

TAKE THE BEST

Decades of quality from Austria! www.sihga.com



**KLIMANEUTRALES
UNTERNEHMEN**
certified by Fokus Zukunft
Klimaneutral durch Kompensation
mit Klimaschutzzertifikaten

SYSTEM CATALOGUE



From specialists for specialists.

The SIHGA® system catalogue

Personal catalogue copy for:



Pioneer of fastening technologies

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.

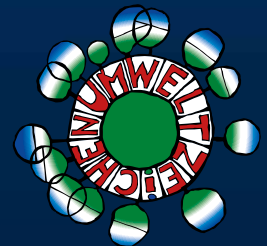


Jane-Beryl Simmer, MBA
Owner, General Management

A stylized, handwritten signature in white ink, appearing to be 'JBS'.

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



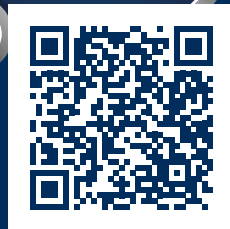
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The heart of our passion...



Also discover the new
MASS-X[®] CLT Program



THE NEW STRONG WEBSITE

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 German-speaking 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®, 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® und ZaFix®.



**KLIMANEUTRALES
UNTERNEHMEN**
certified by Fokus Zukunft
Klimaneutral durch Kompensation
mit Klimaschutzzertifikaten



#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 or call **+43 7612 74370 0**.
We're happy to help!

Dimensioning service

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



Pick check

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



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® **online.** 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 m² 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® Index/ Photo Credits

Limited edition

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Legal notes: SIHGA® products are subject to continuous development, technical modifications and changes in the product range.

The technical data in this catalogue is provided to assist the authorised user to choose the appropriate fastener. It does not release the user from his responsibility to choose the right product and to check the actual conditions.

Please take note of the state of the art technology, building regulations and relevant safety regulations in force in planning and application of our products.

DeliPUries are exclusively based on our General Terms and Conditions in the valid version (page 20-21 of this catalogue).

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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, www.sihga.com

Any liability for printing and typesetting errors is excluded.

We cordially thank our customers for providing the reference photos of their building projects!

SIHGA[®] General Terms and Conditions of Business

(10.10.2021)

- 1.) Our deliveries, and all subsequent transactions, are performed exclusively on the basis of these terms and conditions of business. The ordering party's purchasing conditions are not binding on us. We enter into contracts exclusively with businesses, but not with consumers. With their order, the ordering party declares they are concluding the contract exclusively for entrepreneurial purposes. They shall provide proof of their commercial status upon request.
Unless a written objection is received within three days, the conditions of an order confirmation sent by us shall be deemed to be accepted by the ordering party.
- 2.) Our offers, price lists and cost estimates are non-binding. All orders and agreements, as well as commitments made by representatives, require our written confirmation in each case in order to be valid.
Our technical details and descriptions of the objects of the delivery are non-binding and are only approximations.
- 3.) Our prices are ex works from our site in 4694 Ohlsdorf near Gmunden.
The prices offered as standard are quoted excluding VAT and are subject to the standard rate of VAT.
Packaging is not collected.
- 4.) All delivery (performance) dates and delivery (performance) deadlines are approximate.
Claims for compensation by the ordering party due to late delivery / performance or non-performance are excluded. Partial services already provided must be accepted and paid for by the ordering party.
Partial deliveries (performance) and interim invoices are permitted, whereby payments must be made by the ordering party according to the specified payment conditions.
If an extension set for us by the ordering party is not observed without our being at fault, the ordering party's right of withdrawal is excluded. They can withdraw from the contract no earlier than two months after the original delivery date is missed.
- 5.) Our goods are shipped from our factory in 4694 Ohlsdorf near Gmunden at the ordering party's risk, even if the freight and other costs are charged to us. The risk shall transfer to the ordering party with the transfer of the goods to the forwarder, etc. In the absence of any other agreement in individual cases, we shall be free to choose the carrier. The goods are only insured by us against transport damage upon written instruction from the ordering party and at their cost. Unless otherwise agreed in individual cases, within Austria, Germany and the Southern Tyrol our deliveries are free of charge.
If the ordering party does not accept the goods, after setting a 14-day period we can withdraw from the contract and/or demand compensation due to non-fulfilment. We reserve the right either to demand 25 per cent of the agreed order total without proof of damages or reimbursement of the actual damages incurred.
The return of goods by the ordering party requires our written consent and is at the ordering party's costs and risk. The delivery note number and/or invoice number must be cited with each return.
- 6.) For all claims by the ordering party against us, they are entitled to default interest only to a maximum of 3% above the ECB base rate.
- 7.) Our invoices are payable within 10 days of the date of invoice without deduction. Other terms and discount agreements are noted separately. Only prompt payment in full in cash justifies the deduction of a discount.
If payment by instalment is agreed, default shall occur if the payment of just one instalment is late. All our outstanding receivables shall then fall due in full.
The ordering party is not entitled to withhold payments for any reason or to declare offsetting against our receivables. Insofar as the ordering party, in the case of a delivery or performance, reserves the right of retention in respect of our fee, this is limited in any case to the amount of the capital required to cover reasonable costs of improvement.
- 8.) To the exclusion of all claims, the ordering party shall immediately inspect the delivered goods or work and services performed after receipt of the delivery or notification of completion by us and shall immediately report identified defects in detail to us by registered letter. Defects identified subsequently must also be reported to us in writing immediately after their discovery.
The warranty period for moveable objects is six months. The burden of proof that a defect for which we are responsible was present on delivery shall lie with the ordering party.
At our discretion we can fulfil warranty claims such that the defect is repaired or replaced with defect-free goods, or we can grant a reasonable price reduction, in particular if we believe a repair would be possible only with unreasonably high costs for us. We shall not be liable for consequential damage occurring in connection with a warranty claim, for example after processing has already taken place.

With regard to the suitability of the delivered goods, we only guarantee that they can be used as defined in our conditions and provisions. We are not obliged to check whether the ordered goods are suitable for a specific purpose, not even as a secondary contractual obligation. Such properties shall only be deemed to be warranted where this is expressly stated by us in writing. Customary and/or production-related deviations in terms of dimensions, equipment, material and similar shall not be grounds for complaint.

Changes to our goods by the ordering party or their people shall lead to the full exclusion of our liability.

Our liability for damage caused as a result of material used by the ordering party is excluded.

- 9.) The delivered goods shall remain our property until full payment of the purchase price and all our receivables deriving from the business relationship with the ordering party, including secondary claims. A resale is only permissible if we have been informed of this in good time beforehand and have given our consent to the sale. In the event of our consent, the purchase price claim shall thereupon be deemed to have been assigned to us and we shall be entitled to notify the buyer of this assignment at any time.

If the ordering party defaults on their payment obligations toward us or if they breach one of the duties based on the agreed retention of title, the entire receivable shall become immediately payable. We also reserve the right to demand the return of the objects belonging to us, also without withdrawing from the contract, and to collect them from the ordering party, whereby the ordering party shall waive the assertion of a right of retention.

- 10.) In the case of a resale of SIHGA® products by the ordering party, this is only permitted with the original name. Moreover, the ordering party is not permitted to use our brands and/or product designations without our written consent.

- 11.) All claims for compensation against us are excluded, irrespective of the legal reason on which they are based, in particular also due to breach of contract and when concluding the contract, but also according to the conditions of the Product Liability Act for personal, material and pecuniary damages which are suffered as a result of a fault in the goods, whereby above all claims for compensation due to consequential damages, such as loss of production or lost profits and the like are excluded in full, unless we are guilty of malice or gross negligence. The burden of proof for such a degree of fault shall lie with the ordering party. Claims for compensation in any case shall exclusively include the basic costs for correcting the damages, but not consequential damages, lost profits or the like. They shall become statute-barred - unless a limitation period occurs earlier - at the latest two years after delivery has taken place.

All claims for compensation and any redress against us must be asserted in the courts within six months or other wise shall expire. The return or exchange of ordered and supplied goods is not possible. If goods from the current delivery range are returned to us in undamaged original packaging, we shall be at liberty to take back the goods against payment of a processing fee of at least 20% of the value of the goods or to store the goods at the risk and expense of the ordering party or to return them to the ordering party.

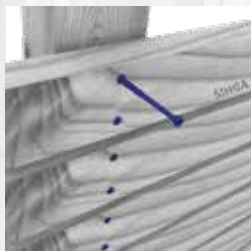
- 12.) Any drafts, plans and other documents prepared by us are our sole property and may not be used by the ordering party or made accessible to third parties.

- 13.) The place of jurisdiction for all disputes arising directly or indirectly from the contract between the ordering party and us, in particular also regarding its validity, shall be exclusively the materially competent court in 4600 Wels.

The place of performance is 4694 Ohlsdorf near Gmunden.

The contractual relationship shall be governed exclusively by Austrian law to the exclusion of its conflict of law provisions and the UN Convention on Contracts for the International Sale of Goods.

In the absence of any other express written agreement, the contractual language shall be exclusively German. This shall not be affected if, in individual cases, we correspond or exchange information in other languages before or after the conclusion of the contract.

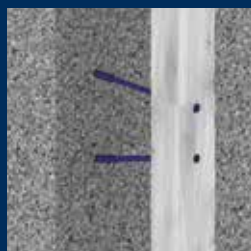
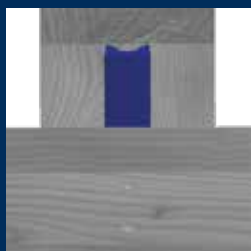


Fastening Visible

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Fastening Invisible

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Constructive Wood Protection

KompeFix® II KF 37

Substructure

BeziFix® SR II 26

BeziFix® Therm BT 28

TefaFix® F 52

TefaFlex® F 54

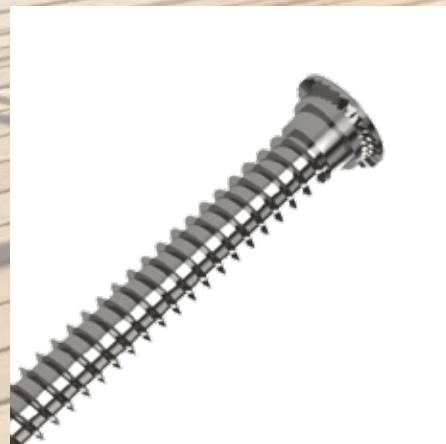
TefaBind® 56



Alu-TeFix®



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



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

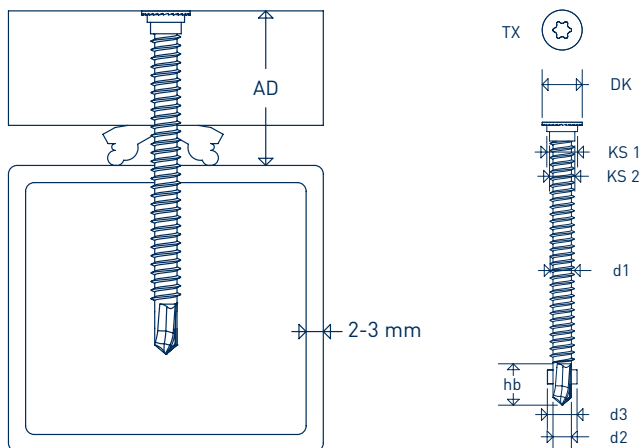
SIHGA® montagepack		Dimension Alu-TeFix®	Add-on Part up to AD	Characteristic Values*			Substructure TefaFix®T/F
Art. Nr.	PU	d1 x L	[mm]	Tensile Force F ₁ [kN] Head	Shear Force F ₂ [kN] Thread	Alu-Wood	
54016	200	5,0 x 51	33	1,96	1,30	2,95	yes
54026	200	5,0 x 61	43	1,96	1,30	3,22	yes

SIHGA® 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]	Tensile Force F ₁ [kN] Head	Shear Force F ₂ [kN] Thread	Alu-Wood	yes	yes
54066	200	5,0 x 51	33	1,96	0,85	1,40	yes	yes
54076	200	5,0 x 61	43	1,96	0,85	1,40	yes	yes

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



SIHGA® Feature

YOUR Benefit

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

particularly good bearing capacity, even in hollow brick

integrated anti-rotation lock

for easy installation

fastens 20 - 200 mm thick materials

universally usable with low storage costs

designed with extra thin waistband

can be screwed flush-mounted

screw packaged already inserted into anchor

fast, saves installation work on-site

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

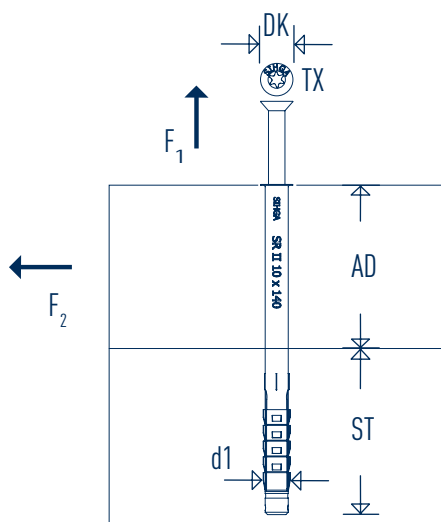
time-saving, practical, precise, complete accessories included; Hozibo® when drilling in brick or Stabebo SDS, the concrete drill

design values

SIHGA® performs the calculation for you

SIHGA® montagepack Hozibo®	SIHGA® montagepack Stabebo	Dimension BeziFix® SR II	Installation Part AD	Characteristic Values		
Art. No.	Art. No.	PU d1 x L	[mm]	Tension F ₁ / Transverse F ₂ HLZ [kN]	Tension F ₁ / Transverse F ₂ Beton [kN]	
32016	32516	50	10 x 80	20	0,90	3,00
32026	32526	50	10 x 100	40	0,90	3,00
32036	32536	50	10 x 120	60	0,90	3,00
32046	32546	50	10 x 140	80	0,90	3,00
32056	32556	50	10 x 160	100	0,90	3,00
32066	32566	50	10 x 180	120	0,90	3,00
32076	32576	50	10 x 200	140	0,90	3,00
32086	32586	50	10 x 230	170	0,90	3,00
32096	32596	50	10 x 260	200	0,90	3,00

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



Dimension [mm]

BeziFix® SR II

d1	TX	DK	ST
10	40	14	60

BeziFix[®] Therm BT



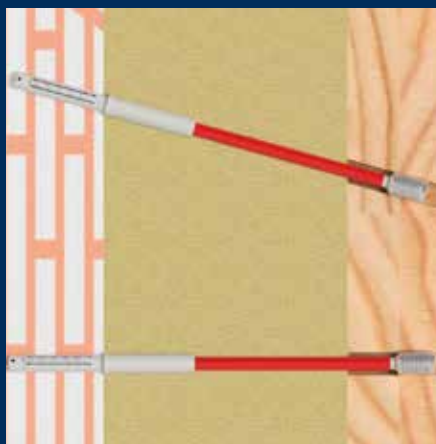
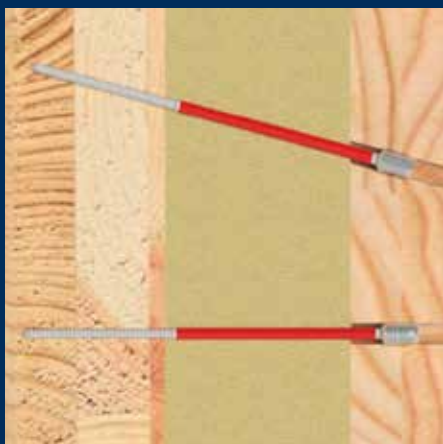
BeziFix[®] Therm BT



SIHGA® Feature

YOUR Benefit

fastens the entire load of the horizontal and vertical facade covering	takes the entire load of the facade covering
fastens on wood or brickwork with the BeziFix®Therm TR dowel	can be installed on any foundation, with the BeziFix® Therm TR anchor the right drill is always enclosed for precise drilling through all materials. Hozibo® SDS even leaves hollow bricks undamaged
also protects the substructure of the facade	SC 3-corrosion protection and insulation protect against rust and thermal bridges
aligns the facade	saves underlay work for levelling as well as counter-battens
for full-surface thermal insulation	prevents thermal bridges
easy installation for soft, hard, blown-in and full surface insulation up to 300 mm; can be used horizontally and vertically	fast, thereby saving time and wage costs
including Systemstift® and installation instructions	enclosed accessories - practical and time-saving
online calculation	at www.sihga.com (facade)



SIHGA®		Dimension	Insulation	Example Calculation	
montagepack		BeziFix® Therm BT	max.	Total weight of facade	Fastening Distance
Art. No.	PU	d1 x L	[mm]	[kg/m²]	EV [cm]
29096	50	7,2 x 220	100	25	160
29106	50	7,2 x 240	120	25	147
29116	50	7,2 x 260	140	25	129
29126	50	7,2 x 280	160	25	115
29136	50	7,2 x 300	180	25	104
29146	50	7,2 x 320	200	25	95
29156	50	7,2 x 340	220	25	87
29166	50	7,2 x 360	240	25	81
29176	50	7,2 x 380	260	25	75
29186	50	7,2 x 400	280	25	70
29196	50	7,2 x 420	300	25	66

Calculation with wind suction 0.8 kN / m² - counter battens 50 x 80 mm C 24 - horizontal distance 600 mm
Quantity determination = m²: substructure distance [m]: EV distance [m] x 2

SIHGA®	Dimension	Seat Depth	Drill Length	Drill Length	Drill Length	Correct Screw Length	Base	
montagepack	BeziFix® Anchor TR	ST	Hozibo®	Stabebo	SDS-Hammer drill	BeziFix® Therm BT		
Art. No.	PU	Type	DD x LD	[mm]	[mm]	[mm]	[mm]	
29216	50	TRH 450	10 x 100	60	450	-	220 - 360	Brick*
29276	50	TRS 450	10 x 100	60	-	450	220 - 360	Concrete
29226	50	TR 600	10 x 100	60	-	600	380 - 420	Brick*, Concrete

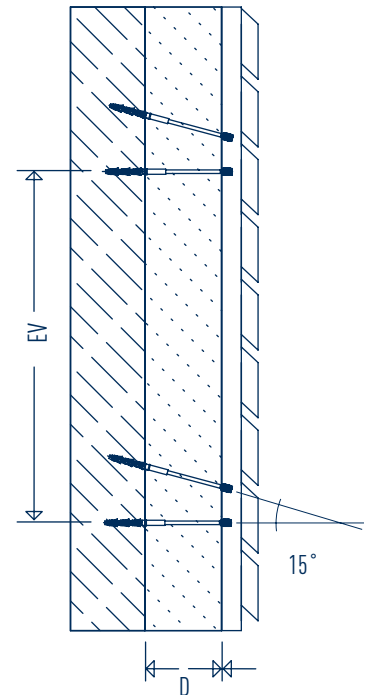
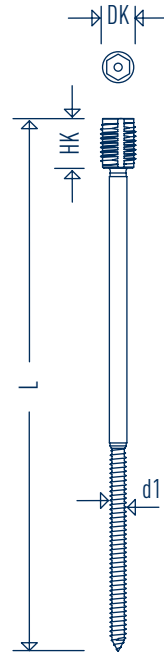
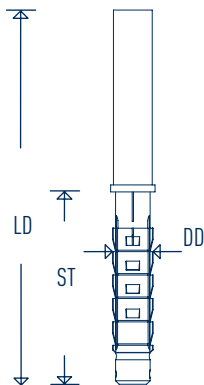
*these include: solid brick, perforated brick, lightweight concrete, Pore drilling, foam concrete, Sand-lime brick; only rotating drill in bricks

Dimension [mm]

BeziFix® Therm BT

d1	DK	HK	BK
7,2	16	20	13

BK= drilling diameter for head DK



BeziFix[®] Therm BT Accessories

SIHGA[®] Feature

BeziFix[®] Therm Fastening Tool



two functions in one tool

for 13 mm drill chucks

YOUR Benefit

one side is designed for mounting the BeziFix[®] on wood or brickwork, the opposite side is used for the adjustment of the battens

fits all conventional chucks

BeziFix[®] Therm Drilling guide



for accurate guiding of the hammer drill in brickwork, even angular

the fixed disks accurately indicate 90° or 15° and ensure easy, precise drilling

BeziFix[®] Therm Lewis Drill



Ø 13 mm, length 230 mm

for drilling in wood, in battens

Hozibo[®] SDS Drill



drill for precise drilling with SDS-slot
automatic impact stop

drills wood and bricks in one process
even leaves hollow bricks undamaged

Stabebo SDS Drill



drill for precise drilling with SDS-slot
and 4-edged drill geometry

specially for applications in reinforced
concrete

BeziFix[®] Therm TR Dowel



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

high loading capacity, even in hollow bricks

integrated anti-rotation lock and plugs

for easy 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

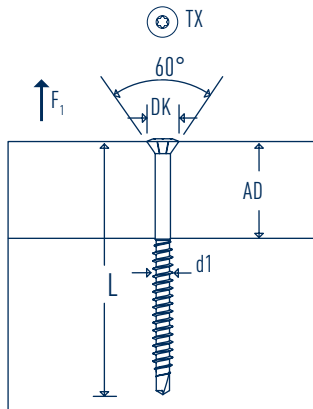
also clean fastening close to the edge

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® montagepack		Dimension F-BohrFix® ES	Installation Part 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



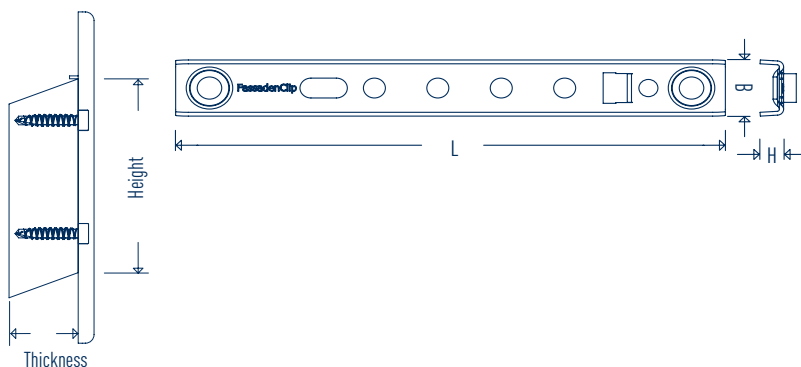
FassadenClip® FCS



SIHGA® Feature

YOUR Benefit

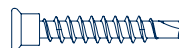
patented facade fastening, invisibly screwed, made and developed in Austria	the optically elegant surface is created simply, flexibly and without auxiliary tools
suitable for almost all wood types with profile height 57-95 mm	both rhombus and square-shaped profiles can be professionally fastened
automatic 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 ²	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	115 x 17	57	68	19
32365	300	115 x 22	57	68	24
32375	300	115 x 28	57	68	30
32385	300	130 x 17	69	80	19
32395	300	130 x 22	69	80	24
32405	300	130 x 28	69	80	30
32415	300	145 x 17	81	95	19
32425	300	145 x 22	81	95	24
32435	300	145 x 28	81	95	30

L-BohrFix® FB
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 of the special geometry

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

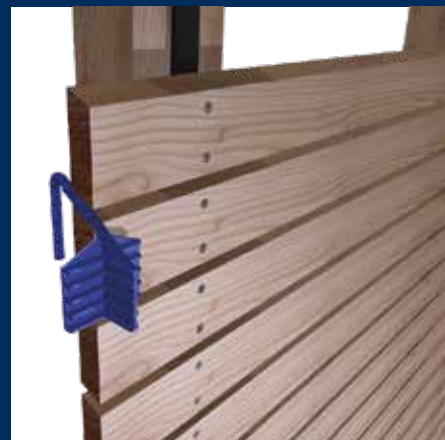
YOUR Benefit

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	FF	5, 6, 7, 8



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

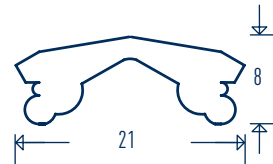
quantity calculation per m²

1: substructure distance [m] : 4.5

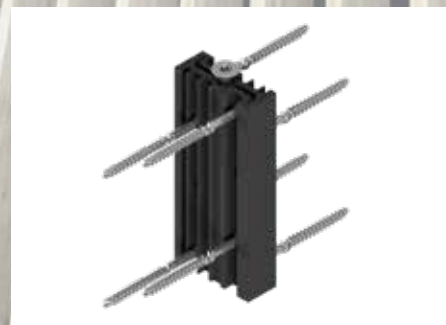
includes installation instructions

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



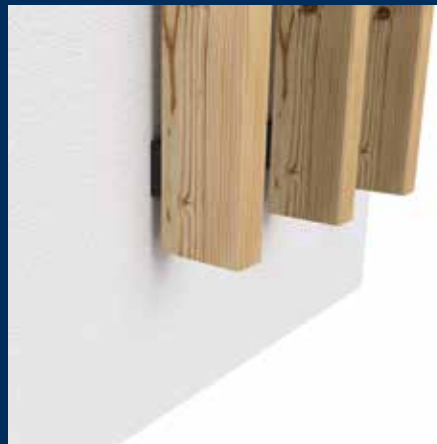
LamellenFix



SIHGA® Feature

YOUR Benefit

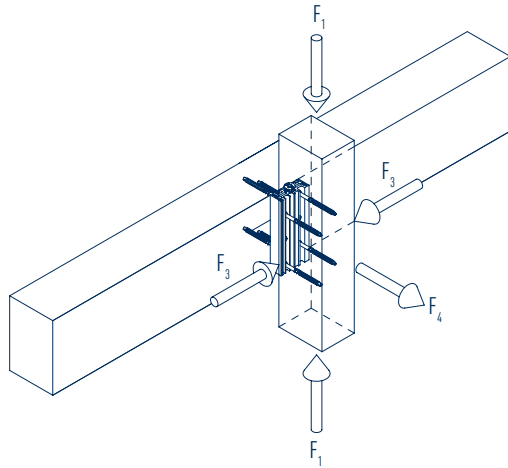
Connectors for façade slats on different substructures	Whether wood, steel or concrete, the connector can be fastened to almost any substrate
Node connection made of two identical parts (1 connection consists of 2 pieces)	Can be pre-assembled without confusion and on the slat in the factory
The first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



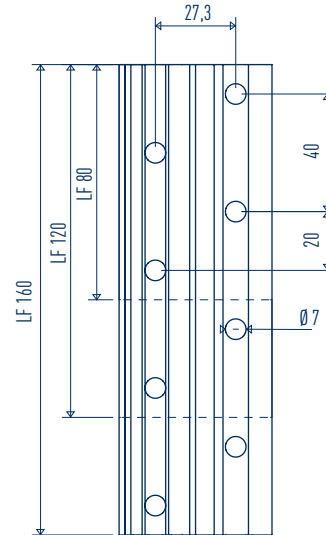
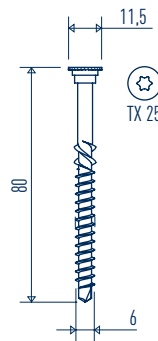
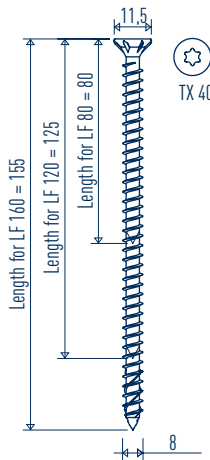
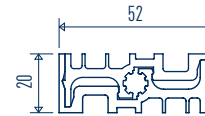
SIHGA® TIP:

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

LamellenFix



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



Locking screw:
GoFix® S+ in stainless steel

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

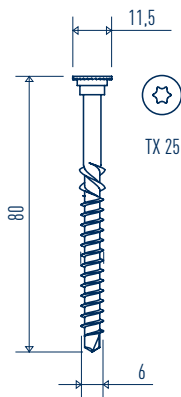
SIHGA®		Dimension		Slat		Substrate	
montagepack	LamellenFix	TeFix® in slat per connector	min. Width	min. Height (depth)	min. Height	min. Width (depth)	
Art. No.	PU	Typ	6,0 x 80	[mm]	[mm]	[mm]	[mm]
31206	40*	80	4	60	80	80	80
31216	40*	120	4	60	80	120	80
31226	40*	160	6	60	80	160	80

* Corresponds to 20 connections

Fastening for substructure

Substructure wood

TeFix® in hardened stainless steel



SIHGA®

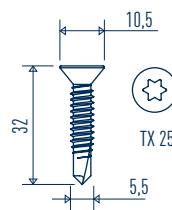
TeFix® hardened stainless steel

Art. No.

54416

Substructure steel up to 4 mm

Sheet metal screw in stainless steel
hardened



SIHGA®

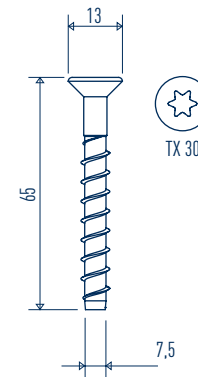
Tapping screw,
hardened st/less steel

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 180 mm
- Few attachment points for large wooden slats
- simple, quick assembly

LamellenFix template

SIHGA® Feature

YOUR Benefit

For all LamellenFix models

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

Automatically finds the centre of the slat or substructure

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

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

You have both hands free for screwing

Developed and produced in Austria

Superlative European quality and added value

SIHGA®

LamellenFix template

Art. No.

31716

SIHGA®

DUO Bit TX 40, 350 mm

Art. No.

31821



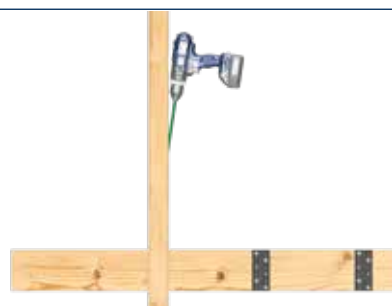
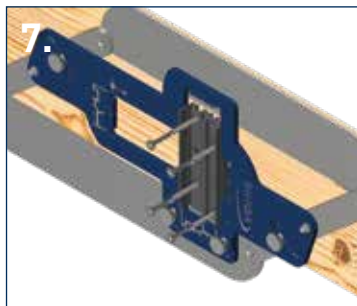
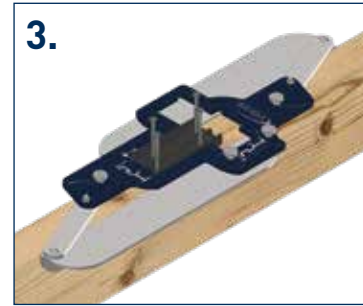
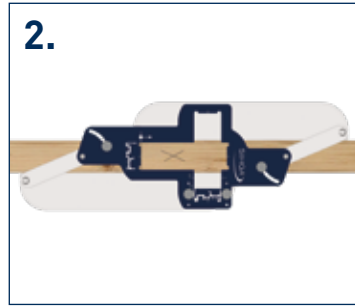
LamellenFix template



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.

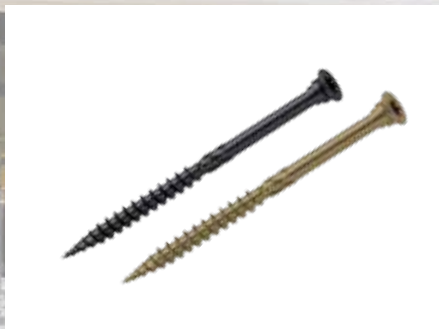
LamellenFix application



L-GoFix[®] 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

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).



L-GoFix® MS with additional SC 11 coating



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

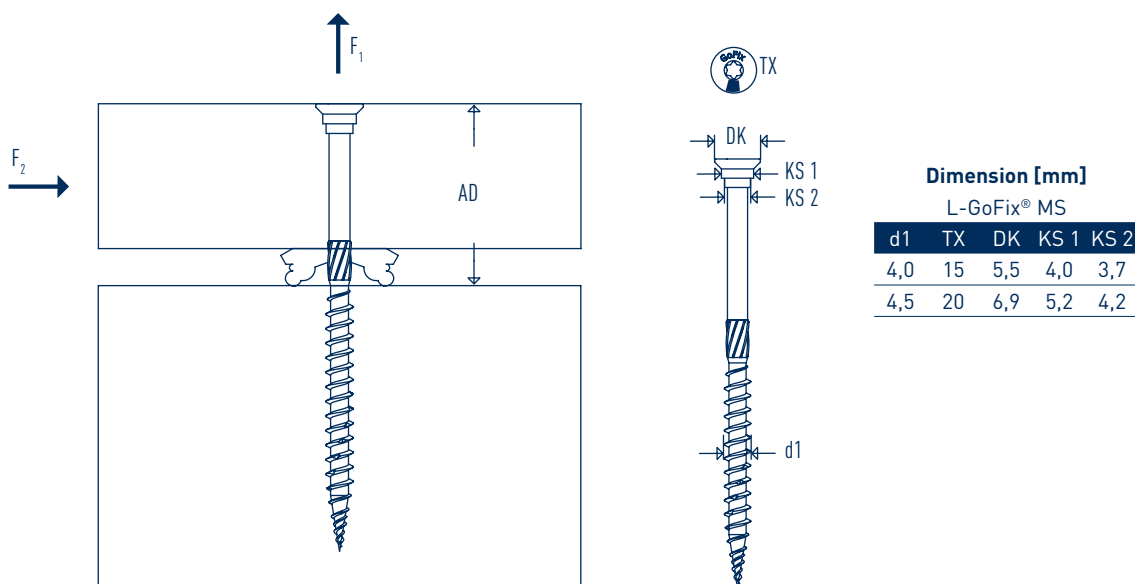
quantity calculation

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® montagepack		Dimension L-GoFix® MS	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
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

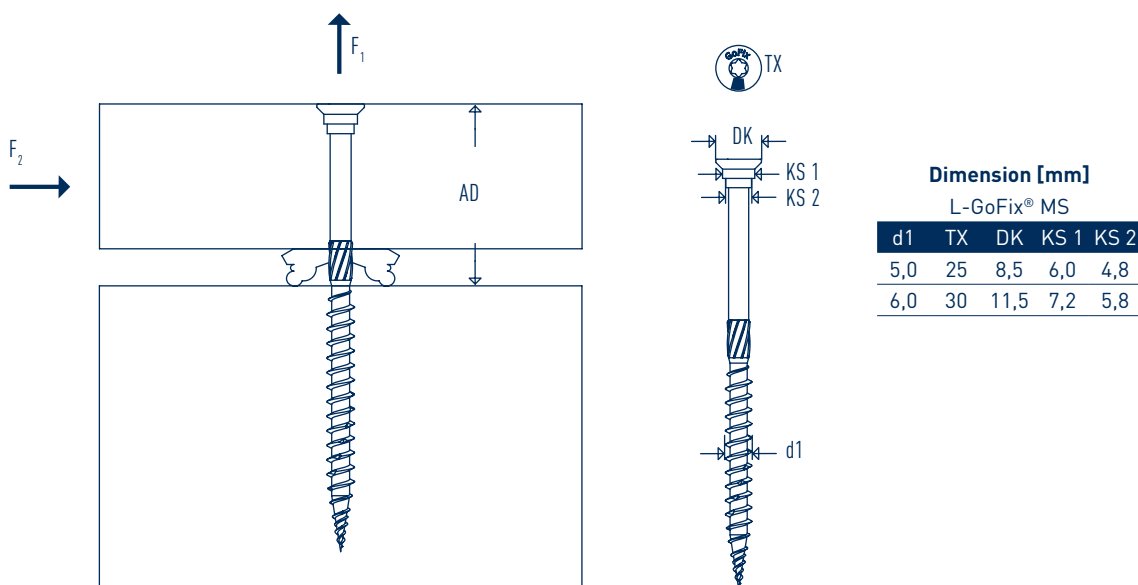
calculation of quantity

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 ₁ [kN]		Shear Force F ₂ [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)

L-GoFix[®] MS A2

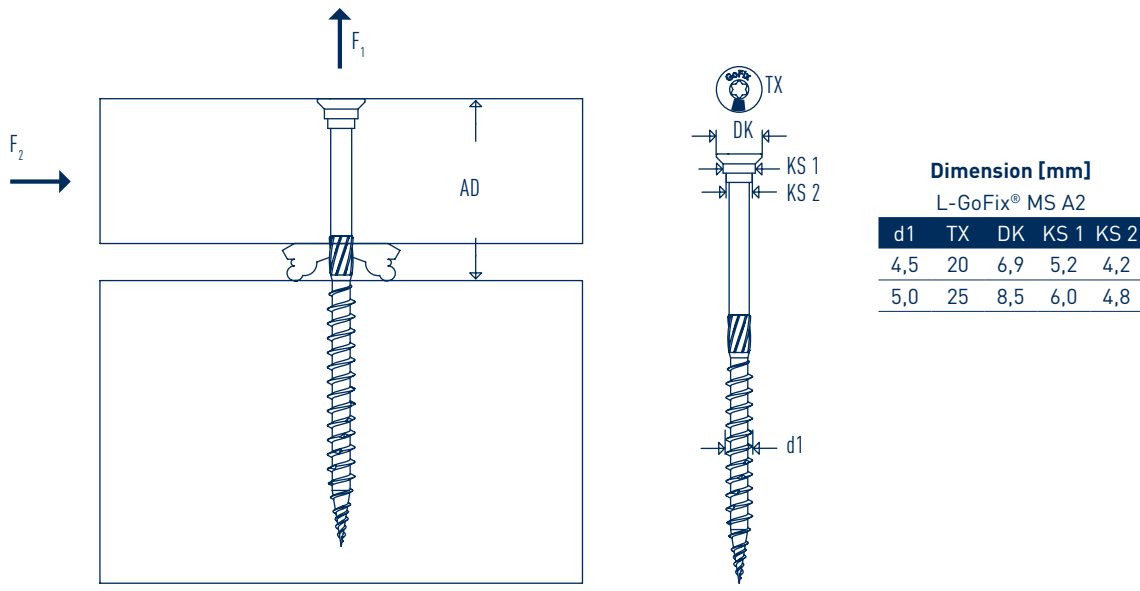
SIHGA[®] Feature

YOUR Benefit

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

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





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	4,5 x 40	16	0,48	1,55	0,74	1,15
22236	400	4,5 x 45	18	0,48	1,77	0,83	1,21
22246	400	4,5 x 50	20	0,61	1,99	0,92	1,26
22266	400	4,5 x 60	24	0,61	2,36	1,07	1,35
22276	300	4,5 x 70	28	0,61	2,72	1,22	1,45
22316	200	5,0 x 45	18	0,76	1,82	0,89	1,36
22326	200	5,0 x 50	20	0,95	2,14	0,99	1,44
22336	200	5,0 x 60	24	0,95	2,53	1,18	1,54
22346	200	5,0 x 70	28	0,95	2,93	1,33	1,64
22356	200	5,0 x 80	32	0,95	3,72	1,57	1,84
22366	200	5,0 x 90	36	0,95	4,12	1,67	1,94
22376	200	5,0 x 100	40	0,95	4,30	1,72	1,98

Subject to technical modifications and errors. Status of approval 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[®] RF



RomboFix[®] RF
made from SIHGAMID[®]

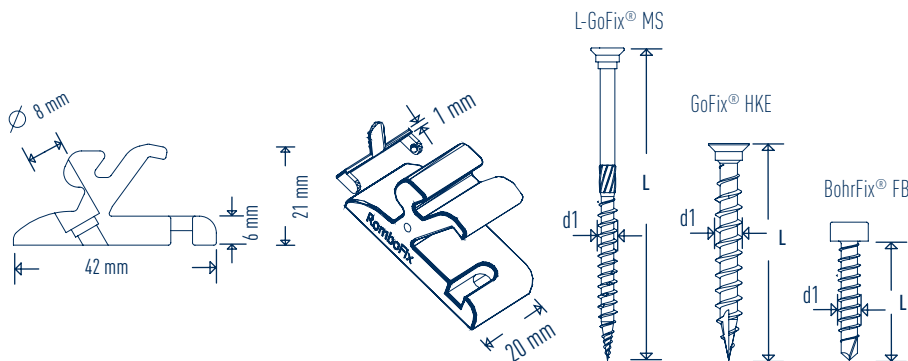


SIHGA® Feature

YOUR Benefit

developed, patented and made in Austria	local quality, experience from more than 150,000 m ² 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 m ² : 1: Substructure distance in m: (high rhombus beam + joint in m)

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



SIHGA® TIP:

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

TefaFix[®] F



TefaFix[®] F
aluminium bright



TefaFix[®] F
aluminium SC 9 coated

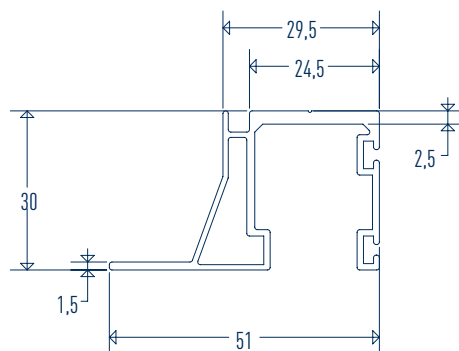
SIHGA® Feature

YOUR Benefit

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

* Available from specialist timber dealers

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



SIHGA® TIP:

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

TefaFlex® F



TefaFlex® F
polyvinyl chloride

SIHGA® Feature

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

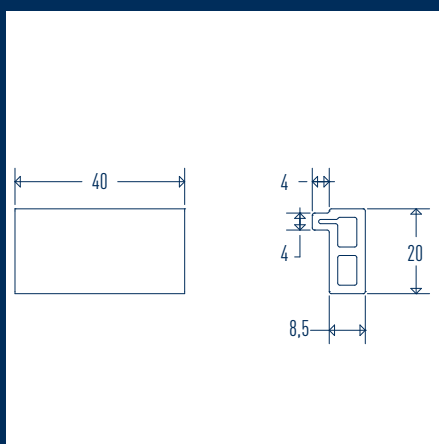
ventilation and drainage of the water is guaranteed, especially with vertical installation of the facade profiles

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

suitable for all profile widths

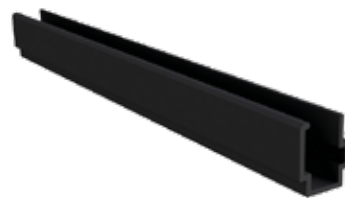
finished distance of the profile to the substructure according to the state of the art, optimal ventilation and drainage

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



SIHGA® TIP:

One piece of TefaFlex® F is required per joint.



