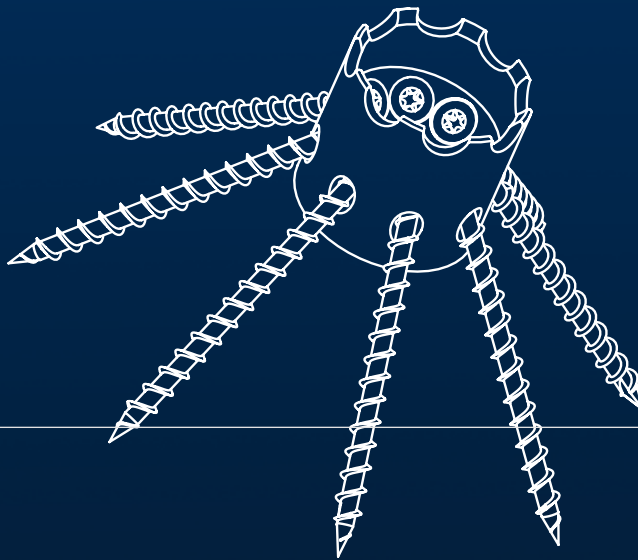
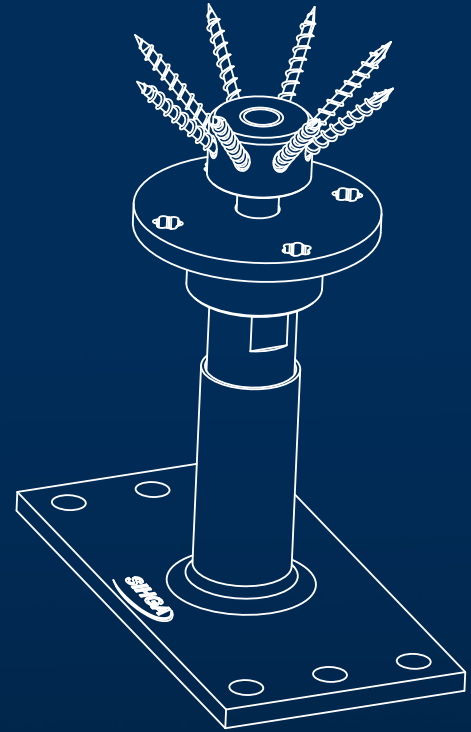
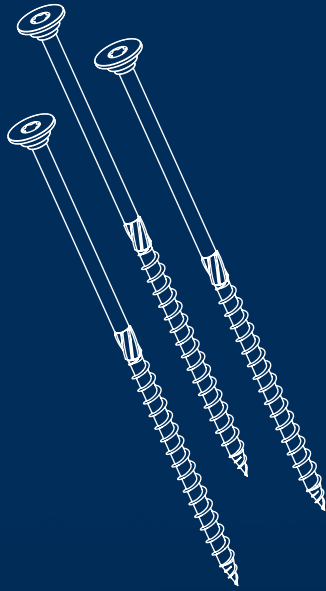


# TAKE THE BEST

Decades of quality from Austria! [www.sihga.com](http://www.sihga.com)



**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.



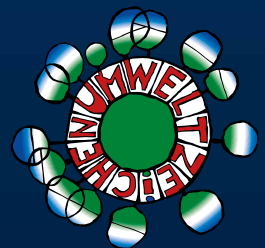
DI Dr. Marc C. Simmer, MBA  
CEO, Owner



Jane-Beryl Simmer, MBA  
Chairwoman of the board

## Committed to the Environment

In order to optimally protect the environment and the health of our employees, when producing our packaging and all printed materials we are careful to use environmentally friendly and recyclable materials, and ensure environmentally friendly production.



# SSSS - SIHGA® SYSTEM SAFETY STANDARD

## SIHGA® Feature

exclusively for all SIHGA® products

this means

and stands for

## YOUR Benefit

security for YOUR future

SIHGA® SYSTEM SAFETY STANDARD

tested, regularly externally monitored, certified,  
guaranteed, long-lasting



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# The heart of our passion...



Also discover the new  
MASS-X® CLT Program



# THE NEW STRONG WEBSITE

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## For partners and construction clients

Welcome to the world of SIHGA® fastening technology! On our website you will find all the information you need, as well as convenient inquiry and order options and numerous downloads.

**SIHGA® online-Shop**

**SIHGA Jointplan®**

**SIHGA Terrassenplaner®**

**Online calculation**

**Product information**

**Approvals**

**News**

**Tender texts**

**Product and installation videos**

**Anchor dimensioning software**

**Terrace planning software**

**Recommendations**

**Technical details**

**Design recommendations**

**Installation instructions**

**SIHGA® reference projects**



#WEBSITE  
#SIHGA.COM

# 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®, Pfallu®, Pfallu Aquastop®, Pick, Pick Max®, Pick PSA, Pick Engel®, Pick Out, Pocket Traverse, ProziFix®, Rest-X®, RomboFix®, SIHGAFIX®, Stabilix, Stegsan®, SystemFix®, TefaBind®, TefaFix®, TefaFlex®, TeFix®, TerrassenFix®, WabaFix®, Winkelix® and ZaFix®.



# #TAKETHEBEST #TAKESIHGA

# 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



### Technology on tour

- Book our **SIHGA® Applications Engineer** completely free of charge - we are happy to support your team with advice and action directly on the construction site.





## 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](mailto: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](mailto:bemessung@sihga.com)!



## Pick check

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



## BIM data

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

# Secure is secure! With SIHGA®

Our all-inclusive services for your security

SIHGA® **product developments.** From practice for practice.

SIHGA® **innovations.** We secure YOUR Benefit.

SIHGA® **specialist competence.** Due to our specialisation in wood construction.

SIHGA® **quality.** Permanently tested and externally monitored.

SIHGA® **ecology.** We take care of the environment.

SIHGA® **system packaging.** Tailored for wood construction.

SIHGA® **system catalogue.** Technical information at a glance.

SIHGA® **S<sup>3</sup> Software.** Calculations at the click of a mouse.

SIHGA **Jointplan**®. Anchor dimensioning software.

SIHGA **Terrassenplaner**®. Terrace planning software.

SIHGA **ProziFix**®. Dimensioning sheet.

We keep  
our promises.

# 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



colour-coating made from stainless steel



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



SIHGA-MID® =  
fiberglass-reinforced plastic



# SIHGAFIX®

## SIHGA® Feature

the original from SIHGA®

length 60 mm, 77 mm

also made from hardened stainless steel

vacuum ice-chill hardened

precisely milled drive zone

made in Germany

colour-coding system

## YOUR Benefit

the first Quadro attachment for use in cordless screwdrivers, hammer screwdrivers, chucks and bit holders

also screws easily in deep grooves

prevents rust from external sources occurring at the screw

for extreme high strength and long lifespan

resulting in a very accurate fit

German tested workmanship for reliable quality

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

lengths 150, 200 and 350 mm

double Torx drive

made in Europe

colour-coding system

## YOUR Benefit

tailored to the requirements in wood construction

for double lifetime

European tested workmanship for reliable quality

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

# 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® System Packaging

## 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 painting of cardboard boxes to protect the environment



**SIHGA® mehrwertpack**



**SIHGA® objektpack®**

# SIHGA® SystemFix®

## SIHGA® Feature

display equipment for up to 160 montagepacks

clear storage for up to 160 montagepacks

expandable and changeable as desired

content is checked automatically

forward-sloping compartment floors

over 1200 companies confirm that SystemFix® brings profits

## YOUR Benefit

less than half m<sup>2</sup> of space needed

automatic moving-up of packages

shelf heights can be changed at any time and several SystemFix® can be connected to each other in a row

your personal SIHGA® application specialist will be happy to do this by arrangement

so that the packages slide forward automatically

the fact that 80 % of the time is needed for 20 % of the purchasing volume is optimised by SystemFix®





# SIHGA<sup>®</sup> 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.

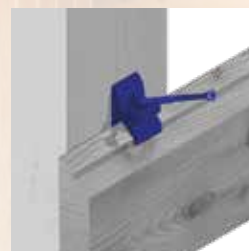
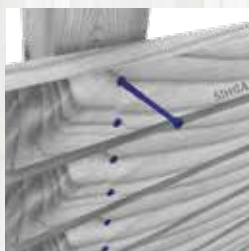
- 17.3 You can view the text of the contract in our customer log-in.

- 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.

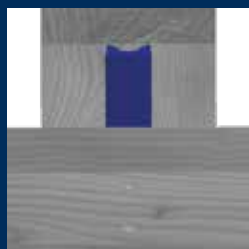


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### Fastening Invisible

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# 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

[www.sihga.com/Online Calculation](http://www.sihga.com/Online Calculation)

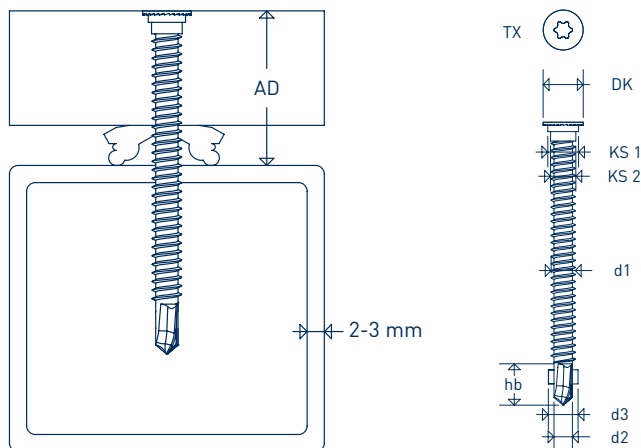
SIHGA® montagepack		Dimension Alu-TeFix®	Add-on Part up to AD	Characteristic Values*			Substructure TefaFix®T/F
Art. Nr.	PU	d1 x L	[mm]	Tensile Force F <sub>1</sub> [kN] Head	Shear Force F <sub>2</sub> [kN] Thread	Alu-Wood	
54016	200	<b>5,0 x 51</b>	33	1,96	1,30	2,95	yes
54026	200	<b>5,0 x 61</b>	43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

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

\* characteristic values for dimensioning according to EC 5 and for strength class pk 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.



# BeziFix® SR II



INNOVATION  
2022



BeziFix® SR II  
the original



ETA-15/0832





## SIHGA® Feature

works in vertical coring bricks, light, normal and cellular concrete, solid brick, and solid sand-lime bricks

integrated anti-rotation lock

fastens 20 - 200 mm thick materials

designed with extra thin waistband

screw packaged already inserted into anchor

includes SIHGAFIX®, Hozibo® or Stabebo SDS drill and installation instructions

design values

## YOUR Benefit

particularly good bearing capacity, even in hollow brick

for easy installation

universally usable with low storage costs

can be screwed flush-mounted

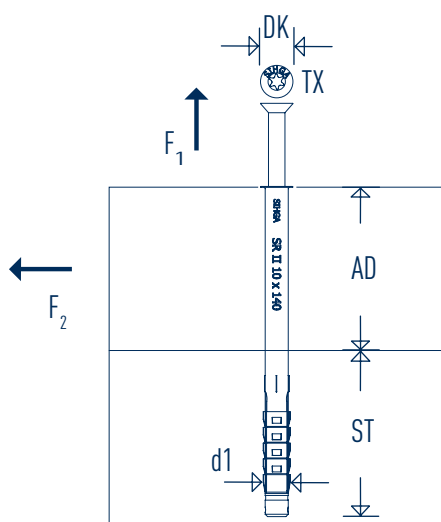
fast, saves installation work on-site

time-saving, practical, precise, complete accessories included; Hozibo® when drilling in brick or Stabebo SDS, the concrete drill

SIHGA® performs the calculation for you

SIHGA® montagepack Hozibo®	SIHGA® montagepack Stabebo		Dimension BeziFix® SR II	Installation Part AD	Characteristic Values	
Art. No.	Art. No.	PU	d1 x L	[mm]	Tension F <sub>1</sub> / Transverse F <sub>2</sub> HLZ [kN]	Tension F <sub>1</sub> / Transverse F <sub>2</sub> 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<sup>®</sup> Therm-H



BeziFix<sup>®</sup> 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

general building approval/  
general type approval

Safety tested by the DIBt (German Institute for Building Technology)

high-quality and durable materials, very low thermal conductivity ( $\lambda$  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](http://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
Art. No.	PU	d1 x L	[mm]	[kg/m²]	EV [cm]	EV [cm]
55606	50	<b>7,0 x 198*</b>	60	25	140	140
55616	50	<b>7,0 x 218*</b>	80	25	140	140
55626	50	<b>7,0 x 238</b>	100	25	135	140
55636	50	<b>7,0 x 258</b>	120	25	115	140
55646	50	<b>7,0 x 278</b>	140	25	100	135
55656	50	<b>7,0 x 298</b>	160	25	90	115
55666	50	<b>7,0 x 318</b>	180	25	80	100
55676	50	<b>7,0 x 338</b>	200	25	75	90
55686	50	<b>7,0 x 358</b>	220	25	65	80
55696	50	<b>7,0 x 378</b>	240	25	60	75
55706	50	<b>7,0 x 398</b>	260	25	60	70
55716	50	<b>7,0 x 418</b>	280	25	55	65
55726	50	<b>7,0 x 438</b>	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® SR 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

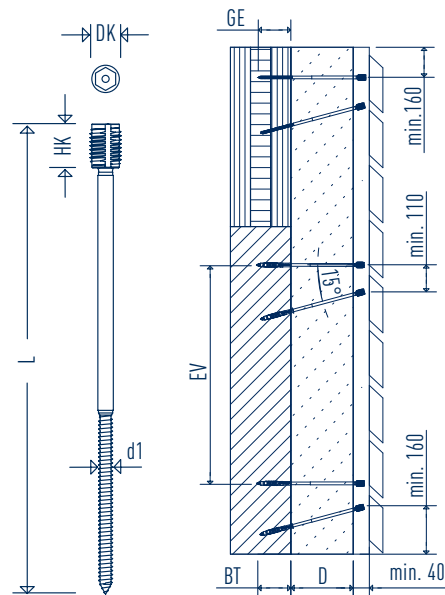
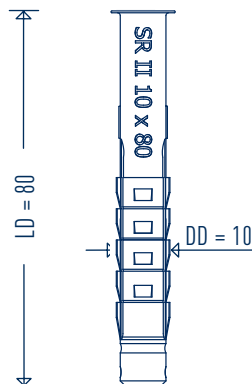
\* Minimum drill hole depth in concrete, brick, KS stone; dowel length = 80 mm, drill hole depth = 90 mm; screw pitch for substructure wood = 90 mm

\*\* 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<sup>®</sup> Therm-H Accessories

## SIHGA<sup>®</sup> Feature

## YOUR Benefit



### BeziFix<sup>®</sup> Therm-H Setting tool (Art. No. 55732)

two functions in one tool

one side for mounting the BeziFix<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> Therm Dowel TR

fixed in concrete, 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

fastens wood to wood with small decorative head Ø 5.2 mm

fastens without pre-drilling

fastens without splitting the wood

made from hardened stainless steel

including SIHGAFIX® stainless steel, Systemstift® and installation instructions

also available with black surface (SC 9 coating)

## YOUR Benefit

facade formwork is fastened directly in the spring

fast, saves installation work

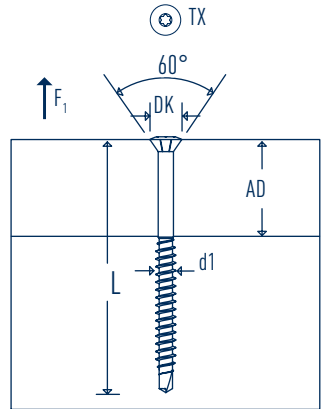
also clean fastening close to the edge

rust-free fastening, extremely break-proof

time-saving, practical, all accessories enclosed; SIHGAFIX® stainless steel prevents rust from external sources and also screws into deep grooves

also fastens dark materials, visually appealing

Dimension [mm]			
F-BohrFix® ES/SC			
d1	TX	DK	Decorative Head
3,2	10	5,2	60°



SIHGA®		Dimension	Installation Part
montagepack		F-BohrFix® ES	AD
Art. No.	PU	d1 x L	[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

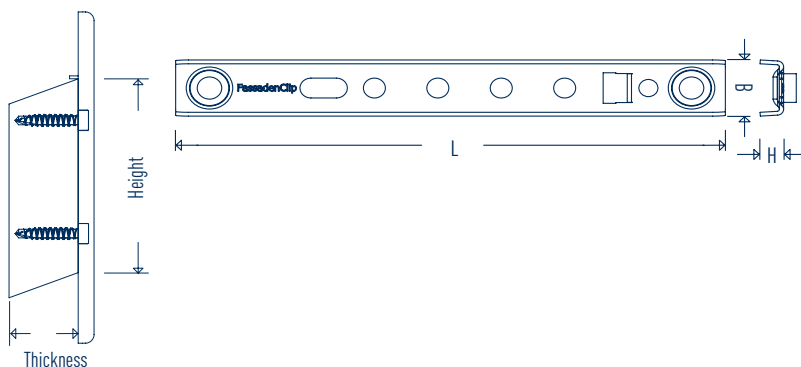




## SIHGA® Feature

## 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 m <sup>2</sup>	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		
Art. No.	PU	Type	Height [mm] min.	max.	Thickness [mm] min.
32355	300	<b>115 x 17</b>	57	68	19
32365	300	<b>115 x 22</b>	57	68	24
32375	300	<b>115 x 28</b>	57	68	30
32385	300	<b>130 x 17</b>	69	80	19
32395	300	<b>130 x 22</b>	69	80	24
32405	300	<b>130 x 28</b>	69	80	30
32415	300	<b>145 x 17</b>	81	95	19
32425	300	<b>145 x 22</b>	81	95	24
32435	300	<b>145 x 28</b>	81	95	30

L-BohrFix® FB  
Ø 4,5 x 29



BohrFix® FB  
Ø 4,2 x 17 / 22 / 28



# FugiFix® FF

## SIHGA® Feature

universal joint spacer for facades

due to the special geometry

made from SIHGAMID®, the fibre-glass reinforced plastic originating from space research

## YOUR Benefit

joint widths of either 5, 6, 7 or 8 mm can be set quickly

the FugiFix® FF cannot fall into the joint and can easily be removed again

extremely heat-, frost- and UV-resistant

SIHGA® montagepack		Dimension FugiFix®	Joint Widths
Art. No.	PU	Type	[mm]
34966	5	<b>FF</b>	5, 6, 7, 8



FugiFix® FF made from  
SIHGAMID®



### SIHGA® TIP:

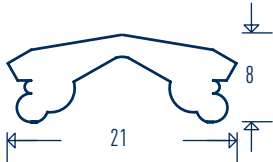
To extend the life of timber constructions, we recommend using KompeFix® II KF.



# 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 m²	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



# LamellenFix



LamellenFix



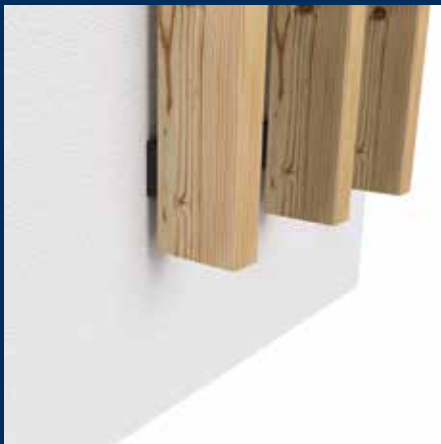
ETA-11/0425



## SIHGA® Feature

## YOUR Benefit

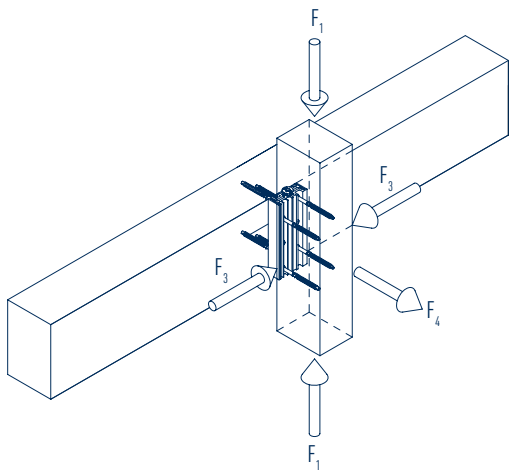
Connectors for façade slats on different substructures	Whether wood, steel or concrete, the connector can be fastened to almost any substrate
Node connection made of two identical parts (1 connection consists of 2 pieces)	Can be pre-assembled without confusion and on the slat in the factory
The first 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; All accessories are included



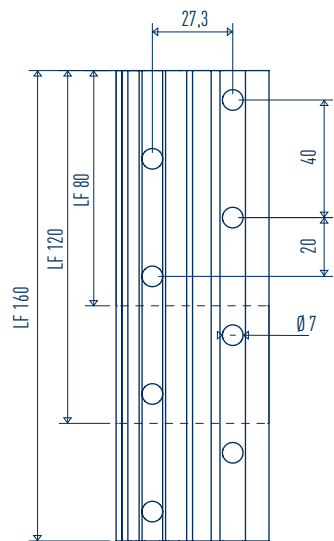
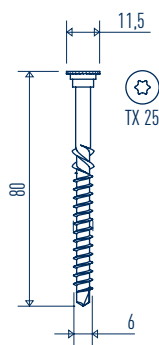
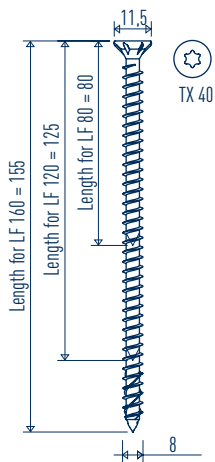
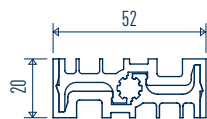
### SIHGA® TIP:

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

# LamellenFix



SIHGA® LamellenFix	Rated values (kN)		
	F <sub>1,d</sub> Compressive force [kN]	F <sub>3,d</sub> Transverse force [kN]	F <sub>4,d</sub> Traction [kN]
<b>80</b>	4,46	3,10	5,08
<b>120</b>	7,67	3,92	5,71
<b>160</b>	12,90	4,66	8,29



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

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

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	6,0 x 80	[mm]	[mm]	[mm]	[mm]
31206	20*	<b>80</b>	<b>4</b>	60	80	80	80
31216	20*	<b>120</b>	<b>4</b>	60	80	120	80
31226	20*	<b>160</b>	<b>6</b>	60	80	160	80

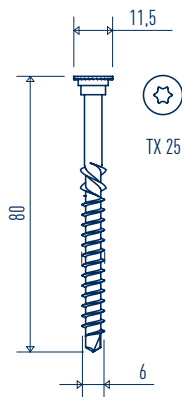
\* Corresponds to 10 connections



# Fastening for substructure

## Substructure wood

TeFix® in hardened stainless steel



### SIHGA®

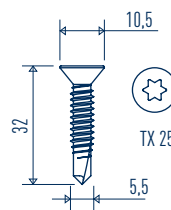
TeFix® hardened stainless steel

Art. No.

54416

## Substructure steel up to 4 mm

Sheet metal screw in stainless steel hardened



### SIHGA®

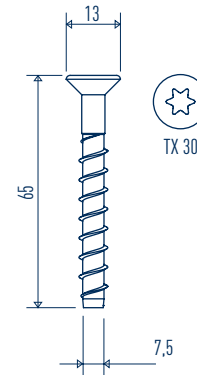
Tapping screw,  
hardened st/less steel

Art. No.

31306

## Substructure concrete

Concrete anchor in stainless steel



### SIHGA®

Concrete anchor A4

Art. No.

41906

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

- best suited for slat dimensions of >60 x 80 mm
- few attachment points for large wooden slats
- simple, quick assembly
- 4 screws are required per LamellenFix for mounting on the substructure

# LamellenFix template

## SIHGA® Feature

For all LamellenFix models

Automatically finds the centre of the slat or substructure

The template can be clamped onto the horizontally mounted substructure and the LamellenFix inserted

Developed and produced in Austria

## YOUR Benefit

For the rational and precise assembly of Apply LamellenFix to the slat and to the substructure

By moving the two side parts towards each other, the parallelogram closes and centres the template on the component

You have both hands free for screwing

Superlative European quality and added value

### SIHGA®

LamellenFix template

Art. No.

31716

### SIHGA®

DUO Bit TX 40, 350 mm

Art. No.

31821



LamellenFix template

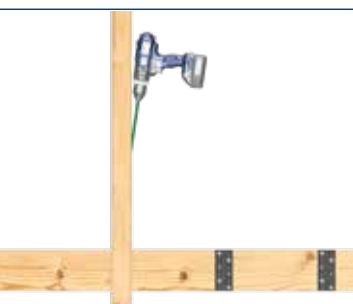
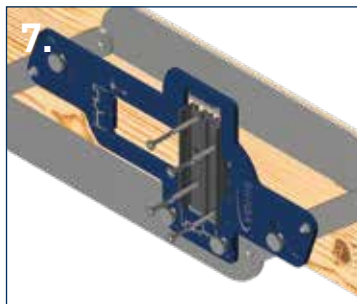
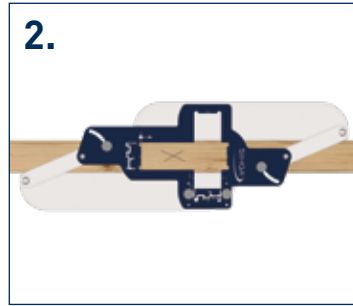


### SIHGA® TIP:

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



# L-GoFix<sup>®</sup> MS



**L-GoFix<sup>®</sup> MS made from  
hardened stainless steel**



**L-GoFix<sup>®</sup> MS with additional  
SC 9 / SC 11 coating**

ETA-11/0425



SIHGA® Feature

YOUR Benefit

fastens wood to wood without pre-drilling and without countersinking	reduces crack formation or splitting of the timbers, even board materials, saves work time, additional pre-drilling extends the life of the wood
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 without splitting
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) and antique look (SC 11 coating)	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

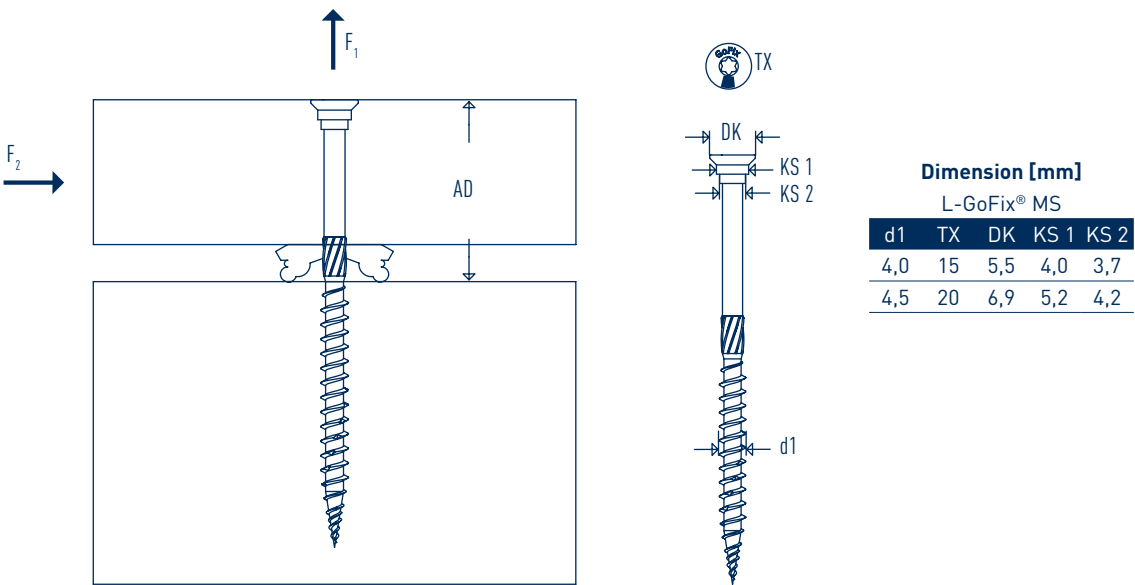
quantity calculation

including SIHGAFIX® stainless steel, Systemstift® and installation instructions

## YOUR Benefit

SIHGA® performs the calculation for you

time-saving, practical, precise, all accessories enclosed, SIHGAFIX® stainless steel prevents rust from external sources and also screws into deep grooves



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
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 12.2022

\* also available with SC 9 coating

\*\* characteristic values for dimensioning according to EC 5 and for strength class pk 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



## SIHGA® Feature

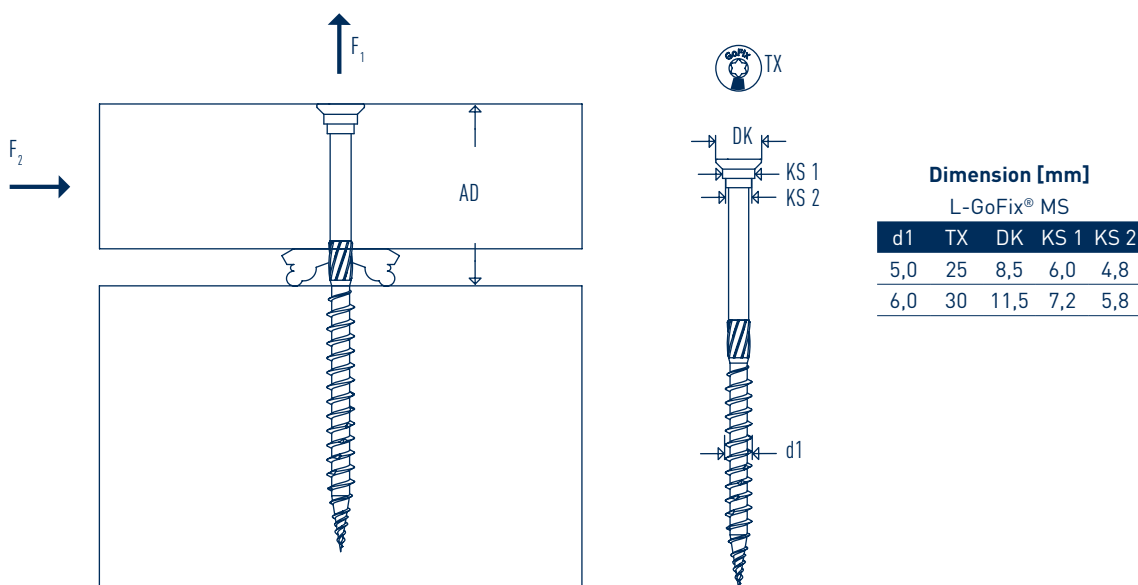
calculation of quantity

including SIHGAFIX® stainless steel, Systemstift® and installation instructions

## YOUR Benefit

SIHGA® performs the calculation for you, just read the installation part thickness

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

Subject to technical modifications and errors. Status of approval 12.2022

\* also available with SC 9 coating

° also available with SC 11 coating

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

# L-GoFix<sup>®</sup> MS A2

## SIHGA<sup>®</sup> 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<sup>®</sup> point with special shape

guarantees fast setting of screws without splitting

SIHGA<sup>®</sup> ribs on shaft and slip coating

light, fast rotation and optimum fit in the wood are guaranteed

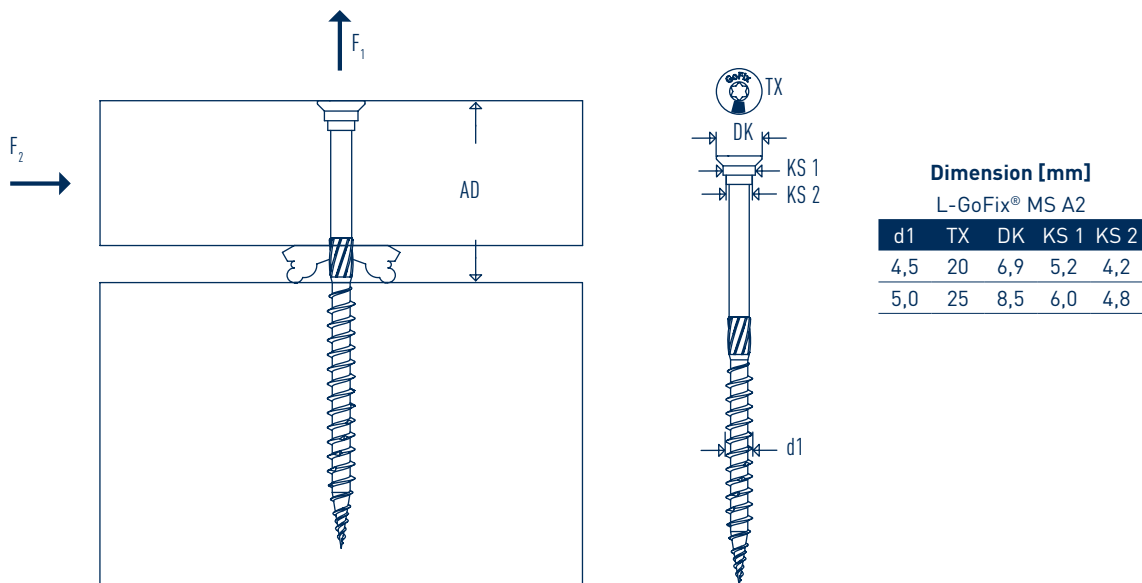
including SIHGAFIX<sup>®</sup> stainless steel, Systemstift<sup>®</sup> and installation instructions

time-saving, practical, precise, all accessories enclosed; SIHGAFIX<sup>®</sup> 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 Ø 3 mm. If in doubt, we recommend carrying out pretrials



**L-GoFix<sup>®</sup> MS A2**  
**made of A2 stainless steel**



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

Subject to technical modifications and errors. Status of approval 12.2022

\*\* characteristic values for dimensioning according to EC 5 and for strength class pk 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<sup>®</sup> RF



RomboFix<sup>®</sup> RF  
made from SIHGAMID<sup>®</sup>



ETA-18/0887

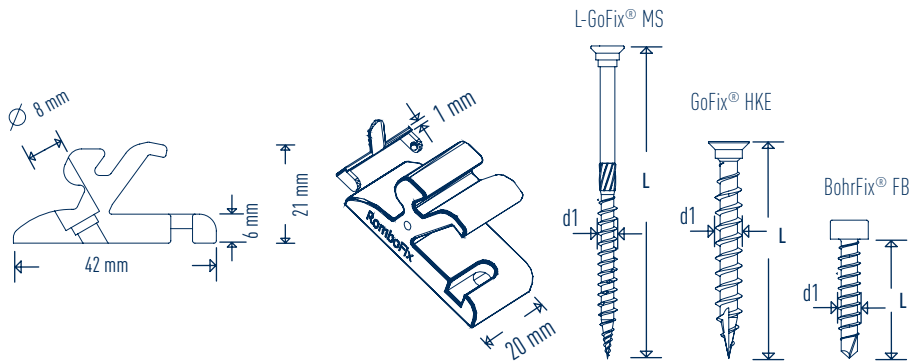


SIHGA® Feature

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<sup>®</sup> FT



**SenoFix<sup>®</sup> FT**  
for facade application



Plank Thickness 20 - 30 mm

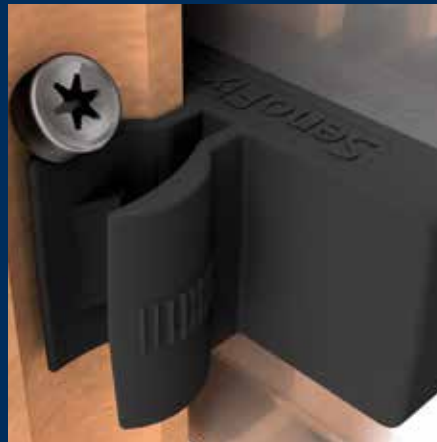
**Optional accessories: SIHGAFIX<sup>®</sup>**  
TX 20, 77 mm; p. 14 & TTB p. 129



## 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 m²	1: Substructure spacing [m] : {boardwidth [m] + joint [m]}



### SIHGA® TIP:

Secure each facade board once with BohrFix® FB 4.2 x 43.



# TefaFix® F



**TefaFix® F**  
aluminium bright



**TefaFix® F**  
aluminium SC 9 coated



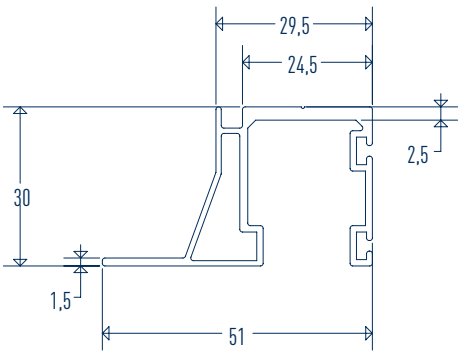
SIHGA® Feature

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<sup>®</sup> F



**TefaFlex<sup>®</sup> F**  
polyvinyl chloride





## SIHGA® Feature

special geometry

act as punctual supports for the facade profiles

jams when inserted into the TefaFix® F

40 mm length

8.5 mm height

## YOUR Benefit

minimum contact area of the profiles in case of visible screwing, allows bowling up of the profiles stress-free

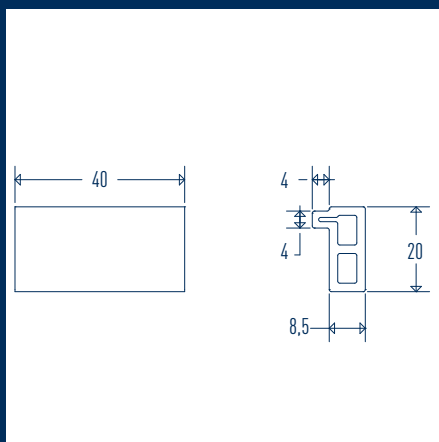
ventilation and drainage of the water is guaranteed, especially with vertical installation of the facade profiles

can be inserted into the intended shaft of the TefaFix® F and holds, no complex and costly fixing necessary

suitable for all profile widths

finished distance of the profile to the substructure according to the state of the art, optimal ventilation and drainage

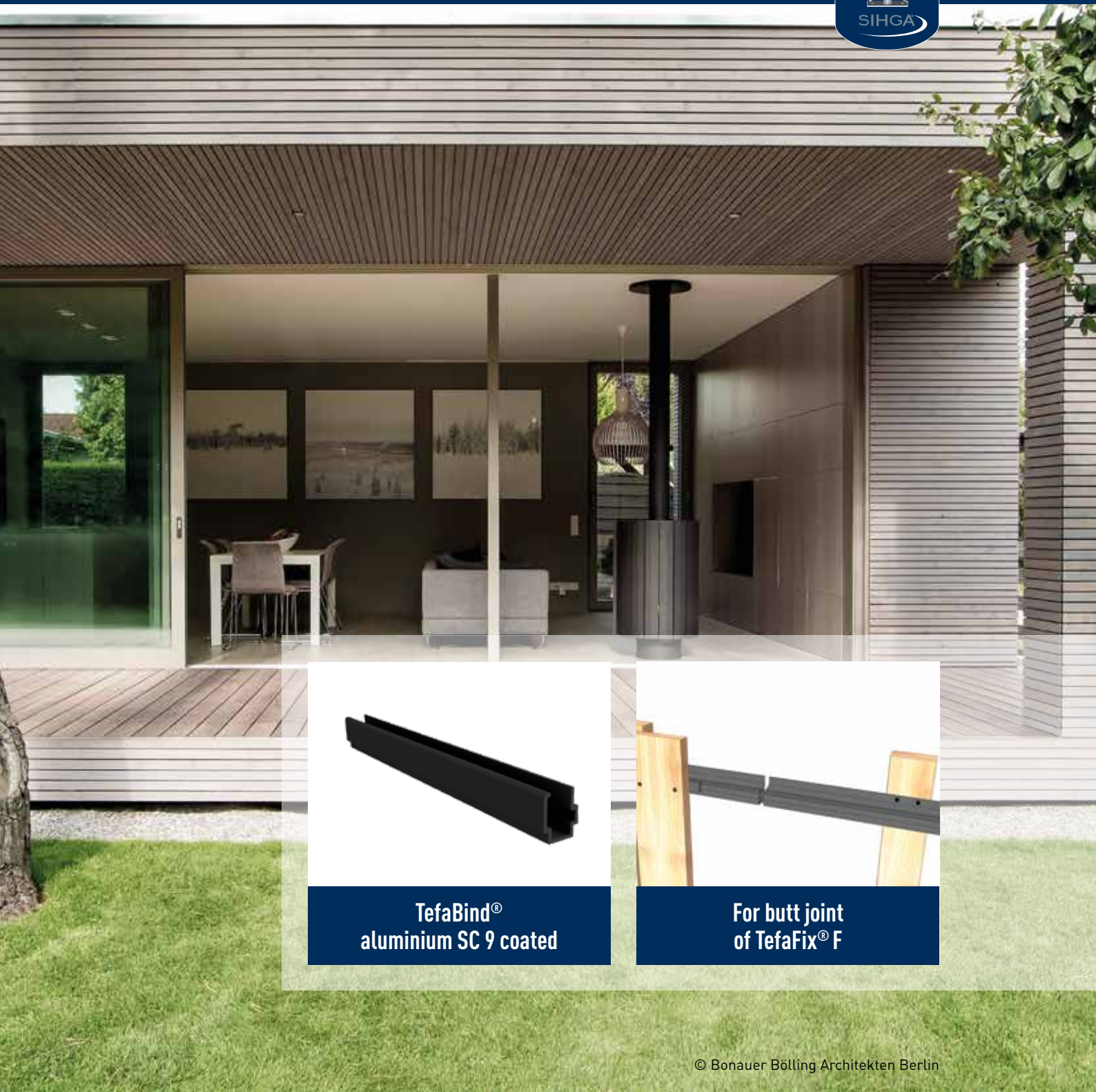
SIHGA®		TefaFlex® F		
montagepack		Length	Width	Height
Art. No.	PU			[mm]
52126	300	40	20	8,5



### 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



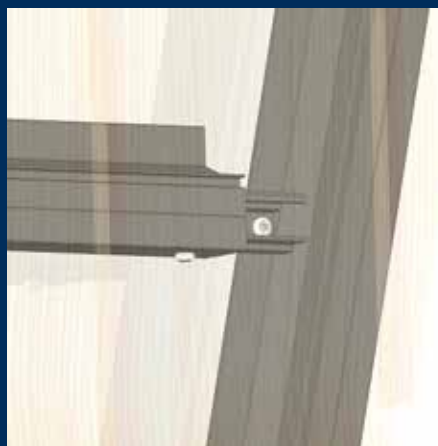
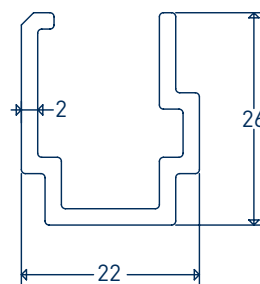
**SIHGA® Feature****YOUR Benefit**

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

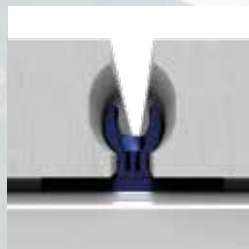
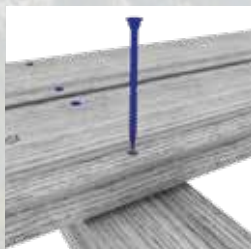
BohrFix® FB

Ø 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.



