm	Tinst Nm	ETA
	042 101 02	M6 x 70/12	100x	M6	70	SW10	6 / 7	55 / -	40 / -	12 / -	7	■
	042 101 05	M8 x 60/3	100x	M8	60	SW13	8 / 9	- / 50	- / 35	- / 3	20	■
	042 101 07	M8 x 75/5+18	100x	M8	75	SW13	8 / 9	65 / 50	48 / 35	5 / 18	20	■
	042 101 09	M8 x 100/30+43	50x	M8	100	SW13	8 / 9	65 / 50	48 / 35	30 / 43	20	■
	042 101 11	M8 x 130/60+73	50x	M8	130	SW13	8 / 9	65 / 50	48 / 35	60 / 73	20	■
	042 101 19	M10 x 80/13	50x	M10	80	SW17	10 / 12	- / 60	- / 42	- / 13	35	■
	042 101 21	M10 x 100/20+33	50x	M10	100	SW17	10 / 12	75 / 60	55 / 42	20 / 33	35	■
	042 101 23	M10 x 120/40+53	25x	M10	120	SW17	10 / 12	75 / 60	55 / 42	40 / 53	35	■
	042 101 25	M10 x 140/60+73	25x	M10	140	SW17	10 / 12	75 / 60	55 / 42	60 / 73	35	■
	042 101 29	M12 x 100/8+23	25x	M12	100	SW19	12 / 14	85 / 70	65 / 50	8 / 23	60	■
	042 101 31	M12 x 110/18+33	25x	M12	110	SW19	12 / 14	85 / 70	65 / 50	18 / 33	60	■
	042 101 33	M12 x 140/48+63	25x	M12	140	SW19	12 / 14	85 / 70	65 / 50	48 / 63	60	■
	042 101 35	M12 x 160/68+83	25x	M12	160	SW19	12 / 14	85 / 70	65 / 50	68 / 83	60	■
	042 101 38	M12 x 180/88+103	20x	M12	180	SW19	12 / 14	85 / 70	65 / 50	88 / 103	60	■
	042 101 40	M12 x 220/128+143	20x	M12	220	SW19	12 / 14	85 / 70	65 / 50	128 / 143	60	■
	042 101 43	M16 x 125/3+22	20x	M16	125	SW24	16 / 18	110 / 90	84 / 65	3 / 22	120	■
	042 101 45	M16 x 145/23+42	10x	M16	145	SW24	16 / 18	110 / 90	84 / 65	23 / 43	120	■
	042 101 47	M16 x 170/48+67	10x	M16	170	SW24	16 / 18	110 / 90	84 / 65	48 / 67	120	■
	042 101 49	M16 x 195/73+92	10x	M16	195	SW24	16 / 18	110 / 90	84 / 65	73 / 92	120	■
	042 101 52	M20 x 170/23+49	10x	M20	170	SW30	20 / 22	135 / 107	75 / 103	23 / 49	240	■



S-Fix Plus galvanised	M6	M8		M10		M12		M16		M20	
		min.	max.	min.	max.	min.	max.	min.	max.	min.	max.
Effective anchoring depth	40 mm	35 mm	48 mm	42 mm	55 mm	50 mm	65 mm	65 mm	84 mm	75 mm	103 mm
Permissible central tension load of a single wall plug without environmental effects N_{zul}											
uncracked concrete C20/25	380 kg	480 kg	660 kg	710 kg	900 kg	930 kg	1140 kg	1370 kg	2020 kg	1700 kg	2740 kg
Permissible shear load of a single anchor without environmental effects V_{zul}											
uncracked concrete C20/25	290 kg	530 kg	530 kg	840 kg	840 kg	1180 kg	1180 kg	2190 kg	2190 kg	3220 kg	3220 kg
Installation characteristics											
minimum centre distance s_{min}	35 mm	40 mm		50 mm		70 mm		90 mm		135 mm	
minimum edge distance c_{min}	35 mm	40 mm		50 mm		70 mm		90 mm		135 mm	
Minimum component thickness h_{min}	100 mm	100 mm	100 mm	100 mm	110 mm	100 mm	130 mm	130 mm	168 mm	150 mm	206 mm
Drill $\varnothing d_0$	6 mm	8 mm		10 mm		12 mm		16 mm		20 mm	
min. borehole depth $h_1 \geq$	55 mm	50 mm	65 mm	60 mm	75 mm	70 mm	85 mm	90 mm	110 mm	107 mm	135 mm
Through hole in attachment part $d_f \leq$	7 mm	9 mm		12 mm		14 mm		18 mm		22 mm	
Tightening torque T_{inst}	7 Nm	20 Nm		35 Nm		60 Nm		120 Nm		240 Nm	

- When sizing, the entire declaration of performance of the S-Fix Plus must be observed
- The partial safety factors of the resistances and a partial safety factor of $\gamma_F = 1.4$ are to be considered
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

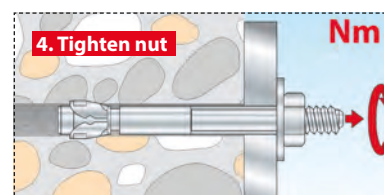
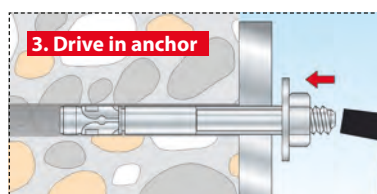
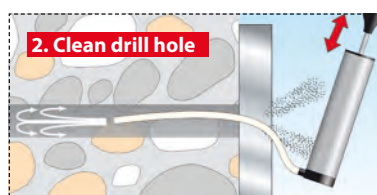
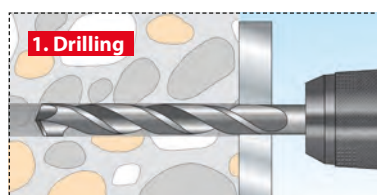
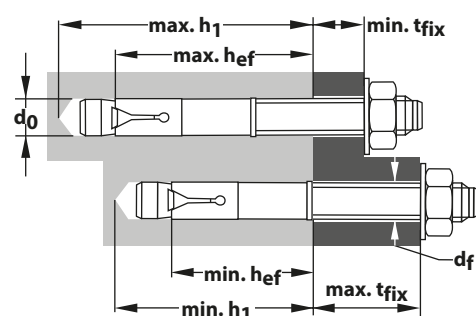
Description & Area of Application

- Galvanised bolt anchor with long thread, washer and hexagonal nut
- Second anchoring depth enables the fastening of attachments with a wide range of thicknesses
- Torque-controlled wall plug
- Small axis and edge distances for near-edge fastenings and small anchor plates



Processing & Installation

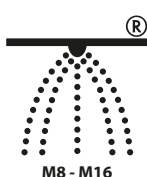
- Use only in dry indoor areas
- The specified torque must be observed
- Through installation



Bolt anchor S-Fix Pro galvanised



Feuerwiderstandsklasse
R120
Dübelgröße
siehe Prüfbericht

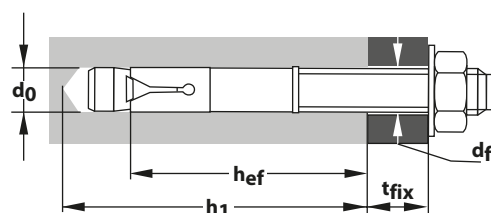


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Features

- Earthquake tested C1 and C2
- Fire resistance class R120
- Approved by the building authorities
- Impact protection protects the thread
- Immediately load-bearing
- Extreme hold
- Setting depth marking for visual inspection of installation



Pack	Item No.	Type	Content anchor	Wall Plug	Wall plug length	Driver	Drill Ø	Drill hole depth	Anchoring depth	Fixture Thickness	Torque Tightening	Approval
		S-Fix Pro galvanised	per pack	metric	mm		d0 / df ø mm	h1 ≥ mm	hef ≥ mm	tfix ≤ mm	Tinst Nm	ETA
	040 102 10	M8 x 75/9	100	M8	75	SW13	8 / 9	60	48	9	15	■
	040 102 11	M8 x 95/29	50	M9	95	SW13	8 / 9	60	48	29	15	■
	040 102 15	M10 x 90/10	50	M10	90	SW17	10 / 12	75	60	10	40	■
	040 102 16	M10 x 105/25	25	M10	105	SW17	10 / 12	75	60	25	40	■
	040 102 19	M10 x 135/55	25	M10	135	SW17	10 / 12	75	60	55	40	■
	040 102 23	M12 x 110/14	25	M12	110	SW19	12 / 14	85	70	14	60	■
	040 102 24	M12 x 120/24	25	M12	120	SW19	12 / 14	85	70	24	60	■
	040 102 27	M12 x 150/54	25	M12	150	SW19	12 / 14	85	70	54	60	■
	040 102 29	M12 x 180/84	20	M12	180	SW19	12 / 14	85	70	84	60	■
	040 102 34	M16 x 145/28	10	M16	145	SW24	16 / 18	105	85	28	100	■
	040 102 37	M16 x 175/58	10	M16	175	SW24	16 / 18	105	85	58	100	■





S-Fix Pro galvanised	M8	M10	M12	M16
Effective anchoring depth	48 mm	60 mm	70 mm	85 mm
Permissible central tension load of a single wall plug without environmental effects N_{zul}				
cracked concrete C20/25	240 kg	430 kg	760 kg	1190 kg
uncracked concrete C20/25	360 kg	760 kg	1190 kg	1670 kg
Permissible shear load of a single anchor without environmental effects V_{zul}				
cracked concrete C20/25	570 kg	990 kg	1450 kg	2690 kg
uncracked concrete C20/25	630 kg	990 kg	1450 kg	2690 kg
Installation data				
minimum centre distance s_{min}	50 mm	60 mm	70 mm	85 mm
minimum edge distance c_{min}	50 mm	60 mm	75 mm	85 mm
Minimum component thickness h_{min}	100 mm	120 mm	140 mm	170 mm
Drill core diameter d_0	8 mm	10 mm	12 mm	16 mm
min. borehole depth $h_1 \geq$	60 mm	75 mm	85 mm	105 mm
Through hole in the component to be connected $d_f \leq$	9 mm	12 mm	14 mm	18 mm
Tightening torque T_{inst}	15 Nm	40 Nm	60 Nm	100 Nm

- When sizing, the entire declaration of performance of the S-Fix Pro must be observed
- The partial safety factors of the resistances and a partial safety factor of $\gamma_F = 1.4$ are to be considered
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

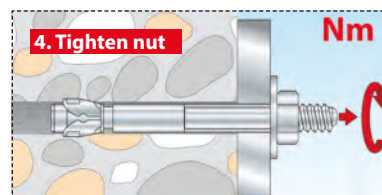
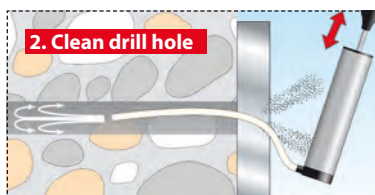
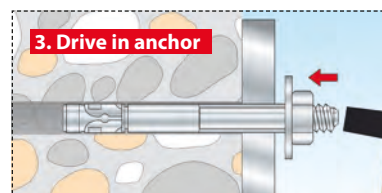
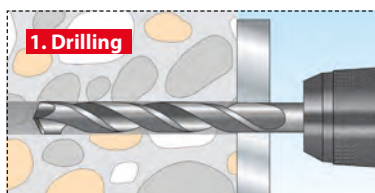
Description & Area of Application

- Galvanised bolt anchor, washer and hexagonal nut
- Torque-controlled wall plug
- Small axis and edge distances for near-edge fastenings and small anchor plates
- Secure adherence to the required setting depth due to setting depth marking



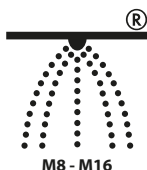
Processing & Installation

- Use only in dry indoor areas
- The specified torque must be observed
- Through installation





Feuerwiderstandsklasse
R120
Dübelgröße
siehe Prüfbericht



M8 - M16



ETA-13/0825

ETAG 001-01,
Option 1

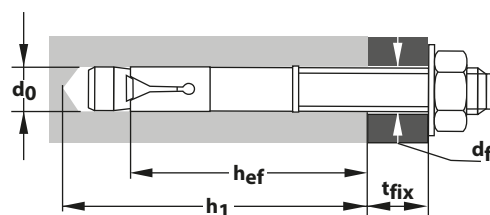




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Features

- Up to 50% higher holding values
- Up to 30% smaller axis and edge distances
- Universal application in cracked and uncracked concrete
- Suitable for indoor and outdoor installation due to weatherproof design in stainless steel A4
- Fire resistance class R120
- Approved by the building authorities
- Earthquake tested C1 and C2



Pack	Item No.	Type	Content anchor	Wall Plug	Wall plug length	Driver	Drill Ø	Drill hole depth	Anchoring depth	Fixture Thickness	Torque Tightening	Approval
	S-Fix Pro 1 Stainless steel A4		per pack	metric	mm		d0 / df ø mm	h1 mm	hef mm	tfix mm	Tinst Nm	ETA
	040 171 071	M8 x 75/10	100x	M8	75	SW13	8 / 9	70	48	10	20	■
	040 171 081	M8 x 90/25	50x	M8	90	SW13	8 / 9	70	48	25	20	■
	040 171 101	M10 x 90/10	50x	M10	90	SW17	10 / 12	80	60	10	40	■
	040 171 111	M10 x 105/25	50x	M10	105	SW17	10 / 12	80	60	25	40	■
	040 171 121	M10 x 115/35	25x	M10	115	SW17	10 / 12	80	60	35	40	■
	040 171 141	M12 x 110/10	25x	M12	110	SW19	12 / 14	100	72	10	60	■
	040 171 151	M12 x 120/20	25x	M12	120	SW19	12 / 14	100	72	20	60	■
	040 171 171	M16 x 130/10	20x	M16	130	SW24	16 / 18	115	86	10	120	■
	040 171 181	M16 x 150/30	10x	M16	150	SW24	16 / 18	115	86	30	120	■



S-Fix Pro 1 Stainless steel A4	M8	M10	M12	M16
Effective anchoring depth	48 mm	60 mm	72 mm	86 mm
Permissible central tension load of a single wall plug without environmental effects N_{zul}				
cracked concrete C20/25	240 kg	430 kg	570 kg	1190 kg
uncracked concrete C20/25	430 kg	760 kg	950 kg	1660 kg
Permissible shear load of a single anchor without environmental effects V_{zul}				
cracked concrete C20/25	570 kg	1030 kg	1500 kg	2730 kg
uncracked concrete C20/25	650 kg	1030 kg	1500 kg	2800 kg
permissible bending moment M_{zul}	13.2 Nm	26.9 Nm	46.7 Nm	118.7 Nm
Component dimensions and installation characteristics				
minimum centre distance s_{min}	50 mm (edge distance ≥ 50 mm)	55 mm (edge distance ≥ 70 mm)	60 mm (edge distance ≥ 80 mm)	70 mm (edge distance ≥ 100 mm)
minimum edge distance c_{min}	50 mm (axis distance ≥ 50 mm)	50 mm (axis distance ≥ 110 mm)	60 mm (axis distance ≥ 120 mm)	70 mm (axis distance ≥ 130 mm)
Minimum component thickness h_{min}	100 mm	120 mm	150 mm	170 mm
Drill core diameter d_0	8 mm	10 mm	12 mm	16 mm
Drill hole depth $h_1 \geq$	70 mm	80 mm	100 mm	115 mm
Through hole in the component to be connected $d_f \leq$	9 mm	12 mm	14 mm	18 mm
Torque when anchoring T_{inst}	20 Nm	40 Nm	60 Nm	120 Nm

- When sizing, the entire declaration of performance of the S-Fix Pro 1 A4 must be observed
- The partial safety factors of the resistances and a partial safety factor of $\gamma_F = 1.4$ are to be considered
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

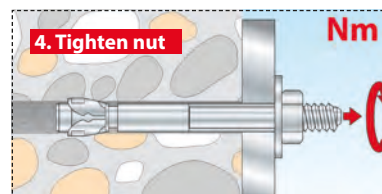
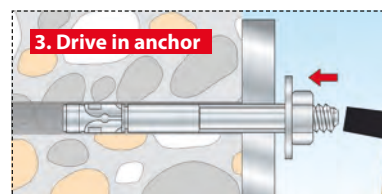
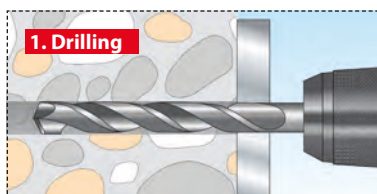
Description & Area of Application

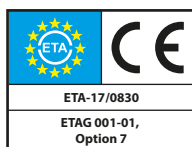
- Stainless steel A4 bolt anchor with long thread, washer and hexagonal nut
- Torque-controlled wall plug
- Small axis and edge distances for near-edge fastenings and small anchor plates
- Only a few hammer blows required to set the anchor
- The required torque is achieved with only a few revolutions



Processing & Installation

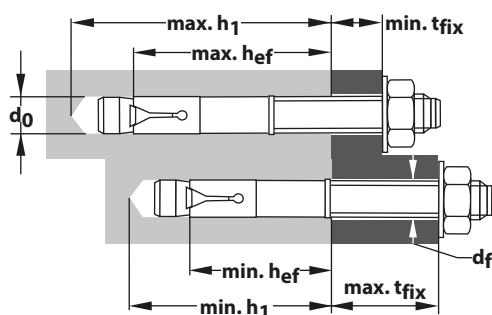
- Approved for indoor and outdoor installation as well as in damp rooms
- The specified torque must be observed
- Through installation




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Features

- Approved by the building authorities
- Impact protection protects the thread
- Immediately load-bearing
- Large washer especially for wooden structures
- Two anchoring depths



Pack	Item No.	Type	Content Wall plug	Wall plug Ø	Wall plug length	Tool	Drill Ø	Drill hole depth	Anchoring depth	Fixture Thickness	Torque Tightening	Approval
		Slim Fix	per pack	metric	mm		d0 / df ø mm	h1 max / min mm	hef max / min mm	tfix min / max mm	Tinst Nm	ETA
	080 101 33	M12x200/106+121	25	M12	200	SW 19	12 / 14	85 / 70	65 / 50	106 / 121	60	■
	080 101 34	M12x240/146+161	20	M12	240	SW 19	12 / 14	85 / 70	65 / 50	146 / 161	60	■
	080 101 35	M12x255/161+176	20	M12	255	SW 19	12 / 14	85 / 70	65 / 50	161 / 176	60	■
	080 101 36	M12x280/186+201	20	M12	280	SW 19	12 / 14	85 / 70	65 / 50	186 / 201	60	■
	080 101 44	M16x250/126+145	10	M16	250	SW 24	16 / 18	110 / 90	84 / 65	126 / 145	120	■
	080 101 45	M16x280/156+175	10	M16	280	SW 24	16 / 18	110 / 90	84 / 65	156 / 175	120	■

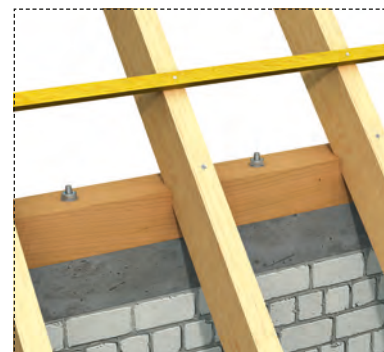


Slim-Fix	M12		M16	
	min	max	min	max
Effective anchoring depth	50 mm	65 mm	65 mm	84 mm
Permissible central tension load of a single wall plug without environmental effects N_{zul}				
uncracked concrete C20/25	930 kg	1140 kg	1370 kg	2020 kg
Permissible shear load of a single anchor without environmental effects V_{zul}				
uncracked concrete C20/25	1180 kg	1180 kg	2190 kg	2190 kg
Component dimensions and installation characteristics				
minimum centre distance s_{min}	70 mm	70 mm	90 mm	90 mm
minimum edge distance c_{min}	70 mm	70 mm	90 mm	90 mm
Minimum component thickness h_{min}	100 mm	130 mm	130 mm	168 mm
Drill core diameter d_0	12 mm	12 mm	16 mm	16 mm
Drill hole depth $h_1 \geq$	70 mm	85 mm	90 mm	110 mm
Through hole in the component to be connected $d_f \leq$	14 mm	14 mm	18 mm	18 mm
Torque when anchoring T_{inst}	60 Nm	60 Nm	120 Nm	120 Nm

- When sizing, the entire declaration of performance of the Slim Fix must be observed
- The partial safety factors of the resistances and a partial safety factor of $\gamma_F = 1.4$ are to be considered
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

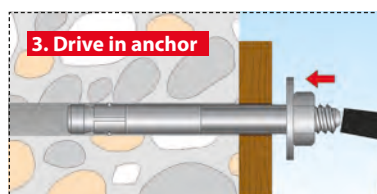
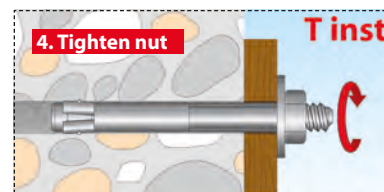
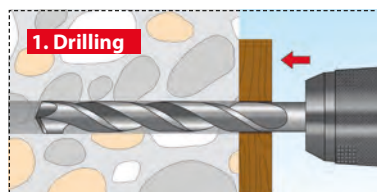
Description & Area of Application

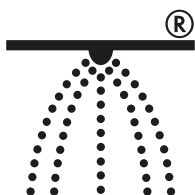
- Galvanised bolt anchor with long thread, large washer and hexagonal nut
- Second anchoring depth enables the fastening of attachments with a wide range of thicknesses
- Large washer DIN 440 (large outer diameter)
- Torque-controlled wall plug
- Small axis and edge distances for fastenings close to the edge



Processing & Installation

- Use only in dry indoor areas
- The specified torque must be observed
- Through installation



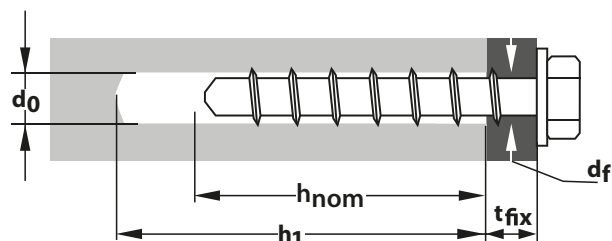




www.YouTube.com/toxgermany





Features

- Three possible anchoring depths
- Simple and rapid installation
- Suitable for temporary fastenings, as they can be removed
- With moulded washer
- Fire resistance class R120
- Approved by the building authorities
- Low spreading pressure
- Immediately load-bearing



Pack	Item No.	Type	Content anchor	Wall Plug	Wall plug length	Driver	Drill Ø	Min. Anchoring depth	Min. Drill hole depth	Thickness Fixing	Approval
	Sumo Pro 1 KB		per pack	Ø	mm		d0 / df Ø mm	h _{nom} mm	h ₁ ≥ mm	t _{fix} ≤ mm	ETA
	041101021	8x75	50	8	75	13	8 / 12	45 / 50 / 65	55 / 60 / 75	30 / 25 / 10	■
	041101041	8x100	50	8	100	13	8 / 12	45 / 50 / 65	55 / 60 / 75	55 / 50 / 35	■
	041101081	10x60	25	10	60	15	10 / 14	50 / - / -	60 / - / -	10 / - / -	■
	041101101	10x75	25	10	75	15	10 / 14	50 / 60 / -	60 / 70 / -	25 / 15 / -	■
	041101121	10x100	25	10	100	15	10 / 14	50 / 60 / 75	60 / 70 / 85	50 / 40 / 25	■
	041101161	12x75	25	12	75	16	12 / 16	50 / 60 / -	60 / 70 / -	25 / 15 / -	■

Pack	Item No.	Type	Content anchor	Wall Plug	Wall plug length	Driver	Drill Ø	Min. Anchoring depth	Min. Drill hole depth	Thickness Fixing	Approval
	Sumo Pro 1 KB		per pack	Ø	mm		d0 / df Ø mm	h _{nom} mm	h ₁ ≥ mm	t _{fix} ≤ mm	ETA
	041601021	8x75	2	8	75	13	8 / 12	45 / 50 / 65	55 / 60 / 75	30 / 25 / 10	■
	041601041	8x100	2	8	100	13	8 / 12	45 / 50 / 65	55 / 60 / 75	55 / 50 / 35	■
	041601081	10x60	2	10	60	15	10 / 14	50 / - / -	60 / - / -	10 / - / -	■
	041601101	10x75	2	10	75	15	10 / 14	50 / 60 / -	60 / 70 / -	25 / 15 / -	■
	041601121	10x100	2	10	100	15	10 / 14	50 / 60 / 75	60 / 70 / 85	50 / 40 / 25	■
	041601161	12x75	2	12	75	16	12 / 16	50 / 60 / -	60 / 70 / -	25 / 15 / -	■



Concrete screw Sumo Pro 1 KB	Ø 8 mm	Ø 10 mm	Ø 12 mm
Anchoring depth h_{nom}	45 mm / 50 mm / 65 mm	50 mm / 60 mm / 75 mm	50 mm / 60 mm / 95 mm
Permissible central tension load of a single wall plug without environmental effects N_{zul}			
cracked concrete C20/25	120 kg / 160 kg / 300 kg	160 kg / 240 kg / 360 kg	160 kg / 240 kg / 630 kg
uncracked concrete C20/25	240 kg / 240 kg / 480 kg	240 kg / 360 kg / 630 kg	240 kg / 360 kg / 990 kg
Permissible shear load of a single anchor without environmental effects V_{zul}			
cracked concrete C20/25	280 kg / 340 kg / 550 kg	320 kg / 470 kg / 680 kg	650 kg / 930 kg / 1900 kg
uncracked concrete C20/25	400 kg / 480 kg / 770 kg	460 kg / 650 kg / 950 kg	910 kg / 1300 kg / 1900 kg
Component dimensions and installation characteristics			
minimum centre distance s_{min}	60 mm	70 mm	80 mm
minimum edge distance c_{min}	60 mm	70 mm	80 mm
Minimum component thickness h_{min}	110 mm	110 mm	130 mm
Drill core diameter d_0	8 mm	10 mm	12 mm
Drill hole depth $h_1 \geq$	55 mm / 60 mm / 75 mm	60 mm / 70 mm / 85 mm	60 mm / 70 mm / 105 mm
Through hole in the component to be connected $d_f \leq$	12 mm	14 mm	16 mm

- When sizing, the entire declaration of performance of the Sumo Pro 1 KB must be observed
- The partial safety factors of the resistances and a partial safety factor of $\gamma_F = 1.4$ are to be considered
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

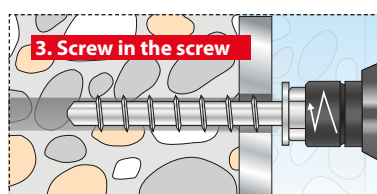
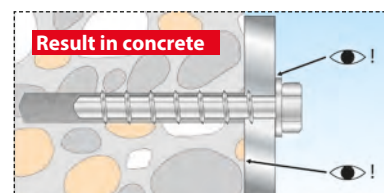
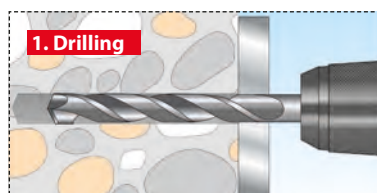
Description & Area of Application

- Concrete screw with moulded washer
- Small axis and edge distances
- Suitable for temporary and fixed fastenings



Processing & Installation

- Through installation
- Screw in the screw completely until the attachment is in full contact and it is no longer possible to turn the screw any further
- Ideally to be processed with tangential impact wrench (with impact wrench-compatible socket)
- The wall plug head must be in full contact with the attachment without damage
- Use only in dry indoor areas





Feuerwider-
standsklasse
R120
Dübelgröße
siehe Prüfbericht

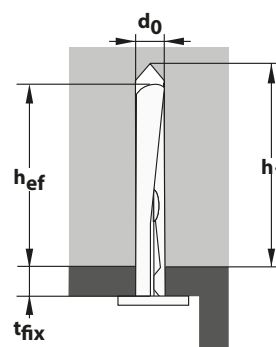



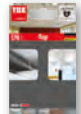
ETA-18/0195

ETAG 001-06

Features

- Small drill hole depth
- Rapid and secure installation without special tools
- Impact lock prevents premature spreading
- Fire resistance class R120
- Approved by the building authorities



Pack	Item No.	Type	Content Wall Plug	Content Screw	Wall plug Ø	Wall plug length	Screw Size	Drill Ø	Min. Drill hole depth	Min. Anchoring depth	Fixture Thickness	Approval
	Top		per pack	per pack	mm	mm	Ø mm	d0 Ø mm	h1 ≥ mm	hef ≥ mm	tfix ≤ mm	ETA
	088 102 01	6/35	100x	-	6	40	-	6	40	32	5.0	■
	088 102 06	6/65	100x	-	6	70	-	6	40	32	35.0	■
	Top		per pack	per pack	mm	mm	Ø mm	d0 Ø mm	h1 ≥ mm	hef ≥ mm	tfix ≤ mm	ETA
	088 702 011	6/35	6x	-	6	40	-	6	40	32	5.0	-
	088 702 061	6/65	4x	-	6	70	-	6	40	32	35.0	-

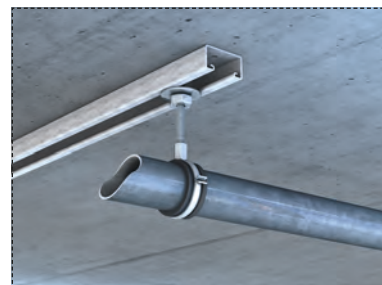


Top	6/35	6/65
Effective anchoring depth	32 mm	32 mm
Permissible load of a single anchor without environmental effects F_{zul}		
cracked and uncracked concrete C20/25	120 kg	120 kg
permissible bending moment M_{zul}	3.1 Nm	3.1 Nm
Component dimensions and installation characteristics		
minimum centre distance s_{min}	200 mm	200 mm
minimum edge distance c_{min}	150 mm	150 mm
Minimum component thickness h_{min}	80 mm	80 mm
Drill core diameter d_0	6 mm	6 mm
Drill hole depth $h_1 \geq$	40 mm	40 mm

- When sizing, the entire declaration of performance of the Top must be observed
- The partial safety factors of the resistances and a partial safety factor of $\gamma_F = 1.4$ are to be considered
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

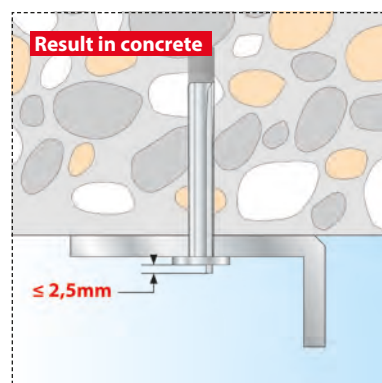
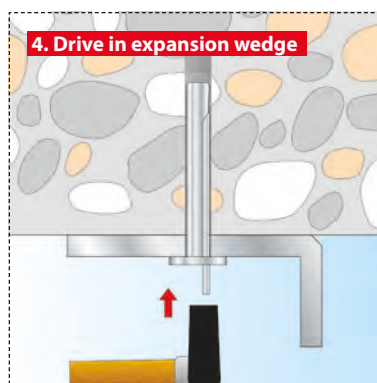
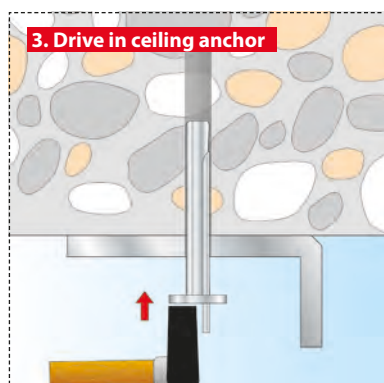
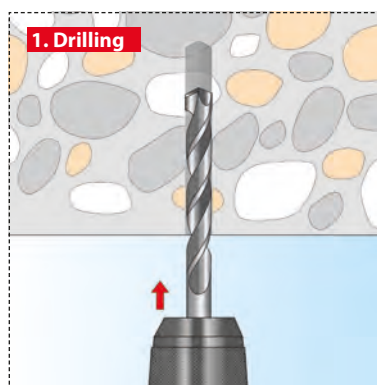
Description & Area of Application

- Ready-to-fit impact anchor of galvanised steel, wall plug shaft with perforated washer $\varnothing 15$ mm, thickness 2.5 mm and expansion wedge
- Fire resistance class R120



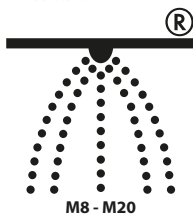
Processing & Installation

- Use only in dry indoor areas
- For multiple fastenings, even in the tensile zone
- When driving the ceiling anchor into the drill hole, do not hit the expansion wedge
- Only use pressure-resistant attachments
- The wedge must be driven in straight
- Through installation





Feuerwiderstandsklasse
R120
Dokumentation
siehe Prüfbericht



M8 - M20



(1)



(2)



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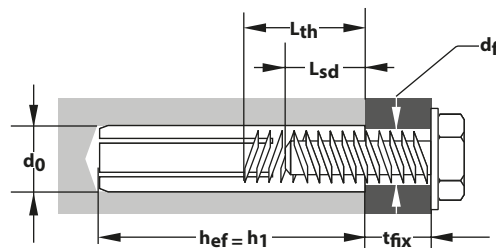




Impact


Impact Tool

Features

- Attachment can be loosened and tightened without removing the wall plug
- Simple and secure installation with setting tool
- Small drilling diameter and short anchoring depth
- Fire resistance class R120
- Approved by the building authorities
- High holding values



Pack	Item No.	Type	Content Wall Plug	Content Screw	Wall Plug	Wall plug length	Thread length	Drill Ø	Min. Screw-in depth	Drill-hole/ Anchoring depth	Torque Tightening	Approval
	Impact		per pack	per pack	metric	mm	Lth mm	d0 / df ø mm	Lsd ≥ mm	hef = h1 mm	Tinst Nm	ETA
	029 100 03	M6 x 30	100x	-	M6	30	13	8 / 7	7	30	4	■ (1+2)
	029 100 04	M8 x 30	100x	-	M8	30	13	10 / 9	9	30	8	■ (1+2)
	029 100 05	M10 x 40	50x	-	M10	40	15	12 / 12	11	40	15	■ (1+2)
	029 100 06	M12 x 50	50x	-	M12	50	18	15 / 14	13	50	35	■ (1+2)
	029 100 07	M16 x 65	25x	-	M16	65	23	20 / 18	18	65	60	■ (1)
	Impact Stainless steel A4		per pack	per pack	metric	mm	Lth mm	d0 / df ø mm	Lsd ≥ mm	hef = h1 mm	Tinst Nm	ETA
	029 170 03	M6 x 30	100x	-	M6	30	13	8 / 7	7	30	4	■ (1+2)
	029 170 04	M8 x 30	100x	-	M8	30	13	10 / 9	9	30	8	■ (1+2)
	029 170 05	M10 x 40	50x	-	M10	40	15	12 / 12	11	40	15	■ (1+2)
	029 170 06	M12 x 50	50x	-	M12	50	18	15 / 14	13	50	35	■ (1+2)
	029 170 07	M16 x 65	25x	-	M16	65	23	20 / 18	18	65	60	■ (1)

Pack	Item No.	Type	Content Wall Plug	fits	Wall Plug	Wall plug length	Approval
	Impact Tool		per pack	Impact	metric	mm	ETA
	029 000 93	SW 6	1x	M6	-	-	■
	029 000 94	SW 8	1x	M8	-	-	■
	029 000 95	SW 10	1x	M10	-	-	■
	029 000 96	SW 12	1x	M12	-	-	■
	029 000 97	SW 16	1x	M16	-	-	■

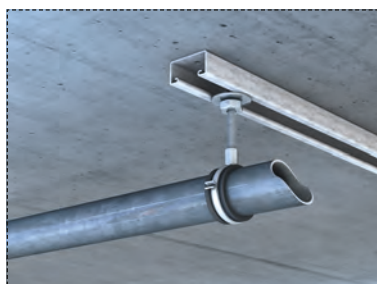


To ETA-05/0139	Galvanised steel					Stainless steel					
Impact	M6 x30	M8 x30	M10 x40	M12 x50	M16 x65	M6 x30	M8 x30	M10 x40	M12 x50	M16 x65	M20 x80
Effective anchoring depth	30 mm	30 mm	40 mm	50 mm	65 mm	30 mm	30 mm	40 mm	50 mm	65 mm	80 mm
Permissible tensile load N_{zul} (screw 5.6 to 8.8)											
uncracked concrete C20/25	330 kg	330 kg	510 kg	710 kg	1050 kg	390 kg	390 kg	610 kg	850 kg	1260 kg	1720 kg
Permissible shear load V_{zul}											
uncracked concrete C20/25											
Screw 5.6	210 kg	390 kg	410 kg	900 kg	1680 kg						
Screw 5.8	290 kg	390 kg	410 kg	1210 kg	1800 kg						
Screw 8.8	290 kg	390 kg	410 kg	1230 kg	1800 kg						
Screw stainless steel A4						320 kg	460 kg	600 kg	1150 kg	1920 kg	3040 kg
Component dimensions and installation characteristics											
minimum centre distance s_{min}	55 mm	60 mm	100 mm	120 mm	150 mm	50 mm	80 mm	100 mm	120 mm	150 mm	160 mm
minimum edge distance c_{min}	95 mm	95 mm	135 mm	165 mm	200 mm	80 mm	95 mm	135 mm	165 mm	200 mm	260 mm
Minimum component thickness h_{min}	100 mm	100 mm	120 mm	130 mm	160 mm	100 mm	100 mm	130 mm	140 mm	160 mm	250 mm
Drill core diameter d_0	8 mm	10 mm	12 mm	15 mm	20 mm	8 mm	10 mm	12 mm	15 mm	20 mm	25 mm
Drill hole depth $h_1 \geq$	30 mm	30 mm	40 mm	50 mm	65 mm	30 mm	30 mm	40 mm	50 mm	65 mm	80 mm
Through-hole in the attachment $d_f \leq$	7 mm	9 mm	12 mm	14 mm	18 mm	7 mm	9 mm	12 mm	14 mm	18 mm	22 mm
Torque when anchoring T_{inst}	4 Nm	8 Nm	15 Nm	35 Nm	60 Nm	4 Nm	8 Nm	15 Nm	35 Nm	60 Nm	120 Nm

- When sizing, the entire declarations of performance of the Impact must be observed
- The partial safety factors of the resistances and a partial safety factor of $\gamma_F = 1.4$ are to be considered
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

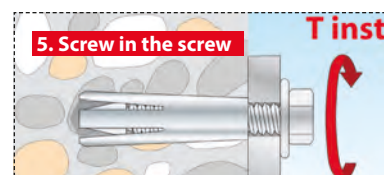
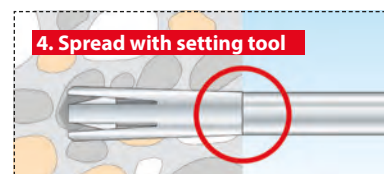
Description & Area of Application

- Impact, galvanised: galvanised, internal thread with built-in expanding segment
- Impact, A4: stainless steel, internal thread with built-in expanding segment
- For flush fastenings
- All wall plugs can also be used with threaded rods
- From size $\geq M8$ approved for sprinkler systems
- Impact Tool: Setting tool for professional, secure installation



Processing & Installation

- The drill hole depth must be observed
- The screw length must be determined according to the minimum screw-in depth and the attachment thickness t_{fix}
- The Impact is made of galvanised steel and must only be used in dry indoor areas
- The Impact A4 is made of stainless steel and may be used in dry indoor areas, wet areas, outdoor areas, including industrial atmospheres and close to the sea
- For use as multiple fixings of non-load-bearing systems in cracked and uncracked concrete
- For spacer installations in combination with threaded rods
- Pre-positioned installation
- The Impact Tool setting tool must be used for professional installation

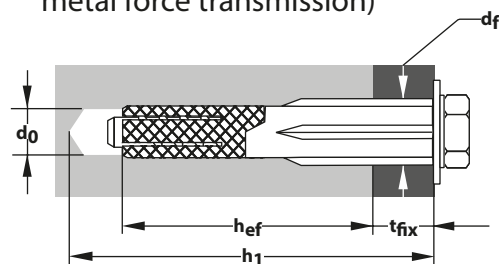




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Features

- Visual spread inspection instead of torque wrench
- Holds in almost all building materials
- Uniform spreading due to internal cone
- High holding values (metal-to-metal force transmission)



Pack	Item No.	Type	Content Wall Plug	Content Screw	Driver	Wall plug length	Thread	Drill Ø	Min. Drill hole depth	Min. Anchoring depth	Thickness Fixing	Approval
		Control	per pack	per pack	SW	mm	metric	d0 / df ø mm	h1 ≥ mm	hef ≥ mm	tfix ≤ mm	ETA
	030 101 621	12/60	25x	-	17	60	M10	12/13	70	50 {-}	10 {-}	-
	030 101 631	12/80	25x	-	17	80	M10	12/13	90	50 {-}	30 {-}	-
	030 101 641	12/100	25x	-	17	100	M10	12/13	110	50 {90}	50 {10}	-
	030 101 651	12/120	25x	-	17	120	M10	12/13	130	50 {90}	70 {30}	-
	030 101 661	12/140	25x	-	17	140	M10	12/13	150	50 {90}	90 {50}	-
	030 101 671	12/160	25x	-	17	160	M10	12/13	170	50 {90}	110 {70}	-
		Control	per pack	per pack	SW	mm	metric	d0 / df ø mm	h1 ≥ mm	hef ≥ mm	tfix ≤ mm	ETA
	030 701 621	12/60	2x	-	17	60	M10	12/13	70	50 {-}	10 {-}	-
	030 701 631	12/80	2x	-	17	80	M10	12/13	90	50 {-}	30 {-}	-
	030 701 641	12/100	2x	-	17	100	M10	12/13	110	50 {90}	50 {10}	-
	030 701 651	12/120	2x	-	17	120	M10	12/13	130	50 {90}	70 {30}	-

{ } Cellular concrete



Control	Concrete C 20/25	Solid brick MZ 12	Vertically perforated brick ≥ Hlz12 Bulk density 1 kg/dm³	Hollow brick ≥ Hbz12	Cellular concrete ≥ PB2, PP2	Gypsum plasterboard 12.5 mm	Gypsum fibreboard 12.5 mm
Ø 12 mm	300 kg	300 kg	100 kg	100 kg	50 kg	-	-

- The anchoring depth of the wall plug must be observed
- Drilling method must be adapted to the building material
- The recommended loads only apply to installation in the building material, not for installation in joints
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

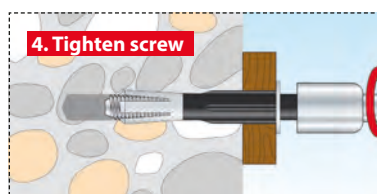
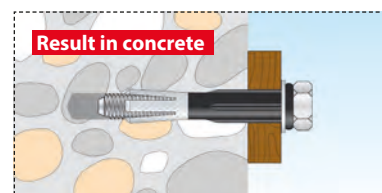
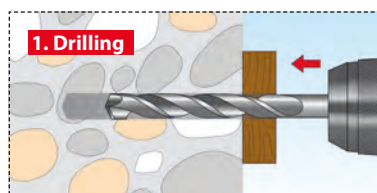
Description & Area of Application

- 4-way split spreader element of metal
- Wide washer Ø 24 mm
- Hexagonal head screw, property class 8.8, galvanised with plastic sleeve



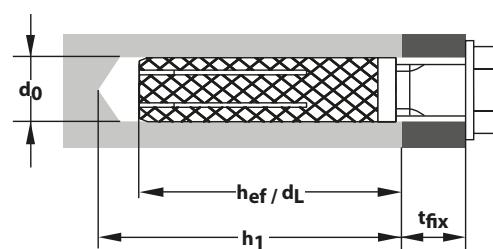
Processing & Installation

- The maximum spread in the various building materials is achieved when the protruding collar on the set marking ring is squeezed together.
- Holds in concrete and solid masonry through expansion
- Holds in perforated brick and cellular concrete (aerated concrete) through expansion and form fitting
- Through installation





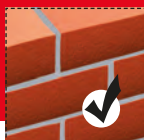
Features

- Attachment can be loosened and tightened without removing the wall plug
- No setting tool required
- Corrosion-resistant fastening for indoor and outdoor use
- Inexpensive fastening



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Pack	Item No.	Type	Content Wall Plug	Content Screw	Wall Plug	Wall plug length	Screw length	Drill Ø	Min. Drill hole depth	Min. Anchoring depth	Thickness Fixing	Approval
	Metrix	per pack	per pack		metric	mm	Ls = dL + tfix mm	d0 mm	h1 ≥ mm	hef = dL mm	tfix ≤ mm	ETA
	026 100 031	M6 x 22	100x	-	M6	22	22 + tfix	8	35	22	-	-
	026 100 131	M6 x 22	25x	-	M6	22	22 + tfix	8	35	22	-	-
	026 100 041	M8 x 28	50x	-	M8	28	28 + tfix	10	40	28	-	-
	026 100 141	M8 x 28	25x	-	M8	28	28 + tfix	10	40	28	-	-
	026 100 051	M10 x 32	50x	-	M10	32	32 + tfix	12	45	32	-	-
	026 100 151	M10 x 32	25x	-	M10	32	32 + tfix	12	45	32	-	-
	026 100 061	M12 x 37	25x	-	M12	37	37 + tfix	16	50	37	-	-
	026 100 081	M16 x 43	15x	-	M16	43	43 + tfix	20	55	43	-	-
	Metrix	per pack	per pack		metric	mm	Ls = dL + tfix mm	d0 mm	h1 ≥ mm	hef = dL mm	tfix ≤ mm	ETA
	026 700 021	M5 x 18	8x	-	M5	18	18 + tfix	6	30	18	-	-
	026 700 031	M6 x 22	8x	-	M6	22	22 + tfix	8	35	22	-	-
	026 700 041	M8 x 28	6x	-	M8	28	28 + tfix	10	40	28	-	-
	026 700 051	M10 x 32	4x	-	M10	32	32 + tfix	12	45	32	-	-

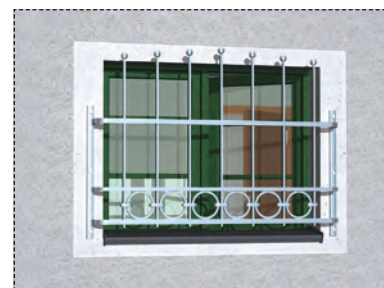


Metrix	Concrete C 20/25	Solid brick MZ 12/ KS 12	Vertically perforated brick ≥ Hlz12 Bulk density 1 kg/dm³	Hollow brick ≥ Hbz12	Cellular concrete ≥ PB2, PP2	Gypsum plasterboard 12.5 mm	Gypsum fibreboard 12.5 mm
M5x18	40 kg	35 kg	-	-	-	-	-
M6x22	65 kg	55 kg	-	-	-	-	-
M8x28	110 kg	90 kg	-	-	-	-	-
M10x32	160 kg	130 kg	-	-	-	-	-
M12x37	220 kg	160 kg	-	-	-	-	-
M14x40	270 kg	190 kg	-	-	-	-	-
M16x43	330 kg	230 kg	-	-	-	-	-

- The anchoring depth of the wall plug must be observed
- Drilling method and drill hole cleaning must be adapted to the building material
- The recommended loads only apply to installation in the building material, not for installation in joints
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

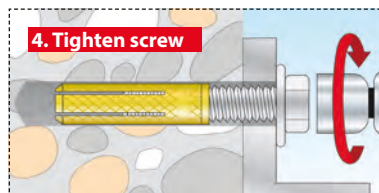
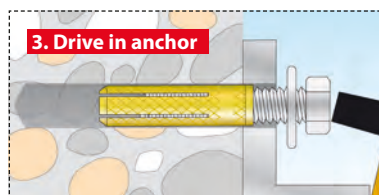
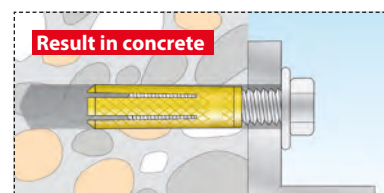
Description & Area of Application

- Multiple split brass internally-threaded wall plug
- Special knurled surface prevents rotation in the drill hole
- Corrosion resistant brass wall plug
- Wall plug designation indicates the required screw diameter



Processing & Installation

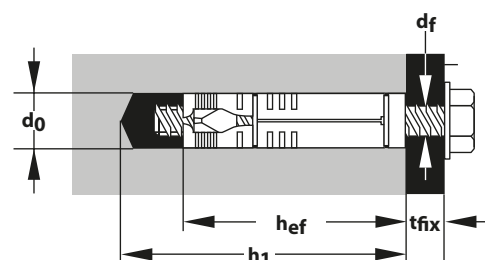
- Screw length L_s = wall plug length + attachment thickness t_{fix}
- Suitable for all screws and threaded rods with metric thread
- As necessary, slightly pre-spread the brass wall plug by screwing in the threaded screw
- Through installation and pre-positioned installation










Features

- Can be used with standard screws and threaded rods
- Also for solid masonry with dense structure
- Pre-positioned installation
- High hold due to 4 spreaders
- High holding values
- No setting tool required
- Removable



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Pack	Item No.	Type	Content	Wall Plug	Wall plug length	Driver	Drill Ø	Min. Drill hole depth	Min. Anchoring depth	Thickness Fixing	Torque Tightening	Approval
	Machine Wall Plug HAC		per pack	metric	mm	SW	d0/df ø mm	h1 ≥ mm	hef mm	tfix ≤ mm	Tinst Nm	ETA
	037 100 03	M8 x 55	50x	M8	55	-	14/9	55	50	-	25	-
Pack	Item No.	Type	Content	Wall Plug	Wall plug length	Driver	Drill Ø	Min. Drill hole depth	Min. Anchoring depth	Eye Ø	Torque Tightening	Approval
	Pirat Sven-S		per pack	metric	mm	SW	d0 ø mm	h1 ≥ mm	hef mm	a mm	Tinst Nm	ETA
	037 103 01	M6 x 40	50x	M6	40	10	10	45	40	8	10	-
	Pirat Sven-S		per pack	metric	mm	SW	d0 ø mm	h1 ≥ mm	hef mm	a mm	Tinst Nm	ETA
	037 703 01	M6 x 40	2x	M6	40	10	10	45	40	8	10	-
	Pirat Sven-O		per pack	metric	mm	SW	d0 ø mm	h1 ≥ mm	hef mm	a mm	Tinst Nm	ETA
	037 102 01	M6 x 40	50x	M6	40	10	10	45	40	10	10	-
	037 102 03	M8 x 50	50x	M8	50	13	14	55	50	11.8	25	-
	037 102 04	M10 x 60	25x	M10	60	17	16	65	60	14.5	50	-
	037 102 05	M12 x 80	25x	M12	80	19	20	85	80	17	85	-
	Pirat Sven-O		per pack	metric	mm	SW	d0 ø mm	h1 ≥ mm	hef mm	a mm	Tinst Nm	ETA
	037 702 01	M6 x 40	2x	M6	40	10	10	45	40	10	10	-



Machine Wall Plug HAC	M8
Effective anchoring depth	50 mm
Tensile force of a single anchor without environmental effects	
uncracked concrete C20/25	430 kg
Shear load of a single anchor without environmental effects	
uncracked concrete C20/25	840 kg
Component dimension and installation characteristics	
Minimum axis distance s_{min}	75 mm
Minimum edge distance c_{min}	75 mm
Drill core diameter d_0	14 mm
Drill hole depth h_1	55 mm
Through hole in the component to be connected d_f	9 mm
Torque when anchoring T_{inst}	25 Nm

