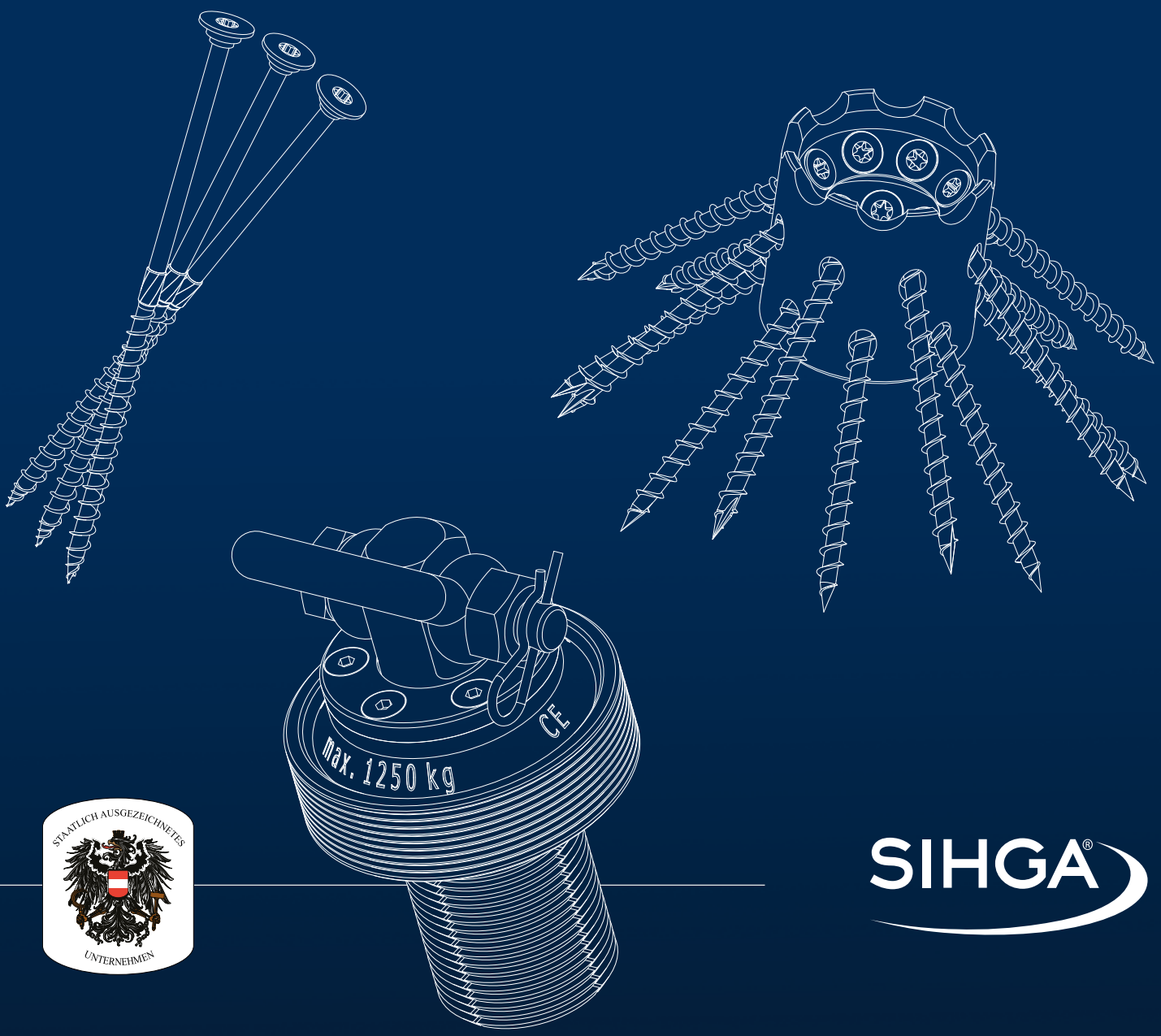
# TAKE THE BEST

Decades of quality from Austria! **www.sihga.com**




STAATLICH AUSGEZEICHNETES UNTERNEHMEN

SIHGA®

# SYSTEM CATALOGUE

# From specialists for specialists.

The SIHGA® system catalogue

Personal catalogue copy for:

## SIHGA® provides innovative construction technology and support for the future

| | | |
|---|---|---|
| S | SICHERHEIT | SECURITY |
| I | IM | IN |
| H | HOLZBAU | WOOD CONSTRUCTION |
| G | GARANTIERT | GUARANTEES |
| A | AUSSERGEWÖHNLICHES | EXTRAORDINARY RESULTS |

# You need to let go to hold firm.

In our hectic day and age, we find inspiration in our collaboration with the SIHGA family to reflect on conventional methods – even if these have been proven for centuries. An important step towards the era of pioneering innovations.

It is precisely this positive energy that our Austrian engineers at SIHGA draw on.

While striving for perfection – though with our feet firmly on the ground – we take professional pride in developing reliable and innovative fastening solutions that make timber construction affordable.

These guarantee our customers maximum satisfaction, save time and allow totally new structures.

**SIHGA® -** Security in Wood Construction Guarantees Extraordinary Results.



DI Dr. Marc C. Simmer, MBA
CEO, Owner



Jane-Beryl Simmer, MBA
Chairwoman of the board

## Using resources responsibly

When manufacturing our packaging and printed materials, we take great care in selecting the right materials. In doing so, we take into account, amongst other things, recyclable materials and aspects of resource-efficient production.



# SSSS - SIHGA® SYSTEM SAFETY STANDARD

| SIHGA® Feature | YOUR Benefit |
|---|---|
| exclusively for all SIHGA® products | security for YOUR future |
| this means | SIHGA® SYSTEM SAFETY STANDARD |
| and stands for | tested, regularly externally monitored, certified, guaranteed, long-lasting |



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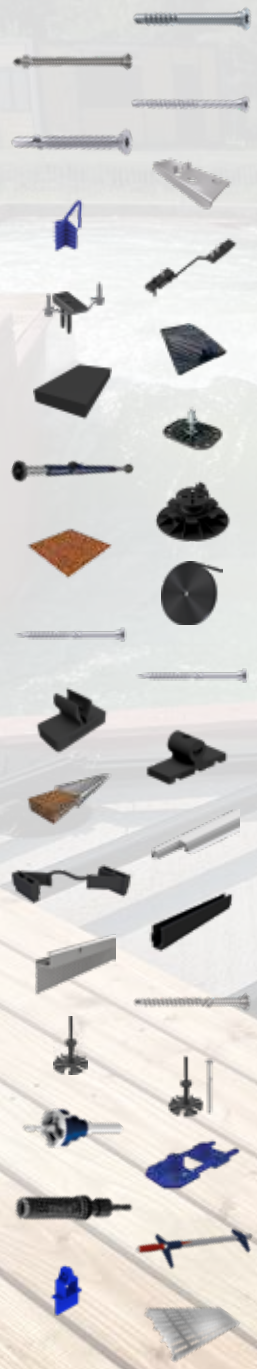

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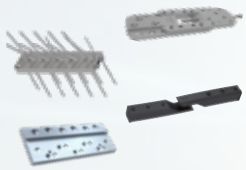
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**Monitorix System Catalogue**

**MASS-X® CLT Program**

# SIHGA®

Strong and safe together

## We focus on service - use the all-inclusive services to your advantage




### SIHGA® Academy

- Your advantage through knowledge:
  take advantage of the free seminars and workshops for qualified further training.

  **New!** Also to watch on **YouTube!**




### Become a development partner

- Use bundled knowledge from theory and practice
- Test new products even in the beta phase






### SIHGA® Tourbus

Arrange a suitable appointment directly with your personal application specialist or send an enquiry to support@sihga.com




## Technical support

- The **"Technical Support"** department is always available to help you with questions and for tips on tricky applications.

  Simply e-mail **support@sihga.com** or call **+43 7612 74370 0**.
  We're happy to help!

## Dimensioning service

- We work with you to find the safest and simplest solution.
  Simply e-mail **bemessung@sihga.com**!



## Pick check

- We think of security in completely new dimensions: have your SIHGA® Pick tested by an official institution with ultrasound.

https://www.sihga.com/service/pick-ultraschallpruefung

TÜV AUSTRIA



## BIM data

- Use 3D data from all SIHGA® products for your straightforward planning.

# **SIHGA®** PROVIDES INNOVATIVE **CONSTRUCTION TECHNOLOGY** AND **SUPPORT** FOR THE **FUTURE.**

## Strong products – made in Austria

SIHGA® is a family company based in Gmunden, Upper Austria. Fastenings from SIHGA® are the preferred choice today of many commercial and increasingly also private users in the world.

## Strong for our customers

SIHGA® sees every customer as a partner. We supply trade, retail and industry. SIHGA® wood construction engineers create design suggestions, advise on realisation, train users on site, and organise technical seminars for specialist areas in wood construction. Our innovations are packed exclusively in tailored system packaging and always include the installation instructions and high quality accessories.

## Strong innovations

Our products are developed, carefully packaged and tested many times over in Austria. SIHGA® is the inventor of Alu-TeFix®, Betsi®, BeziFee®, BeziFix®, BohrFix®, DielenFix®, FassadenClip®, FugiFix®, GleitFix®, GoFix®, Herakulix®, HobaFix®, HobaFix® Max, Hobet®, Hozibo®, IdeFix®, JustiFix®, Klebsan®, KompeFix®, LamellenFix, L-GoFix®, Monitorix®, Orakelix®, Pfalu®, Pfalu Aquastop®, Pick, Pick Max®, Pick PSA, Pick Engel®, Pocket Traverse, ProziFix®, Rest-X®, RomboFix®, SIHGAFIX®, Stabilix, Stegsan®, SystemFix®, TefaBind®, TefaFix®, TefaFlex®, TeFix®, TerrassenFix®, WabaFix®, Winkelix® and ZaFix®.

#TAKETHEBEST
#TAKESIHGA

# Surface




galvanic zinc-coating, chrome 6 free, good corrosion protection under "normal" environmental conditions without direct weather exposure and with covered installation




galvanic zinc-coating, chrome 6 free, additional layers for greatly enhanced corrosion protection, surface is paintable, no contact corrosion in case of metals with aluminium or magnesium content




zinc dip-coating, paintable and has improved slip properties




galvanic zinc-coating, chrome 6 free, additional layers for greatly enhanced corrosion protection, surface is paintable, „self-healing effect" in the event of damage to the protective layer




galvanic zinc-nickel coating, similar to SC 1, although significantly greater corrosion protection




aluminium zinc dip-coating, similar to hot-dip galvanisation, with sheets and wires (for punched parts may mean bright cut edges, therefore only suitable for use with direct weather exposure)




high quality black-coating, abrasion-resistant and additional increase in corrosion protection




galvanic zinc-coating, chrome 6 free, good corrosion resistance with indirect weather exposure and covered installation, very good slip properties, abrasion-resistant passivated layer prevents particles detaching and therefore no adhesion between thread and wood (reduces the screw-in torque)

All information about corrosion protection refers to tested products directly after production!

# Material






















**SIHGAMID** =
fiberglass-reinforced plastic

# SIHGAFIX®

| SIHGA® Feature | YOUR Benefit |
|---|---|
| the original from SIHGA® | the first Quadro attachment for use in cordless screwdrivers, hammer screwdrivers, chucks and bit holders |
| length 60 mm, 77 mm | also screws easily in deep grooves |
| also made from hardened stainless steel | prevents rust from external sources occurring at the screw |
| vacuum ice-chill hardened | for extreme high strength and long lifespan |
| precisely milled drive zone | resulting in a very accurate fit |
| made in Germany | German tested workmanship for reliable quality |
| colour-coding system | each bit size is clear at first glance |

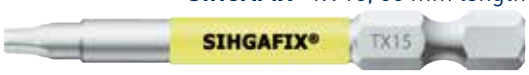
Optional in:







**SIHGAFIX®** TX 10, 60 mm length




**SIHGAFIX®** TX 15, 60 mm length




**SIHGAFIX®** TX 20, 60 mm length




**SIHGAFIX®** TX 20, 77 mm length




**SIHGAFIX®** TX 25, 60 mm length




**SIHGAFIX®** TX 30, 60 mm length




**SIHGAFIX®** TX 40, 60 mm length




**SIHGAFIX®** TX 50, 60 mm length

# DUO Bit

| SIHGA® Feature | YOUR Benefit |
|---|---|
| lengths 150, 200 and 350 mm | tailored to the requirements in wood construction |
| double Torx drive | for double lifetime |
| made in Europe | European tested workmanship for reliable quality |
| colour-coding system | each bit size is clear at first glance |




**DUO-Bit** TX 30, 150 mm length

**DUO-Bit** TX 40, 150, 200 and 350 mm length

**DUO-Bit** TX 50, 150 mm length

# Full-Bits




Installing the SIHGA® Full-Bits system on the screwdriver is as simple as it is effective. The flexible positioning tape is attached to the desired location on the screwdriver – provided the surface is clean and dust-free. The bit holder can be bent and positioned precisely as required and has a magnetic insert so that the SIHGAFIX® bits are always within easy reach.

# SIHGA® System Packaging

| SIHGA® Feature | YOUR Benefit |
|---|---|
| height and width always the same | so the space needed is also always the same |
| always firmly closable | in combination with the closing flap particularly practical against unintended emptying |
| patented, externally visible holders for accessories | the accessories are always to hand and visible in the unopened pack |
| water-repellent surface | a great help in wet building weather |
| system size on the left underside | the practical scale is always available |
| montagepack specially developed for installation; patent-protected | the accessories required for installation and the installation instructions are always enclosed |
| Systemstift® enclosed in the installation pack | the carpenter's pencil that can also measure |
| minimontagepack specially developed for installation and resale | contents externally visible thanks to viewing panel |




## SIHGA® minimontagepack




## SIHGA® montagepack




## SIHGA® Systemstift®

| SIHGA® Feature | YOUR Benefit |
|---|---|
| mehrwertpack | consists of four montagepacks |
| specially developed for installation; patent-protected | the accessories required for installation and the installation instructions are always enclosed |
| specially patented holders inside for accessories | so the accessories are always to hand |
| always firmly closable | in combination with the closing flap, particularly practical |
| objektpack® | package content for larger properties |
| Reduced use of varnish on cardboard packaging | resource-efficient production |




## SIHGA® mehrwertpack




## SIHGA® objektpack®

# SIHGA® SystemFix®

| SIHGA® Feature | YOUR Benefit |
|---|---|
| display equipment for up to 160 montagepacks | less than half m² of space needed |
| clear storage for up to 160 montagepacks | automatic moving-up of packages |
| expandable and changeable as desired | shelf heights can be changed at any time and several SystemFix® can be connected to each other in a row |
| content is checked automatically | your personal SIHGA® application specialist will be happy to to do this by arrangement |
| forward-sloping compartment floors | so that the packages slide forward automatically |
| over 1200 companies confirm that SystemFix® brings profits | the fact that 80 % of the time is needed for 20 % of the purchasing volume is optimised by SystemFix® |



# SIHGA® General Terms and Conditions of Business

(version August 2024)

1) Our delivery transactions, including all subsequent transactions, are based exclusively on these General Terms and Conditions. We are not bound by the customer's terms and conditions of purchase. We deal exclusively with entrepreneurs, but not with consumers (with the exception of transactions in accordance with point 15; the deviations listed there apply to these). With order, the customer declares that the customer is concluding the contract exclusively for business purposes. The customer must prove the entrepreneurial status upon request. In the absence of a written objection within three days, the terms and conditions of an order confirmation sent by us shall be deemed to have been accepted in full by the customer.

2) Our offers, price lists and cost estimates are non-binding. All orders and agreements, as well as promises made by representatives, require our written confirmation in order to be valid. Our technical specifications and descriptions of the delivery item are non-binding and are only approximate.

3) Our prices are quoted from our location in 4694 Ohlsdorf near Gmunden. Value added tax is added to the prices (offers do not include without value added tax). Packaging is not returnable.

4) All delivery (service) dates and delivery (service) deadlines are approximate. Claims for damages by the purchaser due to delayed delivery/performance or non-fulfillment are excluded. Partial services already rendered are to be accepted and paid for by the customer. Partial deliveries (services) and partial invoicing are permissible, whereby such are to be paid by the customer at the specified payment conditions. If a period of grace set by the customer has not been complied without our fault, the customer shall have no right of withdrawal. The customer may withdraw from the contract at the earliest two months after the original delivery date has been exceeded.

5) Our goods are sent from our location in 4694 Ohlsdorf near Gmunden at the risk of the customer, even if the freight and other costs are borne by us. The risk shall pass to the purchaser when the goods are handed over to the carrier. Unless otherwise agreed in individual cases, we shall be free to choose the carrier. The goods will only be insured by us against transport damage on written instruction and at the expense of the customer. Deliveries only to Austria, Germany and South Tyrol shall be free domicile, unless otherwise agreed in individual cases. If the customer does not accept the goods, we can withdraw from the contract after setting a 14-day deadline and/or demand compensation for non-performance. We are entitled to demand either 25 percent of the agreed order amount without proof of damage or compensation for the actual damage incurred. Any return of goods by the customer shall require our written consent and shall be at the customer's expense and risk. The delivery bill and/or invoice number must be quoted with each return shipment.

6) For any claims of the customer against us interest at a maximum rate of 3% above the prime rate of the Austrian National Bank shall apply.

7) Our invoices are due for payment within 10 days of the invoice date without deduction. Other target or discount agreements shall be noted separately. Only timely payment in full in cash shall entitle the customer to a cash discount. In the case of payment by instalments, default even with only one instalment shall result in the loss of the deadline. All our outstanding claims shall then become due in full. The customer is not entitled to withhold payments for any reason whatsoever or to declare a set-off against our claims. Insofar as the customer is entitled to a right of retention with regard to our remuneration in the event of a delivery or service, this shall in any case be limited to the amount of the cover capital of the reasonable improvement costs.

8) Otherwise all claims are excluded, the customer is obliged to inspect the goods delivered or the work performed immediately after receipt of the delivery or a notice of completion from us and to report any defects found immediately by registered letter in detail. Likewise, defects discovered later must be reported in writing immediately after their discovery. The warranty period for movable goods is six months. The burden of proof that a defect for which we are responsible was present at the time of delivery shall lie with the customer. At our discretion, we can fulfill warranty claims in such a way that the defect is remedied or replaced by defect-free goods or a reasonable price reduction is granted, in particular if a remedy would not be possible or, in our opinion, only at disproportionately high cost. We shall not be liable for consequential damage that occurs in connection with a warranty claim, for example after processing that has already taken place. With regard to the suitability of the delivered goods, we only warrant that they can be used in accordance with our specifications and regulations. We are not obliged to check whether the ordered goods are suitable for a specific purpose, not even as a contractual secondary obligation. Only those properties shall be deemed to be warranted for which we expressly state this in writing. Deviations in dimensions, equipment, material and the like which are customary in the trade and/or due to production technology shall not entitle the customer to make a complaint. Modifications to our goods by the customer or his employees shall lead to a complete exclusion of liability towards us. Any liability on our part for damage caused by the material used by the customer is excluded.

9) Until full payment of the purchase price and all our claims arising from the business relationship with the purchaser, including ancillary claims, the delivered goods shall remain our property. A resale shall only be permissible if we have been notified of this in good time in advance, stating the purchaser, and if we consent to the sale. In the event of our consent, the purchase price claim shall be deemed assigned to us already now and we shall be authorized to notify the buyer of this assignment at any time. If the purchaser defaults on its payment obligation to us or breaches one of the obligations arising from the agreed retention of title, the entire outstanding claim shall become due immediately. In any case, we shall be entitled to demand the return of the items in our ownership even without withdrawing from the contract and to collect them from the customer, whereby the customer waives the right to assert a retention.

10) In the event of resale of SIHGA products by the customer, such resale is only permitted with the original designation. The customer is otherwise not permitted to use our brands and/or product designations without our written consent.

11) All claims for damages against us are excluded, irrespective of the legal grounds on which they are based, in particular for breach of contract and upon conclusion of the contract, but also in accordance with the provisions of the Product Liability Act for personal injury, property damage and financial loss caused by a defect in the goods, whereby claims for compensation for consequential damage, such as loss of production or loss of profit and the like are excluded in their entirety, unless we are guilty of intent or gross negligence. The burden of proof for such a degree of fault lies with the customer. (Damage) compensation claims shall in any case only include the pure costs of remedying the damage, but not ancillary claims, consequential damage, loss of profit or the like. They shall become statute-barred at the latest two years after delivery, unless the statute of limitations expires earlier. All claims for damages and any recourse claims against us must be asserted in court within six months, otherwise they shall lapse. Return or exchange of ordered and delivered goods is not possible. If goods from the current delivery program are returned to us in undamaged original packaging, we are free to take the goods back against payment of a handling fee of at least 20% of the value of the goods or to store them at the risk and expense of the customer or to return them to the customer.

12) Any drafts, plans and other documents created by us are our sole property and may not be used by the customer or made accessible to third parties.

13) All copyrights to the distributed software solutions (programs, program documentation, etc.) remain the property of SIHGA. The customer shall only receive the right to use the software after payment of the agreed remuneration exclusively for his own purposes and only for the hardware specified in the contract. The customer receives a right of use (license right) to the software (use of the moisture monitoring); any duplication, processing, distribution, sale, transfer and/or provision by the customer is expressly prohibited. Any infringement of copyrights shall result in claims for injunctive relief, defense and damages, whereby full satisfaction shall be provided in such a case. The license agreement provided shall also apply to the software.

14) The place of jurisdiction for all disputes arising directly or indirectly from the contract between the customer and us, in particular regarding its validity, shall be exclusively the competent court in 4600 Wels. The place of performance is 4694 Ohlsdorf near Gmunden.The contractual relationship shall be governed exclusively by Austrian law, excluding its conflict-of-law rules and the UN Convention on Contracts for the International Sale of Goods. Unless otherwise expressly agreed in writing, the language of the contract shall be exclusively German. This does not change if we correspond or exchange information in other languages before or after the conclusion of the contract in individual cases.

15) Special provisions for consumer transactions

In connection with the Monitorix monitoring offered by SIHGA, software solutions are also sold to consumers.

In deviation from the above points, the following applies to consumer transactions:

Point 2: Sentences 1 and 3 do not apply. Offers, price lists and cost estimates are binding for consumers. The same applies to technical descriptions.
Point 3: Prices for consumer transactions are quoted inclusive of VAT.
Point 4: Sentence 2 (exclusion of claims for damages) shall not apply.
Point 5. does not apply.
Point 6: Default interest of 4% per annum shall apply.
Point 7: The penultimate sentence (prohibition of set-off) does not apply.
Point 8. does not apply. The statutory warranty provisions shall apply.
Point 11 does not apply. The statutory provisions on damages shall apply.
Point 13: Sentence 1 does not apply.

16) Right of withdrawal for consumers according to § 11 FAGG

Consumers within the meaning of the KSchG have the right to withdraw from a distance contract or a contract concluded outside the business premises of the entrepreneur within 14 days without giving reasons, unless a statutory exception applies. The withdrawal period for sales contracts and other contracts for the purchase of goods against payment begins on the day on which the customer or a third party named by the customer, who is not the carrier, has taken possession of the goods.

In order to exercise the right of withdrawal, the customer must declare the withdrawal to SIHGA by means of a clear statement (e.g. a letter sent by post, fax or e-mail). The customer can use the sample consumer form provided on the SIHGA website for this purpose. However, the use of the sample withdrawal form is not mandatory. In order to comply

with the withdrawal period, it is sufficient for the consumer to send the notification of the exercise of the right of withdrawal before the expiry of the withdrawal period.

If SIHGA fails to comply with the information obligation pursuant to § 4 para. 1 no. 8 FAGG, the consumer's withdrawal period shall be extended by 12 months. If SIHGA provides the information within this period, the withdrawal period shall end 14 days after the date on which the consumer received the information about the right of withdrawal.

If the customer withdraws from the contract, he must return the goods received to SIHGA without delay, but at the latest within 14 days of submitting the declaration of withdrawal. The deadline is met if the customer sends the goods before the 14-day period has expired. The customer shall bear the direct costs of returning the good.

17) Orders in the online store

The following also in addition to orders in the online store:

17.1 The presentation of the products in the online store does not constitute a legally binding offer, but a non-binding online catalog. You can initially place our products in the shopping cart without obligation and correct your entries at any time before sending your binding order by using the correction aids provided and explained for this purpose in the order process. By clicking on the order button, you place a binding order for the goods contained in the shopping cart. Confirmation of receipt of your order will be sent by e-mail immediately after the order has been sent.

17.2 The time when the contract with us is concluded depends on the payment method you have chosen: cash on delivery, invoice, SEPA direct debit.

We accept your order by sending a declaration of acceptance in a separate e-mail or by delivering the goods within two days.

Prepayment: We will accept your order by sending you a separate e-mail within two days in which we will provide you with our bank details.

Credit card: We will accept your order by sending you a separate e-mail declaration of acceptance or by delivering the goods within two days.

Cash payment on collection: You pay the invoice amount in cash on collection.

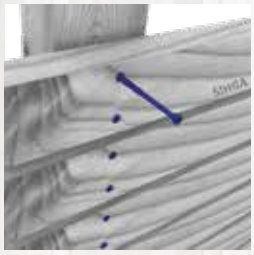
17.3 You can view the text of the contract in our customer log-in.

17.4 You agree to the transmission of all invoices by e-mail. This consent can be revoked at any time. The following payment methods are available in our store: Cash on collection, invoice.

Prepayment: If you select the prepayment payment method, we will inform you of our bank details in a separate e-mail and deliver the goods after receipt of payment. Cash on delivery: You pay the purchase price directly to the deliverer. There are no further costs for this.

Credit card: You enter your credit card details when placing the order. Once you have been legitimized as the rightful cardholder, the payment transaction will be carried out automatically and your card will be debited immediately after the goods have been dispatched.

SEPA Direct Debit: By placing the order, you issue us with a SEPA direct debit mandate. We will inform you of the date on which your account will be debited (prenotification). Upon submission of the SEPA direct debit mandate, we will request our bank to initiate the payment transaction. The payment transaction will be carried out automatically and your account will be debited. The account will be debited after the goods have been dispatched. The period for advance notification of the date of the account debit (so-called prenotification period) is 7 days. Invoice You pay the invoice amount after receipt of the goods and the invoice by bank transfer to our bank account. We reserve the right to accept purchase on account only after a successful credit rating.









## Fastening Visible

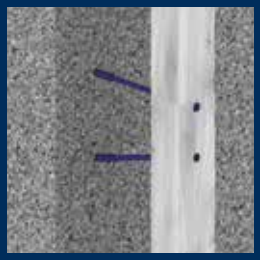

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## Fastening Invisible


| | |
|---|---|
| F-BohrFix® ES/SC | 32 |
| FassadenClip® FCS | 34 |
| LamellenFix | 38 |
| RomboFix® RF | 50 |
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## Constructive Wood Protection


KompeFix® II KF 37


## Substructure


BeziFix® SR II 26

BeziFix® Therm H 28

TefaFix® F 54

TefaFlex® F 56

TefaBind® 58

# Alu-TeFix®



Alu-TeFix® made of hardened stainless steel or in A2





ETA-20/0558

| SIHGA® Feature | YOUR Benefit |
|---|---|
| Alu-TeFix® in A2 fastens wood on aluminium (except SymbioFix® SFT) 2-3 mm without predrilling | prevents the formation of cracks or splitting in almost all hardwood and thermo-wood; saves working time |
| Alu-TeFix® made of hardened steel fastens wood on TefaFix® T/F without predrilling and countersinking | as TefaFix® absorbs the axial movement from swelling and shrinking of the wood, there is no danger of breakage |
| SIHGA® drill wings with special shape | pre-drills the boards at 6 mm and prevents lifting of the board while screwing; drilling wings break off when penetrating into the aluminium |
| SIHGA® further-developed multi-stage head | no displacement or chipping of the wood due to an extra thin head and saw tooth corrugation |
| in combination with KompeFix® II KF on conventional aluminium and in combination with TefaFlex® T/F on TefaFix® T/F the perfect solution | increases the lifetime of the wood and the screw |
| including SIHGAFIX® stainless steel, Systemstift® and installation instructions | time-saving, practical, precise; all accessories are included |
| quantity determination | https://bemessung.sihga.com/terrace |

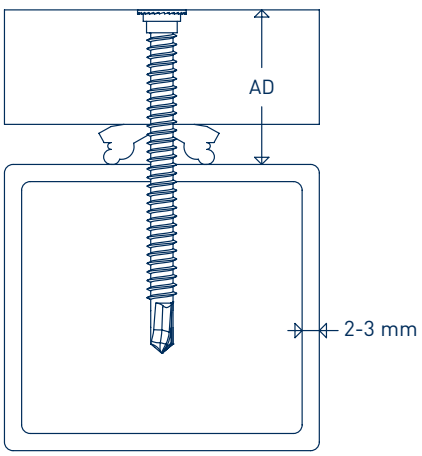
| SIHGA® | | Dimension | Add-on Part up to | Characteristic Values* | | | Substructure |
|---|---|---|---|---|---|---|---|
| montagepack | | Alu-TeFix® | AD | Tensile Force $F_1$ [kN] | | Shear Force $F_2$ [kN] | TefaFix®T/F |
| Art. Nr. | PU | d1 x L | [mm] | Head | Thread | Alu-Wood | |
| 54016 | 200 | **5,0 x 51** | 33 | 1,96 | 1,30 | 2,95 | yes |
| 54026 | 200 | **5,0 x 61** | 43 | 1,96 | 1,30 | 3,22 | yes |

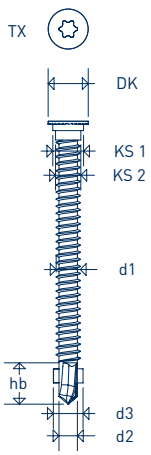
| SIHGA® | | Dimension | Add-on Part up to | Characteristic Values* | | | Substructure | |
|---|---|---|---|---|---|---|---|---|
| montagepack | | Alu-TeFix® A2 | AD | Tensile Force $F_1$ [kN] | | Shear Force $F_2$ [kN] | TefaFix®T/F | Alu 2-3 mm |
| Art. Nr. | PU | d1 x L | [mm] | Head | Thread | Alu-Wood | | |
| 54066 | 200 | **5,0 x 51** | 33 | 1,96 | 0,85 | 1,40 | yes | yes |
| 54076 | 200 | **5,0 x 61** | 43 | 1,96 | 0,85 | 1,40 | yes | yes |

* characteristic values for dimensioning according to EC 5 and for strength class ρk 490 kg/m³ (Larch)

**Dimensions [mm] Alu-TeFix®**

| d1 | TX | DK | KS 1 | KS 2 | d2 | d3 | hb |
|---|---|---|---|---|---|---|---|
| 5,0 | 20 | 8,5 | 6,5 | 5,4 | 3,9 | 6,4 | 10 |

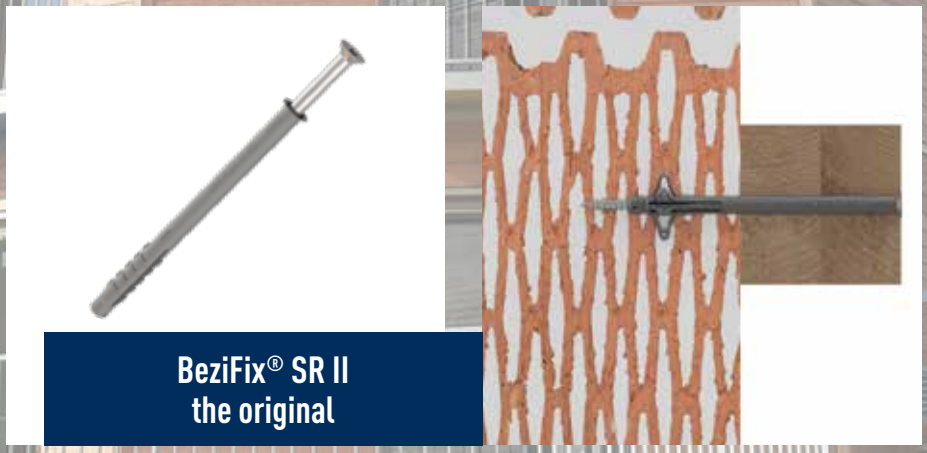



## SIHGA® TIP:

When used in combination with woods containing high levels of tannins (such as cumaru, oak, robinia, garapa, etc.) and on other aluminium substructures, we recommend Alu-TeFix® in A2.

# BeziFix® SR II



BeziFix® SR II
the original

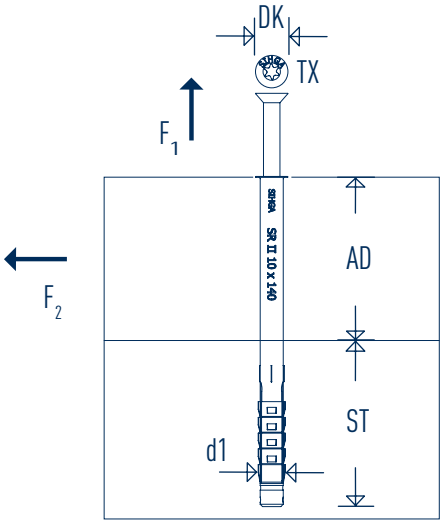


ETA-15/0832

| SIHGA® Feature | YOUR Benefit |
|---|---|
| works in vertical coring bricks, light, normal and cellular concrete, solid brick, and solid sand-lime bricks | particularly good bearing capacity, even in hollow brick |
| integrated anti-rotation lock | for easy installation |
| fastens 20 - 200 mm thick materials | universally usable with low storage costs |
| designed with extra thin waistband | can be screwed flush-mounted |
| screw packaged already inserted into anchor | fast, saves installation work on-site |
| includes SIHGAFIX®, Hozibo® or Stabebo SDS drill and installation instructions | time-saving, practical, precise, complete accessories included; Hozibo® when drilling in brick or Stabebo SDS, the concrete drill |
| design values | SIHGA® performs the calculation for you |

| SIHGA® montagepack Hozibo® | SIHGA® montagepack Stabebo | | Dimension BeziFix® SR II | Installation Part AD | Characteristic Values Tension $F_1$ / Transverse $F_2$ | Tension $F_1$ / Transverse $F_2$ |
|---|---|---|---|---|---|---|
| Art. No. | Art. No. | PU | d1 x L | [mm] | HLZ [kN] | Beton [kN] |
| 32016 | 32516 | 50 | **10 x 80** | 20 | 0,90 | 3,00 |
| 32026 | 32526 | 50 | **10 x 100** | 40 | 0,90 | 3,00 |
| 32036 | 32536 | 50 | **10 x 120** | 60 | 0,90 | 3,00 |
| 32046 | 32546 | 50 | **10 x 140** | 80 | 0,90 | 3,00 |
| 32056 | 32556 | 50 | **10 x 160** | 100 | 0,90 | 3,00 |
| 32066 | 32566 | 50 | **10 x 180** | 120 | 0,90 | 3,00 |
| 32076 | 32576 | 50 | **10 x 200** | 140 | 0,90 | 3,00 |
| 32086 | 32586 | 50 | **10 x 230** | 170 | 0,90 | 3,00 |
| 32096 | 32596 | 50 | **10 x 260** | 200 | 0,90 | 3,00 |

Min. setting depth of 60 mm in load-bearing wall
HLZ = hollow brick




**Dimension [mm]**
BeziFix® SR II

| d1 | TX | DK | ST |
|---|---|---|---|
| 10 | 40 | 14 | 60 |

# BeziFix® Therm-H



**BeziFix® Therm-H**



| SIHGA® Feature | YOUR Benefit |
|---|---|
| supports the entire load of the facade cladding (horizontal and vertical design of the substructure possible) | takes over the entire load of the facade cladding |
| fixed to wood or concrete, masonry and KS-stone with BeziFix® SR II dowel | Can be mounted on almost any surface, the BeziFix® SR II dowels always come with the appropriate drill for precise drilling through all materials |
| high-quality and durable materials, very low thermal conductivity (λ of austenitic steel ~15 W/m*K) | Screw in stainless steel A4 and adjusting sleeve in aluminum protect against corrosion and thermal bridges |
| adjusts the facade | saves underlay work for leveling and also a multi-layered construction of the substructure |
| for full-surface thermal insulation | avoids thermal bridges |
| easy installation for soft, hard, blown-in, even full-surface insulation materials from 60 to 300 mm; can be used horizontally and vertically | fast, thus saving time and labor costs |
| including Systemstift® and assembly instructions | Included accessories - practical and time-saving |
| Online calculation | on www.sihga.com |





| SIHGA® | Dimension | Insulation | | Design example | |
|---|---|---|---|---|---|
| montagepack | BeziFix® Therm-H | max. | Total weight of facade | Fixing distance substrate wood | Fixing distance substrate concrete / brick |
| Art. No. | PU | d1 x L | [mm] | [kg/m²] | EV [cm] | EV [cm] |
| 55606 | 50 | **7,0 x 198*** | 60 | 25 | 140 | 140 |
| 55616 | 50 | **7,0 x 218*** | 80 | 25 | 140 | 140 |
| 55626 | 50 | **7,0 x 238** | 100 | 25 | 135 | 140 |
| 55636 | 50 | **7,0 x 258** | 120 | 25 | 115 | 129 |
| 55646 | 50 | **7,0 x 278** | 140 | 25 | 100 | 115 |
| 55656 | 50 | **7,0 x 298** | 160 | 25 | 90 | 104 |
| 55666 | 50 | **7,0 x 318** | 180 | 25 | 80 | 95 |
| 55676 | 50 | **7,0 x 338** | 200 | 25 | 75 | 87 |
| 55686 | 50 | **7,0 x 358** | 220 | 25 | 65 | 81 |
| 55696 | 50 | **7,0 x 378** | 240 | 25 | 60 | 75 |
| 55706 | 50 | **7,0 x 398** | 260 | 25 | 60 | 70 |
| 55716 | 50 | **7,0 x 418** | 280 | 25 | 55 | 66 |
| 55726 | 50 | **7,0 x 438** | 300 | 25 | 50 | 60 |

Dimensioning with wind suction 0.8 kN/m² - counter batten 40 x 80 mm (min. 40 x 60) C 24 - horizontal distance 600 mm
Quantity determination = m²: distance substructure [m]: distance EV [m] x 2
* is not included in the ABZ/ABG
ATTENTION: Check the assumptions made. The values, type and number of fasteners given are planning aids. Projects may only be dimensioned by authorized persons.

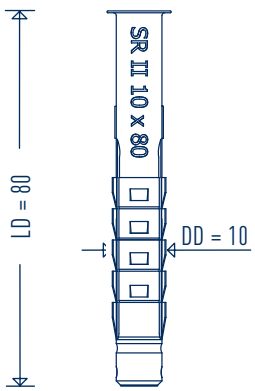
| SIHGA® | Dimension | | Drilling depth* | Drill length | Drill length | Drill length | suitable screw length | Subsoil |
|---|---|---|---|---|---|---|---|---|
| montagepack | BeziFix® II Dowel | | BT | Hozibo® | Stabebo | SDS-Hammerbohrer | BeziFix® Therm-H | |
| Art. No. | PU | Type | DD x LD | [mm] | [mm] | [mm] | | [mm] | |
| 55746 | 50 | SR II H | 10 x 80 | 90 | 450 | - | - | 198 - 358 | brick** |
| 55756 | 50 | SR II S | 10 x 80 | 90 | - | 450 | - | 198 - 358 | concrete |
| 55766 | 50 | SR II | 10 x 80 | 90 | - | - | 600 | 378 - 438 | brick**, concrete |

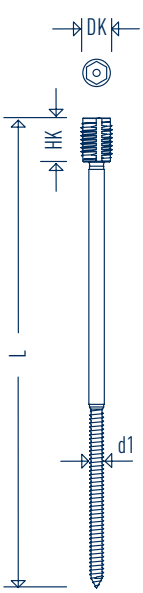
* Minimum drill hole depth in concrete, brick, KS stone; dowel length = 80 mm, drill hole depth = 90 mm; screw pitch for substructure wood = 90 mm
** Solid brick

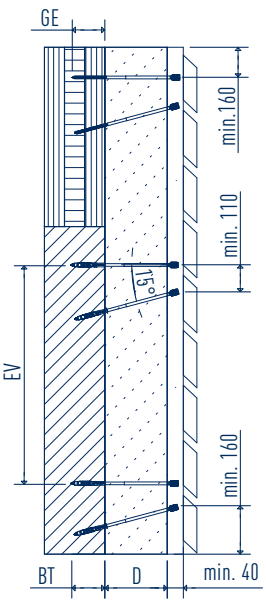
**Dimension [mm]**
BeziFix® Therm-H

| d1 | DK | HK | BK* | GE/BT** |
|---|---|---|---|---|
| 7,0 | 18,5 | 22 | 16 | 90 |

* BK = Drilling diameter for head DK
** GE/BT = Threaded rod for substructure wood/drilling depth when using BeziFix SR II dowel




## SIHGA® TIP:

Caution: The setting tool and drill guide of the BeziFix® Therm BT are not compatible with BeziFix® Therm-H.

# BeziFix® Therm-H Accesories



| SIHGA® Feature | YOUR Benefit |
|---|---|
| **BeziFix® Therm-H Setting tool** (Art. No. 55732) | |
| two functions in one tool | one side for mounting the BeziFix® on wood or in masonry, the opposite side for adjusting the battens |
| Mounting in 13 mm drill chuck | fits in any standard drill chuck |



| | |
|---|---|
| **BeziFix® Therm-H Drill guide** (Art. No.: 55772) | |
| the exact guidance of the drill in the masonry, even at an angle | the fixed discs specify the 90° or 15° exactly for simple, precise drilling |



| | |
|---|---|
| **Hozibo® SDS Drill** | |
| Drill for precise holes with SDS holder | drills wood and brick in one operation |
| automatic impact stop | Due to the shortened SDS holder, the hammer mechanism cannot hit the drill |



| | |
|---|---|
| **Stabebo SDS Drill** | |
| Drill for precise drilling with SDS holder and 4-edge drilling geometry | especially for use in reinforced concrete |



| | |
|---|---|
| **BeziFix® II Dowel** | |
| fixed in concrete, Perforated brick as well as solid brick and sand-lime brick | particularly good load-bearing capacity |
| integrated anti-rotation and anti-impact protection | for trouble-free installation |

# F-BohrFix® ES/SC





**F-BohrFix® ES/SC**
**made from hardened stainless steel or SC 1**



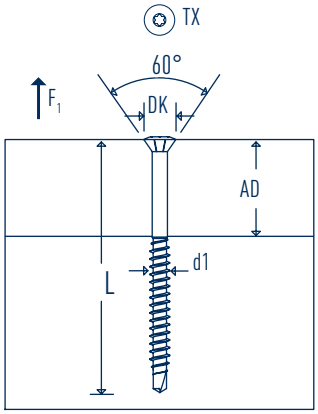
**F-BohrFix® ES**
**made from stainless steel with SC 9 coating**

| SIHGA® Feature | YOUR Benefit |
|---|---|
| fastens wood to wood with small decorative head ∅ 5.2 mm | facade formwork is fastened directly in the spring |
| fastens without pre-drilling | fast, saves installation work |
| fastens without splitting the wood | also clean fastening close to the edge |
| made from hardened stainless steel | rust-free fastening, extremely break-proof |
| including SIHGAFIX® stainless steel, Systemstift® and installation instructions | time-saving, practical, all accessories enclosed; SIHGAFIX® stainless steel prevents rust from external sources and also screws into deep grooves |
| also available with black surface (SC 9 coating) | also fastens dark materials, visually appealing |

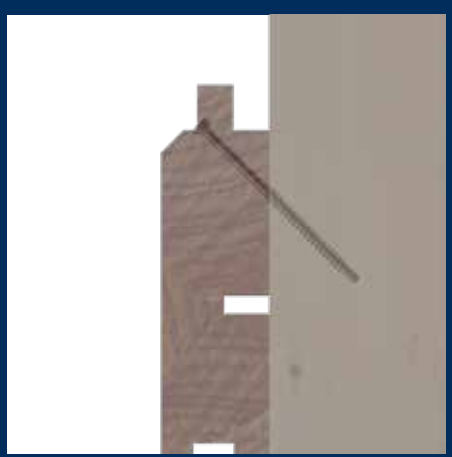
**Dimension [mm]**

F-BohrFix® ES/SC

| d1 | TX | DK | Decorative Head |
|---|---|---|---|
| 3,2 | 10 | 5,2 | 60° |




| SIHGA® montagepack Art. No. | PU | Dimension F-BohrFix® ES d1 x L | Installation Part AD [mm] |
|---|---|---|---|
| 27956 | 500 | **3,2 x 35** | 14 |
| 27966 | 500 | **3,2 x 40** | 16 |
| 27976 | 500 | **3,2 x 50** | 20 |
| 27986 | 500 | **3,2 x 60** | 24 |
| F-BohrFix® SC 1 | | | |
| 32936 | 500 | **3,2 x 35** | 14 |
| 32946 | 500 | **3,2 x 40** | 16 |
| 32956 | 500 | **3,2 x 50** | 20 |
| 32966 | 500 | **3,2 x 60** | 24 |
| F-BohrFix® ES/SC 9 | | | |
| 27955 | 500 | **3,2 x 35** | 14 |
| 27965 | 500 | **3,2 x 40** | 16 |
| 27975 | 500 | **3,2 x 50** | 20 |
| 27985 | 500 | **3,2 x 60** | 24 |





## SIHGA® TIP:

Timber outdoors should only be fastened with stainless steel products.

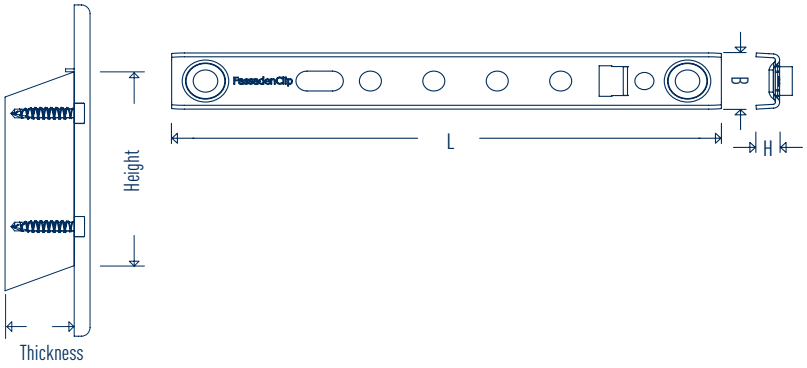
# FassadenClip® FCS



FassadenClip® FCS



| SIHGA® Feature | YOUR Benefit |
|---|---|
| patented facade fastening, invisibly screwed, made and developed in Austria | the optically elegant surface is created simply, flexibly and without auxiliary tools |
| suitable for almost all wood types with profile height 57-95 mm | both rhombus and square-shaped profiles can be professionally fastened |
| automatic distance to the substructure is 5.5 mm | the facade remains optimally ventilated, timber can dry well |
| freely selectable reveal width, we recommend 10 mm | the recommended joint width can be installed automatically without further aids |
| timber remains undamaged on all visible surfaces | timber is screwed from behind, this prevents direct weathering and ensures a durable facade |
| includes SIHGAFIX®, all fastening screws, Systemstift® and installation instructions | time-saving, practical, precise, complete accessories enclosed |
| two screw points per FassadenClip® in the facade panel | creates the same stability as when visibly screwed, prevents warping of the timber |
| quantity calculation per m² | 1: substructure distance [m] : (height of facade profile [m] + join [m]) |




**Dimension [mm]**
FassadenClip® FCS

| L | B | H |
|---|---|---|
| 115 | 15 | 5,5 |
| 130 | 15 | 5,5 |
| 145 | 15 | 5,5 |

| SIHGA® montagepack | | Dimension FassadenClip® FCS | Dimension of facade profile Height [mm] | | Thickness [mm] |
|---|---|---|---|---|---|
| Art. No. | PU | Type | min. | max. | min. |
| 32355 | 300 | **115 x 17** | 57 | 68 | 19 |
| 32365 | 300 | **115 x 22** | 57 | 68 | 24 |
| 32375 | 300 | **115 x 28** | 57 | 68 | 30 |
| 32385 | 300 | **130 x 17** | 69 | 80 | 19 |
| 32395 | 300 | **130 x 22** | 69 | 80 | 24 |
| 32405 | 300 | **130 x 28** | 69 | 80 | 30 |
| 32415 | 300 | **145 x 17** | 81 | 95 | 19 |
| 32425 | 300 | **145 x 22** | 81 | 95 | 24 |
| 32435 | 300 | **145 x 28** | 81 | 95 | 30 |

L-BohrFix® FB
∅ 4,5 x 29



BohrFix® FB
∅ 4,2 x 17 / 22 /28



# FugiFix® FF

| SIHGA® Feature | YOUR Benefit |
|---|---|
| universal joint spacer for facades | joint widths of either 5, 6, 7 or 8 mm can be set quickly |
| dut to of the special geometry | the FugiFix® FF cannot fall into the joint and can easily be removed again |
| made from SIHGAMID, the fibre-glass reinforced plastic originating from space research | extremely heat-, frost- and UV-resistant |

| SIHGA® montagepack | | Dimension FugiFix® | Joint Widths |
|---|---|---|---|
| Art. No. | PU | Type | [mm] |
| 34966 | 5 | **FF** | 5, 6, 7, 8 |



FugiFix® FF made from SIHGAMID



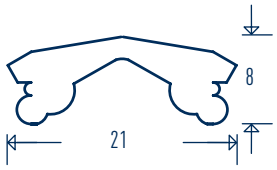
## SIHGA® TIP:

To extend the life of timber constructions, we recommend using KompeFix® II KF.

# KompeFix® II KF

| SIHGA® Feature | YOUR Benefit |
|---|---|
| universal, constructive wood protection for facades with height 8 mm and width 21 mm | creates distance between the woods; thereby allowing them to breathe and increasing their lifespan |
| developed, patented and made in Austria | local quality, experience from more than 14 years of facade construction included |
| the roll with 4.5 metres length is only fastened structurally | fast and easy, can be fixed as desired (screwable) and cut to length |
| patented, helps to seal the screw | increases the service life of the construction |
| the pre-load effect integrated through the specific shape compensates for the swelling and shrinkage of the timber | improves the appearance of the facade |
| monitored production from polyvinyl chloride, with a special recipe | remains permanently dimensionally stable, is heat-, frost- and UV-resistant |
| quantity calculation per $m^2$ | 1: substructure distance [m] : 4.5 |
| includes installation instructions | is time-saving and enclosed for practicality |

| SIHGA® montagepack | | Dimension KompeFix® | Dimension [mm] | | |
|---|---|---|---|---|---|
| Art. No. | PU | Type | Width | Height | Length |
| 41006 | 8 x 4,5 m | **II KF** | 21 | 8 | 4500 |

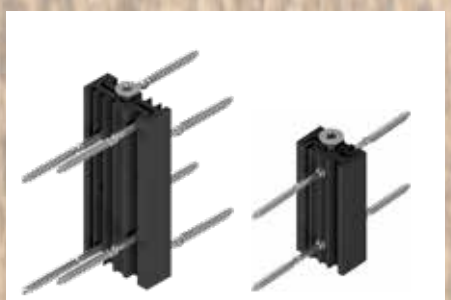





**KompeFix® II KF made from polyvinyl chloride**



# LamellenFix



**LamellenFix /
LamellenFix small**



© Thomas Gobauer



ETA-23/0821

| SIHGA® Feature | YOUR Benefit |
|---|---|
| Connectors for façade slats on different substructures | Whether wood, steel or concrete, the connector can be fastened to almost any substrate |
| Node connection made of two identical parts (1 connection consists of 2 pieces) | Can be pre-assembled without confusion and on the slat in the factory |
| The first connector on the market that enables the simple and cost-efficient installation of wooden slats | Quick and visually very appealing way to mount wooden slats on façades |
| Thanks to the ingenious coupling of the connectors by means of a locking screw, LamellenFix mounted in series are loaded equally | The LamellenFix has a high assembly tolerance, as the connection can be made perfectly even with a layer difference (in a longitudinal direction) of up to 8 mm |
| The geometry of the connector profile ensures that the water drains off quickly | Structural wood protection was always taken into account in the development and thus offers a long construction service life |
| Developed, patented and manufactured in Austria | Highest European quality and added value |
| Statically loadable in five directions | horizontally, vertically and under tension with high tested static values |
| Made of aluminium under monitoring and anodised | Durable, dimensionally stable quality, rust-free |
| All enclosed screws in stainless steel | Approved for use in NKL 3 |
| Includes SIHGAFIX® and assembly instructions | Time-saving, practical, precise;<br>All accessories are included |

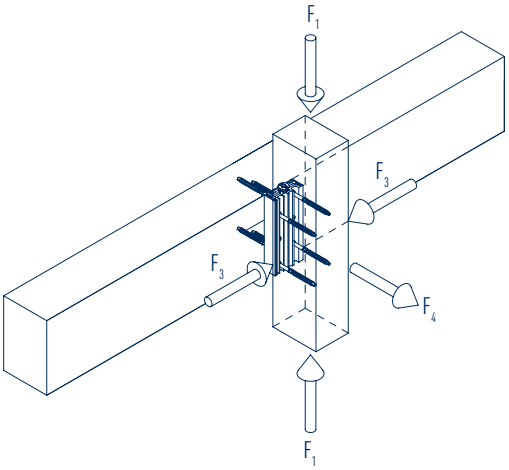




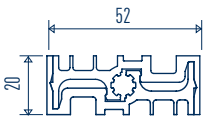
## SIHGA® TIP:

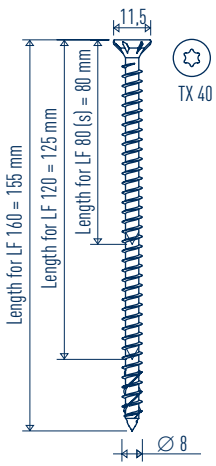
The fixing screws for the respective substrate must be ordered separately.

# LamellenFix

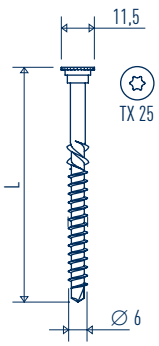



| SIHGA® | Rated values (kN) | | |
|---|---|---|---|
| LamellenFix | $F_{1,d}$ | $F_{3,d}$ | $F_{4,d}$ |
| Type | Compressive force [kN] | Transverse force [kN] | Traction [kN] |
| **80 small** | 2,36 | 1,18 | 3,87 |
| **80** | 4,46 | 3,10 | 5,08 |
| **120** | 7,67 | 3,92 | 5,71 |
| **160** | 12,90 | 4,66 | 8,29 |

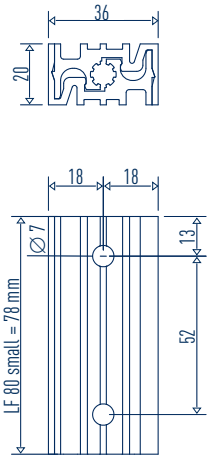


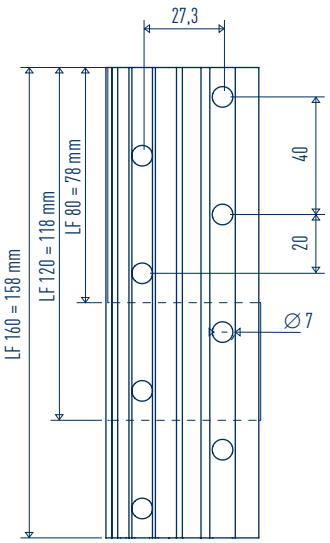

**Locking screw:**
GoFix® S+ in stainless steel




**Screwing of the wooden slat:**
TeFix® in hardened stainless steel




**LamellenFix small**




**LamellenFix**

| SIHGA® | | Dimension | | Slat | | Substrate | |
|---|---|---|---|---|---|---|---|
| montagepack | | LamellenFix | TeFix® in slat per connector | min. Width | min. Height (depth) | min. Height | min. Width (depth) |
| Art. No. | PU | Typ | Pcs. x ∅ x L | [mm] | [mm] | [mm] | [mm] |
| 31196 | 20* | **80 small** | **2 x 6,0 x 70** | 40 | 65 | 80 | 65 |
| 31206 | 20* | **80** | **4 x 6,0 x 80** | 60 | 80 | 80 | 80 |
| 31216 | 20* | **120** | **4 x 6,0 x 80** | 60 | 80 | 120 | 80 |
| 31226 | 20* | **160** | **6 x 6,0 x 80** | 60 | 80 | 160 | 80 |

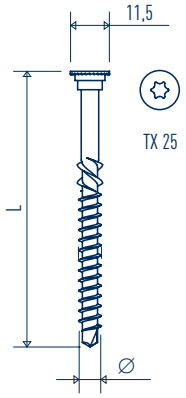
* Corresponds to 10 connections



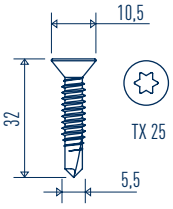
ETA-23/0821

# Fastening for substructure

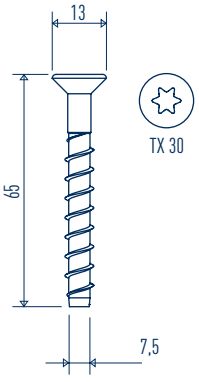
**Substructure wood**
TeFix® in hardened stainless steel




**Substructure steel up to 4 mm**
Sheet metal screw in stainless steel hardened




**Substructure concrete**
Concrete anchor in stainless steel




**SIHGA®**
TeFix® hardened stainless steel

| Art. No. | ∅ x L |
|---|---|
| 54406 (small) | 6,0 x 70 |
| 54416 | 6,0 x 80 |

**SIHGA®**
Tapping screw, hardened st/less steel

| Art. No. |
|---|
| 31306 |

**SIHGA®**
Concrete anchor A4

| Art. No. |
|---|
| 41906 |

**The secure connector for architecturally and structurally demanding slatted facades**

- best suited for slat dimensions of >40 x 65 mm
- few attachment points for large wooden slats
- simple, quick assembly
- 4 screws are required per LamellenFix for mounting on the substructure (2 screws for LamellenFix small)
- If other fastening screws are required for a specific project, this can be calculated and approved by SIHGA Technik if necessary

# LamellenFix template

| SIHGA® Feature | YOUR Benefit |
|---|---|
| For all LamellenFix models | For the rational and precise assembly of Apply LamellenFix to the slat and to the substructure |
| Automatically finds the centre of the slat or substructure | By moving the two side parts towards each other, the parallelogram closes and centres the template on the component |
| The template can be clamped onto the horizontally mounted substructure and the LamellenFix inserted | You have both hands free for screwing |
| Developed and produced in Austria | Superlative European quality and added value |

| SIHGA® LamellenFix template |
|---|
| Art. No. |
| 31716 |

| SIHGA® DUO Bit TX 40, 350 mm |
|---|
| Art. No. |
| 31821 |

| SIHGA® LamellenFix small extension kit |
|---|
| Art. No. |
| 31712 |



LamellenFix template



Stencil extension kit

## SIHGA® TIP:

When inserting the self-tapping screw into the LamellenFix, we strongly recommend using the DUO Bit TX 40, 350 mm length, as this is indispensable in various installation situations.
See LamellenFix application, page 43.

# LamellenFix application

1.



2.



3.



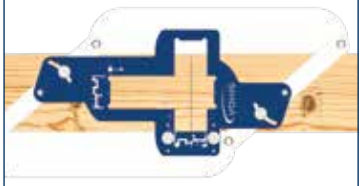
4.



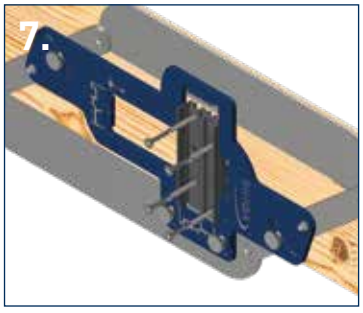
5.



6.



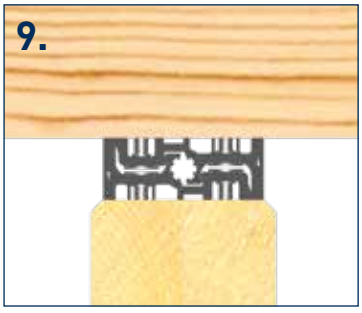
7.



8.



9.



10.



11.



# L-GoFix® MS






**L-GoFix® MS made from hardened stainless steel**



**L-GoFix® MS with additional SC 9 coating**

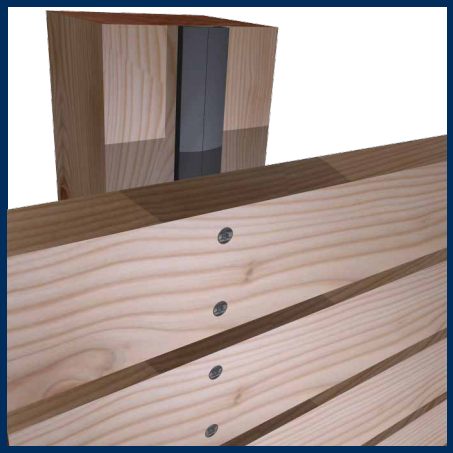
© raumpixel.at



ETA-11/0425

| SIHGA® Feature | YOUR Benefit |
|---|---|
| also attaches coverings made out of hard and thermo-wood | creates a perfect look, with these woods additional pre-drilling is recommended |
| multi-stage head with small head diameter | high constructive wood protection and refined surface as a result of the plane head |
| special thread angle with sharp thread edges | high pull-out value |
| SIHGA® point with special shape | guarantees fast setting of screws |
| SIHGA® ribs on shaft and slip coating | light, fast rotation and optimum fit in the wood are guaranteed |
| made from hardened stainless steel | rust-free fastening, extremely break-proof |
| also available with black (SC 9 coating) look | optimum on dark materials, or can be used for larch, Douglas fir and Bangkirai |
| including SIHGAFIX® stainless steel, Systemstift® and installation instructions | time-saving, practical, precise, all accessories enclosed; SIHGAFIX® stainless steel prevents rust from external sources and also screws into deep grooves |

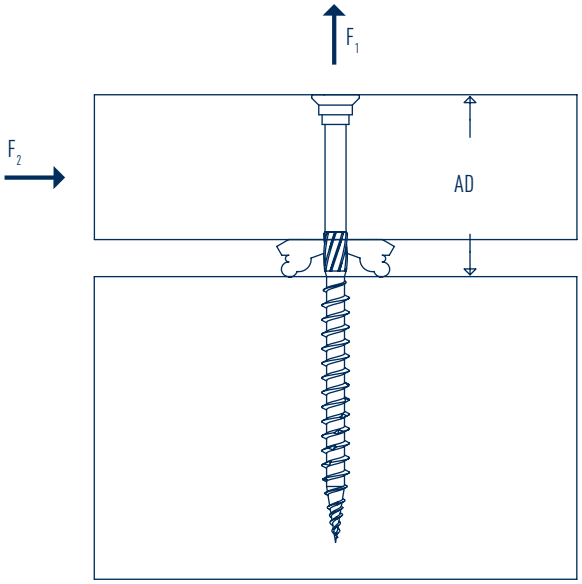
When using coatings such as oils, glazes and pre-greying, it is essential to consult the coating manufacturer. As a rule, the manufacturer specifies the minimum material quality of the binding agent. If the manufacturer is not known, we recommend material quality A4 (L-BohrFix® MB A4).

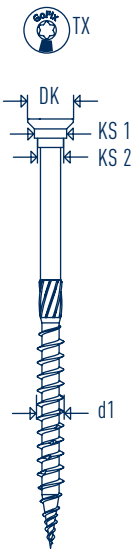


## SIHGA® TIP:

In case of applications in the pool area with timbers and with a high tannin content, we recommend using L-BohrFix® MB A4.

| SIHGA® Feature | YOUR Benefit |
|---|---|
| quantity calculation | SIHGA® performs the calculation for you |
| including SIHGAFIX® stainless steel, Systemstift® and installation instructions | time-saving, practical, precise, all accessories enclosed, SIHGAFIX® stainless steel prevents rust from external sources and also screws into deep grooves |




**Dimension [mm]**
L-GoFix® MS

| d1 | TX | DK | KS 1 | KS 2 |
|---|---|---|---|---|
| 4,0 | 15 | 5,5 | 4,0 | 3,7 |
| 4,5 | 20 | 6,9 | 5,2 | 4,2 |

| SIHGA® montagepack | | Dimension L-GoFix® MS | Installation Part AD | Characteristic Values** Tensile Force $F_1$ [kN] | | Shear Force $F_2$ [kN] | |
|---|---|---|---|---|---|---|---|
| Art. No. | PU | d1 x L | [mm] | Head | Thread | Wood-Wood | Steel-Wood |
| 24106 | 500 | **4,0 x 30** | 12 | 0,36 | 1,01 | 0,51 | 1,01 |
| 24116 | 500 | **4,0 x 35** | 14 | 0,36 | 1,22 | 0,59 | 1,14 |
| 24126 | 500 | **4,0 x 40*** | 16 | 0,36 | 1,42 | 0,68 | 1,22 |
| 24136 | 500 | **4,0 x 45** | 18 | 0,36 | 1,62 | 0,76 | 1,27 |
| 24146 | 500 | **4,0 x 50*** | 20 | 0,46 | 1,82 | 0,85 | 1,32 |
| 24156 | 500 | **4,0 x 60*** | 24 | 0,46 | 2,16 | 1,02 | 1,40 |
| 24226 | 400 | **4,5 x 40*** | 16 | 0,48 | 1,55 | 0,74 | 1,39 |
| 24236 | 400 | **4,5 x 45*** | 18 | 0,48 | 1,77 | 0,83 | 1,49 |
| 24246 | 400 | **4,5 x 50*** | 20 | 0,61 | 1,99 | 0,92 | 1,54 |
| 24266 | 400 | **4,5 x 60*** | 24 | 0,61 | 2,36 | 1,11 | 1,64 |
| 24276 | 300 | **4,5 x 70*** | 28 | 0,61 | 2,72 | 1,29 | 1,73 |

Subject to technical modifications and errors. Status of approval 2026
* also available with SC 9 coating
** characteristic values for dimensioning according to EC 5 and for strength class ρk 490 kg/m³ (Larch)

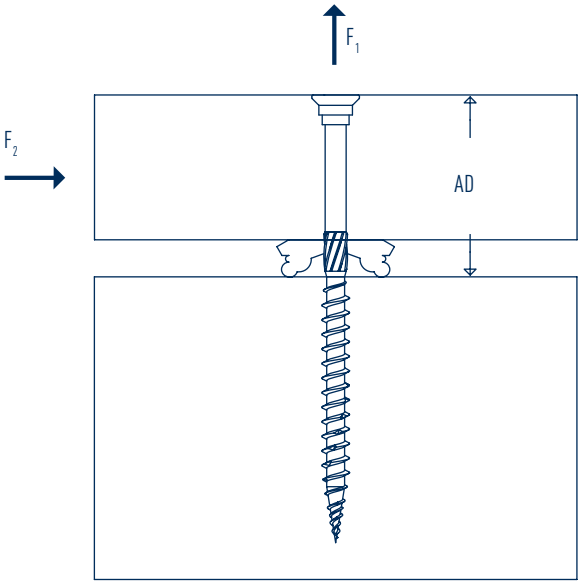
## SIHGA® TIP:

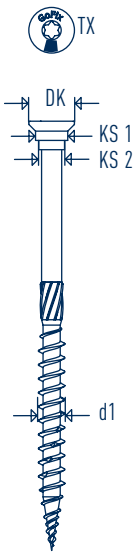
Requirement in items per m² is determined:
1: substructure distance [m] : (height of facade profile [m] + join [m]) x 2



ETA-11/0425

| SIHGA® Feature | YOUR Benefit |
|---|---|
| calculation of quantity | SIHGA® performs the calculation for you, just read the installation part thickness |
| including SIHGAFIX® stainless steel, Systemstift® and installation instructions | time-saving, practical, precise, all accessories enclosed; SIHGAFIX® stainless steel prevents rust from external sources and also screws into deep grooves |




**Dimension [mm]**
L-GoFix® MS

| d1 | TX | DK | KS 1 | KS 2 |
|---|---|---|---|---|
| 5,0 | 25 | 8,5 | 6,0 | 4,8 |
| 6,0 | 30 | 11,5 | 7,2 | 5,8 |

| SIHGA® | | Dimension | Installation Part | Characteristic Values** | | | |
|---|---|---|---|---|---|---|---|
| montagepack | | L-GoFix® MS | AD | Tensile Force $F_1$ [kN] | | Shear Force $F_2$ [kN] | |
| Art. No. | PU | d1 x L | [mm] | Head | Thread | Wood-Wood | Steel-Wood |
| 24316 | 200 | **5,0 x 45*** | 18 | 0,76 | 1,82 | 0,89 | 1,65 |
| 24326 | 200 | **5,0 x 50*** | 20 | 0,95 | 2,14 | 0,99 | 1,78 |
| 24336 | 200 | **5,0 x 60*** | 24 | 0,95 | 2,53 | 1,19 | 1,88 |
| 24346 | 200 | **5,0 x 70*** | 28 | 0,95 | 2,93 | 1,39 | 1,98 |
| 24356 | 200 | **5,0 x 80*** | 32 | 0,95 | 3,72 | 1,59 | 2,18 |
| 24366 | 200 | **5,0 x 90*** | 36 | 0,95 | 4,12 | 1,79 | 2,27 |
| 24376 | 200 | **5,0 x 100*** | 40 | 0,95 | 4,51 | 1,97 | 2,37 |
| 24406 | 100 | **6,0 x 70** | 28 | 1,64 | 3,31 | 1,58 | 2,51 |
| 24416 | 100 | **6,0 x 80** | 32 | 1,64 | 4,21 | 1,80 | 2,73 |
| 24426 | 100 | **6,0 x 90** | 36 | 1,64 | 4,66 | 2,03 | 2,85 |
| 24436 | 100 | **6,0 x 100** | 40 | 1,64 | 5,10 | 2,25 | 2,96 |
| 24446 | 100 | **6,0 x 120** | 50 | 1,64 | 5,10 | 2,45 | 2,96 |
| 24456 | 100 | **6,0 x 140** | 70 | 1,64 | 6,00 | 2,69 | 3,18 |
| 24466 | 100 | **6,0 x 160** | 90 | 1,64 | 6,00 | 2,69 | 3,18 |

Subject to technical modifications and errors. Status of approval 2026
* also available with SC 9 coating
** characteristic values for dimensioning according to EC 5 and for strength class ρk 490 kg/m³ (Larch)

# L-GoFix® MS A2

| SIHGA® Feature | YOUR Benefit |
|---|---|
| Made from A2 stainless steel | stands out thanks to its good corrosion resistance and is best used in moderate, corrosive environments |
| multi-stage head with small head diameter | high constructive wood protection and refined surface as a result of the plane head |
| special thread angle with sharp thread edges | high extraction value |
| SIHGA® point with special shape | guarantees fast setting of screws |
| SIHGA® ribs on shaft and slip coating | light, fast rotation and optimum fit in the wood are guaranteed |
| including SIHGAFIX® stainless steel, Systemstift® and installation instructions | time-saving, practical, precise, all accessories enclosed; SIHGAFIX® stainless steel prevents rust from external sources and also screws into deep grooves |

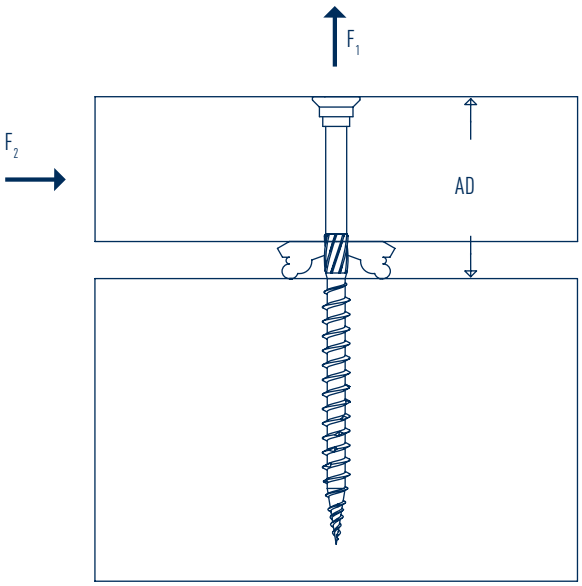
Because of the material properties it is strongly advised to generally pre-drill the add-on part (screw diameter + 0.5 -1 mm). The substructure, due to the different bulk densities and moisture, also in conifers, should in most cases be pre-drilled over the entire thread length with ∅ 3 mm. If in doubt, we recommend carrying out pretrials

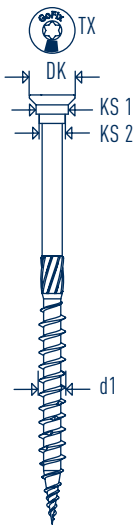


**L-GoFix® MS A2**
**made of A2 stainless steel**



ETA-11/0425




**Dimension [mm]**
L-GoFix® MS A2

| d1 | TX | DK | KS 1 | KS 2 |
|---|---|---|---|---|
| 4,5 | 20 | 6,9 | 5,2 | 4,2 |
| 5,0 | 25 | 8,5 | 6,0 | 4,8 |

| SIHGA® | | Dimension | Installation Part | Characteristic Values** | | | |
|---|---|---|---|---|---|---|---|
| montagepack | | L-GoFix® MS A2 | AD | Tensile Force $F_1$ [kN] | | Shear Force $F_2$ [kN] | |
| Art. No. | PU | d1 x L | [mm] | Head | Thread | Wood-Wood | Steel-Wood |
| 22226 | 400 | **4,5 x 40** | 16 | 0,48 | 1,55 | 0,74 | 1,15 |
| 22236 | 400 | **4,5 x 45** | 18 | 0,48 | 1,77 | 0,83 | 1,21 |
| 22246 | 400 | **4,5 x 50** | 20 | 0,61 | 1,99 | 0,92 | 1,26 |
| 22266 | 400 | **4,5 x 60** | 24 | 0,61 | 2,36 | 1,07 | 1,35 |
| 22276 | 300 | **4,5 x 70** | 28 | 0,61 | 2,72 | 1,22 | 1,45 |
| 22316 | 200 | **5,0 x 45** | 18 | 0,76 | 1,82 | 0,89 | 1,36 |
| 22326 | 200 | **5,0 x 50** | 20 | 0,95 | 2,14 | 0,99 | 1,44 |
| 22336 | 200 | **5,0 x 60** | 24 | 0,95 | 2,53 | 1,18 | 1,54 |
| 22346 | 200 | **5,0 x 70** | 28 | 0,95 | 2,93 | 1,33 | 1,64 |
| 22356 | 200 | **5,0 x 80** | 32 | 0,95 | 3,72 | 1,57 | 1,84 |
| 22366 | 200 | **5,0 x 90** | 36 | 0,95 | 4,12 | 1,67 | 1,94 |
| 22376 | 200 | **5,0 x 100** | 40 | 0,95 | 4,30 | 1,72 | 1,98 |

Subject to technical modifications and errors. Status of approval 2026
** characteristic values for dimensioning according to EC 5 and for strength class ρk 490 kg/m³ (Larch)

## SIHGA® TIP:

When using coatings such as oils, glazes and pre-greying, it is essential to consult the coating manufacturer. As a rule, the manufacturer specifies the minimum material quality of the binding agent. If the manufacturer is not known, we recommend material quality A4 (L-BohrFix® MB A4).