**TefaBind®
aluminium SC 9 coated**



**For butt joint
of TefaFix® F**

SIHGA® Feature

TefaBind® connector

SC 9 coated

profile open at the front

aluminium

all-purpose

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

for endless joining of TefaFix® F

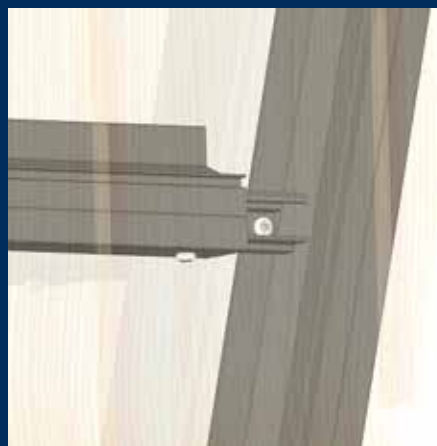
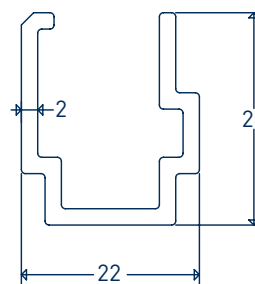
continuous black joint optic

with the supplied BohrFix® FB 4.2 x 17 mm in
stainless steel the TefaBind® can be easily fixeddurable, with conventional tools and machines
workableall longitudinal and transverse connections can be
made with the TefaBind®time-saving, practical, precise, all accessories are
included

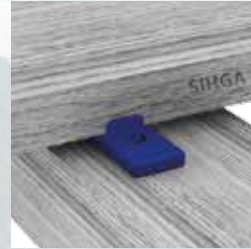
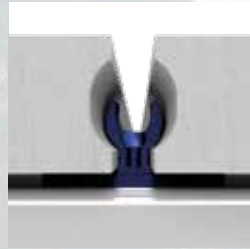
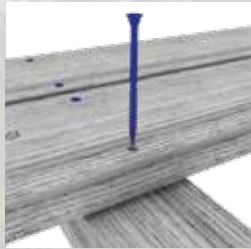
SIHGA® montagepack		TefaBind®		
Art. No.	PU	Length [mm]	Width [mm]	Height [mm]
52056	25	250	22,0	26,0

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.

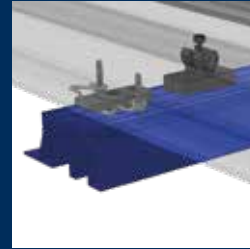
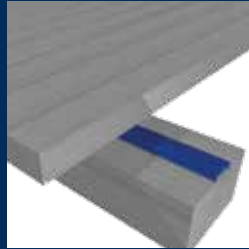


Fastening Visible

Terrace Guarantee	60
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Terrassenplaner®	66
Alu-BohrFix® MB^	688
Alu-TeFix®	70
L-BohrFix® MB A4	72
FugiFix® FF	76
L-GoFix® MS	97
L-GoFix® MS A2	100
Rest-X®	102
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Fastening Invisible

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Constructive Wood Protection

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Substructure

Terrace Guarantee	60
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TefaFlex® T	110
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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 H₂SO₄, 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.

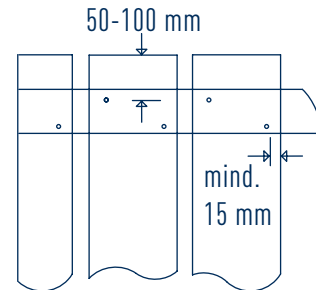
The exclusive place of jurisdiction for any claims arising from this is the materially competent court for 4600 Wels | Austria. The General Terms and Conditions of SIHGA® GmbH shall apply.

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!

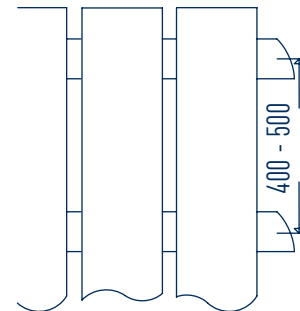


For the centre distance from the substructure, we recommend, for:

Thermo-wood and hardwood: 400 - 450 mm

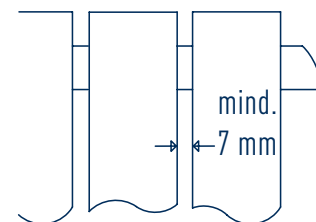
Larch: 400 - 500 mm

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.

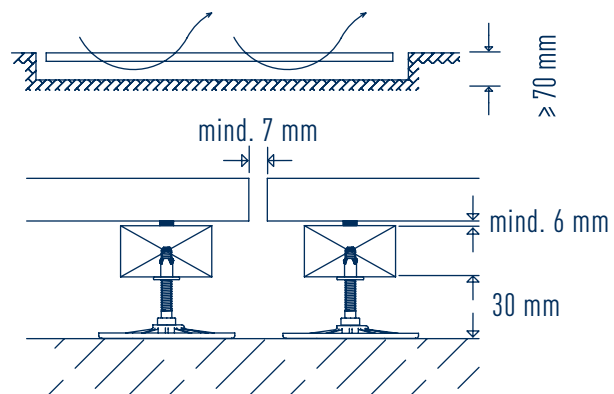


The joint distance for plank widths 90 - 120 mm should be at least 7 mm or 6 % of the plank width!

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.



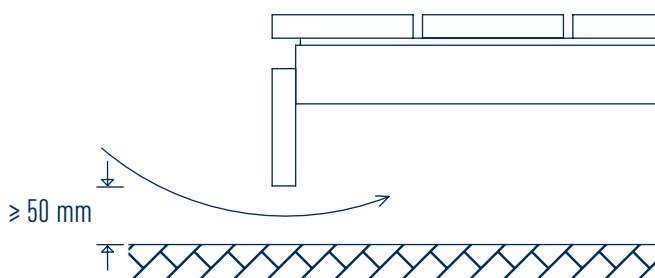
SIHGA® TIP:

With applications close to the pool surround, we recommend L-BohrFix® MB A4 (page 70) for visible or GleitFix® GF CS (page 76) for invisible fastening!

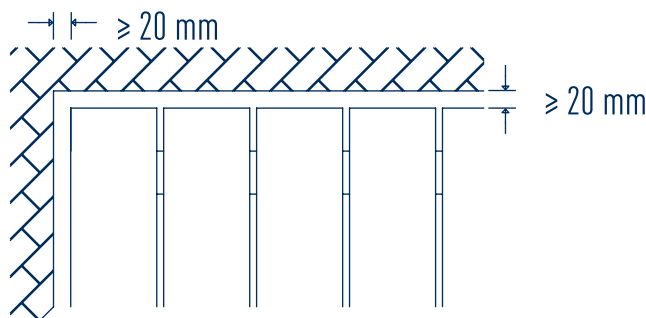
The longitudinal joint of decking planks should not be completed directly on the substructure, but between two substructures. Even with the longitudinal joint, a gap of at least 7 mm must be maintained.

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

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



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



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

The terrace should be cleaned regularly.

Recommendation Predrill Diameter and Type of Wood

Roof Cladding	Substructure	Predrilling	Predrill - \emptyset	Recommended Screw
Softwood	Softwood	Recommended	\emptyset of screw	L-GoFix® MS
Hardwood	Hardwood	Required	\emptyset of screw +0.5 - 1 mm	L-GoFix® MS or L-BohrFix® MB A4
All	TefaFix®, Symbio-Fix® and Aluminium	Required	\emptyset 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 \emptyset screw

HFA inspected



SIHGA® Terrace Fastening

© Guggemos

HFA inspected



SIHGA® is the first and only company that has succeeded in offering all the fasteners required for the construction of a terrace HFA inspected (Holzforschung Austria).

Holzforschung Austria is considered one of the most important institutions for the certification of wood products in the German speaking countries.

Quality, safety and reliability - voluntarily externally monitored.

The following products have been awarded HFA inspected:

GleitFix®

HFA inspected in combination with larch, thermo ash and Accoya

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

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

TeFix®

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

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

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

KompeFix® II KF

HFA inspected in combination with TeFix®

Alu-TeFix®

HFA inspected in combination with TefaFix® and larch

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

TefaFix®

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

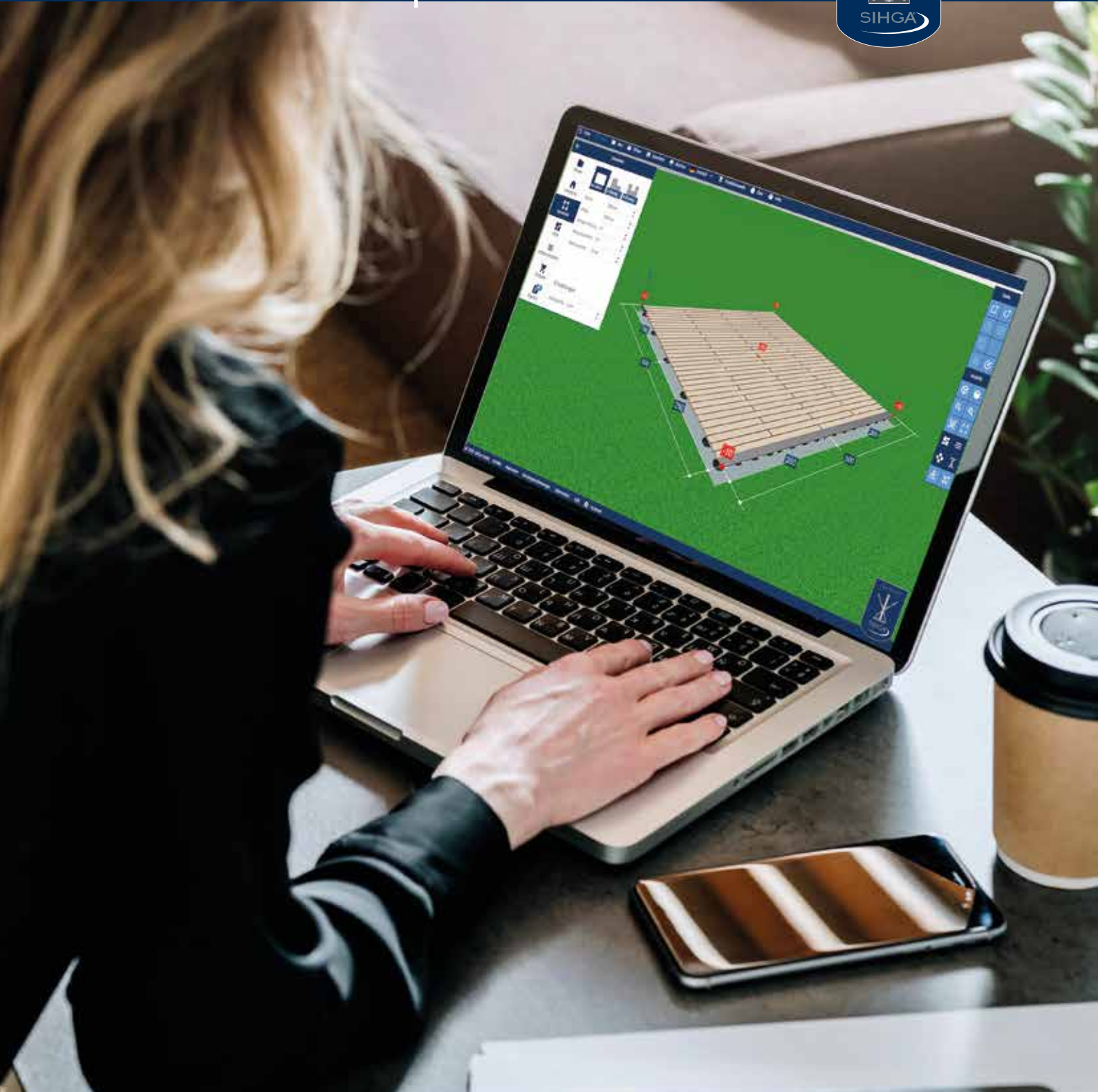
TefaFlex®

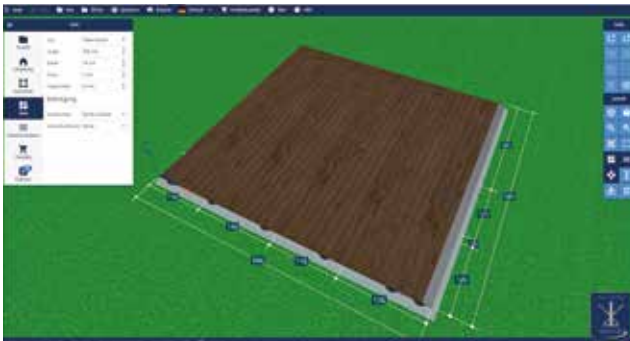
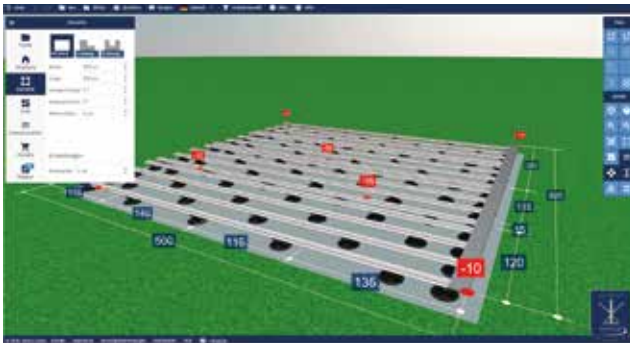
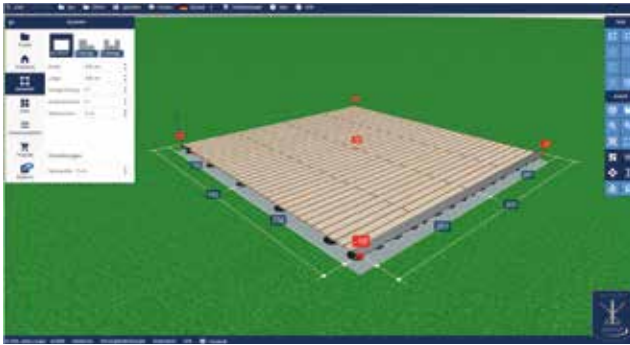
HFA inspected in combination with Alu-TeFix® and TefaFix®

TefaBind®

HFA inspected in combination with TefaFix®

Terrassenplaner[®]





New features of Terrace Planner 2.0

- 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

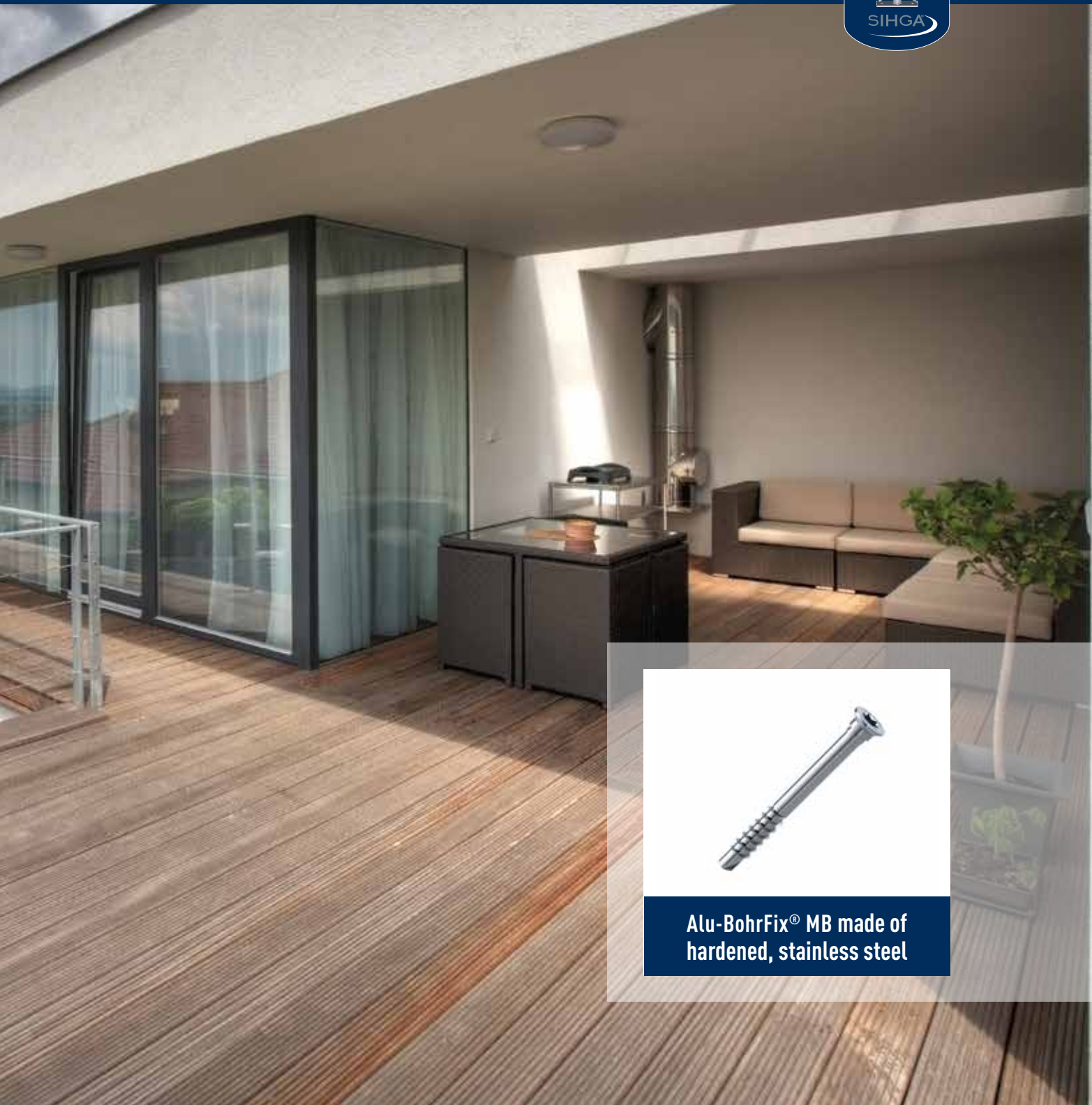
- quantities of wood, substructure, fasteners, incl. schematic laying plans



SIHGA® TIP:

Log in at www.sihga.com - immediately plan your project and order the necessary components in the webshop.

Alu-BohrFix[®] MB



Alu-BohrFix[®] MB made of hardened, stainless steel

SIHGA® Feature

YOUR benefit

attaches all wood types and aluminium

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

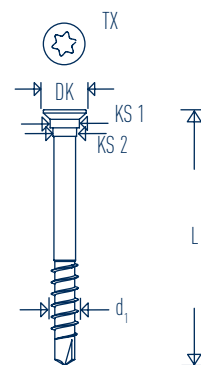
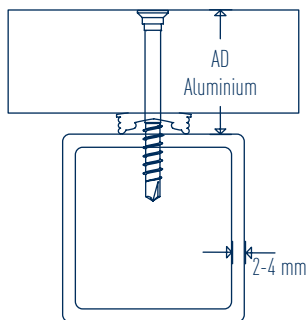
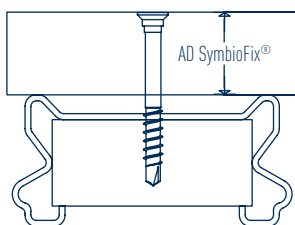
including SIHGAFIX® non-corrosive, system pin and installation instructions

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 ₁ x L	[mm]	[mm]	[mm]	[mm]	d ₁	TX	DK	KS 1	KS 1
26006	200	5,5 x 46	21	27	28	33	5,5	25	8,5	5,8	4,7
26016	200	5,5 x 51	27	34	33	38					
26026	200	5,5 x 61	36	43	43	48					



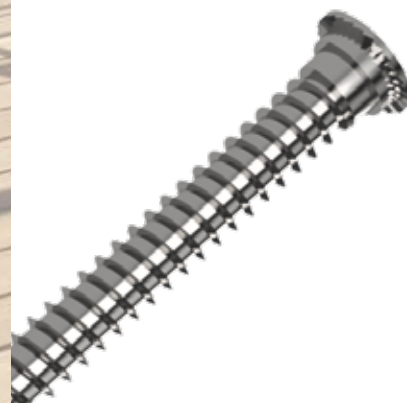
SIHGA® TIP:

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



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

HFA inspected in combination with TefaFix® and larch

for details please see page 65

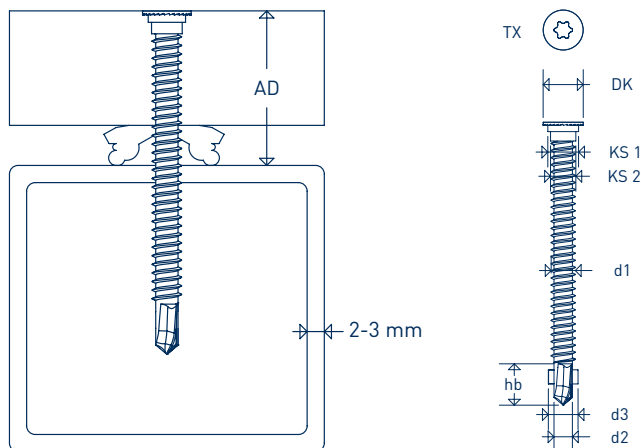
SIHGA® montagepack		Dimension Alu-TeFix®	Add-on Part up to AD	Characteristic Values*			Substructure TefaFix®T/F
Art. Nr.	PU	d1 x L	[mm]	Tensile Force F _t , [kN]	Shear Force F _s , [kN]	Alu-Wood	
54016	200	5,0 x 51	33	1,96	1,30	2,95	yes
54026	200	5,0 x 61	43	1,96	1,30	3,22	yes

SIHGA® 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]	Tensile Force F _t , [kN]	Shear Force F _s , [kN]	Alu-Wood		
54066	200	5,0 x 51	33	1,96	0,85	1,40	yes	yes
54076	200	5,0 x 61	43	1,96	0,85	1,40	yes	yes

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

Dimensions [mm] Alu-TeFix®

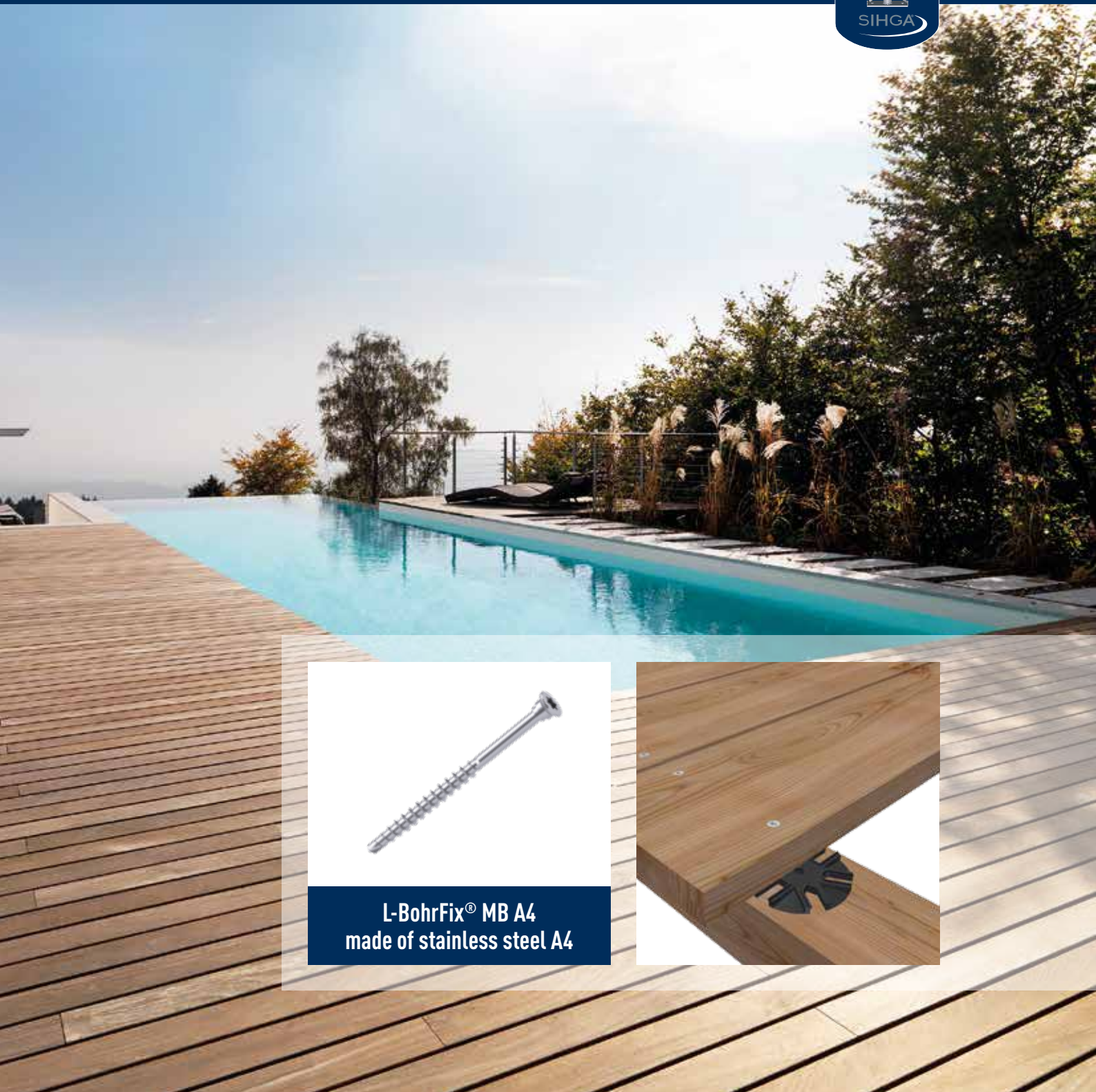
d1	TX	DK	KS 1	KS 2	d2	d3	hb
5,0	20	8,5	6,5	5,4	3,9	6,4	10



SIHGA® TIP:

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

L-BohrFix[®] MB A4



L-BohrFix[®] MB A4
made of stainless steel A4



SIHGA® Feature

fastens all types of wood, even when exposed to salt and chlorine

drill bit with special shape

made from stainless steel A4

material highly resistant to corrosion

multi-stage head with small head diameter of 8.5 mm

including SIHGAFIX® stainless steel, Systemstift® and installation instructions

calculation of quantity

YOUR Benefit

special drill bit prevents the substructure from splitting

prevents cracks in the wood

fastens without rusting, also in acidic woods and when exposed to salt and chlorine

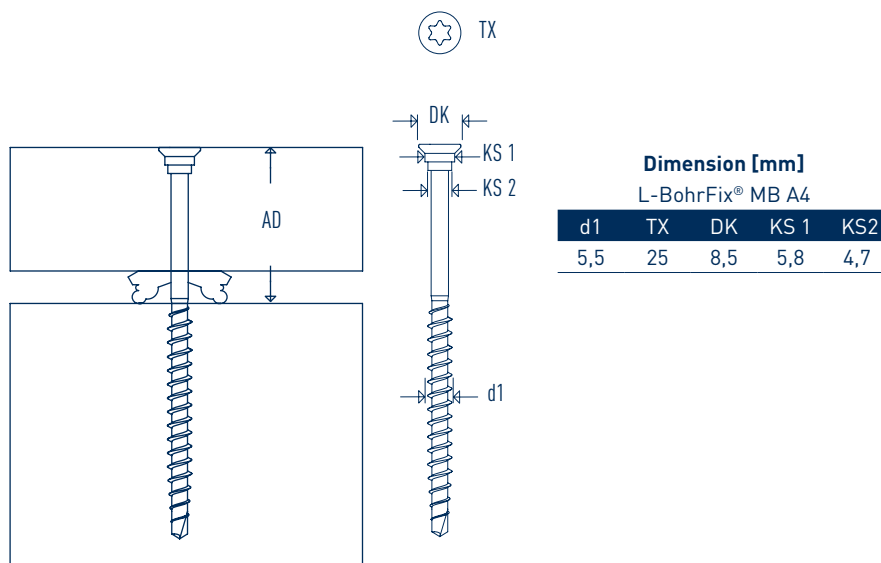
optimally suited for use close to the pool surround

elegant look, non-cutting screwing

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

www.sihga.com/Online Calculation Terrace

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



SIHGA® TIP:

To extend the life of timber constructions, we recommend using KompeFix® II KF and noting the design recommendations (page 62 - 63).

S-BohrFix® SBF



S-BohrFix® SBF made from hardened stainless steel



SIHGA® Feature

YOUR Benefit

fastens wood to steel without pre-drilling

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

drill bit with special shape and thread lock flanks

fastens woods up to 90 mm to steel in one step

made from hardened stainless steel

rust-free fastening, is extremely break-proof

including SIHGAFIX® stainless steel, Systemstift® and installation instructions

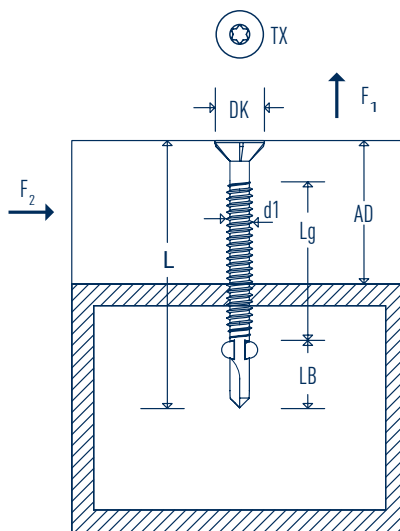
time-saving, practical, precise, all accessories enclosed, SIHGAFIX® stainless steel prevents rust from external sources and also screws into deep grooves

design values

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 ₁ [kN]	Shear Force F ₂ [kN]
31236	100	4,8 x 38	20	2,2	0,45	0,64
31246	100	5,5 x 45	25	4,0	0,61	0,64
31256	100	5,5 x 50	30	4,0	0,61	0,84
31266	100	6,3 x 60	35	5,0	0,72	0,84
31276	100	6,3 x 70	45	5,0	0,72	0,84
31286	100	6,3 x 85	60	5,0	0,72	0,84
31296	100	6,3 x 110	85	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.

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

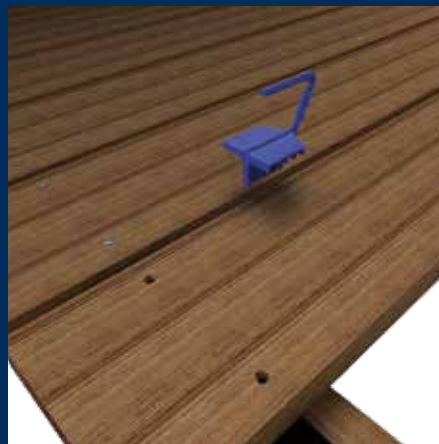
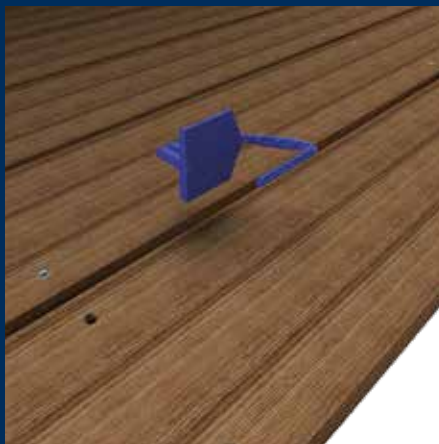
YOUR Benefit

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 62 - 63).

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
optimised fastening of varying plank thicknesses from 19 mm

selection of three screw lengths

variable adjustment of the visible joint (0 - 15 mm)

suitable for every developer, FugiFix® is the ideal assistant here (page 74)

HFA inspected in combination with larch, thermo ash and Accoya

for details please see page 65



SIHGA® TIP:

As substructure we recommend using TefaFix® T and noting the design recommendations (page 62 - 63).

SIHGA® Feature

connector height with 8 mm for optimal ventilation

with joint spacing ≥ 8 mm

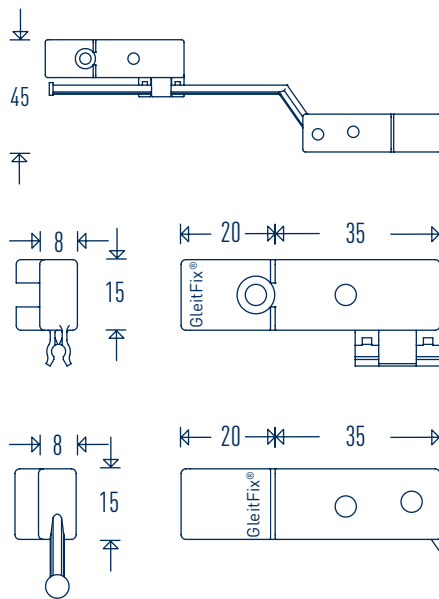
includes SIHGAFIX® stainless steel, from hardened stainless steel BohrFix® FB with drill bit and installation instructions

YOUR Benefit

ensures optimum constructive wood protection;
prevents accumulations of water between the plank and substructure

individual planks can be disassembled or replaced

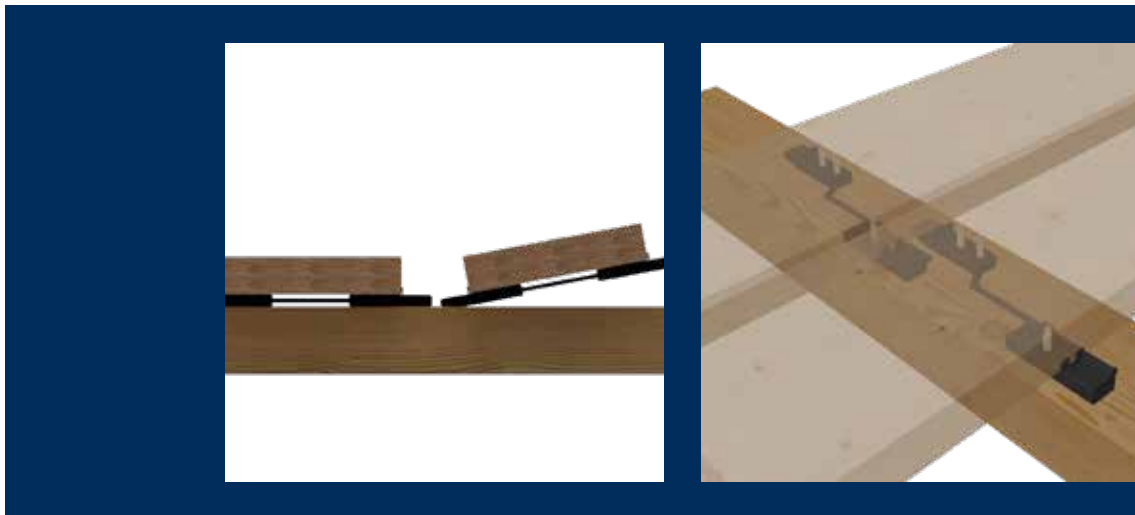
no rust from external sources, screws do not shear or break; time-saving, practical, precise, all accessories are enclosed



SIHGA® objektpack®		Dimension GleitFix® GF	Plank Thickness mind.	Average Quantity / m ² *
Art. No.	PU	Type	[mm]	Pieces
34419	150	GF 17	19	16
34449	150	GF 22	24	16
34479	150	GF 28	30	16
34519	150	GF 17 CS	19	16
34549	150	GF 22 CS	24	16
34579	150	GF 28 CS	30	16

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

BohrFix® FB
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

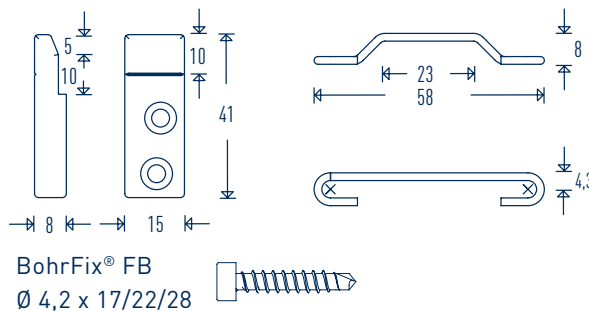
elegant look and long-lasting fastening

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

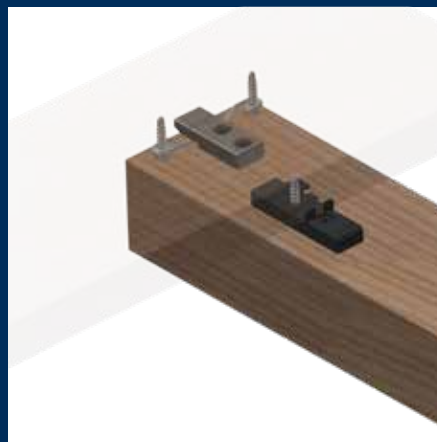
reduces the crack and break behaviour of the timber during these natural processes

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	AE 17	19
34656	24	AE 22	24
34686	24	AE 28	30
34726	24	AE 17 CS	19
34756	24	AE 22 CS	24
34786	24	AE 28 CS	30



SIHGA® TIP:

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

* Available from specialist timber dealers

JustiFix[®] JV

SIHGA[®] 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 m² easy to lay

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

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



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	J 3H	80 x 40 x 3
41216	60	J 5H	80 x 40 x 5
41226	30	J 10H	80 x 40 x 10



JustiFix[®] 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

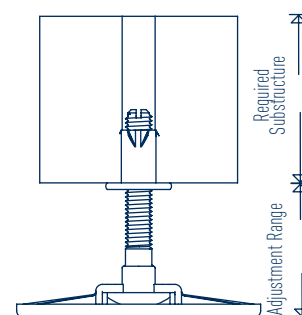
compensates for floor unevenness

increases walking comfort on the terrace

quantity calculation: approx. 4 units/m²

easy height adjustment from above with screwdriver or with open-end spanner SW 10 from below

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



SIHGA® TIP:

Drill substructure with Ø 10 mm. Note design recommendations (page 62 - 63).