Pirat Sven-S:	Concrete C 20/25	Solid brick MZ 12	Vertically perforated brick $\geq Hlz12$ Bulk density $\geq 1 \text{ kg/cm}^3$	Hollow brick $\geq Hbl2$	Cellular concrete $\geq PB2, PP2$	Gypsum plasterboard 12.5 mm	Gypsum fibreboard 12.5 mm
M6	80 kg	*	-	-	-	-	-
Pirat Sven-O:	Concrete C 20/25	Solid brick MZ 12	Vertically perforated brick $\geq Hlz12$ Bulk density $\geq 1 \text{ kg/cm}^3$	Hollow brick $\geq Hbl2$	Cellular concrete $\geq PB2, PP2$	Gypsum plasterboard 12.5 mm	Gypsum fibreboard 12.5 mm
M6	200 kg	*	-	-	-	-	-
M8	360 kg	*	-	-	-	-	-
M10	480 kg	*	-	-	-	-	-
M12	630 kg	*	-	-	-	-	-

- The anchoring depth of the wall plug must be observed
- Drilling method and drill hole cleaning must be adapted to the building material
- The recommended loads only apply to installation in the building material, not for installation in joints
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

*only for solid masonry with dense structure / holding values depend on building material

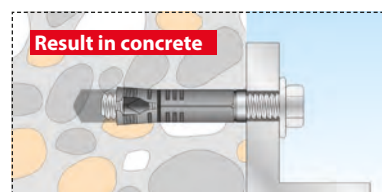
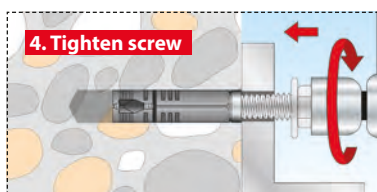
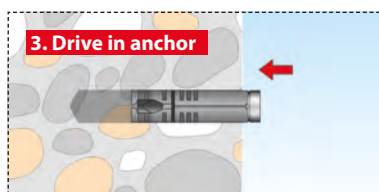
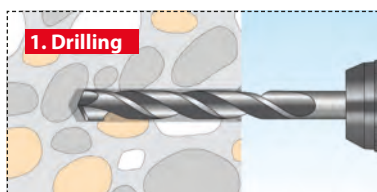
Description & Area of Application

- Machine wall plug HAC without screw
- Heavy-duty fastening with standard screws and threaded rods
- Anchor sleeve made of galvanised steel
- For temporary and permanent fixings



Processing & Installation

- Only suitable for dry indoor areas
- For concrete and solid masonry with dense structure
- Pre-positioned installation
- The specified torque must be observed





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Liquix Sleeve

Liquix Mix

Liquix Pro 1
280 ml

Features

- A single solution for everything: Building authority approval for cracked & un-cracked concrete, perforated and solid masonry and additional reinforcement connections
- LEED and emission tested: for ecological and healthy living
- Usual threaded rods* can be used
- Earthquake tested C1
- Processing even possible at extremely low temperatures (down to -10° C)
- Can be used in wet and water-filled drill holes
- Small axis and edge distances for anchoring without spreading pressure
- Fixing of high loads weighing up to 13.3 tonnes
- Can also be processed overhead
- Reuse of the broken cartridge by changing the static mixer
- Variable anchoring depth – saves time and material

*according to Approval

Pack	Item No.	Type	Content	Cartridge	Drill Ø	Min. Drill hole depth	Min. Setting Depth	Fixture Thickness	Approval	
	Liquix Pro 1 styrene-free		per pack		d0 ø mm	h1 ≥ mm	hef mm	tfix ≤ mm	ETA	
	084 600 041	150 ml	1x Liquix Pro 1 2x Liquix Mix 4x Liquix Sleeve 16x85	coaxial	-	-	-	-	■	
	084 600 081	280 ml	1x Liquix Pro 1 2x Liquix Mix 4x Liquix Sleeve 16x85	peeler	-	-	-	-	■	
	Liquix Pro 1 styrene-free		per pack		d0 ø mm	h1 ≥ mm	hef mm	tfix ≤ mm	ETA	
	084 100 081	280 ml	12x Liquix Pro 1 24x Liquix Mix	peeler	-	-	-	-	■	
	084 100 031	345 ml	12x Liquix Pro 1 24x Liquix Mix	side-by-side	-	-	-	-	■	
Pack	Item No.	Type	Content	Diameter	Length	Drill Ø	Min. Drill hole depth	Min. Setting Depth	Threaded rod	Approval
	Liquix Set		per range	ø mm	mm	d0/df ø mm	h1 ≥ mm	hef mm	Stix ø mm	ETA
	084 909 251	Liquix Pro 1 280 ml	4x	-	280	-	-	-	-	■
		Liquix Blaster	1x	-	-	-	-	-	-	-
		Liquix Sleeve	8x	16	85	16/12	90	85	M10	■
		Taifun 240 ml	1x	-	-	-	-	-	-	-
		Brush	1x	10	300	-	-	-	-	-
		Brush	1x	13	300	-	-	-	-	-
		Brush	1x	18	300	-	-	-	-	-
		Brush	1x	28	300	-	-	-	-	-
		Liquix Mix	6x	-	200	-	-	-	-	■



Description & Area of Application

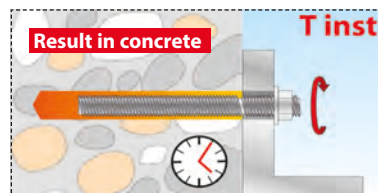
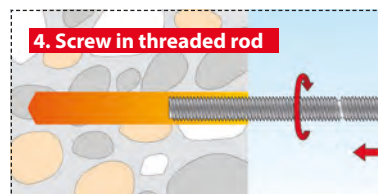
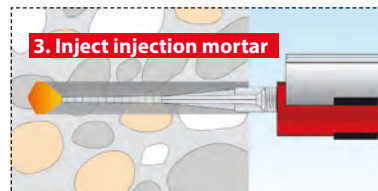
- Liquix Pro 1 is a styrene-free, vinylester injection mortar available in various cartridge types and cartridge sizes with static mixer Liquix Mix
- For approval-relevant fixings in cracked and uncracked concrete and masonry
- Approved in connection with standard threaded rods or the TOX threaded rod Stix.
- Watertight fastening tested to DIN EN 12390-8



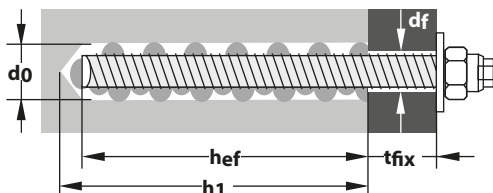
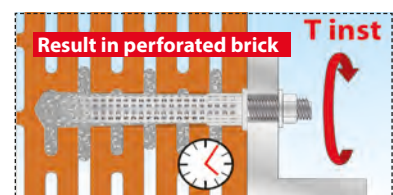
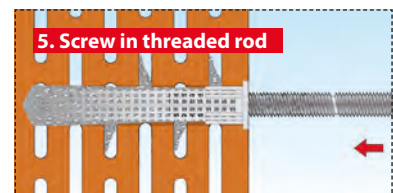
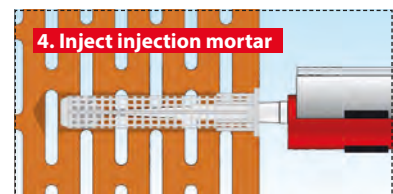
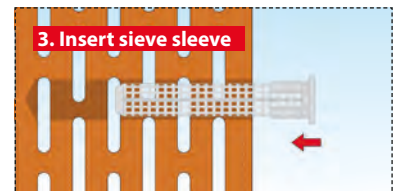
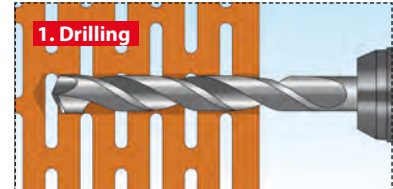
Processing & Installation

- In perforated brick, work with sieve sleeve
- Clean drill hole
- Screw static mixer tightly onto the cartridge
- Mark setting depth differing from standard onto anchor rod
- Discard the first approx. 10 cm of the injection mortar and do not use it for fastening
- Fill the cleaned drill hole approx. 2/3 of the way from the base of the drill hole or, if a sieve sleeve is used, fill it completely with injection mortar
- Insert the anchor rod with slight turning movements to the specified setting depth
- Observe the torques and curing times of the respective valid permits
- The mortar may be used in wet or dry concrete as well as in water-filled drill holes
- For the processing of coaxial, peeler and hose film cartridges, use the Liquix Blaster and Liquix Blaster Pro squeeze guns; for side-by-side cartridges use the Liquix Blaster Plus squeeze gun

Installation in concrete and solid masonry



Installation in perforated brick



Injection mortar Liquix Pro 1

Liquix Pro 1 in concrete C20/25	M8	M10	M12	M16	M20	M24	M27	M30
Effective anchoring depth h_{ef}¹	60-160 mm	60-200 mm	70-240 mm	80-320 mm	90-400 mm	96-480 mm	108-540 mm	120-600 mm
Permissible loads								
Permissible central tension load of a single wall plug without environmental effects N_{zul} in uncracked concrete C20/25								
Threaded rod galvanised, property class 5.8	720-860 kg	900-1380 kg	1170-2000 kg	1430-3710 kg	1710-5810 kg	1880-8380 kg	2250-10950 kg	2630-13300 kg
Threaded rod A4, property class 50 \geq M24 \leq 70	720-990 kg	900-1570 kg	1170-2250 kg	1430-4200 kg	1710-6530 kg	1880-9430 kg	2250-5740 kg	2630-7020 kg
Permissible shear loads of a single wall plug without environmental effects V_{zul} in uncracked concrete C20/25								
Threaded rod galvanised, property class 5.8	510 kg	860 kg	1200 kg	2230 kg	3490 kg	4520-5030 kg	5400-6570 kg	6320-8000 kg
Threaded rod A4, property class 50 \geq M24 \leq 70	600 kg	920 kg	1370 kg	2520 kg	3940 kg	4520-5680 kg	3450 kg	4200 kg
Permissible central tension load of a single wall plug without environmental effects N_{zul} in cracked concrete C20/25								
Threaded rod galvanised, property class 5.8	290-770 kg	370-1250 kg	570-1970 kg	880-3510 kg	1220-5490 kg	1340-7900 kg	1600-10950 kg	1880-13300 kg
Threaded rod A4, property class 50 \geq M24 \leq 70	290-770 kg	370-1250 kg	570-1970 kg	880-3510 kg	1220-5490 kg	1340-7900 kg	1600-5740 kg	1880-7020 kg
Permissible shear loads of a single wall plug without environmental effects V_{zul} in cracked concrete C20/25								
Threaded rod galvanised, property class 5.8	510 kg	860 kg	1200 kg	2230 kg	2930-3490 kg	3230-5030 kg	3850-6570 kg	4500-8000 kg
Threaded rod A4, property class 50 \geq M24 \leq 70	600 kg	920 kg	1370 kg	2450-2520 kg	2930-3490 kg	3220-5670 kg	3450 kg	4200 kg
Component dimensions and installation characteristics								
Minimum axis distance s_{min}	40 mm	50 mm	60 mm	80 mm	100 mm	120 mm	135 mm	150 mm
Minimum edge distance c_{min}	40 mm	50 mm	60 mm	80 mm	100 mm	120 mm	135 mm	150 mm
Minimum component thickness h_{min}	----- $h_{ef} + 30 \text{ mm} \geq 100 \text{ mm}$ -----			----- $h_{ef} + 2d_0$ -----				
Drill nominal diameter d_0	10 mm	12 mm	14 mm	18 mm	24 mm	28 mm	32 mm	35 mm
Drill hole depth h_1	60-160 mm	60-200 mm	70-240 mm	80-320 mm	90-400 mm	96-480 mm	108-540 mm	120-600 mm
Through hole in the component to be connected $d_f \leq$	9 mm	12 mm	14 mm	18 mm	22 mm	26 mm	30 mm	33 mm
Torque during anchoring $T_{inst} \leq$	10 Nm	20 Nm	40 Nm	80 Nm	120 Nm	160 Nm	180 Nm	200 Nm

- The specified loads refer to anchorings of single anchors in wet and dry concrete as well as for anchorings from -40° C to +24° C (or briefly up to +40° C)
- When sizing, the entire declaration of performance of the Liquix Pro 1 must be observed
- The partial safety factors of the resistances specified in the approval and a partial safety factor of $\gamma_F = 1.4$ are to be considered.
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

¹ The anchoring depth h_{ef} can be freely selected between the values $h_{ef \min}$ und $h_{ef \max}$

Curing times for injection mortar Liquix Pro 1:

Concrete temperature	Processing time	Minimum curing time in dry concrete	Minimum curing time in wet concrete
$\geq -10^\circ \text{C}^*$	90 min.	24 h	48 h
$\geq -5^\circ \text{C}$	90 min.	14 h	28 h
$\geq 0^\circ \text{C}$	45 min.	7 h	14 h
$\geq +5^\circ \text{C}$	25 min.	2 h	4 h
$\geq +10^\circ \text{C}$	15 min.	80 min.	160 min.
$\geq +20^\circ \text{C}$	6 min.	45 min.	90 min.
$\geq +30^\circ \text{C}$	4 min.	25 min.	50 min.
$\geq +35^\circ \text{C}$	2 min.	20 min.	40 min.
$\geq +40^\circ \text{C}$	1.5 min.	15 min.	30 min.

* The cartridge temperature must be at least +15° C



Liquix Pro 1 for masonry	Anchoring depth h_{ef}	Drill hole depth h_0	Drill diameter d_0	Brush \emptyset	Sieve sleeve	T_{inst}	Permissible Tensile load N_{Zul}	Permissible Shear load V_{Zul}
Brick Mz $f_b \geq 20 \text{ N/mm}^2$								
M8	80 mm	80 mm	10 mm	12 mm	-	2 Nm	130 kg	140 kg
M10	90 mm	90 mm	12 mm	14 mm	-	2 Nm	160 kg	140 kg
M12	100 mm	100 mm	14 mm	16 mm	-	2 Nm	170 kg	140 kg
M16	100 mm	100 mm	18 mm	20 mm	-	2 Nm	170 kg	230 kg
Vertically-perforated brick Hlz $f_b \geq 12 \text{ N/mm}^2$								
M8	80 mm	85 mm	12 mm	14 mm	12x80	2 Nm	40 kg	100 kg
M8/M10	85 mm	90 mm	16 mm	18 mm	16x85	2 Nm	70 kg	160 kg
M8/M10	130 mm	135 mm	16 mm	18 mm	16x130	2 Nm	100 kg	170 kg
M12/M16	85 mm	90 mm	20 mm	22 mm	20x85	2 Nm	100 kg	170 kg
Solid lime sand brick KS $f_b \geq 20 \text{ N/mm}^2$								
M8	80 mm	80 mm	10 mm	12 mm	-	2 Nm	170 kg	110 kg
M10	90 mm	90 mm	12 mm	14 mm	-	2 Nm	170 kg	130 kg
M12	100 mm	100 mm	14 mm	16 mm	-	2 Nm	170 kg	110 kg
M16	100 mm	100 mm	18 mm	20 mm	-	2 Nm	140 kg	110 kg
Perforated lime sand brick KSL $f_b \geq 14 \text{ N/mm}^2$								
M8	80 mm	85 mm	12 mm	14 mm	12x80	2 Nm	70 kg	100 kg
M8/M10	85 mm	90 mm	16 mm	18 mm	16x85	2 Nm	70 kg	170 kg
M8/M10	130 mm	135 mm	16 mm	18 mm	16x130	2 Nm	70 kg	170 kg
M12/M16	85 mm	90 mm	20 mm	22 mm	20x85	2 Nm	190 kg	170 kg
Lightweight concrete solid block Hbn $f_b \geq 2 \text{ N/mm}^2$								
M8	80 mm	80 mm	10 mm	12 mm	-	2 Nm	90 kg	90 kg
M10	90 mm	90 mm	12 mm	14 mm	-	2 Nm	90 kg	90 kg
M12	100 mm	100 mm	14 mm	16 mm	-	2 Nm	100 kg	90 kg
M16	100 mm	100 mm	18 mm	20 mm	-	2 Nm	90 kg	90 kg
Lightweight concrete hollow block Hbl B40 $f_b \geq 4 \text{ N/mm}^2$								
M8	80 mm	85 mm	12 mm	14 mm	12x80	2 Nm	30 kg	90 kg
M8/M10	85 mm	90 mm	16 mm	18 mm	16x85	2 Nm	30 kg	90 kg
M8/M10	130 mm	135 mm	16 mm	18 mm	16x130	2 Nm	30 kg	90 kg
M12/M16	85 mm	90 mm	20 mm	22 mm	20x85	2 Nm	30 kg	90 kg
Cellular concrete P6 $f_b \geq 6 \text{ N/mm}^2$								
M8	80 mm	80 mm	10 mm	12 mm	-	2 Nm	90 kg	210 kg
M10	90 mm	90 mm	12 mm	14 mm	-	2 Nm	140 kg	360 kg
M12	100 mm	100 mm	14 mm	16 mm	-	2 Nm	180 kg	360 kg
M16	100 mm	100 mm	18 mm	20 mm	-	2 Nm	230 kg	360 kg

- The specified loads refer to anchorings of a single anchor without environmental effects as well as for anchorings from -40° C to $+24^\circ \text{ C}$ (or briefly up to $+40^\circ \text{ C}$)
- When sizing, the entire declaration of performance of the Liquix Pro 1 must be observed
- Drilling into perforated masonry in rotary mode
- The partial safety factors of the resistances and a partial safety factor of $\gamma_F = 1.4$ are to be considered.
- For other masonry types see approval ETA-13/0047
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)



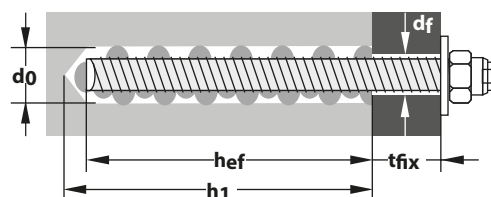
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Features

- Low cost injection mortar for common heavy duty applications
- Small axis and edge distances for anchoring without spreading pressure
- Usual threaded rods* can be used
- Styrene-free
- Processing even possible at low temperatures (down to -5° C)
- Can be used in dry and water-filled drill holes
- Fixing of high loads weighing up to 10.6 tonnes
- Reuse of the broken cartridge by changing the static mixer

*according to Approval



Pack	Item No.	Type	Content	Cartridge	Drill Ø	Min. Drill hole depth	Min. Setting Depth	Fixture Thickness	Approval
	Liquix Plus 7 Fastening Set		per pack		d0 Ø mm	h1 ≥ mm	hef mm	tfix ≤ mm	ETA
	084 901 91	300 ml	1x Liquix Plus 7 2x Liquix Mix 6x Liquix Sleeve 16x85 6x Stix M10x165	Hose film	-	-	-	-	■
	Liquix Plus 7 Box		per pack		d0 Ø mm	h1 ≥ mm	hef mm	tfix ≤ mm	ETA
	084 100 211	165 ml	12x Liquix Plus 7 24x Liquix Mix	Hose film	-	-	-	-	■
	084 100 121	300 ml	12x Liquix Plus 7 24x Liquix Mix	Hose film	-	-	-	-	■
	084 100 131	345 ml	12x Liquix Plus 7 24x Liquix Mix	side-by-side	-	-	-	-	■
	Liquix Plus 7 Combi		per pack		d0 Ø mm	h1 ≥ mm	hef mm	tfix ≤ mm	ETA
	084 600 211	165 ml	1x Liquix Plus 7 2x Liquix Mix 1x Liquix Blaster mini	Hose film	-	-	-	-	■



Description & Area of Application

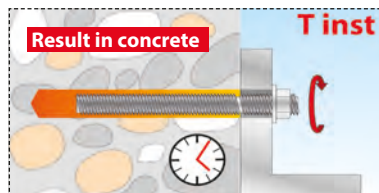
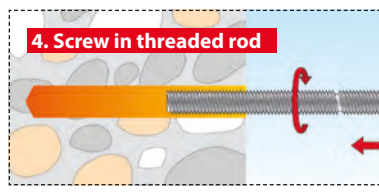
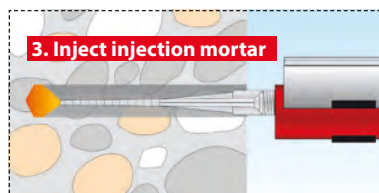
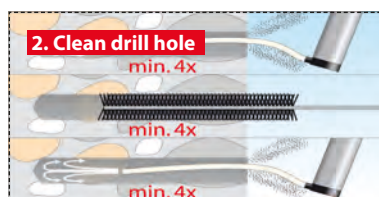
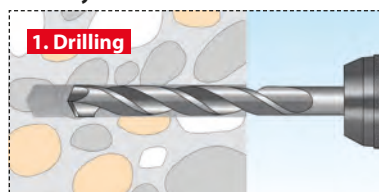
- The mortar may be used in wet and dry concrete
- For overhead installation, the threaded rod must be fixed according to the processing time
- Approved in connection with usual threaded rods or the TOX threaded rod Stix.



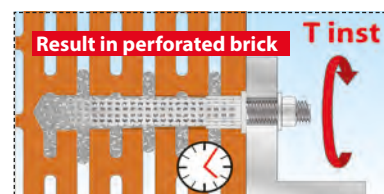
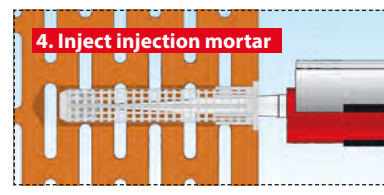
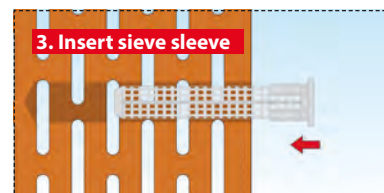
Processing & Installation

- In perforated brick, work with sieve sleeve
- Clean drill hole
- Screw static mixer tightly onto the cartridge
- Mark setting depth differing from standard onto anchor rod
- Discard the first approx. 10 cm of the injection mortar and do not use it for fastening
- Fill the cleaned drill hole approx. 2/3 of the way from the base of the drill hole or, if a sieve sleeve is used, fill it completely with injection mortar
- Insert the anchor rod with slight turning movements to the specified setting depth
- Observe the torques and curing times of the respective valid permits
- The mortar may be used in wet and dry concrete
- For the processing of coaxial, peeler and hose film cartridges, use the Liquix Blaster and Liquix Blaster Pro squeeze guns; for side-by-side cartridges use the Liquix Blaster Plus squeeze gun

Installation in concrete and solid masonry



Installation in perforated brick



Injection mortar **Liquix Plus 7**

Liquix Pro 7 in concrete C20/25	M8	M10	M12	M16	M20	M24
Effective anchoring depth	60-160 mm	60-200 mm	70-240 mm	80-320 mm	90-400 mm	96-480 mm
Permissible central tension load of a single wall plug without environmental effects N_{zul} in uncracked concrete C20/25						
Threaded rod galvanised, property class 5.8	510-860 kg	600-1380 kg	840-2000 kg	1280-3760 kg	1710-5860 kg	1880-8430 kg
Threaded rod A4, property class 70	510-1090 kg	600-1730 kg	840-2520 kg	1280-4740 kg	1710-7370 kg	1880-10600 kg
Permissible shear load of a single wall plug without environmental effects V_{zul} in uncracked concrete C20/25						
Threaded rod galvanised, property class 5.8	510 kg	860 kg	1200 kg	2230 kg	3490 kg	5030 kg
Threaded rod A4, property class 70	600 kg	920 kg	1370 kg	2520 kg	3940 kg	5510 kg
Component dimensions and installation characteristics						
Minimum axis distance s_{min}	40 mm	50 mm	60 mm	80 mm	100 mm	120 mm
Minimum edge distance c_{min}	40 mm	50 mm	60 mm	80 mm	100 mm	120 mm
Minimum component thickness h_{min}	----- $h_{ef} + 30 \text{ mm} \geq 100 \text{ mm}$ -----			----- $h_{ef} + 2d_0$ -----		
Drill core diameter d_0	10 mm	12 mm	14 mm	18 mm	24 mm	28 mm
Drill hole depth $h_1 \geq$	60-160 mm	60-200 mm	70-240 mm	80-320 mm	90-400 mm	96-480 mm
Through hole in the component to be connected $d_f \leq$	9 mm	12 mm	14 mm	18 mm	22 mm	26 mm
Torque when anchoring T_{inst}	10 Nm	20 Nm	40 Nm	80 Nm	120 Nm	160 Nm

- The specified loads refer to anchorings of a single anchor in wet and dry concrete as well as for anchorings from -40°C to $+24^\circ \text{C}$ (or briefly up to $+40^\circ \text{C}$)
- When sizing, the entire declaration of performance of the Liquix Plus 7 must be observed
- The partial safety factors of the resistances specified in the approval and a partial safety factor of $\gamma_F = 1.4$ are to be considered.
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

Curing times for injection mortar Liquix Plus 7:

Concrete temperature	Processing time	Minimum curing time
-5 to -1°C	90 min.	360 min.
0 to $+4^\circ \text{C}$	45 min.	180 min.
+5 to $+9^\circ \text{C}$	25 min.	120 min.
+10 to $+14^\circ \text{C}$	20 min.	100 min.
+15 to $+19^\circ \text{C}$	15 min.	80 min.
+20 to $+29^\circ \text{C}$	6 min.	45 min.
+30 to $+34^\circ \text{C}$	4 min.	25 min.
+35 to $+39^\circ \text{C}$	2 min.	20 min.

The cartridge temperature must be between $+5^\circ$ to $+40^\circ \text{C}$



Liquix Plus 7 in masonry	Anchoring depth h_{ef}	Drill hole depth h_0	Drill diameter d_0	Brush \emptyset	Sieve sleeve	T_{inst}	Permissible Tensile load N_{Zul}	Permissible Shear load V_{Zul}
Brick Mz $f_b \geq 28 \text{ N/mm}^2$								
M8	80 mm	80 mm	10 mm	10 mm	-	6 Nm	90 kg	160 kg
M10	90 mm	90 mm	12 mm	14 mm	-	10 Nm	90 kg	190 kg
M12	100 mm	100 mm	14 mm	16 mm	-	10 Nm	70 kg	260 kg
M16	100 mm	100 mm	18 mm	20 mm	-	10 Nm	130 kg	260 kg
Vertically-perforated brick Hlz $f_b \geq 12 \text{ N/mm}^2$								
M8	80 mm	85 mm	12 mm	14 mm	12x80	6 Nm	40 kg	100 kg
M8/M10	85 mm	90 mm	16 mm	18 mm	16x85	6 Nm	70 kg	170 kg
M8/M10	130 mm	135 mm	16 mm	18 mm	16x130	6 Nm	100 kg	190 kg
M12/ M16	85 mm	90 mm	20 mm	22 mm	20x85	6 Nm	100 kg	170 kg
Solid lime sand brick KS $f_b \geq 27 \text{ N/mm}^2$								
M8	80 mm	80 mm	10 mm	10 mm	-	10 Nm	160 kg	140 kg
M10	90 mm	90 mm	12 mm	14 mm	-	20 Nm	160 kg	170 kg
M12	100 mm	100 mm	14 mm	16 mm	-	20 Nm	190 kg	190 kg
M16	100 mm	100 mm	18 mm	20 mm	-	20 Nm	160 kg	170 kg
Perforated lime sand brick KSL $f_b \geq 14 \text{ N/mm}^2$								
M8	80 mm	85 mm	12 mm	14 mm	12x80	8 Nm	70 kg	90 kg
M8/M10	85 mm	90 mm	16 mm	18 mm	16x85	8 Nm	70 kg	110 kg
M8/M10	130 mm	135 mm	16 mm	18 mm	16x130	8 Nm	110 kg	140 kg
M12/ M16	85 mm	90 mm	20 mm	22 mm	20x85	8 Nm	70 kg	130 kg
Lightweight concrete solid block Hbn $f_b \geq 2 \text{ N/mm}^2$								
M8	80 mm	80 mm	10 mm	10 mm	-	6 Nm	60 kg	90 kg
M10	90 mm	90 mm	12 mm	14 mm	-	6 Nm	60 kg	100 kg
M12	100 mm	100 mm	14 mm	16 mm	-	10 Nm	60 kg	110 kg
M16	100 mm	100 mm	18 mm	20 mm	-	10 Nm	60 kg	110 kg
Lightweight concrete hollow block B40 $f_b \geq 4 \text{ N/mm}^2$								
M8	80 mm	85 mm	12 mm	14 mm	12x80	2 Nm	10 kg	30 kg
M8/M10	85 mm	90 mm	16 mm	18 mm	16x85	2 Nm	20 kg	90 kg
M8/M10	130 mm	135 mm	16 mm	18 mm	16x130	2 Nm	60 kg	100 kg
M12/ M16	85 mm	90 mm	20 mm	22 mm	20x85	2 Nm	30 kg	90 kg
Cellular concrete P2 $f_b \geq 2 \text{ N/mm}^2$								
M8	80 mm	80 mm	10 mm	10 mm	-	2 Nm	30 kg	50 kg
M10	90 mm	90 mm	12 mm	14 mm	-	2 Nm	30 kg	70 kg
M12	100 mm	100 mm	14 mm	16 mm	-	2 Nm	40 kg	90 kg
M16	100 mm	100 mm	18 mm	20 mm	-	2 Nm	40 kg	130 kg
Cellular concrete P4 $f_b \geq 4 \text{ N/mm}^2$								
M8	80 mm	80 mm	10 mm	10 mm	-	2 Nm	30 kg	40 kg
M10	90 mm	90 mm	12 mm	14 mm	-	2 Nm	90 kg	70 kg
M12	100 mm	100 mm	14 mm	16 mm	-	2 Nm	90 kg	90 kg
M16	100 mm	100 mm	18 mm	20 mm	-	2 Nm	130 kg	130 kg
Cellular concrete P6 $f_b \geq 6 \text{ N/mm}^2$								
M8	80 mm	80 mm	10 mm	10 mm	-	2 Nm	70 kg	200 kg
M10	90 mm	90 mm	12 mm	14 mm	-	2 Nm	110 kg	320 kg
M12	100 mm	100 mm	14 mm	16 mm	-	2 Nm	160 kg	320 kg
M16	100 mm	100 mm	18 mm	20 mm	-	2 Nm	200 kg	390 kg

- The specified loads refer to anchorings of a single anchor without environmental effects as well as for anchorings from -40° C to $+24^\circ \text{ C}$ (or briefly up to $+40^\circ \text{ C}$)
- When sizing, the entire declaration of performance of the Liquix Plus 7 must be observed
- Drilling into perforated masonry in rotary mode
- The partial safety factors of the resistances and a partial safety factor of $\gamma_F = 1.4$ are to be considered.
- For other masonry types see approval ETA-13/0053
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

THE FURNITURE RESCUER



Features

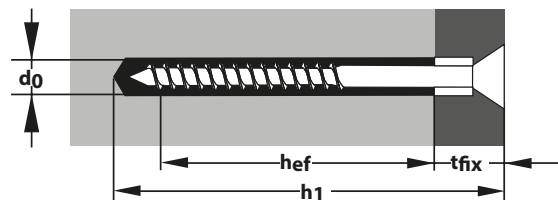
- Suitable for many building materials, e.g. concrete, wood, tiles, natural stone
- Also suitable for insulating materials such as EPS or PUR
- Repair compound for wood – ideal for torn out drill holes
- Optimal for renovations
- Paintable and sandable
- Gluing in wall plugs and anchor rods
- Maximum strength
- Fast curing after 3-5 min.
- With four static mixers




ACHTUNG



DANGER



Pack	Item No.	Type	Content	Cartridge	Min. Drill hole depth	Min. Anchoring depth	Max. thickness Insulating layer	Thickness Fixing	Approval
	Liquix SOS		per pack		ø mm	h1 ≥ mm	hef ≥ mm	tfix ≤ mm	ETA
			1x Liquix SOS 25ml		-	-	-	-	-
			4x sieve sleeve		-	-	-	-	-
	084 100 161 25ml		4x static mixer		-	-	-	-	-
			2x mixing extension		-	-	-	-	-

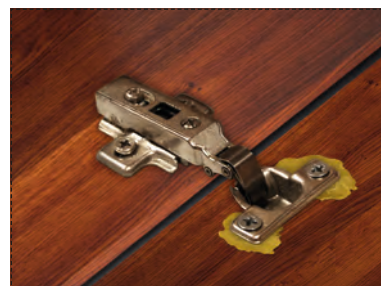


Liquix SOS	C 20/25	Mz 12	HLz 12	Hbl 2	P2	≥ 25 mm	Wood
6/50	70 kg	60 kg	-	-	15 kg	-	-
8/50	80 kg	70 kg	-	-	30 kg	-	-
10/50	100 kg	90 kg	40 kg*	35 kg*	40 kg	35 kg*	-

- The anchoring depth of the fastening must be observed
 - Drilling method and drill hole cleaning must be adapted to the building material
 - The recommended loads only apply to installation in the building material, not for installation in joints
 - The specified curing time must be observed
 - Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)
- * with sieve sleeve

Description & Area of Application

- For fixing light shelves, curtain rails, towel rails etc.
- For repairing torn-out hinges, holes drilled too large, wooden doors, etc.
- Fast reacting 2-component repair adhesive with very high strength
- Fast curing ensures rapid further processing (after 3-5 minutes)
- Suitable for indoor and outdoor use
- Processable from ≥ 10° C



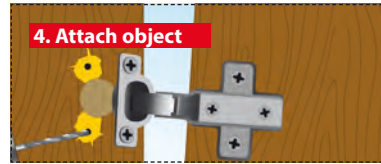
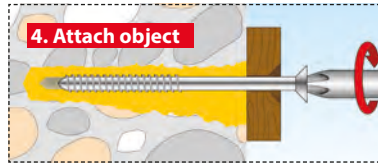
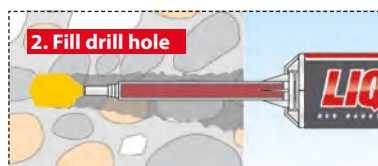
Processing & Installation

For fastening:

- Clean drill hole
- Always use a sieve sleeve for perforated and sheet building materials and cavity blocks
- Remove the sealing cap and put on the static mixer
- Discard the first 5 cm of the adhesive and do not use it for fastening
- Fill the drill hole completely with repair adhesive
- Approx. 5 minutes after filling the drill hole, screw the screw into the hardened compound. Pre-drill the core diameter of the screw for larger screw diameters
- Content of the cartridge (25 ml) is sufficient for min. 4 drill holes (at 10 mm diameter and 50 mm depth)
- Largely expansion pressure-free anchoring prevents damage to tiles and rendering

When repairing:

- Torn out fittings, hinges or pieces of wood, - simply fill with Liqfix SOS
- After curing, remove and grind off excess compound with a suitable tool (e.g. knife or drill)

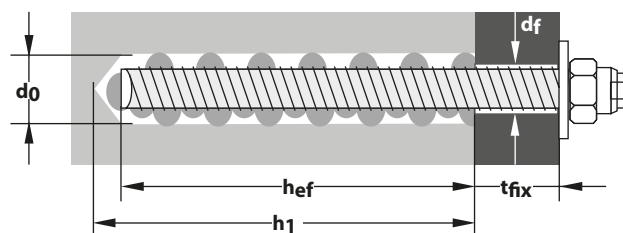




ACHTUNG

www.YouTube.com/toxgermany

Features

- Fast, uncomplicated application due to precisely predefined quantity for each drill hole
- High loads with small drill diameter
- Approved by the building authorities
- Anchoring free from expansion pressure
- Low anchoring depth enables rapid installation
- Waterproof fastening
- Styrene-free
- M12 – even for water-filled drill holes



Pack	Item No.	Type	Content Wall Plug	Content Screw	Cartridge Ø	Cartridge length	Screw Size	Drill Ø	Min. Drill hole depth	Min. Setting Depth	Fixture Thickness	Approval
	Contact Plus 7		per pack	per pack	mm	mm	ø mm	d0 / df ø mm	h1 mm	hef mm	tfix ≤ mm	ETA
	038 100 601	M8	10x	-	9	80	M8	10 / 9	80	80	-	■
	038 100 611	M10	10x	-	10.5	85	M10	12 / 12	90	90	-	■
	038 100 621	M12	10x	-	12.5	95	M12	14 / 14	110	110	-	■

Curing Times for Compound Anchor Contact Plus 7:

Temperature in the drill hole	Minimum curing time in dry concrete [min]	Minimum curing time in wet concrete [min]
-5° C to 0° C	360	720
0° C to +5° C	180	360
+5° C to +10° C	90	180
+10° C to +20° C	40	80
> 20° C	20	40



Contact Plus 7	M8	M10	M12
Effective anchoring depth h_{ef}	80 mm	90 mm	110 mm
Permissible central tension load of a single wall plug without environmental effects N_{zul} in uncracked concrete C20/25			
Galvanised, property class 5.8	480 kg	630 kg	990 kg
A4, property class 70	480 kg	630 kg	990 kg
Permissible shear load of a single wall plug without environmental effects V_{zul} in uncracked concrete C20/25			
Galvanised, property class 5.8	460 kg	740 kg	1090 kg
A4, property class 70	520 kg	780 kg	1140 kg
Component dimensions and installation characteristics			
Minimum component thickness h_{min}	110 mm	120 mm	150 mm
minimum centre distance s_{min}	60 mm	70 mm	85 mm
minimum edge distance c_{min}	60 mm	70 mm	85 mm
Drill core diameter d_0	10 mm	12 mm	14 mm
Drill hole depth h_1	80 mm	90 mm	110 mm
Through hole in the component to be connected d_f	9 mm	12 mm	14 mm
Torque when anchoring T_{inst}	10 Nm	20 Nm	40 Nm

- Permissible tension and shear load of an individual wall plug in uncracked, dry concrete with premium cleaning and for anchorings at -40°C to 50°C (or briefly up to 80°C)
- When sizing, the entire declaration of performance of the Contact Plus 7 must be observed
- The partial safety factors of the resistances specified in the approval and a partial safety factor of $\gamma_F = 1.4$ are to be considered.
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

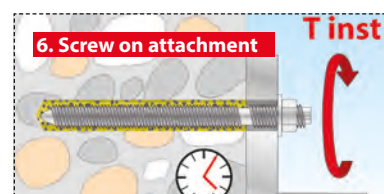
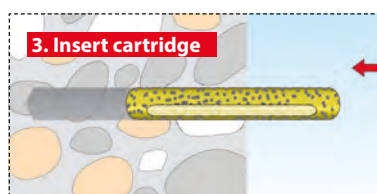
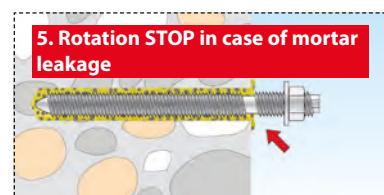
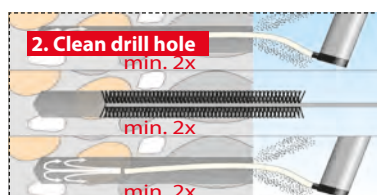
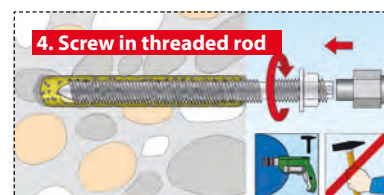
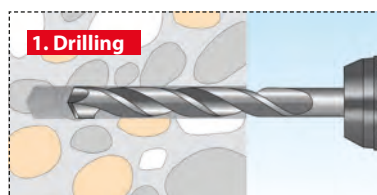
Description & Area of Application

- Composite anchor glass cartridge with components separated from each other
- To be processed in combination with threaded rod Stix
- For fastening steel structures, railings, high shelves, baseplates, supports, wooden structures without spreading pressure



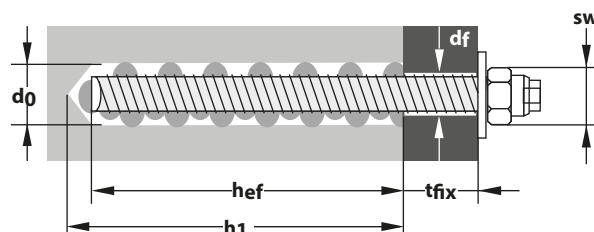
Processing & Installation







- Clean drill hole
- Insert the mortar cartridge into the drill hole
- Slowly vibrate the threaded rod in by hammering and turning with a drill until excess mortar is visible
- The specified torque and curing time must be observed
- Pre-positioned installation



Features

- Approved for use with Contact chemical anchor and Liquix injection mortar
- Variants:
 - stainless steel A4
 - galvanised



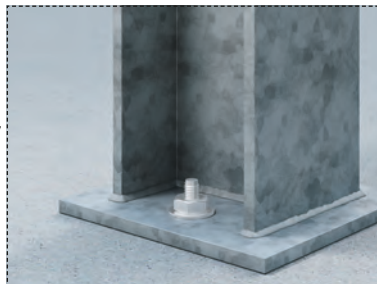
Pack	Item No.	Type	Content Stix	Content Stix Tool	Thread Ø	Stix length	Spanner size	Drill Ø	Min. Drill hole depth	Min. Setting Depth	Fixture Thickness	Approval
	Stix-A4		per pack	per pack	mm	mm	SW 	d0 / df ø mm	h1 ≥ mm	hef mm	tfix ≤ mm	ETA
	070 171 101	M8x110	10x	1x	M8	110	SW13	10 / 9	60 (105)	60 (80)	≤36 (16)	■
	070 171 131	M10x130	10x	1x	M10	130	SW17	12 / 12	60 (105)	60 (90)	≤55 (25)	■
	070 171 191	M12x160	10x	1x	M12	160	SW19	14 / 14	70	70	≤70	■
	070 171 281	M16x190	10x	1x	M16	190	SW24	18 / 18	80	80	≤85	■
	Stix-VZ		per pack	per pack	mm	mm	1  2 mm	d0 / df ø mm	h1 ≥ mm	hef mm	tfix ≤ mm	ETA
	070 101 101	M8x110	10x	1x	M8	110	SW13	10 / 9	60 (105)	60 (80)	≤36 (16)	■
	070 101 131	M10x130	10x	1x	M10	130	SW17	12 / 12	60 (105)	60 (90)	≤55 (25)	■
	070 101 161	M10x165	10x	1x	M10	165	SW17	12 / 12	60 (105)	60 (90)	≤90 (60)	■
	070 101 191	M12x160	10x	1x	M10	160	SW19	14 / 14	70	70	≤70	■
	070 101 221	M12x250	10x	1x	M12	250	SW19	14 / 14	70	70	≤160	■
	070 101 281	M16x190	10x	1x	M16	190	SW24	18 / 18	80	80	≤85	■
	Stix-VZ		per pack	per pack	mm	mm	1  2 mm	d0 / df ø mm	h1 ≥ mm	hef mm	tfix ≤ mm	ETA
	070 701 101	M8x110	8x	1x	M8	110	SW13	10 / 9	60 (105)	60 (80)	≤36 (16)	-
	070 701 131	M10x130	6x	1x	M10	130	SW17	12 / 12	60 (105)	60 (90)	≤55 (25)	-
	070 701 161	M10x165	4x	1x	M10	165	SW17	12 / 12	60 (105)	60 (90)	≤90 (60)	-

() Masonry



Description & Area of Application

- Made of galvanised steel (Stix-VZ) or stainless steel (Stix-A4) with external hexagonal driver, setting depth marking, roof tip, hexagonal nut, washer and setting tool
- The Stix anchor rod is included in the approvals for Contact chemical anchor and Liquix Pro 1 and Liquix Plus 7 injection mortar

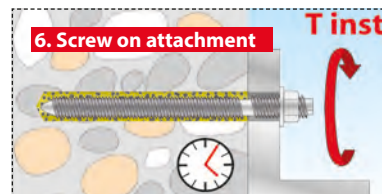
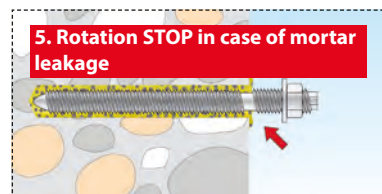
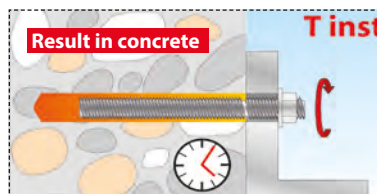
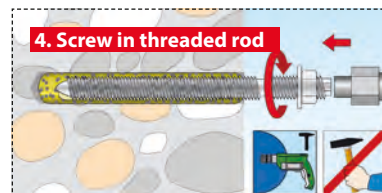
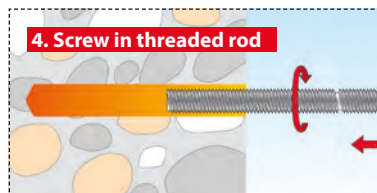
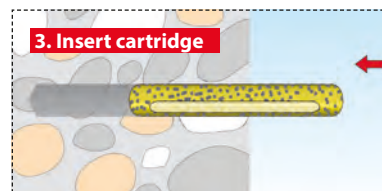
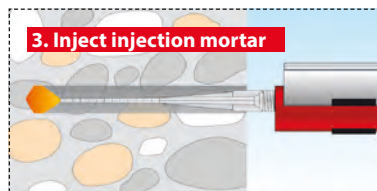
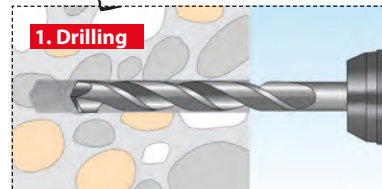
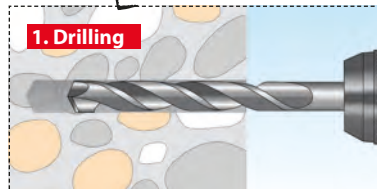


Processing & Installation

- Anchor rod made of steel, galvanized, to be used only in dry rooms
- The anchor rod is made of A4 stainless steel and may be used in dry indoor areas, wet areas, outdoor areas, including industrial atmospheres and close to the sea
- Pre-positioned installation

IN CONJUNCTION WITH
LIQUIX

IN CONJUNCTION WITH
CONTACT



Sieve sleeve Liquix Sleeve

Liquix Sleeve Pro

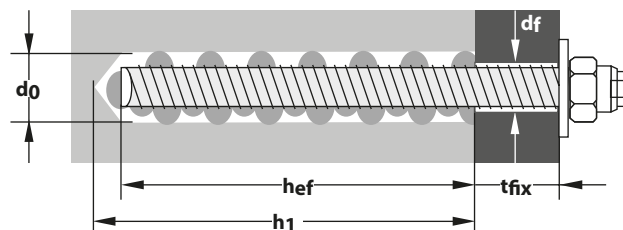
Liquix Sleeve Plus

Liquix Sleeve


www.YouTube.com/toxgermany

Features

- Is included in approvals for Liquix
- Design-related automatic centring of the anchor rod
- **Liquix Sleeve Pro:** For bridging non-load bearing layers and individual anchoring depths



Pack	Item No.	Type	Content Wall Plug	Content Screw	Sieve sleeve Ø	Sieve sleeve length	Drill Ø	Threaded rod	Min. Drill hole depth	Min. Setting Depth	Fixture Thickness	Approval
	Liquix Sleeve Plus		per pack	per pack	mm	mm	d_0 / d_1 Ø mm	Stix Ø mm	h_1 ≥ mm	h_{ef} mm	t_{fix} ≤ mm	ETA
	084 600 61	13x100	20x	-	13	100	14 / 10	M8	105	100	-	■
	084 600 62	15x100	20x	-	15	100	16 / 12	M10	105	100	-	■
	Liquix Sleeve		per pack	per pack	mm	mm	d_0 / d_f Ø mm	Stix Ø mm	h_1 ≥ mm	h_{ef} mm	t_{fix} ≤ mm	ETA
	084 600 68	12x50	20x	-	12	50	12 / 7-9	M6-M8	60	50	-	-
	084 600 69	12x80	20x	-	12	80	12 / 7-9	M8	90	80	-	■
	084 600 92	16x85	20x	-	16	85	16 / 9-12	M8/M10	90	85	-	■
	084 600 74	16x130	20x	-	16	130	16 / 9-12	M8/M10	140	130	-	■
	084 600 78	20x85	20x	-	20	85	20 / 14-18	M12-M16	90	85	-	■
	084 600 79	20x130	10x	-	20	130	20 / 14-18	M12-M16	140	130	-	■
	084 600 81	20x200	10x	-	20	200	20 / 14-18	M12-M16	210	200	-	■
	Liquix Sleeve		per pack	per pack	mm	mm	d_0 / d_f Ø mm	Stix Ø mm	h_1 ≥ mm	h_{ef} mm	t_{fix} ≤ mm	ETA
	084 700 921	16x85	8x	-	16	85	16 / 12	M10	90	85	-	■
	Liquix Sleeve Pro		per pack	per pack	mm	mm	d_0 / d_f Ø mm	Stix Ø mm	h_1 ≥ mm	h_{ef} mm	t_{fix} ≤ mm	ETA
	084 900 68	11x1000	1x	-	11	1000	12 / 7-10	M6-M8	60-1010	50-1000	-	-
	084 900 70	15x1000	1x	-	15	1000	16 / 12	M10	90-1010	85-1000	-	-
	084 900 72	20x1000	1x	-	20	1000	22 / 14-18	M12-M16	95-1010	85-1000	-	-



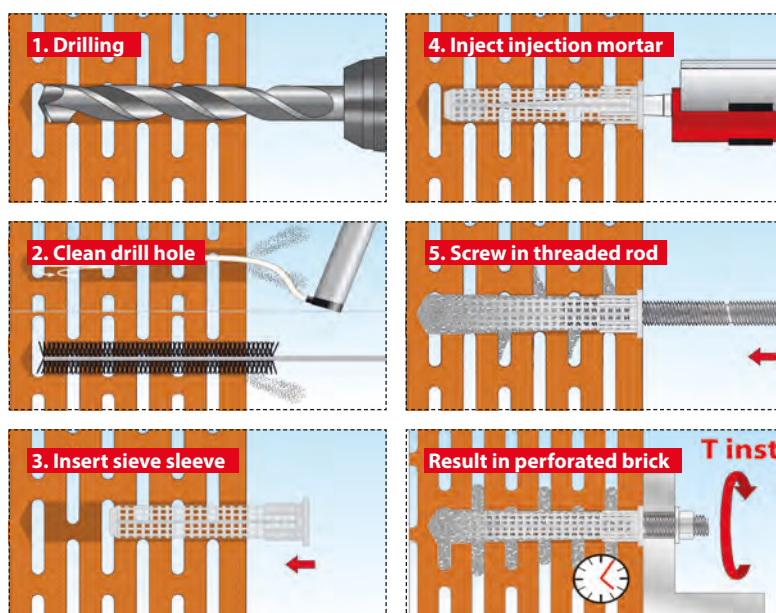
Description & Area of Application

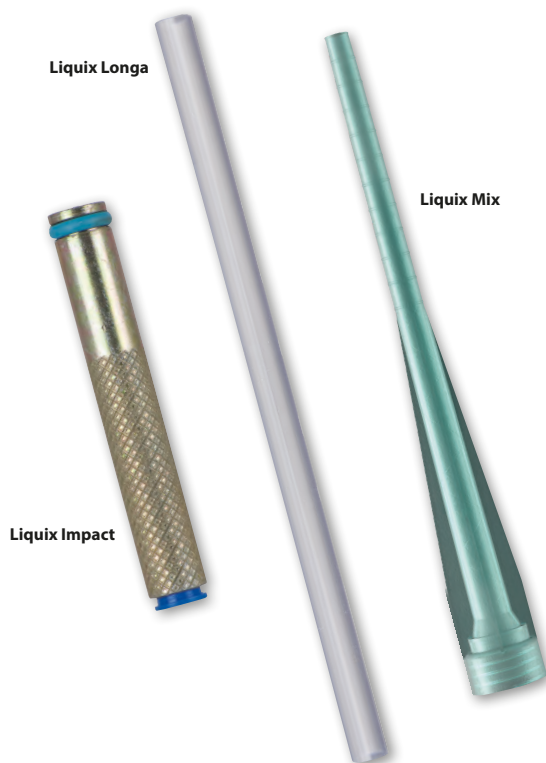
- Sieve sleeves especially for use with TOX injection mortars
- The sieve sleeves are used in conjunction with the Liquix injection systems in masonry
- Sieve sleeve **Liquix Sleeve** is included in the approvals of the injection mortars
- Sieve sleeve **Liquix Sleeve Pro** is used to bridge non-load-bearing layers or to achieve high anchoring depths



Processing & Installation

- In solid building materials, the use of sieve sleeves can be dispensed with
- For perforated and cavity bricks, sieve sleeves must be used





Features

Liquix Impact:

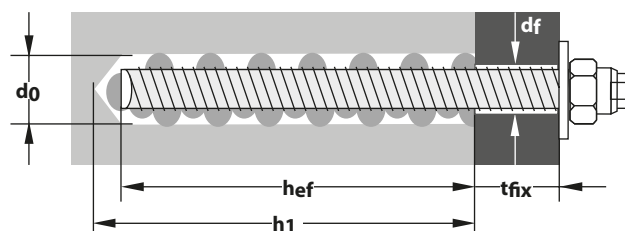
- Suitable for usual metric screws
- Attachment can be loosened and tightened without removing the wall plug

Liquix Mix:

- Approved by the building authorities
- For optimal mixing of TOX injection mortars

Liquix Longa:

- Simple extension of the static mixer
- For filling deep drill holes



Pack	Item No.	Type	Content Wall Plug	Ø	Length	Drill Ø	Sieve sleeve	Min. Drill hole depth	Min. Setting Depth	Approval
	Liquix Impact		per pack	mm	mm	d₀ / d_f ø mm	SHK ø mm	h₁ ≥ mm	hef mm	ETA
	084 100 15	M8x80	10x	12	80	14 / 9	20x85	90	85	-
	084 100 19	M10x80	10x	14	80	16 / 12	20x85	90	85	-
	Liquix Mix		per pack	mm	mm	d₀ / d_f ø mm	ø mm	h₁ ≥ mm	hef mm	ETA
	084 600 91	Mix	25x	-	200	-	-	-	-	■
	Liquix Mix		per pack	mm	mm	d₀ / d_f ø mm	ø mm	h₁ ≥ mm	hef mm	ETA
	084 700 911	Mix	4x	-	200	-	-	-	-	■
	Liquix Longa		per pack	mm	mm	d₀ / d_f ø mm	ø mm	h₁ ≥ mm	hef mm	ETA
	084 600 90	Longa	10x	-	200	-	-	-	-	-



Description & Area of Application

Liquix Impact:

- The internal threaded anchor **Liquix Impact** is suitable for usual metric screws and threaded rods in the sizes M8 and M10
- After removal of the attachment, the internal threaded anchor is flush with the surface of the wall
- For use with injection mortar

Liquix Mix:

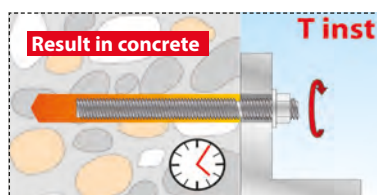
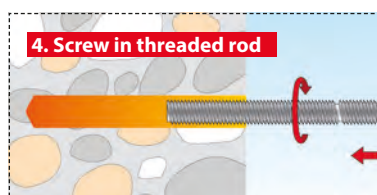
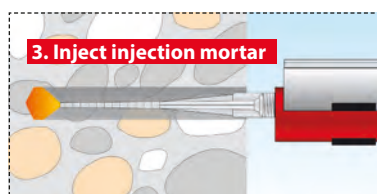
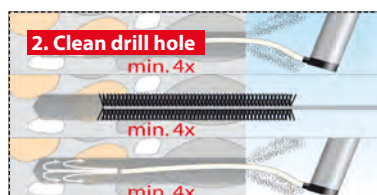
- Static mixer **Liquix Mix** is included in the approvals by building authorities of the injection mortars
- For use with new or opened Liquix cartridges
- The static mixer is required for use with injection mortar. The two components in the cartridge mix in the static mixer and are thus "activated"
- Covered by the following approvals:
European Technical Approval ETA 09/0258,
ETA-13/0047, ETA-13/0052, ETA-13/0053

Liquix Longa:

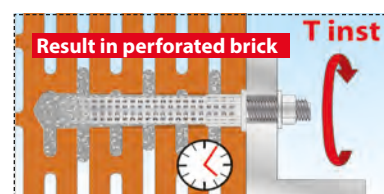
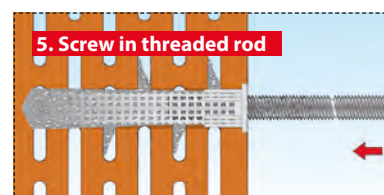
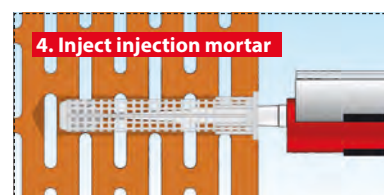
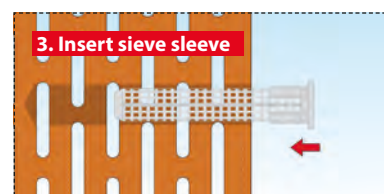
- For filling drill holes from an anchoring depth ≥ 190 mm



Installation in concrete



Installation in perforated brick



Squeeze gun Liquix Blaster

Liquix Blaster



Liquix Blaster Pro



Liquix Blaster Plus



Features

- Low effort and rapid processing
- Especially for working with injection mortar cartridges
- Ergonomic, non-slip handle
- Sturdy, metal design

Liquix Blaster:

- High quality alternative to the Profi model

- Transmission ratio up to 1:18

Liquix Blaster Pro:

- Transmission ratio up to 1:17

Liquix Blaster Plus:

- Transmission ratio up to 1:25


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Pack	Item No.	Suitable for	Content	Drill Ø	Injection mortar	Min. Drill hole depth	Min. Setting Depth	Fixture Thickness	Approval
	Liquix Blaster		per pack	d₀ ø mm	Liquix Pro 1 / Plus 7	h₁ ≥ mm	h_{ef} mm	t_{fix} ≤ mm	ETA
	150 ml coaxial				150 ml				
	084 600 95	280 ml peeler	1x	-	280 ml	-	-	-	-
	300 ml hose film				300 ml				
	Liquix Blaster Pro		per pack	d₀ ø mm	Liquix Pro 1 / Plus 7	h₁ ≥ mm	h_{ef} mm	t_{fix} ≤ mm	ETA
	150 ml coaxial				150 ml				
	084 600 96	280 ml peeler	1x	-	280 ml	-	-	-	-
	300 ml hose film				300 ml				
	Liquix Blaster Plus		per pack	d₀ ø mm	Liquix Pro 1 / Plus 7	h₁ ≥ mm	h_{ef} mm	t_{fix} ≤ mm	ETA
	150 ml coaxial				150 ml				
	280 ml peeler				280 ml				
	300 ml hose film				300 ml				
	084 600 94	345 ml side-by-side	1x	-	345 ml	-	-	-	-



Description & Area of Application

Liquix Blaster:

- Guidance of the feed rod: The plastic in the core guarantees smooth gliding
- Feed Plate: 2 thin metal layers with a plastic interlayer for problem-free dosing of the injection mortar
- Riveted frame: Sufficient robustness to meet normal requirements
- For the use of injection mortar with coaxial cartridges.