# RomboFix® RF



RomboFix® RF
made from SIHGAMID

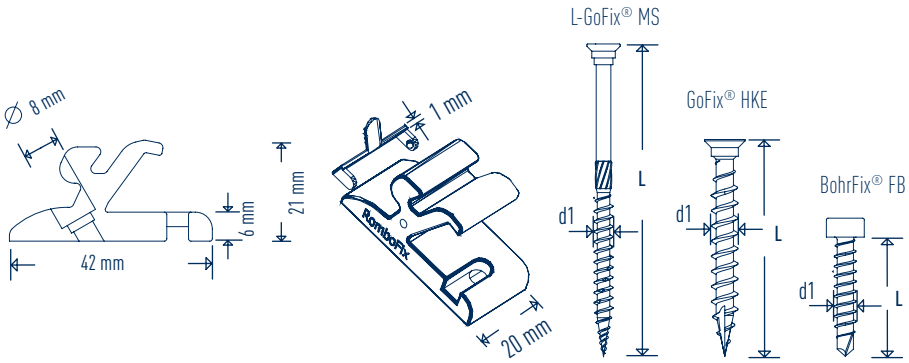





ETA-18/0887

| SIHGA® Feature | YOUR Benefit |
|---|---|
| developed, patented and made in Austria | local quality, experience from more than 150,000 m² invisibly screwed facades included |
| facade fastening, invisibly screwed | the optically elegant facade is created extremely quickly, without damaging the surface |
| for rhombus beams from wood, modified wood or WPC, which are approved by SIHGA® | saves extensive time, even beams that are not completely straight are fastened professionally |
| compensation clip integrated | compensates irregularities in the profile width |
| made from SIHGAMID, the reinforced plastic originating from space research | fastens more permanently than stainless steel, is extremely break-proof, heat-, frost- and UV-resistant |
| automatic distance to the substructure is 6 mm | the facade remains well-ventilated, timber can dry well |
| even joint spacing | join width specified by profile |
| includes SIHGAFIX® stainless steel, all fastening and fixing screws and installation instructions | time-saving, practical, all accessories enclosed, SIHGAFIX® stainless steel prevents rust from external sources and also screws into deep grooves |
| with technical fire-protection assessment | usable for building classes 1, 2, 3 ,4, 5 |
| calculation of quantity | calculated per m²: 1: Substructure distance in m: (high rhombus beam + joint in m) |

| SIHGA® | | Dimension | | | | System Screws | | Substructure |
|---|---|---|---|---|---|---|---|---|
| montagepack | | RomboFix® | | | | GoFix® HKE | BohrFix® FB | Height |
| Art. No. | PU | Type | L | B | H | d1 x L | d1 x L | [mm] |
| 40416 | 100 | **RF 40** | 42 | 20 | 21 | 5,0 x 40 | 4,2 x 22 | 30 - 45 |
| | | | | | | L-GoFix® MS | BohrFix® FB | |
| 40406 | 100 | **RF 60** | 42 | 20 | 21 | 4,5 x 60 | 4,2 x 22 | > 45 |




## SIHGA® TIP:

RomboFix® RF also fastens privacy shields, fences, balconies, blinds, easily and precisely.

# SenoFix® FT



SenoFix® FT
for facade application



Plank Thickness 20 - 30 mm

Optional accessories: SIHGAFIX®
TX 20, 77 mm; p. 14 & TTB p. 129

| SIHGA® Feature | YOUR Benefit |
|---|---|
| use with additional locking screw for vertical facade claddings | safeguarding facade profiles from slippage |
| developed, patented and manufactured in Austria | highest European quality and value creation |
| screw fastening only in the joint with SenoFix®, cover- and lateral surfaces of the boards remain unharmed | creating a visually appealing surface is quick, simple and precise |
| ONLY for timbers tested by SIHGA® | greatest security through long-term testing |
| expansion mechanism with joint width of 7 mm in final state | no spacers needed for assembly |
| assembly possible without additional tools | no additional costs for clamps or belts, etc. |
| connector height per the latest state of the art | automatic spacing from substructure of 8 mm |
| stabilises and compensates for any swelling and shrinkage in the wood | increases the life of the facade substantially |
| only 1 screw per attachment point | requires 50% less installation time and provides perfect grip |
| available with two different screw lengths | use on wood and alu substructure |
| produced of reinforced SIHGAMID | is therefore permanently heat-, frost- and UV-resistant |
| attachment screw made of hardened stainless steel | permanent and break-proof |
| including SIHGAFIX® stainless steel, all attachment screws and installation instructions | time-saving, practical, precise, all accessories are included, SIHGAFIX® stainless steel prevents extraneous rust |
| quantity calculation per $m^2$ | 1: Substructure spacing [m] : (boardwidth [m] + joint [m]) |





## SIHGA® TIP:

Secure each facade board once with BohrFix® FB 4.2 x 43 (Art.No.: 33742).

# TefaFix® F



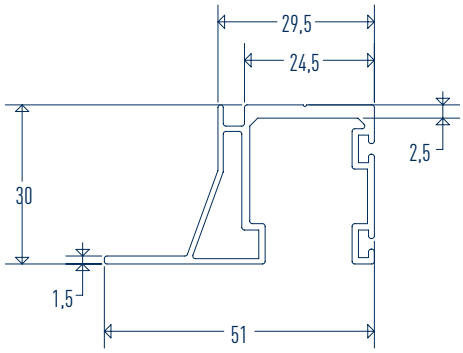
**TefaFix® F**
**aluminium bright**



**TefaFix® F**
**aluminium SC 9 coated**

| SIHGA® Feature | YOUR Benefit |
|---|---|
| 1-piece system | can be combined with the counterpart for terrace application |
| also available in SC 9 coated | continuous black joint optic |
| profile open at the back | prefabrication of the parts possible by screwing on the rear |
| lateral flange | easy mounting on the existing facade substructure |
| special inner geometry | many connections possible with TefaBind® connector |
| trapezoidal shape | perfect water drainage guaranteed |
| TefaBind® connector | endlessly extendable in length |
| aluminium | durable, machinable with conventional tools and machines |
| universally combinable | for use also optimally with SenoFix® FT* |
| combinable | in case of storage with the counterpart can be used also for the terrace |

* Available from specialist timber dealers




| SIHGA® | | TefaFix® F | | |
|---|---|---|---|---|
| Package | | Type | Surface | Length |
| Art. No. | PU | | | [mm] |
| 52102 | 10 | 4400 | bright | 4400 |
| 52012 | 10 | 4400 | SC 9 | 4400 |





## SIHGA® TIP:

To attach the TefaFix® F, we recommend BohrFix® FB 4.2 x 28/43 mm in stainless steel. Due to the linear expansion of the TefaFix® F, we recommend pre-drilling the hole for the fixing screw at least 2 mm larger.

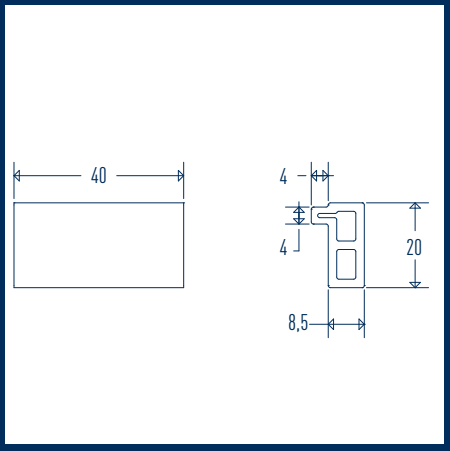
# TefaFlex® F



**TefaFlex® F**
**polyvinyl chloride**

| SIHGA® Feature | YOUR Benefit |
|---|---|
| special geometry | minimum contact area of the profiles in case of visible screwing, allows bowling up of the profiles stress-free |
| act as punctual supports for the facade profiles | ventilation and drainage of the water is guaranteed, especially with vertical installation of the facade profiles |
| jams when inserted into the TefaFix® F | can be inserted into the intended shaft of the TefaFix® F and holds, no complex and costly fixing necessary |
| 40 mm length | suitable for all profile widths |
| 8.5 mm height | finished distance of the profile to the substructure according to the state of the art, optimal ventilation and drainage |

| SIHGA® | | TefaFlex® F | | |
|---|---|---|---|---|
| montagepack | | Length | Width | Height |
| Art. No. | PU | | | [mm] |
| 52126 | 300 | 40 | 20 | 8,5 |






## SIHGA® TIP:

One piece of TefaFlex® F is required per joint.

# TefaBind®





**TefaBind®
aluminium SC 9 coated**



**For butt joint
of TefaFix® F**

© Bonauer Bölling Architekten Berlin

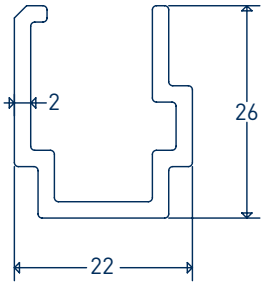
| SIHGA® Feature | YOUR Benefit |
|---|---|
| TefaBind® connector | for endless joining of TefaFix® F |
| SC 9 coated | continuous black joint optic |
| profile open at the front | with the supplied BohrFix® FB 4.2 x 17 mm in stainless steel the TefaBind® can be easily fixed |
| aluminium | durable, with conventional tools and machines workable |
| all-purpose | all longitudinal and transverse connections can be made with the TefaBind® |
| including assembly instructions and 2 pcs. BohrFix® FB 4.2 x 17 mm per TefaBind® | time-saving, practical, precise, all accessories are included |

| SIHGA® | | TefaBind® | | |
|---|---|---|---|---|
| montagepack | | Length | Width | Height |
| Art. No. | PU | [mm] | [mm] | [mm] |
| 52056 | 25 | 250 | 22,0 | 26,0 |

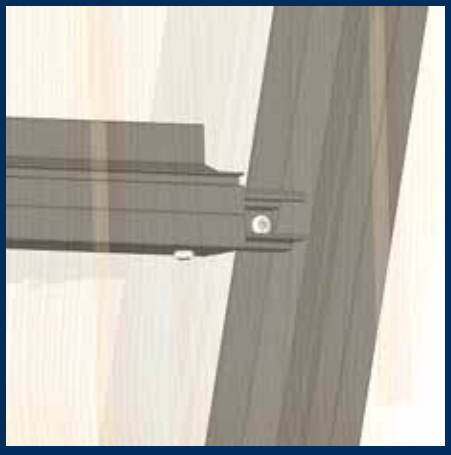
BohrFix® FB

∅ 4,2 x 17



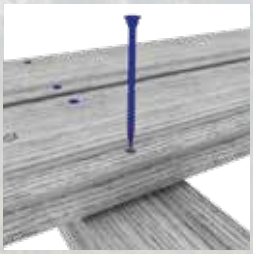


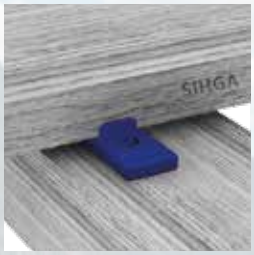


## SIHGA® TIP:

To ensure longitudinal expansion TefaFix® F must have a distance of 10 mm at the longitudinal joint and the TefaBind® may only be screwed on one side.



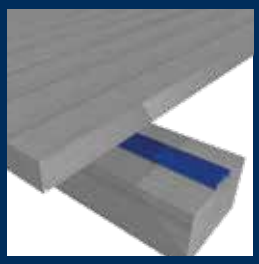

## Fastening Visible


| | |
|---|---|
| Terrace Guarantee | 62 |
| Design Recommendations | 64 |
| HFA inspected | 66 |
| Terrassenplaner® | 68 |
| Alu-BohrFix® MB^ | 70 |
| Alu-TeFix® | 72 |
| L-BohrFix® MB A4 | 74 |
| FugiFix® FF | 80 |
| L-GoFix® MS | 99 |
| L-GoFix® MS A2 | 102 |
| TeFix® | 118 |
| TerrassenFix® Countersink BS | 123 |
| TerrassenFix® Template TFS | 124 |
| TerrassenFix® Depth Limiter TTB | 125 |

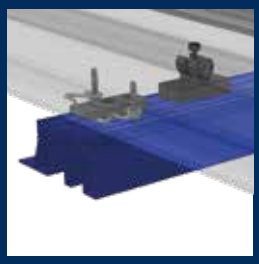

## Fastening Invisible


| | |
|---|---|
| Terrace Guarantee | 62 |
| Design Recommendations | 64 |
| HFA inspected | 66 |
| Terrassenplaner® | 68 |
| DielenFix® | 78 |
| GleitFix® GF | 82 |
| GleitFix® AE | 85 |
| KompeFix® II KF | 98 |
| SenoFix® FT | 104 |
| SenoFix® SX | 106 |
| TerrassenFix® Clamp III | 126 |
| Joint Spacer Clamp FAZ | 127 |









## Constructive Wood Protection


| | |
|---|---|
| Terrace Guarantee | 62 |
| Design Recommendations | 64 |
| HFA inspected | 66 |
| Terrassenplaner® | 68 |
| KompeFix® II KF | 98 |
| TerrassenFix® II TF | 120 |
| TerrassenFix® II Set TFL | 122 |
| TerrassenFix® Countersink BS | 123 |
| TerrassenFix® Template TFS | 124 |
| TerrassenFix® Depth Limiter TTB | 125 |
| TerrassenFix Aqua® | 128 |


## Substructure


| | |
|---|---|
| Terrace Guarantee | 62 |
| Design Recommendations | 64 |
| HFA inspected | 66 |
| Terrassenplaner® | 68 |
| S-BohrFix® SBF | 76 |
| JustiFix® JV | 86 |
| JustiFix® J | 87 |
| JustiFix® II JM | 88 |
| JustiFix® Orakelix® | 90 |
| JustiFix® II JK H /Alu | 93 |
| JustiFix® K | 96 |
| SymbioFix® SFT | 108 |
| TefaFix® T | 110 |
| TefaFlex® T | 112 |
| TefaBind® | 114 |
| TerrassenFix® Air | 116 |

# TERRACE GUARANTEE




## Guarantee Up to 23 Years

In the event of correct processing and standard use according to the SIHGA® installation instructions and SIHGA® design recommendations, SIHGA® guarantees the functionality of the SIHGA® fastenings for a period of 23 years for the original buyer, first buyer, according to the following conditions.

## Guarantee for Our Customers

If a defect occurs within 23 years of the date of purchase, which led or leads to the functioning of the fastenings supplied by SIHGA® failing, SIHGA® shall replace the defective product. Following a check by an appropriate expert, the corresponding replacement product shall be provided to the first buyer by SIHGA® free of charge. The first buyer or other beneficiary of the guarantee themselves is responsible for the costs for the replacement itself, notably also for the removal and installation. In the event of a replacement, irrespective of the period of use of the failed fastening, unless specified otherwise in the individual case, the provision of an equivalent component for the fastening purpose is also possible. The guarantee is not extended by possible guarantee cases.




## Conditions and Requirements

- The resistance against weathering, ozone and UV radiation applies for a period of 23 years under Central European weather conditions to fastening materials made of metal, and for a period of 15 years to fastening materials made of plastic; discolouration of the surface cannot be ruled out and does not justify a guarantee claim here.
- Use of surface treatments, which do not contain organic solvents or solvents with aromatic hydrocarbons (note processing instructions, product and safety datasheets from the manufacturer).
- Processing according to SIHGA® installation instructions and design recommendations in the most recent respective version.
- Compliance with design recommendations for terrace construction, applicable standards in wood and facade construction and with processing recommendations of the wood supplier(s).
- Use in temperatures between -30 °C and +70 °C with static loading.

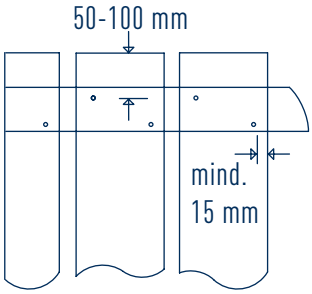
Even if only one of these requirements is not met, a claim under guarantee is excluded. Colour differences are not grounds for a claim. Furthermore, a claim under guarantee is excluded in the event of the following types of use of the respective SIHGA® product:

- In chemically contaminated atmospheres (industry, ...) particularly with sulphur or chlorine compounds such as $H_2SO_4$, HCl, ...
- Use partly or fully in water;
- If the stated temperature range is exceeded.

## Making Claims

After discovering a product defect, a claim must be made immediately to SIHGA® in writing to the exclusion of other claims, providing the proof of purchase, in all cases within 14 days of discovery.
The claiming person must grant the expert from SIHGA® unrestricted access to the site, building or property where the fastening was installed in order to inspect the installation condition, photograph the installed product, and take samples of the fastening subject to the guarantee.
Third parties are not authorised to make statements or assurances on behalf of SIHGA® regarding the quality or usage properties of SIHGA® products, which go beyond the details provided in this guarantee. SIHGA® is not bound by such statements. Austrian law shall apply exclusively to this guarantee.
The exclusive place of jurisdiction for any claims arising from this is the materially competent court for 4600 Wels | Austria. The General Terms and Conditions of SIHGA® GmbH shall apply.

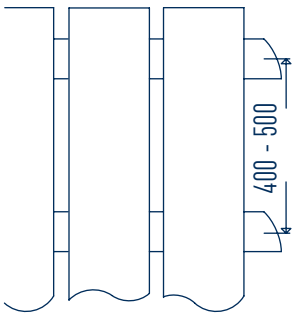
# Design Recommendations - for Terrace Construction




Wood moisture-content must not be more than 16 % ±2 % when laying. Ideally, rift or half-rift goods (planks with standing annual rings) should be used.

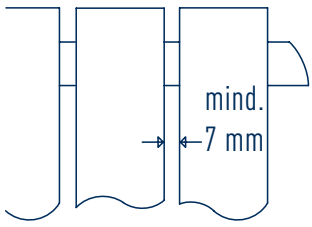
The fastening distance to the end-grain must be at least 50 mm and not more than 100 mm!

For woods high in tannin content, screws may become coated, because of chemical reactions this may lead to corrosion and dark discolouration. In principle, only stainless steel should be used for fastening terraces!



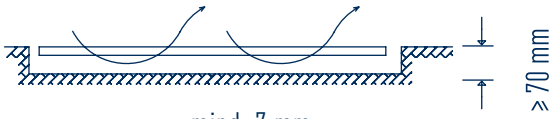

**For the centre distance from the substructure, we recommend, for:**
Thermo-wood and hardwood: 400 - 450 mm
Larch: 400 - 500 mm

Short axial distances ensure that the swell and shrinkage-related warping or distortion of individual terrace planks is limited and that the terrace remains even and obstacle-free. The substructure should be made from TefaFix® T or the same wood type as the planks.

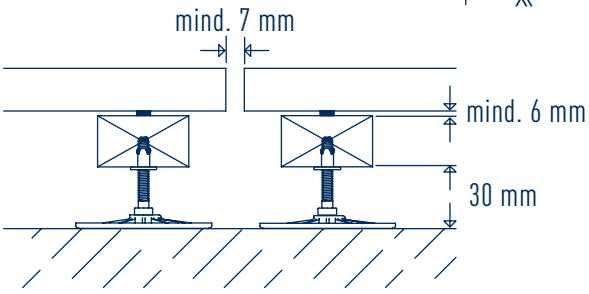



The joint distance for plank widths 90 - 120 mm should be at least 7 mm or 6 % of the plank width!

The planks must not be blocked in the joint!




For recessed terrace structures with a low installation height, a distance from the floor to the top edge of the board of ≥70 mm is required, as well as additional openings in the surface (grids, etc.) to enable ventilation of the terrace structure.



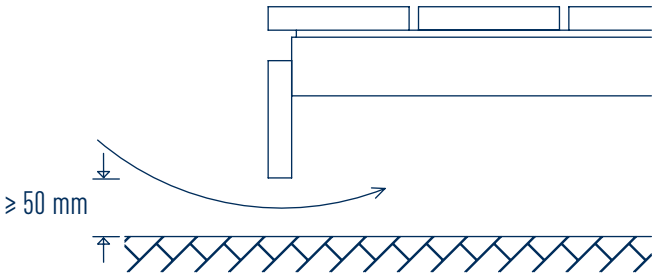

The distance between terrace planks and substructure should be at least 6 mm, in order to guarantee the ventilation of the terrace and to prevent a capillary effect, this is also the case for objects on the terrace.

**SIHGA® TIP:**
With applications close to the pool surround, we recommend L-BohrFix® MB A4 (page 74) for visible or GleitFix® GF CS (page 82) for invisible fastening!

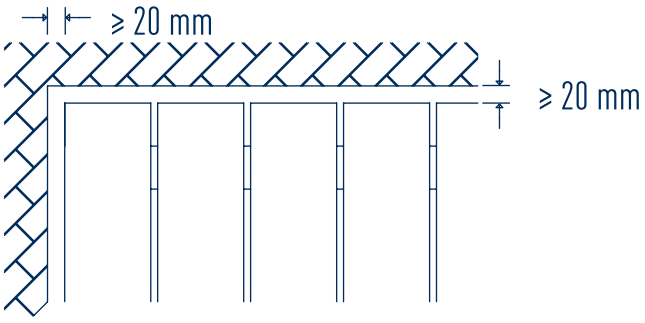
The longitudinal joint of decking planks should not be completed directly on the substructure, but between two substructures. Even with the longitudinal joint, a gap of at least 7 mm must be maintained.

Plank joints on the substructure would lead to increased damp and subsequently to early damage.

There must be a distance of at least 30 mm between the substructure and ground in order to prevent damage due to dampness! This distance should be bridged with adjustable feet or EPDM materials, but never with granulate material or wood. Rising damp in the soil should be prevented.




If the side of the terrace is closed with a cover board, a ventilation opening of ≥50 mm (continuous) must be maintained for ventilation of the terrace construction. The cover board should not touch the ground.




When connecting the terrace to the adjacent building parts, a distance of ≥20 mm must be observed so that the joints cannot close either through dirt or changes to the planks. The unhindered drainage on and beneath the terrace must be permanently guaranteed. The use of drainage grates (TerrassenFix Aqua®) is recommended for this purpose.

The terrace should be cleaned regularly.

**Recommendation Predrill Diameter and Type of Wood**

| Roof Cladding | Substructure | Predrilling | Predrill - ∅ | Recommended Screw |
|---|---|---|---|---|
| Softwood | Softwood | Recommended | ∅ of screw | L-GoFix® MS |
| Hardwood | Hardwood | Required | ∅ of screw +0.5 - 1 mm | L-GoFix® MS or L-BohrFix® MB A4 |
| All | TefaFix®, Symbio-Fix® and Aluminium | Required | ∅ of screw +0.5 - 1 mm | Alu-BohrFix® MB |
| All | TefaFix®, Symbio-Fix® and Aluminium | Not Required* | - | Alu-TeFix® |
| All | All Woods | Not Required* | - | TeFix® |

For wood with high tannin content we recommend L-BohrFix® MB A4 for wood substructure and Alu-TeFix® in A2 for aluminium substructure.
* except for extremely hard wood (e.g. Ipé) with ∅ screw

# HFA inspected




**SIHGA® Terrace Fastening**

© Guggemos

# HFA inspected

SIHGA® is the first and only company that has succeeded in offering all the fasteners required for the construction of a terrace HFA inspected (Holzforschung Austria).
Holzforschung Austria is considered one of the most important institutions for the certification of wood products in the German speaking countries.
Quality, safety and reliability - voluntarily externally monitored.

**The following products have been awarded HFA inspected:**

## GleitFix®

HFA inspected in combination with larch, thermo ash and Accoya

Larch 24-28 x 90-140 mm (VEH AB), substructure-larch 50 x 80 mm
Thermo ash 20-28 x 90-140 mm (VEH AB), substructure-larch 50 x 80 mm
Accoya 20-28 x 90-140 mm, substructure-larch 50 x 80 mm

In order to avoid longitudinal displacement of the planks, each plank must be fastened with at least 3 fastening points (over 3 substructures) when using GleitFix®. If this is not possible, e.g. with short planks, each plank must be fastened with an additional screw from the side or from above.

## TeFix®

HFA inspected in combination with KompeFix®, larch, thermo ash and Accoya

TeFix®:
Larch 24-28 x 90-140 mm (VEH AB), substructure-larch 50 x 80 mm
Thermo ash 20-28 x 90-140 mm (VEH AB), substructure-larch 50 x 80 mm
Accoya 20-28 x 90-140 mm, substructure-larch 50 x 80 mm

TeFix® in combination with KompeFix®:
Larch 24-28 x 90-140 mm (VEH AB), substructure-larch 50 x 80 mm
Thermo ash 20-28 x 90-140 mm (VEH AB), substructure-larch 50 x 80 mm
Accoya 20-28 x 90-140 mm, substructure-larch 50 x 80 mm

## KompeFix® II KF

HFA inspected in combination with TeFix®

## Alu-TeFix®

HFA inspected in combination with TefaFix® and larch

Larch 24-28 x 90-140 mm (VEH AB), substructure TefaFix

## TefaFix®

HFA inspected in combination with Alu-TeFix®, TefaFlex® and TefaBind®

## TefaFlex®

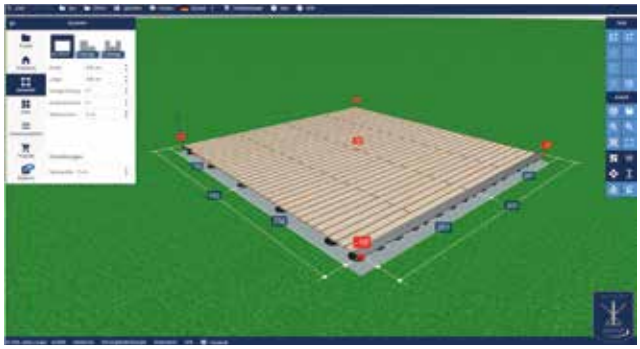
HFA inspected in combination with Alu-TeFix® and TefaFix®

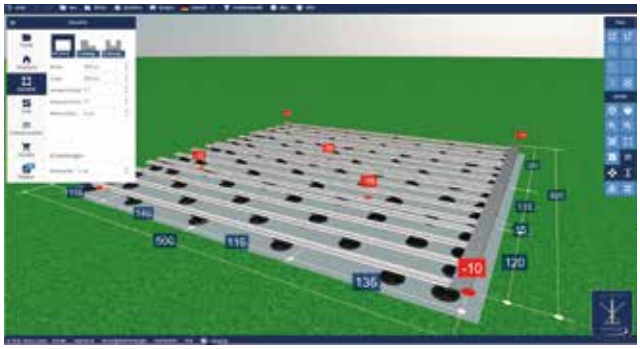
## TefaBind®

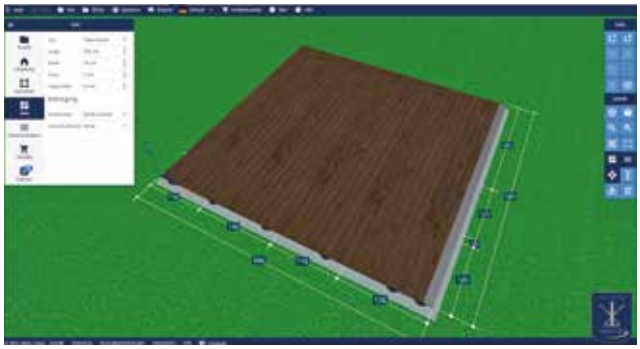
HFA inspected in combination with TefaFix®

# Terrassenplaner®









## New features of Terrace Planner 2.1.9

Freely selectable laying pattern

Position management - several projects can be created

Fixing recommendation

## 3D Planning Software

new terrace planning software, which interacts with the SIHGA® webshop

3 basic forms, but also free forms constructible

angular and round recesses possible

## Unique Possibilities

individual height input of the substrate possible

the adjustable feet and adapter are automatically calculated

terrace surface inclinable

edge definition: drainage grating, cover plate or open edge

## Data Base

29 types of terrace covering can be chosen (free choice of dimension)

6 different substructure types (free choice of dimension)

all products including accessories

continuous adaption to customer requirements

## Visualisation

Upload your photo and place the terrace in front of it or use an existing photo in the software.

## Output

quantities of wood,
substructure, fasteners,
incl. schematic laying plans

## SIHGA® TIP:

Plan your project and order the required components in the webshop at www.sihga.com.
Languages switchable between German, English, French, Italian and Polish.

# Alu-BohrFix® MB





**Alu-BohrFix® MB made of hardened, stainless steel**

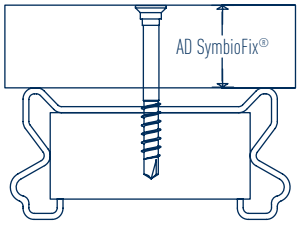
| SIHGA® Feature | YOUR benefit |
|---|---|
| attaches selected types of wood to aluminium profiles | for attaching on to aluminium profiles with up to < 4 mm wall thickness |
| extra-long drill bit | attaches without predrilling and substructure |
| made of hardened, stainless steel | non-corrosive attachment and is extremely breakproof |
| Multi-stage head with a small head diameter 8,5 mm | noble appearance, noncutting screwed connection |
| including SIHGAFIX® non-corrosive, system pin and installation instructions | time-saving, practical, precise, including all accessories, SIHGAFIX® rustproof prevents extraneous rust and also screws into deep grooves |
| quantity determination | SIHGA® will do the calculation for you |

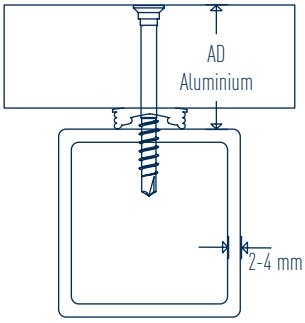
| SIHGA® | | Dimension | SymbioFix® attachment part | | Aluminium attachment part | |
|---|---|---|---|---|---|---|
| montagepack | | Alu-BohrFix® MB | from | to | from | to |
| Art. No. | PU | $d_1$ x L | [mm] | [mm] | [mm] | [mm] |
| 26006 | 200 | **5,5 x 46** | 21 | 27 | 28 | 33 |
| 26016 | 200 | **5,5 x 51** | 27 | 34 | 33 | 38 |
| 26026 | 200 | **5,5 x 61** | 36 | 43 | 43 | 48 |

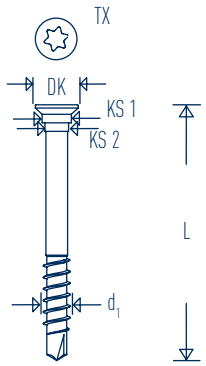
**Dimensions [mm]**

Alu-BohrFix® MB

| $d_1$ | TX | DK | KS 1 | KS 1 |
|---|---|---|---|---|
| 5,5 | 25 | 8,5 | 5,8 | 4,7 |








## SIHGA® TIP:

To extend the life of timber constructions, we recommend using KompeFix® and noting the design recommendations

# Alu-TeFix®





**Alu-TeFix® made of hardened stainless steel or in A2**





ETA-20/0558

| SIHGA® Feature | YOUR Benefit |
|---|---|
| Alu-TeFix® in A2 fastens wood on aluminium (except SymbioFix® SFT) 2-3 mm without predrilling | prevents the formation of cracks or splitting in almost all hardwood and thermo-wood; saves working time |
| SIHGA® drill wings with special shape | pre-drills the boards at 6 mm and prevents lifting of the board while screwing; drilling wings break off when penetrating into the aluminium |
| SIHGA® further-developed multi-stage head | no displacement or chipping of the wood due to an extra thin head and saw tooth corrugation |
| in combination with KompeFix® II KF on conventional aluminium and in combination with TefaFlex® T/F on TefaFix® T/F the perfect solution | increases the lifetime of the wood and the screw |
| including SIHGAFIX® stainless steel, Systemstift® and installation instructions | time-saving, practical, precise; all accessories are included |
| quantity calculation | https://bemessung.sihga.com/terrace |
| HFA inspected in combination with TefaFix® and larch | for details please see page 66 |

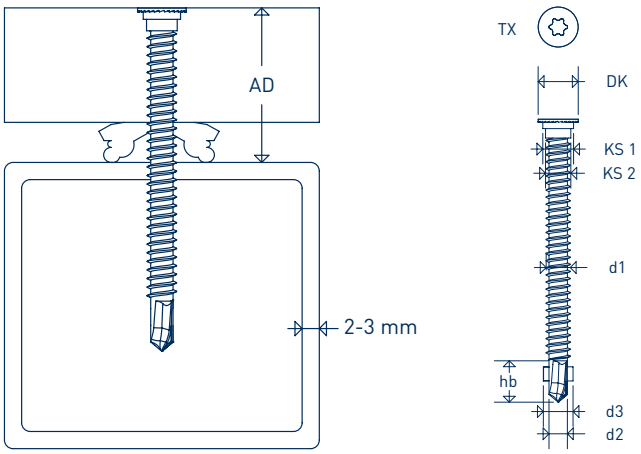
| SIHGA® | | Dimension | Add-on Part up to | Characteristic Values* | | | Substructure |
|---|---|---|---|---|---|---|---|
| montagepack | | Alu-TeFix® | AD | Tensile Force $F_1$ [kN] | | Shear Force $F_2$ [kN] | TefaFix®T/F |
| Art. Nr. | PU | d1 x L | [mm] | Head | Thread | Alu-Wood | |
| 54016 | 200 | **5,0 x 51** | 33 | 1,96 | 1,30 | 2,95 | yes |
| 54026 | 200 | **5,0 x 61** | 43 | 1,96 | 1,30 | 3,22 | yes |

| SIHGA® | | Dimension | Add-on Part up to | Characteristic Values* | | | Substructure | |
|---|---|---|---|---|---|---|---|---|
| montagepack | | Alu-TeFix® A2 | AD | Tensile Force $F_1$ [kN] | | Shear Force $F_2$ [kN] | TefaFix®T/F | Alu 2-3 mm |
| Art. Nr. | PU | d1 x L | [mm] | Head | Thread | Alu-Wood | | |
| 54066 | 200 | **5,0 x 51** | 33 | 1,96 | 0,85 | 1,40 | yes | yes |
| 54076 | 200 | **5,0 x 61** | 43 | 1,96 | 0,85 | 1,40 | yes | yes |

* characteristic values for dimensioning according to EC 5 and for strength class ρk 490 kg/m³ (Larch)

**Dimensions [mm] Alu-TeFix®**

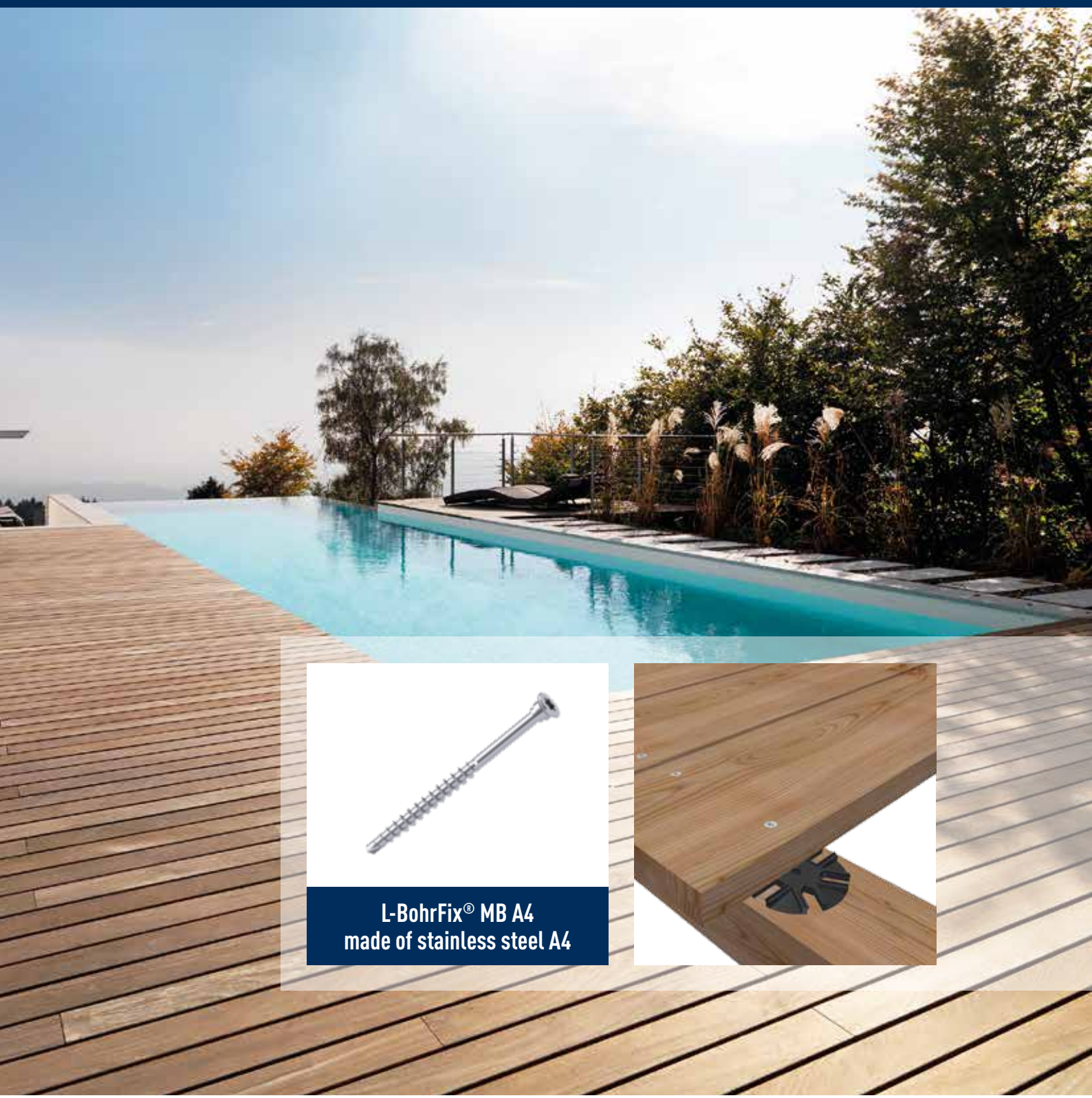
| d1 | TX | DK | KS 1 | KS 2 | d2 | d3 | hb |
|---|---|---|---|---|---|---|---|
| 5,0 | 20 | 8,5 | 6,5 | 5,4 | 3,9 | 6,4 | 10 |




## SIHGA® TIP:

When used in combination with woods that contain a lot of tannins (e. g. cumaru, oak, robinia, garapa, ...) we recommend Alu-TeFix® in A2.

# L-BohrFix® MB A4

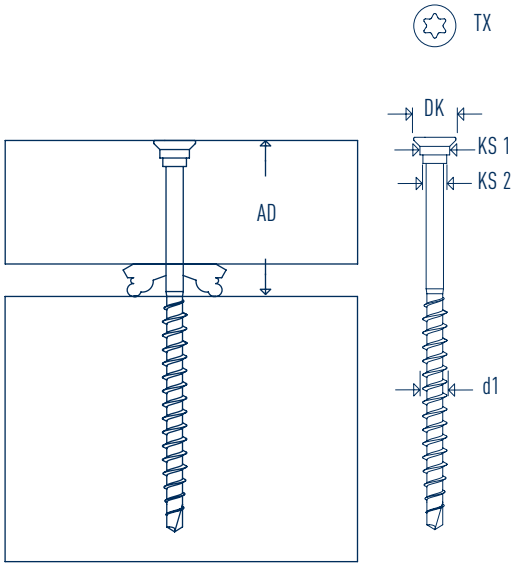




**L-BohrFix® MB A4**
**made of stainless steel A4**

| SIHGA® Feature | YOUR Benefit |
|---|---|
| fastens all types of wood, even when exposed to salt and chlorine | special drill bit prevents the substructure from splitting |
| drill bit with special shape | prevents cracks in the wood |
| made from stainless steel A4 | fastens without rusting, also in acidic woods and when exposed to salt and chlorine, and securely on aluminium up to 3 mm wall thickness |
| material highly resistant to corrosion | optimally suited for use close to the pool surround |
| multi-stage head with small head diameter of 8.5 mm | elegant look, non-cutting screwing |
| including SIHGAFIX® stainless steel, Systemstift® and installation instructions | time-saving, practical, precise, all accessories enclosed; SIHGAFIX® stainless steel prevents rust from external sources and also enables screwing into deep grooves |
| calculation of quantity | https://bemessung.sihga.com/terrace |

| SIHGA® | | Dimension | Installation Part |
|---|---|---|---|
| montagepack | | L-BohrFix® MB A4 | AD |
| Art. No. | PU | d1 x L | [mm] |
| 37766 | 200 | **5,5 x 60** | 24 |
| 37776 | 200 | **5,5 x 70** | 28 |
| 37786 | 200 | **5,5 x 80** | 32 |



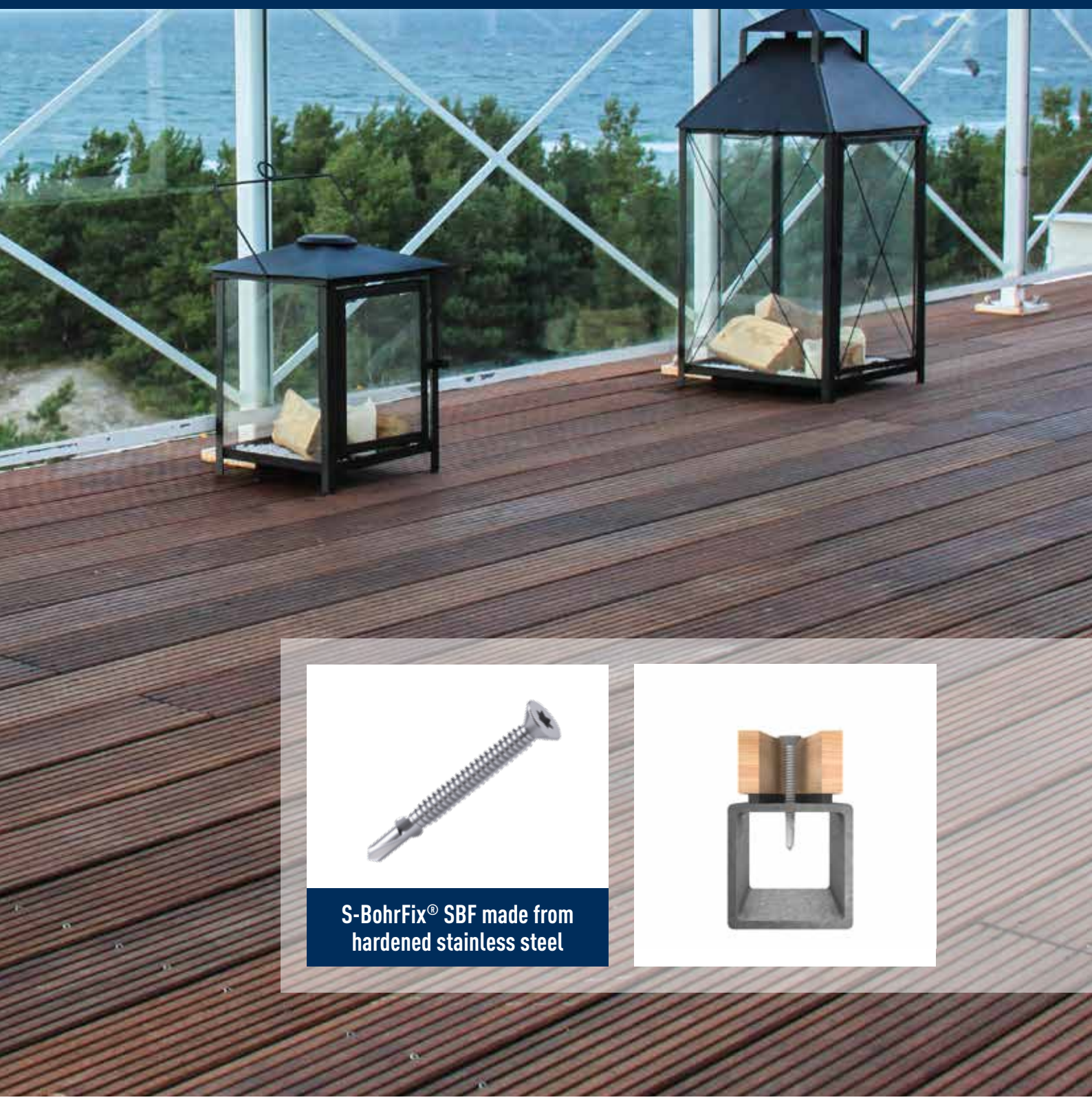

**Dimension [mm]**
L-BohrFix® MB A4

| d1 | TX | DK | KS 1 | KS2 |
|---|---|---|---|---|
| 5,5 | 25 | 8,5 | 5,8 | 4,7 |

## SIHGA® TIP:

To extend the life of timber constructions, we recommend using KompeFix® II KF and noting the design recommendations (page 64).

# S-BohrFix® SBF



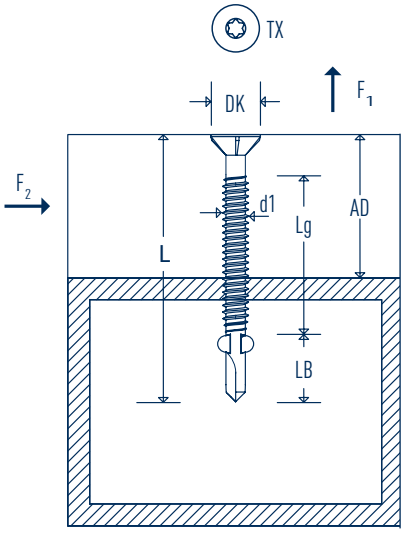


S-BohrFix® SBF made from hardened stainless steel

| SIHGA® Feature | YOUR Benefit |
|---|---|
| fastens wood to steel without pre-drilling | simply screw through up to 5 mm thick steel in one working step |
| drill bit with special shape and thread lock flanks | fastens woods up to 90 mm to steel in one step |
| made from hardened stainless steel | rust-free fastening, is extremely break-proof |
| including SIHGAFIX® stainless steel, Systemstift® and installation instructions | time-saving, practical, precise, all accessories enclosed, SIHGAFIX® stainless steel prevents rust from external sources and also screws into deep grooves |
| design values | https://www.sihga.com/service/online-planung/ |

| SIHGA® | | Dimension | Installation Part | Thread | Drilling Capacity | Recommended Loads | |
|---|---|---|---|---|---|---|---|
| montagepack | | S-BohrFix® SBF | AD | Lg | Steel | Tensile Force $F_1$ | Shear Force $F_2$ |
| Art. No. | PU | d1 x L | [mm] | [mm] | [mm] | [kN] | [kN] |
| 31236 | 100 | **4,8 x 38** | 20 | 22 | 2,2 | 0,45 | 0,64 |
| 31246 | 100 | **5,5 x 45** | 25 | 26 | 4,0 | 0,61 | 0,64 |
| 31256 | 100 | **5,5 x 50** | 30 | 32 | 4,0 | 0,61 | 0,84 |
| 31266 | 100 | **6,3 x 60** | 35 | 31 | 5,0 | 0,72 | 0,84 |
| 31276 | 100 | **6,3 x 70** | 45 | 41 | 5,0 | 0,72 | 0,84 |
| 31286 | 100 | **6,3 x 85** | 60 | 46 | 5,0 | 0,72 | 0,84 |
| 31296 | 100 | **6,3 x 110** | 85 | 46 | 5,0 | 0,72 | 0,84 |

Due to the many different metal qualities, the drilling capacity must be determined on site by trial screwing.




**Dimension [mm]**
S-BohrFix® SBF

| d1 | TX | DK | LB |
|---|---|---|---|
| 4,8 | 25 | 9,5 | 13,0 |
| 5,5 | 30 | 11,0 | 15,0 |
| 6,3 | 30 | 12,0 | 16,0 |

## SIHGA® TIP:

Due to the swell and shrinkage behaviour of wood, only substructure timber should be fastened to steel, and then the surface timber on top.

# DielenFix®

SIHGA



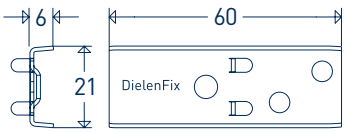
DielenFix®



| SIHGA® Feature | YOUR Benefit |
|---|---|
| fastens planks invisibly screwed; developed, patented and made in Austria | elegant look and long-lasting fastening |
| suitable for almost all wood types (List of wood types at www.sihga.com) | reduces fault ratio when delivering the material to the construction site, this saves time and reduces storage costs |
| fastening screw made from hardened stainless steel | rust-free fastening, extremely break-proof |
| planks remain undamaged on all visible surfaces | the timber is screwed from below, this results in a longer lifespan and prevents rot |
| compensates for the swelling and shrinkage of the wood | reduces the crack and break behaviour of the timber during these natural processes |
| suitable for all plank widths | only one system for different plank widths |
| selection of three screw lengths | optimised fastening of the different plank thicknesses from 19 mm |
| variable adjustment of the visible joint (0 - 15 mm) | suitable for every developer, FugiFix® is the ideal assistant here (page 80) |
| connector height with 6 mm for optimal ventilation | ensures optimum constructive wood protection; prevents accumulations of water between the plank and substructure |
| includes SIHGAFIX® stainless steel from hardened stainless steel, BohrFix® with drill bit and installation instructions | SIHGAFIX® enables screwing in deep grooves and prevents rust from external sources; time-saving, practical, precise, all accessories enclosed |
| two screw points per DielenFix® on the plank | creates the same stability as when visibly screwed from above, and prevents warping of the timber |
| with joint spacing ≥8 mm | individual planks can be disassembled or replaced |

| SIHGA® objektpack® | | Dimension DielenFix® DF | Plank Thickness mind. | Average Quantity/m²* |
|---|---|---|---|---|
| Art. No. | PU | Type | [mm] | Pieces |
| 34119 | 300 | **DF 17** | 19 | 33 |
| 34129 | 300 | **DF 22** | 24 | 33 |
| 34139 | 300 | **DF 28** | 30 | 33 |

*assuming: Axial distance substructure = 0.5 m and plank width = 12 cm
calculation quantity = m² : distance substructure [m] : (width terrace plank [m] + joint [m] x 2



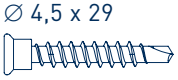

BohrFix® FB

∅ 4,2 x 17/22/28



L-BohrFix® FB

∅ 4,5 x 29



## SIHGA® TIP:

Online calculation at www.sihga.com (terrace); as substructure we recommend the TefaFix® T (page 110).

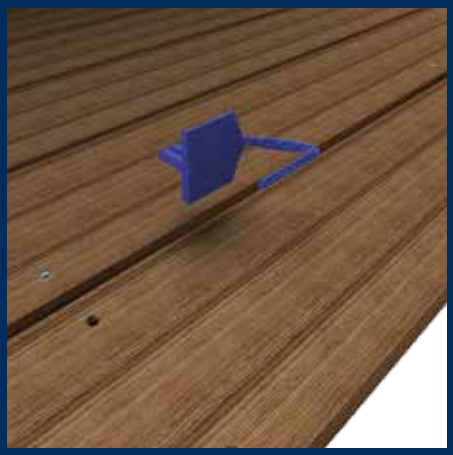
# FugiFix® FF

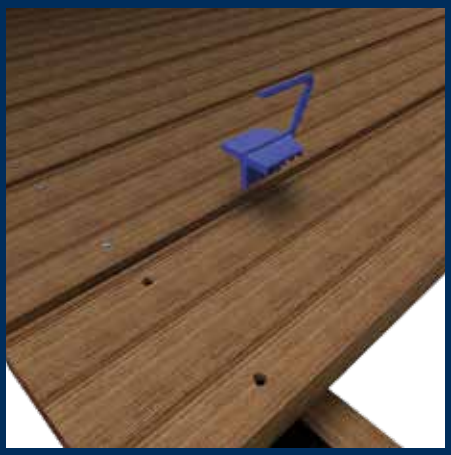


FugiFix® FF made of SIHGAMID

| SIHGA® Feature | YOUR Benefit |
|---|---|
| universal joint spacer for terraces | joint widths of either 5, 6, 7 or 8 mm can be set quickly |
| made of SIHGAMID, the glass fibre reinforced plastic | extremely heat-, frost- and UV-resistant |
| because of the special geometry | the FugiFix® FF cannot fall into the joint and can easily be removed again |

| SIHGA® montagepack Art. No. | PU | Dimension FugiFix® Type | Joint Widths [mm] |
|---|---|---|---|
| 34966 | 5 | **FF** | 5, 6, 7, 8 |





## SIHGA® TIP:

To extend the life of timber constructions, we recommend using KompeFix® II KF and noting the design recommendations (page 64).

# GleitFix® GF





GleitFix® GF

| SIHGA® Feature | YOUR Benefit |
|---|---|
| fastens planks invisibly screwed; developed, patented and made in Austria | elegant look and long-lasting fastening |
| planks remain undamaged on all visible surfaces | timber is screwed from below, this results in a longer lifespan and prevents rot, as well as direct weathering |
| a product for almost every type of wood, reduces storage costs (List of wood types at www.sihga.com) | very large range of applications |
| special compensation system compensates for the natural swelling and shrinkage of the planks | reduces the crack and break behaviour of the timber during these natural processes |
| only one system for plank widths from 90 to 150 mm | suitable for all plank widths |
| tested stainless steel system screws with drill bit enclosed | only one system for timber and aluminium substructure; avoids hairline cracks on the top side of the plank |
| made of SIHGAMID, the glass fibre reinforced plastic | extremely heat-, frost- and UV-resistant |
| optionally also with tested stainless steel system screws with drill bit in A4 (GleitFix® GF CS) | stainless steel A4 BohrFix® screws for increased risk of corrosion when exposed to salt and chlorine |
| selection of three screw lengths | optimised fastening of varying plank thicknesses from 19 mm |
| variable adjustment of the visible joint (0 - 15 mm) | suitable for every developer, FugiFix® is the ideal assistant here (page 80) |
| HFA inspected in combination with larch, thermo ash and Accoya | for details please see page 66 |

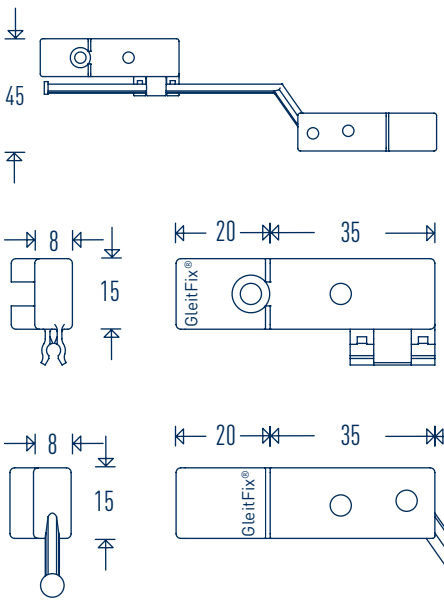




## SIHGA® TIP:

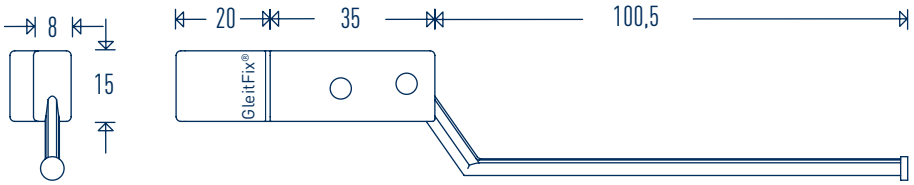
As substructure we recommend using TefaFix® T and noting the design recommendations (page 64).

| SIHGA® Feature | YOUR Benefit |
|---|---|
| connector height with 8 mm for optimal ventilation | ensures optimum constructive wood protection; prevents accumulations of water between the plank and substructure |
| with joint spacing ≥8 mm | individual planks can be disassembled or replaced |
| includes SIHGAFIX® stainless steel, from hardened stainless steel BohrFix® FB with drill bit and installation instructions | no rust from external sources, screws do not shear or break; time-saving, practical, precise, all accessories are enclosed |



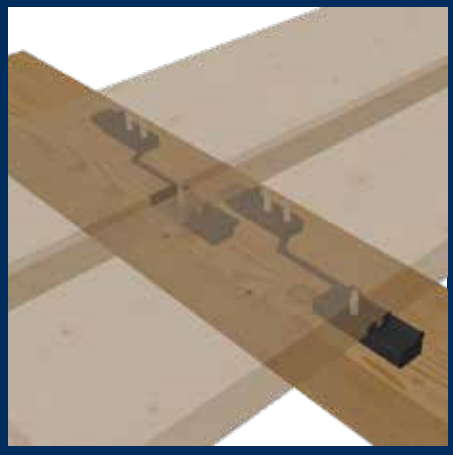

| SIHGA® objektpack® | | Dimension GleitFix® GF | Plank Thickness mind. | Average Quantity / m²* |
|---|---|---|---|---|
| Art. No. | PU | Type | [mm] | Pieces |
| 34419 | 150 | **GF 17** | 19 | 16 |
| 34449 | 150 | **GF 22** | 24 | 16 |
| 34479 | 150 | **GF 28** | 30 | 16 |
| 34519 | 150 | **GF 17 CS** | 19 | 16 |
| 34549 | 150 | **GF 22 CS** | 24 | 16 |
| 34579 | 150 | **GF 28 CS** | 30 | 16 |

*assuming: Axial distance substructure = 0.5 m and plank width = 12 cm
calculation of quantity = m² : distance substructure [m] : (width terrace plank + joint [m])




BohrFix® FB
∅ 4,2 x 17/22/28



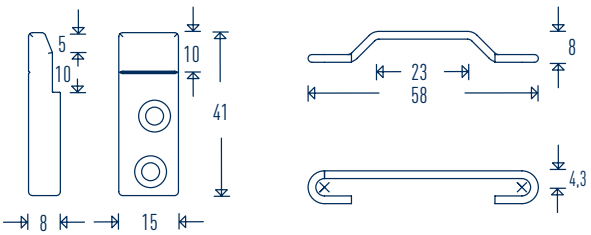


## SIHGA® TIP:

For fastening start and end planks we recommend GleitFix® AE.

# GleitFix® AE

| SIHGA® Feature | YOUR Benefit |
|---|---|
| screw-fastening of start and end planks invisible | elegant look and long-lasting fastening |
| planks remain undamaged on all visible surfaces | timber is screwed from below, this results in a longer lifespan and prevents rot, as well as direct weathering |
| special compensation system compensates for the natural swelling and shrinkage of the planks | reduces the crack and break behaviour of the timber during these natural processes |
| optionally also with tested stainless steel system screws with drill bit in A4 (GleitFix® AE CS) | stainless steel A4 BohrFix® FB screws for increased risk of corrosion when exposed to salt and chlorine |
| includes SIHGAFIX® stainless steel, from hardened stainless steel BohrFix® FB with drill bit and installation instructions | no rust from external sources, screws do not shear or break; time-saving, practical, precise, all accessories are enclosed |



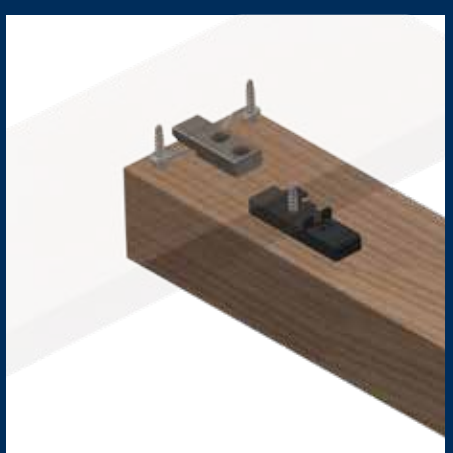

BohrFix® FB
∅ 4,2 x 17/22/28



| SIHGA® montagepack Art. No. | PU | Dimension GleitFix® AE Type | Plank Thickness min. [mm] |
|---|---|---|---|
| 34626 | 24 | **AE 17** | 19 |
| 34656 | 24 | **AE 22** | 24 |
| 34686 | 24 | **AE 28** | 30 |
| 34726 | 24 | **AE 17 CS** | 19 |
| 34756 | 24 | **AE 22 CS** | 24 |
| 34786 | 24 | **AE 28 CS** | 30 |



GleitFix® AE



## SIHGA® TIP:

GleitFix® AE is also compatible with SenoFix® FT*.
* Available from specialist timber dealers

# JustiFix® JV

| SIHGA® Feature | YOUR Benefit |
|---|---|
| the fleece under the terrace | hinders plant growth and is water-permeable |
| 1.6 x 10 metre area | 16 m² easy to lay |
| monitored production from polypropylene, with a special recipe | remains permanently dimensionally stable, is heat-, frost- and UV-resistant |

| SIHGA® montagepack | | Dimension JustiFix® JV | Grammage | Dimension Width x Length | Area |
|---|---|---|---|---|---|
| Art. No. | PU | Type | [g/m²] | [m] | [m²] |
| 34956 | 1 | **JV** | 50 | 1,6 x 10 | 16 |



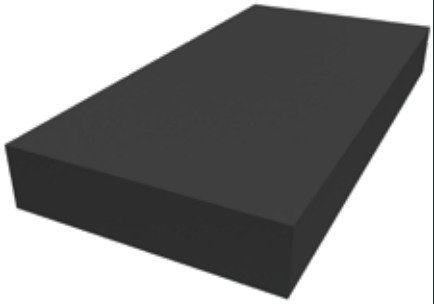
**JustiFix® JV made from polypropylene**



# JustiFix® J

| SIHGA® Feature | YOUR Benefit |
|---|---|
| waterproof space between substructure and foundation | as a result of this distance, the substructure remains dry and the terrace is ventilated |
| manufactured from high quality, black EPDM special rubber | remains permanently dimensionally stable, is heat-, frost- and UV-resistant |
| made in Austria | local quality and added-value |
| minimises vibrations | increases walking comfort on the terrace |
| is just placed down, three material thicknesses to choose from | time-saving, no installation work, can be stacked as desired |
| including Systemstift® and installation instructions | is time-saving and enclosed for practicality |

| SIHGA® montagepack Art. No. | PU | Dimension JustiFix® J Type | Dimension L x B x H [mm] |
|---|---|---|---|
| 41206 | 90 | **J 3H** | 80 x 40 x 3 |
| 41216 | 60 | **J 5H** | 80 x 40 x 5 |
| 41226 | 30 | **J 10H** | 80 x 40 x 10 |



JustiFix® J made from EPDM



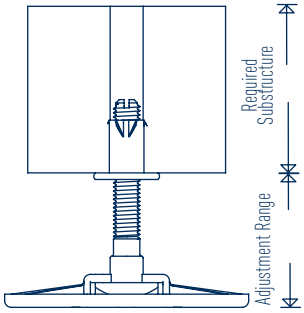
# JustiFix® II JM



**JustiFix® II JM**
**the original**

| SIHGA® Feature | YOUR Benefit |
|---|---|
| height-adjustable distance from 25 to 80 mm between substructure (with the exception of TefaFix® T) and foundation | this adjustable foot saves up to 50 % working time compared to individual solutions, the substructure remains dry and the terrace breathes |
| developed, patented and made in Austria | local quality, experience from more than 14 years of terrace construction included |
| only for solid foundations, paving, concrete, ... (not on insulating materials or flat roof insulation) | versatile, only three models for the entire range |
| articulated mounting of the base plate | compensates for floor unevenness |
| minimises vibrations | increases walking comfort on the terrace |
| load capacity per piece 1.20 kN | quantity calculation: approx. 4 units/m² |
| slot pattern in the header and nuts in the footer | easy height adjustment from above with screwdriver or with open-end spanner SW 10 from below |

| SIHGA® | | Dimension | Adjustment Range | | Dimensions/ Base plate | | Required Substructure |
|---|---|---|---|---|---|---|---|
| montagepack | | JustiFix® II JM | [mm] | | [mm] | | [mm] |
| Art. No. | PU | Type | from | to | Length | Width | min. |
| 40846 | 40 | **JM 40** | 25 | 40 | 100 | 74 | 25 |
| 40866 | 40 | **JM 60** | 25 | 60 | 100 | 74 | 45 |
| 40886 | 40 | **JM 80** | 25 | 80 | 100 | 74 | 65 |






## SIHGA® TIP:

Drill substructure with ∅ 10 mm. Note design recommendations (page 64).