JustiFix[®] JK



JustiFix[®] JK 50 H
made from polypropylene

SIHGA® Feature

height-adjustable distance between substructure made from wood and any foundation

made in Austria

upper section for wood substructure

30 to 50 mm height adjustment

integrated level equaliser

monitored production from polypropylene, with a special recipe

base plate with diameter 210 mm and rounded edge

load capacity per piece 6.0 kN

includes installation instructions

YOUR Benefit

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

top European quality and added-value

versatile, the wood substructure is simply fastened to the side of the upper section

only ONE model for the entire range

evens out slopes of up to 3 %

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

large supporting surface, also for unpaved subsoil, rounded standing areas to protect the underlying films

quantity calculation: approx. 4 units/m²

for professional and practical work without lost time

SIHGA®		Dimension	Adjustment Range		Support Surface
montagepack	Art. No.	JustiFix® JK Type	from [mm]	to [mm]	Diameter [mm]
5	33326	50 H	30	50	210



SIHGA® TIP:

For higher adjustment ranges we recommend JustiFix® II JK H.

JustiFix® II JK H



JustiFix® II JK 125 H
made from polypropylene

SIHGA® Feature

YOUR Benefit

height-adjustable distance between substructure and any foundation

this adjustable foot saves up to 70 % working time compared to individual solutions, the substructure remains dry and the terrace breathes

upper section for wood substructure; integrated level equaliser

versatile in application, the wood substructure is simply fastened to the side of the upper section, evens out slopes of up to 3 %, simply read off from table

50 to 545 mm height adjustment

four basic models for the individual application, can be varied with JustiFix® Adapter JA 70

made in Austria

top European quality and added-value

monitored production from polypropylene, with a special recipe

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

base plate with diameter 210 mm and rounded edge

large supporting surface, also for unpaved subsoil, rounded standing areas to protect the underlying films

load capacity per piece max. 6.0 kN

on solid and unpaved subsoil

includes installation instructions

for professional and practical work without lost time

SIHGA®		Dimension	Adjustment Range		Support Surface
montagepack		JustiFix® II JK	from	to	Diameter
Art. No.	PU	Type	[mm]	[mm]	[mm]
33366	5	90 H	50	90	210
33106	5	125 H	50	125	210
33136	4	160 H	120	160	210



JustiFix® II JK 160 H



SIHGA® TIP:

Note design recommendations (page 62 - 63). On flat roofs in combination with JustiFix® K.

JustiFix® II JK

SIHGA® Feature

height-adjustable distance between substructure and any foundation

upper section for TefaFix® T substructure and SymbioFix® SFT; ntegrated level equaliser

30 to 545 mm height adjustment

made in Austria

monitored production from polypropylene, with a special recipe

YOUR Benefit

this adjustable foot saves up to 70 % working time compared to individual solutions, the substructure remains dry and the terrace breathes

this height-adjustable foot simply latches onto TefaFix® T and SymbioFix® SFT is therefore absolutely installation-stable and evens out slopes of up to 3 %

four basic models for the individual application, can be varied with JustiFix® Adapter JA 70 (page 91)

top European quality and added-value

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

SIHGA® montagepack	Dimension JustiFix® II JK	Adjustment Range		Support Surface Diameter	
		from	to		
Art. No.	PU	Type	[mm]	[mm]	[mm]
33436	5	50	30	50	210
33446	5	90	50	90	210
33116	5	125	50	125	210
33146	4	160	120	160	210



JustiFix® II JK 90



JustiFix® II JK 125



SIHGA® TIP:

Note design recommendations (page 62 - 63).

SIHGA® Feature

base plate with diameter 210 mm and rounded edge

load capacity per piece max. 6.0 kN

includes installation instructions

YOUR Benefit

large supporting surface, also for soft subsoil, rounded standing areas to protect the underlying films

on solid and unpaved subsoil; 2 per m², for example with 1100 mm distance from the terrace footing, are sufficient

for professional and practical work without lost time



JustiFix® II JK 160



SIHGA® TIP:

Note design recommendations (page 62 - 63).

JustiFix[®] II JK S

SIHGA[®] Feature

YOUR Benefit

height-adjustable distance between substructure and any foundation	this adjustable foot saves up to 70 % working time compared to individual solutions
upper section for slabs with joint distance 4 mm and spacer ribs with integrated predetermined breaking point	for all panel formats, even cornering profiles and edge connectors are resolved easily and time-efficiently
30 to 545 mm height adjustment	four basic models for the individual application, can be varied with JustiFix [®] Adapter JA 70
made in Austria	top European quality and added-value
monitored production from polypropylene, with a special recipe	remains permanently dimensionally stable, is heat-, frost- and UV-resistant
base plate with diameter 210 mm and rounded edge	large supporting surface, also for soft subsoil, rounded standing areas to protect the underlying films
load capacity per piece max. 6.0 kN	on solid and unpaved subsoil; 4 per m ² , sufficient for 50 cm plate size, for example
includes installation instructions	for professional and practical work without lost time

SIHGA [®] montagepack		Dimension JustiFix [®] II JK	Adjustment Range		Support Surface
Art. No.	PU	Type	from [mm]	to [mm]	Diameter [mm]
33346	5	50 S	30	50	210
33426	5	90 S	50	90	210
33126	5	125 S	50	125	210
33156	4	160 S	120	160	210



JustiFix[®] II JK 125 S



JustiFix[®] Adapter JA

SIHGA[®] Feature

height expansion for JustiFix[®] II JK by 70 mm respectively

made in Austria

one model, can be stacked as desired

monitored production from polypropylene, with a special recipe

YOUR Benefit

the optimal addition to the adjustable foot, JustiFix[®] Adapter JA is simply inserted; this increases the height adjustment between substructure and foundation by up to 545 mm

top European quality and added-value

can be used for all JustiFix[®] II JK

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

SIHGA [®] montagepack		Dimension JustiFix [®] II JK		Adapter JA 70	Adjustment Range [mm]	
Art. Nr.	VE	Type		Quantity	from	to
33396	8	JK 125 H/S	+	1 x JA 70	120	195
33396	8	JK 125 H/S	+	2 x JA 70	190	265
33396	8	JK 125 H/S	+	3 x JA 70	260	335
33396	8	JK 125 H/S	+	4 x JA 70	330	405
33396	8	JK 125 H/S	+	5 x JA 70	380	475
33396	8	JK 125 H/S	+	6 x JA 70	470	545



SIHGA[®] TIP:

Note design recommendations (page 62 - 63)

JustiFix[®] K



JustiFix[®] 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 m²

YOUR Benefit

protects against mechanical damage to the sealing level

prevents a plasticizer migration between flat roof foil and adjustable feet

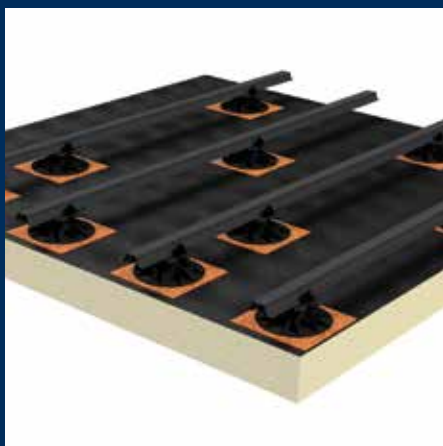
optimal for adjustment feet JustiFix® (II) JK

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



SIHGA® TIP:

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

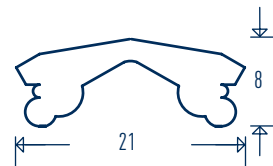
KompeFix[®] II KF

SIHGA[®] Feature

YOUR Benefit

universal, constructive wood protection for terraces with height 8 mm and width 21 mm	creates distance between the woods; thereby allowing them to breathe and increasing their lifespan
developed, patented and made in Austria	local quality, experience from more than 14 years of terrace construction included
the 4.5 metre long roll is simply rolled out	fast and easy, can be fixed as desired (screwable) and cut to length
helps to seal the screw	increases the service life of the construction
the pre-load effect integrated through the specific shape compensates for the swelling and shrinkage of the timber	enhances walking comfort on the terrace
monitored production from polyvinyl chloride, with a special recipe	remains permanently dimensionally stable, is heat-, frost- and UV-resistant
quantity calculation per m ²	1 : distance substructure [m] : 4.5
includes installation instructions	is time-saving and enclosed for practicality
HFA inspected in combination with TeFix [®]	for details please see page 65

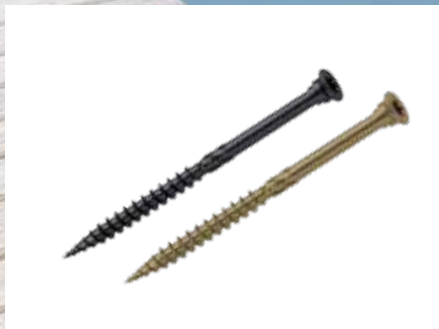
SIHGA [®] montagepack		Dimension KompeFix [®]		Dimension [mm]	
Art. No.	PU	Type	Width	Height	Length
41006	8 x 4,5 m	II KF	21	8	4500



L-GoFix® MS



L-GoFix® MS made from hardened stainless steel



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

L-GoFix® MS

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)

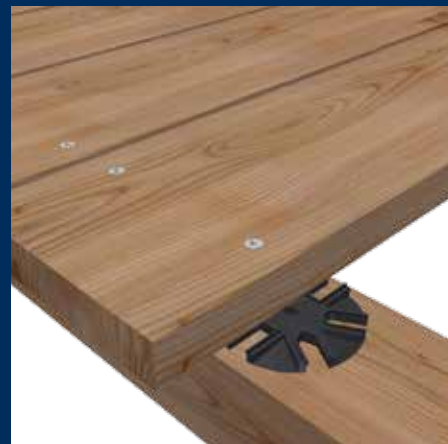
optimum on dark materials, or can be used for larch, Douglas fir and Bangkirai

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

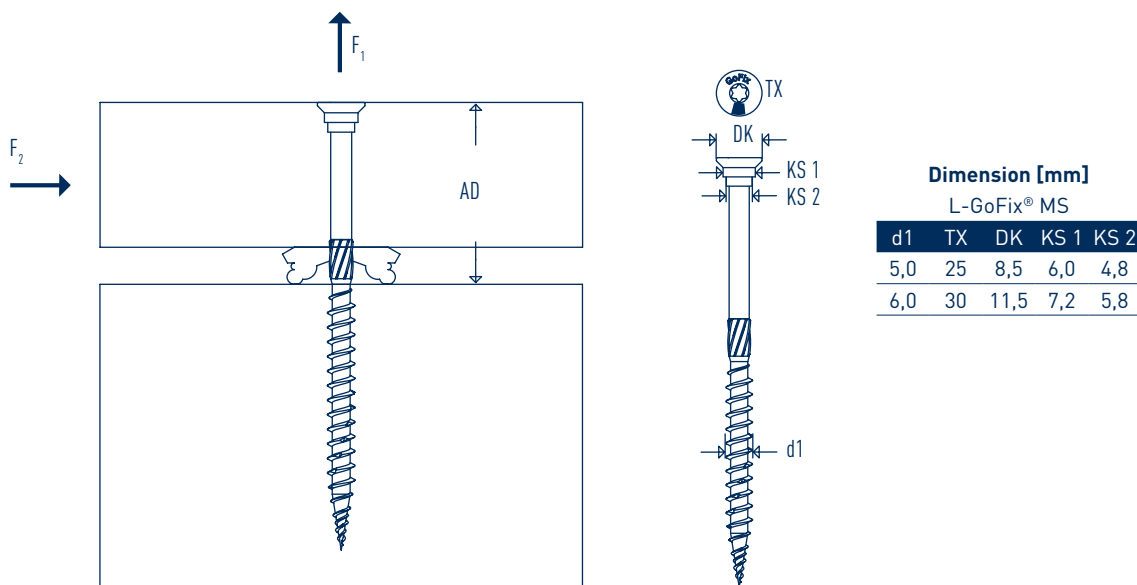
quantity calculation

including SIHGAFIX® stainless steel, Systemstift® and installation instructions

YOUR Benefit

www.sihga.com / 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 ₁ [kN]		Shear Force F ₂ [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® TTB depth limiter.

L-GoFix[®] MS A2

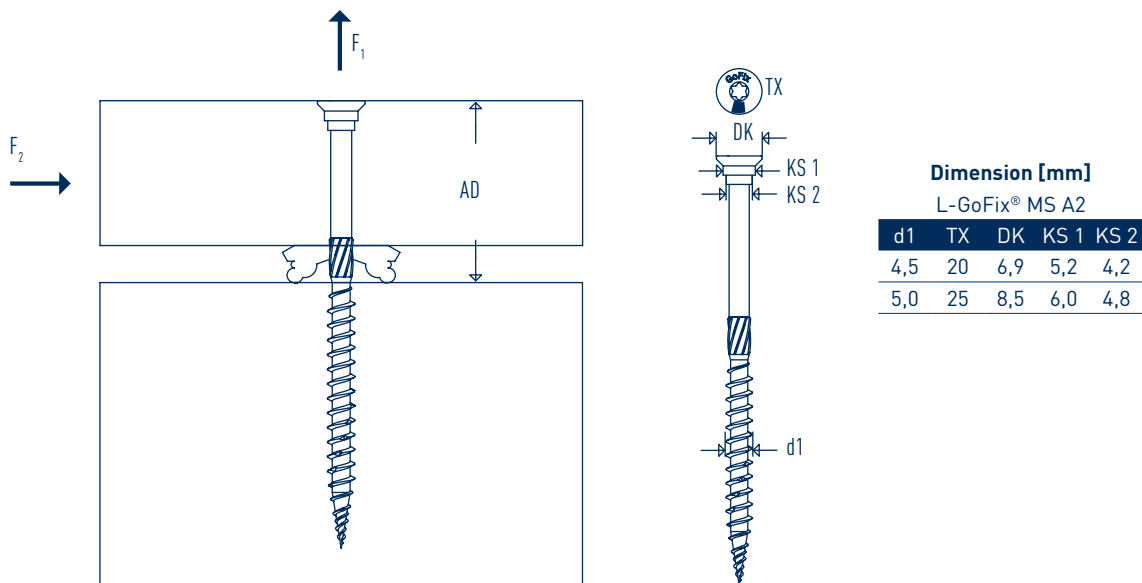
SIHGA[®] Feature

YOUR Benefit

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

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





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 _t [kN]		Shear Force F _v [kN]	
				Head	Thread	Wood-Wood	Steel-Wood
22226	400	4,5 x 40	16	0,48	1,55	0,74	1,15
22236	400	4,5 x 45	18	0,48	1,77	0,83	1,21
22246	400	4,5 x 50	20	0,61	1,99	0,92	1,26
22266	400	4,5 x 60	24	0,61	2,36	1,07	1,35
22276	300	4,5 x 70	28	0,61	2,72	1,22	1,45
22316	200	5,0 x 45	18	0,76	1,82	0,89	1,36
22326	200	5,0 x 50	20	0,95	2,14	0,99	1,44
22336	200	5,0 x 60	24	0,95	2,53	1,18	1,54
22346	200	5,0 x 70	28	0,95	2,93	1,33	1,64
22356	200	5,0 x 80	32	0,95	3,72	1,57	1,84
22366	200	5,0 x 90	36	0,95	4,12	1,67	1,94
22376	200	5,0 x 100	40	0,95	4,30	1,72	1,98

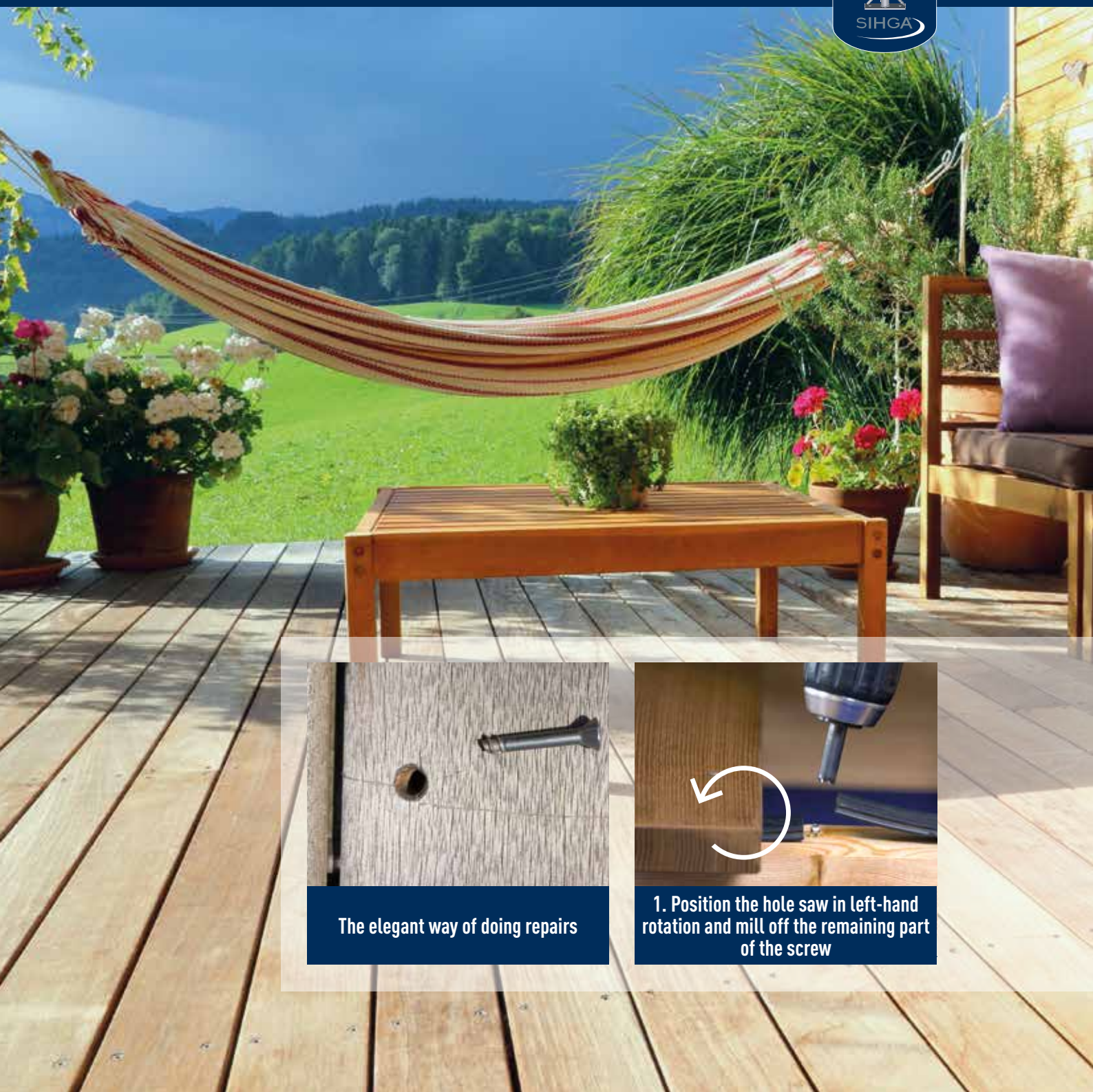
Subject to technical modifications and errors. Status of approval 12.2022

** 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).



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 m² 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

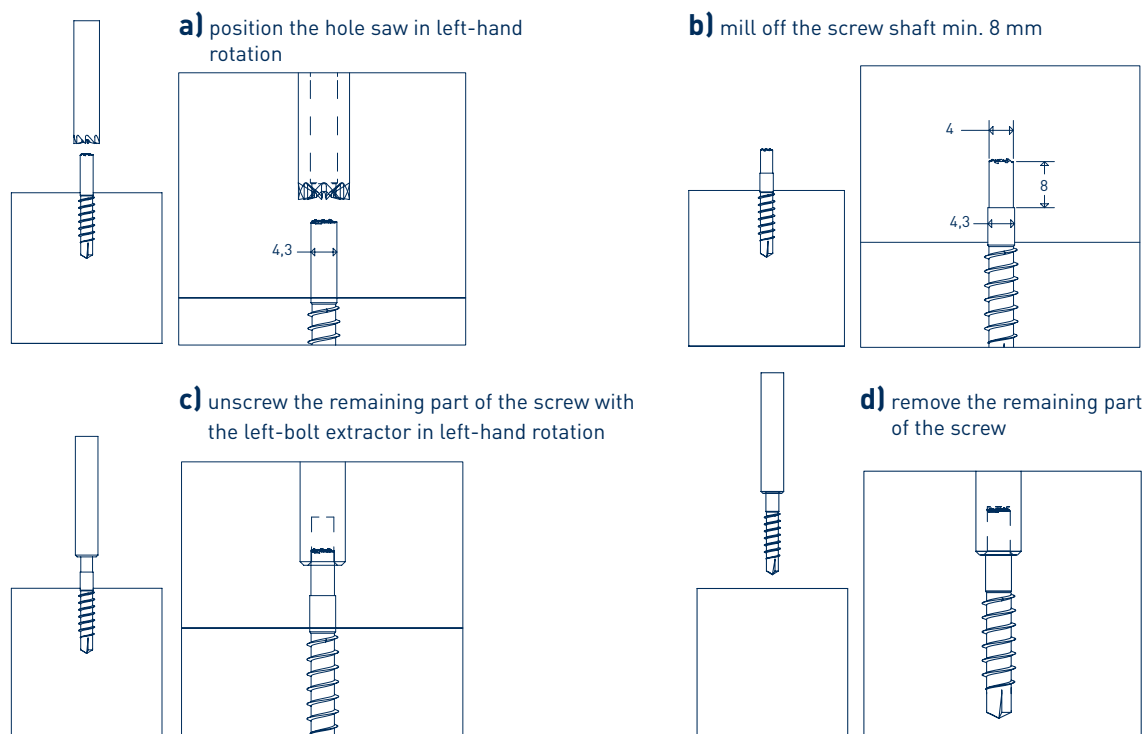
only one replacement screw is required for each defective screw when repairing wooden sub-structures

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



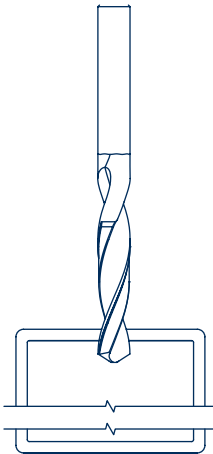
montagepack		SIHGA® Rest-X®			
Art. No.	PU	Hole Saw Ø [mm]	Screw Extractor Ø [mm]	HSS Drill Ø [mm]	SIHGAFIX®
34802	1	8,5 / 4,0	7,5 / M 4,5 left	8,5	TX 25 and 30

Further Procedure in Aluminium Substructure

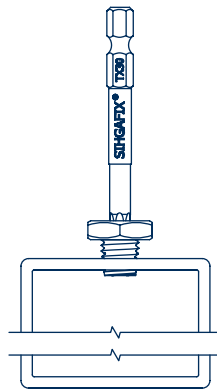
YOUR Benefit

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)

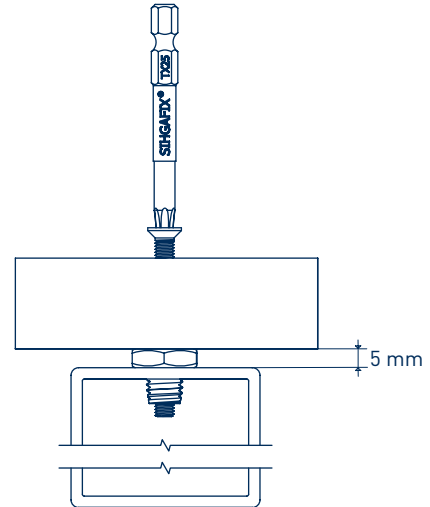
a) drill the hole with diameter 8.5 mm



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 7th 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.

SymbioFix[®] SFT



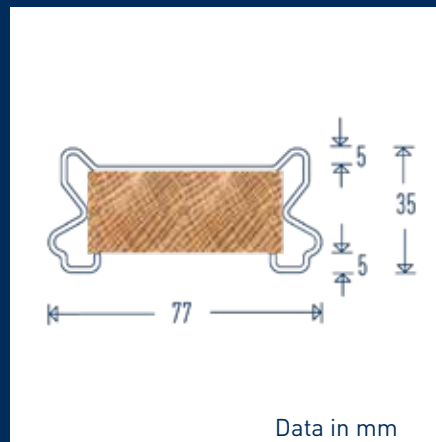
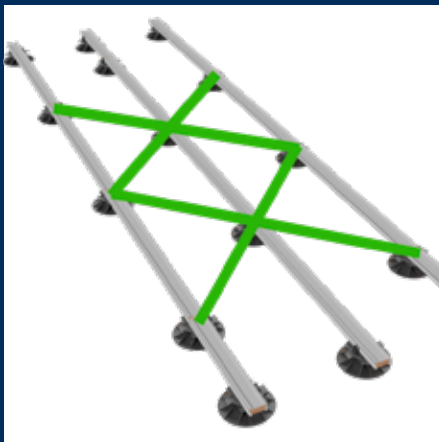
SymbioFix[®] SFT
mit Thermoholzkern

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 1100 mm and low weight, endless connection	time-saving, low construction height, endlessly connectible without adapters, increases the lifespan of the terrace
optionally available with a length of 4400 mm	saves working time when laying the substructure
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
version also available in black (SC 9®)	the substructure is not visible in the joints

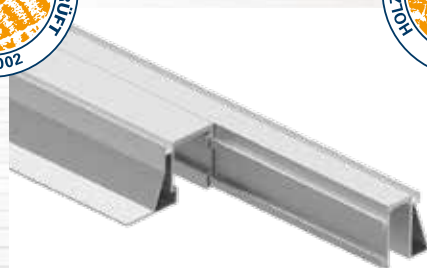
SIHGA® objektpack		SymbioFix®	
Art.No.	PU	Type	Length [mm]
32679	15	SFT 1100	1100



SIHGA® TIP:

Note design recommendations

TefaFix® T



TefaFix® T
aluminium blank



TefaFix® T
aluminium SC 9 coated

© Bonauer Bölling Architekten Berlin



SIHGA® Feature

YOUR Benefit

2-part system

with visible screw connection in offset arrangement, sliding effect also in the longitudinal direction of the substructure, screw breakage due to swelling and shrinking of the wood is a thing of the past

also available in SC 9 coated

continuous black joint optic

profile open at the bottom

prefabrication of the parts possible by screwing on the rear

lateral flange

additional fastening options

special inner geometry

many connections possible with TefaBind® connector

trapezoidal shape

perfect water drainage guaranteed

moveable

endlessly extendable in length

aluminium

durable, machinable with conventional tools and machines

TefaBind® connector

all, even angled connections possible

universally combinable

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

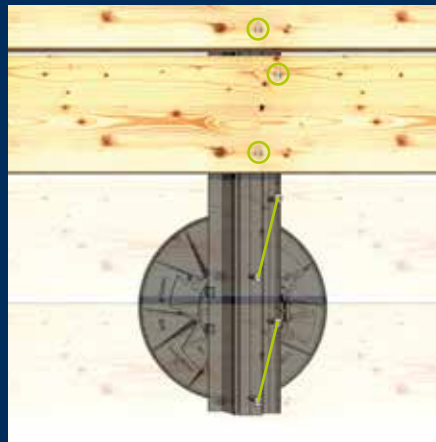
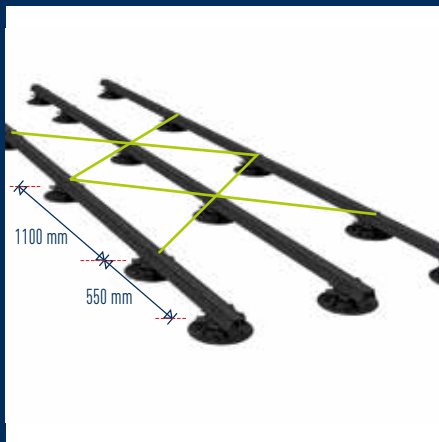
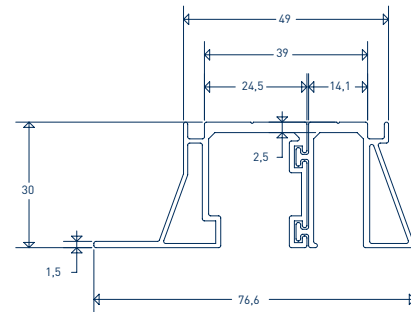
HFA inspected in combination with Alu-TeFix®, TefaFlex® T and TefaBind®

for details please see page 65

* Available from specialist timber dealers

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		
objekt-pack®	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.

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

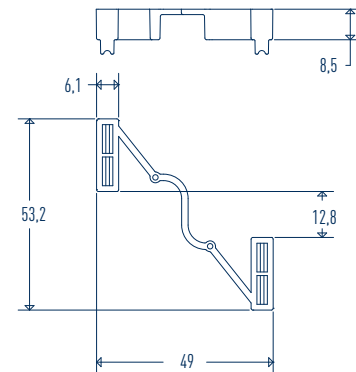
8.5 mm height

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 65

SIHGA® montagepack		Length	TefaFlex® T	
Art. No.	PU	[mm]	Width	Height
			[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



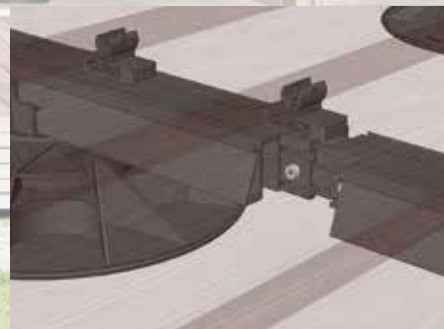
TefaFix® T with SenoFix® FT* Alu



* Available from specialist timber dealers



TefaBind®
aluminium SC 9 coated



For butt joint
of TefaFix® T

© Bonauer Bölling Architekten Berlin

SIHGA® Feature

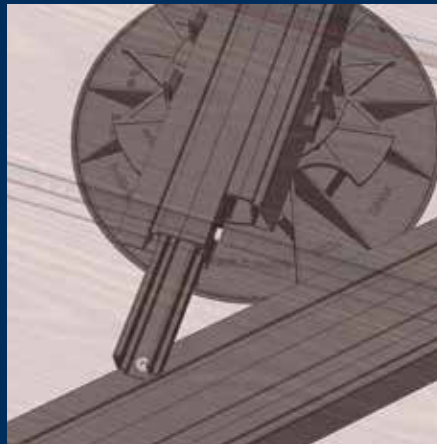
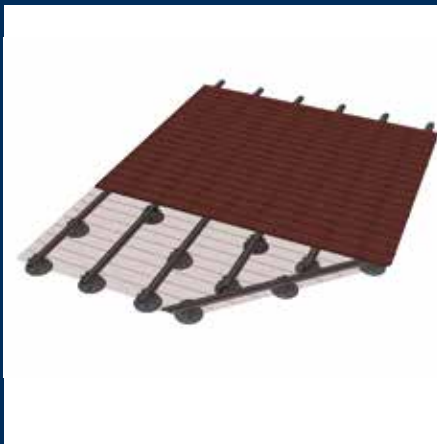
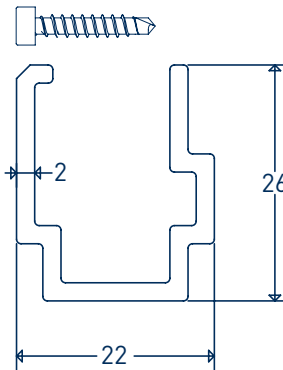
YOUR Benefit

TefaBind® connector	for endless joining of TefaFix® T
SC 9 coated	continuous black joint optic
profile open at the top	with the supplied BohrFix® FB 4.2 x 17 mm in stainless steel the TefaBind® can be easily fixed
Aluminium	durable, with conventional tools and machines workable
all-purpose	all longitudinal and transverse connections can be made with the TefaBind®
including assembly instructions and 2 pcs. BohrFix® FB 4.2 x 17 mm per TefaBind®	time-saving, practical, precise, all accessories are included
HFA inspected in combination with TefaFix® T	for details please see page 65

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

BohrFix® FB

Ø 4,2 x 17

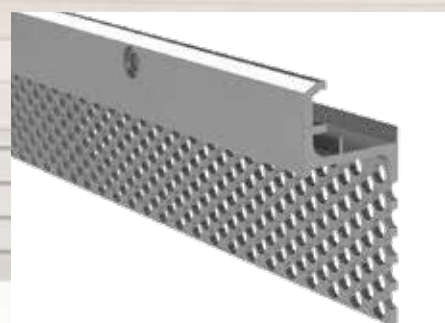


SIHGA® TIP:

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

TerrassenFix[®] Air



TerrassenFix[®] 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

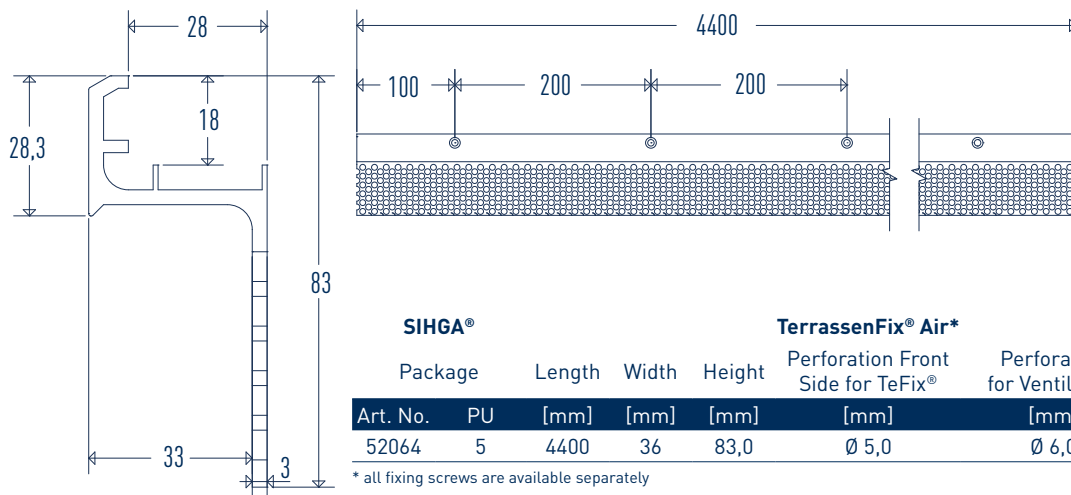
workable with common tools and machines

easy installation using TeFix®

load transfer of the edge cover via the planks

or all plank thicknesses from 20 mm

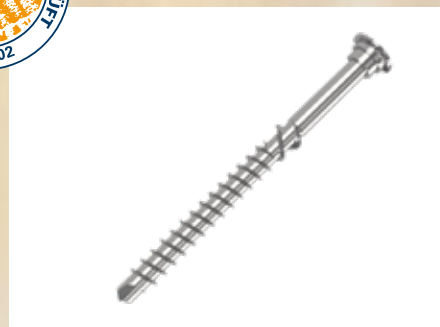
water drainage and ventilation guaranteed



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



SIHGA® Feature

fastens wood to wood without pre-drilling and countersinking

made of hardened stainless steel

SIHGA® friction thread with special form

SIHGA® further-developed multi-stage head

the perfect solution in combination with KompeFix®

including SIHGAFIX®, Systemstift® and installation instructions

calculation of required quantity, please visit

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

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

pre-drills the boards at 5 mm; the wood can thus swell and shrink

no suppression or splitting of the wood due to extra thin head and saw tooth corrugation

increases the life of the wood and the screw

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

www.sihga.com (average quantity = 33 pieces/m²)

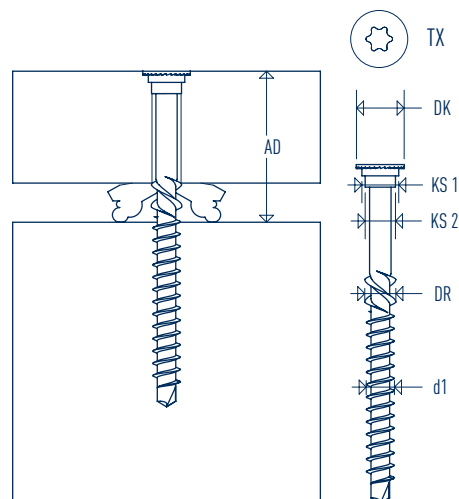
for details please see page 65

SIHGA® montagepack		Dimension TeFix® d1 x L	Installation Part AD [max] [mm]	Characteristic Values**			
Art. No.	PU			Tensile Force F _t [kN]		Shear Force F _v [kN]	
				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



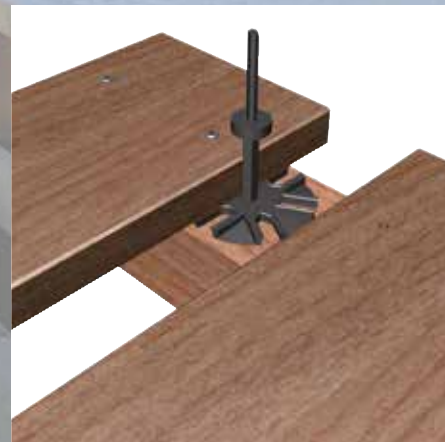
SIHGA® TIP:

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 m ²	1: substructure distance [m]: width of terrace planks + joint [m]

SIHGA® montagepack		Dimension TerrassenFix®	Average Quantity /m ²
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

patented constructive wood protection as a set with L-GoFix® MS screws for terraces

L-GoFix® MS made from hardened stainless steel

including SIHGAFIX® stainless steel, TerrassenFix® II rods TFS, Systemstift® and installation instructions

calculation of quantity

YOUR Benefit

the practical set for visible terrace plank fastening with very long lifespan

rust-free fastening, extremely break-proof

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

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	TFL 60	20	5,0 x 60	7,5
40546	100	TFL 70	24	5,0 x 70	7,5
40566	100	TFL 80	28	5,0 x 80	7,5
40576	100	TFL 90	32	5,0 x 90	7,5



TerrassenFix® II TF



L-GoFix® MS



SIHGA® TIP:

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

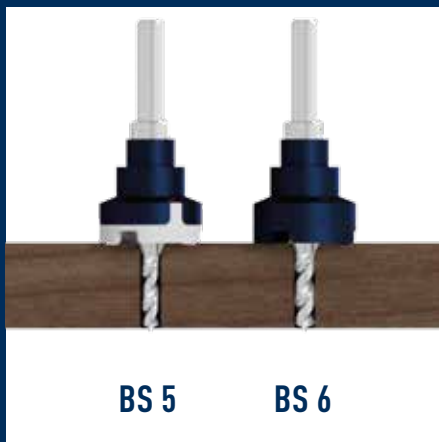
TerrassenFix®^R Countersink BS

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

Art. No.	SIHGA®	TerrassenFix®	Drill Hole	Drill Depth
	minimontagepack	Countersink	Diameter	incl. sink
35052	1	BS 5	5,0	25
35062	1	BS 6	6,0	25



SIHGA® TIP:

Observe drilling table (page 63), we recommend using the TerrassenFix® Template TFS.

TerrassenFix[®] Template TFS

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



**TerrassenFix[®] Template TFS
for rapid precision**



SIHGA[®] TIP:

Note design recommendations (page 62 - 63).

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® minimontagepack		Type Depth Limiter
Art. No.	PU	Type
34992	1	TTB



SIHGA® TIP:

Note design recommendations (page 62 - 63). TerrassenFix® depth limiter TTB with SIHGAFIX® TX 20, 77 mm perfect for laying with SenoFix® FT*.