Liquix Blaster Pro / Plus:

- Guidance of the feed rod: The metal core guarantees precise gliding throughout the entire life cycle thanks to low wear and tear
- Feed Plate: Patented and mass-produced single sheet metal plate made of special alloy; allows precise dosing of the injection mortar
- Riveted frame: Optimum robustness that permanently meets the professional requirements of daily use

Liquix Blaster Pro:

- For the use of injection mortar with coaxial cartridges.

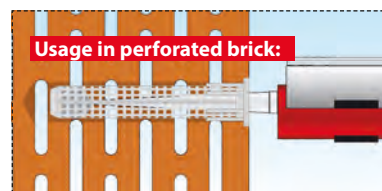
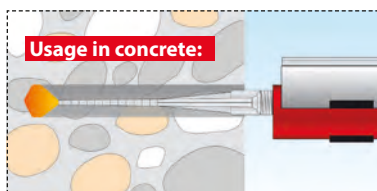
Liquix Blaster Plus:

- For the use of injection mortar with side-by-side cartridges.



Processing & Installation

- The temperature in the anchoring base as well as the processing and hardening times must be observed. The data can be read on the cartridge label
- The first 10 cm of every container should be discarded and not used for anchoring



Cleaning brush Brush



Features

- For optimum holding values
- Use is prescribed in many building authority approvals
- Ergonomic plastic handle
- Durable and robust brush material

Brush:

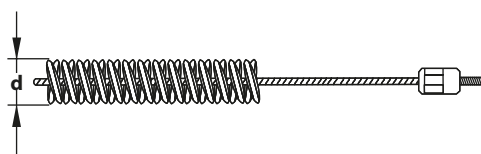
- Cleaning brush for thorough cleaning in concrete and solid masonry

Brush Light:

- Cleaning brush made of nylon - suitable for brittle building materials such as perforated brick

Brush XL:

- Brush extension for cleaning deep drill holes



Pack	Item No.	Type	Content	Ø	Length	Drill Ø	Liquix	Min. Drill hole depth	Min. Setting Depth	Fixture Thickness	Approval
		Brush (for concrete and solid masonry)	per pack per pack	d mm	mm	d0 ø mm	Liquix	h1 ≥ mm	hef mm	tfix ≤ mm	ETA
	084 600 841	M8	1x 1x	12	170	10	-	-	-	-	■
	084 600 871	M10	1x 1x	14	170	12	-	-	-	-	■
	084 600 891	M12	1x 1x	16	170	14	-	-	-	-	■
	084 600 881	M16	1x 1x	20	200	18	-	-	-	-	■
		Brush (for hollow and perforated brick)	per pack per pack	d mm	mm	d0 ø mm	Liquix	h1 ≥ mm	hef mm	tfix ≤ mm	ETA
	084 600 861	M12+M16	1x 1x	22	250	20	-	-	-	-	■
		Brush Light (for hollow and perforated brick)	per pack per pack	d mm	mm	d0 ø mm	Liquix	h1 ≥ mm	hef mm	tfix ≤ mm	ETA
	084 600 85	M8 / M10	1x 1x	20	200	-	-	-	-	-	■
		Brush extension Brush XL	per pack per pack	d mm	mm	d0 ø mm	Liquix	h1 ≥ mm	hef mm	tfix ≤ mm	ETA
	084 600 82	-	1x -	-	200	-	-	-	-	-	■

Processing & Installation

- For precise cleaning procedures see approval, e.g. Liquix or Contact
- All components with M6 connection thread

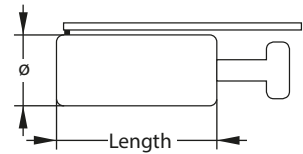




Blower Taifun



Features

- For optimum holding values
- Use is prescribed in many building authority approvals
- Ergonomic handle
- Flexible, 360° rotating hose
- Suitable for all building materials



Pack	Item No.	Type	Content	Ø	Length	Drill Ø	Liquix	Min. Drill hole depth	Min. Setting Depth	Fixture Thickness	Approval
		Taifun	per pack	mm	mm	d0 ø mm	Liquix	h1 ≥ mm	hef mm	tfix ≤ mm	ETA
	084 600 86	240 ml	1x	64	190	-	-	-	-	-	-
	084 600 801	750 ml	1x	64	370	-	-	-	-	-	■

Processing & Installation

- Blow out the drill hole from the base end
- Optimal results in combination with cleaning brush Brush



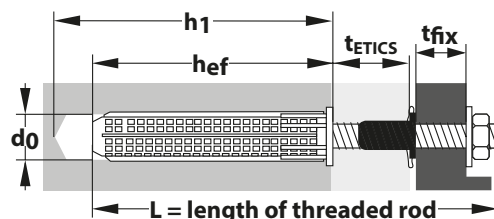










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Features

- Heavy-duty spacer installation for ETICS, clinker or on flat roofs
- Aqua-Stop effectively protects against rotting of the facade due to moisture
- Stainless steel prevents unsightly rust stains
- Approved by the building authorities
- Practically no energy loss
- Simple and rapid installation
- Smoothly adjustable insulating sleeve Iso Spacer
- Suitable for insulation thicknesses and spacer installations up to 200/300 mm



Pack	Item No.	Content	Size / Content	Driver	Tightening torque	Drill Ø	Min. Drill hole depth	Min. Anchoring depth	Max. thickness Insulating layer	Thickness Fixing	Approval
	Thermo Proof	per pack	mm		Nm	d0 ø mm	h1 ≥ mm	hef ≥ mm	tETICS ≤ mm	tfix ≥ mm	Dibt
	084 600 101	2x Iso Spacer	-	SW24	20	14 1)	70 / 100	70 / 100	200 / 170	2	
		2x threaded rod	M12 x 300	-	(Concrete)	(Concrete / solid masonry)	(Concrete / solid masonry)	(Concrete / solid masonry)	(Concrete / solid masonry)	(Concrete / solid masonry)	
		2x sieve sleeve	20 x 85	-		20 1)	90	85	190	2	
		1x extension	10 x 200	-		(perforated brick)	(perforated brick)	(perforated brick)	(perforated brick)	(perforated brick)	
		1x Aqua-Stop 80ml	80 ml	-		14 1)	70 / 100	70 / 100	300 / 270	2	
	084 600 121	2x Iso Spacer	-	SW24	20	14 1)	70 / 100	70 / 100	200 / 170	2	
		2x threaded rod	M12 x 400	-	(Concrete)	(Concrete / solid masonry)	(Concrete / solid masonry)	(Concrete / solid masonry)	(Concrete / solid masonry)	(Concrete / solid masonry)	
		2x sieve sleeve	20 x 85	-		20 1)	90	85	290	2	
		1x extension	10 x 250	-		(perforated brick)	(perforated brick)	(perforated brick)	(perforated brick)	(perforated brick)	
1x Aqua-Stop 80ml		80 ml	-		14 1)	70 / 100	70 / 100	300 / 270	2		
	Thermo Proof Large Pack	per pack	mm		Nm	d0 ø mm	h1 ≥ mm	hef ≥ mm	tETICS ≤ mm	tfix ≥ mm	Dibt
	084 100 102	20x Iso Spacer	-	SW24	20	14 1)	70 / 100	70 / 100	200 / 170	2	
		20x threaded rod	M12 x 300	-	(Concrete)	(Concrete / solid masonry)	(Concrete / solid masonry)	(Concrete / solid masonry)	(Concrete / solid masonry)	(Concrete / solid masonry)	
		20x sieve sleeve	20 x 85	-		20 1)	90	85	190	2	
	084 100 122	16x Iso Spacer	-	SW24	20	14 1)	70 / 100	70 / 100	300 / 270	2	
		16x threaded rod	M12 x 400	-	(Concrete)	(Concrete / solid masonry)	(Concrete / solid masonry)	(Concrete / solid masonry)	(Concrete / solid masonry)	(Concrete / solid masonry)	
		16x sieve sleeve	20 x 85	-		20 1)	90	85	290	2	

¹⁾ remove plaster layer with Ø 20 mm drill as necessary

* in combination with Liquix Pro 1

** in combination with Liquix Plus 7



Thermo Proof	Concrete uncracked C 20/25	Concrete cracked C 20/25	Vertically perforated brick Hlz 12	Perforated lime sand brick KSL 14	Hbn Lightweight concrete Hbn 2	Hbl Concrete Hbl 4	Solid lime sand brick KS 27	Brick Mz 20
Holding values³ (per fastening point without environmental effects)	500 kg *	500 kg *	100 kg	70 kg	60 kg ¹	20 kg ¹	170 kg	170 kg
Drill hole depth h ₁ ²	70 mm		90 mm**	90 mm**	100 mm	90 mm**	100 mm	100 mm
Anchoring depth h _{ef}	70 mm		85 mm**	85 mm**	100 mm	85 mm**	100 mm	100 mm
Drill Ø	14 mm (20 mm in plaster)		20 mm (25 mm in plaster)	20 mm (25 mm in plaster)	14 mm (20 mm in plaster)	20 mm (25 mm in plaster)	14 mm (20 mm in plaster)	14 mm (20 mm in plaster)
Tightening torque	20 Nm		6 Nm	8 Nm	10 Nm	2 Nm	20 Nm	10 Nm
Shear loads as a function of the non-load-bearing layer (insulation & plaster) with full clamping α = 2 of a fastening point without environmental effects								
ETICS	62 mm	80 mm	100 mm	120 mm	140 mm	160 mm	180 mm	200 mm
Shear loads	90 kg	81 kg	68 kg	58 kg	51 kg	46 kg	41 kg	38 kg

■ The partial safety factors of the assessments and a partial safety factor $\gamma_F = 1.4$ of the impact are to be considered in the holding values

■ Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

¹ Not included in approvals Z-21.8-2011

² Applies to the drill hole depth in the building material. The thickness of the insulation and plaster layer are still to be added

³ The entire approval notice Z-21.8-2011 and the approvals ETA-09/0258, ETA-13/0052 and ETA-13/0053 + ETA-13/0047, ETA-17/0501, ETA-17/0503 listed therein must be observed when sizing

* Corresponds to the permissible bearing load of the ISO spacer ** with sieve sleeve

Description & Area of Application

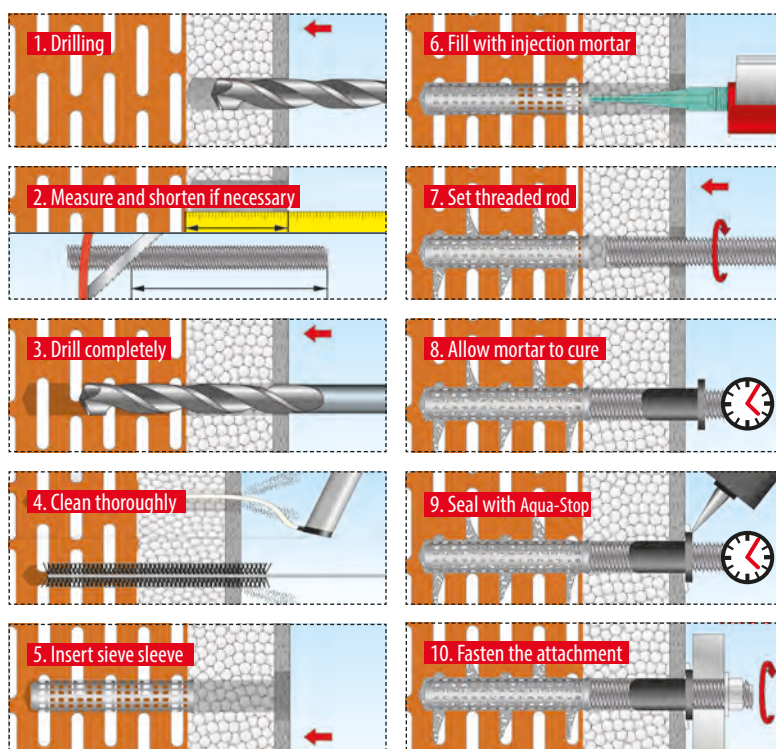
Thermo Proof is a heavy-duty spaced mounting system for thermally-insulated facades (ETICS) consisting of:

- Iso Spacer with large contact surface and SW24 driver for better force transmission
- Aqua-Stop special sealant for exterior use; incl. dosing tip; content 80ml; transparent colour
- Steel parts made of stainless steel in A4 quality; M12 thread; length 300/400 mm
- Static mixer extension for deep drill holes



Processing & Installation

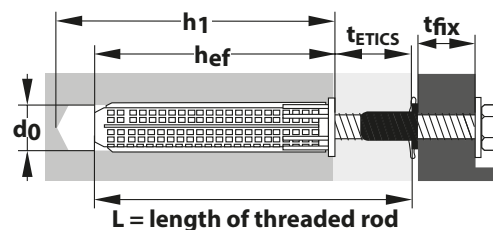
- Drill through thermal insulation
- Measure thermal insulation
- Drill a hole in the building material and remove the plaster layer if necessary
- Clean drill hole
- Shorten threaded rod if necessary (length = drill hole depth + insulation layer + attachment + 20 mm) and screw on Iso Spacer
- In perforated brick only with sieve sleeve. Insert this completely into the drill hole
- Fill 2/3 of the drill hole in the substrate or the sieve sleeve completely with injection mortar
- Insert the threaded rod with the pre-fitted Iso Spacer into the drill hole with a slight twisting motion
- Screw on the Iso Spacer until just before the plaster is applied
- Allow injection mortar to cure
- Seal gap with Aqua-Stop
- Mounting the fixture













Features

- Approved by the building authorities
- Variable M10 or M12 threaded rod connection
- The only approved spacer fastening with M10 threaded connection as used as standard, e.g. for French balconies
- Up to 250% more power than competitive products
- Suitable for insulation thicknesses and spacer installations up to 220/320 mm
- Aqua-Stop effectively protects against rotting of the facade due to moisture
- Safe protection against rust, energy loss and thermal bridges due to A4 stainless steel



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Pack	Item No.	Content	Size / Content	Driver	Tightening torque	Drill Ø	Min. Drill hole depth	Min. Anchoring depth	Max. thickness Insulating layer	Thickness Fixing	Approval				
	Thermo Proof Plus		per pack			mm		Nm	d0 ø mm	h1 ≥ mm	hef ≥ mm	tETICS ≤ mm	tfix ≥ mm	Dibt	
	084 600 151	2x Iso Spacer	-	SW24	20 (Concrete)	18 1)	80 / 100	80 / 100	220 / 200	(Concrete / solid masonry)	(Concrete / solid masonry)	(Concrete / solid masonry)	(Concrete / solid masonry)	min. 6 max. 28	
		2x threaded rod A4	M16x300	-											
		2x screw A4	M10x40	SW											
		2x screw A4	M12x40	SW											
		2x sieve sleeve	20 x 85	-											
		1x extension	10 x 200	-											
		1x Aqua-Stop 80 ml	80 ml												
	084 600 153	2x Iso Spacer	-	SW24	20 (Concrete)	18 1)	80 / 100	80 / 100	320 / 300	(Concrete / solid masonry)	(Concrete / solid masonry)	(Concrete / solid masonry)	(Concrete / solid masonry)	min. 6 max. 28	
		2x threaded rod A4	M16x400	-											
		2x screw A4	M10x40	SW											
		2x screw A4	M12x40	SW											
		2x sieve sleeve	20x85	-											
		1x extension	10x250	-											
1x Aqua-Stop 80ml		80 ml													
	Thermo Proof Plus Large Pack		per pack			mm		Nm	d0 ø mm	h1 ≥ mm	hef ≥ mm	tETICS ≤ mm	tfix ≥ mm	Dibt	
	084 100 152	12x Iso Spacer	-	SW24	20 (Concrete)	18 1)	80 / 100	80 / 100	220 / 200	(Concrete / solid masonry)	(Concrete / solid masonry)	(Concrete / solid masonry)	(Concrete / solid masonry)	min. 6 max. 28	
		12x threaded rod	M16x300	-											
		12x sieve sleeve	20x85	-											
	084 100 154	8x Iso Spacer	-	SW24	20 (Concrete)	18 1)	80 / 100	80 / 100	320 / 300	(Concrete / solid masonry)	(Concrete / solid masonry)	(Concrete / solid masonry)	(Concrete / solid masonry)	min. 6 max. 28	
		8x threaded rod	M16x400	-											
		8x sieve sleeve	20x85	-											

¹ 30 mm in plaster

² The entire approval notice Z-21.8-2020 must be observed when sizing.



Thermo Proof Plus	Concrete C 20/25 cracked & uncracked Connection M10	Concrete C 20/25 cracked & uncracked Connection M12	Vertically perforated brick Hlz 12	Perforated lime sand brick KSL 14	Hbn Lightweight concrete Hbn 2	Hbl Concrete Hbl 4	Solid lime sand brick KS 27	Brick Mz 20
Holding values³ (per fastening point without environmental effects)	1380 kg*	660 kg*	100 kg	70 kg	60 kg ¹	20 kg ¹	160 kg	170 kg
Drill hole depth h ₁ ²	80 mm		90 mm**	90 mm**	100 mm	90 mm**	100 mm	100 mm
Anchoring depth h _{ef}	80 mm		85 mm**	85 mm**	100 mm	85 mm**	100 mm	100 mm
Drill Ø	18 mm (30 mm in plaster)		20 mm (30 mm in plaster)	20 mm (30 mm in plaster)	18 mm (30 mm in plaster)	20 mm (30 mm in plaster)	18 mm (30 mm in plaster)	18 mm (30 mm in plaster)
Tightening torque	20 Nm		6 Nm	8 Nm	14 Nm	2 Nm	20 Nm	10 Nm
Shear loads depending on the non-load-bearing layers (insulation & plaster)								
tETICS	62 mm	80 mm	100 mm	120 mm	140 mm	160 mm	180 mm	200 mm
...of an attachment point without environmental effects								
Threaded connection M10	120 kg	120 kg	98 kg	83 kg	72 kg	63 kg	56 kg	51 kg
Threaded connection M12	60 kg	60 kg	60 kg	60 kg	60 kg	60 kg	56 kg	51 kg
...with full clamping (group installation) without environmental effects								
Threaded connection M10	120 kg	120 kg	120 kg	120 kg	120 kg	120 kg	117 kg	100 kg
Threaded connection M12	60 kg	60 kg	60 kg	60 kg	60 kg	60 kg	60 kg	60 kg

- The partial safety factors of the permits and a partial safety factor $\gamma_F = 1.4$ of the impact are to be considered in the holding values
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)
- ¹ Not included in approvals Z-21.8-2020
- ² Applies to the drill hole depth in the building material. The thickness of the insulation and plaster layer are still to be added
- ³ The entire approval notice Z-21.8-2020 and the approvals ETA-09/0258, ETA-13/0052 and ETA-13/0053 + ETA-13/0047, ETA-17/0501, ETA-17/0503 listed therein must be observed when sizing
- * Corresponds to the permissible bearing load of the ISO spacer ** with sieve sleeve

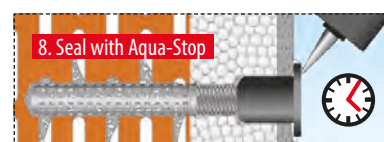
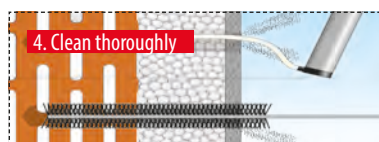
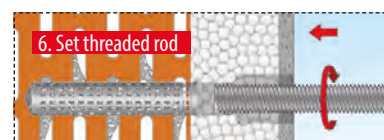
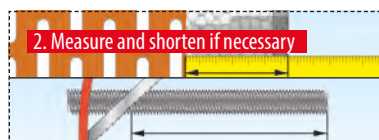
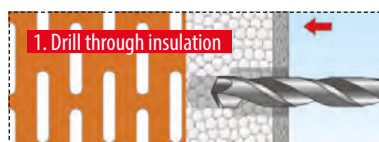
Description & Area of Application

- Heavy-duty spacer fastening for insulation, clinker and flat roofs
- Practically no energy loss and no thermal bridges due to A4 stainless steel
- Building authority approval for all spacer installations
- Simple and rapid installation
- For insulation up to 220/320 mm



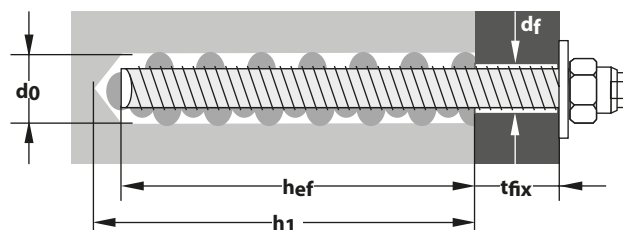
Processing & Installation

- Drill through thermal insulation (Ø 30 mm)
- Measure thermal insulation
- Drill a hole in the building material and remove the plaster layer if necessary
- Clean drill hole
- Shorten threaded rod if necessary (length = drill hole depth + insulation layer) and screw on Iso Spacer
- In perforated brick only with sieve sleeve. Insert this completely into the drill hole
- Fill 2/3 of the drill hole in the substrate or the sieve sleeve completely with injection mortar
- Insert the threaded rod with the pre-fitted Iso Spacer into the drill hole with a slight twisting motion
- Allow injection mortar to cure
- Seal gap with Aqua-Stop
- Mounting the fixture



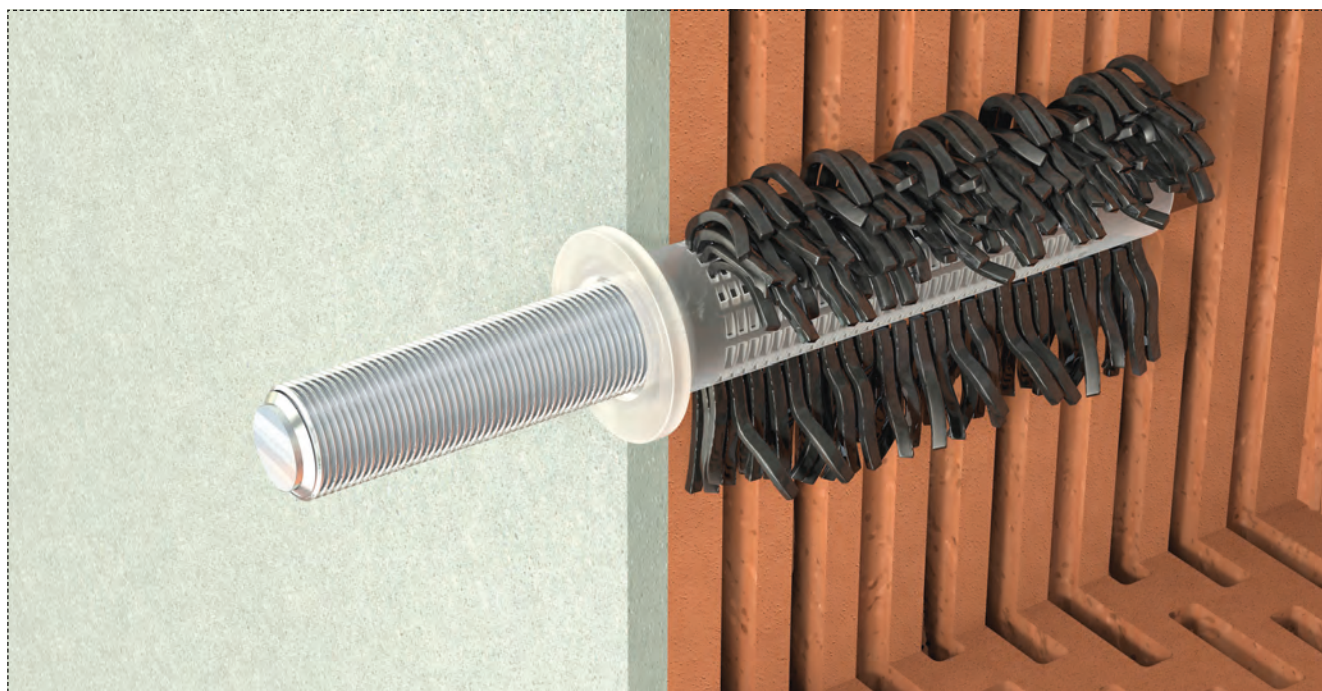
Features

- Universal heavy duty fastening set without spreading pressure
- Approved by the building authorities in conjunction with Liquix Pro 1 and Plus 7 injection mortar for concrete and perforated brickwork
- Made of A4 stainless steel



Pack	Item No.	Content	Size / Content	Driver	Tightening torque	Drill Ø	Min. Drill hole depth	Min. Anchoring depth	Thickness Fixing	Approval
	Wallix	per pack	mm		Nm	d_0 ø mm	h_1 ≥ mm	h_{ef} ≥ mm	t_{fix} ≤ mm	ETA
		2x Stix A4	M12x115	SW19		14* (Concrete)	70* (Concrete)	70 (Concrete)	25 (Concrete)	■
	070 671 021	2x sleeve	20 x 85	-		20 * (perforated brick)	90 (perforated brick)	85 (perforated brick)	10 (perforated brick)	

* In combination with Liquix Pro 1





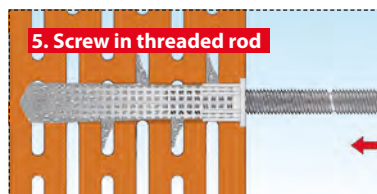
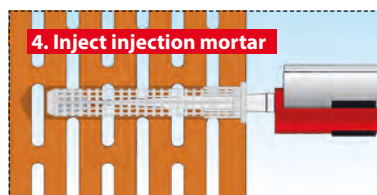
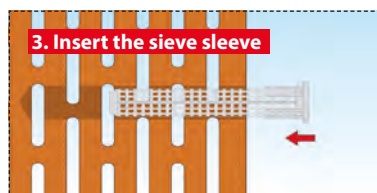
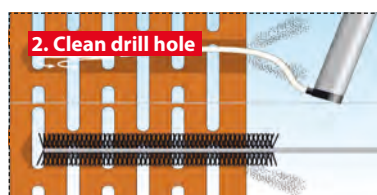
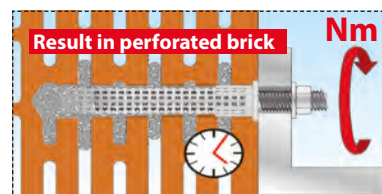
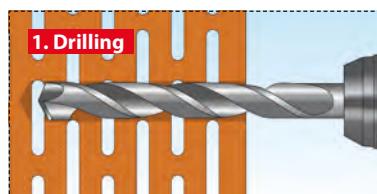
Description & Area of Application

- Ideal complement to Liquix injection mortar
- Made of stainless steel, with hexagonal nut, washer and sieve sleeve 20x85 mm



Processing & Installation

- Anchor rod of stainless steel A4,
- may be used in dry indoor areas, wet areas, outdoor areas, including industrial atmospheres and close to the sea
- Use sieve sleeve in perforated brick
- Pre-positioned installation



Metal hook wall plug Pirat Skippi








FOR PLASTERBOARD

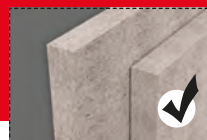


www.YouTube.com/toxgermany

Features

- Wall plug cap with anti-rotation lock prevents rotation in the building material
- Hook bolt can be loosened and tightened without removing the wall plug
- For single and double layer plasterboard, gypsum fibreboard and chipboard
- High holding values due to widespread anchoring on the back of the panel

Pack	Item No.	Type	Content Wall Plug	Content Hook	Wall plug Ø	Wall plug length	Hook	Drill Ø	Min. Cavity depth	Board thickness	Hook length	Approval
	Pirat Skippi-L		per pack	per pack	mm	mm	mm	d ₀ Ø mm	h _t ≥ mm	d _p mm	a ≤ mm	ETA
	035 101 651	M5 x 37	50x	50x	10	37	M5 x 52	10	37	6-13	6	-
	035 101 661	M5 x 37	25x	25x	10	37	M5 x 52	10	37	6-13	6	-
	035 101 681	M6 x 52	25x	25x	12	52	M6 x 68	12	48	7-18	6	-
	035 101 691	M6 x 65	25x	25x	12	65	M6 x 81	12	51	17-32	6	-
	Pirat Skippi-L		per pack	per pack	mm	mm	mm	d ₀ Ø mm	h _t ≥ mm	d _p mm	a ≤ mm	ETA
	035 701 651	M5 x 37	2x	2x	10	37	M5 x 52	10	37	6-13	6	-
	035 701 681	M6 x 52	2x	2x	12	52	M6 x 68	12	48	7-18	6	-
	035 701 691	M6 x 65	2x	2x	12	65	M6 x 81	12	51	17-32	6	-
	Pirat Skippi-XL		per pack	per pack	mm	mm	mm	d ₀ Ø mm	h _t ≥ mm	d _p mm	a ≤ mm	ETA
	035 701 621	M5 x 52	2x	2x	10	52	M5 x 86	10	48	8-21	20	-
	035 701 641	M6 x 52	2x	2x	12	52	M6 x 86	12	48	7-18	20	-
	Pirat Skippi-S		per pack	per pack	mm	mm	mm	d ₀ Ø mm	h _t ≥ mm	d _p mm	a ≤ mm	ETA
	035 701 561	M5 x 52	2x	2x	10	52	M5 x 89	10	48	7-18	14	-
	035 701 581	M6 x 52	2x	2x	12	52	M6 x 92	12	48	7-18	15	-
	Pirat Skippi-O		per pack	per pack	mm	mm	mm	d ₀ Ø mm	h _t ≥ mm	d _p mm	a ≤ mm	ETA
	035 701 521	M5 x 52	2x	2x	10	52	M5 x 89	10	48	7-18	14	-



Pirat Skippi-L	Gypsum plasterboard 9.5 mm	Gypsum plasterboard 12.5 mm	Gypsum plasterboard 2x 12.5 mm	Gypsum fibreboard 12.5 mm	Wood chip / plywood board ≥ 10 mm
M5x37	15 kg	20 kg	-	30 kg	30 kg
M6x52	15 kg	20 kg	-	30 kg	30 kg
M6x65	-	-	35 kg	-	-

Pirat Skippi-XL	Gypsum plasterboard 9.5 mm	Gypsum plasterboard 12.5 mm	Gypsum plasterboard 2x 12.5 mm	Gypsum fibreboard 12.5 mm	Wood chip / plywood board ≥ 10 mm
M5x52	15 kg	20 kg	-	30 kg	30 kg
M6x52	15 kg	20 kg	-	30 kg	30 kg

Pirat Skippi-S	Gypsum plasterboard 9.5 mm	Gypsum plasterboard 12.5 mm	Gypsum plasterboard 2x 12.5 mm	Gypsum fibreboard 12.5 mm	Wood chip / plywood board ≥ 10 mm
M5x52	15 kg	20 kg	-	30 kg	30 kg
M6x52	15 kg	20 kg	-	30 kg	30 kg

Pirat Skippi-O	Gypsum plasterboard 9.5 mm	Gypsum plasterboard 12.5 mm	Gypsum plasterboard 2x 12.5 mm	Gypsum fibreboard 12.5 mm	Wood chip / plywood board ≥ 10 mm
M5x52	15 kg	20 kg	-	30 kg	30 kg

- For fastenings in gypsum plasterboards, the holding value specifications of the board manufacturer must always be observed.
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

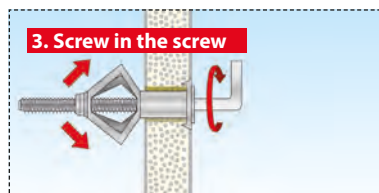
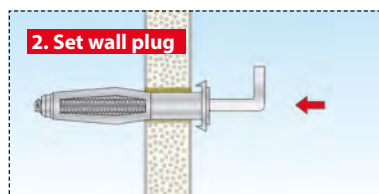
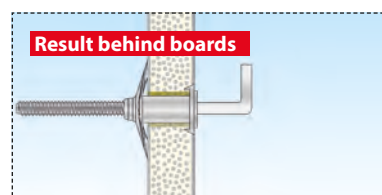
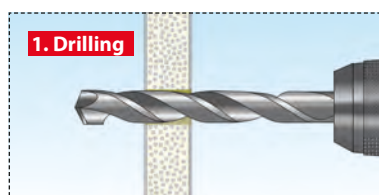
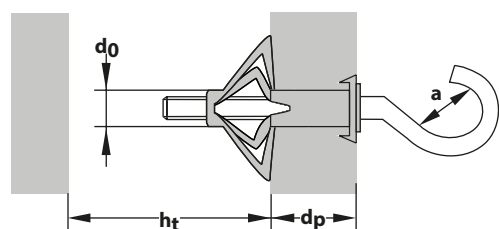
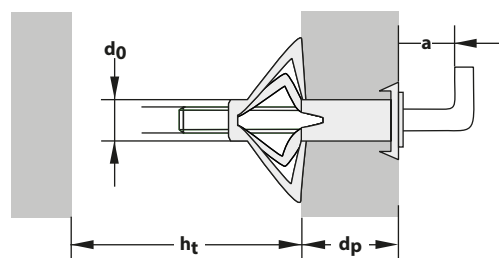
Description & Area of Application

- Galvanised metal cavity wall plug with wall plug cap, anti-rotation locks and metric threaded hook
- Galvanised metal cavity wall plug with wall plug cap, anti-rotation locks and short metric eye or round threaded hook

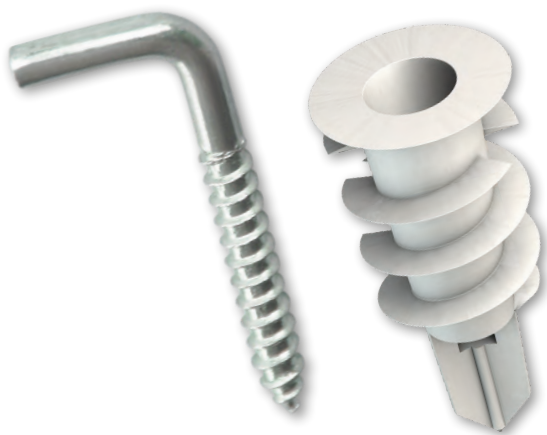


Processing & Installation

- If necessary, the rotation locks can be pressed back into their original shape (e.g. for tiles)
- Observe minimum cavity depth and board thickness
- Pre-positioned installation



Hook wall plug Pirat Leslie



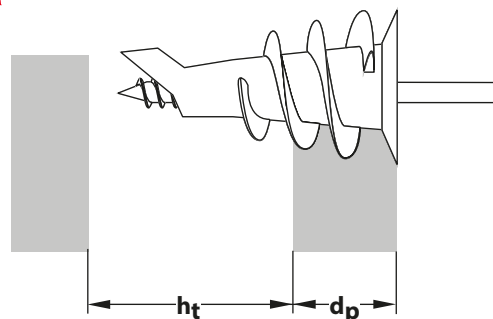
Features

- No pre-drilling required: In single layer gypsum plasterboards
- No special tool required
- Screw in directly
- High holding values in gypsum plasterboard up to 8 kg per fixing point
- Back rotation lock
- With hook bolt

FOR PLASTERBOARD



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Pack	Item No.	Type	Content Wall Plug	Content Hook	Wall plug Ø	Wall plug length	Hook	Drill Ø	Min. Cavity depth	Board thickness	Fixture Thickness	Approval
	Pirat Leslie-L		per pack	per pack	mm	mm	mm	d0 Ø mm	ht ≥ mm	dp ≤ mm	tfix ≤ mm	ETA
	068 701 501	32	4x	4x	-	32	4.0 x 35	-	23	20	-	-



Pirat Leslie-L	Gypsum plasterboard 9.5 mm	Gypsum plasterboard 12.5 mm	Gypsum plasterboard 2x 12.5 mm	Gypsum fibreboard 12.5 mm	Wood chip / plywood board ≥ 10 mm
32	7 kg	8 kg	-	-	-

- For fastenings in gypsum plasterboards, the holding value specifications of the board manufacturer must always be observed.
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

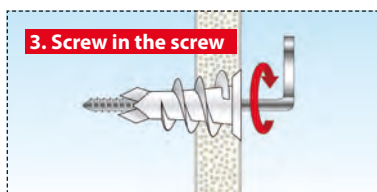
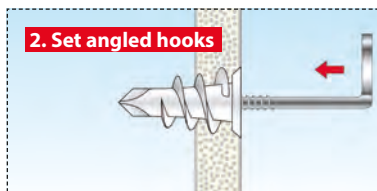
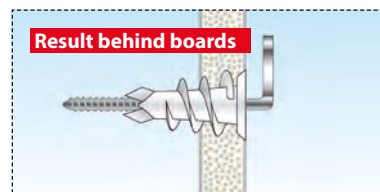
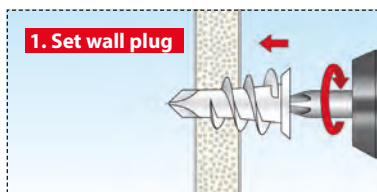
Description & Area of Application

- Glass fibre reinforced plasterboard wall plug
- Reinforced drill tip for easy installation without additional setting tool
- For single layer gypsum plasterboards
- Not suitable for gypsum fibreboards and tiled gypsum plasterboards
- Small footprint behind the panel due to short wall plug length
- PZ2 driver for simple installation



Processing & Installation

- Centre punch the gypsum plasterboard using the drill bit before screwing in
- Pre-positioned installation

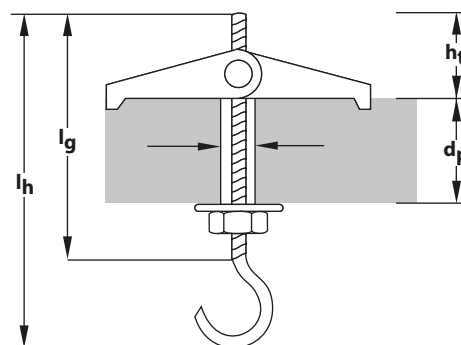



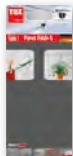


**AUTOMATIC
CAVITY TOGGLE**

Features

- Automatic cavity toggle
- With open round hook
- For bridging large wall thicknesses
- For single and double layer wall panels
- Independent spreading



Pack	Item No.	Type	Content Wall Plug	Content Washer	Spanner size	Hook length	Thread	Thread length	Drill Ø	Min. Cavity depth	Max. Board thickness	Fixture Thickness	Approval
	Pirat Eddi-S		per pack	per pack	SW	l_h mm	M	l_g mm	Ø mm	$h_t \geq$ mm	$d_p \leq$ mm	$t_{fix} \leq$ mm	ETA
	024 100 131	M3	20x	20x5.3x0.5	6	90	M3	60	12	30	25	-	-
	024 100 071	M4	50x	20x5.3x0.5	7	95	M4	70	14	35	25	-	-
	024 100 171	M4	20x	20x5.3x0.5	7	95	M4	70	14	35	25	-	-
	024 100 101	M5	25x	25x6.4x1.0	8	100	M5	70	18	45	20	-	-
	024 100 121	M6	25x	25x6.4x1.0	10	130	M6	90	18	50	30	-	-
	Pirat Eddi-S		per pack	per pack	SW	l_h mm	M	l_g mm	Ø mm	$h_t \geq$ mm	$d_p \leq$ mm	$t_{fix} \leq$ mm	ETA
	024 700 021	M3	2x	20x5.3x0.5	6	90	M3	60	12	30	25	-	-
	024 700 071	M4	2x	20x5.3x0.5	7	95	M4	70	14	35	25	-	-
	024 700 101	M5	2x	25x6.4x1.0	8	100	M5	70	18	45	20	-	-

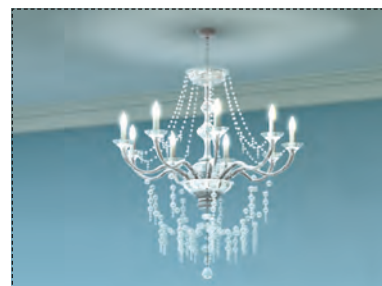


Pirat Eddi-S	Gypsum plasterboard 9.5 mm	Gypsum plasterboard 12.5 mm	Gypsum plasterboard 2x12.5 mm	Gypsum fibreboard 12.5 mm	Wood chip / plywood board ≥ 10 mm
M3	2 kg	2 kg	2 kg	2 kg	2 kg
M4	5 kg	5 kg	5 kg	5 kg	5 kg
M5	15 kg	15 kg	15 kg	15 kg	15 kg
M6	15 kg	20 kg	30 kg	30 kg	30 kg

- For fastenings in gypsum plasterboards, the holding value specifications of the board manufacturer must always be observed.
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

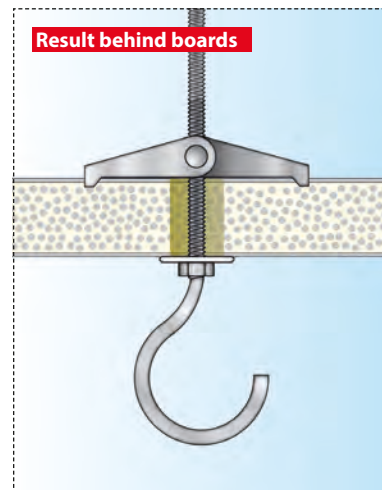
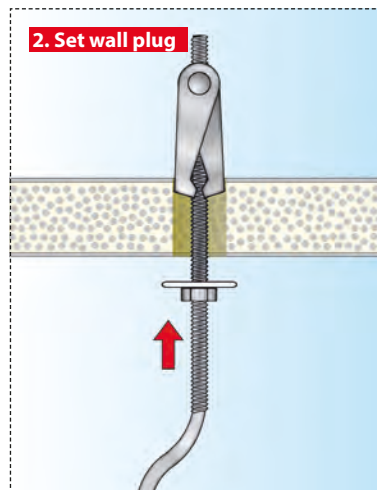
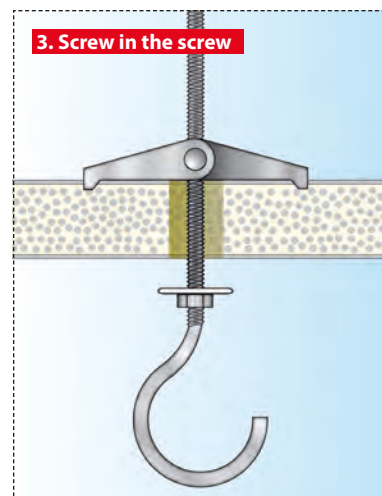
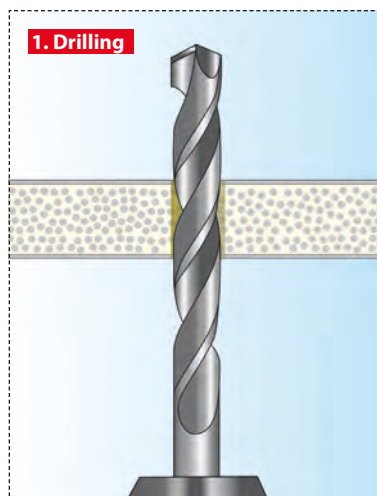
Description & Area of Application

- Galvanised metal cavity toggle wall plug with 2 tilting wings, metric threaded hook, metal washer and hexagonal nut



Processing & Installation

- Observe minimum cavity depth, board thickness and drill \varnothing (see table on the left)
- Observe vertical installation position for wall installation
- Pre-positioned installation



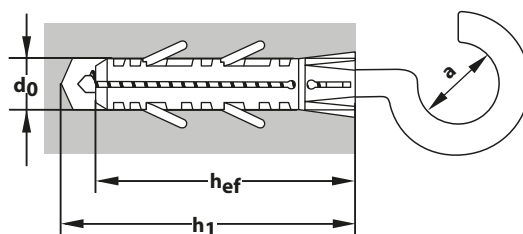
Hook wall plug Pirat Barbossa



www.YouTube.com/toxgermany

Features

- Up to 30% greater holding values than other expansion wall plugs
- Several active rotation locks
- High material content for high holding values
- Secure screw guidance
- 100% nylon
- The flexible wall plug neck adapts itself to the drill hole