# Orakelix®

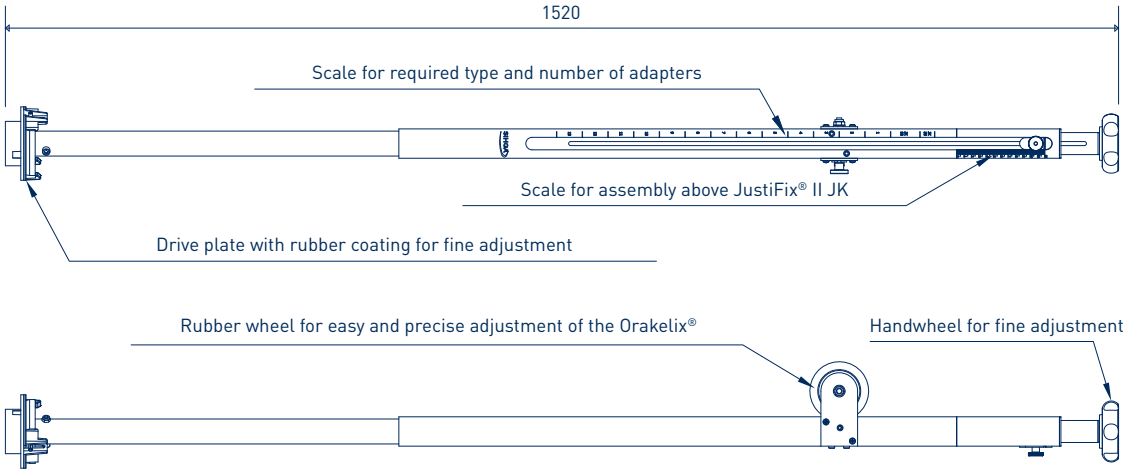


Orakelix®

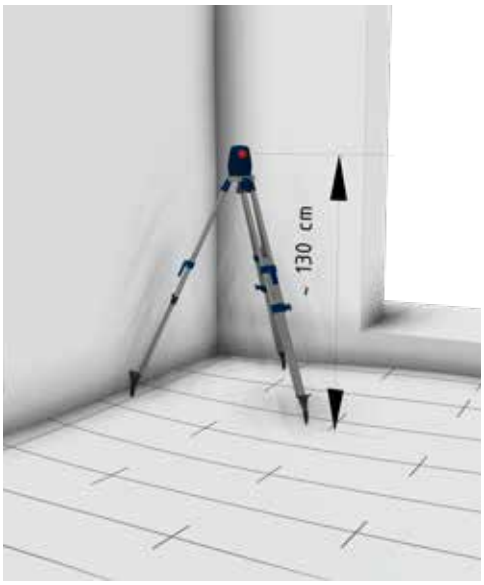


| SIHGA® Feature | YOUR Benefit |
|---|---|
| Orakelix® is a groundbreaking tool for terrace builders | It simplifies the precise prediction of JustiFix® terrace bearings, enables accurate height determination and optimizes ergonomics when adjusting the terrace bearings |
| unique combination of inner and outer aluminum tube | enables precise determination of the altitude, exact reading of the JustiFix® type and any associated adapter, no annoying turning up and down is required |
| sophisticated construction with internal rotating mechanism | allows precise adjustment of the terrace bearings while standing, without having to bend down |
| sets a new standard in terrace construction | offers a time saving of 20 - 30 % during adjustment, protects the back and contributes to a more pleasant working environment |
| perfect for taking measurements | In order to create an accurate quote for your terrace project, it is recommended to use the Orakelix® during the planning phase |
| Reduction of the product range | In the complete system with the JustiFix® II JK including adapter, all heights from 30 - 500 mm are covered with three products |
| developed, patented and manufactured in Austria | highest European quality and added value |
| made of aluminum and anodized | durable, dimensionally stable quality |
| including carrying bag and assembly instructions | time-saving, practical, precise; all accessories are included |

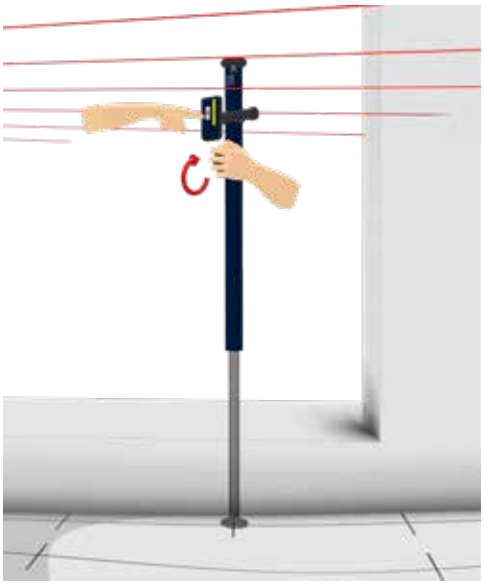
| SIHGA® | | Orakelix® | |
|---|---|---|---|
| Paket | | Length | Weight |
| Art. No. | PU | [cm] | [kg] |
| 55536 | 1 | **152** | **3,3** |



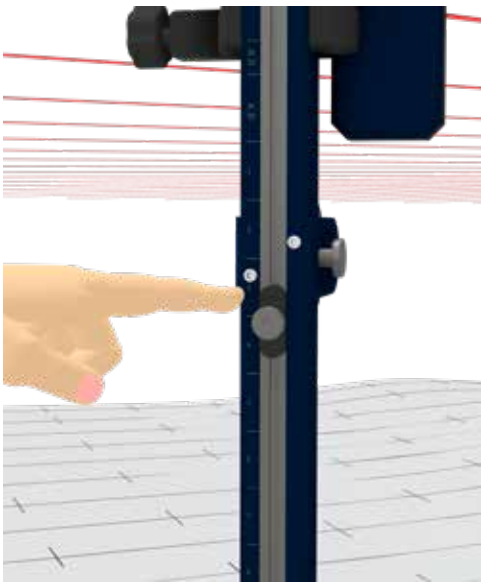
Laser system with receiver (on site)



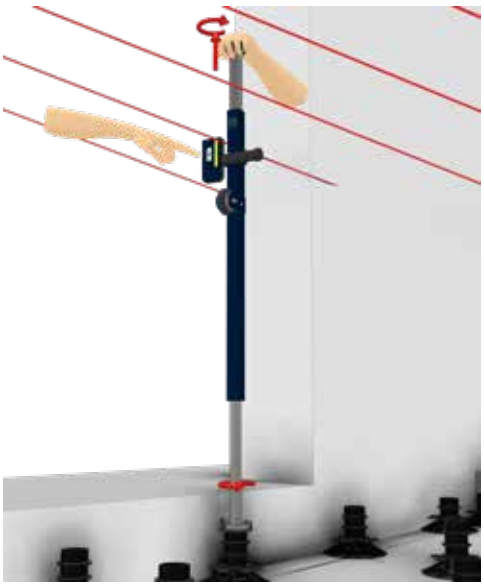

Determination JustiFix® II JK



Reading the JustiFix® II JK



Fine tuning



## SIHGA® TIP:

Orakelix® is compatible with most laser levels equipped with receivers.
Laser equipment is not included.

# JustiFix® II JK H / Alu

SIHGA





JustiFix® II JK 50 H



JustiFix® II JK 90 H

© DAS GERSTL Family Retreat - Florian Andergassen

| SIHGA® Feature | YOUR Benefit |
|---|---|
| Height-adjustable distance between substructure and each foundation | this adjustable foot saves 70% of working time compared to individual solutions, the substructure stays dry and the terrace is ventilated |
| Upper part for wooden substructure; with integrated level adjustment | versatile, the wooden substructure is simply attached to the side of the upper part, compensates for up to 3% gradient, easy to read in the table |
| Upper part for TefaFix® T and SymbioFix® SFT; with integrated level compensation | versatile, the aluminium substructure is simply clicked in, compensates for gradients of up to 3%, easy to read in the table |
| 30 to 545 mm height adjustment | two basic models for individual use, can be varied with JustiFix® adapter JA 35 or JA 70 |
| JustiFix® adapter JA 35 or JA 70 for JustiFix® II JK 90 wood (H) / aluminum (Alu) 35 mm or 70 mm extendable | the perfect addition to the adjustable foot; JustiFix® Adapter JA is simply plugged in; this extends the height adjustment between the substructure and the foundation to up to 545 mm |
| made in Austria | highest European quality and added value |
| manufactured from polypropylene in a special recipe under supervision | remains permanently dimensionally stable, is heat, frost and UV resistant |
| Base plate with 210 mm diameter and rounded edge | large support surface also for unpaved surfaces, rounded base to protect the films underneath |
| Load capacity per piece max. 6.0 kN | on paved and unpaved surfaces; 2 - 3 pieces per $m^2$ |

| SIHGA® montagepack | | Dimension JustiFix® II JK | Adjustment range from | to | Support surface Diameter |
|---|---|---|---|---|---|
| Art. No. | PU | Type | [mm] | | [mm] |
| 33336 | 5 | **50 H** | 30 | 50 | 210 |
| 33366 | 5 | **90 H** | 50 | 90 | 210 |
| 33436 | 5 | **50 Alu** | 30 | 50 | 210 |
| 33446 | 5 | **90 Alu** | 50 | 90 | 210 |



## SIHGA® TIP:

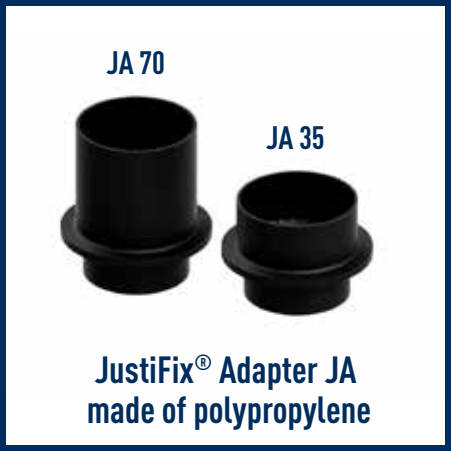
All models compatible with Orakelix® leveling rod. Observe construction recommendations (system catalog p. 64). On flat roofs in combination with Justifix® K.

# JustiFix® Adapter JA

| SIHGA® montagepack | | Adapter JustiFix® JA | Height |
|---|---|---|---|
| Art. No. | PU | Type | [mm] |
| 33386 | 5 | **35** | 35 |
| 33396 | 8 | **70** | 70 |

**Extension with JustiFix® adapter JA 35 or JA 70**

| Dimension | | Adapter | | | Adjustment range | |
|---|---|---|---|---|---|---|
| JustiFix® II JK | | JA 35 | | JA 70 | from | to |
| Type | | Amount | | Amount | [mm] | |
| JustiFix® II JK 90 H/Alu | + | **1 x JA 35** | | | 85 | 125 |
| JustiFix® II JK 90 H/Alu | + | **2 x JA 35** | | **1 x JA 70** | 120 | 160 |
| JustiFix® II JK 90 H/Alu | + | **3 x JA 35** | | | 155 | 195 |
| JustiFix® II JK 90 H/Alu | + | **4 x JA 35** | | **2 x JA 70** | 190 | 230 |
| JustiFix® II JK 90 H/Alu | + | **5 x JA 35** | | | 225 | 265 |
| JustiFix® II JK 90 H/Alu | + | **6 x JA 35** | | **3 x JA 70** | 260 | 300 |
| JustiFix® II JK 90 H/Alu | + | **7 x JA 35** | or | | 295 | 335 |
| JustiFix® II JK 90 H/Alu | + | **8 x JA 35** | | **4 x JA 70** | 330 | 370 |
| JustiFix® II JK 90 H/Alu | + | **9 x JA 35** | | | 365 | 405 |
| JustiFix® II JK 90 H/Alu | + | **10 x JA 35** | | **5 x JA 70** | 400 | 440 |
| JustiFix® II JK 90 H/Alu | + | **11 x JA 35** | | | 435 | 475 |
| JustiFix® II JK 90 H/Alu | + | **12 x JA 35** | | **6 x JA 70** | 470 | 510 |
| JustiFix® II JK 90 H/Alu | + | **13 x JA 35** | | | 505 | 545 |




**JustiFix® Adapter JA made of polypropylene**




## SIHGA® TIP:

Observe design recommendations (system catalogue p. 64).

# JustiFix® K



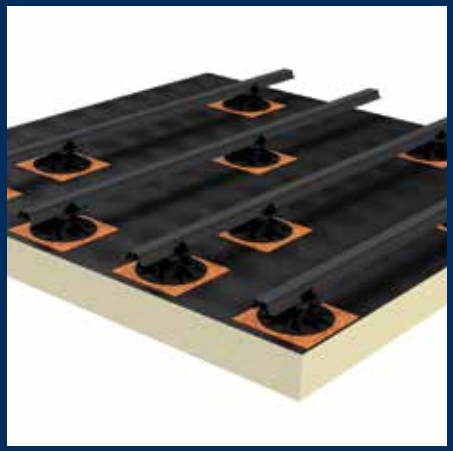


**JustiFix® K**
**made from cork**

# JustiFix® K

| SIHGA® Feature | YOUR Benefit |
|---|---|
| cork interlayer as protection for flat roof foils | protects against mechanical damage to the sealing level |
| does not contain any plasticisers | prevents a plasticizer migration between flat roof foil and adjustable feet |
| dimensions 250 x 250 x 2 mm | optimal for adjustment feet JustiFix® (II) JK |
| made of chemically neutral material | cork is resistant to moisture, does not rot and is resistant against most acids |
| cork as a flexible material | inhibits impact sound, noise-insulating is non-slip and pressure-stable |
| quantity calculation per $m^2$ | 1 : distance substructure in m : distance of the terrace feet |

| SIHGA® montagepack | | Dimension L x B x H |
|---|---|---|
| Art. No. | PU | [mm] |
| 41256 | 20 | 250 x 250 x 2 |



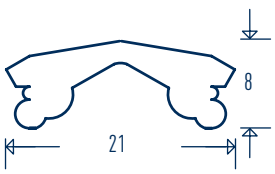
## SIHGA® TIP:

Plasticizer migration may occur between EPDM films and JustiFix® JK, so JustiFix® K should be used.

# KompeFix® II KF

| SIHGA® Feature | YOUR Benefit |
|---|---|
| universal, constructive wood protection for terraces with height 8 mm and width 21 mm | creates distance between the woods; thereby allowing them to breathe and increasing their lifespan |
| developed, patented and made in Austria | local quality, experience from more than 14 years of terrace construction included |
| the 4.5 metre long roll is simply rolled out | fast and easy, can be fixed as desired (screwable) and cut to length |
| helps to seal the screw | increases the service life of the construction |
| the pre-load effect integrated through the specific shape compensates for the swelling and shrinkage of the timber | enhances walking comfort on the terrace |
| monitored production from polyvinyl chloride, with a special recipe | remains permanently dimensionally stable, is heat-, frost- and UV-resistant |
| quantity calculation per $m^2$ | 1 : distance substructure [m] : 4.5 |
| includes installation instructions | is time-saving and enclosed for practicality |
| HFA inspected in combination with TeFix® | for details please see page 66 |

| SIHGA® montagepack | | Dimension KompeFix® | Dimension [mm] | | |
|---|---|---|---|---|---|
| Art. No. | PU | Type | Width | Height | Length |
| 41006 | 8 x 4,5 m | **II KF** | 21 | 8 | 4500 |






**KompeFix® II KF made from polyvinylchloride**



# L-GoFix® MS





**L-GoFix® MS made from hardened stainless steel**



**L-GoFix® MS with additional SC 9 coating**

| SIHGA® Feature | YOUR Benefit |
|---|---|
| also attaches coverings made out of hard and thermo-wood | creates a perfect look, with these woods additional pre-drilling is recommended |
| multi-stage head with small head diameter | high constructive wood protection and refined surface as a result of the plane head |
| special thread angle with sharp thread edges | high extraction value |
| SIHGA® point with special shape | guarantees fast setting of screws |
| SIHGA® ribs on shaft and slip coating | light, fast rotation and optimum fit in the wood are guaranteed |
| made from hardened stainless steel | rust-free fastening, extremely break-proof |
| also available with black (SC 9 coating) look | optimum on dark materials, or can be used for larch, Douglas fir and Bangkirai |
| including SIHGAFIX® stainless steel, Systemstift® and installation instructions | time-saving, practical, precise, all accessories enclosed; SIHGAFIX® stainless steel prevents rust from external sources and also screws into deep grooves |





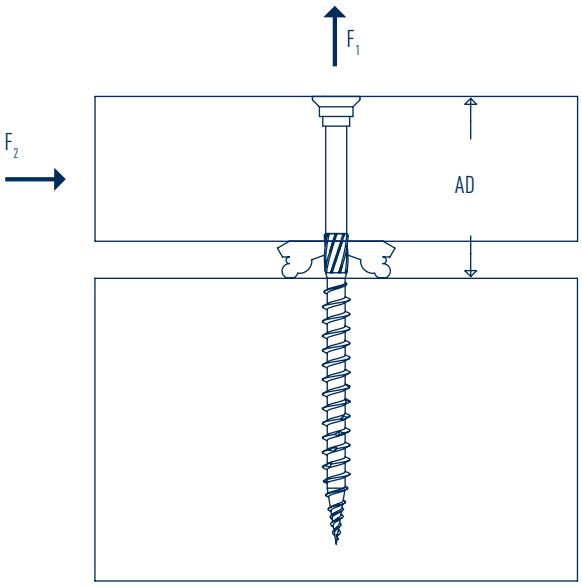
## SIHGA® TIP:

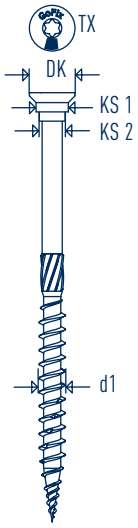
In case of applications in the pool area and with timbers with a high tannin content, we recommend L-BohrFix® MB A4.



ETA-11/0425

| SIHGA® Feature | YOUR Benefit |
|---|---|
| quantity calculation | https://bemessung.sihga.com/terrace |
| including SIHGAFIX® stainless steel, Systemstift® and installation instructions | time-saving, practical, precise, all accessories enclosed; SIHGAFIX® stainless steel prevents rust from external sources and also screws into deep grooves |




**Dimension [mm]**
L-GoFix® MS

| d1 | TX | DK | KS 1 | KS 2 |
|---|---|---|---|---|
| 5,0 | 25 | 8,5 | 6,0 | 4,8 |
| 6,0 | 30 | 11,5 | 7,2 | 5,8 |

| SIHGA® | | Dimension | Installation Part | Characteristic Values** | | | |
|---|---|---|---|---|---|---|---|
| montagepack | | L-GoFix® MS | AD | Tensile Force $F_1$ [kN] | | Shear Force $F_2$ [kN] | |
| Art. No. | PU | d1 x L | [mm] | Head | Thread | Wood-Wood | Steel-Wood |
| 24316 | 200 | **5,0 x 45*** | 18 | 0,76 | 1,82 | 0,89 | 1,65 |
| 24326 | 200 | **5,0 x 50*** | 20 | 0,95 | 2,14 | 0,99 | 1,78 |
| 24336 | 200 | **5,0 x 60*** | 24 | 0,95 | 2,53 | 1,19 | 1,88 |
| 24346 | 200 | **5,0 x 70*** | 28 | 0,95 | 2,93 | 1,39 | 1,98 |
| 24356 | 200 | **5,0 x 80*** | 32 | 0,95 | 3,72 | 1,59 | 2,18 |
| 24366 | 200 | **5,0 x 90*** | 36 | 0,95 | 4,12 | 1,79 | 2,27 |
| 24376 | 200 | **5,0 x 100*** | 40 | 0,95 | 4,51 | 1,97 | 2,37 |
| 24406 | 100 | **6,0 x 70** | 28 | 1,64 | 3,31 | 1,58 | 2,51 |
| 24416 | 100 | **6,0 x 80** | 32 | 1,64 | 4,21 | 1,80 | 2,73 |
| 24426 | 100 | **6,0 x 90** | 36 | 1,64 | 4,66 | 2,03 | 2,85 |
| 24436 | 100 | **6,0 x 100** | 40 | 1,64 | 5,10 | 2,25 | 2,96 |
| 24446 | 100 | **6,0 x 120** | 50 | 1,64 | 5,10 | 2,45 | 2,96 |
| 24456 | 100 | **6,0 x 140** | 70 | 1,64 | 6,00 | 2,69 | 3,18 |
| 24466 | 100 | **6,0 x 160** | 90 | 1,64 | 6,00 | 2,69 | 3,18 |

Subject to technical modifications and errors. Status of approval 2026
* also available with SC 9 coating
** characteristic values for dimensioning according to EC 5 and for strength class ρk 490 kg/m³ (Larch)

## SIHGA® TIP:

For surface-flush rotation, fast and secure, we recommend TerrassenFix® TTB depth limiter.

# L-GoFix® MS A2

| SIHGA® Feature | YOUR Benefit |
|---|---|
| Made from A2 stainless steel | stands out thanks to its good corrosion resistance and is best used in moderate, corrosive environments |
| multi-stage head with small head diameter | high constructive wood protection and refined surface as a result of the plane head |
| special thread angle with sharp thread edges | high extraction value |
| SIHGA® point with special shape | guarantees fast setting of screws |
| SIHGA® ribs on shaft and slip coating | light, fast rotation and optimum fit in the wood are guaranteed |
| including SIHGAFIX® stainless steel, Systemstift® and installation instructions | time-saving, practical, precise, all accessories enclosed; SIHGAFIX® stainless steel prevents rust from external sources and also screws into deep grooves |

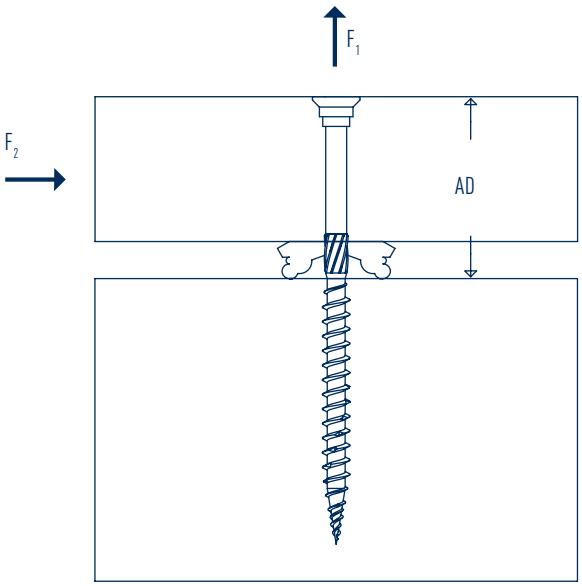
Because of the material properties it is strongly advised to generally pre-drill the add-on part (screw diameter + 0.5 -1 mm). The substructure, due to the different bulk densities and moisture, also in conifers, should in most cases be pre-drilled over the entire thread length with ∅ 3 mm. If in doubt, we recommend carrying out pretrials

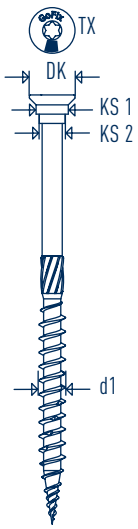


**L-GoFix® MS A2**
**made of A2 stainless steel**



ETA-11/0425




**Dimension [mm]**
L-GoFix® MS A2

| d1 | TX | DK | KS 1 | KS 2 |
|---|---|---|---|---|
| 4,5 | 20 | 6,9 | 5,2 | 4,2 |
| 5,0 | 25 | 8,5 | 6,0 | 4,8 |

| SIHGA® | | Dimension | Installation Part | Characteristic Values** | | | |
|---|---|---|---|---|---|---|---|
| montagepack | | L-GoFix® MS A2 | AD | Tensile Force $F_1$ [kN] | | Shear Force $F_2$ [kN] | |
| Art. No. | PU | d1 x L | [mm] | Head | Thread | Wood-Wood | Steel-Wood |
| 22226 | 400 | **4,5 x 40** | 16 | 0,48 | 1,55 | 0,74 | 1,15 |
| 22236 | 400 | **4,5 x 45** | 18 | 0,48 | 1,77 | 0,83 | 1,21 |
| 22246 | 400 | **4,5 x 50** | 20 | 0,61 | 1,99 | 0,92 | 1,26 |
| 22266 | 400 | **4,5 x 60** | 24 | 0,61 | 2,36 | 1,07 | 1,35 |
| 22276 | 300 | **4,5 x 70** | 28 | 0,61 | 2,72 | 1,22 | 1,45 |
| 22316 | 200 | **5,0 x 45** | 18 | 0,76 | 1,82 | 0,89 | 1,36 |
| 22326 | 200 | **5,0 x 50** | 20 | 0,95 | 2,14 | 0,99 | 1,44 |
| 22336 | 200 | **5,0 x 60** | 24 | 0,95 | 2,53 | 1,18 | 1,54 |
| 22346 | 200 | **5,0 x 70** | 28 | 0,95 | 2,93 | 1,33 | 1,64 |
| 22356 | 200 | **5,0 x 80** | 32 | 0,95 | 3,72 | 1,57 | 1,84 |
| 22366 | 200 | **5,0 x 90** | 36 | 0,95 | 4,12 | 1,67 | 1,94 |
| 22376 | 200 | **5,0 x 100** | 40 | 0,95 | 4,30 | 1,72 | 1,98 |

Subject to technical modifications and errors. Status of approval 2026
** characteristic values for dimensioning according to EC 5 and for strength class ρk 490 kg/m³ (Larch)

## SIHGA® TIP:

When using coatings such as oils, glazes and pre-greying, it is essential to consult the coating manufacturer. As a rule, the manufacturer specifies the minimum material quality of the binding agent. If the manufacturer is not known, we recommend material quality A4 (L-BohrFix® MB A4).

# SenoFix® FT





**SenoFix® FT**
**for terrace applications**




Plank Thickness 20 - 30 mm

**Optional accessories: SIHGAFIX® TX 20, 77 mm; p. 14 & TTB p. 129**

| SIHGA® Feature | YOUR Benefit |
|---|---|
| for untreated, profiled wooden planks released by SIHGA® | we reccomend using TefaFix® T rail as substructure |
| manufactured, developed, and patented in Austria | highest European quality and value creation |
| screwed fastening for floorboards only in the joint with the SenoFix® FT, cover- and lateral surfaces of the boards remain unharmed | creating a visually appealing surface is quick, simple and precise |
| expansion mechanism with joint width of 7 mm in final state | no spacers needed for assembly |
| assembly possible without additional tools | no additional costs for clamps or belts, etc. |
| connector height per the latest state of the art | automatic spacing from substructure of 8 mm |
| stabilises and compensates for any swelling and shrinkage in the wood | increases the lifespan of the terrace considerably |
| only 1 screw per attachment point | requires 50 % less installation time and provides perfect grip |
| available with two different screw lengths | use on wood and alu substructure |
| produced of reinforced SIHGAMID | is therefore permanently heat-, frost- and UV-resistant |
| attachment screw made of hardened stainless steel | is permanent and break-proof |
| including SIHGAFIX® stainless steel, all attachment screws and installation instructions | time-saving, practical, precise, all accessories are included, SIHGAFIX® stainless steel prevents extraneous rust |
| quantity calculation per $m^2$ | 1:substructure spacing [m]:(board width [m] + joint [m]) |
| HFA inspected in combination with thermo ash | for details please see page 66 |





## SIHGA® TIP:

Note design recommendations (page 64).
For oiled terraces we recommend the SenoFix® II SX.

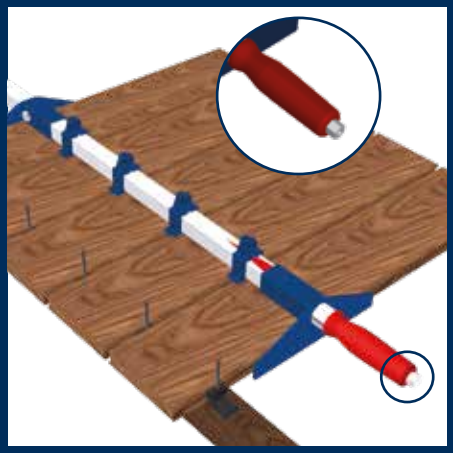
# SenoFix® II SX





**SenoFix® II SX**
**the original**

| SIHGA® Feature | YOUR Benefit |
|---|---|
| for oiled, profiled wooden planks released by SIHGA® | we recommend using TefaFix® T rail as substructure |
| developed, patented and made in Austria | top European quality and added-value, 1,1 million m² of terraces already laid |
| only in the joint through the SenoFix® II SX screwed plank fastening without damaging the top and side surfaces of the planks | the optically elegant surface is created simply, quickly and precisely |
| automatic distance to the substructure is 5 mm | the terrace remains well-ventilated, timber can dry well, accumulations of water are prevented |
| reveal joint width 6 mm | never lay without TerrassenFix® Clamp III including Joint Spacer Clamp FAZ (page 126 – 127) |
| stabilises and compensates for the wood's swell and shrinkage processes | significantly increases the lifespan of the terrace |
| only 1 screw per fastening point, which extends 25 mm into the substructure | saves 50 % installation time and establishes a perfect hold |
| made from thermoplastic elastomer, the permanently elastic material | is UV, frost and heat resistant, provides product assurance also for the future |
| fastening screw made from hardened stainless steel | rust-free and break-proof fastening, for professional and practical work without lost time |
| includes SIHGAFIX® stainless steel, all fastening screws and installation instructions | time-saving, practical, precise, all accessories enclosed; SIHGAFIX® stainless steel prevents rust from external sources |
| quantity calculation per $m^2$ | 1:substructure spacing [m]:(board width [m] + joint [m]) |





## SIHGA® TIP:

Note design recommendations (page 64) and never lay without TerrassenFix® Clamp III (page 126).

# SymbioFix® SFT

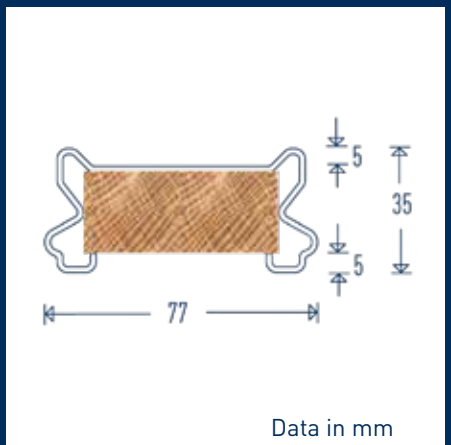


**SymbioFix® SFT with thermowood core**

| SIHGA® Feature | YOUR benefit |
|---|---|
| the substructure rails in terrace construction made from aluminium with thermo-wood core | saves 50 % of the time and the counter-batten construction, the thermo-wood core holds the fastening screws permanently |
| for visible and invisible plank screw connections | visible planks Screwed connection with Alu-BohrFix® MB and non-visible attachment with DielenFix®, GleitFix® or SenoFix® |
| made, developed and patented in Austria | top European quality |
| easy handling and low weight, endless connection | time-saving, low construction height, endlessly connectible without adapters, increases the lifespan of the terrace |
| load transfer through aluminium rails | high load-bearing capacity and no substructure warping, support is required in the outer-edge area |
| simply click onto the JustiFix® II JK SF adjustable feet | the ideal combination, the transversal joint is also placed on it, JustiFix® II JK SF; this saves adjustable feet and delivers a further cost advantage |
| constructive wood protection integrated | SymbioFix® profile has a 5 mm distance from the top to the plank, this results in good ventilation and a long-lasting terrace |

| SIHGA® objektpack | | SymbioFix® | |
|---|---|---|---|
| | | Type | Length |
| Art.No. | PU | | [mm] |
| 32680 | 40 | **SFT 4400** | 4400 |
| 32682 | 20 | **SFT 4400** | 4400 |






Data in mm

## SIHGA® TIP:

Note design recommendations

# TefaFix® T

SIHGA





**TefaFix® T**
**aluminium blank**



**TefaFix® T**
**aluminium SC 9 coated**

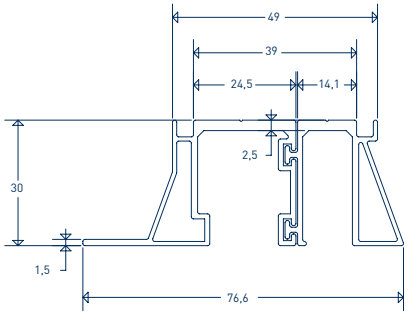
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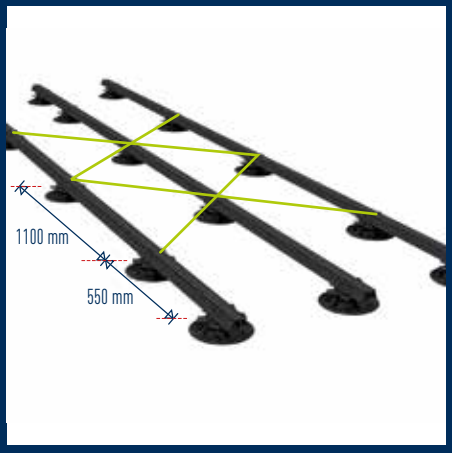
| SIHGA® Feature | YOUR Benefit |
|---|---|
| 2-part system | with visible screw connection in offset arrangement, sliding effect also in the longitudinal direction of the substructure, screw breakage due to swelling and shrinking of the wood is a thing of the past |
| also available in SC 9 coated | continuous black joint optic |
| profile open at the bottom | prefabrication of the parts possible by screwing on the rear |
| lateral flange | additional fastening options |
| special inner geometry | many connections possible with TefaBind® connector |
| trapezoidal shape | perfect water drainage guaranteed |
| moveable | endlessly extendable in length |
| aluminium | durable, machinable with conventional tools and machines |
| TefaBind® connector | all, even angled connections possible |
| universally combinable | for use also optimally with SenoFix® FT* and GleitFix® GF |
| HFA inspected in combination with Alu-TeFix®, TefaFlex® T and TefaBind® | for details please see page 66 |

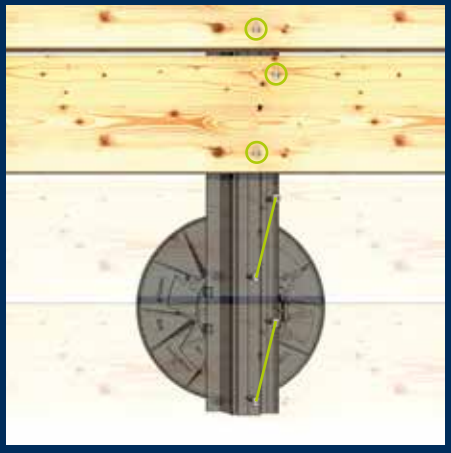
* Available from specialist timber dealers

| SIHGA® Package | | TefaFix® T Type | Surface | Length |
|---|---|---|---|---|
| Art. No. | PU | | | [mm] |
| 52112 | 10 | 4400 | bright | 4400 |
| 52022 | 10 | 4400 | SC 9 | 4400 |

| SIHGA® objektpack® | | TefaFix® T Type | Surface | Length |
|---|---|---|---|---|
| Art. No. | PU | | | [mm] |
| 52023 | 15 | 1100 | SC 9 | 1100 |



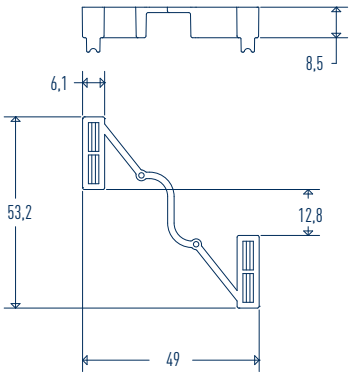



## SIHGA® TIP:

For the application in combination with SenoFix® FT the TefaBind® connecting piece incl. screw connection for the longitudinal joint must be used.

# TefaFlex® T

| SIHGA® Feature | YOUR Benefit |
|---|---|
| special geometry | minimum contact area of the boards in case of visible screwing, allows bowling up of the planks stress-free |
| takes up the axial displacement of the TefaFix® T effortlessly | screw breakage due to swelling and shrinkage is thus counteracted |
| 53 mm length | suitable for all plank widths |
| 8.5 mm height | final distance of the plank to the substructure according to the state of technology, optimum ventilation and drainage |
| HFA inspected in combination with Alu-TeFix® and TefaFix® T | for details please see page 66 |




| SIHGA® | | TefaFlex® T | | |
|---|---|---|---|---|
| montagepack | | Length | Width | Height |
| Art. No. | PU | [mm] | [mm] | [mm] |
| 52036 | 300 | 53,2 | 49 | 8,5 |



**TefaFlex® T made of polypropylene**



## SIHGA® TIP:

One piece of TefaFlex® T is required per plank joint.

## TefaFix® T with TefaFlex® T and Alu-TeFix®



## TefaFix® T with GleitFix® GF



## TefaFix® T with SenoFix® FT* Alu



* Available from specialist timber dealers

# TefaBind®

SIHGA





**TefaBind®**
**aluminium SC 9 coated**



**For butt joint**
**of TefaFix® T**

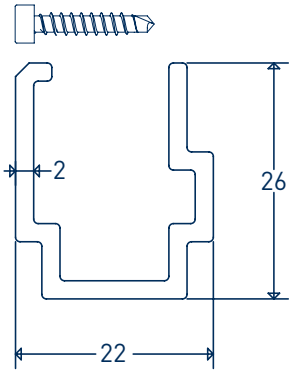
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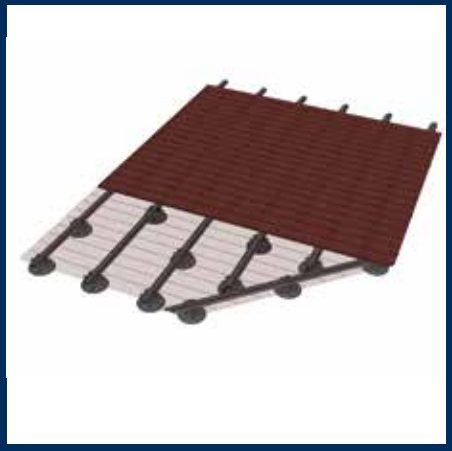
| SIHGA® Feature | YOUR Benefit |
|---|---|
| TefaBind® connector | for endless joining of TefaFix® T |
| SC 9 coated | continuous black joint optic |
| profile open at the top | with the supplied BohrFix® FB 4.2 x 17 mm in stainless steel the TefaBind® can be easily fixed |
| Aluminium | durable, with conventional tools and machines workable |
| all-purpose | all longitudinal and transverse connections can be made with the TefaBind® |
| including assembly instructions and 2 pcs. BohrFix® FB 4.2 x 17 mm per TefaBind® | time-saving, practical, precise, all accessories are included |
| HFA inspected in combination with TefaFix® T | for details please see page 66 |

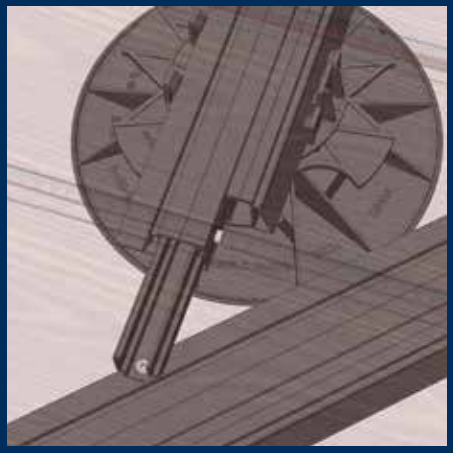
| SIHGA® | | TefaBind® | | |
|---|---|---|---|---|
| montagepack | | Length | Width | Height |
| Art. No. | PU | [mm] | [mm] | [mm] |
| 52056 | 25 | 250 | 22,0 | 26,0 |

BohrFix® FB

∅ 4,2 x 17



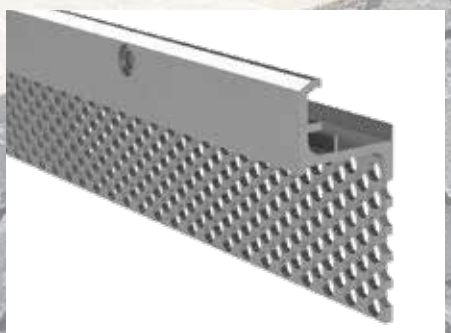


## SIHGA® TIP:

For the application of TefaFix® T in combination with SenoFix® FT* and SenoFix® II SX* the TefaBind® connector incl. screw connection for the longitudinal joint is mandatory.

* Available from specialist timber dealers

# TerrassenFix® Air

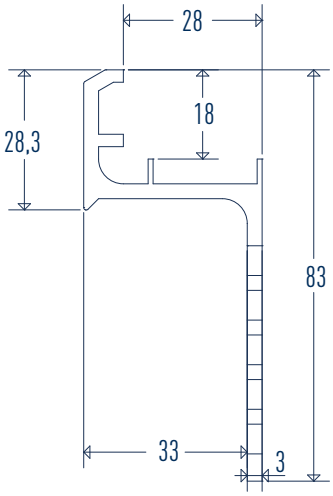


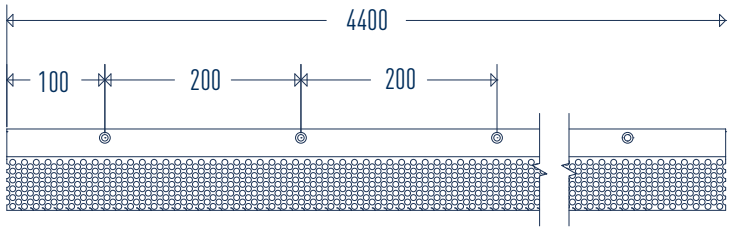
TerrassenFix® Air aluminium



Terrace Edge Revetment

| SIHGA® Feature | YOUR Benefit |
|---|---|
| special geometry | can be used as a ventilation element or substructure for terrace edge revetment |
| aluminium | workable with common tools and machines |
| pre-drilled | easy installation using TeFix® |
| optimum static solution | load transfer of the edge cover via the planks |
| profile height | or all plank thicknesses from 20 mm |
| profile interruptions | water drainage and ventilation guaranteed |




| SIHGA® | | | | | TerrassenFix® Air* | |
|---|---|---|---|---|---|---|
| Package | | Length | Width | Height | Perforation Front Side for TeFix® | Perforation for Ventilation |
| Art. No. | PU | [mm] | [mm] | [mm] | [mm] | [mm] |
| 52064 | 5 | 4400 | 36 | 83,0 | ∅ 5,0 | ∅ 6,0 |

* all fixing screws are available separately



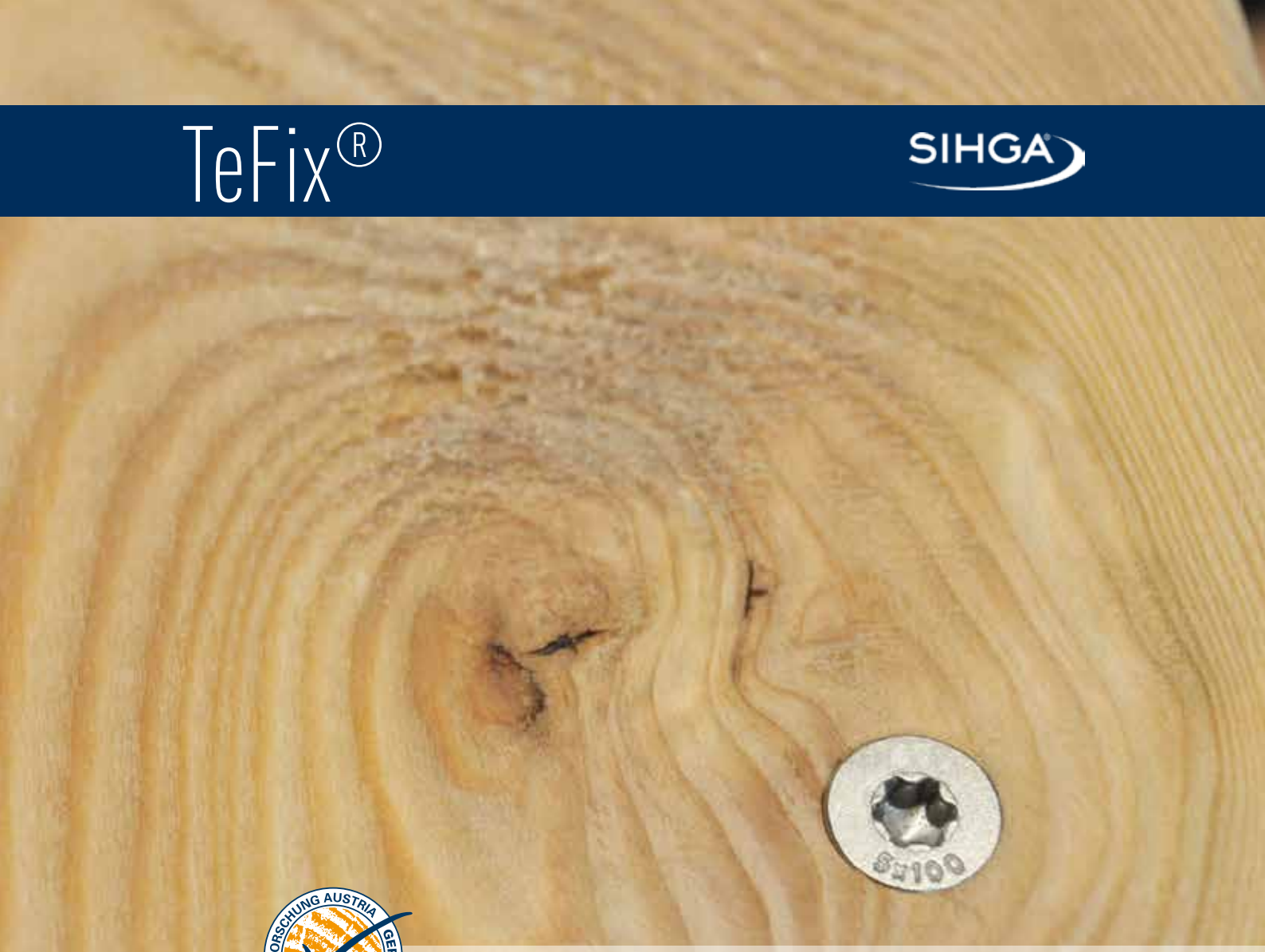


## SIHGA® TIP:

To fix a wooden panel, we recommend the BohrFix® FB 4.2 x 17/22/28 mm in stainless steel screwed in from the back of the TerrassenFix® Air.

# TeFix®

SIHGA





**TeFix® made of hardened stainless steel**





Details on page 65

ETA-20/0558

www.sihga.com

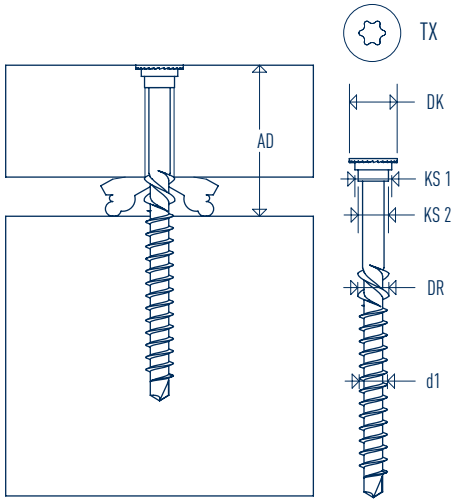
| SIHGA® Feature | YOUR Benefit |
|---|---|
| fastens wood to wood without pre-drilling and countersinking | prevents the formation of cracks or splitting in almost all hardwood and thermo-wood; saves working time |
| made of hardened stainless steel | non-corrosive attachment and is extremely break-proof |
| SIHGA® friction thread with special form | pre-drills the boards at 5 mm; the wood can thus swell and shrink |
| SIHGA® further-developed multi-stage head | no suppression or splitting of the wood due to extra thin head and saw tooth corrugation |
| the perfect solution in combination with KompeFix® | increases the life of the wood and the screw |
| including SIHGAFIX®, Systemstift® and installation instructions | time-saving, practical, precise, all accessories are included |
| calculation of required quantity, please visit | www.sihga.com (average quantity = 33 pieces/m²) |
| HFA inspected in combination with KompeFix® II KF, larch, thermo ash and Accoya | for details please see page 66 |

| SIHGA® montagepack | | Dimension TeFix® | Installation Part AD [max] | Characteristic Values** Tensile Force $F_1$ [kN] | | Shear Force $F_2$ [kN] | |
|---|---|---|---|---|---|---|---|
| Art. No. | PU | d1 x L | [mm] | Head | Thread | Wood-Wood | Steel-Wood |
| 54316 | 200 | **5,0 x 45*** | 18 | 1,65 | 1,43 | 1,58 | 2,75 |
| 54326 | 200 | **5,0 x 50*** | 24 | 1,65 | 1,66 | 1,70 | 2,81 |
| 54336 | 200 | **5,0 x 60*** | 27 | 1,65 | 2,18 | 1,94 | 2,94 |
| 54346 | 200 | **5,0 x 70*** | 30 | 1,65 | 2,71 | 2,18 | 3,07 |
| 54356 | 200 | **5,0 x 80*** | 34 | 1,65 | 3,16 | 2,46 | 3,18 |
| 54366 | 200 | **5,0 x 90*** | 37 | 1,65 | 3,69 | 2,61 | 3,31 |
| 54376 | 200 | **5,0 x 100*** | 40 | 1,65 | 4,21 | 2,75 | 3,45 |
| 54406 | 100 | **6,0 x 70** | 30 | 2,92 | 2,75 | 2,61 | 4,03 |
| 54416 | 100 | **6,0 x 80** | 34 | 2,92 | 3,22 | 2,91 | 4,15 |
| 54426 | 100 | **6,0 x 90** | 37 | 2,92 | 3,77 | 3,19 | 4,29 |
| 54436 | 100 | **6,0 x 100** | 40 | 2,92 | 4,32 | 3,44 | 4,42 |
| 54446 | 100 | **6,0 x 120** | 52 | 2,92 | 4,95 | 3,60 | 4,58 |

* also available with SC 9 coating
** characteristic values for dimensioning according to EC 5 and for strength class ρk 490 kg/m³ (Larch)

**Dimensions [mm]**

| d1 | TX | DK | KS 1 | KS 2 | DR |
|---|---|---|---|---|---|
| 5,0 | 20 | 8,5 | 6,5 | 5,4 | 5,2 |
| 6,0 | 25 | 11,5 | 8,2 | 6,4 | 6,3 |




## SIHGA® TIP:

For use in the area of pool surroundings and to fasten wood with high tannin content (such as e.g. cumaru, oak, robinia, garapa) we recommend L-BohrFix® MB A4.

# TerrassenFix® II TF



**TerrassenFix® II TF made from polyethylene**



| SIHGA® Feature | YOUR Benefit |
|---|---|
| universal constructive wood protection for terraces | creates distance between the woods*, thereby allowing them to breathe and increasing the lifespan |
| developed, patented and made in Austria | top European quality, experience from more than 14 years of terrace construction included |
| TerrassenFix® II TF with ∅ 70 mm is only placed on the substructure | saves time, no installation work |
| joint setting for 4, 5, 6, 7, 8, 9 mm wide joints without residue in the joint | joint widths can be adjusted quickly as a result; time-saving, practical, precise, all accessories enclosed |
| including TerrassenFix®II rods TFS and installation instructions | the TerrassenFix® II rods TFS cannot fall into the joints |
| TerrassenFix® II rods TFS are removed entirely using a handle, can be reused after screw-connecting the planks | nothing blocks the planks during their swell and shrinkage behaviour |
| monitored production from polyethylene | remains permanently dimensionally stable, is heat-, frost- and UV-resistant |
| calculation of quantity per m² | 1: substructure distance [m]: width of terrace planks + joint [m] |

| SIHGA® montagepack | | Dimension TerrassenFix® | Average Quantity /m² |
|---|---|---|---|
| Art. No. | PU | Type | Stk. |
| 40506 | 100 | **II TF** | 14 |

* calculation takes place with the assumption "plank width 140 mm".





## SIHGA® TIP:

The joint space should not be less than 7 mm or 6 % of the plank width.

# TerrassenFix® II Set TFL

| SIHGA® Feature | YOUR Benefit |
|---|---|
| patented constructive wood protection as a set with L-GoFix® MS screws for terraces | the practical set for visible terrace plank fastening with very long lifespan |
| L-GoFix® MS made from hardened stainless steel | rust-free fastening, extremely break-proof |
| including SIHGAFIX® stainless steel, TerrassenFix® II rods TFS, Systemstift® and installation instructions | time-saving, practical, precise, all accessories enclosed; SIHGAFIX® stainless steel prevents rust from external sources and also screws into deep grooves |
| calculation of quantitiy | SIHGA® performs the calculation for you |

| SIHGA® montagepack | | Dimension TerrassenFix® II | Planks Thickness | Set - Screw L-GoFix® MS | Sufficient for approx. |
|---|---|---|---|---|---|
| Art. No. | PU | Type | [mm] | ∅ x Length | [m²] |
| 40526 | 100 | **TFL 60** | 20 | 5,0 x 60 | 7,5 |
| 40546 | 100 | **TFL 70** | 24 | 5,0 x 70 | 7,5 |
| 40566 | 100 | **TFL 80** | 28 | 5,0 x 80 | 7,5 |
| 40576 | 100 | **TFL 90** | 32 | 5,0 x 90 | 7,5 |



TerrassenFix® II TF



L-GoFix® MS

## SIHGA® TIP:

The joint distance should not be less than 7 mm or 6 % of the plank width, note design recommendations.



ETA-11/0425

# TerrassenFix® Countersink BS

| SIHGA® Feature | YOUR Benefit |
|---|---|
| pre-drilling and counter sinking in one step | saves at least 50 % working time |
| developed, patented and made in Austria | local quality, experience from more than 14 years of terrace construction included |
| drill and counter sinker are made from hardened stainless steel | prevents corrosion/rust from external sources on the terrace, also in the case of any abrasion of the drill |
| integrated depth stop | gives a uniform finish to the sinking, prevents sink holes and thus damp patches |
| for SIHGA® stainless steel screws L-GoFix® MS, L-BohrFix® MB (A4) and Alu-BohrFix® | the precise match for these screws creates a uniform surface |
| stop ribs on the end | prevent ugly contact traces on the terrace surface |
| with a second change ring and re-closable system packaging | extends the life of the counter sinker, protects against damage |
| drill depth including sinker 25 mm | the geometry optimally transports the drill dust out |

| SIHGA® minimontagepack | | TerrassenFix® Countersink | Drill Hole Diameter | Drill Depth incl. sink |
|---|---|---|---|---|
| Art. No. | PU | Type | [mm] | |
| 35052 | 1 | **BS 5** | 5,0 | 25 |
| 35062 | 1 | **BS 6** | 6,0 | 25 |



**BS 5** **BS 6**

## SIHGA® TIP:

Observe drilling table (page 65), we recommend using the TerrassenFix® Template TFS.

# TerrassenFix® Template TFS

| SIHGA® Feature | YOUR Benefit |
|---|---|
| pre-drilling and counter sinking of the terrace planks without measuring and marking | saves 50 % of working time and creates an attractive and uniformly screwed surface |
| developed, patented and made in Austria | local quality, experience from more than 14 years of terrace construction included |
| for terrace planks from 70 - 205 mm wide | universally usable in terrace construction |
| made entirely of anodised aluminium | for a long life of the template in everyday construction use |
| automatically suitable guide for TerrassenFix® Countersink BS | drilling is performed in a precise and consistent position each time |
| side wood distance adjustable via stops | 15, 20, 25 mm side wood distances can be optionally selected with ease |
| constructive wood protection is considered | a distance of 50 mm is automatically added to the wood end-grain |
| inspection opening for previous screw connections | for rational, fast working |
| includes installation instructions | is time-saving and enclosed for practicality |

| SIHGA® montagepack Art. No. | PU | Dimension TerrassenFix® Template Type | Plank Width min - max [mm] |
|---|---|---|---|
| 34946 | 1 | **TFS** | 70 - 205 |



**TerrassenFix® Template TFS for rapid precision**



## SIHGA® TIP:

Note design recommendations (page 64).

# TerrassenFix®
# Depth Limiter TTB

| SIHGA® Feature | YOUR Benefit |
|---|---|
| specific slip-coupling | prevents screws penetrating too deeply into the terrace planks, they are all automatically screwed flush; saves lots of time and results in an attractive and uniform surface |
| rotatable contact slide ring on the end | prevents ugly contact traces on the terrace surface |
| extends the lifespan of the terrace | no sink holes arise above the screw heads in the terrace planks here, in which water and dirt accumulate |
| suitable for all SIHGAFIX® sizes | can be used with every SIHGAFIX® |
| Accessories: SIHGAFIX® TX 20, 77 mm | especially for use with SenoFix® FT* |

* Available from specialist timber dealers

| **SIHGA®** minimontagepack | | **Type** Depth Limiter |
|---|---|---|
| Art. No. | PU | Type |
| 34992 | 1 | **TTB** |




**TerrassenFix® Depth Limiter TTB**



**SIHGAFIX® TX 20, 77mm**

## SIHGA® TIP:

Note design recommendations (page 64). TerrassenFix® depth limiter TTB with SIHGAFIX® TX 20, 77 mm perfect for laying with SenoFix® FT*.

* Available from specialist timber dealers

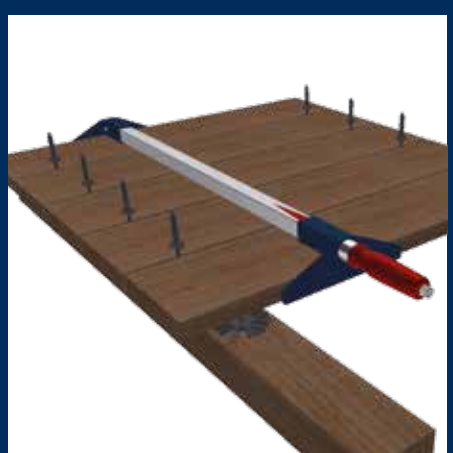
# TerrassenFix® Clamp III

| SIHGA® Feature | YOUR Benefit |
|---|---|
| clamping width 260 - 780 mm | time-saving, practical, precise for terrace construction, from plank widths of 90 mm or can also be used universally; |
| material thickness of the front section only 4 mm | easy to use with all terrace joints and when working close to walls |
| wide clamp jaws | no pressure points on the plank edge |
| close and open the clamp with one handle or ... | the clamping together of the planks and the opening of the clamps are performed by turning the handle or... |
| ... with additional universal drive, the further development by professionals for professionals | ... with drive TX 40, external hex SW 13, hexagon socket 6 mm for even faster handling |
| easy, quick adjustment and fine adjustment of the clamping width | quick adjustment from the front with a magnetic rod, fine adjustment using a rotating handle |

| SIHGA® montagepack | | Type TerrassenFix® | Clamping Distance [mm] | |
|---|---|---|---|---|
| Art. No. | PU | Type | from | to |
| 35036 | 1 | **Clamp III** | **260** | **780** |



TerrassenFix®
Clamp III



## SIHGA® TIP:

The TerrassenFix® Clamp III is the ideal laying tool for floorboard coverings and the precondition for the assemby of SenoFix® II SX*.

* Available from specialist timber dealers

# Joint Spacer Clamp FAZ for TerrassenFix® Clamp III

| SIHGA® Feature | YOUR Benefit |
|---|---|
| accessories for TerrassenFix® Clamp III | saves lots of working time and results in uniform joints |
| joint distance either 6, 7, 8, 10 mm | just set desired width on the TerrassenFix® Clamp III, the conical shape ensures easy removal after use |
| wide supporting surface | prevents pressing into the timber |
| is placed directly on TerrassenFix® Clamp III | cannot fall into the joint |

| SIHGA® montagepack | | Joint Spacer Clamp Type | Joint Widths |
|---|---|---|---|
| Art. No. | PU | FAZ | [mm] |
| 40646 | 5 | **6** | **6,0** |
| 40656 | 5 | **7** | **7,0** |
| 40666 | 5 | **8** | **8,0** |
| 40686 | 5 | **10** | **10,0** |



**Joint Spacer Clamp FAZ**

## SIHGA® TIP:

TerrassenFix® Joint Spacer Clamp FAZ 6 optimum for laying of SenoFix® II SX*.

* Available from specialist timber dealers

# TerrassenFix Aqua®





**TerrassenFix Aqua®**
**made of aluminium**

# TerrassenFix Aqua®

## SIHGA® Feature

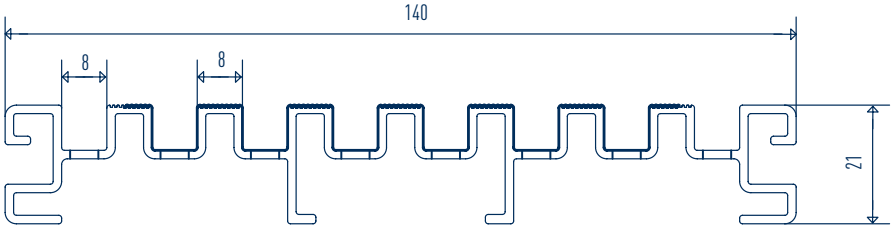
## YOUR Benefit

| SIHGA® Feature | YOUR Benefit |
|---|---|
| drainage grating for protecting seals for use in passages | professional design in accordance with ÖNORM B 3691 and DIN 68800 standards |
| aluminium profile with special geometry | easy to work with conventional tools |
| perforation for rapid water drainage | protection of vertical bonding and seals |
| grooved surface | prevents spray water |
| developed for universal use | suitable for terrace projects |
| supplied in 1000 mm or 4000 mm length | simply put the necessary parts together |
| TerrassenFix Aqua® 1000 mm incl. F-BohrFix® ES 3.2 x 50 mm | for securing on wood or aluminium substructure |

| SIHGA® objektpack® | | Type Dimensionen |
|---|---|---|
| Art. No. | PU | Aqua |
| 40459 | 10 | **140 x 1000 x 21*** |

* incl. F-BohrFix® ES 3,2 x 50 mm

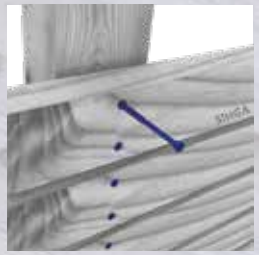
| SIHGA® Package | | Type Dimensionen |
|---|---|---|
| Art. No. | PU | Aqua |
| 40472 | 10 | **140 x 4000 x 21** |

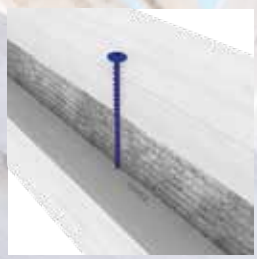


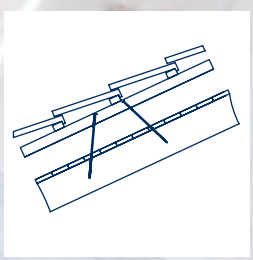

## SIHGA® TIP:

Can be easily attached to substructure with F-BohrFix® ES 3.2 x 50 mm.









## System Screws


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## Roof Insulation

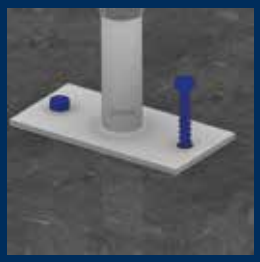
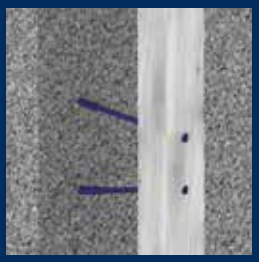

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## Load Handling Device


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## Installation Tool


| | |
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## Wood with Concrete / Metal / Brick


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## Digital wood protection

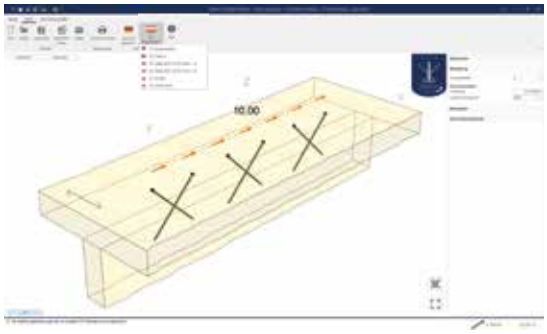

| | |
|---|---|
| Monitorix® | 288 |

# $S^3$ Software


SIHGA
Konstruktiver Holzbau
Betriebsfestigkeit in Beton

# S³ - The software that covers everything









## Support for 5 different Eurocodes:

The software offers the option of choosing between five different Eurocodes to meet country-specific requirements. This includes standards for timber construction, concrete design and general construction connections.

## Multilingualism:

The software is available in five languages – English, German, French, Italian and Polish – making it user-friendly for an international audience.

## Starting point for timber construction calculations, decking planners and concrete connections (Jointplan):

The software serves as a comprehensive platform for timber construction design, planning of terrace constructions and safe connection technology for components in concrete, with a special focus on the area of fasteners.

## 10 different applications can be run through:

There are 10 different application areas available, which can be worked through step by step. This can range from the design of a timber structure to the calculation of anchor.

## Save projects and edit them again:

Users can save their projects and load them later for further editing. This makes it possible to plan complex constructions over long periods of time and to adapt them step by step.

## 3D visualisation for a better representation:

The software offers 3D visualisation to provide users with a clear and realistic representation of their projects. This function helps to better understand and check complex construction projects and connections.

## SIHGA® TIP:

Download the free desktop version at www.sihga.com.

# Technical Information - Timber Construction

| Bulk Density Wood | Needle Wood | Glued Laminated Timber |
|---|---|---|
| 290 | C 14 | |
| 330 | C 20 | |
| 350 | C 24 | |
| 365 | | Gl24c |
| 380 | C 30 | |
| 385 | | Gl24h |
| 390 | | Gl28c |
| 400 | C 35 | Gl32c |
| 425 | | Gl28h |
| 440 | | Gl32h |

ρk = Mass (kg) : Volume $m^3$

C = Coniferous tree

GL = Glue lam timber

The aim of the innovative SIHGA® developments is to increase the efficiency of building with wood through modern mechanical fastenings. The load-bearing capacity and deformation behaviour of the fastenings have a critical impact on building designs.
The unique quality of wood as a building material requires the greatest attention to connections and fastenings. For a simple overview of the strength classes of the various woods, please see the above table for the raw density rk with the allocated designations.

| Category of exposure time | Order of magnitude | Examples | Use category 1 + 2 $k_{mod}$ |
|---|---|---|---|
| Permanent | Longer than 10 years | Tare weight | 0.6 |
| Long | 6 months to 10 years | Stored material in factories | 0.7 |
| Mean | 1 week to 6 months | Payloads in residential buildings, snow > 1,000 masl | 0.8 |
| Short | Shorter than 1 week | Snow ≤ 1,000 masl | 0.9 |
| Very short | Shorter than 1 minute | Impact and earthquakes | 1.1 |

As a result of the new standard Eurocode 5 and the introduced evidence concept with help from partial safety factors, wood construction is confronted with various values and calculation formulas. On one hand, the effects are increased with certain partial safety factors, and on the other hand the load-bearing capacity (or resistance) of the material and fastenings are reduced with other partial safety factors.
For this, SIHGA® offers pre-calculation for the respective load in various raw densities and wood qualities.