* Available from specialist timber dealers

www.sihga.com

System Catalogue 123

TerrassenFix[®] Clamp III

SIHGA[®] Feature

clamping width 260 - 780 mm

material thickness of the front section only 4 mm

wide clamp jaws

close and open the clamp with one handle or ...

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

easy, quick adjustment and fine adjustment of the clamping width

YOUR Benefit

time-saving, practical, precise for terrace construction, from plank widths of 90 mm or can also be used universally;

easy to use with all terrace joints and when working close to walls

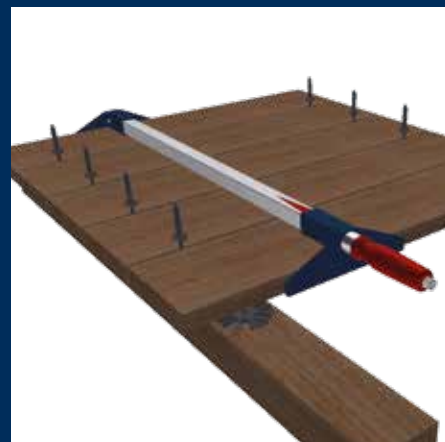
no pressure points on the plank edge

the clamping together of the planks and the opening of the clamps are performed by turning the handle or...

... with drive TX 40, external hex SW 13, hexagon socket 6 mm for even faster handling

quick adjustment from the front with a magnetic rod, fine adjustment using a rotating handle

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



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

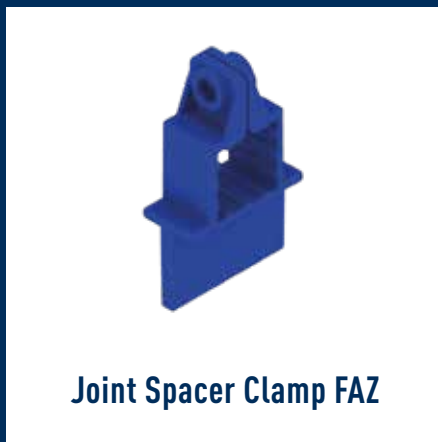
wide supporting surface

prevents pressing into the timber

is placed directly on TerrassenFix® Clamp III

cannot fall into the joint

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



SIHGA® TIP:

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

* Available from specialist timber dealers

www.sihga.com



System Catalogue 125

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

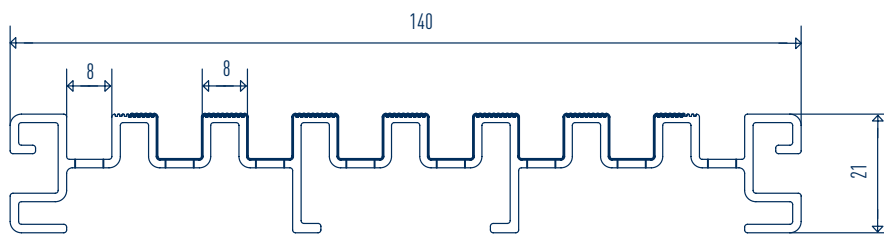
simply put the necessary parts together

TerrassenFix Aqua® 1000 mm incl.
F-BohrFix® ES 3.2 x 50 mm

for securing on wood or aluminium substructure

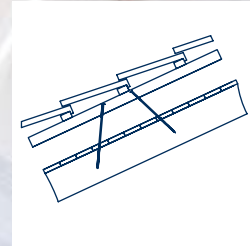
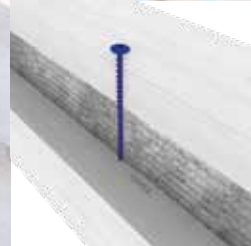
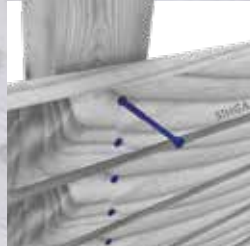
SIHGA® objektpack®		Type Dimensionen	SIHGA® Package		Type Dimensionen
Art. No.	PU	Aqua	Art. No.	PU	Aqua
40459	10	140 x 1000 x 21*	40472	10	140 x 4000 x 21

* 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.



System Screws

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Load Handling Device

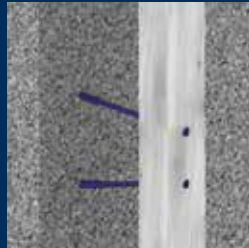
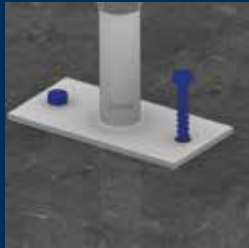
Pick	212
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Roof Insulation

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Installation Tool

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Wood with Concrete / Metal / Brick

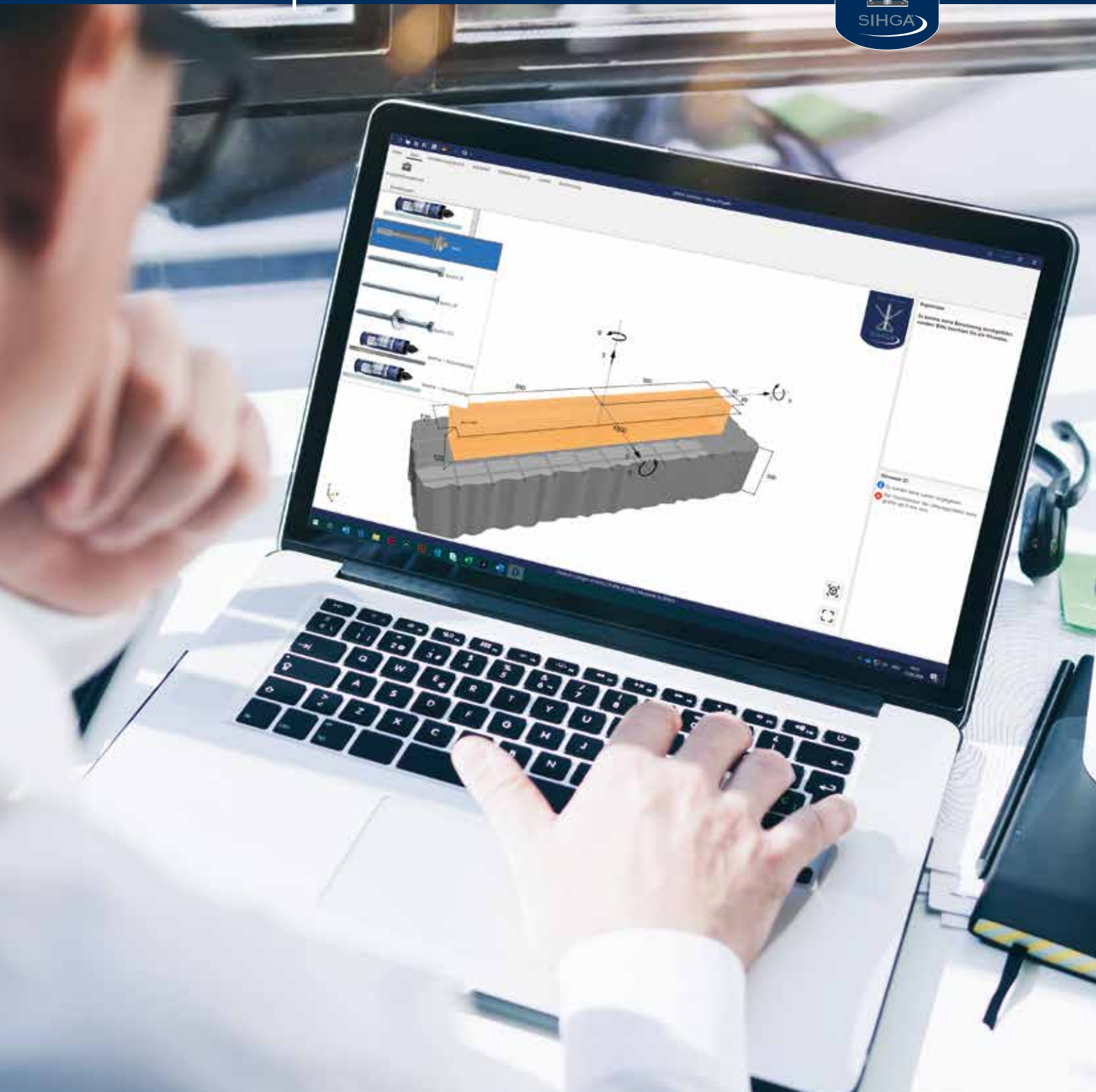
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BeziFee® Bonded Anchor	140
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Pfalu Aquastop®	210
ProziFix®	230
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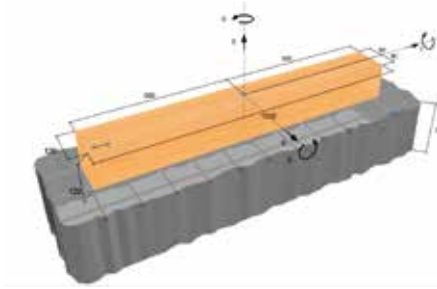
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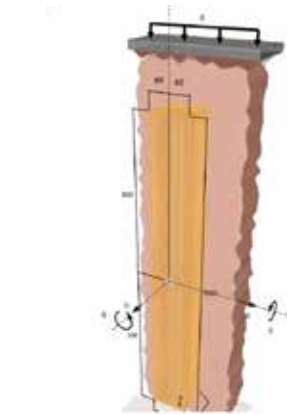


SIHGA® Feature

innovative software for dimensioning of wood and steel add-on parts in the most common dimensions, profile types and sizes according to current standards

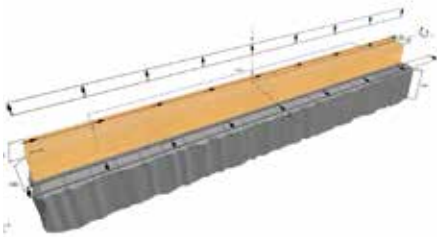
YOUR Benefit

time saving; security for you and your customers



both concrete and brick substrates selectable; even with individual reinforcement and bricks with preload by ceilings possible

for almost all building project applicable



optimised dowel arrangement; due to the possibility to enter line loads the fasteners arrangement is immediately optimised

automatic saving on material and working time



extensive database of SIHGA® wood/concrete/brick anchoring technology

one software for all applications



SIHGA® TIP:

Download the desktop version at www.sihga.com.

Technical Information - Timber Construction

Bulk Density Wood	Needle Wood	Glued Laminated Timber
290	C 14	
330	C 20	
350	C 24	
365		GL24c
380	C 30	
385		GL24h
390		GL28c
400	C 35	GL32c
425		GL28h
440		GL32h

ρ_k = Mass (kg) : Volume m^3

C = Coniferous tree

GL = Glue lam timber

The aim of the innovative SIHGA® developments is to increase the efficiency of building with wood through modern mechanical fastenings. The load-bearing capacity and deformation behaviour of the fastenings have a critical impact on building designs.

The unique quality of wood as a building material requires the greatest attention to connections and fastenings. For a simple overview of the strength classes of the various woods, please see the above table for the raw density ρ_k with the allocated designations.

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

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

For this, SIHGA® offers pre-calculation for the respective load in various raw densities and wood qualities.

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

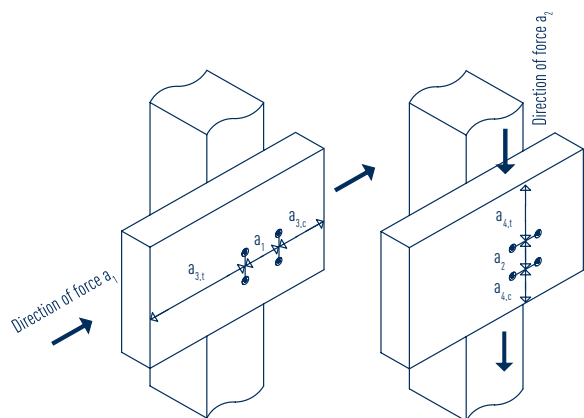
R_d Calculation or design value

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

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

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

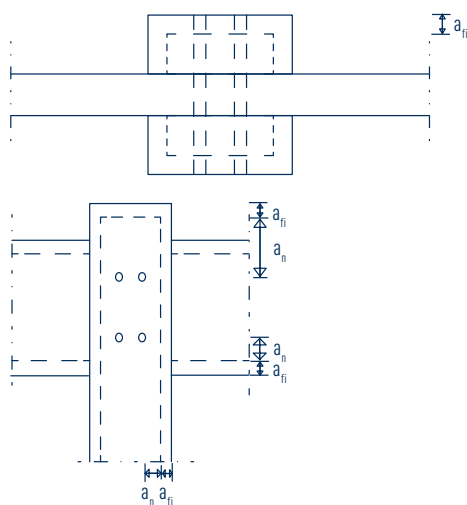
Edge and Axial Distances



Edge and Axial Distances		Not Pre-Drilled	Pre-Drilled/ Drill Bit
Distance a		[mm]	[mm]
a ₁	parallel to the grain	12 d	5 d
a _{3,t}	stressed end-cut timber	15 d	12 d
a _{3,c}	unstressed end-cut timber	10 d	7 d
a ₂	perpendicular to the grain	5 d	4 d
a _{4,t}	stressed edge	10 d	7 d
a _{4,c}	unstressed edge	5 d	3 d

d... Screw diameter

Fire Protection



Fire protection for constructive screw connections

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

¹⁾ protected with a glued wooden dowel

²⁾ protected against direct fire stress

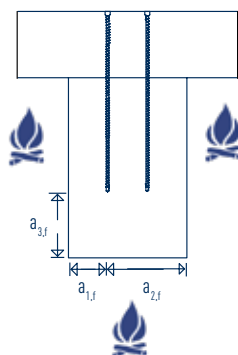
Minimum distances at normal temperature do not lose their validity

Calculation according to EN 1995-1-2

a_n...edge and centre distances at normal temperature

— Burnout cross section

Fire safety when using HobaFix® HF



HobaFix® HF	Secondary Beam		Main Beam			
	Width [mm]	Height [mm] ¹⁾	Width [mm]	Height [mm] ¹⁾	Height [mm] ¹⁾	Height [mm] ¹⁾
			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

¹⁾ flush installation on the upper edge and three-sided strip

Calculation according to EN 1995-1-2

Shear load is to be validated separately

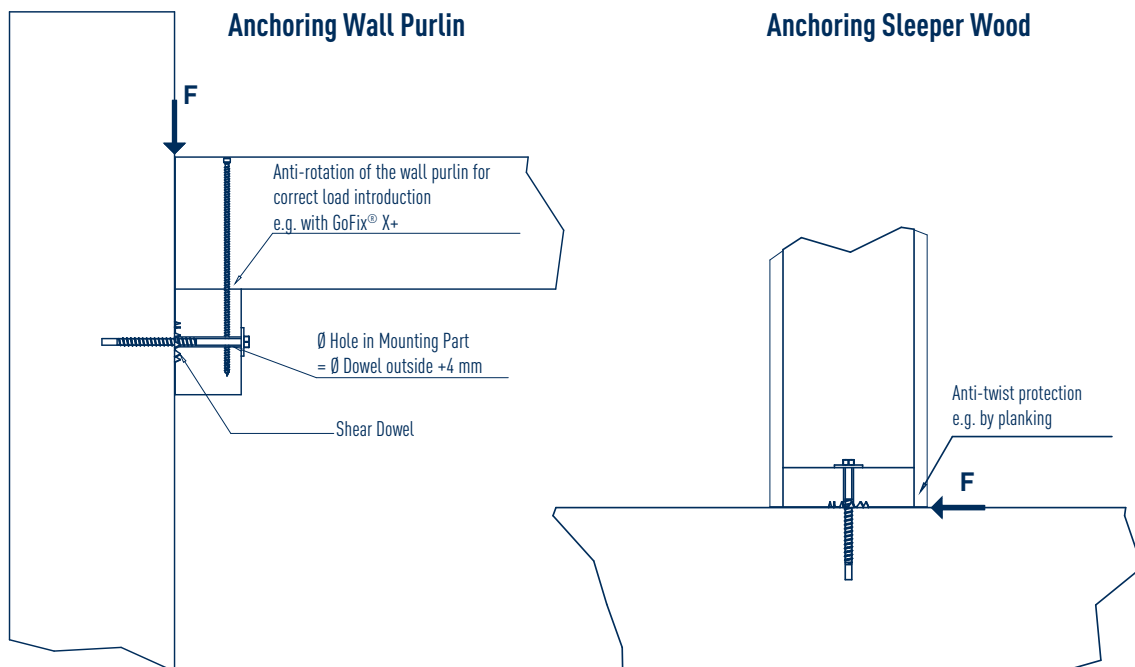
Stressing of Anchors on Shear Force

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

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

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

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

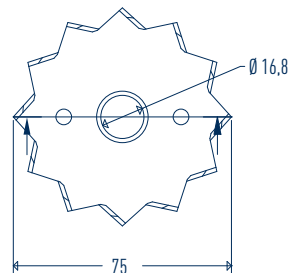
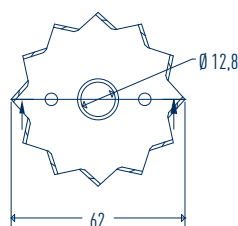
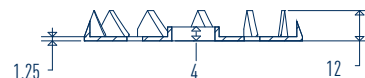
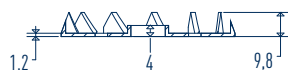


Shear Dowel

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]	Charcteristic 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 (ρ_k 350 kg/m³)



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



SIHGA® Feature

YOUR Benefit

fastenings for wall beams, sills, steel brackets, support feet, etc. on non-cracked concrete from concrete quality C 20/25

one expansion anchor for numerous application areas

developed for very high tensile and shear loads

saves time, costs and establishes long-lasting and highly durable connections

extra long lengths of up to 400 mm

enables the fastening of large wood cross-sections

easy to install

the full load-bearing capacity is attained through simply knocking in and tightening

simply read the load table incl. edge distances

provides assurance of the right anchor selection

enables even smaller edge and axial distances than those specified in the table values

for special applications, SIHGA® performs the calculation for you

includes installation instructions and Stabebo SDS drill with four-edged geometry specially for reinforced concrete

time-saving, practical, precise, complete accessories enclosed

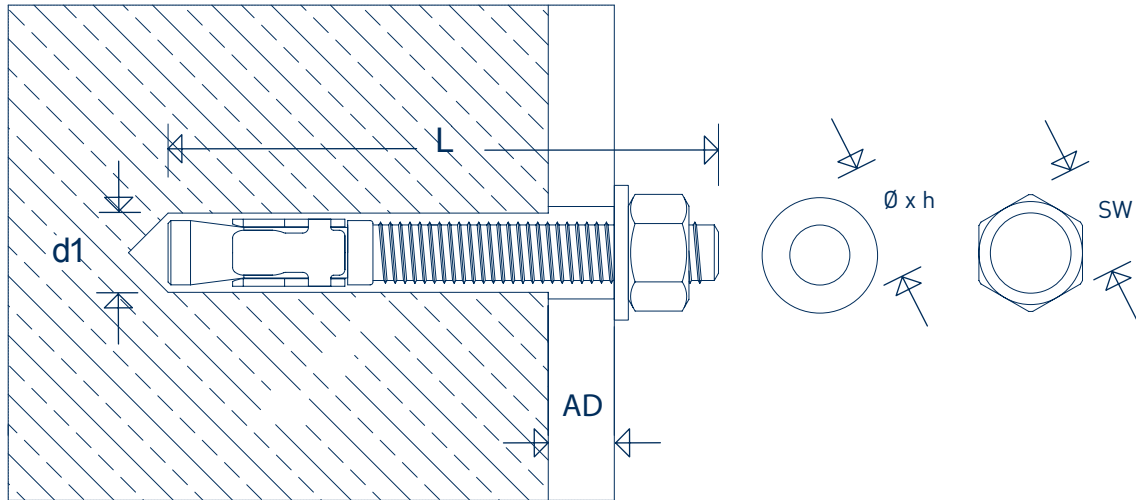
stainless steel expansion clip

safety per ETA

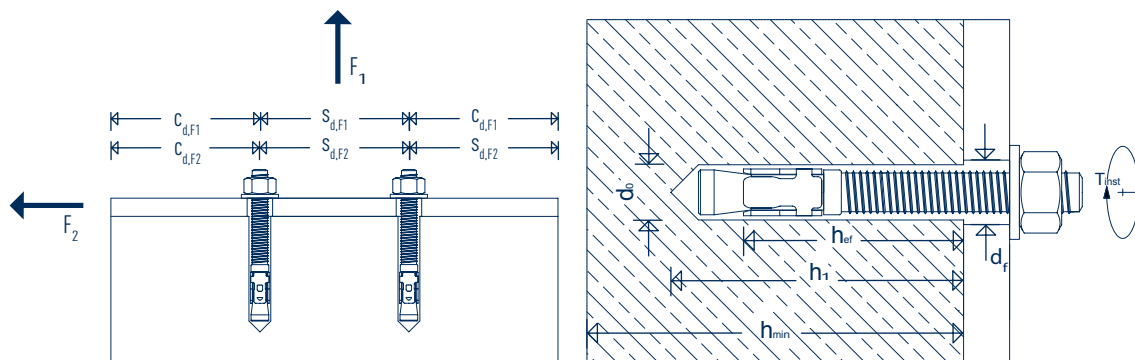


SIHGA® TIP:

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



SIHGA® montagepack		Dimension Betsi®	Add-on Part AD = t _{fix}	Width Across Flats SW	Washer 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



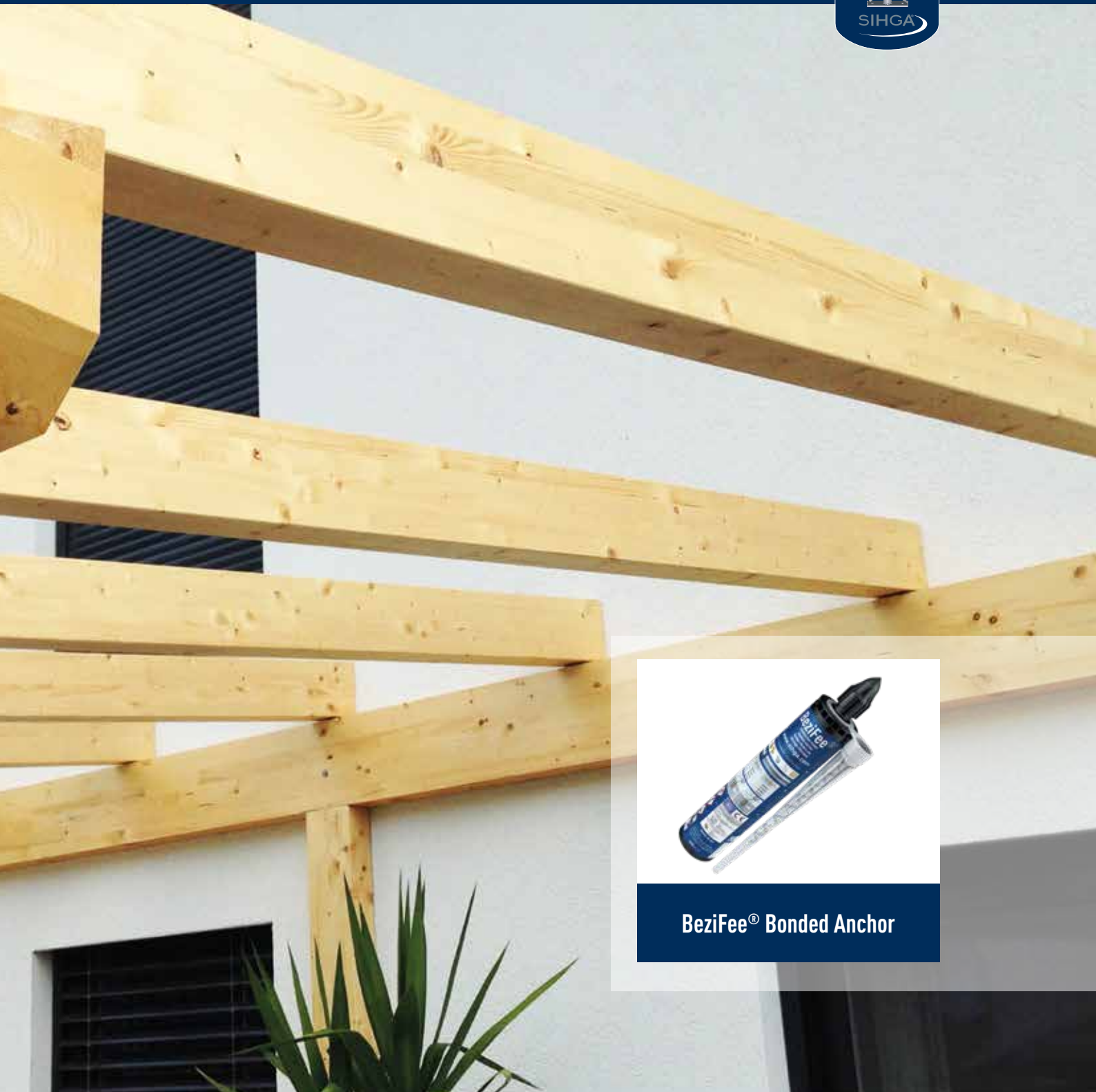
SIHGA®	Betsi®	M 8	M 10	M 12	M 16	
effective anchoring depth	h_{ef}	[mm]	45	50	60	85
concrete drilling diameter	d_0	[mm]	8	10	12	16
attachment drilling diameter	d_f	[mm]	10	12	14	18
borehole depth	h_1	[mm]	60	65	80	110
min. concrete thickness	h_{min}	[mm]	100	100	120	170
max. tightening torque	T_{inst}	[Nm]	20	35	55	100
minimum edge spacing without load influence	C_{min}	[mm]	61	68	81	115
maximum axial distance without load influence	S_{min}	[mm]	61	68	81	115
recommended tensile strength per anchor without edge influence, at edge spacing $c \geq 1.2 \times c_{cr,sp}$ (lt. ETA) recommended centre distance $s \geq 3 \times h_{ef}$*						
in non-cracked concrete min C 20/25	F_1	[kN]	5.0*	6.7*	8.9*	8.9*
recommended edge distance	$C_{d,F1}$	[mm]	136	150	180	256
recommended centre distance	$S_{d,F1}$	[mm]	135	150	180	255
recommended shear resistance per anchor without edge influence, with edge spacing $c \geq 60 \times d$ and centre distance $s \geq 3 \times h_{ef}$						
in non-cracked concrete min C 20/25	F_2	[kN]	7.4*	11.6*	16.9*	31.4*
recommended edge distance	$C_{d,F2}$	[mm]	480	600	720	960
recommended centre distance	$S_{d,F2}$	[mm]	135	150	180	255

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

ETAG 0001 2010 Annex C - Design method for Anchoring in concrete / safety concept 3.2.3.1 and 3.2.3.2

recommended loads of a single anchor in concrete C 20/25, normal reinforced in compliance with the specified AD and edge distances

BeziFee®



BeziFee® Bonded Anchor

SIHGA® Feature

2 component injection adhesive system
for secure attachment of threaded and anchor rods

certified for extensive use

useable under water and waterproof when installed

does not contain any harmful styrene and is free
from VOC (volatile organic compounds)

fire resistance F120

static mixer for mixing the two components and
extension pipe for thermal insulation contain

high rated values, also near the edge

case with static mixer, hand pump, wire brush,
extension tube and sieve sleeve

YOUR Benefit

approved product for cracked and non-cracked
concrete, brick and stone

low storage costs, only one product

no restrictions on applicability, even with
seismic loading (performance category C1)

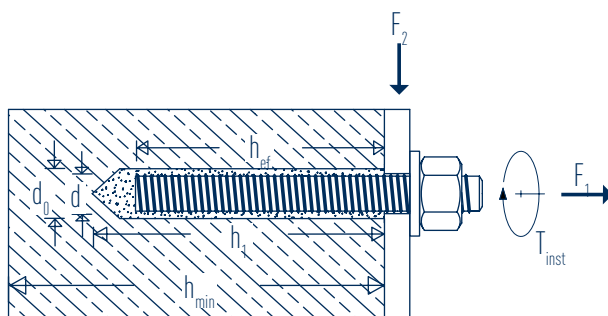
even useable in the drinking water sector and no
biting odour during processing

incombustible (class A1)

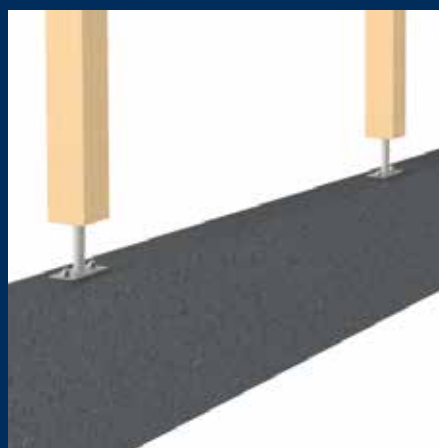
practical accessories directly on the construction
site, commercial cartridge gun can be used

easy to read carrying capacity - for special
applications SIHGA® can perform the sizing for you

use accessories directly on the construction site
using a practical case



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



SIHGA® TIP:

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

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

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

Brick		M 8	M 10	M 12	
perforated casing		[-]	16 x 85	16 x 85	20 x 85
brick drilling diameter	d _o	[mm]	16	16	20
borehole depth	h ₁	[mm]	90		
effective anchoring depth	h _{ef}	[mm]	85		
max. tightening torque	T _{inst}	[Nm]	2		
recommended load capacity stone 1* F ₁ = F ₂	[kN]	0,80	0,80	1,00	
recommended load capacity stone 2* F ₁ = F ₂	[kN]	0,36	0,48	0,60	

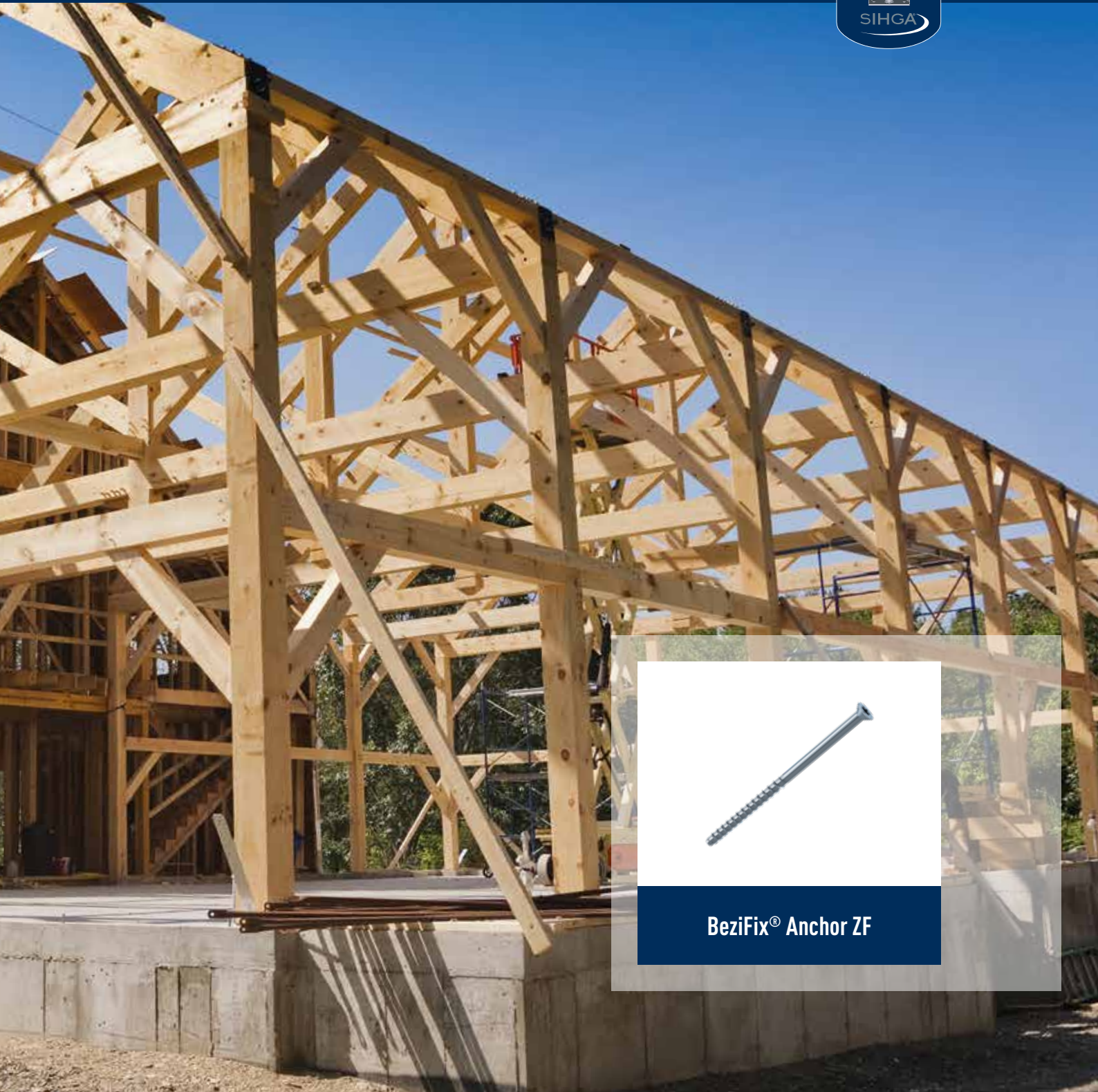
* recommended loads of a single anchor without edge influence
The load-bearing capacity of other stones may be determined by on-site tests in accordance with ETAG 029 appendix B

Type of Bricks	Min. Thickness	Min. Compressive Strength	Min. Horizontal Centre Distance	Min. Vertical Centre Distance	Min. Edge Distance
	ρ [kg/dm ³]	fb [N/mm ²]	s _{min,l} [mm]	s _{min,n} [mm]	c _{min} [mm]
stone no. 1: Porotherm P+W	0,9	12	373	238	120
stone no. 2: Hueco Doble	0,74	2,5	245	110	120

BeziFee[®] Equipment

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

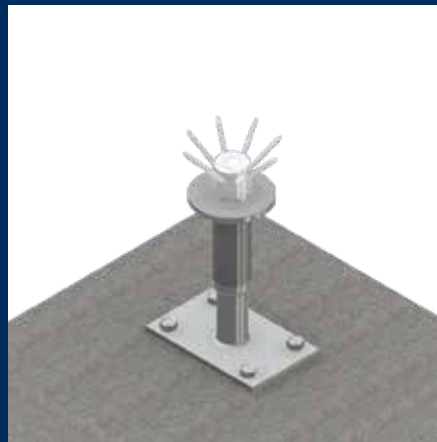


BeziFix[®] Anchor ZF

SIHGA® Feature

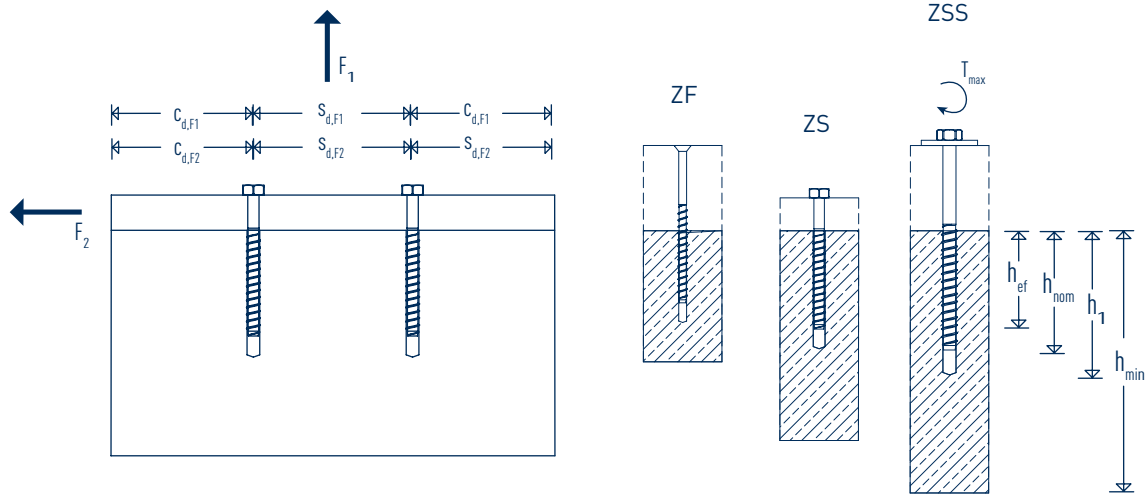
YOUR Benefit

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

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

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

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

⁴⁾ 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

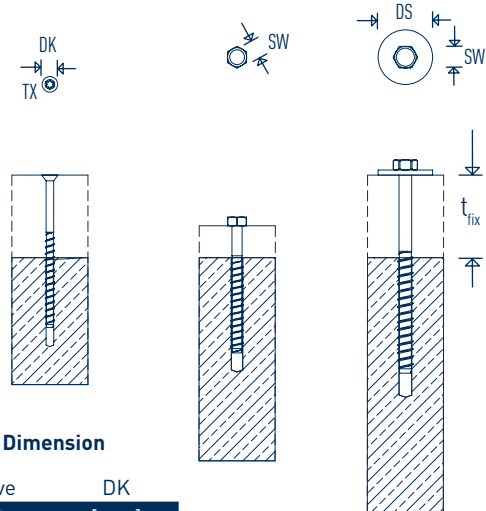
YOUR Benefit

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

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

SIHGA®		Dimension	Installation Part Thickness	Dimension	
montagepack	BeziFix® Anchor ZSS		t_{fix}	Drive	DS
Art. No.	PU	d1 x L	[mm]	SW	[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

GoFix[®] JK



GoFix[®] 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

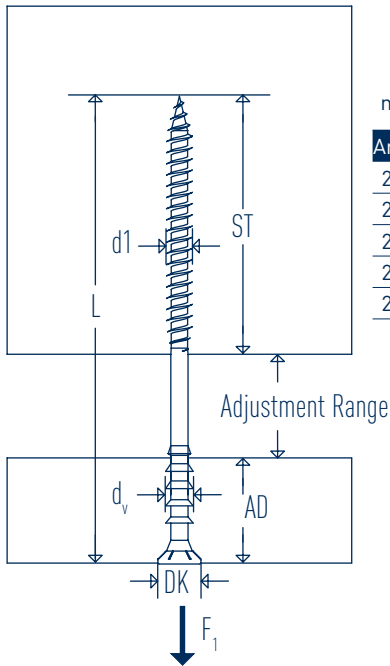
YOUR Benefit

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

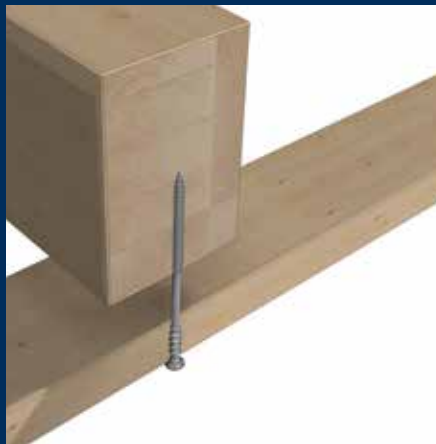
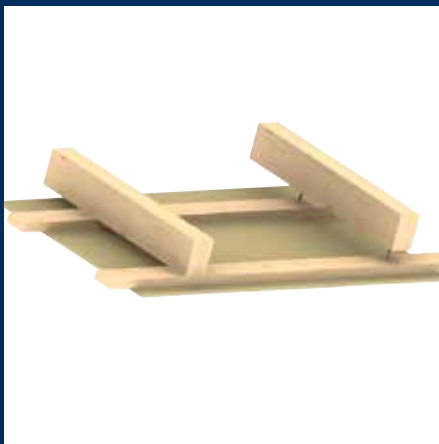