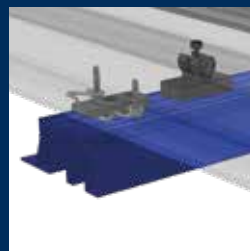
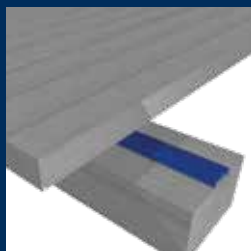


### Fastening Visible

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
Rest-X®	104
TeFix®	122
TerrassenFix® Countersink BS	127
TerrassenFix® Template TFS	128
TerrassenFix® Depth Limiter TTB	129

### 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	108
SenoFix® SX	110
TerrassenFix® Clamp III	130
Joint Spacer Clamp FAZ	131



## Constructive Wood Protection

Terrace Guarantee	62
Design Recommendations	64
HFA inspected	66
Terrassenplaner®	68
KompeFix® II KF	98
TerrassenFix® II TF	124
TerrassenFix® II Set TFL	126
TerrassenFix® Countersink BS	127
TerrassenFix® Template TFS	128
TerrassenFix® Depth Limiter TTB	129
TerrassenFix Aqua®	132

## 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	112
TefaFix® T	114
TefaFlex® T	116
TefaBind®	118
TerrassenFix® Air	120



# 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.

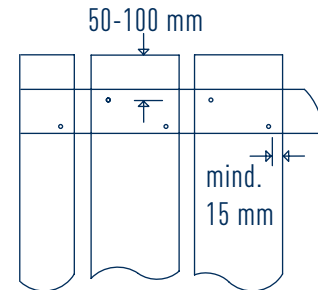
The exclusive place of jurisdiction for any claims arising from this is the materially competent court for 4600 Wels | Austria. The General Terms and Conditions of SIHGA® GmbH shall apply.

# Design Recommendations - for Terrace Construction

Wood moisture-content must not be more than 16 %  $\pm$  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!

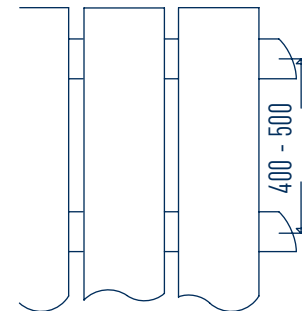


**For the centre distance from the substructure, we recommend, for:**

Thermo-wood and hardwood: 400 - 450 mm

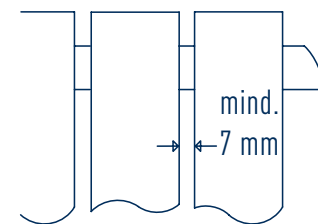
Larch: 400 - 500 mm

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.

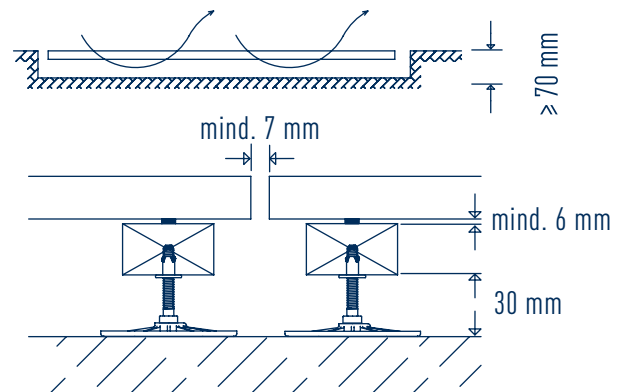


The joint distance for plank widths 90 - 120 mm should be at least 7 mm or 6 % of the plank width!

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  $\geq 70$  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.



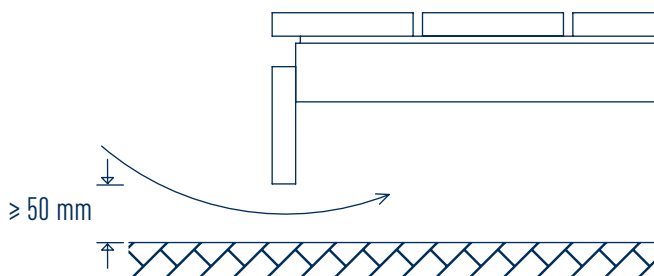
## SIHGA® TIP:

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!

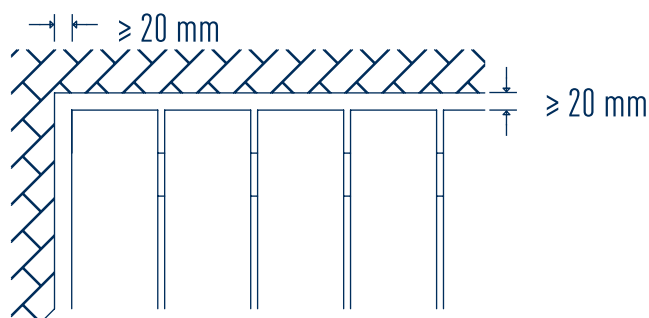
The longitudinal joint of decking planks should not be completed directly on the substructure, but between two substructures. Even with the longitudinal joint, a gap of at least 7 mm must be maintained.

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  $\geq 50$  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  $\geq 20$  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 - Ø	Recommended Screw
Softwood	Softwood	Recommended	Ø of screw	L-GoFix® MS
Hardwood	Hardwood	Required	Ø of screw +0.5 - 1 mm	L-GoFix® MS or L-BohrFix® MB A4
All	TefaFix®, Symbio-Fix® and Aluminium	Required	Ø 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 Ø screw



# HFA inspected



SIHGA® Terrace Fastening



# 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®

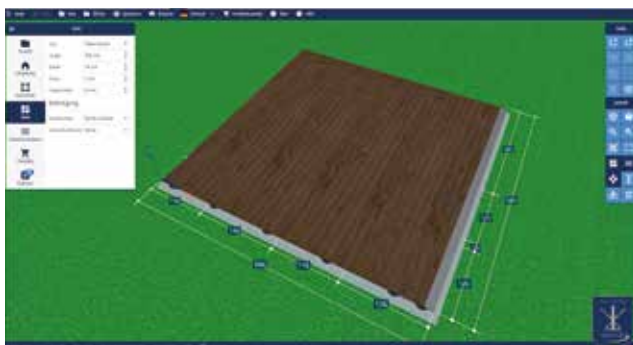
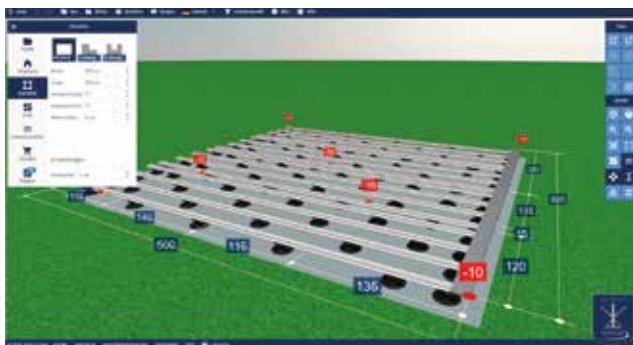
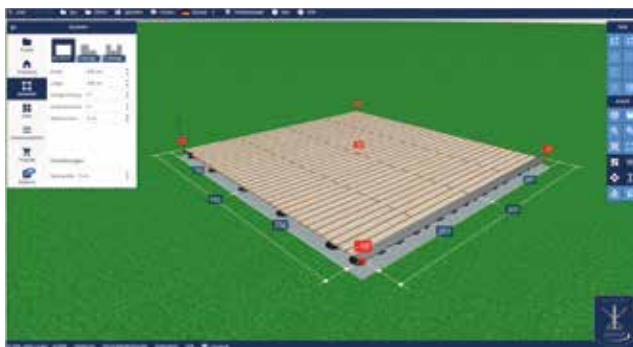
HFA inspected in combination with Alu-TeFix® and TefaFix®

## TefaBind®

HFA inspected in combination with TefaFix®

# Terrassenplaner<sup>®</sup>





## New features of Terrace Planner 2.1.5

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

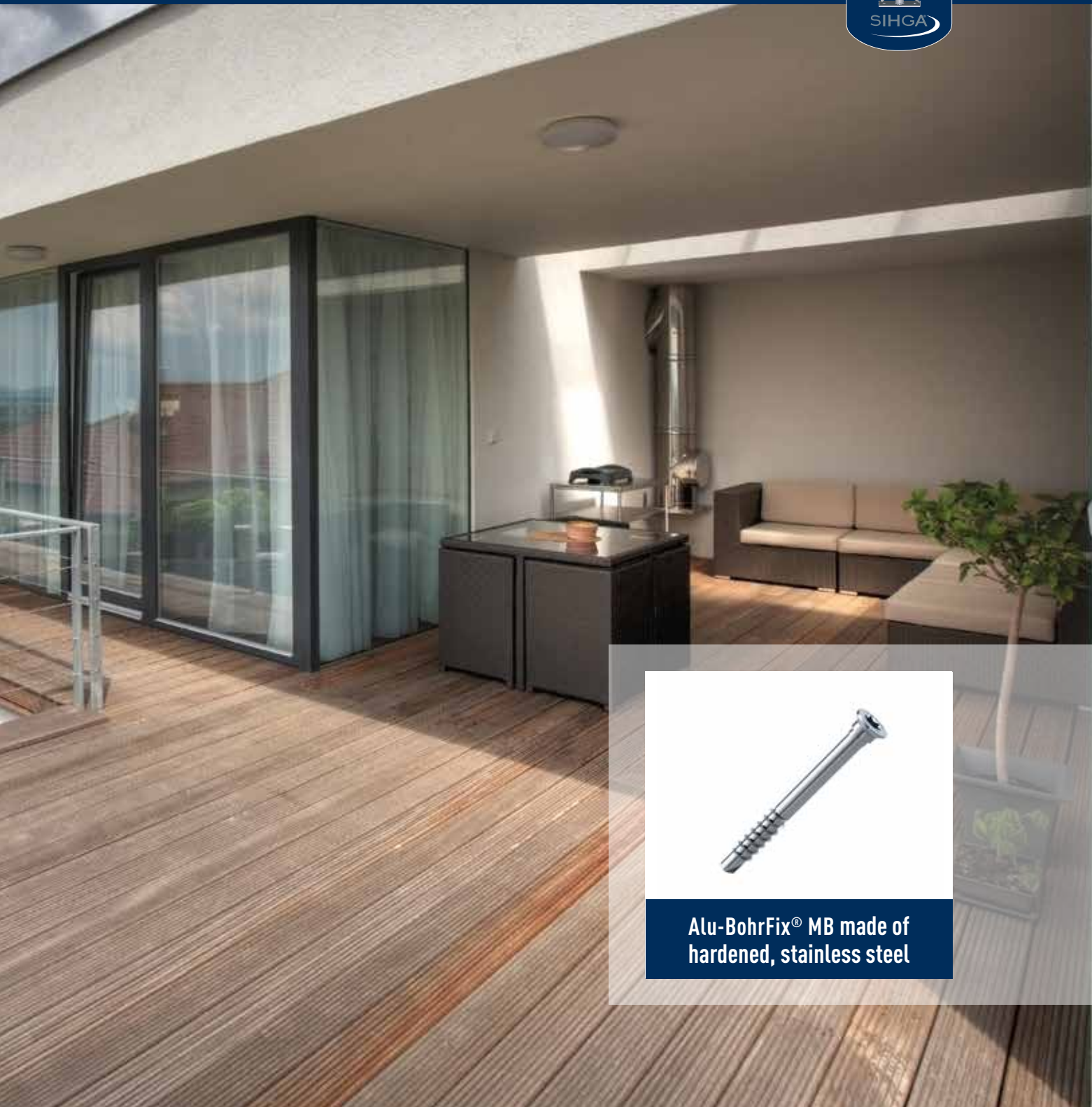


### SIHGA® TIP:

Plan your project and order the required components in the webshop at [www.sihga.com](http://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

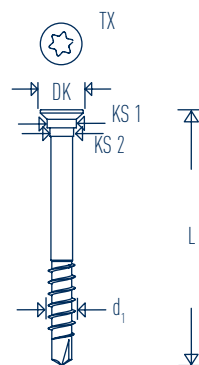
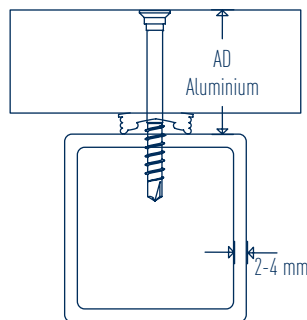
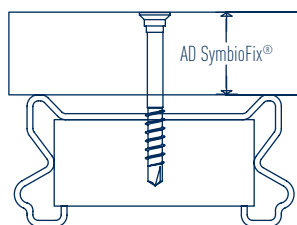
including SIHGAFIX® non-corrosive, system pin and installation instructions

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		Dimensions [mm]				
montagepack		Alu-BohrFix® MB		from	to	from	to	Alu-BohrFix® MB				
Art. No.	PU	d, x L		[mm]	[mm]	[mm]	[mm]	d <sub>1</sub>	TX	DK	KS 1	KS 1
26006	200	<b>5,5 x 46</b>		21	27	28	33	5,5	25	8,5	5,8	4,7
26016	200	<b>5,5 x 51</b>		27	34	33	38					
26026	200	<b>5,5 x 61</b>		36	43	43	48					



### 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

Alu-TeFix® made of hardened steel fastens wood on TefaFix® T/F without predrilling and countersinking

as TefaFix® absorbs the axial movement caused by 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 calculation

[www.sihga.com/Online Calculation](http://www.sihga.com/Online%20Calculation)

HFA inspected in combination with TefaFix® and larch

for details please see page 66

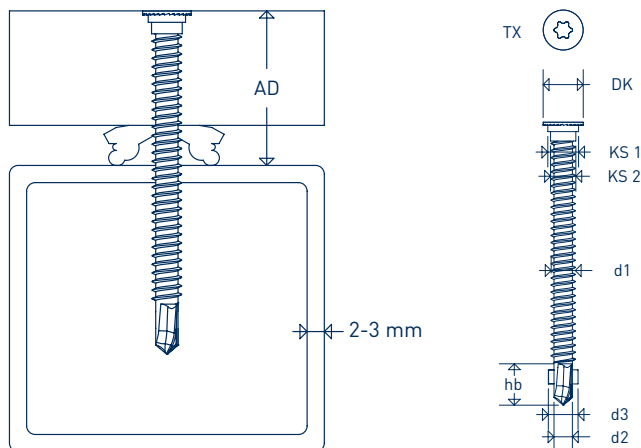
SIHGA® montagepack		Dimension Alu-TeFix®	Add-on Part up to AD	Characteristic Values*			Substructure TefaFix®T/F
Art. Nr.	PU	d1 x L	[mm]	Head	Thread	Alu-Wood	
54016	200	<b>5,0 x 51</b>	33	1,96	1,30	2,95	yes
54026	200	<b>5,0 x 61</b>	43	1,96	1,30	3,22	yes

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

\* characteristic values for dimensioning according to EC 5 and for strength class p<sub>k</sub> 490 kg/m<sup>3</sup> (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

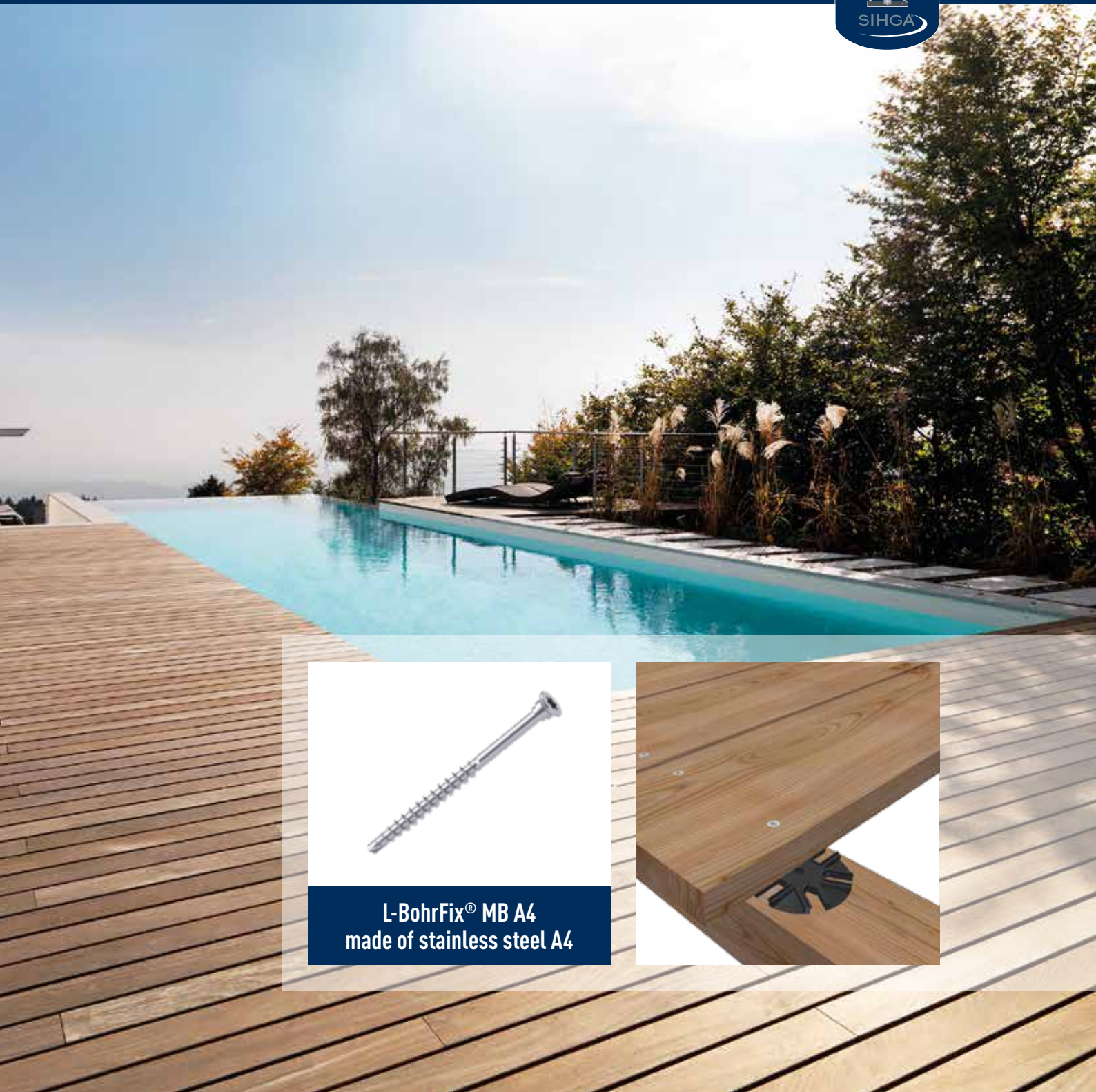


### SIHGA® TIP:

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<sup>®</sup> MB A4



L-BohrFix<sup>®</sup> MB A4  
made of stainless steel A4

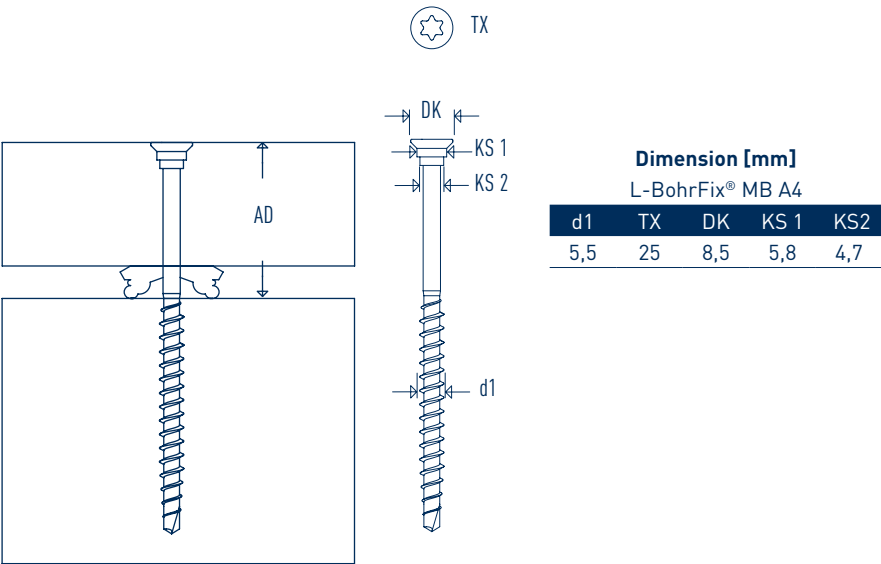


# SIHGA® Feature

# 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
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	<a href="http://www.sihga.com/Online Calculation Terrace">www.sihga.com/Online Calculation Terrace</a>

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



## 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

fastens wood to steel without pre-drilling

drill bit with special shape and thread lock flanks

made from hardened stainless steel

including SIHGAFIX® stainless steel, Systemstift® and installation instructions

design values

## YOUR Benefit

simply screw through up to 5 mm thick steel, up to quality S355, in one working step

fastens woods up to 90 mm to steel in one step

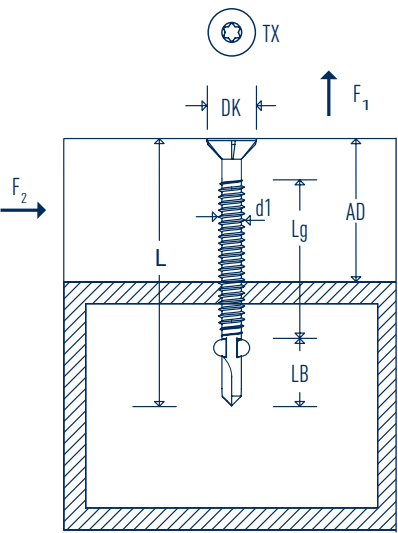
rust-free fastening, is extremely break-proof

time-saving, practical, precise, all accessories enclosed, SIHGAFIX® stainless steel prevents rust from external sources and also screws into deep grooves

[www.sihga.com/Online Calculation Terrace](http://www.sihga.com/Online Calculation Terrace)

SIHGA® montagepack		Dimension S-BohrFix® SBF	Installation Part AD	Thread Lg	Drilling Capacity Steel	Recommended Loads	
Art. No.	PU	d1 x L	[mm]	[mm]	[mm]	Tensile Force F <sub>1</sub> [kN]	Shear Force F <sub>2</sub> [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®



DielenFix®



EDELSTAHL®  
Rost  
frei

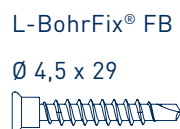
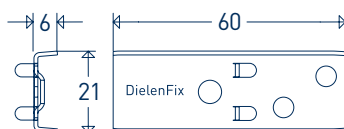
## SIHGA® Feature

## YOUR Benefit

fastens planks invisibly screwed; developed, patented and made in Austria	elegant look and long-lasting fastening
suitable for almost all wood types	reduces fault ratio when delivering the material to the construction site, this saves time and reduces storage costs
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 $\geq 8$ mm	individual planks can be disassembled or replaced

SIHGA® objektpack®		Dimension DielenFix® DF	Plank Thickness mind.	Average Quantity/m <sup>2</sup> *
Art. No.	PU	Type	[mm]	Pieces
34119	300	<b>DF 17</b>	19	33
34129	300	<b>DF 22</b>	24	33
34139	300	<b>DF 28</b>	30	33

\*assuming: Axial distance substructure = 0.5 m and plank width = 12 cm  
 calculation quantity = m<sup>2</sup> : distance substructure [m] : (width terrace plank [m] + joint [m] x 2)



### SIHGA® TIP:

Online calculation at [www.sihga.com](http://www.sihga.com) (terrace); as substructure we recommend the TefaFix® T (page 114).

# FugiFix® FF



FugiFix® FF made of  
SIHGAMID®





SIHGA® Feature

universal joint spacer for terraces

made from SIHGAMID®, the fibre-glass reinforced plastic originating from space research

because of the special geometry

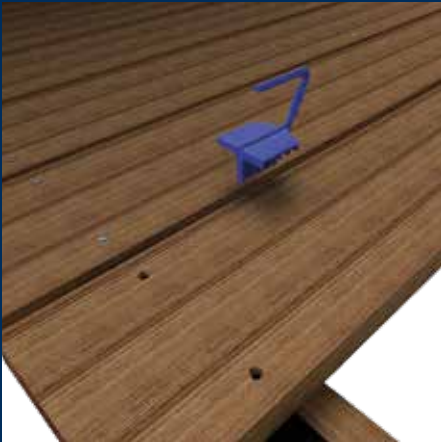
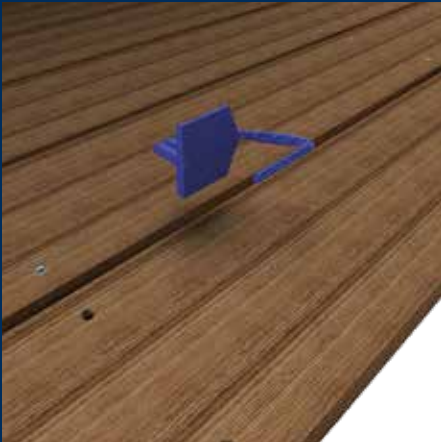
YOUR Benefit

joint widths of either 5, 6, 7 or 8 mm can be set quickly

extremely heat-, frost- and UV-resistant

the FugiFix® FF cannot fall into the joint and can easily be removed again

SIHGA® montagepack		Dimension FugiFix®	Joint Widths
Art. No.	PU	Type	[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	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 from SIHGAMID®, the fibre-glass reinforced plastic originating from space research	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



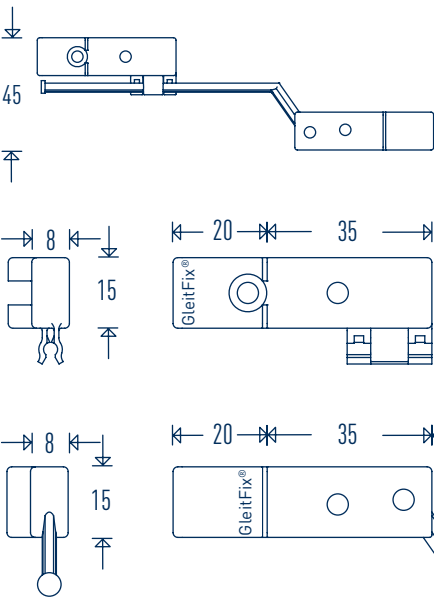
SIHGA® TIP:

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

# SIHGA® Feature

# YOUR Benefit

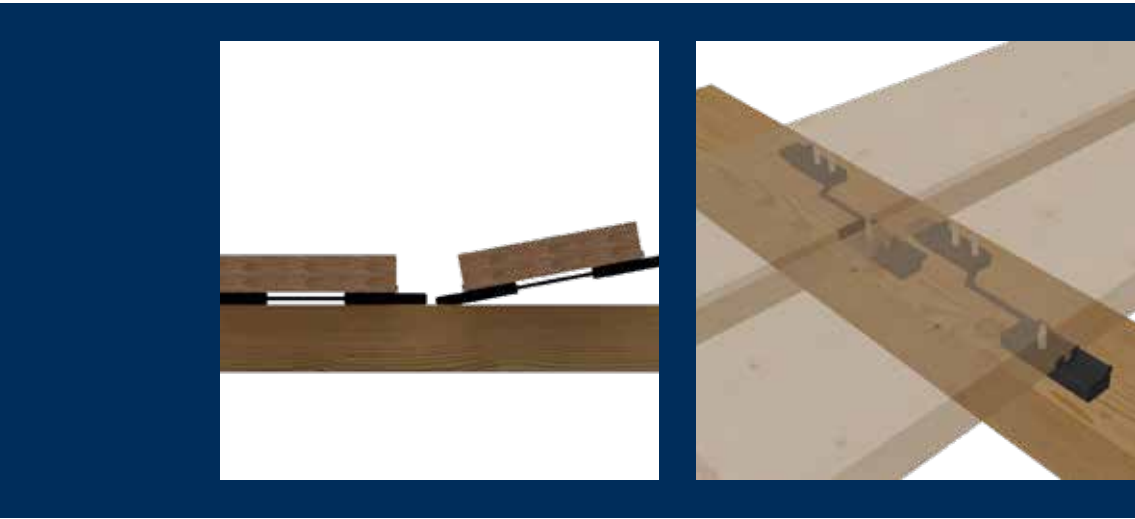
connector height with 8 mm for optimal ventilation	ensures optimum constructive wood protection; prevents accumulations of water between the plank and substructure
with joint spacing $\geq 8$ mm	individual planks can be disassembled or replaced
includes SIHGAFIX® stainless steel, from hardened stainless 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. [mm]	Average Quantity / m²*
Art. No.	PU	Type		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  
Ø 4,2 x 17/22/28



**SIHGA® TIP:** For fastening start and end planks we recommend GleitFix® AE.

# GleitFix® AE

## SIHGA® Feature

screw-fastening of start and end planks invisible

planks remain undamaged on all visible surfaces

special compensation system compensates for the natural swelling and shrinkage of the planks

optionally also with tested stainless steel system screws with drill bit in A4 (GleitFix® AE CS)

includes SIHGAFIX® stainless steel, from hardened stainless steel BohrFix® FB with drill bit and installation instructions

## YOUR Benefit

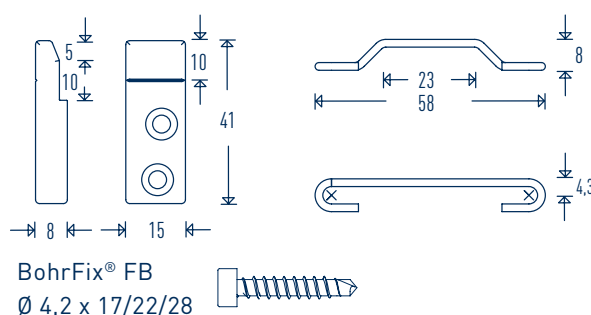
elegant look and long-lasting fastening

timber is screwed from below, this results in a longer lifespan and prevents rot, as well as direct weathering

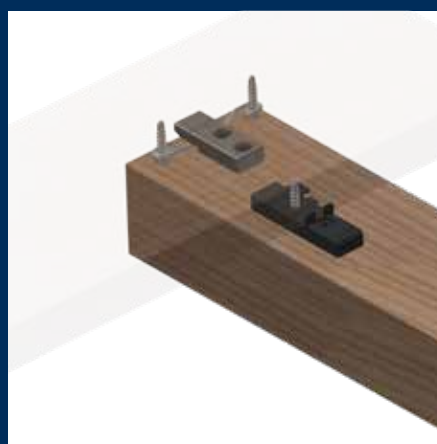
reduces the crack and break behaviour of the timber during these natural processes

stainless steel A4 BohrFix® FB screws for increased risk of corrosion when exposed to salt and chlorine

no rust from external sources, screws do not shear or break; time-saving, practical, precise, all accessories are enclosed



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



## SIHGA® TIP:

GleitFix® AE is also compatible with SenoFix® FT\*.

\* Available from specialist timber dealers



# JustiFix<sup>®</sup> JV

## SIHGA<sup>®</sup> Feature

the fleece under the terrace

1.6 x 10 metre area

monitored production from polypropylene, with a special recipe

## YOUR Benefit

hinders plant growth and is water-permeable

16 m<sup>2</sup> easy to lay

remains permanently dimensionally stable, is heat-, frost- and UV-resistant

SIHGA <sup>®</sup> montagepack		Dimension JustiFix <sup>®</sup> JV	Grammage	Dimension	
Art. No.	PU	Type	[g/m <sup>2</sup> ]	Width x Length [m]	Area [m <sup>2</sup> ]
34956	1	JV	50	1,6 x 10	16



**JustiFix<sup>®</sup> JV**  
**made from polypropylene**



# JustiFix® J

## SIHGA® Feature

waterproof space between substructure and foundation

manufactured from high quality, black EPDM special rubber

made in Austria

minimises vibrations

is just placed down, three material thicknesses to choose from

including Systemstift® and installation instructions

## YOUR Benefit

as a result of this distance, the substructure remains dry and the terrace is ventilated

remains permanently dimensionally stable, is heat-, frost- and UV-resistant

local quality and added-value

increases walking comfort on the terrace

time-saving, no installation work, can be stacked as desired

is time-saving and enclosed for practicality

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



# JustiFix® II JM



JustiFix® II JM  
the original



## SIHGA® Feature

height-adjustable distance from 25 to 80 mm between substructure (with the exception of TefaFix® T) and foundation

developed, patented and made in Austria

only for solid foundations, paving, concrete, ... (not on insulating materials or flat roof insulation)

articulated mounting of the base plate

minimises vibrations

load capacity per piece 1.20 kN

slot pattern in the header and nuts in the footer

## YOUR Benefit

this adjustable foot saves up to 50 % working time compared to individual solutions, the substructure remains dry and the terrace breathes

local quality, experience from more than 14 years of terrace construction included

versatile, only three models for the entire range

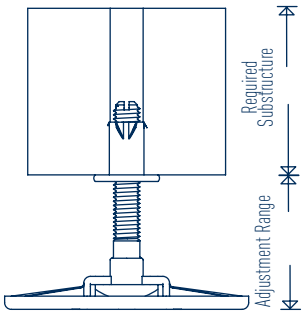
compensates for floor unevenness

increases walking comfort on the terrace

quantity calculation: approx. 4 units/m<sup>2</sup>

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	<b>JM 40</b>	25	40	100	74	25
40866	40	<b>JM 60</b>	25	60	100	74	45
40886	40	<b>JM 80</b>	25	80	100	74	65



### SIHGA® TIP:

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



# Orakelix<sup>®</sup>



Orakelix<sup>®</sup>



SIHGA® Feature

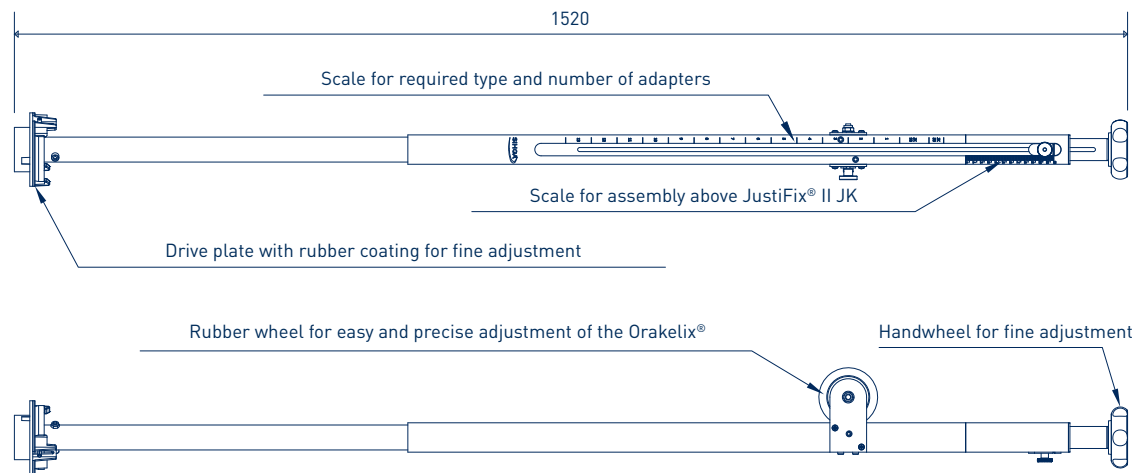
Orakelix® is a groundbreaking tool for terrace builders

YOUR Benefit

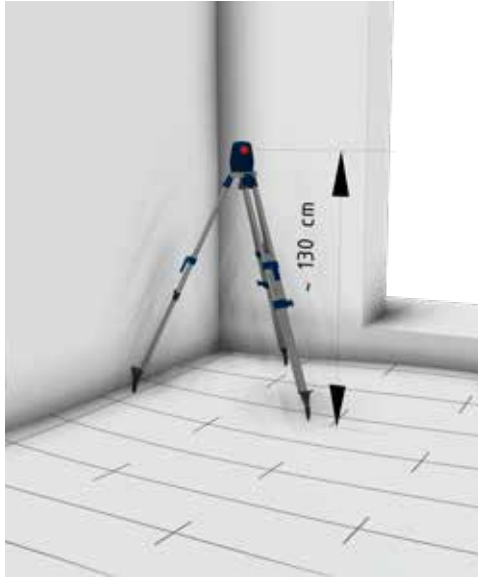
It simplifies the precise prediction of JustiFix® terrace bearings, enables accurate height determination and optimizes ergonomics when adjusting the terrace bearings

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

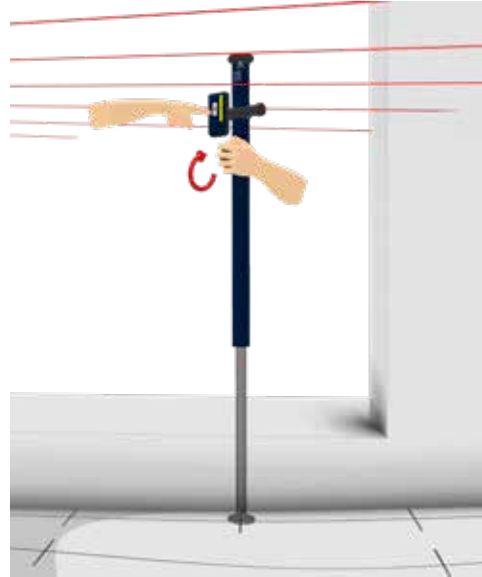
SIHGA®		Orakelix®	
Paket		Length	Weight
Art. No.	PU	[cm]	[kg]
55536	1	152	3,3



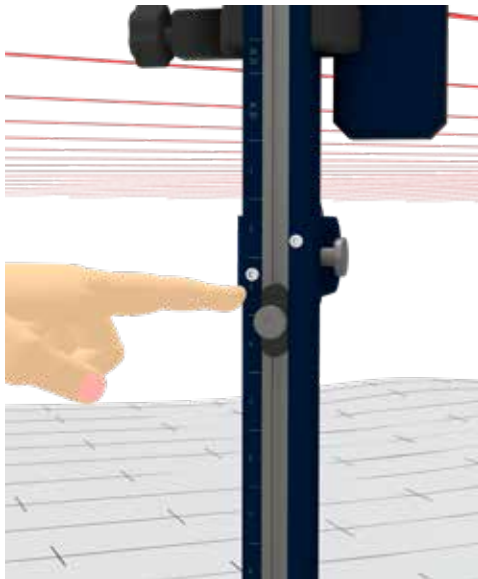
Laser system with receiver (on site)



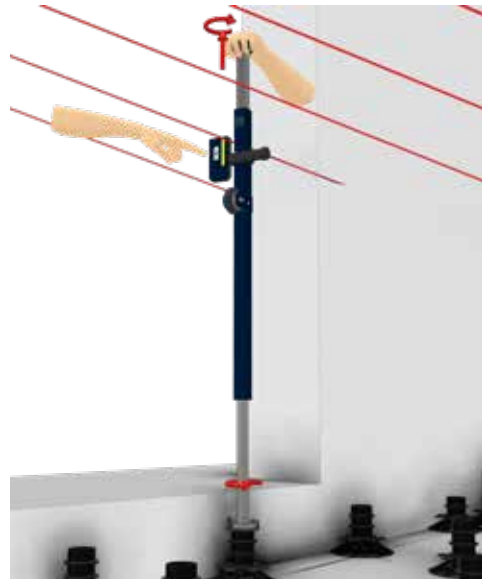
Determination JustiFix® II JK



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



JustiFix® II JK 50 H



JustiFix® II JK 90 H



SIHGA® Feature

Height-adjustable distance between substructure and each foundation

YOUR Benefit

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 m²

SIHGA® montagepack		Dimension JustiFix® II JK	Adjustment range		Support surface
Art. No.	PU	Type	from [mm]	to [mm]	Diameter [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	Height
Art. No.		Type	[mm]
33386	5	<b>35</b>	35
33396	8	<b>70</b>	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	Amount	[mm]	
JustiFix® II JK 90 H/Alu	+	<b>1 x JA 35</b>		85	125
JustiFix® II JK 90 H/Alu	+	<b>2 x JA 35</b>	<b>1 x JA 70</b>	120	160
JustiFix® II JK 90 H/Alu	+	<b>3 x JA 35</b>		155	195
JustiFix® II JK 90 H/Alu	+	<b>4 x JA 35</b>	<b>2 x JA 70</b>	190	230
JustiFix® II JK 90 H/Alu	+	<b>5 x JA 35</b>		225	265
JustiFix® II JK 90 H/Alu	+	<b>6 x JA 35</b>	<b>3 x JA 70</b>	260	300
JustiFix® II JK 90 H/Alu	+	<b>7 x JA 35</b>	or	295	335
JustiFix® II JK 90 H/Alu	+	<b>8 x JA 35</b>		330	370
JustiFix® II JK 90 H/Alu	+	<b>9 x JA 35</b>		365	405
JustiFix® II JK 90 H/Alu	+	<b>10 x JA 35</b>		400	440
JustiFix® II JK 90 H/Alu	+	<b>11 x JA 35</b>		435	475
JustiFix® II JK 90 H/Alu	+	<b>12 x JA 35</b>		470	510
JustiFix® II JK 90 H/Alu	+	<b>13 x JA 35</b>	<b>6 x JA 70</b>	505	545



## SIHGA® TIP:

Observe design recommendations (system catalogue p. 64).