The characteristic values shown in the SIHGA® tables must be further calculated using the following equation:

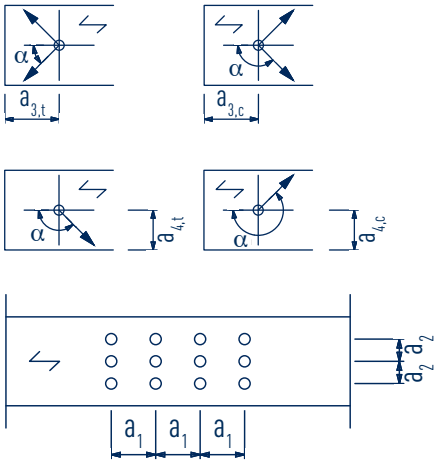
$R_d$ Calculation or design value

$k_{mod}$ Modification factor, influence of the load exposure period and usage class

$\gamma_M$ Partial safety factors for construction material properties (EC 5 recommends $\gamma_M$ = 1.3 for connections)

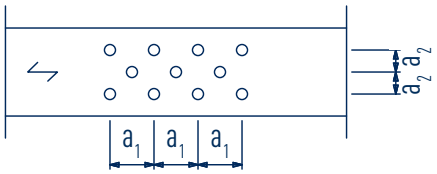
$$R_d = \frac{k_{mod} \cdot R_k}{\gamma_M}$$

# Edge and Axial Distances

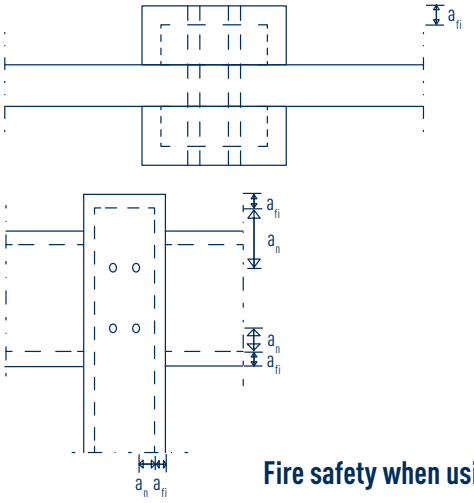



| Edge and Axial Distances | | Not Pre-Drilled | Pre-Drilled/ Drill Bit |
|---|---|---|---|
| Distance a | | [mm] | [mm] |
| $a_1$ | parallel to the grain | 12 d | 5 d |
| $a_{3,t}$ | stressed end-cut timber | 15 d | 12 d |
| $a_{3,c}$ | unstressed end-cut timber | 10 d | 7 d |
| $a_2$ | perpendicular to the grain | 5 d | 4 d |
| $a_{4,t}$ | stressed edge | 10 d | 7 d |
| $a_{4,c}$ | unstressed edge | 5 d | 3 d |

d... Screw diameter




# Fire Protection

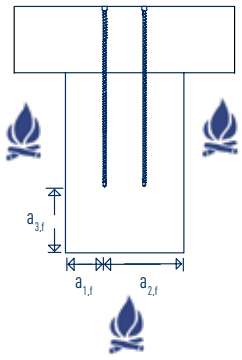



## Fire protection for constructive screw connections

| In the Event of a Fire | Screws on Shearing | | Screws on Pull Out[2] | | |
|---|---|---|---|---|---|
| | BSH | Solid Wood | | | |
| | $a_{fi}$ [mm] | $a_{fi}$ [mm] | $a_{1,f}$ [mm] | $a_{2,f}$ [mm] | $a_{3,f}$ [mm] |
| R 30 | 16 | 18 | 29 | 69 | 49 |
| R 60 | 48[1] | 54[1] | 53 | 93 | 73 |

[1] protected with a glued wooden dowel
[2] protected against direct fire stress
Minimum distances at normal temperature do not lose their validity
Calculation according to EN 1995-1-2
$a_n$...edge and centre distances at normal temperature
Burnout cross section

## Fire safety when using HobaFix® HF




| | Secondary Beam | | | | Main Beam | |
|---|---|---|---|---|---|---|
| | R 30 | | R 60 | | R 30 | R 60 |
| HobaFix® HF | Width [mm] | Height [mm] [1] | Width [mm] | Height [mm] [1] | Height [mm] [1] | Height [mm] [1] |
| 70 | 97 | 135 | 148 | 160 | 98 | 134 |
| 100 | 112 | 167 | 163 | 192 | 133 | 169 |
| 135 | 112 | 202 | 163 | 227 | 168 | 204 |
| 170 | 112 | 237 | 163 | 262 | 203 | 239 |
| 200 | 126 | 270 | 177 | 295 | 238 | 274 |
| 240 | 126 | 310 | 177 | 335 | 278 | 314 |

[1] flush installation on the upper edge and three-sided strip
Calculation according to EN 1995-1-2
Shear load is to be validated separately

# Stressing of Anchors on Shear Force

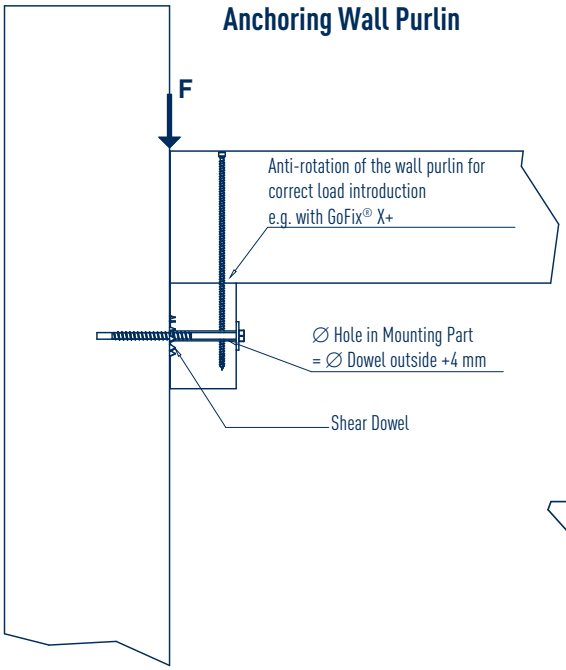
For anchorages of timber beams in concrete or masonry subjected to shear force, EN 1992-4:2018 stipulates that a lever arm must be considered. This means that the anchor is not only stressed by shearing but also by bending. This component is usually decisive and results in the anchor having only a fraction of its actual shear resistance.

In order to utilise the full shear force bearing capacity of the anchor, it is possible to insert a single-sided shear dowel type C, whose nominal diameter is equal to the nominal diameter of the anchor, between the fixture and the concrete, so that the entire shear force is introduced into the anchor via the shear dowel. This applies to anchors of all types and manufacturers, whether glued, screwed or driven in.

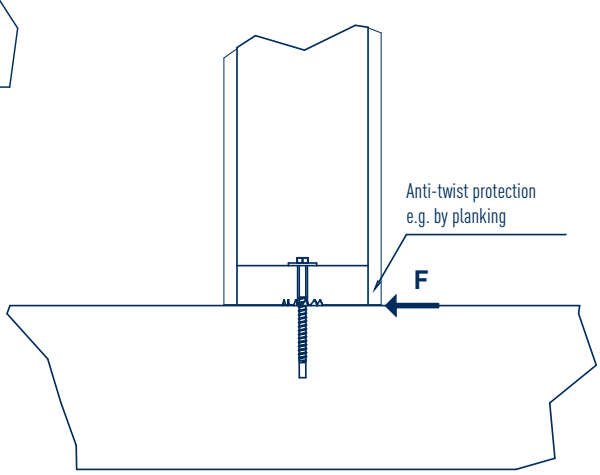
For the correct load introduction in the shear joint, sufficient stiffness or anti-twist protection is necessary.

Furthermore, the attachment part must have a sufficiently large hole to ensure that the hole soffit of the disc anchor lies securely on the anchor.

**Anchoring Wall Purlin**




**Anchoring Sleeper Wood**

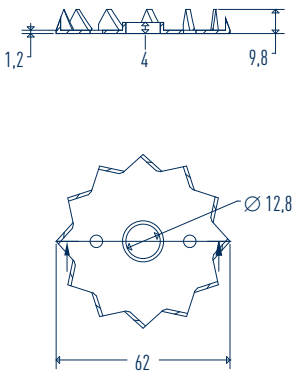


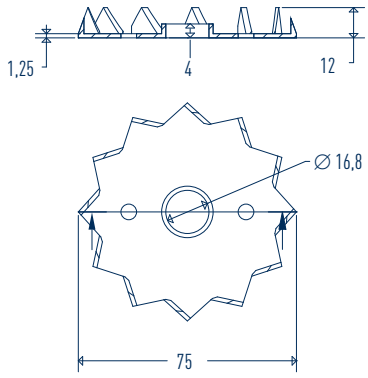
# Shear Dowel

| SIHGA® montagepack | | Dimension | | |
|---|---|---|---|---|
| | | Outer ∅ | ∅ Hole | ∅ Anchor |
| Art. No. | PU | [mm] | [mm] | [mm] |
| 35116 | 20 | 62 | 12,8 | 12 / 12,5 |
| 35126 | 20 | 75 | 16,8 | 16,0 |

| Dimension | Distance stressed edge dowel axis 90° to fibre | Distance unstressed edge dowel axis 90° to fibre | Charcteristic Values [kN]* |
|---|---|---|---|
| | [mm] | [mm] | $R_{v,k}$ |
| 62 x 12 | 50 | 38 | 8,7 |
| 75 x 16 | 60 | 45 | 11,6 |

* characteristic values for dimensioning according to EC 5 and strength class C 24 (ρk 350 kg/m²)






**Shear Dowel 62/12**



**Shear Dowel 75/16**

## SIHGA® TIP:

Serves for the perfect introduction of shear forces with BeziFix® Anchor ZSS 12.5 and Betsi® M 12 / M 16 as well as BeziFee® with M 12 / M 16.

# Betsi®





**Betsi® Expansion Anchor**



ETA 18/1141
Option 7

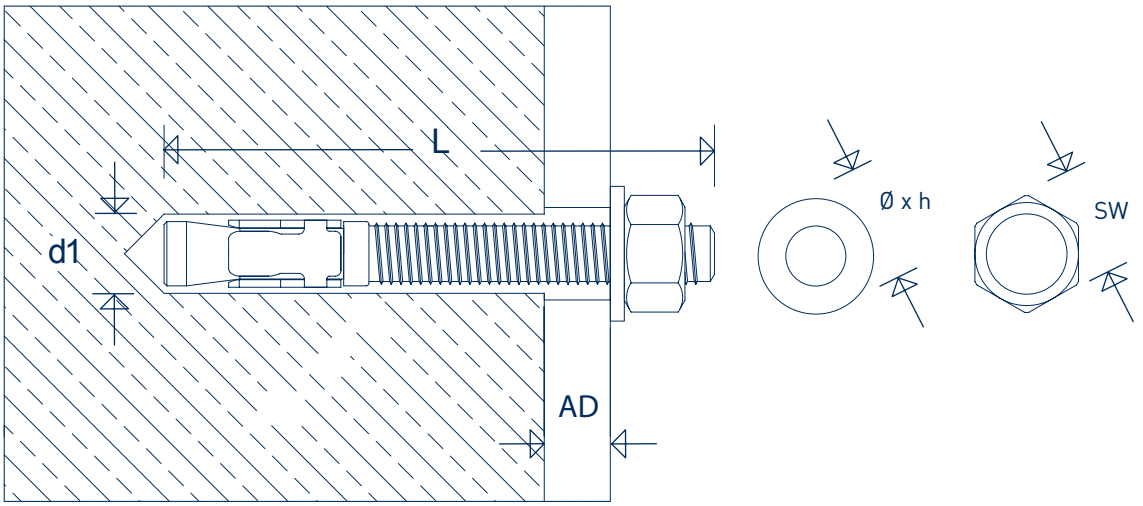
| SIHGA® Feature | YOUR Benefit |
|---|---|
| fastenings for wall beams, sills, steel brackets, support feet, etc. on non-cracked concrete from concrete quality C 20/25 | one expansion anchor for numerous application areas |
| developed for very high tensile and shear loads | saves time, costs and establishes long-lasting and highly durable connections |
| extra long lengths of up to 400 mm | enables the fastening of large wood cross-sections |
| easy to install | the full load-bearing capacity is attained through simply knocking in and tightening |
| simply read the load table incl. edge distances | provides assurance of the right anchor selection |
| enables even smaller edge and axial distances than those specified in the table values | for special applications, SIHGA® performs the calculation for you |
| includes installation instructions and Stabebo SDS drill with four-edged geometry specially for reinforced concrete | time-saving, practical, precise, complete accessories enclosed |
| stainless steel expansion clip | safety per ETA |





## SIHGA® TIP:

Ensure the correct drill diameter and drill quality, the Stabebo SDS Drill is therefore enclosed.



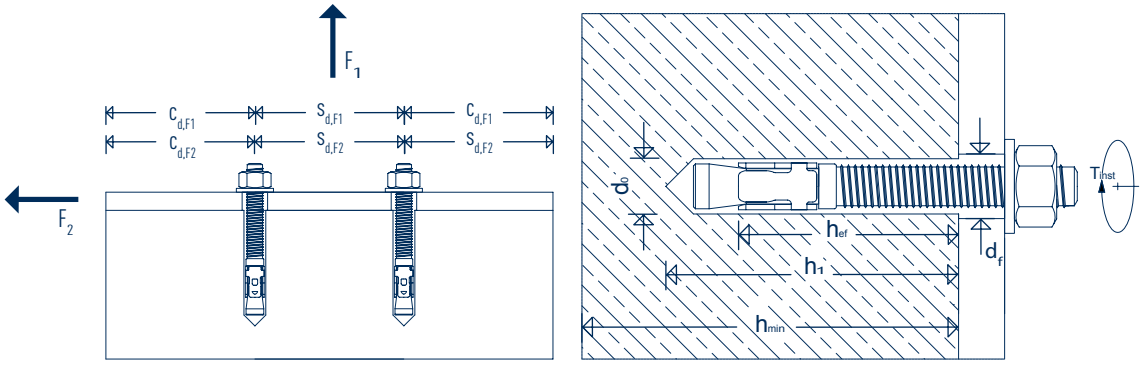

| SIHGA® montagepack | | Dimension Betsi® | Add-on Part AD = $t_{fix}$ | Width Across Flats SW | Washer ∅ x h |
|---|---|---|---|---|---|
| Art. No. | PU | d1 x L | [mm] | [mm] | [mm] |
| 25856 | 100 | 8,0 x 75 | 17 | 13 | 16 x 1,6 |
| 25416 | 50 | 10,0 x 90 | 25 | 17 | 20 x 2,0 |
| 25426 | 50 | 10,0 x 100 | 35 | 17 | 20 x 2,0 |
| 25436 | 50 | 10,0 x 120 | 55 | 17 | 20 x 2,0 |
| 25446 | 50 | 10,0 x 150 | 85 | 17 | 20 x 2,0 |
| 25456 | 50 | 10,0 x 170 | 105 | 17 | 20 x 2,0 |
| 25516 | 50 | 12,0 x 110 | 28 | 19 | 24 x 2,0 |
| 25526 | 50 | 12,0 x 120 | 38 | 19 | 24 x 2,0 |
| 25536 | 50 | 12,0 x 140 | 58 | 19 | 24 x 2,0 |
| 25546 | 50 | 12,0 x 160 | 78 | 19 | 24 x 2,0 |
| 25556 | 50 | 12,0 x 180 | 98 | 19 | 24 x 2,0 |
| 25606 | 50 | 12,0 x 200 | 118 | 19 | 36 x 2,5 |
| 25616 | 50 | 12,0 x 220 | 138 | 19 | 36 x 2,5 |
| 25626 | 50 | 12,0 x 240 | 158 | 19 | 36 x 2,5 |
| 25636 | 30 | 12,0 x 280 | 198 | 19 | 36 x 2,5 |
| 25646 | 30 | 12,0 x 300 | 218 | 19 | 36 x 2,5 |
| 25656 | 30 | 12,0 x 360 | 278 | 19 | 36 x 2,5 |
| 25706 | 20 | 16,0 x 240 | 125 | 24 | 48 x 3,0 |
| 25716 | 20 | 16,0 x 280 | 165 | 24 | 48 x 3,0 |
| 25726 | 15 | 16,0 x 300 | 185 | 24 | 48 x 3,0 |
| 25736 | 15 | 16,0 x 400 | 285 | 24 | 48 x 3,0 |

## SIHGA® TIP:

Obtain reliable anchoring results with the S3 design software.



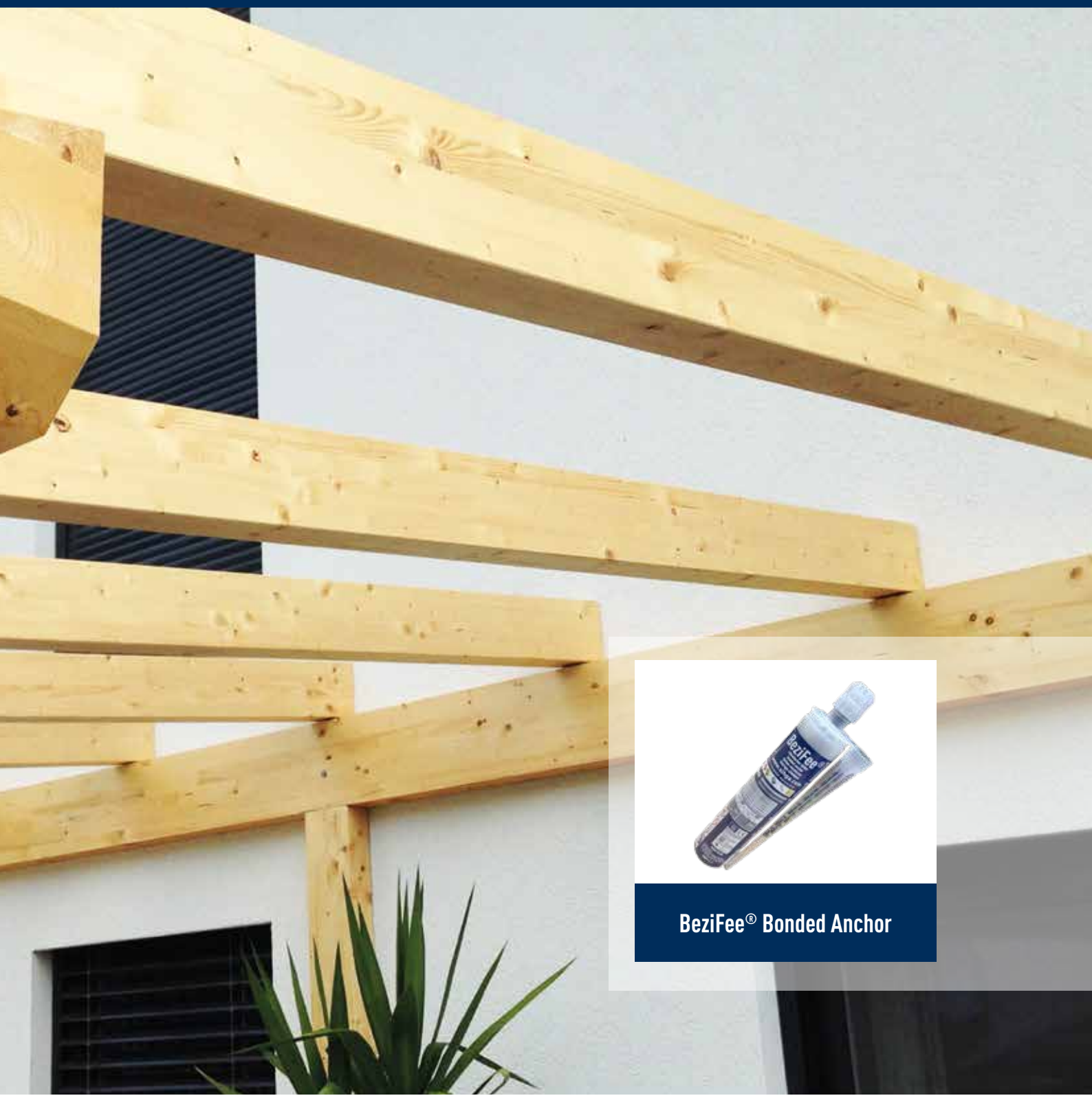
ETA 18/1141 Option 7




| SIHGA® | Betsi® | | M 8 | M 10 | M 12 | M 16 |
|---|---|---|---|---|---|---|
| effective anchoring depth | $h_{ef}$ | [mm] | 45 | 50 | 60 | 85 |
| concrete drilling diameter | $d_o$ | [mm] | 8 | 10 | 12 | 16 |
| attachment drilling diameter | $d_f$ | [mm] | 10 | 12 | 14 | 18 |
| borehole depth | $h_1$ | [mm] | 60 | 65 | 80 | 110 |
| min. concrete thickness | $h_{min}$ | [mm] | 100 | 100 | 120 | 170 |
| max. tightening torque | $T_{inst}$ | [Nm] | 20 | 35 | 55 | 100 |
| minimum edge spacing without load influence | $C_{min}$ | [mm] | 61 | 68 | 81 | 115 |
| maximum axial distance without load influence | $S_{min}$ | [mm] | 61 | 68 | 81 | 115 |
| **recommended tensile strength per anchor without edge influence,at edge spacing c ≥ 1.2 x $c_{cr.sp\ (lt.\ ETA)}$ recommended centre distance s ≥ 3 x $h_{ef}$*** | | | | | | |
| in non-cracked concrete min C 20/25 | $F_1$ | [kN] | 5.0* | 6.7* | 8.9* | 8.9* |
| recommended edge distance | $C_{d.F1}$ | [mm] | 136 | 150 | 180 | 256 |
| recommended centre distance | $S_{d.F1}$ | [mm] | 135 | 150 | 180 | 255 |
| **recommended shear resistance per anchor without edge influence, with edge spacing c ≥ 60 x d and centre distance s ≥ 3 x $h_{ef}$** | | | | | | |
| in non-cracked concrete min C 20/25 | $F_2$ | [kN] | 7.4* | 11.6* | 16.9* | 31.4* |
| recommended edge distance | $C_{d.F2}$ | [mm] | 480 | 600 | 720 | 960 |
| recommended centre distance | $S_{d.F2}$ | [mm] | 135 | 150 | 180 | 255 |

* for systems with high installation safety $\gamma_2$ = 1.0
ETAG 0001 2010 Annex C - Design method for Anchoring in concrete / safety concept 3.2.3.1 and 3.2.3.2
recommended loads of a single anchor in concrete C 20/25, normal reinforced in compliance with the specified AD and edge distances

# BeziFee®





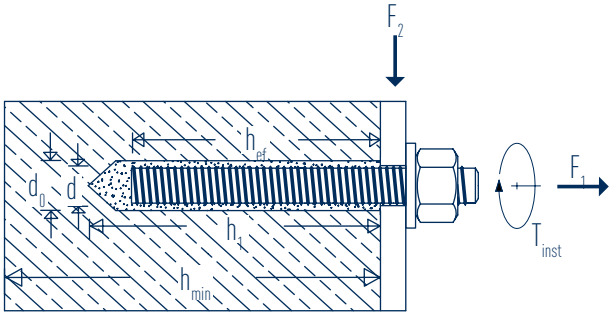

**BeziFee® Bonded Anchor**



ETA 17/0181

ETA 17/0182
Option 1

| SIHGA® Feature | YOUR Benefit |
|---|---|
| 2 component injection adhesive system for secure attachment of threaded and anchor rods | approved product for cracked and non-cracked concrete, brick and stone |
| certified for extensive use | low storage costs, only one product |
| useable under water and waterproof when installed | no restrictions on applicability, even with seismic loading (performance category C1) |
| does not contain any harmful styrene and is free from VOC (volatile organic compounds) | even useable in the drinking water sector and no biting odour during processing |
| fire resistance F120 | incombustible (class A1) |
| static mixer for mixing the two components and extension pipe for thermal insulation contain | practical accessories directly on the construction site, commercialcartridge gun can be used |
| high rated values, also near the edge | easy to read carrying capacity - for special applications SIHGA® can perform the sizing for you |
| case with static mixer, hand pump, wire brush, extension tube and sieve sleeve | use accessories directly on the construction site using a practical case |




| montagepack | | SIHGA® | Dimension |
|---|---|---|---|
| Art. No. | PU | | ml |
| 41706 | 2 | BeziFee® | 300 |





## SIHGA® TIP:

Observe processing temperature of +5 °C to +30 °C.

| SIHGA® | BeziFee® | | Threaded Rod in Concrete | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| threaded rod | d | [-] | M 8 | M 10 | M 12 | M 16 | M 20 | M 24 | M 27 | M 30 |
| concrete drilling diameter | $d_o$ | [mm] | 10 | 12 | 14 | 18 | 22 | 26 | 30 | 35 |
| min. edge distance without load influence | $c_{min}$ | [mm] | $h_{ef}$ / 2 | | | | | | | |
| min. centre distance without load influence | $s_{min}$ | [mm] | $h_{ef}$ / 2 | | | | | | | |
| min. concrete thickness | $h_{min}$ | [mm] | $h_{ef}$ + 30 ≥ 100 | | | | $h_{ef}$ + $2d_0$ | | | |
| max. tightening torque | $T_{inst}$ | [Nm] | 10 | 20 | 40 | 80 | 150 | 200 | 240 | 275 |
| effective anchoring depth | $h_{ef,min}$ | [mm] | 64 | 80 | 96 | 128 | 160 | 192 | 216 | 240 |
| | $h_{ef,max}$ | [mm] | 160 | 200 | 240 | 320 | 400 | 480 | 540 | 600 |
| standard anchoring depth | $h_{ef,s}$ | [mm] | 80 | 90 | 110 | 128 | 170 | 210 | 240 | 270 |
| **non-cracked concrete** | | | | | | | | | | |
| recommended tensile strength with $h_{ef,s}$ | $F_1$ | [kN] | 8,5 | 14,9 | 21,9 | 32,2 | 50,4 | 70,4 | 63,0 | 66,6 |
| recommended shear resistance with $h_{ef,s}$ | $F_2$ | [kN] | 6,5 | 10,4 | 15,1 | 28,7 | 44,8 | 64,5 | 85,1 | 103,4 |
| **cracked concrete** | | | | | | | | | | |
| recommended tensile strength with $h_{ef,s}$ | $F_1$ | [kN] | - | - | 10,4 | 16,1 | 26,7 | 39,6 | - | - |
| recommended shear resistance with $h_{ef,s}$ | $F_2$ | [kN] | - | - | 15,1 | 28,7 | 44,8 | 64,5 | - | - |

ETAG 0012010 C - Design method for anchorages in concrete / Safety concept 3.2
Recommended loads of a single anchor in dry and damp concrete C 20/25, normal reinforced, without edge influence:
Temperature range (–40 °C to + 40 °C); Cross bearing capability with steel 5.8
For other applications see ETA 17/0182 and 17/0181

| Brick | | | M 8 | M 10 | M 12 |
|---|---|---|---|---|---|
| perforated casing | | [-] | 16 x 85 | 16 x 85 | 20 x 85 |
| brick drilling diameter | $d_o$ | [mm] | 16 | | 20 |
| borehole depth | $h_1$ | [mm] | 90 | | |
| effective anchoring depth | $h_{ef}$ | [mm] | 85 | | |
| max. tightening torque | $T_{inst}$ | [Nm] | 2 | | |
| recommended load capacity stone 1* | $F_1 = F_2$ | [kN] | 0,80 | 0,80 | 1,00 |
| recommended load capacity stone 2* | $F_1 = F_2$ | [kN] | 0,36 | 0,48 | 0,60 |

* recommended loads of a single anchor without edge influence
The load-bearing capacity of other stones may be determined by on-site tests in accordance with ETAG 029 appendix B

| Type of Bricks | Min. Thickness | Min. Compressive Strength | Min. Horizontal Centre Distance | Min. Vertical Centre Distance | Min. Edge Distance |
|---|---|---|---|---|---|
| | ρ [kg/dm³] | fb [N/mm²] | $s_{min,II}$ [mm] | $s_{min,n}$ [mm] | $c_{min}$ [mm] |
| stone no. 1: Porotherm P+W | 0,9 | 12 | 373 | 238 | 120 |
| stone no. 2: Hueco Doble | 0,74 | 2,5 | 245 | 110 | 120 |

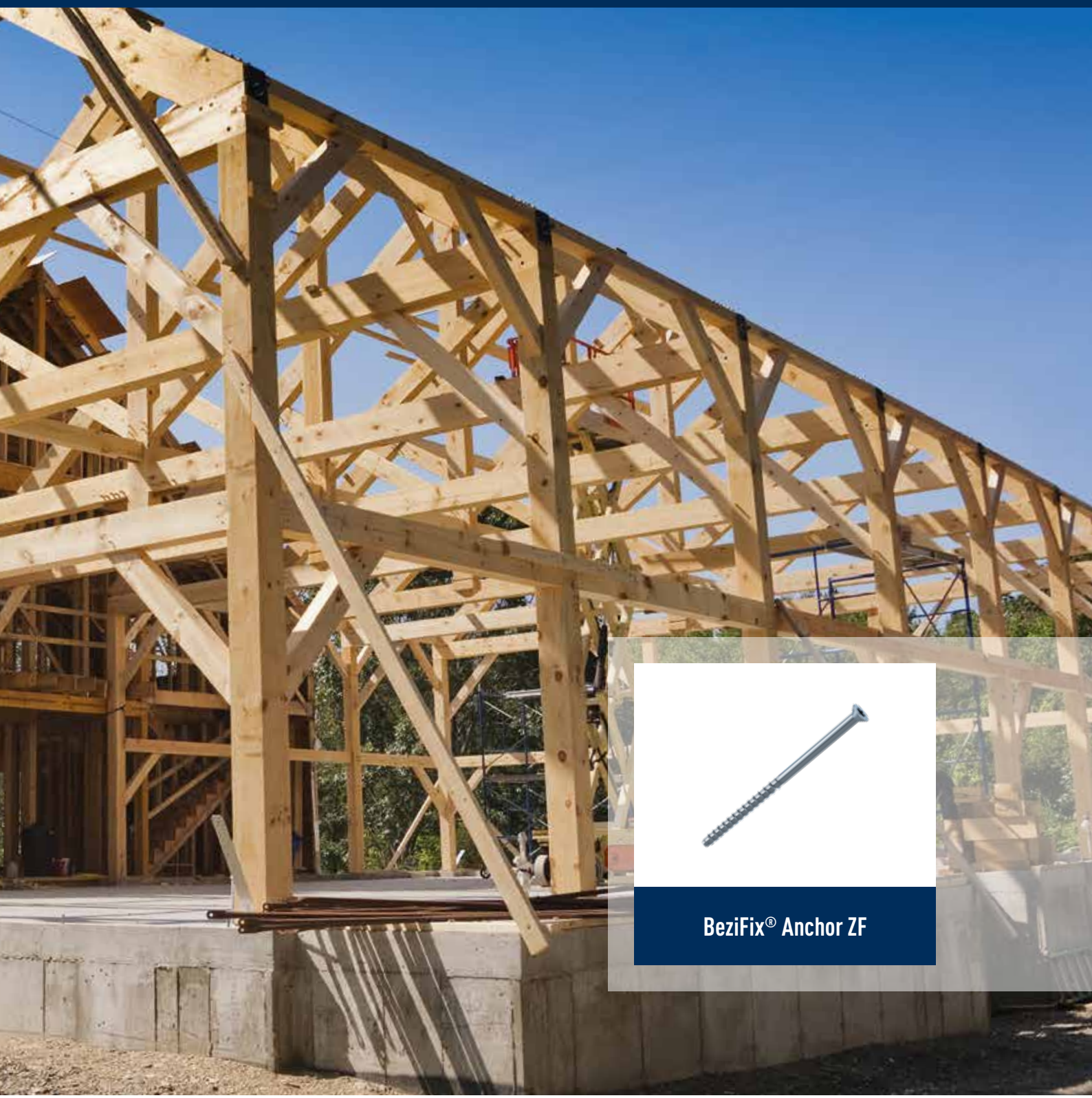


ETA 17/0181 ETA 17/0182 Option 1

# BeziFee® Equipment

| | SIHGA® Feature | YOUR Benefit |
|---|---|---|
|  | **BeziFee® Wire Brush** | |
| | ∅ 18 mm | for dust-free boreholes |
|  | **BeziFee® Sieve Sleeve long** | |
| | sieve sleeve for perforated bricks | cut to length according to individual requirements |
| | ∅ 22, length 1000 mm | for M 12 - M 16 |
|  | **BesiFee® Sieve Sleeve short** | |
| | ∅ 20, length 85 mm, for M 12 | sieve sleeve with stop for perforated bricks |
|  | **BeziFee® Hand Pump** | |
| | hand pump 750 ml for dust-free boreholes | secure hold in bore-hole |
|  | **BeziFee® Statik Mixer** | |
| | suitable mixer | for mixing the components |
|  | **BeziFee® Extension Tube** | |
| | ∅ 10, length 285 mm for deeper boreholes | for use with thermal insulation |

# BeziFix® Anchor ZF/ZS/ZSS





**BeziFix® Anchor ZF**



ETA-16/0889
Option 1

| SIHGA® Feature | YOUR Benefit |
|---|---|
| fastens in concrete without dowels | optimal for fastening close to edges, no splitting effect |
| easy push-through installation | saves a great deal of time because the BeziFix® Anchor ZF/ZS/ZSS is only pushed through the part to be anchored |
| drill hole diameter smaller than with expansion anchors | also saves lots of installation time |
| sawtooth thread in the front area | makes it easy to screw into the pre-drilled concrete |
| just tighten by hand to achieve the full load-bearing capacity | does not need a torque wrench |
| approved with grades C 20/25 to C 50/60 in cracked and non-cracked concrete | there are few restrictions on the application, gives security |
| includes installation instructions and Stabebo® SDS drill with four-edged geometry specially for reinforced concrete | time-saving, practical, precise, complete accessories enclosed |
| design values | SIHGA® performs the calculation for you |

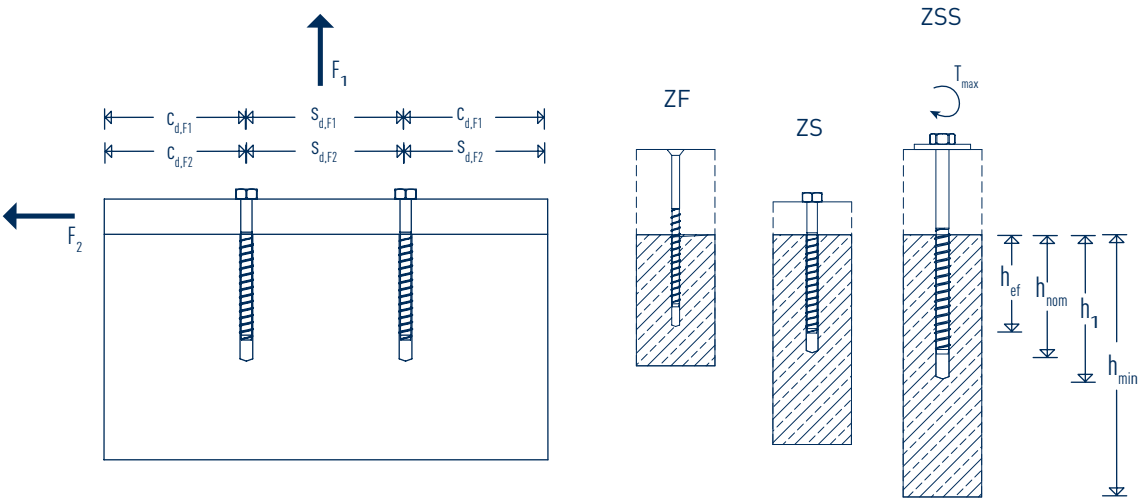


BeziFix® Anchor ZS/ZSS



## SIHGA® TIP:

Ensure correct drill diameter and drill quality, the drill is therefore enclosed.




| SIHGA® | BeziFix® Anchor | | ZF | ZS | ZSS |
|---|---|---|---|---|---|
| coating | | | SC 12 | SC 12 | SC 4 |
| diameter | ∅ | [mm] | 7.5 | 10.5 | 12.5 |
| screw-in depth | $h_{nom}$ | [mm] | 55 | 75 | 95 |
| effective anchoring depth | $h_{ef}$ | [mm] | 41 | 55 | 71 |
| drill diameter - concrete | $d_o$ | [mm] | 6.0 | 9.0 | 10.0 |
| drilled hole depth | $h_1$ | [mm] | 70 | 90 | 110 |
| min. concrete thickness | $h_{min}$ | [mm] | 100 | 160 | 200 |
| max. tightening torque [4] | $T_{max}$ | [Nm] | 250 | 450 | 450 |
| min. edge and axial distances without load influence | | [mm] | 40 | 55 | 65 |
| **recommended tensile capacity $F_1$ per anchor without edge influence, with edge distance c ≥ 1.2 x $C_{Cr.sp\ (per\ ETA)}$ and axial distance s ≥ 3 x $h_{ef}$** | | | | | |
| uncracked concrete min. C20/25 | $F_1$ | [kN] | 2.9 [1] | 3.3 [2] | 13.9 [2] |
| cracked concrete min. C20/25 | $F_1$ | [kN] | 1.4 [1] | 1.7 [2] | 6.7 [2] |
| recommended edge distance | $C_{d,F1}$ | [mm] | 90 | 120 | 168 |
| recommended axial distance | $S_{d,F1}$ | [mm] | 123 | 165 | 213 |
| **recommended lateral capacity $F_2$ per anchor without edge influence, with edge distance c ≥ 10 x $h_{ef}$ and axial distance s ≥ 3 x $h_{ef}$** | | | | | |
| concrete min. C 20/25 | $F_2$ | [kN] | 7.6 [3] | 14.9 [3] | 23.1 [3] |
| recommended edge distance | $C_{d,F2}$ | [mm] | 410 | 550 | 710 |
| recommended axial distance | $S_{d,F2}$ | [mm] | 123 | 165 | 213 |

[1] low installation safety γ2 = 1.4; ETAG 001 2010 annex C
[2] normal installation safety γ2 = 1.2; ETAG 001 2010 annex C
[3] high installation safety γ2 = 1.0; ETAG 001 2010 annex C
[4] setting tool: Tangential impact wrench, max. power rating Tmax per manufacturer's instructions
ETAG 001 2010 Annex C – dimensioning of metal anchors for use in concrete / safety concept 3.2.3.1 and 3.2.3.2
Recommended loads for single anchor in concrete C 20/25, standard reinforcement - in compliance with AD (thickness add-on part) and edge distances as indicated

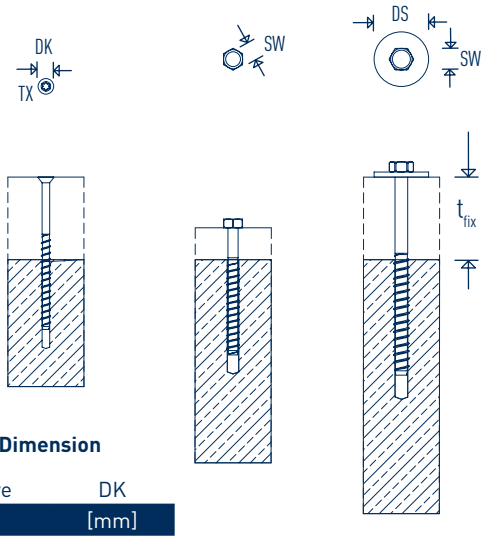
## SIHGA® TIP:

Tangential impact wrench recommended for processing.



ETA-16/0889 Option 1

| SIHGA® Feature | YOUR Benefit |
|---|---|
| design values | SIHGA® performs the calculation for you |
| BeziFix® Anchor ZF with counter-sunk head and Torx drive, Bezifix® Anchor ZS with hex head, BeziFix® Anchor ZSS with hex head and washer DIN 440 | ensures optimum force transfer when screwed in |




| SIHGA® | | Dimension | Installation Part Thickness | Dimension | |
|---|---|---|---|---|---|
| montagepack | | BeziFix® Anchor ZF | $t_{fix}$ | Drive | DK |
| Art. No. | PU | d1 x L | [mm] | TX | [mm] |
| 41306 | 100 | **7.5 x 40** | 5 | 40 | 13 |
| 41316 | 100 | **7.5 x 60** | 5 | 40 | 13 |
| 41326 | 100 | **7.5 x 80** | 25 | 40 | 13 |
| 41336 | 100 | **7.5 x 100** | 45 | 40 | 13 |
| 41346 | 100 | **7.5 x 120** | 65 | 40 | 13 |
| 41356 | 100 | **7.5 x 140** | 85 | 40 | 13 |
| 41366 | 100 | **7.5 x 160** | 105 | 40 | 13 |

| montagepack | | BeziFix® Anchor ZS | $t_{fix}$ | SW |
|---|---|---|---|---|
| Art. No. | PU | d1 x L | [mm] | [mm] |
| 41506 | 50 | **10.5 x 60** | 5 | 15 |
| 41516 | 50 | **10.5 x 80** | 5 | 15 |
| 41526 | 50 | **10.5 x 100** | 25 | 15 |
| 41536 | 50 | **10.5 x 120** | 45 | 15 |
| 41546 | 50 | **10.5 x 140** | 65 | 15 |
| 41556 | 50 | **10.5 x 160** | 85 | 15 |

| montagepack | | BeziFix® Anchor ZSS | $t_{fix}$ | SW | DS |
|---|---|---|---|---|---|
| Art. No. | PU | d1 x L | [mm] | [mm] | |
| 41816 | 30 | **12.5 x 100** | 5 | 17 | 44 |
| 41826 | 30 | **12.5 x 120** | 25 | 17 | 44 |
| 41836 | 30 | **12.5 x 140** | 45 | 17 | 44 |
| 41846 | 30 | **12.5 x 160** | 65 | 17 | 44 |
| 41856 | 30 | **12.5 x 180** | 85 | 17 | 44 |
| 41866 | 30 | **12.5 x 200** | 105 | 17 | 44 |
| 41876 | 30 | **12.5 x 240** | 145 | 17 | 44 |
| 41886 | 30 | **12.5 x 280** | 185 | 17 | 44 |
| 41896 | 30 | **12.5 x 320** | 225 | 17 | 44 |

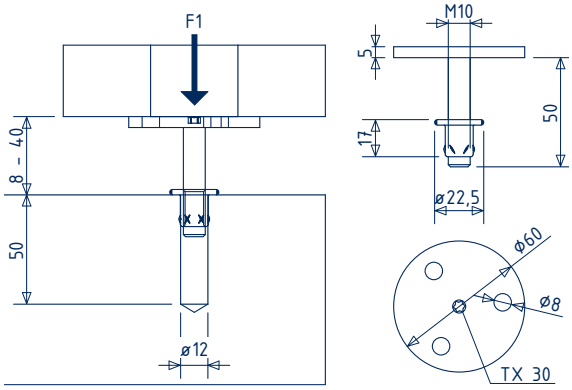
# Distancer



Distancer /
with DistaStop (optional)



| SIHGA® Feature | YOUR benefit |
|---|---|
| Specially developed for the assembly of timber frame and cross-laminated timber constructions | Perfectly suited for quick and precise installation of the first component on the concrete floor slab, no tedious placement of levelling plates |
| Drill hole of 12 mm diameter and 50 mm depth required | Simply drill and tap in the threaded sleeve with a hammer |
| TX 30 drive in disc | The distancer can be screwed in to the desired height in a flash using a cordless screwdriver |
| Stepless height adjustment from 8 - 40 mm via M10 thread | Precise and flexible adjustment, a real game changer |
| Fixing by screwing into the concrete slab | Stability guaranteed, no unintentional slipping or shifting |
| Compatible with Orakelix thanks to perforations in the disc and the option of combining with a laser | Even more efficient in combination with Orakelix and a laser, for exact levelling, maximum precision and ergonomic working in a standing position |
| No need to attach plates | No tedious handling |




| SIHGA® montagepack / parcel | Dimension Distancer | Recommended values* Pressure F1 max. | Tension | Cross |
|---|---|---|---|---|
| Art. No. | PU | Type | [kN] | |
| 50056 | 25 | M10x50 | 10 | - | - |
| 50072 | 25 | DistaStop | - | - | - |

* recommended values refer to the load-bearing capacity of the steel parts. The press-fit of the distancer in the overlying timber component must be dimensioned in accordance with EC 5.

| SIHGA® montagepack | Accessory Orakelix Adaptor |
|---|---|
| Art. No. | PU | Type |
| 55556 | 1 | Distancer |





Adaptor for Orakelix

## SIHGA® TIP:

The permanently acting compressive forces, e.g. of a wall mounted on it, must be dissipated using suitable methods, such as a swelling mortar strip.

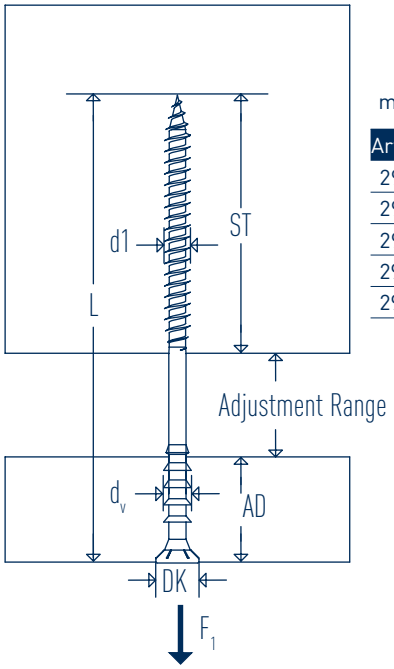
# GoFix® JK





**GoFix® JK**
**made of hardened carbon**

| SIHGA® Feature | YOUR Benefit |
|---|---|
| for professional installation from wood on wood | including distance of the two woods |
| ribs pull without pre-drilling into the wood | adjustment in horizontal and vertical direction possible |
| including SIHGAFIX, system pin and installation instructions | time-saving, practical, precise, all accessories are included |
| rated value | SIHGA® will do the calculation for you |

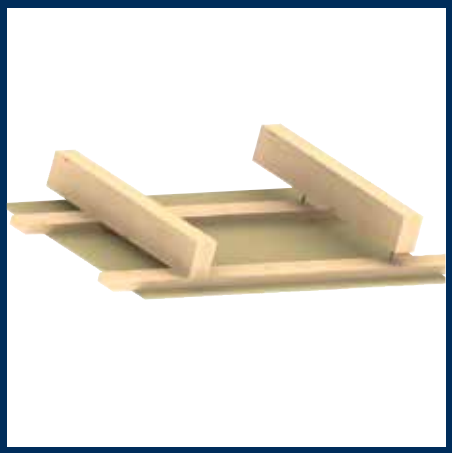


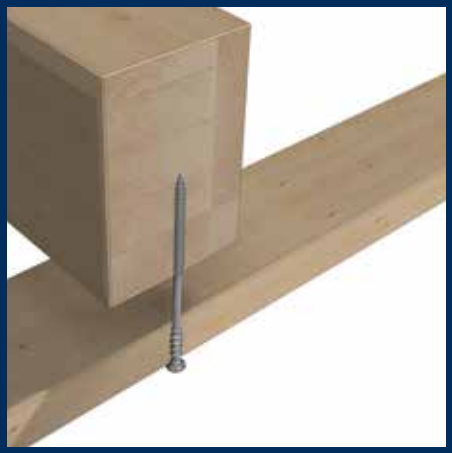

| SIHGA® | | Dimension | Attachment Part | Setting Depth | Adjustment Range | Recommended Loads | |
|---|---|---|---|---|---|---|---|
| montagepack | | GoFix® JK | AD | ST | to | Tensile Force $F_1$ [kN] | |
| Art. No. | PU | d1 x L | [mm] | [mm] | [mm] | Head | Thread |
| 29326 | 100 | **6,0 x 80** | 20 | 50 | 10 | 0,51 | 1,03 |
| 29336 | 100 | **6,0 x 100** | 20 | 50 | 30 | 0,51 | 1,03 |
| 29346 | 100 | **6,0 x 120** | 20 | 50 | 50 | 0,51 | 1,03 |
| 29356 | 100 | **6,0 x 145** | 20 | 50 | 75 | 0,51 | 1,03 |
| 29366 | 100 | **6,0 x 160** | 20 | 50 | 90 | 0,51 | 1,03 |

**Dimension [mm]**

GoFix® JK

| d1 | $d_v$ | TX | DK |
|---|---|---|---|
| 6,0 | 6,5 | 25 | 10,0 |





# GoFix® MS II





**GoFix® MS II**
**the wood construction screw**



ETA-20/0558

| SIHGA® Feature | YOUR Benefit |
|---|---|
| made in Austria | top European quality and added-value |
| special thread geometry | optimal traction in the end grain |
| fastens wood to wood, even OSB panels | screw without pre-drilling and pre-sinking |
| fastens pressure-resistant insulation materials for on-rafter insulation | for insulation with a compressive stress above 50 kPa |
| screwing permissible from 0° up to 90° to the grain | fastens with all screw-in angles |
| the splitting effect in the wood is reduced through the special multi-stage head | saves 50 % of storage, combines countersunk head and flat-head; transfers high forces, but can still be countersunk and facilitates screw connections close to the edge |
| special ribs on the shaft and slip coating | pre-drilling effect, easy rotation, battery-saving |
| SIHGA® tip | fast setting of the screw, user-friendly and time-saving |
| including SIHGAFIX®, Systemstift® and installation instructions | time-saving, practical, precise, all accessories enclosed; SIHGAFIX® also enables screwing into deep grooves |
| SIHGA® Ornamental Washer MSZ for diameter 8 mm | this Ornamental Washer MSZ increases the tensile force of the head to 9.1 kN; very attractive solution |

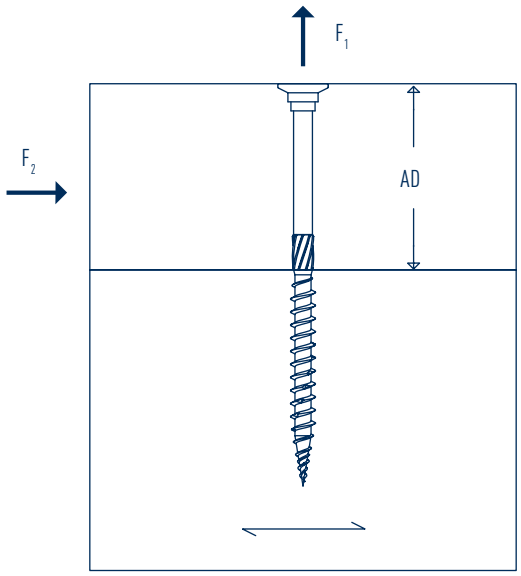


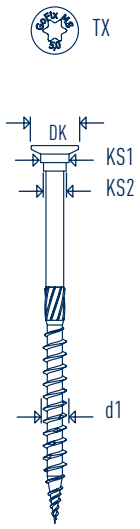


## SIHGA® TIP:

For perfect screw pattern, screw head in flush.

| SIHGA® Feature | YOUR Benefit |
|---|---|
| fastens wood to wood, even OSB panels | screw without pre-drilling and pre-sinking |
| screwing permissible from 0° up to 90° to the grain | fastens with all screw-in angles |
| design values | SIHGA® performs the calculation for you |




**Dimension [mm]**

GoFix® MS II

| d1 | TX | DK | KS 1 | KS 2 |
|---|---|---|---|---|
| 4,0 | 15 | 8,0 | 5,2 | 4,0 |
| 4,5 | 20 | 9,0 | 5,9 | 4,5 |
| 5,0 | 25 | 10,0 | 6,6 | 5,0 |

| SIHGA® | | Dimension | Installation Part | Characteristic Values* | | | |
|---|---|---|---|---|---|---|---|
| montagepack | | GoFix® MS II | AD | Tensile Force $F_1$ [kN] | | Shear Force $F_2$ [kN] | |
| Art. No. | PU | d1 x L | [mm] | Head | Thread | Wood-Wood | Steel-Wood |
| 44056 | 500 | **4,0 x 30** | 12 | 1,04 | 1,04 | 0,75 | 1,10 |
| 44066 | 500 | **4,0 x 35** | 14 | 1,13 | 1,22 | 0,79 | 1,23 |
| 44076 | 500 | **4,0 x 40** | 16 | 1,13 | 1,39 | 0,82 | 1,29 |
| 44086 | 500 | **4,0 x 45** | 18 | 1,13 | 1,57 | 0,84 | 1,29 |
| 44096 | 500 | **4,0 x 50** | 20 | 1,13 | 1,74 | 0,87 | 1,29 |
| 44106 | 500 | **4,0 x 60** | 24 | 1,13 | 2,09 | 0,94 | 1,29 |
| 44226 | 400 | **4,5 x 50** | 20 | 1,39 | 1,89 | 1,01 | 1,52 |
| 44236 | 400 | **4,5 x 60** | 24 | 1,39 | 2,27 | 1,09 | 1,52 |
| 44246 | 300 | **4,5 x 70** | 28 | 1,39 | 2,65 | 1,16 | 1,52 |
| 44316 | 200 | **5,0 x 50** | 20 | 1,67 | 2,07 | 1,20 | 1,92 |
| 44326 | 200 | **5,0 x 60** | 24 | 1,67 | 2,48 | 1,27 | 1,92 |
| 44336 | 200 | **5,0 x 70** | 28 | 1,67 | 2,90 | 1,34 | 1,92 |
| 44346 | 200 | **5,0 x 80** | 32 | 1,67 | 3,31 | 1,42 | 1,92 |
| 44356 | 200 | **5,0 x 90** | 36 | 1,67 | 3,73 | 1,48 | 1,92 |
| 44366 | 200 | **5,0 x 100** | 40 | 1,67 | 4,14 | 1,48 | 1,92 |
| 44376 | 200 | **5,0 x 120** | 50 | 1,67 | 4,83 | 1,48 | 1,92 |

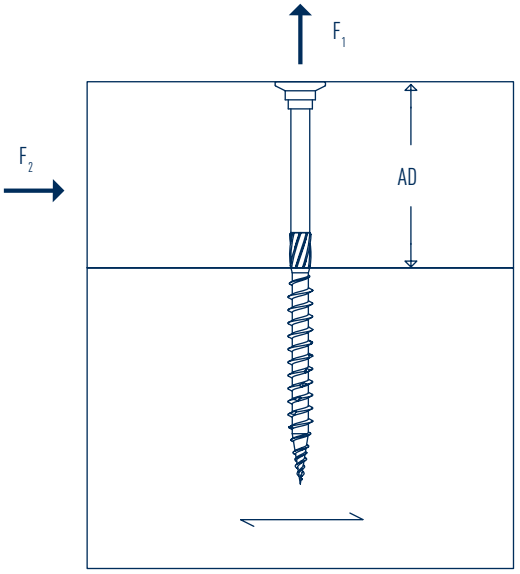
Subject to technical modifications and errors. Status of approval 02.2026

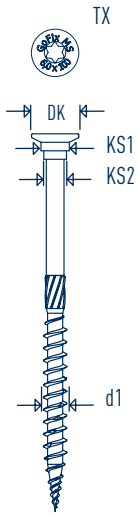
* characteristic values for measurement according to EC 5, bulk density ρk = 350 kg/m³ (C24)



ETA-20/0558

| SIHGA® Feature | YOUR Benefit |
|---|---|
| fastens wood to wood, even OSB panels | screw without pre-drilling and pre-sinking |
| screwing permissible from 0° up to 90° to the grain | fastens with all screw-in angles |
| design values | SIHGA® performs the calculation for you |




**Dimension [mm]**

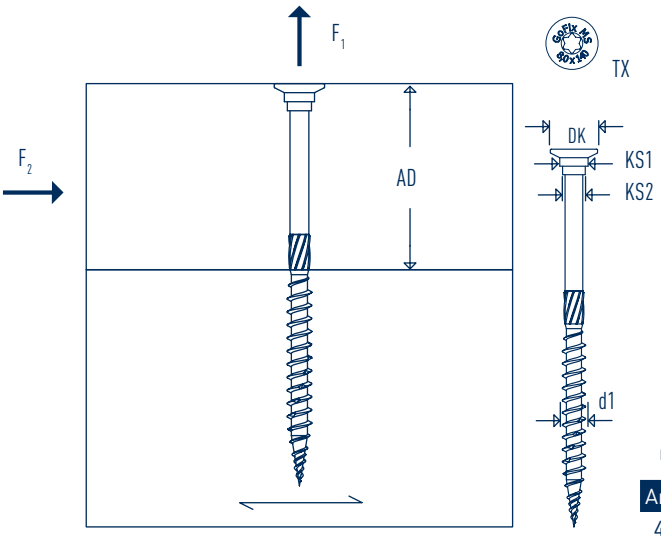
GoFix® MS II

| d1 | TX | DK | KS 1 | KS 2 |
|---|---|---|---|---|
| 6,0 | 30 | 13,5 | 8,6 | 6,0 |

| SIHGA® | | Dimension | Installation Part | Characteristic Values* | | | |
|---|---|---|---|---|---|---|---|
| montagepack | | GoFix® MS II | AD | Tensile Force $F_1$ [kN] | | Shear Force $F_2$ [kN] | |
| Art. No. | PU | d1 x L | [mm] | Head | Thread | Wood-Wood | Steel-Wood |
| 44406 | 100 | **6,0 x 70** | 28 | 2,97 | 3,38 | 1,90 | 2,87 |
| 44416 | 100 | **6,0 x 80** | 32 | 2,97 | 3,86 | 1,98 | 2,87 |
| 44426 | 100 | **6,0 x 90** | 36 | 2,97 | 4,34 | 2,06 | 2,87 |
| 44436 | 100 | **6,0 x 100** | 40 | 2,97 | 4,82 | 2,15 | 2,87 |
| 44446 | 100 | **6,0 x 120** | 50 | 2,97 | 5,63 | 2,25 | 2,87 |
| 44456 | 100 | **6,0 x 140** | 70 | 2,97 | 5,63 | 2,25 | 2,87 |
| 44466 | 100 | **6,0 x 160** | 90 | 2,97 | 5,63 | 2,25 | 2,87 |
| 44476 | 100 | **6,0 x 180** | 110 | 2,97 | 5,63 | 2,25 | 2,87 |
| 44486 | 100 | **6,0 x 200** | 130 | 2,97 | 5,63 | 2,25 | 2,87 |

Subject to technical modifications and errors. Status of approval 05.2023
* characteristic values for measurement according to EC 5, bulk density ρk = 350 kg/m³ (C24)

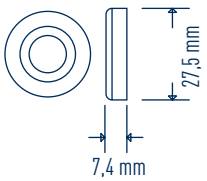
| SIHGA® Feature | YOUR Benefit |
|---|---|
| fastens wood to wood, even OSB panels | screw without pre-drilling and pre-sinking |
| screwing permissible from 0° up to 90° to the grain | fastens with all screw-in angles |
| design values | SIHGA® performs the calculation for you |
| online calculation | at www.sihga.com (on-rafter insulation) |




**Dimension [mm]**

GoFix® MS II

| d1 | TX | DK | KS 1 | KS 2 |
|---|---|---|---|---|
| 8,0 | 40 | 18,3 | 11,6 | 8,0 |




| SIHGA® | Dimension | Characteristic Values* |
|---|---|---|
| montagepack | Washer MSZ | Tensile Force $F_1$ [kN] |
| Art. No. | PU | $d_{MSZ}$ [mm] | Washer MSZ |
| 44696 | 75 | 27,5 | 9,1 |

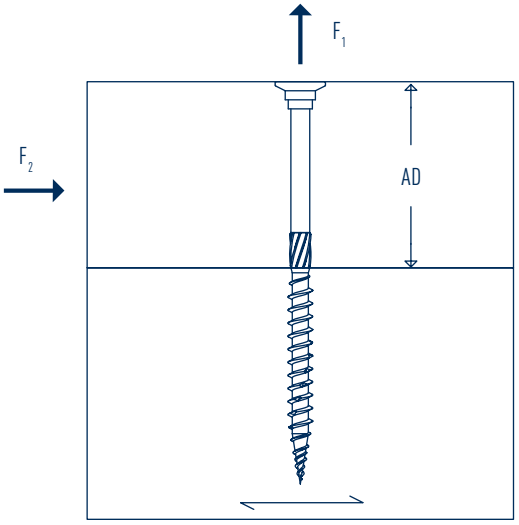
| SIHGA® | | Dimension | Installation Part | Characteristic Values* | | | |
|---|---|---|---|---|---|---|---|
| montagepack | | GoFix® MS II | AD | Tensile Force $F_1$ [kN] | | Shear Force $F_2$ [kN] | |
| Art. No. | PU | d1 x L | [mm] | Head | Thread | Wood-Wood | Steel-Wood |
| 44506 | 75 | **8,0 x 80** | 30 | 4,96 | 4,96 | 2,96 | 4,66 |
| 44516 | 75 | **8,0 x 100** | 40 | 5,05 | 5,95 | 3,19 | 4,72 |
| 44526 | 75 | **8,0 x 120** | 50 | 5,05 | 6,94 | 3,44 | 4,72 |
| 44536 | 75 | **8,0 x 140** | 60 | 5,05 | 7,94 | 3,71 | 4,72 |
| 44546 | 75 | **8,0 x 160** | 70 | 5,05 | 8,93 | 3,71 | 4,72 |
| 44556 | 75 | **8,0 x 180** | 80 | 5,05 | 9,92 | 3,71 | 4,72 |
| 44566 | 75 | **8,0 x 200** | 100 | 5,05 | 9,92 | 3,71 | 4,72 |
| 44576 | 75 | **8,0 x 220** | 120 | 5,05 | 9,92 | 3,71 | 4,72 |
| 44586 | 75 | **8,0 x 240** | 140 | 5,05 | 9,92 | 3,71 | 4,72 |
| 44596 | 75 | **8,0 x 260** | 160 | 5,05 | 9,92 | 3,71 | 4,72 |
| 44606 | 75 | **8,0 x 280** | 180 | 5,05 | 9,92 | 3,71 | 4,72 |
| 44616 | 75 | **8,0 x 300** | 200 | 5,05 | 9,92 | 3,71 | 4,72 |
| 44626 | 75 | **8,0 x 320** | 220 | 5,05 | 9,92 | 3,71 | 4,72 |
| 44636 | 75 | **8,0 x 340** | 240 | 5,05 | 9,92 | 3,71 | 4,72 |
| 44646 | 75 | **8,0 x 360** | 260 | 5,05 | 9,92 | 3,71 | 4,72 |
| 44656 | 75 | **8,0 x 380** | 280 | 5,05 | 9,92 | 3,71 | 4,72 |
| 44666 | 75 | **8,0 x 400** | 300 | 5,05 | 9,92 | 3,71 | 4,72 |
| 44676 | 75 | **8,0 x 450** | 350 | 5,05 | 9,92 | 3,71 | 4,72 |
| 44686 | 75 | **8,0 x 500** | 400 | 5,05 | 9,92 | 3,71 | 4,72 |

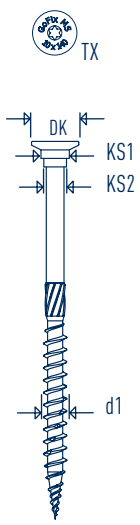
Subject to technical modifications and errors. Status of approval 05.2023
* characteristic values for measurement according to EC 5, bulk density ρk = 350 kg/m³ (C24)



ETA-20/0558

| SIHGA® Feature | YOUR Benefit |
|---|---|
| fastens wood to wood, even OSB panels | screw without pre-drilling and pre-sinking |
| screwing permissible from 0° up to 90° to the grain | fastens with all screw-in angles |
| design values | SIHGA® performs the calculation for you |
| online calculation | at www.sihga.com (on-rafter insulation) |




**Dimension [mm]**
GoFix® MS II

| d1 | TX | DK | KS 1 | KS 2 |
|---|---|---|---|---|
| 10,0 | 50 | 22,5 | 14,4 | 10,0 |

| SIHGA® | | Dimension | Installation Part | Characteristic Values* | | | |
|---|---|---|---|---|---|---|---|
| montagepack | | GoFix® MS II | AD | Tensile Force $F_1$ [kN] | | Shear Force $F_2$ [kN] | |
| Art. No. | PU | d1 x L | [mm] | Head | Thread | Wood-Wood | Steel-Wood |
| 44706 | 50 | **10,0 x 80** | 30 | 5,75 | 5,75 | 3,49 | 5,57 |
| 44716 | 50 | **10,0 x 100** | 40 | 6,90 | 6,90 | 4,16 | 6,34 |
| 44726 | 50 | **10,0 x 120** | 50 | 7,09 | 8,05 | 4,48 | 6,39 |
| 44736 | 50 | **10,0 x 140** | 60 | 7,09 | 9,20 | 4,79 | 6,39 |
| 44746 | 50 | **10,0 x 160** | 70 | 7,09 | 10,35 | 5,04 | 6,39 |
| 44756 | 50 | **10,0 x 180** | 80 | 7,09 | 11,50 | 5,04 | 6,39 |
| 44766 | 50 | **10,0 x 200** | 100 | 7,09 | 11,50 | 5,04 | 6,39 |
| 44776 | 50 | **10,0 x 220** | 120 | 7,09 | 11,50 | 5,04 | 6,39 |
| 44786 | 50 | **10,0 x 240** | 140 | 7,09 | 11,50 | 5,04 | 6,39 |
| 44796 | 50 | **10,0 x 260** | 160 | 7,09 | 11,50 | 5,04 | 6,39 |
| 44806 | 50 | **10,0 x 280** | 180 | 7,09 | 11,50 | 5,04 | 6,39 |
| 44816 | 50 | **10,0 x 300** | 200 | 7,09 | 11,50 | 5,04 | 6,39 |
| 44826 | 50 | **10,0 x 320** | 220 | 7,09 | 11,50 | 5,04 | 6,39 |
| 44836 | 50 | **10,0 x 340** | 240 | 7,09 | 11,50 | 5,04 | 6,39 |
| 44846 | 50 | **10,0 x 360** | 260 | 7,09 | 11,50 | 5,04 | 6,39 |
| 44856 | 50 | **10,0 x 400** | 300 | 7,09 | 11,50 | 5,04 | 6,39 |
| 44866 | 50 | **10,0 x 450** | 350 | 7,09 | 11,50 | 5,04 | 6,39 |
| 44876 | 50 | **10,0 x 500** | 400 | 7,09 | 11,50 | 5,04 | 6,39 |
| 44886 | 50 | **10,0 x 550** | 450 | 7,09 | 11,50 | 5,04 | 6,39 |
| 44896 | 50 | **10,0 x 600** | 500 | 7,09 | 11,50 | 5,04 | 6,39 |

Subject to technical modifications and errors. Status of approval 05.2023
* characteristic values for measurement according to EC 5, bulk density ρk = 350 kg/m³ (C24)



ETA-20/0558

Greatest earthquake protection

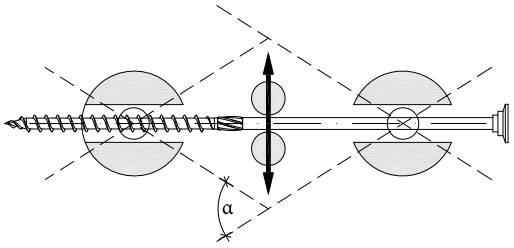
# GoFix® MS II

| SIHGA® Feature | YOUR Benefit |
|---|---|
| SIHGA® is ahead of its time | tests already under way for the latest revision of Eurocode 5 |
| latest tests confirm excellent properties | ductility ensures safety |
| best ductility class S3 for earthquake resistance | safety according to prEN 14592 |
| simulated earthquake load through cyclic bending of the bolts | reliable residual load capacity of at least 90 % |

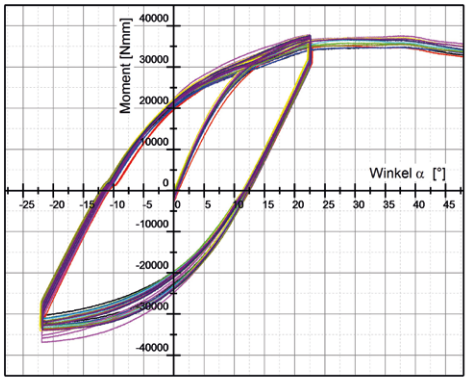
| GoFix® MS II | Residual Load Capacity |
|---|---|
| ∅ [mm] | $M_{final}/M_{int}$ |
| 6 | 90 % |
| 8 | 93 % |
| 10 | 100 % |



bending of the bolt during the test



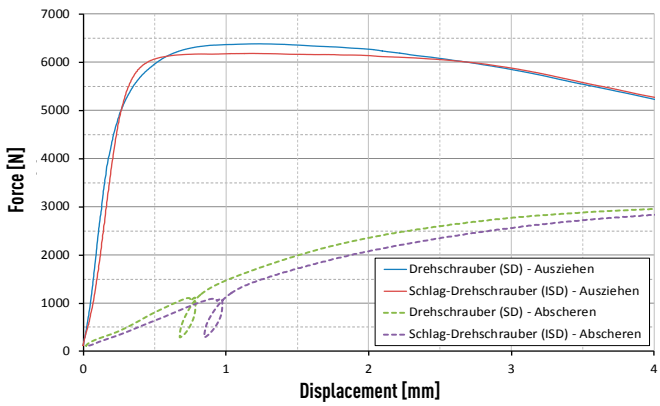

torque load of the bolt as a function of the bending angle



# GoFix® MS II application by means of impact screwdriver

Tested by the University of Innsbruck

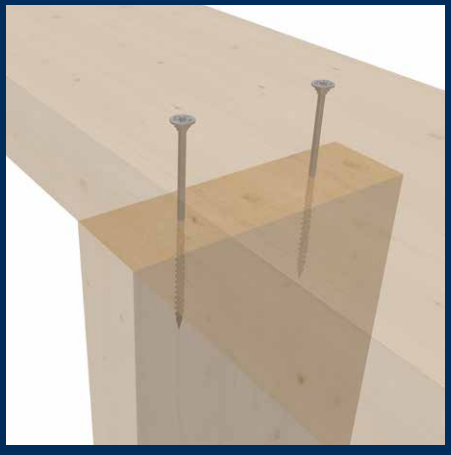
| SIHGA® Feature | YOUR Benefit |
|---|---|
| positive report for processing with impact screwdrivers | provides security |
| graph below shows comparison of screw-in methods | only slightly affects the initial stiffness of a connection |
| impact screwdriver brings benefits | less strain on the wrist, even when working overhead |

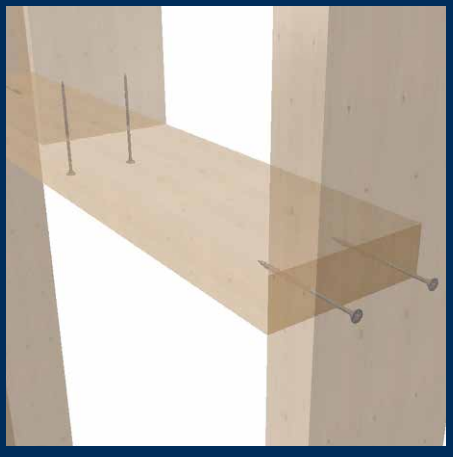







# GoFix® MS II using in end grain





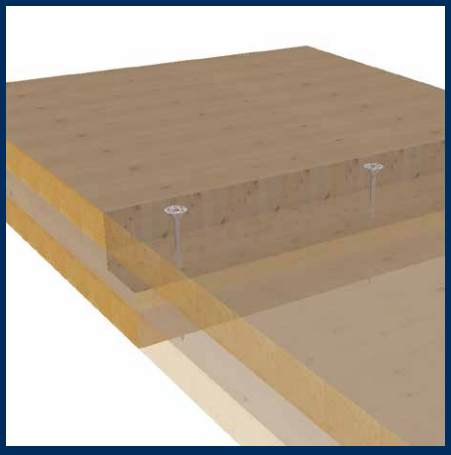
# GoFix® MS II using in hardwood

| SIHGA® Feature | YOUR Benefit |
|---|---|
| use in hardwood allowed | safety according to ETA -20/0558 |
| extensive application possible by means of pre-drilling | in solid wood, glued plywood board and laminated veneer wood |
| head pull-through force and thread extension may be increased by the factor k; observe maximum tensile strength according to ETA | high load capacity for efficient connections |

| GoFix® MS II | Core Diameter = max. Predrilling Diameter |
|---|---|
| Diameter [mm] | [mm] |
| **5,0** | 3,3 |
| **6,0** | 4,0 |
| **8,0** | 5,3 |
| **10,0** | 6,2 |

$$k_{dens} = \left(\frac{\rho_k}{350}\right)^{0,8}$$





## SIHGA® TIP:

For screw connections in hardwood WITHOUT drilling, we recommend GoFix® SH.