SIHGA®	Dimension	Attachment Part	Setting Depth	Adjustment Range	Recommended Loads		
montagepack	GoFix® JK	AD	ST	to	Tensile Force F_1 [kN]		
Art. No.	PU	d1 x L	[mm]	[mm]	[mm]	Head	Thread
29326	100	6,0 x 80	20	50	10	0,51	1,03
29336	100	6,0 x 100	20	50	30	0,51	1,03
29346	100	6,0 x 120	20	50	50	0,51	1,03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

Dimension [mm]

GoFix® JK

d1	d _v	TX	DK
6,0	6,5	25	10,0



GoFix[®] MS II

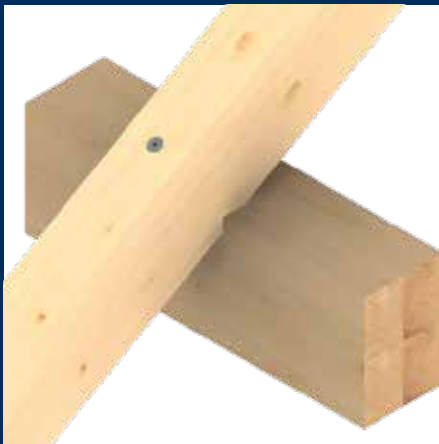


GoFix[®] MS II
the wood construction screw

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

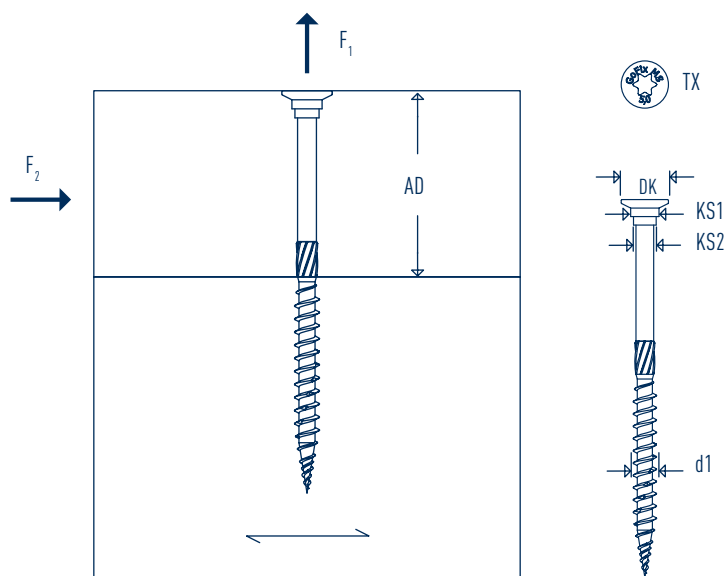
design values

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]

SIHGA® Feature

fastens wood to wood, even OSB panels

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

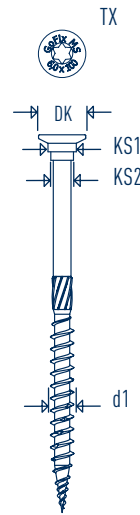
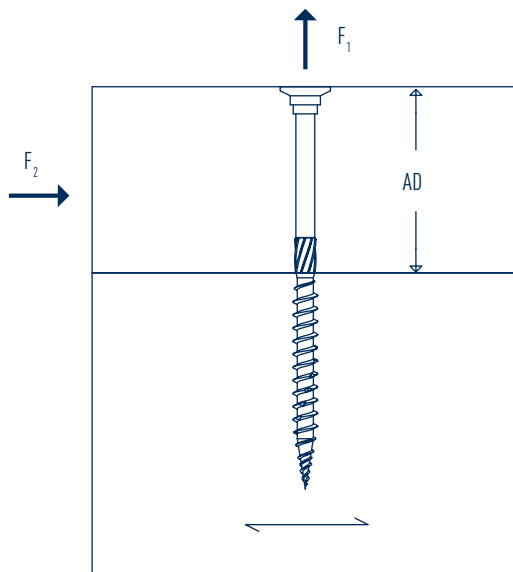
design values

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_t [kN]		Shear Force F_s [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 $\rho_k = 350 \text{ kg/m}^3$ (C24)

SIHGA® Feature

fastens wood to wood, even OSB panels

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

design values

online calculation

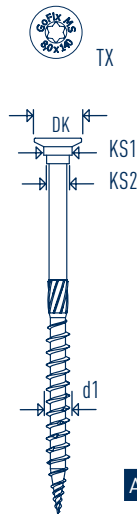
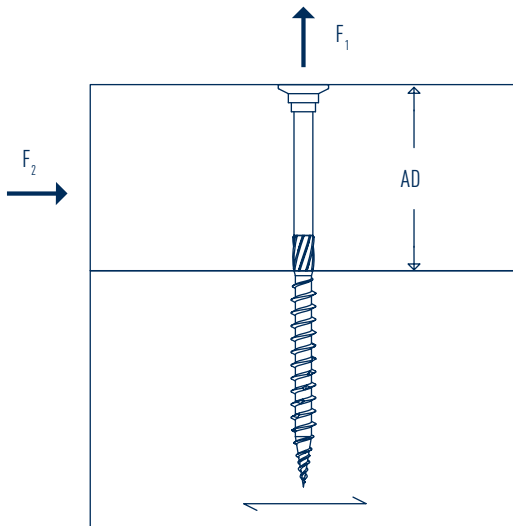
YOUR Benefit

screw without pre-drilling and pre-sinking

fastens with all screw-in angles

SIHGA® performs the calculation for you

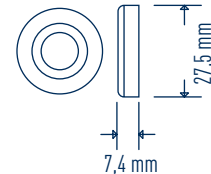
at www.sihga.com (on-rafter insulation)



Dimension [mm]

GoFix® MS II

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



SIHGA®

Dimension

Characteristic Values*

montagepack

Washer MSZ

Tensile Force F_1 [kN]

Art. No.	PU	d_{MSZ} [mm]	Washer MSZ
44696	75	27,5	9,1

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

Subject to technical modifications and errors. Status of approval 05.2023

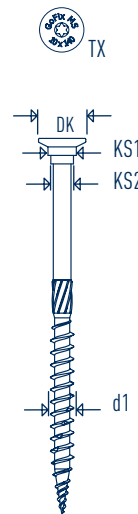
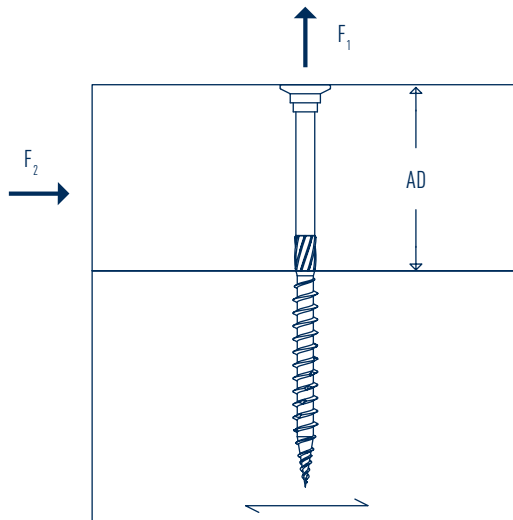
* characteristic values for measurement according to EC 5, bulk density $\rho_k = 350 \text{ kg/m}^3$ (C24)

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 (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_t , [kN]		Shear Force F_s , [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[®] MS II

SIHGA[®] Feature

SIHGA[®] 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

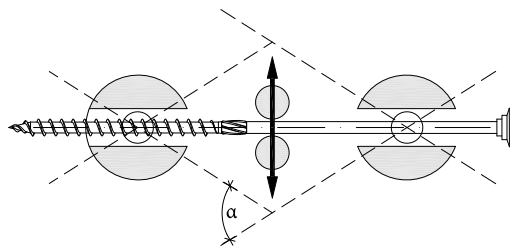
safety according to prEN 14592

reliable residual load capacity of at least 90 %

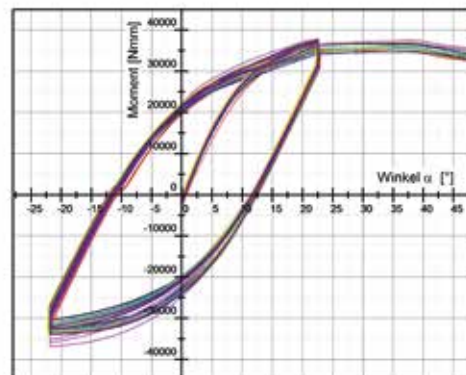
GoFix [®] MS II	Residual Load Capacity
Ø [mm]	M_{final} / M_{int}
6	90 %
8	93 %
10	100 %



bending of the bolt during the test



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



GoFix[®] MS II application by means of impact screwdriver

Tested by the University of Innsbruck

SIHGA[®] Feature

positive report for processing with impact screwdrivers

graph below shows comparison of screw-in methods

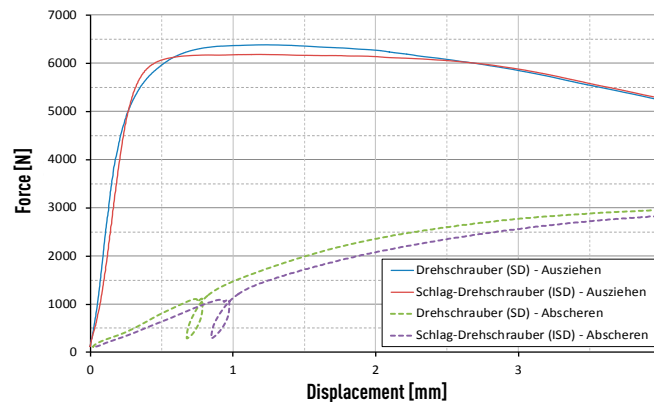
impact screwdriver brings benefits

YOUR Benefit

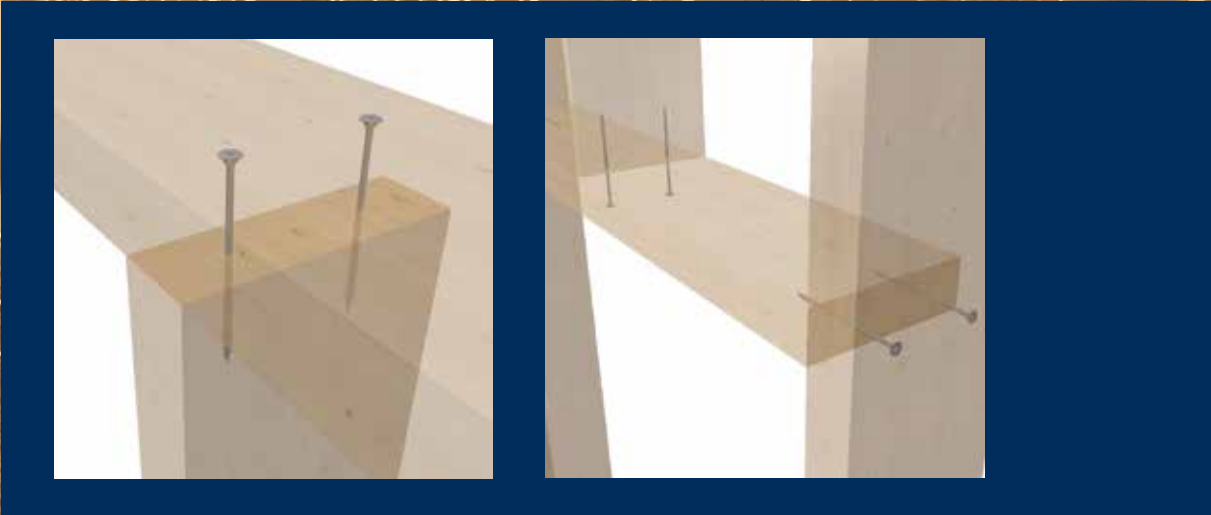
provides security

only slightly affects the initial stiffness of a connection

less strain on the wrist, even when working overhead



GoFix[®] MS II using in end grain



GoFix[®] MS II using in hardwood

SIHGA[®] 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_k ; observe maximum tensile strength according to ETA

YOUR Benefit

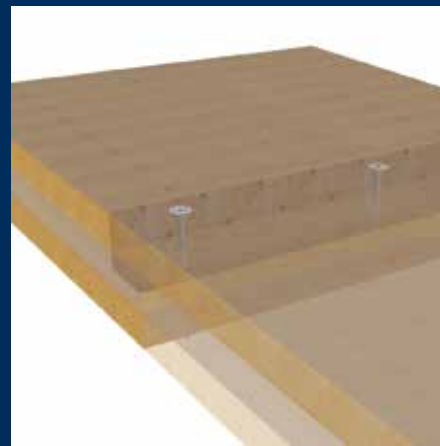
safety according to ETA -20/0558

in solid wood, glued plywood board and laminated veneer wood

high load capacity for efficient connections

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

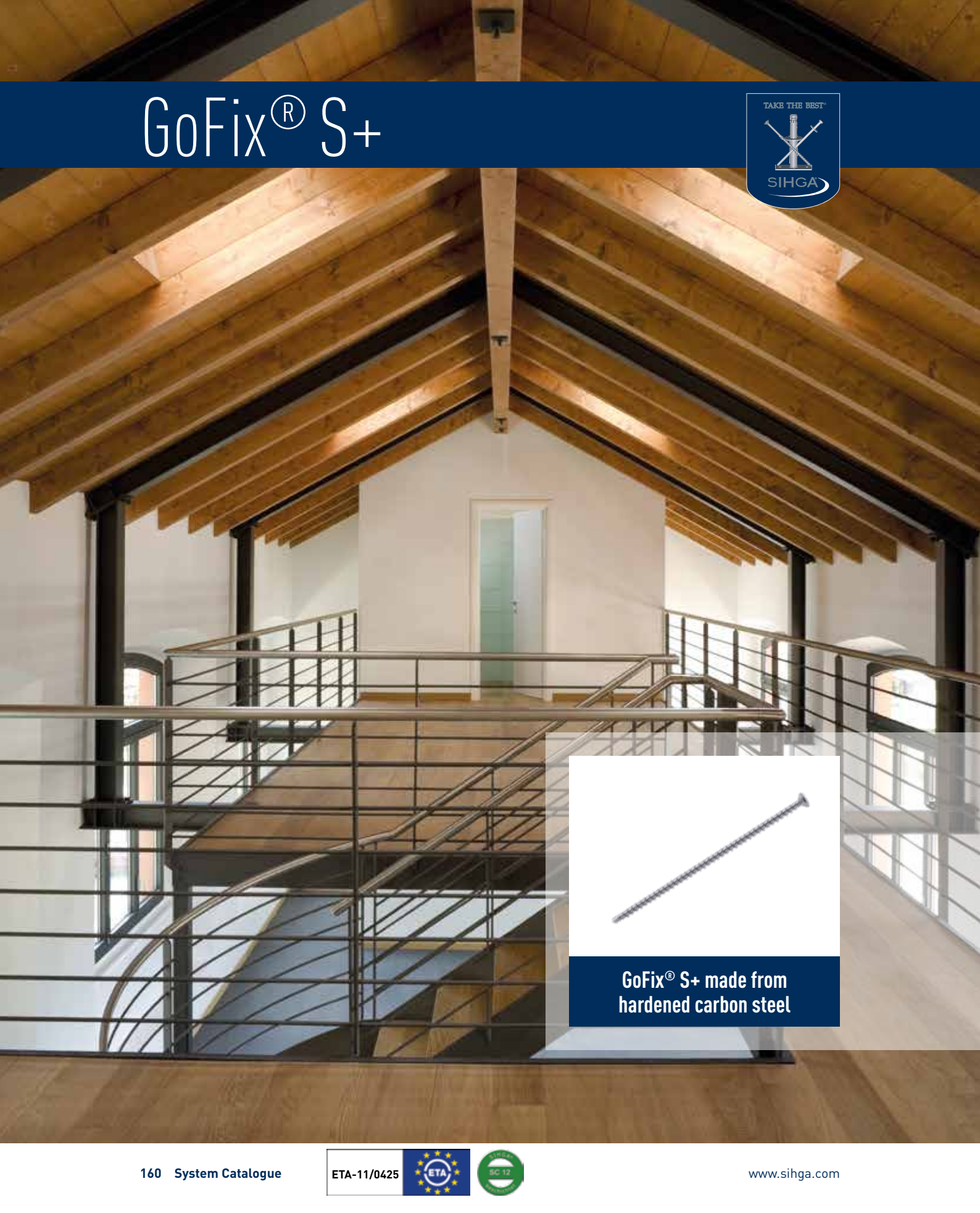
$$k_{\text{dens}} = \left(\frac{\rho_k}{350} \right)^{0,8}$$



SIHGA[®] TIP:

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

GoFix[®] S+



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



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

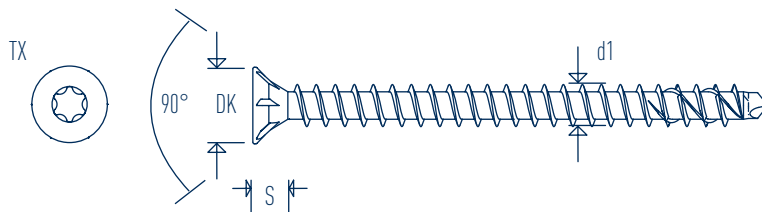
for lightweight screw connections with low screw-in torque

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

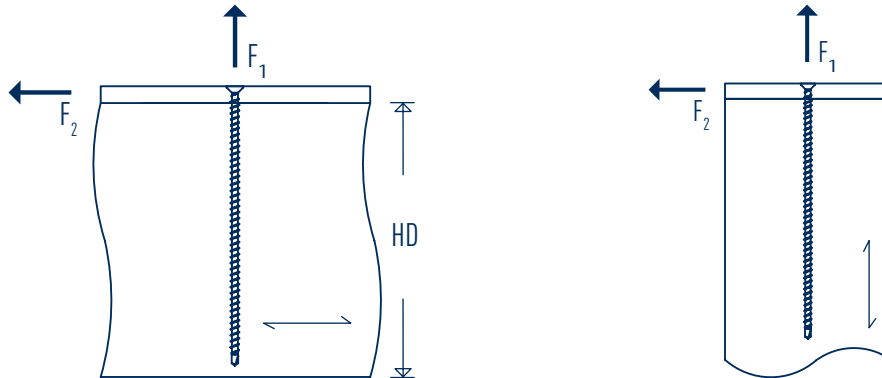
online calculation

YOUR Benefit

time-saving, practical, precise, complete accessories enclosed

SIHGA® performs the calculation for you

at www.sihga.com (support reinforcement, notches, anchor beam, breakout)



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

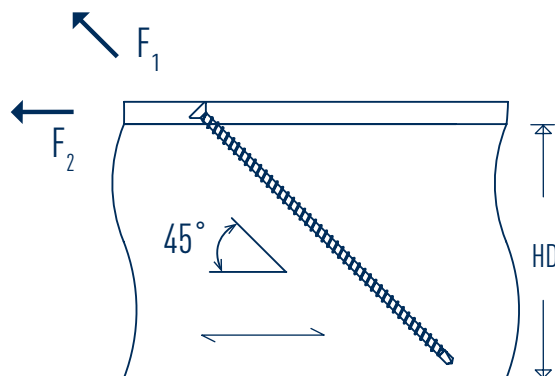
online calculation

YOUR Benefit

time-saving, practical, precise, complete accessories enclosed

SIHGA® performs the calculation for you

at www.sihga.com (support reinforcement, notches, anchor beam, breakout)



Art. No.	SIHGA® montagepack PU	Dimension GoFix® S+ d1 x L	Wood Component HD [mm]	Characteristic Values*	
				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[®] S+ application by means of impact screwdriver

Tested by the University of Innsbruck

SIHGA[®] Feature

positive report for processing with impact screwdrivers

graph below shows comparison of screw-in methods

impact screwdriver brings benefits

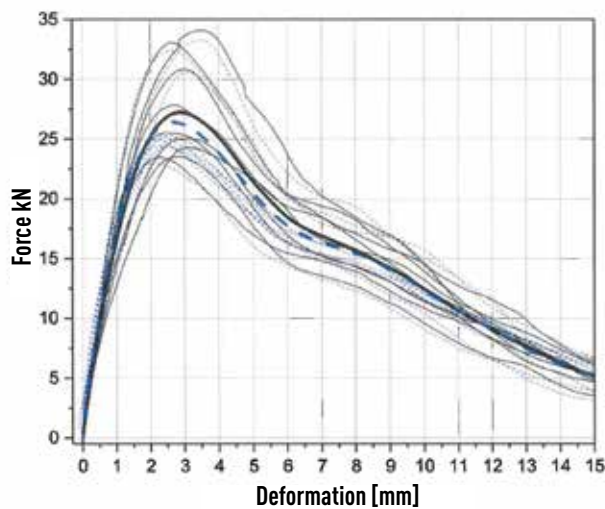
YOUR Benefit

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



GoFix® Element Tensioner

SIHGA® Feature

YOUR Benefit

robust, high quality finishing	for a longer service life
shift lever to tension or release	easy handling during use
screw boards	thus only slight damage to the wood and high power transfer possible ideal for wall and ceiling elements
boards can be swivelled 360°	fixing in every position
joist hook with 4-sided interlock available as an accessory	for pulling, tensioning rafters, purlins etc.
innovative long narrow hook	for high power transfer and minimal damage to the wood
joist hook for trapezoidal thread 16 x 4 mm	easy replacement of the hooks with the element pull boards

SIHGA®		
montagepack		GoFix®
Art. No.	PU	Type
31432	1	Element Tensioner
31436	1	Joist Hook



**GoFix® Element Tensioner
& Joist Hook**



SIHGA® TIP:

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

GoFix[®] X+



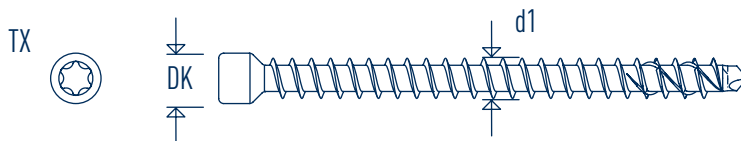
GoFix[®] X+ made from
hardened carbon steel



SIHGA® Feature

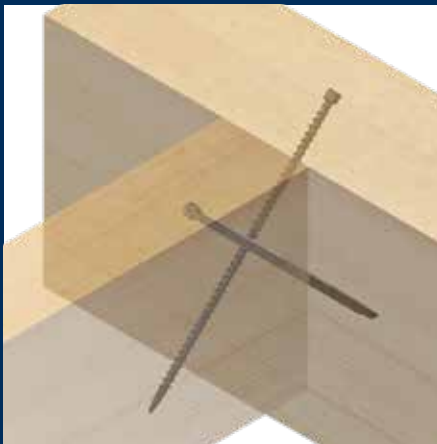
YOUR Benefit

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

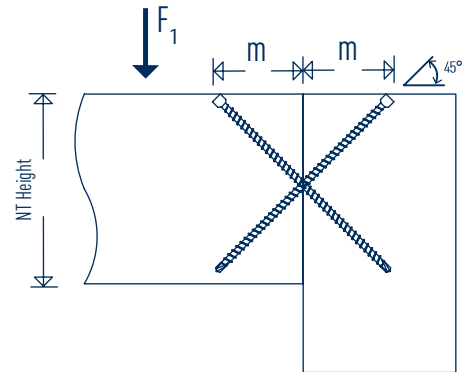
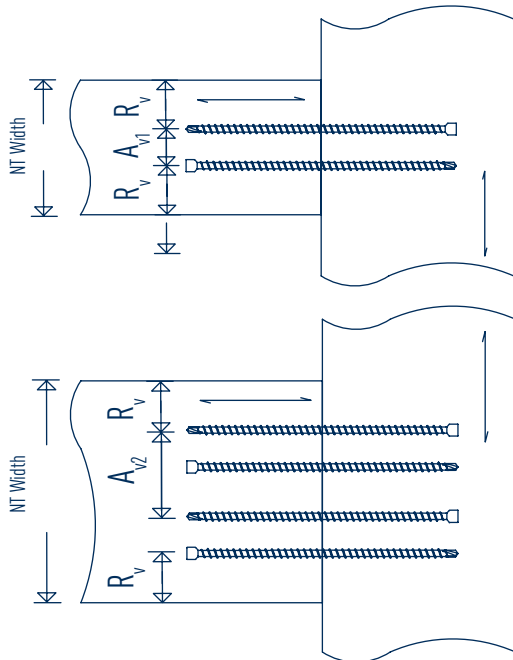
online calculation

YOUR Benefit

SIHGA® performs the calculation for you

time-saving, practical, precise, complete accessories enclosed

at www.sihga.com (main beam - secondary beam connection)



Dimension [mm]

GoFix® X+					
d1	TX	DK	R _v	A _{v1}	A _{v2}
6,5	30	8,0	20	10	33
8,0	40	10,0	24	12	40
10,0	50	13,0	30	15	50

SIHGA® montagepack	Dimension GoFix® X+	Secondary Beam NT Height	Assembly Dimensions m	Shear Force F ₁ - 1 pair			Shear Force F ₁ - 2 pair			
				NT Width min.	Char. Values*	Design Values**	NT Width min.	Char. Values*	Design Values**	
Art. No.	PU	d1 x L	min. [mm]	[mm]	[mm]	[kN]	[kN]	[mm]	[kN]	[kN]
42066	150	6,5 x 195	140	70	50	10,88		85	21,77	
42246	75	8,0 x 220	160	80	60	13,19		100	26,37	
42256	75	8,0 x 245	180	90	60	14,76		100	29,51	
42276	75	8,0 x 295	220	110	60	17,90		100	35,79	
42286	75	8,0 x 330	240	120	60	20,09		100		0,00
42296	75	8,0 x 375	270	135	60		15,89	100		31,78
42306	75	8,0 x 400	290	145	60		15,89	100		31,78
42316	75	8,0 x 430	310	155	60		15,89	100		31,78
42326	75	8,0 x 480	350	170	60		15,89	100		31,78
42666	50	10,0 x 300	220	110	75	22,15		125	44,29	
42676	50	10,0 x 330	240	120	75	24,44		125	48,88	
42686	50	10,0 x 360	260	130	75	26,73		125	53,46	
42696	50	10,0 x 400	290	145	75		22,43	125		44,86
42706	50	10,0 x 450	320	160	75		22,43	125		44,86
42716	50	10,0 x 500	360	180	75		22,43	125		44,86
42726	50	10,0 x 550	400	200	75		22,43	125		44,86
42736	50	10,0 x 600	430	215	75		22,43	125		44,86

Subject to technical modifications and errors. Status of approval 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)

SIHGA® Feature

YOUR Benefit

design values

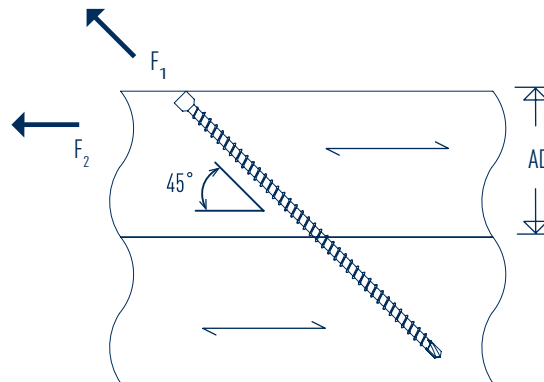
SIHGA® performs the calculation for you

including SIHGAFIX®, Systemstift® and installation instructions

time-saving, practical, precise, complete accessories enclosed

online calculation

at www.sihga.com [support reinforcement, notches, anchor beam, breakout, main beam - secondary beam connection]



SIHGA® montagepack		Dimension GoFix® X+	Installation Part Thickness Wood AD [mm]	Characteristic Values*	
Art. No.	PU	d1 x L		Tensile Force F_1 [kN]	Shear Force F_2 [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 $\rho_k = 350 \text{ kg/m}^3$ [C24]

SIHGA® Feature

design values

including SIHGAFIX®, Systemstift® and installation instructions

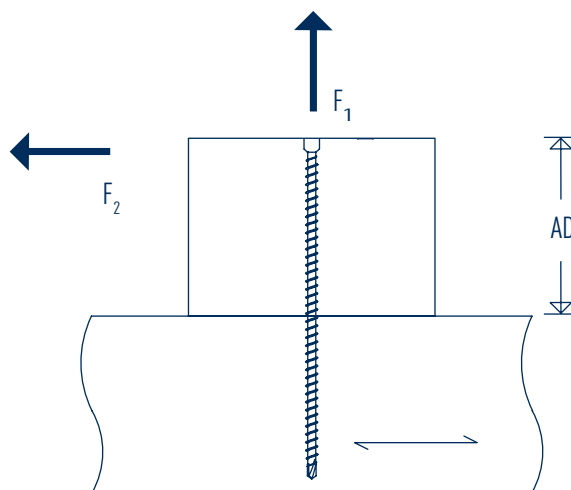
online calculation

YOUR Benefit

SIHGA® performs the calculation for you

time-saving, practical, precise, complete accessories enclosed

at www.sihga.com [support reinforcement, notches, anchor beam, breakout, main beam - secondary beam connection]



SIHGA® montagepack		Dimension GoFix® X+	Installation Part Thickness Wood	Characteristic Values 90°*	
Art. No.	PU	d1 x L	AD [mm]	Tensile Force F ₁ [kN]	Shear Force F ₂ [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 $\rho_k = 350 \text{ kg/m}^3$ (C24)

SIHGA® Feature

design values

including SIHGAFIX®, Systemstift® and installation instructions

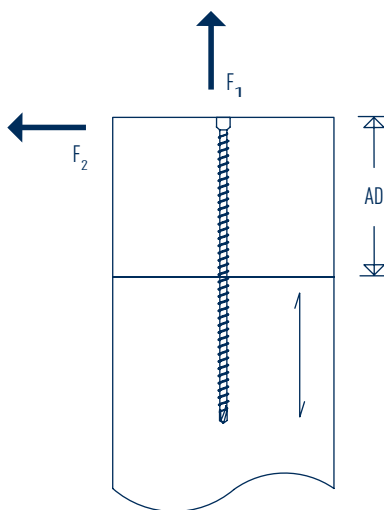
online calculation

YOUR Benefit

SIHGA® performs the calculation for you

time-saving, practical, precise, complete accessories enclosed

at www.sihga.com [support reinforcement, notches, anchor beam, breakout, main beam - secondary beam connection]

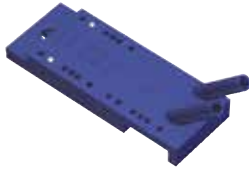


SIHGA® montagepack		Dimension GoFix® X+	Installation Part Thickness Wood AD [mm]	Characteristic Values 0** Tensile Force F_1 [kN] Shear Force F_2 [kN]	
42026	150	6,5 x 120	60	1,22	1,50
42036	150	6,5 x 140	70	1,44	1,91
42046	150	6,5 x 160	80	1,67	1,97
42066	150	6,5 x 195	100	2,06	2,06
42226	75	8,0 x 155	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 $\rho_k = 350 \text{ kg/m}^3$ (C24)

Equipment GoFix® X+



SIHGA® Feature

GoFix® X+ Setting Jig

with GoFix® X+ 6.5 and 8.0 mm

YOUR Benefit

the professional installation aid,
simplifies construction processes and
saves time



GoFix® X+ Mounting Bracket

with GoFix® X+ 6.5 and 8.0 mm

the professional installation aid,
simplifies construction processes and
saves time



SIHGA® TIP:

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



System Kit GoFix® X+

with GoFix® X+ 6.5 and 8.0 mm with
varying lengths

the professional installation aid,
simplifies construction processes and
saves time

developed, patented and made in
Austria

top European quality and added-value

contains 1 GoFix® X+ Setting jig with
4 GoFix® X+ Beam holders and
GoFix® fastening screws

for the rational and precise installation
of main/secondary beams

contains 4 GoFix® X+ Mounting
brackets

for the rational and precise installation
of secondary beams on struts

includes SIHGA® DUO-Bit and
Systemstift®

time-saving, practical, precise,
complete accessories enclosed

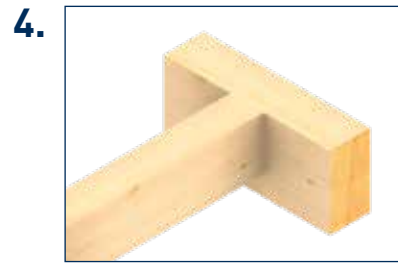
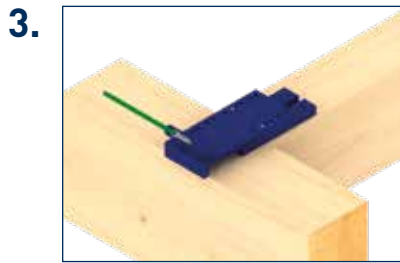
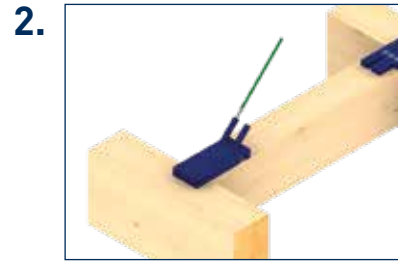
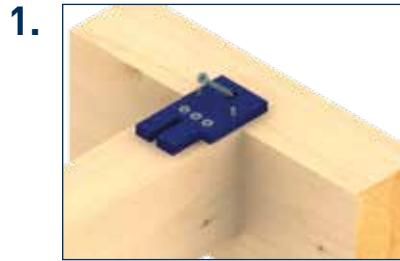


SIHGA® TIP:

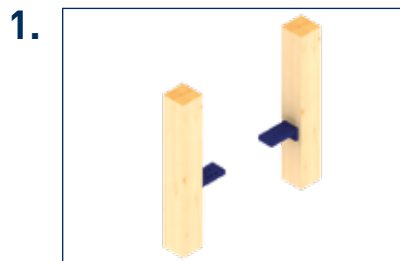
The System Kit GoFix® X+ contains a setting jig and mounting bracket, completely and portably combined with all accessories for practicality.

Application GoFix[®] X+

GoFix[®] X+ Setting Jig



GoFix[®] X+ Mounting Bracket



Application GoFix[®] X+ in Plywood Board

SIHGA[®] 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[®] from slipping out



GoFix[®] X+ application by means of impact screwdriver

Tested by the University of Innsbruck

SIHGA[®] Feature

positive report for processing with impact screwdrivers

graph below shows comparison of screw-in methods

impact screwdriver brings benefits

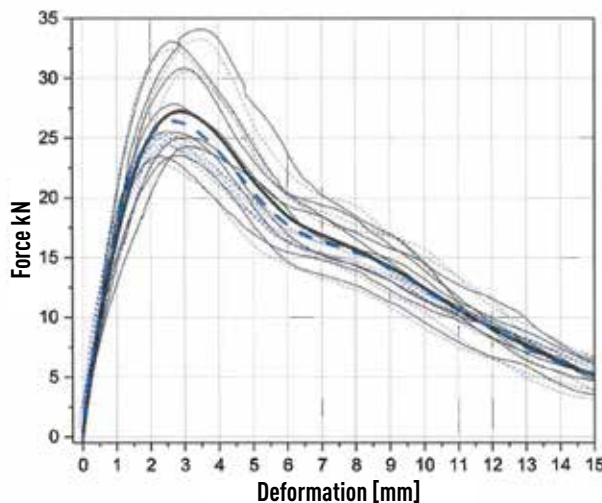
YOUR Benefit

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[®] ESH 8



**GoFix[®] ESH 8 Screw-in
Assistance for screws Ø 8 mm**

SIHGA® Feature

holds the screw head securely in the SIHGAFIX®
 various adjustment options
 enhanced tool standard design
 reduces effort
 automatic reset upon contact with wood

YOUR Benefit

no more slippage with large screw sizes
 fits cylindrical head- and countersunk head screws
 long life
 pressure on screw-in device no longer needed
 makes numerous screw-in variations such as oblique screw-in possible in all situations, for example overhead installation

SIHGA® montagepack		Dimension for GoFix® Type	
Art. No.	PU	GoFix® ESH 8 d x L	X+ / S+ / SH 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[®] 45



GoFix[®] 45
8,0 mm



GoFix[®] 45
10,0 mm

SIHGA® Feature

YOUR Benefit

rapid, problem-free installation of the GoFix® 45

fixed 45° inclination for optimal tensile force uptake

ideal in combination with the SIHGA® GoFix® S+ 8.0 and 10.0 mm fully threaded screw or GoFix® SH

pull-through prevented by the large countersunk head seating area

no special production needed with inclined counterbore

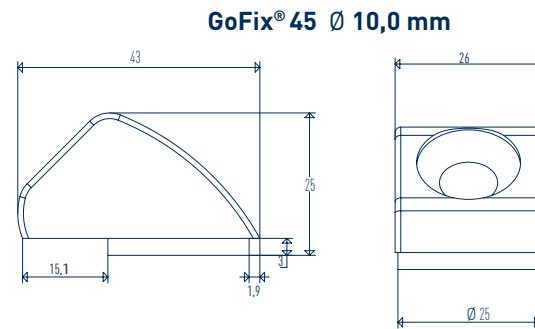
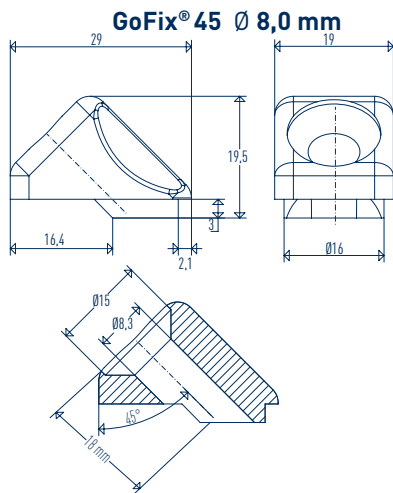
saves time and money

provides maximum flexibility

the most varied metal tabs can be used

including installation instructions

enclosed accessories - practical and time-saving



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[®] SS



GoFix[®] SS made from hardened carbon steel

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

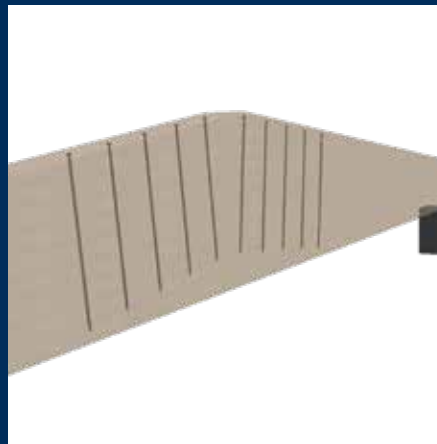
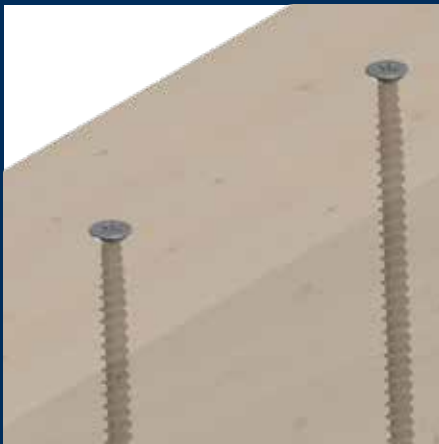
YOUR Benefit