Pack	Item No.	Type	Content Wall Plug	Content Hook	Wall plug Ø	Wall plug length	Hook	Drill Ø	Min. Drill hole depth	Anchoring depth	Eye Ø	Approval
	Pirat 051 701 011	 Barbossa S	per pack 4x	per pack 4x	mm 8	mm 40	mm 5.0 x 75	d0 ø mm 8	h1 ≥ mm 55	hef mm 40	a ≤ mm 14	ETA -
Pack	Item No.	Type	Content Wall Plug	Content Hook	Wall plug Ø	Wall plug length	Hook	Drill Ø	Min. Drill hole depth	Anchoring depth	Eye Ø	Approval
	Pirat 051 701 031	 Barbossa-O	per pack 2x	per pack 2x	mm 8	mm 40	mm 5.0 x 70	d0 ø mm 8	h1 ≥ mm 55	hef mm 40	a ≤ mm 14	ETA -
Pack	Item No.	Type	Content Wall Plug	Content Hook	Wall plug Ø	Wall plug length	Hook	Drill Ø	Min. Drill hole depth	Anchoring depth	Fixture Thickness	Approval
	Pirat 051 701 061	 Barbossa-L	per pack 4x	per pack 4x	mm 8	mm 40	mm 5.0 x 53	d0 ø mm 8	h1 ≥ mm 55	hef mm 40	tfix ≤ mm 14	ETA -



	Concrete C 20/25	Solid brick MZ 12	Vertically perforated brick ≥ H12 Bulk density ≥ 1 kg/dm³	Hollow brick ≥ Hb12	Cellular concrete ≥ PB2, PP2	Gypsum plasterboard 12.5 mm	Gypsum fibreboard 12.5 mm
Barbossa S	40 kg	40 kg	-	-	-	-	-
Barbossa-O	30 kg	30 kg	-	-	-	-	-
Barbossa-L	30 kg	30 kg	-	-	-	-	-

- The anchoring depth of the wall plug must be observed
- Drilling method and drill hole cleaning must be adapted to the building material
- The recommended loads only apply to installation in the building material, not for installation in joints
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

Description & Area of Application

- Barracuda expansion wall plug for solid building materials

Barbossa-S:

- Open eyebolt

Barbossa-O:

- Closed eyebolt with 14 mm hole diameter

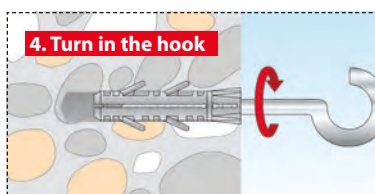
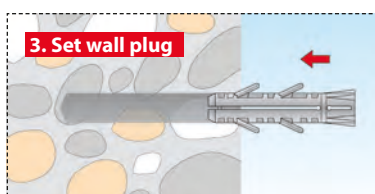
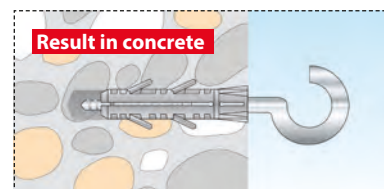
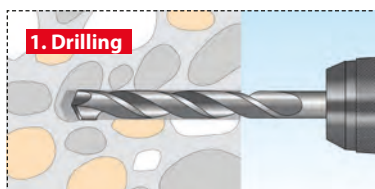
Barbossa-L:

- Angled hook



Processing & Installation

- Create drill hole in the size of the wall plug diameter
- Use hammer drilling into concrete and solid masonry
- Pre-positioned installation



Hook dowel Pirat Will

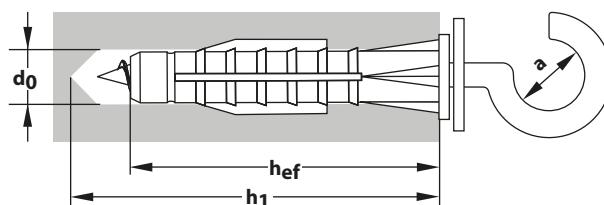


Features

- Wall plug cap protects the surface and prevents slipping deeper into the drill hole
- Holds in almost all building materials
- Secure tying in cavities
- Spreads reliably in solid masonry
- Anti-rotation locks prevent rotation in the drill hole



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Pack	Item No.	Type	Content Wall Plug	Content Hook	Wall plug Ø	Wall plug length	Hook	Drill Ø	Min. Drill hole depth	Anchoring depth	Eye Ø	Approval
		per pack	per pack		mm	mm	mm	d0 ø mm	h1 ≥ mm	hef mm	a ≤ mm	ETA
	012 261 11	Will-S	20x	20x	8	51	5.0 x 86	8	70	51	14	-
		per pack	per pack		mm	mm	mm	d0 ø mm	h1 ≥ mm	hef mm	a ≤ mm	ETA
	051 701 111	Will-S	2x	2x	8	51	5.0 x 86	8	70	51	14	-
Pack	Item No.	Type	Content Wall Plug	Content Hook	Wall plug Ø	Wall plug length	Hook	Drill Ø	Min. Drill hole depth	Anchoring depth	Hook length	Approval
		per pack	per pack		mm	mm	mm	d0 ø mm	h1 ≥ mm	hef mm	a ≤ mm	ETA
	051 701 121	Will-L	2x	2x	8	51	5.0 x 70	8	70	51	8	-
Pack	Item No.	Type	Content Wall Plug	Content Hook	Wall plug Ø	Wall plug length	Hook	Drill Ø	Min. Drill hole depth	Anchoring depth	Eye Ø	Approval
		per pack	per pack		mm	mm	mm	d0 ø mm	h1 ≥ mm	hef mm	a ≤ mm	ETA
	051 701 131	Will-O	4x	4x	8	51	5.0 x 86	8	70	51	14	-



Pirat	Concrete C 20/25	Solid brick MZ 12	Vertically perforated brick ≥ Hlz12 Bulk density ≥ 1 kg/dm³	Hollow brick ≥ Hbl2	Cellular concrete ≥ PB2, PP2	Gypsum plasterboard 12.5 mm	Gypsum fibreboard 12.5 mm
Will-S	40 kg	40 kg	30 kg	25 kg	15 kg	10 kg	20 kg
Will-L	50 kg	50 kg	30 kg	25 kg	15 kg	10 kg	20 kg
Will-O	35 kg	35 kg	30 kg	25 kg	15 kg	10 kg	20 kg

- The anchoring depth of the wall plug must be observed
- Drilling method and drill hole cleaning must be adapted to the building material
- The recommended loads only apply to installation in the building material, not for installation in joints
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

Description & Area of Application

- All-purpose wall plug Trika for almost all building materials
- 3-way split wall plug body with wall plug cap
- Hook with fastener for securing the function of the all-purpose wall plug
- White coated hooks for visually appealing fastenings

Pirat Will-S:

- Open eyebolt

Pirat Will-L:

- Angled hook

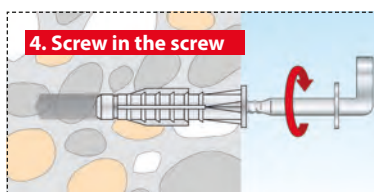
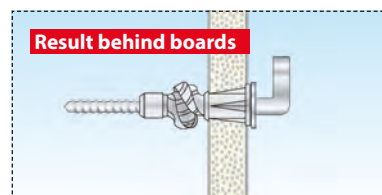
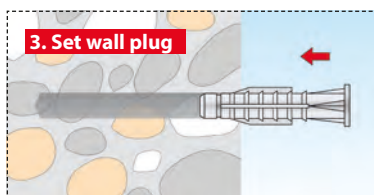
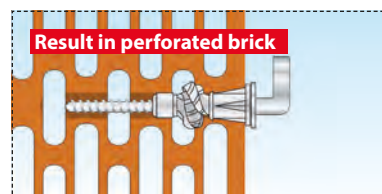
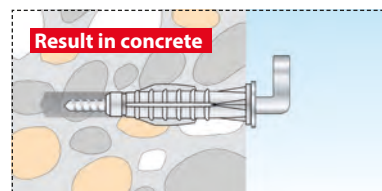
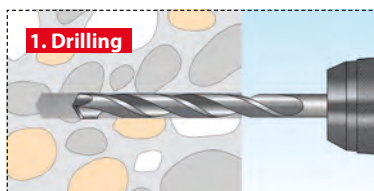
Pirat Will-O:

- Closed eyebolt



Processing & Installation

- Create drill hole in the size of the wall plug diameter
- Drill into perforated brick and gypsum plasterboard without hammering in a rotary motion so that the webs in the perforated brick are not broken
- When drilling into gypsum plasterboards, use a wood or metal drill bit
- Use hammer drilling into concrete and solid masonry
- Pre-positioned installation



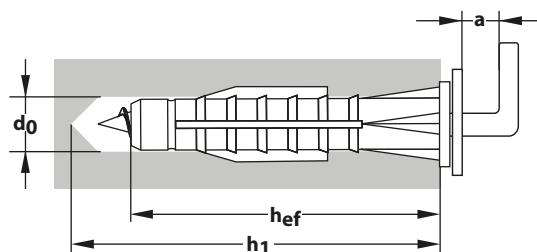
Hook wall plug Pirat Bill



www.YouTube.com/toxgermany

Features

- Wall plug cap protects the surface and prevents slipping deeper into the drill hole
- Holds in almost all building materials
- Secure tying in cavities
- Spreads reliably in solid masonry
- Anti-rotation locks prevent rotation in the drill hole



Pack	Item No.	Type	Content Wall Plug	Content Hook	Wall plug Ø	Wall plug length	Hook	Drill Ø	Min. Drill hole depth	Anchoring depth	Hook length	Approval
	051 701 221	Bill-XL	per pack 4x	per pack 4x	mm 8	mm 51	mm 5.0 x 80	d_0 ø mm 8	h_1 ≥ mm 70	h_{ef} mm 51	a ≤ mm 20	ETA -
	012 261 26	Bill-L	per pack 20x	per pack 20x	mm 8	mm 51	mm 5.0 x 66	d_0 ø mm 8	h_1 ≥ mm 70	h_{ef} mm 51	a ≤ mm 5	ETA -
	051 701 261	Bill-L	per pack 4x	per pack 4x	mm 8	mm 51	mm 5.0 x 66	d_0 ø mm 8	h_1 ≥ mm 70	h_{ef} mm 51	a ≤ mm 5	ETA -



Pirat	Concrete C 20/25	Solid brick MZ 12	Vertically perforated brick ≥ Hlz12 Bulk density ≥ 1 kg/dm³	Hollow brick ≥ Hbl2	Cellular concrete ≥ PB2, PP2	Gypsum plasterboard 12.5 mm	Gypsum fibreboard 12.5 mm
Bill-XL	15 kg	15 kg	15 kg	15 kg	15 kg	10 kg	15 kg
Bill-L	15 kg	15 kg	15 kg	15 kg	15 kg	10 kg	15 kg

- The anchoring depth of the wall plug must be observed
- Drilling method and drill hole cleaning must be adapted to the building material
- The recommended loads only apply to installation in the building material, not for installation in joints
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

Description & Area of Application

- All-purpose wall plug Trika for almost all building materials
- 3-way split wall plug body with wall plug cap
- Hook with fastener for securing the function of the all-purpose wall plug

Pirat Bill-XL:

- Long angled hook

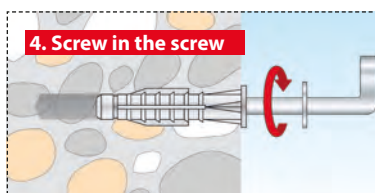
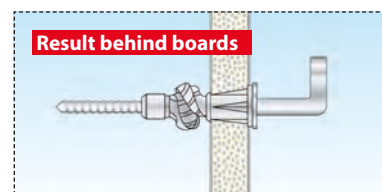
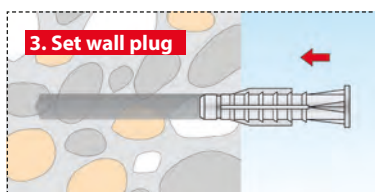
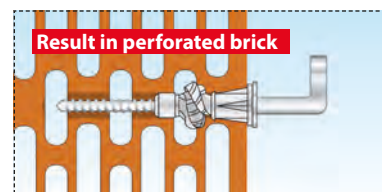
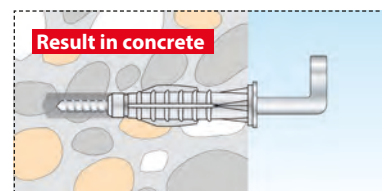
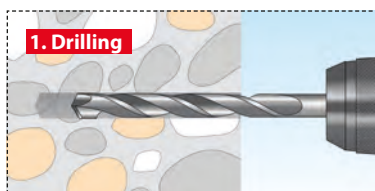
Pirat Bill-L:

- Short angled hook



Processing & Installation

- Create drill hole in the size of the wall plug diameter
- Drill into perforated brick and gypsum plasterboard without hammering in a rotary motion so that the webs in the perforated brick are not broken
- When drilling into gypsum plasterboards, use a wood or metal drill bit
- Use hammer drilling into concrete and solid masonry
- Secure tying behind plasterboards and in cavities
- Pre-positioned installation

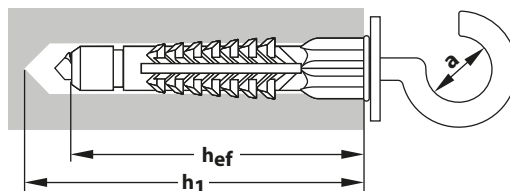


Hook wall plug Pirat Lenny




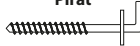

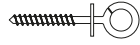


Features

- The smart one: Hooks can be screwed in very easily due to the special geometry
- Wall plug cap protects the surface and prevents slipping deeper into the drill hole
- Holds in almost all building materials
- Secure tying in cavities
- Spreads reliably in solid masonry
- Uniform force distribution
- Rotation locks
- Detachable wall plug cap for pre-positioned and through installation



www.YouTube.com/toxgermany

Pack	Item No.	Type	Content Wall Plug	Content Hook	Wall plug Ø	Wall plug length	Hook	Drill Ø	Min. Drill hole depth	Anchoring depth	Eye Ø	Approval
		per pack	per pack		mm	mm	mm	d0 Ø mm	h1 ≥ mm	hef mm	a ≤ mm	ETA
	051 701 311	Lenny-S	4x	4x	6	41	3.5 x 71	6	50	41	14	-
Pack	Item No.	Type	Content Wall Plug	Content Hook	Wall plug Ø	Wall plug length	Hook	Drill Ø	Min. Drill hole depth	Anchoring depth	Hook length	Approval
		per pack	per pack		mm	mm	mm	d0 Ø mm	h1 ≥ mm	hef mm	a ≤ mm	ETA
	051 701 321	Lenny-L	4x	4x	6	41	3.5 x 55	6	50	41	5	-
Pack	Item No.	Type	Content Wall Plug	Content Hook	Wall plug Ø	Wall plug length	Hook	Drill Ø	Min. Drill hole depth	Anchoring depth	Eye Ø	Approval
		per pack	per pack		mm	mm	mm	d0 Ø mm	h1 ≥ mm	hef mm	a ≤ mm	ETA
	051 701 331	Lenny-O	4x	4x	6	41	3.5 x 71	6	50	41	14	-



Pirat	Concrete C 20/25	Solid brick MZ 12	Vertically perforated brick ≥ Hlz12 Bulk density ≥ 1 kg/dm³	Hollow brick ≥ Hbz2	Cellular concrete ≥ PB2, PP2	Gypsum plasterboard 12.5 mm	Gypsum fibreboard 12.5 mm
Lenny-S	15 kg	15 kg	15 kg	15 kg	-	10 kg	10 kg
Lenny-L	15 kg	15 kg	15 kg	15 kg	-	10 kg	15 kg
Lenny-O	15 kg	15 kg	15 kg	15 kg	-	10 kg	15 kg

- The anchoring depth of the wall plug must be observed
- Drilling method and drill hole cleaning must be adapted to the building material
- The recommended loads only apply to installation in the building material, not for installation in joints
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

Description & Area of Application

- All-purpose wall plug Deco for almost all building materials
- 4-way split wall plug body for uniform force distribution
- Hook with fastener for securing the function of the all-purpose wall plug

Pirat Lenny-S:

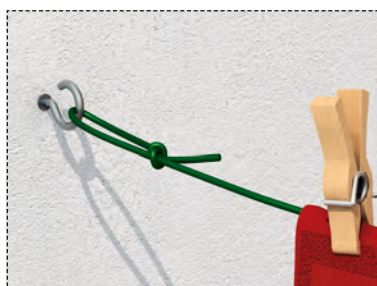
- Open eyebolt

Pirat Lenny-L:

- Angle screw

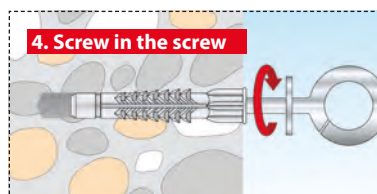
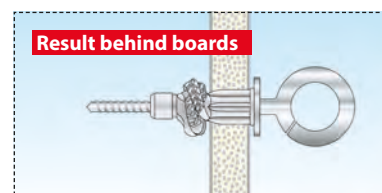
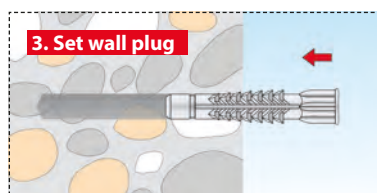
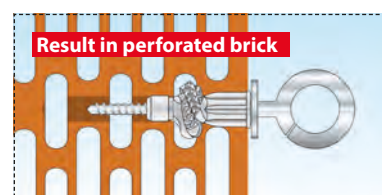
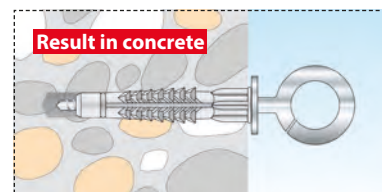
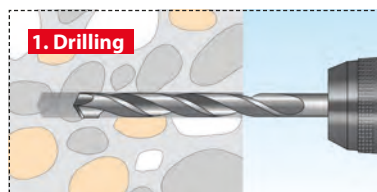
Pirat Lenny-O:

- Closed eyebolt



Processing & Installation

- Create drill hole in the size of the wall plug diameter
- Drill into perforated brick and gypsum plasterboard without hammering in a rotary motion so that the webs in the perforated brick are not broken
- When drilling into gypsum plasterboards, use a wood or metal drill bit
- Use hammer drilling into concrete and solid masonry
- Secure tying behind plasterboards and in cavities
- Pre-positioned installation



Hook wall plug Pirat Longbird

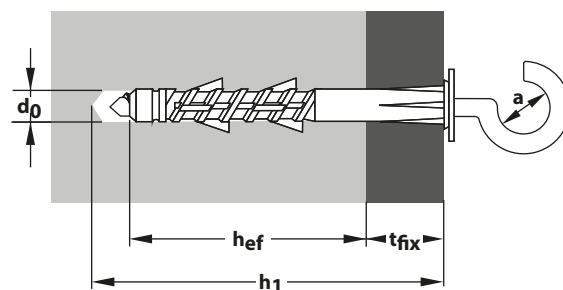



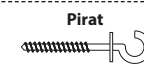


Pirat Longbird-S

Pirat Longbird-L

Features

- Extra long hook or eye bolts
- Holds in almost all building materials
- For bridging non-load-bearing layers
- No slipping deeper into the drill hole


www.YouTube.com/toxgermany

Pack	Item No.	Type	Content Wall Plug	Content Hook	Wall plug Ø	Wall plug length	Hook	Drill Ø	Min. Drill hole depth	Min. Anchoring depth	Eye Ø	Useful length	Permission
		Pirat Longbird-S	per pack	per pack	mm	mm	mm	d0 ø mm	h1 ≥ mm	hef ≥ mm	a ≤ mm	tfix ≤ mm	ETA
	051 701 411	Longbird-S	2x	2x	8	80	6.0 x 115	8	90	50 {70}	13	30 {10}	-
Pack	Item No.	Type	Content Wall Plug	Content Hook	Wall plug Ø	Wall plug length	Hook	Drill Ø	Min. Drill hole depth	Min. Anchoring depth	Hook length	Useful length	Permission
		Pirat Longbird-L	per pack	per pack	mm	mm	mm	d0 ø mm	h1 ≥ mm	hef ≥ mm	a ≤ mm	tfix ≤ mm	ETA
	051 701 421	Longbird-L	2x	2x	8	80	6.0 x 97	8	90	50 {70}	5	30 {10}	-

{} Cellular concrete



Pirat	Concrete C 20/25	Solid brick MZ 12	Vertically perforated brick ≥ Hlz12 Bulk density ≥ 1 kg/dm³	Hollow brick ≥ Hbl2	Cellular concrete ≥ PB2, PP2	Gypsum plasterboard 12.5 mm	Gypsum fibreboard 12.5 mm
Longbird-S	20 kg	20 kg	20 kg	-	15 kg	-	-
Longbird-L	30 kg	30 kg	30 kg	-	15 kg	-	-

- The anchoring depth of the wall plug must be observed
- Drilling method and drill hole cleaning must be adapted to the building material
- The recommended loads only apply to installation in the building material, not for installation in joints
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

Description & Area of Application

- Tetrafix XL wall plug for almost all building materials
- Hook with fastener for securing the function of the wall plug

Pirat Longbird-S:

- Open eyebolt

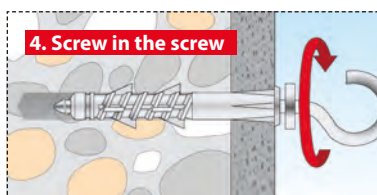
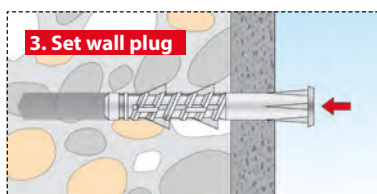
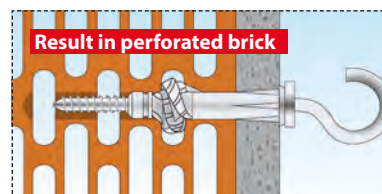
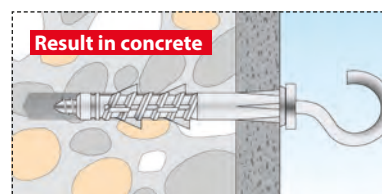
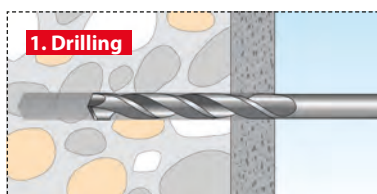
Pirat Longbird-L:

- Short angled hook



Processing & Installation

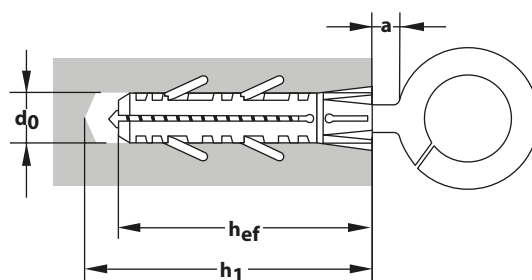
- Create drill hole in the size of the wall plug diameter
- Drill into perforated brick in a rotary motion without hammering so that the webs are not broken
- Use hammer drilling into concrete and solid masonry
- Pre-positioned installation





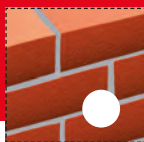
Features

- Use with and without wall plugs
- Welded-on eyelet
- Flexible applications



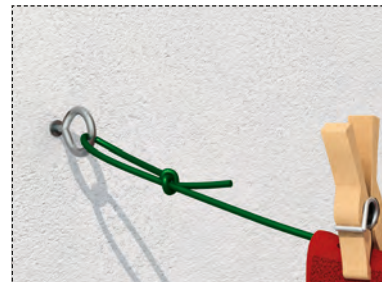
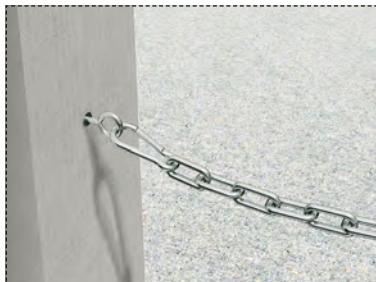
Pack	Item No.	Type	Content Wall Plug	Content Hook	Hook Ø	Hook length	Eye Ø	Drill Ø	Min. Drill hole depth	Anchoring depth	Spacing Building material	Approval
		Eye	per pack	per pack	mm	mm	ø mm	d0 ø mm	h1 ≥ mm	hef mm	a ≤ mm	ETA
	057 101 041	8 x 80	-	10x	8	80	22	10	60	50	22	-
	057 101 051	8 x 100	-	10x	8	100	22	10	60	50	42	-
	057 101 061	8 x 120	-	10x	8	120	22	10	60	50	62	-





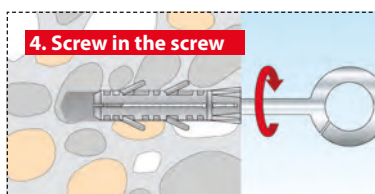
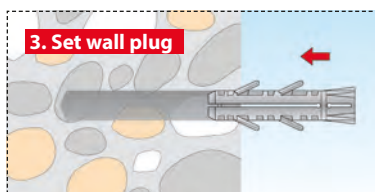
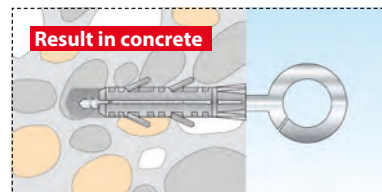
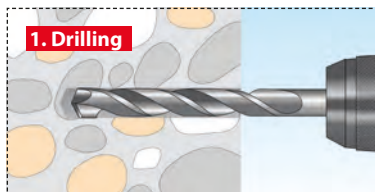
Description & Area of Application

- Galvanised eyebolt with 21 mm eye Ø and wooden thread
- Welded-on eyelet prevents bending



Processing & Installation

- When using in hardwood, pre-drill with the core Ø of the screw
- Do not use for anchoring free-standing frameworks
- In concrete and solid masonry we recommend a combination with the TOX expansion wall plug Barracuda 10/50 (Pirat Will-O)
- Pre-positioned installation



Machine wall plug Pirat Sven

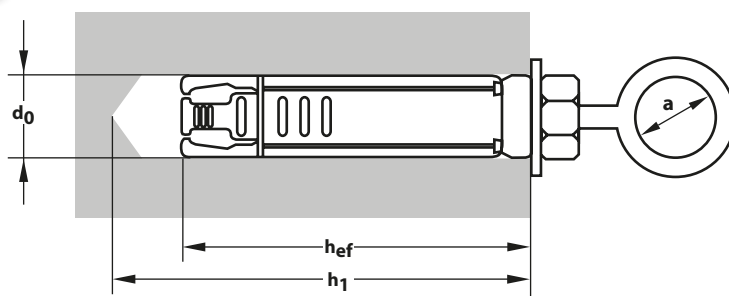


Pirat Sven-S

Pirat Sven-O

Features

- Heavy-duty machine wall plug with hook bolt or eyelet
- Hook bolt can be loosened and tightened without removing the wall plug
- For concrete and solid building materials with dense structure
- High holding values due to 4-way spreading



Pack	Item No.	Type	Content	Wall Plug	Wall plug length	Driver	Drill Ø	Min. Drill hole depth	Anchoring depth	Eye Ø	Torque Tightening	Approval
	Pirat Sven-S		per pack	metric	mm	SW	d0 Ø mm	h1 ≥ mm	hef mm	a mm	Tinst Nm	ETA
	037 103 01	M6 x 40	50x	M6	40	10	10	45	40	8	10	-
	Pirat Sven-S		per pack	metric	mm	SW	d0 Ø mm	h1 ≥ mm	hef mm	a mm	Tinst Nm	ETA
	037 703 01	M6 x 40	2x	M6	40	10	10	45	40	8	10	-
Pack	Item No.	Type	Content	Wall Plug	Wall plug length	Driver	Drill Ø	Min. Drill hole depth	Anchoring depth	Eye Ø	Torque Tightening	Approval
	Pirat Sven-O		per pack	metric	mm	SW	d0 Ø mm	h1 ≥ mm	hef mm	a mm	Tinst Nm	ETA
	037 102 01	M6 x 40	50x	M6	40	10	10	45	40	10	10	-
	037 102 03	M8 x 50	50x	M8	50	13	14	55	50	11.8	25	-
	037 102 04	M10 x 60	25x	M10	60	17	16	65	60	14.5	50	-
	037 102 05	M12 x 80	25x	M12	80	19	20	85	80	17	85	-
	Pirat Sven-O		per pack	metric	mm	SW	d0 Ø mm	h1 ≥ mm	hef mm	a mm	Tinst Nm	ETA
	037 702 01	M6 x 40	2x	M6	40	10	10	45	40	10	10	-



Pirat Sven-S:	Concrete C 20/25	Solid brick MZ 12	Vertically perforated brick ≥ Hlz12 Bulk density ≥ 1 kg/dm³	Hollow brick ≥ Hbz2	Cellular concrete ≥ PB2, PP2	Gypsum plasterboard 12.5 mm	Gypsum fibreboard 12.5 mm
M6	80 kg	*	-	-	-	-	-
Pirat Sven-O:	Concrete C 20/25	Solid brick MZ 12	Vertically perforated brick ≥ Hlz12 Bulk density ≥ 1 kg/dm³	Hollow brick ≥ Hbz2	Cellular concrete ≥ PB2, PP2	Gypsum plasterboard 12.5 mm	Gypsum fibreboard 12.5 mm
M6	200 kg	*	-	-	-	-	-
M8	360 kg	*	-	-	-	-	-
M10	480 kg	*	-	-	-	-	-
M12	630 kg	*	-	-	-	-	-

- The anchoring depth of the wall plug must be observed
- Drilling method and drill hole cleaning must be adapted to the building material
- The recommended loads only apply to installation in the building material, not for installation in joints
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

*only for solid masonry with dense structure / holding values depend on building material

Description & Area of Application

Sven-S:

- Machine wall plug with hook screw
- Anchor sleeve made of galvanised steel
- For temporary and permanent fixings

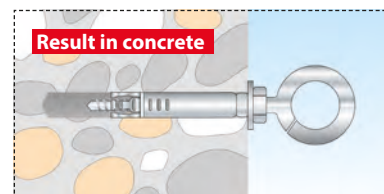
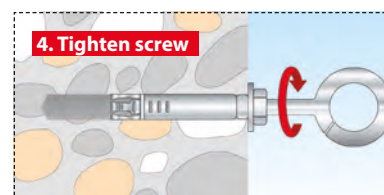
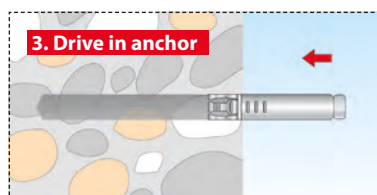
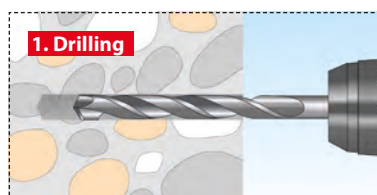
Sven-O:

- Machine wall plug with eyebolt
- High quality welding prevents bending of the eye
- Machine wall plug made of galvanized steel



Processing & Installation

- For concrete and solid masonry with dense structure
- Pre-positioned installation
- The specified torque must be observed





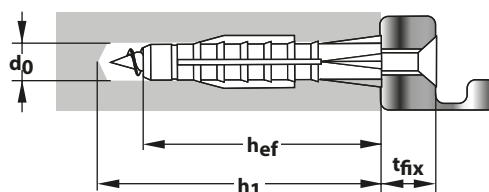
Tri



www.YouTube.com/toxgermany

Features

- Optimally aligned components
- With the original Tri wall plug
- Holds in almost all building materials
- Spring-loaded metal clamps for easy hanging of the object



Pack	Item No.	Type	Content	Wall plug Ø	Wall plug length	Screw Size	Drill Ø	Min. Drill hole depth	Min. Anchoring depth	Fixture Thickness	Approval
	Look		per pack	mm	mm	mm	d0 Ø mm	h1 ≥ mm	hef mm	tfix ≤ mm	ETA
			4x	5	31	4.0 x 40	5	45	31	2	-
			4x								
			2x								
			2x								
	Look		per pack	mm	mm	mm	d0 Ø mm	h1 ≥ mm	hef mm	tfix ≤ mm	ETA
			4x	6	36	4.0 x 40	6	50	36	2	-
			4x								
			2x								
			2x								



Tri	Concrete C 20/25	Solid brick MZ 12	Vertically perforated brick ≥ Hlz12 Bulk density 1 kg/dm³	Hollow brick ≥ Hbl2	Cellular concrete ≥ PB4, PP4	Gypsum plasterboard 12.5 mm	Gypsum fibreboard 12.5 mm
5/31	10 kg	10 kg	10 kg	10 kg	7 kg	6 kg	10 kg
6/36	10 kg	10 kg	10 kg	10 kg	10 kg	10 kg	10 kg

- The anchoring depth of the wall plug must be observed
- Drilling method and drill hole cleaning must be adapted to the building material
- The recommended loads only apply to installation in the building material, not for installation in joints
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

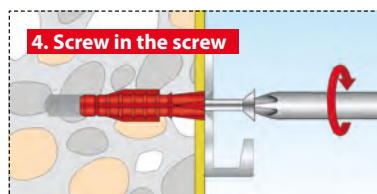
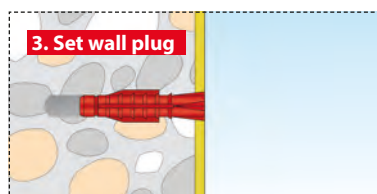
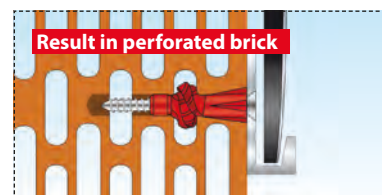
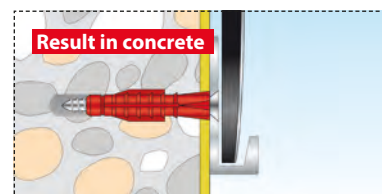
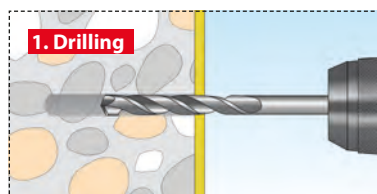
Description & Area of Application

- Tri wall plug, two spring-loaded metal clips, two plastic clips and screws with PZ2 driver
- Plastic brackets prevent damage due to pressure or scratching



Processing & Installation

- Drill into perforated brick and gypsum plasterboards without hammering in a rotary motion so that the drill hole is not too big and the webs in the perforated brick are not broken.
- The plastic clamp fixes the object at the desired height
- The spring-loaded metal clamp allows the object to be replaced
- Pre-positioned installation



Washbasin fastening Oasis



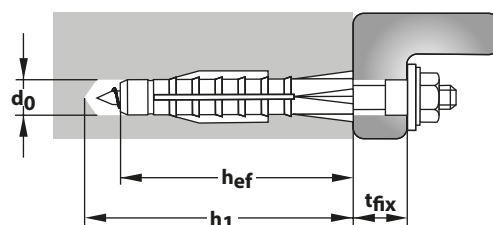
Tri



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Features

- Optimally aligned components
- Surface protection thanks to plastic washer with flange: surface protection fixing
- With the original Tri wall plug
- Holds in almost all building materials



Pack	Item No.	Type	Content	Wall plug Ø	Wall plug length	Screw Size	Drill Ø	Min. Drill hole depth	Min. Anchoring depth	Fixture Thickness	Approval
				mm	mm	mm	d0 ø mm	h1 ≥ mm	hef mm	tfix ≤ mm	ETA
	Oase		per pack								
			2x								
			2x								
	045 101 03		2x								
			2x (34x11x3 / DIN 440)								
			2x (M10 / DIN 934)								
				14	75	M10 x 140	14	100	75	40	-
	Oase		per pack								
			2x								
			2x								
	045 701 031		2x								
			2x (34x11x3 / DIN 440)								
			2x (M10 / DIN 934)								
				14	75	M10 x 140	14	100	75	40	-



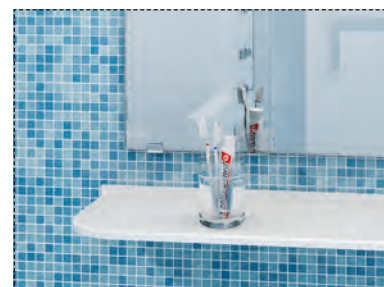
Oase	Concrete C 20/25	Solid brick MZ 12	Vertically perforated brick ≥ Hlz12 Bulk density ≥ 1 kg/dm³	Hollow brick ≥ Hbz12	Cellular concrete ≥ PB2, PP2	Gypsum plasterboard 2x12.5 mm	Gypsum fibreboard 12.5 mm
M10	140 kg	120 kg	35 kg	15 kg	35 kg	-	-

- The anchoring depth of the wall plug must be observed
- Drilling method and drill hole cleaning must be adapted to the building material
- The recommended loads only apply to installation in the building material, not for installation in joints
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

Description & Area of Application

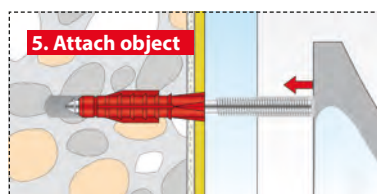
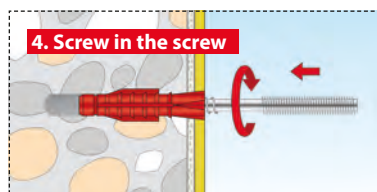
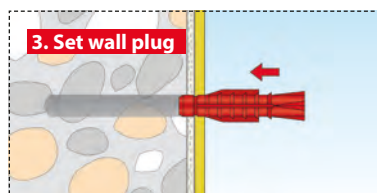
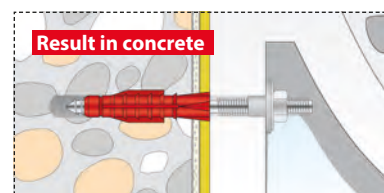
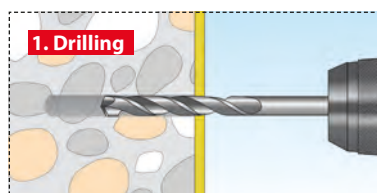
Contents of fastening set:

- Original Tri all-purpose wall plugs for almost all building materials
- Plastic washers with collar
- Hanger bolts M10 x 140
- Metal washers and hexagonal nuts (SW 17)



Processing & Installation

- The plastic washer with collar protects the ceramic body from damage during installation
- Drill into perforated brick without hammering in a rotary motion so that the drill hole is not too big and the webs in the perforated brick are not broken.
- Pre-positioned installation

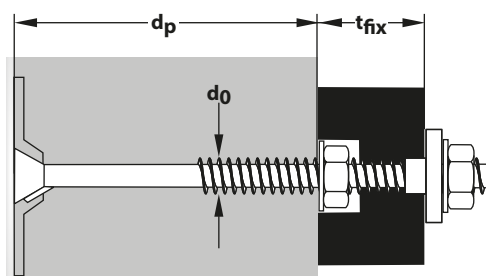


Washbasin fastening Oasis Backside

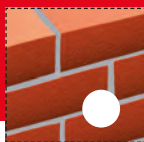


Features

- Surface protection thanks to plastic washer with flange: surface protection fixing
- Optimally aligned components



Pack	Item No.	Type	Content	Wall plug Ø	Wall plug length	Screw Size	Drill Ø	Suitable Board thickness	Fixture Thickness	Approval
		Oasis Backside	per pack	mm	mm	M	d ₀ ø mm	d _p ≤ mm	t _{fix} ≤ mm	ETA
	045 101 07		2x	-	-	M10 x 160	10	100	40	-
			2x (Ø 65 mm)							
			4x (34x11x3 / DIN 440)							
			4x (M10 / DIN 934)							
			2x							



Description & Area of Application

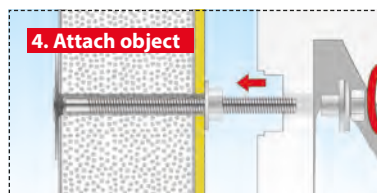
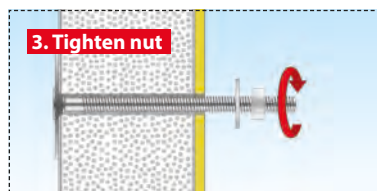
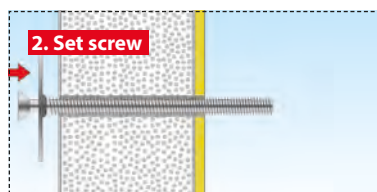
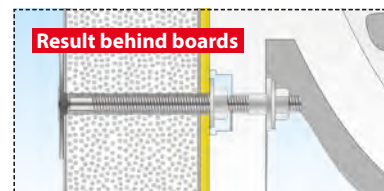
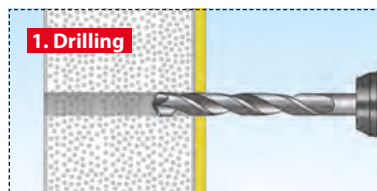
Contents of fastening set:

- Metric countersunk screw M10x160 with large metal washer Ø 65 mm and plastic washer with collar
- Hexagonal nut (SW17) with metal washer for M10
- Installation via rear wall side up to 100 mm wall thickness
- Holding values are wall-dependent



Processing & Installation

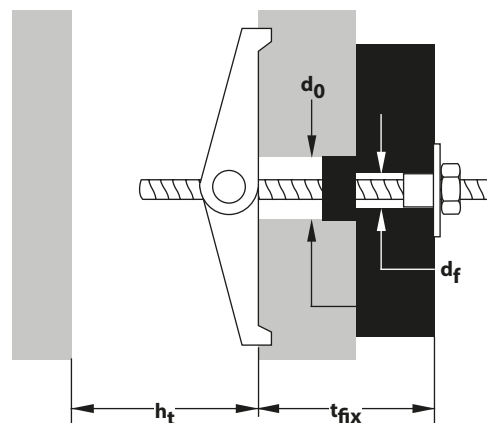
- Install the countersunk screw with metal washer from the back of the wall, then fasten the object
- The plastic washer with collar protects the ceramic body from damage during installation
- DIN 18183 must be observed when fastening washstands to gypsum plasterboard walls, and DIN 4103-2 for gypsum wall panels
- Pre-positioned installation






Features

- Automatic spreading
- Bridges large boards and fixing thicknesses



Pack	Item No.	Type	Content	Driver	Thread	Wall Plug	Drill Ø Building material	Drill Ø Attachment	Min. Cavity depth	Min. Anchoring depth	Thickness Fixing
	Oase Spagat		per pack	SW	M	mm	d0 ø mm	df ø mm	ht ≥ mm	hef mm	tfix ≤ mm
	024 100 221	M10	10x	17	M10	180	30	14	90	-	140



Oase Spagat	Concrete C 20/25	Solid brick MZ 12	Vertically perforated brick ≥ Hlz12 Bulk density ≥ 1 kg/dm³	Hollow brick ≥ Hbz12	Cellular concrete ≥ PB2, PP2	Gypsum plasterboard 2x12.5 mm	Gypsum fibreboard 12.5 mm
M10	-	-	-	-	-	70 kg	-

- The anchoring depth of the wall plug must be observed
- Drilling method and drill hole cleaning must be adapted to the building material
- The recommended loads only apply to installation in the building material, not for installation in joints
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

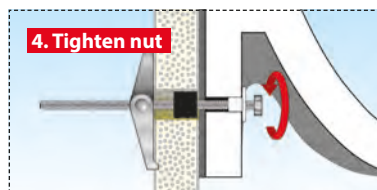
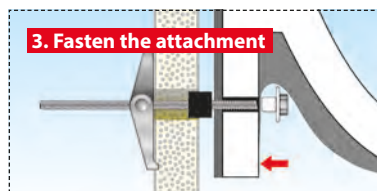
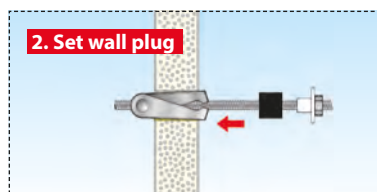
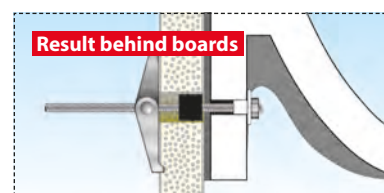
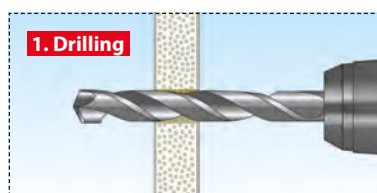
Description & Area of Application

- Galvanised metal sprung cavity toggle with two wings and spring-action mechanism, rubber support washer, plastic collar washer, hexagonal nut (SW17) and threaded rod M10
- For wall panels up to 100 mm thick
- For gypsum plasterboard and gypsum fibreboard with a minimum thickness of 18 mm



Processing & Installation

- Observe minimum cavity depth, board thickness and drill Ø
- For wall panels up to 100 mm thick
- For gypsum plasterboard and gypsum fibreboard with a minimum thickness of 18 mm
- Observe vertical installation position of the wings for wall installation
- DIN 18183 must be observed when fastening washstands to gypsum plasterboard walls, and DIN 4103-2 for gypsum wall panels
- Pre-positioned installation

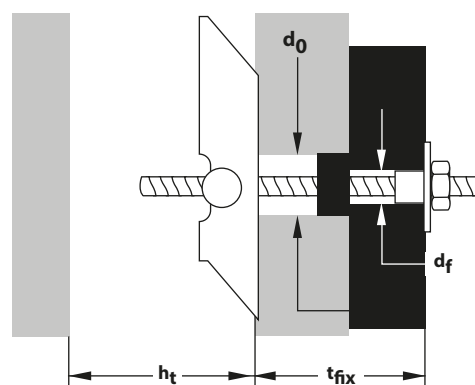



Washbasin fastening Oase Spagat Pro



Features

- Bridges large boards and fixing thicknesses



Pack	Item No.	Type	Content	Driver	Thread	Wall Plug	Drill Ø Building material	Drill Ø Attachment	Min. Cavity depth	Min. Anchoring depth	Thickness Fixing
	Oase Spagat Pro		per pack	SW	mm	mm	d0 ø mm	df ø mm	ht ≥ mm	hef mm	tfix ≤ mm
	023 100 091	M10	10x	17	M10	180	30	14	90	-	140



Oase Spagat Pro	Concrete C 20/25	Solid brick MZ 12	Vertically perforated brick ≥ Hlz12 Bulk density ≥ 1 kg/dm³	Hollow brick ≥ Hbl2	Cellular concrete ≥ PB2, PP2	Gypsum plasterboard 2x12.5 mm	Gypsum fibreboard 12.5 mm
M10	-	-	-	-	-	70 kg	-

- The anchoring depth of the wall plug must be observed
- Drilling method and drill hole cleaning must be adapted to the building material
- The recommended loads only apply to installation in the building material, not for installation in joints
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

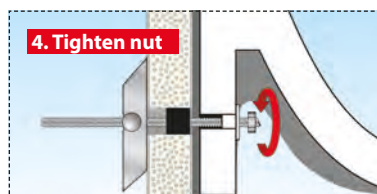
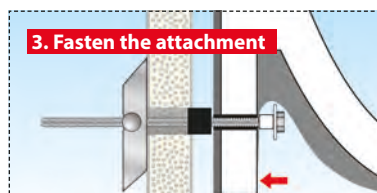
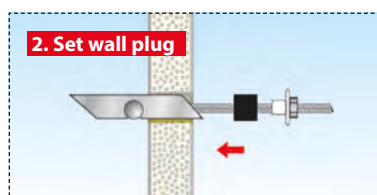
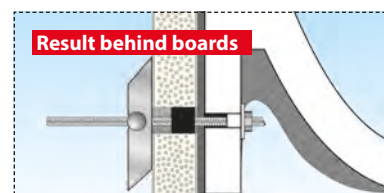
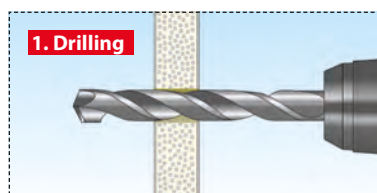
Description & Area of Application

- Galvanised metal cavity toggle wall plug with a crooked wing, rubber support washer, plastic collar washer, hexagonal nut (SW17) and threaded rod M10
- For wall panels up to 100 mm thick
- For gypsum plasterboard and gypsum fibreboard with a minimum thickness of 18 mm



Processing & Installation

- Observe minimum cavity depth, board thickness and drill Ø
- Observe vertical installation position of the wing for wall installation
- DIN 18183 must be observed when fastening washstands to gypsum plasterboard walls, and DIN 4103-2 for gypsum wall panels
- Pre-positioned installation



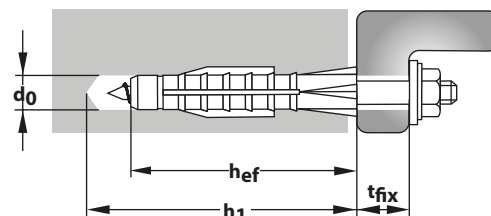
Urinal basin fastening **Piss-Fix XL**

















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Features

- Surface protection by plastic washer
- With the original Tri wall plug
- Holds in almost all building materials
- Spreads reliably in solid masonry
- No turning in the drill hole
- Pre-positioned and through installation



Pack	Item No.	Type	Content	Wall plug Ø	Wall plug length	Screw Size	Drill Ø	Screw	Min. Drill hole depth	Min. Anchoring depth	Thickness Fixing
	045 101 48	Piss Fix XL White		mm	mm	mm	d0 ø mm	M	h1 ≥ mm	hef mm	tfix ≤ mm
			2x	14	75	M10 X 140	14	M10	100	75	40
			2x								
			2x (34x11x3 / white)								
			2x (34x11x3 / vz)								
			2x (M10)								
	2x (white)										

Pack	Item No.	Type	Content			Drill Ø	Screw	Min. Drill hole depth	Min. Anchoring depth	Thickness Fixing	
	045 101 49	Piss-Fix XL	per pack	mm	mm	mm	d0 ø mm	M	h1 ≥ mm	hef mm	tfix ≤ mm
			2x	14	75	M10 X 140	14	M10	100	75	40
			2x								
			2x (34x11x3 / white)								
			2x (34x11x3 / vz)								
			2x (M10)								
			2x (chrome)								



Piss-Fix XL	Concrete C 20/25	Solid brick MZ 12	Vertically perforated brick ≥ Hlz12 Bulk density ≥ 1 kg/dm³	Hollow brick ≥ Hbl2	Cellular concrete ≥ PB2, PP2	Gypsum plasterboard 2x12.5 mm	Gypsum fibreboard 12.5 mm
14x75	140 kg	120 kg	35 kg	15 kg	35 kg	-	-

- The anchoring depth of the wall plug must be observed
- Drilling method and drill hole cleaning must be adapted to the building material
- The recommended loads only apply to installation in the building material, not for installation in joints
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

Description & Area of Application

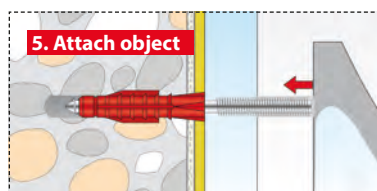
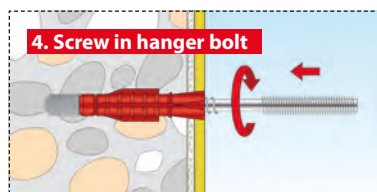
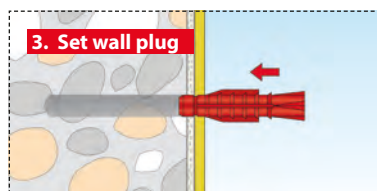
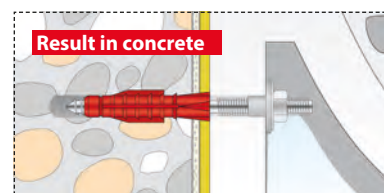
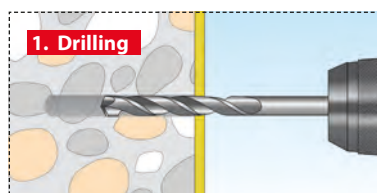
Contents of fastening set:

- Original Tri all-purpose wall plugs for almost all building materials
- Plastic washers
- Small plastic cover caps (white / chrome-plated)
- Hanger bolts (M10 x 140)
- Washers and hexagonal nuts (SW 17) of galvanized steel