# GoFix® S+



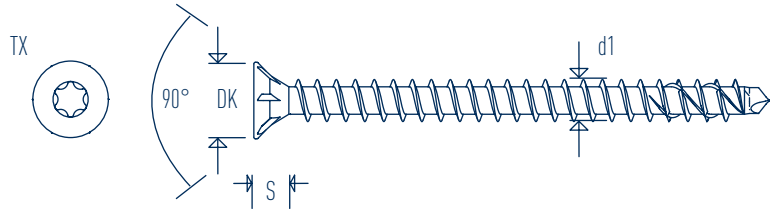


**GoFix® S+ made from hardened carbon steel**



ETA-11/0425

| SIHGA® Feature | YOUR Benefit |
|---|---|
| fastens steel parts to wood | ideal for mounting wooden covers to steel beams, attaching steel brackets to wooden beams, mounting with steel struts |
| made from hardened carbon steel | the permanent, secure and powerful fastening |
| SIHGA® threads and countersunk head | the load forces are optimally transferred from the wood to the steel part |
| SIHGA® drill bit | for stress-free, easy rotation, enables small edge and axial distances |
| screwing permissible from 0° up to 90° to the grain | fastens with all screw-in angles |
| optimised thread | for lightweight screw connections with low screw-in torque |
| screw head with deep, recessed drive | for optimum force transfer; avoids undesired skipping of the drive out of the screw head |
| including SIHGAFIX®, Systemstift® and installation instructions | time-saving, practical, precise, complete accessories enclosed |




**Dimension [mm]**

GoFix® S+

| d1 | TX | DK | S |
|---|---|---|---|
| 8,0 | 40 | 15,0 | 5,5 |
| 10,0 | 50 | 18,3 | 6,5 |

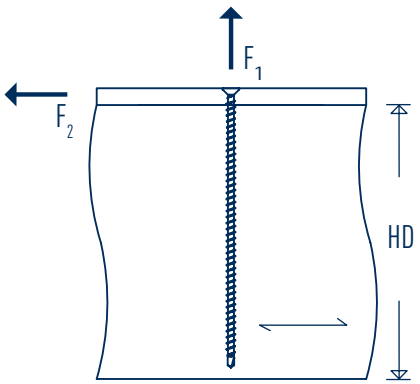


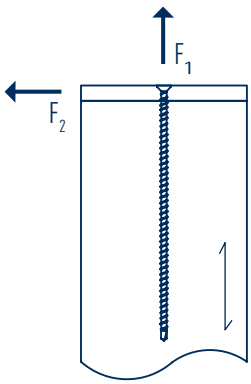


## SIHGA® TIP:

Note edge and axial distances.
For easier screw-in, use screw-in assistance GoFix® ESH 8.

| SIHGA® Feature | YOUR Benefit |
|---|---|
| including SIHGAFIX®, Systemstift® and installation instructions | time-saving, practical, precise, complete accessories enclosed |
| design values | SIHGA® performs the calculation for you |
| calculation | S³ software download at www.sihga.com |



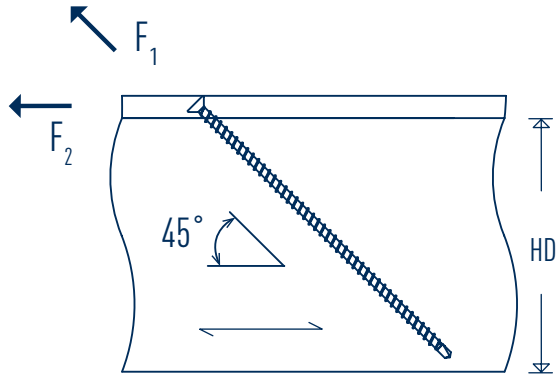

| SIHGA® | | Dimension | Wood Component | Characteristic Values 90° * | | Characteristic Values 0° * | |
|---|---|---|---|---|---|---|---|
| montagepack | | GoFix® S+ | HD | Tensile Force $F_1$ | Shear Force $F_2$ | Tensile Force $F_1$ | Shear Force $F_2$ |
| Art. No. | PU | d1 x L | [mm] | [kN] | [kN] | [kN] | [kN] |
| 42406 | 75 | **8,0 x 95** | 100 | 7,50 | 6,07 | 2,25 | 3,58 |
| 42416 | 75 | **8,0 x 125** | 130 | 10,50 | 7,11 | 3,15 | 3,81 |
| 42426 | 75 | **8,0 x 155** | 160 | 13,40 | 7,83 | 4,02 | 4,02 |
| 42436 | 75 | **8,0 x 195** | 200 | 17,40 | 8,83 | 5,22 | 4,32 |
| 42446 | 75 | **8,0 x 220** | 230 | 19,90 | 9,46 | 5,97 | 4,51 |
| 42456 | 75 | **8,0 x 245** | 250 | 22,40 | 10,08 | 6,72 | 4,70 |
| 42466 | 75 | **8,0 x 270** | 280 | 24,90 | 10,71 | 7,47 | 4,89 |
| 42476 | 75 | **8,0 x 295** | 300 | 25,00 | 10,73 | 8,22 | 5,07 |
| 42486 | 75 | **8,0 x 330** | 340 | 25,00 | 10,73 | 9,27 | 5,34 |
| 42496 | 75 | **8,0 x 375** | 380 | 25,00 | 10,73 | 10,62 | 5,67 |
| 42506 | 75 | **8,0 x 400** | 410 | 25,00 | 10,73 | 11,37 | 5,86 |
| 42516 | 75 | **8,0 x 430** | 440 | 25,00 | 10,73 | 12,27 | 6,09 |
| 42526 | 75 | **8,0 x 480** | 490 | 25,00 | 10,73 | 13,77 | 6,46 |
| 42806 | 50 | **10,0 x 125** | 130 | 11,96 | 9,27 | 3,59 | 5,01 |
| 42816 | 50 | **10,0 x 155** | 160 | 15,41 | 10,13 | 4,62 | 5,27 |
| 42826 | 50 | **10,0 x 195** | 200 | 20,01 | 11,28 | 6,00 | 5,61 |
| 42836 | 50 | **10,0 x 220** | 230 | 22,89 | 12,00 | 6,87 | 5,83 |
| 42846 | 50 | **10,0 x 245** | 250 | 25,76 | 12,72 | 7,73 | 6,04 |
| 42856 | 50 | **10,0 x 270** | 280 | 28,64 | 13,44 | 8,59 | 6,26 |
| 42866 | 50 | **10,0 x 300** | 310 | 32,09 | 14,30 | 9,63 | 6,52 |
| 42876 | 50 | **10,0 x 330** | 340 | 33,00 | 14,53 | 10,66 | 6,78 |
| 42886 | 50 | **10,0 x 360** | 370 | 33,00 | 14,53 | 11,70 | 7,03 |
| 42896 | 50 | **10,0 x 400** | 410 | 33,00 | 14,53 | 13,08 | 7,38 |
| 42906 | 50 | **10,0 x 450** | 460 | 33,00 | 14,53 | 14,80 | 7,81 |
| 42916 | 50 | **10,0 x 500** | 510 | 33,00 | 14,53 | 16,53 | 8,24 |
| 42926 | 50 | **10,0 x 550** | 560 | 33,00 | 14,53 | 18,25 | 8,67 |
| 42936 | 50 | **10,0 x 600** | 610 | 33,00 | 14,53 | 19,98 | 9,10 |

Subject to technical modifications and errors. Status of approval 2026
* characteristic values for measurement according to EC 5, bulk density ρk = 350 kg/m³ (C24). Selected steel thickness 15 mm



ETA-11/0425

| SIHGA® Feature | YOUR Benefit |
|---|---|
| including SIHGAFIX®, Systemstift® and installation instructions | time-saving, practical, precise, complete accessories enclosed |
| design values | SIHGA® performs the calculation for you |
| calculation | S3 software download at www.sihga.com |




| SIHGA® montagepack | | Dimension GoFix® S+ | Wood Component HD | Characteristic Values* Tensile Force $F_1$ | Shear Force $F_2$ |
|---|---|---|---|---|---|
| Art. No. | PU | d1 x L | [mm] | [kN] | [kN] |
| 42406 | 75 | **8,0 x 95** | 70 | 6,88 | 4,86 |
| 42416 | 75 | **8,0 x 125** | 95 | 9,88 | 6,99 |
| 42426 | 75 | **8,0 x 155** | 115 | 12,88 | 9,11 |
| 42436 | 75 | **8,0 x 195** | 145 | 16,88 | 11,94 |
| 42446 | 75 | **8,0 x 220** | 165 | 19,38 | 13,70 |
| 42456 | 75 | **8,0 x 245** | 180 | 21,88 | 15,47 |
| 42466 | 75 | **8,0 x 270** | 200 | 24,38 | 17,24 |
| 42476 | 75 | **8,0 x 295** | 215 | 25,00 | 17,68 |
| 42486 | 75 | **8,0 x 330** | 240 | 25,00 | 17,68 |
| 42496 | 75 | **8,0 x 375** | 270 | 25,00 | 17,68 |
| 42506 | 75 | **8,0 x 400** | 290 | 25,00 | 17,68 |
| 42516 | 75 | **8,0 x 430** | 310 | 25,00 | 17,68 |
| 42526 | 75 | **8,0 x 480** | 345 | 25,00 | 17,68 |
| 42806 | 50 | **10,0 x 125** | 95 | 11,36 | 8,03 |
| 42816 | 50 | **10,0 x 155** | 115 | 14,81 | 10,47 |
| 42826 | 50 | **10,0 x 195** | 145 | 19,41 | 13,73 |
| 42836 | 50 | **10,0 x 220** | 165 | 22,29 | 15,76 |
| 42846 | 50 | **10,0 x 245** | 180 | 25,16 | 17,79 |
| 42856 | 50 | **10,0 x 270** | 200 | 28,04 | 19,82 |
| 42866 | 50 | **10,0 x 300** | 220 | 31,49 | 22,26 |
| 42876 | 50 | **10,0 x 330** | 240 | 33,00 | 23,33 |
| 42886 | 50 | **10,0 x 360** | 260 | 33,00 | 23,33 |
| 42896 | 50 | **10,0 x 400** | 290 | 33,00 | 23,33 |
| 42906 | 50 | **10,0 x 450** | 325 | 33,00 | 23,33 |
| 42916 | 50 | **10,0 x 500** | 360 | 33,00 | 23,33 |
| 42926 | 50 | **10,0 x 550** | 395 | 33,00 | 23,33 |
| 42936 | 50 | **10,0 x 600** | 430 | 33,00 | 23,33 |

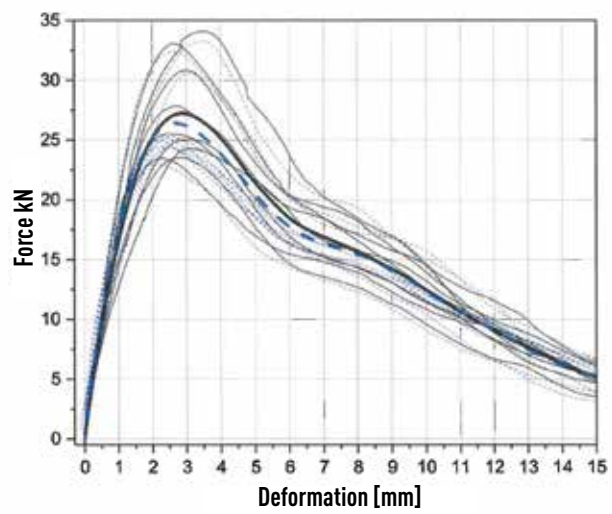
Subject to technical modifications and errors. Status of approval 2026
* characteristic values for measurement according to EC 5, bulk density ρk = 350 kg/m³ (C24). Selected steel thickness 15 mm

# GoFix® S+ application by means of impact screwdriver

Tested by the University of Innsbruck

| SIHGA® Feature | YOUR Benefit |
|---|---|
| positive report for processing with impact screwdrivers | provides security |
| graph below shows comparison of screw-in methods | comparing the different screw-in methods |
| impact screwdriver brings benefits | less strain on the wrist, even when working overhead |

## Extension of the screw in relation to applied force






# Mass-X® Element Tensioner

| SIHGA® Feature | YOUR Benefit |
|---|---|
| robust, high quality finishing | for a longer service life |
| shift lever to tension or release | easy handling during use |
| screw boards | thus only slight damage to the wood and high power transfer possible<br>ideal for wall and ceiling elements |
| boards can be swivelled 360° | fixing in every position |
| made in Austria | best european quality |

| SIHGA® | | Dimension plate | | |
|---|---|---|---|---|
| montagepack | | Length | Width | Height |
| Art.-No. | PU | | [mm] | |
| 60926 | 1 | 160 | 60 | 8 |



**Mass-X® Element Tensioner & Joist Hook**

## SIHGA® TIP:

GoFix S + 8.0 mm full thread screws are suitable for screwing the Mass-X® Element Tensioner.

# GoFix® X+



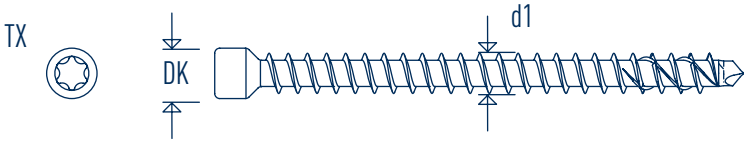


**GoFix® X+ made from hardened carbon steel**



ETA-11/0425

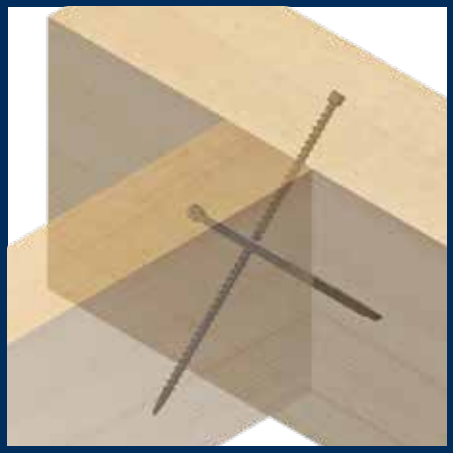
| SIHGA® Feature | YOUR Benefit |
|---|---|
| fastens blunt wood connections extremely quickly | transfers high tensile, compressive and shearing forces |
| made from hardened carbon steel | the permanent, secure and powerful fastening |
| screwing permissible from 0° up to 90° to the grain | fastens with all screw-in angles |
| SIHGA® drill bit | for stress-free, easy rotation, enables small edge and axial distances |
| pre-drilling also permitted, for GoFix® X+ ∅ 6.5 mm with 4 mm, with ∅ 8.0 mm with 5 mm, with ∅ 10.0 mm with 6 mm | for renovating old timber or hard timber |
| stepless counter sinking screw head with deep, recessed drive | can be countersunk, without splitting effect in the wood and without the drive skipping out of the head |
| strengthens constructive wood construction | support reinforcements, anchor beams (combined bending girder), notches, transverse force reinforcements can therefore be produced quickly and individually |
| optimised thread | for lightweight screw connections with low screw-in torque |
| including SIHGAFIX®, Systemstift® and installation instructions | time-saving, practical, precise, complete accessories enclosed |




**Dimension [mm]**

GoFix® X+

| d1 | TX | DK |
|---|---|---|
| 6,5 | 30 | 8,0 |
| 8,0 | 40 | 10,0 |
| 10,0 | 50 | 13,0 |

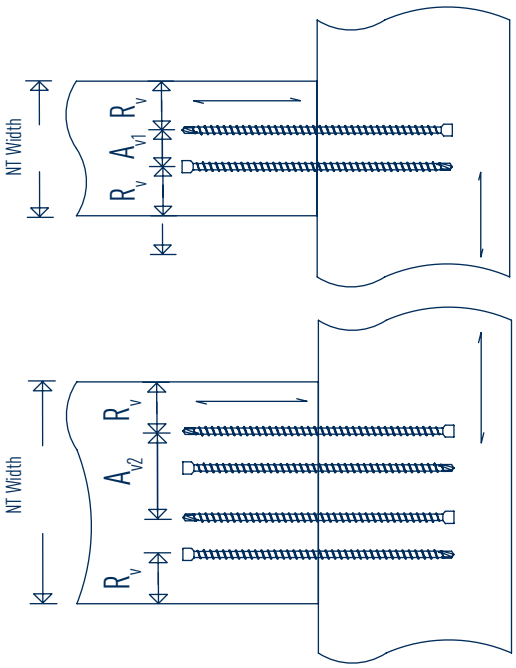


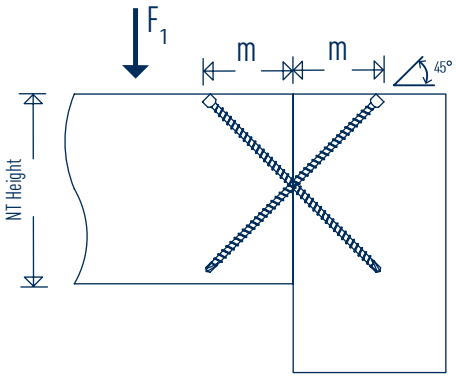


## SIHGA® TIP:

For precise and fast series production of cross screw connections we recommend the professional installation aid. For easier screw-in, use screw-in assistance GoFix® ESH 8.

| SIHGA® Feature | YOUR Benefit |
|---|---|
| design values | SIHGA® performs the calculation for you |
| including SIHGAFIX®, Systemstift® and installation instructions | time-saving, practical, precise, complete accessories enclosed |
| calculation | S³ software download at www.sihga.com |




**Dimension [mm]**

GoFix® X+

| d1 | TX | DK | $R_v$ | $A_{v1}$ | $A_{v2}$ |
|---|---|---|---|---|---|
| 6,5 | 30 | 8,0 | 20 | 10 | 33 |
| 8,0 | 40 | 10,0 | 24 | 12 | 40 |
| 10,0 | 50 | 13,0 | 30 | 15 | 50 |

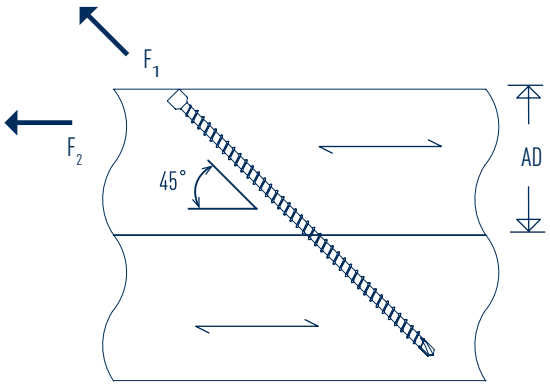
| SIHGA® | | Dimension | Secondary Beam | Assembly Dimensions | Shear Force $F_1$ - 1 pair | | | Shear Force $F_1$ - 2 pair | | |
|---|---|---|---|---|---|---|---|---|---|---|
| montagepack | | GoFix® X+ | NT Height | m | NT Width min. | Char. Values* | Design Values** | NT Width min. | Char. Values* | Design Values** |
| Art. No. | PU | d1 x L | min. [mm] | [mm] | [mm] | [kN] | [kN] | [mm] | [kN] | [kN] |
| 42066 | 150 | **6,5 x 195** | 140 | 70 | 60 | 12,33 | | 85 | 24,65 | |
| 42246 | 75 | **8,0 x 220** | 160 | 80 | 64 | 14,85 | | 100 | 29,70 | |
| 42256 | 75 | **8,0 x 245** | 180 | 90 | 64 | 16,62 | | 100 | 33,23 | |
| 42276 | 75 | **8,0 x 295** | 220 | 110 | 64 | 20,15 | | 100 | 40,31 | |
| 42286 | 75 | **8,0 x 330** | 240 | 120 | 64 | | 15,89 | 100 | | 31,78 |
| 42296 | 75 | **8,0 x 375** | 270 | 135 | 64 | | 15,89 | 100 | | 31,78 |
| 42306 | 75 | **8,0 x 400** | 290 | 145 | 64 | | 15,89 | 100 | | 31,78 |
| 42316 | 75 | **8,0 x 430** | 310 | 155 | 64 | | 15,89 | 100 | | 31,78 |
| 42326 | 75 | **8,0 x 480** | 350 | 170 | 64 | | 15,89 | 100 | | 31,78 |
| 42666 | 50 | **10,0 x 300** | 220 | 110 | 75 | 23,58 | | 125 | 47,16 | |
| 42676 | 50 | **10,0 x 330** | 240 | 120 | 75 | 26,02 | | 125 | 52,04 | |
| 42686 | 50 | **10,0 x 360** | 260 | 130 | 75 | 28,46 | | 125 | 56,92 | |
| 42696 | 50 | **10,0 x 400** | 290 | 145 | 75 | | 22,43 | 125 | | 44,86 |
| 42706 | 50 | **10,0 x 450** | 320 | 160 | 75 | | 22,43 | 125 | | 44,86 |
| 42716 | 50 | **10,0 x 500** | 360 | 180 | 75 | | 22,43 | 125 | | 44,86 |
| 42726 | 50 | **10,0 x 550** | 400 | 200 | 75 | | 22,43 | 125 | | 44,86 |
| 42736 | 50 | **10,0 x 600** | 430 | 215 | 75 | | 22,43 | 125 | | 44,86 |

Subject to technical modifications and errors. Status of approval 2026
* characteristic values for measurement according to EC 5, bulk density ρk = 350 kg/m³ (C24)
** design values according to EC 3 due to buckling (γm= 1.1 already considered)



ETA-11/0425

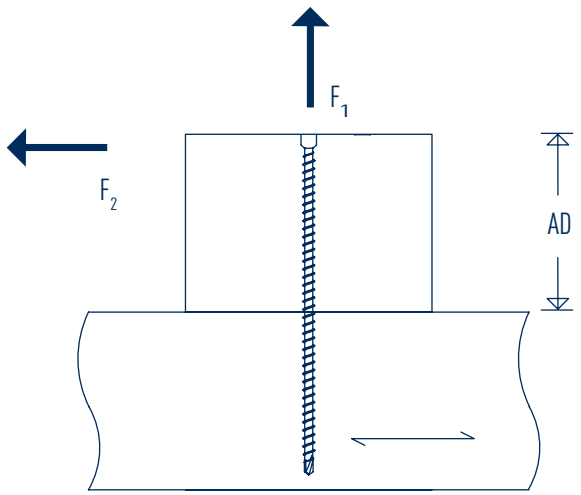
| SIHGA® Feature | YOUR Benefit |
|---|---|
| design values | SIHGA® performs the calculation for you |
| including SIHGAFIX®, Systemstift® and installation instructions | time-saving, practical, precise, complete accessories enclosed |
| calculation | S³ software download at www.sihga.com |




| SIHGA® | | Dimension | Installation Part Thickness | Characteristic Values* | |
|---|---|---|---|---|---|
| montagepack | | GoFix® X+ | Wood | Tensile Force $F_1$ | Shear Force $F_2$ |
| Art. No. | PU | d1 x L | AD [mm] | [kN] | [kN] |
| 42026 | 150 | **6,5 x 120** | 45 | 5,54 | 3,92 |
| 42036 | 150 | **6,5 x 140** | 50 | 6,55 | 4,63 |
| 42046 | 150 | **6,5 x 160** | 60 | 7,56 | 5,34 |
| 42066 | 150 | **6,5 x 195** | 70 | 9,32 | 6,59 |
| 42226 | 75 | **8,0 x 155** | 60 | 7,25 | 5,13 |
| 42236 | 75 | **8,0 x 195** | 70 | 9,25 | 6,54 |
| 42246 | 75 | **8,0 x 220** | 80 | 10,50 | 7,42 |
| 42256 | 75 | **8,0 x 245** | 90 | 11,75 | 8,31 |
| 42276 | 75 | **8,0 x 295** | 105 | 14,25 | 10,08 |
| 42286 | 75 | **8,0 x 330** | 120 | 16,00 | 11,31 |
| 42296 | 75 | **8,0 x 375** | 135 | 18,25 | 12,90 |
| 42306 | 75 | **8,0 x 400** | 145 | 19,50 | 13,79 |
| 42316 | 75 | **8,0 x 430** | 155 | 21,00 | 14,85 |
| 42326 | 75 | **8,0 x 480** | 170 | 23,50 | 16,62 |
| 42666 | 50 | **10,0 x 300** | 110 | 16,68 | 11,79 |
| 42676 | 50 | **10,0 x 330** | 120 | 18,40 | 13,01 |
| 42686 | 50 | **10,0 x 360** | 130 | 20,13 | 14,23 |
| 42696 | 50 | **10,0 x 400** | 145 | 22,43 | 15,86 |
| 42706 | 50 | **10,0 x 450** | 160 | 25,30 | 17,89 |
| 42716 | 50 | **10,0 x 500** | 180 | 28,18 | 19,92 |
| 42726 | 50 | **10,0 x 550** | 195 | 31,05 | 21,96 |
| 42736 | 50 | **10,0 x 600** | 215 | 33,00 | 23,33 |

Subject to technical modifications and errors. Status of approval 2026
* characteristic values for measurement according to EC 5, bulk density ρk = 350 kg/m³ (C24)

| SIHGA® Feature | YOUR Benefit |
|---|---|
| design values | SIHGA® performs the calculation for you |
| including SIHGAFIX®, Systemstift® and installation instructions | time-saving, practical, precise, complete accessories enclosed |
| calculation | $S^3$ software download at www.sihga.com |



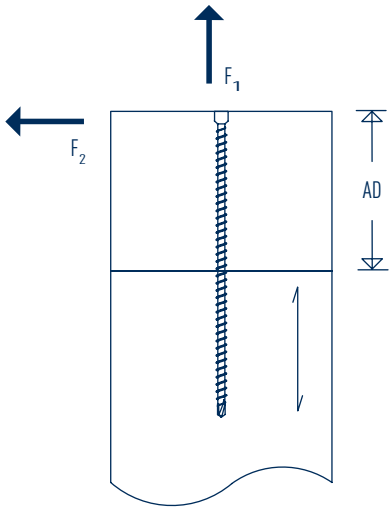

| SIHGA® | | Dimension | Installation Part Thickness | Characteristic Values 90°* | |
|---|---|---|---|---|---|
| montagepack | | GoFix® X+ | Wood | Tensile Force $F_1$ | Shear Force $F_2$ |
| Art. No. | PU | d1 x L | AD [mm] | [kN] | [kN] |
| 42026 | 150 | **6,5 x 120** | 60 | 5,54 | 3,62 |
| 42036 | 150 | **6,5 x 140** | 70 | 6,55 | 3,87 |
| 42046 | 150 | **6,5 x 160** | 80 | 7,56 | 4,12 |
| 42066 | 150 | **6,5 x 195** | 100 | 9,32 | 4,56 |
| 42226 | 75 | **8,0 x 155** | 80 | 7,20 | 4,97 |
| 42236 | 75 | **8,0 x 195** | 100 | 9,20 | 5,47 |
| 42246 | 75 | **8,0 x 220** | 110 | 10,45 | 5,78 |
| 42256 | 75 | **8,0 x 245** | 125 | 11,70 | 6,09 |
| 42276 | 75 | **8,0 x 295** | 150 | 14,20 | 6,72 |
| 42286 | 75 | **8,0 x 330** | 170 | 15,95 | 7,16 |
| 42296 | 75 | **8,0 x 375** | 190 | 18,20 | 7,72 |
| 42306 | 75 | **8,0 x 400** | 200 | 19,45 | 8,03 |
| 42316 | 75 | **8,0 x 430** | 215 | 20,95 | 8,41 |
| 42326 | 75 | **8,0 x 480** | 240 | 23,45 | 9,03 |
| 42666 | 50 | **10,0 x 300** | 150 | 16,56 | 8,58 |
| 42676 | 50 | **10,0 x 330** | 170 | 18,29 | 9,01 |
| 42686 | 50 | **10,0 x 360** | 180 | 20,01 | 9,44 |
| 42696 | 50 | **10,0 x 400** | 200 | 22,31 | 10,02 |
| 42706 | 50 | **10,0 x 450** | 225 | 25,19 | 10,74 |
| 42716 | 50 | **10,0 x 500** | 250 | 28,06 | 11,45 |
| 42726 | 50 | **10,0 x 550** | 275 | 30,94 | 12,17 |
| 42736 | 50 | **10,0 x 600** | 300 | 33,00 | 12,69 |

Subject to technical modifications and errors. Status of approval 2026
* characteristic values for measurement according to EC 5, bulk density ρk = 350 kg/m³ (C24)



ETA-11/0425

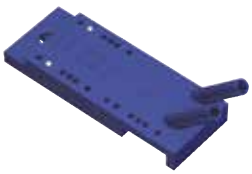
| SIHGA® Feature | YOUR Benefit |
|---|---|
| design values | SIHGA® performs the calculation for you |
| including SIHGAFIX®, Systemstift® and installation instructions | time-saving, practical, precise, complete accessories enclosed |
| online calculation | at www.sihga.com (support reinforcement, notches, anchor beam, breakout, main beam - secondary beam connection) |




| SIHGA® | | Dimension | Installation Part Thickness | Characteristic Values 0°* | |
|---|---|---|---|---|---|
| montagepack | | GoFix® X+ | Wood | Tensile Force $F_1$ | Shear Force $F_2$ |
| Art. No. | PU | d1 x L | AD [mm] | [kN] | [kN] |
| 42026 | 150 | **6,5 x 120** | 60 | 1,66 | 1,50 |
| 42036 | 150 | **6,5 x 140** | 70 | 1,96 | 2,04 |
| 42046 | 150 | **6,5 x 160** | 80 | 2,27 | 2,12 |
| 42066 | 150 | **6,5 x 195** | 100 | 2,80 | 2,25 |
| 42226 | 75 | **8,0 x 155** | 80 | 2,16 | 2,67 |
| 42236 | 75 | **8,0 x 195** | 100 | 2,76 | 2,82 |
| 42246 | 75 | **8,0 x 220** | 110 | 3,14 | 2,92 |
| 42256 | 75 | **8,0 x 245** | 125 | 3,51 | 3,01 |
| 42276 | 75 | **8,0 x 295** | 150 | 4,26 | 3,20 |
| 42286 | 75 | **8,0 x 330** | 170 | 4,79 | 3,33 |
| 42296 | 75 | **8,0 x 375** | 190 | 5,46 | 3,50 |
| 42306 | 75 | **8,0 x 400** | 200 | 5,84 | 3,59 |
| 42316 | 75 | **8,0 x 430** | 215 | 6,29 | 3,71 |
| 42326 | 75 | **8,0 x 480** | 240 | 7,04 | 3,89 |
| 42666 | 50 | **10,0 x 300** | 150 | 4,97 | 4,15 |
| 42676 | 50 | **10,0 x 330** | 170 | 5,49 | 4,28 |
| 42686 | 50 | **10,0 x 360** | 180 | 6,00 | 4,41 |
| 42696 | 50 | **10,0 x 400** | 200 | 6,69 | 4,58 |
| 42706 | 50 | **10,0 x 450** | 225 | 7,56 | 4,80 |
| 42716 | 50 | **10,0 x 500** | 250 | 8,42 | 5,01 |
| 42726 | 50 | **10,0 x 550** | 275 | 9,28 | 5,23 |
| 42736 | 50 | **10,0 x 600** | 300 | 10,14 | 5,44 |

Subject to technical modifications and errors. Status of approval 2026
* characteristic values for measurement according to EC 5, bulk density pk = 350 kg/m³ (C24)

# Equipment GoFix® X+



| SIHGA® Feature | YOUR Benefit |
|---|---|
| **GoFix® X+ Setting Jig** | |
| with GoFix® X+ 6.5 and 8.0 mm | For efficient and precise assembly of main beam-secondary beam connections |



| GoFix® X+ Mounting Bracket | |
|---|---|
| with GoFix® X+ 6.5 and 8.0 mm | For the efficient and precise installation of secondary beams on columns |

**SIHGA® TIP:**

GoFix® X+ can also be pre-drilled X+ 6.5 with ∅ 4 mm, X+ 8.0 with ∅ 5 mm.



| System Kit GoFix® X+ | |
|---|---|
| with GoFix® X+ 6.5 and 8.0 mm with varying lengths | the professional installation aid, simplifies construction processes and saves time |
| developed, patented and made in Austria | top European quality and added-value |
| contains 1 GoFix® X+ Setting jig with 4 GoFix® X+ Beam holders and GoFix® fastening screws | for the rational and precise installation of main/secondary beams |
| contains 4 GoFix® X+ Mounting brackets | for the rational and precise installation of secondary beams on struts |
| includes SIHGA® DUO-Bit and Systemstift® | time-saving, practical, precise, complete accessories enclosed |

**SIHGA® TIP:**

The System Kit GoFix® X+ contains a setting jig and mounting bracket, completely and portably combined with all accessories for practicality.

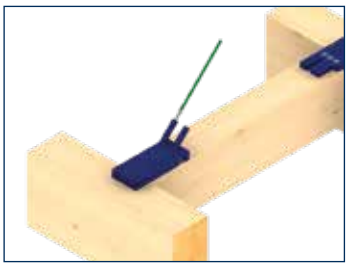
# Application GoFix® X+

## GoFix® X+ Setting Jig

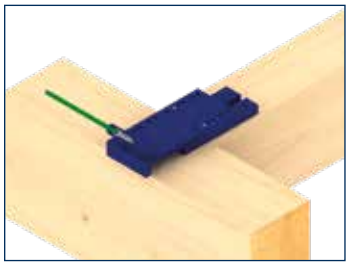
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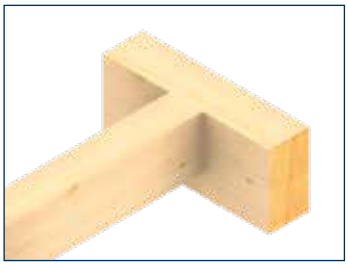
2.



3.

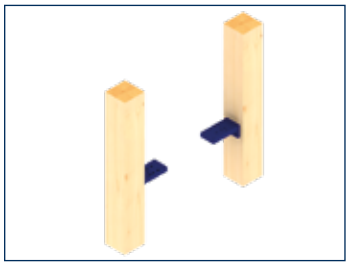


4.

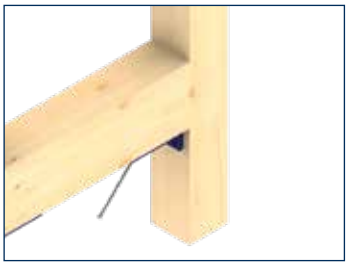


## GoFix® X+ Mounting Bracket

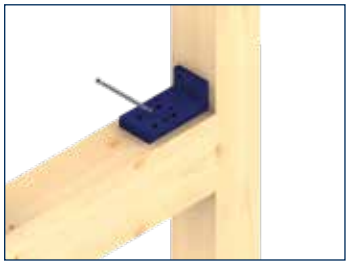
1.



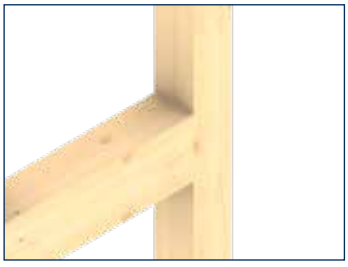
2.



3.



4.



# Application GoFix® X+ in Plywood Board

| SIHGA® Feature | YOUR Benefit |
|---|---|
| optimised geometry of the drill bit | rapid attachment and simultaneous predrilling |
| screwing below 0 ° to the fibre allowed | can be installed in all layers and angles in plywood board |
| special cylinder head | infinitely countersinking without splitting effect |
| deep bit punching | prevents the SIHGAFIX® from slipping out |



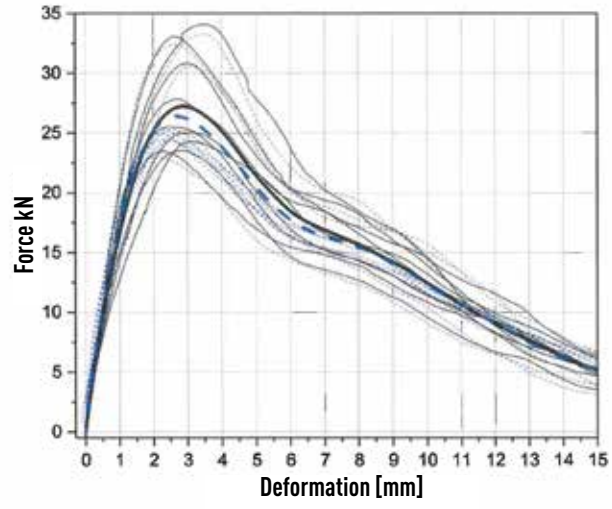


# GoFix® X+ application by means of impact screwdriver

Tested by the University of Innsbruck

| SIHGA® Feature | YOUR Benefit |
|---|---|
| positive report for processing with impact screwdrivers | provides security |
| graph below shows comparison of screw-in methods | comparing the different screw-in methods |
| impact screwdriver brings benefits | less strain on the wrist, even when working overhead |

## Extraction of the screw in relation to applied force






# GoFix® ESH





**GoFix® ESH Screw-in Assistance for screws ∅ 8/10/11,3 mm**

| SIHGA® Feature | YOUR Benefit |
|---|---|
| holds the screw head securely in the SIHGAFIX® | no more slippage with large screw sizes |
| various adjustment options | fits cylindrical head- and countersunk head screws |
| enhanced tool standard design | long life |
| reduces effort | pressure on screw-in device no longer needed |
| automatic reset upon contact with wood | makes numerous screw-in variations such as oblique screw-in possible in all situations, for example overhead installation |

| | SIHGA® montagepack | | Dimension | for GoFix® Type |
|---|---|---|---|---|
| | | | GoFix® ESH 8 | X+ / S+ / SH |
| Art. No. | Type | PU | d x L | d [mm] |
| 31446 | ESH 8 | 1 | 40 x 120 | 8 |

| | SIHGA® montagepack | | Dimension | for GoFix® Type |
|---|---|---|---|---|
| | | | GoFix® ESH 10 | X+ / S+ / SS |
| Art. No. | Type | PU | d x L | d [mm] |
| 31476 | ESH 10 | 1 | 40 x 110 | 10 / 11,3 |



## SIHGA® TIP:

For easier insertion, use the GoFix® ESH insertion aid for the GoFix® X+, S+ and SS.

# GoFix® 45



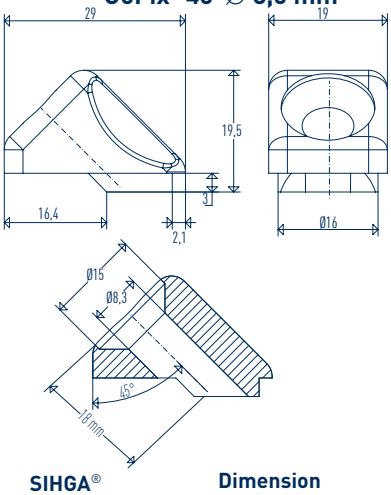
GoFix® 45
8,0 mm



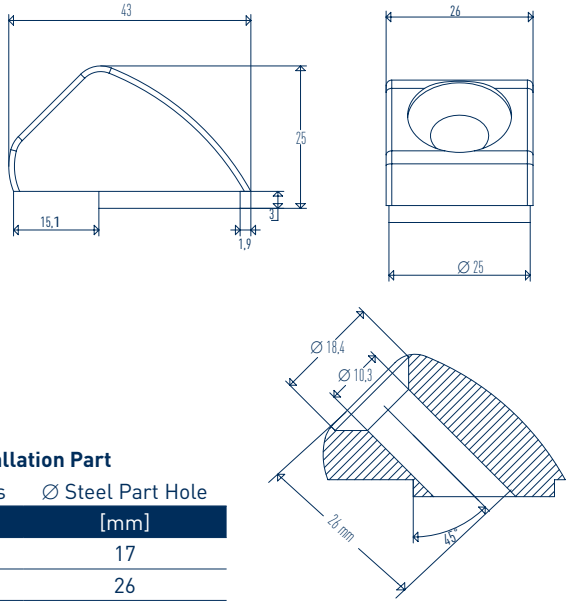
GoFix® 45
10,0 mm

| SIHGA® Feature | YOUR Benefit |
|---|---|
| rapid, problem-free installation of the GoFix® 45 | fixed 45° inclination for optimal tensile force uptake |
| ideal in combination with the SIHGA® GoFix® S+ 8.0 and 10.0 mm fully threaded screw or GoFix® SH | pull-through prevented by the large countersunk head seating area |
| no special production needed with inclined counterbore | saves time and money |
| provides maximum flexibility | the most varied metal tabs can be used |
| including installation instructions | enclosed accessories - practical and time-saving |

**GoFix® 45 ∅ 8,0 mm**




**GoFix® 45 ∅ 10,0 mm**




| SIHGA® montagepack | | Dimension | | Installation Part | |
|---|---|---|---|---|---|
| | | ∅ Drill | GoFix® 45 | Steel Thickness | ∅ Steel Part Hole |
| Art. No. | PU | [mm] | [mm] | [mm] | [mm] |
| 31582 | 10 | 8,0 | 29 x 19 x 19,5 | ≤ 5 | 17 |
| 31592 | 10 | 10,0 | 43 x 26 x 25 | 6 - 10 | 26 |





## SIHGA® TIP:

For effortless screw-in of GoFix® S+, a tangential-impact screwdriver to spare your wrist joint.

# GoFix® SS





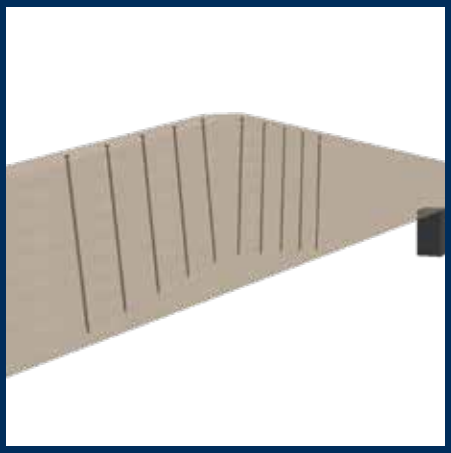
GoFix® SS made from hardened carbon steel



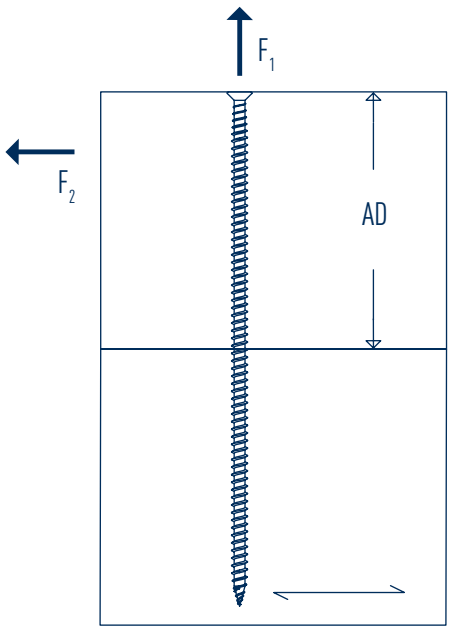
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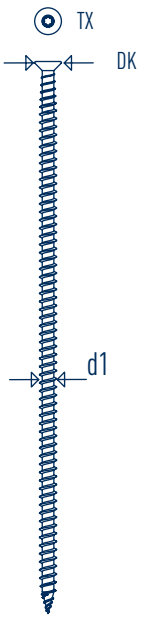
| SIHGA® Feature | YOUR Benefit |
|---|---|
| extremely high thread load-bearing capacity of up to 50 kN and length up to 1000 mm | ideal for reinforcements in timber engineering and for large glued laminated timber beams or for fastening steel parts onto wooden beams, replaces threaded rods |
| made from hardened carbon steel | the permanent, secure and powerful fastening |
| additional pre-drilling, with GoFix® SS ∅ 11.3 mm with 8.0 mm | for lightweight screw connections with low screw-in torque |
| including SIHGAFIX® and installation instructions | time-saving, practical, precise, complete accessories enclosed |





| SIHGA® Feature | YOUR Benefit |
|---|---|
| design values | SIHGA® performs the calculation for you |
| including SIHGAFIX® and installation instructions | time-saving, practical, precise, all accessories enclosed; SIHGAFIX® also screws into deep grooves |
| calculation | S³ software download at www.sihga.com |




**Dimension [mm]**
GoFix® SS

| d1 | TX | DK |
|---|---|---|
| 11,3 | 50 | 18 |

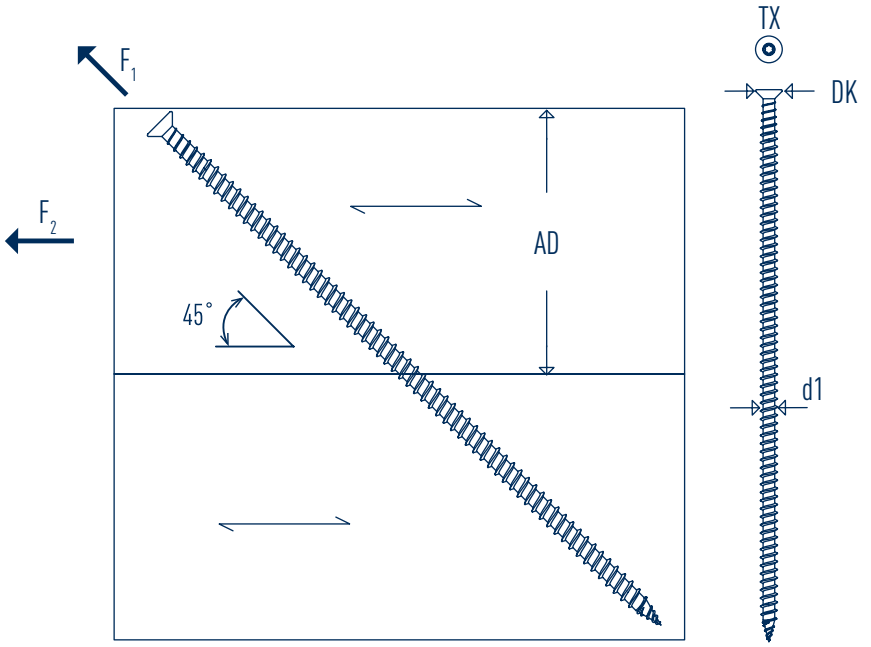
| SIHGA® | | Dimension | Installation Part Thickness | Characteristic Values* | |
|---|---|---|---|---|---|
| montagepack | | GoFix® SS | Wood | Tensile Force $F_1$ | Shear Force $F_2$ |
| Art. No. | PU | d1 x L | AD [mm] | [kN] | [kN] |
| 25336 | 50 | **11,3 x 300** | 150 | 18,90 | 12,33 |
| 25346 | 50 | **11,3 x 340** | 170 | 21,51 | 12,98 |
| 25206 | 50 | **11,3 x 380** | 190 | 24,11 | 13,63 |
| 25216 | 50 | **11,3 x 420** | 210 | 26,72 | 14,28 |
| 25226 | 50 | **11,3 x 460** | 230 | 29,33 | 14,94 |
| 25236 | 50 | **11,3 x 500** | 250 | 31,93 | 15,21 |
| 25246 | 50 | **11,3 x 540** | 270 | 34,54 | 15,21 |
| 25256 | 50 | **11,3 x 580** | 290 | 37,15 | 15,21 |
| 25266 | 50 | **11,3 x 620** | 310 | 39,75 | 15,21 |
| 25276 | 50 | **11,3 x 660** | 330 | 42,36 | 15,21 |
| 25286 | 50 | **11,3 x 700** | 350 | 44,97 | 15,21 |
| 25296 | 50 | **11,3 x 750** | 375 | 48,23 | 15,21 |
| 25306 | 50 | **11,3 x 800** | 400 | 50,00 | 15,21 |
| 25316 | 50 | **11,3 x 900** | 450 | 50,00 | 15,21 |
| 25326 | 50 | **11,3 x 1000** | 500 | 50,00 | 15,21 |

* characteristic values for dimensioning according to EC 5 and strength class C 30 (ρk 380 kg/m³)



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| SIHGA® Feature | YOUR Benefit |
|---|---|
| design values | SIHGA® performs the calculation for you |
| including SIHGAFIX® and installation instructions | time-saving, practical, precise, all accessories enclosed; SIHGAFIX® also screws into deep grooves |
| calculation | S³ software download at www.sihga.com |




**Dimension [mm]**

GoFix® SS

| d1 | TX | DK |
|---|---|---|
| 11,3 | 50 | 18 |

| SIHGA® montagepack | | Dimension GoFix® SS | Installation Part Thickness Wood | Characteristic Values* Tensile Force $F_1$ | Shear Force $F_2$ |
|---|---|---|---|---|---|
| Art. No. | PU | d1 x L | AD [mm] | [kN] | [kN] |
| 25336 | 50 | **11,3 x 300** | 110 | 18,90 | 13,36 |
| 25346 | 50 | **11,3 x 340** | 120 | 21,51 | 15,21 |
| 25206 | 50 | **11,3 x 380** | 140 | 24,11 | 17,05 |
| 25216 | 50 | **11,3 x 420** | 150 | 26,72 | 18,89 |
| 25226 | 50 | **11,3 x 460** | 170 | 29,33 | 20,74 |
| 25236 | 50 | **11,3 x 500** | 180 | 31,93 | 22,58 |
| 25246 | 50 | **11,3 x 540** | 200 | 34,54 | 24,42 |
| 25256 | 50 | **11,3 x 580** | 210 | 37,15 | 26,27 |
| 25266 | 50 | **11,3 x 620** | 220 | 39,75 | 28,11 |
| 25276 | 50 | **11,3 x 660** | 240 | 42,36 | 29,95 |
| 25286 | 50 | **11,3 x 700** | 250 | 44,97 | 31,80 |
| 25296 | 50 | **11,3 x 750** | 270 | 48,23 | 34,10 |
| 25306 | 50 | **11,3 x 800** | 290 | 50,00 | 35,36 |
| 25316 | 50 | **11,3 x 900** | 320 | 50,00 | 35,36 |
| 25326 | 50 | **11,3 x 1000** | 360 | 50,00 | 35,36 |

* characteristic values for dimensioning according to EC 5 and strength class C 30 (ρk 380 kg/m³)

# GoFix® ZS



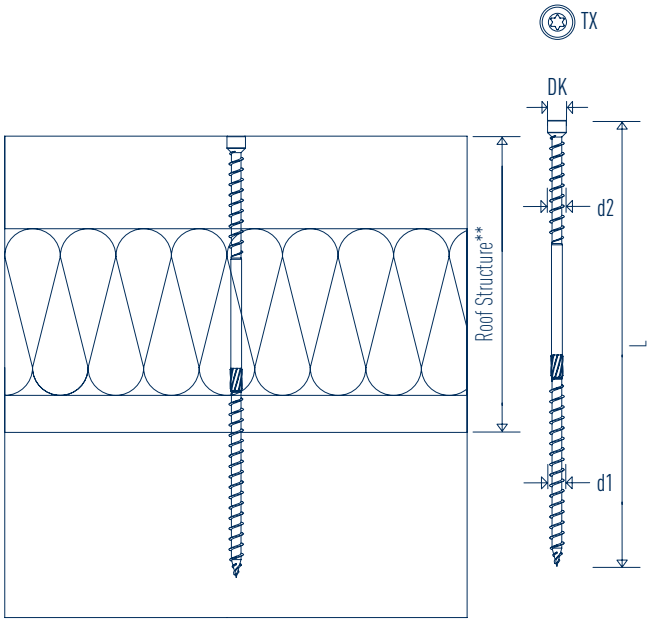


GoFix® ZS with special SC 3 coating



ETA-11/0425

| SIHGA® Feature | YOUR Benefit |
|---|---|
| fastens soft insulation materials for on-rafter insulation | also for insulation material with a compressive stress below 50 kPa; no pressure on the insulation |
| including SIHGAFIX®, Systemstift® and installation instructions | time-saving, practical, precise, complete accessories enclosed |
| design values | SIHGA® performs the calculation for you |
| calculation | S³ software download at www.sihga.com |




**Dimension [mm]**

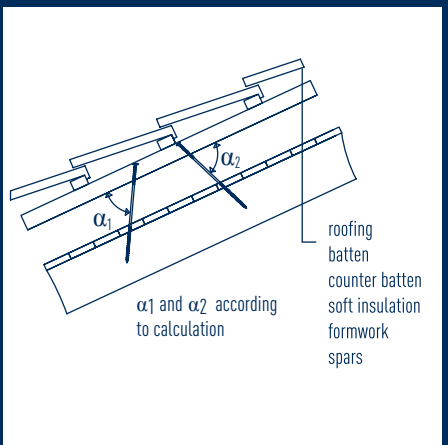
GoFix® ZS

| d1 | d2 | TX | DK |
|---|---|---|---|
| 8,0 | 8,0 | 40,0 | 10,0 |

| SIHGA® montagepack | | Dimension GoFix® ZS | Roof Structure** Thickness [mm] |
|---|---|---|---|
| Art. No. | PU | d1 x L | from |
| 26996* | 75 | **8,0 x 165** | 75 |
| 27006* | 75 | **8,0 x 195** | 100 |
| 27116 | 75 | **8,0 x 225** | 130 |
| 27126 | 75 | **8,0 x 235** | 140 |
| 27136 | 75 | **8,0 x 255** | 155 |
| 27146 | 75 | **8,0 x 275** | 175 |
| 27156 | 75 | **8,0 x 302** | 200 |
| 27166 | 75 | **8,0 x 335** | 230 |
| 27176 | 75 | **8,0 x 365** | 255 |
| 27186 | 75 | **8,0 x 397** | 285 |
| 27196 | 75 | **8,0 x 435** | 320 |

* design with plate head, DK = 16 mm
** at thread anchoring depth in rafters of 80 mm





# L-GoFix® MS





L-GoFix® MS of hardened stainless steel



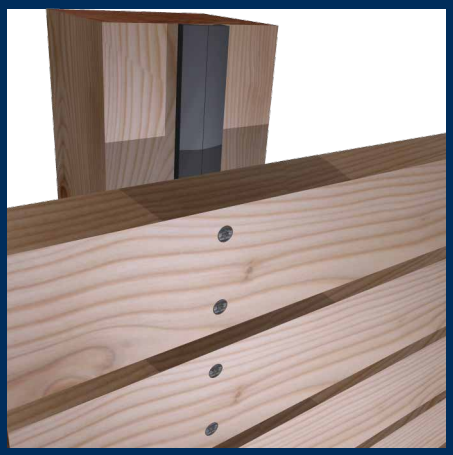
L-GoFix® MS with additional SC 9 coating



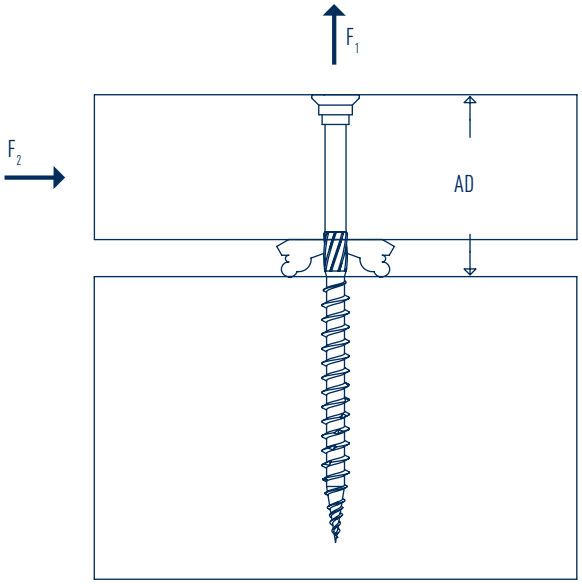
ETA-11/0425

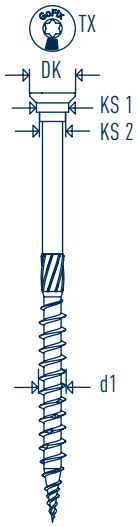
| SIHGA® Feature | YOUR Benefit |
|---|---|
| fastens wood to wood without pre-drilling and without countersinking | prevents crack formation or splitting of timbers, even for panel materials, saves work time, additional pre-drilling extends the life of the wood |
| also attaches coverings made of hard and thermo-wood | results in a perfect appearance, these coverings should additionally be pre-drilled |
| Multi-stage head with a small head diameter | high constructional wood protection and exquisite surface through flat head ending |
| special thread pitch with sharp thread flanks | high extraction value |
| SIHGA® tip with special form | guarantees fast screw attachment without developing cracks |
| SIHGA® milling ribs on the shaft | easy, rapid screw-in and optimal seating in wood are guaranteed |
| made of hardened stainless steel | non-corrosive attachment and is extremely break-proof |
| also available in black (SC 9 coating) appearance | optimally useable on dark materials or for larch, Douglas fir and Bangkirai |
| including SIHGAFIX® stainless steel, Systemstift® and installation instructions | time-saving, practical, precise, all accessories included, SIHGAFIX® stainless steel prevents extraneous rust and also enables screw connections in deep grooves |





| SIHGA® Feature | YOUR Benefit |
|---|---|
| design values | SIHGA® performs the calculation for you |
| including SIHGAFIX® stainless steel, Systemstift® and installation instructions | time-saving, practical, precise, all accessories included, SIHGAFIX® stainless steel prevents extraneous rust and also enables screw connections in deep grooves |




**Dimension [mm]**
L-GoFix® MS

| d1 | TX | DK | KS 1 | KS 2 |
|---|---|---|---|---|
| 4,0 | 15 | 5,5 | 4,0 | 3,7 |
| 4,5 | 20 | 6,9 | 5,2 | 4,2 |

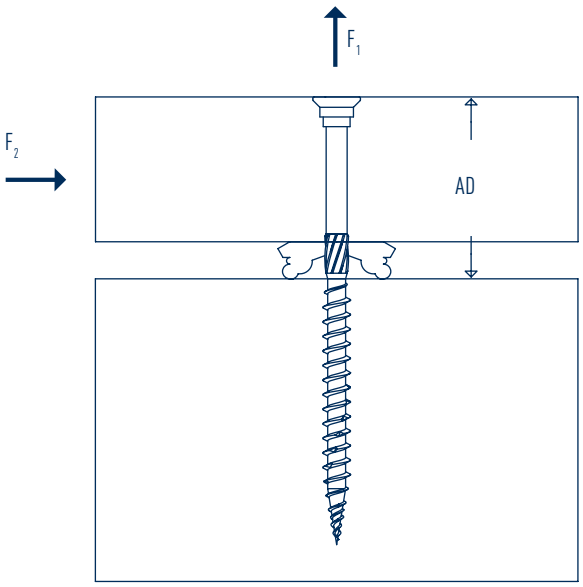
| SIHGA® montagepack | | Dimension L-GoFix® MS | Installation Part AD | Characteristic Values** Tensile Force $F_1$ [kN] | | Shear Force $F_2$ [kN] | |
|---|---|---|---|---|---|---|---|
| Art. No. | PU | d1 x L | [mm] | Head | Thread | Wood-Wood | Steel-Wood |
| 24106 | 500 | **4,0 x 30** | 12 | 0,36 | 1,01 | 0,51 | 1,01 |
| 24116 | 500 | **4,0 x 35** | 14 | 0,36 | 1,22 | 0,59 | 1,14 |
| 24126 | 500 | **4,0 x 40*** | 16 | 0,36 | 1,42 | 0,68 | 1,22 |
| 24136 | 500 | **4,0 x 45** | 18 | 0,36 | 1,62 | 0,76 | 1,27 |
| 24146 | 500 | **4,0 x 50*** | 20 | 0,46 | 1,82 | 0,85 | 1,32 |
| 24156 | 500 | **4,0 x 60*** | 24 | 0,46 | 2,16 | 1,02 | 1,40 |
| 24226 | 400 | **4,5 x 40*** | 16 | 0,48 | 1,55 | 0,74 | 1,39 |
| 24236 | 400 | **4,5 x 45*** | 18 | 0,48 | 1,77 | 0,83 | 1,49 |
| 24246 | 400 | **4,5 x 50*** | 20 | 0,61 | 1,99 | 0,92 | 1,54 |
| 24266 | 400 | **4,5 x 60*** | 24 | 0,61 | 2,36 | 1,11 | 1,64 |
| 24276 | 300 | **4,5 x 70*** | 28 | 0,61 | 2,72 | 1,29 | 1,73 |

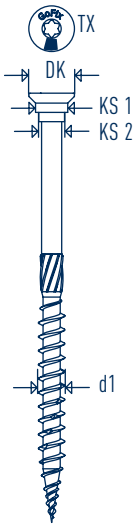
Subject to technical modifications and errors. Status of approval 2026
* also available with SC 9 coating
** characteristic values for dimensioning according to EC 5 and for strength class ρk 490 kg/m³ (Larch)



ETA-11/0425

| SIHGA® Feature | YOUR Benefit |
|---|---|
| design values | SIHGA® performs the calculation for you |
| including SIHGAFIX® stainless steel, Systemstift® and installation instructions | time-saving, practical, precise, all accessories included, SIHGAFIX® stainless steel prevents extraneous rust and also enables screw connections in deep grooves |




**Dimension [mm]**
L-GoFix® MS

| d1 | TX | DK | KS 1 | KS 2 |
|---|---|---|---|---|
| 5,0 | 25 | 8,5 | 6,0 | 4,8 |
| 6,0 | 30 | 11,5 | 7,2 | 5,8 |

| SIHGA® montagepack | | Dimension L-GoFix® MS | Installation Part AD | Characteristic Values** Tensile Force $F_1$ [kN] | | Shear Force $F_2$ [kN] | |
|---|---|---|---|---|---|---|---|
| Art. No. | PU | d1 x L | [mm] | Head | Thread | Wood-Wood | Steel-Wood |
| 24316 | 200 | **5,0 x 45*** | 18 | 0,76 | 1,82 | 0,89 | 1,65 |
| 24326 | 200 | **5,0 x 50*** | 20 | 0,95 | 2,14 | 0,99 | 1,78 |
| 24336 | 200 | **5,0 x 60*** | 24 | 0,95 | 2,53 | 1,19 | 1,88 |
| 24346 | 200 | **5,0 x 70*** | 28 | 0,95 | 2,93 | 1,39 | 1,98 |
| 24356 | 200 | **5,0 x 80*** | 32 | 0,95 | 3,72 | 1,59 | 2,18 |
| 24366 | 200 | **5,0 x 90*** | 36 | 0,95 | 4,12 | 1,79 | 2,27 |
| 24376 | 200 | **5,0 x 100*** | 40 | 0,95 | 4,51 | 1,97 | 2,37 |
| 24406 | 100 | **6,0 x 70** | 28 | 1,64 | 3,31 | 1,58 | 2,51 |
| 24416 | 100 | **6,0 x 80** | 32 | 1,64 | 4,21 | 1,80 | 2,73 |
| 24426 | 100 | **6,0 x 90** | 36 | 1,64 | 4,66 | 2,03 | 2,85 |
| 24436 | 100 | **6,0 x 100** | 40 | 1,64 | 5,10 | 2,25 | 2,96 |
| 24446 | 100 | **6,0 x 120** | 50 | 1,64 | 5,10 | 2,45 | 2,96 |
| 24456 | 100 | **6,0 x 140** | 70 | 1,64 | 6,00 | 2,69 | 3,18 |
| 24466 | 100 | **6,0 x 160** | 90 | 1,64 | 6,00 | 2,69 | 3,18 |

Subject to technical modifications and errors. Status of approval 2026
* also available with SC 9 coating
** characteristic values for dimensioning according to EC 5 and for strength class ρk 490 kg/m³ (Larch)

## SIHGA® TIP:

For surface-flush rotation, fast and secure, we recommend TerrassenFix® Depth Limiter TTB.

# L-GoFix® MS A2

| SIHGA® Feature | YOUR Benefit |
|---|---|
| Made from A2 stainless steel | stands out thanks to its good corrosion resistance and is best used in moderate, corrosive environments |
| multi-stage head with small head diameter | high constructive wood protection and refined surface as a result of the plane head |
| special thread angle with sharp thread edges | high extraction value |
| SIHGA® point with special shape | guarantees fast setting of screws without splitting |
| SIHGA® ribs on shaft and slip coating | light, fast rotation and optimum fit in the wood are guaranteed |
| including SIHGAFIX® stainless steel, Systemstift® and installation instructions | time-saving, practical, precise, all accessories enclosed; SIHGAFIX® stainless steel prevents rust from external sources and also screws into deep grooves |

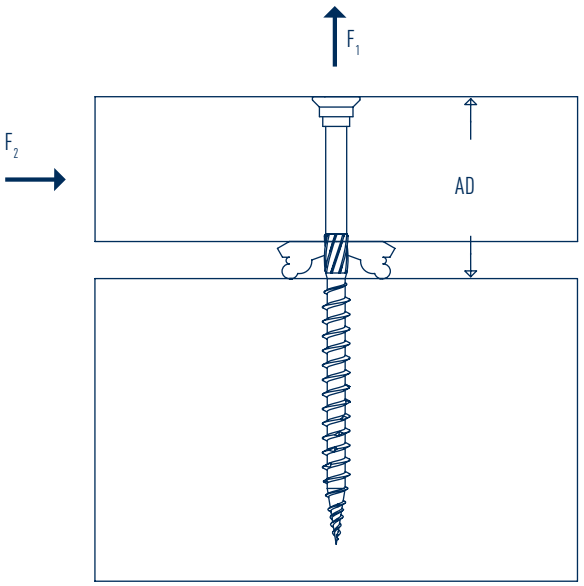
Because of the material properties it is strongly advised to generally pre-drill the add-on part (screw diameter + 0.5 -1 mm). The substructure, due to the different bulk densities and moisture, also in conifers, should in most cases be pre-drilled over the entire thread length with ∅ 3 mm. If in doubt, we recommend carrying out pretrials

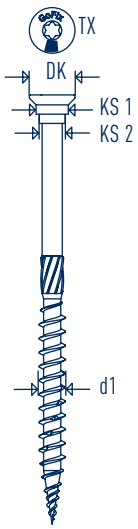


**L-GoFix® MS A2**
**made of A2 stainless steel**



ETA-11/0425




**Dimension [mm]**

L-GoFix® MS A2

| d1 | TX | DK | KS 1 | KS 2 |
|---|---|---|---|---|
| 4,5 | 20 | 6,9 | 5,2 | 4,2 |
| 5,0 | 25 | 8,5 | 6,0 | 4,8 |

| SIHGA® | | Dimension | Installation Part | Characteristic Values** | | | |
|---|---|---|---|---|---|---|---|
| montagepack | | L-GoFix® MS A2 | AD | Tensile Force $F_1$ [kN] | | Shear Force $F_2$ [kN] | |
| Art. No. | PU | d1 x L | [mm] | Head | Thread | Wood-Wood | Steel-Wood |
| 22226 | 400 | **4,5 x 40** | 16 | 0,48 | 1,55 | 0,74 | 1,15 |
| 22236 | 400 | **4,5 x 45** | 18 | 0,48 | 1,77 | 0,83 | 1,21 |
| 22246 | 400 | **4,5 x 50** | 20 | 0,61 | 1,99 | 0,92 | 1,26 |
| 22266 | 400 | **4,5 x 60** | 24 | 0,61 | 2,36 | 1,07 | 1,35 |
| 22276 | 300 | **4,5 x 70** | 28 | 0,61 | 2,72 | 1,22 | 1,45 |
| 22316 | 200 | **5,0 x 45** | 18 | 0,76 | 1,82 | 0,89 | 1,36 |
| 22326 | 200 | **5,0 x 50** | 20 | 0,95 | 2,14 | 0,99 | 1,44 |
| 22336 | 200 | **5,0 x 60** | 24 | 0,95 | 2,53 | 1,18 | 1,54 |
| 22346 | 200 | **5,0 x 70** | 28 | 0,95 | 2,93 | 1,33 | 1,64 |
| 22356 | 200 | **5,0 x 80** | 32 | 0,95 | 3,72 | 1,57 | 1,84 |
| 22366 | 200 | **5,0 x 90** | 36 | 0,95 | 4,12 | 1,67 | 1,94 |
| 22376 | 200 | **5,0 x 100** | 40 | 0,95 | 4,30 | 1,72 | 1,98 |

Subject to technical modifications and errors. Status of approval 2026

** characteristic values for dimensioning according to EC 5 and for strength class ρk 490 kg/m³ (Larch)

## SIHGA® TIP:

When using coatings such as oils, glazes and pre-greying, it is essential to consult the coating manufacturer. As a rule, the manufacturer specifies the minimum material quality of the binding agent. If the manufacturer is not known, we recommend material quality A4 (L-BohrFix® MB A4).