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

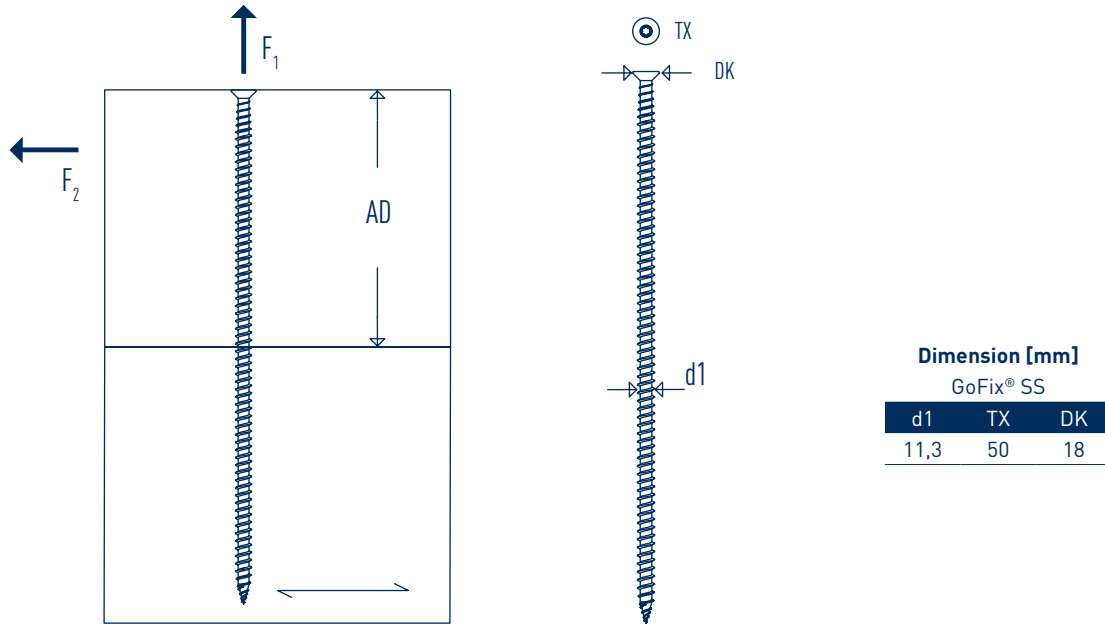
online calculation

YOUR Benefit

SIHGA® performs the calculation for you

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

at www.sihga.com (support reinforcement, notches, anchor beam, breakout)



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_1 [kN]	Shear Force F_2 [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 (ρ_k 380 kg/m³)

SIHGA® Feature

design values

including SIHGAFIX® and installation instructions

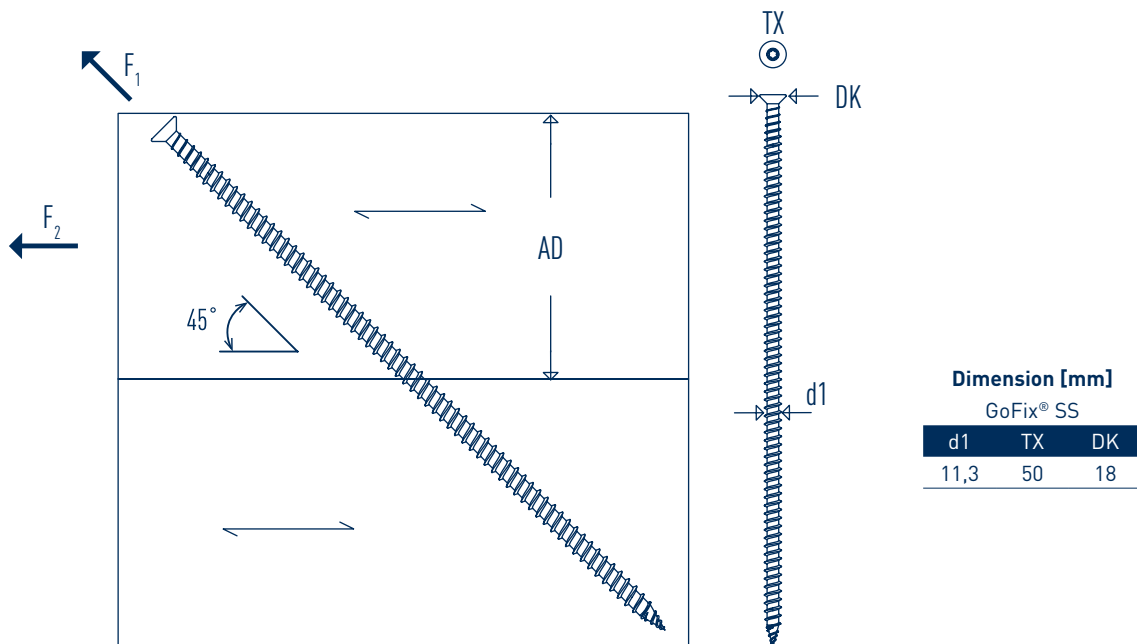
online calculation

YOUR Benefit

SIHGA® performs the calculation for you

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

at www.sihga.com (support reinforcement, notches, anchor beam, breakout)



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[®] ZS



GoFix[®] ZS with special SC 3 coating



SIHGA® Feature

fastens soft insulation materials for on-rafter insulation

including SIHGAFIX®, Systemstift® and installation instructions

design values

online calculation

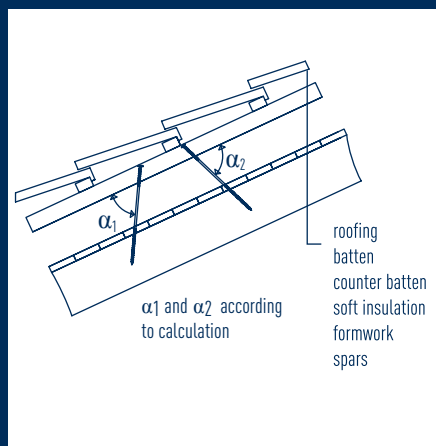
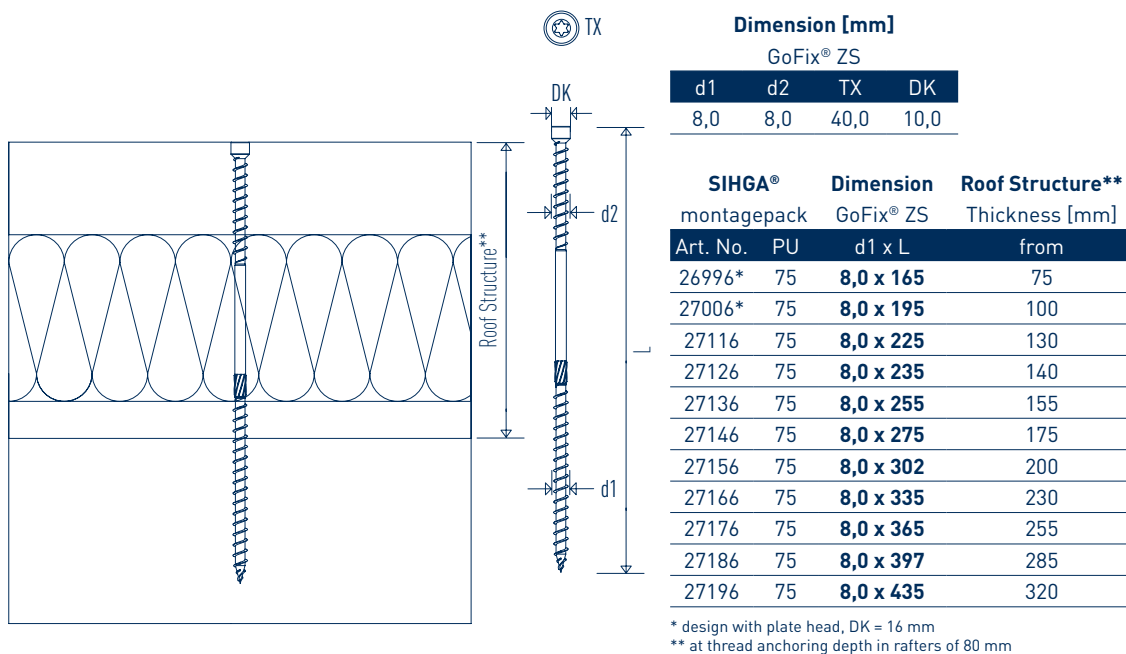
YOUR Benefit

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

at www.sihga.com (on-rafter insulation)



GoFix[®] SH



GoFix[®] SH for uses
in hardwood applications



SIHGA® Feature

YOUR Benefit

new screw geometry	no pre-drilling, quick installation
shortened thread length	high extraction values using shorter screw
special screw tip	assembly in construction beech without pre-drilling
special head geometry and milling ribs	a perfect, clean screw pattern
design values	SIHGA® performs the calculation for you
wide use possible without pre-drilling	in solid wood and construction beech
special geometry	high load-bearing capacity for efficient connections

SIHGA® montagepack		Dimension Installation Part		Construction Beech Characteristic Values*					
Art. No.	PU	GoFix® SH d1 x L	AD [mm]	Head	Tensile Force F ₁ [kN]			Shear Force F ₂ [kN]	
					Thread 90/90	Thread 90/00	Thread 00/00	Wood-Wood 90/90	Steel-Wood 90/90
29426	75	8,0 x 100	20	9,80	24,62	18,24	18,24	6,62	10,96
29436	75	8,0 x 120	40	9,80	24,62	18,24	18,24	8,23	10,96
29446	75	8,0 x 140	60	9,80	24,62	18,24	18,24	8,47	10,96
29456	75	8,0 x 160	80	9,80	24,62	18,24	18,24	8,47	10,96
29466	75	8,0 x 180	100	9,80	24,62	18,24	18,24	8,47	10,96
29476	75	8,0 x 200	120	9,80	24,62	18,24	18,24	8,47	10,96
29486	75	8,0 x 220	140	9,80	24,62	18,24	18,24	8,47	10,96
29496	75	8,0 x 240	160	9,80	24,62	18,24	18,24	8,47	10,96

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).

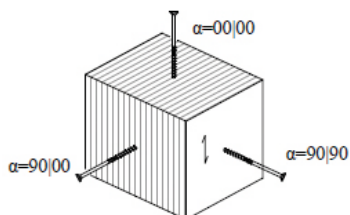
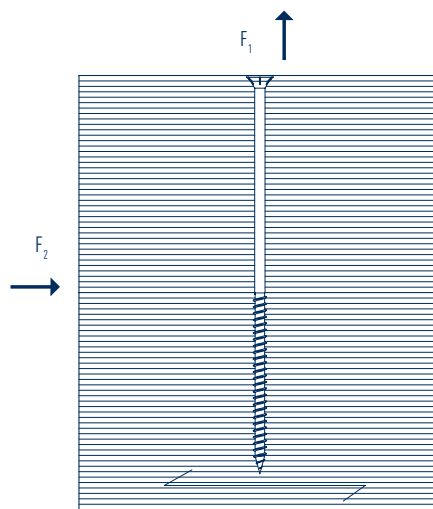
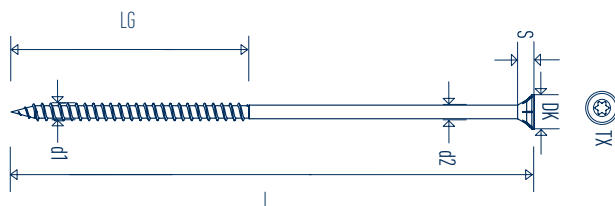


Figure 2: GoFix SH in LVL

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

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

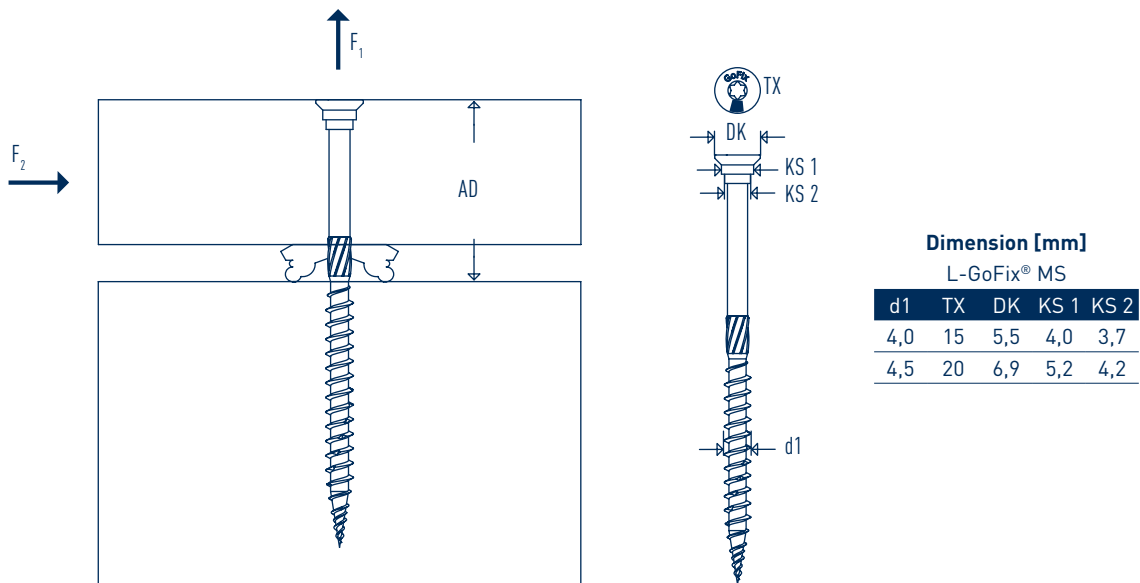
design values

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



Dimension [mm]

L-GoFix® MS

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

SIHGA® montagepack		Dimension L-GoFix® MS	Installation Part AD	Characteristic Values**			
Art. No.	PU	d1 x L	[mm]	Tensile Force F ₁ [kN]		Shear Force F ₂ [kN]	
				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

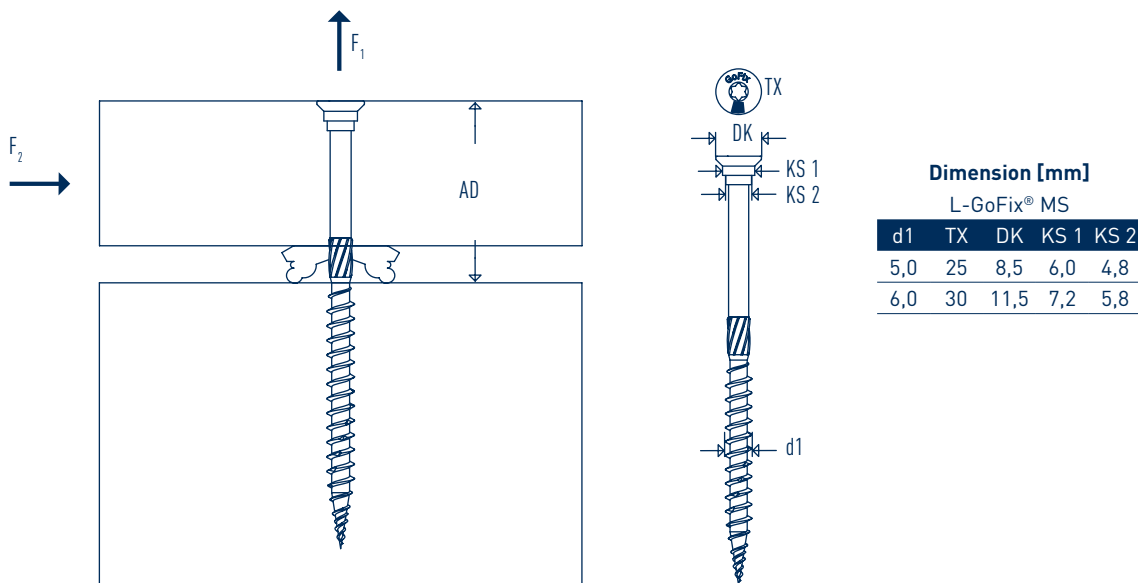
design values

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 ₁ [kN]		Shear Force F ₂ [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[®] MS A2

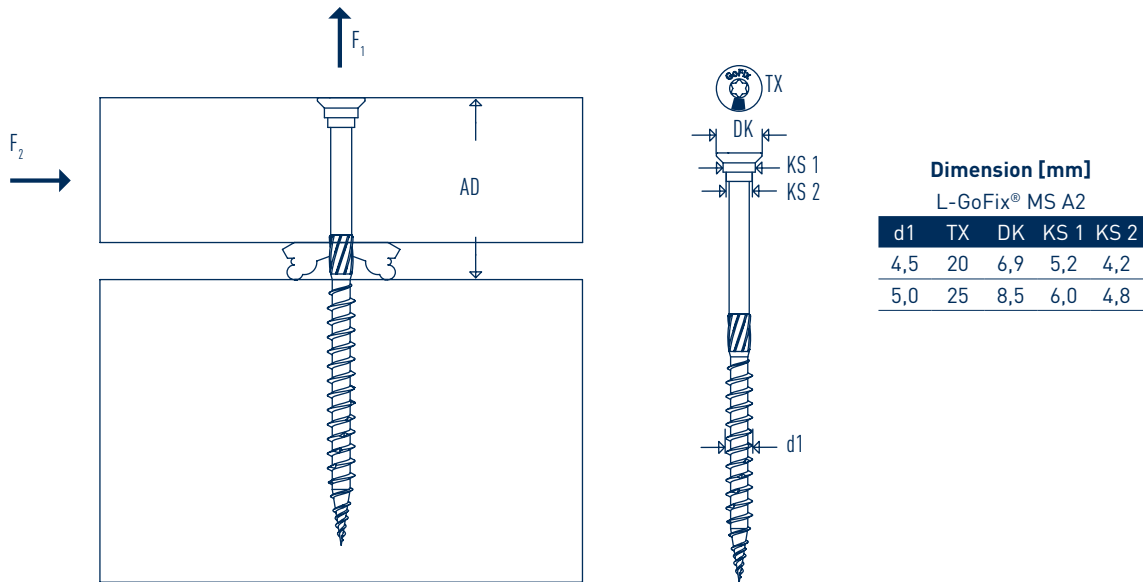
SIHGA[®] Feature

YOUR Benefit

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

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





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 _t [kN]		Shear Force F _v [kN]	
				Head	Thread	Wood-Wood	Steel-Wood
22226	400	4,5 x 40	16	0,48	1,55	0,74	1,15
22236	400	4,5 x 45	18	0,48	1,77	0,83	1,21
22246	400	4,5 x 50	20	0,61	1,99	0,92	1,26
22266	400	4,5 x 60	24	0,61	2,36	1,07	1,35
22276	300	4,5 x 70	28	0,61	2,72	1,22	1,45
22316	200	5,0 x 45	18	0,76	1,82	0,89	1,36
22326	200	5,0 x 50	20	0,95	2,14	0,99	1,44
22336	200	5,0 x 60	24	0,95	2,53	1,18	1,54
22346	200	5,0 x 70	28	0,95	2,93	1,33	1,64
22356	200	5,0 x 80	32	0,95	3,72	1,57	1,84
22366	200	5,0 x 90	36	0,95	4,12	1,67	1,94
22376	200	5,0 x 100	40	0,95	4,30	1,72	1,98

Subject to technical modifications and errors. Status of approval 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®



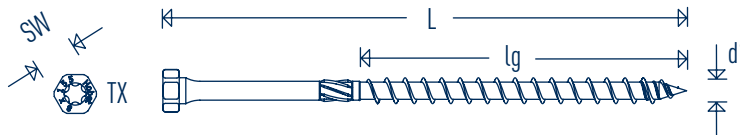
Hobet® the wood-concrete connection screw



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



IdeFix[®] DWD



IdeFix[®] DWD shear connection for wall and ceiling elements



SIHGA® Feature

proven three-dimensional load uptake through geometry and 45° screw connection

tested in plywood boards - as well as solid wood elements

simple assembly, only one hole per connector

flush-mounted in construction

design values

YOUR Benefit

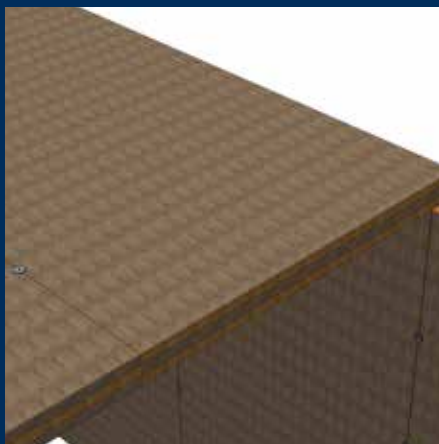
connects solid wood elements in parallel and across corners

shear connections for wood elements of all sizes and types

this hole can be factory-made or made on-site

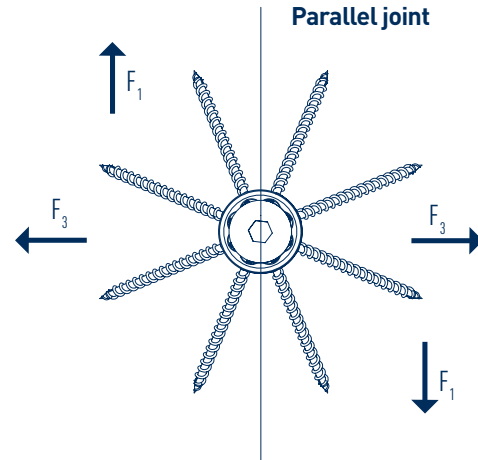
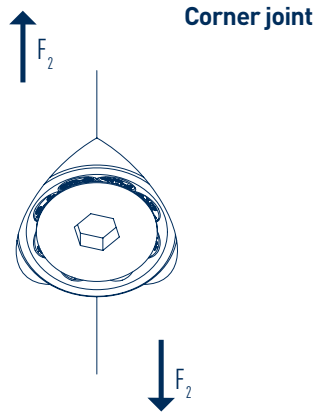
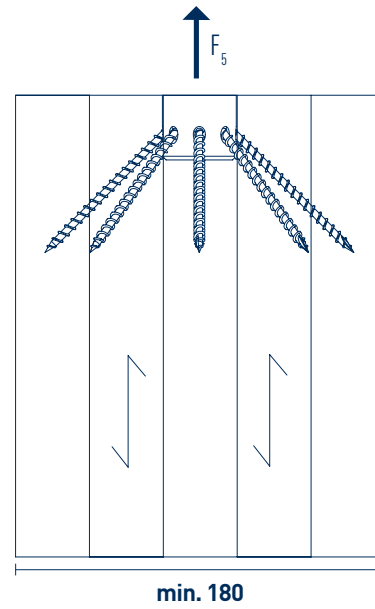
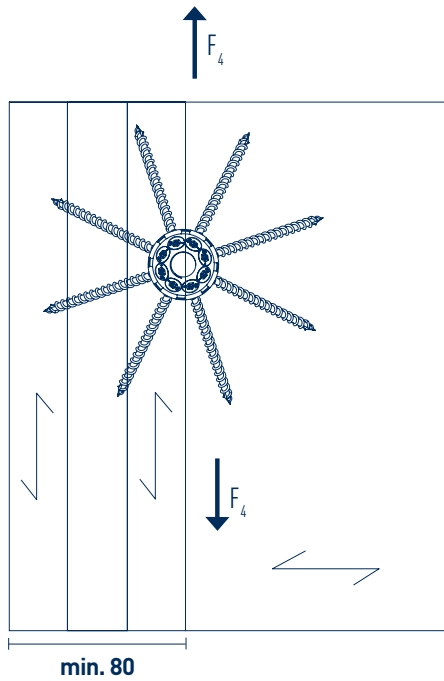
no processing of further wall layers needed

SIHGA® performs the calculation for you



SIHGA® TIP:

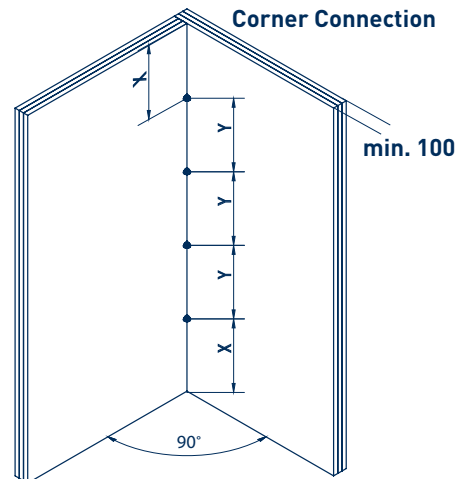
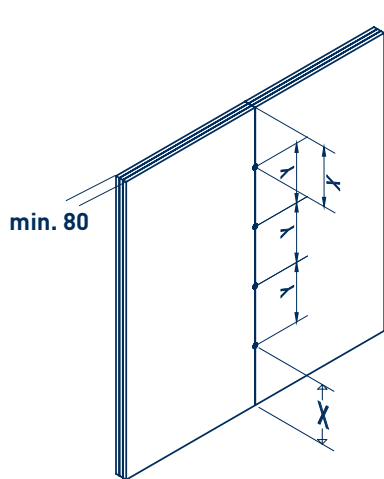
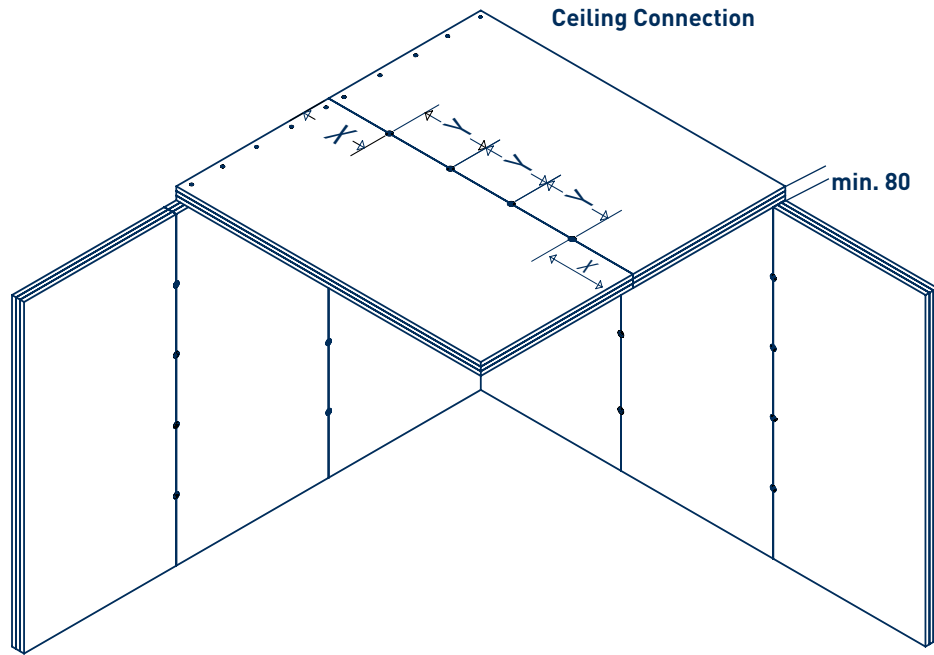
For parallel joints, drill with IdeFix® Drill IB HMB together with IdeFix® IBG Drilling Template. For corner joints drill only with IdeFix® Drill IB HMB.



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	[kN]	[kN]	
28896	5	30 x 20	5,0 x 80	12 x 20	14,30	6,33
28906	5	40 x 25	6,0 x 100	16 x 25	20,36	8,99

SIHGA®	Dimension	Dimension	Dimension	Corner Connection Characteristic Value	Corner Connection Characteristic Value	Extraction 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	[kN]	[kN]	[kN]	
28896	5	30 x 20	5,0 x 80	12 x 20	8,27	12,61	31,66
28906	5	40 x 25	6,0 x 100	16 x 25	11,75	20,36	44,98

Application



Minimum Axis Spacings

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

IdeFix[®] IF/IFD

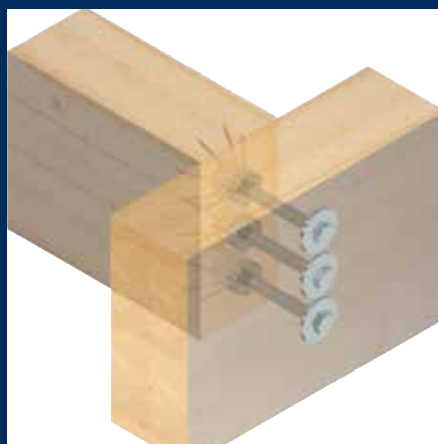


IdeFix[®] IFD

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

design values

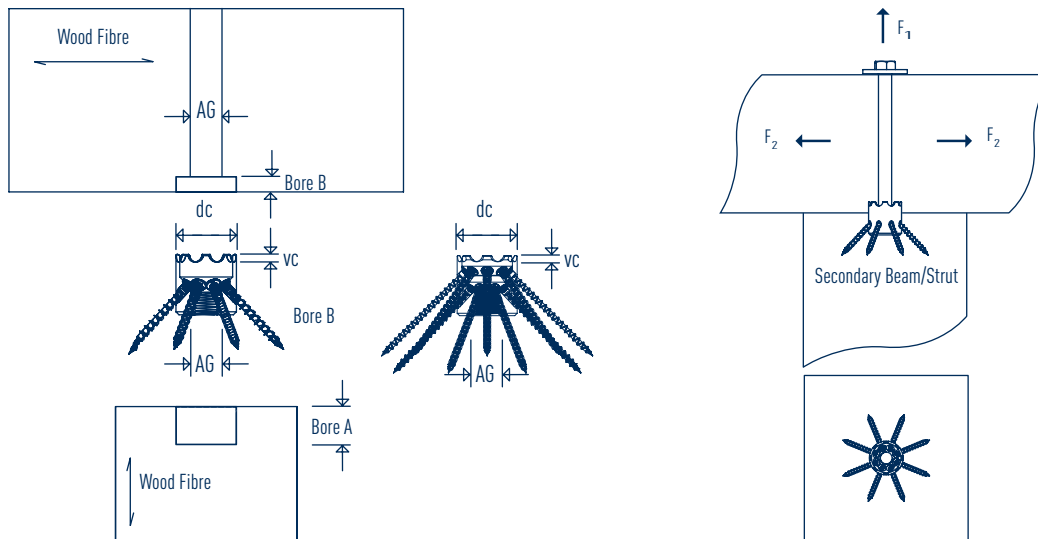
YOUR Benefit

time-saving, practical, precise, complete accessories enclosed

SIHGA® performs the calculation for you

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

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



SIHGA® montagepack		Dimension	System Screw		Secondary Beam / Strut		Characteristic Values*	
Art. No.	PU	IdeFix® IF/IFD Type	GoFix® HK [mm]	Pieces Stk.	Edge / axis distance [mm]	Height/Width [mm]	Tensile F_1 [kN]	Shear F_2 [kN]
28806	24	IF 304	5,0 x 40	8	50	100	17,0	10,1
28866	24	IF 306	5,0 x 60	8	60	120	25,6	12,3
28816	24	IF 308	5,0 x 80	8	70	140	32,4	13,8
28826	12	IF 406	6,0 x 60	8	60	120	29,0	13,0
28886	12	IF 408	6,0 x 80	8	80	160	37,9	18,8
28836	12	IF 410	6,0 x 100	8	90	180	45,6	20,5
28846	6	IF 509	8,0 x 90	8	80	160	56,0	20,5
28856	6	IFD 508	6,0 x 80	16	80 / 160	160	71,9	20,5
28876	6	IFD 510	6,0 x 100	16	100 / 200	200	87,3	30,7

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



SIHGA® TIP:

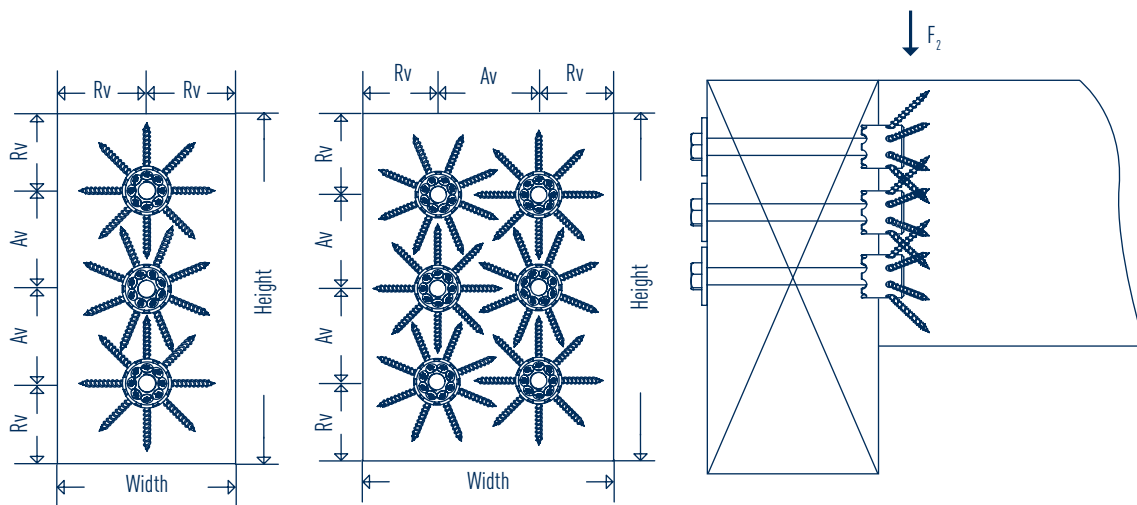
For drilling by hand, we recommend the IdeFix® Drill Gauge IBL with drill.

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

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



SIHGA® TIP:

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

System Kit IdeFix[®] IF HMB

SIHGA[®] Feature

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

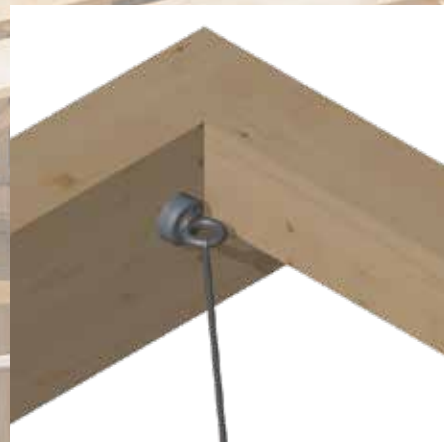
independent feeding and centring of the drill without effort at different fibre directions



IdeFix[®] IFS



IdeFix[®] IFS with special SC 6 coating



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

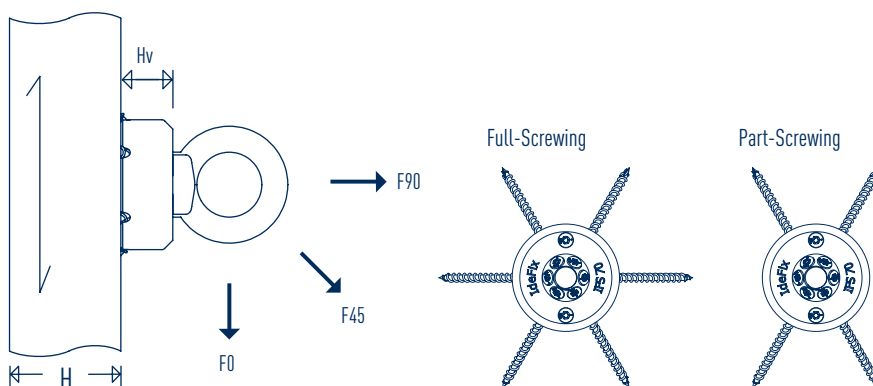
includes SIHGAFIX®, GoFix® HK screws and installation instructions

time-saving, practical, precise, complete accessories enclosed

calculation

SIHGA® performs the calculation for you

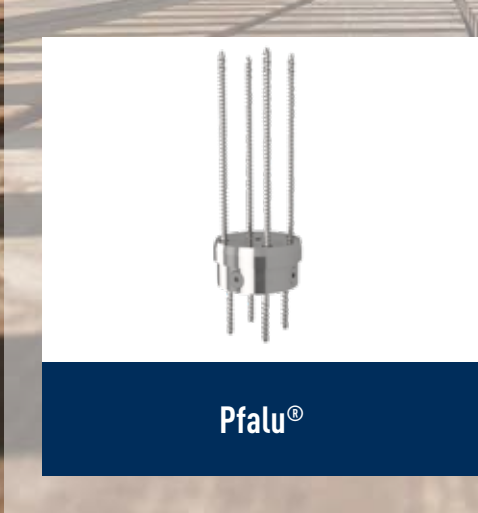
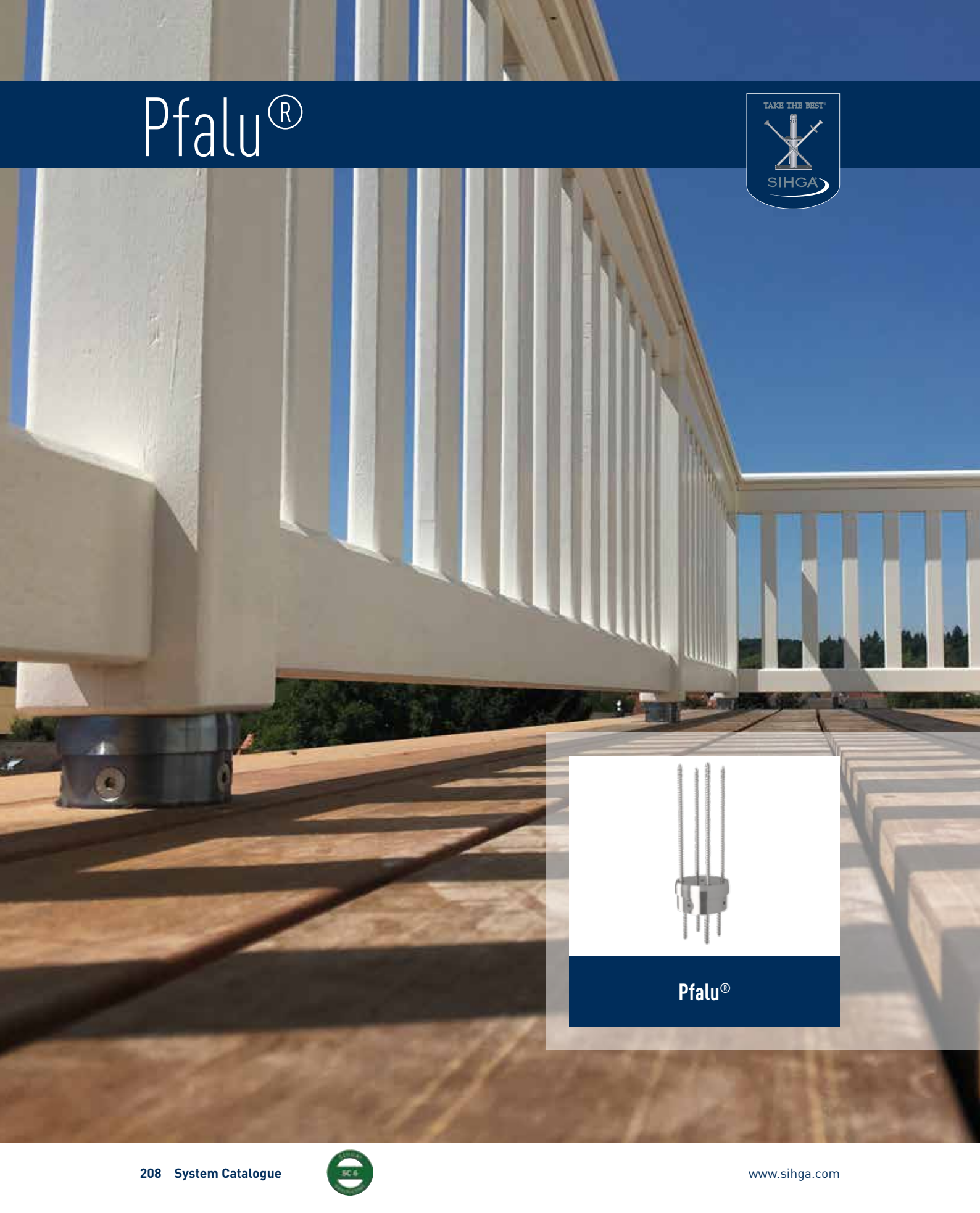
SIHGA® montagepack	IdeFix®		Wood Dimension		Angle To the Grain [Grad]	Characteristic Values [kN]		System Screw GoFix® HK d1 x L	
	PU	Type	Hv	Height (H) [mm]		Width [mm]	Screw Pattern Voll		Teil
Art. No.	PU	Type	Hv	[mm]	[mm]	[Grad]	Voll	Teil	d1 x L
29046	6	710	28	80	110	F 0°	-	5,66	6,0 x 100
29046	6	710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