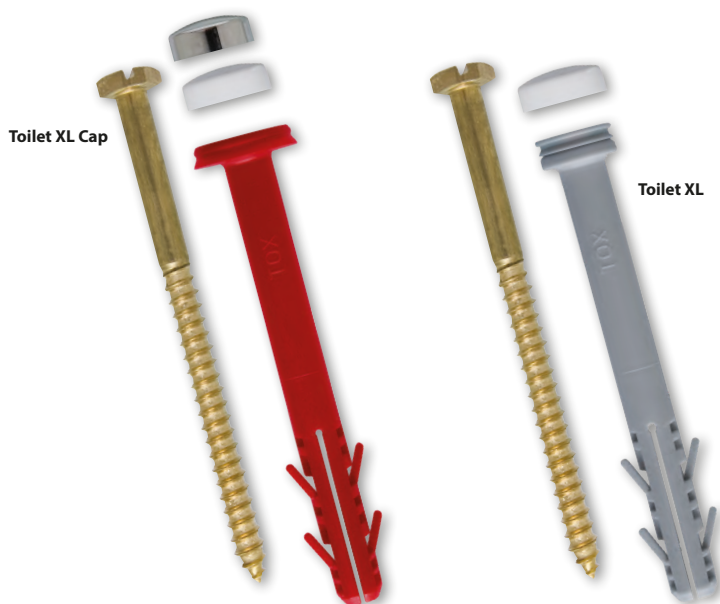


Processing & Installation

- Drill into perforated brick without hammering in a rotary motion so that the drill hole is not too big and the webs in the perforated bricks are not broken.
- The plastic washer protects the ceramic body from damage
- The cover cap is fixed on the nut
- Pre-positioned installation

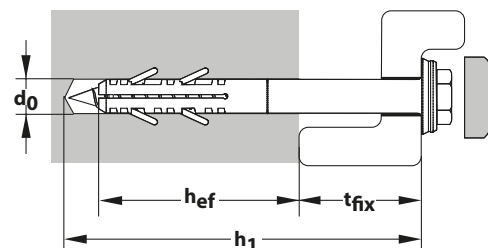


Stand-alone WC fastening Toilet XL Cap

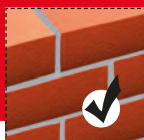


Features

- Extreme hold in concrete and solid masonry
- Up to 35 mm attachment thickness
- Wall plug with special mounting for a secure hold of the cover caps
- Optimally aligned components



Pack	Item No.	Type	Content	Wall plug Ø	Wall plug length	Drill Ø	Screw	Min. Drill hole depth	Min. Anchoring depth	Thickness Fixing
	Toilet XL Cap		per pack	mm	mm	d0 Ø mm	mm	h1 ≥ mm	hef ≥ mm	tfix ≤ mm
	045 101 34		2x	8	80	8	6 x 85	90	40	35
			2x (SW 10 / brass)							
			2x (white)							
			2x (chrome)							
	Toilet XL Cap		per pack	mm	mm	d0 Ø mm	mm	h1 ≥ mm	hef ≥ mm	tfix ≤ mm
	045 701 341		2x	8	80	8	6 x 85	90	40	35
			2x (SW 10 / brass)							
			2x (white)							
			2x (chrome)							
	Toilet XL Cap		per pack	mm	mm	d0 Ø mm	mm	h1 ≥ mm	hef ≥ mm	tfix ≤ mm
	045 101 35		2x	8	80	8	6 x 85	90	40	35
			2x (SW 10 / brass)							
			2x (white)							
Pack	Item No.	Type	Content	Wall plug Ø	Wall plug length	Drill Ø	Screw	Min. Drill hole depth	Min. Anchoring depth	Thickness Fixing
	Toilet XL		per pack	mm	mm	d0 Ø mm	mm	h1 ≥ mm	hef ≥ mm	tfix ≤ mm
	045 101 39		2x	8	80	8	6 x 85	90	40	35
			2x (SW 10 / brass)							
			2x (white)							
	Toilet XL		per pack	mm	mm	d0 Ø mm	mm	h1 ≥ mm	hef ≥ mm	tfix ≤ mm
	045 701 391		2x	8	80	8	6 x 85	90	40	35
			2x (SW 10 / brass)							
			2x (white)							



Toilet XL Cap	Concrete C 20/25	Solid brick MZ 12	Vertically perforated brick ≥ Hlz12 Bulk density ≥ 1 kg/dm³	Hollow brick ≥ Hbz12	Cellular concrete ≥ PB2, PP2	Gypsum plasterboard 2x12.5 mm	Gypsum fibreboard 12.5 mm
8x80	80 kg	70 kg	-	-	-	-	-

- The anchoring depth of the wall plug must be observed
- Drilling method and drill hole cleaning must be adapted to the building material
- The recommended loads only apply to installation in the building material, not for installation in joints
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

Description & Area of Application

- Works in concrete and solid masonry through expansion

Toilet XL Cap:

- Expansion wall plug with shaft and take-up for large cover caps
- Brass screw with SW 10 driver

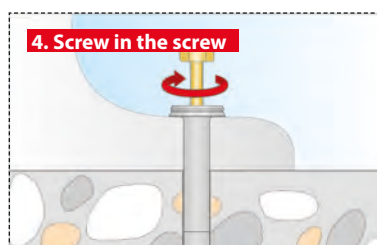
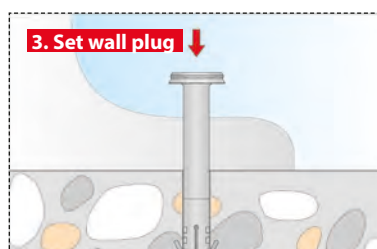
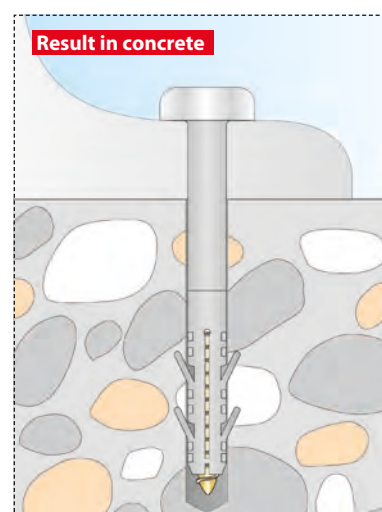
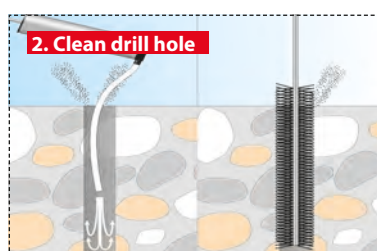
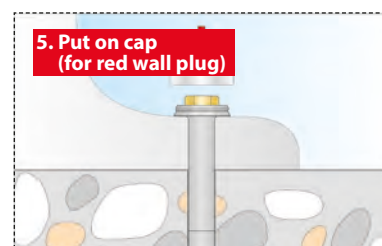
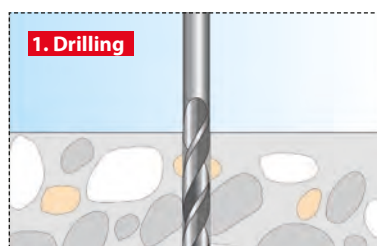
Toilet XL:

- Expansion wall plug with shaft and take-up for small cover caps
- Brass screw with SW 10 driver



Processing & Installation

- The wall plug shaft with flange protects the ceramic object from damage during installation and at the same time serves as a slot for the cap
- Cover caps supplied for visually attractive installation

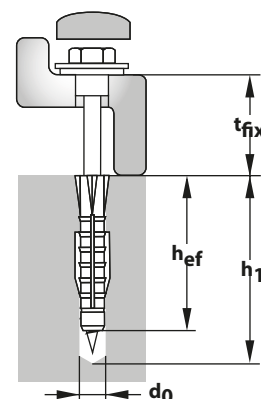



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Features

- Surface protection by plastic washer
- High-quality corrosion protection (brass screw)
- Optimally aligned components



Pack	Item No.	Type	Content	Wall plug Ø	Wall plug length	Drill Ø	Screw	Min. Drill hole depth	Min. Anchoring depth	Thickness Fixing
	Toile Plus		per pack	mm	mm	d0 Ø mm	mm	h1 ≥ mm	hef ≥ mm	tfix ≤ mm
	045 101 52		2x Tri	8	51	8	6.0 x 85	70	51	30
			2x (SW 10 / DIN 571 / brass)							
			2x (white)							
			2x (chrome)							
	Toile Plus		per pack	mm	mm	d0 Ø mm	mm	h1 ≥ mm	hef ≥ mm	tfix ≤ mm
	045 101 52/S		2x Tri	8	51	8	6.0 x 85	70	51	30
			2x (SW 10 / DIN 571 / brass)							
			2x (white)							
			2x (chrome)							
	Toile Plus		per pack	mm	mm	d0 Ø mm	mm	h1 ≥ mm	hef ≥ mm	tfix ≤ mm
	045 701 461		2x Tri	8	51	8	6.0 x 85	70	51	30
			2x (SW 10 / DIN 571 / brass)							
			2x (white)							
			2x (chrome)							
Pack	Item No.	Type	Content	Wall plug Ø	Wall plug length	Drill Ø	Screw	Min. Drill hole depth	Min. Anchoring depth	Thickness Fixing
	Toilet		per pack	mm	mm	d0 Ø mm	mm	h1 ≥ mm	hef ≥ mm	tfix ≤ mm
	045 101 36		2x Barracuda	8	40	8	6.0 x 70	55	40	24
			2x (SW 10 / DIN 571 / brass)							
			2x (white)							
			2x (chrome)							
	Toilet		per pack	mm	mm	d0 Ø mm	mm	h1 ≥ mm	hef ≥ mm	tfix ≤ mm
	045 101 36/S		2x Barracuda	8	40	8	6.0 x 70	55	40	24
			2x (SW 10 / DIN 571 / brass)							
			2x (white)							
			2x (chrome)							



	Concrete C 20/25	Solid brick MZ 12	Vertically perforated brick ≥ Hlz12 Bulk density ≥ 1 kg/dm³	Hollow brick ≥ Hbz12	Cellular concrete ≥ PB2, PP2	Gypsum plasterboard 2x12.5 mm	Gypsum fibreboard 12.5 mm
Toilet	50 kg	50 kg	-	-	-	-	-
Toilet Plus	40 kg	40 kg	-	-	-	-	-

- The anchoring depth of the wall plug must be observed
- Drilling method and drill hole cleaning must be adapted to the building material
- The recommended loads only apply to installation in the building material, not for installation in joints
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

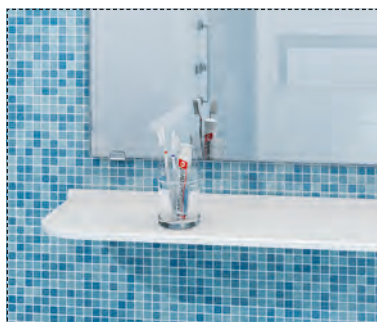
Description & Area of Application

Toilet Plus:

- 2 Tri wall plugs (8/51), 2 plastic washers with flange, brass hexagonal screw (SW 10) and white and/or chrome-plated caps
- Holds in almost all building materials

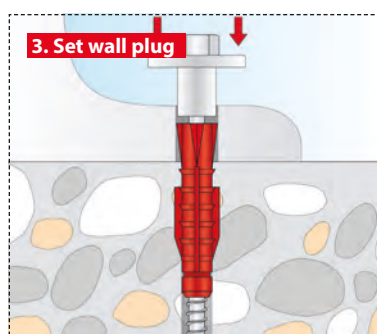
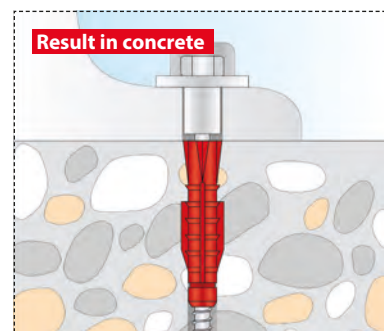
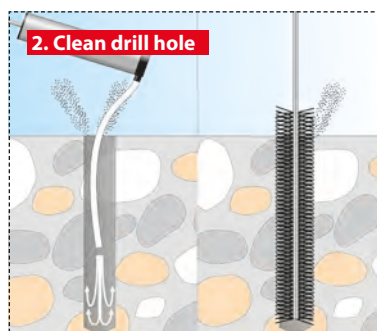
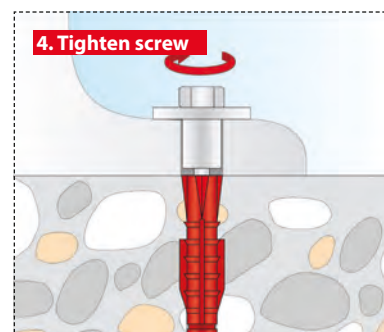
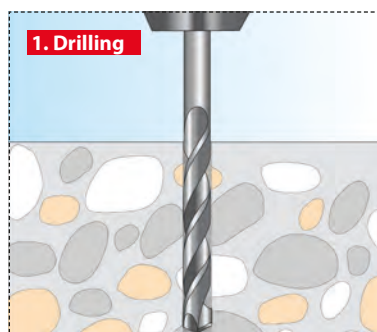
Toilet:

- 2 Barracuda expansion wall plugs (8/40), 2 plastic washers with flange, brass hexagonal screw (SW 10) and white and/or chrome-plated caps
- Holds in concrete and solid masonry



Processing & Installation

- The plastic washers with flange protect the ceramic object from damage during installation and also have a cap slot
- Through installation

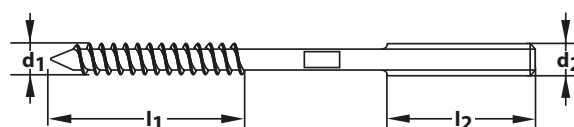



Hanger bolt Boltix

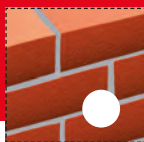


Features

- Individual installation options
- Simple adjustment
- Can be used in wood without wall plugs



Pack	Item No.	Type	Content Wall Plug	Content Screw	Wall plug Ø	Thread length	Hanger bolt				Screw driver	Approval
	Boltix		per pack	per pack	mm	mm	d1 ø mm	l1 mm	d2 ø mm	l2 mm	TX	ETA
	095 101 51	M8x50	-	100x	-	-	7	30	M8	20	25	-
	095 101 52	M8x60	-	100x	-	-	7	30	M8	20	25	-
	095 101 53	M8x80	-	100x	10	-	7	40	M8	30	25	-
	095 101 54	M8x100	-	100x	10	-	7	40	M8	40	25	-
	095 101 55	M8x120	-	100x	10	-	7	57	M8	50	25	-



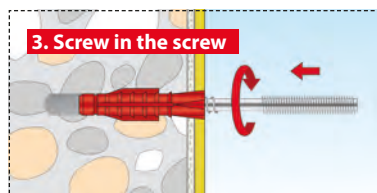
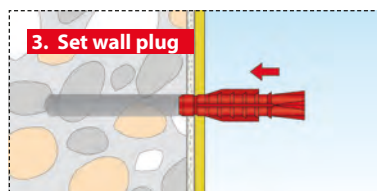
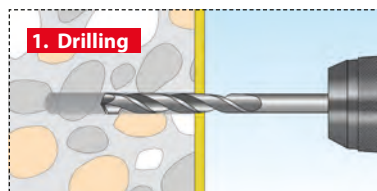
Description & Area of Application

- Made of galvanized steel 4.6
- Has a wood thread on one side and a metric thread with a TX 25 drive on the other side



Processing & Installation

- Individual installation of objects
- When used in wood, pre-drill the core Ø of the wood thread
- In combination with all-purpose wall plug, metal claw wall plug for concrete, solid and perforated brick and cellular concrete
- Spacing installation

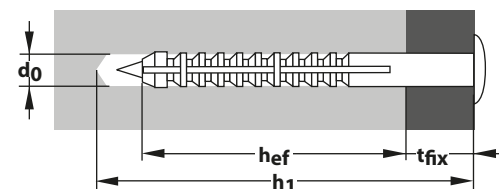






www.YouTube.com/toxgermany

Features

- Just knock in: simple and fast
- Large contact surface on the attachment
- Buttress thread
- Impact lock prevents premature spreading
- Fast and economical through installation
- Nail screw can be easily screwed in and out as required



Pack	Item No.	Type	Content Wall Plug	Content Screw	Wall plug Ø	Wall plug length	Nail Size	Drill Ø	Min. Drill hole depth	Min. Anchoring depth	Fixture Thickness	Approval
	Attack Metal		per pack	per pack	mm	mm	mm	d0 ø mm	h1 ≥ mm	hef ≥ mm	tfix ≤ mm	ETA
	019 102 131	6/35	50x	50x	6	35	3.5 x 43	6	45	25	10	-
	019 102 151	6/55	50x	50x	6	55	3.5 x 62	6	65	25	30	-
	Attack Metal		per pack	per pack	mm	mm	mm	d0 ø mm	h1 ≥ mm	hef ≥ mm	tfix ≤ mm	ETA
	019 702 131	6/35	6x	6x	6	35	3.5 x 43	6	45	25	10	-
	019 702 151	6/55	4x	4x	6	55	3.5 x 62	6	65	25	30	-



Attack Metal	Concrete C 20/25	Solid brick MZ 12	Vertically perforated brick ≥ Hlz12 Bulk density 1 kg/dm³	Hollow brick ≥ Hbl2	Cellular concrete ≥ PP4	Gypsum plasterboard 12.5 mm	Gypsum fibreboard 12.5 mm
Ø 6	25 kg	20 kg	-	-	10 kg	-	-

- The anchoring depth of the wall plug must be observed
- Drilling method and drill hole cleaning must be adapted to the building material
- The recommended loads only apply to installation in the building material, not for installation in joints
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

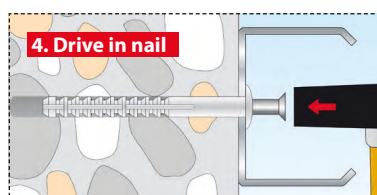
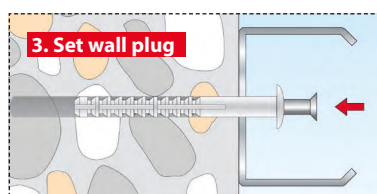
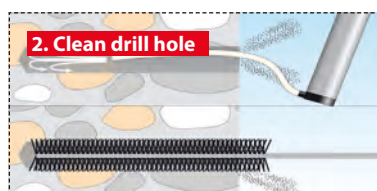
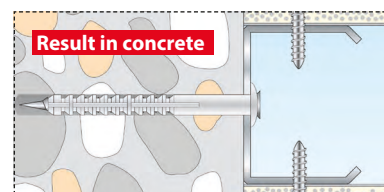
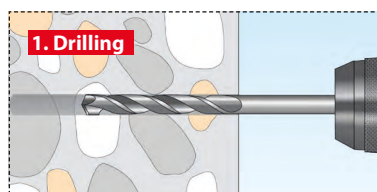
Description & Area of Application

- Truss Head
- 2-way split spreader element with impact lock
- Pre-assembled, galvanized nail screw with buttress thread
- Countersunk screw with PZ driver



Processing & Installation

- Attack Metal for non-countersunk installation (truss head with internal counterbore)
- Through installation

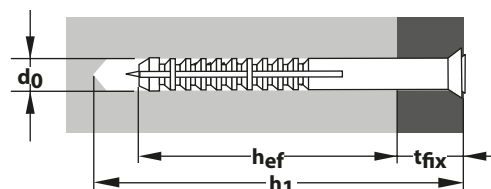




www.YouTube.com/toxgermany

Features

- Just knock in: simple and fast
- For wood components
- Impact lock prevents premature spreading
- Butress thread
- Fast and economical through installation
- Nail screw can be easily screwed in and out as required
- Attack Plus with M6 connection thread



Pack	Item No.	Type	Content Wall Plug	Content Screw	Wall plug Ø	Wall plug length	Nail Size	Drill Ø	Min. Drill hole depth	Min. Anchoring depth	Fixture Thickness	Approval
	Attack		per pack	per pack	mm	mm	mm	d0 ø mm	h1 ≥ mm	hef ≥ mm	tfix ≤ mm	ETA
	017 102 081	5/40	50x	50x	5	40	3.0 x 43	5	50	20	20	-
	017 102 131	6/35	50x	50x	6	35	4.0 x 37	6	45	25	10	-
	017 102 101	6/40	50x	50x	6	40	4.0 x 43	6	50	25	15	-
	017 102 151	6/50	50x	50x	6	50	4.0 x 52	6	60	25	25	-
	017 102 141	6/60	50x	50x	6	60	4.0 x 65	6	70	25	35	-
	017 102 171	6/80	50x	50x	6	80	4.0 x 85	6	90	25	55	-
	017 102 221	8/60	50x	50x	8	60	5.0 x 62	8	70	40	20	-
	017 102 231	8/80	50x	50x	8	80	5.0 x 82	8	90	40	40	-
	017 102 241	8/100	50x	50x	8	100	5.0 x 105	8	110	40	60	-
	017 102 271	8/120	50x	50x	8	120	5.0 x 125	8	130	40	80	-
	017 102 281	8/140	50x	50x	8	140	5.0 x 145	8	150	40	100	-
	Attack		per pack	per pack	mm	mm	ø mm	d0 ø mm	h1 ≥ mm	hef ≥ mm	tfix ≤ mm	ETA
	017 702 131	6/35	12x	12x	6	35	4.0 x 37	6	45	25	10	-
	017 702 101	6/40	12x	12x	6	40	4.0 x 43	6	50	25	15	-
	017 702 151	6/50	10x	10x	6	50	4.0 x 52	6	60	25	25	-
	017 702 141	6/60	10x	10x	6	60	4.0 x 65	6	70	25	35	-
	017 702 171	6/80	8x	8x	6	80	4.0 x 85	6	90	25	55	-
	017 702 221	8/60	8x	8x	8	60	5.0 x 62	8	70	40	20	-
	017 702 231	8/80	6x	6x	8	80	5.0 x 82	8	90	40	40	-
	017 702 241	8/100	6x	6x	8	100	5.0 x 105	8	110	40	60	-
Pack	Item No.	Type	Content Wall Plug	Content Screw	Wall plug Ø	Wall plug length	Screw Size	Drill Ø	Min. Drill hole depth	Min. Anchoring depth	Fixture Thickness	Approval
	Attack Plus		per pack	per pack	mm	mm	ø mm	d0 ø mm	h1 ≥ mm	hef ≥ mm	tfix ≤ mm	ETA
	017 102 321	6/40 M6	50x	50x	6	35	4.0 x 52	6	50	40	-	-



Attack	Concrete C 20/25	Solid brick MZ 12	Vertically perforated brick ≥ Hlz12 Bulk density 1 kg/dm³	Hollow brick ≥ Hbl2	Cellular concrete ≥ PP4	Gypsum plasterboard 12.5 mm	Gypsum fibreboard 12.5 mm
Ø 5	15 kg	10 kg	*	*	10 kg	-	-
Ø 6	25 kg	20 kg	*	*	10 kg	-	-
Ø 8	35 kg	30 kg	*	*	15 kg	-	-
Attack Plus	Concrete C 20/25	Solid brick MZ 12	Vertically perforated brick ≥ Hlz12 Bulk density 1 kg/dm³	Hollow brick ≥ Hbl2	Cellular concrete ≥ PP4	Gypsum plasterboard 12.5 mm	Gypsum fibreboard 12.5 mm
Ø 6	25 kg	20 kg	*	*	10 kg	-	-

- The anchoring depth of the wall plug must be observed
- Drilling method and drill hole cleaning must be adapted to the building material
- The recommended loads only apply to installation in the building material, not for installation in joints
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

* In perforated brick, the expansion element must expand in at least one internal web

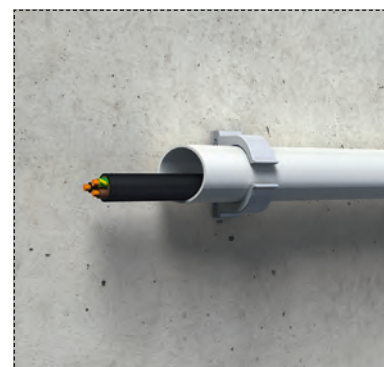
Description & Area of Application

Attack:

- 2-way split spreader element with impact lock
- Countersunk head
- Pre-assembled, galvanized nail screw with buttress thread
- Countersunk head and PZ driver

Attack Plus:

- 2-way split spreader element with impact lock
- Pre-assembled, galvanized nail screw with buttress thread
- Countersunk head and metric connection thread M6



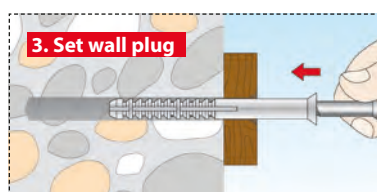
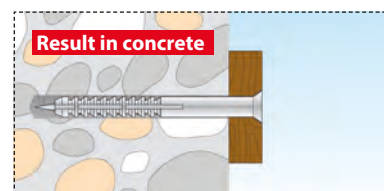
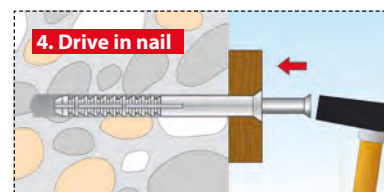
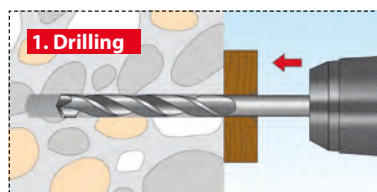
Processing & Installation

Attack:

- Sits flush with the fixture

Attack Plus:

- With connection thread
- Through installation



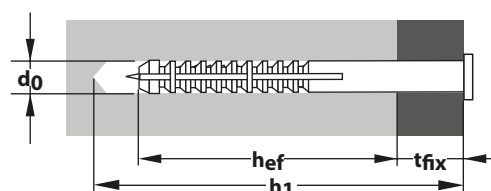
Nail wall plug Attack KB




www.YouTube.com/toxgermany

Features

- Just knock in: simple and fast
- For metal components
- Impact lock prevents premature spreading
- Butress thread
- Fast and economical through installation
- Nail screw can be easily screwed in and out as required



Pack	Item No.	Type	Content Wall Plug	Content Screw	Wall plug Ø	Wall plug length	Nail Size	Drill Ø	Min. Drill hole depth	Min. Anchoring depth	Fixture Thickness	Approval
	Attack KB		per pack	per pack	mm	mm	mm	d0 ø mm	h1 ≥ mm	hef ≥ mm	tfix ≤ mm	ETA
	017 102 551	6/35	50x	50x	6	35	4.0 x 43	6	45	25	10	-
	017 102 571	6/50	50x	50x	6	50	4.0 x 58	6	60	25	25	-



Attack KB	Concrete C 20/25	Solid brick MZ 12	Vertically perforated brick ≥ Hlz12 Bulk density 1 kg/dm³	Hollow brick ≥ Hbz12	Cellular concrete ≥ PP4	Gypsum plasterboard 12.5 mm	Gypsum fibreboard 12.5 mm
Ø 6	25 kg	20 kg	*	*	10 kg	-	-

- The anchoring depth of the wall plug must be observed
- Drilling method and drill hole cleaning must be adapted to the building material
- The recommended loads only apply to installation in the building material, not for installation in joints
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

* In perforated brick, the expansion element must expand in at least one internal web

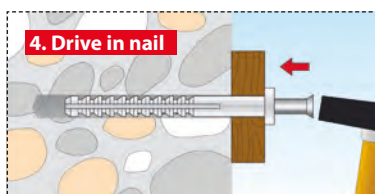
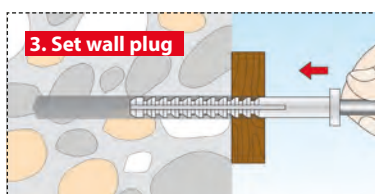
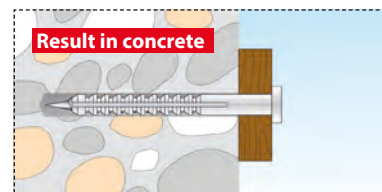
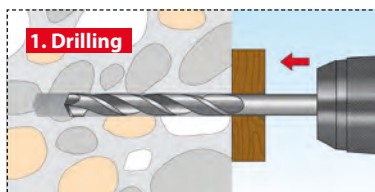
Description & Area of Application

- 2-way split spreader element with impact lock
- Pre-assembled, galvanized nail screw with buttress thread
- Cylinder head and PZ driver



Processing & Installation

- For non-countersunk installation (cylinder head with internal counterbore)
- In perforated bricks, the expansion element must expand in at least one internal web and be drilled without hammering
- Through installation

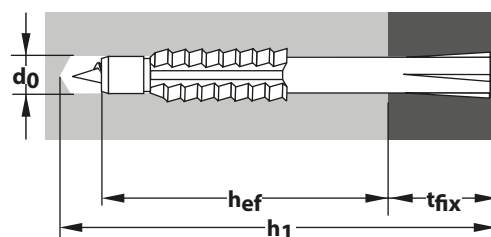


All-purpose frame wall plug Constructor

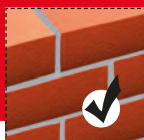


Features

- Optimally aligned components
- All-purpose character
- Ties or expands automatically depending on the building material



Pack	Item No.	Type	Content Wall Plug	Content Screw	Wall plug Ø	Wall plug length	Screw Size	Drill Ø	Min. Drill hole depth	Min. Anchoring depth	Fixture Thickness	Approval
	Constructor + Screw 		per pack	per pack	mm	mm	mm	d0 ø mm	h1 ≥ mm	hef ≥ mm	tfix ≤ mm	ETA
	022 102 081	6/50 S	50x	50x	6	50	4.0 x 55	6	60	35	15	-
	022 102 101	6/70 S	50x	50x	6	70	4.0 x 75	6	80	35	35	-
	022 102 291	8/60 S	50x	50x	8	60	5.5 x 65	8	70	50	10	-
	022 102 301	8/80 S	50x	50x	8	80	5.5 x 85	8	90	50	30	-
	022 102 311	8/100 S	50x	50x	8	100	5.5 x 105	8	110	50	50	-
	022 102 491	10/100 S	25x	25x	10	100	7.0 x 110	10	115	60	40	-
	022 102 501	10/115 S	25x	25x	10	115	7.0 x 120	10	125	60	55	-
	022 102 511	10/135 S	25x	25x	10	135	7.0 x 140	10	145	60	75	-
	022 102 521	10/160 S	25x	25x	10	160	7.0 x 170	10	175	60	100	-
	Constructor + Screw 		per pack	per pack	mm	mm	mm	d0 ø mm	h1 ≥ mm	hef ≥ mm	tfix ≤ mm	ETA
	022 702 081	6/50 S	10x	10x	6	50	4.0 x 55	6	60	35	15	-
	022 702 101	6/70 S	6x	6x	6	70	4.0 x 75	6	80	35	35	-
	022 702 291	8/60 S	6x	6x	8	60	5.5 x 65	8	70	50	10	-
	022 702 301	8/80 S	6x	6x	8	80	5.5 x 85	8	90	50	30	-
	022 702 311	8/100 S	6x	6x	8	100	5.5 x 105	8	110	50	50	-
	022 702 491	10/100 S	4x	4x	10	100	7.0 x 110	10	115	60	40	-



Constructor + Screw	Concrete C 20/25	Solid brick MZ 12	Vertically perforated brick ≥ Hlz12 Bulk density 1 kg/dm³	Hollow brick ≥ Hbz12	Cellular concrete ≥ PB2, PP2	Gypsum plaster-board 12.5 mm	Gypsum fibre-board 12.5 mm
6/50	40 kg	35 kg	20 kg	20 kg	-	-	-
6/70	40 kg	35 kg	20 kg	20 kg	-	-	-
8/60	80 kg	60 kg	25 kg	25 kg	-	-	-
8/80	80 kg	60 kg	25 kg	25 kg	-	-	-
8/100	80 kg	60 kg	25 kg	25 kg	-	-	-
10/100	90 kg	70 kg	30 kg	30 kg	-	-	-
10/115	90 kg	70 kg	30 kg	30 kg	-	-	-
10/135	90 kg	70 kg	30 kg	30 kg	-	-	-
10/160	90 kg	70 kg	30 kg	30 kg	-	-	-

- The anchoring depth of the wall plug must be observed
- Drilling method and drill hole cleaning must be adapted to the building material
- The recommended loads only apply to installation in the building material, not for installation in joints
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

Description & Area of Application

Constructor + Screw:

- 3-part split expansion element with rotation locks and galvanised screw with countersunk head and TX driver

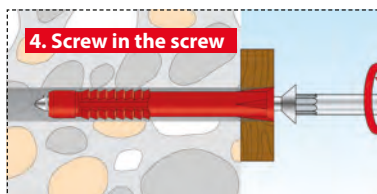
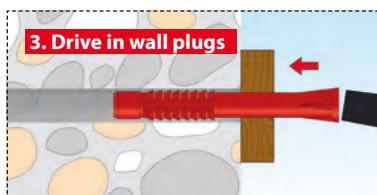
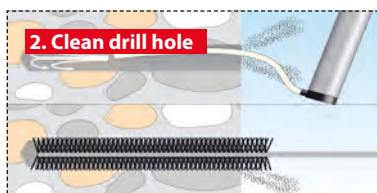
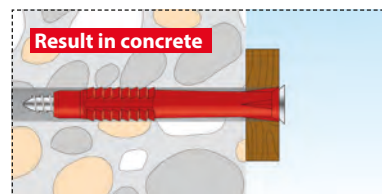
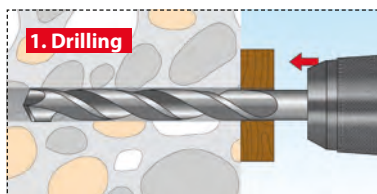
Constructor Ø 10 mm:

- In combination with insulation disc Disc 75/10 for fastening insulation boards



Processing & Installation

- Create drill hole in the size of the wall plug diameter
- Drill into perforated and hollow brick without hammering
- Installation object is drawn to the masonry by the wall plug construction
- Through installation



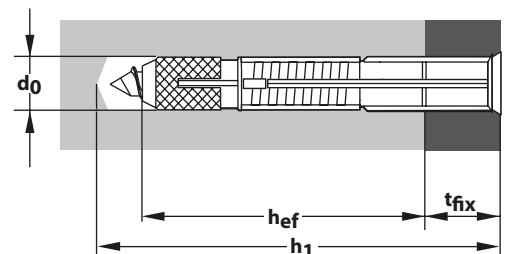
All-purpose frame wall plug Apollo





www.YouTube.com/toxgermany

Features

- Ideal for cellular concrete P2: just hammer in and tighten – quick and easy
- Holds in almost all building materials
- Metal tip enables high holding values
- Directly usable due to pre-assembled screw



Pack	Item No.	Type	Content Wall Plug	Content Screw	Wall plug Ø	Wall plug length	Screw Size	Drill Ø	Min. Drill hole depth	Min. Anchoring depth	Fixture Thickness	Approval
	Apollo		per pack	per pack	mm	mm	Ø mm	d0 Ø mm	h1 ≥ mm	hef ≥ mm	tfix ≤ mm	ETA
	049 101 041	6/50	50x	50x	6	50	4.5	6	60	30 {40}	15 {5}	-
	049 101 051	6/70	50x	50x	6	70	4.5	6	80	30 {55}	35 {10}	-
	049 101 121	8/60	50x	50x	8	60	6.0	8	70	45 {50}	10 {5}	-
	049 101 131	8/80	50x	50x	8	80	6.0	8	90	45 {65}	30 {10}	-
	049 101 141	8/100	50x	50x	8	100	6.0	8	110	45 {65}	50 {30}	-
	049 101 151	8/120	50x	50x	8	120	6.0	8	130	45 {65}	70 {50}	-
	049 101 161	8/140	50x	50x	8	140	6.0	8	150	45 {65}	90 {70}	-
	049 101 231	10/100	50x	50x	10	100	7.0	10	110	55 {75}	40 {20}	-
	049 101 241	10/120	50x	50x	10	120	7.0	10	130	55 {75}	60 {40}	-
	049 101 251	10/140	50x	50x	10	140	7.0	10	150	55 {75}	80 {60}	-
	049 101 261	10/160	50x	50x	10	160	7.0	10	170	55 {75}	100 {80}	-
	Apollo		per pack	per pack	mm	mm	Ø mm	d0 Ø mm	h1 ≥ mm	hef ≥ mm	tfix ≤ mm	ETA
	049 701 121	8/60	6x	6x	8	60	6.0	8	70	45 {50}	10 {5}	-
	049 701 131	8/80	6x	6x	8	80	6.0	8	90	45 {65}	30 {10}	-
	049 701 141	8/100	6x	6x	8	100	6.0	8	110	45 {65}	50 {30}	-
	049 701 151	8/120	6x	6x	8	120	6.0	8	130	45 {65}	70 {50}	-

{ } Cellular concrete



Apollo	Concrete C 20/25	Solid brick MZ 12	Vertically perforated brick $\geq \text{Hlz12}$ Bulk density 1 kg/dm ³	Hollow brick $\geq \text{Hbz12}$	Cellular concrete $\geq \text{PB2, PP2}$	Gypsum plasterboard 12.5 mm	Gypsum plasterboard 2x12.5 mm
6/50	20 kg	15 kg	20 kg	25 kg	10 kg	10 kg	15 kg
6/70	20 kg	15 kg	20 kg	25 kg	10 kg	10 kg	15 kg
8/60	50 kg	40 kg	25 kg	30 kg	15 kg	10 kg	15 kg
8/80	50 kg	40 kg	25 kg	30 kg	20 kg	10 kg	15 kg
8/100	50 kg	40 kg	25 kg	30 kg	20 kg	10 kg	15 kg
8/120	50 kg	40 kg	25 kg	30 kg	20 kg	10 kg	15 kg
8/140	50 kg	40 kg	25 kg	30 kg	20 kg	10 kg	15 kg
10/100	80 kg	60 kg	30 kg	35 kg	30 kg	10 kg	15 kg
10/120	80 kg	60 kg	30 kg	35 kg	30 kg	10 kg	15 kg
10/140	80 kg	60 kg	30 kg	35 kg	30 kg	10 kg	15 kg
10/160	80 kg	60 kg	30 kg	35 kg	30 kg	10 kg	15 kg

- The anchoring depth of the wall plug must be observed
- Drilling method and drill hole cleaning must be adapted to the building material
- The recommended loads only apply to installation in the building material, not for installation in joints
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

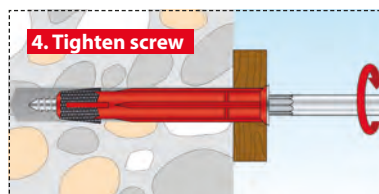
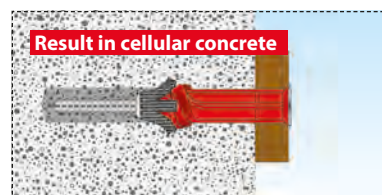
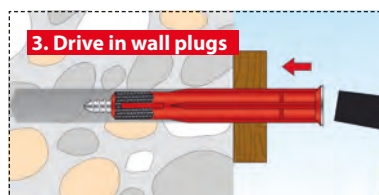
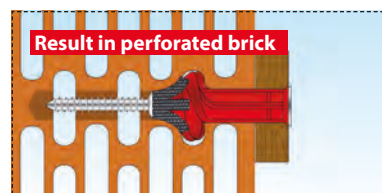
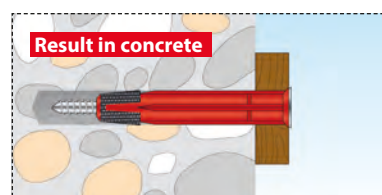
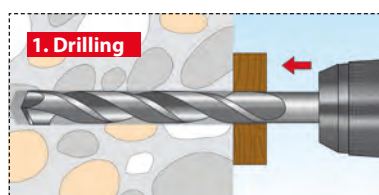
Description & Area of Application

- 3-way split spreader element with metal tip
- Shaft with rotation locks
- Wall plug is completely pre-assembled with galvanized countersunk screw with TX driver



Processing & Installation

- In cellular concrete P2 just hammer in without pre-drilling
- After setting the Apollo, be sure to tighten the screw – in aerated concrete, optimum holding values after 6 turns of the screw
- Drill into perforated brick and gypsum plasterboard without hammering in a rotary motion so that the webs in the perforated brick are not broken
- Holds in concrete and solid masonry through expansion
- Holds in perforated brick by spreading and tying
- Holds behind gypsum plasterboard by tying
- In cellular concrete (aerated concrete), a deep-set rear gripping (tying) is created
- Through installation



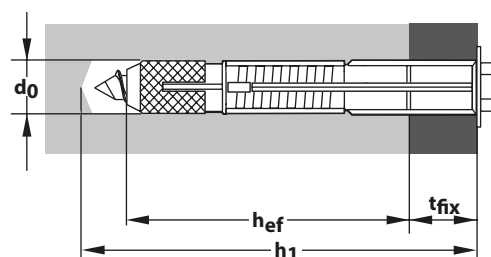
All-purpose frame wall plug Apollo KB




www.YouTube.com/toxgermany

Features

- In cellular concrete P2 just hammer in and tighten: quick and easy
- Ideal for cellular concrete
- Holds in almost all building materials
- Metal tip enables high holding values
- Directly usable due to pre-assembled screw



Pack	Item No.	Type	Content Wall Plug	Content Screw	Wall plug Ø	Wall plug length	Screw Size	Drill Ø	Min. Drill hole depth	Min. Anchoring depth	Fixture Thickness	Approval
	Apollo KB		per pack	per pack	mm	mm	Ø mm	d0 Ø mm	h1 ≥ mm	hef ≥ mm	tfix ≤ mm	ETA
	049 101 531	10/100	25x	25x	10	100	7.0	10	110	55 {75}	40 {20}	-
	049 101 541	10/120	25x	25x	10	120	7.0	10	130	55 {75}	60 {40}	-
	049 101 551	10/140	25x	25x	10	140	7.0	10	150	55 {75}	80 {60}	-
	049 101 561	10/160	25x	25x	10	160	7.0	10	170	55 {75}	100 {80}	-

{ } Cellular concrete



Apollo KB	Concrete C 20/25	Solid brick MZ 12	Vertically perforated brick \geq H12 Bulk density 1 kg/dm ³	Hollow brick \geq Hbl2	Cellular concrete \geq PB2, PP2	Gypsum plasterboard 12.5 mm	Gypsum plasterboard 2x12.5 mm
10/100	80 kg	60 kg	30 kg	35 kg	30 kg	10 kg	15 kg
10/120	80 kg	60 kg	30 kg	35 kg	30 kg	10 kg	15 kg
10/140	80 kg	60 kg	30 kg	35 kg	30 kg	10 kg	15 kg
10/160	80 kg	60 kg	30 kg	35 kg	30 kg	10 kg	15 kg

- The anchoring depth of the wall plug must be observed
- Drilling method and drill hole cleaning must be adapted to the building material
- The recommended loads only apply to installation in the building material, not for installation in joints
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

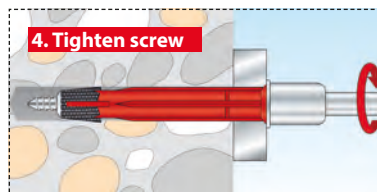
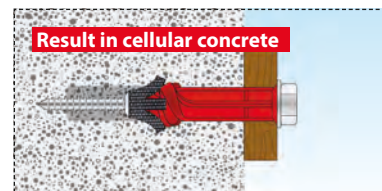
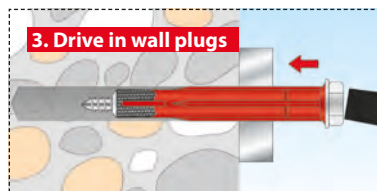
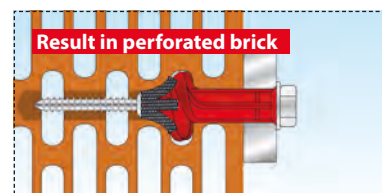
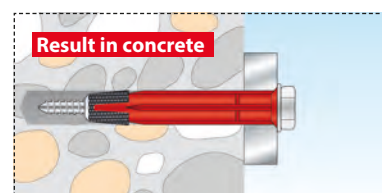
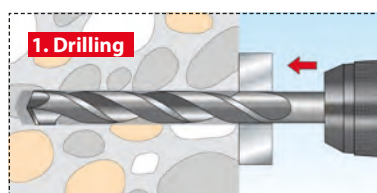
Description & Area of Application

- 3-way split spreader element with metal tip
- Shaft with rotation locks
- Wall plug is completely pre-assembled with galvanized hexagonal screw with SW13 driver



Processing & Installation

- In cellular concrete P2 just hammer in without pre-drilling
- After setting the Apollo KB, be sure to tighten the screw – in cellular concrete, optimum holding values after 6 turns of the screw
- Drill into perforated brick and gypsum plasterboard without hammering in a rotary motion so that the webs in the perforated brick are not broken
- In concrete and solid masonry through expansion
- In perforated brick by spreading and tying
- Behind gypsum plasterboard by tying
- In cellular concrete (aerated concrete), a deep-set rear gripping (tying) is created
- Through installation





Features

- All-purpose for almost all building materials
- Approved by the building authorities
- Also approved for the fastening of ceiling substructures
- 70 mm anchoring depth for secure hold in perforated brick
- Fire resistance class R90 (in concrete)
- Optimised spreading geometry
- Can be processed down to -20°C
- Also suitable for natural stone with dense structure

Fassad SK:

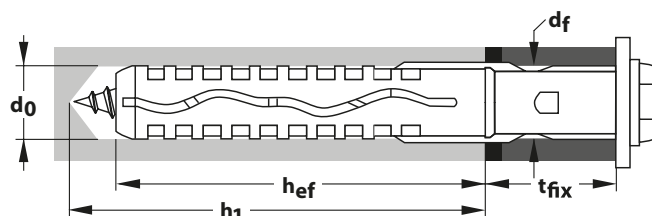
- Countersunk screw with internal driver TX40 for flush installations



Fassad KB:

- Lag bolt SW13 with internal driver TX40 for narrow components and pressed-on washer for optimum force transmission



www.YouTube.com/toxgermany



Pack	Item No.	Type	Content Wall Plug	Content Screw	Wall plug Ø	Wall plug length	Screw Size	Drill Ø	Min. Drill hole depth	Min. Anchoring depth	Fixture Thickness	Approval
	Fassad SK		per pack	per pack	mm	mm	mm	d0 ø mm	h1 ≥ mm	hef mm	tfix ≤ mm	ETA
	062 101 401	10/80	50x	50x	10	80	7.0 x 90	10	85	70	10	■
	062 101 411	10/100	50x	50x	10	100	7.0 x 110	10	85	70	30	■
	062 101 421	10/120	50x	50x	10	120	7.0 x 130	10	85	70	50	■
	062 101 431	10/140	50x	50x	10	140	7.0 x 150	10	85	70	70	■
	062 101 441	10/160	25x	25x	10	160	7.0 x 170	10	85	70	90	■
	062 101 451	10/180	25x	25x	10	180	7.0 x 190	10	85	70	110	■
	062 101 461	10/200	25x	25x	10	200	7.0 x 210	10	85	70	130	■
	062 101 471	10/220	25x	25x	10	220	7.0 x 230	10	85	70	150	■
	Fassad KB		per pack	per pack	mm	mm	mm	d0 ø mm	h1 ≥ mm	hef mm	tfix ≤ mm	ETA
	062 101 601	10/80	50x	50x	10	80	7.0 x 90	10	85	70	10	■
	062 101 611	10/100	50x	50x	10	100	7.0 x 110	10	85	70	30	■
	062 101 621	10/120	50x	50x	10	120	7.0 x 130	10	85	70	50	■
	062 101 631	10/140	50x	50x	10	140	7.0 x 150	10	85	70	70	■
	062 101 641	10/160	25x	25x	10	160	7.0 x 170	10	85	70	90	■
	062 101 651	10/180	25x	25x	10	180	7.0 x 190	10	85	70	110	■
	062 101 661	10/200	25x	25x	10	200	7.0 x 210	10	85	70	130	■
	062 101 671	10/220	25x	25x	10	220	7.0 x 230	10	85	70	150	■



Fassad SK & KB	Concrete C16/20	Brick MZ 20-1.8 NF	Vertically perforated brick HLz 12-1.0 2DF	Solid lime sand brick KS 20-1.8, NF	Perforated lime sand brick KSL 12-1.4, 8DF	Lightweight concrete solid masonry V 20-2, 0 8DF	Lightweight concrete hollow masonry HBL 2-0, 8, 16 DF	Cellular concrete P2	Cellular concrete P6
Effective anchoring depth h_{ef}	70 mm	70 mm	70 mm	70 mm	70 mm	70 mm	70 mm	70 mm	70 mm
Permissible load capacity F_{Zul} ¹	200 kg	170 kg	40 kg	170 kg	35 kg	90 kg	20 kg	30 kg	90 kg
Permissible bending moment M_{Zul}	7 Nm	7 Nm	7 Nm	7 Nm	7 Nm	7 Nm	7 Nm	7 Nm	7 Nm
Component dimensions and installation characteristics									
Minimum axis distance s_{min}	50 mm	250 mm	250 mm	250 mm	250 mm	250 mm	250 mm	250 mm	250 mm
Minimum edge distance c_{min}	60 mm	100 mm	100 mm	100 mm	100 mm	100 mm	100 mm	100 mm	100 mm
Minimum component thickness h_{min}	100 mm	115 mm	115 mm	115 mm	115 mm	115 mm	115 mm	200 mm	200 mm
Drill core diameter d_0	10 mm	10 mm	10 mm	10 mm	10 mm	10 mm	10 mm	10 mm	10 mm
Drill hole depth h_1	85 mm	85 mm	85 mm	85 mm	85 mm	85 mm	85 mm	85 mm	85 mm
Through hole in the component to be connected $d_f \leq$	10.5 mm	10.5 mm	10.5 mm	10.5 mm	10.5 mm	10.5 mm	10.5 mm	10.5 mm	10.5 mm

- When sizing, the entire declaration of performance of the Fassad must be observed
- The partial safety factors of the resistances and a partial safety factor of $\gamma_F = 1.4$ are to be considered
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)
- For other masonry types see approval ETA-17/1002

¹ F_{Zul} for tension, shear load or diagonal pull

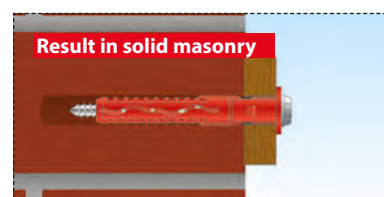
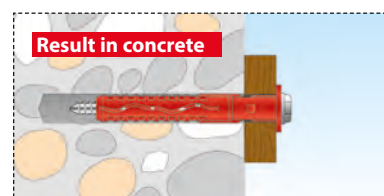
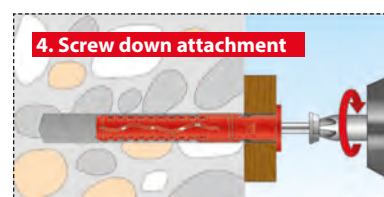
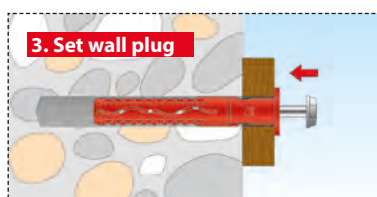
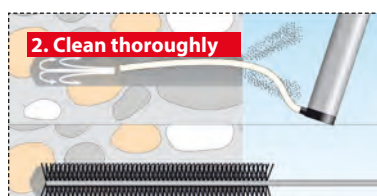
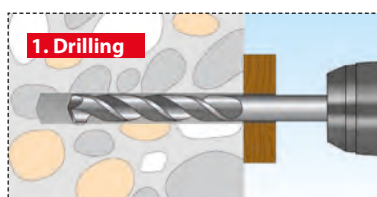
Description & Area of Application