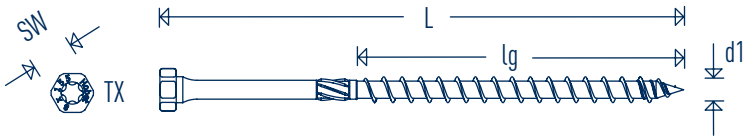
# Hobet®





**Hobet® the wood-concrete connection screw**

| SIHGA® Feature | YOUR Benefit |
|---|---|
| made in Austria | top European quality and added-value |
| high load bearing wood-concrete connection screw | connects wooden beam ceilings, dowel beam ceilings or panel ceilings and the top concrete layer to optimise the strength with limited structural height |
| diverse areas of application, economical and cost-effective | old building renovation (strengthening wooden beam ceilings), building height extensions (load-distributing ceilings for attics), new buildings (high load bearing wood-concrete compound structures) |
| optimises properties of simple wooden ceilings | greater strength and rigidity, fire protection, better vibration behaviour, noise protection, thermal insulation |
| optimised compared to purely concrete ceilings | low inherent weight |
| Hobet® thread | fast screw connection, low tightening torque, minimises splitting effect |
| Hobet® bit | time savings due to rapid attachment, especially at 45° screw angle, easy to work with |
| comprehensive calculation of load capacities, fire protection, serviceability and vibration | complicated calculations are superfluous - SIHGA® performs the calculation for you |




| SIHGA® | | Dimension | | Drive | | Screwing Angle |
|---|---|---|---|---|---|---|
| objektpack® | | Hobet® | lg | SW | TX | in the Wood |
| Art. No. | PU | d1 x L | [mm] | | | [°] |
| 30879 | 400 | **8,0 x 155** | 100 | 12 | 40 | 90 |
| 30889 | 400 | **8,0 x 205** | 130 | 12 | 40 | 45 / 90 |





# IdeFix® DWD



IdeFix® DWD shear connection for wall and ceiling elements



ETA-14/0160

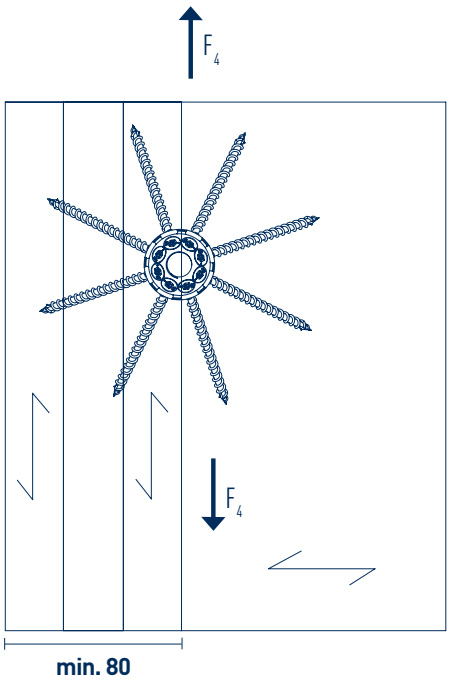
| SIHGA® Feature | YOUR Benefit |
|---|---|
| proven three-dimensional load uptake through geometry and 45° screw connection | connects solid wood elements in parallel and across corners |
| tested in plywood boards - as well as solid wood elements | shear connections for wood elements of all sizes and types |
| simple assembly, only one hole per connector | this hole can be factory-made or made on-site |
| flush-mounted in construction | no processing of further wall layers needed |
| design values | SIHGA® performs the calculation for you |

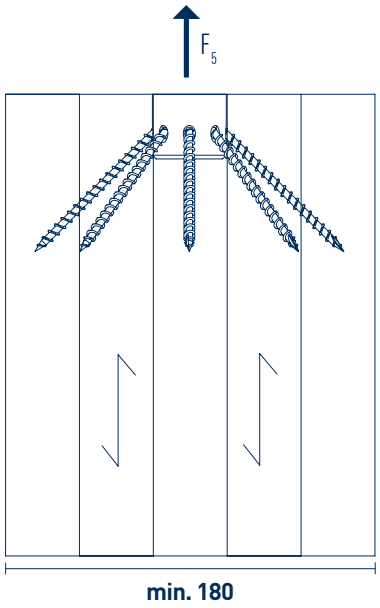


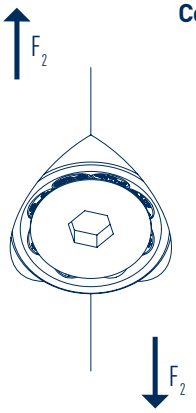


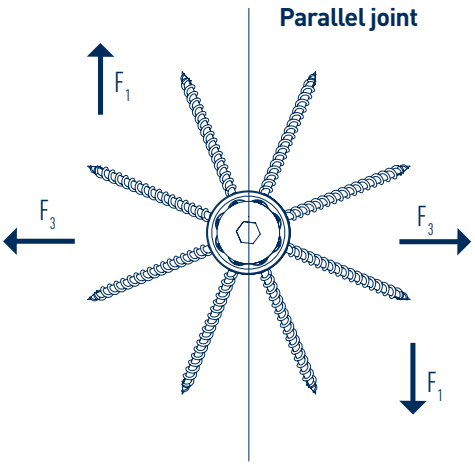
## SIHGA® TIP:

For parallel joints, drill with IdeFix® Drill IB HMB together with IdeFix® IBG Drilling Template. For corner joints drill only with IdeFix® Drill IB HMB.



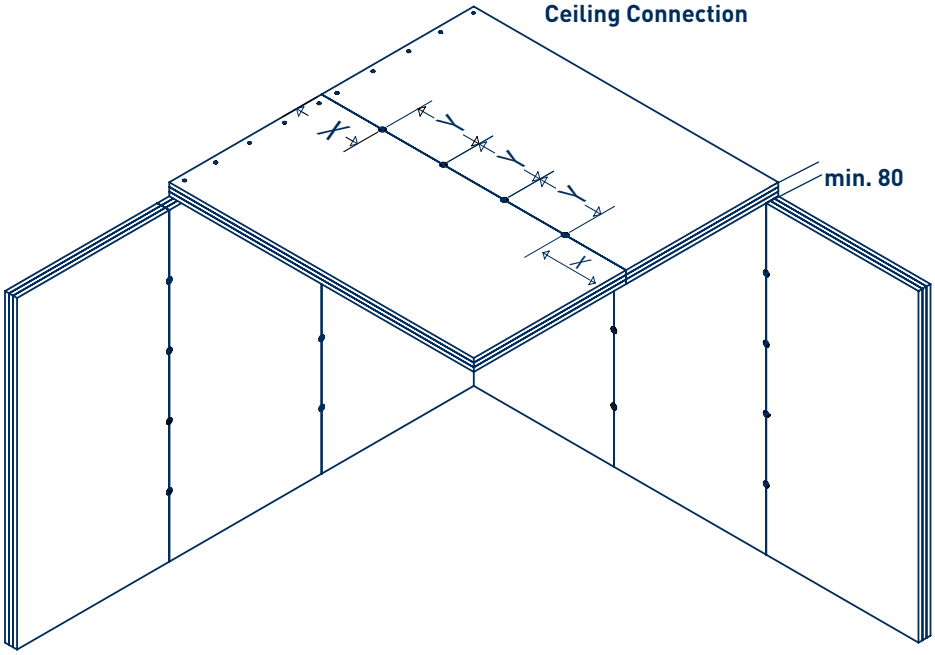



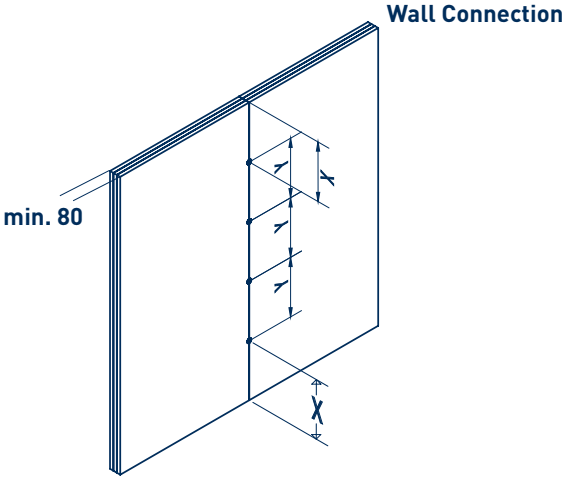



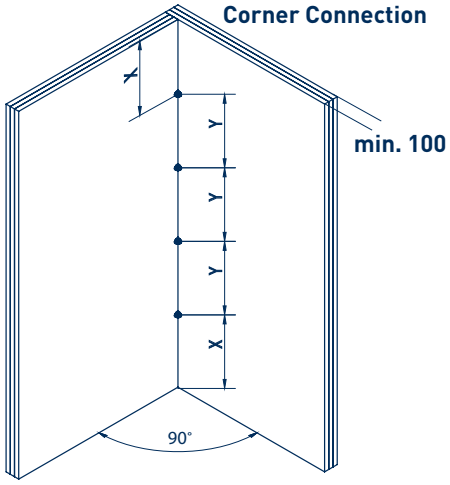

| SIHGA® | | Dimension | Dimension | Dimension | Parallel Characteristic Value | Corner Connection Characteristic Value |
|---|---|---|---|---|---|---|
| IdeFix® DWD | | IFK | GoFix® HK | Pressure Bulkhead | $F_1$ | $F_2$ |
| Art. No. | PU | d x h | d x L | d x L | [kN] | [kN] |
| 28896 | 5 | **30 x 20** | 5,0 x 80 | 12 x 20 | 14,30 | 6,33 |
| 28906 | 5 | **40 x 25** | 6,0 x 100 | 16 x 25 | 20,36 | 8,99 |

| SIHGA® | | Dimension | Dimension | Dimension | Corner Connection Characteristic Value | Corner Connection Characteristic Value | Extraction Characteristic Value |
|---|---|---|---|---|---|---|---|
| IdeFix® DWD | | IFK | GoFix® HK | Pressure Bulkhead | $F_3$ | $F_4$ | $F_5$ |
| Art. No. | PU | d x h | d x L | d x L | [kN] | [kN] | [kN] |
| 28896 | 5 | **30 x 20** | 5,0 x 80 | 12 x 20 | 8,27 | 12,61 | 31,66 |
| 28906 | 5 | **40 x 25** | 6,0 x 100 | 16 x 25 | 11,75 | 20,36 | 44,98 |

# Application




**Minimum Axis Spacings**

| Typ | X | Y |
|---|---|---|
| IdeFix® DWD | [mm] | [mm] |
| IFK 308 | 80 | 80 |
| IFK 410 | 100 | 100 |

# IdeFix® IF/IFD





**IdeFix® IFD**

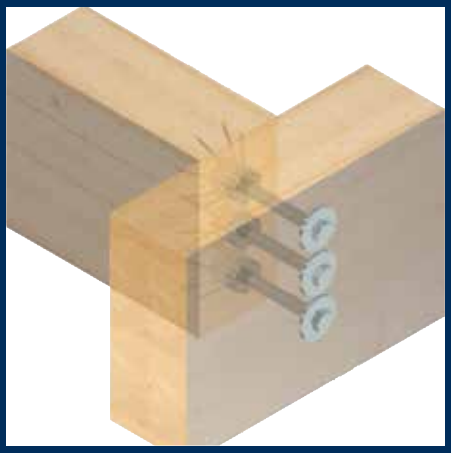


ETA-14/0160

| SIHGA® Feature | YOUR Benefit |
|---|---|
| even in end-grain wood, IdeFix® IF transfers extremely high tensile and shearing (transverse) forces, up to 101.6 kN per fastening point | the heavy load connection with small space requirement and small axial and edge distances |
| three-dimensional load attachment through geometry and 45° screw connection for normal and angled connections | the range of applications for wood construction is almost unlimited |
| for horizontal connections, vertical connections, angled connections, multiple connections in single and multiple rows | IdeFix® IF is the ideal problem solver - even for grain-cut connections |
| integrated anti-rotation lock | thanks to the geometry, rotation of the timber, for example columns, is prevented; during installation it automatically presses into the wood being connected |
| can be re-tightened at any time through metric internal thread M 12, M 16, M 20 | IdeFix® IF can be re-tightened when installed |
| installed invisibly | perfect look and high fire protection advantage |
| enables small edge and axial distances | allows the simple installation of multiple IdeFix® IF |
| modular construction, also for multiple use possible | connection can be loosened and fixed as often as required, ideal for seasonal (temporary) buildings |
| can also be installed as pin attachment, including anti-rotation lock | the wood being connected also has to be drilled; minimises the weakening of timber despite the pin attachment |
| easy installation, only insert in hole with 30, 40 or 50 mm diameter and depth | this drilling can be performed in the factory or on-site |
| tensile force may be statically combined with transverse force | a major and simple security advantage, also with angled connections |



IdeFix® IF



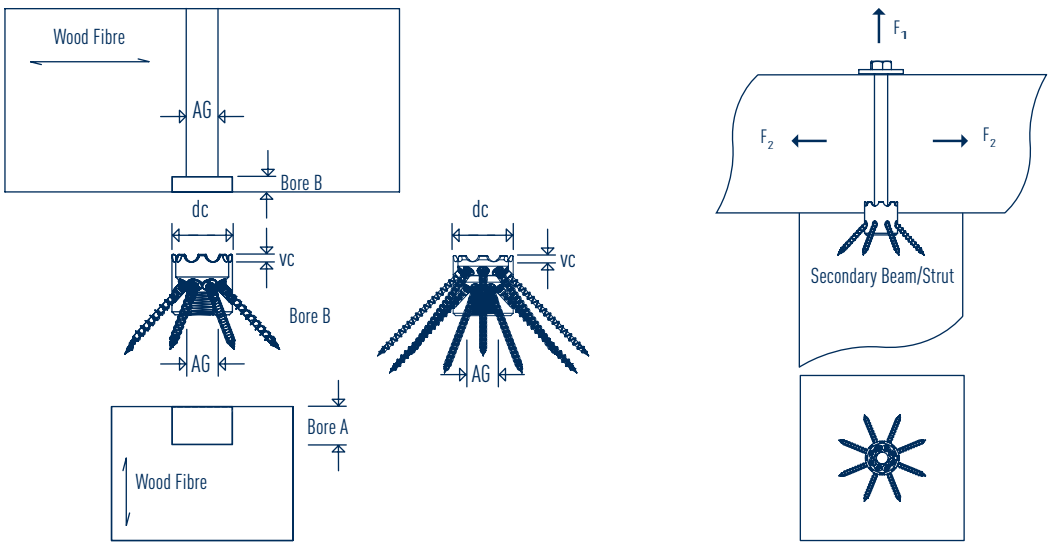
## SIHGA® TIP:

IdeFix® IFD for even higher tensile loads with double the number of screws.

| SIHGA® Feature | YOUR Benefit |
|---|---|
| includes SIHGAFIX®, GoFix® HK screws and installation instructions | time-saving, practical, precise, complete accessories enclosed |
| Permitted for service class 3 by using GoFix® HKE screws | Connections in outdoor areas are easy to manage |
| design values | SIHGA® performs the calculation for you |

| Dimension | Dimension | Connection | Tensile Force Connection | | Transverse Force Connection* | | Locking Device |
|---|---|---|---|---|---|---|---|
| IdeFix® IF/IFD | dc | Thread | Bore [mm] | | Bore [mm] | | vc |
| Type | [mm] | AG | A | B | A | B | [mm] |
| **304/306/308** | 30 | M 12 | 27 | 0 | 20 | 7 | 3 |
| **406/408/410** | 40 | M 16 | 35 | 0 | 25 | 10 | 5 |
| **509** | 50 | M 20 | 45 | 0 | 30 | 15 | 5 |
| **508/510** | 50 | M 20 | 45 | 0 | 35 | 10 | 5 |

* for multiple joints, the drill hole B is increased by the anti-twist protection vc




| SIHGA® montagepack | | Dimension IdeFix® IF/IFD | | System Screw GoFix® HK | | Secondary Beam / Strut | | Characteristic Values* | |
|---|---|---|---|---|---|---|---|---|---|
| Art. No. | PU | | Type | [mm] | Stk. | Edge / axis distance [mm] | Height/Width [mm] | Tensile $F_1$ [kN] | Shear $F_2$** [kN] |
| 28806 | 24 | **IF** | **304** | 5,0 x 40 | 8 | 50 | 100 | 19,90 | 14,00 |
| 28866 | 24 | **IF** | **306** | 5,0 x 60 | 8 | 60 | 120 | 30,20 | 15,66 |
| 28816 | 24 | **IF** | **308** | 5,0 x 80 | 8 | 70 | 140 | 38,80 | 16,73 |
| 28826 | 12 | **IF** | **406** | 6,0 x 60 | 8 | 60 | 120 | 34,20 | 18,40 |
| 28886 | 12 | **IF** | **408** | 6,0 x 80 | 8 | 80 | 160 | 44,90 | 24,38 |
| 28836 | 12 | **IF** | **410** | 6,0 x 100 | 8 | 90 | 180 | 54,60 | 25,59 |
| 28846 | 6 | **IF** | **509** | 8,0 x 90 | 8 | 80 | 160 | 66,10 | 28,33 |
| 28856 | 6 | **IFD** | **508** | 6,0 x 80 | 16 | 80 / 160 | 160 | 85,00 | 28,33 |
| 28876 | 6 | **IFD** | **510** | 6,0 x 100 | 16 | 100 / 200 | 200 | 104,00 | 37,03 |

* characteristic values for design according to EC 5, utilisation class 1 - 2 and strength class C 24 (ρk 350 kg/m³).
** characteristic values related to a single connector with minimum dimensions, load direction 0° to the fibre fh,0,k
The values refer exclusively to the IdeFix connection to wood. Screw bolts and washers must be verified separately.

## SIHGA® TIP:

For drilling by hand, we recommend the IdeFix® Drill Gauge IBL with drill.



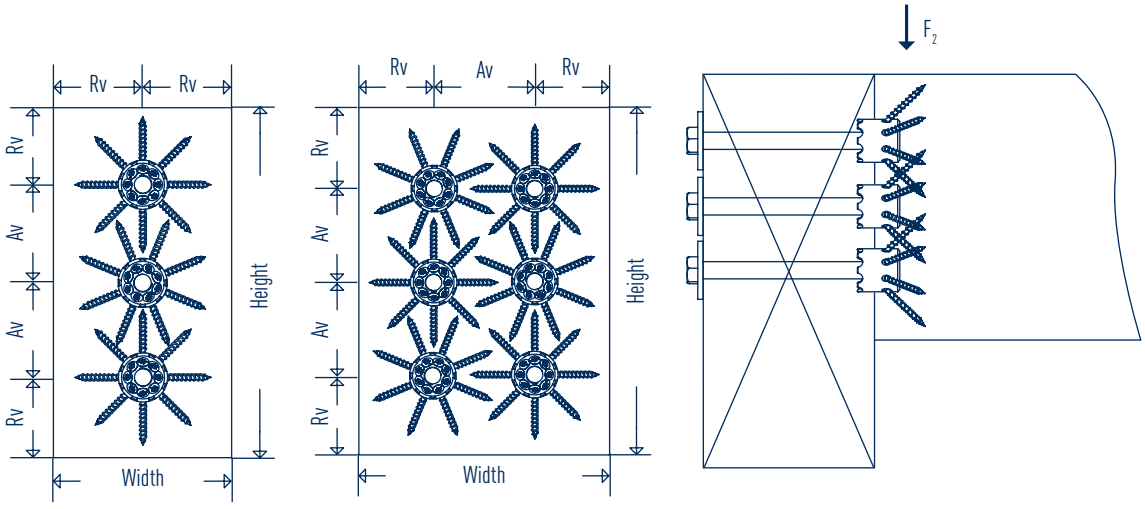
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## SIHGA® Feature

design values

## YOUR Benefit

SIHGA® performs the calculation for you




**Edge and Axial Distances**

IdeFix® IF

| Type | Rv | Av |
|---|---|---|
| 304 | 50 | 50 |
| 406 | 60 | 60 |
| 509 | 80 | 80 |

| SIHGA® | | Type | Secondary Beam | | Number | Characteristic Values* | Secondary Beam | | Number | Characteristic Values* |
|---|---|---|---|---|---|---|---|---|---|---|
| montagepack | | IdeFix® | Width | Height | Connector | Transverse Force $F_2$ | Width | Height | Connector | Transverse Force $F_2$ |
| Art. No. | PU | IF | [mm] | [mm] | Pieces | [kN] | [mm] | [mm] | Pieces | [kN] |
| 28806 | 24 | **304** | 100 | 150 | 2 | 20,20 | 150 | 150 | 4 | 40,40 |
| 28826 | 12 | **406** | 120 | 180 | 2 | 26,00 | 180 | 180 | 4 | 52,00 |
| 28846 | 6 | **509** | 160 | 240 | 2 | 41,00 | 240 | 240 | 4 | 82,00 |
| 28806 | 24 | **304** | 100 | 200 | 3 | 30,30 | 150 | 200 | 6 | 60,60 |
| 28826 | 12 | **406** | 120 | 240 | 3 | 39,00 | 180 | 240 | 6 | 78,00 |
| 28846 | 6 | **509** | 160 | 320 | 3 | 61,50 | 240 | 320 | 6 | 123,00 |
| 28806 | 24 | **304** | 100 | 250 | 4 | 40,40 | 150 | 250 | 8 | 80,80 |
| 28826 | 12 | **406** | 120 | 300 | 4 | 52,00 | 180 | 300 | 8 | 104,00 |
| 28846 | 6 | **509** | 160 | 400 | 4 | 82,00 | 240 | 400 | 8 | 164,00 |
| 28806 | 24 | **304** | 100 | 300 | 5 | 50,50 | 150 | 300 | 10 | 101,00 |
| 28826 | 12 | **406** | 120 | 360 | 5 | 65,00 | 180 | 360 | 10 | 130,00 |
| 28846 | 6 | **509** | 160 | 480 | 5 | 102,50 | 240 | 480 | 10 | 205,00 |

* characteristic values for dimensioning according to EC 5 and strength class C 24 (ρk 350 kg/m³)
The values refer exclusively to the IdeFix connection to wood. Screw bolts and washers must be verified separately.

## SIHGA® TIP:

For multiple drilling by hand, we recommend the IdeFix® Drill Template IBS with drill.
Always drill through holes for the threaded screws from the IdeFix® side.

# System Kit IdeFix® IF HMB

| SIHGA® Feature | YOUR Benefit |
|---|---|
| for all IdeFix® IF and IFD (excluding IFD 510) | the professional installation aid, simplifies construction processes and saves time |
| contains 1 IdeFix® Drill Gauge IBG, 1 IdeFix® Drill IB HMB, 1 IdeFix® Drill Template IBS, all GoFix® fastening screws, Allen key | everything is professionally and rationally protected and packed in a case |
| including Systemstift® and installation instructions | time-saving, practical, precise, complete accessories enclosed |





IdeFix® Drill Gauge IBG



IdeFix® Drill Template IBS
IdeFix® Drill IB HMB

# IdeFix® Drill IB HMB

| SIHGA® Feature | YOUR Benefit |
|---|---|
| IdeFix® Drills IB HMB made of high-quality steel with exchangeable hard metal cutting inserts | for permanent use of the drill without downtime for re-sharpening |
| IdeFix® Drills IB HMB with optimised geometry and thread tip | independent feeding and centring of the drill without effort at different fibre directions |



IdeFix®
Drill IB HMB



# IdeFix® IFK





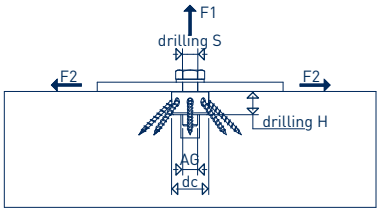
**IdeFix® IFK**



ETA-14/0160

| SIHGA® Feature | YOUR Benefit |
|---|---|
| proven three-dimensional load pick-up through geometry and 45° screw connection | combines wood with steel components and can transfer very high loads |
| Simplified geometry by omitting the anti-twist protection | The IdeFix® IFK is perfectly suited for multiple connections or pure train connections and can be used very economically |
| Simple installation, only one hole per connector | this hole can be made at the factory or on site |
| made of steel, manufactured under supervision and galvanised | long-lasting, consistent quality |
| incl. all fasteners | all accessories are included |
| design values | SIHGA® takes care of the measurement for you |

| Dimension | Measure | Connection | Drilling | |
|---|---|---|---|---|
| IdeFix® IFK | dc | AG | Wood H | Steel S |
| Type | [mm] | [mm] | [mm] | [mm] |
| 304/306/308 | 30 | M 12 | 20 | 12,5 |
| 406/408/410 | 40 | M 16 | 25 | 16,5 |




| SIHGA® | Dimension | Systemsrew | | Beam/column | | Characteristic values* | |
|---|---|---|---|---|---|---|---|
| montagepack | IdeFix® IFK | GoFix® HK | Quantity | edge/axis distance | height/width | Tensile $F_1$ | Shear $F_2$** |
| Art. No. PU | Type | [mm] | Pcs./IFK | [mm] | [mm] | [kN] | [kN] |
| 28066 24 | **304** | 5,0 x 40 | 8 | 50 | 100 | 19,90 | 11,81 |
| 28076 24 | **306** | 5,0 x 60 | 8 | 60 | 120 | 30,20 | 11,81 |
| 28086 24 | **308** | 5,0 x 80 | 8 | 70 | 140 | 38,80 | 11,81 |
| 28096 12 | **406** | 6,0 x 60 | 8 | 60 | 120 | 34,20 | 20,27 |
| 28106 12 | **408** | 6,0 x 80 | 8 | 80 | 160 | 44,90 | 20,27 |
| 28116 12 | **410** | 6,0 x 100 | 8 | 90 | 180 | 54,60 | 20,27 |

* Characteristic values for design according to EC 5 and strength class C 24 (ρk 350 kg/m³)
** Characteristic values related to a single connector with minimum dimensions
The values refer exclusively to the connection IdeFix® on wood or steel. Bolts and washers must be verified separately. Selected steel thickness 10 mm, bolt grade 8.8





## SIHGA® TIP:

For manual drilling, we recommend the IdeFix® IBG drill bell and drill bit.

# Cubix




For information and personalised advice on using SIHGA® Cubix for your project, please do not hesitate to contact us.
Find out how SIHGA® Cubix can increase your efficiency on the construction site.

**REQUEST A PERSONALISED QUOTE – WE ARE HAPPY TO ASSIST YOU!**

+43 7612 74370 0 | support@sihga.com

# SIHGA® Tourbus




## INTERESTED?
## WE WOULD BE HAPPY TO VISIT YOU!

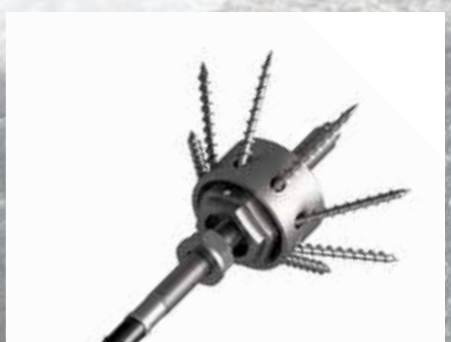
Arrange a suitable appointment directly with your personal application specialist or send an enquiry to
**support@sihga.com**

**#ONTOUR**

# Modulix®



Modulix® HB

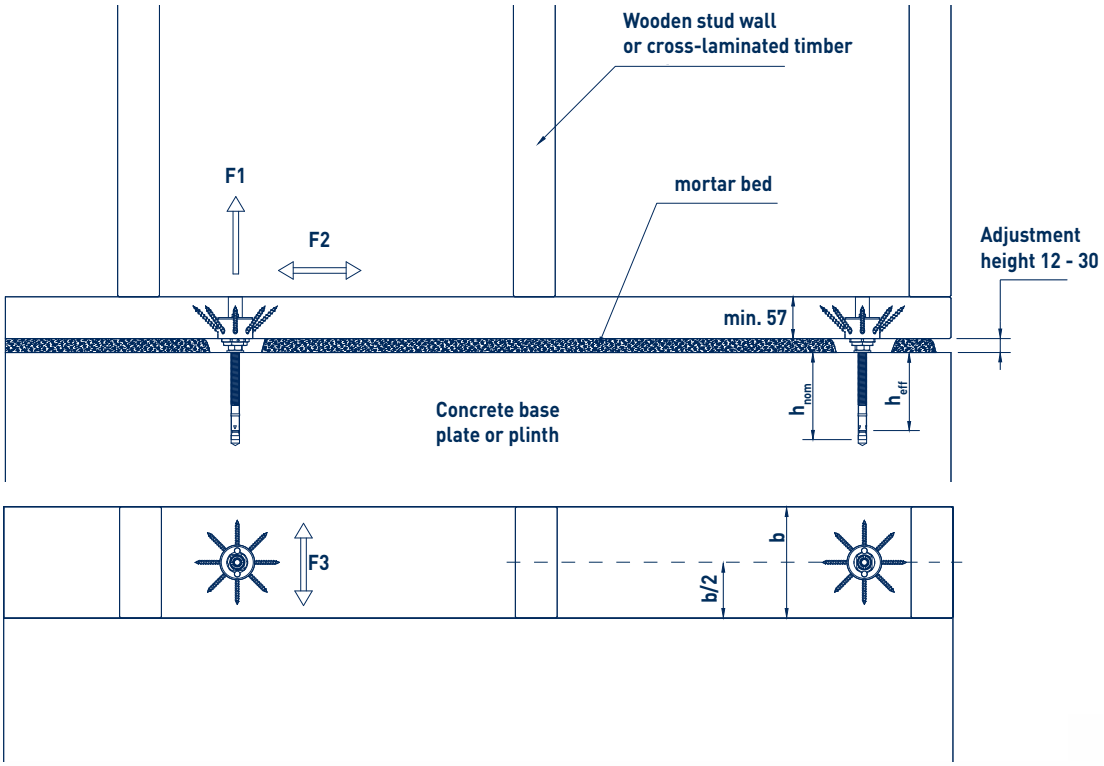


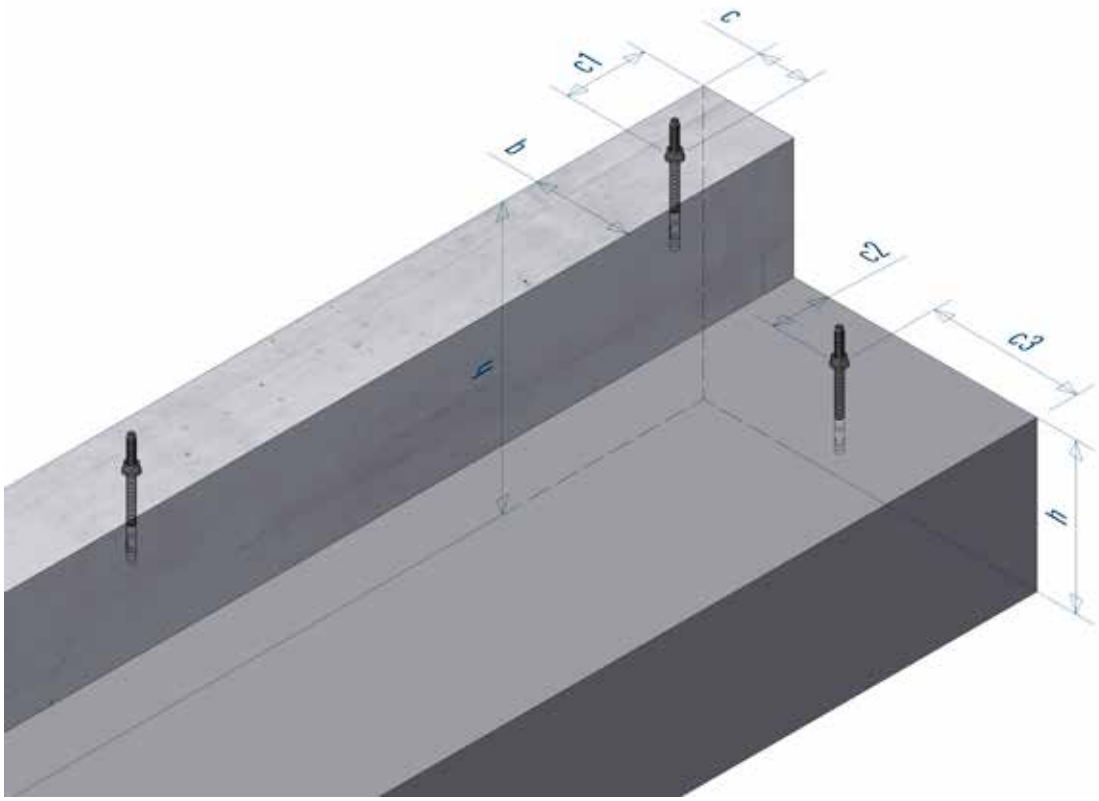
| SIHGA® Feature | YOUR Benefit |
|---|---|
| Connection of timber frame or cross-laminated timber wall to concrete floor slab or concrete base | Secure, centric load transfer along the wall axis |
| Installation also possible with narrow concrete bases | Ideal when classic angle connectors cannot be used |
| Locking with 90° rotation | fast, backlash-free and mechanically secured connection |
| Height-adjustable base, 12–30 mm adjustment range | Compensation for construction tolerances and uneven concrete surfaces |
| Installation with SIHGA® Orakelix® system | Height adjustment accurate to the millimetre using laser levelling |
| Retrospective height adjustment possible even when wall is already installed | flexible adjustment during assembly |
| 45° three-dimensional screw connection based on the proven IdeFix® principle | Highest tensile and shear forces, additional cross-tensile reinforcement of the wood |
| No visible angles on the outside or inside | Airtight layer remains unbroken, no taping required |
| Tool-based, demountable and reusable; a future-proof solution for circular construction | Ideal for modular, temporary or dismantlable structures (circular building) |
| Conical guide and marking for locking control | Secure installation and simple visual inspection |
| Components made of high-quality electro-galvanised steel | long-term stability |
| Ppre-assembled design | Reduced assembly time, efficient construction site logistics |
| Compatible with common anchoring systems (M12 bolts or adhesive anchors) | Easy integration into existing planning and execution systems |
| Developed and manufactured in Austria, patent pending | Highest quality, precision and added value from Austria |





# Technical specifications



## Load capacities Moduleix® IdeFix®

| | GoFix® HK | | dimension | | | [kN] | |
|---|---|---|---|---|---|---|---|
| | | | b min. [mm] | h min. [mm] | C24 | CLT 5S (2 cm middle layer) | $R_d$ steel at F1 |
| characteristic load capacities Rk,**F1** ETA 14/0160 Annex A) | **6 pcs.** | 6,0 x 60 | 90 | 57 | 25,62 | 20,75 | 23,6 |
| | **8 pcs.** | 6,0 x 60 | 120 | 57 | 34,17 | 27,67 | |

| | | | b min. [mm] | h min. [mm] | C24 | CLT 5S (2 cm middle layer) |
|---|---|---|---|---|---|---|
| characteristic load capacities Rk,**F2** ETA 14/0160 Annex E) | **6 pcs.** | 6,0 x 60 | 90 | 57 | 19,99 | 39,88 |
| | **8 pcs.** | 6,0 x 60 | 120 | 57 | 23,39 | 39,88 |

| | | | b min. [mm] | h min. [mm] | C24 | CLT 5S (2 cm middle layer) |
|---|---|---|---|---|---|---|
| characteristic load capacities Rk,**F3** ETA 14/0160 Annex E) | **6 pcs.** | 6,0 x 60 | 90 | 57 | 17,45 | 7,82 |
| | **8 pcs.** | 6,0 x 60 | 120 | 57 | 20,85 | 13,36 |

## Load-bearing capacities of Fischer FAZ II Plus M12 bolt anchors under the following assumptions:

Design according to DIN EN 1992-4:2019-04
Substrate cracked concrete C25/30
Certification in accordance with ETA-19/0520
≤ 20 mm levelling layer / swelling mortar under timber frame/CLT
clamping degree α = 2,0
For combined tensile/shear stress: interaction verification required
https://www.fixperience.online

| $h_{nom}$ 124 mm $h_{eff}$ 110mm | plinth h min. 200 mm | | | | concrete slab h min. 200 mm | | |
|---|---|---|---|---|---|---|---|
| | b [mm] | c [mm] | c1 [mm] | [kN] | c2 [mm] | c3 [mm] | [kN] |
| Rated load capacity Rd, **F1** ETA -19/0520 | 120 | 60 | 150 | 8,4 | 55 | 150 | 14,2 |
| | 150 | 75 | 150 | 10.9 | 80 | 150 | 14,9 |
| | 200 | 100 | 150 | 14,9 | 120 | 150 | 14,9 |

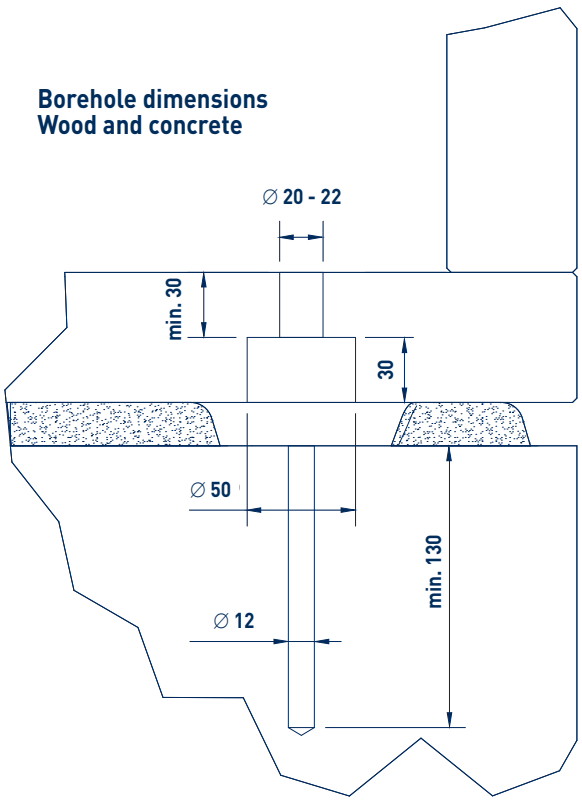
| | b [mm] | c [mm] | c1 [mm] | [kN] | c2 [mm] | c3 [mm] | [kN] |
|---|---|---|---|---|---|---|---|
| Rated load capacity Rd, **F2** ETA -19/0520 | 120 | 60 | no edge effect | 5,41 | 55 | no edge effect | 5,41 |
| | 150 | 75 | no edge effect | 5,41 | 80 | no edge effect | 5,41 |
| | 200 | 100 | no edge effect | 5,41 | 120 | no edge effect | 5,41 |

| | b [mm] | c [mm] | c1 [mm] | [kN] | c2 [mm] | c3 [mm] | [kN] |
|---|---|---|---|---|---|---|---|
| Rated load capacity Rd, **F3** ETA -19/0520 | 120 | 60 | no edge effect | 5,18 | 55 | no edge effect | 4,64 |
| | 150 | 75 | no edge effect | 5,41 | 80 | no edge effect | 5,41 |
| | 200 | 100 | no edge effect | 5,41 | 120 | no edge effect | 5,41 |

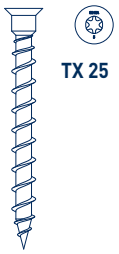
## TECHNICAL NOTE – LOAD-BEARING CAPACITIES

- Wood load-bearing capacities based on test report by Bureau Schmid and ETA-14/0160 (IdeFix®)
- Load-bearing capacities of steel components from FEM analysis according to technical report ZTA-SIH-25-001 ZT Awender GmbH
- Design values for concrete anchors according to DIN EN 1992-4:2019-04 and ETA-19/0520
- Load-bearing capacities may vary due to variations in raw density and application
- The lowest resistance of wood, concrete or steel is always decisive
- Minimum dimensions must be checked on a project-specific basis; tables are for guidance only
- Dimensioning of wood in accordance with EN 1995-1-1: $Rd = Rk \cdot k_{mod} / \gamma_M$
- Verification of materials must be carried out separately; interactions must be taken into account in accordance with the standard

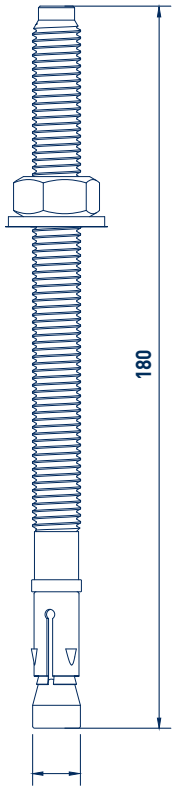
## Borehole dimensions
## Wood and concrete



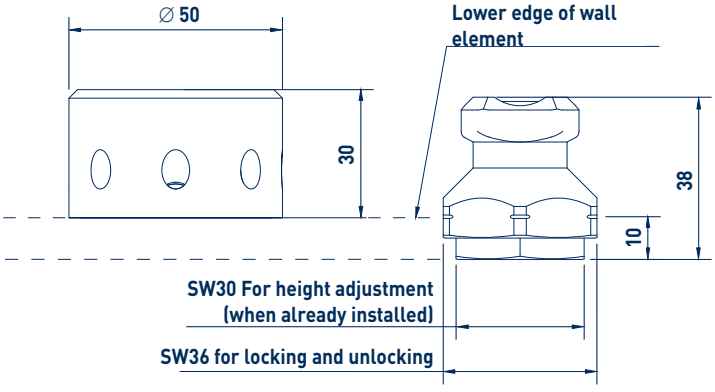

**GoFix® HK 6 x 60**




**Fischer bolt anchor FAZ II Plus 12/80 gvz galvanised**



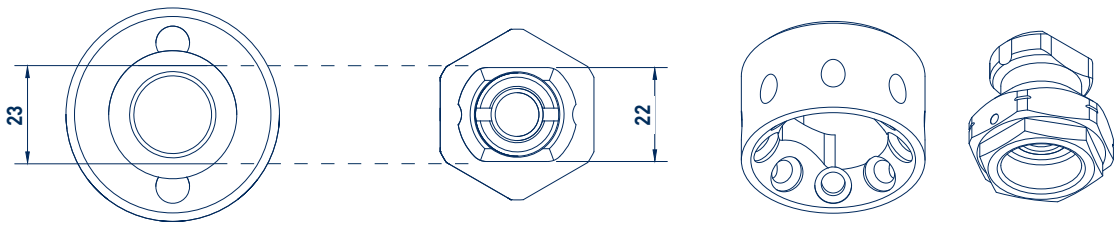

**Modulix® IdeFix®**




**Modulix® latch**

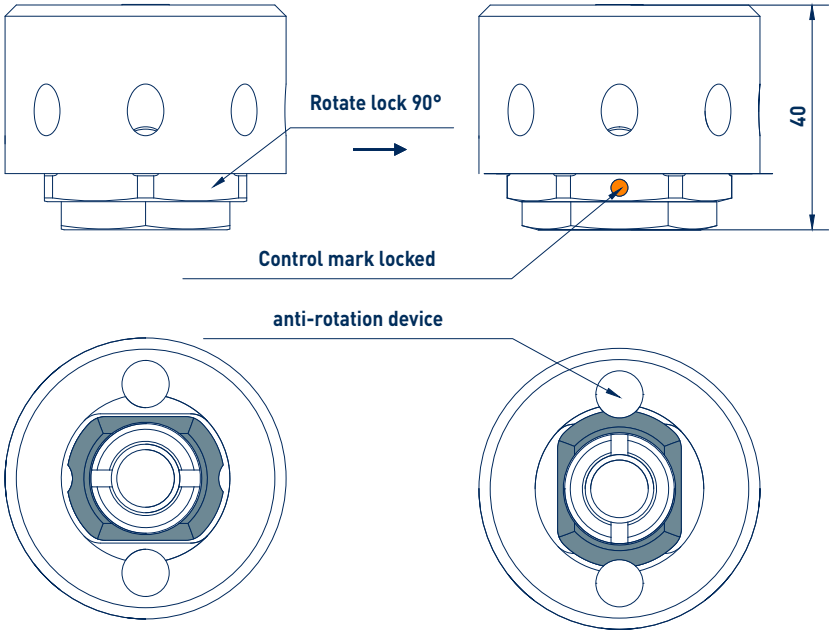



| 1 pcs. Modulix® consists of: | |
|---|---|
| 1 pcs. | Modulix® IdeFix® |
| 1 pcs. | Modulix® latch |
| 8 pcs. | GoFix® HK 6 x 60 |
| optional 1 pcs. | Fischer bolt anchor FAZ II Plus 12/80 gvz galvanised |




### SIHGA® TIP:

For precise drilling into concrete, we recommend using a drilling template. The Modulix® open-end spanner with integrated drill guide or a homemade makeshift tool is suitable for this purpose.




| SIHGA® montagepack | | | dimension ∅ x l |
|---|---|---|---|
| Art. No. | PU | Type | [mm] |
| 55806 | 20 | **Modulix®** | 50 x 30 |
| 55892 | 20 | **Fischer bolt anchor FAZ II Plus** | M12 x 180 (ETA-19/0520) |



**Modulix® unlatched**



**Modulix® locked**

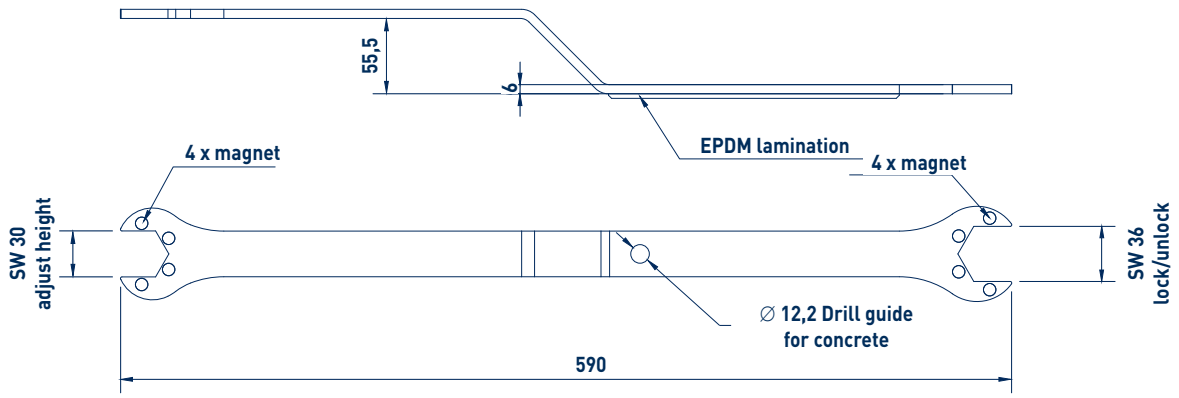
## SIHGA® TIP:

For precise drilling in wood by hand, we recommend the Modulix® drilling template with quick-change adapter (page 219).

# Modulix® accessories

## Modulix® Open-ended wrench 30/36

| SIHGA® Modulix® Open-ended wrench |
| --- |
| Art. No. |
| 55882 |








# Modulix® accessories

## Modulix® drilling jig with quick-change system between drilling and screwing

| SIHGA® |
| --- |
| Modulix® drilling jig rental device |
| Art. No. |
| 55902 |



## Orakelix® (page 90)

| SIHGA® |
| --- |
| Orakelix® |
| Art. No. |
| 55536 |



## Orakelix® adapter Modulix®

| SIHGA® |
| --- |
| Orakelix® adapter Modulix® |
| Art. No. |
| 55576 |

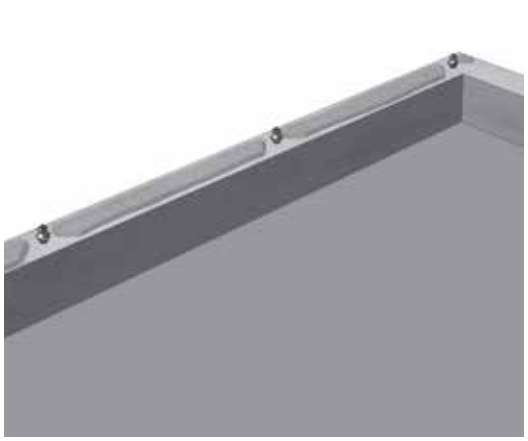


# Modulix® application

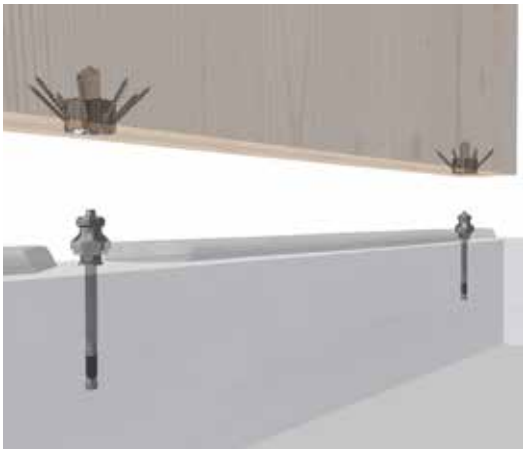
**Create a level with Orakelix®**



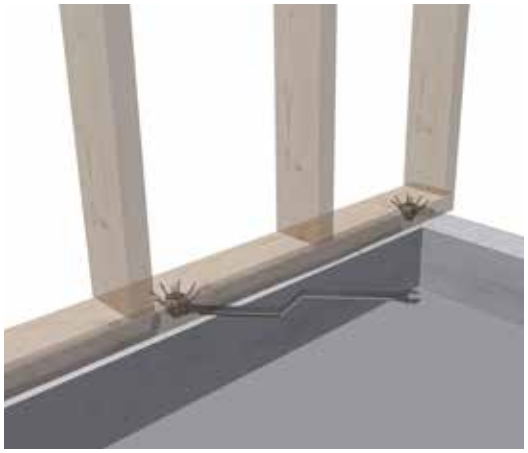
**Produce mortar tape**



**Put up a wall**



**Lock Modulix® with 90° rotation**

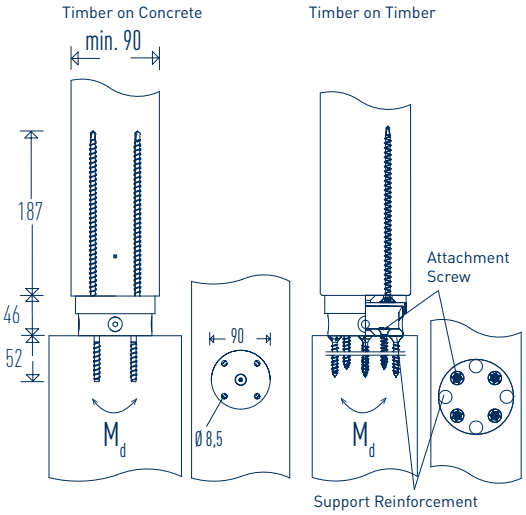


# Pfalu®



**Pfalu®**

| SIHGA® Feature | YOUR Benefit |
|---|---|
| fastenings for fence and railing posts | quick, simple and safe installation of posts |
| ideally suited for fences and privacy walls | offers extensive stability and bending stiffness |
| stepless and easily accessible incline adjustment up to 4 degrees in all directions | straight-lined, flush appearance of the posts without complex compensation panels, applicable to 15 cm concrete width |
| no slotting or milling necessary in the factory | simply fit the accessories supplied |
| no protruding steel plates, which need to be milled out with fence or balcony elements | plain and simple, aesthetically pleasing, can be (re-)adjusted at any time, no drill holes, pre-assembling possible |
| fastening into the posts only from below | no side insertion of screws necessary, which become an entry point for water |
| includes SIHGAFIX®, BeziFix® Anker ZF for timber on concrete or GoFix® S+ for timber on timber | time-saving (up to 70 %), practical, precise, complete accessories enclosed |




| SIHGA® | | Dimension | GoFix® S+ Post Attachment | BeziFix® Anker ZF Concrete Attachment | Max. Moment |
|---|---|---|---|---|---|
| montagepack | | Pfalu® | d1 x L | d1 x L | $M_d$ |
| Art. No. | PU | ∅ x h | [mm] | [mm] | [kNm] |
| 43526 | 5 | **90 x 46** | 8,0 x 195 | 7,5 x 60 | 1,50 |

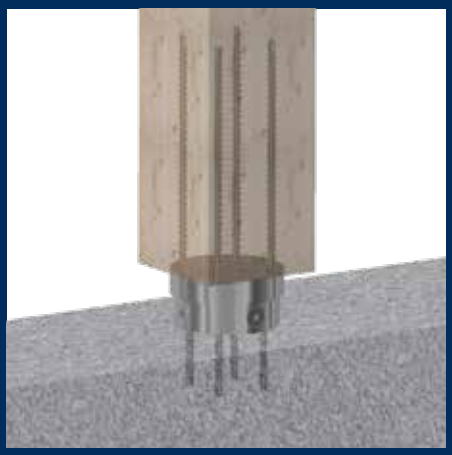
* tested concrete quality C 35/45 unreinforced

| SIHGA® | | Dimension | GoFix® S+ Post Attachment | GoFix® S+ Attachment to Wood incl. Support Reinforcement | Max. Moment |
|---|---|---|---|---|---|
| montagepack | | Pfalu® S+ | d1 x L | d1 x L | $M_d$ |
| Art. No. | PU | ∅ x h | [mm] | [mm] | [kNm] |
| 43536 | 5 | **90 x 46** | 8,0 x 195 | 8,0 x 125 | 1,25 |

**Example: 100 km / h wind speed** closed area max. 80 %

| Fence Height | Field Width* |
|---|---|
| [m] | [m] |
| 1,8 | 1,7 |
| 1,5 | 2,4 |
| 1,2 | 3,8 |
| 1,0 | 5,4 |

* these distances apply only to the specified boundary conditions in residential areas





## SIHGA® TIP:

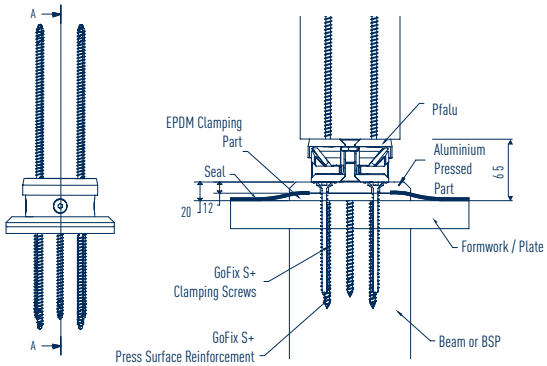
With BeziFix® SR II on natural stone and GoFix® S + screws also for fixing on wooden background. To prevent pressing in the wood we recommend an additional support reinforcement.

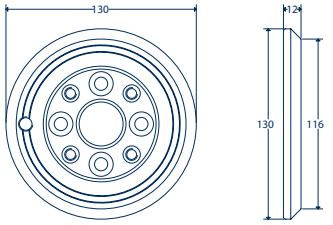
# Pfalu Aquastop®



**Pfalu Aquastop®
for integration with foil roofs**

| SIHGA® Feature | YOUR Benefit |
|---|---|
| fastening system for railing uprights on flat roof waterproofing | quick, simple and safe installation |
| ideally suited for railings and screening walls | offers extensive stability and bending stiffness |
| stepless and easily accessible inclination adjustment up to 4° in all directions | straight-lined, flush appearance of posts without complex compensation |
| pressing surface reinforcement using GoFix® S+ | use on wood beams and solid wood ceilings and BSP systems |
| valve for leak testing | reliable connection and sealing, system can be serviced |
| combinable with various sealants | fastened to PVC, EPDM and even sheet metal |
| sealants are clamped-in | later installation in existing waterproofing also possible |
| including Pfalu®, SIHGAFIX®, GoFix® S+ and all seals | time-saving, practical, precise, all accessories included |




| SIHGA® montagepack Art. No. | PU | Dimension Pfalu® d x h | Dimension Aquastop d x h | GoFix® S+ Underground d x L [mm] | GoFix® S+ Pressed Piece d x L [mm] | GoFix® S+ Pfalu® d x L [mm] | Max. Torque [kNm] |
|---|---|---|---|---|---|---|---|
| 43546 | 5 | **90 x 46** | 130 x 20 | 8,0 x 125 | 8,0 x 155 | 8 x 195 | 1,25 |

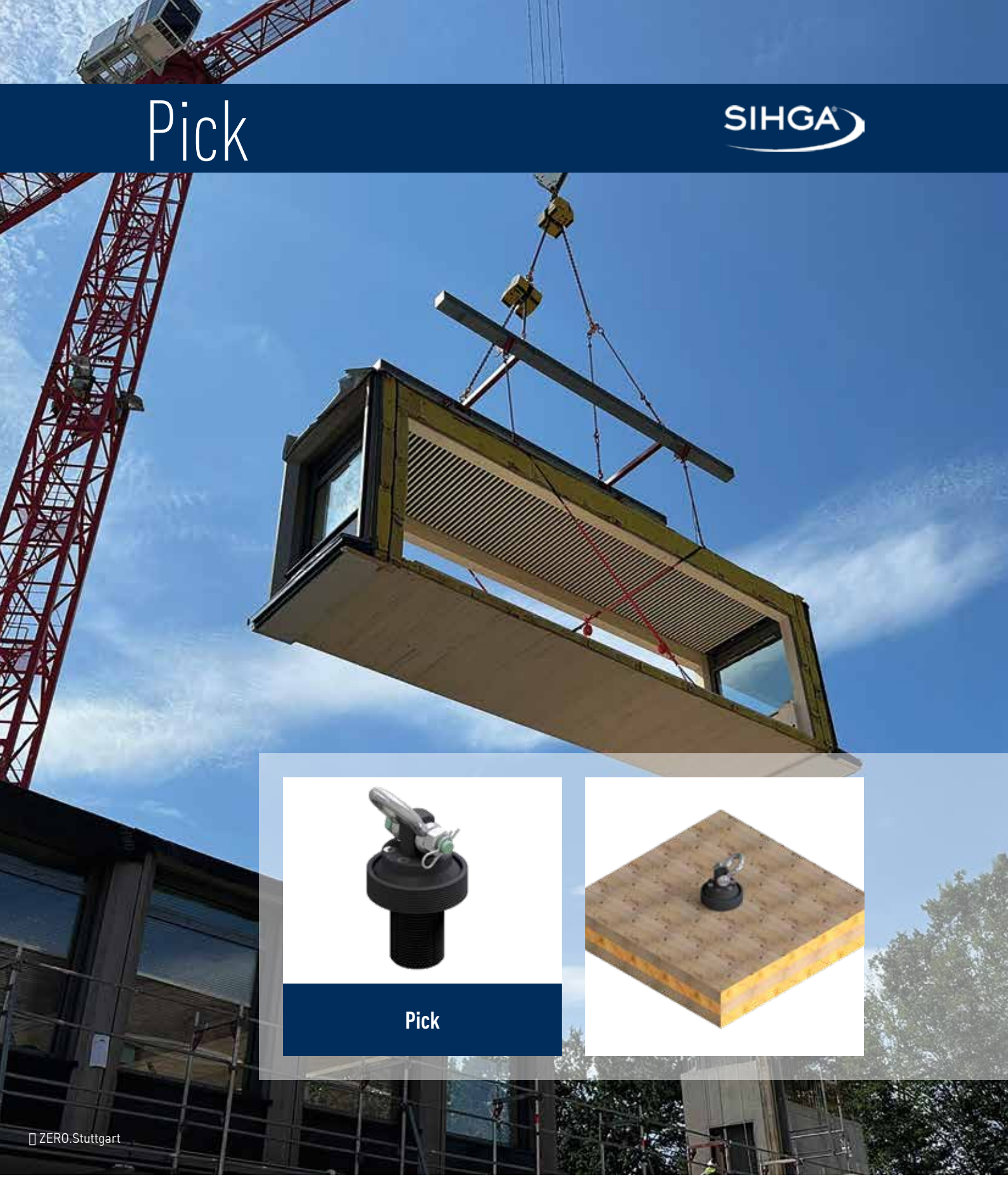




## SIHGA® TIP:

For waterproofing testing use leak spray and an air pump.

# Pick





Pick



ZERO.Stuttgart

| SIHGA® Feature | YOUR Benefit |
|---|---|
| load attachment for lifting glued laminated timber, glued cross laminate timber and solid timber | capacity up to 1250 kg per fastening point |
| made, developed and patented in Austria from high-quality steel | local quality and reliability, Q&T steel for permanent, robust long life |
| lift by drilling a blind hole (∅ 50 mm, depth 70 mm) | visible quality of the surfaces is not impaired, no fastening screws needed |
| Pick Drill HMB can be combined with the IdeFix® Drill Gauge IBG | easy, safe compliance with the drill depth, precise drilling at 90° |
| safe and simple attachment | attached with a few actions, the attachment does not have to be aligned |
| versatile in application | on the back (from panel thickness of 90 mm), side and transom-side for all kinds of support |
| low-maintenance | annual test together with personal protective equipment according to Occupational Health and Safety Directive possible |
| long service life | 16,000 load cycles (according to EN 13155:2020) |
| safety tested – accompanied by TÜV | avoidance of safety risks, diverse application areas and ambient conditions tested |
| **Now NEW:** Ultrasonic inspection for your SIHGA PICK | annual safety assessment according to the operating instructions, including ultrasonic testing |
| **Now NEW:** SIHGA Pick calculation in hsbcad | to make planning and use even easier and safer, the SIHGA Pick lifting system was fully implemented in hsbcad for HRW and BSP www.hsbcad.com |

Important note: The drill hole must not be used for lifting more than six times.

| **SIHGA®** |
|---|
| System Kit Pick HMB |
| Art. No. |
| 49223 |

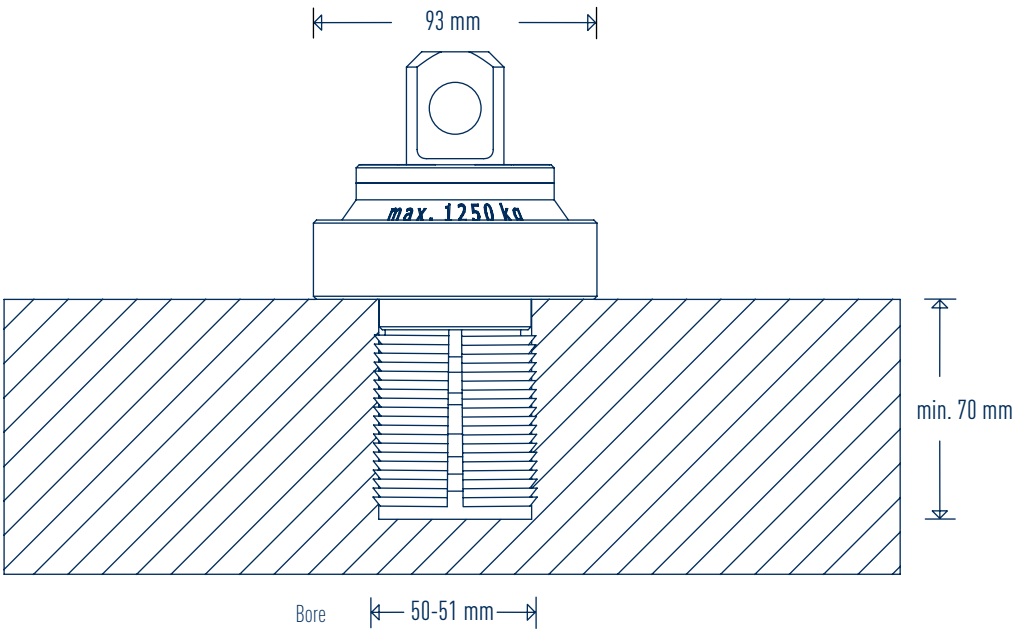


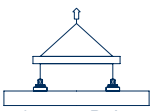
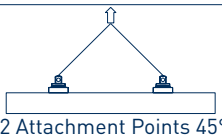
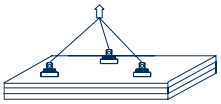
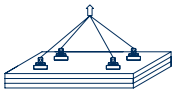


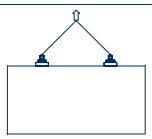
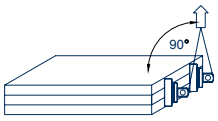
**Pick Deck**

## SIHGA® TIP:

Pick Deck closes the borehole, e.g. for sound insulation and fire protection requirements.




| Pick Load Table | | | | |
|---|---|---|---|---|
| Beam | Beam Dimension | |  2 Attachment Points 0°* |  2 Attachment Points 45° |
| | min. Height | min. Width | | |
| | [mm] | [mm] | [kg] | [kg] |
| BSH | 200 | 140 | 2.500 | 1.370 |
| KVH e.g. framed wall | 60 | 140 | 1.800 | 1.370 |
| | | | | |
| Glued ceiling panels BSP/ CLT (glue laminate timber) | Panel Dimension | |  3 Attachment Points 45° |  4 Attachment Points 45° (only with rocker) |
| | min. Thickness | min. Length and Width | | |
| | [mm] | [mm] | [kg] | [kg] |
| | 90 | 1.000 | 2.430 | 3.240 |

| | | | | |
|---|---|---|---|---|
| Glued wall panels BSP (glue laminate timber) | Panel Dimension | |  2 Attachment Points 45° |   2 Attachment Points 90° |
| | min. Thickness | min. Length and Width | | |
| | [mm] | [mm] | [kg] | [kg] |
| | 90 | 1.000 | 1.160 | 520 = (Panel Weight / 2) |

* Highly resinous timber like pine and larch, or BSP walls mounted at the front side, may only be lifted at an angle of ≥5° to the borehole axis.
the minimum distance to the surface layer while fastening plates to the front of the BSP panel is 2 cm
the minimum distance between each attachment point is 50 cm
the minimum distance between attachment points and beam or panel edge must not be less than 25 cm

Attention: The axial distance between the posts in framed walls must not exceed 62.5 cm.
The operator is responsible for the sufficient transfer of force from the head threshold (plate) to the posts, SIHGA® accepts no liability for this.

## SIHGA® TIP:

Detailed load tables for different wood dimensions and load cases can be found in the Pick operating.

# System Kit Pick HMB

| SIHGA® Feature | YOUR Benefit |
|---|---|
| two Pick and shackle, Pick Drill HMB, IdeFix® Drill Gauge IBG, 1 set HMB spare indexable inserts with screws and Allen keys and operating instructions are supplied in the System Kit | reliable and clean storage including all accessories; including place holder for third Pick |
| operating instructions stored in the lid | load values and safety conditions always to hand |
| Pick Drill HMB with optimised geometry for clean drilling in the glue laminate timber, glued cross laminate timber and solid timber | for seamless use of the Pick in the drilled hole, the best precondition for safe lifting |
| Pick Drill HMB made from high quality steel with exchangeable tungsten carbide indexable inserts | for continuous use of the drill with uniform quality of the drilled hole standing times (costly crane hours!) for sharpening the drill are superfluous |
| Pick Drill HMB with threaded bit | independent retraction of the drill without the application of force, guaranteed centring with different grain directions |
| including IdeFix® Drill Gauge IBG | easy, safe compliance with the drill depth against unintended drilling through, chippings collection, protection of the drill and against injuries |



Pick Drill HMB



# Pick Max®



Pick Max®



| SIHGA® Feature | YOUR Benefit |
|---|---|
| load attachment for lifting glued laminated timber, glued cross laminate timber and solid timber | capacity up to 2.400 kg per fastening point |
| made, developed and patented in Austria from high-quality steel | local quality and reliability, Q&T steel for permanent, robust long life |
| lift by drilling a blind hole (∅ 50 mm, depth 140 mm) | visible quality of the surfaces is not impaired, no fastening screws needed |
| Pick Max® Bohrer HMB can be combined with the IdeFix® Drill Gauge IBG | easy, safe compliance with the drill depth, precise drilling at 90° |
| safe and simple attachment | attached with a few actions, the attachment does not have to be aligned |
| versatile in application | on the back (from panel thickness of 100 mm), side and transom-side for all kinds of support |
| low-maintenance | annual test together with personal protective equipment according to Occupational Health and Safety Directive possible |
| long service life | 16.000 load cycles |
| safety tested – accompanied by TÜV | avoidance of safety risks, diverse application areas and ambient conditions tested |

**SIHGA®**
Expandix

| Art. No. | PU |
|---|---|
| 30486 | 2 |

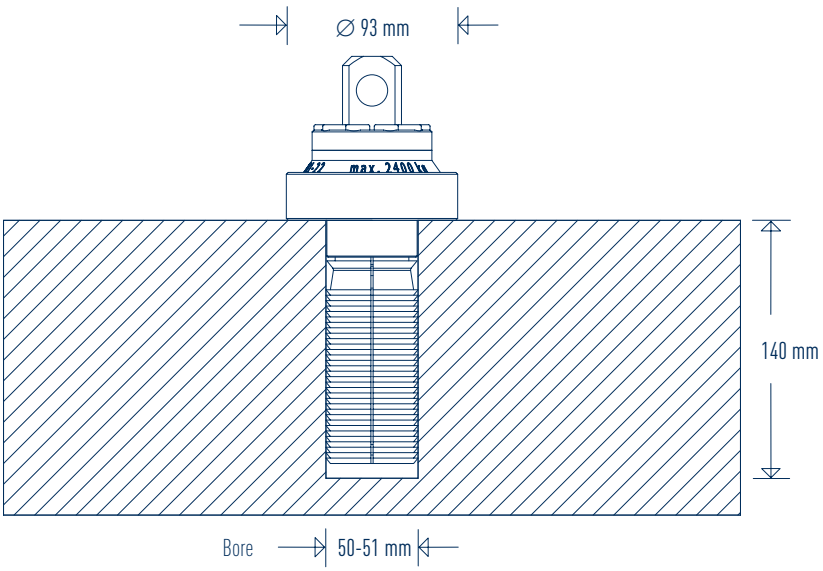


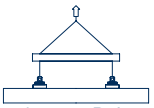
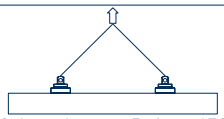


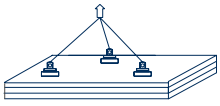
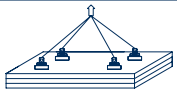
Expandix

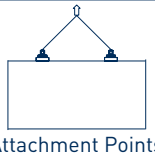
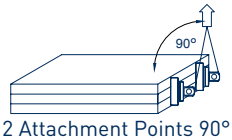
## SIHGA® TIP:

The Expandix (consisting of 2 rubber bands with loops and 4 shackles) is a practical lifting aid that dampens the swinging of the Pick and Pick Max® during the release process.




| Pick Max® Load Table | | | | |
|---|---|---|---|---|
| Beam | Beam Dimension | |  2 Attachment Points 0°* |  2 Attachment Points 45° |
| | min. Height | min. Width | | |
| | [mm] | [mm] | [kg] | [kg] |
| KVH e.g. framed wall | 160 | 160 | 4.800 | 2.696 |

| | | | | |
|---|---|---|---|---|
| Glued ceiling panels BSP/CLT (glue laminate timber) | Panel Dimension | |  3 Attachment Points 30° |  4 Attachment Points 30° (only with rocker) |
| | min. Thickness | min. Length and Width | | |
| | [mm] | [mm] | [kg] | [kg] |
| | 160 | 2.000 | 4.054 | 5.405 |

| | | | | |
|---|---|---|---|---|
| Glued wall panels BSP (glue laminate timber) | Panel Dimension | |  2 Attachment Points 30° |   2 Attachment Points 90° |
| | min. Thickness 5-layer | min. Length x min. Height | | |
| | [mm] | [mm] | [kg] | [kg] |
| | 120 | 2.000 x 1.000 | 2.618 | 1.765 |

* Highly resinous timber like pine and larch, or CLT walls mounted at the front side, may only be lifted at an angle of ≥5° to the borehole axis.
the minimum distance to the surface layer while fastening plates to the front of the CLT panel is 2,5 cm
the minimum distance between each attachment point is 100 cm
the minimum distance between attachment points and beam or panel edge must not be less than 50 cm

Attention: The axial distance between the posts in framed walls must not exceed 62.5 cm.
The operator is responsible for the sufficient transfer of force from the head threshold (plate) to the posts, SIHGA® accepts no liability for this.