# JustiFix<sup>®</sup> K



JustiFix<sup>®</sup> K  
made from cork



# JustiFix® K

## SIHGA® Feature

cork interlayer as protection for flat roof foils

does not contain any plasticisers

dimensions 250 x 250 x 2 mm

made of chemically neutral material

cork as a flexible material

quantity calculation per m<sup>2</sup>

## YOUR Benefit

protects against mechanical damage to the sealing level

prevents a plasticizer migration between flat roof foil and adjustable feet

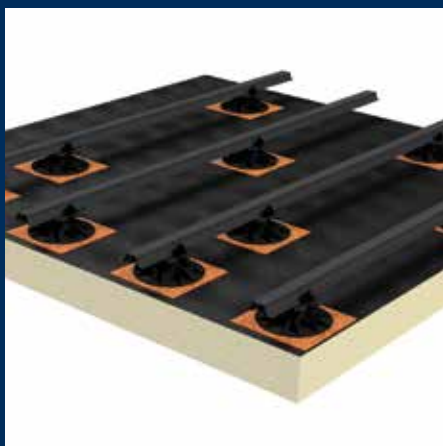
optimal for adjustment feet JustiFix® (II) JK

cork is resistant to moisture, does not rot and is resistant against most acids

inhibits impact sound, noise-insulating is non-slip and pressure-stable

1 : distance substructure in m : distance of the terrace feet

SIHGA®		Dimension
montagepack		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<sup>®</sup> II KF

SIHGA <sup>®</sup> 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 <sup>2</sup>	1 : distance substructure [m] : 4.5
includes installation instructions	is time-saving and enclosed for practicality
HFA inspected in combination with TeFix <sup>®</sup>	for details please see page 66

SIHGA <sup>®</sup> montagepack		Dimension KompeFix <sup>®</sup>		Dimension [mm]	
Art. No.	PU	Type	Width	Height	Length
41006	8 x 4,5 m	<b>II KF</b>	21	8	4500



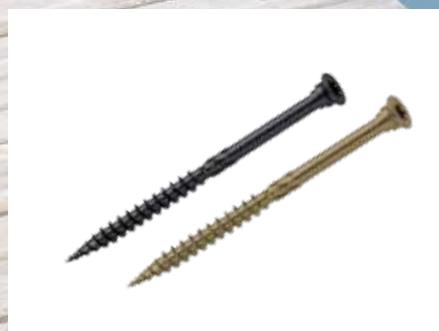
**KompeFix<sup>®</sup> II KF**  
made from polyvinylchloride



# L-GoFix® MS



L-GoFix® MS made from  
hardened stainless steel



L-GoFix® MS with additional  
SC 9 / SC 11 coating

**SIHGA® Feature**

**YOUR Benefit**

fastens wood to wood without pre-drilling and without countersinking	prevents crack formation or splitting of the timbers, even board materials, saves work time, additional pre-drilling extends the life of the wood
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 without splitting
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) and antique look (SC 11 coating)	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



**L-GoFix® MS with additional  
SC 11 coating**



**SIHGA® TIP:**

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

## SIHGA® Feature

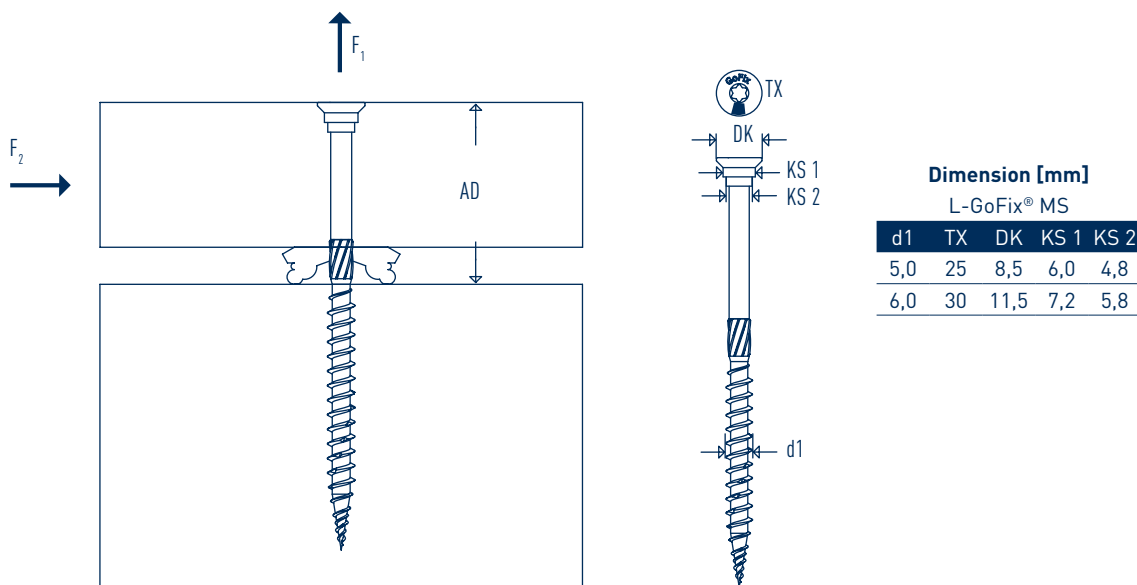
quantity calculation

including SIHGAFIX® stainless steel, Systemstift® and installation instructions

## YOUR Benefit

[www.sihga.com](http://www.sihga.com) / Online Calculation Terrace

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

Subject to technical modifications and errors. Status of approval 12.2022

\* also available with SC 9 coating

° also available with SC 11 coating

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



### SIHGA® TIP:

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



# L-GoFix<sup>®</sup> MS A2

## SIHGA<sup>®</sup> Feature

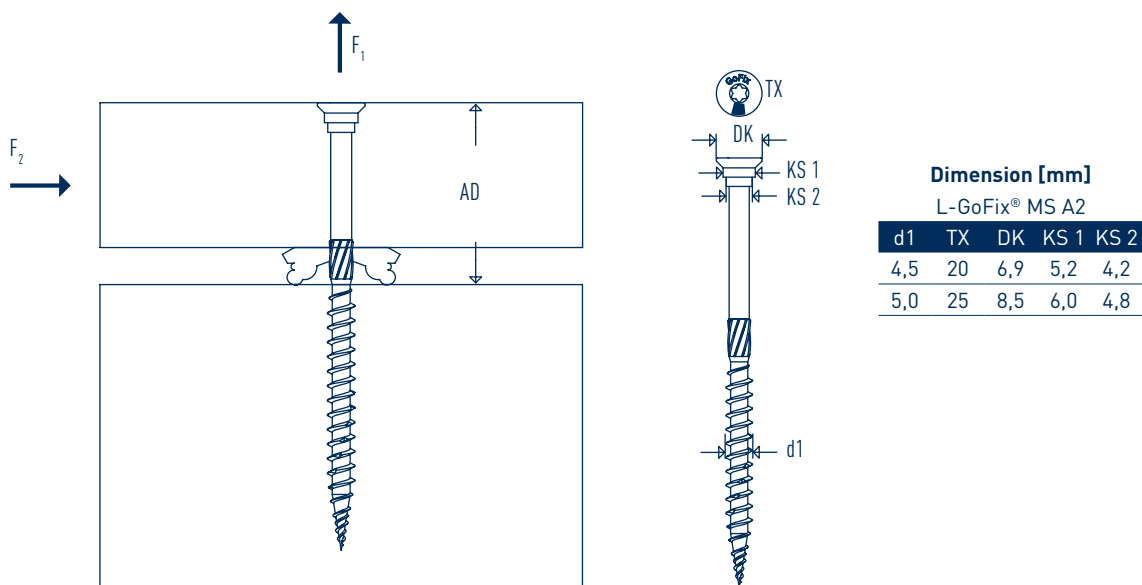
## YOUR Benefit

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 <sup>®</sup> point with special shape	guarantees fast setting of screws without splitting
SIHGA <sup>®</sup> ribs on shaft and slip coating	light, fast rotation and optimum fit in the wood are guaranteed
including SIHGAFIX <sup>®</sup> stainless steel, Systemstift <sup>®</sup> and installation instructions	time-saving, practical, precise, all accessories enclosed; SIHGAFIX <sup>®</sup> 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 Ø 3 mm. If in doubt, we recommend carrying out pretrials



**L-GoFix<sup>®</sup> MS A2**  
made of A2 stainless steel



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

Subject to technical modifications and errors. Status of approval 12.2022

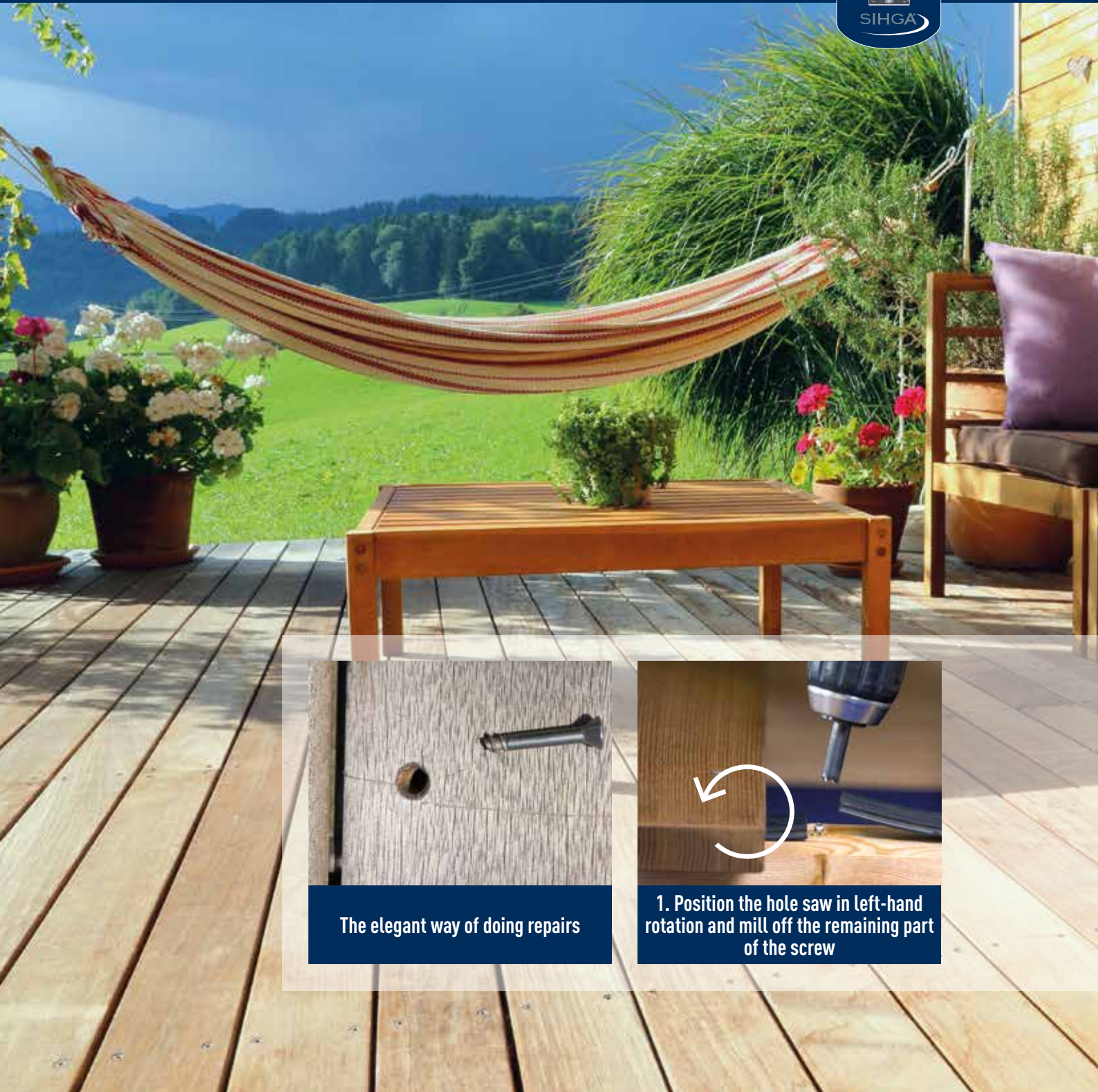
\*\* characteristic values for dimensioning according to EC 5 and for strength class pk 490 kg/m³ (Larch)



### 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).

# Rest-X<sup>®</sup>



The elegant way of doing repairs



1. Position the hole saw in left-hand rotation and mill off the remaining part of the screw

# Screw breakage in the terrace - what now?

Imagine, you are just installing the second-to-last decking board on a 20 m<sup>2</sup> large teak terrace – the final stretch – the cordless screwdriver is showing no sign of getting tired and a well-deserved relaxing evening awaits... or does it?

Suddenly a screw breaks off – after around 600 have been perfectly inserted and screwed in place. A nightmare!

With the broken screw part in your hands, you note that the thread of the screw is lodged in the aluminium sub-structure – broken off flush at its upper edge – no chance of removing the remainder of the screw with a tool such as pliers or the like.

## **You are now spoilt for choice:**

Either you break your customer promise of delivering a perfect wooden terrace and add a new screw alongside the old drill hole in the decking board or you insert the new screw at an angle into the old drill hole.

In both cases, you are putting customer satisfaction at stake – risking both customer dissatisfaction and the loss of your own good reputation.

Or, you remove as many of the decking boards necessary in order to replace the damaged aluminium sub-structure rail.

No evening off in sight and a tiring, tedious and above all costly journey before you in your role as a terrace installer.

But now SIHGA® has found a solution:

## **Rest-X® – the elegant way of doing repairs**

Scenarios like this are a thing of the past thanks to the SIHGA® Rest-X®!

SIHGA® is the first and only company to provide a tool which enables you to repair damage screws QUICKLY, PROFESSIONALLY AND COST-EFFECTIVELY.

The faulty screw is replaced, the decking board remains intact and the surface of the terrace looks just like new.

Based on survey results\*, **investment in a Rest-X® set will pay for itself in less than 2 years!**



**2. Unscrew the remaining part of the screw with the left-bolt extractor in left-hand rotation**



**3. Screw in the new screw**



# YOUR Benefit

with Rest-X®, it is possible to repair individual broken screws WITHOUT having to extensively dismantle the terrace

the new screw can be screwed STRAIGHT into the old drill hole

1 Rest-X® set can repair 100 damaged screws without the need for replacing any parts of the terrace decking

works with both wood and aluminium sub-structures

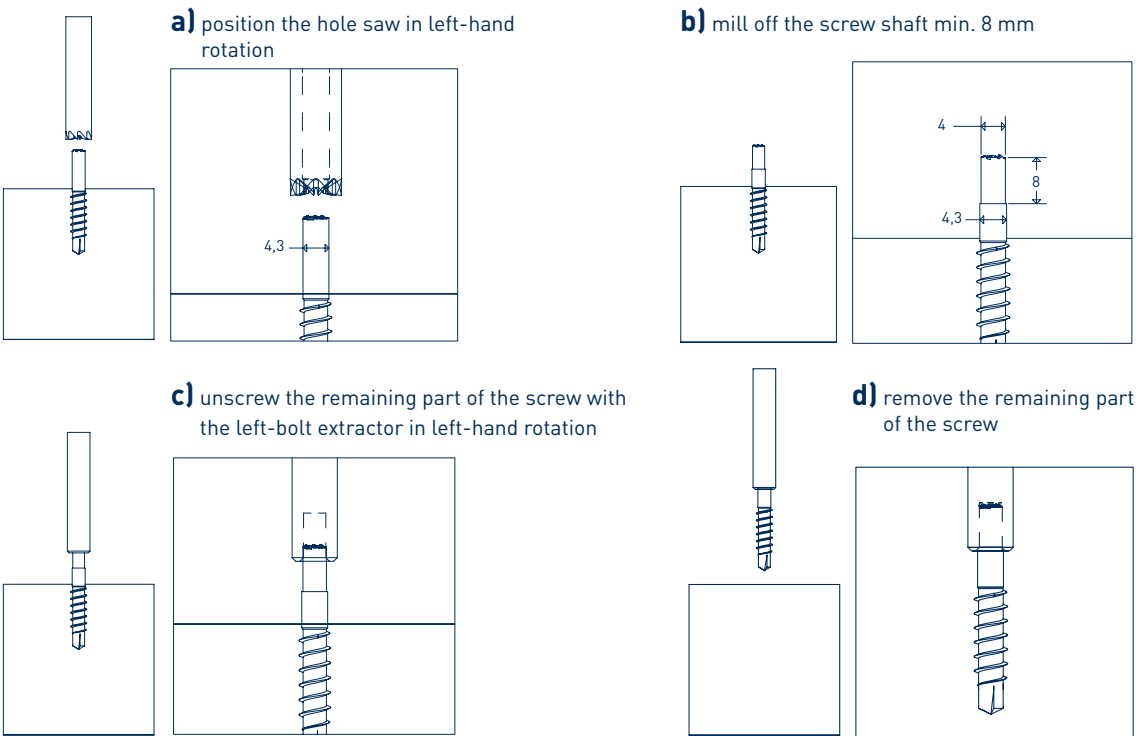
only one replacement screw is required for each defective screw when repairing wooden sub-structures

Rest-X® is suitable for stainless steel screws of Ø 5 mm and Ø 5.5 mm (by all manufacturers)

incl. SIHGAFIX®, hole saw, screw extractor and HSS drill

one set – countless applications

## Best Practice for Substructure Made of Wood and Aluminium



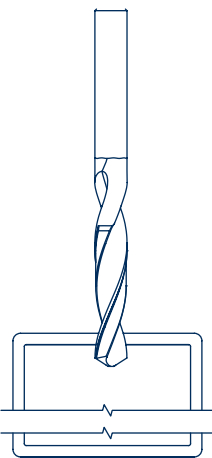
SIHGA® Rest-X®					
montagepack		Hole Saw	Screw Extractor	HSS Drill	SIHGAFIX®
Art. No.	PU	Ø [mm]	Ø [mm]	Ø [mm]	
34802	1	8,5 / 4,0	7,5 / M 4,5 left	8,5	TX 25 and 30

# Further Procedure in Aluminium Substructure

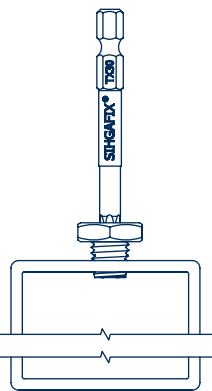
## YOUR Benefit

in the case of repairing aluminium sub-structures, a thread insert plus a replacement screw are required for each faulty screw (20 are included in one montagepack)

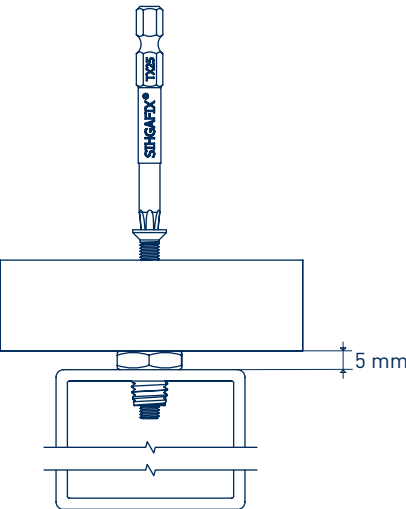
a) drill the hole with diameter 8.5 mm



b) screw in the thread insert with TX 30



c) screw in the screw M 5 x 50 A2 with TX 25



SIHGA® Rest-X® San-Set			
montagepack		Thread insert	Drill
Art. No.	PU	Ø [mm]	Ø x L [mm]
34812	20	M 5	5 x 50

## Is this even worth it?

**\* Results of a survey of 1059 carpenters, joiners, dealers, gardeners and landscape designers from August 2020:**

- investment in this tool pays for itself in less than 2 years
- an average of 2.2 cases of broken screws across terrace areas (during or after installation) per year
- on average 5 to 6 affected screws per case of damage
- every 7<sup>th</sup> case of damage on average involves the terrace being extensively dismantled
- average lifespan of Rest-X® is over 8 years (if Rest-X® is used for all cases of damage)



### SIHGA® TIP:

Remove the screw in aluminium substructure, drill out the aluminium by using the HSS drill 8.5 mm and refix the board by using the Rest-X®-thread insert together with the screw.

# SenoFix<sup>®</sup> FT



**SenoFix<sup>®</sup> FT**  
for terrace applications



Plank Thickness 20 - 30 mm

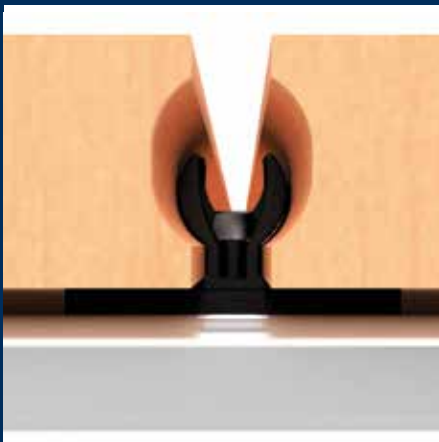
**Optional accessories: SIHGAFIX<sup>®</sup>**  
TX 20, 77 mm; p. 14 & TTB p. 129



## SIHGA® Feature

## YOUR Benefit

for untreated, profiled wooden planks released by SIHGA®	we recommend 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 <sup>2</sup>	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



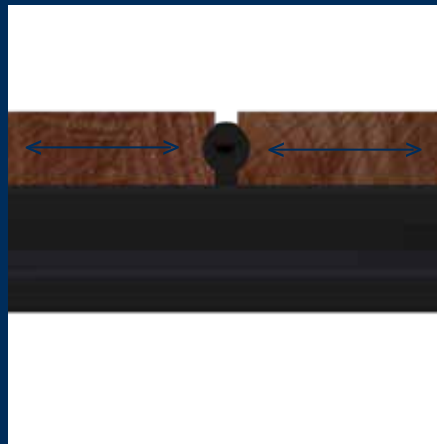
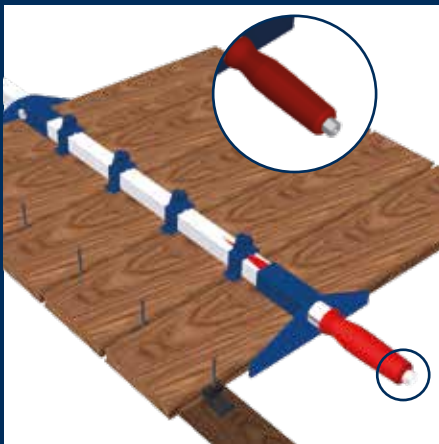
SenoFix® II SX  
the original



## 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 130 – 131)
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 m²	1:substructure spacing [m]:(board width [m] + joint [m])



### SIHGA® TIP:

Note design recommendations (page 64) and never lay without TerrassenFix® Clamp III (page 130).



# SymbioFix<sup>®</sup> SFT



SymbioFix<sup>®</sup> SFT  
with thermowood core

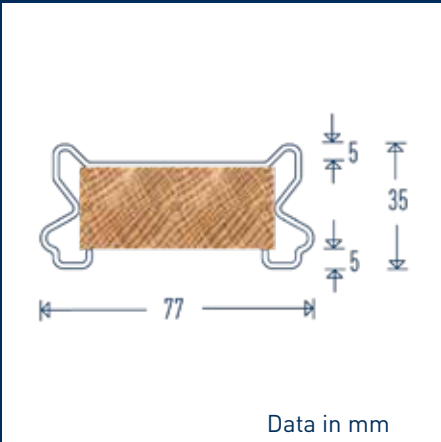


SIHGA® Feature

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, which aluminium alone cannot
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 as a result of length 4400 mm 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

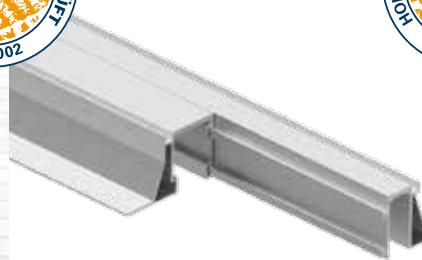
SIHGA® objektpack		SymbioFix®	
Art.No.	PU	Type	Length [mm]
32680	40	<b>SFT 4400</b>	4400
32682	20	<b>SFT 4400</b>	4400



**SIHGA® TIP:** \_\_\_\_\_  
Note design recommendations



# TefaFix<sup>®</sup> T



**TefaFix<sup>®</sup> T**  
aluminium blank



**TefaFix<sup>®</sup> T**  
aluminium SC 9 coated

SIHGA® Feature

2-part system

also available in SC 9 coated

profile open at the bottom

lateral flange

special inner geometry

trapezoidal shape

moveable

aluminium

TefaBind® connector

universally combinable

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

\* Available from specialist timber dealers

YOUR Benefit

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

continuous black joint optic

prefabrication of the parts possible by screwing on the rear

additional fastening options

many connections possible with TefaBind® connector

perfect water drainage guaranteed

endlessly extendable in length

durable, machinable with conventional tools and machines

all, even angled connections possible

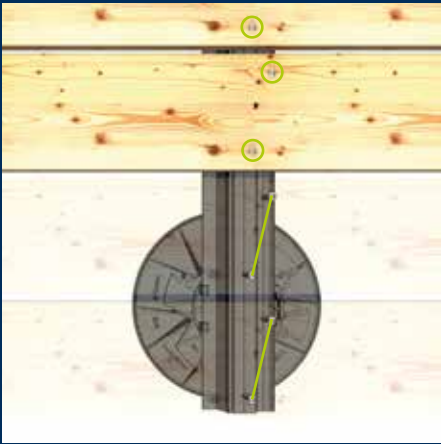
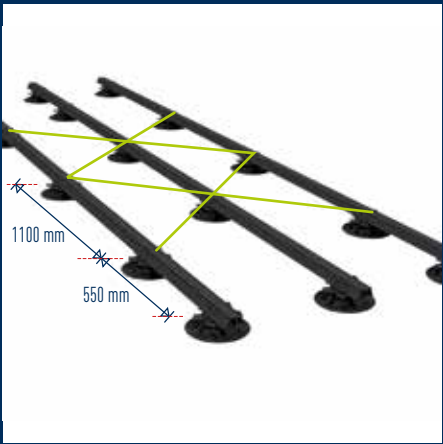
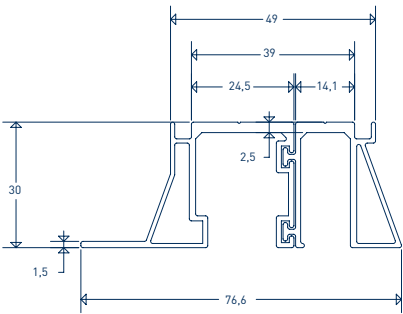
for use also optimally with SenoFix® FT\* and GleitFix® GF

for details please see page 66

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

SIHGA®		TefaFix® T		
objektpack®	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

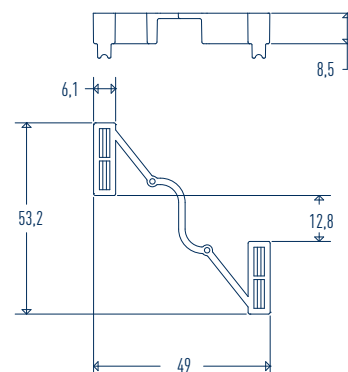
8.5 mm height

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



## 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



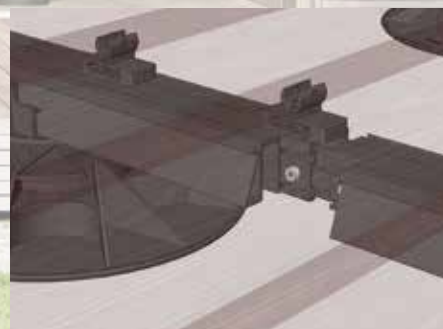
\* Available from specialist timber dealers



# TefaBind®



**TefaBind®**  
aluminium SC 9 coated



**For butt joint**  
of TefaFix® T

© Bonauer Bölling Architekten Berlin



## SIHGA® Feature

TefaBind® connector

SC 9 coated

profile open at the top

Aluminium

all-purpose

including assembly instructions and 2 pcs.  
BohrFix® FB 4.2 x 17 mm per TefaBind®

HFA inspected in combination with TefaFix® T

## YOUR Benefit

for endless joining of TefaFix® T

continuous black joint optic

with the supplied BohrFix® FB 4.2 x 17 mm in  
stainless steel the TefaBind® can be easily fixed

durable, with conventional tools and machines  
workable

all longitudinal and transverse connections can be  
made with the TefaBind®

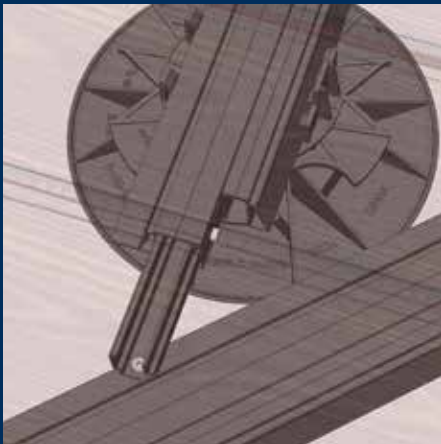
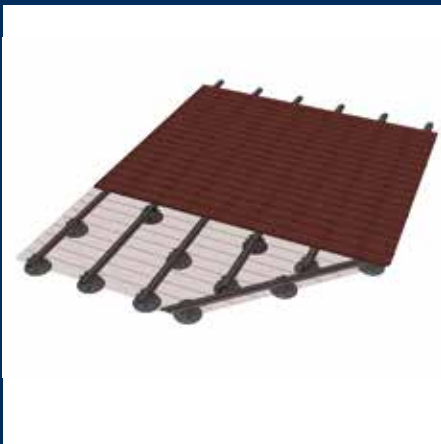
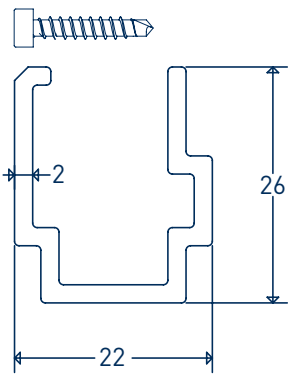
time-saving, practical, precise, all accessories are  
included

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

Ø 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

[www.sihga.com](http://www.sihga.com)



System Catalogue 119

TefaFix® T

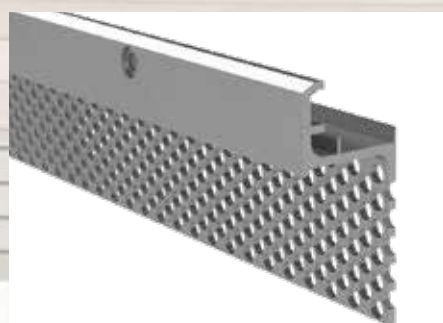
TefaFlex® T

TefaBind® T

TerrassenFix® Air



# TerrassenFix<sup>®</sup> Air



TerrassenFix<sup>®</sup> Air aluminium



Terrace Edge Revetment

© Bonauer Bölling Architekten Berlin



## SIHGA® Feature

special geometry

aluminium

pre-drilled

optimum static solution

profile height

profile interruptions

## YOUR Benefit

can be used as a ventilation element or  
substructure for terrace edge revetment

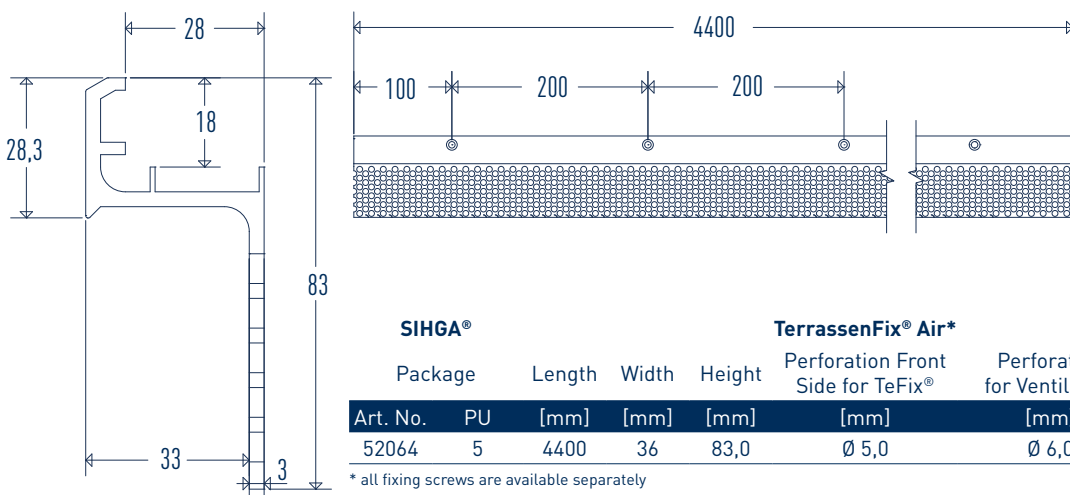
workable with common tools and machines

easy installation using TeFix®

load transfer of the edge cover via the planks

or all plank thicknesses from 20 mm

water drainage and ventilation guaranteed



### 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®



**TeFix® made of hardened  
stainless steel**



Details on  
page 65



ETA-20/0558



SIHGA® Feature

fastens wood to wood without pre-drilling and countersinking  
made of hardened stainless steel

YOUR Benefit

prevents the formation of cracks or splitting in almost all hardwood and thermo-wood; saves working time  
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

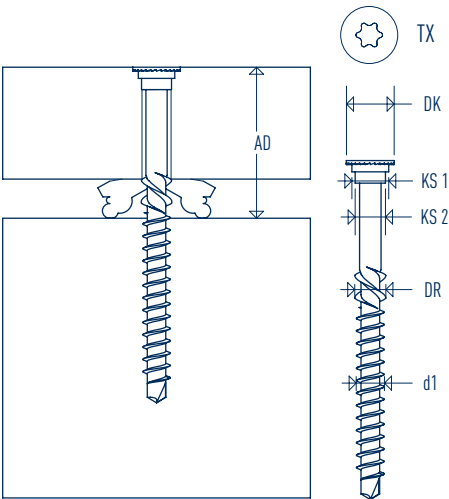
for details please see page 66

SIHGA® montagepack		Dimension TeFix® d1 x L	Installation Part AD [max] [mm]	Characteristic Values**			
				Tensile Force F <sub>t</sub> [kN]		Shear Force F <sub>s</sub> [kN]	
Art. No.	PU			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 pk 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



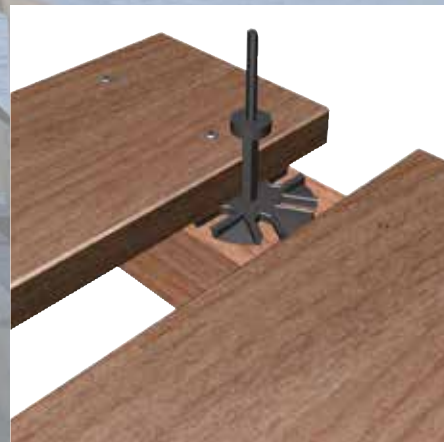
SIHGA® TIP:

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 Ø 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 quantity

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]	Ø x Length	[m²]
40526	100	<b>TFL 60</b>	20	5,0 x 60	7,5
40546	100	<b>TFL 70</b>	24	5,0 x 70	7,5
40566	100	<b>TFL 80</b>	28	5,0 x 80	7,5
40576	100	<b>TFL 90</b>	32	5,0 x 90	7,5



**TerrassenFix® II TF**

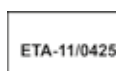


**L-GoFix® MS**



### SIHGA® TIP:

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



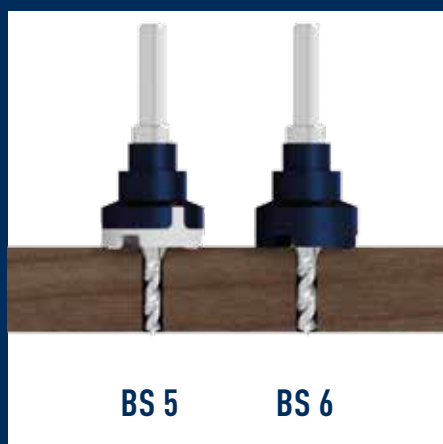
# TerrassenFix® Countersink BS

## 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®		TerrassenFix®	Drill Hole	Drill Depth
minimontagepack		Countersink	Diameter	incl. sink
Art. No.	PU	Type	[mm]	
35052	1	<b>BS 5</b>	5,0	25
35062	1	<b>BS 6</b>	6,0	25



### SIHGA® TIP:

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

# TerrassenFix<sup>®</sup> Template TFS

## SIHGA<sup>®</sup> Feature

pre-drilling and counter sinking of the terrace planks without measuring and marking

developed, patented and made in Austria

for terrace planks from 70 - 205 mm wide

made entirely of anodised aluminium

automatically suitable guide for TerrassenFix<sup>®</sup> Countersink BS

side wood distance adjustable via stops

constructive wood protection is considered

inspection opening for previous screw connections

includes installation instructions

## YOUR Benefit

saves 50 % of working time and creates an attractive and uniformly screwed surface

local quality, experience from more than 14 years of terrace construction included

universally usable in terrace construction

for a long life of the template in everyday construction use

drilling is performed in a precise and consistent position each time

15, 20, 25 mm side wood distances can be optionally selected with ease

a distance of 50 mm is automatically added to the wood end-grain

for rational, fast working

is time-saving and enclosed for practicality

SIHGA <sup>®</sup> montagepack		Dimension TerrassenFix <sup>®</sup> Template	Plank Width min - max
Art. No.	PU	Type	[mm]
34946	1	<b>TFS</b>	70 - 205



**TerrassenFix<sup>®</sup> Template TFS  
for rapid precision**



### SIHGA<sup>®</sup> TIP:

Note design recommendations (page 64).



# TerrassenFix® Depth Limiter TTB

## SIHGA® Feature

specific slip-coupling

rotatable contact slide ring on the end

extends the lifespan of the terrace

suitable for all SIHGAFIX® sizes

Accessories: SIHGAFIX® TX 20, 77 mm

## YOUR Benefit

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

prevents ugly contact traces on the terrace surface

no sink holes arise above the screw heads in the terrace planks here, in which water and dirt accumulate

can be used with every SIHGAFIX®

especially for use with SenoFix® FT\*

\* Available from specialist timber dealers

SIHGA®		Type
minimontagepack		Depth Limiter
Art. No.	PU	Type
34992	1	<b>TTB</b>



**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

[www.sihga.com](http://www.sihga.com)

System Catalogue 129



# 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...

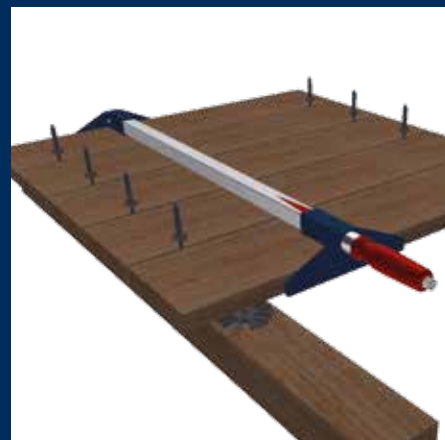
... with additional universal drive, the further development by professionals for professionals

... 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	<b>Clamp III</b>	<b>260</b>	<b>780</b>



### SIHGA® TIP:

The TerrassenFix® Clamp III is the ideal laying tool for floorboard coverings and the precondition for the assembly 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	
Art. No.	PU	Type	Joint Widths [mm]
40646	5	FAZ 6	6,0
40656	5	FAZ 7	7,0
40666	5	FAZ 8	8,0
40686	5	FAZ 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

[www.sihga.com](http://www.sihga.com)



System Catalogue 131

# TerrassenFix Aqua®



**TerrassenFix Aqua®**  
made of aluminium

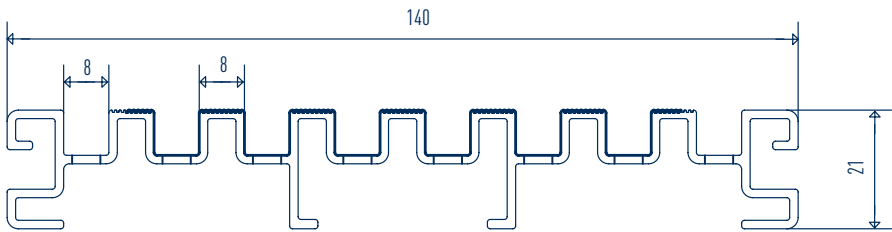


# TerrassenFix Aqua®

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

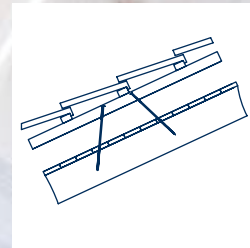
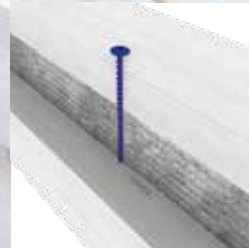
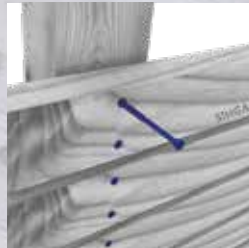
SIHGA® objektpack®			SIHGA® Package		
Art. No.		PU	Art. No.		PU
40459		10	40472		10
Type		Dimensionen	Type		Dimensionen
		Aqua			Aqua
		140 x 1000 x 21*			140 x 4000 x 21

\* incl. F-BohrFix® ES 3,2 x 50 mm



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





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## Roof Insulation

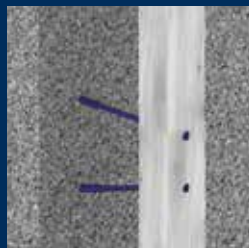
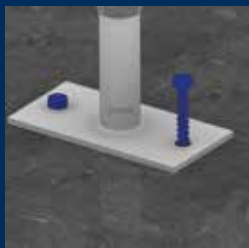
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## Digital wood protection

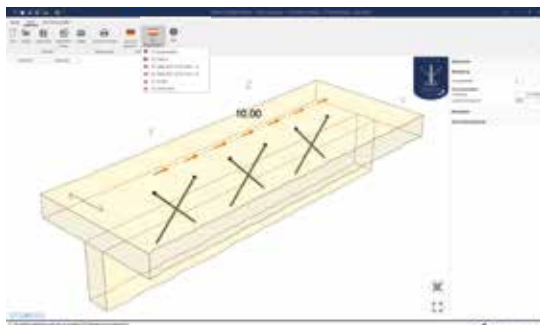
Monitorix®	284
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# S<sup>3</sup> Software



## S<sup>3</sup> - 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](http://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 m³  
 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 ρk with the allocated designations.