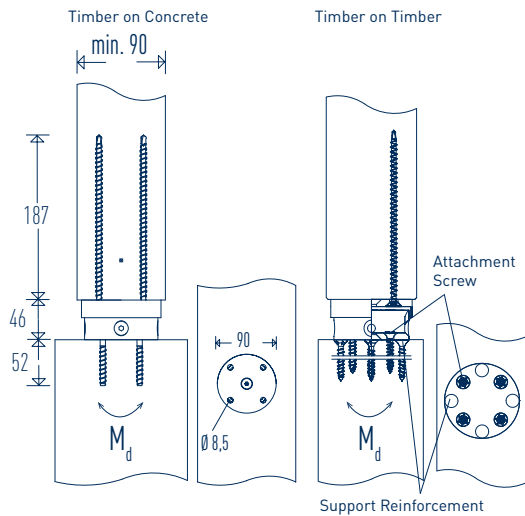
straight-lined, flush appearance of the posts without complex compensation panels, applicable to 15 cm concrete width

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 _d	
Art. No.	PU	Ø x h [mm]	[mm]	[kNm]	
43526	5	90 x 46	8,0 x 195	7,5 x 60	1,50

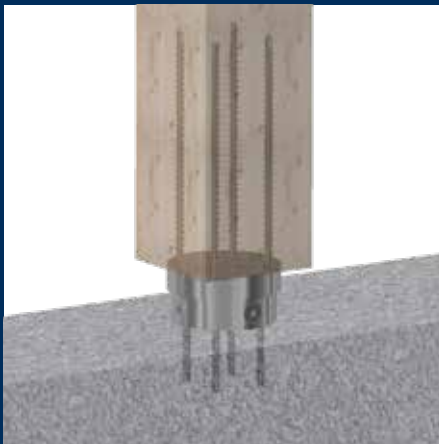
* tested concrete quality C 35/45 unreinforced

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 _d
Art. No.	PU	Ø x h [mm]	[mm]	[kNm]
43536	5	90 x 46	8,0 x 125	1,25

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

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

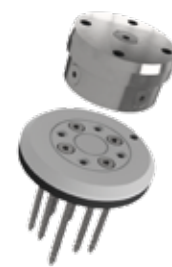
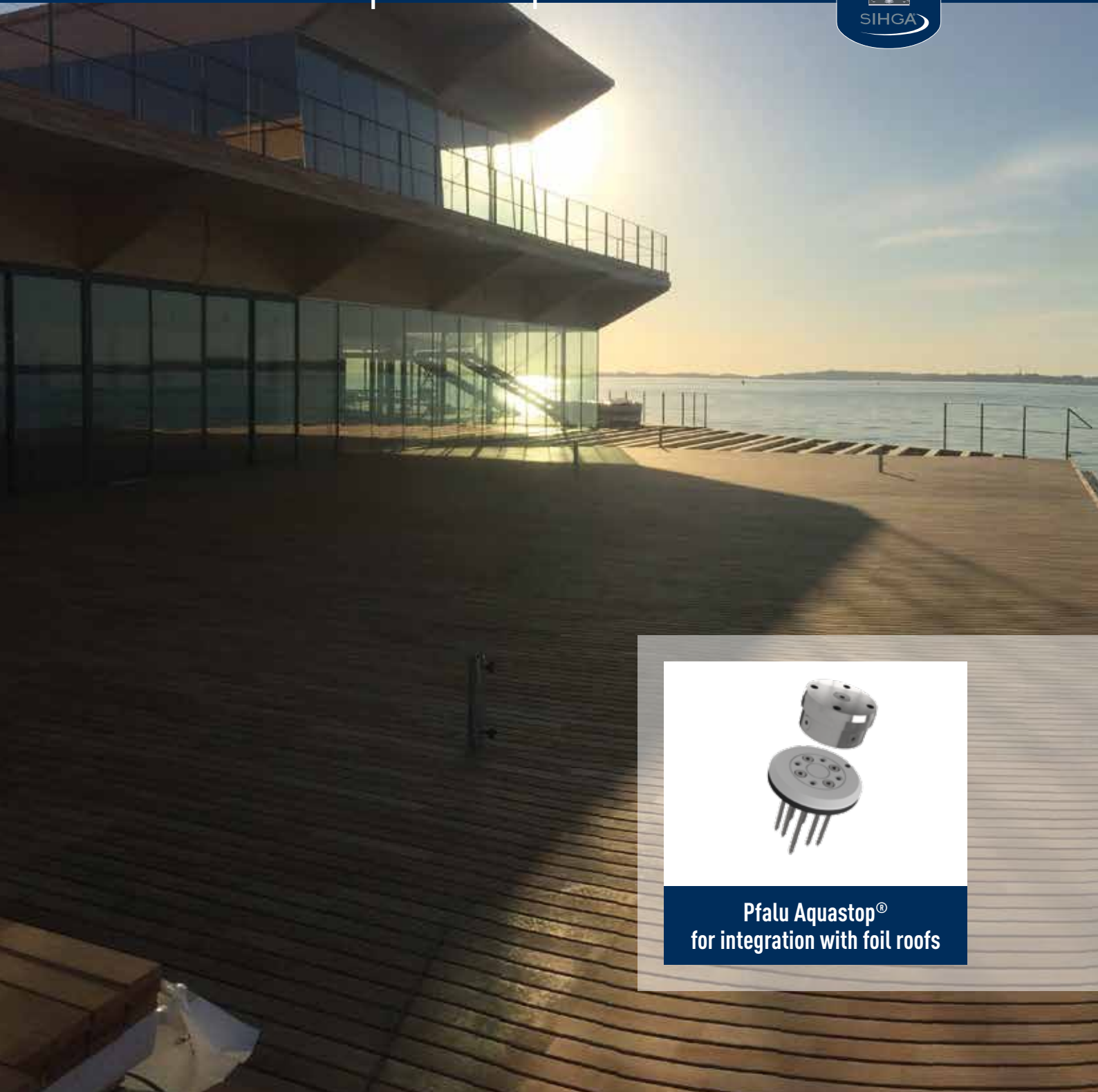
* these distances apply only to the specified boundary conditions in residential areas



SIHGA® TIP:

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

Pfalu Aquastop®



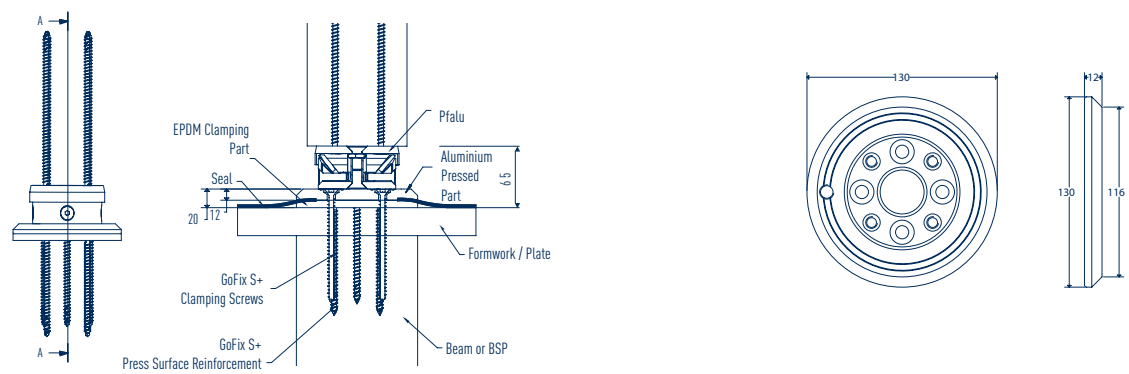
**Pfalu Aquastop®
for integration with foil roofs**



SIHGA® Feature

YOUR Benefit

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



SIHGA®	Dimension	Dimension	GoFix® S+ Underground	GoFix® S+ Pressed Piece	GoFix® S+ Pfalu®	Max.
montagepack	Pfalu®	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	8,0 x 125	8,0 x 155	8 x 195	1,25



SIHGA® TIP: For waterproofing testing use leak spray and an air pump.

Pick



Pick



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
Now NEW: Ultrasonic inspection for your SIHGA PICK	annual safety assessment according to the operating instructions, including ultrasonic testing
Now NEW: SIHGA Pick calculation in hsbcad	to make planning and use even easier and safer, the SIHGA Pick lifting system was fully implemented in hsbcad for HRW and BSP www.hsbcad.com

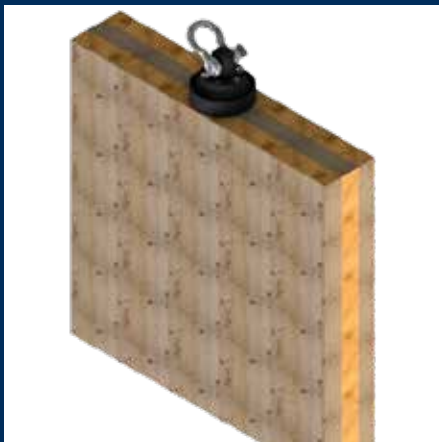
Important note: The drill hole must not be used for lifting more than six times.

SIHGA®

System Kit Pick HMB

Art. No.

49223

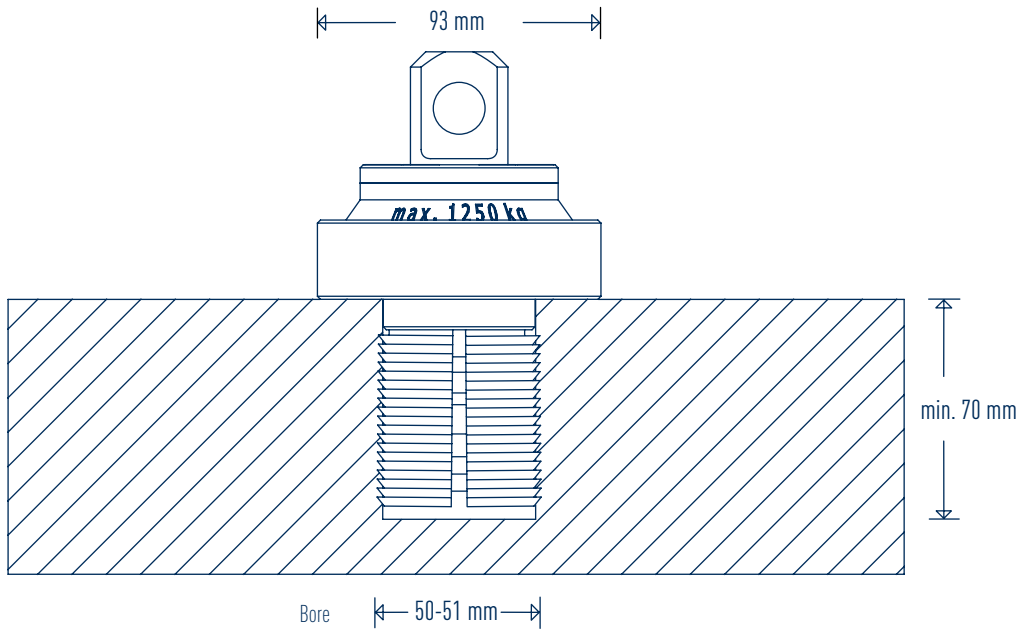


Pick Deck



SIHGA® TIP:

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



Pick Load Table				
Beam	Beam Dimension			
	min. Height	min. Width	2 Attachment Points 0°*	2 Attachment Points 45°
	[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			
	min. Thickness	min. Length and Width	3 Attachment Points 45°	4 Attachment Points 45° (only with rocker)
	[mm]	[mm]	[kg]	[kg]
90	1.000	2.430	3.240	
Glued wall panels BSP (glue laminate timber)	Panel Dimension			
	min. Thickness	min. Length and Width	2 Attachment Points 45°	2 Attachment Points 90°
	[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[®]



Pick Max[®]



SIHGA® Feature

YOUR Benefit

load attachment for lifting glued laminated timber, glued cross laminate timber and solid timber	capacity up to 2.400 kg per fastening point
made, developed and patented in Austria from high-quality steel	local quality and reliability, Q&T steel for permanent, robust long life
lift by drilling a blind hole (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

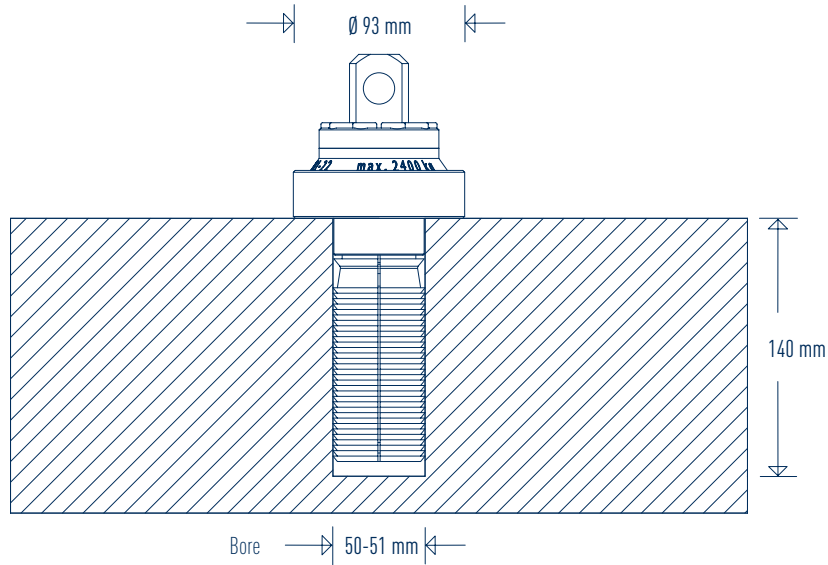
SIHGA® Expandix

Art. No.	PU
30486	2



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[®] HMB

SIHGA[®] Feature

YOUR Benefit

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

reliable and clean storage including all accessories

operating instructions stored in the lid

load values and safety conditions always to hand

Pick Max[®] Drill HMB with optimised geometry for clean drilling in the glue laminate timber, glued cross laminate timber and solid timber

for seamless use of the Pick in the drilled hole, the best precondition for safe lifting

Pick Max[®] Drill HMB made from high quality steel with exchangeable tungsten carbide indexable inserts

for continuous use of the drill with uniform quality of the drilled hole standing times (costly crane hours!) for sharpening the drill are superfluous

Pick Max[®] Drill HMB with threaded bit

independent retraction of the drill without the application of force, guaranteed centring with different grain directions

including IdeFix[®] Drill Gauge IBG

easy, safe compliance with the drill depth against unintended drilling through, chippings collection, protection of the drill and against injuries

SIHGA[®]

System Kit Pick Max[®] HMB

Art. No.	PU
49293	1



Pick 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



Pick Deck II



SOLID CONSTRUCTION ...

... BUT IN WOOD



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

Pick HMB

Pick Max[®]

Pick Deck II

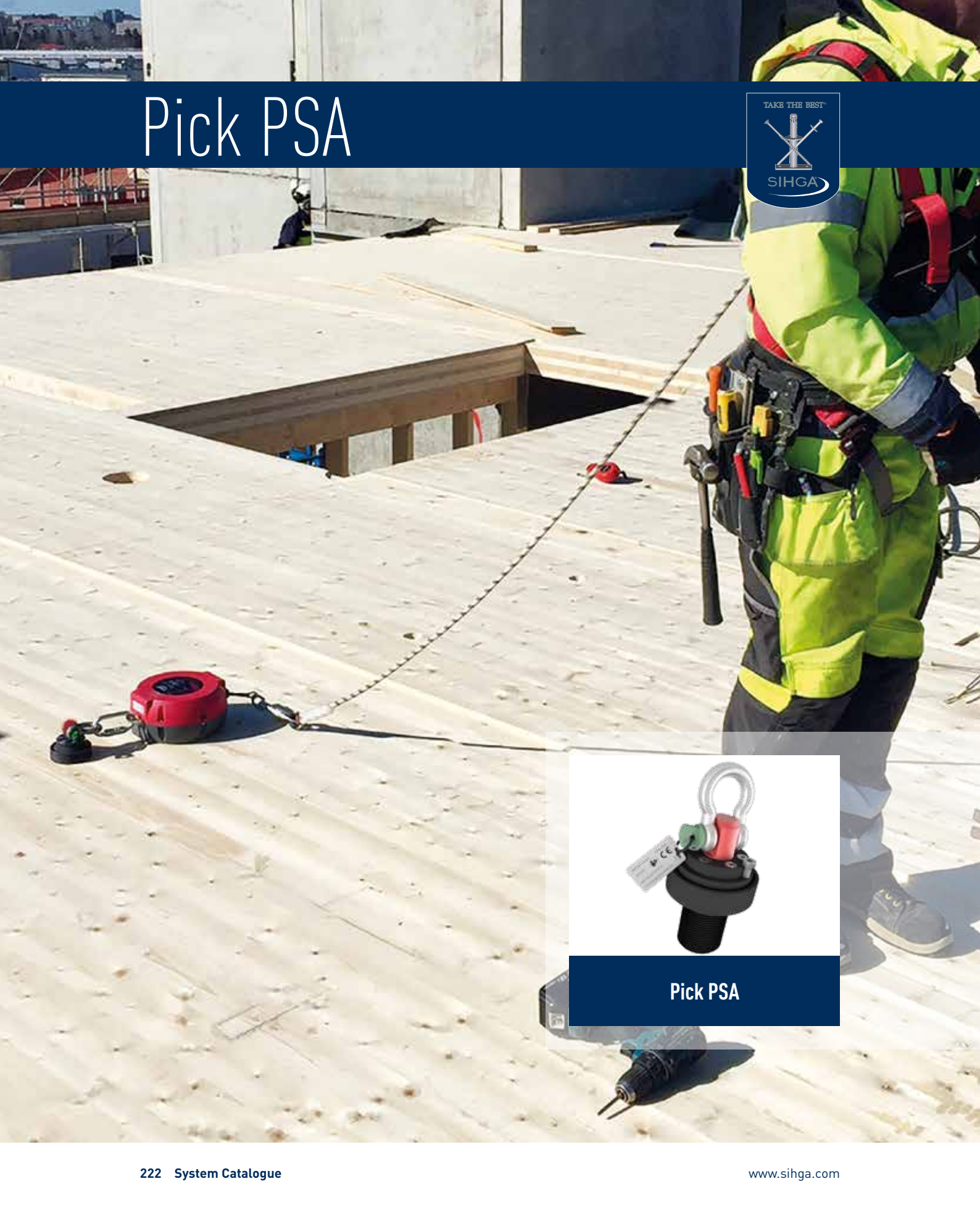
Pick PSA

System Pick Engel[®]

Pick Out

Pocket Traverse

Pick PSA



Pick PSA

SIHGA® Feature

protecting yourself and your employees from injury does not get any simpler than this

if the wooden elements have already been lifted with the Sihga Pick, there are already sufficient holes available

optimal cable lengths possible

no time-consuming installation and deinstallation necessary

no cumbersome scaffolding needed

versatile in use

made, developed and patented in Austria

almost maintenance free

tested by TÜV Austria

YOUR Benefit

choose Pick-PSA when selecting your type-B attachment point

there are no time-consuming issues with tangled cables as the next attachment point is always within reach

enables secure movement without restricting freedom of movement

for maximum security, the Pick-PSA is simply inserted into the borehole and the safety screw is tightened to 3 Nm

saves time and money

applicable for beam ceilings and board locking slabs

Austrian build quality and reliability, robust heat-treatable steel for long durability

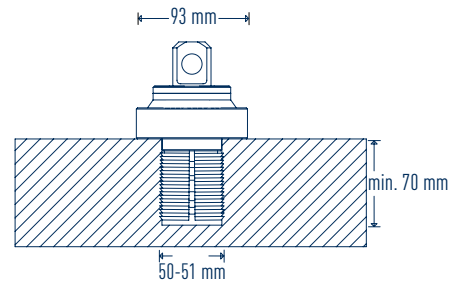
regular cleaning and visual inspections, as well as annual testing in accordance with operating material regulations (Arbeitsmittelverordnung) are sufficient

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

Helixon-S safety equipment for heights conformity with EN 360:2002

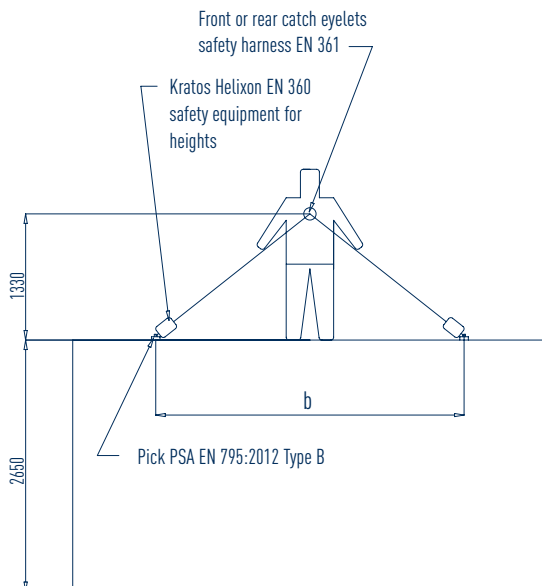
Swivel hook and connecting element FA 50 101 17 to attach to the Pick PSA

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

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



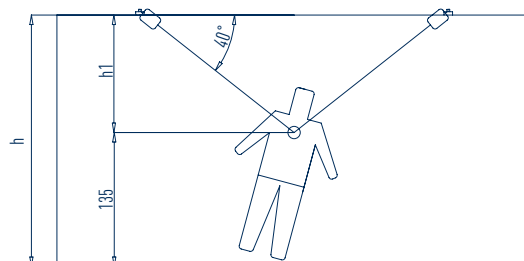
$$h1 = h - 135\text{cm}$$

$$b = \frac{2 \times h1}{\tan(40^\circ)}$$

Example:

$$h1 = 265 - 135 = 130\text{cm}$$

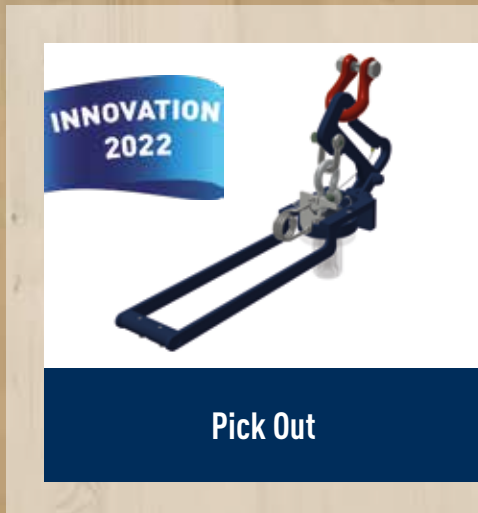
$$b = \frac{2 \times 130}{\tan(40^\circ)} = 310\text{ cm}$$



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

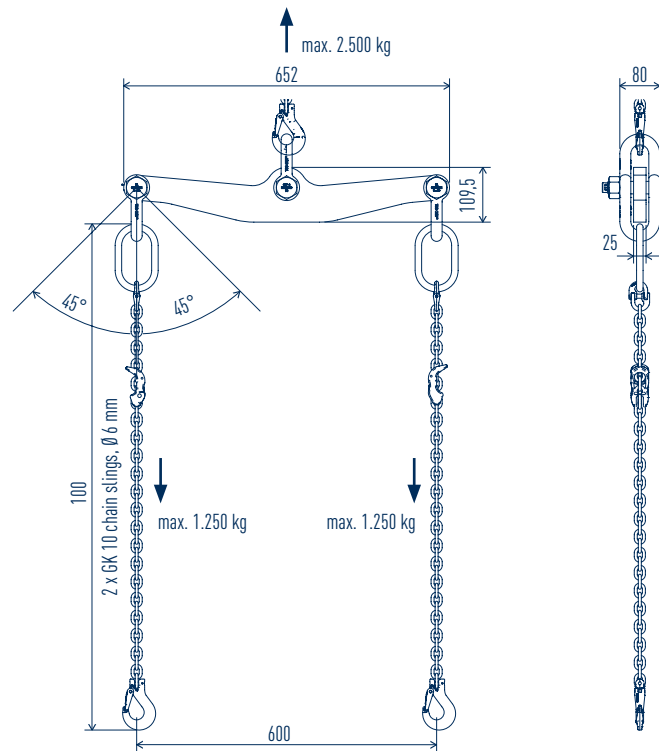
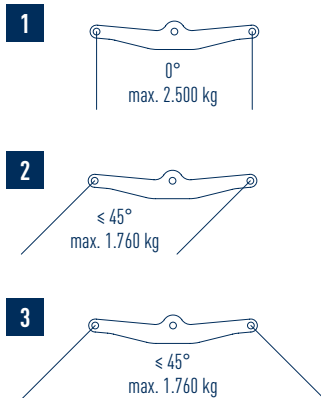
SIHGA® Feature

YOUR Benefit

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

SIHGA®
Pocket Traverse
Art. No.
50036

Load cases:



SIHGA® TIP:

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

ProziFix®



* Threaded rod is not included

ProziFix®



SIHGA® Feature

YOUR Benefit

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



SIHGA® TIP:

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



ProziFix® load tables

Senftenbacher 25 VZ Plan

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

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

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

Wienerberger Poroton flat brick T8-50,0

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

Wienerberger Porotherm 25-38 Plan

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

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

Reductions of the recommended values are applied as follows:

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

Wienerberger Porotherm 50-20 H.i. Plan

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

Pichler PIAplan 25/38 VZ

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

Pichler PIAplan 50/20 VZ

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

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

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

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

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

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

Reductions of the recommended values are applied as follows:

Reduction by the factor $\beta_{FT} = 0.7$ is required for damp substrates or a temperature range II according to ETA 17/0181 and ETA 17/0182 (minimum temperature -40° C, maximum short-term temperature +80° C; maximum long-term temperature +50° C) F_{1d} and F_{2d}. F_{2d} must then be reduced by the factor $\beta_{duration} = 0.6$ if the proportion of the permanently acting tractive load is higher than 50%. Material coefficients of γ_{M2} 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 γ_{inst} of 1.4 is already taken into account for tractive load F_{2d}. This does not apply for shear forces F_{1d}. For load cases not covered in this table, the underlying expert opinion of MPA Stuttgart is available at www.sihga.com.

EDER Plan XP 50 plus

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

H+H solid lime sand brick 2 DF

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

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

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

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

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

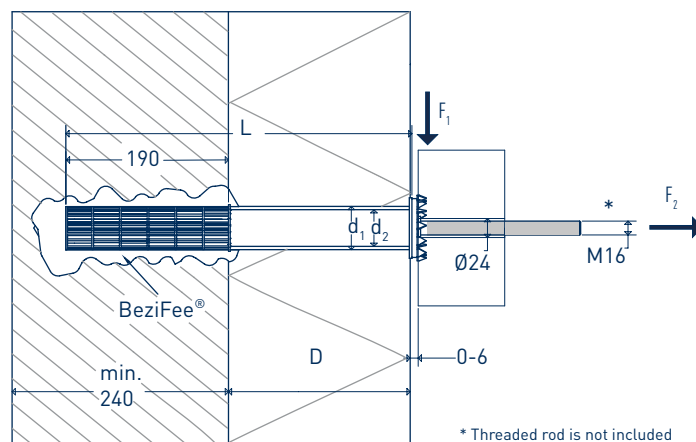
*For installation in dry concrete or masonry and a temperature range I according to ETA 17/0181 and ETA 17/0182 (minimum temperature -40° C, maximum short-term temperature +40° C; maximum long-term temperature +24° C). Valid for the minimum edge & axis distances given in the table.

Reductions of the recommended values are applied as follows:

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

ProziFix[®] brick dimensions, axis and edge distances

	Length l [cm]	Height h [cm]	Thickness d [cm]	$f_{b,min}/f_{c,min}$ [N/mm ²]	Edge distances C ₁ /C ₂ [cm]	Axis distances S ₁ /S ₂
Senftenbacher 25 VZ Plan	38,0	24,9	25,0	15,0	19,0/12,5	U/h
Wienerberger Poroton Vertical perforated brick Plan-T 24,0-0,9	37,3	24,9	24,0	12,0	18,7/12,5	U/h
Wienerberger Poroton Poroton flat brick T8-50,0	24,8	24,9	50,0	6,0	12,4/12,5	U/h
Wienerberger Porotherm 25-38 Plan	37,5	24,9	25,0	10,0	18,8/12,5	U/h
Wienerberger Porotherm 50-20 H.i. Plan	20,0	24,9	50,0	7,5	10,0/12,5	U/h
Pichler PIAplan 25/38 VZ	38,0	24,9	25,0	15,0	19,0/12,5	U/h
Pichler PIAplan 50/20 VZ	20,0	24,9	50,0	10,0	10,0/12,5	U/h
Leitl Vital Plan 25/30/24,9 cm N+F	30,0	24,9	25,0	15,0	15,0/12,5	U/h
Leitl Vital Solex Plan 50/20/24,9 cm N+F	20,0	24,9	50,0	7,5	10,0/12,5	U/h
EDER Plan XP 50 plus	20,0	24,9	50,0	5,0	10,0/12,5	U/h
H+H Solid lie sand brick 2 DF	11,5	11,3	24,0	20,0	5,8/5,7	U/h
Concrete slab front side > 20 cm	40,0	20,0	25,0	C20/25	20,0/10,0	U/h
Betondecke stirnseitig > 25 cm	50,0	25,0	25,0	C20/25	25,0/12,5	U/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		∅ x L	Working Length
Art. No.	PU	[mm]	[mm]
55206	1	50 x 620	400

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



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

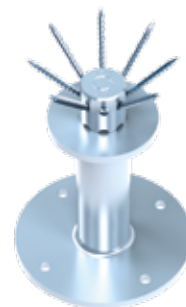
* equals 4 connections



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 (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

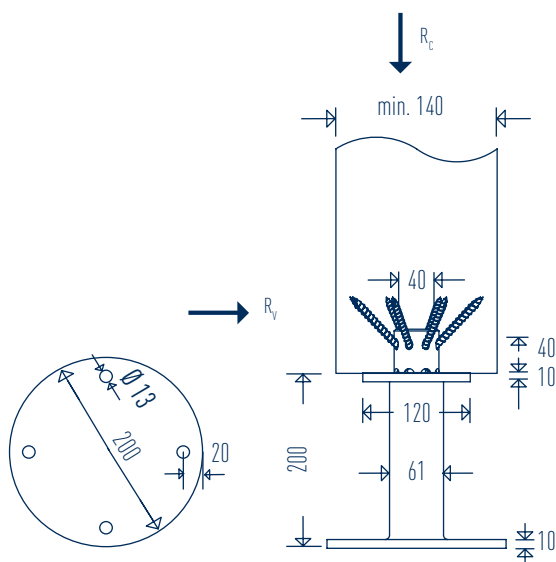
time-saving, practical, precise, including all accessories

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	KI 200	406	237,5	29,00	10,00	50,00 ¹	10,00 ²

* characteristic values for design according to EC 5 and strength class C24 (ρ_k 350 kg/m³)

¹ deformed condition: exceptional load case as per EC: partial safety factors for constant loads (1.35) and variable loads (1.5) may be set to 1.0 and snow below 1000 m may be reduced by 80 %.

² impact load car at a bumper height of 337.5 cm and at a speed of 5 km / h (requirement: Betsi A4 12 x 118 or equivalent load values)



SIHGA® TIP:

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

Herakulix® XS/S/M/L/XL

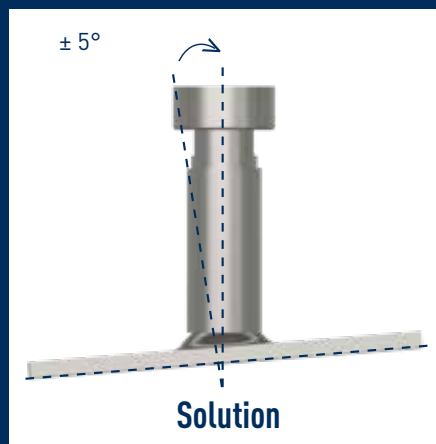


Herakulix® XS/S/M/L/XL two-part system with SC 6 coating



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° 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

**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.

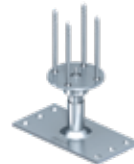
Herakulix[®] XS



XS RI 30 (115 - 155 mm)



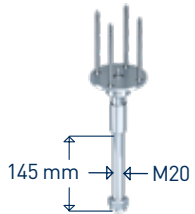
XS QI 30 (115 - 155 mm)



XS RG (115 - 155 mm)



XS QG (115 - 155 mm)



XS BG (99 - 136 mm)



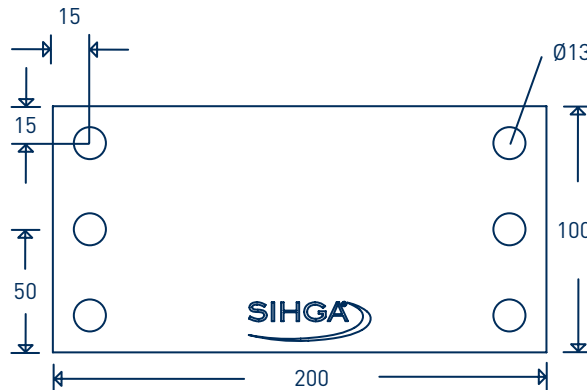
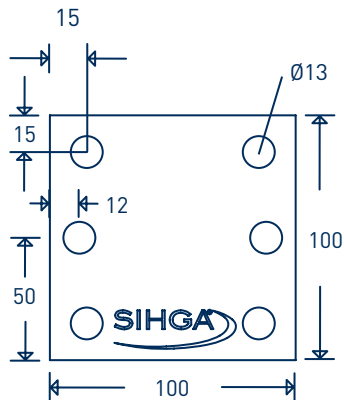
*optional accessor XS/RZ



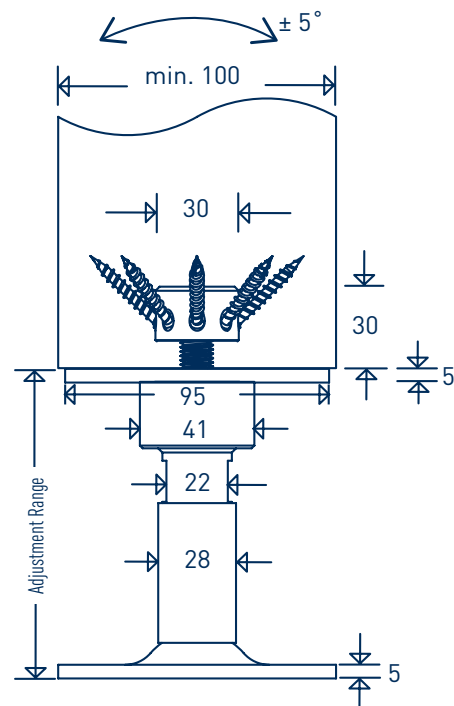
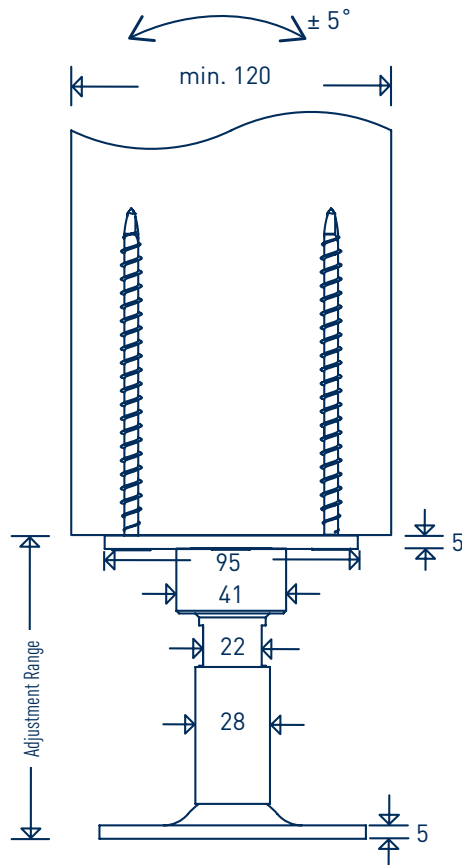
Accessoires see page 140

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)



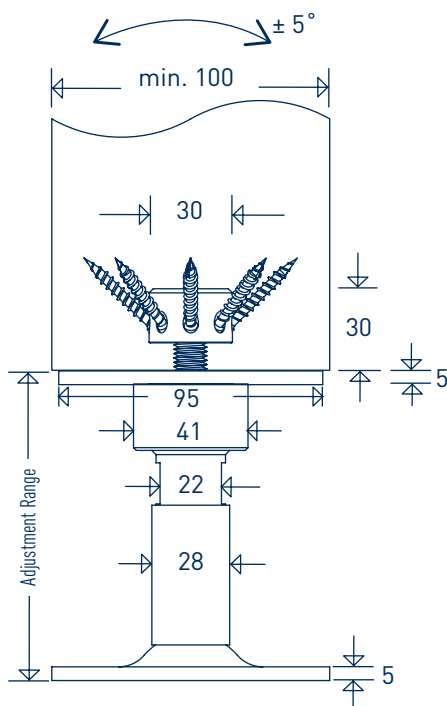
Herakulix® XS



objektpack®	SIHGA®	Herakulix®	Wood Connection	Adjustment Range		Design Values		Character. Values**	
				Height [mm]	from	to	Compressive Force [kN]	Shear Force [kN]	Tensile Force [kN]
Art. No.	PU	Type	Type				$R_{c,d}$	$R_{v,d}$	$R_{t,k}$
51107	10	XS RI 30	IdeFix® IFK 304	115	155	45,55	2,40	17,00	
51117	10	XS QI 30	IdeFix® IFK 304	115	155	45,55	2,40	17,00	
51127	10	XS RG	GoFix® S+ 8,0 x 195	115	155	45,55	-	10,90	
51137	10	XS QG	GoFix® S+ 8,0 x 195	115	155	45,55	-	10,90	
51147	10	XS BG	GoFix® S+ 8,0 x 195	99	136	45,55	1,92	10,90	
47706	10	*XSRZ	Ring + disc	M 20	Ø 37/21				

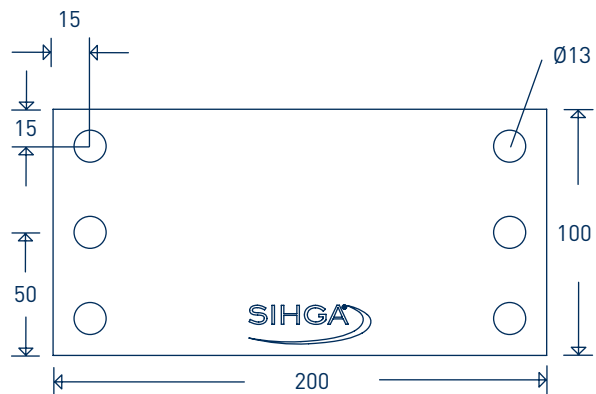
** characteristic values for design according to EC 5 and strength class C 24 (ρ_k 350 kg/m³)

Herakulix[®] 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 [®] 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}
51167	10	S RI 30	IdeFix [®] IFK 304	155	245	45,55	1,2	17,00

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

Herakulix[®] M



M RI 40 (155 - 220 mm)



M QI 40 (155 - 220 mm)



M RG (155 - 220 mm)



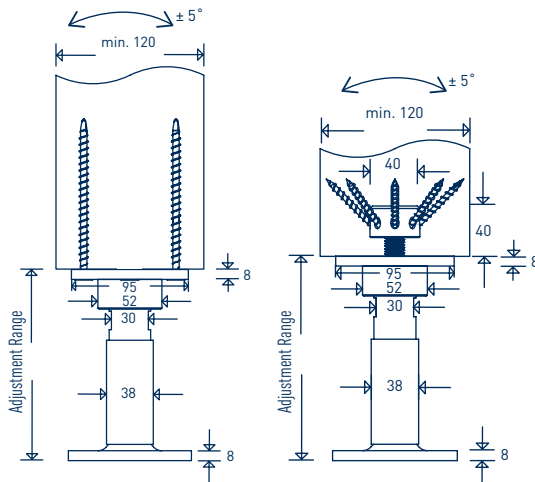
M QG (155 - 220 mm)