## SIHGA® TIP:

Detailed load tables for different wood dimensions and load cases can be found in the Pick Max® operating.

# Systemkoffer Pick Max® HMB

| SIHGA® Feature | YOUR Benefit |
|---|---|
| two Pick Max® and shackle, Pick Max® Drill HMB, IdeFix® Drill Gauge IBG, 1 set HMB spare indexable inserts with screws and Allen keys and operating instructions are supplied in the System Kit | reliable and clean storage including all accessories |
| operating instructions stored in the lid | load values and safety conditions always to hand |
| Pick Max® Drill HMB with optimised geometry for clean drilling in the glue laminate timber, glued cross laminate timber and solid timber | for seamless use of the Pick in the drilled hole, the best precondition for safe lifting |
| Pick Max® Drill HMB made from high quality steel with exchangeable tungsten carbide indexable inserts | for continuous use of the drill with uniform quality of the drilled hole standing times (costly crane hours!) for sharpening the drill are superfluous |
| Pick Max® Drill HMB with threaded bit | independent retraction of the drill without the application of force, guaranteed centring with different grain directions |
| including IdeFix® Drill Gauge IBG | easy, safe compliance with the drill depth against unintended drilling through, chippings collection, protection of the drill and against injuries |

**SIHGA®**
System Kit Pick Max® HMB

| Art. No. | PU |
|---|---|
| 49293 | 1 |



Pick Max® Drill HMB



# Pick Deck II / Deck Max II

Prefabricated steel insert for pick holes after shifting wooden beam/panel components.
By inserting the Pick Deck (Max) II into the pick hole, the compression zone of the displaced component is closed again and the full cross-section can be assumed again with regard to the load-bearing capacity.

| SIHGA® | | | Dimensions | |
|---|---|---|---|---|
| montagepack® | | Pick® Deck II | d | l |
| Art. Nr. | VE | Type | [mm] | [mm] |
| 90766 | 10 | **Pick Deck II** | 50 | 70 |
| 90776 | 10 | **Pick Deck Max II** | 50 | 140 |

As Neuhaus 2017 (8.3.3) 1. points out with reference to EN DIN 1995-1-1:2019, weakening of the cross-section in the compression zone of structural members subjected to bending need not be taken into account in the calculation if the weakened area is filled to capacity and the filling material has the same or more stiffness as the surrounding timber.

Source: Neuhaus, Helmuth (2017): Ingenieurholzbau. 4th Ed. Wiesbaden: Springer Fachmedien Wiesbaden



**Pick Deck II**



# SOLID CONSTRUCTION ...

# ... BUT IN WOOD



Also discover the
MASS-X® CLT Program



# Pick PSA



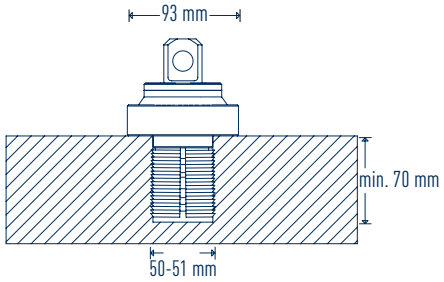
Pick PSA

| SIHGA® Feature | YOUR Benefit |
|---|---|
| protecting yourself and your employees from injury does not get any simpler than this | choose Pick-PSA when selecting your type-B attachment point |
| if the wooden elements have already been lifted with the Sihga Pick, there are already sufficient holes available | there are no time-consuming issues with tangled cables as the next attachment point is always within reach |
| optimal cable lengths possible | enables secure movement without restricting freedom of movement |
| no time-consuming installation and deinstallation necessary | for maximum security, the Pick-PSA is simply inserted into the borehole and the safety screw is tightened to 3 Nm |
| no cumbersome scaffolding needed | saves time and money |
| versatile in use | applicable for beam ceilings and board locking slabs |
| made, developed and patented in Austria | Austrian build quality and reliability, robust heat-treatable steel for long durability |
| almost maintenance free | regular cleaning and visual inspections, as well as annual testing in accordance with operating material regulations (Arbeitsmittelverordnung) are sufficient |
| tested by TÜV Austria | ensures the highest level of safety |

TÜV AUSTRIA BAUMUSTER GEPRÜFT

**SIHGA®**
System Kit Pick PSA

| Art. No. | PU |
|---|---|
| 49231 | 1 |






Application with beam ceilings




How to use with BSP

## SIHGA® TIP:

Use the SIHGA® Pick to lift your wooden elements in order to achieve the best conditions for the Pick PSA.

# System Pick Engel®



Pick PSA



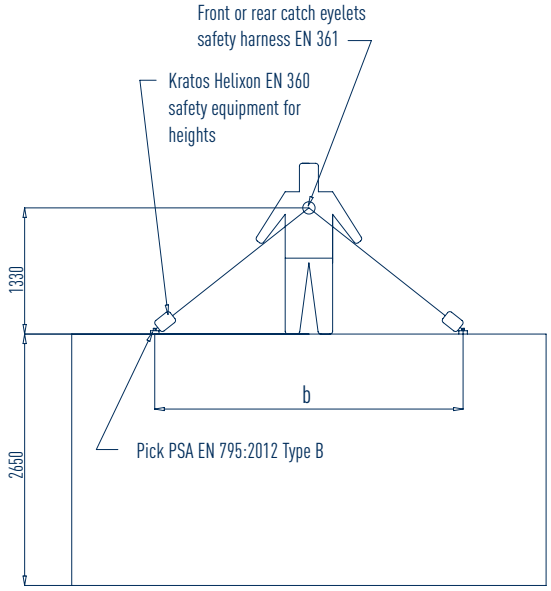
Helixon-S safety equipment for heights

| SIHGA® Feature | YOUR Benefit |
|---|---|
| tested product combination to protect in case of low height falls | also safeguard yourself and your employees from an often underestimated low height fall of ≥2.00 m |
| applicable as a safety team: two Pick PSA and two Helixon-S height protection devices tested as a system | reliable and immediately useable fall protection |
| versatile in use | applicable when erecting construction elements, placing ceiling elements and various loading activities |
| simple and safe installation | the worker is protected with fewer handgrips |
| Helixon-S safety equipment for heights, with FA 50 203 20 connecting element including fall indicator, a carry handle and an external fall impact absorber | safety equipment for heights ready to use, all important functions are integrated |
| integrated braking system for a collision force of less than 6kN<br>Swivel hook and connecting element FA 50 101 17 to attach to the Pick PSA | Helixon-S safety equipment for heights conformity with EN 360:2002 |
| high load-bearing capacity possible | tested for up to 100 kg body weight |

| SIHGA® montagepack | | Safety Equipment for Heights Helixon-S | Strap Width | Max. Body Weight | Weight Helixon-S |
|---|---|---|---|---|---|
| Art. No. | PU | [m] | [mm] | [kg] | [kg] |
| 43596 | 1 | **3,5** | 25 | 100 | 1,74 |

Table

| h | h1 | b |
|---|---|---|
| 200 | 65 | **155** |
| 210 | 75 | **179** |
| 220 | 85 | **203** |
| 230 | 95 | **226** |
| 240 | 105 | **250** |
| 250 | 115 | **274** |
| 260 | 125 | **298** |
| 270 | 135 | **322** |
| 280 | 145 | **346** |
| 290 | 155 | **369** |
| 300 | 165 | **393** |



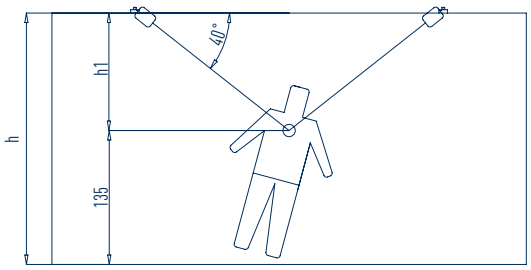

h1 = h - 135cm

$b = \frac{2 \times h1}{\tan(40°)}$

Example:

h1 = 265 - 135 = 130cm

$b = \frac{2 \times 130}{\tan(40°)} = 310$ cm




## SIHGA® TIP:

For your safety, use the combination exclusively with the Pick PSA.

# Pocket Traverse



Pocket Traverse

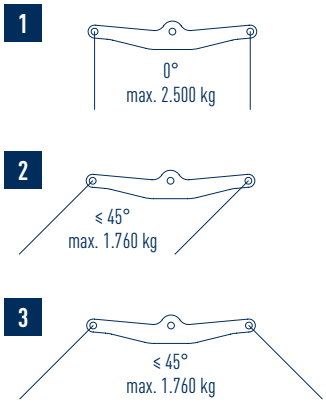


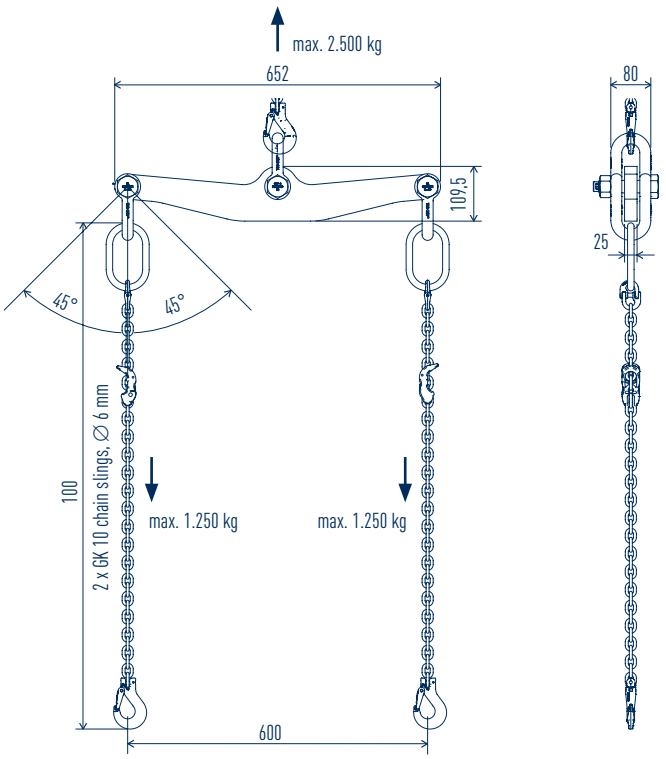
# Pocket Traverse

| SIHGA® Feature | YOUR Benefit |
|---|---|
| The Pocket Traverse is a traverse with a small format | It is easily transportable and therefore also readily available |
| Couples two load handling attachments with each other | By coupling two load handling attachments, twice the load can be lifted |
| Specialist geometry | The patent-pending geometry guarantees equal load distribution on each anchor point for lifting angles between 0° and 45° |
| The Pocket Traverse can also be used as a balancing rocker | When lifting 4 strands, e.g. ceiling elements, all four chain strands can be assumed to have the same load-bearing capacity |
| Chains with shortening claws | The Pocket Traverse can also be used correctly with challenging geometries |
| 2,500 kg load capacity | When using 2 Pocket Traverses, elements up to 5,000 kg can be lifted up |
| Long service life | Up to 16,000 load cycles |
| Low-maintenance | Annual inspection together with personal safety equipment in accordance with the Work Equipment Ordinance |
| CE marking | Provides security through conformity with all relevant standards |

| SIHGA® Pocket Traverse |
|---|
| Art. No. |
| 50036 |

## Load cases:




## SIHGA® TIP:

In combination with the SIHGA® Pick, the system offers maximum safety and efficiency and elements can be lifted with twice the weight as before

# ProziFix®



* Threaded rod is not included

**ProziFix®**



| SIHGA® Feature | YOUR Benefit |
|---|---|
| wall anchors for vertically perforated brick | assembly of canopies, carports and pergolas |
| bridges up to 20 cm insulation | no cumbersome cutting out of insulation necessary |
| high load-bearing capacity | cannot be achieved with any other customary system |
| internal pipe insulation | very low heat loss |
| including sealing disc | reseals the facade |
| 0-6 mm rear ventilation joint | for pergolas that are not covered and so on, a distance of 6 mm should be selected so that the wood can dry, no spacing for covered construction |
| disc dowels included | for optimal cross shear force transmission, Reinforcement of the embedment strength |
| anchor pipe with high corrosion resistance | SC 9 coating means high service life |
| BeziFee® is included | no additional material required |
| developed and manufactured in Austria | time-saving, practical, precise, complete accessories included |

**SIHGA® TIP:**

The special ProziFix® drill PFB 50 was developed to make the 50 mm hole, as it cuts a clean hole in brick without shattering the brick.

# ProziFix® load tables

### Senftenbacher 25 VZ Plan

| SIHGA® | | Dimension | | Insulation Thickness | Drilling tool | Characteristic Values | | Recommended Values* | |
|---|---|---|---|---|---|---|---|---|---|
| montagepack | | d1 x L | d2 / Wall Thickness | D | | $F_{1c}$ | $F_{2c}$ | $F_{1d}$ | $F_{2d}$ |
| Art. No. | PU | [mm] | [mm] | [mm] | | Shear Force [kN] | Tensile Force [kN] | Shear Force [kN] | Tensile Force [kN] |
| 55416 | 5 | 50 x 300 | 42,4 / 8 | **110** | ProziFix® Drill PFB 50 | 6,27 | 6,5 | 2,51 | 1,86 |
| 55426 | 5 | 50 x 320 | 42,4 / 8 | **130** | | 5,88 | 6,5 | 2,35 | 1,86 |
| 55436 | 5 | 50 x 340 | 42,4 / 8 | **150** | | 5,53 | 6,5 | 2,21 | 1,86 |
| 55446 | 5 | 50 x 360 | 42,4 / 8 | **170** | | 5,23 | 6,5 | 2,09 | 1,86 |
| 55456 | 5 | 50 x 380 | 42,4 / 8 | **190** | | 4,95 | 6,5 | 1,98 | 1,86 |
| 55466 | 5 | 50 x 400 | 42,4 / 8 | **210** | | 4,70 | 6,5 | 1,88 | 1,86 |

### Wienerberger Poroton vertically perforated brick Plan-T 24,0-0,9

| SIHGA® | | Dimension | | Insulation Thickness | Drilling tool | Characteristic Values | | Recommended Values* | |
|---|---|---|---|---|---|---|---|---|---|
| montagepack | | d1 x L | d2 / Wall Thickness | D | | $F_{1c}$ | $F_{2c}$ | $F_{1d}$ | $F_{2d}$ |
| Art. No. | PU | [mm] | [mm] | [mm] | | Shear Force [kN] | Tensile Force [kN] | Shear Force [kN] | Tensile Force [kN] |
| 55416 | 5 | 50 x 300 | 42,4 / 8 | **110** | ProziFix® Drill PFB 50 | 14,19 | 16,34 | 5,67 | 4,67 |
| 55426 | 5 | 50 x 320 | 42,4 / 8 | **130** | | 13,30 | 16,34 | 5,32 | 4,67 |
| 55436 | 5 | 50 x 340 | 42,4 / 8 | **150** | | 12,52 | 16,34 | 5,01 | 4,67 |
| 55446 | 5 | 50 x 360 | 42,4 / 8 | **170** | | 11,82 | 16,34 | 4,73 | 4,67 |
| 55456 | 5 | 50 x 380 | 42,4 / 8 | **190** | | 11,20 | 16,34 | 4,48 | 4,67 |
| 55466 | 5 | 50 x 400 | 42,4 / 8 | **210** | | 10,64 | 16,34 | 4,26 | 4,67 |

### Wienerberger Poroton flat brick T8-50,0

| SIHGA® | | Dimension | | Insulation Thickness | Drilling tool | Characteristic Values | | Recommended Values* | |
|---|---|---|---|---|---|---|---|---|---|
| montagepack | | d1 x L | d2 / Wall Thickness | D | | $F_{1c}$ | $F_{2c}$ | $F_{1d}$ | $F_{2d}$ |
| Art. No. | PU | [mm] | [mm] | [mm] | | Shear Force [kN] | Tensile Force [kN] | Shear Force [kN] | Tensile Force [kN] |
| 55406 | 5 | 50 x 190 | 42,4 / 8 | **0** | ProziFix® Drill PFB 50 | 14,70 | 6,76 | 5,88 | 1,93 |
| 55416 | 5 | 50 x 300 | 42,4 / 8 | **110** | | 9,31 | 6,76 | 3,72 | 1,93 |

### Wienerberger Porotherm 25-38 Plan

| SIHGA® | | Dimension | | Insulation Thickness | Drilling tool | Characteristic Values | | Recommended Values* | |
|---|---|---|---|---|---|---|---|---|---|
| montagepack | | d1 x L | d2 / Wall Thickness | D | | $F_{1c}$ | $F_{2c}$ | $F_{1d}$ | $F_{2d}$ |
| Art. No. | PU | [mm] | [mm] | [mm] | | Shear Force [kN] | Tensile Force [kN] | Shear Force [kN] | Tensile Force [kN] |
| 55416 | 5 | 50 x 300 | 42,4 / 8 | **110** | ProziFix® Drill PFB 50 | 8,74 | 13,27 | 3,50 | 3,79 |
| 55426 | 5 | 50 x 320 | 42,4 / 8 | **130** | | 8,19 | 13,27 | 3,28 | 3,79 |
| 55436 | 5 | 50 x 340 | 42,4 / 8 | **150** | | 7,71 | 13,27 | 3,08 | 3,79 |
| 55446 | 5 | 50 x 360 | 42,4 / 8 | **170** | | 7,28 | 13,27 | 2,91 | 3,79 |
| 55456 | 5 | 50 x 380 | 42,4 / 8 | **190** | | 6,90 | 13,27 | 2,76 | 3,79 |
| 55466 | 5 | 50 x 400 | 42,4 / 8 | **210** | | 6,56 | 13,27 | 2,62 | 3,79 |

*For installation in dry concrete or masonry and a temperature range I according to ETA 17/0181 and ETA 17/0182 (minimum temperature -40° C, maximum short-term temperature +40° C; maximum long-term temperature +24° C). Valid for the minimum edge & axis distances given in the table.

**Reductions of the recommended values are applied as follows:**
Reduction by the factor $\beta_{FT}$ **= 0.7** is required for damp substrates or a temperature range II according to ETA 17/0181 and ETA 17/0182 (minimum temperature -40° C, maximum short-term temperature +80° C; maximum long-term temperature +50° C) $F_{1d}$ and $F_{2d}$.
$F_{2d}$ must then be reduced by the factor $\beta_{duration}$ **= 0.6** if the proportion of the permanently acting tractive load is higher than 50% Material coefficients of $\gamma M_c$ **of 2.5 for brick and 1.5 for concrete** are already taken into account for $F_{1d}$ and $F_{2d}$.
An installation safety factor $\gamma_{inst}$ **of 1.4** is already taken into account for tractive load $F_{2d}$. This does not apply for shear forces $F_{1d}$.
For load cases not covered in this table, the underlying expert opinion of MPA Stuttgart is available at www.sihga.com.

### Wienerberger Porotherm 50-20 H.i. Plan

| SIHGA® | | Dimension | | Insulation Thickness | Drilling tool | Characteristic Values | | Recommended Values* | |
|---|---|---|---|---|---|---|---|---|---|
| montagepack | | d1 x L | d2 / Wall Thickness | D | | $F_{1c}$ | $F_{2c}$ | $F_{1d}$ | $F_{2d}$ |
| Art. No. | PU | [mm] | [mm] | [mm] | | Shear Force [kN] | Tensile Force [kN] | Shear Force [kN] | Tensile Force [kN] |
| 55406 | 5 | 50 x 190 | 42,4 / 8 | **0** | ProziFix® Drill PFB 50 | 8,10 | 2,32 | 3,24 | 0,66 |
| 55416 | 5 | 50 x 300 | 42,4 / 8 | **110** | | 5,13 | 2,32 | 2,05 | 0,66 |

### Pichler PIAplan 25/38 VZ

| SIHGA® | | Dimension | | Insulation Thickness | Drilling tool | Characteristic Values | | Recommended Values* | |
|---|---|---|---|---|---|---|---|---|---|
| montagepack | | d1 x L | d2 / Wall Thickness | D | | $F_{1c}$ | $F_{2c}$ | $F_{1d}$ | $F_{2d}$ |
| Art. No. | PU | [mm] | [mm] | [mm] | | Shear Force [kN] | Tensile Force [kN] | Shear Force [kN] | Tensile Force [kN] |
| 55416 | 5 | 50 x 300 | 42,4 / 8 | **110** | ProziFix® Drill PFB 50 | 8,55 | 5,86 | 3,42 | 1,67 |
| 55426 | 5 | 50 x 320 | 42,4 / 8 | **130** | | 8,02 | 5,86 | 3,21 | 1,67 |
| 55436 | 5 | 50 x 340 | 42,4 / 8 | **150** | | 7,54 | 5,86 | 3,02 | 1,67 |
| 55446 | 5 | 50 x 360 | 42,4 / 8 | **170** | | 7,13 | 5,86 | 2,85 | 1,67 |
| 55456 | 5 | 50 x 380 | 42,4 / 8 | **190** | | 6,75 | 5,86 | 2,70 | 1,67 |
| 55466 | 5 | 50 x 400 | 42,4 / 8 | **210** | | 6,41 | 5,86 | 2,57 | 1,67 |

### Pichler PIAplan 50/20 VZ

| SIHGA® | | Dimension | | Insulation Thickness | Drilling tool | Characteristic Values | | Recommended Values* | |
|---|---|---|---|---|---|---|---|---|---|
| montagepack | | d1 x L | d2 / Wall Thickness | D | | $F_{1c}$ | $F_{2c}$ | $F_{1d}$ | $F_{2d}$ |
| Art. No. | PU | [mm] | [mm] | [mm] | | Shear Force [kN] | Tensile Force [kN] | Shear Force [kN] | Tensile Force [kN] |
| 55406 | 5 | 50 x 190 | 42,4 / 8 | **0** | ProziFix® Drill PFB 50 | 2,40 | 3,15 | 0,96 | 0,90 |
| 55416 | 5 | 50 x 300 | 42,4 / 8 | **110** | | 1,52 | 3,15 | 0,61 | 0,90 |

### Leitl Vital Plan 25/30/24,9 cm N+F

| SIHGA® | | Dimension | | Insulation Thickness | Drilling tool | Characteristic Values | | Recommended Values* | |
|---|---|---|---|---|---|---|---|---|---|
| montagepack | | d1 x L | d2 / Wall Thickness | D | | $F_{1c}$ | $F_{2c}$ | $F_{1d}$ | $F_{2d}$ |
| Art. No. | PU | [mm] | [mm] | [mm] | | Shear Force [kN] | Tensile Force [kN] | Shear Force [kN] | Tensile Force [kN] |
| 55416 | 5 | 50 x 300 | 42,4 / 8 | **110** | ProziFix® Drill PFB 50 | 8,74 | 5,75 | 3,50 | 1,64 |
| 55426 | 5 | 50 x 320 | 42,4 / 8 | **130** | | 8,19 | 5,75 | 3,28 | 1,64 |
| 55436 | 5 | 50 x 340 | 42,4 / 8 | **150** | | 7,71 | 5,75 | 3,08 | 1,64 |
| 55446 | 5 | 50 x 360 | 42,4 / 8 | **170** | | 7,28 | 5,75 | 2,91 | 1,64 |
| 55456 | 5 | 50 x 380 | 42,4 / 8 | **190** | | 6,90 | 5,75 | 2,76 | 1,64 |
| 55466 | 5 | 50 x 400 | 42,4 / 8 | **210** | | 6,56 | 5,75 | 2,62 | 1,64 |

### Leitl Vital Solex Plan 50/20/24,9 cm N+F

| SIHGA® | | Dimension | | Insulation Thickness | Drilling tool | Characteristic Values | | Recommended Values* | |
|---|---|---|---|---|---|---|---|---|---|
| montagepack | | d1 x L | d2 / Wall Thickness | D | | $F_{1c}$ | $F_{2c}$ | $F_{1d}$ | $F_{2d}$ |
| Art. No. | PU | [mm] | [mm] | [mm] | | Shear Force [kN] | Tensile Force [kN] | Shear Force [kN] | Tensile Force [kN] |
| 55406 | 5 | 50 x 190 | 42,4 / 8 | **0** | ProziFix® Drill PFB 50 | 2,40 | 4,45 | 0,96 | 1,27 |
| 55416 | 5 | 50 x 300 | 42,4 / 8 | **110** | | 1,52 | 4,45 | 0,61 | 1,27 |

*For installation in dry concrete or masonry and a temperature range I according to ETA 17/0181 and ETA 17/0182 (minimum temperature -40° C, maximum short-term temperature +40° C; maximum long-term temperature +24° C). Valid for the minimum edge & axis distances given in the table.

**Reductions of the recommended values are applied as follows:**
Reduction by the factor $\beta_{FT}$ **= 0.7** is required for damp substrates or a temperature range II according to ETA 17/0181 and ETA 17/0182 (minimum temperature -40° C, maximum short-term temperature +80° C; maximum long-term temperature +50° C) $F_{1d}$ and $F_{2d}$.
$F_{2d}$ must then be reduced by the factor $\beta_{duration}$ **= 0.6** if the proportion of the permanently acting tractive load is higher than 50% Material coefficients of $\gamma M_c$ **of 2.5 for brick and 1.5 for concrete** are already taken into account for $F_{1d}$ and $F_{2d}$.
An installation safety factor $\gamma_{inst}$ **of 1.4** is already taken into account for tractive load $F_{2d}$. This does not apply for shear forces $F_{1d}$.
For load cases not covered in this table, the underlying expert opinion of MPA Stuttgart is available at www.sihga.com.

### EDER Plan XP 50 plus

| SIHGA® montagepack | | Dimension | | Insulation Thickness | Drilling tool | Characteristic Values | | Recommended Values* | |
|---|---|---|---|---|---|---|---|---|---|
| | | d1 x L | d2 / Wall Thickness | D | | $F_{1c}$ | $F_{2c}$ | $F_{1d}$ | $F_{2d}$ |
| Art. No. | PU | [mm] | [mm] | [mm] | | Shear Force [kN] | Tensile Force [kN] | Shear Force [kN] | Tensile Force [kN] |
| 55406 | 5 | 50 x 190 | 42,4 / 8 | **0** | ProziFix® Drill PFB 50 | 5,30 | 5,7 | 2,12 | 1,63 |
| 55416 | 5 | 50 x 300 | 42,4 / 8 | **110** | | 3,36 | 5,7 | 1,34 | 1,63 |

### H+H solid lime sand brick 2 DF

| SIHGA® montagepack | | Dimension | | Insulation Thickness | Drilling tool | Characteristic Values | | Recommended Values* | |
|---|---|---|---|---|---|---|---|---|---|
| | | d1 x L | d2 / Wall Thickness | D | | $F_{1c}$ | $F_{2c}$ | $F_{1d}$ | $F_{2d}$ |
| Art. No. | PU | [mm] | [mm] | [mm] | | Shear Force [kN] | Tensile Force [kN] | Shear Force [kN] | Tensile Force [kN] |
| 55416 | 5 | 50 x 300 | 42,4 / 8 | **110** | ProziFix® Drill PFB 50 or 50 mm Hammer Drill | 22,61 | 20,56 | 9,04 | 5,87 |
| 55426 | 5 | 50 x 320 | 42,4 / 8 | **130** | | 21,20 | 20,56 | 8,48 | 5,87 |
| 55436 | 5 | 50 x 340 | 42,4 / 8 | **150** | | 19,95 | 20,56 | 7,98 | 5,87 |
| 55446 | 5 | 50 x 360 | 42,4 / 8 | **170** | | 18,84 | 20,56 | 7,54 | 5,87 |
| 55456 | 5 | 50 x 380 | 42,4 / 8 | **190** | | 17,85 | 20,56 | 7,14 | 5,87 |
| 55466 | 5 | 50 x 400 | 42,4 / 8 | **210** | | 16,96 | 20,56 | 6,78 | 5,87 |

### C20/25 cracked and non-cracked slab > 20 cm front side

| SIHGA® montagepack | | Dimension | | Insulation Thickness | Drilling tool | Characteristic Values | | Recommended Values* | |
|---|---|---|---|---|---|---|---|---|---|
| | | d1 x L | d2 / Wall Thickness | D | | $F_{1c}$ | $F_{2c}$ | $F_{1d}$ | $F_{2d}$ |
| Art. No. | PU | [mm] | [mm] | [mm] | | Shear Force [kN] | Tensile Force [kN] | Shear Force [kN] | Tensile Force [kN] |
| 55416 | 5 | 50 x 300 | 42,4 / 8 | **110** | 50 mm Hammer Drill | 10,89 | 10,45 | 7,26 | 4,98 |
| 55426 | 5 | 50 x 320 | 42,4 / 8 | **130** | | 10,21 | 10,45 | 6,81 | 4,98 |
| 55436 | 5 | 50 x 340 | 42,4 / 8 | **150** | | 9,61 | 10,45 | 6,41 | 4,98 |
| 55446 | 5 | 50 x 360 | 42,4 / 8 | **170** | | 9,08 | 10,45 | 6,05 | 4,98 |
| 55456 | 5 | 50 x 380 | 42,4 / 8 | **190** | | 8,60 | 10,45 | 5,73 | 4,98 |
| 55466 | 5 | 50 x 400 | 42,4 / 8 | **210** | | 8,17 | 10,45 | 5,45 | 4,98 |

### C20/25 cracked and non-cracked slab > 25 cm front side or wall surface

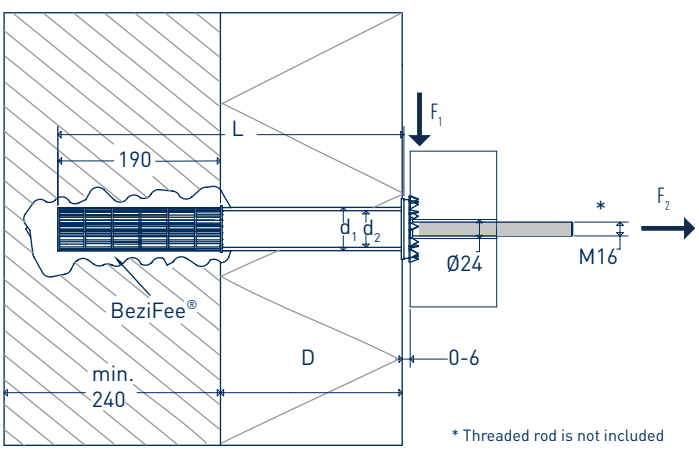
| SIHGA® montagepack | | Dimension | | Insulation Thickness | Drilling tool | Characteristic Values | | Recommended Values* | |
|---|---|---|---|---|---|---|---|---|---|
| | | d1 x L | d2 / Wall Thickness | D | | $F_{1c}$ | $F_{2c}$ | $F_{1d}$ | $F_{2d}$ |
| Art. No. | PU | [mm] | [mm] | [mm] | | Shear Force [kN] | Tensile Force [kN] | Shear Force [kN] | Tensile Force [kN] |
| 55416 | 5 | 50 x 300 | 42,4 / 8 | **110** | 50 mm Hammer Drill | 12,92 | 10,45 | 8,61 | 4,98 |
| 55426 | 5 | 50 x 320 | 42,4 / 8 | **130** | | 12,11 | 10,45 | 8,08 | 4,98 |
| 55436 | 5 | 50 x 340 | 42,4 / 8 | **150** | | 11,40 | 10,45 | 7,60 | 4,98 |
| 55446 | 5 | 50 x 360 | 42,4 / 8 | **170** | | 10,77 | 10,45 | 7,18 | 4,98 |
| 55456 | 5 | 50 x 380 | 42,4 / 8 | **190** | | 10,20 | 10,45 | 6,80 | 4,98 |
| 55466 | 5 | 50 x 400 | 42,4 / 8 | **210** | | 9,69 | 10,45 | 6,46 | 4,98 |

*For installation in dry concrete or masonry and a temperature range I according to ETA 17/0181 and ETA 17/0182 (minimum temperature -40° C, maximum short-term temperature +40° C; maximum long-term temperature +24° C). Valid for the minimum edge & axis distances given in the table.

**Reductions of the recommended values are applied as follows:**
Reduction by the factor $\beta_{FT}$ **= 0.7** is required for damp substrates or a temperature range II according to ETA 17/0181 and ETA 17/0182 (minimum temperature -40° C, maximum short-term temperature +80° C; maximum long-term temperature +50° C) $F_{1d}$ and $F_{2d}$.
$F_{2d}$ must then be reduced by the factor $\beta_{duration}$ **= 0.6** if the proportion of the permanently acting tractive load is higher than 50% Material coefficients of $\gamma M_c$ **of 2.5 for brick and 1.5 for concrete** are already taken into account for $F_{1d}$ and $F_{2d}$.
An installation safety factor $\gamma_{inst}$ **of 1.4** is already taken into account for tractive load $F_{2d}$. This does not apply for shear forces $F_{1d}$.
For load cases not covered in this table, the underlying expert opinion of MPA Stuttgart is available at www.sihga.com.

# ProziFix® brick dimensions, axis and edge distances

| | Length l | Height h | Thickness d | $f_{b,min}/f_{c,min}$ | Edge distances $C_1/C_2$ | Axis distances $S_1/S_2$ |
|---|---|---|---|---|---|---|
| | [cm] | [cm] | [cm] | [N/mm²] | [cm] | |
| **Senftenbacher** 25 VZ Plan | 38,0 | 24,9 | 25,0 | 15,0 | 19,0/12,5 | l/h |
| **Wienerberger Poroton** Vertical perforated brick Plan-T 24,0-0,9 | 37,3 | 24,9 | 24,0 | 12,0 | 18,7/12,5 | l/h |
| **Wienerberger Poroton** Poroton flat brick T8-50,0 | 24,8 | 24,9 | 50,0 | 6,0 | 12,4/12,5 | l/h |
| **Wienerberger** Porotherm 25-38 Plan | 37,5 | 24,9 | 25,0 | 10,0 | 18,8/12,5 | l/h |
| **Wienerberger** Porotherm 50-20 H.i. Plan | 20,0 | 24,9 | 50,0 | 7,5 | 10,0/12,5 | l/h |
| **Pichler** PIAplan 25/38 VZ | 38,0 | 24,9 | 25,0 | 15,0 | 19,0/12,5 | l/h |
| **Pichler** PIAplan 50/20 VZ | 20,0 | 24,9 | 50,0 | 10,0 | 10,0/12,5 | l/h |
| **Leitl** Vital Plan 25/30/24,9 cm N+F | 30,0 | 24,9 | 25,0 | 15,0 | 15,0/12,5 | l/h |
| **Leitl** Vital Solex Plan 50/20/24,9 cm N+F | 20,0 | 24,9 | 50,0 | 7,5 | 10,0/12,5 | l/h |
| **EDER** Plan XP 50 plus | 20,0 | 24,9 | 50,0 | 5,0 | 10,0/12,5 | l/h |
| **H+H** Solid lie sand brick 2 DF | 11,5 | 11,3 | 24,0 | 20,0 | 5,8/5,7 | l/h |
| **Concrete slab front side > 20 cm** | 40,0 | 20,0 | 25,0 | C20/25 | 20,0/10,0 | l/h |
| **Betondecke stirnseitig > 25 cm** | 50,0 | 25,0 | 25,0 | C20/25 | 25,0/12,5 | l/h |




* Threaded rod is not included

# ProziFix® Drill PFB 50

| SIHGA® Feature | YOUR Benefit |
|---|---|
| special cutting geometry | cuts a 50 mm hole in bricks without destroying them |
| all blades are exchangeable | saves time and money |
| extra long shaft, compatible with IdeFix® Drill Gauge IBG | hole depths are precisely adjustable and the hole can be drilled cleanly at a right angle |
| can be used with common cordless screwdrivers | no hammer drill device required |
| manufactured in Austria | highest European quality and value creation |

| SIHGA® montagepack | | ProziFix® Drill PFB 50 ∅ x L | Working Length |
|---|---|---|---|
| Art. No. | PU | [mm] | [mm] |
| 55206 | 1 | **50 x 620** | **400** |

| SIHGA® montagepack | | IdeFix® Drill Gauge IBG ∅ x L |
|---|---|---|
| Art. No. | PU | [mm] |
| 33666 | 1 | **90 x 130** |



ProziFix®
Drill PFB 50



IdeFix® Drill Gauge IBG

## SIHGA® TIP:

When drilling with the ProziFix® Drill PFB 50, the IdeFix® Drill Gauge IBG is recommended in order to be able to maintain the exact depth.

# Compared with Threaded Rod

| System | Wall Thickness | Distance (WDVS) | Threaded Rod | Anchoring Depth (with adhesive mortar) | Wood Spacing Holder (L x W x H) | Failure Load | Failure Type | Max. Load* |
|---|---|---|---|---|---|---|---|---|
| | [mm] | [mm] | [mm] | [mm] | [mm] | [kN] | | [kN] |
| Threaded Rod | 250 | 200 | M 16 | 150 | 200 x 140 x 140 | ~ 1.20 | Brick breakage | ~ 0.4 |
| ProziFix® 210 | 250 | 200 | - | 190 | - | ~ 7.50 | Brick breakage | 1.80 |

* failure value with partial safety factors reduced (Senftenbacher 25 VZ Plan)






# Stegsan® RV/BA






**Stegsan® RV**
**for posts and stakes**



**Stegsan® BA**
**for beams**

| SIHGA® Feature | YOUR Benefit |
|---|---|
| walkway renovation system for wooden posts, stakes (Stegsan® RV) | the defective piece of wood between the water and air is simply replaced; extensive cost-savings |
| walkway renovation system for beams (Stegsan® BA) to wooden posts, stakes | the beam is permanently, quickly, securely and easily connected to the wooden post, stakes |
| developed, patented and made in Austria | local quality and added-value |
| special coupling system for pre-installation in the factory | saves lots of time |
| angled screw connection in end-grain wood | transfers high forces, especially for loads on the walkway from boats or waves |
| anti-rotation lock enclosed (Stegsan® VS) | the anti-rotation lock against unintended loosening is easily screwed to the side on-site |
| includes SIHGAFIX® stainless steel, GoFix® HKE stainless steel screws and installation instructions | time-saving, practical, precise, complete accessories enclosed |
| made from aluminium | for permanent fastening, even under water |
| can be removed at any time | can always be reused |
| calculation values | SIHGA® performs the calculation for you |

| SIHGA® | | | Stegsan® | | | Stake/Post | Screw |
|---|---|---|---|---|---|---|---|
| montagepack | | Dimension | ∅ | Height | Thread | min. ∅ | GoFix® HKE |
| Art. No. | PU | Type | [mm] | [mm] | [mm] | [mm] | d1 x L |
| 30266 | 8* | RV | 160 | 10 | 16 | 160 | 6,0 x 60 |
| 30286 | 2 | BA | 100 | 25 | 20 | - | 6,0 x 60 |

* equals 4 connections





## SIHGA® TIP:

Stegsan®, the easy, quick and reliable method for renovating lake walkways or jetties; while planning permission is made easier.

# Herakulix® KI 200





Herakulix® KI 200 with special SC 6 coating



ETA-18/0886

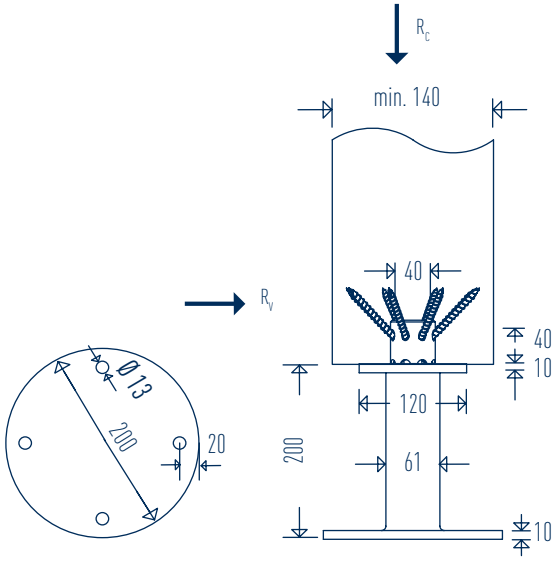
| SIHGA® Feature | YOUR Benefit |
|---|---|
| takes up to 237.5 kN per attachment point, 29 kN tensile force 10 kN impact load (requirement: anchoring with Betsi A4 12 x 118 or same design values) | the most durable and reliable connection with impact protection at carports, according to comments on www.sihga.com (Herakulix® KI 200/Download) |
| high corrosion and splash protection due to coating | suitable for use in weathered areas |
| permanent wood connection | structural wood protection keeps surfaces free of damage |
| three-dimensional screwing with IdeFix® in the end grain | the world's only product with a three-dimensional, standard-compliant fitting provides safety |
| IdeFix® Drill Gauge IBG (page 206) | for efficient, angular drilling also on site |
| including SIHGAFIX®, GoFix® HK screws and installation instructions | time-saving, practical, precise, including all accessories |

| SIHGA® | | Herakulix® | IdeFix® | Characteristic Values with Normal Force* | | | Rated Values Impact Recommended for Carports | |
|---|---|---|---|---|---|---|---|---|
| objektpack | | KI | IF | Thrust [kN] | Traction [kN] | Transverse Force [kN] | Thrust [kN] | Transverse Force [kN] |
| Art. No. | PU | Type | Type | $R_{c,k}$ | $R_{t,k}$ | $R_{v,k}$ | $R_{c,d}$ | $R_{v,d}$ |
| 51547 | 2 | **KI 200** | 406 | 237,5 | 29,00 | 10,00 | 50,00[1] | 10,00[2] |

* characteristic values for design according to EC 5 and strength class C24 (ρk 350 kg/m³)
[1] deformed condition: exceptional load case as per EC: partial safety factors for constant loads (1.35) and variable loads (1.5) may be set to 1.0 and snow below 1000 m may be reduced by 80 %.
[2] impact load car at a bumper height of 337.5 cm and at a speed of 5 km / h (requirement: Betsi A4 12 x 118 or equivalent load values)



**Also available in RAL colours*
Price on request**




## SIHGA® TIP:

For manual drilling, we recommend the IdeFix® Drill Gauge IBG and drill.

# Herakulix® XS/S/M/L/XL



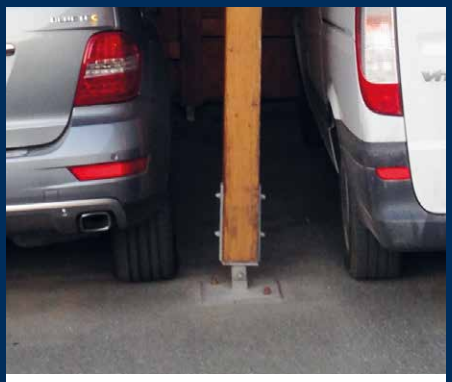


**Herakulix® XS/S/M/L/XL two-part system with SC 6 coating**

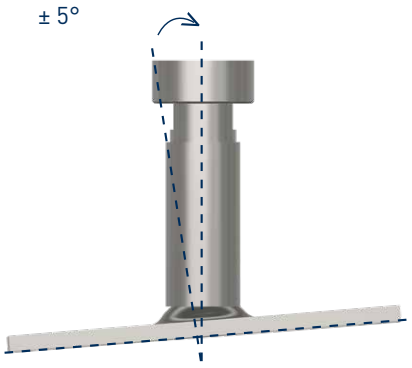


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| SIHGA® Feature | YOUR Benefit |
|---|---|
| integrated inclination compensation of up to ±5° in all directions | surface unevenness and slopes can be compensated for in an aesthetically pleasing and structurally correct manner |
| two-part system with a short retraction path | very simple assembly, height adjustable when assembled |
| a range of variants and additional drill bores in the base plate | allows individual anchoring and unimpeded 90° drilling |
| high corrosion and spray water protection | permissible for use in areas exposed to weather (Usage Class (NKL) 3) |
| durable wood connection | structural wood protection keeps surfaces free of damage |
| takes up to 89.09 kN compressive force, 29 kN tensile force, and 3.25 kN transverse force per attachment point | the durable, reliable connection with great load capacity |
| individual connection to wood with IdeFix® or GoFix® | the world's only product with a three-dimensional, standard-compliant screw connection and the approved end grain screw ensure safety |
| punching pin for end grain screws | for one-man installation |
| IdeFix® Drill Gauge IBG | for efficient, angular drilling, including on site |
| including SIHGAFIX®, GoFix® HK or GoFix® S+ screws and installation instructions | time-saving, practical, precise, including all accessories |



Problem

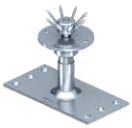



Solution

## SIHGA® TIP:

For manual drilling, we recommend the IdeFix® Drill Gauge IBL with drill.
**For subsequent application of paving or the like, we recommend applying additional corrosion protection to the support foot in the affected area.**

# Herakulix® XS



XS RI 30 (115 - 155 mm)



XS QI 30 (115 - 155 mm)



XS RG (115 - 155 mm)



XS QG (115 - 155 mm)




XS BG (99 - 136 mm)



*optional accessor XS/RZ



Also available in RAL colours*

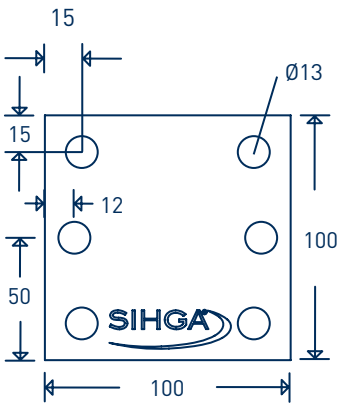


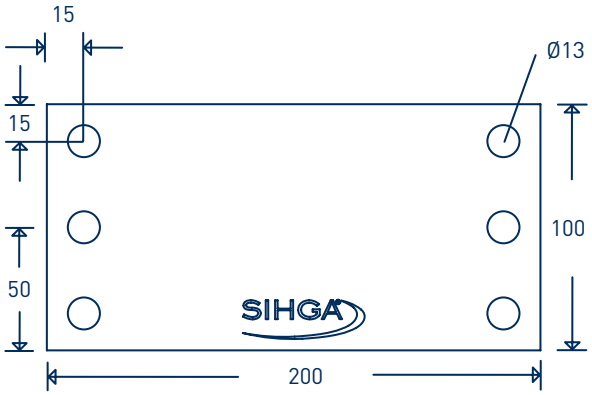
Accessories see page 142

* Price on request;
accompanying screws are not black/coloured!

**Legend:**

| | | | |
|---|---|---|---|
| XS | X-Small | R | Rectangular Base Plate |
| S | Small | Q | Square Base Plate |
| M | Medium | K | Circular Base Plate |
| L | Large | I | IdeFix® |
| XL | X-Large | G | GoFix® |
| | | B | Concrete (for setting in concrete) |

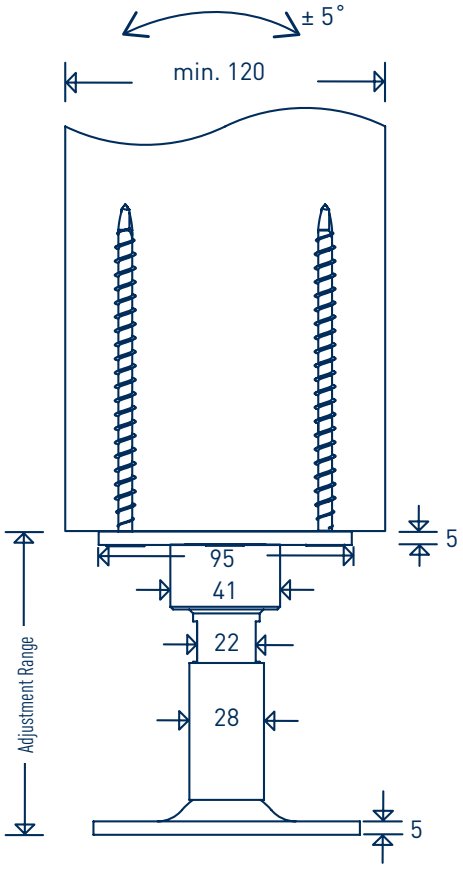


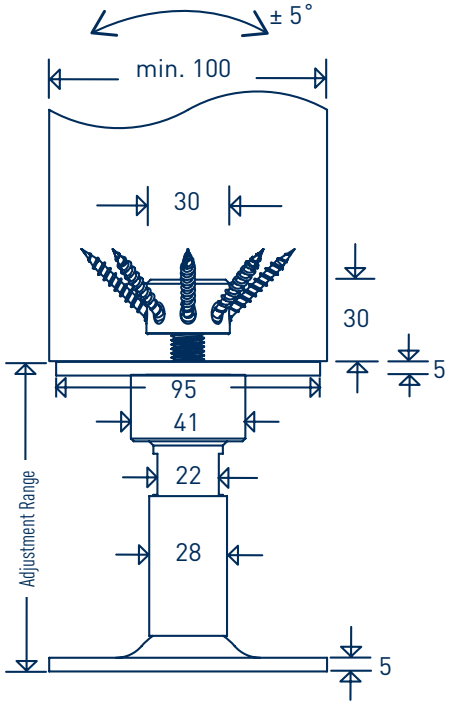






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# Herakulix® XS




| SIHGA® | | Herakulix® | Wood Connection | Adjustment Range | | Design Values | | Character. Values** |
|---|---|---|---|---|---|---|---|---|
| objektpack® | | | | Height [mm] | | Compressive Force [kN] | Shear Force [kN] | Tensile Force [kN] |
| Art. No. | PU | Type | Type | from | to | $R_{c,d}$ | $R_{v,d}$ | $R_{t,k}$ |
| 51107 | 10 | **XS RI 30** | IdeFix® IFK 304 | 115 | 155 | 45,55 | 2,40 | 19,90 |
| 51117 | 10 | **XS QI 30** | IdeFix® IFK 304 | 115 | 155 | 45,55 | 2,40 | 19,90 |
| 51127 | 10 | **XS RG** | GoFix® S+ 8,0 x 195 | 115 | 155 | 45,55 | - | 10,90 |
| 51137 | 10 | **XS QG** | GoFix® S+ 8,0 x 195 | 115 | 155 | 45,55 | - | 10,90 |
| 51147 | 10 | **XS BG** | GoFix® S+ 8,0 x 195 | 99 | 136 | 45,55 | 1,92 | 10,90 |
| 47706 | 10 | ***XSRZ** | Ring + disc | M 20 | ∅ 37/21 | | | |

** characteristic values for design according to EC 5 and strength class C 24 (ρ k 350 kg/m³)

# Herakulix® S



S RI 30 (155 - 245 mm)

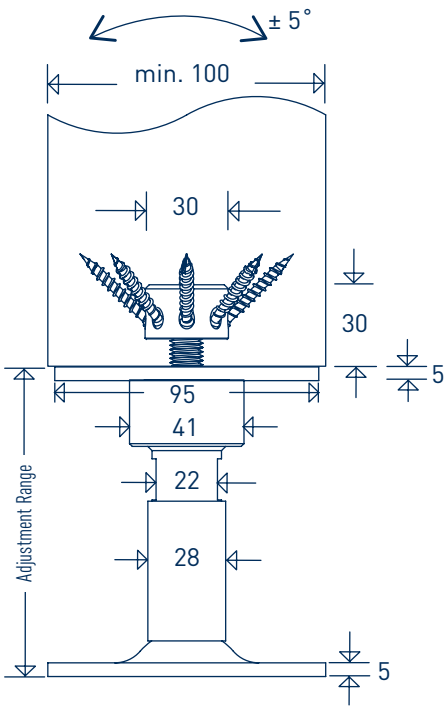


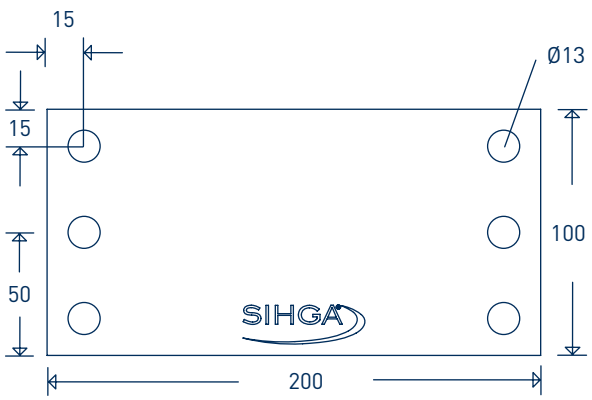
Also available in RAL colours*

* Price and delivery time on request;
associated screws are not coloured!

**Legend:**

| | | | |
|---|---|---|---|
| XS | X-Small | R | Rectangular Base Plate |
| S | Small | Q | Square Base Plate |
| M | Medium | K | Circular Base Plate |
| L | Large | I | IdeFix® |
| XL | X-Large | G | GoFix® |
| | | B | Concrete (for setting in concrete) |




| SIHGA® objektpack® | | Herakulix® Type | Wood Connection Type | Adjustment Range Height [mm] from | to | Design Values Compressive Force [kN] $R_{c,d}$ | Shear Force [kN] $R_{v,d}$ | Character. Values** Tensile Force [kN] $R_{t,k}$ |
|---|---|---|---|---|---|---|---|---|
| Art. No. | PU | | | | | | | |
| 51167 | 10 | **S RI 30** | IdeFix® IFK 304 | 155 | 245 | 45,55 | 1,2 | 19,90 |

** characteristic values for design according to EC 5 and strength class C 24 (ρk 350 kg/m³)



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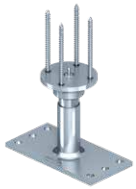
# Herakulix® M



M RI 40 (155 - 220 mm)



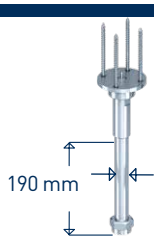
M QI 40 (155 - 220 mm)



M RG (155 - 220 mm)



M QG (155 - 220 mm)




M BG (137 - 202 mm)

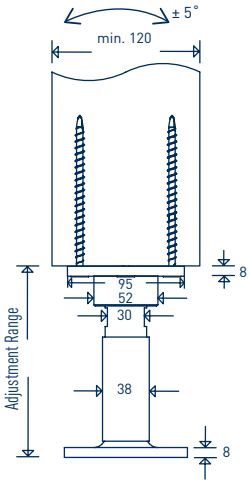


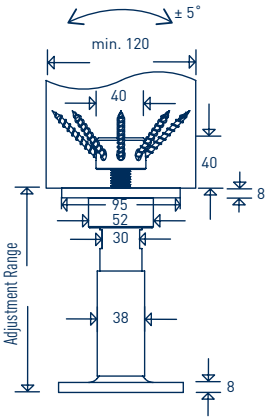
*optional accessory MI RZ



Also available in RAL colours*

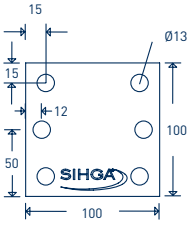
* Price and delivery time on request;
associated screws are not coloured!

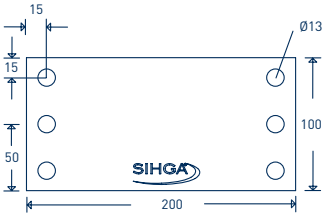



**Legend:**

| | | | |
|---|---|---|---|
| XS | X-Small | R | Rectangular Base Plate |
| S | Small | Q | Square Base Plate |
| M | Medium | K | Circular Base Plate |
| L | Large | I | IdeFix® |
| XL | X-Large | G | GoFix® |
| | | B | Concrete (for setting in concrete) |




| SIHGA® objektpack® | | Herakulix® | Wood Connection | Adjustment Range Height [mm] | | Design Values Compressive Force [kN] | Character. Values** Shear Force [kN] | Tensile Force [kN] |
|---|---|---|---|---|---|---|---|---|
| Art. No. | PU | Type | Type | from | to | $R_{c,d}$ | $R_{v,d}$ | $R_{t,k}$ |
| 51307 | 5 | **M RI 40** | IdeFix® IFK 406 | 155 | 220 | 89,18 | 3,25 | 34,20 |
| 51317 | 5 | **M QI 40** | IdeFix® IFK 406 | 155 | 220 | 89,18 | 3,25 | 34,20 |
| 51327 | 5 | **M RG** | GoFix® S+ 8,0 x 195 | 155 | 220 | 89,18 | - | 10,90 |
| 51337 | 5 | **M QG** | GoFix® S+ 8,0 x 195 | 155 | 220 | 89,18 | - | 10,90 |
| 51347 | 5 | **M BG** | GoFix® S+ 8,0 x 195 | 137 | 202 | 89,18 | 3,20 | 10,90 |
| 47716 | 5 | ***MLRZ** | Ring + disc | M 27 | ∅ 50/28 | | | |

** characteristic values for design according to EC 5 and strength class C 24 (ρk 350 kg/m³)



ETA-18/0886

# Herakulix® L



L RI 40 (220 - 350 mm)



L QI 40 (220 - 350 mm)



L RG (220 - 350 mm)



L QG (220 - 350 mm)

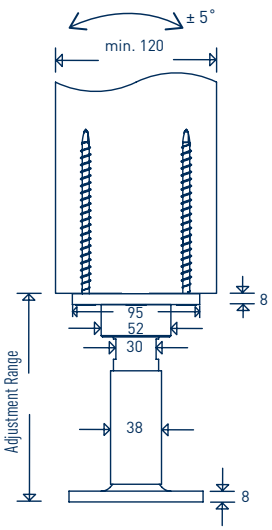


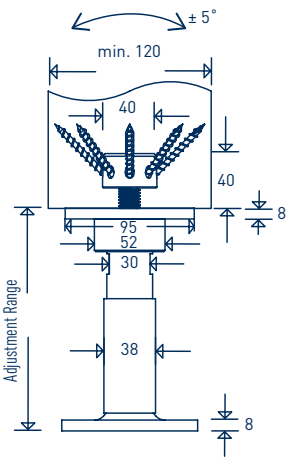
Also available in RAL colours*

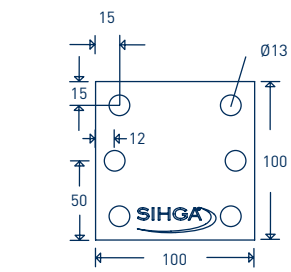
* Price and delivery time on request;
associated screws are not coloured!

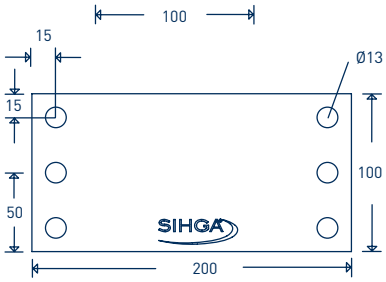
**Legend:**

| | | | |
|---|---|---|---|
| XS | X-Small | R | Rectangular Base Plate |
| S | Small | Q | Square Base Plate |
| M | Medium | K | Circular Base Plate |
| L | Large | I | IdeFix® |
| XL | X-Large | G | GoFix® |
| | | B | Concrete (for setting in concrete) |




| SIHGA® objektpack® | | Herakulix® | Wood Connection | Adjustment Range Height [mm] | | Design Values Compressive Force [kN] | Design Values Shear Force [kN] | Character. Values* Tensile Force [kN] |
|---|---|---|---|---|---|---|---|---|
| Art. No. | PU | Type | Type | from | to | $R_{c,d}$ | $R_{v,d}$ | $R_{t,k}$ |
| 51507 | 5 | **L RI 40** | IdeFix® IFK 406 | 220 | 350 | 89,18 | 1,9 | 34,20 |
| 51517 | 5 | **L QI 40** | IdeFix® IFK 406 | 220 | 350 | 89,18 | 1,9 | 34,20 |
| 51527 | 5 | **L RG** | GoFix® S+ 8,0 x 195 | 220 | 350 | 89,18 | - | 10,90 |
| 51537 | 5 | **L QG** | GoFix® S+ 8,0 x 195 | 220 | 350 | 89,18 | - | 10,90 |

* characteristic values for design according to EC 5 and strength class C 24 (ρ k 350 kg/m³)



ETA-18/0886

# Herakulix® XL



XL RI 40 (340 - 460 mm)

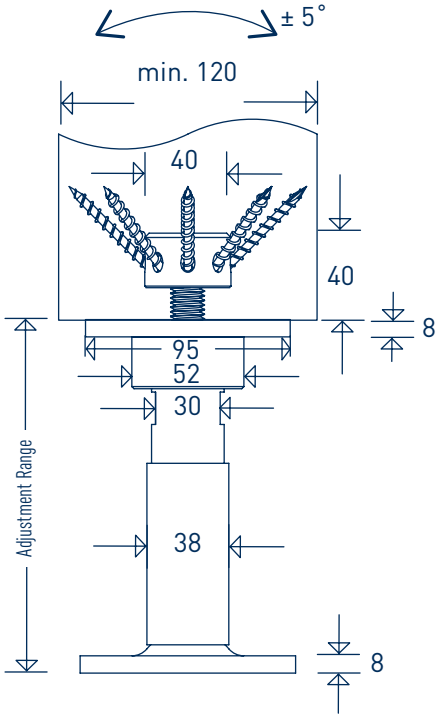


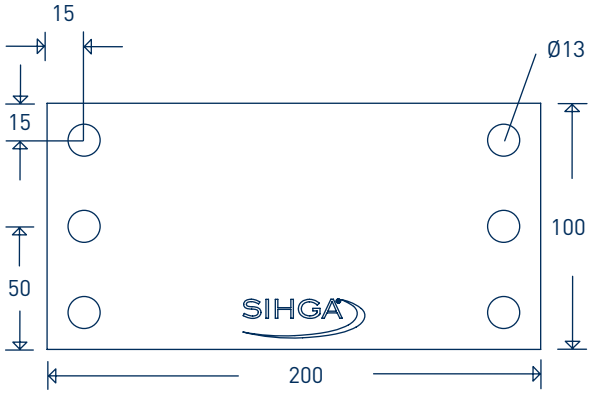
Also available in RAL colours*

* Price and delivery time on request;
associated screws are not coloured!

**Legend:**

| | | | |
|---|---|---|---|
| XS | X-Small | R | Rectangular Base Plate |
| S | Small | Q | Square Base Plate |
| M | Medium | K | Circular Base Plate |
| L | Large | I | IdeFix® |
| XL | X-Large | G | GoFix® |
| | | B | Concrete (for setting in concrete) |



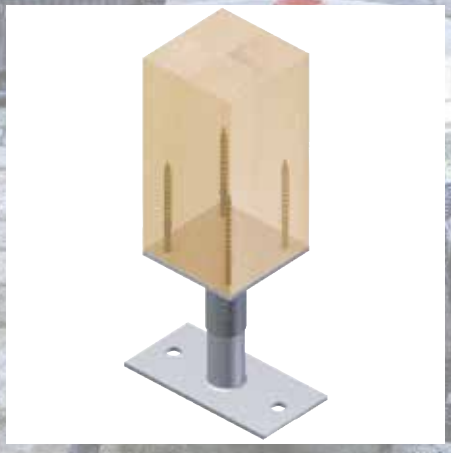

| SIHGA® | | Herakulix® | Wood Connection | Adjustment Range | | Design Values | Character. Values** | |
|---|---|---|---|---|---|---|---|---|
| objektpack® | | | | Height [mm] | | Compressive Force [kN] | Shear Force [kN] | Tensile Force [kN] |
| Art. No. | PU | Type | Type | from | to | $R_{c,d}$ | $R_{v,d}$ | $R_{t,k}$ |
| 51567 | 5 | **XL RI 40** | IdeFix® IFK 406 | 340 | 460 | 89,18 | 1,5 | 34,20 |

** characteristic values for design according to EC 5 and strength class C 24 (ρk 350 kg/m³)

# ZaFix® STZ



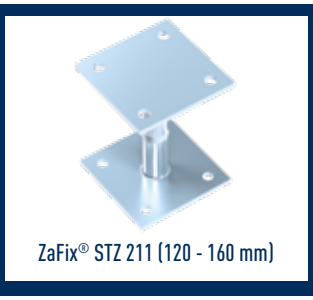
ZaFix® STZ with special SC 6 coating

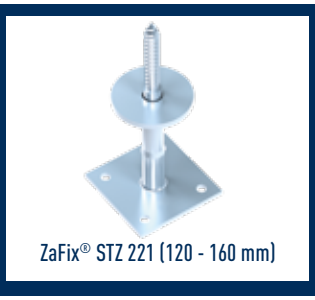


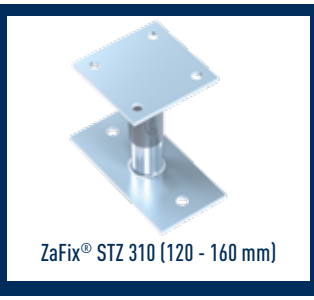


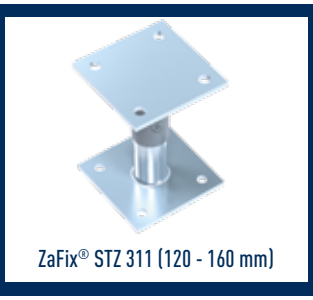
ETA-14/0160

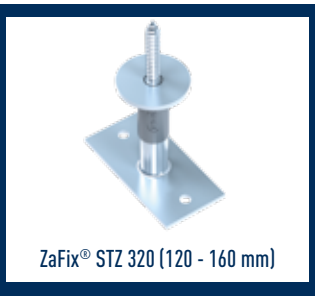
| SIHGA® Feature | YOUR Benefit |
|---|---|
| takes over up to 154.5 kN pressure force and 10.57 kN tensile force per fastening point | the durable, reliable connection with extremely quick assembly time |
| durable wood connection | structural wood protection keeps surfaces free of damage |
| thread cover through stainless steel covering sleeve | high corrosion and spray water protection |
| series 300 are height adjustable in the installed condition | height adjustable any time afterwards |

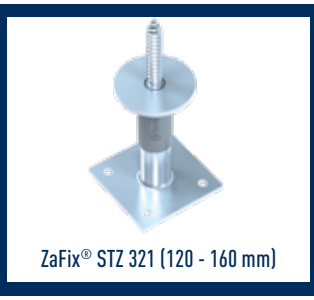

ZaFix® STZ 211 (120 - 160 mm)

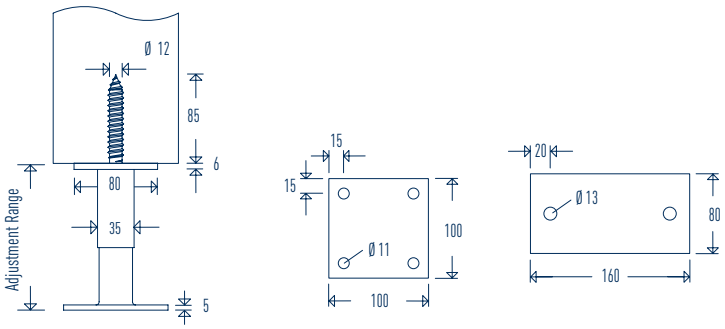

ZaFix® STZ 221 (120 - 160 mm)


ZaFix® STZ 310 (120 - 160 mm)


ZaFix® STZ 311 (120 - 160 mm)


ZaFix® STZ 320 (120 - 160 mm)


ZaFix® STZ 321 (120 - 160 mm)




| SIHGA® | | ZaFix® | Adjustment Range | | Characteristic Values** |
|---|---|---|---|---|---|
| objektpack® | | STZ | Height [mm] | | Compressive Force [kN] |
| Art. No. | PU | Type | from | to | Rc, k |
| 47957 | 10 | **STZ 211*** | 120 | 160 | 44,63 |
| 47907 | 10 | **STZ 221*** | 120 | 160 | 44,63 |
| 47917 | 10 | **STZ 310** | 120 | 160 | 70,42 |
| 47927 | 10 | **STZ 311** | 120 | 160 | 70,42 |
| 47937 | 10 | **STZ 320** | 120 | 160 | 70,42 |
| 47947 | 10 | **STZ 321** | 120 | 160 | 70,42 |

* not height adjustable in installed condition
** characteristic values for design according to EC 5 and strength class C 24 (ρk 350 kg/m³)

# Stabilix C/H



**Stabilix C**
**for carports**



**Stabilix H**
**for timber construction**

| SIHGA® Feature | YOUR Benefit |
|---|---|
| connectors for rigidity | versatile in application, deformations are minimised: particularly in use for carports (model C) and in wood construction (model H) |
| developed and made in Austria | local quality and added-value |
| tested suitability | transfers both horizontal and vertical forces, as well as moment in frame constructions from wind and snow loads |
| simple installation | can be used without pre-drilling, connector can be pre-fitted in the factory |
| space-saving connection | no disruptive braces for rigidity, low construction height possible while maintaining the same access height |
| includes SIHGAFIX®, GoFix® S+ screws and installation instructions | time-saving, practical, precise, complete accessories enclosed |
| design values | SIHGA® performs the calculation for you, example calculations provided online |
| calculation template | at www.sihga.com (Stabilix C) |

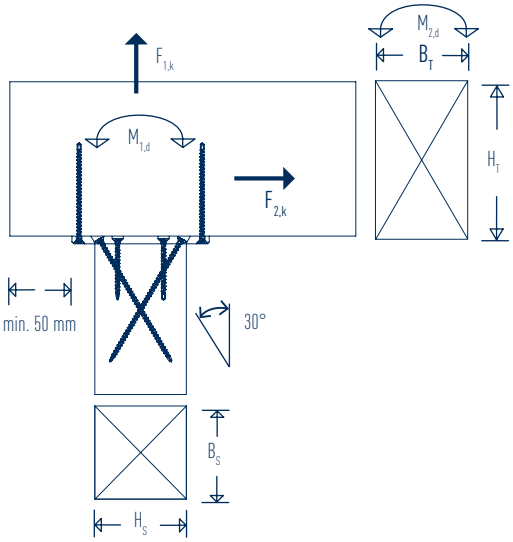




## SIHGA® TIP:

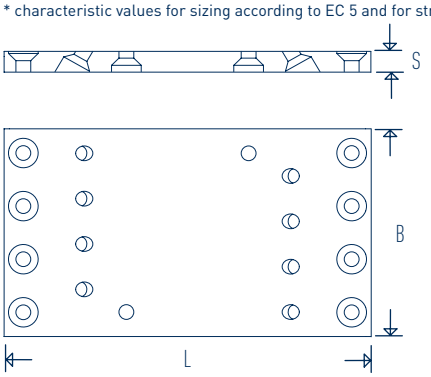
2 connectors can be selected per connection variant and combined with IdeFix®.