Category of exposure time	Order of magnitude	Examples	Use category 1 + 2 k <sub>mod</sub>
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:

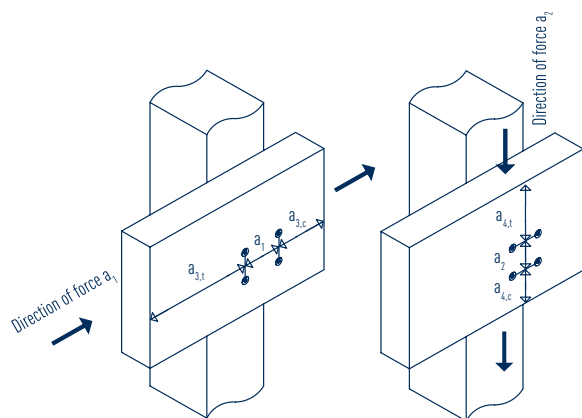
R<sub>d</sub>
 Calculation or design value

k<sub>mod</sub>
 Modification factor, influence of the load exposure period and usage class

γ<sub>M</sub>
 Partial safety factors for construction material properties (EC 5 recommends γ<sub>M</sub> = 1.3 for connections)

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

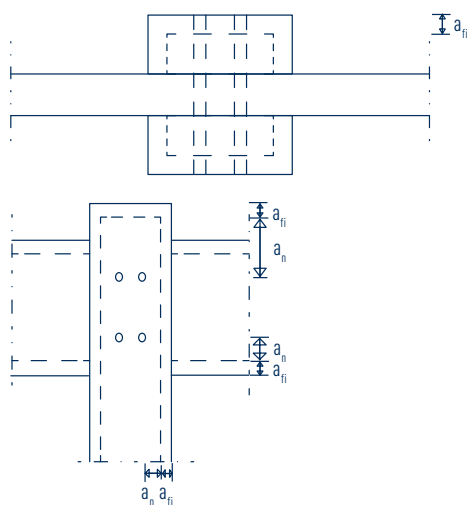
# Edge and Axial Distances



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 <sup>2)</sup>		
	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 <sup>1)</sup>	54 <sup>1)</sup>	53	93	73

<sup>1)</sup> protected with a glued wooden dowel

<sup>2)</sup> protected against direct fire stress

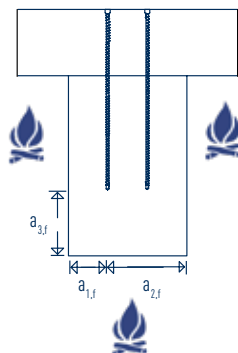
Minimum distances at normal temperature do not lose their validity

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



Hobafix® HF	Secondary Beam				Main Beam	
	Width [mm]	Height [mm] <sup>1)</sup>	Width [mm]	Height [mm] <sup>1)</sup>	Height [mm] <sup>1)</sup>	Height [mm] <sup>1)</sup>
			R 30	R 60	R 30	R 60
70	88	126,5	136	150,5	98	124
100	108	159	156	183	128	154
135	108	192	156	216	163	189
170	108	228	156	252	198	224
200	128	261	176	285	228	254
240	128	301	176	325	268	294

<sup>1)</sup> flush installation on the upper edge and three-sided strip

Calculation according to EN 1995-1-2

Shear load is to be validated separately

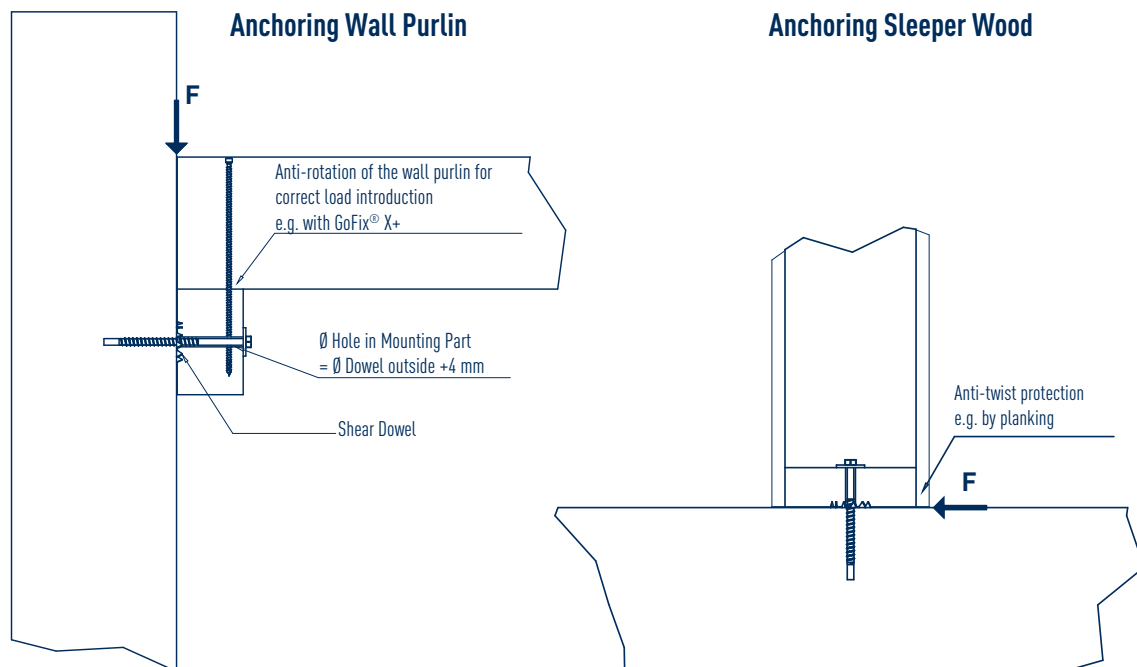
# Stressing of Anchors on Shear Force

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.

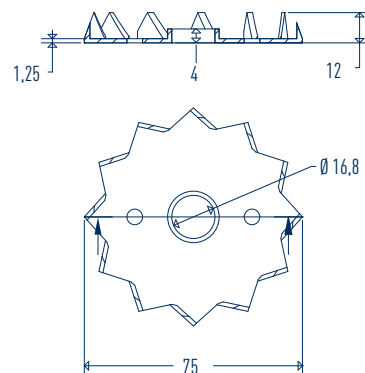
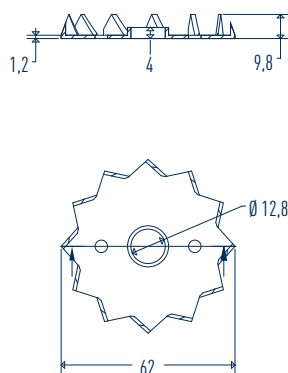


# Shear Dowel

SIHGA® montagepack		Dimension		
Art. No.	PU	Outer Ø [mm]	Ø Hole [mm]	Ø Anchor [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 [mm]	Distance unstressed edge dowel axis 90° to fibre [mm]	Characteristic Values [kN]* $R_{yk}$
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 ( $p_k$  350 kg/m<sup>2</sup>)



**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

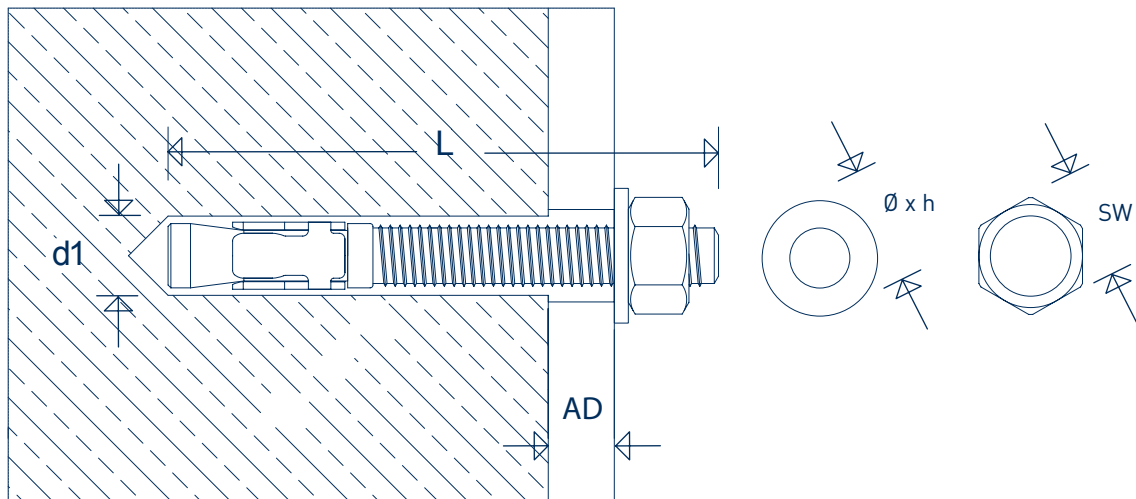
stainless steel expansion clip

safety per ETA



### SIHGA® TIP:

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

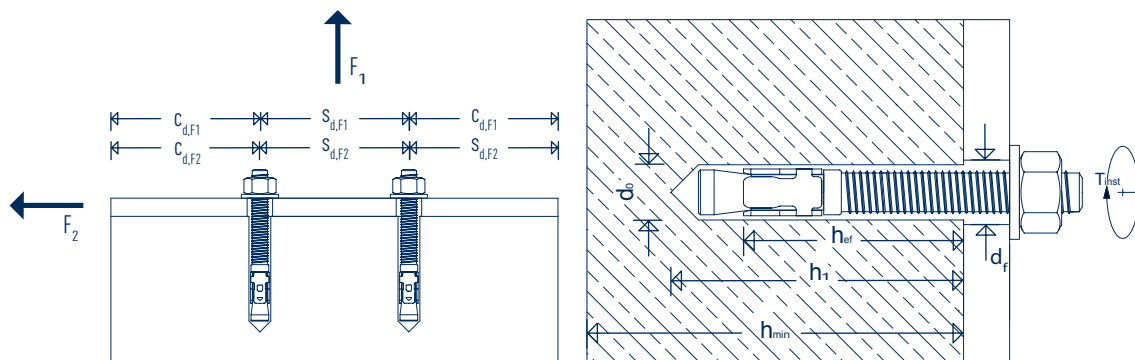


SIHGA® montagepack		Dimension Betsi®	Add-on Part AD = t <sub>fix</sub>	Width Across Flats SW	Washer Ø x h
Art. No.	PU	d1 x L	[mm]	[mm]	[mm]
25856	100	8,0 x 75	17	13	16 x 1,6
25416	50	10,0 x 90	25	17	20 x 2,0
25426	50	10,0 x 100	35	17	20 x 2,0
25436	50	10,0 x 120	55	17	20 x 2,0
25446	50	10,0 x 150	85	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.



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
<b>recommended tensile strength per anchor without edge influence, at edge spacing <math>c \geq 1.2 \times c_{cr.sp}</math> [lt. ETA] recommended centre distance <math>s \geq 3 \times h_{ef}</math>*</b>						
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
<b>recommended shear resistance per anchor without edge influence, with edge spacing <math>c \geq 60 \times d</math> and centre distance <math>s \geq 3 \times h_{ef}</math></b>						
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

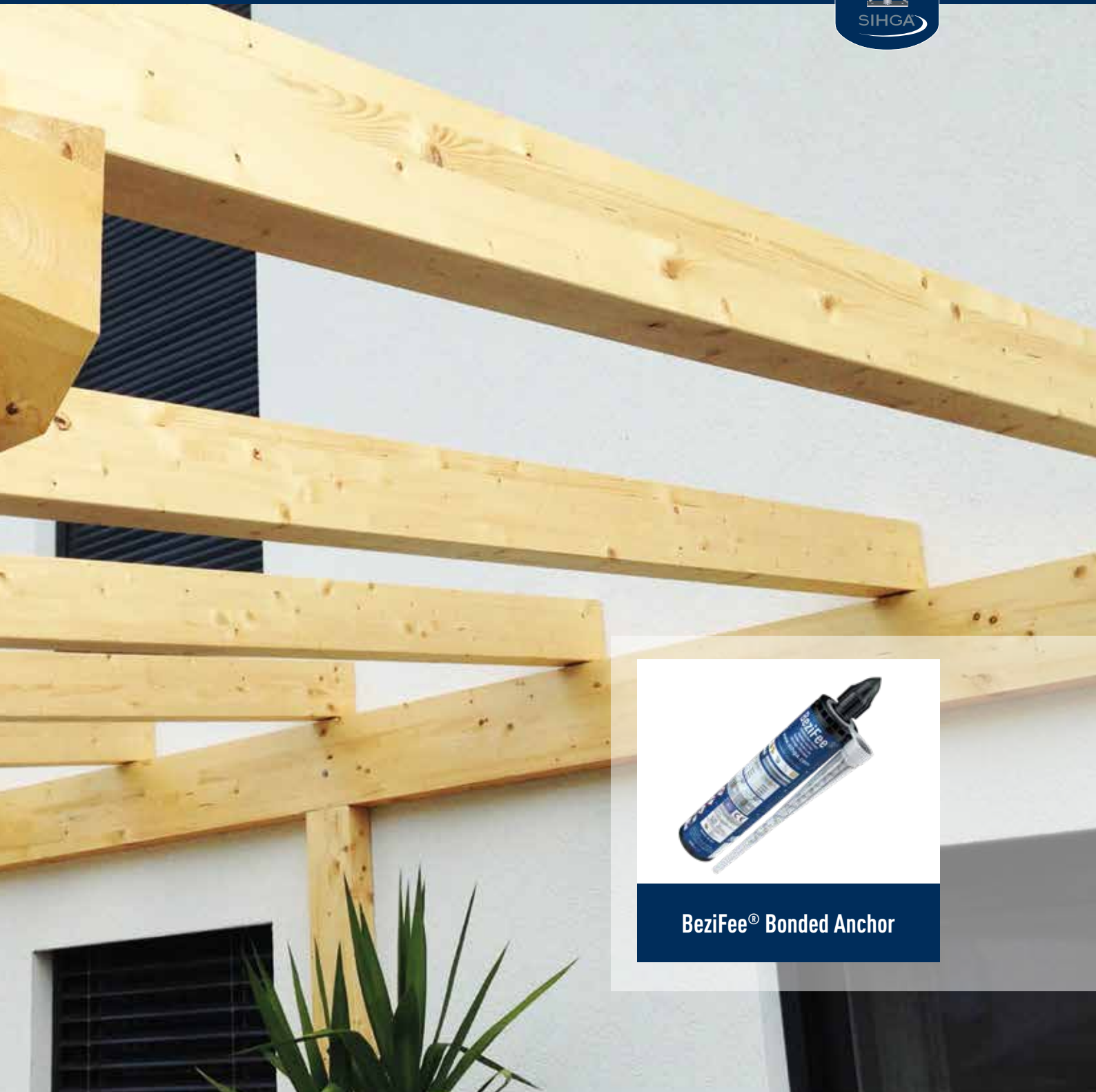
\* for systems with high installation safety  $\gamma_2 = 1.0$

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

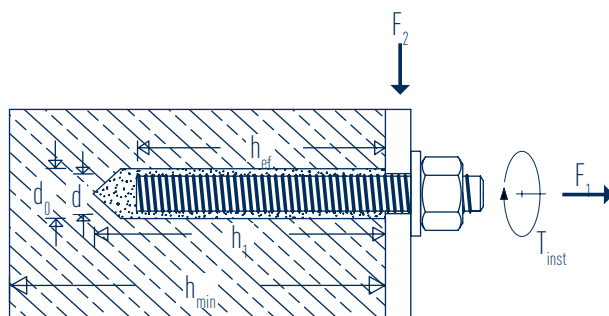
Option 1



## 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, commercial cartridge 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 <sub>o</sub>	[mm]	10	12	14	18	22	26	30	35
min. edge distance without load influence	c <sub>min</sub>	[mm]	h <sub>ef</sub> / 2							
min. centre distance without load influence	s <sub>min</sub>	[mm]								
min. concrete thickness	h <sub>min</sub>	[mm]	h <sub>ef</sub> + 30 ≥ 100				h <sub>ef</sub> + 2d <sub>o</sub>			
max. tightening torque	T <sub>inst</sub>	[Nm]	10	20	40	80	150	200	240	275
effective anchoring depth	h <sub>ef,min</sub>	[mm]	64	80	96	128	160	192	216	240
	h <sub>ef,max</sub>	[mm]	160	200	240	320	400	480	540	600
standard anchoring depth	h <sub>ef,s</sub>	[mm]	80	90	110	128	170	210	240	270
<b>non-cracked concrete</b>										
recommended tensile strength with h <sub>ef,s</sub>	F <sub>1</sub>	[kN]	8,5	14,9	21,9	32,2	50,4	70,4	63,0	66,6
recommended shear resistance with h <sub>ef,s</sub>	F <sub>2</sub>	[kN]	6,5	10,4	15,1	28,7	44,8	64,5	85,1	103,4
<b>cracked concrete</b>										
recommended tensile strength with h <sub>ef,s</sub>	F <sub>1</sub>	[kN]	-	-	10,4	16,1	26,7	39,6	-	-
recommended shear resistance with h <sub>ef,s</sub>	F <sub>2</sub>	[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 <sub>o</sub>	[mm]	16	20
borehole depth	h <sub>1</sub>	[mm]	90	
effective anchoring depth	h <sub>ef</sub>	[mm]	85	
max. tightening torque	T <sub>inst</sub>	[Nm]	2	
recommended load capacity stone 1*	F <sub>1</sub> = F <sub>2</sub>	[kN]	0,80	1,00
recommended load capacity stone 2*	F <sub>1</sub> = F <sub>2</sub>	[kN]	0,36	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

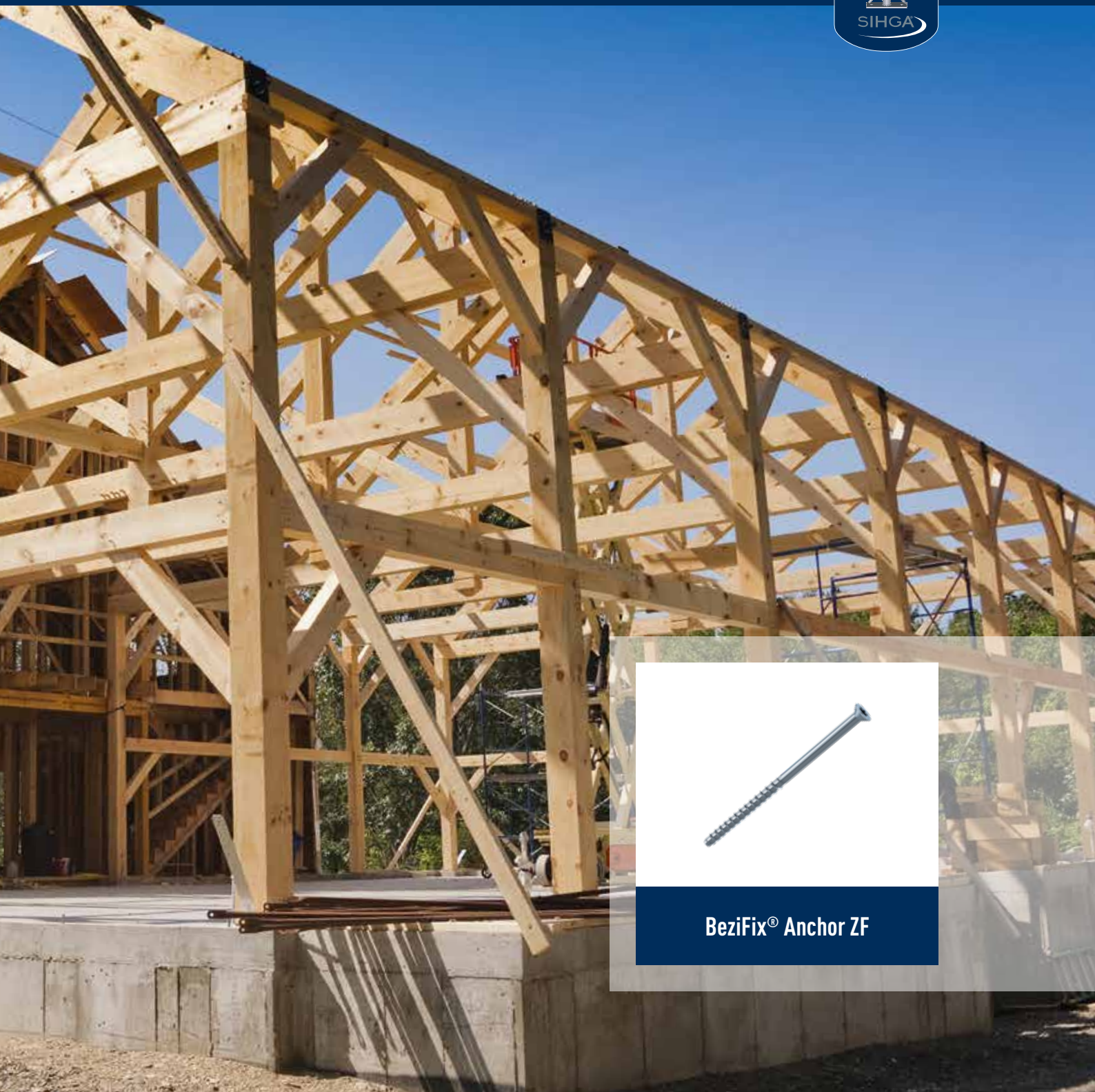
Type of Bricks	Min. Thickness	Min. Compressive Strength	Min. Horizontal Centre Distance	Min. Vertical Centre Distance	Min. Edge Distance
	ρ [kg/dm³]	fb [N/mm²]	s <sub>min,l</sub> [mm]	s <sub>min,n</sub> [mm]	c <sub>min</sub> [mm]
stone no. 1: Porotherm P+W	0,9	12	373	238	120
stone no. 2: Hueco Doble	0,74	2,5	245	110	120

# BeziFee® Equipment

	<b>SIHGA® Feature</b> <b>BeziFee® Wire Brush</b>	<b>YOUR Benefit</b>
	Ø 18 mm	for dust-free boreholes
	<b>BeziFee® Sieve Sleeve long</b>	<b>YOUR Benefit</b>
	sieve sleeve for perforated bricks	cut to length according to individual requirements
	Ø 22, length 1000 mm	for M 12 - M 16
	<b>BeziFee® Sieve Sleeve short</b>	<b>YOUR Benefit</b>
	Ø 20, length 85 mm, for M 12	sieve sleeve with stop for perforated bricks
	<b>BeziFee® Hand Pump</b>	<b>YOUR Benefit</b>
	hand pump 750 ml for dust-free boreholes	secure hold in bore-hole
	<b>BeziFee® Statik Mixer</b>	<b>YOUR Benefit</b>
	suitable mixer	for mixing the components
	<b>BeziFee® Extension Tube</b>	<b>YOUR Benefit</b>
	Ø 10, length 285 mm for deeper boreholes	for use with thermal insulation
	<b>BeziFee® Systemkit</b>	<b>YOUR Benefit</b>
	case with static mixer, hand pump, wire brush, extension tube and sieve sleeve	use accessories directly on the construction site using a practical case



# BeziFix<sup>®</sup> Anchor ZF/ZS/ZSS



BeziFix<sup>®</sup> Anchor ZF

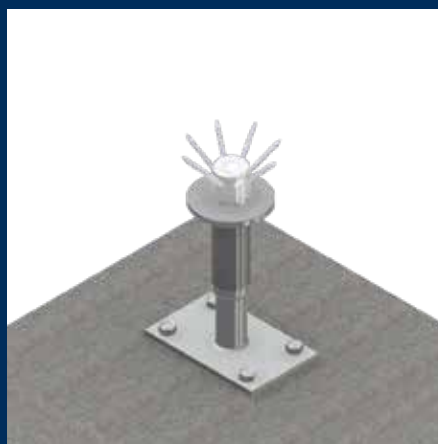
ETA-16/0889  
Option 1



## SIHGA® Feature

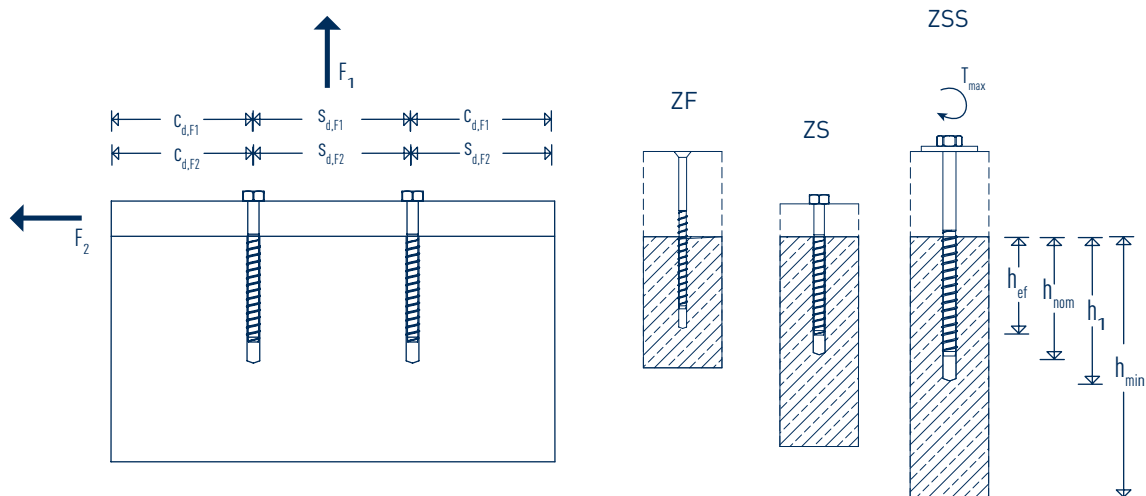
## YOUR Benefit

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



### 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	Ø	[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 <sup>4)</sup>	$T_{max}$	[Nm]	250	450	450
min. edge and axial distances without load influence		[mm]	40	55	65
<b>recommended tensile capacity <math>F_1</math> per anchor without edge influence, with edge distance <math>c \geq 1.2 \times C_{Cr.sp}</math> (per ETA) and axial distance <math>s \geq 3 \times h_{ef}</math></b>					
uncracked concrete min. C20/25	$F_1$	[kN]	2.9 <sup>1)</sup>	3.3 <sup>2)</sup>	13.9 <sup>2)</sup>
cracked concrete min. C20/25	$F_1$	[kN]	1.4 <sup>1)</sup>	1.7 <sup>2)</sup>	6.7 <sup>2)</sup>
recommended edge distance	$C_{d,F1}$	[mm]	90	120	168
recommended axial distance	$S_{d,F1}$	[mm]	123	165	213
<b>recommended lateral capacity <math>F_2</math> per anchor without edge influence, with edge distance <math>c \geq 10 \times h_{ef}</math> and axial distance <math>s \geq 3 \times h_{ef}</math></b>					
concrete min. C 20/25	$F_2$	[kN]	7.6 <sup>3)</sup>	14.9 <sup>3)</sup>	23.1 <sup>3)</sup>
recommended edge distance	$C_{d,F2}$	[mm]	410	550	710
recommended axial distance	$S_{d,F2}$	[mm]	123	165	213

<sup>1)</sup> low installation safety  $\gamma_2 = 1.4$ ; ETAG 001 2010 annex C

<sup>2)</sup> normal installation safety  $\gamma_2 = 1.2$ ; ETAG 001 2010 annex C

<sup>3)</sup> high installation safety  $\gamma_2 = 1.0$ ; ETAG 001 2010 annex C

<sup>4)</sup> setting tool: Tangential impact wrench, max. power rating  $T_{max}$  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.

# SIHGA® Feature

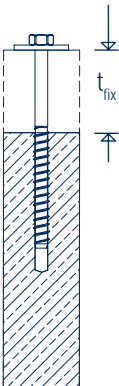
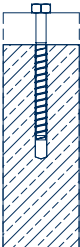
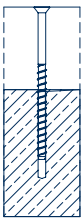
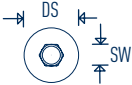
# YOUR Benefit

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]	[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



## SIHGA® Feature

Specially developed for the assembly of timber frame and cross-laminated timber constructions

Drill hole of 12 mm diameter and 50 mm depth required

TX 30 drive in disc

Stepless height adjustment from 8 - 40 mm via M10 thread

Fixing by screwing into the concrete slab

Compatible with Orakelix thanks to perforations in the disc and the option of combining with a laser

No need to attach plates

Developed in Austria, patented and made of high-quality steel, galvanised surface

## YOUR benefit

Perfectly suited for quick and precise installation of the first component on the concrete floor slab, no tedious placement of levelling plates

Simply drill and tap in the threaded sleeve with a hammer

The distancer can be screwed in to the desired height in a flash using a cordless screwdriver

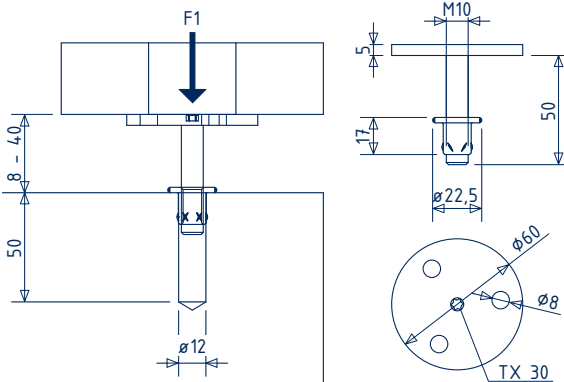
Precise and flexible adjustment, a real game changer

Stability guaranteed, no unintentional slipping or shifting

Even more efficient in combination with Orakelix and a laser, for exact levelling, maximum precision and ergonomic working in a standing position

No tedious handling

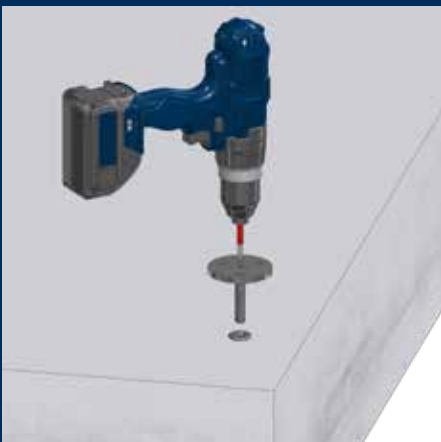
Domestic quality and added value



SIHGA®		Dimension	Recommended values*		
montagepack	Distancer		Pressure F1 max.	Tension	Cross
Art. No.	PU	Type	[kN]		
50056	25	M10x50	10	-	-
50059	75	M10x50	10	-	-

\* 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®		Accessory
montagepack	Orakelix Adaptor	
Art. No.	PU	Type
55556	1	Distancer



### 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<sup>®</sup> JK



GoFix<sup>®</sup> JK  
made of hardened carbon



## SIHGA® Feature

for professional installation from wood on wood

ribs pull without pre-drilling into the wood

including SIHGAFIX, system pin and installation instructions

rated value

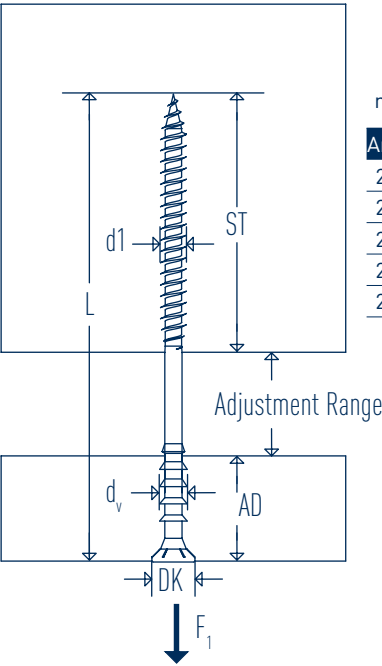
## YOUR Benefit

including distance of the two woods

adjustment in horizontal and vertical direction possible

time-saving, practical, precise, all accessories are included

SIHGA® will do the calculation for you

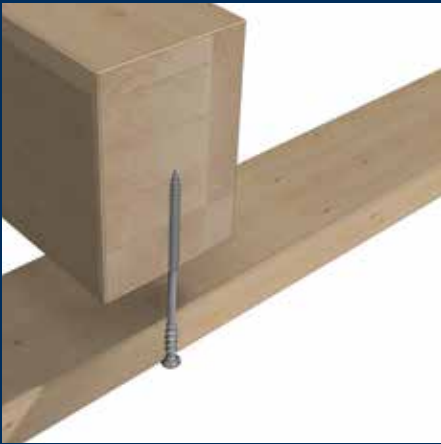


SIHGA®		Dimension	Attachment Part	Setting Depth	Adjustment Range	Recommended Loads	
montagepack		GoFix® JK	AD	ST	to	Tensile Force F <sub>1</sub> [kN]	
Art. No.	PU	d1 x L	[mm]	[mm]	[mm]	Head	Thread
29326	100	<b>6,0 x 80</b>	20	50	10	0,51	1,03
29336	100	<b>6,0 x 100</b>	20	50	30	0,51	1,03
29346	100	<b>6,0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

### Dimension [mm]

GoFix® JK

d1	dv	TX	DK
6,0	6,5	25	10,0





# GoFix<sup>®</sup> MS II



**GoFix<sup>®</sup> 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

fastens wood to wood, even OSB panels

screwing permissible from 0° up to 90° to the grain

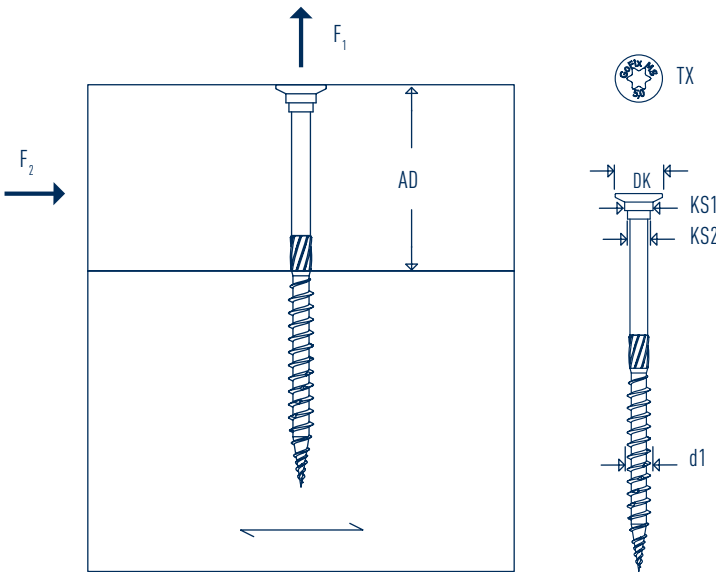
design values

## YOUR Benefit

screw without pre-drilling and pre-sinking

fastens with all screw-in angles

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 $F_t$ [kN]		Shear Force $F_s$ [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 05.2023

\* characteristic values for measurement according to EC 5, bulk density  $\rho_k = 350 \text{ kg/m}^3$  [C24]

ETA-20/0558

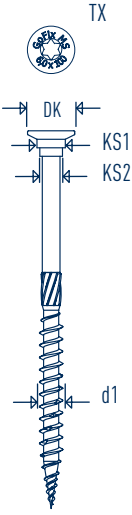
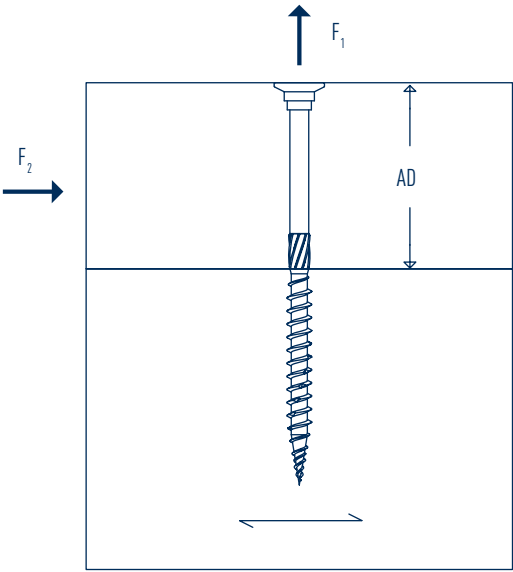


# SIHGA® Feature

fastens wood to wood, even OSB panels  
screwing permissible from 0° up to 90° to the grain  
design values

# YOUR Benefit

screw without pre-drilling and pre-sinking  
fastens with all screw-in angles  
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 <sub>t</sub> [kN]		Shear Force F <sub>v</sub> [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 pk = 350 kg/m³ [C24]



## SIHGA® Feature

fastens wood to wood, even OSB panels

screwing permissible from 0° up to 90° to the grain

design values

online calculation

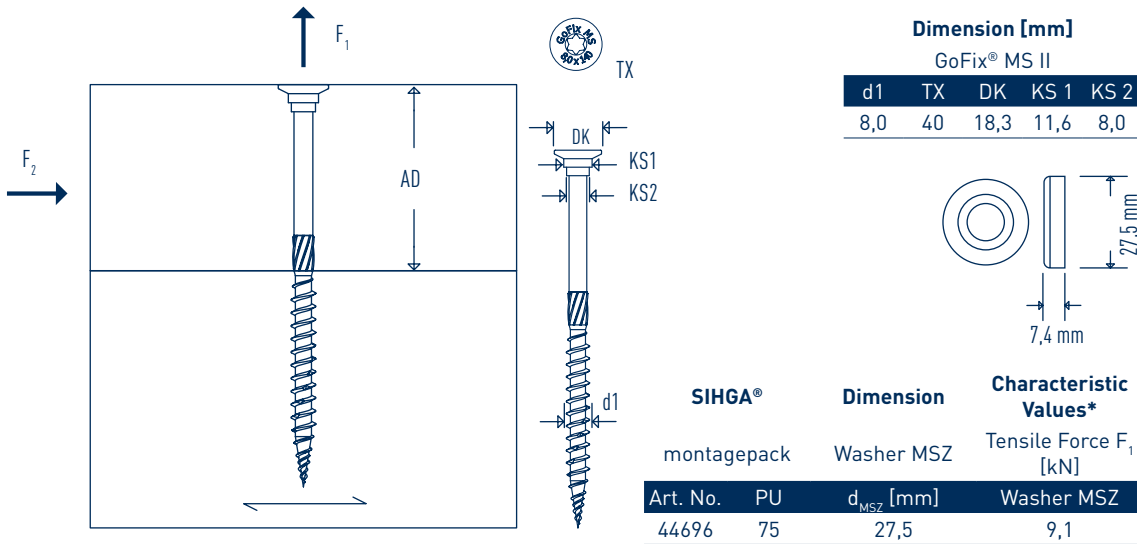
## YOUR Benefit

screw without pre-drilling and pre-sinking

fastens with all screw-in angles

SIHGA® performs the calculation for you

at [www.sihga.com](http://www.sihga.com) (on-rafter insulation)



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  $\rho_k = 350\text{ kg/m}^3$  (C24)

## SIHGA® Feature

fastens wood to wood, even OSB panels

screwing permissible from 0° up to 90° to the grain

design values

online calculation

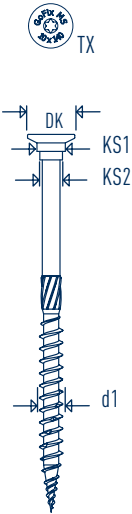
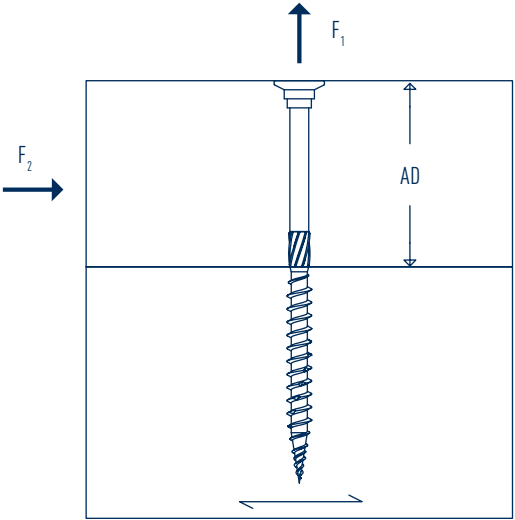
## YOUR Benefit

screw without pre-drilling and pre-sinking

fastens with all screw-in angles

SIHGA® performs the calculation for you

at [www.sihga.com](http://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® montagepack		Dimension GoFix® MS II	Installation Part AD	Characteristic Values*			
Art. No.	PU	d1 x L	[mm]	Tensile Force F <sub>1</sub> [kN]		Shear Force F <sub>2</sub> [kN]	
				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  $\rho_k = 350 \text{ kg/m}^3$  (C24)

Greatest earthquake protection

# GoFix<sup>®</sup> MS II

## SIHGA<sup>®</sup> Feature

SIHGA<sup>®</sup> is ahead of its time

latest tests confirm excellent properties

best ductility class S3 for earthquake resistance

simulated earthquake load through cyclic bending of the bolts

## YOUR Benefit

tests already under way for the latest revision of Eurocode 5

ductility ensures safety

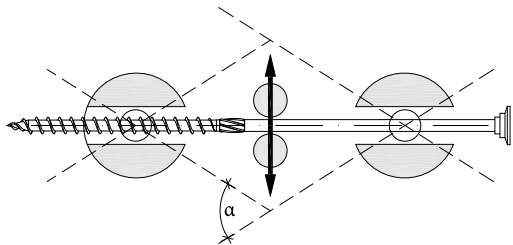
safety according to prEN 14592

reliable residual load capacity of at least 90 %

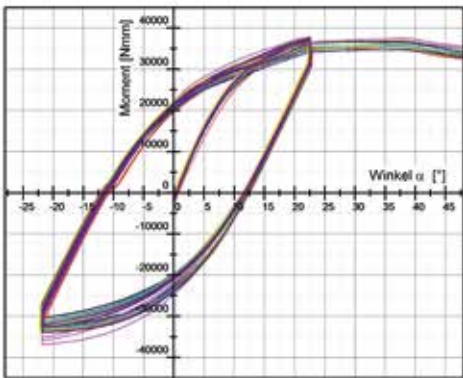
GoFix <sup>®</sup> MS II	Residual Load Capacity
Ø [mm]	$M_{\text{final}}/M_{\text{int}}$
6	90 %
8	93 %
10	100 %



bending of the bolt during the test



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



# GoFix<sup>®</sup> MS II application by means of impact screwdriver

Tested by the University of Innsbruck

## SIHGA<sup>®</sup> Feature

positive report for processing with impact screwdrivers

graph below shows comparison of screw-in methods

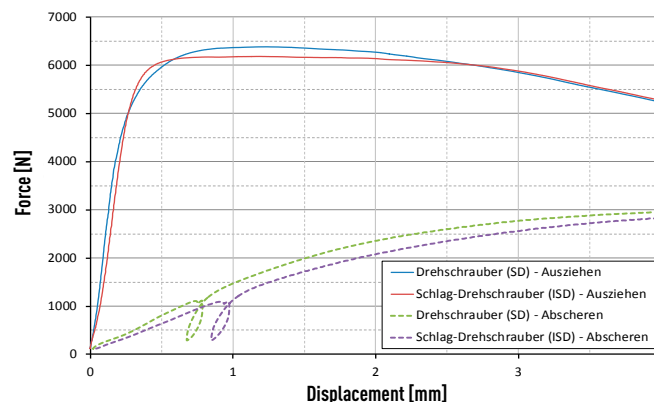
impact screwdriver brings benefits

## YOUR Benefit

provides security

only slightly affects the initial stiffness of a connection

less strain on the wrist, even when working overhead





# GoFix<sup>®</sup> MS II using in end grain



# GoFix<sup>®</sup> MS II using in hardwood

## SIHGA<sup>®</sup> Feature

use in hardwood allowed

extensive application possible by means of pre-drilling

head pull-through force and thread extension may be increased by the factor k; observe maximum tensile strength according to ETA

## YOUR Benefit

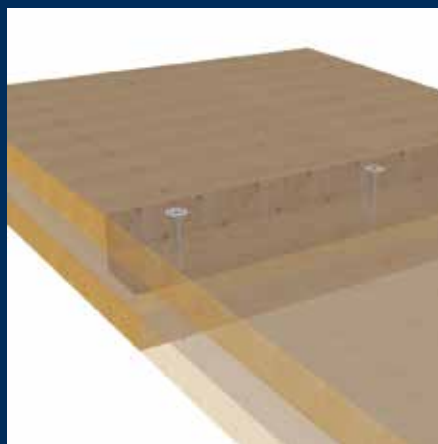
safety according to ETA -20/0558

in solid wood, glued plywood board and laminated veneer wood

high load capacity for efficient connections

GoFix <sup>®</sup> 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

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



### SIHGA<sup>®</sup> TIP:

For screw connections in hardwood WITHOUT drilling, we recommend GoFix<sup>®</sup> SH.