- 2-way split spreader element with rotation lock
- For fastening facade and roof substructures, doors, windows, etc.
- The Fassad is supplied as a fastening kit with screw



Processing & Installation

- The galvanised screw may be used outdoors, in industrial atmospheres and near the sea with a suitable protective coating
- Through installation
- Drill into perforated brick without hammering

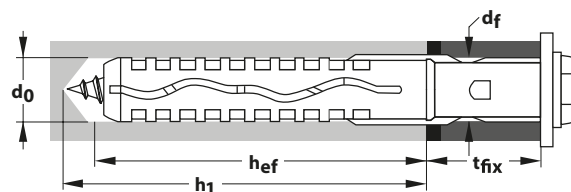


Frame wall plug Fassad XL



Features

- High bending moment
- Approved by the building authorities
- Optimal force distribution due to 2-way spreading
- Rotation lock for secure installation
- Collar flange for thermal separation and avoidance of contact corrosion
- Lag bolt SW 17 with internal driver TX50 for narrow components and moulded-on washers for optimum force transmission



Pack	Item No.	Type	Content Wall Plug	Content Screw	Wall plug Ø	Wall plug length	Screw Size	Drill Ø	Min. Drill hole depth	Min. Anchoring depth	Fixture Thickness	Approval
	Fassad XL		per pack	per pack	mm	mm	mm	d0 ø mm	h1 ≥ mm	hef mm	tfix ≤ mm	ETA
	067101201	14x180	25	25	14	180	10 x 190	14	85	70	110	■
	067101221	14x220	25	25	14	220	10 x 230	14	85	70	150	■
	067101231	14x240	25	25	14	240	10 x 250	14	85	70	170	■
	067101241	14x260	25	25	14	260	10 x 270	14	85	70	190	■
	067101251	14x280	25	25	14	280	10 x 290	14	85	70	210	■
	067101271	14x320	25	25	14	320	10 x 330	14	85	70	250	■





Fasad XL	Concrete C16/20	Brick Mz 20	Solid lime sand brick KS 20	Vertically perforated brick* HLZ 12	Perforated lime sand brick* KSL 12	Cellular concrete* P2	Cellular concrete* P4	Cellular concrete* P6
Effective anchoring depth h_{ef}	70 mm	70 mm	70 mm	70 mm	70 mm	70 mm	70 mm	70 mm
Permissible load capacity F_{Zul} ¹	300 kg	130 kg	260 kg	40 kg	100 kg	40 kg	80 kg	140 kg
Permissible bending moment M_{Zul}	20 Nm	20 Nm	20 Nm	20 Nm	20 Nm	20 Nm	20 Nm	20 Nm
Component dimensions and installation characteristics								
Minimum axis distance s_{min}	75 mm	250 mm	250 mm	250 mm	250 mm	250 mm	250 mm	250 mm
Minimum edge distance c_{min}	85 mm	100 mm	100 mm	100 mm	100 mm	100 mm	100 mm	100 mm
Minimum component thickness h_{min}	100 mm	115 mm	240 mm	240 mm	240 mm	240 mm	240 mm	240 mm
Drill core diameter d_0	14 mm	14 mm	14 mm	14 mm	14 mm	14 mm	14 mm	14 mm
Drill hole depth h_1	85 mm	85 mm	85 mm	85 mm	85 mm	85 mm	85 mm	85 mm
Through hole in the component to be connected $d_f \leq$	14.5 mm	14.5 mm	14.5 mm	14.5 mm	14.5 mm	14.5 mm	14.5 mm	14.5 mm

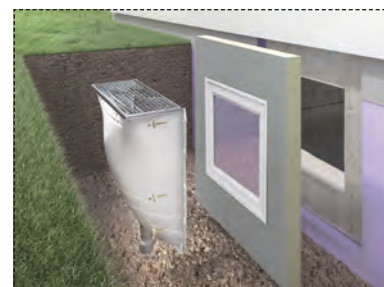
- When sizing, the entire declaration of performance of the Fasad XL must be observed
- The partial safety factors of the resistances and a partial safety factor of $\gamma_F = 1.4$ are to be considered
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)
- For other masonry types see approval ETA-17/1002

¹ F_{Zul} for tension, shear load or diagonal pull

* Not included in ETA-17/1002

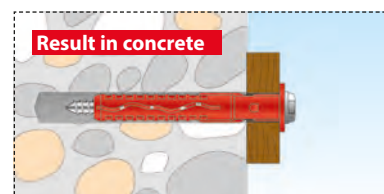
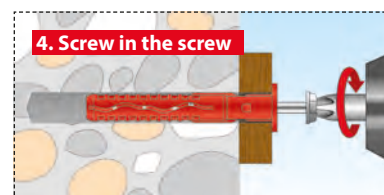
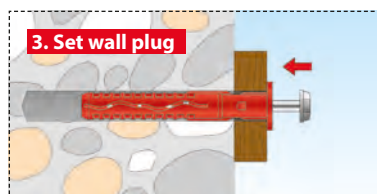
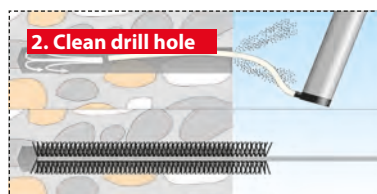
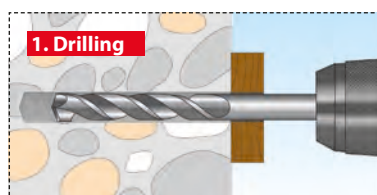
Description & Area of Application

- 2-way split spreader element with rotation lock
- For fastening facades and roof substructures, light shafts, etc.
- The Fasad XL is supplied as a fastening kit with screw
- High bending moment for particularly heavy facades



Processing & Installation

- The galvanised screw may be used outdoors, in industrial atmospheres and near the sea with a suitable protective coating
- Through installation

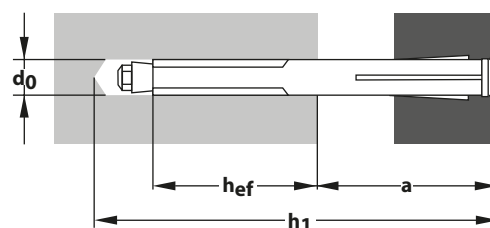


Metal frame wall plug Window



Features

- Tension- and pressure-resistant fastening
- No backing or wedging of the frame necessary
- Corrosion protection due to aluminium-zinc coating
- Fire resistant to DIN 4102 (class A1)



Pack	Item No.	Type	Content Wall Plug	Content Cover cap	Wall plug Ø	Wall plug length	Screw Size	Drill Ø	Min. Drill hole depth	Min. Anchoring depth	Spacing Building material	Approval
	Window		per pack	per pack	mm	mm	metric	d0 ø mm	h1 ≥ mm	hef ≥ mm	a ≤ mm	ETA
	027 101 13	10/92	100x	-	10	92	M6	10	110	30 {70}	62 {22}	-
	027 101 14	10/112	100x	-	10	112	M6	10	130	30 {70}	82 {42}	-
	027 101 15	10/132	100x	-	10	132	M6	10	150	30 {70}	102 {62}	-
	027 101 16	10/152	100x	-	10	152	M6	10	170	30 {70}	122 {82}	-
	027 101 17	10/182	100x	-	10	182	M6	10	200	30 {70}	152 {112}	-
	027 101 18	10/202	100x	-	10	202	M6	10	220	30 {70}	172 {132}	-
	Window		per pack	per pack	mm	mm	metric	d0 ø mm	h1 ≥ mm	hef ≥ mm	a ≤ mm	ETA
	027 601 141	10/112	6x	6x Window Cap (17x4.2x4/ white)	10	112	M6	10	130	30 {70}	82 {42}	-
	027 601 151	10/132	6x		10	132	M6	10	150	30 {70}	102 {62}	-
	027 601 161	10/152	6x		10	152	M6	10	170	30 {70}	122 {82}	-
	027 601 171	10/182	6x	6x Window Cap (17x4.2x4/ brown)	10	182	M6	10	200	30 {70}	152 {112}	-
	027 601 181	10/202	6x		10	202	M6	10	220	30 {70}	172 {132}	-

{ } Cellular concrete



Window	Concrete C 20/25	Solid brick MZ 12	Vertically perforated brick ≥ Hlz12 Bulk density 1 kg/dm³	Hollow brick ≥ Hbl2	Cellular concrete ≥ PB2, PP2	Gypsum plasterboard 12.5 mm
10/92	100 kg	70 kg	40 kg	-	10 kg	-
10/112	100 kg	70 kg	40 kg	-	10 kg	-
10/132	100 kg	70 kg	40 kg	-	10 kg	-
10/152	100 kg	70 kg	40 kg	-	10 kg	-
10/182	100 kg	70 kg	40 kg	-	10 kg	-
10/202	100 kg	70 kg	40 kg	-	10 kg	-

- The anchoring depth of the wall plug must be observed
- Drilling method and drill hole cleaning must be adapted to the building material
- The recommended loads only apply to installation in the building material, not for installation in joints
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

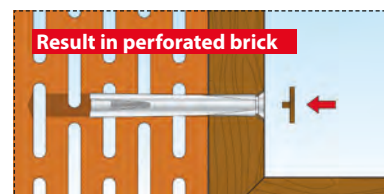
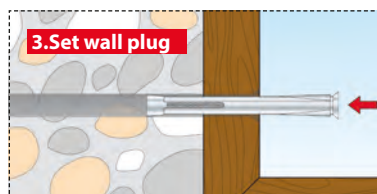
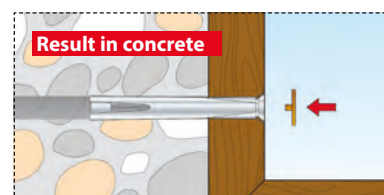
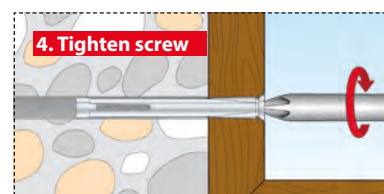
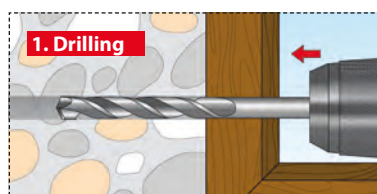
Description & Area of Application

- Galvanized metal frame wall plug, pre-assembled with metric countersunk screw M6 (driver PZ3)
- Fire resistant to DIN 4102 (class A1)
- Tension- and pressure-resistant fastening
- Tightening the screw pulls the cone into the sleeve and spreads it open



Processing & Installation

- Observe the anchoring depth
- Visually attractive installation is possible thanks to screw caps
- Through installation



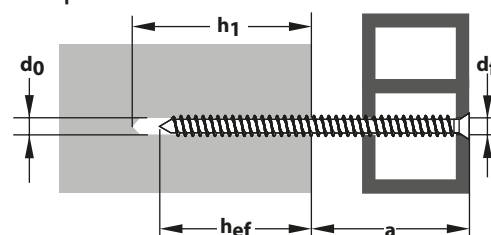





Window Pro SK

Window Pro

Features

- Installation without additional wall plug
- Tension-free spaced mounting due to thread engagement in the frame and building material
- Rapid installation due to small drill diameter
- Easy screwing in
- Optimized thread



Pack	Item No.	Type	Content screw	Content Cover cap	Screw Ø	Screws Length	Screw driver	Drill Ø	Min. Drill hole depth	Min. Anchoring depth	Spacing Building material	Approval
	Window Pro		per pack	per pack	mm	mm	TX	d0 / df ø mm	h1 ≥ mm	hef ≥ mm	a ≤ mm	ETA
	093 101 44	7.5/72	100x	-	7.5	72	25	6.0 / 6.5	40 [70]	30 [60]	42 [12]	-
	093 101 46	7.5/92	100x	-	7.5	92	25	6.0 / 6.5	40 [70]	30 [60]	62 [32]	-
	093 101 48	7.5/112	100x	-	7.5	112	25	6.0 / 6.5	40 [70]	30 [60]	82 [52]	-
	093 101 50	7.5/132	100x	-	7.5	132	25	6.0 / 6.5	40 [70]	30 [60]	102 [72]	-
	093 101 52	7.5/152	100x	-	7.5	152	25	6.0 / 6.5	40 [70]	30 [60]	122 [92]	-
	093 101 54	7.5/182	100x	-	7.5	182	25	6.0 / 6.5	40 [70]	30 [60]	152 [122]	-
	093 101 56	7.5/212	100x	-	7.5	212	25	6.0 / 6.5	40 [70]	30 [60]	182 [152]	-
	Window Pro SK		per pack	per pack	mm	mm	TX	d0 / df ø mm	h1 ≥ mm	hef ≥ mm	a ≤ mm	ETA
	091 101 33	7.5/72	100x	-	7.5	72	30	6.0 / 6.5	40 [70]	30 [60]	42 [12]	-
	091 101 35	7.5/92	100x	-	7.5	92	30	6.0 / 6.5	40 [70]	30 [60]	62 [32]	-
	091 101 37	7.5/112	100x	-	7.5	112	30	6.0 / 6.5	40 [70]	30 [60]	82 [52]	-
	091 101 39	7.5/132	100x	-	7.5	132	30	6.0 / 6.5	40 [70]	30 [60]	102 [72]	-
	091 101 41	7.5/152	100x	-	7.5	152	30	6.0 / 6.5	40 [70]	30 [60]	122 [92]	-
	091 101 43	7.5/182	100x	-	7.5	182	30	6.0 / 6.5	40 [70]	30 [60]	152 [122]	-
	091 101 45	7.5/212	100x	-	7.5	212	30	6.0 / 6.5	40 [70]	30 [60]	182 [152]	-
	Window Pro SK		per pack	per pack	mm	mm	TX	d0 / df ø mm	h1 ≥ mm	hef ≥ mm	a ≤ mm	ETA
	091 601 371	7.5/112	6x	-	7.5	112	30	6.0 / 6.5	40 [70]	30 [60]	82 [52]	-
	091 601 391	7.5/132	6x	-	7.5	132	30	6.0 / 6.5	40 [70]	30 [60]	102 [72]	-
	091 601 411	7.5/152	6x	-	7.5	152	30	6.0 / 6.5	40 [70]	30 [60]	122 [92]	-
	091 601 431	7.5/182	6x	-	7.5	182	30	6.0 / 6.5	40 [70]	30 [60]	152 [122]	-

[] Perforated brick and ceellular concrete

Building materials & Holding values



Window Pro	Concrete C 20/25	Solid brick MZ 12	Vertically perforated brick \geq Hlz12 Bulk density 1 kg/dm ³	Hollow brick \geq Hbl2	Cellular concrete \geq PB2, PP2	Wood
\varnothing 7.5 mm	150 kg*	70 kg*	10 kg*	10 kg*	10 kg*	-

- The anchoring depth of the wall plug must be observed
- Drilling method and drill hole cleaning must be adapted to the building material
- The recommended loads only apply to installation in the building material, not for installation in joints
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

* Holding value applies to tensile and shear force

Description & Area of Application

Window Pro:

- Made of case-hardened steel with self-tapping thread and cylinder head with TX 25 driver

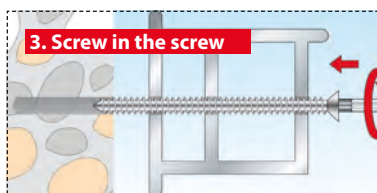
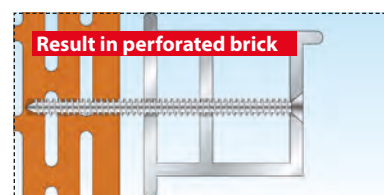
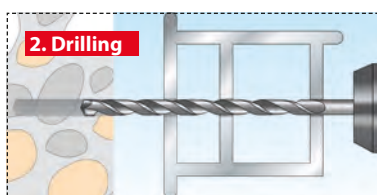
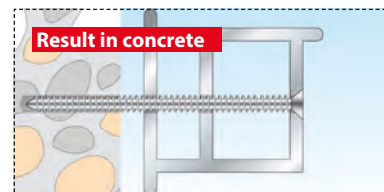
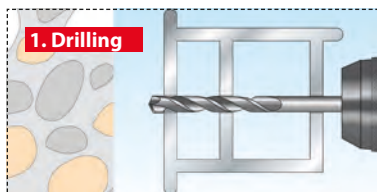
Window Pro SK:

- Made of case-hardened steel with self-tapping thread and countersunk head with TX 30 drive



Processing & Installation

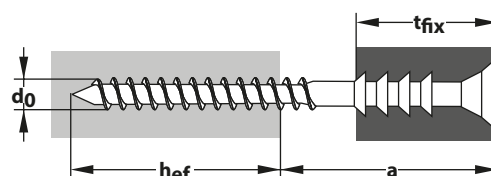
- Observe drill hole \varnothing , screw-in depth and drill hole depth of the various building materials
- For hollow masonry, the frame screw length must be selected so that the screw-in depth passes at least through one internal web
- Through installation





Features

- No pre-drilling necessary
- Attachment is screwed on and tightened directly
- Countersunk milling head prevents splitting of wooden strips and boards
- Stepless, millimetre-precise adjustment
- Tension-free installation possible



Pack	Item No.	Type	Content Wall Plug	Content Screw	Screws Ø	Screws Length	Screws Driver	Drill Ø	Min. Anchoring depth	Max. Spacing Building material	Thickness Fixing	Approval
	Distance		per pack	per pack	mm	mm	TX	d0 ø mm	hef ≥ mm	a ≤ mm	tfix ≤ mm	ETA
	090 101 02	6/60	-	100x	6	60	25	-	30	30	20	-
	090 101 03	6/70	-	100x	6	70	25	-	30	40	25	-
	090 101 04	6/80	-	100x	6	80	25	-	30	50	25	-
	090 101 06	6/100	-	100x	6	100	25	-	30	70	25	-
	090 101 08	6/120	-	100x	6	120	25	-	30	90	25	-
	090 101 10	6/145	-	100x	6	145	25	-	30	115	25	-





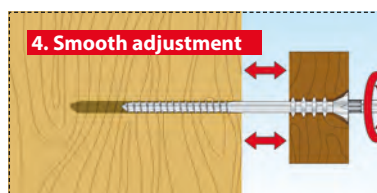
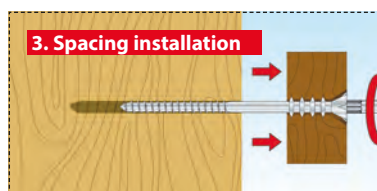
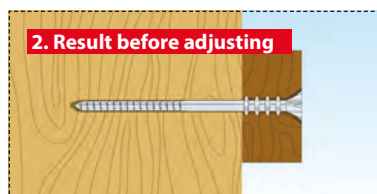
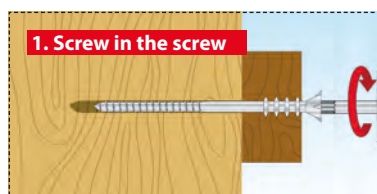
Description & Area of Application

- Made of galvanised, hardened steel
- Self-tapping woodscrew with spacer shank
- Object holder with countersunk milling head and TX25 driver



Processing & Installation

- Distance is set without wall plugs and pre-drilling, the wooden substructure is screwed directly to the wooden substrate
- The distance is continuously adjusted precise to the millimetre by turning the screw to the left
- Spaced mounting, wood on wood only

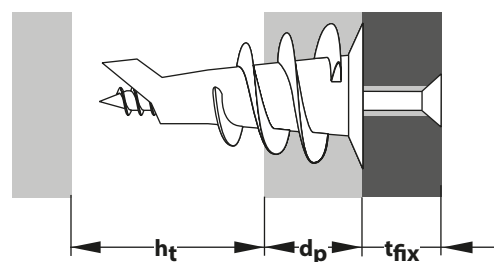










www.YouTube.com/toxgermany

Features

- Without pre-drilling in single-layer gypsum plasterboards
- No cracking of the surface due to special thread geometry
- In gypsum plasterboards high holding values up to 8 kg per fixing point
- PZ2 driver for simple installation



Pack	Item No.	Type	Content Wall Plug	Content Screw	Wall plug Ø	Wall plug length	Screw Size	Drill Ø	Min. Cavity depth	Board thickness	Fixture Thickness	Approval
	Spiral		per pack	per pack	mm	mm	Ø mm	d ₀ Ø mm	h _t ≥ mm	d _p ≤ mm	t _{fix} ≤ mm	ETA
	068 100 231	32	50x	-	-	32	4.5	-	25*	20	-	-
	Spiral + screw		per pack	per pack	mm	mm	mm	d ₀ Ø mm	h _t ≥ mm	d _p ≤ mm	t _{fix} ≤ mm	ETA
	068 101 231	32 S	50x	50x	-	32	4.5 x 45	-	25*	20	13	-
	Spiral		per pack	per pack	mm	mm	Ø mm	d ₀ Ø mm	h _t ≥ mm	d _p ≤ mm	t _{fix} ≤ mm	ETA
	068 260 23	32	70x	-	-	32	4.5	-	25*	20	-	-
	Spiral		per pack	per pack	mm	mm	Ø mm	d ₀ Ø mm	h _t ≥ mm	d _p ≤ mm	t _{fix} ≤ mm	ETA
	068 700 231	32	10x	-	-	32	4.5	-	25*	20	-	-
	Spiral + screw		per pack	per pack	mm	mm	mm	d ₀ Ø mm	h _t ≥ mm	d _p ≤ mm	t _{fix} ≤ mm	ETA
	068 701 231	32 S	4x	4x	-	32	4.5 x 45	-	25*	20	13	-
* For 9.5 mm gypsum plasterboard. For other boards, 23 mm is sufficient.												
Pack	Item No.	Type	Content Wall Plug	Content Hook	Wall plug Ø	Wall plug length	Hook	Drill Ø	Min. Cavity depth	Board thickness	Fixture Thickness	Approval
	Pirat Leslie		per pack	per pack	mm	mm	mm	d ₀ Ø mm	h _t ≥ mm	d _p ≤ mm	t _{fix} ≤ mm	ETA
	068 701 501	32	4x	4x	-	32	4.0 x 35	-	23	20	-	-



Spiral	Gypsum plasterboard 9.5 mm	Gypsum plasterboard 12.5 mm	Gypsum plasterboard 2x 12.5 mm	Gypsum fibreboard 12.5 mm	Wood chip / plywood board ≥ 10 mm
32	7 kg	8 kg	-	-	-

- For fastenings in gypsum plasterboards, the holding value specifications of the board manufacturer must always be observed.
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

Description & Area of Application

- Glass fibre reinforced gypsum plasterboard wall plug
- Reinforced drill tip for easy installation without additional setting tool
- For single layer gypsum plasterboards

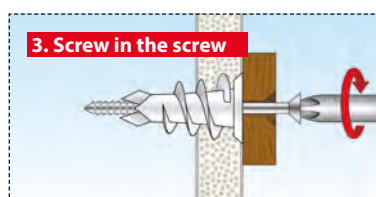
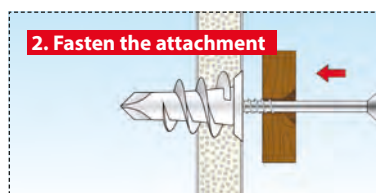
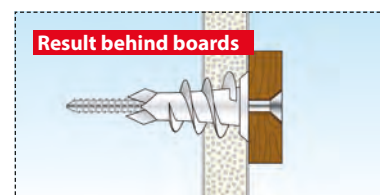
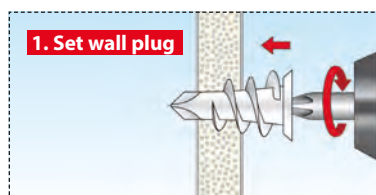
Spiral + screw:

- Screw with PZ driver



Processing & Installation

- Centre punch the gypsum plasterboard using the centre punch before screwing in
- Not suitable for gypsum fibreboards and tiled gypsum plasterboards
- Small footprint behind the panel due to short wall plug length
- Only use chipboard and panel screws with $\varnothing 4.5$ mm
- Minimum screw length = wall plug length 32 mm + attachment thickness
- Pre-positioned installation

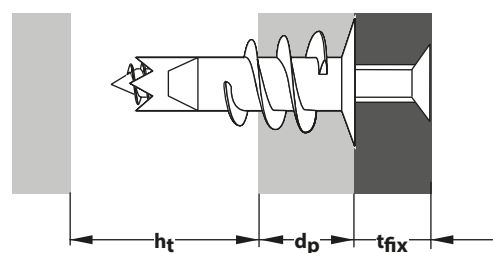








www.YouTube.com/toxgermany

Features

- Without pre-drilling in gypsum plasterboard
- Screw in directly
- No special tool required
- In gypsum fibreboards high holding values up to 20 kg per fixing point
- Also suitable for M4 screws



Pack	Item No.	Type	Content Wall Plug	Content Screw	Wall plug Ø	Wall plug length	Screw Size	Drill Ø	Min. Cavity depth	Board thickness	Fixture Thickness	Approval
	Spiral Plus		per pack	per pack	mm	mm	mm	d0 ø mm	ht ≥ mm	dp ≤ mm	tfix ≤ mm	ETA
	068 100 021	37	50x	-	-	32	4.5	-	28	25	-	-
	Spiral Plus + Screw		per pack	per pack	mm	mm	mm	d0 ø mm	ht ≥ mm	dp ≤ mm	tfix ≤ mm	ETA
	068 101 021	37-2 S	50x	50x	-	32	4.5 x 35	-	28	25	12	-
	Spiral Plus + Screw		per pack	per pack	mm	mm	mm	d0 ø mm	ht ≥ mm	dp ≤ mm	tfix ≤ mm	ETA
	068 101 041	37-4 S	50x	50x	-	32	4.5 x 50	-	28	25	27	-
	Spiral Plus + Screw		per pack	per pack	mm	mm	mm	d0 ø mm	ht ≥ mm	dp ≤ mm	tfix ≤ mm	ETA
	068 701 041	37-4 S	4x	4x	-	32	4.5 x 50	-	28	25	27	-



Spiral Plus	Gypsum plasterboard 9.5 mm	Gypsum plasterboard 12.5 mm	Gypsum plasterboard 2x 12.5 mm	Gypsum fibreboard 12.5 mm	Wood chip / plywood board ≥ 10 mm
37	7 kg	8 kg	15 kg	20 kg	-

- For fastenings in gypsum plasterboards, the holding value specifications of the board manufacturer must always be observed.
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

Description & Area of Application

- Metal wall plug (zinc die-cast) with drill tip and pronounced external thread
- Also suitable for double-layer gypsum plasterboard
- PH2 driver for easy installation

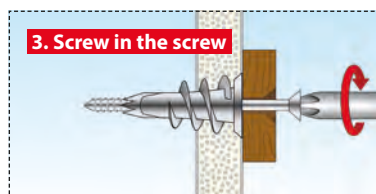
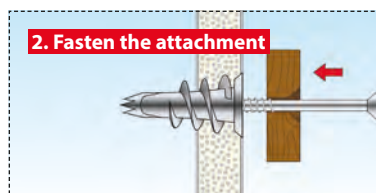
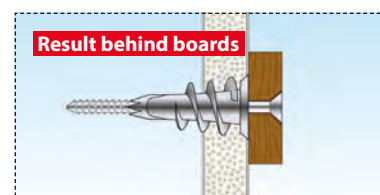
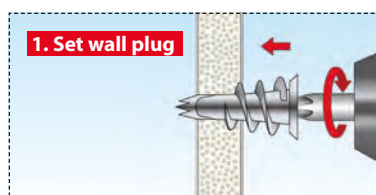
Spiral Plus + Screw:

- Screw with PH2 driver



Processing & Installation

- Not suitable for tiled gypsum plasterboards
- Pre-drill with 8 mm for gypsum fibre boards
- Small footprint behind the panel due to short wall plug length
- Only use chipboard and panel screws with \varnothing 4.5 mm
- Minimum screw length = wall plug length 32 mm + attachment thickness + 5 mm
- Punch the cover of the board before wall plug installation
- Flush wall join
- Pre-positioned installation



Plasterboard wall plug **Spiral Pro**

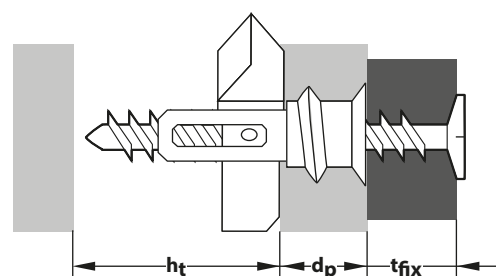


Features

- Without pre-drilling in gypsum plasterboard
- No special tool required
- Screw in directly
- In gypsum fibreboards high holding values up to 25 kg per fixing point
- Same bit for screwing in the wall plug and the screw



www.YouTube.com/toxgermany



Pack	Item No.	Type	Content Wall Plug	Content Screw	Wall plug Ø	Wall plug length	Screw Size	Drill Ø	Min. Cavity depth	Board thickness	Fixture Thickness	Approval
	Spiral Pro + Screw 	per pack	per pack		mm	mm	mm	d ₀ ø mm	h _t ≥ mm	d _p ≤ mm	t _{fix} ≤ mm	ETA
	068 101 031 39-3 S		50x	50x	-	39	4.5 x 45	-	30	9 - 13	12	-
	Spiral Pro + Screw 	per pack	per pack		mm	mm	mm	d ₀ ø mm	h _t ≥ mm	d _p ≤ mm	t _{fix} ≤ mm	ETA
	068 101 051 39-5 S		25x	25x	-	39	4.5 x 60	-	30	9 - 13	27	-
	Spiral Pro + Screw 	per pack	per pack		mm	mm	mm	d ₀ ø mm	h _t ≥ mm	d _p ≤ mm	t _{fix} ≤ mm	ETA
	068 701 051 39-5 S		4x	4x	-	39	4.5 x 60	-	30	9 - 13	27	-



Spiral Pro	Gypsum plasterboard 9.5 mm	Gypsum plasterboard 12.5 mm	Gypsum plasterboard 2x 12.5 mm	Gypsum fibreboard 12.5 mm	Wood chip / plywood board ≥ 10 mm
39	10 kg	15 kg	-	25 kg	-

- For fastenings in gypsum plasterboards, the holding value specifications of the board manufacturer must always be observed.
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

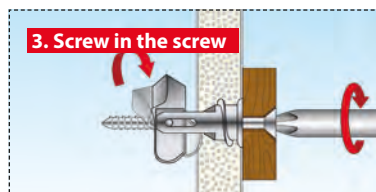
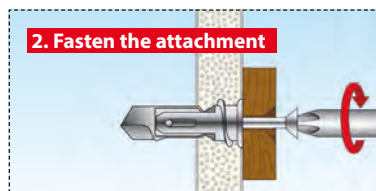
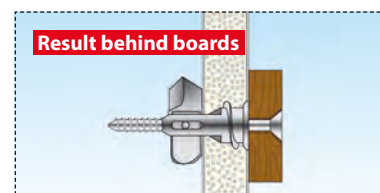
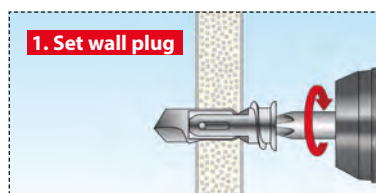
Description & Area of Application

- Metal wall plug (zinc die-cast) with drill tip and crooked wing
- PZ2 driver
- Crooked wing for high holding values
- Screw with PZ driver



Processing & Installation

- Not suitable for tiled wall panels
- Suitable for board thicknesses of 9-13 mm
- Small footprint behind the panel due to short wall plug length
- Only use the screws supplied
- Pre-drill with 11 mm in gypsum fibre boards
- Pre-positioned installation



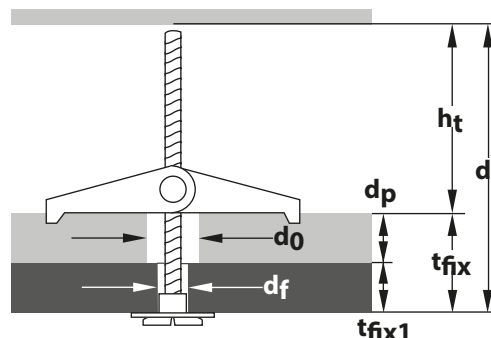
Sprung cavity toggle Spagat


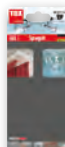

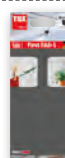


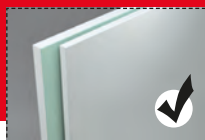
**AUTOMATIC
CAVITY TOGGLE**

Features

- Automatic cavity toggle
- For bridging large wall thicknesses
- For single and double layer wall panels
- Independent spreading



Pack	Item No.	Type	Content Wall Plug	Content Washer	Wall plug Ø	Screw length	Thread	Drill Ø	Min. Cavity depth	Min. Setting Depth	Min. Anchoring Depth	Approval	
	Spagat		per pack	per pack	mm	d _l mm	metric	d ₀ / d _f Ø mm	h _t ≥ mm	h _{ef} mm	t _{fix} (d _p +t _{fix1}) ≤ mm	ETA	
	024 100 011	M3	50x	20x5.3x0.5	-	85	M3	12 / 4	30	-	70	-	
	024 100 111	M3	20x	20x5.3x0.5	-	85	M3	12 / 4	30	-	70	-	
	024 100 061	M4	50x	20x5.3x0.5	-	90	M4	14 / 5	35	-	70	-	
	024 100 161	M4	20x	20x5.3x0.5	-	90	M4	14 / 5	35	-	70	-	
	024 100 091	M5	25x	25x6.4x1.0	-	100	M5	18 / 6	45	-	80	-	
	024 100 191	M5	10x	25x6.4x1.0	-	100	M5	18 / 6	45	-	80	-	
	024 100 141	M6	25x	25x6.4x1.0	-	100	M6	18 / 7	50	-	80	-	
	Spagat		per pack	per pack	mm	d _l mm	metric	d ₀ / d _f Ø mm	h ₁ ≥ mm	h _{ef} mm	t _{fix} (d _p +t _{fix1}) ≤ mm	ETA	
	024 700 011	M3	2x	20x5.3x0.5	-	85	M3	12 / 4	30	-	70	-	
	024 700 061	M4	2x	20x5.3x0.5	-	90	M4	14 / 5	35	-	70	-	
	024 700 091	M5	2x	25x6.4x1.0	-	100	M5	18 / 6	45	-	80	-	
Pack	Item No.	Type	Content Wall Plug	Content Washer	Spanner size	Hook length	Thread	Thread length	Drill Ø	Min. Cavity depth	max. Board thickness	Fixture Thickness	Approval
	Pirat Eddi-S		per pack	per pack	SW	l _h mm	M	l _g mm	Ø mm	h _t ≥ mm	d _p ≤ mm	t _{fix} ≤ mm	ETA
	024 100 131	M3	20x	20x5.3x0.5	6	90	M3	60	12	30	25	-	-
	024 100 071	M4	50x	20x5.3x0.5	7	95	M4	70	14	35	25	-	-
	024 100 171	M4	20x	20x5.3x0.5	7	95	M4	70	14	35	25	-	-
	024 100 101	M5	25x	25x6.4x1.0	8	100	M5	70	18	45	20	-	-
	024 100 121	M6	25x	25x6.4x1.0	10	130	M6	90	18	50	30	-	-
	Pirat Eddi-S		per pack	per pack	SW	l _h mm	M	l _g mm	Ø mm	h ₁ ≥ mm	d _p ≤ mm	t _{fix} ≤ mm	ETA
	024 700 021	M3	2x	20x5.3x0.5	6	90	M3	60	12	30	25	-	-
	024 700 071	M4	2x	20x5.3x0.5	7	95	M4	70	14	35	25	-	-
	024 700 101	M5	2x	25x6.4x1.0	8	100	M5	70	18	45	20	-	-



Spagat	Gypsum plasterboard 9.5 mm	Gypsum plasterboard 12.5 mm	Gypsum plasterboard 2x12.5 mm	Gypsum fibreboard 12.5 mm	Wood chip / plywood board ≥ 10 mm
M3	10 kg	20 kg	20 kg	30 kg	40 kg
M4	15 kg	20 kg	40 kg	40 kg	40 kg
M5	15 kg	20 kg	40 kg	40 kg	40 kg
M6	15 kg	20 kg	40 kg	40 kg	40 kg

Pirat Eddi-S	Gypsum plasterboard 9.5 mm	Gypsum plasterboard 12.5 mm	Gypsum plasterboard 2x12.5 mm	Gypsum fibreboard 12.5 mm	Wood chip / plywood board ≥ 10 mm
M3	2 kg	2 kg	2 kg	2 kg	2 kg
M4	5 kg	5 kg	5 kg	5 kg	5 kg
M5	15 kg	15 kg	15 kg	15 kg	15 kg
M6	15 kg	20 kg	30 kg	30 kg	30 kg

- For fastenings in gypsum plasterboards, the holding value specifications of the board manufacturer must always be observed.
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

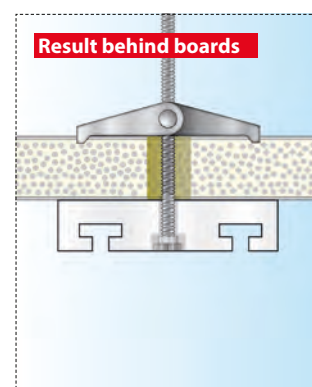
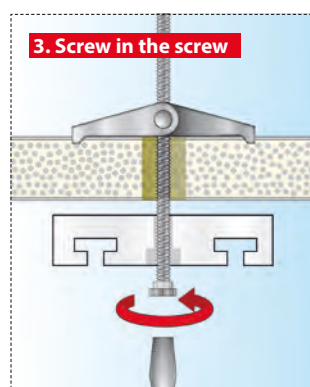
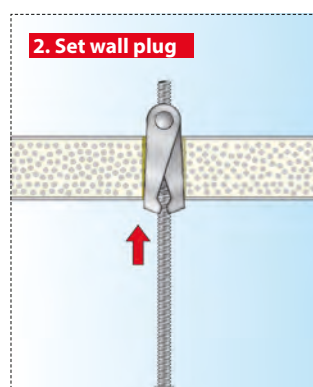
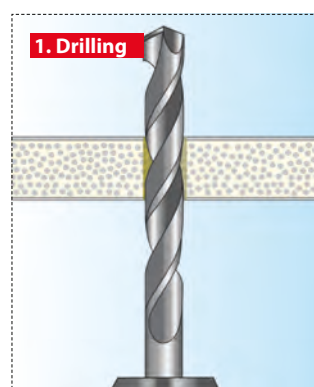
Description & Area of Application

- Galvanised metal cavity toggle wall plug with 2 tilting wings, metal washer and knurled nut



Processing & Installation

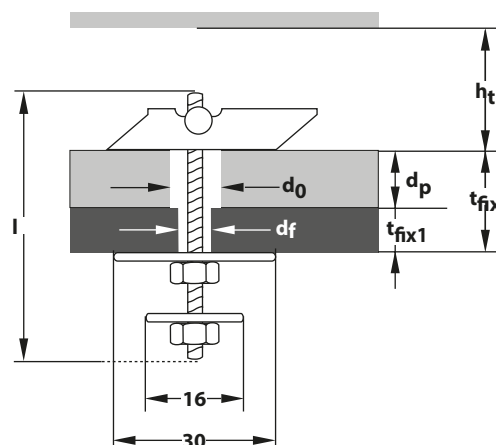
- Observe minimum cavity depth, board thickness and drill Ø (see table on the left)
- Observe vertical installation position for wall installation
- Pre-positioned installation






Features

- Extremely high holding values for cavities
- Ideal for wall installation
- Universal fastening bracket with hexagonal nut
- For bridging large wall thicknesses
- For single and double layer boards
- Tilting mechanism automatically adjusts to the optimum angle for the load capacity when installed on the wall



Pack	Item No.	Type	Content Wall Plug	Spanner size	Washer	Wall plug length	Thread	Drill Ø	Min. Cavity depth	Min. Setting Depth	Fixture Thickness	Approval
	Spagat Pro		per pack	SW	small / large mm	l	metric	d ₀ / d _f ø mm	h _t ≥ mm	h _{ef} mm	t _{fix} (d _p +t _{fix1}) ≤ mm	ETA
	023 100 071	M8	20x	13	16 / 30	100	M8	20 / 10	75	-	60	-
	023 100 171	M8	10x	13	16 / 30	100	M8	20 / 10	75	-	60	-

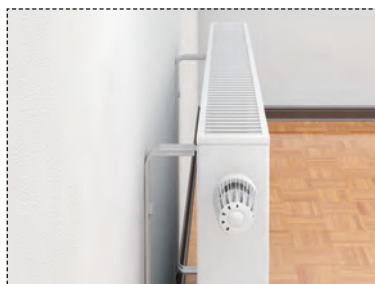


Spagat Pro	Gypsum plasterboard 9.5 mm	Gypsum plasterboard 12.5 mm	Gypsum plasterboard 2x12.5 mm	Gypsum fibreboard 12.5 mm	Wood chip / plywood board ≥ 10 mm
M8	20 kg	40 kg	70 kg	60 kg	120 kg

- For fastenings in gypsum plasterboards, the holding value specifications of the board manufacturer must always be observed.
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

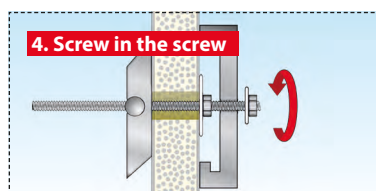
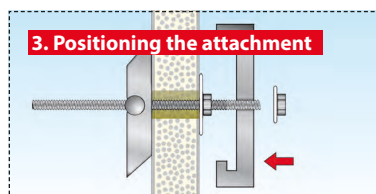
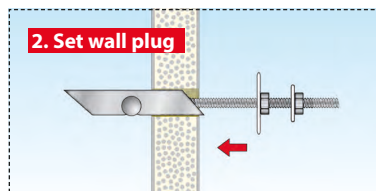
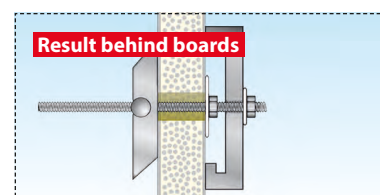
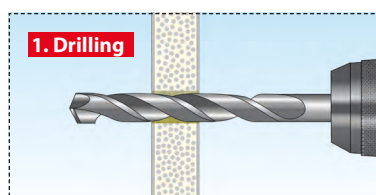
Description & Area of Application

- Galvanised metal cavity plug with one tilting wing, threaded rod, one large and one small metal washer and two hexagonal nuts (SW13)
- For wall and ceiling installations
- For gypsum plasterboard, gypsum fibreboard and chipboard as well as hollow cavity blocks and prestressed concrete false ceiling panels



Processing & Installation

- Observe minimum cavity depth, board thickness and drill Ø
- Observe vertical installation position for wall installation
- Pre-positioned installation



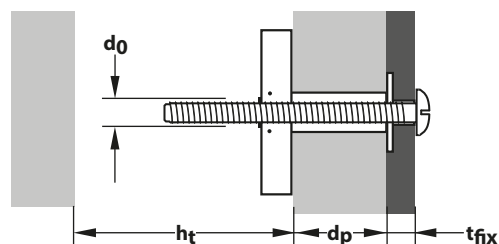
Cavity wall plug Spagat Plus



Features

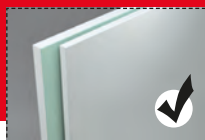
- Extremely high holding values for cavities
- Suitable for metric screws
- For board thicknesses from 9.5-70 mm*
- Tilting mechanism automatically adjusts to the optimum angle for the load capacity when installed on the wall
- No setting tool required
- Simple and rapid installation

*from a board thickness of 50 mm a longer screw must be used



Pack	Item No.	Type	Content Wall Plug	Content Screw	Wall plug Ø	Driver	Screw Size	Drill Ø	Min. Cavity depth	Board thickness	Fixture Thickness	Approval
	Spagat Plus		per pack		mm	+	mm	d0 Ø mm	ht	dp mm	tfix	ETA
	036 600 021	M5	2x	2x	-	PH2	M5x60	13	55	9.5-70	≤ 40 ¹	-
	036 600 041	M6	2x	2x	-	PH3	M6x60	13	55	9.5-70	≤ 40 ¹	-
	036 600 051	M8	2x	2x	-	PH4	M8x60	18	55	12.5-70	≤ 30 ¹	-

¹ depending on board thickness

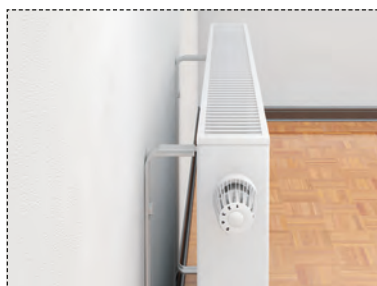


Spagat Plus	Gypsum plasterboard 9.5 mm	Gypsum plasterboard 12.5 mm	Gypsum plasterboard 2x12.5 mm	Gypsum fibreboard 12.5 mm	Wood chip / plywood board ≥ 10 mm
M5	20 kg	25 kg	50 kg	40 kg	60 kg
M6	20 kg	30 kg	55 kg	45 kg	65 kg
M8	20 kg	30 kg	55 kg	45 kg	65 kg

- For fastenings in gypsum plasterboards, the holding value specifications of the board manufacturer must always be observed.
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

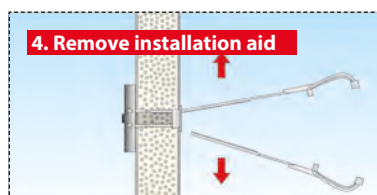
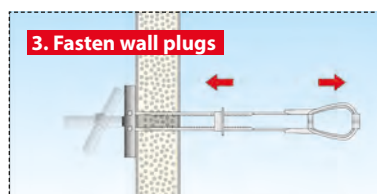
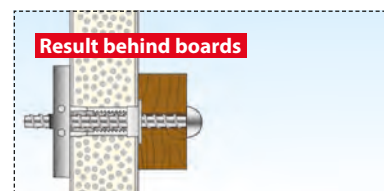
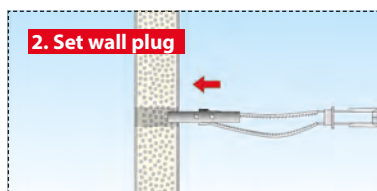
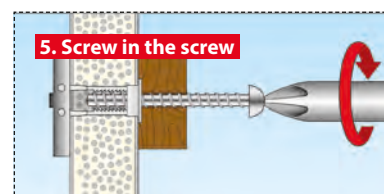
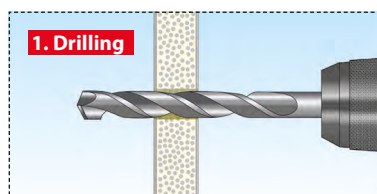
Description & Area of Application

- Variable length plastic cavity wall plug with metal tilting wings
- For wall and ceiling installations
- For gypsum plasterboard gypsum fibreboard and chipboard as well as hollow cavity blocks and prestressed concrete false ceiling panels



Processing & Installation

- Observe minimum cavity depth, board thickness and drill \varnothing
- Observe vertical installation position for wall installation
- Pre-positioned installation
- Put on screw with slight pressure and screw in

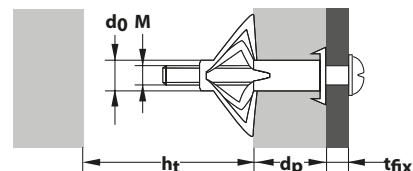




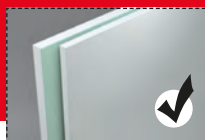
www.YouTube.com/toxgermany

Features

- Quick processing with mounting pliers (can also be mounted without)
- For shallow cavity depths
- Wall plug cap with anti-rotation lock prevents rotation in the building material
- Suitable for single and double layer wall panels



Pack	Item No.	Type	Content Wall Plug	Content Screw	Wall plug Ø	Wall plug length	Screw Size	Driver	Drill Ø	Min. Cavity depth	Board thickness	Fixture Thickness	Approval
			per Pack	per Pack	d0 mm	mm	mm		d0 mm	ht ≥ mm	dp mm	tfix ≤ mm	ETA
	035 101 021	M4 x 32	50x	50x	8	32	M4 x 39	PH2	8	35	3 - 11	23	-
	035 101 221	M4 x 32	25x	25x	8	32	M4 x 39	PH2	8	35	3 - 11	23	-
	035 101 031	M4 x 38	50x	50x	8	38	M4 x 45	PH2	8	35	8 - 16	20	-
	035 101 231	M4 x 38	25x	25x	8	38	M4 x 45	PH2	8	35	8 - 16	20	-
	035 101 061	M5 x 37	50x	50x	10	37	M5 x 45	PH2	10	37	6 - 13	21	-
	035 101 261	M5 x 37	25x	25x	10	37	M5 x 45	PH2	10	37	6 - 13	21	-
	035 101 071	M5 x 52	50x	50x	10	52	M5 x 58	PH2	10	48	7 - 18	28	-
	035 101 271	M5 x 52	25x	25x	10	52	M5 x 58	PH2	10	48	7 - 18	28	-
	035 101 081	M5 x 65	25x	25x	10	65	M5 x 71	PH2	10	51	17 - 32	28	-
	035 101 111	M6 x 37	25x	25x	12	37	M6 x 45	PH3	12	37	6 - 13	21	-
	035 101 121	M6 x 52	25x	25x	12	52	M6 x 58	PH3	12	48	7 - 18	28	-
	035 101 131	M6 x 65	25x	25x	12	65	M6 x 71	PH3	12	51	17 - 32	28	-
			per Pack	per Pack	d0 mm	mm	mm		d0 mm	ht ≥ mm	dp mm	tfix ≤ mm	ETA
	035 101 171	M8 x 55	25x	25x	12	55	M8 x 60	SW13	12	55	8 - 16	26	-
	035 101 181	M8 x 68	25x	25x	12	68	M8 x 71	SW13	12	55	17 - 32	27	-
			per Pack	per Pack	d0 mm	mm	mm		d0 mm	ht ≥ mm	dp mm	tfix ≤ mm	ETA
	035 701 021	M4 x 32	4x	4x	8	32	M4 x 39	PH2	8	35	3 - 11	23	-
	035 701 031	M4 x 38	4x	4x	8	38	M4 x 45	PH2	8	35	8 - 16	20	-
	035 701 061	M5 x 37	4x	4x	10	37	M5 x 45	PH2	10	37	6 - 13	21	-
	035 701 071	M5 x 52	4x	4x	10	52	M5 x 58	PH2	10	48	7 - 18	28	-
	035 701 081	M5 x 65	4x	4x	10	65	M5 x 71	PH2	10	51	17 - 32	28	-
	035 701 111	M6 x 37	4x	4x	12	37	M6 x 45	PH3	12	37	6 - 13	21	-
	035 701 121	M6 x 52	4x	4x	12	52	M6 x 58	PH3	12	48	7 - 18	28	-
			per Pack	per Pack	d0 mm	mm	mm		d0 mm	ht ≥ mm	dp mm	tfix ≤ mm	ETA
	035 701 171	M8 x 55	2x	2x	12	55	M8 x 60	SW13	12	55	8 - 16	26	-
	035 701 181	M8 x 68	2x	2x	12	68	M8 x 71	SW13	12	55	17 - 32	27	-



Acrobat	Gypsum plasterboard 9.5 mm	Gypsum plasterboard 12.5 mm	Gypsum plasterboard 2x12.5 mm	Gypsum fibreboard 12.5 mm	Wood chip / plywood board ≥ 10 mm
M4x32	15 kg	-	-	-	25 kg
M4x38	15 kg	20 kg	-	20 kg	25 kg
M5x37	15 kg	20 kg	-	30 kg	30 kg
M5x52	15 kg	20 kg	-	30 kg	30 kg
M5x65	-	-	20 kg	-	-
M6x37	15 kg	20 kg	-	30 kg	30 kg
M6x52	15 kg	20 kg	-	30 kg	30 kg
M6x65	-	-	35 kg	-	-
M8x55	15 kg	25 kg	-	30 kg	30 kg
M8x68	-	-	35 kg	-	-