# Stabilix C




| SIHGA® | Torque | | Characteristic Values* | |
|---|---|---|---|---|
| Stabilix C | $M_{1,d}$ | $M_{2,d}$ | $F_{1,k}$ | $F_{2,k}$ |
| Type | [kNm] | [kNm] | [kN] | [kN] |
| 10 | 1,56 | - | 14,8 | 9,8 |
| 12 | 4,50 | - | 28,8 | 15,9 |
| 14/16 | 7,00 | 2,5 | 45,3 | 22,1 |
| 18/20 | 12,25 | - | 146,95 | 44,50 |

* characteristic values for sizing according to EC 5 and for strength class C 24



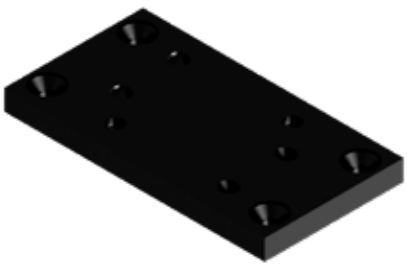

| SIHGA® | | Pillar | | Cross Beam | | Screws GoFix® S+ | | Dimensions | | |
|---|---|---|---|---|---|---|---|---|---|---|
| montagepack | Stabilix C | min. $H_s$ / $B_s$* | | max. $H_s$ / $B_s$ | min. $H_T$ | min. $B_T$ | Pillar | Cross Beam | L | B | S |
| Art. No. | PU | Type | [mm] | [mm] | [mm] | [mm] | d1 x L [mm] | | [mm] | | |
| 43306 | 2 | **10** | 90 | 100 | 100 | 90 | 8,0 x 155 and 8,0 x 95 | 8,0 x 95 | 150 | 80 | 12 |
| 43326 | 2 | **12** | 110 | 120 | 130 | 110 | 8,0 x 195 and 8,0 x 95 | 8,0 x 125 | 170 | 100 | 12 |
| 43346 | 2 | **14/16** | 130 | 160 | 160 | 130 | 8,0 x 220 and 8,0 x 95 | 8,0 x 155 | 210 | 120 | 15 |
| 43356 | 2 | **18/20** | 180 | 200 | 200 | 180 | 8,0 x 330 and 8,0 x 95 | 8,0 x 195 | 250 | 150 | 15 |

* ensure accurate positioning during installation

**Torsion spring stiffness for Stabilix C10-C14/16***

| Stabilix C | Node stiffness | |
|---|---|---|
| Type | Initially | Medium |
| **10** | 127 kNm/Rad | 78 kNm/Rad |
| **12** | 317 kNm/Rad | 186 kNm/Rad |
| **14/16** | 435 kNm/Rad | 385 kNm/Rad |
| **18/20** | 1061 kNm/Rad | 762 kNm/Rad |

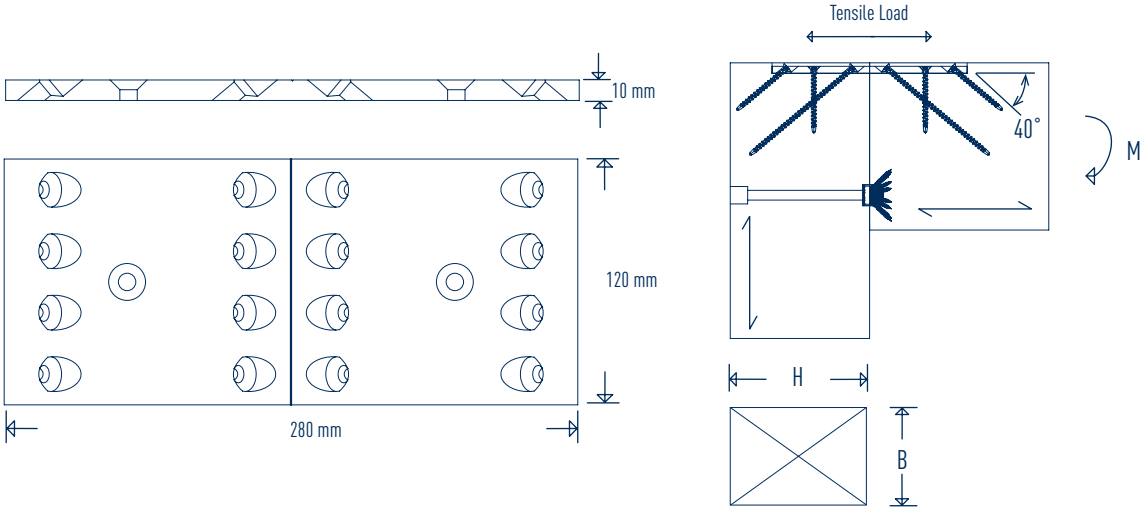
* derived from the test report of the BTI Linz



Also available in RAL colours*

* Price and delivery time on request;
associated screws are not coloured!

# Stabilix H




| SIHGA® | | | Column | | Beam | | Angle | Char. Values* | Screw GoFix® S+ |
|---|---|---|---|---|---|---|---|---|---|
| montagepack | | Stabilix | B | H | min. Width | min. Height | Beam | Tensile Load | Dimension |
| Art. No. | PU | Type | [mm] | [mm] | [mm] | [mm] | [°] | [kN] | d1 x L [mm] |
| 43436 | 2 | **H** | 140 | 200 | 140 | 240 | 0 | 51,34 | 8,0 x 95 and 8,0 x 195 |
| 43436 | 2 | **H** | 140 | 200 | 140 | 240 | 20 | 42,68 | 8,0 x 95 and 8,0 x 195 |
| 43446 | 2 | **H** | 140 | 280 | 140 | 240 | 0 | 70,36 | 8,0 x 195 |
| 43446 | 2 | **H** | 140 | 280 | 140 | 240 | 20 | 58,50 | 8,0 x 195 |

* characteristic values for dimensioning according to EC 5 and strength class C 24 (ρk 350 kg/m³)





# Stabilix R



Stabilix R

| SIHGA® Feature | YOUR Benefit |
|---|---|
| connection system for rigid frame corners | individual application for small wooden frames up to large halls |
| includes wooden elements (glued laminated timber) depending on requirement, made in Austria | dimensions, drill holes and GoFix® X+ screws as required |
| tested suitability | transfers both horizontal and vertical forces, depending on individual loading moment |
| uncomplicated rapid installation of the screws under 45° and suitable distances through pre-drilled timber | no grounds for mistakes or time losses, correct placement and guidance of the screws is given |
| no steel parts | no fire protection coating or welding required, aesthetically pleasing due to wooden connection |
| space-saving connection | no connection parts on top or inside |
| economical system | low costs due to prefabrication, prices on inquiry |
| system supply incl. pre-drilled wooden elements, GoFix® X+, SIHGAFIX®, Systemstift® and installation instructions | time-saving, practical, precise, all accessories enclosed, the tailored system for rapid installation |
| statics tested by civil engineer | SIHGA® performs the calculation for you, simply fill in the form, example calculations are provided |
| individual dimension | SIHGA® will do the calculation for you, simply fill out the checklist |
| universal dimensioning | application for 2 or 3 articulated frames |
| verifiable, transparent dimensioning | safety in your projects |

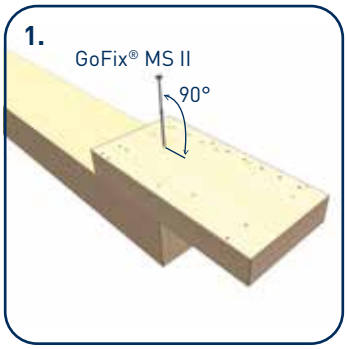




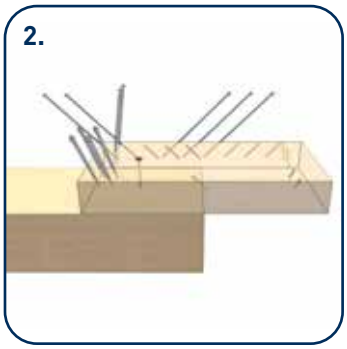
## SIHGA® TIP:

Use GoFix® MS II for simple positioning and location security of the brackets.

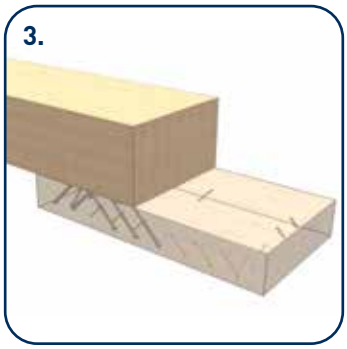
# Stabilix R Application



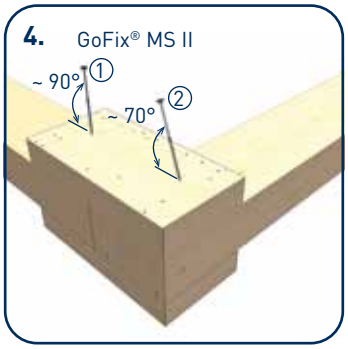

The strap is fixed in position on the support using GoFix MSII screws.



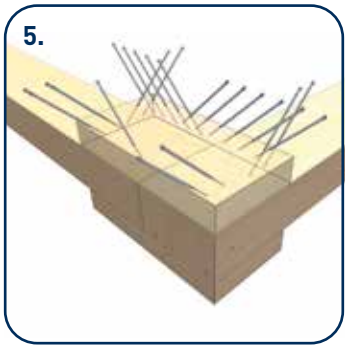

The support area can now be unscrewed.



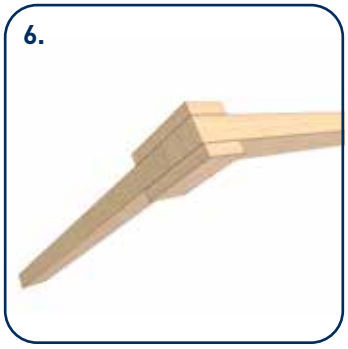

The support is turned over, thus creating a support for the beam.

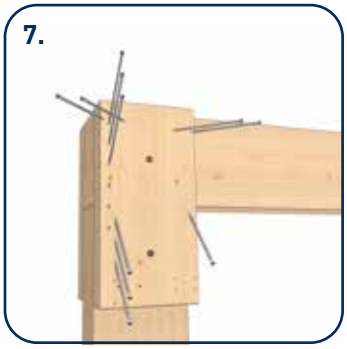



The beam is put on and the second strap is attached to the support. In order to achieve a positive fit between the beam and the support, a GoFix MS II screw is inserted at an angle of 70° to the strap in the direction of the OK beam. This arrangement guarantees a "contraction effect".




The drill holes on the beam and support side of the straps are unscrewed.




After the beam has been erected, the remaining screws are inserted on the beam side.

**SIHGA® TIP:**

It is also possible to assemble the supports first; then place the beams from above and screw them into place.

# From practice







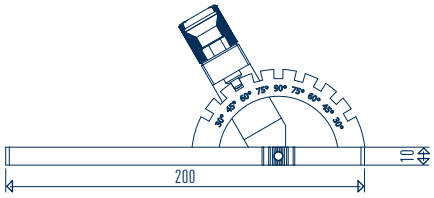


# Winkelix® X+

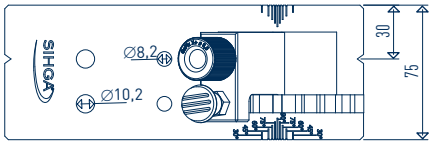


**Winkelix® X+**

| SIHGA® Feature | YOUR Benefit |
|---|---|
| Variable drill and screw template for GoFix® X+ | One template for all common angles, including adapter tube for GoFix® X+ ∅ 8.0 mm |
| Adjustable from 30° - 90° in 15° increments, also in a mirrored arrangement | Suitable for almost any application in timber construction for drilling and screwdriving |
| Suitable for different screw diameters | The GoFix® X+ can be used with screw diameters of 6.5 mm, 8.0 mm and 10 mm, and the GoFix® ZS 8.0 mm can be processed with the different adapter tubes |
| Can also be used as a drilling template | The adapter tube ∅ 6.0 mm can be used to pre-drill the holes for the screw connections at the factory |
| Adapter pipes made of hardened tool steel | promises a high level of wear resistance |
| Winkelix® X+ base body made of high-quality stainless steel | for a long service life and elegant appearance |
| developed and manufactured in Austria | highest European quality and added value |




| SIHGA® montagepack | | Winkelix® X+ incl. adapter tube |
|---|---|---|
| Art. No. | PU | Type |
| 42746 | 1 | **8,0** |




| SIHGA® montagepack | | Dimension Winkelix® X+ adapter tube | | Application for drill diameter | for GoFix® X+/ZS |
|---|---|---|---|---|---|
| Art. No. | PU | Type | ∅ hole [mm] | [mm] | [mm] |
| 42782 | 1 | **6,0** | 6,2 | 6 | - |
| 42772 | 1 | **6,5** | 8,4 | 8 | 6,5 |
| 42762 | 1 | **8,0** | 10,6 | 10 | 8,0 |
| 42752 | 1 | **10,0** | 13,6 | 13 | 10,0 |





**adapter tube**
**6,0 / 6,5 / 8,0 / 10,0**

## SIHGA® TIP:

The 150 mm long DUO-Bit TX 30, 40 or 50 is required as an accessory.

# HobaFix® HF



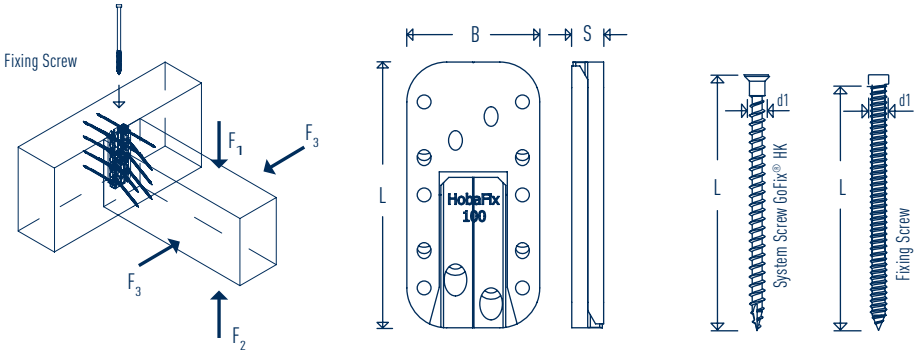
HobaFix® HF





ETA-11/0135

| SIHGA® Feature | YOUR Benefit |
|---|---|
| knot connection from two identical parts (one connection consists of two parts) | can be fully pre-fabricated without any risk of a mix-up |
| developed, patented and made in Austria | top European quality and added-value |
| statically highly loadable in four directions, per connection up to 48 kN | horizontally and vertically, with high tested static values, can be used irrespective of the grain direction |
| mounting connection with Hoba coupling | major advantage during installation, allows smooth insertion of the two components |
| monitored production from aluminium | permanent and dimensionally stable quality, rust-free |
| including fixing screw for securing | prevents inadvertent loosening of the connector |
| visible and invisible installation | only one model for the entire range, with shadow groove or invisible installation |
| includes SIHGAFIX®, all fastening and fixing screws, installation instructions | time-saving, practical, precise, complete accessories enclosed |
| design values | online calculation of main beams-secondary beams (HT/NT) |
| HFA test seal, externally monitored | Holzforschung Austria also confirms and monitors these high values |




| SIHGA® montagepack | | | Dimension HobaFix® HF | | GoFix® HK | Fixing Screw | Secondary Beam | | Characteristic Values** Load Direction [kN] | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Art. No. | PU | Type (L) | B | S | d1 x L | d1 x L | Width [mm] | Height [mm] | $F_1$ | $F_2$ | $F_3$ |
| 30036 | 20* | **70** | 30 | 9 | 4,0 x 60 | 4,2 x 50 | 50 | 80 | 6,80 | 2,04 | 4,40 |
| 30056 | 20* | **100** | 50 | 12 | 5,0 x 80 | 4,8 x 80 | 80 | 115 | 17,40 | 8,56 | 10,60 |
| 30076 | 20* | **135** | 50 | 12 | 5,0 x 80 | 4,8 x 120 | 80 | 150 | 26,70 | 8,56 | 15,00 |
| 30096 | 20* | **170** | 50 | 12 | 5,0 x 80 | 4,8 x 120 | 80 | 185 | 33,40 | 8,56 | 16,00 |
| 30116 | 12* | **200** | 70 | 17 | 6,0 x 100 | 6,3 x 180 | 100 | 220 | 43,00 | 17,07 | 22,70 |
| 30126 | 12* | **240** | 70 | 17 | 6,0 x 100 | 6,3 x 180 | 100 | 260 | 48,30 | 17,07 | 23,80 |

*equal to 10 or 6 connections
** characteristic values for dimensioning according to EC 5 and strength class C 24 (ρk 350 kg/m³)

# System Kit HobaFix® HF

| SIHGA® Feature | YOUR Benefit |
|---|---|
| for all HobaFix® HF models | the professional installation aid simplifies construction processes and saves time, milling and assembly templates are fully and portably combined with all accessories for practicality |
| contains 1 HobaFix® milling and assembly template HFFM, 1 HobaFix® milling cutter with stop ring HFF and fastening screws, allen key and Systemstift® | for the rational and precise installation of knot connections |





**HobaFix® Milling and Assembly Template HFFM**




**HobaFix® Milling Cutter with stop ring HFF**



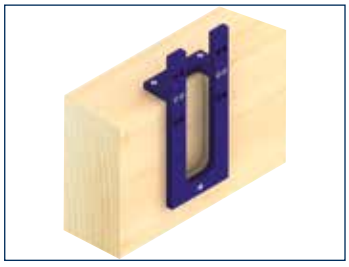
ETA-11/0135

# Application HobaFix® HF

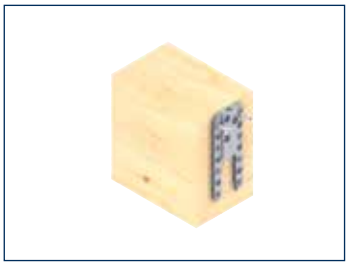
1.



2.



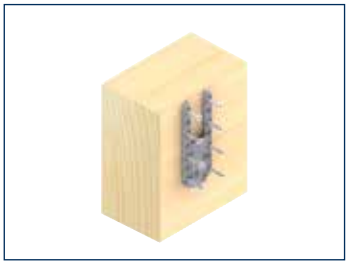
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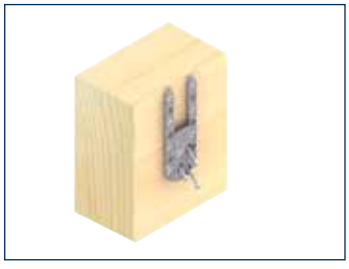
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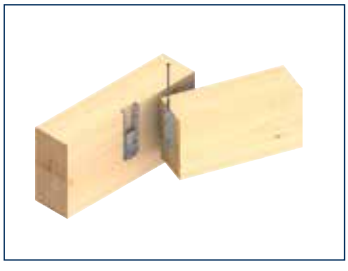
5.



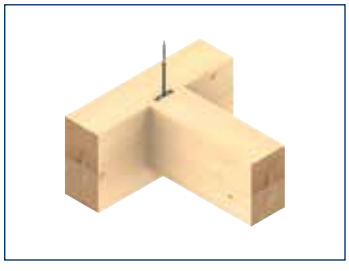
6.



7.



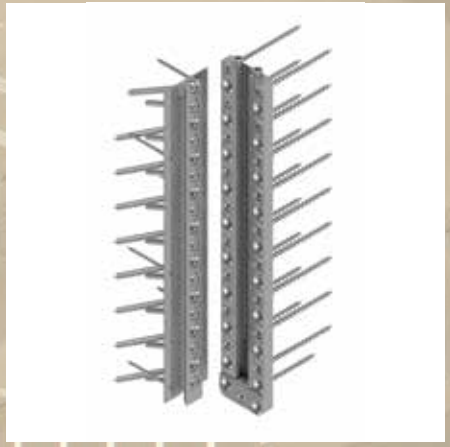
8.



# HobaFix® Max



HobaFix® Max





ETA-23/0821

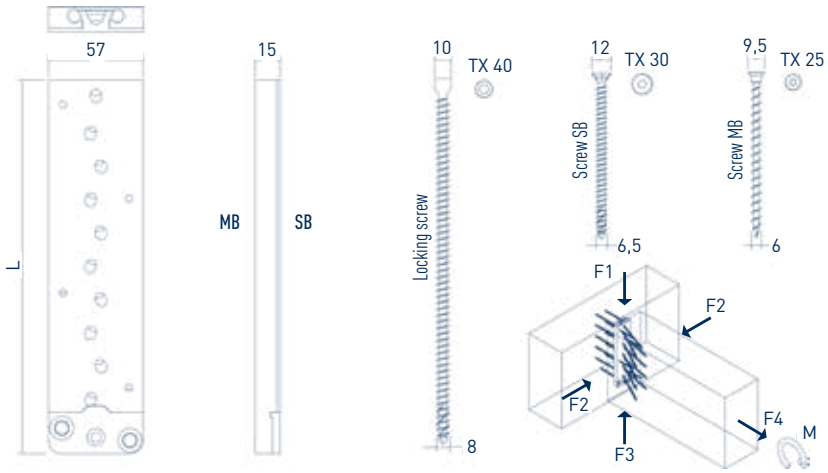
| SIHGA® feature | YOUR benefits |
|---|---|
| Connector for main beam - secondary beam constructions | Wood-wood or wood-concrete connections are possible with the HobaFix® Max (BeziFix anchors 7.5 x 80 for concrete must be ordered separately) |
| No screw collisions thanks to offset fastening screws | Multiple node connections of e.g.: four beams on one support can be created |
| With the sophisticated coupling of the connectors by means of thread-cutting screws, several connectors can also be mounted next to and on top of each other | The thread-cutting locking screws distribute the load equally over the entire height of the connector and fix the position of the two beams in relation to each other at the time of bolting. This ensures an assembly tolerance in the insertion direction for multiple arrangements |
| Flexibility in the connection mechanism | Due to the practical geometry of the connector, length tolerances of the secondary beam of up to -3 mm can be accommodated (with connector arrangement on both sides) |
| High static load capacity in six load cases, with up to 100 kN being characteristic per connection | Can be used for horizontal, vertical, tensile and torque loads with high tested static values |
| Excellent price-performance ratio | Thanks to the consistent profile geometry across all connector heights, an optimised manufacturing process helps save time and money |
| The different HobaFix® Max differ only in length and the number of screws | All connector sizes can be mounted with just one template |
| Developed, patented and manufactured in Austria | Highest European quality and added value |
| Made under supervised conditions from aluminium and anodised | Durable, dimensionally stable quality |
| Includes SIHGAFIX®, all fastening and fixing screws, assembly instructions | Time-saving, practical, precise; all accessories are included |





## SIHGA® TIP:

The screw connection of the two connector parts can also be made from the underside (in the case of non- milled applications).




| SIHGA® | | Dimension | | | Main beam | | Secondary beam | |
|---|---|---|---|---|---|---|---|---|
| montage-pack | | HobaFix® Max | GoFix® HK in MB per connector | GoFix® S+ in SB per connector | 2x locking screws GoFix® X+ | min. width | min. height | min. width | min. height |
| Art. No. | PU | Type (L) | 6,0 x 100 | 6,5 x 100 | 8 x ... | [mm] | [mm] | [mm] | [mm] |
| 31006 | 10 | 105 | 5 | 4 | 95 | 100 | 160 | 80 | 140 |
| 31016 | 10 | 145 | 7 | 6 | 125 | 100 | 200 | 80 | 180 |
| 31026 | 10 | 185 | 9 | 8 | 155 | 100 | 240 | 80 | 220 |
| 31036 | 10 | 225 | 11 | 10 | 220 | 100 | 280 | 100 | 260 |
| 31046 | 10 | 265 | 13 | 12 | 245 | 100 | 320 | 100 | 300 |
| 31056 | 10 | 305 | 15 | 14 | 295 | 100 | 360 | 100 | 340 |
| 31066 | 10 | 345 | 17 | 16 | 330 | 120 | 400 | 120 | 380 |
| 31076 | 10 | 385 | 19 | 18 | 330 | 120 | 440 | 120 | 420 |
| 31086 | 10 | 425 | 21 | 20 | 330 | 120 | 480 | 120 | 460 |

| SIHGA® | | Characteristic values* | | | | | Characteristic values* | | | | | Reduction factor*** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| montage-pack | | C24 Load direction [kN] | | | | [kNm] Milled HFM** | GL24h Load direction [kN] | | | | [kNm] Milled HFM** | C24 / GL24h |
| Art. No. | PU | $F_1$ | $F_2$ | $F_3$ | $F_4$ | $M_d$ | $F_1$ | $F_2$ | $F_3$ | $F_4$ | $M_d$ | for F1, F2, F3 |
| 31006 | 10 | 17,87 | 8,89 | 11,63 | 11,00 | 0,15 | 17,87 | 9,32 | 11,63 | 11,00 | 0,17 | 0,90 |
| 31016 | 10 | 23,58 | 12,80 | 16,06 | 14,38 | 0,27 | 23,58 | 13,43 | 16,06 | 14,38 | 0,30 | 0,93 |
| 31026 | 10 | 29,30 | 16,58 | 20,49 | 17,75 | 0,41 | 29,30 | 17,39 | 20,49 | 17,75 | 0,46 | 0,94 |
| 31036 | 10 | 40,07 | 18,96 | 20,34 | 18,85 | 0,88 | 44,93 | 21,26 | 22,81 | 21,13 | 0,99 | 0,95 |
| 31046 | 10 | 46,42 | 22,34 | 23,48 | 21,85 | 2,30 | 52,05 | 25,05 | 26,32 | 24,50 | 2,58 | 0,96 |
| 31056 | 10 | 54,62 | 25,67 | 26,61 | 24,87 | 2,56 | 61,24 | 28,78 | 29,83 | 27,88 | 2,87 | 0,97 |
| 31066 | 10 | 60,78 | 28,95 | 29,49 | 27,87 | 2,72 | 68,15 | 32,46 | 33,06 | 31,25 | 3,05 | 0,97 |
| 31076 | 10 | 66,88 | 32,19 | 32,59 | 30,89 | 3,41 | 74,98 | 36,09 | 36,54 | 34,63 | 3,82 | 0,97 |
| 31086 | 10 | 72,90 | 35,39 | 35,69 | 33,89 | 3,97 | 81,73 | 39,68 | 40,02 | 38,00 | 4,45 | 0,98 |

* Characteristic values for design according to EC 5 and strength class C24 (ρk 350 kg/m³); Gl24h (ρk 385 kg/m³).

** Value tested according to ÖNORM EN 26891, single connector milled in for minimum dimension.

*** In the case of double applications on top of each other, it must be noted that situation-related corner moments and other forces can arise. These must be taken into account in accordance with EN 1995-1-1 and the load-bearing capacity verified. If only shear forces are applied (F1 or F2 or F3), the max. characteristic load capacities given in the table can be multiplied by the actual number of connectors and reduced by the factor according to the table.

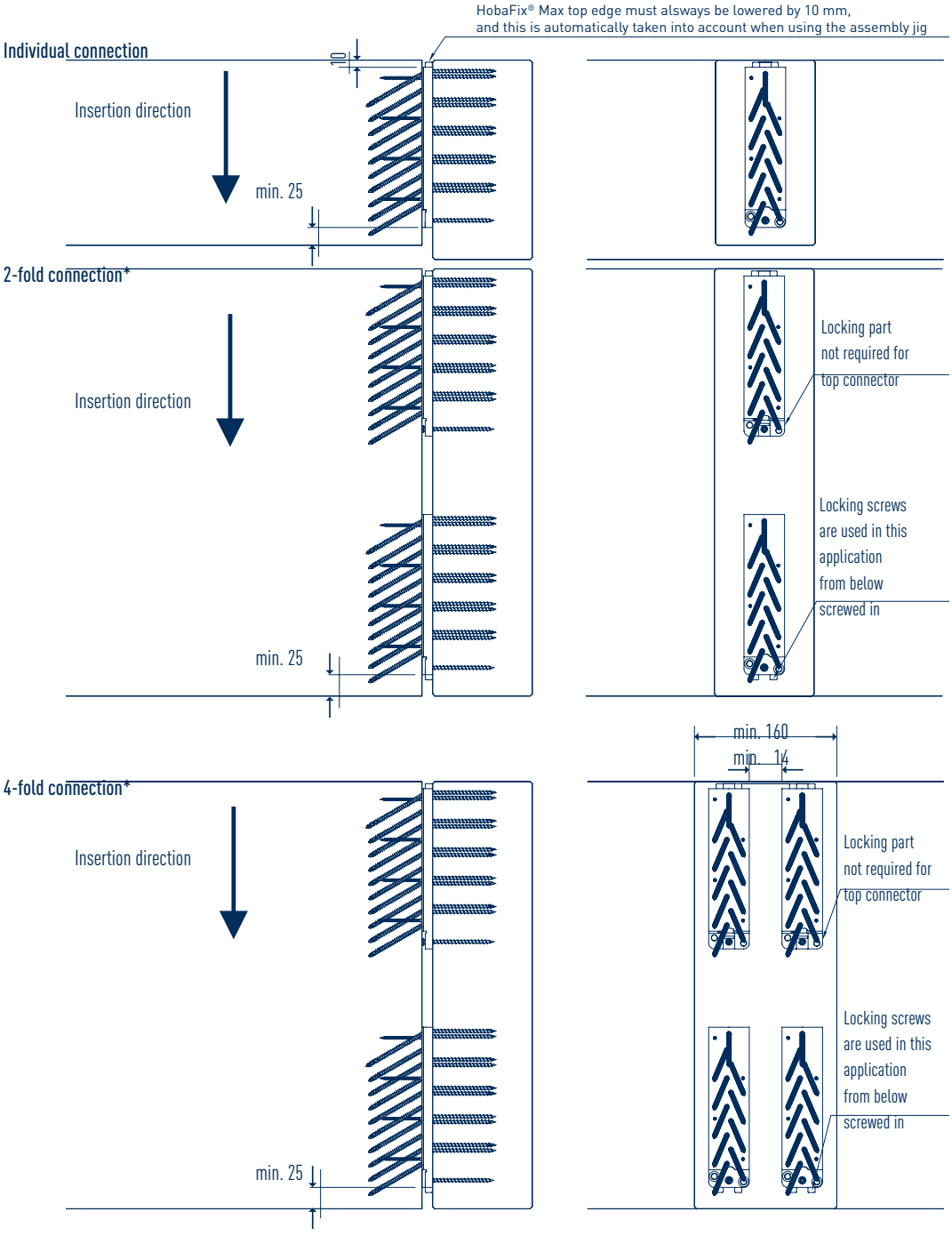
## ATTENTION

The load-bearing capacity of the connection is only achieved after the two locking screws have been screwed in. The maximum hanging load for all sizes of the HobaFix® Max must not exceed 800 kg per connector.



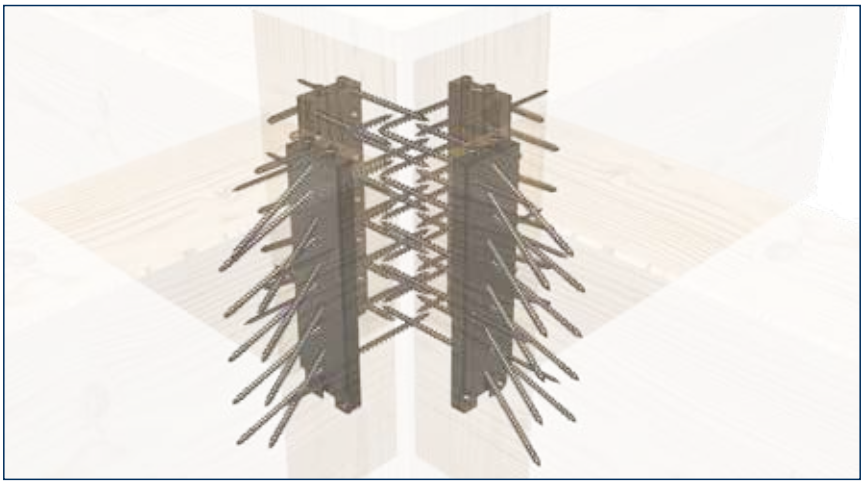
ETA-23/0821

# Multiple applications HobaFix® Max

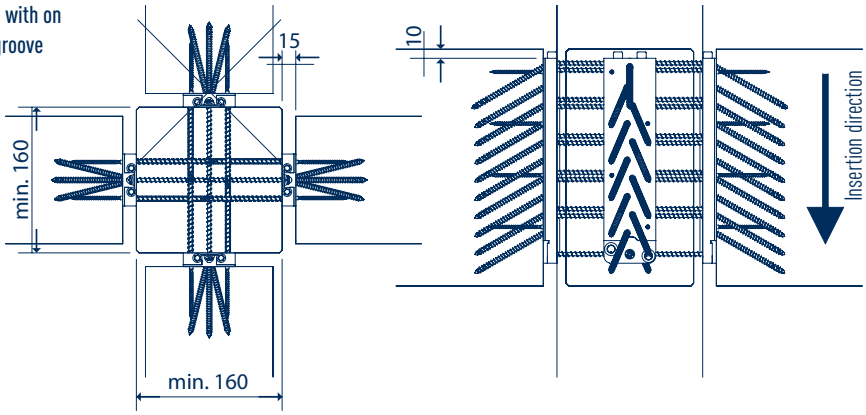



* In the case of multiple applications, it should be noted that situational corner torques and other forces may arise. These must be taken into account according to ETA-23/0821 and EN 1995-1-1 and the load-bearing capacity must be verified. In the case of exclusively transverse force application (F1 or F2 or F3), the max. characteristic load capacities given in the table can be multiplied by the actual number of connectors and reduced by a factor of 0.95.

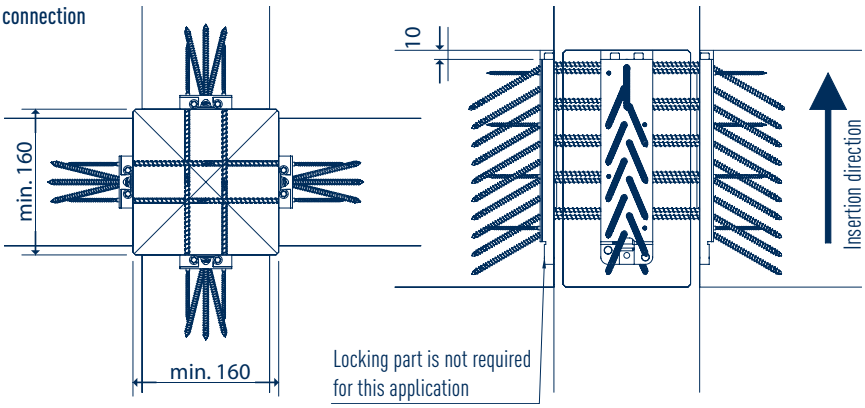
# Multiple nodes on support HobaFix® Max



4-fold connection with on support shadow groove




4-fold on support connection milled




**SIHGA® TIP:**

For applications of this type, the DUO bit TX 40, 350 mm is recommended so that the two locking screws can be screwed in



ETA-23/0821

# HobaFix® Max
# HFML milling assembly jig

| SIHGA® feature | YOUR benefits |
|---|---|
| For all models of the HobaFix® Max | For the rational and precise assembly of HobaFix® Max on the main beam and on the secondary beam |
| Optimal in use with HobaFix® Max cutter (to be purchased separately) | The HobaFix® Max can be milled in one operation thanks to the coordinated cutter length and position of the thrust ring |
| The jig stop can be continuously adjusted in height and at an angle of up to 30° | Offers maximum flexibility |
| Developed and produced in Austria | Superlative European quality and added value |

| SIHGA® | |
|---|---|
| HobaFix® Max HFML milling assembly jig | HobaFix® Max milling cutter |
| Art. No. | Art. No. |
| 31606 | 29632 |





**HobaFix® Max HFML milling assembly jig**




**HobaFix® Max HFMF cutter**

## SIHGA® TIP:

In order to obtain a nice closed joint with the milled version, a milling depth of 15.5 mm is recommended. From the point of view of the secondary beam, the right-hand locking screw should be screwed in first to achieve a contraction effect. It is recommended that the first locking screw is screwed in halfway before the second screw is fully screwed in and then the first screw is finished.

# HobaFix® HFM

| SIHGA® Feature | YOUR Benefit |
|---|---|
| for wall connections, corner connections, partition walls and privacy fence elements | one connector for all applications when installing wall elements, precise and accurate |
| the installation connector for mounting | for rational positioning, saves extensive work time |
| installation tolerance of 14 mm | the major advantage during installation, on site and in the factory: the high tolerance |
| elastic pre-tensioning | which is why HobaFix® HFM has a spring effect, a great help during installation |
| fastened in the installation groove to the wall element, 30 mm wide and 17 mm deep | good view of the connector at all times during installation, important for fast and accurate mounting |
| made from polyamide | HobaFix® HFM slides easily into the desired position - without abrasion |
| the static load per pair of connectors is characteristically 8.5 kN | tested value of the enclosed system screws in accordance with ETA approval |
| includes SIHGAFIX®, all fastening screws, Systemstift®, installation instructions | time-saving, practical, precise, complete accessories enclosed |

| SIHGA® | | Dimension | | | Chamfer | | System Screws |
|---|---|---|---|---|---|---|---|
| montagepack | | HobaFix® HFM | | | Depth | Width | GoFix® SK |
| Art. No. | PU | L | B | H | [mm] | [mm] | d1 x L |
| 30306 | 12* | 176 | 28 | 32 | 17 | 30 | 6,0 x 70 |

* corresponds to 6 connections



**HobaFix® HFM made from polyamide**

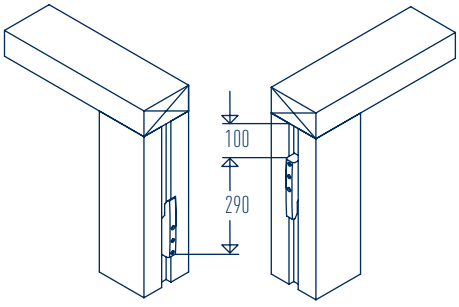


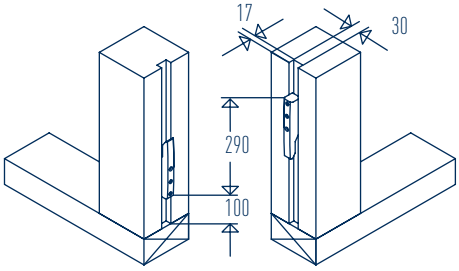
**Example wall connection**

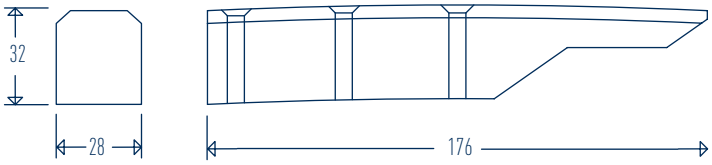
## SIHGA® TIP:

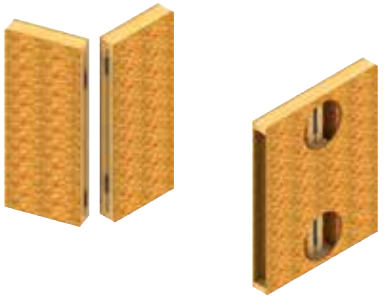
We recommend two pairs of HobaFix® HFM per wall joint.

# Application HobaFix® HFM

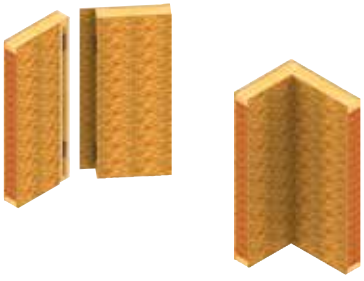


**HobaFix® HFM wall connections**



**HobaFix® HFM corner connections**

# WabaFix® WF



**WabaFix® WF made from aluminium**



| SIHGA® Feature | YOUR Benefit |
|---|---|
| universal heavy-load connection up to 94.72 kN per fastening point | beam and wall connections, ceiling beams and various wood constructions are fastened easily |
| developed, patented and made in Austria | local quality and added-value |
| load attachment without risk of abrasion during installation | through the screw connection with GoFix® S+ screws, transfers static load in four directions |
| for wall/beam connections, corner connections with wooden walls, partition wall fastening, wood cover fastening | WabaFix® can be loosened again later, particularly important for modular construction |
| fastening on concrete possible with BeziFix® anchors | also a great advantage for wall connections |
| monitored production from aluminium | permanent and dimensionally stable quality, rust-free |
| includes SIHGAFIX®, GoFix® screws, Systemstift® and installation instructions | time-saving, practical, precise, complete accessories enclosed |
| calculation values | SIHGA® performs the calculation for you |

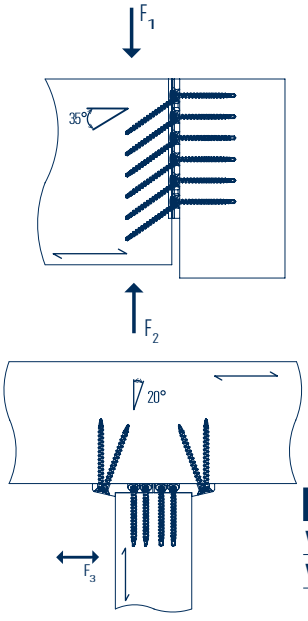
| SIHGA® | | WabaFix® | Secondary Beam | | Drill | Characteristic Values* | | | Recommended Values Wood - Concrete | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| objektpack® | | WF | Width | Height | GoFix® S+ | Load Direction [kN] | | | Load Direction [kN] | | |
| Art. No. | PU | Type | [mm] | [mm] | d1 x L | $F_1$ | $F_2$ | $F_3$ | $F_1$ | $F_2$ | $F_3$ |
| 43146 | 6[1] | **210** | 100 | 250 | 8,0 x 95 | 41,31 | 33,71 | 26,93 | 19,40 | 19,40 | 14,80 |
| 43156 | 6[1] | **210** | 100 | 270 | 8,0 x 125 | 51,02 | 41,27 | 32,96 | 19,40 | 19,40 | 14,80 |
| 43206 | 4[1] | **280** | 100 | 320 | 8,0 x 95 | 68,87 | 51,57 | 35,90 | 25,86 | 25,86 | 19,73 |
| 43216 | 4[1] | **280** | 100 | 340 | 8,0 x 125 | 81,80 | 63,12 | 43,94 | 25,86 | 25,86 | 19,73 |

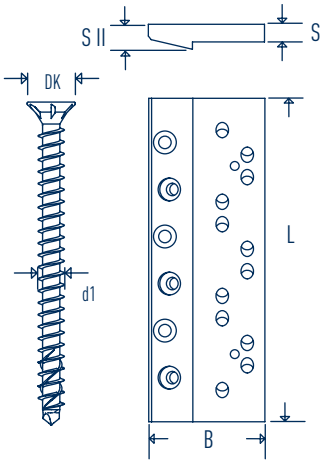
[1] corresponds to 3 or 2 connections
[2] recommended values for concrete at least C 20/25, without edging influence
attachment by means of BeziFix® anchor ZF 7.5 x 80 mm, screws, available separately
* characteristic values for design per EC 5, bulk density ρk = 385 kg/m³



## Also available in RAL colours*

* Price and delivery time on request;
associated screws are not coloured!




**Dimension [mm]**

WabaFix® WF

| Type | L | B | S | S II |
|---|---|---|---|---|
| **WF 210** | 210 | 79 | 12 | 17 |
| **WF 280** | 280 | 79 | 12 | 17 |

## SIHGA® TIP:

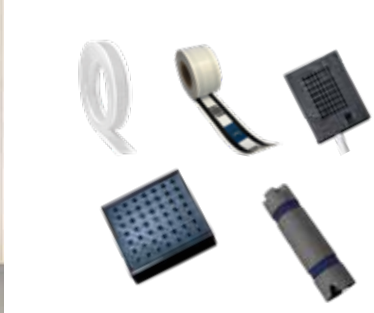
Customised connection solutions using the calculation model developed by TU Graz,
Download at www.sihga.com/service/online-planung/

# Monitorix®

SIHGA

NEW

## Discover also the complete SIHGA® Monitorix® catalogue



**Monitorix®**
**Digital building protection**

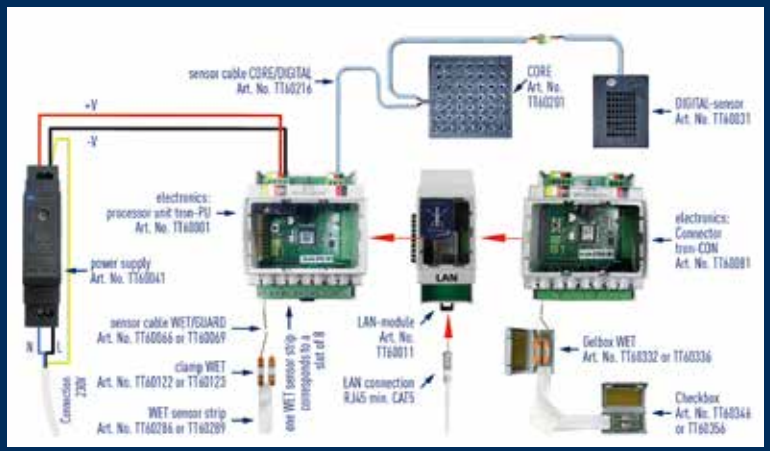


**The early warning system for moisture ingress**

# Monitorix®

| SIHGA® Feature | YOUR Benefit |
|---|---|
| developed and manufactured in Austria | highest Austrian quality and value |
| creation State-of-the-art sensor technology | innovative monitoring system for moisture and water ingress in wooden building elements |
| unobtrusive system components, easy to install | unobtrusive system, which can be easily integrated during the building phase or renovation |
| early detection of moisture ingress or condensate formation | prevents costly repairs |
| smart software solution compatible with all common terminals | notification with precise location of the damage |
| certified technology | secures the value of properties constructed from wood |
| ready to use right after activation | immediate protection right after installation and during the entire useful life |
| can be used in: flat roofs, wet rooms, bathrooms and wooden structures - in all desired areas | certainty that all materials used in construction harmonise structurally-physically |
| support by the SIHGA-Team | easy processing – you send us your floor plan and we'll put together a non-binding offer for you |

**Big plus for you**
In a property monitored with Monitorix® there will hardly be any cases that you will have to remedy under warranty. And that remains the case for a (building's) lifetime!



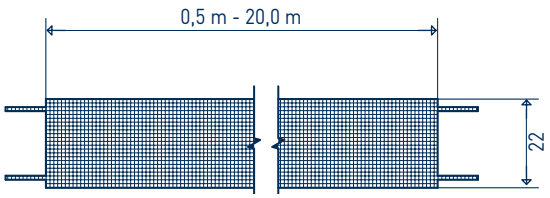

## SIHGA® TIP:

Fields of application: flat roof, bathroom (bath, toilet, shower, etc.), kitchenette, heating manifold, base, window sill, modular construction, etc.

# WET-Sensor strip

| SIHGA® Feature | YOUR Benefit |
|---|---|
| Two sensor wires embedded in plastic fabric | The robust processing makes the sensor strip particularly suitable for practical use on the construction site |
| Insert length from 0.5 - 20 m | Enables a high degree of flexibility and makes work easier |
| Tool-free mounting on sensor terminal | By sliding the sensor wires, a connection to the sensor terminal can be established without additional tools |
| Delivery in handy cardboard boxes | Easy installation of the sensor strips using system packaging |
| Resistances from wet to dry | Due to the fixed spacing of the wires, an exact diagram can be displayed in the cockpit using logic |

| SIHGA® | | Dimension | | Effective length | Connections | | Measurement type |
|---|---|---|---|---|---|---|---|
| montagepack | | Width | Length | per slot | Sensor cable | Clamp | Resistance |
| Art. No. | PU | [mm] | [m] | min - max [m] | 2 x 0,25 mm² | Clamp WET | kOhm |
| TT60286 | 1 | **22** | **25** | 0,5 - 20 | 2-pole | 2 Pcs. | 0 - 300 |
| TT60289 | 1 | **22** | **100** | 0,5 - 20 | 2-pole | 2 Pcs. | 0 - 300 |






**WET-Sensor strip**



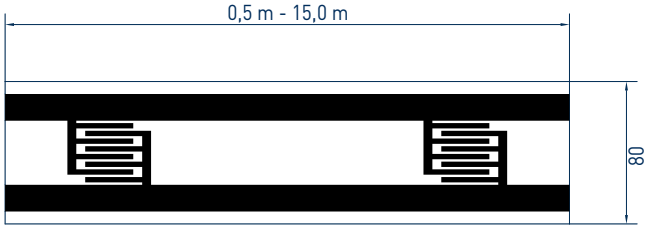
## SIHGA® TIP:

Sensor tracks can also be divided at one and the same slot and the transitions connected with sensor cable WET.

# GUARD-Sensor strip

| SIHGA® Feature | YOUR Benefit |
|---|---|
| The impedance in components is transmitted to the electronics by transmitting pulses | A wide range of units is covered to illustrate the explanation of vapor diffusion in building structures |
| Self-adhesive, water-repellent cellulose strip with printed graphite sensors | Quick installation and processing thanks to factory-applied adhesive |
| Slim material thickness with high efficiency | Sensor membranes can be embedded in laminated wood |
| Measuring the impedance of structurally demanding superstructures | Possibility of moisture monitoring on constructions with challenging features |
| Rust-resistant Clamp as a connecting element | Clamping the toothing to the sensor strip ensures a static connection to the sensor cable |

| SIHGA® | | Dimension | | Effective length | Connections | | Measurement type |
|---|---|---|---|---|---|---|---|
| montagepack | | Width | Length | per slot | Sensor cable | Clamp | Impedance |
| Art. No. | PU | [mm] | [m] | min - max [m] | 2 x 0,25 mm² | Clamp GUARD | Units |
| TT60056 | 1 | **80** | **25** | 0,5 - 15 | 2-pole | 2 Pcs. | 0 - 65.000 |
| TT60059 | 1 | **80** | **250** | 0,5 - 15 | 2-pole | 2 Pcs. | 0 - 65.000 |






GUARD-Sensor strip



**SIHGA® TIP:**

It is recommended that the GUARD sensor membrane is not installed in combination with wet fills. We recommend the WET sensor track for wet fills.

# DIGITAL-Sensor

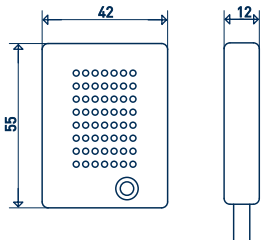
| SIHGA® Feature | YOUR Benefit |
|---|---|
| Compact design in plastic | Very flexible installation due to small size |
| Pre-contacted screw terminal | The sensor cables can be mounted on the terminal so that it is not necessary to open the housing |
| Measures relative humidity and room temperature | In combination with GUARD or WET, you have more informative power when analyzing the object data |
| Can be installed in a star-shaped arrangement | The LIN bus cable allows you to cover up to 8 sensors with one electronic connection |

| SIHGA® | | Dimension | Assembly | Connections | | |
|---|---|---|---|---|---|---|
| montagepack | | L x W x H | Drill hole | Processor unit / Connector | Sensor cable | Connection cable |
| Art. No. | PU | [mm] | [mm] | LIN-Bus | 2 x 2 x 0,8 mm² | Assembly |
| TT60031 | 1 | **42 x 55 x 12** | ∅ 5 | 1 | 4-pole | Screw terminal |

**Measurement type**

Measuring range

| rel. humidity | Temperature |
|---|---|
| 0 - 100% | -40 to 100°C |






DIGITAL-Sensor



## SIHGA® TIP:

To prevent possible corrosion of the screw terminal and strands, a shrink sleeve is included in the scope of delivery.

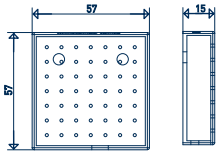
# CORE-Sensor

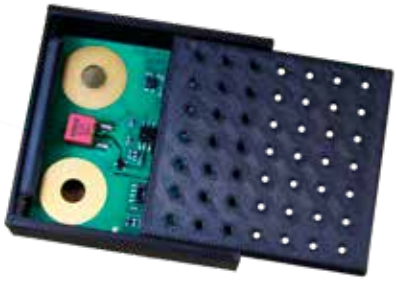
| SIHGA® Feature | YOUR Benefit |
|---|---|
| Plastic housing with integrated electronics | Very easy to install due to its small size |
| Connection via screw terminal in the housing | The CORE sensor cables can be clamped directly to the device and connected in a star configuration |
| Measures relative humidity and room temperature | In combination with GUARD or WET, you have more informative power when analyzing the object data |
| Can be installed in a star-shaped arrangement | The LIN bus cable allows you to cover up to 8 sensors with one electronic connection |
| Measurement of wood core moisture | The screws supplied are both the measuring wires and also serve as fasteners |
| Spring for tension-free mounting | The spring to be installed prevents screw breakage and damage to the board due to shrinkage and swelling of the wood |

| SIHGA® | | Dimension | Assembly | Connections | | |
|---|---|---|---|---|---|---|
| montagepack | | L x W x H | 2 holes | Processor unit / Connector | Sensor cable | Connection cable |
| Art. No. | PU | [mm] | [mm] | LIN-Bus | 2 x 2 x 0,8 mm² | Assembly |
| TT60201 | 1 | **57 x 57 x 15** | ∅ 6 | 1 | 4-pole | Screw terminal |

**Measurement type**

| Measuring range | |
|---|---|
| rel. humidity | Temperature |
| 0 - 100% | -40 to 100°C |



**CORE-Sensor**



## SIHGA® TIP:

The sum of the CORE or DIGITAL sensors per Processor unit or connector must not exceed 8, but it is possible to mix them.

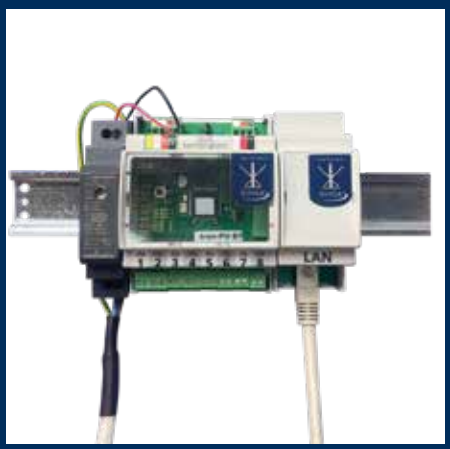
# Processor unit

| SIHGA® Feature | YOUR Benefit |
|---|---|
| Evaluation electronics | Is connected to the power supply using the Power supply and connected to the Internet / Monitorix® cockpit via the LAN-module |
| Slot for up to 8 sensor strips (Monitorix® WET or GUARD) | Each electronic can mount up to 8 risk areas or problem areas on moisture |
| Space for up to 8 wood core moisture, relative humidity and temperature sensors in star connection | Ideal reference sensors for tuning the sensor paths and extended analysis in the event of moisture ingress; the core moisture of load-bearing timber components can also be monitored |
| Top-hat rail mounting possible | Can be mounted in a switch cabinet, flush-mounted or surface-mounted distribution board without tools |
| Browser-based recording in the cockpit | The cockpit can be accessed via any end device, no app or updates required |
| Jumper for opening or closing | Enables locally separated placement of the electronics (Processor unit and connector) |
| CE-compliant | Tested quality |

| **SIHGA®** | | **Dimension** | **Dividing unit** | | **Connections** | | |
|---|---|---|---|---|---|---|---|
| montagepack | | L x B x H | Top hat rail | Connector | DIGITAL-CORE-Sensor | Sensor strip | Extension |
| Art. No. | PU | [mm] | 1DU = 18 mm | CAN-Bus | LIN-Bus | WET | Coupling Connector |
| TT60001 | 1 | **71,5 x 91 x 61,4** | 4DU | 1 | 8 | 8 | 1 |



Processor unit




## SIHGA® TIP:

The hardware is only fully functional in combination with an annual software license.

# Connector

| SIHGA® Feature | YOUR Benefit |
|---|---|
| Extends the sensor slots of the Processor unit many times over | A Processor unit can be extended by up to 13 connectors via plug connection or CAN bus line (with local disconnection) |
| Slot for up to 8 sensor strips (Monitorix® WET or GUARD) | Each electronic unit can monitor up to 8 risk areas or problem areas for moisture |
| Space for up to 8 wood core moisture, relative humidity and temperature sensors in star connection | Ideal reference sensors for tuning the sensor paths and extended analysis in the event of moisture ingress; the core moisture of load-bearing timber components can also be monitored |
| Top-hat rail mounting possible | Can be mounted in a switch cabinet, flush-mounted or surface-mounted distribution board without tools |
| Browser-based recording in the cockpit | The cockpit can be accessed via any end device, no app or updates required |
| Jumper for opening and closing | Enables locally separated placement of the electronics (Processor unit and connector) |
| CE-compliant | Tested quality |

| SIHGA® | | Dimension | Dividing unit | | Connections | | |
|---|---|---|---|---|---|---|---|
| montagepack | | L x W x H | Top hat rail | Main processor | DIGITAL-CORE-Sensor | Sensor strip | Extension |
| Art. No. | PU | [mm] | 1DU = 18 mm | CAN-Bus | LIN-Bus | WET | Coupling Connector |
| TT60081 | 1 | **71,5 x 91 x 61,4** | 4DU | 1 | 8 | 8 | 1 |



Connector




## SIHGA® TIP:

When expanding the system, the connector can be plugged directly into the LAN-module or connected via the CAN bus line in the event of local disconnection.

# Monitorix® accessories

| | SIHGA® Feature | YOUR Benefit |
|---|---|---|
|  | **Monitorix® LAN-module** (Art. No.: TT60011) | |
| | Connection to the Internet via RJ45 network cable from Cat6 | The Processor unit is connected to the Internet via LAN cable; Cable not included in the scope of delivery |
|  | **Monitorix® Power supply** (Art. No.: TT60041) | |
| | 230 V alternating current to 12 V low voltage | The Processor unit and the entire project are supplied with power via the Power supply |
|  | **Monitorix® Sensor cable** (Art. No.: TT60066 or TT60069) | |
| | Connecting cable between electronics and WET/GUARD sensor strip | The pulse from the electronics is transferred to the sensor strip and the resistance measurement is transmitted to the cockpit |
|  | **Monitorix® Clamp WET** (Art. No.: TT60122 or TT60123) | |
| | Connection terminal between WET sensor track, WET sensor cable and GUARD | Tool-free connection of WET sensor strip and WET sensor cable |
|  | **Monitorix® Gel box** (Art. No.: TT60332 or TT60336) | |
| | Moisture protection for terminal connection WET | Immediately ready for use and accessible again without special tools |
|  | **Monitorix® Sensor cable** (Art. No.: TT60216) | |
| | 4-pole connection cable between electronics, CORE and DIGITAL sensors | Up to 8 sensors per Processor unit or connector can be installed in a star-shaped arrangement using the LIN bus line |
|  | **Monitorix® Checkbox** (Art. No.: TT60346 or TT60356) | |
| | Terminating resistor for closing the sensor track | The functionality of the WET sensor track can be checked either in the cockpit or on site using a multimeter |

**SIHGA® TIP:**

The total length of the sensor cables per slot must not exceed 100 metres.

# ROOF IOT

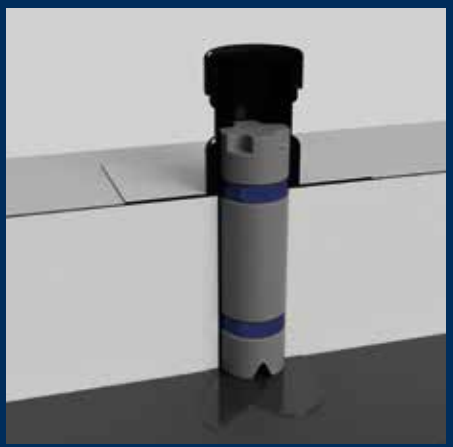
| SIHGA® Feature | YOUR Benefit |
|---|---|
| EPS cylinder placed in inspection port | The ROOF IOT can be inserted and put into operation without tools |
| Measurement of 4 parameters | By measuring the temperature, relative humidity, water level in mm and moisture content of the EPS housing, these measured values can be used to detect damage |
| Existing roofs or new construction | The ROOF IOT can be used both on existing flat roofs by retrofitting an inspection spigot and on new flat roofs via the inspection spigot |
| No cabling necessary | The ROOF IOT is battery-operated and sends the data to the software via an integrated SIM card; an automatic alarm is triggered when the battery is low |

| SIHGA® | | Dimension | Assembly | Operating mode | Battery | |
|---|---|---|---|---|---|---|
| montagepack | | ∅ x L | Inner control nozzle | Battery | Service life | Operating temperature |
| Art. No. | PU | [mm] | min. 110 mm | 1,5 V AA | years | °C |
| TT60291 | 1 | **106 x 400** | No scope of delivery | 6 | > 3 | -20 to 60 |

| Measurement type | | | | | | | |
|---|---|---|---|---|---|---|---|
| Measuring range | Water level | relative humidity | | Temperature | | Moisture measurement of the EPS housing | |
| [mm] | Res. [mm] | Range [%] | Res. [%] | Range [°C] | Res. [°C] | Measuring principle | Range [%] |
| 0 - 12 | 0 / 4 / 7 / 12 | 0 - 100 | 0,1 | -40 to 100 | 0,1 | Resistance | 6 - 100 |



ROOF IOT



## SIHGA® TIP:

When purchasing the control connection pieces, ensure that they have an internal diameter of at least 110 mm.

# CORE IOT

| SIHGA® Feature | YOUR Benefit |
|---|---|
| IP67 housing, UV-resistant cables | Protection against moisture and dust, permanent suitability for outdoor use |
| Up to 6 wood core moisture sensor connections, 2 connections for temperature/room air | flexible monitoring of multiple measurement points, combined climate data |
| Spring-loaded screw connection point | Compensation for swelling and shrinkage in wood |
| Waterproof plug connections | Modular, secure system with simple installation |
| Data storage for up to 5 years | Long-term monitoring without data loss |
| battery operation | Self-sufficient operation without mains connection |
| Compatible with the entire Monitorix® portfolio | Uniform data evaluation |

| SIHGA® | Assembly | Connections | | Operating mode | Battery | |
|---|---|---|---|---|---|---|
| montagepack | 2 holes | | | battery | service life | operating temperature |
| Art. No. | PU | [mm] | coaxial cable | connection | 1,5V AA | years | °C |
| TT10000 | 1 | ∅ 6 mm | 2-pole | Click-Connector | 3 | > 3 years | -20 to 60 |

| Transmission | Measurement interval* | Transmission interval* | Objective |
|---|---|---|---|
| open network | hours | hours | web application |
| NBIoT | 6 | 24** | https://tagtron.sihga.com |

* Freely selectable, affects battery life
** Transmits immediately when threshold values are exceeded



CORE IOT



## SIHGA® TIP:

Ideal for timber engineering and renovation, where measuring points need to be monitored continuously and reliably.

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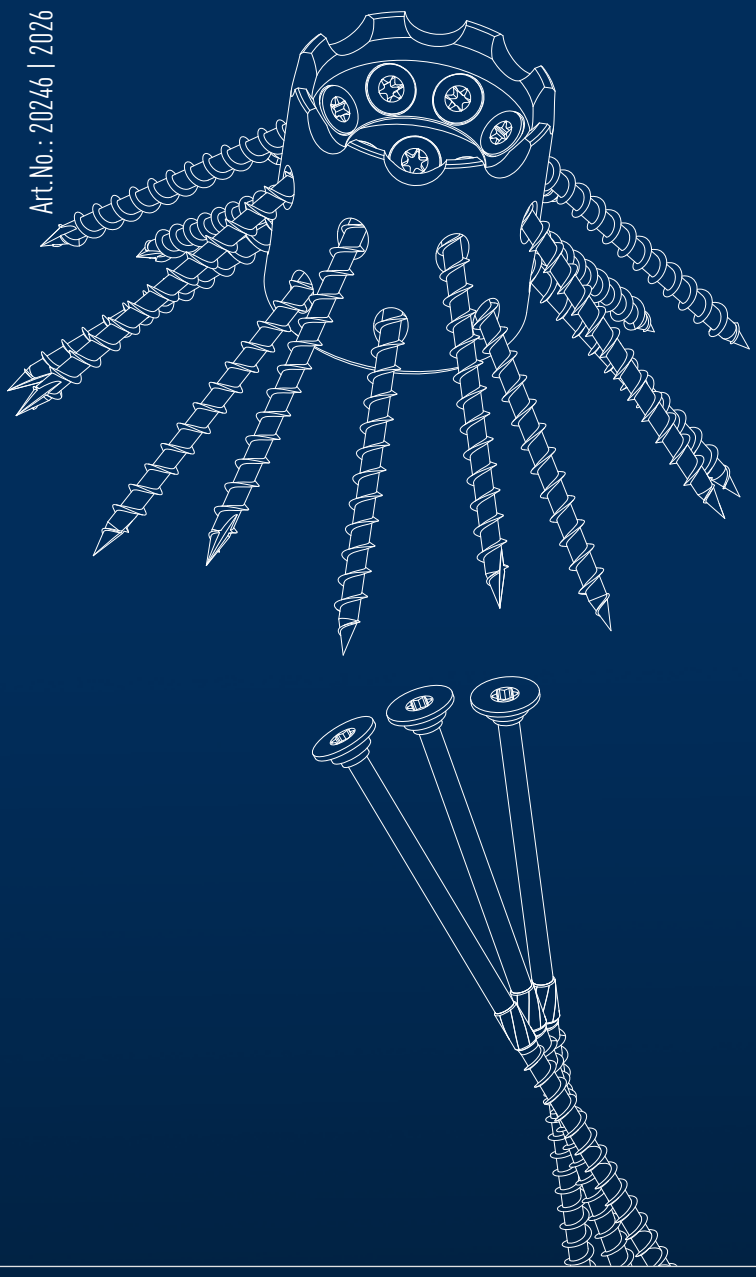
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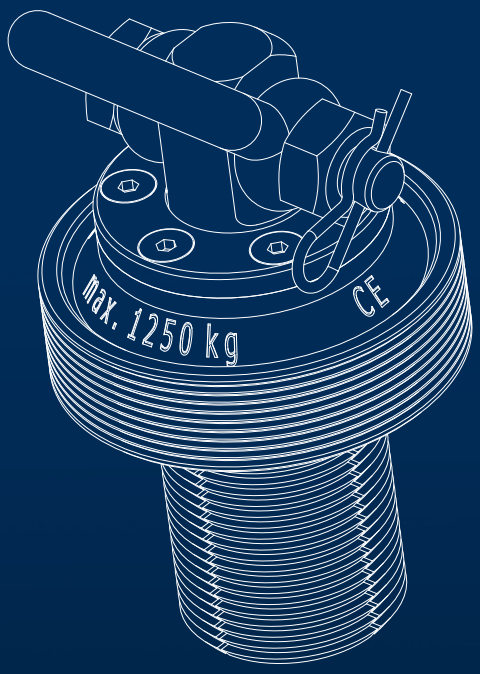
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