# GoFix<sup>®</sup> S+



GoFix<sup>®</sup> S+ made from  
hardened carbon steel

ETA-11/0425

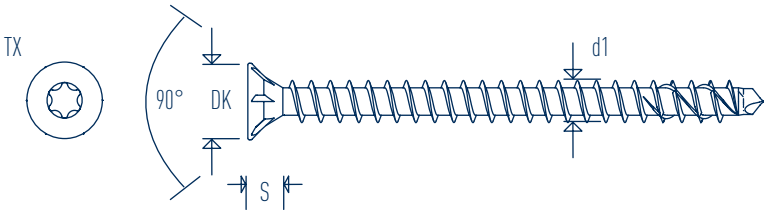




SIHGA® Feature

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

including SIHGAFIX®, Systemstift® and installation instructions

design values

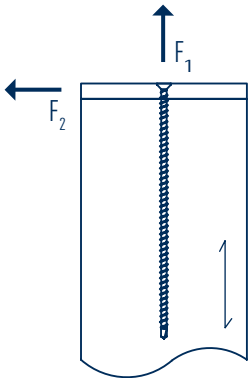
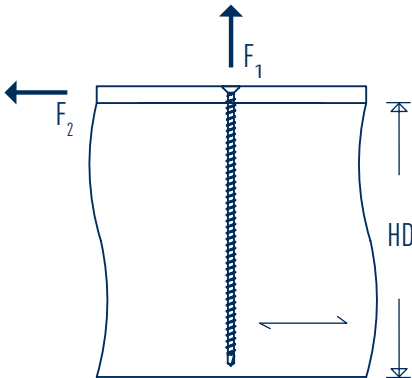
calculation

## YOUR Benefit

time-saving, practical, precise, complete accessories enclosed

SIHGA® performs the calculation for you

S<sup>3</sup> software download at [www.sihga.com](http://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	6,66	6,07	2,00	3,52
42416	75	8,0 x 125	130	9,32	6,81	2,80	3,72
42426	75	8,0 x 155	160	11,90	7,46	3,57	3,91
42436	75	8,0 x 195	200	15,45	8,34	4,64	4,18
42446	75	8,0 x 220	230	17,67	8,90	5,30	4,34
42456	75	8,0 x 245	250	19,89	9,45	5,97	4,51
42466	75	8,0 x 270	280	22,11	10,01	6,63	4,68
42476	75	8,0 x 295	300	24,33	10,56	7,30	4,84
42486	75	8,0 x 330	340	25,00	10,73	8,23	5,08
42496	75	8,0 x 375	380	25,00	10,73	9,43	5,38
42506	75	8,0 x 400	410	25,00	10,73	10,10	5,54
42516	75	8,0 x 430	440	25,00	10,73	10,90	5,74
42526	75	8,0 x 480	490	25,00	10,73	12,23	6,08
42806	50	10,0 x 125	130	11,23	9,09	3,37	4,95
42816	50	10,0 x 155	160	14,47	9,90	4,34	5,20
42826	50	10,0 x 195	200	18,79	10,98	5,64	5,52
42836	50	10,0 x 220	230	21,49	11,65	6,45	5,72
42846	50	10,0 x 245	250	24,19	12,33	7,26	5,93
42856	50	10,0 x 270	280	26,89	13,00	8,07	6,13
42866	50	10,0 x 300	310	30,13	13,81	9,04	6,37
42876	50	10,0 x 330	340	33,00	14,53	10,01	6,61
42886	50	10,0 x 360	370	33,00	14,53	10,98	6,86
42896	50	10,0 x 400	410	33,00	14,53	12,28	7,18
42906	50	10,0 x 450	460	33,00	14,53	13,90	7,59
42916	50	10,0 x 500	510	33,00	14,53	15,52	7,99
42926	50	10,0 x 550	560	33,00	14,53	17,14	8,40
42936	50	10,0 x 600	610	33,00	14,53	18,76	8,80

Subject to technical modifications and errors. Status of approval 05.2023

\* characteristic values for measurement according to EC 5, bulk density  $\rho_k = 350 \text{ kg/m}^3$  [C24]. Selected steel thickness 15 mm

## SIHGA® Feature

including SIHGAFIX®, Systemstift® and installation instructions

design values

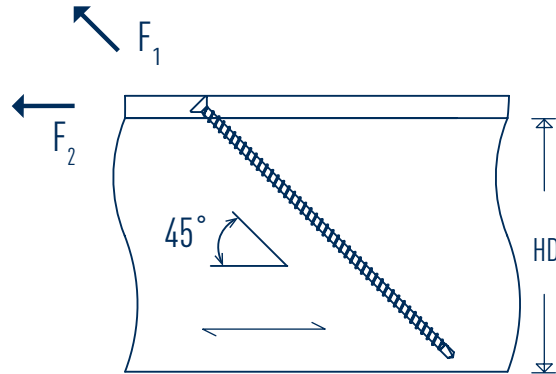
calculation

## YOUR Benefit

time-saving, practical, precise, complete accessories enclosed

SIHGA® performs the calculation for you

S3 software download at [www.sihga.com](http://www.sihga.com)



SIHGA® montagepack		Dimension GoFix® S+	Wood Component	Characteristic Values*	
Art. No.	PU	d1 x L	HD [mm]	Tensile Force $F_1$ [kN]	Shear Force $F_2$ [kN]
42406	75	8,0 x 95	70	6,11	4,32
42416	75	8,0 x 125	95	8,77	6,20
42426	75	8,0 x 155	115	11,44	8,09
42436	75	8,0 x 195	145	14,99	10,60
42446	75	8,0 x 220	165	17,21	12,17
42456	75	8,0 x 245	180	19,43	13,74
42466	75	8,0 x 270	200	21,65	15,31
42476	75	8,0 x 295	215	23,87	16,88
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	10,67	7,54
42816	50	10,0 x 155	115	13,91	9,84
42826	50	10,0 x 195	145	18,23	12,89
42836	50	10,0 x 220	165	20,93	14,80
42846	50	10,0 x 245	180	23,63	16,71
42856	50	10,0 x 270	200	26,33	18,62
42866	50	10,0 x 300	220	29,57	20,91
42876	50	10,0 x 330	240	32,81	23,20
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 05.2023

\* characteristic values for measurement according to EC 5, bulk density  $\rho_k = 350 \text{ kg/m}^3$  [C24]. Selected steel thickness 15 mm

# GoFix<sup>®</sup> S+ application by means of impact screwdriver

Tested by the University of Innsbruck

## SIHGA<sup>®</sup> Feature

positive report for processing with impact screwdrivers

graph below shows comparison of screw-in methods

impact screwdriver brings benefits

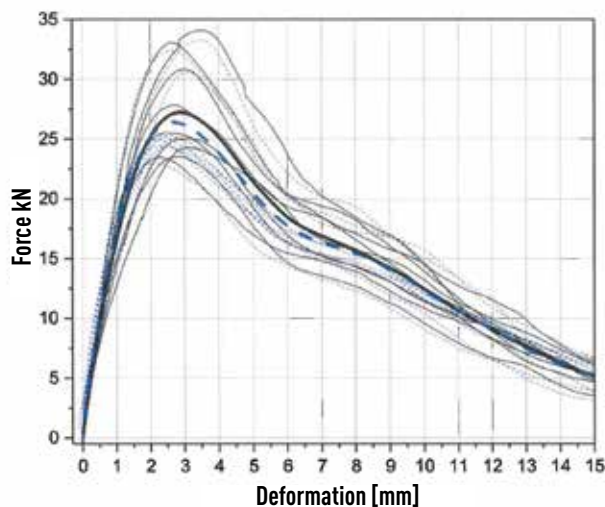
## YOUR Benefit

provides security

comparing the different screw-in methods

less strain on the wrist, even when working overhead

Extension of the screw in relation to applied force



# Mass-X<sup>®</sup> Element Tensioner

SIHGA <sup>®</sup> 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
	ideal for wall and ceiling elements
boards can be swivelled 360°	fixing in every position
made in Austria	best european quality

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



**SIHGA<sup>®</sup> TIP:**

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



# GoFix<sup>®</sup> X+



**GoFix<sup>®</sup> X+ made from  
hardened carbon steel**

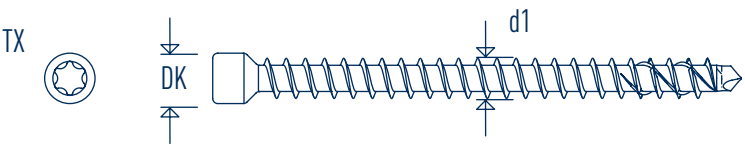
ETA-11/0425



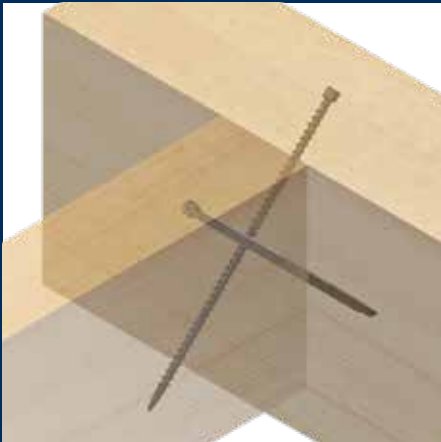
SIHGA® Feature

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+ Ø 6.5 mm with 4 mm, with Ø 8.0 mm with 5 mm, with Ø 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

design values

including SIHGAFIX®, Systemstift® and installation instructions

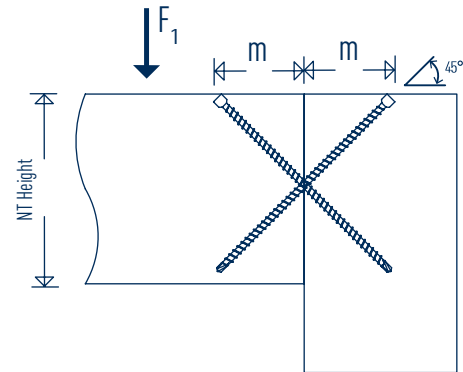
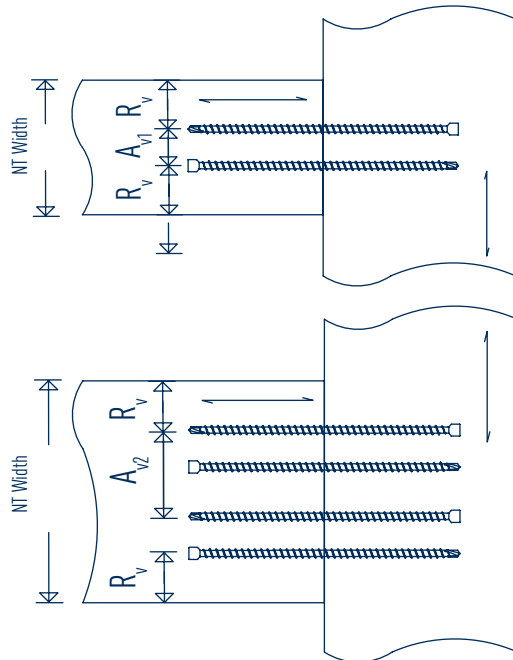
calculation

## YOUR Benefit

SIHGA® performs the calculation for you

time-saving, practical, precise, complete accessories enclosed

S<sup>3</sup> software download at [www.sihga.com](http://www.sihga.com)



Dimension [mm]

GoFix® X+

d1	TX	DK	R <sub>v</sub>	A <sub>v1</sub>	A <sub>v2</sub>
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 <sub>1</sub> - 1 pair			Shear Force F <sub>1</sub> - 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	<b>6,5 x 195</b>	140	70	50	10,88		85	21,77	
42246	75	<b>8,0 x 220</b>	160	80	60	13,19		100	26,37	
42256	75	<b>8,0 x 245</b>	180	90	60	14,76		100	29,51	
42276	75	<b>8,0 x 295</b>	220	110	60	17,90		100	35,79	
42286	75	<b>8,0 x 330</b>	240	120	60	20,09	17,99	100	40,19	
42296	75	<b>8,0 x 375</b>	270	135	60		15,89	100		31,78
42306	75	<b>8,0 x 400</b>	290	145	60		15,89	100		31,78
42316	75	<b>8,0 x 430</b>	310	155	60		15,89	100		31,78
42326	75	<b>8,0 x 480</b>	350	170	60		15,89	100		31,78
42666	50	<b>10,0 x 300</b>	220	110	75	22,15		125	44,29	
42676	50	<b>10,0 x 330</b>	240	120	75	24,44		125	48,88	
42686	50	<b>10,0 x 360</b>	260	130	75	26,73		125	53,46	
42696	50	<b>10,0 x 400</b>	290	145	75		22,43	125		44,86
42706	50	<b>10,0 x 450</b>	320	160	75		22,43	125		44,86
42716	50	<b>10,0 x 500</b>	360	180	75		22,43	125		44,86
42726	50	<b>10,0 x 550</b>	400	200	75		22,43	125		44,86
42736	50	<b>10,0 x 600</b>	430	215	75		22,43	125		44,86

Subject to technical modifications and errors. Status of approval 05.2023

\* characteristic values for measurement according to EC 5, bulk density  $\rho_k = 350 \text{ kg/m}^3$  [C24]

\*\* design values according to EC 3 due to buckling ( $\gamma_m = 1.1$  already considered)

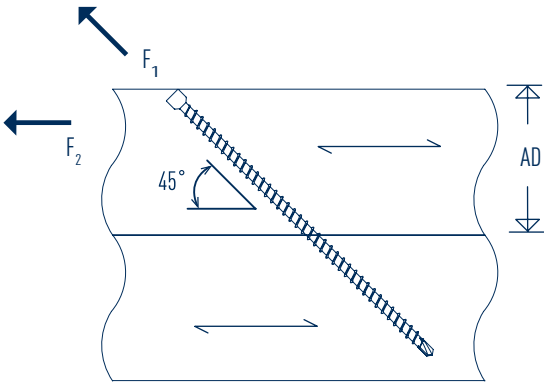
ETA-11/0425



# 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 <a href="http://www.sihga.com">www.sihga.com</a>



SIHGA® montagepack		Dimension GoFix® X+	Installation Part Thickness Wood AD [mm]	Characteristic Values*	
Art. No.	PU	d1 x L		Tensile Force F <sub>1</sub> [kN]	Shear Force F <sub>2</sub> [kN]
42026	150	6,5 x 120	45	4,08	2,88
42036	150	6,5 x 140	50	4,82	3,41
42046	150	6,5 x 160	60	5,56	3,93
42066	150	6,5 x 195	70	6,85	4,85
42226	75	8,0 x 155	60	6,44	4,55
42236	75	8,0 x 195	70	8,21	5,81
42246	75	8,0 x 220	80	9,32	6,59
42256	75	8,0 x 245	90	10,43	7,38
42276	75	8,0 x 295	105	12,65	8,95
42286	75	8,0 x 330	120	14,21	10,05
42296	75	8,0 x 375	135	16,21	11,46
42306	75	8,0 x 400	145	17,32	12,24
42316	75	8,0 x 430	155	18,65	13,19
42326	75	8,0 x 480	170	20,87	14,76
42666	50	10,0 x 300	110	15,66	11,07
42676	50	10,0 x 330	120	17,28	12,22
42686	50	10,0 x 360	130	18,90	13,36
42696	50	10,0 x 400	145	21,06	14,89
42706	50	10,0 x 450	160	23,76	16,80
42716	50	10,0 x 500	180	26,46	18,71
42726	50	10,0 x 550	195	29,16	20,62
42736	50	10,0 x 600	215	31,86	22,53

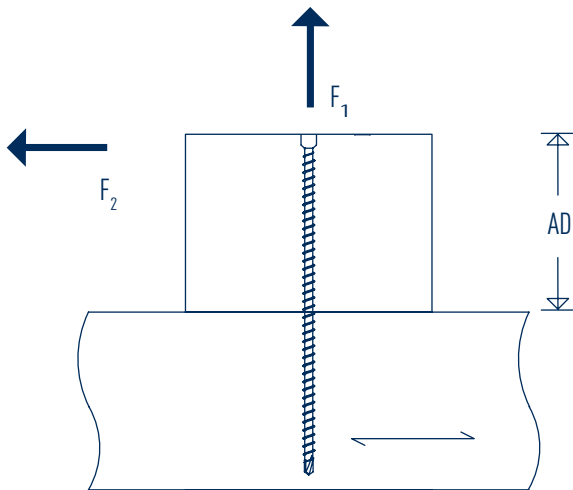
Subject to technical modifications and errors. Status of approval 05.2023  
\* characteristic values for measurement according to EC 5, bulk density pk = 350 kg/m³ [C24]



# 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	S³ software download at <a href="http://www.sihga.com">www.sihga.com</a>



SIHGA® montagepack		Dimension GoFix® X+	Installation Part Thickness Wood	Characteristic Values 90°*	
Art. No.	PU	d1 x L	AD [mm]	Tensile Force F <sub>1</sub> [kN]	Shear Force F <sub>2</sub> [kN]
42026	150	6,5 x 120	60	4,08	3,25
42036	150	6,5 x 140	70	4,82	3,43
42046	150	6,5 x 160	80	5,56	3,62
42066	150	6,5 x 195	100	6,85	3,94
42226	75	8,0 x 155	80	6,39	4,77
42236	75	8,0 x 195	100	8,17	5,21
42246	75	8,0 x 220	110	9,28	5,49
42256	75	8,0 x 245	125	10,39	5,77
42276	75	8,0 x 295	150	12,61	6,32
42286	75	8,0 x 330	170	14,16	6,71
42296	75	8,0 x 375	190	16,16	7,21
42306	75	8,0 x 400	200	17,27	7,49
42316	75	8,0 x 430	215	18,60	7,82
42326	75	8,0 x 480	240	20,82	8,37
42666	50	10,0 x 300	150	15,55	8,33
42676	50	10,0 x 330	170	17,17	8,73
42686	50	10,0 x 360	180	18,79	9,14
42696	50	10,0 x 400	200	20,95	9,68
42706	50	10,0 x 450	225	23,65	10,35
42716	50	10,0 x 500	250	26,35	11,03
42726	50	10,0 x 550	275	29,05	11,70
42736	50	10,0 x 600	300	31,75	12,38

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

# SIHGA® Feature

design values

including SIHGAFIX®, Systemstift® and installation instructions

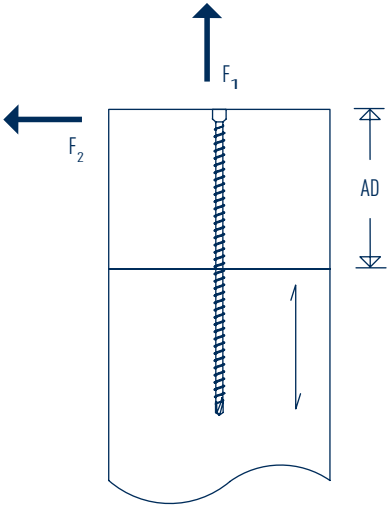
online calculation

# YOUR Benefit

SIHGA® performs the calculation for you

time-saving, practical, precise, complete accessories enclosed

at [www.sihga.com](http://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 <sub>1</sub>	Shear Force F <sub>2</sub>
Art. No.	PU	d1 x L	AD [mm]	[kN]	[kN]
42026	150	6,5 x 120	60	1,22	1,50
42036	150	6,5 x 140	70	1,44	1,91
42046	150	6,5 x 160	80	1,67	1,97
42066	150	6,5 x 195	100	2,06	2,06
42226	75	8,0 x 155	80	1,92	2,61
42236	75	8,0 x 195	100	2,45	2,75
42246	75	8,0 x 220	110	2,78	2,83
42256	75	8,0 x 245	125	3,12	2,91
42276	75	8,0 x 295	150	3,78	3,08
42286	75	8,0 x 330	170	4,25	3,20
42296	75	8,0 x 375	190	4,85	3,35
42306	75	8,0 x 400	200	5,18	3,43
42316	75	8,0 x 430	215	5,58	3,53
42326	75	8,0 x 480	240	6,25	3,70
42666	50	10,0 x 300	150	4,67	4,07
42676	50	10,0 x 330	170	5,15	4,19
42686	50	10,0 x 360	180	5,64	4,32
42696	50	10,0 x 400	200	6,29	4,48
42706	50	10,0 x 450	225	7,10	4,68
42716	50	10,0 x 500	250	7,91	4,88
42726	50	10,0 x 550	275	8,72	5,09
42736	50	10,0 x 600	300	9,53	5,29

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

# Equipment GoFix<sup>®</sup> X+



## SIHGA<sup>®</sup> Feature

### GoFix<sup>®</sup> X+ Setting Jig

with GoFix<sup>®</sup> X+ 6.5 and 8.0 mm

## YOUR Benefit

the professional installation aid,  
simplifies construction processes and  
saves time



### GoFix<sup>®</sup> X+ Mounting Bracket

with GoFix<sup>®</sup> X+ 6.5 and 8.0 mm

the professional installation aid,  
simplifies construction processes and  
saves time



## SIHGA<sup>®</sup> TIP:

GoFix<sup>®</sup> X+ can also be pre-drilled X+ 6.5 with Ø 4 mm, X+ 8.0 with Ø 5 mm.



### System Kit GoFix<sup>®</sup> X+

with GoFix<sup>®</sup> 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<sup>®</sup> X+ Setting jig with  
4 GoFix<sup>®</sup> X+ Beam holders and  
GoFix<sup>®</sup> fastening screws

for the rational and precise installation  
of main/secondary beams

contains 4 GoFix<sup>®</sup> X+ Mounting  
brackets

for the rational and precise installation  
of secondary beams on struts

includes SIHGA<sup>®</sup> DUO-Bit and  
Systemstift<sup>®</sup>

time-saving, practical, precise,  
complete accessories enclosed

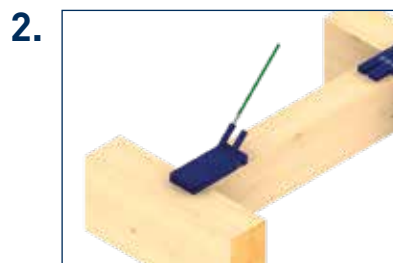


## SIHGA<sup>®</sup> TIP:

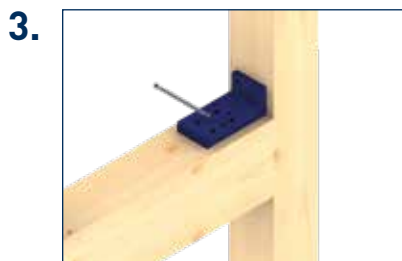
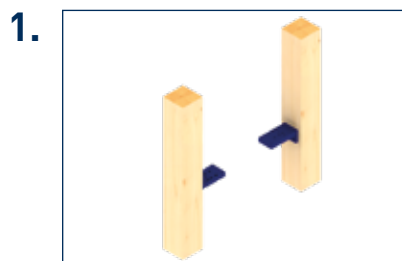
The System Kit GoFix<sup>®</sup> X+ contains a setting jig and mounting bracket, completely and portably  
combined with all accessories for practicality.

# Application GoFix<sup>®</sup> X+

## GoFix<sup>®</sup> X+ Setting Jig



## GoFix<sup>®</sup> X+ Mounting Bracket





# Application GoFix<sup>®</sup> X+ in Plywood Board

## SIHGA<sup>®</sup> Feature

optimised geometry of the drill bit

screwing below 0 ° to the fibre allowed

special cylinder head

deep bit punching

## YOUR Benefit

rapid attachment and simultaneous predrilling

can be installed in all layers and angles in plywood board

infinitely countersinking without splitting effect

prevents the SIHGAFIX<sup>®</sup> from slipping out



# GoFix<sup>®</sup> X+ application by means of impact screwdriver

Tested by the University of Innsbruck

## SIHGA<sup>®</sup> Feature

positive report for processing with impact screwdrivers

graph below shows comparison of screw-in methods

impact screwdriver brings benefits

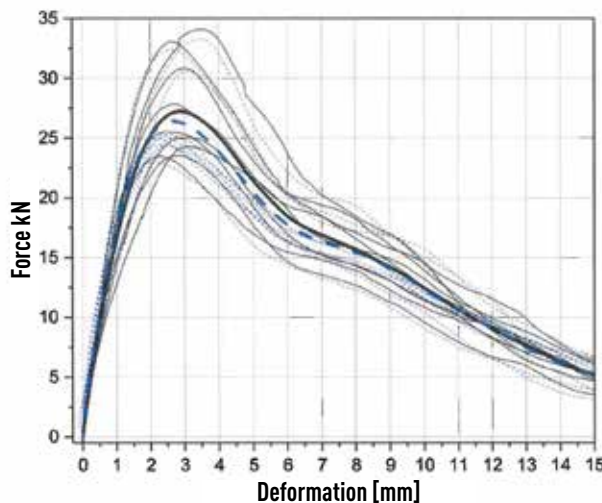
## YOUR Benefit

provides security

comparing the different screw-in methods

less strain on the wrist, even when working overhead

## Extraction of the screw in relation to applied force



# GoFix<sup>®</sup> ESH 8



**GoFix<sup>®</sup> ESH 8 Screw-in  
Assistance for screws Ø 8 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 GoFix® ESH 8	for GoFix® Type X+ / S+ / SH
Art. No.	PU	d x L	d [mm]
31446	1	40 x 120	8



SIHGA® TIP:

For simplified screw-in of GoFix® X+, S+ and SH, use screw-in assistance GoFix® ESH 8.





# GoFix<sup>®</sup> 45



GoFix<sup>®</sup> 45  
8,0 mm

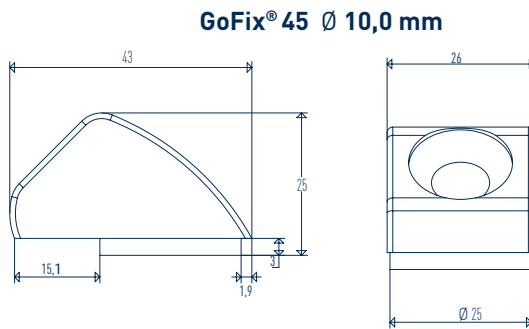
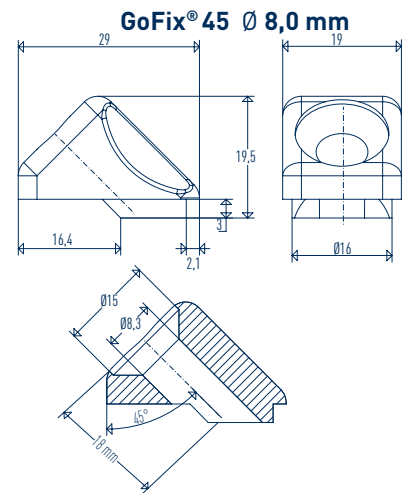


GoFix<sup>®</sup> 45  
10,0 mm

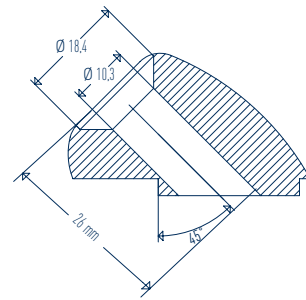
## SIHGA® Feature

## 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



SIHGA®		Dimension		Installation Part	
montagepack	Ø Drill	GoFix® 45	Steel Thickness	Ø 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<sup>®</sup> SS



GoFix<sup>®</sup> SS made from  
hardened carbon steel

ETA-11/0425



SIHGA® Feature

extremely high thread load-bearing capacity of up to 50 kN and length up to 1000 mm

made from hardened carbon steel

additional pre-drilling, with GoFix® SS Ø 11.3 mm with 8.0 mm

including SIHGAFIX® and installation instructions

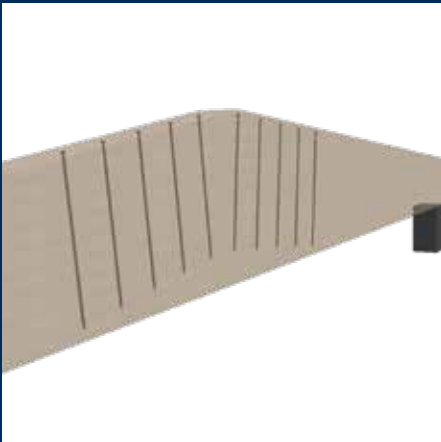
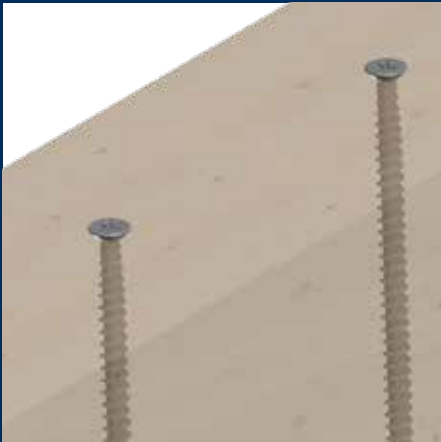
YOUR Benefit

ideal for reinforcements in timber engineering and for large glued laminated timber beams or for fastening steel parts onto wooden beams, replaces threaded rods

the permanent, secure and powerful fastening

for lightweight screw connections with low screw-in torque

time-saving, practical, precise, complete accessories enclosed





# SIHGA® Feature

design values

including SIHGAFIX® and installation instructions

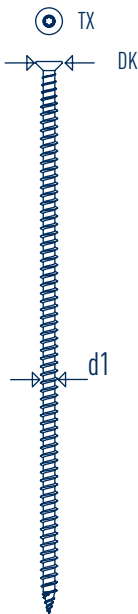
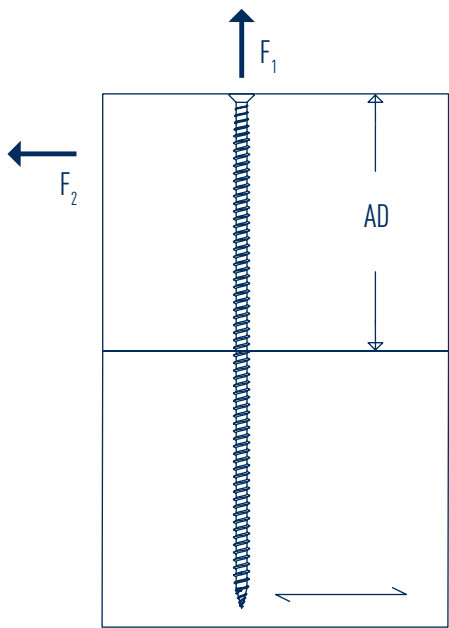
calculation

# YOUR Benefit

SIHGA® performs the calculation for you

time-saving, practical, precise, all accessories enclosed; SIHGAFIX® also screws into deep grooves

S³ software download at [www.sihga.com](http://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*	
Art. No.	PU	d1 x L	AD [mm]	Tensile Force F <sub>1</sub> [kN]	Shear Force F <sub>2</sub> [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 (p<sub>k</sub> 380 kg/m³)



# SIHGA® Feature

design values

including SIHGAFIX® and installation instructions

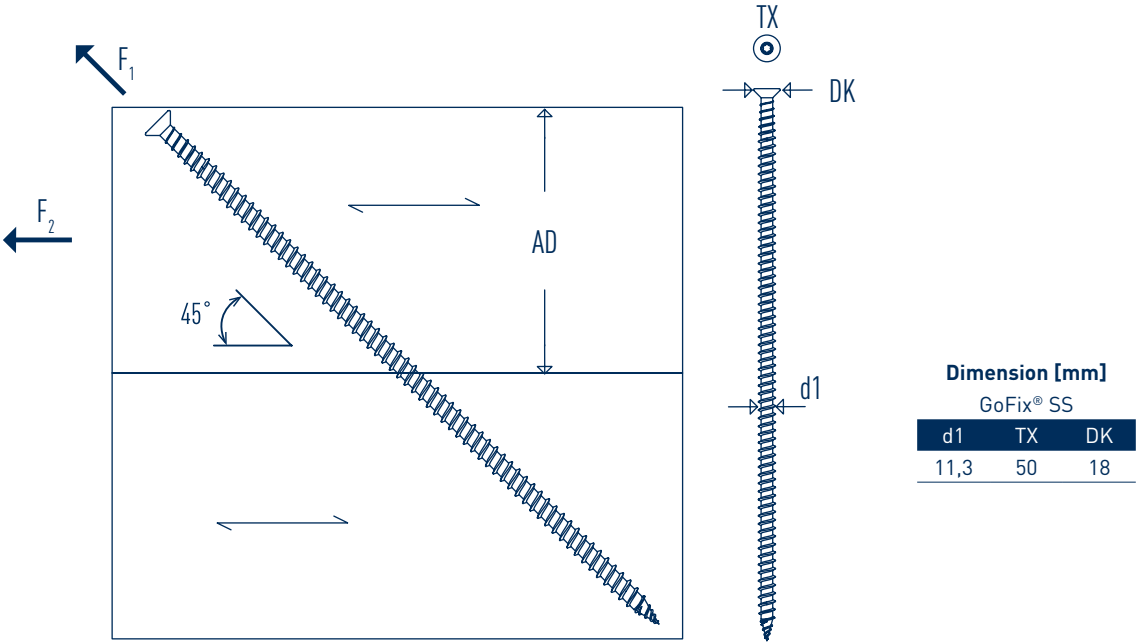
calculation

# YOUR Benefit

SIHGA® performs the calculation for you

time-saving, practical, precise, all accessories enclosed; SIHGAFIX® also screws into deep grooves

S³ software download at [www.sihga.com](http://www.sihga.com)



SIHGA® montagepack		Dimension GoFix® SS	Installation Part Thickness Wood	Characteristic Values*	
Art. No.	PU	d1 x L	AD [mm]	Tensile Force $F_1$ [kN]	Shear Force $F_2$ [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 (pk 380 kg/m³)



# GoFix<sup>®</sup> ZS



GoFix<sup>®</sup> ZS with special  
SC 3 coating

ETA-11/0425



# SIHGA® Feature

fastens soft insulation materials for on-rafter insulation

including SIHGAFIX®, Systemstift® and installation instructions

design values

calculation

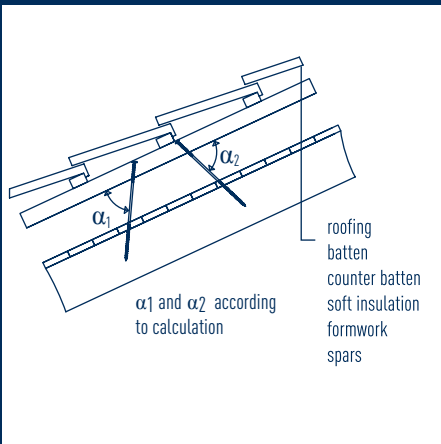
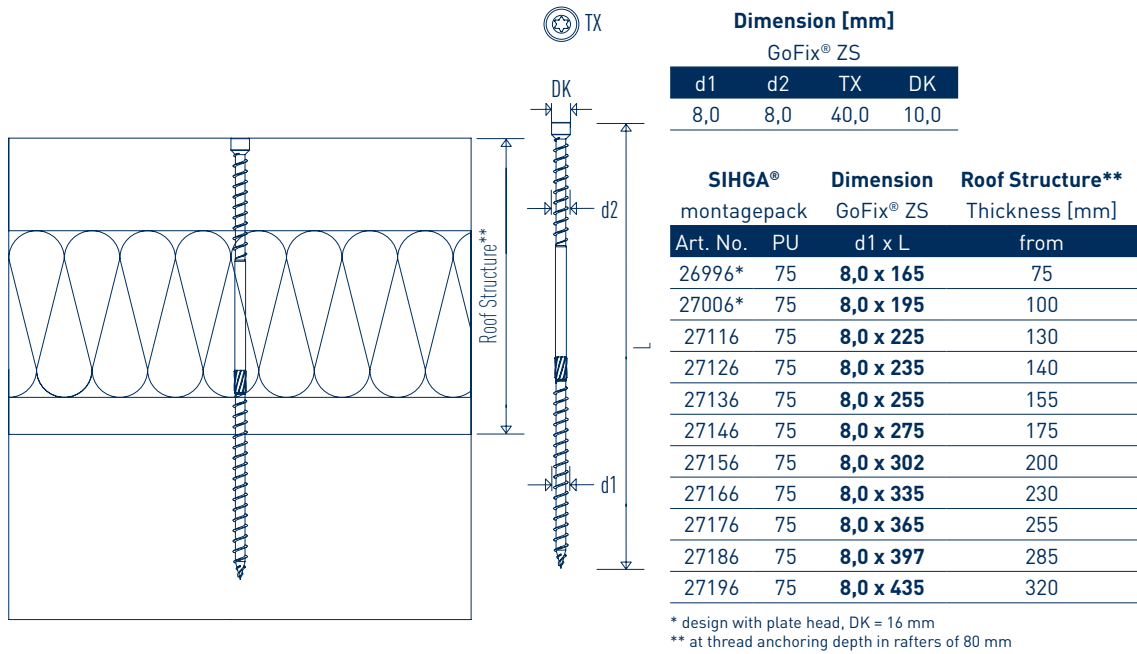
# YOUR Benefit

also for insulation material with a compressive stress below 50 kPa; no pressure on the insulation

time-saving, practical, precise, complete accessories enclosed

SIHGA® performs the calculation for you

S³ software download at [www.sihga.com](http://www.sihga.com)





# GoFix<sup>®</sup> SH



GoFix<sup>®</sup> SH for uses  
in hardwood applications

ETA-20/0558



## SIHGA® Feature

new screw geometry

shortened thread length

special screw tip

special head geometry and milling ribs

design values

wide use possible without pre-drilling

special geometry

## YOUR Benefit

no pre-drilling, quick installation

high extraction values using shorter screw

assembly in construction beech without pre-drilling

a perfect, clean screw pattern

SIHGA® performs the calculation for you

in solid wood and construction beech

high load-bearing capacity for efficient connections

SIHGA®		Dimension		Installation Part		Construction Beech Characteristic Values*			
montagepack		GoFix® SH	AD			Tensile Force $F_1$ [kN]		Shear Force $F_2$ [kN]	
Art. No.	PU	d1 x L	[mm]	Head		Thread 90/90	Thread 90/00	Thread 00/00	Wood-Wood 90/90
29426	75	8,0 x 100	20	9,80		24,62	18,24	18,24	6,62
29436	75	8,0 x 120	40	9,80		24,62	18,24	18,24	8,23
29446	75	8,0 x 140	60	9,80		24,62	18,24	18,24	8,47
29456	75	8,0 x 160	80	9,80		24,62	18,24	18,24	8,47
29466	75	8,0 x 180	100	9,80		24,62	18,24	18,24	8,47
29476	75	8,0 x 200	120	9,80		24,62	18,24	18,24	8,47
29486	75	8,0 x 220	140	9,80		24,62	18,24	18,24	8,47
29496	75	8,0 x 240	160	9,80		24,62	18,24	18,24	8,47

In addition to the cases of failure according to Johansen, other cases of failure are possible and are to be taken into consideration.

Subject to technical modifications and errors. Status of approval 12.2022

\* characteristic values for measurement according to EC 5,

bulk density according to ETA-14/0354 Pollmeier BauBuche (pk 730 kg/m³).

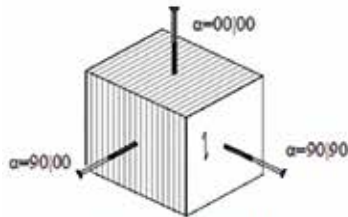
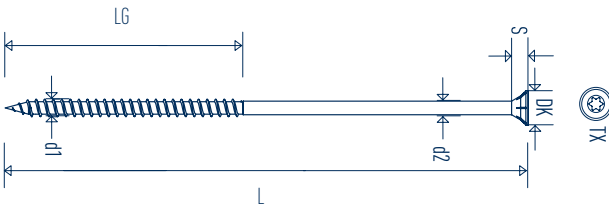
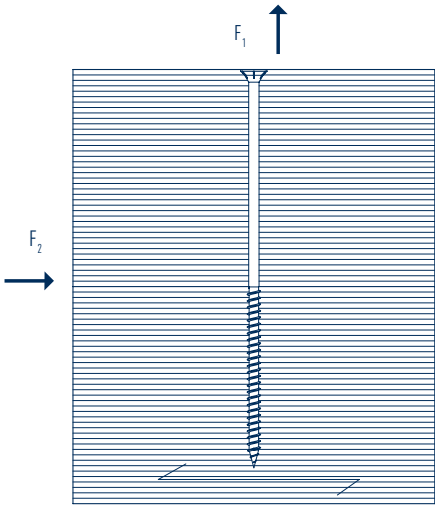


Figure 2: GoFix SH in LVL



### Dimension [mm]

GoFix® SH				
d1	d2	DK	S	TX
8	6,4	15	6,7	40



### SIHGA® TIP:

Use electric screwdriver device for assembly without pre-drilling. For easier screw-in, use GoFix® ESH 8. Use a washer for higher head pull-through values.