- For fastenings in gypsum plasterboards, the holding value specifications of the board manufacturer must always be observed.
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

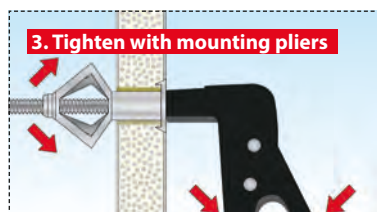
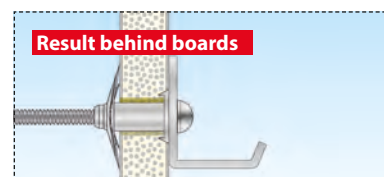
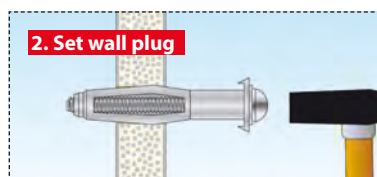
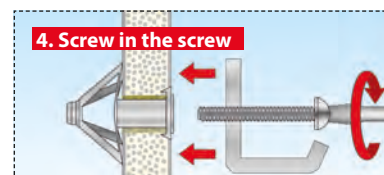
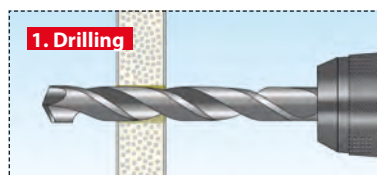
Description & Area of Application

- Galvanised metal cavity wall plug with wall plug cap, rotation locks and metric screw with hexagonal (SW13) or crosshead driver
- When the wall plug is put in place, the expansion segments are widespread on the rear of the panel
- Fire resistant to DIN 4102 (class A1)



Processing & Installation

- The wall plug is preferably installed with the TOX mounting pliers Acrobat Speed-Plus or Acrobat Speed-Pro, alternatively it can also be mounted with cordless and standard screwdriver
- The specified drill Ø must be observed
- The rotation locks can be pressed back into their original shape if necessary (e.g. on tiled gypsum plasterboard)
- Observe minimum cavity depth and board thickness
- When drilling into gypsum plasterboards, use a wood or metal drill bit
- Pre-positioned installation
- When installing with cordless or standard screwdriver, unscrew the screw completely and install it together with the attachment








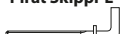






Features

- Wall plug cap with anti-rotation lock prevents rotation in the building material
- Hook bolt can be loosened and tightened without removing the wall plug
- For single and double layer plasterboard, gypsum fibreboard and chipboard
- High holding values due to widespread anchoring on the back of the panel



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FOR PLASTERBOARD

Pack	Item No.	Type	Content Wall Plug	Content Hook	Wall plug Ø	Wall plug length	Hook	Drill Ø	Min. Cavity depth	Board thickness	Hook length	Approval
			per pack	per pack	mm	mm	mm	d ₀ Ø mm	h _t ≥ mm	d _p mm	a ≤ mm	ETA
	035 101 651	M5 x 37	50x	50x	10	37	M5 x 52	10	37	6-13	6	-
	035 101 661	M5 x 37	25x	25x	10	37	M5 x 52	10	37	6-13	6	-
	035 101 681	M6 x 52	25x	25x	12	52	M6 x 68	12	48	7-18	6	-
	035 101 691	M6 x 65	25x	25x	12	65	M6 x 81	12	51	17-32	6	-
			per pack	per pack	mm	mm	mm	d ₀ Ø mm	h _t ≥ mm	d _p mm	a ≤ mm	ETA
	035 701 651	M5 x 37	2x	2x	10	37	M5 x 52	10	37	6-13	6	-
	035 701 681	M6 x 52	2x	2x	12	52	M6 x 68	12	48	7-18	6	-
	035 701 691	M6 x 65	2x	2x	12	65	M6 x 81	12	51	17-32	6	-
			per pack	per pack	mm	mm	mm	d ₀ Ø mm	h _t ≥ mm	d _p mm	a ≤ mm	ETA
	035 701 621	M5 x 52	2x	2x	10	52	M5 x 86	10	48	8-21	20	-
	035 701 641	M6 x 52	2x	2x	12	52	M6 x 86	12	48	7-18	20	-
			per pack	per pack	mm	mm	mm	d ₀ Ø mm	h _t ≥ mm	d _p mm	a ≤ mm	ETA
	035 701 561	M5 x 52	2x	2x	10	52	M5 x 89	10	48	7-18	14	-
	035 701 581	M6 x 52	2x	2x	12	52	M6 x 92	12	48	7-18	15	-
			per pack	per pack	mm	mm	mm	d ₀ Ø mm	h _t ≥ mm	d _p mm	a ≤ mm	ETA
	035 701 521	M5 x 52	2x	2x	10	52	M5 x 89	10	48	7-18	14	-



Pirat Skippi-L	Gypsum plasterboard 9.5 mm	Gypsum plasterboard 12.5 mm	Gypsum plasterboard 2x 12.5 mm	Gypsum fibreboard 12.5 mm	Wood chip / plywood board ≥ 10 mm
M5x37	15 kg	20 kg	-	30 kg	30 kg
M6x52	15 kg	20 kg	-	30 kg	30 kg
M6x65	-	-	35 kg	-	-

Pirat Skippi-XL	Gypsum plasterboard 9.5 mm	Gypsum plasterboard 12.5 mm	Gypsum plasterboard 2x 12.5 mm	Gypsum fibreboard 12.5 mm	Wood chip / plywood board ≥ 10 mm
M5x52	15 kg	20 kg	-	30 kg	30 kg
M6x52	15 kg	20 kg	-	30 kg	30 kg

Pirat Skippi-S	Gypsum plasterboard 9.5 mm	Gypsum plasterboard 12.5 mm	Gypsum plasterboard 2x 12.5 mm	Gypsum fibreboard 12.5 mm	Wood chip / plywood board ≥ 10 mm
M5x52	15 kg	20 kg	-	30 kg	30 kg
M6x52	15 kg	20 kg	-	30 kg	30 kg

Pirat Skippi-O	Gypsum plasterboard 9.5 mm	Gypsum plasterboard 12.5 mm	Gypsum plasterboard 2x 12.5 mm	Gypsum fibreboard 12.5 mm	Wood chip / plywood board ≥ 10 mm
M5x52	15 kg	20 kg	-	30 kg	30 kg

- For fastenings in gypsum plasterboards, the holding value specifications of the board manufacturer must always be observed.
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

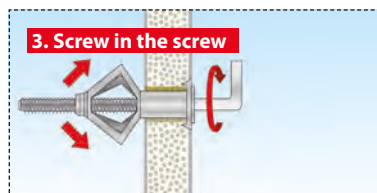
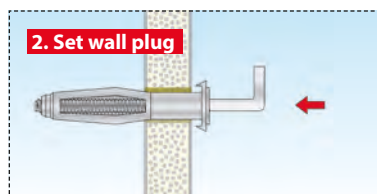
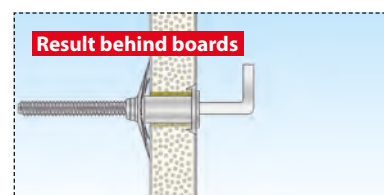
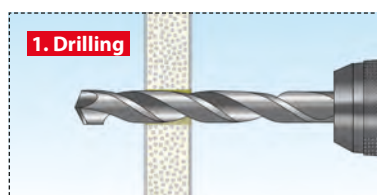
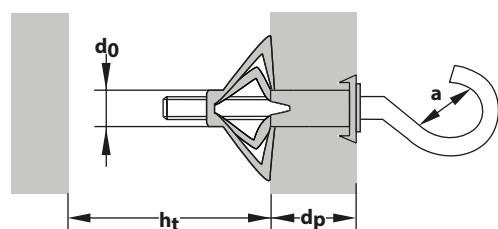
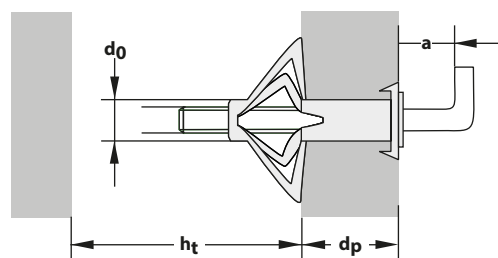
Description & Area of Application

- Galvanised metal cavity wall plug with wall plug cap, anti-rotation locks and metric threaded hook
- Galvanised metal cavity wall plug with wall plug cap, anti-rotation locks and short metric eye or round threaded hook



Processing & Installation

- If necessary, the rotation locks can be pressed back into their original shape (e.g. for tiles)
- Observe minimum cavity depth and board thickness
- Pre-positioned installation



Mounting pliers Acrobat Speed-Plus



www.YouTube.com/toxgermany

Features

- Continuous installation without readjustments of the screw
- Rapid and convenient installation of the Acrobat
- Short construction for narrow spaces
- Comfortable handle for pleasant and safe working

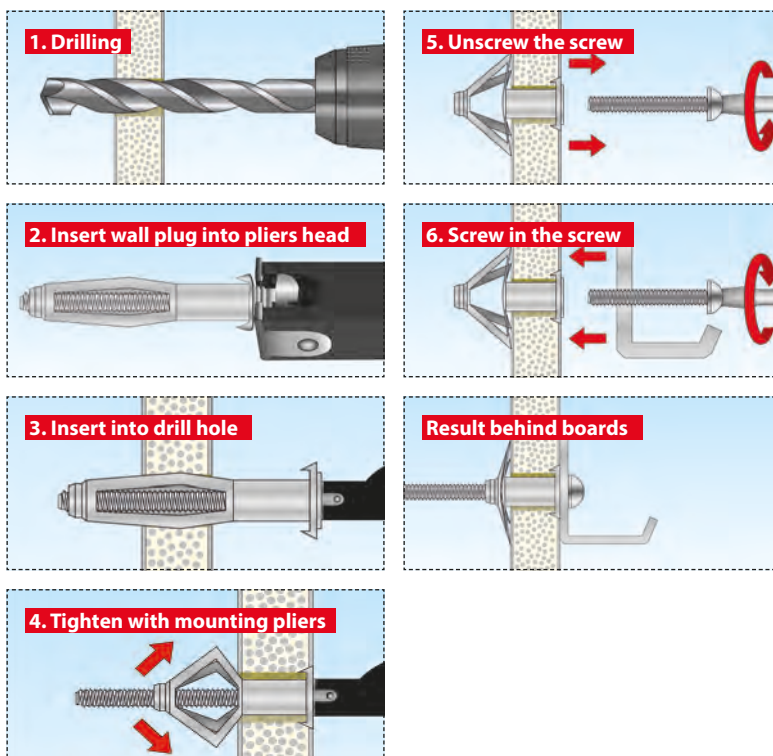
Pack	Item No.	Content
	Acrobat Speed-Plus	
	035 900 94	1x

Description & Area of Application

- For fastening the Acrobat
- Metal mounting pliers, with head and two handles with slip protection
- Enlarged screw holder for all sizes M4 to M8

Processing & Installation

- Insert wall plug with screw head into the holder on the pliers head
- The wall plug is fitted by operating the pliers handles several times
- Remove the pliers from the wall plug by pulling on the small pliers lever
- Remove screw and install with attachment



Whether it's a doorbell, camera, awning or a canopy...

Fastenings to ETICS

- for every project



Find your solution
using the colour



Insulation wall plug
THERMO
7PLUS



Downpipe fastening
THERMO VARIO



Flashing strip fastening
THERMO
KAPPO



Spaced mounting system
THERMO
FreeMini



Installation system
THERMO
Free

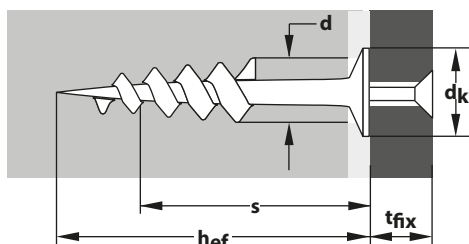
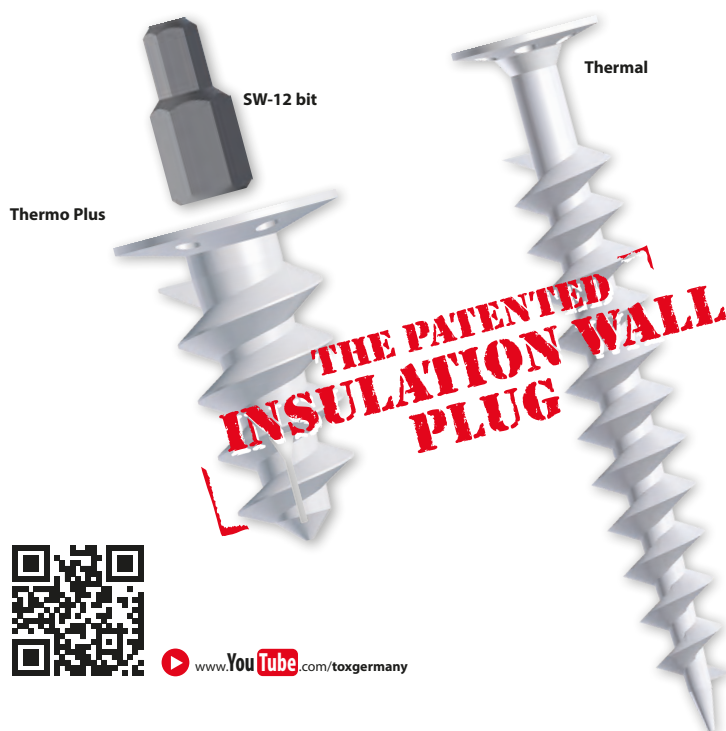


Installation system
THERMO
Free plus

For light loads

For moderate loads

For heavy loads



www.YouTube.com/toxgermany

Features

- TOX patent: Processing possible without pre-drilling or special tools
- Effectively prevents thermal bridges
- No pressure load on the facade
- Fast processing and immediately loadable

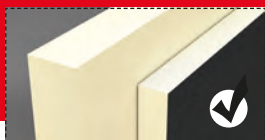
Thermal

- Reinforced wall plug neck prevents possible twisting off
- 100% nylon

Thermo Plus

- Suitable for M8 and M10 hanger bolts
- SW12 internal driver with supplied bit for high force transmission

Pack	Item No.	Type	Content Wall Plug	Content Bit	Wall plug Ø	Wall plug length	Screw Ø	Wall plug cap Ø / Driver	Anchoring depth	Max. Screw-in depth	Approval
	Thermal		per pack	per pack	d Ø mm	mm	Ø mm	dk / TX Ø mm	hef mm	s ≤ mm	ETA
	072 100 221	50	50x	-	18	50	4.5 - 5.0	25 / 40	50	30	-
	072 100 251	85	50x	-	18	85	4.5 - 5.0	25 / 40	85	40	-
	072 100 281	120	50x	-	18	120	4.5 - 5.0	25 / 40	120	50	-
	072 100 311	155	50x	-	18	155	4.5 - 5.0	25 / 40	155	50	-
	Thermal		per pack	per pack	d Ø mm	mm	Ø mm	dk / TX Ø mm	hef mm	s ≤ mm	ETA
	072 700 221	50	4x	-	18	50	4.5 - 5.0	25 / 40	50	30	-
	072 700 251	85	4x	-	18	85	4.5 - 5.0	25 / 40	85	40	-
	072 700 281	120	2x	-	18	120	4.5 - 5.0	25 / 40	120	50	-
Pack	Item No.	Type	Content Wall Plug	Content Bit	Wall plug Ø	Wall plug length	Screw Ø	Wall plug cap Ø / Driver	Anchoring depth	Max. Screw-in depth	Approval
	Thermo Plus		per pack	per pack	d Ø mm	mm	M / Ø mm	dk / SW Ø mm	hef mm	s ≤ mm	ETA
	072 100 421	55	50x	1x	24	55	8 - 10	33 / 12	55	50	-
	072 100 441	85	50x	1x	24	85	8 - 10	33 / 12	85	50	-
	Thermo Plus		per pack	per pack	d Ø mm	mm	M / Ø mm	dk / SW Ø mm	hef mm	s ≤ mm	ETA
	072 700 421	55	2x	1x	24	55	8 - 10	33 / 12	55	50	-
	072 700 441	85	2x	1x	24	85	8 - 10	33 / 12	85	50	-



Thermal	EPS 20	XPS 20	PUR	Wood fibre insulation boards
50	2 kg	3 kg	4 kg	4 kg
85	4 kg	4 kg	6 kg	8 kg
120	6 kg	5 kg	10 kg	15 kg
155	8 kg	6 kg	10 kg	20 kg

Thermo Plus	EPS 20	XPS 20	PUR	Wood fibre insulation boards
55	3 kg	6 kg	4 kg	6 kg
85	8 kg	10 kg	8 kg	10 kg

■ Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

Description & Area of Application

Thermo:

- Insulation wall plug with coarse, conical thread and flat head driver TX40
- Holder for chipboard screw Ø 4.5 - 5.0 mm
- Wide range of lengths

Thermo Plus:

- Insulation wall plug with coarse, conical thread and flat head
- With hexagonal socket driver (SW12) with holder for woodscrews Ø 8.0 - 10.0 mm or hanger bolts M8 - M10
- Matching bit SW12 is included in each pack



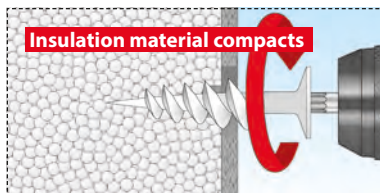
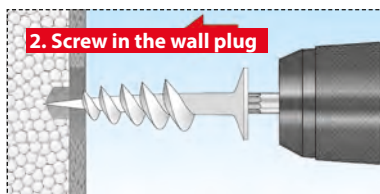
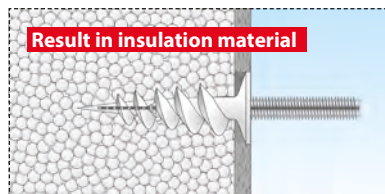
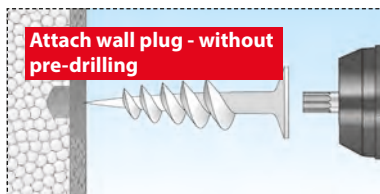
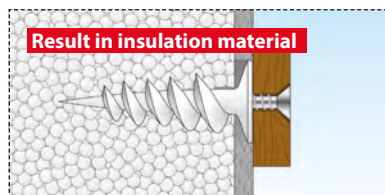
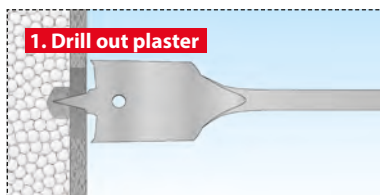
Processing & Installation

Thermo:

- Screw insulation wall plugs directly into the substrate without pre-drilling
- Pre-drill into wood fibre boards with Ø 6 mm
- To prevent water ingress after installation, seal the annular gap between the edge of the wall plug and the plaster with sealing adhesive or paintable acrylic
- Pre-positioned installation

Thermo Plus:

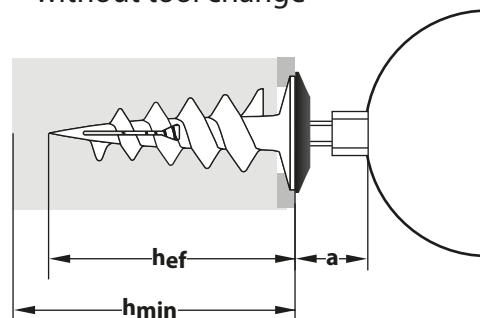
- On non-plastered insulation materials, screw in the wall plug without pre-drilling using a cordless or standard screwdriver
- On plastered insulation materials, the plaster must be removed using a drill Ø 24 - 25 mm
- Pre-drill into wood fibre boards with Ø 12 mm
- To prevent water ingress after installation, seal the annular gap between the edge of the wall plug and the plaster with sealing adhesive or paintable acrylic
- Pre-positioned installation





Features

- Variable downpipe fastening for downpipe spacing 30-60 mm
- Ideal for uneven facades
- For installation before and after plastering
- Flexible cover cap protects against rain and spray
- Protective sleeve prevents soiling of the thread during plastering
- Installation with setting tool without tool change

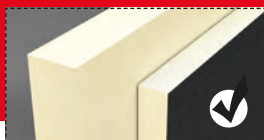


www.YouTube.com/toxgermany

Pack	Item No.	Content	Screw	Wall plug length	Cover cap Ø	Protective sleeve length	Minimum insulation thickness	Min. Anchoring depth	Wall spacing	Approval
	Thermo Vario	per pack	M x l mm	mm	Ø mm	mm	hmin mm	hef mm	a mm	ETA
	072 600 351	4 x hanger bolt M10x110	M10 x 110	85	40	65	100	85	30-60	-
		4 x Thermo Plus 85								
		4 x cover cap								
		4 x protective sleeve								
		1 x Setting tool SW12 bit								

Pack	Item No.	Content	Screw	Wall plug length	Cover cap Ø	Protective sleeve length	Minimum insulation thickness	Min. Anchoring depth	Wall spacing	Approval
	Thermo Vario	per pack	M x l mm	mm	Ø mm	mm	hmin mm	hef mm	a mm	ETA
	072 100 351	20 x hanger bolt M10x110	M10 x 110	85	40	65	100	85	30-60	-
		20 x Thermo Plus 85								
		20 x Flexi Cap								
		20 x protective sleeve								
		1 x Setting tool SW12 bit								

Pack	Item No.	Content	Screw	Wall plug length	Cover cap Ø	Protective sleeve length	Minimum insulation thickness	Min. Anchoring depth	Wall spacing	Approval
	Flexi Cap	per pack	M x l mm	mm	Ø mm	mm	hmin mm	hef mm	a mm	ETA
	072 100 371	50 x	M8 x 40	-	40	-	-	-	-	-
	072 100 361	50 x	M10 x 40	-	40	-	-	-	-	-



Thermo Plus	EPS 20	XPS 20	PUR	Wood fibre insulation boards
85	8 kg	10 kg	8 kg	10 kg

- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

Description & Area of Application

Thermo Vario:

- Specially designed for fastening down pipes in ETICS systems
- Adjustable hanger bolt to compensate for unevenness in the façade
- Also for the installation of trellises, house signs, lighting, alarm systems, electrical installations, etc.
- Thermal separation through insulation wall plug Thermo Plus
- Extensive accessories allow for mounting before and after plastering of the façade



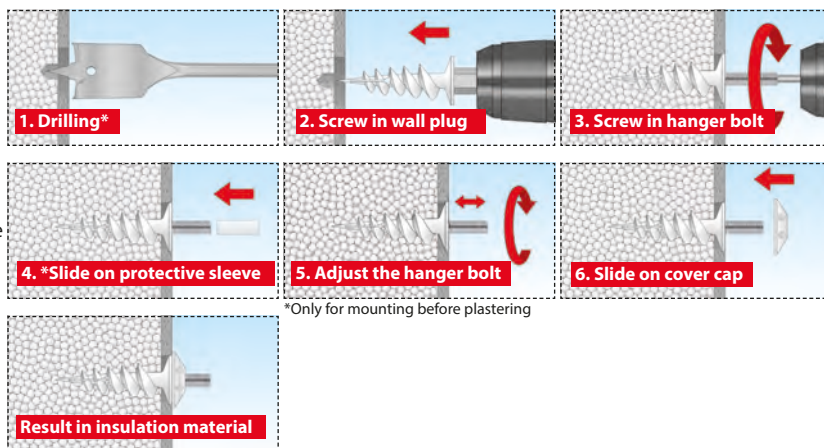
Flexi Cap:

- For visually appealing installations for: e.g. downpipe fastenings, trellises, electrical installations, etc.
- Quick and easy installation
- Protects against rain and spray
- Weatherproof
- For thread size M8 & M10

Processing & Installation

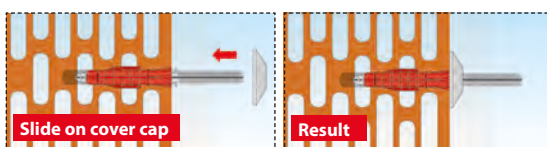
Thermo Vario

- Pre-drill for thick and hard plaster layers (Ø 24 mm)
- Screw in thermal wall plug with the supplied SW12 bit
- Screw in the hanger bolt up to the setting mark
- When installing before plastering, slide the protective sleeve over the threaded rod (protection against dirt)
- After plastering, remove the protective sleeve
- Set the required distance to the façade by turning the threaded rod in or out
- Slide on cover cap
- Mounting the fixture



Flexi Cap:

- Push Flexi Cap cover cap onto the threaded rod.



Flashing strip fastening **Thermo Kappo**



Thermo Kappo

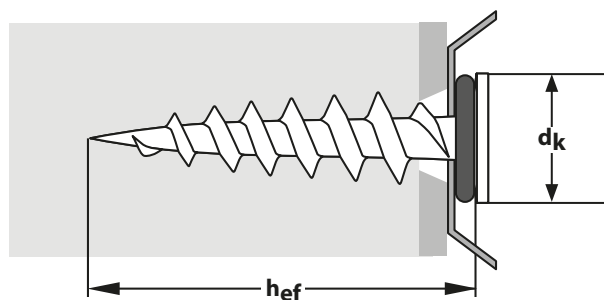
**WITHOUT
PRE-DRILLING**




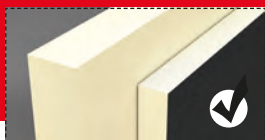
www.YouTube.com/toxgermany

Features

- With drill tip - therefore no marking & pre-drilling of the flashing strip necessary
- Sealing washer included
- Anchoring without thermal bridges
- No pre-drilling in thick plaster



Pack	Item No.	Content Wall Plug	Content Bit	Wall plug Ø	Wall plug length	Wall plug cap Ø	Driver	Anchoring depth	Approval
	Thermo Kappo	per pack	per pack	d Ø mm	mm	d _k Ø mm	TX	hef mm	ETA
	072 100 321	50x	-	15	65	15	30	65	-

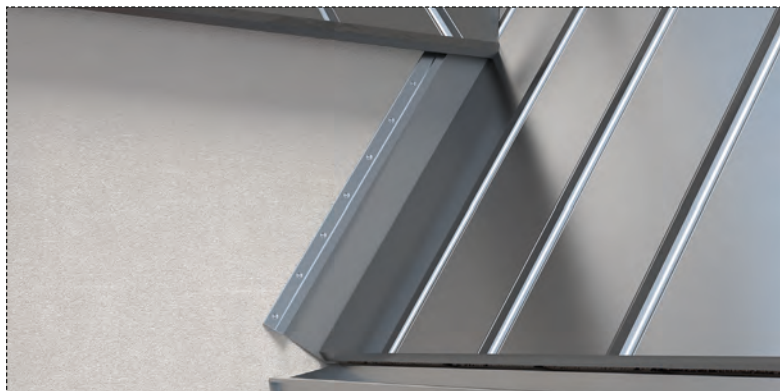


Thermo Kappo	EPS 20	XPS 20	PUR	Wood fibre insulation boards
65	4 kg	6 kg	3 kg	4 kg

■ Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

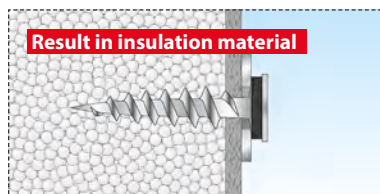
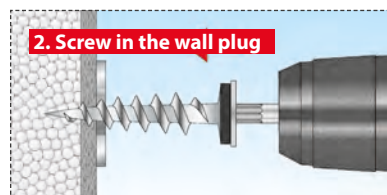
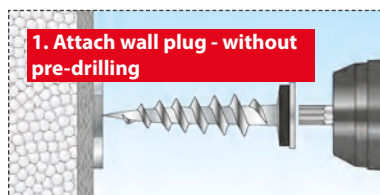
Description & Area of Application

- TX30 driver, no driver slippage
- In wood fibre insulation boards without pre-drilling
- Head replaces Spengler screw
- Direct fitting without separate wall plug
- For wall connection sections and signs



Processing & Installation

- Screw insulation wall plugs into the facade without pre-drilling

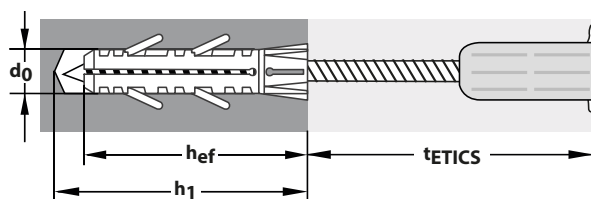




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Features

- Particularly even for soft insulating materials such as rock wool
- For insulation thicknesses of 50-200 mm
- Variable connection options (M10 external thread, M6 internal thread or screws with Ø 3-5 mm)
- No thermal bridge
- No pressure load on the facade
- Slim head geometry for invisible fastenings



Pack	Item No.	Content	Size / Content	Driver	Tightening torque	Drill Ø	Min. Drill hole depth	Min. Anchoring depth	Max. thickness insulating layer	Thickness Fixing	Approval
	Thermo Proof Mini M8/120 mm	per pack	mm		Nm	d0 ø mm	h1 ≥ mm	hef ≥ mm	tETICS ≤ mm	tfix ≥ mm	Dibt
	084 600 341	2x Iso Spacer	-	-	-	14	90	70	120	-	-
		2x threaded rod	M8	-							
		Installation threaded rod ≥ M6, M10	M6/M10	TX25							
		2x expansion wall plug Barracuda 14/70 mm	14/70	-							
	Thermo Proof Mini M8/200 mm	per pack	mm		Nm	d0 ø mm	h1 ≥ mm	hef ≥ mm	tETICS ≤ mm	tfix ≥ mm	Dibt
	084 600 381	2x Iso Spacer	-	-	-	14	90	70	200	-	-
		2x threaded rod	M8	-							
		Installation threaded rod ≥ M6, M10	M6/M10	TX25							
		2x expansion wall plug Barracuda 14/70 mm	14/70	-							
	Thermo Proof Mini M8/120 mm	per pack	mm		Nm	d0 ø mm	h1 ≥ mm	hef ≥ mm	tETICS ≤ mm	tfix ≥ mm	Dibt
	084 100 342	20x threaded rod	M8	-	-	14	90	70	120	-	-
		Installation threaded rod ≥ M6, M10	M6/M10	TX25							
		20x expansion wall plug Barracuda 14/70 mm	14/70	-							
		20x expansion wall plug Barracuda 5/25 mm	5/25	-							
	Thermo Proof Mini M8/200 mm	per pack	mm		Nm	d0 ø mm	h1 ≥ mm	hef ≥ mm	tETICS ≤ mm	tfix ≥ mm	Dibt
	084 100 382	20x threaded rod	M8	-	-	14	90	70	120	-	-
		Installation threaded rod ≥ M6, M10	M6/M10	TX25							
		20x expansion wall plug Barracuda 14/70 mm	14/70	-							
		20x expansion wall plug Barracuda 5/25 mm	5/25	-							



	Tensile load					Shear load			
Thermo Proof Mini	Concrete C 20/25	Solid brick MZ 12	Vertically perforated brick \geq Hlz 12 Bulk density \geq 1kg/dm ²	Cellular concrete \geq P4	EPS 20	XPS 20	PUR	Wood fibre insulation boards	Rockwool
ø 8	100kg*	50kg*	20kg*	40kg*	15kg**	15kg**	15kg**	15kg**	15kg**

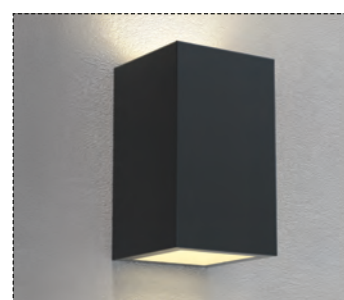
- The anchoring depth of the wall plug must be observed
- Drilling method and drill hole cleaning must be adapted to the building material
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

* The max. tensile load when used with Barracuda 5/25 in the Iso-Spacer is limited to 35 kg.

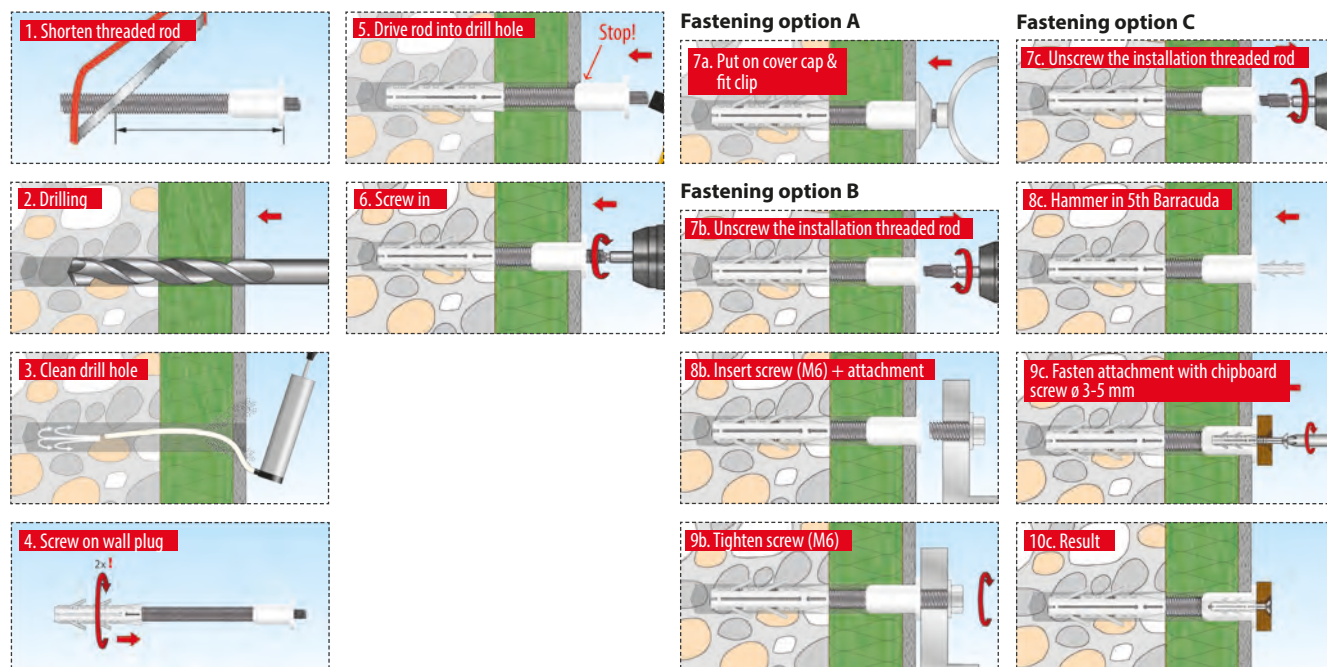
** Applies to insulation materials with plaster thicknesses \geq 5mm

Description & Area of Application

- Thermo Proof Mini M8/120 for insulation thicknesses of 50-120 mm
- Thermo Proof Mini M8/200 for insulation thicknesses of 50-200 mm
- **When used with installation threaded rod M10**
Fastening of e.g. downpipe clips
- **When used without installation threaded rod**
Fastening of attachments with M6 threaded screws
- **When used without installation threaded rod and Barracuda 5/25**
Fastening of attachments with screws Ø 3 - 5 mm



Processing & Installation



- Shorten threaded rod to the required length
- Make hole with Ø 14 mm in the building material (drill hole depth 90 mm + tETICS)
- Clean drill hole
- Screw Barracuda 14/70 onto the threaded rod with max. two turns
- Hammer the pre-fitted Thermo Proof Mini into the drill hole until the Iso-Spacer is flush with the outer wall
- Screw in until the collar of the Iso-Spacer is flush with the plaster

Usage Example A: Rainwater downpipe fastening

- Put on TOX Flexi Cap cover cap and fit pipe clip

Usage Example B: Installation with M6 screw for miscellaneous

- Unscrew installation threaded rod
- Fastening the attachment with M6 screw

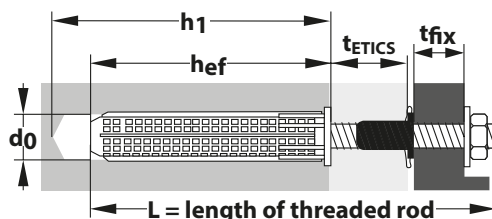
Usage Example C: Installation with screws for miscellaneous

- Unscrew the installation threaded rod
- Hammer the Barracuda 5/25 into the Iso-Spacer
- Fasten the attachment with a Ø 3.0 - 5.0 screw



Features

- Heavy-duty spacer installation for ETICS, clinker or on flat roofs
- Aqua-Stop effectively protects against rotting of the facade due to moisture
- Stainless steel prevents unsightly rust stains
- Approved by the building authorities
- Practically no energy loss
- Simple and rapid installation
- Smoothly adjustable insulating sleeve Iso Spacer
- Suitable for insulation thicknesses and spacer installations up to 200/300 mm



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Pack	Item No.	Content	Size / Content	Driver	Tightening torque	Drill Ø	Min. Drill hole depth	Min. Anchoring depth	Max. thickness Insulating layer	Thickness Fixing	Approval
	Thermo Proof	per pack	mm		Nm	d0 Ø mm	h1 ≥ mm	hef ≥ mm	tETICS ≤ mm	tfix ≥ mm	Dibt
	084 600 101	2x Iso Spacer	-	SW24	20	14 ¹⁾	70 / 100	70 / 100	200 / 170	2	
		2x threaded rod	M12 x 300	-	(Concrete)	(Concrete / solid masonry)	(Concrete / solid masonry)	(Concrete / solid masonry)	(Concrete / solid masonry)	(Concrete / solid masonry)	
		2x sieve sleeve	20 x 85	-		20 ¹⁾	90	85	190	2	
		1x extension	10 x 200	-		(perforated brick)	(perforated brick)	(perforated brick)	(perforated brick)	(perforated brick)	
		1x Aqua-Stop 80ml	80 ml	-		14 ¹⁾	70 / 100	70 / 100	300 / 270	2	
	084 600 121	2x Iso Spacer	-	SW24	20	14 ¹⁾	70 / 100	70 / 100	200 / 170	2	
		2x threaded rod	M12 x 400	-	(Concrete)	(Concrete / solid masonry)	(Concrete / solid masonry)	(Concrete / solid masonry)	(Concrete / solid masonry)	(Concrete / solid masonry)	
		2x sieve sleeve	20 x 85	-		20 ¹⁾	90	85	190	2	
		1x extension	10 x 250	-		(perforated brick)	(perforated brick)	(perforated brick)	(perforated brick)	(perforated brick)	
		1x Aqua-Stop 80ml	80 ml	-		14 ¹⁾	70 / 100	70 / 100	300 / 270	2	
	Thermo Proof Large Pack	per pack	mm		Nm	d0 Ø mm	h1 ≥ mm	hef ≥ mm	tETICS ≤ mm	tfix ≥ mm	Dibt
	084 100 102	20x Iso Spacer	-	SW24	20	14 ¹⁾	70 / 100	70 / 100	200 / 170	2	
		20x threaded rod	M12 x 300	-	(Concrete)	(Concrete / solid masonry)	(Concrete / solid masonry)	(Concrete / solid masonry)	(Concrete / solid masonry)	(Concrete / solid masonry)	
		20x sieve sleeve	20 x 85	-		20 ¹⁾	90	85	190	2	
	084 100 122	16x Iso Spacer	-	SW24	20	14 ¹⁾	70 / 100	70 / 100	300 / 270	2	
		16x threaded rod	M12 x 400	-	(Concrete)	(Concrete / solid masonry)	(Concrete / solid masonry)	(Concrete / solid masonry)	(Concrete / solid masonry)	(Concrete / solid masonry)	
		16x sieve sleeve	20 x 85	-		20 ¹⁾	90	85	190	2	

¹⁾ remove plaster layer with Ø 20 mm drill as necessary

* in combination with Liquix Pro 1

** in combination with Liquix Plus 7



Thermo Proof	Concrete uncracked C 20/25	Concrete cracked C 20/25	Vertically perforated brick Hlz 12	Perforated lime sand brick KSL 14	Hbn Lightweight concrete Hbn 2	Hbl Concrete Hbl 4	Solid lime sand brick KS 27	Brick Mz 20
Holding values³ (per fastening point without environmental effects)	500 kg *	500 kg *	100 kg	70 kg	60 kg ¹	20 kg ¹	170 kg	170 kg
Drill hole depth h ₁ ²	70 mm	90 mm**	90 mm**	100 mm	90 mm**	100 mm	100 mm	100 mm
Anchoring depth h _{ef}	70 mm	85 mm**	85 mm**	100 mm	85 mm**	100 mm	100 mm	100 mm
Drill Ø	14 mm (20 mm in plaster)	20 mm (25 mm in plaster)	20 mm (25 mm in plaster)	14 mm (20 mm in plaster)	20 mm (25 mm in plaster)	14 mm (20 mm in plaster)	14 mm (20 mm in plaster)	14 mm (20 mm in plaster)
Tightening torque	20 Nm	6 Nm	8 Nm	10 Nm	2 Nm	20 Nm	10 Nm	10 Nm
Shear loads as a function of the non-load-bearing layer (insulation & plaster) with full clamping α = 2 of a fastening point without environmental effects								
ETICS	62 mm	80 mm	100 mm	120 mm	140 mm	160 mm	180 mm	200 mm
Shear loads	90 kg	81 kg	68 kg	58 kg	51 kg	46 kg	41 kg	38 kg

■ The partial safety factors of the assessments and a partial safety factor $\gamma_F = 1.4$ of the impact are to be considered in the holding values

■ Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

¹ Not included in approvals Z-21.8-2011

² Applies to the drill hole depth in the building material. The thickness of the insulation and plaster layer are still to be added

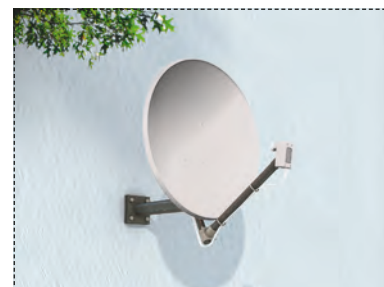
³ The entire approval notice Z-21.8-2011 and the approvals ETA-09/0258, ETA-13/0052 and ETA-13/0053 + ETA-13/0047, ETA-17/0501, ETA-17/0503 listed therein must be observed when sizing

* Corresponds to the permissible bearing load of the ISO spacer ** with sieve sleeve

Description & Area of Application

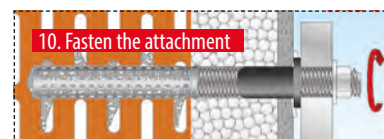
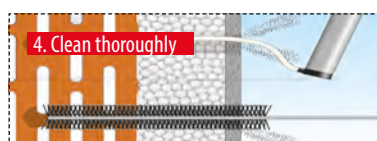
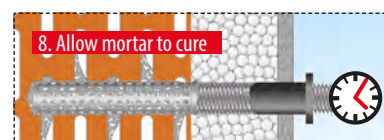
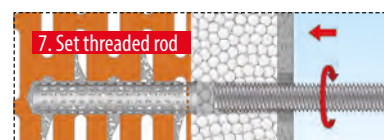
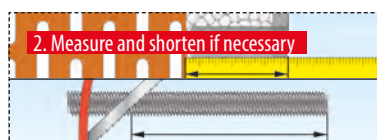
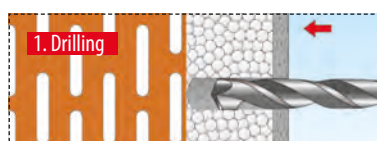
Thermo Proof is a heavy-duty spaced mounting system for thermally-insulated facades (ETICS) consisting of:

- Iso Spacer with large contact surface and SW24 driver for better force transmission
- Aqua-Stop special sealant for exterior use; incl. dosing tip; content 80ml; transparent colour
- Steel parts made of stainless steel in A4 quality; M12 thread; length 300/400 mm
- Static mixer extension for deep drill holes



Processing & Installation

- Drill through thermal insulation
- Measure thermal insulation
- Drill a hole in the building material and remove the plaster layer if necessary
- Clean drill hole
- Shorten threaded rod if necessary (length = drill hole depth + insulation layer + attachment + 20 mm) and screw on Iso Spacer
- In perforated brick only with sieve sleeve. Insert this completely into the drill hole
- Fill 2/3 of the drill hole in the substrate or the sieve sleeve completely with injection mortar
- Insert the threaded rod with the pre-fitted Iso Spacer into the drill hole with a slight twisting motion
- Screw on the Iso Spacer until just before the plaster is applied
- Allow injection mortar to cure
- Seal gap with Aqua-Stop
- Mounting the fixture



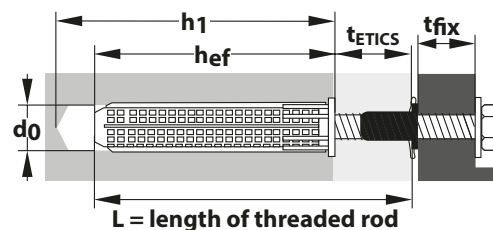










Features

- Approved by the building authorities
- Variable M10 or M12 threaded rod connection
- The only approved spacer fastening with M10 threaded connection as used as standard, e.g. for French balconies
- Up to 250% more power than competitive products
- Suitable for insulation thicknesses and spacer installations up to 220/320 mm
- Aqua-Stop effectively protects against rotting of the facade due to moisture
- Safe protection against rust, energy loss and thermal bridges due to A4 stainless steel



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Pack	Item No.	Content	Size / Content	Driver	Tightening torque	Drill Ø	Min. Drill hole depth	Min. Anchoring depth	Max. thickness Insulating layer	Thickness Fixing	Approval	
	Thermo Proof Plus		per pack	mm		Nm	d0 ø mm	h1 ≥ mm	hef ≥ mm	tETICS ≤ mm	tfix ≥ mm	Dibt
	084 600 151	2x Iso Spacer	-	SW24	20 (Concrete)	18 1)	80 / 100	80 / 100	220 / 200	min. 6	max. 28	
		2x threaded rod A4	M16x300	-		(Concrete / solid masonry)	(Concrete / solid masonry)	(Concrete / solid masonry)	(Concrete / solid masonry)			
		2x screw A4	M10x40	SW								
		2x screw A4	M12x40	SW								
		2x sieve sleeve	20 x 85	-								
		1x extension	10 x 200	-								
	084 600 153	1x Aqua-Stop 80 ml	80 ml									
		2x Iso Spacer	-	SW24	20 (Concrete)	18 1)	80 / 100	80 / 100	320 / 300	min. 6	max. 28	
		2x threaded rod A4	M16x400	-		(Concrete / solid masonry)	(Concrete / solid masonry)	(Concrete / solid masonry)	(Concrete / solid masonry)			
		2x screw A4	M10x40	SW								
		2x screw A4	M12x40	SW								
2x sieve sleeve		20x85	-									
1x extension	10 x 250	-										
	Thermo Proof Plus Large Pack		per pack	mm		Nm	d0 ø mm	h1 ≥ mm	hef ≥ mm	tETICS ≤ mm	tfix ≥ mm	Dibt
	084 100 152	12x Iso Spacer	-	SW24	20 (Concrete)	18 1)	80 / 100	80 / 100	220 / 200	min. 6	max. 28	
		12x threaded rod	M16x300	-		(Concrete / solid masonry)	(Concrete / solid masonry)	(Concrete / solid masonry)	(Concrete / solid masonry)			
		12x sieve sleeve	20x85	-		20 1)	90	85	190	min. 6	max. 28	
	084 100 154	8x Iso Spacer	-	SW24	20 (Concrete)	18 1)	80 / 100	80 / 100	320 / 300	min. 6	max. 28	
		8x threaded rod	M16x400	-		(Concrete / solid masonry)	(Concrete / solid masonry)	(Concrete / solid masonry)	(Concrete / solid masonry)			
		8x sieve sleeve	20x85	-		20 1)	90	85	290	min. 6	max. 28	

¹ 30 mm in plaster

² The entire approval notice Z-21.8-2020 must be observed when sizing.