# L-GoFix® MS



L-GoFix® MS of hardened  
stainless steel



L-GoFix® MS with additional  
SC 9 / SC 11 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) and antique (SC 11 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

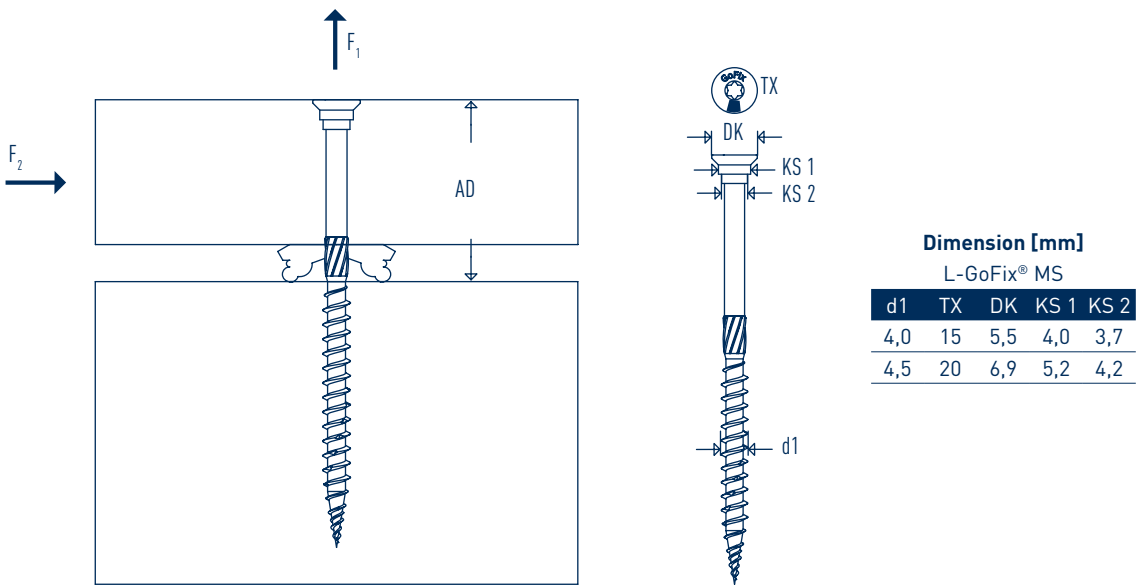
design values

including SIHGAFIX® stainless steel, Systemstift® and installation instructions

# YOUR Benefit

SIHGA® performs the calculation for you

time-saving, practical, precise, all accessories included, SIHGAFIX® stainless steel prevents extraneous rust and also enables screw connections in deep grooves



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
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 12.2022

\* also available with SC 9 coating

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

# SIHGA® Feature

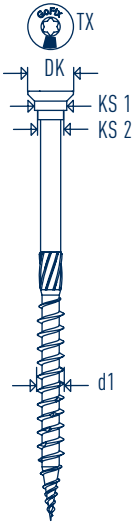
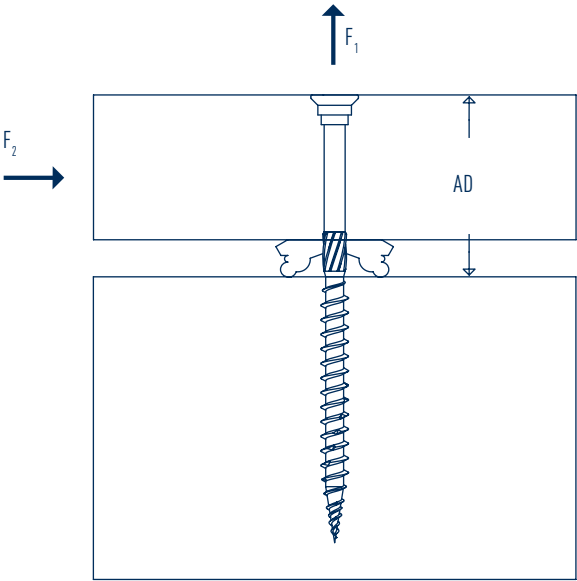
design values

including SIHGAFIX® stainless steel, Systemstift® and installation instructions

# YOUR Benefit

SIHGA® performs the calculation for you

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**			
Art. No.	PU	d1 x L	[mm]	Tensile Force F <sub>1</sub> [kN]		Shear Force F <sub>2</sub> [kN]	
				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 12.2022

\* also available with SC 9 coating

° also available with SC 11 coating

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



## SIHGA® TIP:

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

# L-GoFix<sup>®</sup> MS A2

## SIHGA<sup>®</sup> Feature

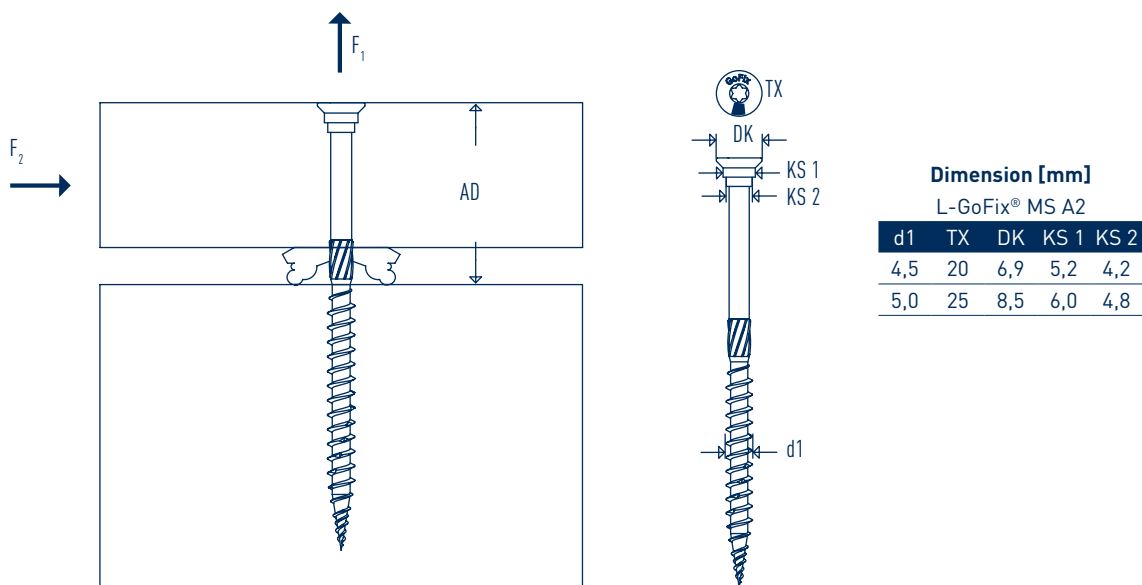
## YOUR Benefit

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 <sup>®</sup> point with special shape	guarantees fast setting of screws without splitting
SIHGA <sup>®</sup> ribs on shaft and slip coating	light, fast rotation and optimum fit in the wood are guaranteed
including SIHGAFIX <sup>®</sup> stainless steel, Systemstift <sup>®</sup> and installation instructions	time-saving, practical, precise, all accessories enclosed; SIHGAFIX <sup>®</sup> 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 Ø 3 mm. If in doubt, we recommend carrying out pretrials



**L-GoFix<sup>®</sup> MS A2**  
made of A2 stainless steel



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

Subject to technical modifications and errors. Status of approval 12.2022

\*\* characteristic values for dimensioning according to EC 5 and for strength class pk 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®



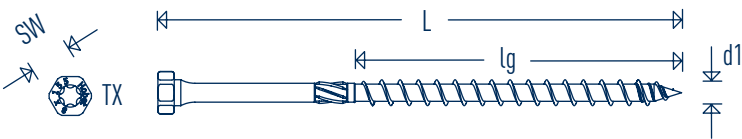
**Hobet® the wood-concrete  
connection screw**



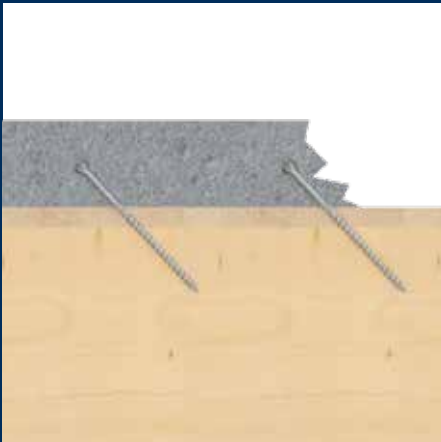
SIHGA® Feature

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	better eco-balance, low inherent weight, degradable
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<sup>®</sup> DWD

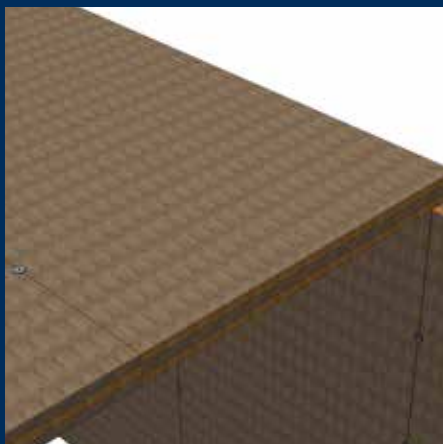


IdeFix<sup>®</sup> DWD shear connection for  
wall and ceiling elements

## SIHGA® Feature

## YOUR Benefit

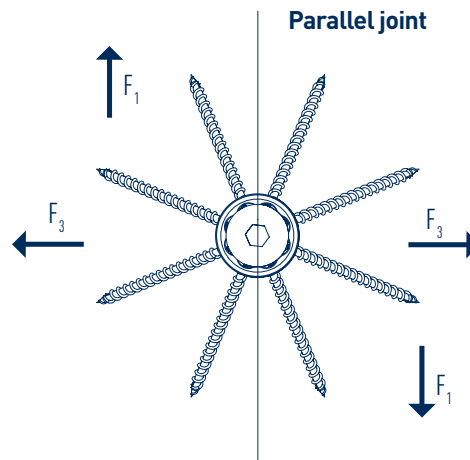
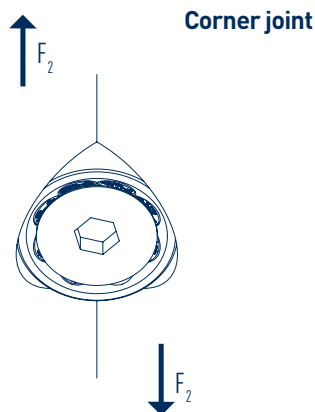
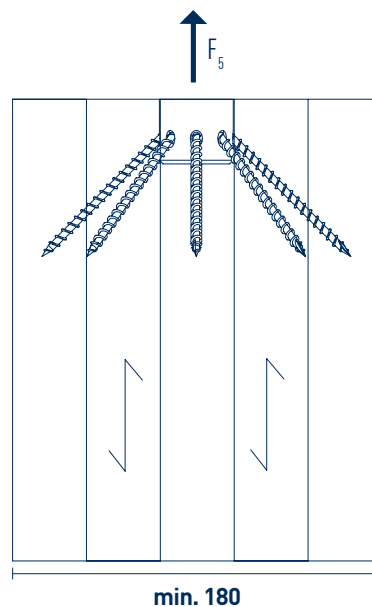
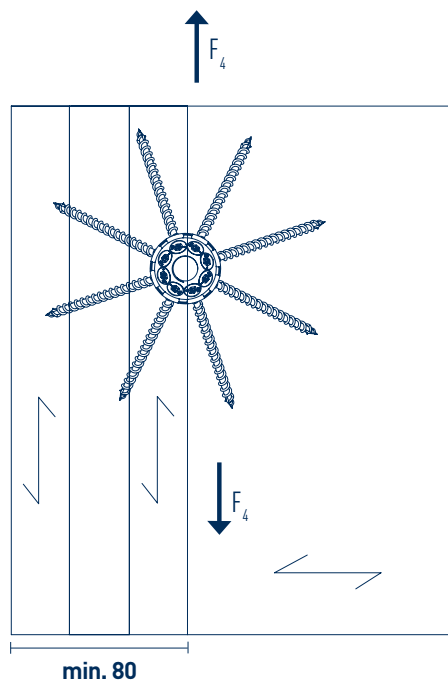
proven three-dimensional load uptake through geometry and 45° screw connection	connects solid wood elements in parallel and across corners
tested in plywood boards - as well as solid wood elements	shear connections for wood elements of all sizes and types
simple assembly, only one hole per connector	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.

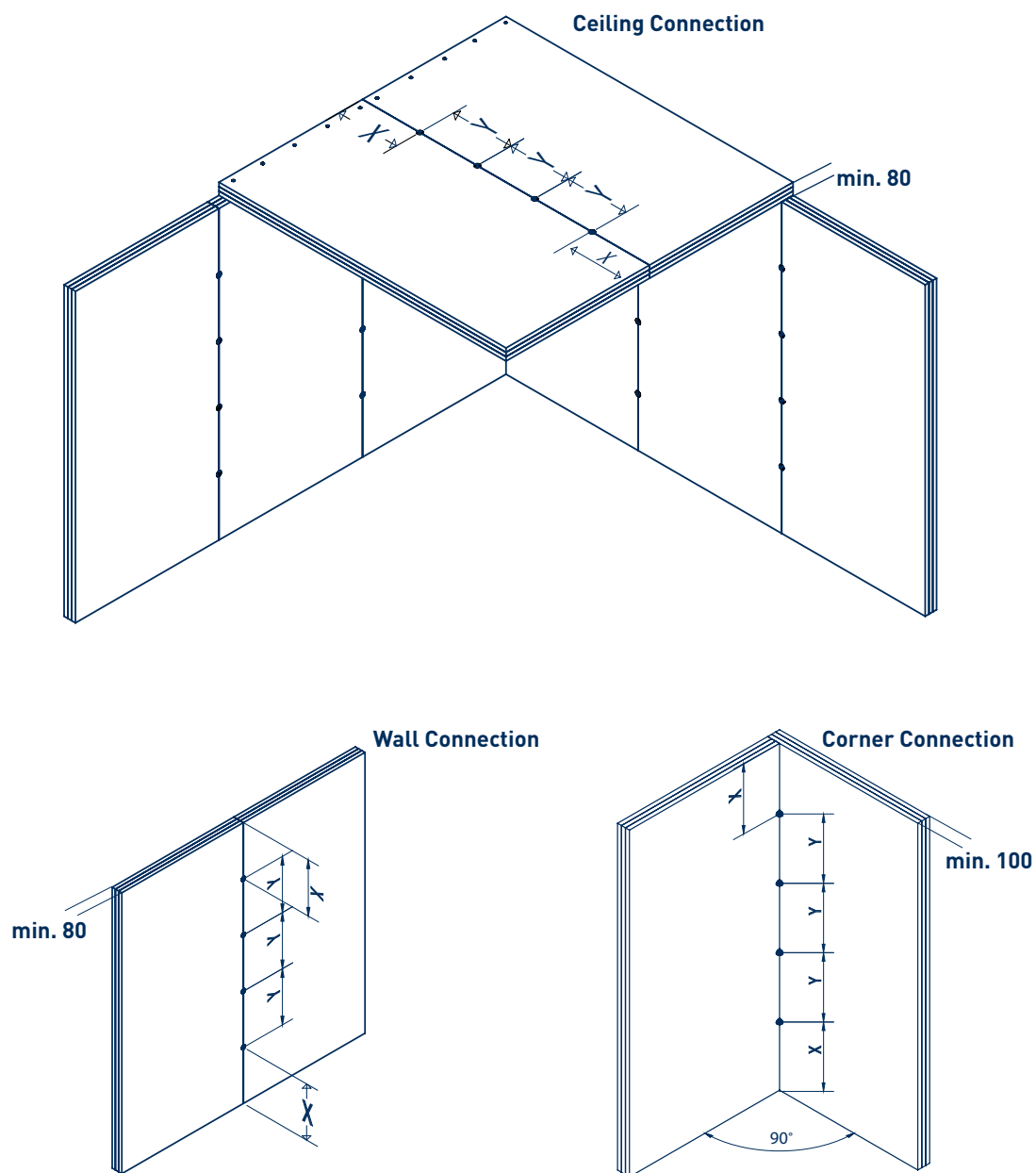




SIHGA®		Dimension	Dimension	Dimension	Parallel Characteristic Value	Corner Connection Characteristic Value
IdeFix® DWD		IFK	GoFix® HK	Pressure Bulkhead	$F_1$	$F_2$
Art. No.	PU	d x h	d x L	d x L	[kN]	[kN]
28896	5	<b>30 x 20</b>	5,0 x 80	12 x 20	14,30	6,33
28906	5	<b>40 x 25</b>	6,0 x 100	16 x 25	20,36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

SIHGA®		Dimension	Dimension	Dimension	Corner Connection Characteristic Value	Corner Connection Characteristic Value	Extraction Char- acteristic 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	<b>30 x 20</b>	5,0 x 80	12 x 20	8,27	12,61	31,66
28906	5	<b>40 x 25</b>	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

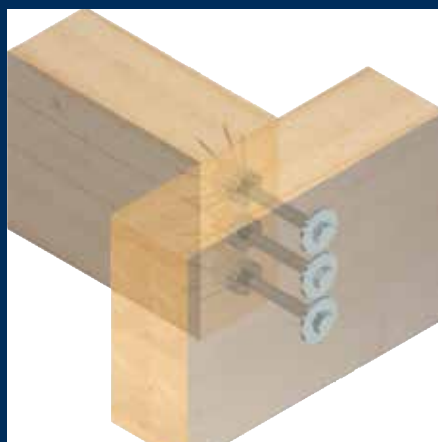
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## SIHGA® Feature

## 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



### SIHGA® TIP:

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



## SIHGA® Feature

includes SIHGAFIX®, GoFix® HK screws and installation instructions

Permitted for service class 3 by using GoFix® HKE screws

design values

## YOUR Benefit

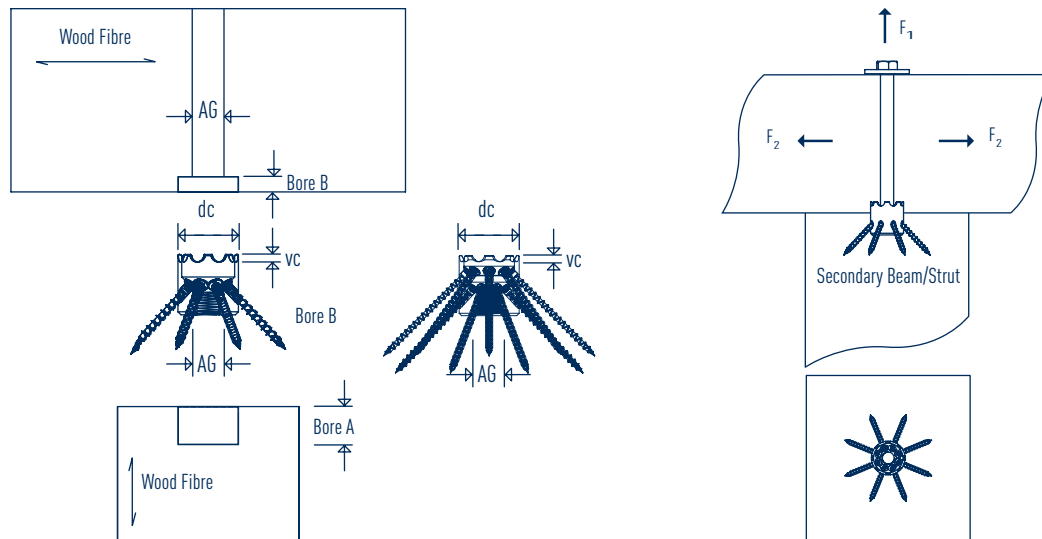
time-saving, practical, precise, complete accessories enclosed

Connections in outdoor areas are easy to manage

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]
<b>304/306/308</b>	30	M 12	27	0	20	7	3
<b>406/408/410</b>	40	M 16	35	0	25	10	5
<b>509</b>	50	M 20	45	0	30	15	5
<b>508/510</b>	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		System Screw		Secondary Beam / Strut		Characteristic Values*	
Art. No.	PU	IdeFix® IF/IFD Type	GoFix® HK Pieces	Stk.	Edge / axis distance [mm]	Height/Width [mm]	Tensile F <sub>1</sub> [kN]	Shear F <sub>2</sub> ** [kN]	
28806	24	<b>IF 304</b>	5,0 x 40	8	50	100	19,90	14,00	
28866	24	<b>IF 306</b>	5,0 x 60	8	60	120	30,20	15,66	
28816	24	<b>IF 308</b>	5,0 x 80	8	70	140	38,80	16,73	
28826	12	<b>IF 406</b>	6,0 x 60	8	60	120	34,20	18,40	
28886	12	<b>IF 408</b>	6,0 x 80	8	80	160	44,90	24,38	
28836	12	<b>IF 410</b>	6,0 x 100	8	90	180	54,60	25,59	
28846	6	<b>IF 509</b>	8,0 x 90	8	80	160	66,10	28,33	
28856	6	<b>IFD 508</b>	6,0 x 80	16	80 / 160	160	85,00	28,33	
28876	6	<b>IFD 510</b>	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 (pk 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:

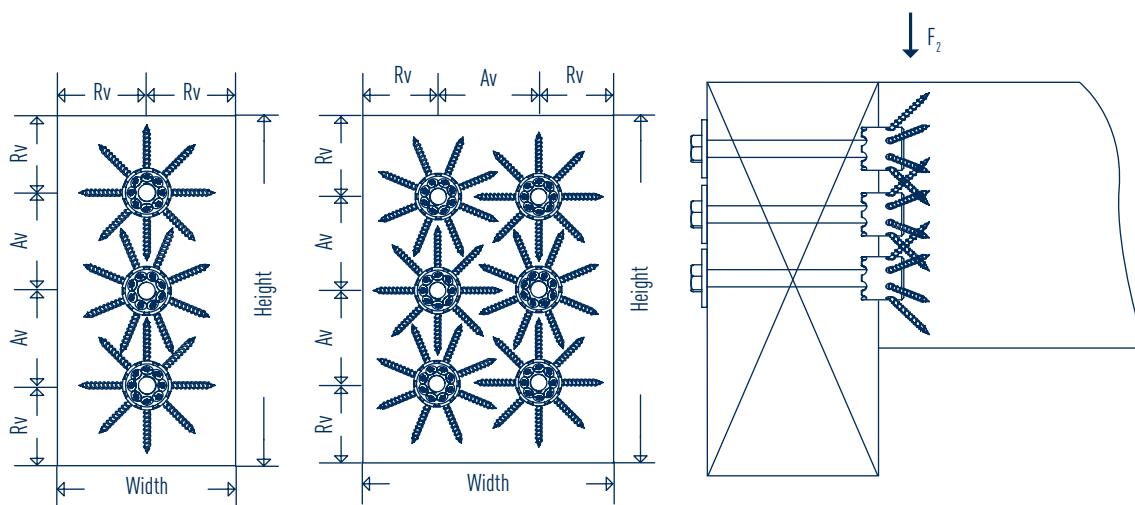
For drilling by hand, we recommend the IdeFix® Drill Gauge IBL with drill.

## SIHGA® Feature

## YOUR Benefit

design values

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 $F_{t2}$		Width	Height	Connector	Transverse Force $F_{t2}$	
Art. No.	PU	IF	[mm]	[mm]	Pieces	[kN]		[mm]	[mm]	Pieces	[kN]	
28806	24	<b>304</b>	100	150	2	20,20		150	150	4	40,40	
28826	12	<b>406</b>	120	180	2	26,00		180	180	4	52,00	
28846	6	<b>509</b>	160	240	2	41,00		240	240	4	82,00	
28806	24	<b>304</b>	100	200	3	30,30		150	200	6	60,60	
28826	12	<b>406</b>	120	240	3	39,00		180	240	6	78,00	
28846	6	<b>509</b>	160	320	3	61,50		240	320	6	123,00	
28806	24	<b>304</b>	100	250	4	40,40		150	250	8	80,80	
28826	12	<b>406</b>	120	300	4	52,00		180	300	8	104,00	
28846	6	<b>509</b>	160	400	4	82,00		240	400	8	164,00	
28806	24	<b>304</b>	100	300	5	50,50		150	300	10	101,00	
28826	12	<b>406</b>	120	360	5	65,00		180	360	10	130,00	
28846	6	<b>509</b>	160	480	5	102,50		240	480	10	205,00	

\* characteristic values for dimensioning according to EC 5 and strength class C 24 ( $\rho_k$  350 kg/m<sup>3</sup>)

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

for all IdeFix® IF and IFD (excluding IFD 510)

contains 1 IdeFix® Drill Gauge IBG, 1 IdeFix® Drill IB HMB, 1 IdeFix® Drill Template IBS, all GoFix® fastening screws, Allen key

including Systemstift® and installation instructions

## YOUR Benefit

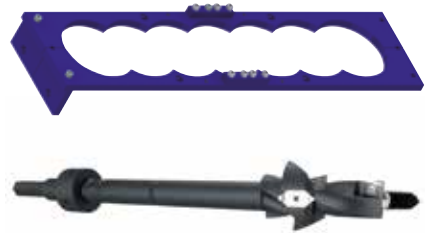
the professional installation aid, simplifies construction processes and saves time

everything is professionally and rationally protected and packed in a case

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

IdeFix® Drills IB HMB made of high-quality steel with exchangeable hard metal cutting inserts

IdeFix® Drills IB HMB with optimised geometry and thread tip

## YOUR Benefit

for permanent use of the drill without downtime for re-sharpening

independent feeding and centring of the drill without effort at different fibre directions





# 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

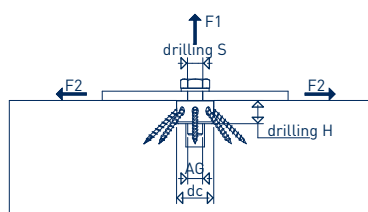
incl. all fasteners

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

\* Characteristic values for design according to EC 5 and strength class C 24 ( $\rho_k$  350 kg/m<sup>3</sup>)

\*\* Characteristic values related to a single connector with minimum dimensions

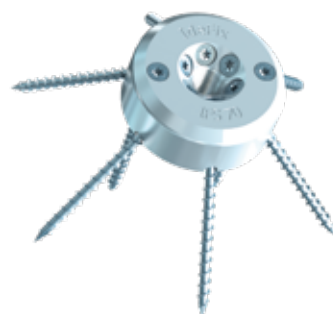
The values refer exclusively to the connection IdeFix® on wood or steel. Bolts and washers must be verified separately. Selected steel thickness 10 mm, bolt grade 8.8



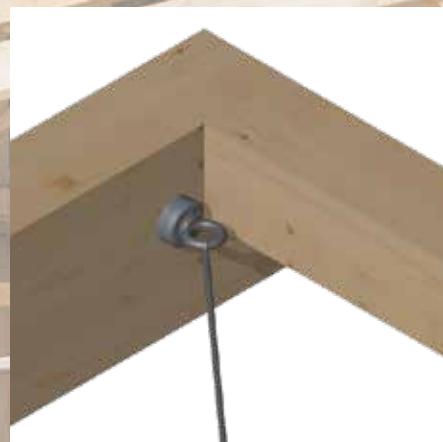
### SIHGA® TIP:

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

# IdeFix® IFS



IdeFix® IFS with  
special SC 6 coating



ETA-14/0160



## SIHGA® Feature

## YOUR Benefit

for heavy-load connections perpendicular to the grain

the usual complicated drilling, grooving or special production of steel parts can be omitted

three-dimensional load attachment through geometry and 45° screw connection with integrated transverse strengthening

the range of applications in wood construction is almost unlimited, even for applications where conventional wood screws are not sufficient

for fastening wind bracing, anchors against high wind loads and mountings of various kinds

IdeFix® IFS is the simple, secure solution

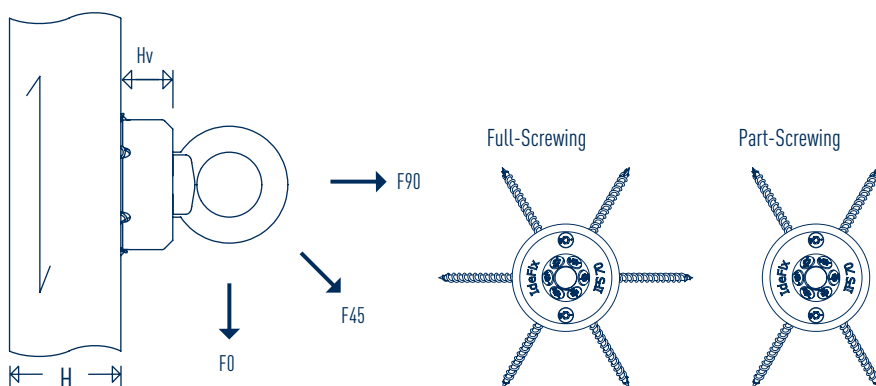
includes SIHGAFIX®, GoFix® HK screws and installation instructions

time-saving, practical, precise, complete accessories enclosed

calculation

SIHGA® performs the calculation for you

SIHGA® montagepack		IdeFix® IFS		Wood Dimension		Angle	Characteristic Values [kN]		System Screw
Art. No.	PU	Type	Hv	Height [H] [mm]	Width [mm]	To the Grain [Grad]	Screw Pattern		GoFix® HK d1 x L
29046	6	<b>710</b>	28	80	110	F 0°	-	5,66	6,0 x 100
29046	6	<b>710</b>	28	80	180	F 0°	8,50	-	6,0 x 100
29046	6	<b>710</b>	28	80	110	F 45°	-	7,90	6,0 x 100
29046	6	<b>710</b>	28	80	180	F 45°	11,40	-	6,0 x 100
29046	6	<b>710</b>	28	80	110	F 90°	-	17,00	6,0 x 100
29046	6	<b>710</b>	28	80	180	F 90°	25,50	-	6,0 x 100



### SIHGA® TIP:

If required, order the high-strength, tested ring screw at once.



# Pfalu®



Pfalu®



SIHGA® Feature

fastenings for fence and railing posts

ideally suited for fences and privacy walls

stepless and easily accessible incline adjustment up to 4 degrees in all directions

no slotting or milling necessary in the factory

no protruding steel plates, which need to be milled out with fence or balcony elements

fastening into the posts only from below

includes SIHGAFIX®, BeziFix® Anker ZF for timber on concrete or GoFix® S+ for timber on timber

YOUR Benefit

quick, simple and safe installation of posts

offers extensive stability and bending stiffness

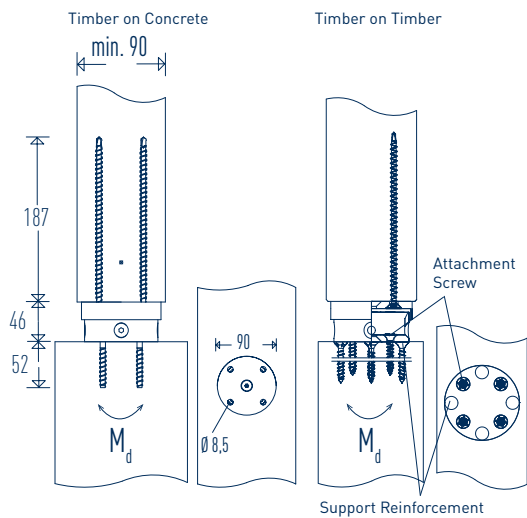
straight-lined, flush appearance of the posts without complex compensation panels, applicable to 15 cm concrete width

simply fit the accessories supplied

plain and simple, aesthetically pleasing, can be (re-)adjusted at any time, no drill holes, pre-assembling possible

no side insertion of screws necessary, which become an entry point for water

time-saving (up to 70 %), practical, precise, complete accessories enclosed



SIHGA®	Dimension	GoFix® S+ Post Attachment	BeziFix® Anchor ZF Concrete Attachment	Max. Moment	
montagepack	Pfalu®	d1 x L	d1 x L	M <sub>d</sub>	
Art. No.	PU	Ø x h	[mm]	[mm]	[kNm]
43526	5	90 x 46	8,0 x 195	7,5 x 60	1,50

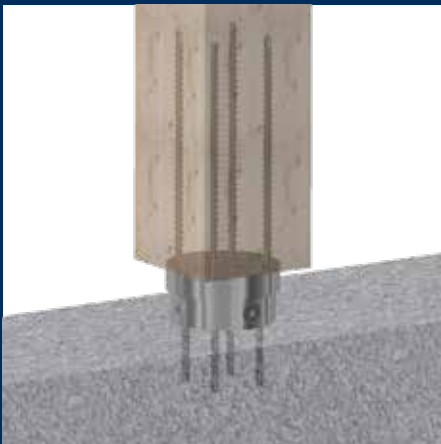
\* tested concrete quality C 35/45 unreinforced

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 <sub>s</sub>
Art. No.	PU	Ø x h	[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

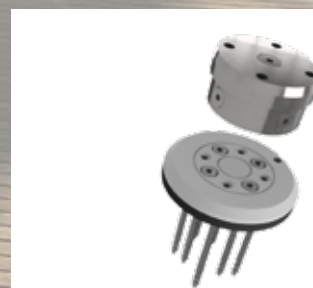


SIHGA® TIP:

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

fastening system for railing uprights on flat roof waterproofing

ideally suited for railings and screening walls

stepless and easily accessible inclination adjustment up to 4° in all directions

pressing surface reinforcement using GoFix® S+

valve for leak testing

combinable with various sealants

sealants are clamped-in

including Pfalu®, SIHGAFIX®, GoFix® S+ and all seals

## YOUR Benefit

quick, simple and safe installation

offers extensive stability and bending stiffness

straight-lined, flush appearance of posts without complex compensation

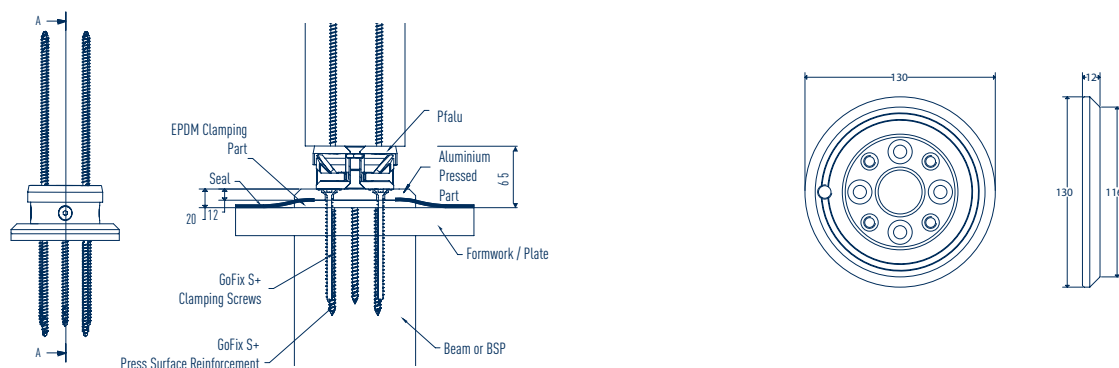
use on wood beams and solid wood ceilings and BSP systems

reliable connection and sealing, system can be serviced

fastened to PVC, EPDM and even sheet metal

later installation in existing waterproofing also possible

time-saving, practical, precise, all accessories included



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



### SIHGA® TIP:

For waterproofing testing use leak spray and an air pump.



# Pick



Pick



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 (Ø 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
<b>Now NEW:</b> Ultrasonic inspection for your SIHGA PICK	annual safety assessment according to the operating instructions, including ultrasonic testing
<b>Now NEW:</b> 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 <a href="http://www.hsbcad.com">www.hsbcad.com</a>

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

SIHGA®

System Kit Pick HMB

Art. No.

49223

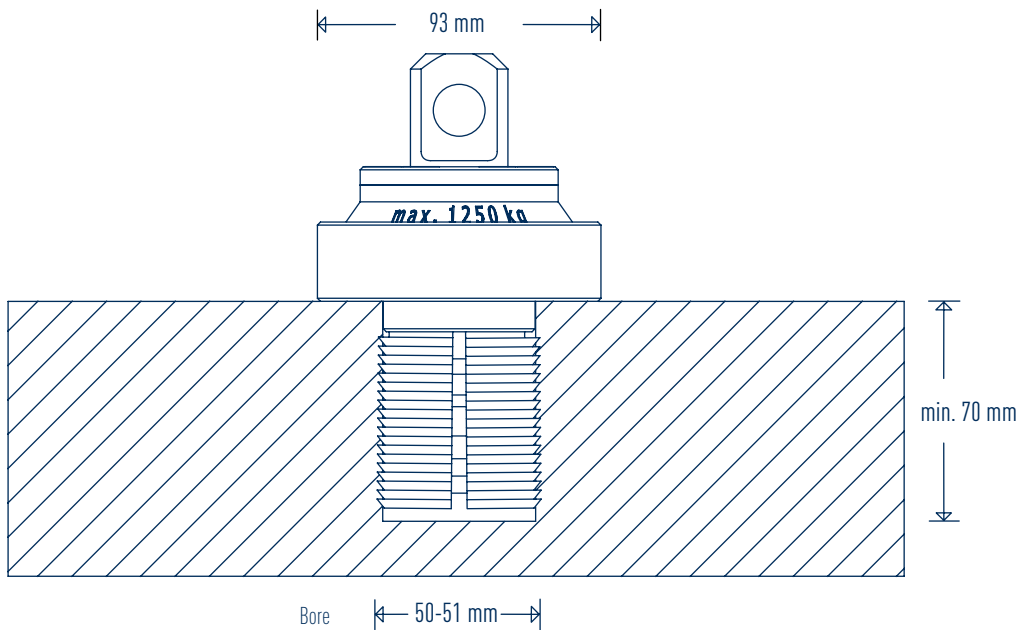


Pick Deck



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  $\geq 5^\circ$  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<sup>®</sup>



Pick Max<sup>®</sup>

INNOVATION  
2023



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 (Ø 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

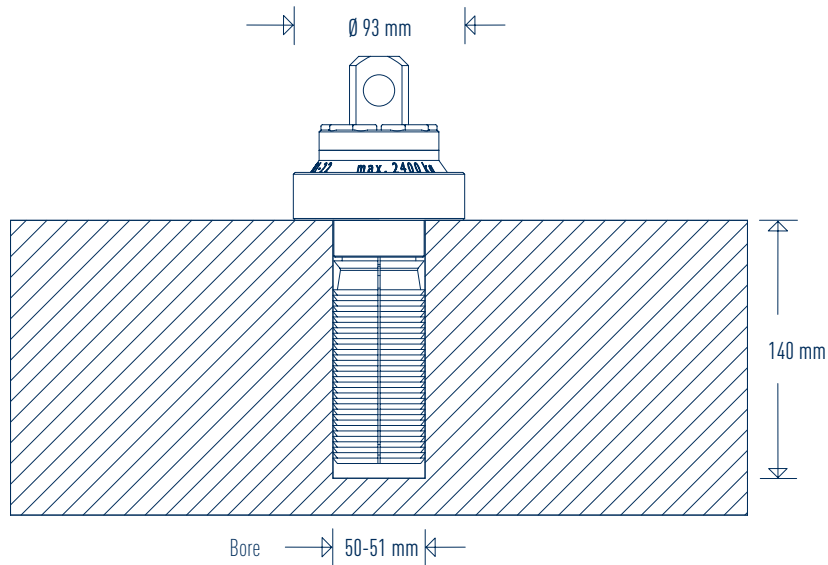


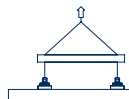
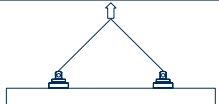
Expandix



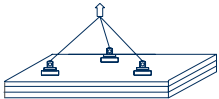

SIHGA® TIP:

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.

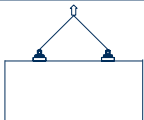
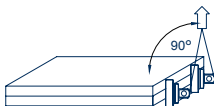


Pick Max® Load Table				
Beam	Beam Dimension		 2 Attachment Points 0°*	 2 Attachment Points 45°
	min. Height	min. Width		
	[mm]	[mm]	[kg]	[kg]
KVH e.g. framed wall	160	160	4.800	2.696

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  $\geq 5^\circ$  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<sup>®</sup> HMB

## SIHGA<sup>®</sup> Feature

two Pick Max<sup>®</sup> and shackle, Pick Max<sup>®</sup> Drill HMB, IdeFix<sup>®</sup> Drill Gauge IBG, 1 set HMB spare indexable inserts with screws and Allen keys and operating instructions are supplied in the System Kit

## YOUR Benefit

reliable and clean storage including all accessories

operating instructions stored in the lid	load values and safety conditions always to hand
Pick Max <sup>®</sup> 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 <sup>®</sup> 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 <sup>®</sup> Drill HMB with threaded bit	independent retraction of the drill without the application of force, guaranteed centring with different grain directions
including IdeFix <sup>®</sup> Drill Gauge IBG	easy, safe compliance with the drill depth against unintended drilling through, chippings collection, protection of the drill and against injuries

### SIHGA<sup>®</sup>

System Kit Pick Max<sup>®</sup> HMB

Art. No.	PU
49293	1



Pick Max<sup>®</sup> 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® montagepack®		Pick® Deck II	Dimensions	
Art. Nr.	VE	Type	d [mm]	l [mm]
90766	10	Pick Deck II	50	70
90776	10	Pick Deck Max II	50	140

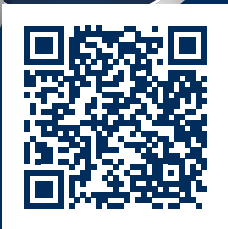
As Neuhaus 2017 (8.3.3) 1. points out with reference to EN DIN 1995-1-1:2019, weakening of the cross-section in the compression zone of structural members subjected to bending need not be taken into account in the calculation if the weakened area is filled to capacity and the filling material has the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

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



**SOLID CONSTRUCTION ...**

**... BUT IN WOOD**



**Also discover the new  
MASS-X® CLT Program**

Pick HMB

Pick Max®

Pick Deck II

Pick PSA

System Pick Engel®

Pick Out

Pocket Traverse

# Pick PSA



Pick PSA



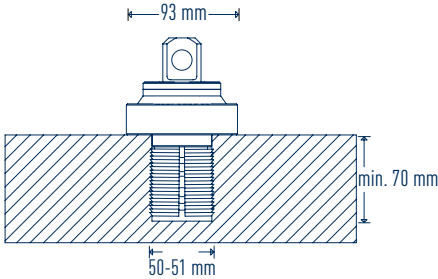
SIHGA® Feature

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



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

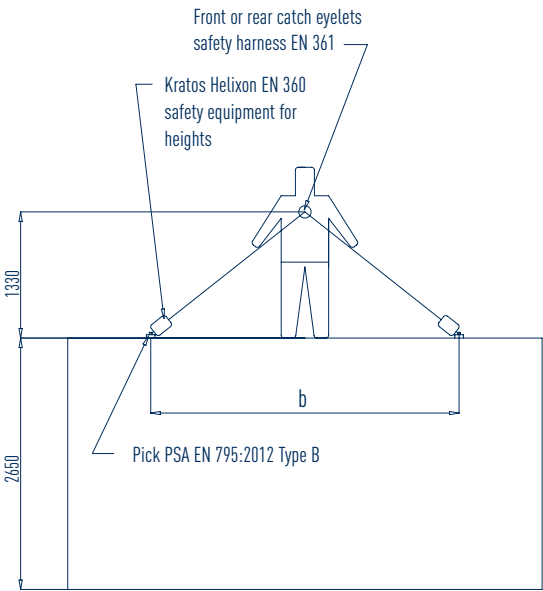
SIHGA® Feature

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 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

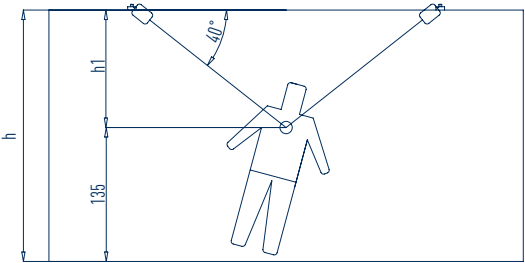
Table		
h	h1	b
200	65	155
210	75	179
220	85	203
230	95	226
240	105	250
250	115	274
260	125	298
270	135	322
280	145	346
290	155	369
300	165	393



$$h1 = h - 135\text{cm}$$
$$b = \frac{2 \times h1}{\tan(40^\circ)}$$

Example:

$$h1 = 265 - 135 = 130\text{cm}$$
$$b = \frac{2 \times 130}{\tan(40^\circ)} = 310\text{ cm}$$



**SIHGA® TIP:** For your safety, use the combination exclusively with the Pick PSA.

# Pick Out



# System Kit Pick Out

## SIHGA® Feature

## YOUR Benefit

developed, patented and manufactured in Austria	the highest Austrian quality and added value
is an extension for the Pick load handling device	mounts quickly and easily onto your existing picks
the Pick Out removes the pick from the load without the use of personnel	no one has to climb on the component to remove the pick
only the skill of the crane operator removes the pick	suspending a load at dizzying heights is a thing of the past
the removal time of the picks is drastically shortened	saves time and money
elastic bands pull the Pick Out including pick upwards as quickly as possible	the swinging of the load handling attachments after unhooking is greatly minimised and thus ensures high safety
the Pick Out is a purely mechanical component	no electronics -> therefore no empty batteries, no reception problems
low-maintenance	annual inspection together with personal safety equipment is possible as per the work equipment directive
tested safety - development was accompanied by the TÜV	avoidance of safety risks, corresponds to the latest state of the technological art
has been tested by SIHGA clients	field reports provide certainty about function and suitability
supplied in a high-quality system case	accessories and operating instructions are placed in a foam inlay, Pick Outs are accommodated even with mounted picks



**System Kit Pick Out**



### SIHGA® TIP:

In order to protect visible surfaces and built-in window elements on the Pick Out, we recommend the use of guide cords, which are manually guided from below, thus avoiding uncontrolled swaying of the crane chains. Another aid is the single strand chain (item no.: 50046).



# Pocket Traverse



Pocket Traverse



# Pocket Traverse

## SIHGA® Feature

The Pocket Traverse is a traverse with a small format

Couples two load handling attachments with each other

Specialist geometry

The Pocket Traverse can also be used as a balancing rocker

Chains with shortening claws

2,500 kg load capacity

Long service life

Low-maintenance

CE marking

## YOUR Benefit

It is easily transportable and therefore also readily available

By coupling two load handling attachments, twice the load can be lifted

The patent-pending geometry guarantees equal load distribution on each anchor point for lifting angles between 0° and 45°

When lifting 4 strands, e.g. ceiling elements, all four chain strands can be assumed to have the same load-bearing capacity

The Pocket Traverse can also be used correctly with challenging geometries

When using 2 Pocket Traverses, elements up to 5,000 kg can be lifted up

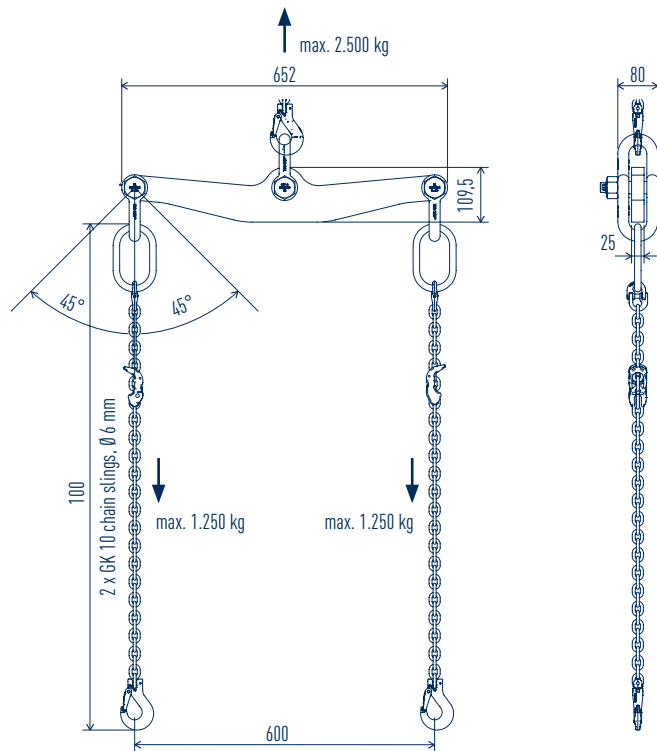
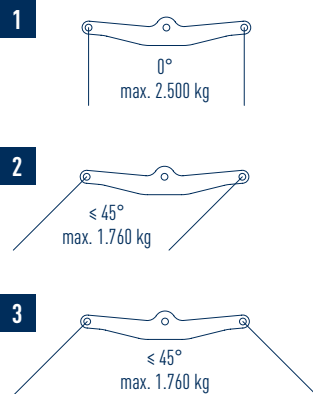
Up to 16,000 load cycles

Annual inspection together with personal safety equipment in accordance with the Work Equipment Ordinance

Provides security through conformity with all relevant standards

**SIHGA®**  
Pocket Traverse  
Art. No.  
50036

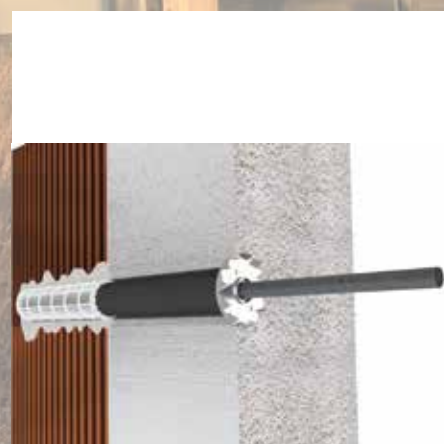
## Load cases:



## 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®



## 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 <sub>1c</sub>	F <sub>2c</sub>	F <sub>1d</sub>	F <sub>2d</sub>
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 <sub>1c</sub>	F <sub>2c</sub>	F <sub>1d</sub>	F <sub>2d</sub>
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 <sub>1c</sub>	F <sub>2c</sub>	F <sub>1d</sub>	F <sub>2d</sub>
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 <sub>1c</sub>	F <sub>2c</sub>	F <sub>1d</sub>	F <sub>2d</sub>
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  $\beta_{tr} = 0.7$  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  $\gamma_{M}$  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](http://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 <sub>1c</sub>	F <sub>2c</sub>	F <sub>1d</sub>	F <sub>2d</sub>
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 <sub>1c</sub>	F <sub>2c</sub>	F <sub>1d</sub>	F <sub>2d</sub>
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 <sub>1c</sub>	F <sub>2c</sub>	F <sub>1d</sub>	F <sub>2d</sub>
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 <sub>1c</sub>	F <sub>2c</sub>	F <sub>1d</sub>	F <sub>2d</sub>
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 <sub>1c</sub>	F <sub>2c</sub>	F <sub>1d</sub>	F <sub>2d</sub>
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  $\beta_{tr} = 0.7$  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<sub>1d</sub> and F<sub>2d</sub>.  
F<sub>2d</sub> 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  $\gamma_M$  of 2.5 for brick and 1.5 for concrete are already taken into account for F<sub>1d</sub> and F<sub>2d</sub>.  
An installation safety factor  $\gamma_{inst}$  of 1.4 is already taken into account for tractive load F<sub>2d</sub>. This does not apply for shear forces F<sub>1d</sub>.  
For load cases not covered in this table, the underlying expert opinion of MPA Stuttgart is available at [www.sihga.com](http://www.sihga.com).

EDER Plan XP 50 plus								
SIHGA®		Dimension		Insulation Thickness	Drilling tool	Characteristic Values		Recommended Values*
montagepack		d1 x L	d2 / Wall Thickness	D		F <sub>1c</sub>	F <sub>2c</sub>	F <sub>1d</sub>
Art. No.	PU	[mm]	[mm]	[mm]		Shear Force [kN]	Tensile Force [kN]	Shear Force [kN]
55406	5	50 x 190	42,4 / 8	0	ProziFix® Drill PFB 50	5,30	5,7	2,12
55416	5	50 x 300	42,4 / 8	110		3,36	5,7	1,34

H+H solid lime sand brick 2 DF								
SIHGA®		Dimension		Insulation Thickness	Drilling tool	Characteristic Values		Recommended Values*
montagepack		d1 x L	d2 / Wall Thickness	D		F <sub>1c</sub>	F <sub>2c</sub>	F <sub>1d</sub>
Art. No.	PU	[mm]	[mm]	[mm]		Shear Force [kN]	Tensile Force [kN]	Shear 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
55426	5	50 x 320	42,4 / 8	130		21,20	20,56	8,48
55436	5	50 x 340	42,4 / 8	150		19,95	20,56	7,98
55446	5	50 x 360	42,4 / 8	170		18,84	20,56	7,54
55456	5	50 x 380	42,4 / 8	190		17,85	20,56	7,14
55466	5	50 x 400	42,4 / 8	210		16,96	20,56	6,78

C20/25 cracked and non-cracked slab > 20 cm front side								
SIHGA®		Dimension		Insulation Thickness	Drilling tool	Characteristic Values		Recommended Values*
montagepack		d1 x L	d2 / Wall Thickness	D		F <sub>1c</sub>	F <sub>2c</sub>	F <sub>1d</sub>
Art. No.	PU	[mm]	[mm]	[mm]		Shear Force [kN]	Tensile Force [kN]	Shear Force [kN]
55416	5	50 x 300	42,4 / 8	110	50 mm Hammer Drill	10,89	10,45	7,26
55426	5	50 x 320	42,4 / 8	130		10,21	10,45	6,81
55436	5	50 x 340	42,4 / 8	150		9,61	10,45	6,41
55446	5	50 x 360	42,4 / 8	170		9,08	10,45	6,05
55456	5	50 x 380	42,4 / 8	190		8,60	10,45	5,73
55466	5	50 x 400	42,4 / 8	210		8,17	10,45	5,45

C20/25 cracked and non-cracked slab > 25 cm front side or wall surface								
SIHGA®		Dimension		Insulation Thickness	Drilling tool	Characteristic Values		Recommended Values*
montagepack		d1 x L	d2 / Wall Thickness	D		F <sub>1c</sub>	F <sub>2c</sub>	F <sub>1d</sub>
Art. No.	PU	[mm]	[mm]	[mm]		Shear Force [kN]	Tensile Force [kN]	Shear Force [kN]
55416	5	50 x 300	42,4 / 8	110	50 mm Hammer Drill	12,92	10,45	8,61
55426	5	50 x 320	42,4 / 8	130		12,11	10,45	8,08
55436	5	50 x 340	42,4 / 8	150		11,40	10,45	7,60
55446	5	50 x 360	42,4 / 8	170		10,77	10,45	7,18
55456	5	50 x 380	42,4 / 8	190		10,20	10,45	6,80
55466	5	50 x 400	42,4 / 8	210		9,69	10,45	6,46

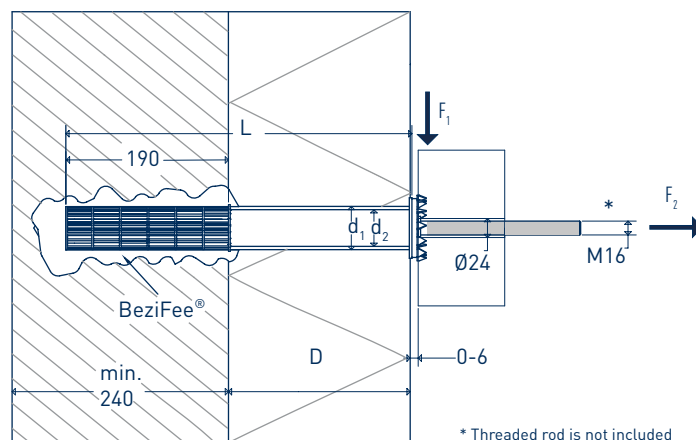
\*For installation in dry concrete or masonry and a temperature range I according to ETA 17/0181 and ETA 17/0182 (minimum temperature -40° C, maximum short-term temperature +40° C; maximum long-term temperature +24° C). Valid for the minimum edge & axis distances given in the table.

**Reductions of the recommended values are applied as follows:**

Reduction by the factor  $\beta_{tr} = 0.7$  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<sub>1d</sub> and F<sub>2d</sub>. F<sub>2d</sub> 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  $\gamma_M$  of 2.5 for brick and 1.5 for concrete are already taken into account for F<sub>1d</sub> and F<sub>2d</sub>. An installation safety factor  $\gamma_{inst}$  of 1.4 is already taken into account for tractive load F<sub>2d</sub>. This does not apply for shear forces F<sub>1d</sub>. For load cases not covered in this table, the underlying expert opinion of MPA Stuttgart is available at [www.sihga.com](http://www.sihga.com).

# ProziFix<sup>®</sup> brick dimensions, axis and edge distances

	Length l [cm]	Height h [cm]	Thickness d [cm]	$f_{b,min}/f_{c,min}$ [N/mm <sup>2</sup> ]	Edge distances C <sub>1</sub> /C <sub>2</sub> [cm]	Axis distances S <sub>1</sub> /S <sub>2</sub>
<b>Senftenbacher</b> 25 VZ Plan	38,0	24,9	25,0	15,0	19,0/12,5	l/h
<b>Wienerberger Poroton</b> Vertical perforated brick Plan-T 24,0-0,9	37,3	24,9	24,0	12,0	18,7/12,5	l/h
<b>Wienerberger Poroton</b> Poroton flat brick T8-50,0	24,8	24,9	50,0	6,0	12,4/12,5	l/h
<b>Wienerberger</b> Porotherm 25-38 Plan	37,5	24,9	25,0	10,0	18,8/12,5	l/h
<b>Wienerberger</b> Porotherm 50-20 H.i. Plan	20,0	24,9	50,0	7,5	10,0/12,5	l/h
<b>Pichler</b> PIAplan 25/38 VZ	38,0	24,9	25,0	15,0	19,0/12,5	l/h
<b>Pichler</b> PIAplan 50/20 VZ	20,0	24,9	50,0	10,0	10,0/12,5	l/h
<b>Leitl</b> Vital Plan 25/30/24,9 cm N+F	30,0	24,9	25,0	15,0	15,0/12,5	l/h
<b>Leitl</b> Vital Solex Plan 50/20/24,9 cm N+F	20,0	24,9	50,0	7,5	10,0/12,5	l/h
<b>EDER</b> Plan XP 50 plus	20,0	24,9	50,0	5,0	10,0/12,5	l/h
<b>H+H</b> Solid lie sand brick 2 DF	11,5	11,3	24,0	20,0	5,8/5,7	l/h
<b>Concrete slab front side &gt; 20 cm</b>	40,0	20,0	25,0	C20/25	20,0/10,0	l/h
<b>Betondecke stirnseitig &gt; 25 cm</b>	50,0	25,0	25,0	C20/25	25,0/12,5	l/h





# ProziFix® Drill PFB 50

## SIHGA® Feature

special cutting geometry

all blades are exchangeable

extra long shaft, compatible with  
IdeFix® Drill Gauge IBG

can be used with common cordless screwdrivers

manufactured in Austria

## YOUR Benefit

cuts a 50 mm hole in bricks without destroying  
them

saves time and money

hole depths are precisely adjustable and the hole  
can be drilled cleanly at a right angle

no hammer drill device required

highest European quality and value creation

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

SIHGA®		IdeFix® Drill Gauge IBG
montagepack		Ø 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 Threaded Rod (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	Ø	Height	Thread	min. Ø	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



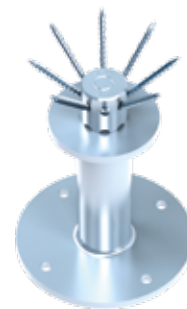
### SIHGA® TIP:

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





# Herakulix® KI 200



Herakulix® KI 200 with  
special SC 6 coating

## SIHGA® Feature

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)

high corrosion and splash protection due to coating

permanent wood connection

three-dimensional screwing with IdeFix® in the end  
grain

IdeFix® Drill Gauge IBG (page 200)

including SIHGAFIX® GoFix® HK screws and  
installation instructions

## YOUR Benefit

the most durable and reliable connection  
with impact protection at carports, according to  
comments on [www.sihga.com](http://www.sihga.com)  
(Herakulix® KI 200/Download)

suitable for use in weathered areas

structural wood protection keeps surfaces free of  
damage

the world's only product with a three-dimensional,  
standard-compliant  
fitting provides safety

for efficient, angular drilling also on site

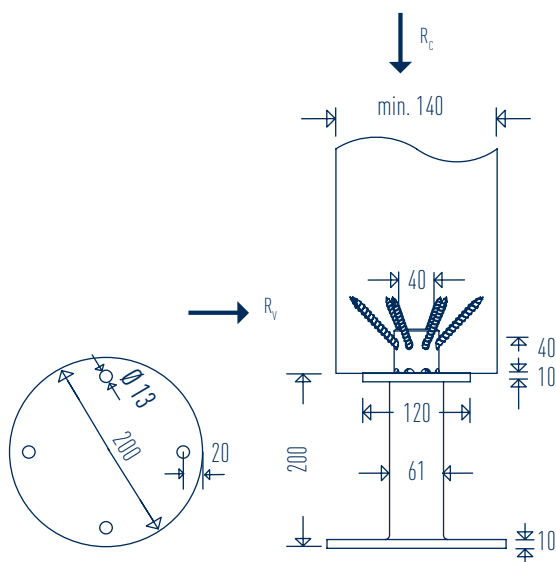
time-saving, practical, precise, including all  
accessories

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	<b>KI 200</b>	406			237,5	29,00	10,00	50,00 <sup>1</sup>	10,00 <sup>2</sup>

\* characteristic values for design according to EC 5 and strength class C24 ( $\rho_k$  350 kg/m<sup>3</sup>)

<sup>1</sup> 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 %.

<sup>2</sup> 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)

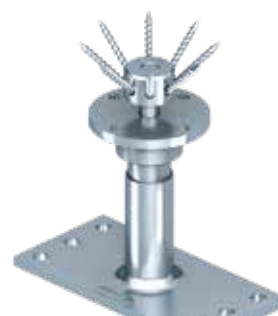


### SIHGA® TIP:

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



# Herakulix® XS/S/M/L/XL



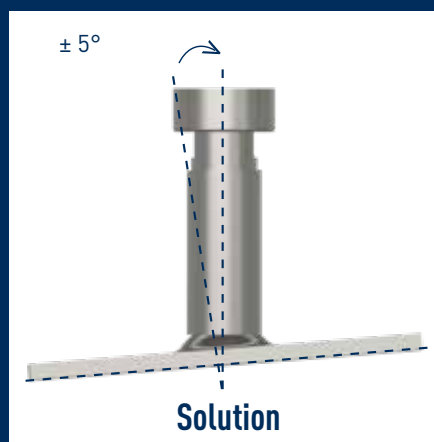
Herakulix® XS/S/M/L/XL two-part system with SC 6 coating

ETA-18/0886



**SIHGA® Feature****YOUR Benefit**

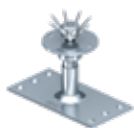
integrated inclination compensation of up to $\pm 5^\circ$ in all directions	surface unevenness and slopes can be compensated for in an aesthetically pleasing and structurally correct manner
two-part system with a short retraction path	very simple assembly, height adjustable when assembled
a range of variants and additional drill bores in the base plate	allows individual anchoring and unimpeded $90^\circ$ 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****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.



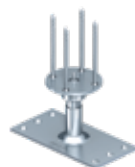
# Herakulix® XS



XS RI 30 (115 - 155 mm)



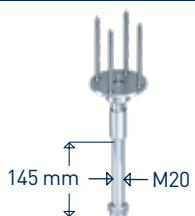
XS QI 30 (115 - 155 mm)



XS RG (115 - 155 mm)



XS QG (115 - 155 mm)



XS BG (99 - 136 mm)



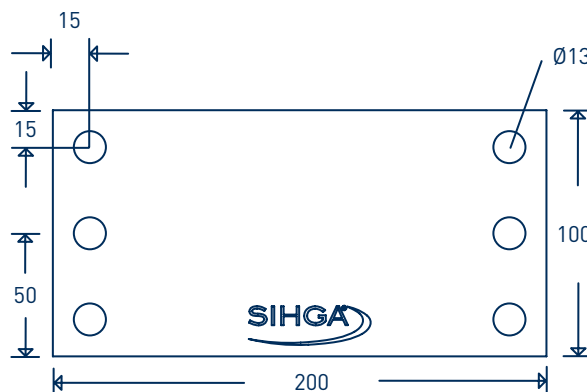
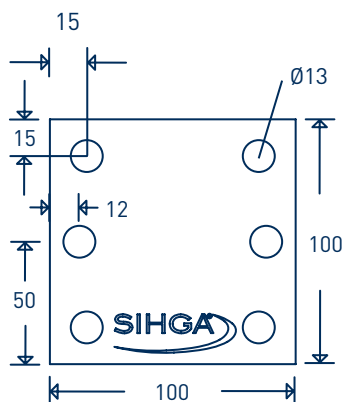
\*optional accessor XS/RZ



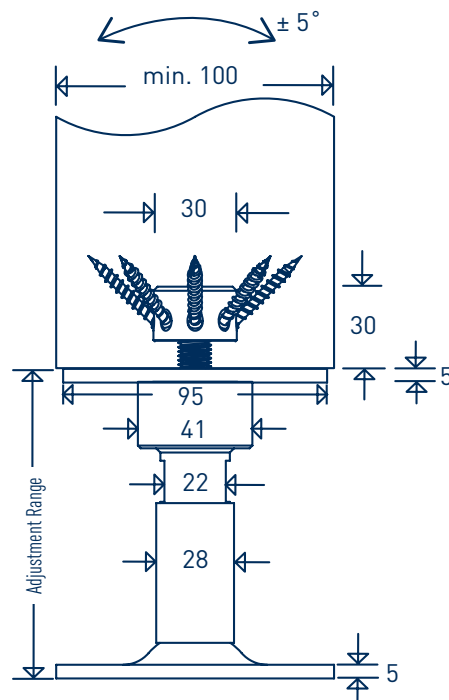
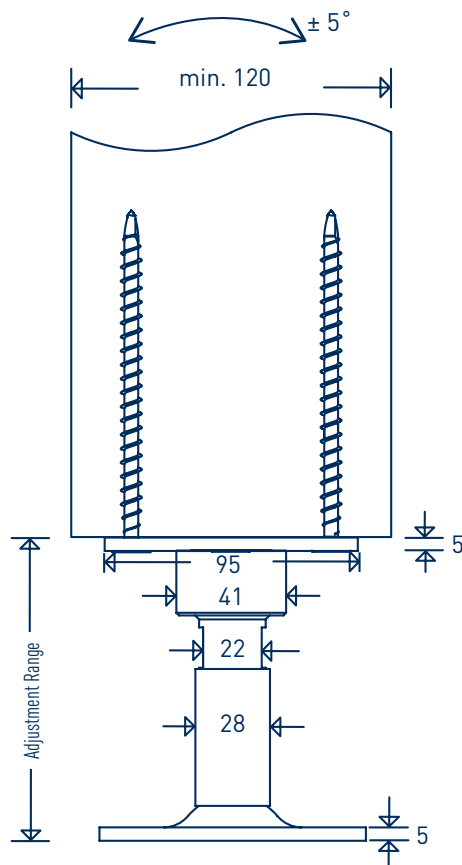
Accessoires see page 146

## 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)



# 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	<b>XS RI 30</b>	IdeFix® IFK 304	115	155	45,55	2,40	19,90
51117	10	<b>XS QI 30</b>	IdeFix® IFK 304	115	155	45,55	2,40	19,90
51127	10	<b>XS RG</b>	GoFix® S+ 8,0 x 195	115	155	45,55	-	10,90
51137	10	<b>XS QG</b>	GoFix® S+ 8,0 x 195	115	155	45,55	-	10,90
51147	10	<b>XS BG</b>	GoFix® S+ 8,0 x 195	99	136	45,55	1,92	10,90
47706	10	<b>*XSRZ</b>	Ring + disc	M 20	Ø 37/21			

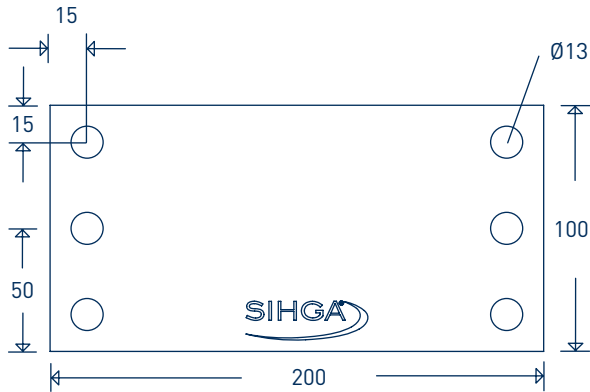
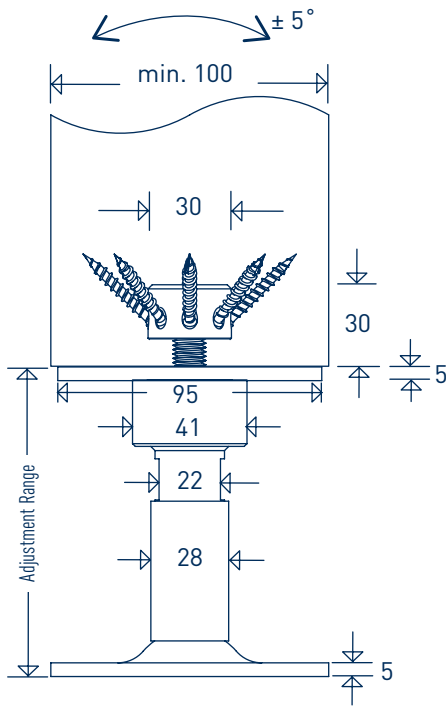
\*\* characteristic values for design according to EC 5 and strength class C 24 ( $\rho_k$  350 kg/m<sup>3</sup>)

# Herakulix<sup>®</sup> S



## 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 <sup>®</sup> Herakulix <sup>®</sup> Wood Connection				Adjustment Range		Design Values		Character. Values**
objektpack <sup>®</sup>				Height [mm]		Compressive Force [kN]	Shear Force [kN]	Tensile Force [kN]
Art. No.	PU	Type	Type	from	to	R <sub>c,d</sub>	R <sub>v,d</sub>	R <sub>t,k</sub>
51167	10	S RI 30	IdeFix <sup>®</sup> IFK 304	155	245	45,55	1,2	19,90

\*\* characteristic values for design according to EC 5 and strength class C 24 (p<sub>k</sub> 350 kg/m<sup>3</sup>)

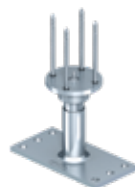
# Herakulix® M



M RI 40 (155 - 220 mm)



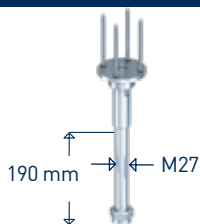
M QI 40 (155 - 220 mm)



M RG (155 - 220 mm)



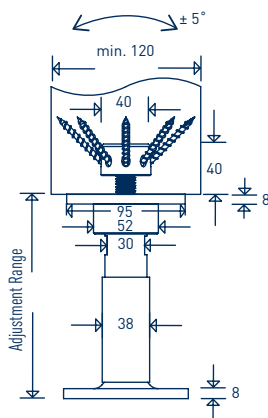
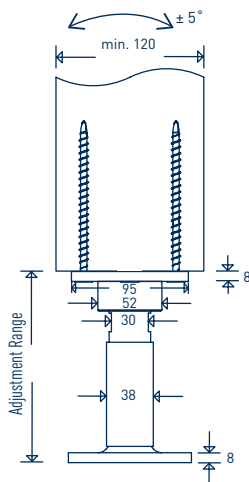
M QG (155 - 220 mm)



M BG (137 - 202 mm)

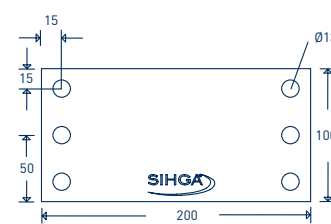
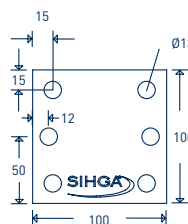


\*optional accessory ML RZ



## 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		Design Values		Character. Values**
Art. No.	PU	Type	Type	from	to	Compressive Force [kN]	Shear Force [kN]	Tensile Force [kN]
51307	5	<b>M RI 40</b>	IdeFix® IFK 406	155	220	89,18	3,25	34,20
51317	5	<b>M QI 40</b>	IdeFix® IFK 406	155	220	89,18	3,25	34,20
51327	5	<b>M RG</b>	GoFix® S+ 8,0 x 195	155	220	89,18	-	10,90
51337	5	<b>M QG</b>	GoFix® S+ 8,0 x 195	155	220	89,18	-	10,90
51347	5	<b>M BG</b>	GoFix® S+ 8,0 x 195	137	202	89,18	3,20	10,90
47716	5	<b>*MLRZ</b>	Ring + disc	M 27	Ø 50/28			

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



# Herakulix® L



L RI 40 (220 - 350 mm)



L QI 40 (220 - 350 mm)



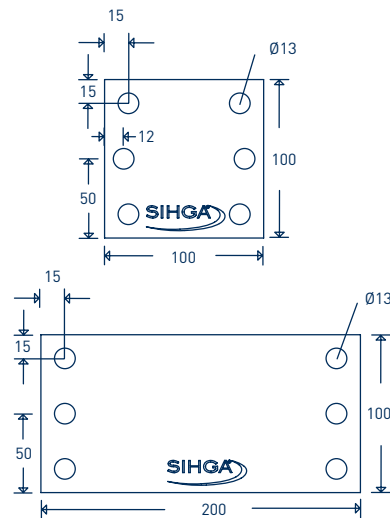
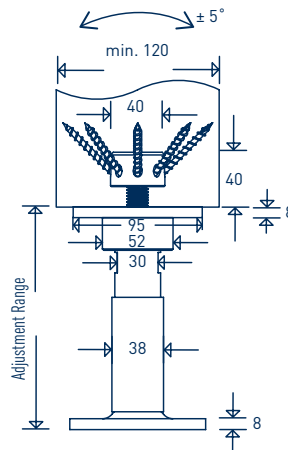
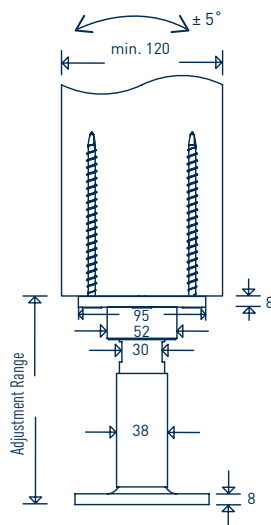
L RG (220 - 350 mm)



L QG (220 - 350 mm)

## 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)



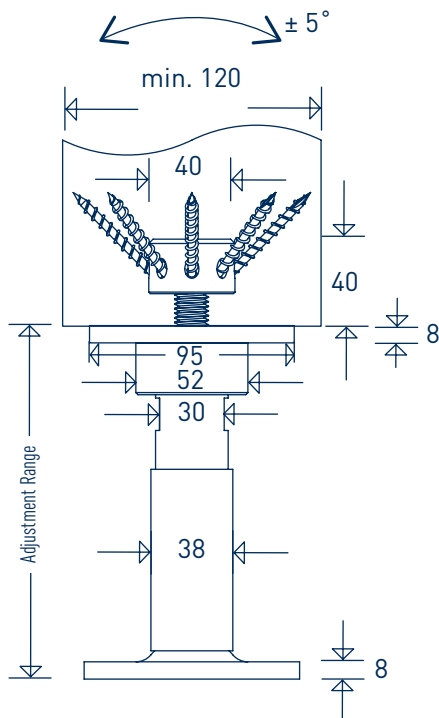
SIHGA®		Herakulix® Wood Connection		Adjustment Range		Design Values		Character. Values*
objektpack®				Height [mm]		Compressive Force [kN]	Shear Force [kN]	Tensile Force [kN]
Art. No.	PU	Type	Type	from	to	$R_{c,d}$	$R_{v,d}$	$R_{t,k}$
51507	5	<b>L RI 40</b>	IdeFix® IFK 406	220	350	89,18	1,9	34,20
51517	5	<b>L QI 40</b>	IdeFix® IFK 406	220	350	89,18	1,9	34,20
51527	5	<b>L RG</b>	GoFix® S+ 8,0 x 195	220	350	89,18	-	10,90
51537	5	<b>L QG</b>	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 ( $\rho_k$  350 kg/m³)

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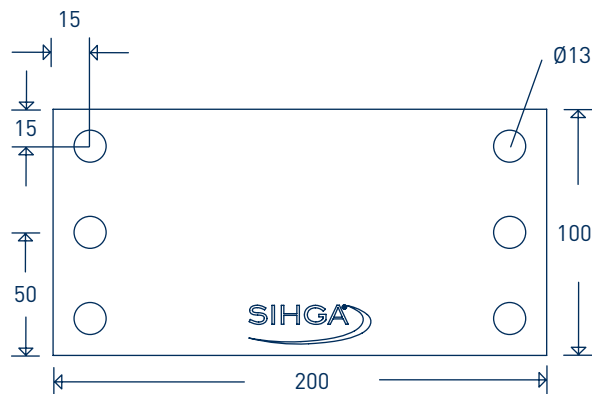


# Herakulix® XL



## 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 <sub>c,d</sub>	R <sub>v,d</sub>	R <sub>t,k</sub>
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 (p<sub>k</sub> 350 kg/m<sup>3</sup>)

# ZaFix® STZ



ZaFix® STZ with  
special SC 6 coating



ETA-14/0160





## SIHGA® Feature

takes over up to 154.5 kN pressure force and 10.57 kN tensile force per fastening point

durable wood connection

thread cover through stainless steel covering sleeve

series 300 are height adjustable in the installed condition

## YOUR Benefit

the durable, reliable connection with extremely quick assembly time

structural wood protection keeps surfaces free of damage

high corrosion and spray water protection

height adjustable any time afterwards



ZaFix® STZ 211 (120 - 160 mm)



ZaFix® STZ 221 (120 - 160 mm)



ZaFix® STZ 310 (120 - 160 mm)



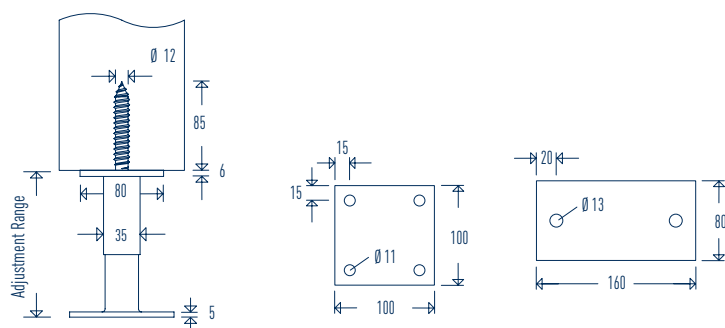
ZaFix® STZ 311 (120 - 160 mm)



ZaFix® STZ 320 (120 - 160 mm)



ZaFix® STZ 321 (120 - 160 mm)



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

\* not height adjustable in installed condition

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



# Stabilix C/H



**Stabilix C  
for carports**



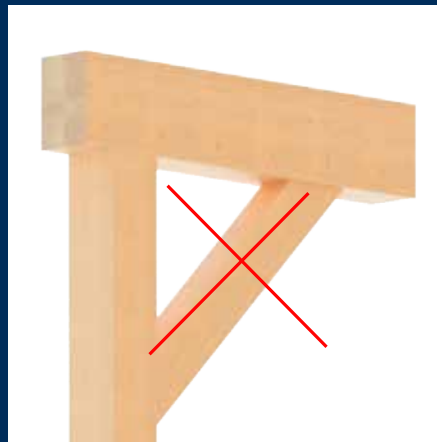
**Stabilix H  
for timber construction**



## SIHGA® Feature

## YOUR Benefit

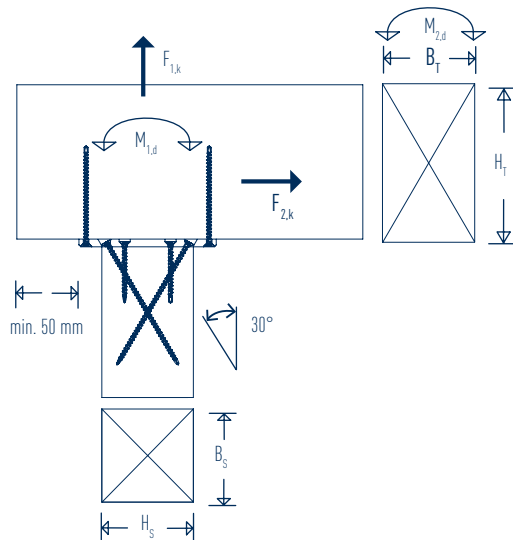
connectors for rigidity	versatile in application, deformations are minimised: particularly in use for carports (model C) and in wood construction (model H)
developed and made in Austria	local quality and added-value
tested suitability	transfers both horizontal and vertical forces, as well as moment in 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 <a href="http://www.sihga.com">www.sihga.com</a> (Stabilix C)



### SIHGA® TIP:

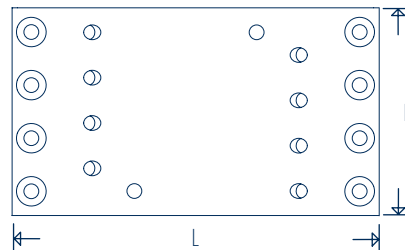
2 connectors can be selected per connection variant and combined with IdeFix®.

# Stabilix C



SIHGA® Stabilix C	Torque		Characteristic Values*	
	M <sub>1,d</sub> [kNm]	M <sub>2,d</sub> [kNm]	F <sub>1,k</sub> [kN]	F <sub>2,k</sub> [kN]
Type 10	1,56	-	13,1	9,8
Type 12	4,50	-	25,6	15,9
Type 14/16	7,00	2,5	40,0	22,1
Type 18/20	12,25	-	123,44	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 <sub>s</sub> / B <sub>s</sub> * max. H <sub>s</sub> / B <sub>s</sub> min. H <sub>T</sub> min. B <sub>T</sub>							Pillar	Cross Beam	L	B	S	
Art. No.	PU	Type	[mm]	[mm]	[mm]	[mm]	d1 x L [mm]		[mm]			
43306	2	<b>10</b>	90	100	100	90	8,0 x 155 and 8,0 x 95		8,0 x 95	150	80	12
43326	2	<b>12</b>	110	120	130	110	8,0 x 195 and 8,0 x 95		8,0 x 125	170	100	12
43346	2	<b>14/16</b>	130	160	160	130	8,0 x 220 and 8,0 x 95		8,0 x 155	210	120	15
43356	2	<b>18/20</b>	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

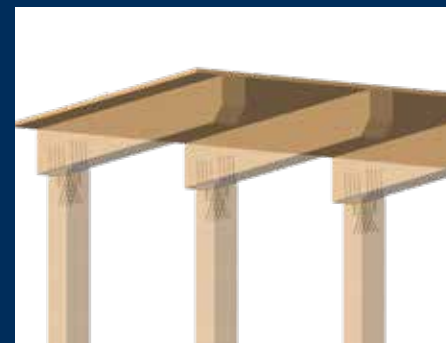
## Torsion spring stiffness for Stabilix C10-C14/16\*

Stabilix C

Node stiffness

Type	Initially	Medium
<b>10</b>	127 kNm/Rad	78 kNm/Rad
<b>12</b>	317 kNm/Rad	186 kNm/Rad
<b>14/16</b>	435 kNm/Rad	385 kNm/Rad
<b>18/20</b>	1061 kNm/Rad	762 kNm/Rad

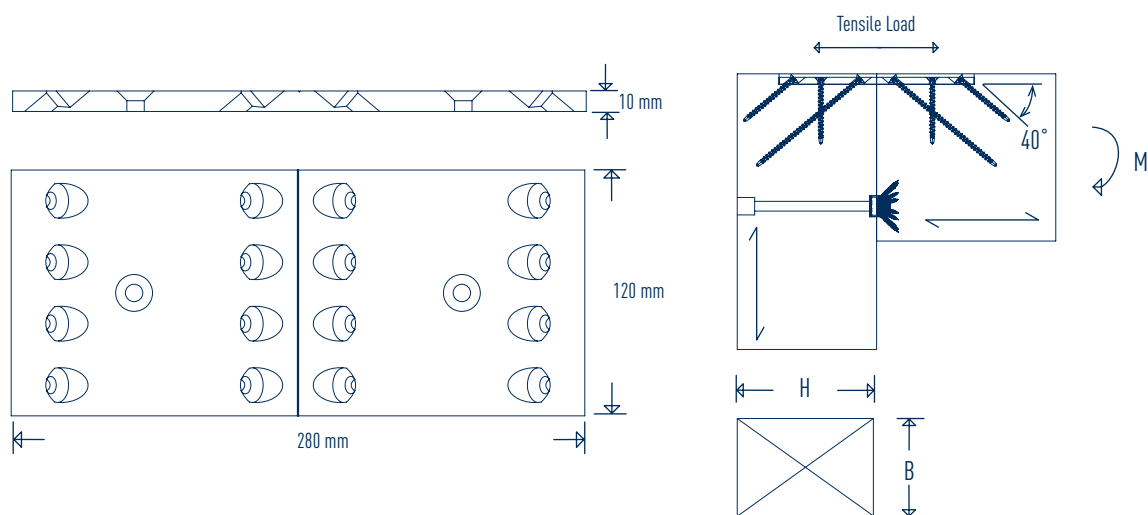
\* derived from the test report of the BTI Linz



**Stabilix C**  
cantilevered roof



# 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]
43436	2	H	140	200	140	240	0	51,34
43436	2	H	140	200	140	240	20	42,68
43446	2	H	140	280	140	240	0	70,36
43446	2	H	140	280	140	240	20	58,50

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





# Stabilix R



Stabilix R



## SIHGA® Feature

## YOUR Benefit

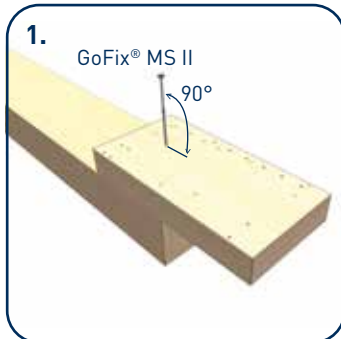
connection system for rigid frame corners	individual application for small wooden frames up to large halls
includes wooden elements (glued laminated timber) depending on requirement, made in Austria	dimensions, drill holes and GoFix® X+ screws as required
tested suitability	transfers both horizontal 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



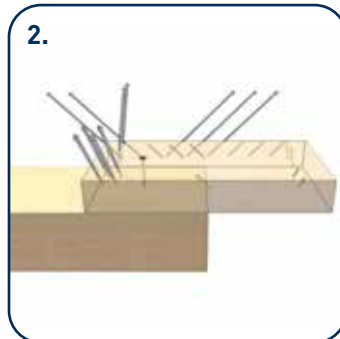
### SIHGA® TIP:

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

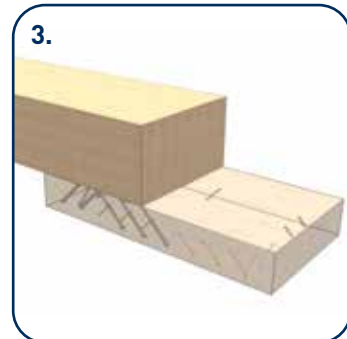
# Stabilix R Application



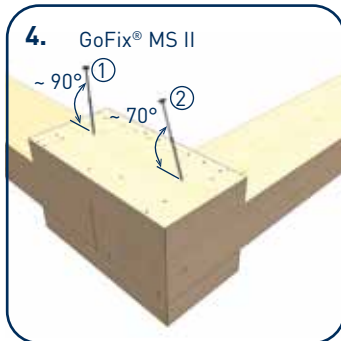
The strap is fixed in position on the support using GoFix MSII screws.



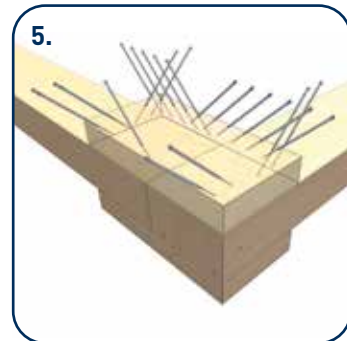
The support area can now be unscrewed.