Thermo Proof Plus	Concrete C 20/25 cracked & uncracked Connection M10	Concrete C 20/25 cracked & uncracked Connection M12	Vertically perforated brick Hlz 12	Perforated lime sand brick KSL 14	Hbn Lightweight concrete Hbn 2	Hbl Concrete Hbl 4	Solid lime sand brick KS 27	Brick Mz 20
Holding values³ (per fastening point without environmental effects)	1380 kg*	660 kg*	100 kg	70 kg	60 kg ¹	20 kg ¹	160 kg	170 kg
Drill hole depth h _{1 2}	80 mm		90 mm**	90 mm**	100 mm	90 mm**	100 mm	100 mm
Anchoring depth h _{ef}	80 mm		85 mm**	85 mm**	100 mm	85 mm**	100 mm	100 mm
Drill Ø	18 mm (30 mm in plaster)		20 mm (30 mm in plaster)	20 mm (30 mm in plaster)	18 mm (30 mm in plaster)	20 mm (30 mm in plaster)	18 mm (30 mm in plaster)	18 mm (30 mm in plaster)
Tightening torque	20 Nm		6 Nm	8 Nm	14 Nm	2 Nm	20 Nm	10 Nm
Shear loads depending on the non-load-bearing layers (insulation & plaster)								
tETICS	62 mm	80 mm	100 mm	120 mm	140 mm	160 mm	180 mm	200 mm
...of an attachment point without environmental effects								
Threaded connection M10	120 kg	120 kg	98 kg	83 kg	72 kg	63 kg	56 kg	51 kg
Threaded connection M12	60 kg	60 kg	60 kg	60 kg	60 kg	60 kg	56 kg	51 kg
...with full clamping (group installation) without environmental effects								
Threaded connection M10	120 kg	120 kg	120 kg	120 kg	120 kg	120 kg	117 kg	100 kg
Threaded connection M12	60 kg	60 kg	60 kg	60 kg	60 kg	60 kg	60 kg	60 kg

■ The partial safety factors of the permits and a partial safety factor $\gamma_F = 1.4$ of the impact are to be considered in the holding values

■ Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

¹ Not included in approvals Z-21.8-2020

² Applies to the drill hole depth in the building material. The thickness of the insulation and plaster layer are still to be added

³ The entire approval notice Z-21.8-2020 and the approvals ETA-09/0258, ETA-13/0052 and ETA-13/0053 + ETA-13/0047, ETA-17/0501, ETA-17/0503 listed therein must be observed when sizing

* Corresponds to the permissible bearing load of the ISO spacer ** with sieve sleeve

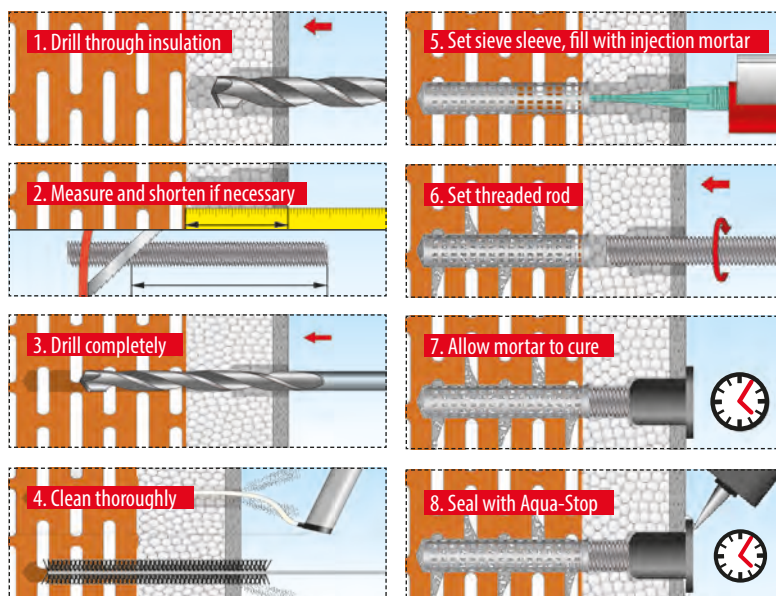
Description & Area of Application

- Heavy-duty spacer fastening for insulation, clinker and flat roofs
- Practically no energy loss and no thermal bridges due to A4 stainless steel
- Building authority approval for all spacer installations
- Simple and rapid installation
- For insulation up to 220/320 mm



Processing & Installation

- Drill through thermal insulation (Ø 30 mm)
- Measure thermal insulation
- Drill a hole in the building material and remove the plaster layer if necessary
- Clean drill hole
- Shorten threaded rod if necessary (length = drill hole depth + insulation layer) and screw on Iso Spacer
- In perforated brick only with sieve sleeve. Insert this completely into the drill hole
- Fill 2/3 of the drill hole in the substrate or the sieve sleeve completely with injection mortar
- Insert the threaded rod with the pre-fitted Iso Spacer into the drill hole with a slight twisting motion
- Allow injection mortar to cure
- Seal gap with Aqua-Stop
- Mounting the fixture

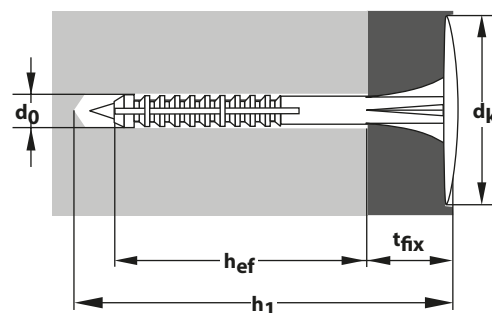



Insulation wall plug Husky



Features

- Quick and easy due to impact installation
- No thermal bridge due to plastic nail
- Resistant to weathering effects and rotting
- Secure hold for insulation boards



Pack	Item No.	Type	Content Wall Plug	Content Nail	Wall plug Ø	Wall plug length	Anchor plate Ø	Drill Ø	Min. Drill hole depth	Min. Anchoring depth	Max. Thickness insulation material	Approval
	Husky		per pack	per pack	mm	mm	dk Ø mm	d0 Ø mm	h1 ≥ mm	hef ≥ mm	tfix ≤ mm	ETA
	022 102 43	8/80	50x	50x	8	80	50	8	95	40 [70]	40 [10]	-
	022 102 44	8/100	50x	50x	8	100	50	8	115	40 [70]	60 [30]	-
	022 102 45	8/120	50x	50x	8	120	50	8	135	40 [70]	80 [50]	-
	022 102 46	8/140	50x	50x	8	140	50	8	155	40 [70]	100 [70]	-
	022 102 62	10/150	50x	50x	10	150	50	10	165	30	120	-
	022 102 63	10/180	50x	50x	10	180	50	10	195	30	150	-
	022 102 64	10/210	50x	50x	10	210	50	10	225	30	180	-

[] Perforated brick



Husky	Concrete C 20/25	Solid brick MZ 12	Vertically perforated brick ≥ Hlz12 Bulk density 1kg/dm³	Hollow Brick ≥ Hbl2	Cellular concrete ≥ PP4	Gypsum plasterboard 12.5 mm	Gypsum fibreboard 12.5 mm
Ø 8 mm	15 kg	15 kg	2 kg	-	-	-	-
Ø 10 mm	7 kg	6 kg	-	-	-	-	-

■ Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

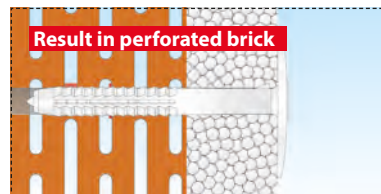
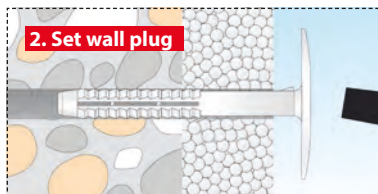
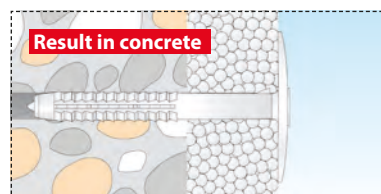
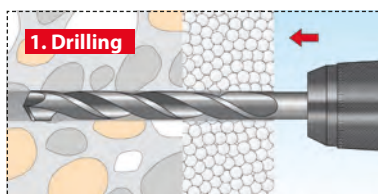
Description & Area of Application

- 3-way split spreader element
- Shaft with rotation locks
- Anchor plate Ø 50 mm
- Plastic nail for installation without thermal bridges



Processing & Installation

- Drill into perforated brick in a rotary motion without hammering so that the webs are not broken
- Use hammer drilling into concrete and solid masonry
- Simply hammer plastic nail into inserted spreader element
- The wall plug is used for fastening insulation boards indoors, outdoors according to DIN 1102, which are not subject to approval
- If insulation boards are plastered, six wall plugs are to be used per m²
- Four wall plugs per m² are sufficient for unplastered insulation boards
- Insulation boards may only be fastened to concrete ceilings if they have a total load of no more than 0.15 kN/m²
- Through installation





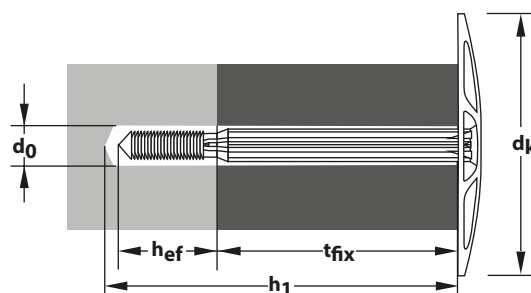
IMPACT MOUNTING

Features

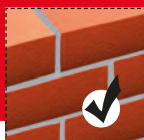
- 2-part
- Several new lengths for up to 210 mm insulation
- For insulation wool indoors and outdoors
- Fast, simple impact installation
- Resistant to weathering and rotting
- No additional spreading element necessary
- No thermal bridge



www.YouTube.com/toxgermany



Pack	Item No.	Type	Content Wall Plug	Content Screw	Wall plug Ø	Wall plug length	Anchor plate Ø	Drill Ø	Min. Drill hole depth	Min. Anchoring depth	Max. Thickness Insulation material	Approval
	Keeper		per pack	per pack	mm	mm	dk Ø mm	d0 Ø mm	h1 ≥ mm	hef ≥ mm	tfix ≤ mm	ETA
	048 100 031	8/100	250x	-	8	100	90	8	110	30	70	-
	048 100 041	8/120	250x	-	8	120	90	8	130	30	90	-
	048 100 051	8/140	250x	-	8	140	90	8	150	30	110	-
	048 100 061	8/160	250x	-	8	160	90	8	170	30	130	-
	048 100 071	8/180	250x	-	8	180	90	8	190	30	150	-
	048 100 081	8/200	250x	-	8	200	90	8	210	30	170	-
	048 100 091	8/220	250x	-	8	220	90	8	230	30	190	-
	048 100 101	8/240	250x	-	8	240	90	8	250	30	210	-



Keeper	Concrete C 20/25	Solid brick MZ 12	Vertically-perforated brick ≥ Hlz 12 Bulk density ≥ 1kg/dm³	Hollow Brick ≥ Hbl2	Cellular concrete ≥ PP4	Gypsum plasterboard 12.5 mm	Gypsum fibreboard 12.5 mm
Ø 8 mm	2 kg	2 kg	1 kg	1 kg	2 kg	-	-

- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

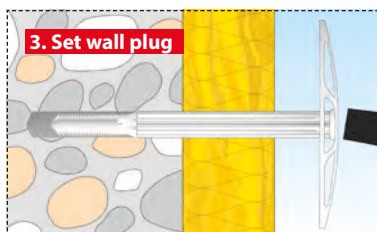
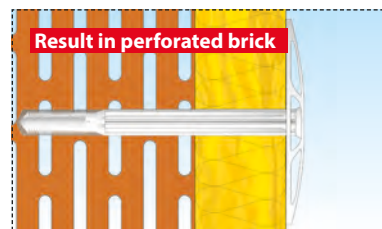
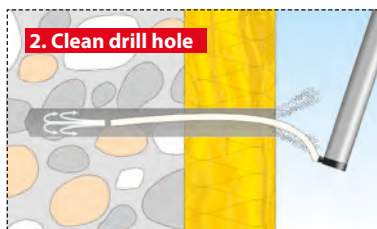
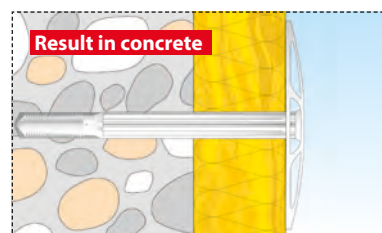
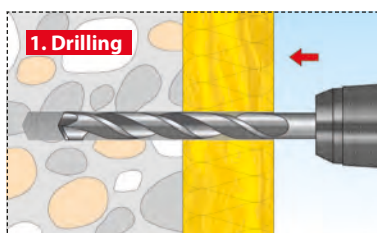
Description & Area of Application

- Wall plug body made of impact-resistant plastic, with longitudinal ribs, shaft and plate Ø 90 mm
- Quick and easy
- 2-part, up to 75% reduced volume of packaging compared with one-part insulation holders



Processing & Installation

- Drill into perforated brick without hammering so that the webs are not broken
- Use hammer drilling into concrete and solid masonry
- Put the wall plug pin and anchor plate together
- Drive in wall plugs
- Through installation



Insulation holder Keeper Metal

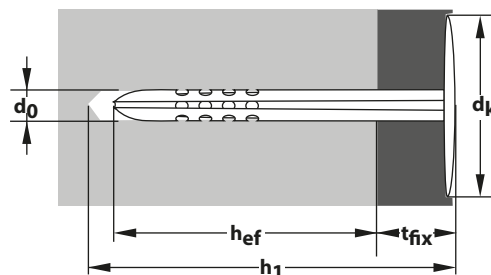



Keeper Metal



Features

- Quick and easy due to impact installation
- Fire resistant to DIN 4102 (class A1)
- Also suitable for under floorboards
- Low workload due to impact mounting



Pack	Item No.	Type	Content Wall Plug	Content Screw	Wall plug Ø	Wall plug length	Anchor plate Ø	Drill Ø	Min. Drill hole depth	Min. Anchoring depth	Max. Thickness insulation material	Approval
	Keeper Metal		per pack	per pack	mm	mm	dk Ø mm	d0 Ø mm	h1 ≥ mm	hef ≥ mm	tfix ≤ mm	ETA
	027 100 211	8/90	100x	-	8	90	35	8	100	50	40	-
	027 100 221	8/110	100x	-	8	110	35	8	120	50	60	-
	027 100 231	8/140	100x	-	8	140	35	8	150	50	90	-



Keeper Metal	Concrete C 20/25	Solid brick MZ 12	Vertically-perforated brick ≥ H12 12 Bulk density ≥ 1kg/dm³	Hollow Brick ≥ Hb12	Cellular concrete ≥ PP4	Gypsum plasterboard 12.5 mm	Gypsum fibreboard 12.5 mm
Ø 8 mm	45 kg	40 kg	15 kg	10 kg	30 kg	-	-

■ Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

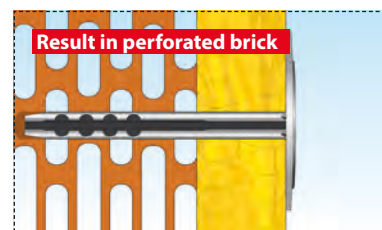
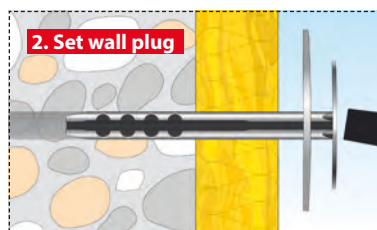
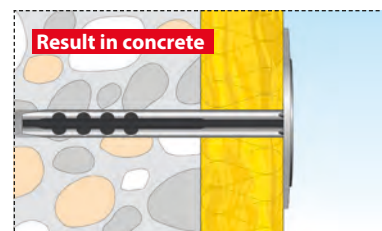
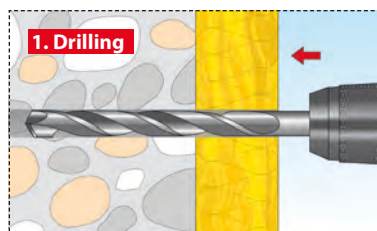
Description & Area of Application

- Spring steel clamping sleeve and zinc-plated flanged plate (Ø 35 mm) made of sheet steel



Processing & Installation

- Create drill hole in the size of the wall plug diameter
- Drill into perforated brick in a rotary motion without hammering so that the webs are not broken
- Use hammer drilling into concrete and solid masonry
- Through installation

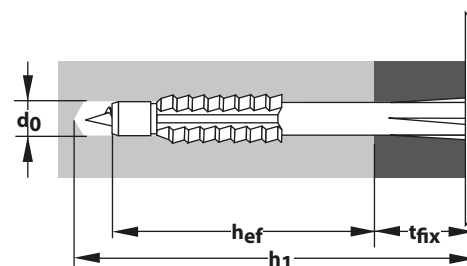


Disc 75



Features

- Improved plaster holding due to trapezoidal or round recesses
- Resistant to weathering effects and rotting



Pack	Item No.	Type	Content Plate	Content Screw	Wall plug Ø	Wall plug length	Plate	Recommended frame wall plug				Approval
	Disc 75		per pack	per pack	mm	mm	Ø mm	Attack	Apollo	Fassad	Fassad Pro	ETA
	047 100 501	75/8	100x	-	8	80 - 140	75 / 8	Attack (Ø 8 mm)	-	-	-	-



Description & Area of Application

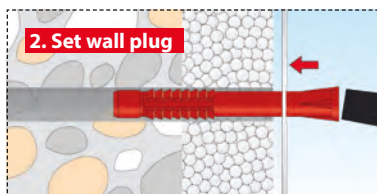
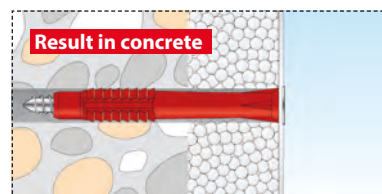
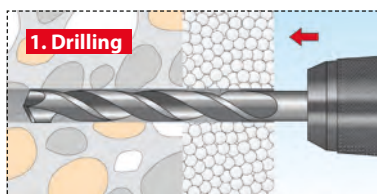
Disc 75:

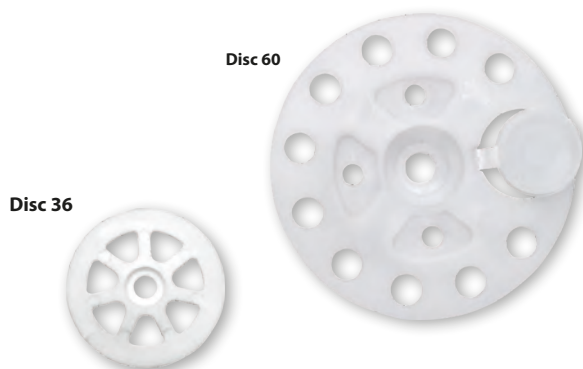
- Convex plate (Ø 75 mm) with trapezoid notches and flexible ribs



Processing & Installation

- If DIN 1202 insulation boards are plastered, at least six wall plugs are to be used per m²
- For insulation boards that are unplastered or behind cladding, four anchors per m² are sufficient
- Insulation boards may only be fastened to concrete ceilings if they have a total load of no more than 0.15 kN/m²
- Drill into perforated brick in a rotary motion without hammering so that the webs are not broken
- Use hammer drilling into concrete and solid masonry
- Through installation





Features

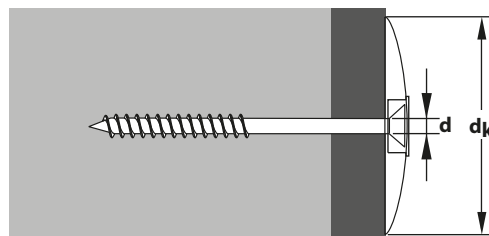
- For fastening pressure-resistant insulation boards to wood
- Good plaster holding due to trapezoidal or round recesses
- Resistant to weathering effects and rotting



Disc 36:

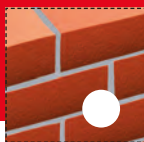
- For screws or nails
Ø 4-5 mm

Disc 60:

- Cover cap prevents marks on the plaster surface
- Screw hole diameter 8mm, for screws of 5 – 8mm



Pack	Item No.	Type	Content Plate	Content Screw	Plate Ø	Screw hole Ø	Recommended screw diameter	Approval
	Disc 36		per pack	per pack	dk Ø mm	d Ø mm	Ø mm	ETA
	047 600 021	36/5	100	-	36	5	4-5	-
Pack	Item No.	Type	Content Plate	Content Screw	Plate Ø	Screw hole Ø	Recommended screw diameter	Approval
	Disc 60		per pack	per pack	dk Ø mm	d Ø mm	Ø mm	ETA
	047 600 041	60/6	100	-	60	8	5-6	-



Description & Area of Application

Disc 36:

- For fastening compression-resistant insulation materials, film and mats to wood
- Convex plate (Ø 36 mm) with trapezoid notches
- Suitable for screws of Ø 4-5 mm

Disc 60:

- For fastening pressure-resistant insulating materials
- Convex plate (Ø 60 mm) with round notches
- Suitable for screws of Ø 5-8 mm



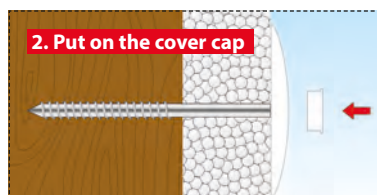
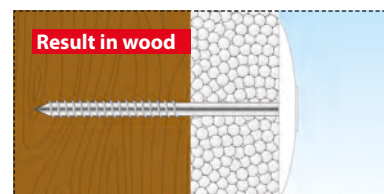
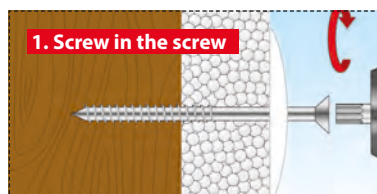
Processing & Installation

Disc 36:


- Ideally for usage with chipboard screws Ø 4.5 mm and wood construction screws Ø 4.8 mm
- The screw-in depth should be at least 25 mm

Disc 60:

- For chipboard and wood construction screws Ø 6-8 mm
- The screw-in depth should be at least 25 mm
- After fitted, seal the screw hole with the enclosed cover cap




Standard ranges

Pack	Item No.	Type	Content Wall Plug	Content Screw	Wall plug Ø	Wall plug length	Screw Size
	Monteur Multi		per pack	per pack	mm	mm	mm
	094 901 021	Tri 5/31 *	20x	20x	5	31	3.5 x 45
		Tri 6/36 *	46x	46x	6	36	4.5 x 50
		Tri 8/51	18x	18x	8	51	6.0 x 70
		Barracuda 5/25	20x	20x	5	25	4.0 x 40
		Barracuda 6/30	46x	46x	6	30	4.5 x 45
		Barracuda 8/40	18x	18x	8	40	6.0 x 60


Description

- The **Monteur Multi** range contains the common **expansion wall plugs Barracuda** and **all-purpose wall plug Tri** with the optimally suitable screws
- For use in almost all building materials
- For product descriptions please refer to the respective catalogue pages

Pack	Item No.	Type	Content Wall Plug	Content Screw	Wall plug Ø	Wall plug length	Screw Size
	Monteur Beton		per pack	per pack	mm	mm	mm
	094 901 041	Barracuda 5/25	20x	20x	5	25	4.0 x 40
		Barracuda 6/30	30x	30x	6	30	4.5 x 45
		Barracuda 8/40	18x	18x	8	40	6.0 x 60


Description

- The **Monteur Beton** range contains the most common sizes of the **expansion wall plug Barracuda** with the optimal matching screws
- For use in concrete and solid masonry
- For product description please refer to the respective catalogue pages

Pack	Item No.	Type	Content Wall Plug	Content Screw	Wall plug Ø	Wall plug length	Screw Size
	Monteur Allround		per pack	per pack	mm	mm	mm
	094 901 081	Tri 5/31 *	24x	24x	5	31	3.5 x 45
		Tri 6/36 *	24x	24x	6	36	4.5 x 50
		Tri 8/51	18x	18x	8	51	6.0 x 70


Description

- The **Monteur Allround** range contains the most common sizes of the **all-purpose wall plug Tri** with the optimally matching screws
- For use in almost all building materials
- For product description please refer to the respective catalogue pages

Pack	Item No.	Type	Content Wall Plug	Content Screw	Wall plug Ø	Wall plug length	Screw Size
	Monteur Tri Pro		per pack	per pack	mm	mm	Ø mm
	010 900 01	Tri 5/31 *	100x	-	5	31	3.0 - 4.0
		Tri 6/36 *	500x	-	6	36	4.0 - 5.0
		Tri 8/51	160x	-	8	51	5.0 - 6.0
		Tri 10/61	60x	-	10	61	7.0 - 8.0
		Tri 12/71	15x	-	12	71	8.0 - 10.0
		Tri 14/75	10x	-	14	75	10.0 - 12.0

Description

- The **Monteur Tri Pro** range includes a variety of sizes of the **all-purpose wall plug Tri**
- For use in almost all building materials
- For product description please refer to the respective catalogue pages

Pack	Item No.	Type	Content Wall Plug	Content Screw	Wall plug Ø	Wall plug length	Screw Size
	Plug & Play		per pack	per pack	mm	mm	mm
	011 901 01	Trika 5/31 *	60x	60x	5	32	3.5 x 45
		Trika 6/36 *	70x	70x	6	37	4.5 x 50
		Trika 8/51	30x	30x	8	52	6.0 x 70

* only suitable for single sheet gypsum plasterboard

Description

- The **Plug & Play** range includes three dowel sizes (Ø 5, 6 and 8 mm) for the most common projects
- The **all-purpose wall plug Trika** holds in almost all building materials
- Perfectly matched screws for optimum wall plug function
- For product description please refer to the respective catalogue pages



Range Monteur Multi	Concrete C 20/25	Solid brick MZ 12	Vertically perforat- ed brick \geq Hlz12 Bulk density $\geq 1 \text{ kg/dm}^3$	Hollow brick \geq Hbl2	Cellular concrete \geq PB2, PP2	Gypsum plasterboard 12.5 mm	Gypsum fibreboard 12.5 mm
Tri 5/31	25 kg	15 kg	15 kg	10 kg	-	6 kg	15 kg
Tri 6/36	50 kg	35 kg	25 kg	15 kg	-	10 kg	20 kg
Tri 8/51	100 kg	80 kg	30 kg	25 kg	15 kg	10 kg	30 kg
Barracuda 5/25	40 kg	20 kg	-	-	-	-	-
Barracuda 6/30	70 kg	35 kg	-	-	-	-	-
Barracuda 8/40	90 kg	50 kg	-	-	-	-	-


Range Monteur Beton	Concrete C 20/25	Solid brick MZ 12	Vertically perforat- ed brick \geq Hlz12 Bulk density $\geq 1 \text{ kg/dm}^3$	Hollow brick \geq Hbl2	Cellular concrete \geq PB2, PP2	Gypsum plasterboard 12.5 mm	Gypsum fibreboard 12.5 mm
Barracuda 5/25	40 kg	20 kg	-	-	-	-	-
Barracuda 6/30	70 kg	35 kg	-	-	-	-	-
Barracuda 8/40	90 kg	50 kg	-	-	-	-	-

Range Monteur Allround	Concrete C 20/25	Solid brick MZ 12	Vertically perforat- ed brick \geq Hlz12 Bulk density $\geq 1 \text{ kg/dm}^3$	Hollow brick \geq Hbl2	Cellular concrete \geq PB2, PP2	Gypsum plasterboard 12.5 mm	Gypsum fibreboard 12.5 mm
Tri 5/31	25 kg	15 kg	15 kg	10 kg	-	6 kg	15 kg
Tri 6/36	50 kg	35 kg	25 kg	15 kg	-	10 kg	20 kg
Tri 8/51	100 kg	80 kg	30 kg	25 kg	15 kg	10 kg	30 kg

Range Monteur Tri Pro	Concrete C 20/25	Solid brick MZ 12	Vertically perforat- ed brick \geq Hlz12 Bulk density $\geq 1 \text{ kg/dm}^3$	Hollow brick \geq Hbl2	Cellular concrete \geq PB2, PP2	Gypsum plasterboard 12.5 mm	Gypsum fibreboard 12.5 mm
Tri 5/31	25 kg	15 kg	15 kg	10 kg	-	6 kg	15 kg
Tri 6/36	50 kg	35 kg	25 kg	15 kg	-	10 kg	20 kg
Tri 8/51	100 kg	80 kg	30 kg	25 kg	15 kg	10 kg	30 kg
Tri 10/61	150 kg	80 kg	35 kg	30 kg	20 kg	-	30 kg
Tri 12/71	160 kg	120 kg	40 kg	30 kg	25 kg	-	-
Tri 14/75	200 kg	140 kg	40 kg	35 kg	25 kg	-	-


range Plug & Play	Concrete C 20/25	Solid brick MZ 12	Vertically perforat- ed brick \geq Hlz12 Bulk density $\geq 1 \text{ kg/dm}^3$	Hollow brick \geq Hbl2	Cellular concrete \geq PB2, PP2	Gypsum plasterboard 12.5 mm	Gypsum fibreboard 12.5 mm
Trika 5/31	25 kg	15 kg	15 kg	10 kg	-	6 kg	15 kg
Trika 6/36	50 kg	35 kg	25 kg	15 kg	-	10 kg	20 kg
Trika 8/51	100 kg	80 kg	30 kg	25 kg	15 kg	10 kg	30 kg

- The specified holding values refer to screws with the largest screw diameter; thread shape similar to DIN 7998
- The anchoring depth of the wall plug must be observed
- Drilling method and drill hole cleaning must be adapted to the building material
- The recommended loads only apply to installation in the building material, not for installation in joints
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

Pack	Item No.	Type	Content Wall Plug	Content Screw	Wall plug Ø	Wall plug length	Screw Size
	Miniset Allround		per pack	per pack	mm	mm	mm
		Tri 5/31	130x	-	5	31	3.0 - 4.0
	094 900 081	Tri 6/36	75x	-	6	36	4.0 - 5.0
		Tri 8/51	35x	-	8	51	5.0 - 6.0


Description

- The **Miniset Allround** range contains the three wall plug sizes (ø 5, 6 and 8 mm) for the most common projects
- The original all-purpose wall plug
- For product description please refer to the respective catalogue pages

Pack	Item No.	Type	Content Wall Plug	Content Screw	Wall plug Ø	Wall plug length	Screw Size
	Miniset Beton		per pack	per pack	mm	mm	mm
		Barracuda 5/25	100x	-	5	25	3.0 - 4.0
	094 900 041	Barracuda 6/30	100x	-	6	30	4.0 - 5.0
		Barracuda 8/40	45x	-	8	40	5.0 - 6.0


Description

- The **Miniset Beton** range contains the three wall plug sizes (ø 5, 6 and 8 mm) for the most common projects
- For product description please refer to the respective catalogue pages

Pack	Item No.	Type	Content Wall Plug	Content Screw	Wall plug Ø	Wall plug length	Screw Size
	Miniset Clever Mix		per pack	per pack	mm	mm	mm
		Tri 5/31	50x	-	5	31	3.0 - 4.0
		Tri 6/36	25x	-	6	36	4.0 - 5.0
		Tri 8/51	15x	-	8	51	5.0 - 6.0
	094 900 051	Trika 5/31	60x	-	5	31	3.0 - 4.0
		Trika 6/36	45x	-	6	36	4.0 - 5.0
		Trika 8/51	20x	-	8	51	5.0 - 6.0


Description

- The **Miniset Clever Mix** range contains three wall plug sizes each (ø 5, 6 and 8 mm) of the **Tri and Trika**
- For product description please refer to the respective catalogue pages

Pack	Item No.	Type	Content Wall Plug	Content Screw	Wall plug Ø	Wall plug length	Screw Size
	Starter Set		per pack	per pack	mm	mm	mm
		Barracuda 6/30	30x	30x	6	30	4.0 - 5.0
		Barracuda 8/40	20x	20x	8	40	5.0 - 6.0
		Tri 6/36	30x	30x	6	36	4.0 - 5.0
	094 901 101	Tri 8/51	20x	20x	8	51	5.0 - 6.0
		Altbaujoker 8/90	6x	6x	8	90	6 x 100
		Altbaujoker 10/90	6x	6x	10	90	7 x 100
		Spiral	20x	20x	-	32	4.5 x 45

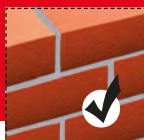
Description

- The **Starter Set** range contains the most important standard wall plugs with the optimally matching screws
- For product description please refer to the respective catalogue pages

Pack	Item No.	Type	Content Wall Plug	Content Screw	Wall plug Ø	Wall plug length	Screw Size
	Wall Plug Queen		per pack	per pack	mm	mm	mm
		Deco 5/25	50x	50x	5	25	3.5 x 40
	094 901 115	Deco 6/41	50x	50x	6	41	4.5 x 60
		Deco 8/49	30x	30x	8	49	6.0 x 70
		Metre stick 2m	1x	-	-	-	-

Description

- The **Wall Plug Queen** range contains the all-purpose wall plug **Deco** and a **metre stick 2m "Real Women Do it Themselves"**
- For product description please refer to the respective catalogue pages



Miniset Allround Range	Concrete C 20/25	Solid brick MZ 12	Vertically perforat- ed brick ≥ Hlz12 Bulk density ≥ 1 kg/dm³	Hollow brick ≥ Hbl2	Cellular concrete ≥ PB2, PP2	Gypsum plasterboard 12.5 mm	Gypsum fibreboard 12.5 mm
Tri 5/31	25 kg	15 kg	15 kg	10 kg	7 kg*	6 kg	15 kg
Tri 6/36	50 kg	35 kg	25 kg	15 kg	10 kg*	10 kg	20 kg
Tri 8/51	100 kg	80 kg	30 kg	25 kg	15 kg	10 kg	30 kg

Miniset Beton Range	Concrete C 20/25	Solid brick MZ 12	Vertically perforat- ed brick ≥ Hlz12 Bulk density ≥ 1 kg/dm³	Hollow brick ≥ Hbl2	Cellular concrete ≥ PB2, PP2	Gypsum plasterboard 12.5 mm	Gypsum fibreboard 12.5 mm
Barracuda 5/25	40 kg	20 kg	-	-	-	-	-
Barracuda 6/30	70 kg	35 kg	-	-	-	-	-
Barracuda 8/40	90 kg	50 kg	-	-	-	-	-


Miniset Clever Mix Range	Concrete C 20/25	Solid brick MZ 12	Vertically perforat- ed brick ≥ Hlz12 Bulk density ≥ 1 kg/dm³	Hollow brick ≥ Hbl2	Cellular concrete ≥ PB2, PP2	Gypsum plasterboard 12.5 mm	Gypsum fibreboard 12.5 mm
Tri 5/31	25 kg	15 kg	15 kg	10 kg	7 kg*	6 kg	15 kg
Tri 6/36	50 kg	35 kg	25 kg	15 kg	10 kg*	10 kg	20 kg
Tri 8/51	100 kg	80 kg	30 kg	25 kg	15 kg	10 kg	30 kg
Trika 5/31	25 kg	15 kg	15 kg	10 kg	7 kg*	6 kg	15 kg
Trika 6/36	50 kg	35 kg	25 kg	15 kg	10 kg*	10 kg	20 kg
Trika 8/51	100 kg	80 kg	30 kg	25 kg	15 kg	10 kg	30 kg

Starter Set Range	Concrete C 20/25	Solid brick MZ 12	Vertically perforat- ed brick ≥ Hlz12 Bulk density ≥ 1 kg/dm³	Hollow brick ≥ Hbl2	Cellular concrete ≥ PB2, PP2	Gypsum plasterboard 12.5 mm	Gypsum fibreboard 12.5 mm
Barracuda 6/30	40 kg	35 kg	-	-	-	-	-
Barracuda 8/40	50 kg	40 kg	-	-	-	-	-
Tri 6/36	50 kg	35 kg	25 kg	-	-	10 kg	-
Tri 8/51	100 kg	80 kg	30 kg	-	15 kg	10 kg	-
Altbaujoker 8/90	110 kg	80 kg	30 kg	-	15 kg	-	-
Altbaujoker 10/90	220 kg	190 kg	60 kg	-	30 kg	-	-
Spiral 4,5/32	-	-	-	-	-	8 kg	-

Wall Plug Queen Range	Concrete C 20/25	Solid brick MZ 12	Vertically perforat- ed brick ≥ Hlz12 Bulk density ≥ 1 kg/dm³	Hollow brick ≥ Hbl2	Cellular concrete ≥ PB2, PP2	Gypsum plasterboard 12.5 mm	Gypsum fibreboard 12.5 mm
Deco 5/25	20 kg	10 kg	10 kg	10 kg	6 kg*	-	10 kg
Deco 6/41	60 kg	40 kg	20 kg	15 kg	7 kg	10 kg	25 kg
Deco 8/49	100 kg	60 kg	25 kg	20 kg	10 kg	10 kg	30 kg


- The specified holding values refer to screws with the largest possible screw diameter; thread shape similar to DIN 7998
- The anchoring depth of the wall plug must be observed
- Drilling method and drill hole cleaning must be adapted to the building material
- The recommended loads only apply to installation in the building material, not for installation in joints
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

* Holding values apply to fastening in cellular concrete PP4

Pack	Item No.	Type	Content Wall Plug	Content Screw/ Hook	Wall plug Ø	Wall plug length	Screw/ Hook Size
	Monteur Gips		per pack	per pack	mm	mm	mm
		Spiral	10x	10x	-	32	4.5 x 45
		Pirat Skippi-S	2x	2x	M5	52	M5 x 89
	094 901 061	Deco 6/41	20x	12x	6	41	4.5 x 60
		Pirat Lenny-S	-	2x	-	-	3.5 x 65
		Pirat Lenny-L	-	6x	-	-	5.0 x 48


Description

- The **Monteur Gips** range contains the most important cavity wall plugs with the optimally matching screws or hooks
- For use in panel building materials
- For product descriptions please refer to the respective catalogue pages

Pack	Item No.	Type	Content Wall Plug	Content Screw	Wall plug Ø	Wall plug length	Screw Size
	Monteur Gips Pro		per pack	per pack	mm	mm	mm
		Acrobat M4 x 38	40x	40x	8	38	M4 x 45
		Acrobat M5 x 37	25x	25x	10	37	M5 x 45
		Acrobat M5 x 52	40x	40x	10	52	M5 x 58
	035 901 11	Spiral Plus	50x	50x	-	37	4.5 x 50
		Spiral Pro	40x	40x	-	39	4.5 x 60
		Acrobat Speed-Plus	1x	-	-	-	-
		Screwdriver	1x	-	-	-	-


Description

- The **Monteur Gips Pro** range includes a wide selection of the most important cavity wall plugs with the optimum matching screws
- For use in panel building materials
- For product descriptions please refer to the respective catalogue pages

Pack	Item No.	Type	Content Wall Plug	Content Screw	Wall plug Ø	Wall plug length	Screw Size
	Acrobat Set		per pack	per pack	mm	mm	mm
		Acrobat M4 x 32	10x	10x	8	32	M4 x 39
		Acrobat M4 x 38	10x	10x	8	38	M4 x 45
		Acrobat M5 x 37	10x	10x	10	37	M5 x 45
		Acrobat M5 x 52	10x	10x	10	52	M5 x 58
	094 901 111	Acrobat M6 x 37	10x	10x	12	37	M6 x 45
		Acrobat M6 x 52	10x	10x	12	52	M6 x 58


Description

- The **Acrobat Set** ranges includes all common sizes of the metal cavity wall plug Acrobat
- For use in gypsum plasterboard and gypsum fibreboard
- For the product description please refer to the Acrobat catalogue page

Pack	Item No.	Type	Content Wall Plug	Content Screw	Wall plug Ø	Wall plug length	Screw Size
	Indoor Box		per pack	per pack	mm	mm	mm
	094 901 112	Spiral	90x	90x	-	32	4.5 x 45

Description

- The **Indoor Box** range includes the **Spiral**
- For use in gypsum plasterboard
- For product descriptions please refer to the respective catalogue pages

Pack	Item No.	Type	Content Wall Plug	Content Screw	Wall plug Ø	Wall plug length	Screw Size
	Indoor Box Plus		per pack	per pack	mm	mm	mm
	094 901 113	Spiral Plus	90x	90x	-	37	4.5 x 50

Description

- The **Indoor Box Plus** range includes the **Spiral Plus**
- For use in gypsum plasterboard
- For product descriptions please refer to the respective catalogue pages

Building materials & Holding values



Range Monteur Gips	Concrete C 20/25	Solid brick MZ 12	Vertically perforat- ed brick ≥ Hlz12 Bulk density ≥ 1 kg/dm³	Hollow brick ≥ Hbl2	Cellular concrete ≥ PB2, PP2	Gypsum plasterboard 12.5 mm	Gypsum plasterboard 2x 12.5 mm
Spiral	-	-	-	-	-	8 kg	-
Pirat Skippi-S M5 x 52	-	-	-	-	-	20 kg	-
Deco 6/41	60 kg	40 kg	20 kg	15 kg	7 kg	10 kg	-

Range Monteur Gips Pro	Concrete C 20/25	Solid brick MZ 12	Vertically perforat- ed brick ≥ Hlz12 Bulk density ≥ 1 kg/dm³	Hollow brick ≥ Hbl2	Cellular concrete ≥ PB2, PP2	Gypsum plasterboard 12.5 mm	Gypsum fibreboard 12.5 mm
Acrobat M4 x 38	-	-	-	-	-	20 kg	-
Acrobat M5 x 37	-	-	-	-	-	20 kg	30 kg
Acrobat M5 x 52	-	-	-	-	-	20 kg	30 kg
Spiral Plus	-	-	-	-	-	8 kg	20 kg
Spiral Pro	-	-	-	-	-	15 kg	25 kg

- The anchoring depth of the wall plug must be observed
- Drilling method and drill hole cleaning must be adapted to the building material
- The recommended loads only apply to installation in the building material, not for installation in joints
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)

Building materials & Holding values



Acrobat Set Range	Gypsum plasterboard 9.5 mm	Gypsum plasterboard 12.5 mm	Gypsum plasterboard 2x12.5 mm	Gypsum fibreboard 12.5 mm	Wood chip / plywood board ≥ 10 mm
M4 x 32	15 kg	-	-	-	25 kg
M4 x 38	15 kg	20 kg	-	20 kg	25 kg
M5 x 37	15 kg	20 kg	-	30 kg	30 kg
M5 x 52	15 kg	20 kg	-	30 kg	30 kg
M6 x 37	15 kg	20 kg	-	30 kg	30 kg
M6 x 52	15 kg	20 kg	-	30 kg	30 kg

Indoor Box Range	Gypsum plasterboard 9.5 mm	Gypsum plasterboard 12.5 mm	Gypsum plasterboard 2x12.5 mm	Gypsum fibreboard 12.5 mm	Wood chip / plywood board ≥ 10 mm
32	7 kg	8 kg	-	-	-

Indoor Box Plus Range	Gypsum plasterboard 9.5 mm	Gypsum plasterboard 12.5 mm	Gypsum plasterboard 2x12.5 mm	Gypsum fibreboard 12.5 mm	Wood chip / plywood board ≥ 10 mm
37	7 kg	8 kg	15 kg	20 kg	-

- For fastenings in gypsum plasterboards, the holding value specifications of the board manufacturer must always be observed.
- Approved wall plugs must be used for fixings where safety is of importance (see also www.tox.de/safety+loads)



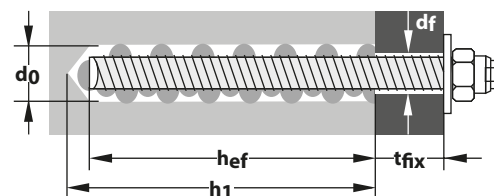
Features

In addition to the injection mortar, this complete set includes everything for processing:

- Injection mortar **Liquix Pro 1**
- Squeeze gun **Liquix Blaster**
- Sieve sleeve **Liquix Sleeve**
- Blower **Taifun**
- Cleaning brushes **Brush**
- Mixing tubes for injection mortar cartridges **Liquix Mix**



www.YouTube.com/toxgermany



Pack	Item No.	Type	Content	Diameter	Length	Drill Ø	Min. Drill hole depth	Min. Setting Depth	Threaded rod	Approval
		Liquix Set	per range	Ø mm	mm	d0/df Ø mm	h1 ≥ mm	hef mm	Stix Ø mm	ETA
		Liquix Pro 1 280 ml	4x	-	280	-	-	-	-	■
		Liquix Blaster	1x	-	-	-	-	-	-	-
		Liquix Sleeve	8x	16	85	16/12	90	85	M10	■
		Taifun 240 ml	1x	-	-	-	-	-	-	-
	084 909 251	Brush	1x	10	300	-	-	-	-	-
		Brush	1x	13	300	-	-	-	-	-
		Brush	1x	18	300	-	-	-	-	-
		Brush	1x	28	300	-	-	-	-	-
		Liquix Mix	6x	-	200	-	-	-	-	■





Liquix Pro 1 in concrete C20/25	M8	M10	M12	M16	M20	M24	M27	M30
Effective anchoring depth h_{ef}^1	60-160 mm	60-200 mm	70-240 mm	80-320 mm	90-400 mm	96-480 mm	108-540 mm	120-600 mm
Permissible loads								
Permissible central tension load of a single wall plug without environmental effects N_{zul} in uncracked concrete C20/25								
Threaded rod galvanised, property class 5.8	720-860 kg	900-1380 kg	1170-2000 kg	1430-3710 kg	1710-5810 kg	1880-8380 kg	2250-10950 kg	2630-13300 kg
Threaded rod A4, property class 5.8 $\geq M24 \leq 70$	720-990 kg	900-1570 kg	1170-2250 kg	1430-4200 kg	1710-6530 kg	1880-9430 kg	2250-5740 kg	2630-7020 kg
Permissible shear loads of a single wall plug without environmental effects V_{zul} in uncracked concrete C20/25								
Threaded rod galvanised, property class 5.8	510 kg	860 kg	1200 kg	2230 kg	3490 kg	4520-5030 kg	5400-6570 kg	6320-8000 kg
Threaded rod A4, property class 5.8 $\geq M24 \leq 70$	600 kg	920 kg	1370 kg	2520 kg	3940 kg	4520-5680 kg	3450 kg	4200 kg
Permissible central tension load of a single wall plug without environmental effects N_{zul} in cracked concrete C20/25								
Threaded rod galvanised, property class 5.8	290-770 kg	370-1250 kg	570-1970 kg	880-3510 kg	1220-5490 kg	1340-7900 kg	1600-10950 kg	1880-13300 kg
Threaded rod A4, property class 5.8 $\geq M24 \leq 70$	290-770 kg	370-1250 kg	570-1970 kg	880-3510 kg	1220-5490 kg	1340-7900 kg	1600-5740 kg	1880-7020 kg
Permissible shear loads of a single wall plug without environmental effects V_{zul} in cracked concrete C20/25								
Threaded rod galvanised, property class 5.8	510 kg	860 kg	1200 kg	2230 kg	2930-3490 kg	3230-5030 kg	3850-6570 kg	4500-8000 kg
Threaded rod A4, property class 5.8 $\geq M24 \leq 70$	600 kg	920 kg	1370 kg	2450-2520 kg	2930-3490 kg	3220-5670 kg	3450 kg	4200 kg
Component dimensions and installation characteristics								
Minimum axis distance s_{min}	40 mm	50 mm	60 mm	80 mm	100 mm	120 mm	135 mm	150 mm
Minimum edge distance c_{min}	40 mm	50 mm	60 mm	80 mm	100 mm	120 mm	135 mm	150 mm
Minimum component thickness h_{min}	----- $h_{ef} + 30 \text{ mm} \geq 100 \text{ mm}$ -----			----- $h_{ef} + 2d_0$ -----				
Drill nominal diameter d_0	10 mm	12 mm	14 mm	18 mm	24 mm	28 mm	32 mm	35 mm
Drill hole depth h_1	60-160 mm	60-200 mm	70-240 mm	80-320 mm	90-400 mm	96-480 mm	108-540 mm	120-600 mm
Through hole in the component to be connected $d_f \leq$	9 mm	12 mm	14 mm	18 mm	22 mm	26 mm	30 mm	33 mm
Torque during anchoring $T_{inst} \leq$	10 Nm	20 Nm	40 Nm	80 Nm	120 Nm	160 Nm	180 Nm	200 Nm

■ The specified loads refer to anchorings of single anchors in wet and dry concrete as well as for anchorings from -40° C to +24° C (or briefly up to +40° C)

■ When sizing, the entire declaration of performance of the Liquix Pro 1 must be observed

■ The partial safety factors of the resistances specified in the approval and a partial safety factor of $\gamma_F = 1.4$ are to be considered.

¹ The anchoring depth h_{ef} can be freely selected between the values $h_{ef \min}$ und $h_{ef \max}$

Curing times for injection mortar Liquix Pro 1:

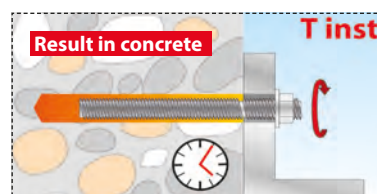
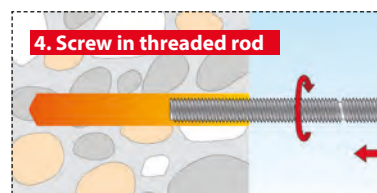
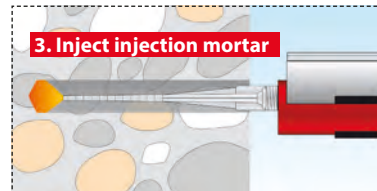
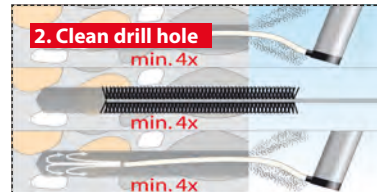
Concrete temperature	Processing time	Minimum curing time in dry concrete	Minimum curing time in wet concrete
$\geq -10^\circ \text{C}^*$	90 min.	24 h	48 h
$\geq -5^\circ \text{C}$	90 min.	14 h	28 h
$\geq 0^\circ \text{C}$	45 min.	7 h	14 h
$\geq +5^\circ \text{C}$	25 min.	2 h	4 h
$\geq +10^\circ \text{C}$	15 min.	80 min.	160 min.
$\geq +20^\circ \text{C}$	6 min.	45 min.	90 min.
$\geq +30^\circ \text{C}$	4 min.	25 min.	50 min.
$\geq +35^\circ \text{C}$	2 min.	20 min.	40 min.
$\geq +40^\circ \text{C}$	1.5 min.	15 min.	30 min.

*The cartridge temperature must be at least +15° C

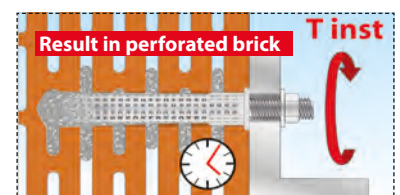
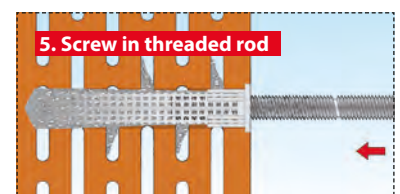
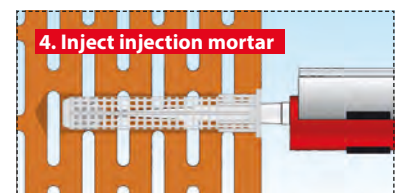
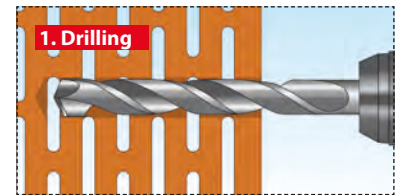
Processing & Installation

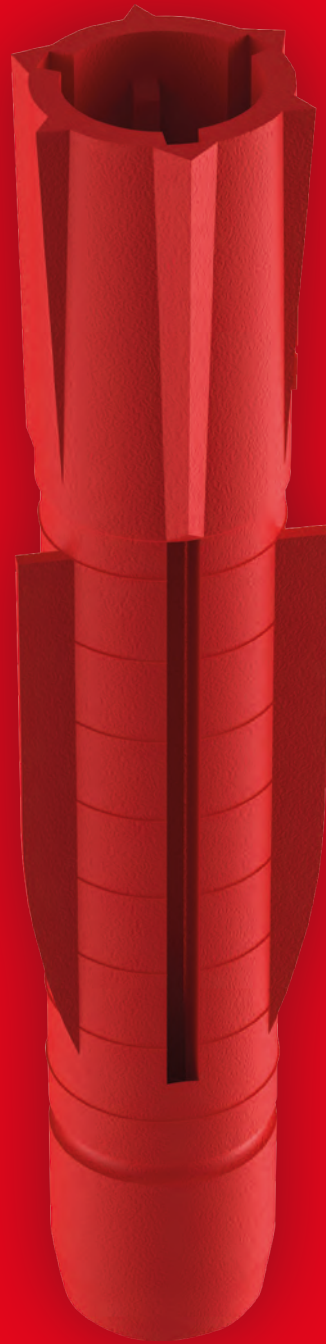
- In perforated brick, work with sieve sleeve
- Cleaning the drill holes
- Screw static mixer tightly onto the cartridge
- Mark setting depth differing from standard onto anchor rod
- Discard the first approx. 10 cm of the injection mortar and do not use it for fastening
- Fill the cleaned drill hole approx. 2/3 of the way from the base of the drill hole or, if a screen sleeve is used, fill it completely with injection mortar
- Insert the anchor rod with slight turning movements to the specified setting depth
- Observe the torques and curing times of the respective valid permits
- The mortar may be used in wet or dry concrete as well as in water-filled drill holes
- For the processing of coaxial, peeler and hose film cartridges, use the Liquix Blaster and Liquix Blaster Pro squeeze guns; for side-by-side cartridges use the Liquix Blaster Plus squeeze gun

Installation in concrete and solid masonry



Installation in perforated brick





Only where it says T0X, it is the
ORIGINAL



NOTES

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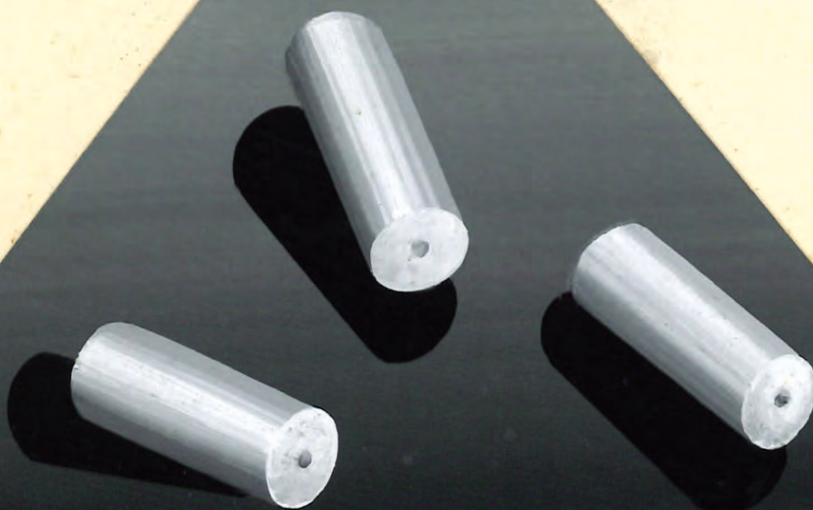


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