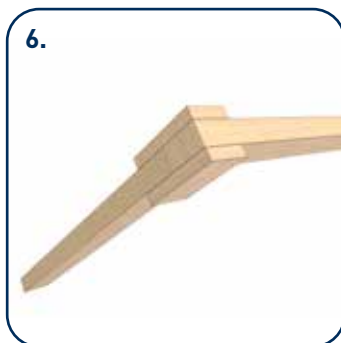
The support is turned over, thus creating a support for the beam.



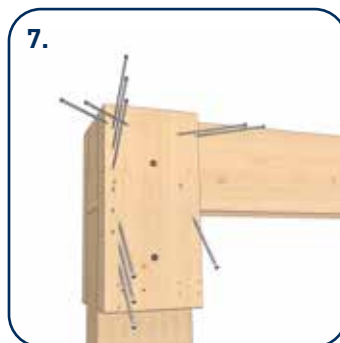
The beam is put on and the second strap is attached to the support. In order to achieve a positive fit between the beam and the support, a GoFix MS II screw is inserted at an angle of 70° to the strap in the direction of the OK beam. This arrangement guarantees a "contraction effect".



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:

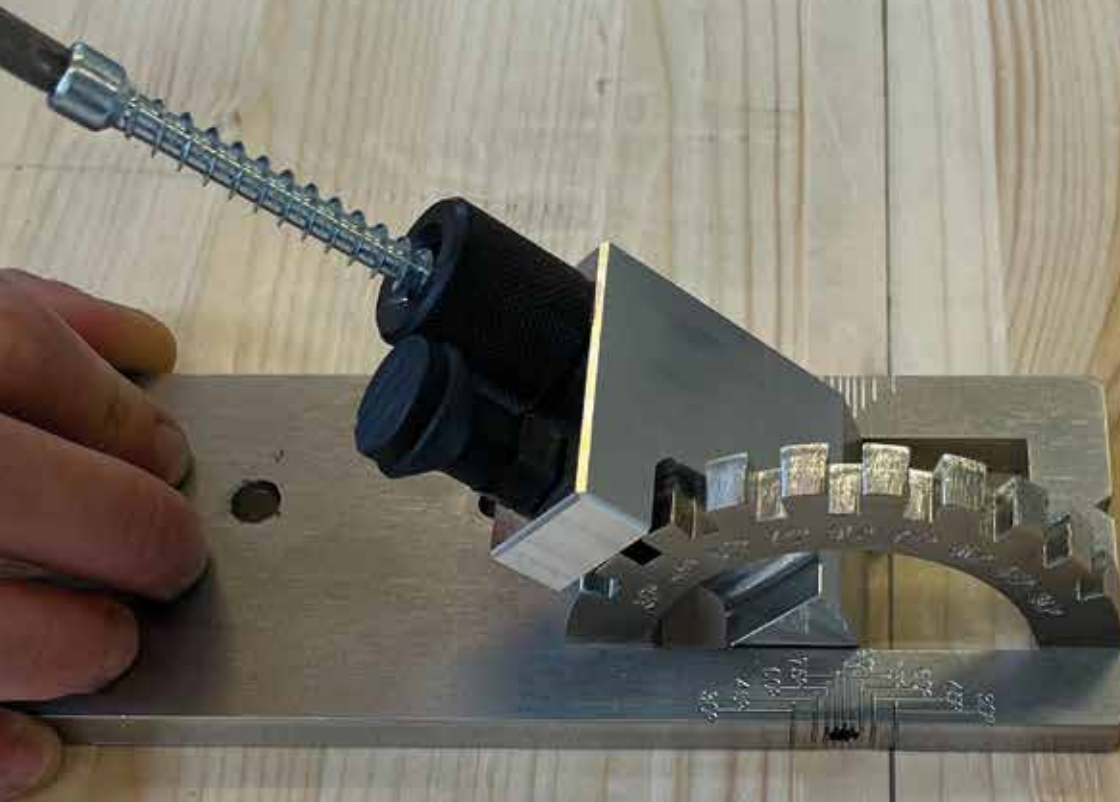
It is also possible to assemble the supports first; then place the beams from above and screw them into place.

# From practice





# Winkelix<sup>®</sup> X+



Winkelix<sup>®</sup> 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+ ø 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 ø 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

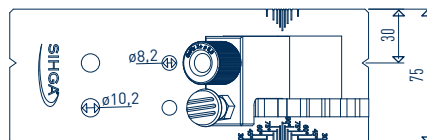
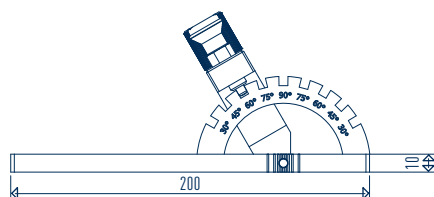
promises a high level of wear resistance

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®		Dimension		Application	
montagepack		Winkelix® X+ adapter tube	ø hole	for drill diameter	for GoFix® X+/ZS
Art. No.	PU	Type	[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



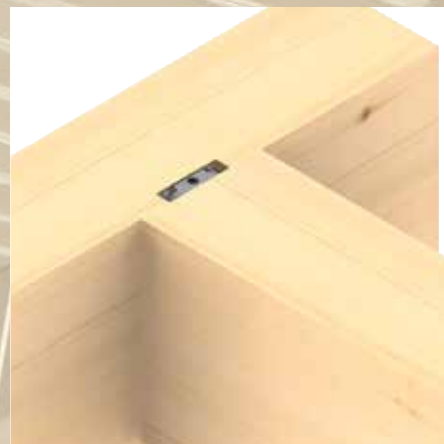
### SIHGA® TIP:

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

# HobaFix<sup>®</sup> HF



HobaFix<sup>®</sup> HF



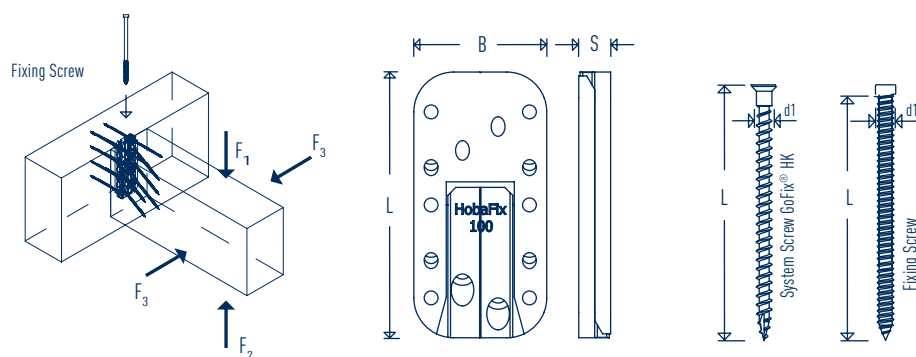
ETA-11/0135



## 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®		Dimension					Secondary Beam		Characteristic Values**		
montagepack	HobaFix® HF	GoFix® HK	Fixing Screw		Width	Height	Load Direction [kN]				
Art. No.	PU	Type (L)	B	S	d1 x L	d1 x L	[mm]	[mm]	F <sub>1</sub>	F <sub>2</sub>	F <sub>3</sub>
30036	20*	<b>70</b>	30	9	4,0 x 60	4,2 x 50	50	80	6,80	2,04	4,40
30056	20*	<b>100</b>	50	12	5,0 x 80	4,8 x 80	80	115	17,40	8,56	10,60
30076	20*	<b>135</b>	50	12	5,0 x 80	4,8 x 120	80	150	26,70	8,56	15,00
30096	20*	<b>170</b>	50	12	5,0 x 80	4,8 x 120	80	185	33,40	8,56	16,00
30116	12*	<b>200</b>	70	17	6,0 x 100	6,3 x 180	100	220	43,00	17,07	22,70
30126	12*	<b>240</b>	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 (pk 350 kg/m³)



### SIHGA® TIP:

For easier dimensioning use our HT-NT Tool online at [www.sihga.com](http://www.sihga.com).  
Not all bores have to be screwed on. Follow the assembly instructions.



# System Kit HobaFix<sup>®</sup> HF

## SIHGA<sup>®</sup> Feature

for all HobaFix<sup>®</sup> HF models

contains 1 HobaFix<sup>®</sup> milling and assembly template HFFM, 1 HobaFix<sup>®</sup> milling cutter with stop ring HFF and fastening screws, allen key and Systemstift<sup>®</sup>

## YOUR Benefit

the professional installation aid simplifies construction processes and saves time, milling and assembly templates are fully and portably combined with all accessories for practicality

for the rational and precise installation of knot connections



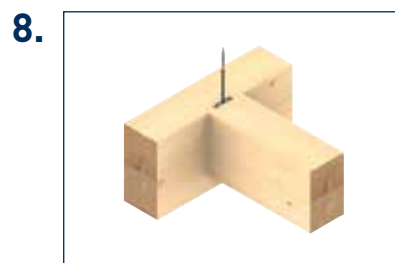
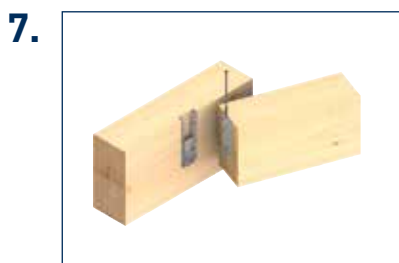
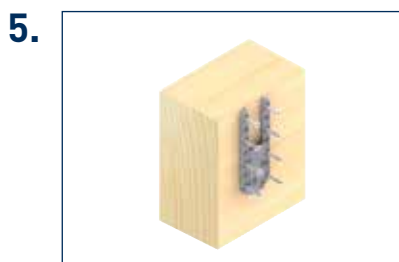
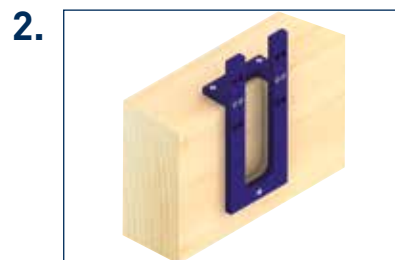
**HobaFix<sup>®</sup> Milling and Assembly Template HFFM**



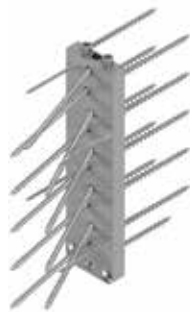
**HobaFix<sup>®</sup> Milling Cutter with stop ring HFF**



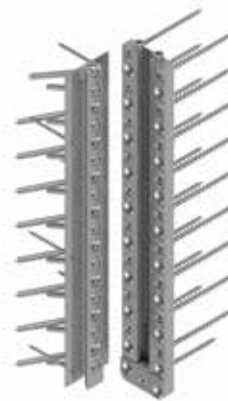
# Application Hobafix® HF



# HobaFix<sup>®</sup> Max



HobaFix<sup>®</sup> Max



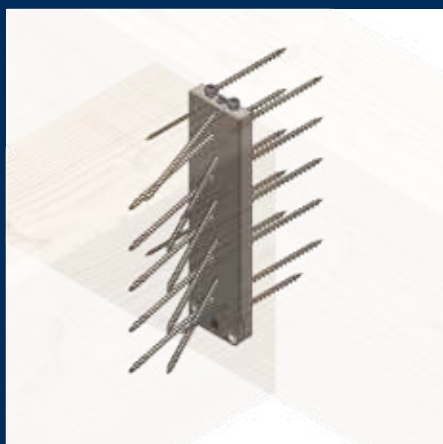
ETA-23/0821



## SIHGA® feature

## YOUR benefits

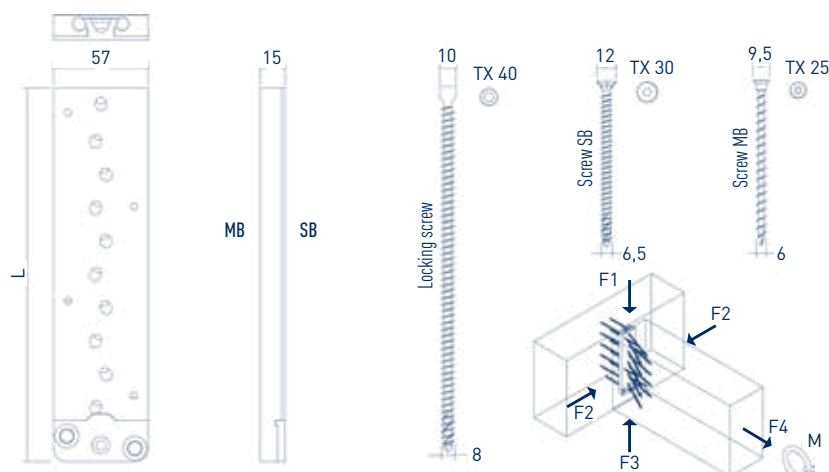
Connector for main beam - secondary beam constructions	Wood-wood or wood-concrete connections are possible with the HobaFix® Max (BeziFix anchors 7.5 x 80 for concrete must be ordered separately)
No screw collisions thanks to offset fastening screws	Multiple node connections of e.g.: four beams on one 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 <sub>1</sub>	F <sub>2</sub>	F <sub>3</sub>	F <sub>4</sub>	M <sub>d</sub>	F <sub>1</sub>	F <sub>2</sub>	F <sub>3</sub>	F <sub>4</sub>	M <sub>d</sub>		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 [pk 350 kg/m³]; GL24h [pk 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.

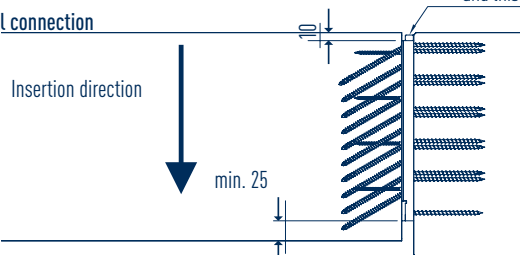
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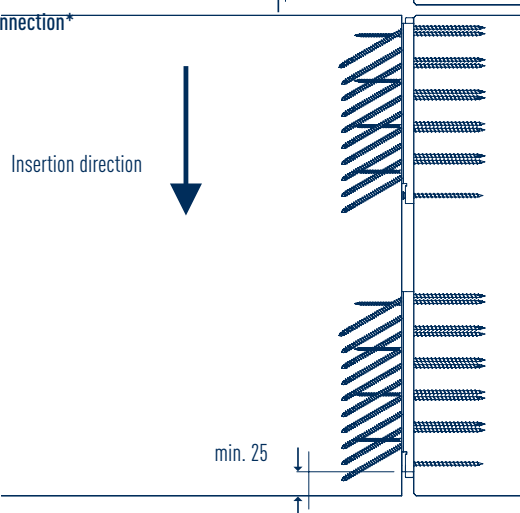
# Multiple applications HobaFix<sup>®</sup> Max

HobaFix<sup>®</sup> Max top edge must always be lowered by 10 mm,  
and this is automatically taken into account when using the assembly jig

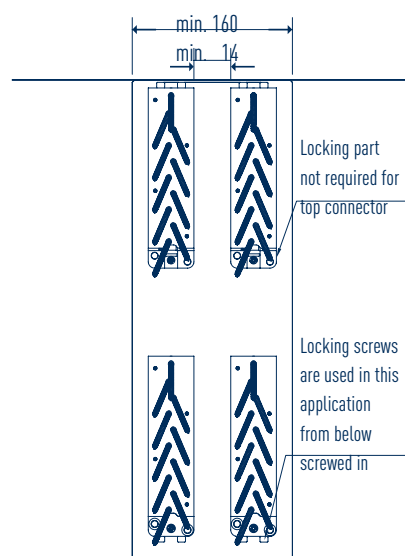
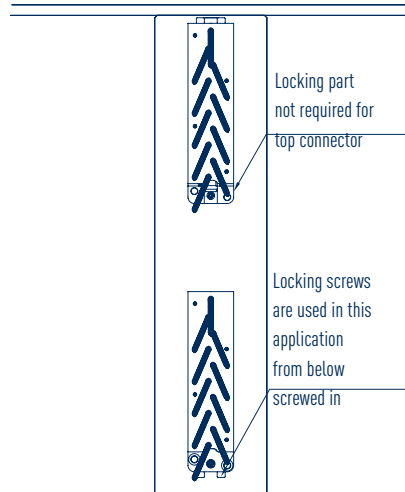
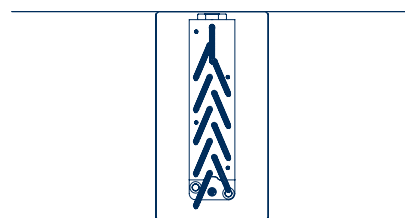
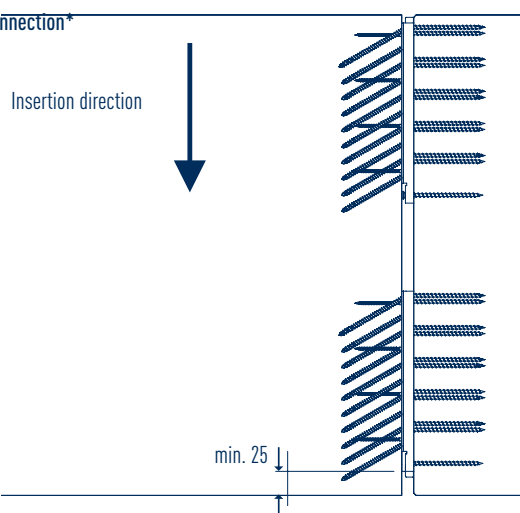
Individual connection



2-fold connection\*

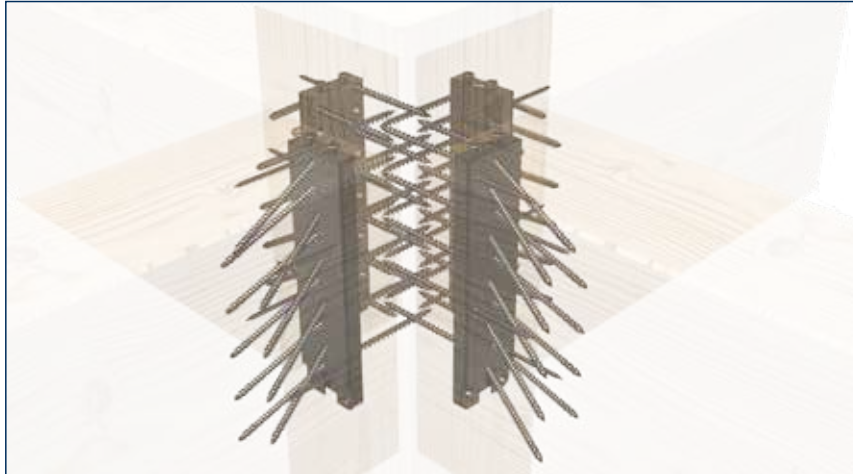


4-fold connection\*

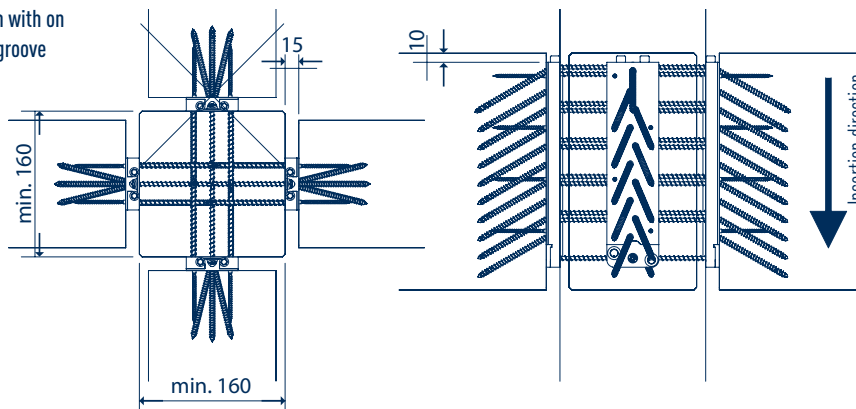


\* In the case of multiple applications, it should be noted that situational corner torques and other forces may arise. These must be taken into account according to ETA-23/0821 and EN 1995-1-1 and the load-bearing capacity must be verified. In the case of exclusively transverse force application (F1 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.

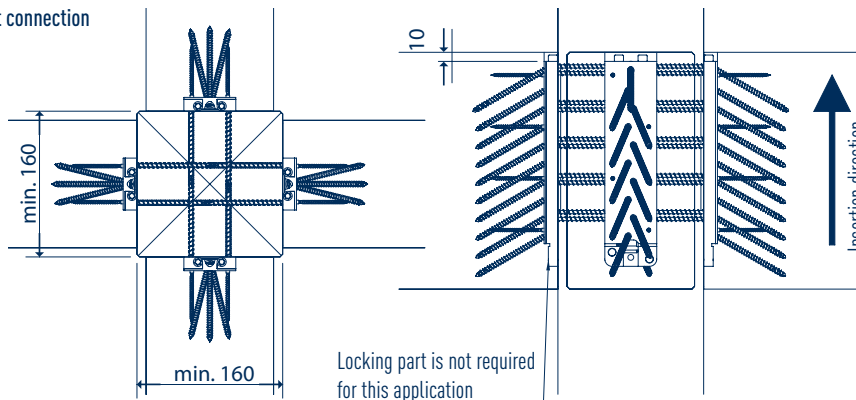
# Multiple nodes on support HobaFix<sup>®</sup> Max



4-fold connection with on  
support shadow groove



4-fold on support connection  
milled



## SIHGA<sup>®</sup> 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

# HobaFix<sup>®</sup> Max HFML milling assembly jig

## SIHGA<sup>®</sup> feature

For all models of the HobaFix<sup>®</sup> Max

Optimal in use with HobaFix<sup>®</sup> Max cutter (to be purchased separately)

The jig stop can be continuously adjusted in height and at an angle of up to 30°

Developed and produced in Austria

## YOUR benefits

For the rational and precise assembly of HobaFix<sup>®</sup> Max on the main beam and on the secondary beam

The HobaFix<sup>®</sup> Max can be milled in one operation thanks to the coordinated cutter length and position of the thrust ring

Offers maximum flexibility

Superlative European quality and added value

SIHGA <sup>®</sup>	
HobaFix <sup>®</sup> Max HFML milling assembly jig	HobaFix <sup>®</sup> Max milling cutter
Art. No.	Art. No.
31606	29632



### SIHGA<sup>®</sup> 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

for wall connections, corner connections, partition walls and privacy fence elements

the installation connector for mounting

installation tolerance of 14 mm

elastic pre-tensioning

fastened in the installation groove to the wall element, 30 mm wide and 17 mm deep

made from polyamide

the static load per pair of connectors is characteristically 8.5 kN

includes SIHGAFIX®, all fastening screws, Systemstift®, installation instructions

## YOUR Benefit

one connector for all applications when installing wall elements, precise and accurate

for rational positioning, saves extensive work time

the major advantage during installation, on site and in the factory: the high tolerance

which is why HobaFix® HFM has a spring effect, a great help during installation

good view of the connector at all times during installation, important for fast and accurate mounting

HobaFix® HFM slides easily into the desired position - without abrasion

tested value of the enclosed system screws in accordance with ETA approval

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**

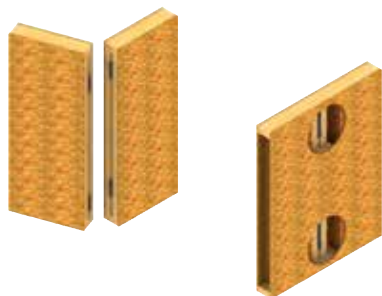
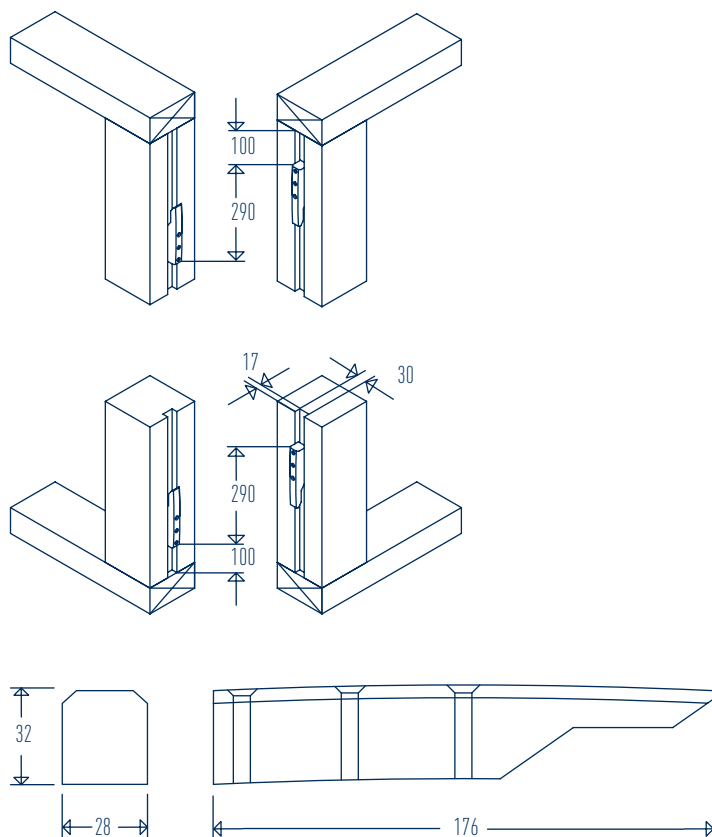


### SIHGA® TIP:

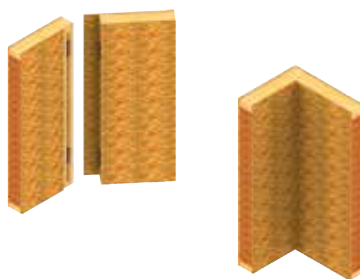
We recommend two pairs of HobaFix® HFM per wall joint.



# Application Hobafix® HFM



**HobaFix® HFM**  
wall connections



**HobaFix® HFM**  
corner connections

# WabaFix<sup>®</sup> WF



WabaFix<sup>®</sup> WF  
made from aluminium



## SIHGA® Feature

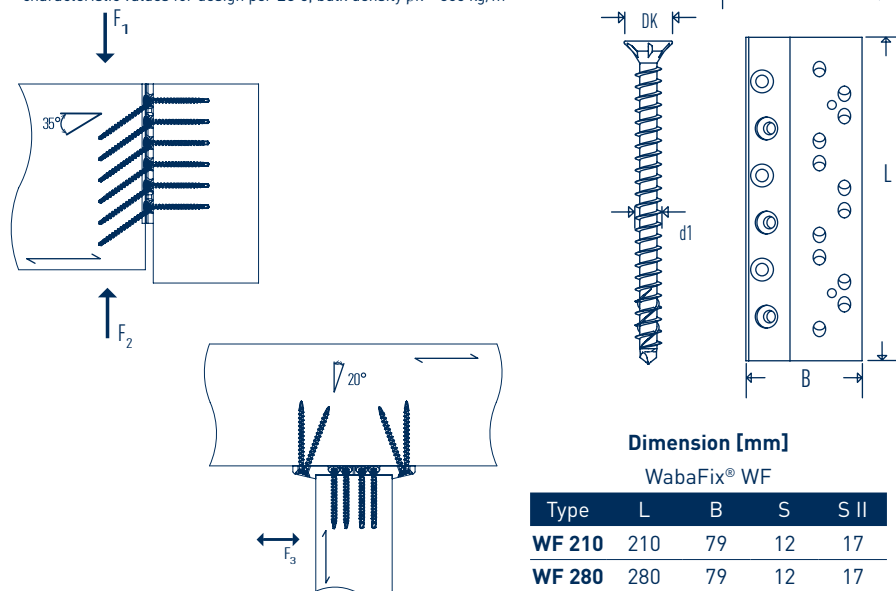
## YOUR Benefit

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® objektpack®	WabaFix® WF	Secondary Beam Width Height [mm] [mm]	Drill GoFix® S+ d1 x L	Characteristic Values*			Recommended Values Wood - Concrete		
				Load Direction [kN]			Load Direction [kN]		
Art. No.	PU	Type		F <sub>1</sub>	F <sub>2</sub>	F <sub>3</sub>	F <sub>1</sub>	F <sub>2</sub>	F <sub>3</sub>
43146	6 <sup>1</sup>	<b>210</b>	100 250 8,0 x 95	39,16	32,18	25,70	19,40	19,40	14,80
43156	6 <sup>1</sup>	<b>210</b>	100 270 8,0 x 125	48,17	39,16	31,27	19,40	19,40	14,80
43206	4 <sup>1</sup>	<b>280</b>	100 320 8,0 x 95	65,05	49,23	34,27	25,86	25,86	19,73
43216	4 <sup>1</sup>	<b>280</b>	100 340 8,0 x 125	78,08	59,90	41,70	25,86	25,86	19,73

<sup>1</sup> corresponds to 3 or 2 connections

<sup>2</sup> 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  $\rho_k = 385 \text{ kg/m}^3$



### SIHGA® TIP:

Customised connection solutions using the calculation model developed by TU Graz,  
Download at [www.sihga.com/service/online-planung/](http://www.sihga.com/service/online-planung/)

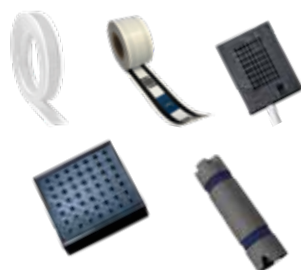




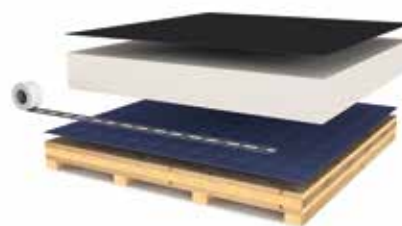
# Monitorix®



Discover also the  
complete  
**SIHGA® Monitorix®** catalogue



**Monitorix®**  
Digital building protection



**The early warning system  
for moisture ingress**

# Monitorix®

## SIHGA® Feature

developed and manufactured in Austria

creation State-of-the-art sensor technology

unobtrusive system components, easy to install

early detection of moisture ingress or condensate formation

smart software solution compatible with all common terminals

certified technology

ready to use right after activation

can be used in: flat roofs, wet rooms, bathrooms and wooden structures - in all desired areas

support by the SIHGA-Team

## YOUR Benefit

highest Austrian quality and value

innovative monitoring system for moisture and water ingress in wooden building elements

unobtrusive system, which can be easily integrated during the building phase or renovation

prevents costly repairs

notification with precise location of the damage

secures the value of properties constructed from wood

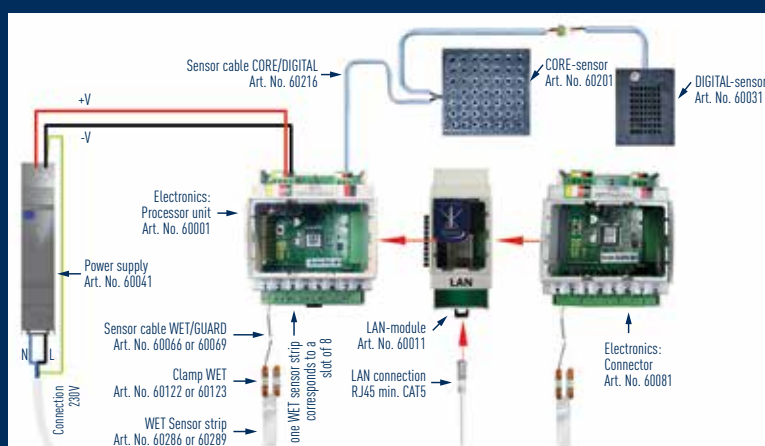
immediate protection right after installation and during the entire useful life

certainty that all materials used in construction harmonise structurally-physically

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

Two sensor wires embedded in plastic fabric

Insert length from 0.5 - 20 m

Tool-free mounting on sensor terminal

Delivery in handy cardboard boxes

Resistances from wet to dry

## YOUR Benefit

The robust processing makes the sensor strip particularly suitable for practical use on the construction site

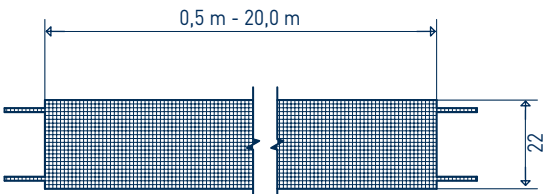
Enables a high degree of flexibility and makes work easier

By sliding the sensor wires, a connection to the sensor terminal can be established without additional tools

Easy installation of the sensor strips using system packaging

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
60286	1	22	25	0,5 - 20	2-pole	2 Pcs.	0 - 300
60289	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.



RELIABLE CONTROL



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EARLY DETECTION

# GUARD-Sensor strip

## SIHGA® Feature

The impedance in components is transmitted to the electronics by transmitting pulses

Self-adhesive, water-repellent cellulose strip with printed graphite sensors

Slim material thickness with high efficiency

Measuring the impedance of structurally demanding superstructures

Rust-resistant Clamp as a connecting element

## YOUR Benefit

A wide range of units is covered to illustrate the explanation of vapor diffusion in building structures

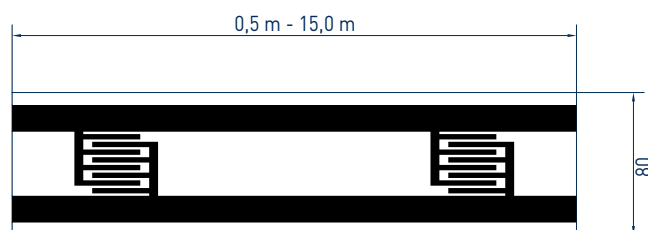
Quick installation and processing thanks to factory-applied adhesive

Sensor membranes can be embedded in laminated wood

Possibility of moisture monitoring on constructions with challenging features

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 mm <sup>2</sup>	Clamp GUARD	Units
60056	1	80	25	0,5 - 15	2-pole	2 Pcs.	0 - 65.000
60059	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

Compact design in plastic

Pre-contacted screw terminal

Measures relative humidity and room temperature

Can be installed in a star-shaped arrangement

## YOUR Benefit

Very flexible installation due to small size

The sensor cables can be mounted on the terminal so that it is not necessary to open the housing

In combination with GUARD or WET, you have more informative power when analyzing the object data

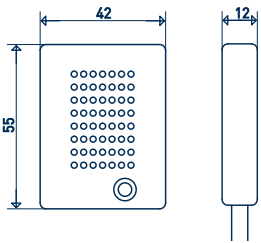
The LIN bus cable allows you to cover up to 8 sensors with one electronic connection

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 mm <sup>2</sup>	Assembly
60031	1	42 x 55 x 12	ø 5	1	4-pole	Screw terminal

### Measurement type

Measuring range

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



### SIHGA® TIP:

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



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# CORE-Sensor

## SIHGA® Feature

Plastic housing with integrated electronics

## YOUR Benefit

Very easy to install due to its small size

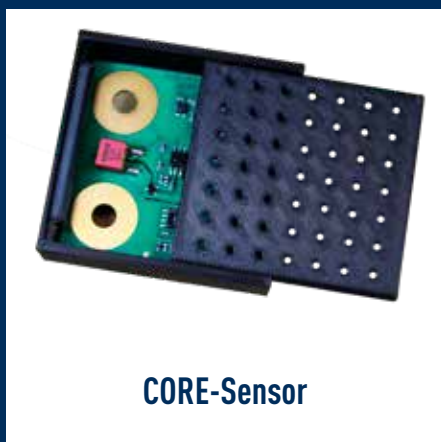
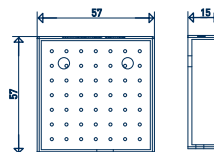
Connection via screw terminal in the housing	The CORE sensor cables can be clamped directly to the device and connected in a star configuration
Measures relative humidity and room temperature	In combination with GUARD or WET, you have more informative power when analyzing the object data
Can be installed 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
60201	1	<b>57 x 57 x 52</b>	ø 6	1	4-pole	Screw terminal

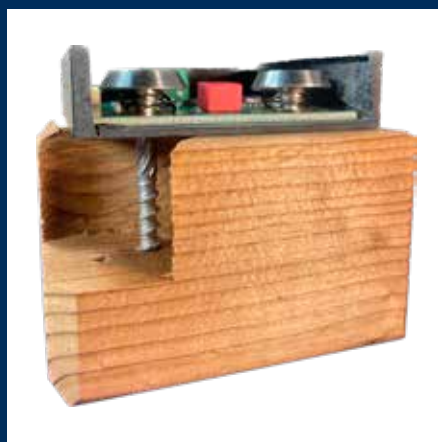
### Measurement type

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

Evaluation electronics

## YOUR Benefit

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
60001	1	74 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.



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# Connector

## SIHGA® Feature

Extends the sensor slots of the Processor unit many times over

Slot for up to 8 sensor strips (Monitorix® WET or GUARD)

Space for up to 8 wood core moisture, relative humidity and temperature sensors in star connection

Top-hat rail mounting possible

Browser-based recording in the cockpit

Jumper for opening and closing

CE-compliant

## YOUR Benefit

A Processor unit can be extended by up to 13 connectors via plug connection or CAN bus line (with local disconnection)

Each electronic unit can monitor up to 8 risk areas or problem areas for moisture

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

Can be mounted in a switch cabinet, flush-mounted or surface-mounted distribution board without tools

The cockpit can be accessed via any end device, no app or updates required

Enables locally separated placement of the electronics (Processor unit and connector)

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
60081	1	74 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<sup>®</sup> accessories



## SIHGA<sup>®</sup> Feature

## YOUR Benefit

### Monitorix<sup>®</sup> LAN-module (Art. No.: 60011)

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<sup>®</sup> Power supply (Art. No.: 60041)

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<sup>®</sup> Sensor cable (Art. No.: 60066 or 60069)

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<sup>®</sup> Clamp WET (Art. No.: 60122 or 60123)

Connection terminal between WET sensor track, WET sensor cable and GUARD

Tool-free connection of WET sensor strip and WET sensor cable



### Monitorix<sup>®</sup> Gel box (Art. No.: 60332 od. 60336)

Moisture protection for terminal connection WET

Immediately ready for use and accessible again without special tools



### Monitorix<sup>®</sup> Sensor cable (Art. No.: 60216)

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<sup>®</sup> Bus cable (Art. No.: 60076)

4-pole CAN bus cable

Locally separated electronics can be connected in series via CAN bus cable



## SIHGA<sup>®</sup> TIP:

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



RELIABLE CONTROL



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EARLY DETECTION

# ROOF-IOT

## SIHGA® Feature

EPS cylinder placed in inspection port

Measurement of 4 parameters

Existing roofs or new construction

No cabling necessary

## YOUR Benefit

The ROOF-IOT can be inserted and put into operation without tools

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

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

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

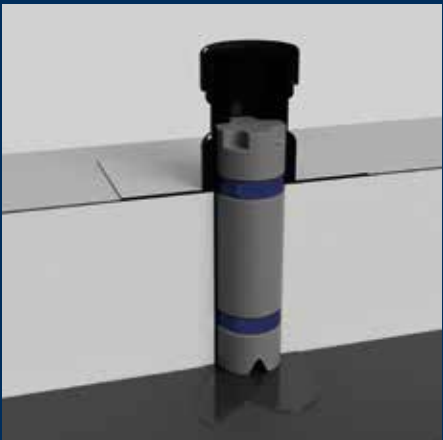
SIHGA®		Dimension	Assembly	Operating mode	Battery	
montagepack		ø x L	Inner control nozzle	Battery	Service life	Operating temperature
Art. No.	PU	[mm]	min. 110 mm	1,5 V AA	years	°C
60291	1	<b>106 x 400</b>	No scope of delivery	6	> 3	-20 to 60

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.



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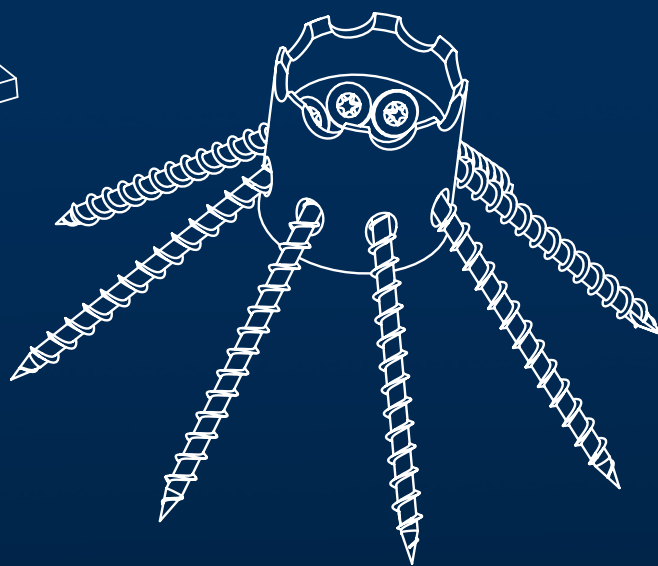
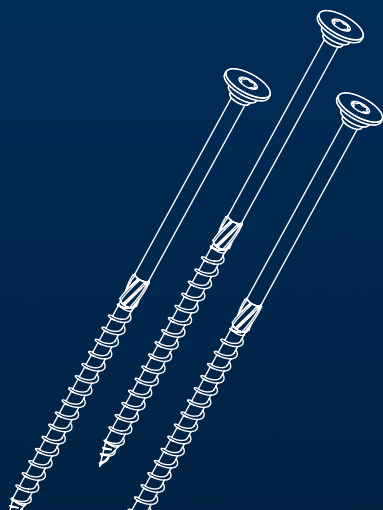
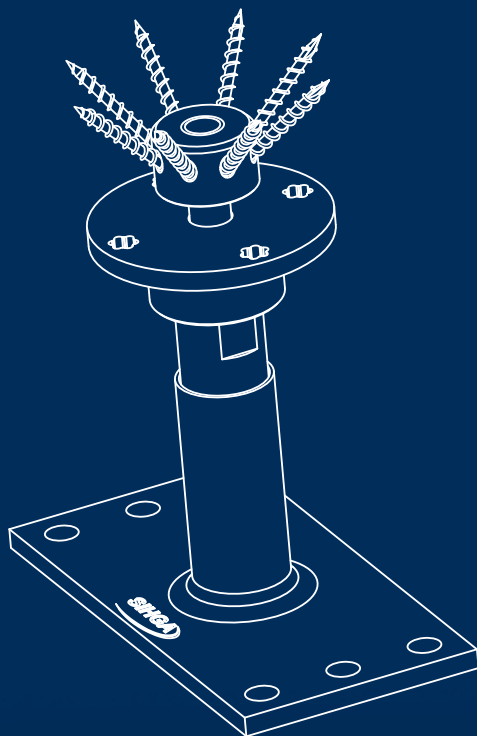
SIHGA® GmbH, Gewerbepark Kleinreith 4, 4694 Ohlsdorf near Gmunden, Austria

Telephone +43 7612 74 370 0, Fax +43 7612 74 370 10, [info@sihga.com](mailto:info@sihga.com), [www.sihga.com](http://www.sihga.com)

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Gewerbepark Kleinreith 4 | 4694 Ohlsdorf bei Gmunden | Austria | Tel +43 7612 74370 0 | info@sihga.com

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