M BG (137 - 202 mm)

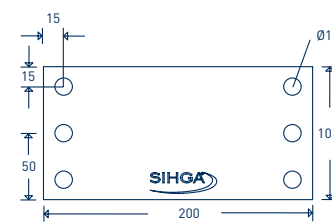
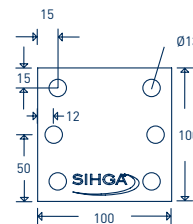


*optional accessory ML RZ



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)



Art. No.	PU	Herakulix [®] Type	Wood Connection Type	Adjustment Range		Design Values		Character. Values**
				from	to	Compressive Force [kN]	Shear Force [kN]	Tensile Force [kN]
51307	5	M RI 40	IdeFix [®] IFK 406	155	220	R _{cd} 89,18	R _{vd} 3,25	R _{Lk} 29,00
51317	5	M QI 40	IdeFix [®] IFK 406	155	220	R _{cd} 89,18	R _{vd} 3,25	R _{Lk} 29,00
51327	5	M RG	GoFix [®] S+ 8,0 x 195	155	220	R _{cd} 89,18	-	R _{Lk} 10,90
51337	5	M QG	GoFix [®] S+ 8,0 x 195	155	220	R _{cd} 89,18	-	R _{Lk} 10,90
51347	5	M BG	GoFix [®] S+ 8,0 x 195	137	202	R _{cd} 89,18	R _{vd} 3,20	R _{Lk} 10,90
47716	5	*MLRZ	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)



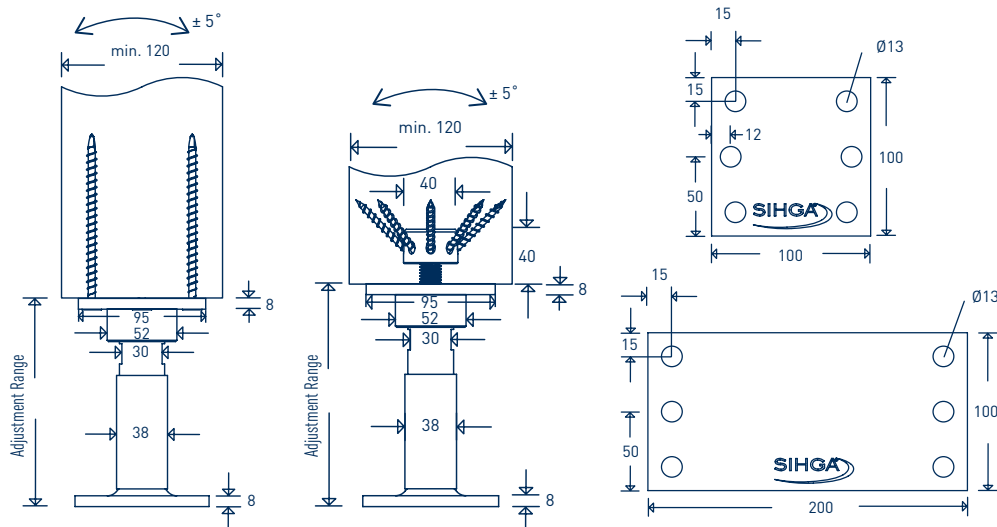
L RG (220 - 350 mm)



L QG (220 - 350 mm)

Legend:

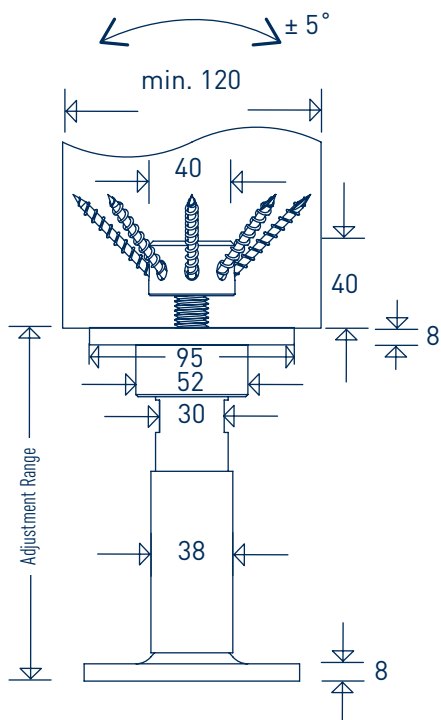
XS	X-Small	R	Rectangular Base Plate
S	Small	Q	Square Base Plate
M	Medium	K	Circular Base Plate
L	Large	I	IdeFix [®]
XL	X-Large	G	GoFix [®]
			B Concrete (for setting in concrete)



SIHGA [®] Herakulix [®] Wood Connection		Adjustment Range		Design Values		Character. Values*		
objektpack [®]		Type	Type	from	to	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	L RI 40	IdeFix [®] IFK 406	220	350	89,18	1,9	29,00
51517	5	L QI 40	IdeFix [®] IFK 406	220	350	89,18	1,9	29,00
51527	5	L RG	GoFix [®] S+ 8,0 x 195	220	350	89,18	-	10,90
51537	5	L QG	GoFix [®] S+ 8,0 x 195	220	350	89,18	-	10,90

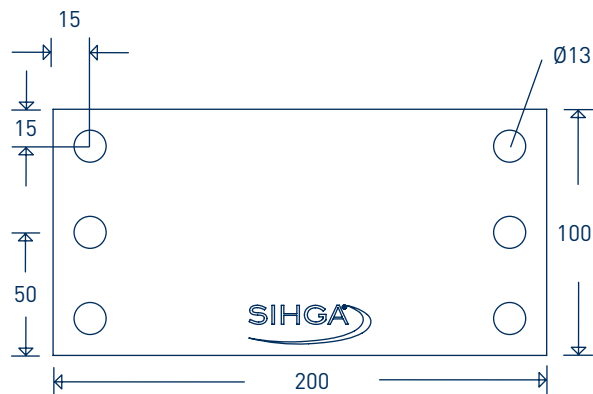
* characteristic values for design according to EC 5 and strength class C 24 (ρ_k 350 kg/m³)

Herakulix[®] XL



Legend:

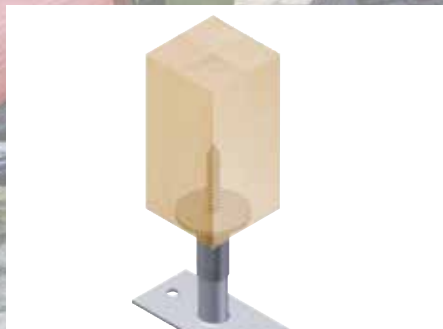
XS	X-Small	R	Rectangular Base Plate
S	Small	Q	Square Base Plate
M	Medium	K	Circular Base Plate
L	Large	I	IdeFix [®]
XL	X-Large	G	GoFix [®]
		B	Concrete (for setting in concrete)



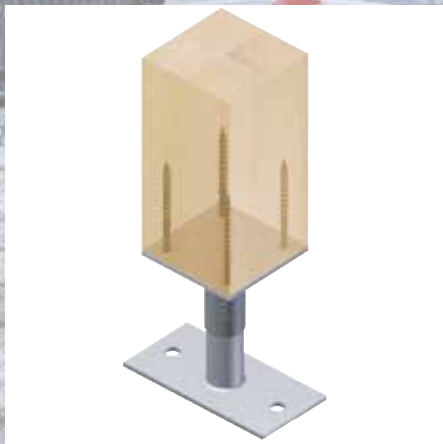
SIHGA [®] Herakulix [®] Wood Connection Adjustment Range				Design Values		Character. Values**		
objektpack [®]		Height [mm]		Compressive Force [kN]	Shear Force [kN]	Tensile Force [kN]		
Art. No.	PU	Type	Type	from	to	R _{c,d}	R _{v,d}	R _{t,k}
51567	5	XL RI 40	IdeFix [®] IFK 406	340	460	89,18	1,5	29,00

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

ZaFix® STZ



ZaFix® STZ with special SC 6 coating



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

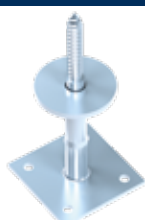
structural wood protection keeps surfaces free of damage

high corrosion and spray water protection

height adjustable any time afterwards



ZaFix® STZ 211 (120 - 160 mm)



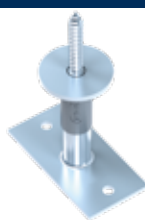
ZaFix® STZ 221 (120 - 160 mm)



ZaFix® STZ 310 (120 - 160 mm)



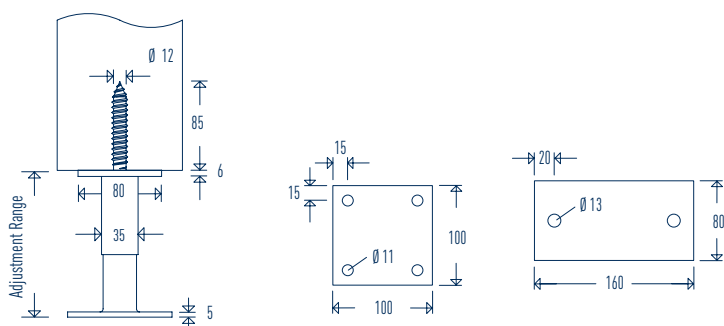
ZaFix® STZ 311 (120 - 160 mm)



ZaFix® STZ 320 (120 - 160 mm)



ZaFix® STZ 321 (120 - 160 mm)



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

* not height adjustable in installed condition

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

Stabilix C/H



**Stabilix C
for carports**



**Stabilix H
for timber construction**

SIHGA® Feature

connectors for rigidity

developed and made in Austria

tested suitability

simple installation

space-saving connection

includes SIHGAFIX®, GoFix® S+ screws and installation instructions

design values

calculation template

YOUR Benefit

versatile in application, deformations are minimised: particularly in use for carports (model C) and in wood construction (model H)

local quality and added-value

transfers both horizontal and vertical forces, as well as moment in frame constructions from wind and snow loads

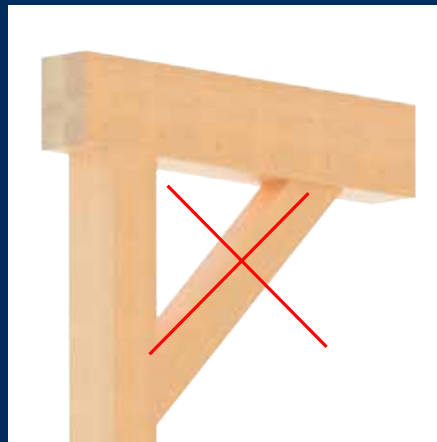
can be used without pre-drilling, connector can be pre-fitted in the factory

no disruptive braces for rigidity, low construction height possible while maintaining the same access height

time-saving, practical, precise, complete accessories enclosed

SIHGA® performs the calculation for you, example calculations provided online

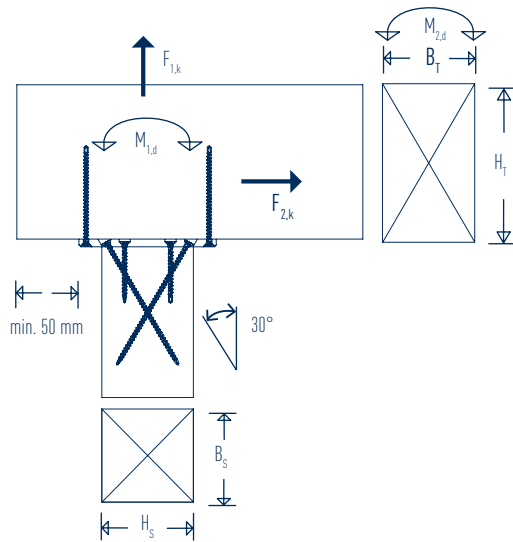
at www.sihga.com (Stabilix C)



SIHGA® TIP:

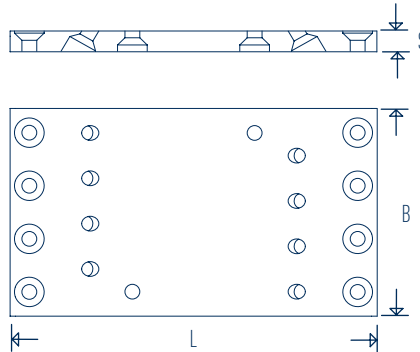
2 connectors can be selected per connection variant and combined with IdeFix®.

Stabilix C



SIHGA® Stabilix C	Torque		Characteristic Values*	
	M _{1,d} [kNm]	M _{2,d} [kNm]	F _{1,k} [kN]	F _{2,k} [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

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



SIHGA® montagepack Stabilix C	PU	Type	Pillar				Cross Beam		Screws GoFix® S+		Dimensions		
			min. H _s / B _s	* max. H _s / B _s	min. H _T	min. B _T	[mm]	[mm]	Pillar	Cross Beam	L	B	S
Art. No.			[mm]	[mm]	[mm]	[mm]	d1 x L [mm]			[mm]			
43306	2	10	90	100	100	90	8,0 x 155 and 8,0 x 95	8,0 x 95	150	80	12		
43326	2	12	110	120	130	110	8,0 x 195 and 8,0 x 95	8,0 x 125	170	100	12		
43346	2	14/16	130	160	160	130	8,0 x 220 and 8,0 x 95	8,0 x 155	210	120	15		

* ensure accurate positioning during installation

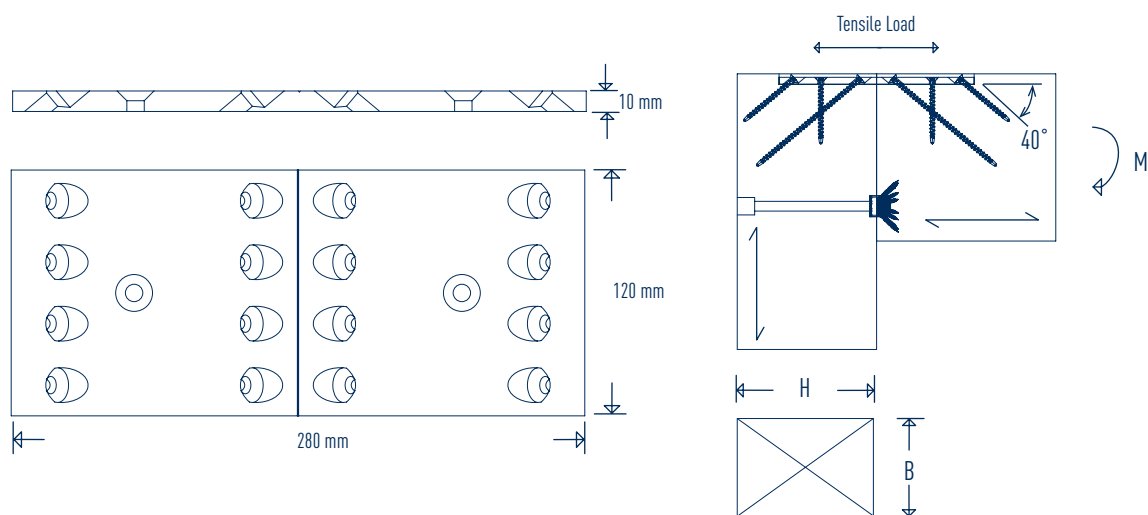
Torsion spring stiffness for Stabilix C10-C14/16*

Stabilix C Type	Node stiffness	
	Initially	Medium
10	127 kNm/Rad	78 kNm/Rad
12	317 kNm/Rad	186 kNm/Rad
14/16	435 kNm/Rad	385 kNm/Rad

* derived from the test report of the BTI Linz



Stabilix H



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

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



Stabilix R



Stabilix R



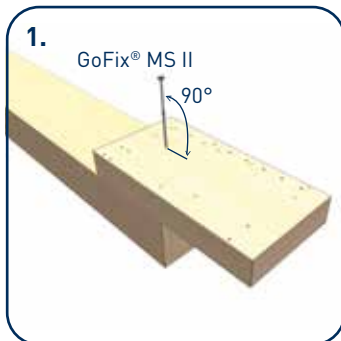
SIHGA® Feature**YOUR Benefit**

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

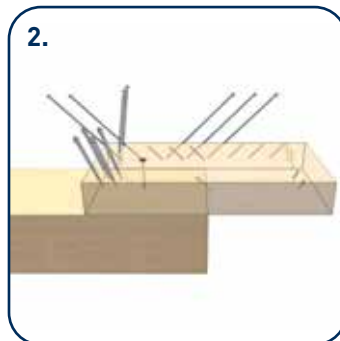
**SIHGA® TIP:**

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

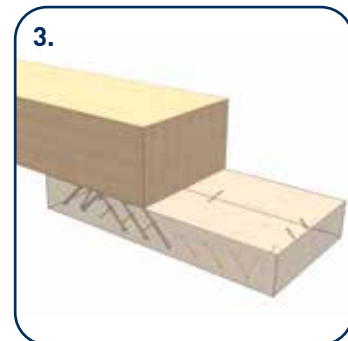
Stabilix R Application



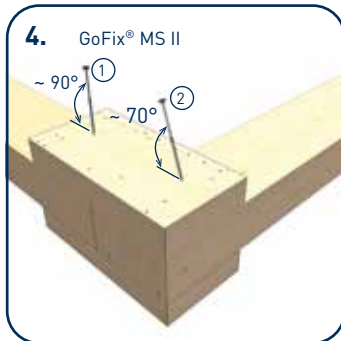
The strap is fixed in position on the support using GoFix MSII screws.



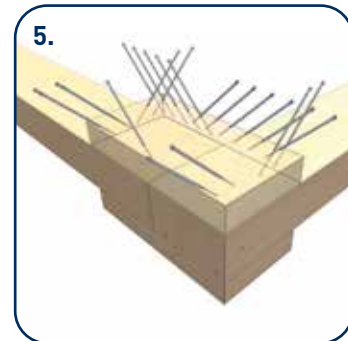
The support area can now be unscrewed.



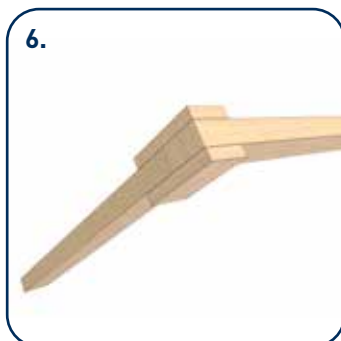
The support is turned over, thus creating a support for the beam.



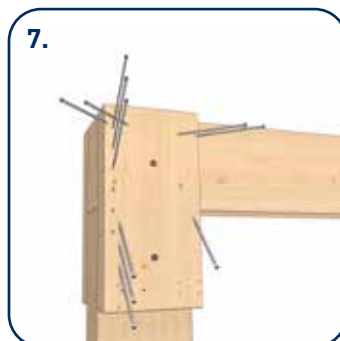
The beam is put on and the second strap is attached to the support. In order to achieve a positive fit between the beam and the support, a GoFix MS II screw is inserted at an angle of 70° to the strap in the direction of the OK beam. This arrangement guarantees a "contraction effect".



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.



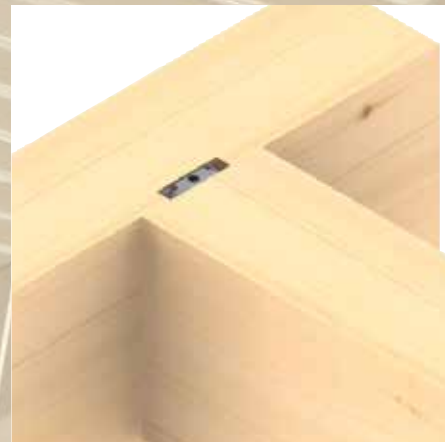
SIHGA® TIP:

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

From practice



HobaFix[®] HF



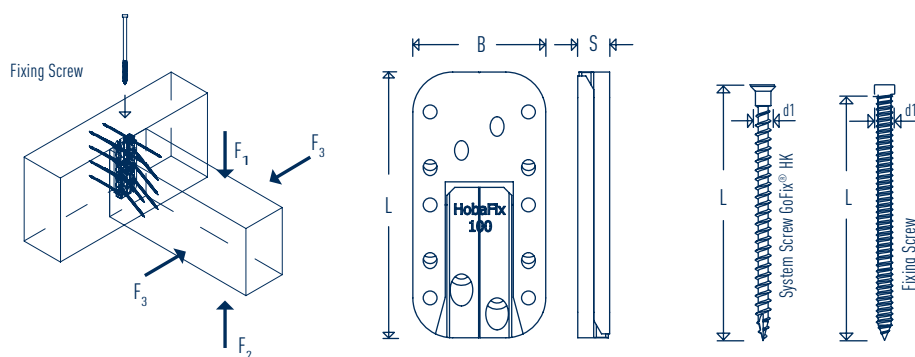
HobaFix[®] HF



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 ₁	F ₂	F ₃
30036	20*	70	30	9	4,0 x 60	4,2 x 50	50	80	6,80	2,04	4,40
30056	20*	100	50	12	5,0 x 80	4,8 x 80	80	115	17,40	8,56	10,60
30076	20*	135	50	12	5,0 x 80	4,8 x 120	80	150	26,70	8,56	15,00
30096	20*	170	50	12	5,0 x 80	4,8 x 120	80	185	33,40	8,56	16,00
30116	12*	200	70	17	6,0 x 100	6,3 x 180	100	220	43,00	17,07	22,70
30126	12*	240	70	17	6,0 x 100	6,3 x 180	100	260	48,30	17,07	23,80

*equal to 10 or 6 connections

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



SIHGA® TIP:

For easier dimensioning use our HT-NT Tool online at www.sihga.com.
Not all bores have to be screwed on. Follow the assembly instructions.

System Kit HobaFix[®] HF

SIHGA[®] Feature

for all HobaFix[®] HF models

contains 1 HobaFix[®] milling and assembly template HFFM, 1 HobaFix[®] milling cutter with stop ring HFF and fastening screws, allen key and Systemstift[®]

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

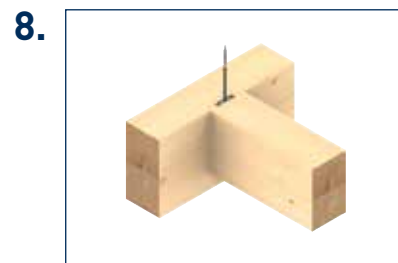
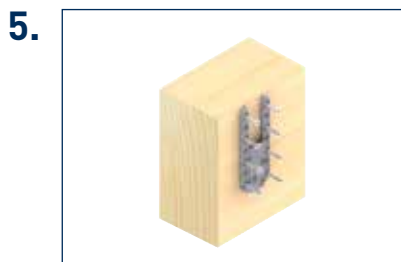
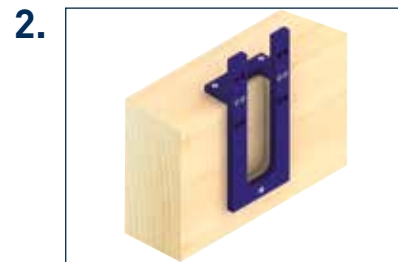


HobaFix[®] Milling and Assembly Template HFFM



HobaFix[®] Milling Cutter with stop ring HFF

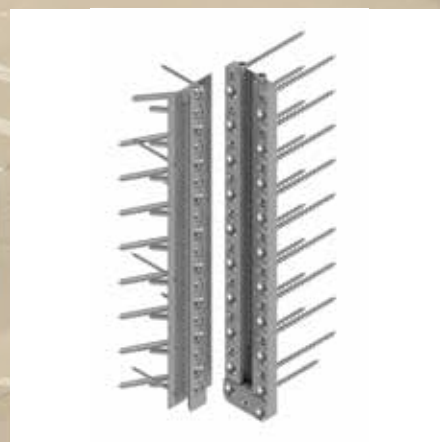
Application Hobafix® HF



HobaFix[®] Max



HobaFix[®] Max



SIHGA® feature

Connector for main beam - secondary beam constructions

No screw collisions thanks to offset fastening screws

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

Flexibility in the connection mechanism

High static load capacity in six load cases, with up to 81,73 kN being characteristic per connection

Excellent price-performance ratio

The different HobaFix® Max differ only in length and the number of screws

Developed, patented and manufactured in Austria

Made under supervised conditions from aluminium and anodised

Includes SIHGAFIX®, all fastening and fixing screws, assembly instructions

YOUR benefits

Wood-wood or wood-concrete connections are possible with the HobaFix® Max (BeziFix anchors 7.5 x 80 for concrete must be ordered separately)

Multiple node connections of e.g.: four beams on one support can be created

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

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)

Can be used for horizontal, vertical, tensile and torque loads with high tested static values

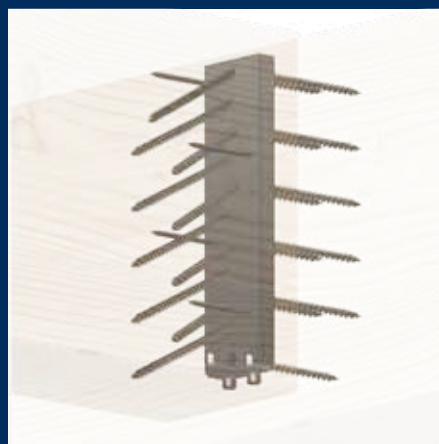
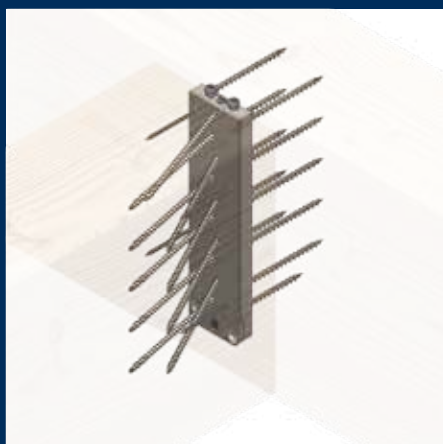
Thanks to the consistent profile geometry across all connector heights, an optimised manufacturing process helps save time and money

All connector sizes can be mounted with just one template

Highest European quality and added value

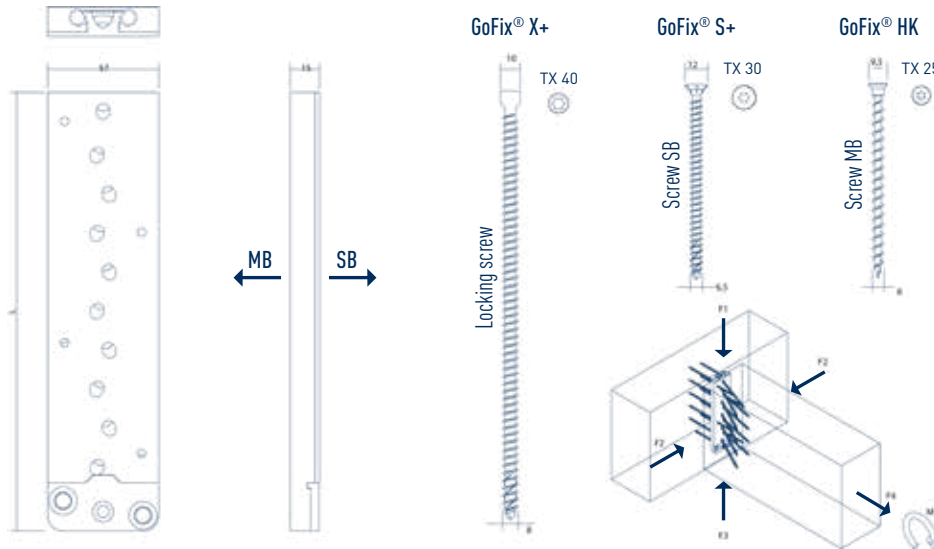
Durable, dimensionally stable quality

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]
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***	
	C24					GL24h						
montage-pack	Load direction [kN]					Load direction [kN]					C24 / GL24h	
Art. No.	PU	F ₁	F ₂	F ₃	F ₄	M _d	F ₁	F ₂	F ₃	F ₄	M _d	for F1, F2, F3
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.

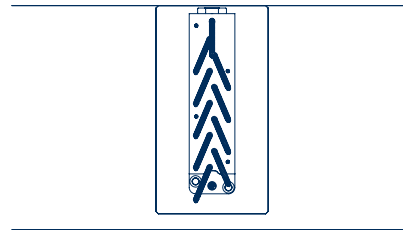
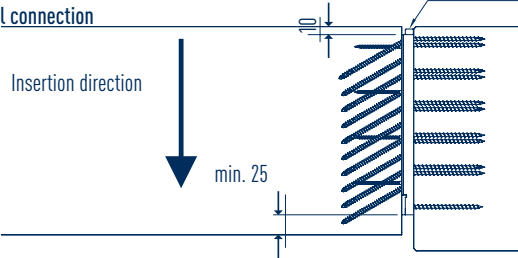
ATTENTION

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.

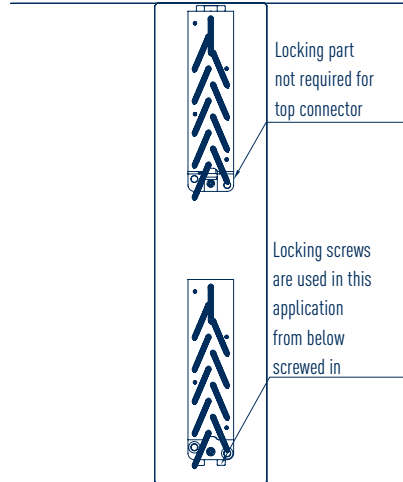
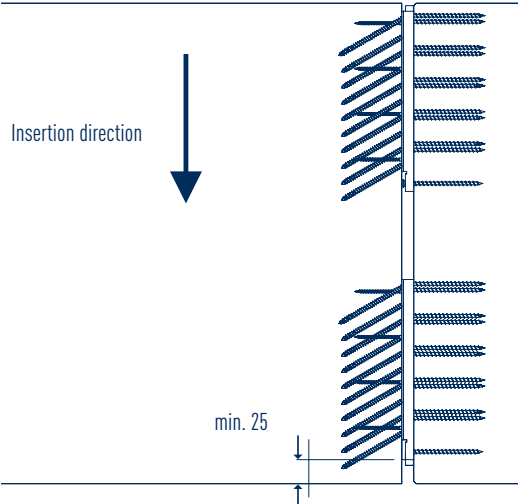
Multiple applications HobaFix[®] Max

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

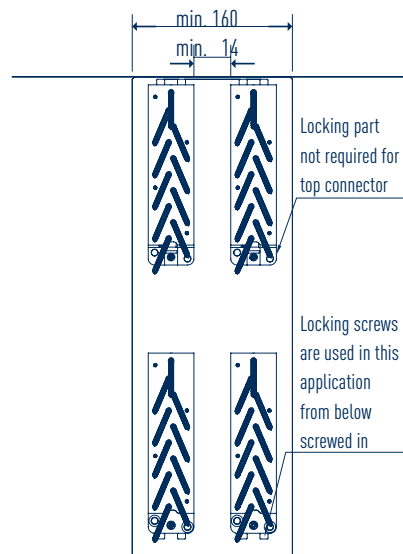
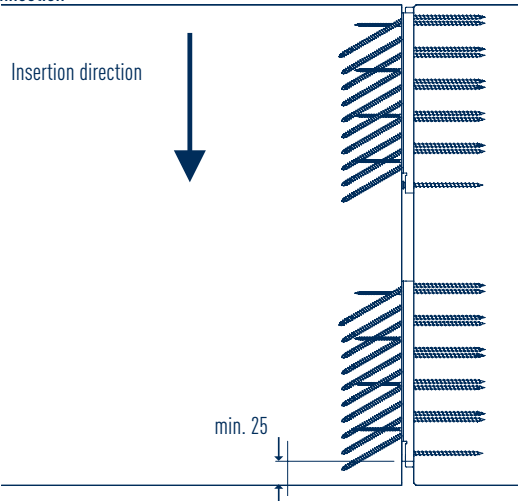
Individual connection



2-fold connection*

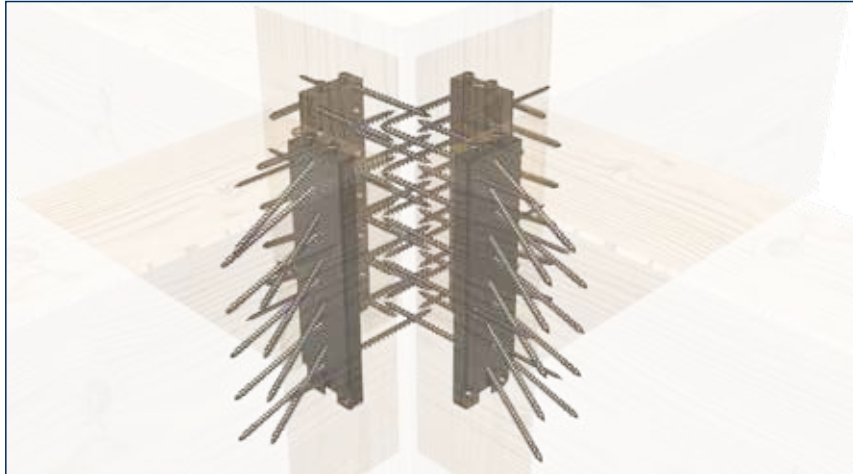


4-fold connection*

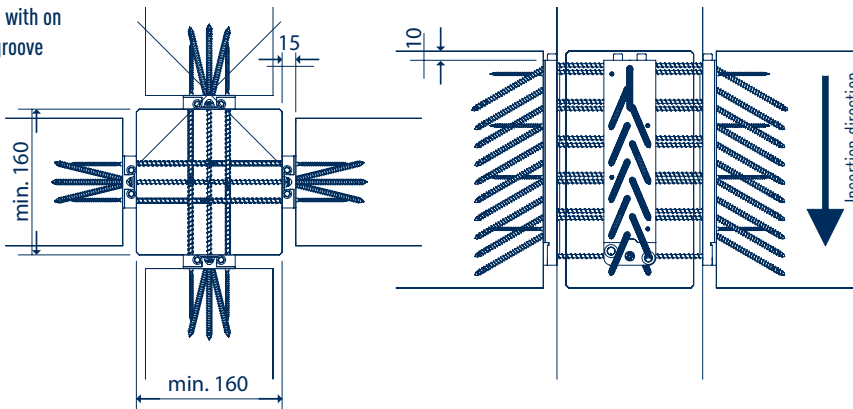


* In the case of multiple applications, it should be noted that situational corner torques and other forces may arise. These must be taken into account according to ETA-23/0821 and EN 1995-1-1 and the load-bearing capacity must be verified. In the case of exclusively transverse force application (F1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

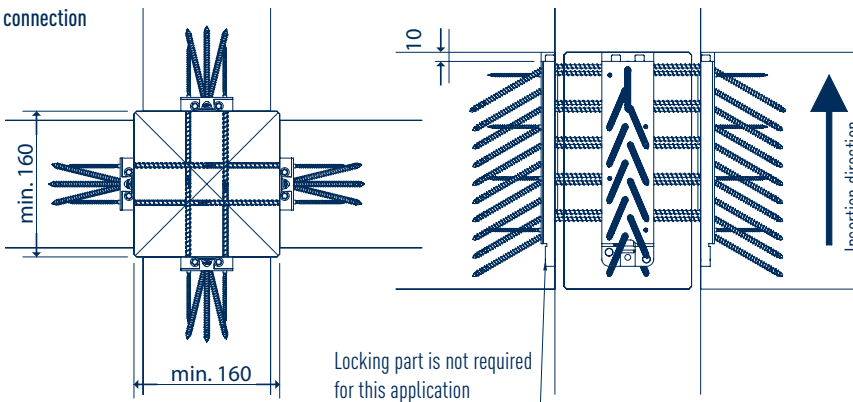
Multiple nodes on support HobaFix[®] Max



4-fold connection with on support shadow groove



4-fold on support connection milled



SIHGA[®] TIP:

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

HobaFix[®] Max HFML milling assembly jig

SIHGA[®] feature

For all models of the HobaFix[®] Max

Incl. HobaFix[®] Max cutter

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[®] Max on the main beam and on the secondary beam

The HobaFix[®] 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 [®]	
HobaFix [®] Max HFML milling assembly jig	HobaFix [®] Max milling cutter
Art. No.	Art. No.
31606	29632



SIHGA[®] TIP:

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

HobaFix® HFM

SIHGA® Feature

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

* corresponds to 6 connections



HobaFix® HFM
made from polyamide



Example wall connection

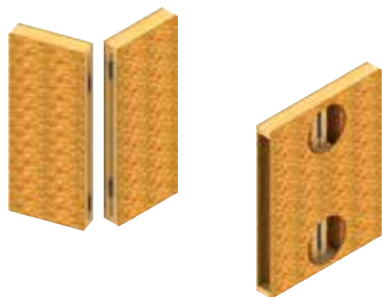
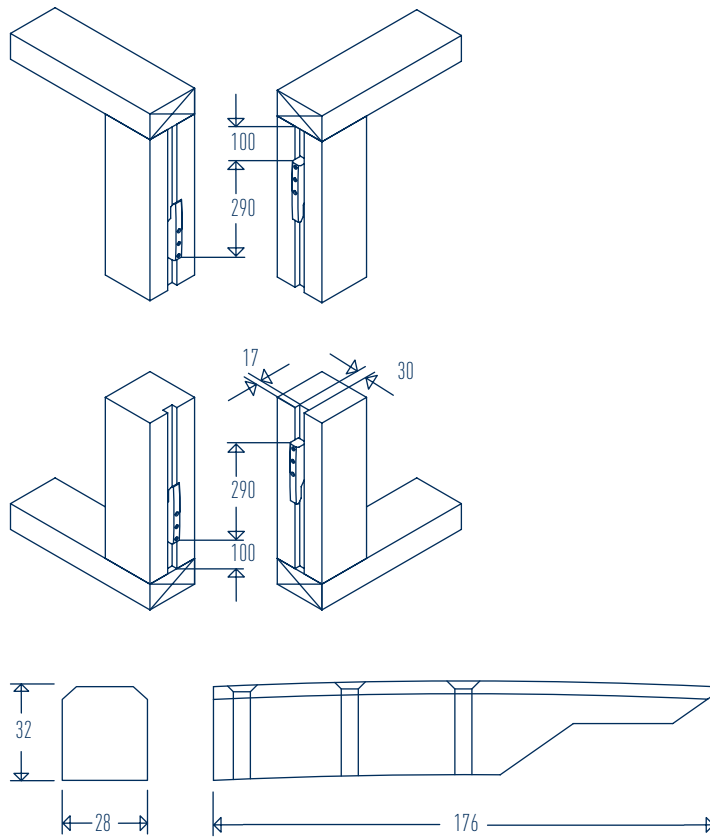


SIHGA® TIP:

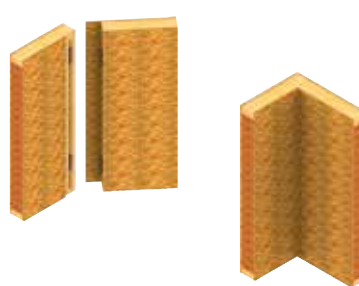
We recommend two pairs of HobaFix® HFM per wall joint.



Application HobaFix[®] HFM



HobaFix[®] HFM
wall connections



HobaFix[®] HFM
corner connections

WabaFix[®] WF



WabaFix[®] WF
made from aluminium



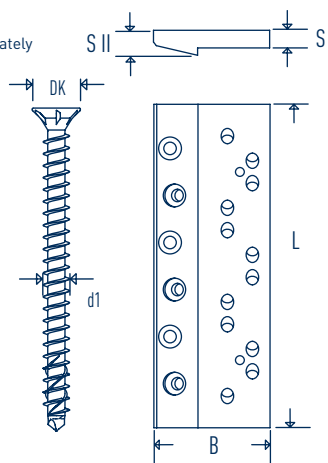
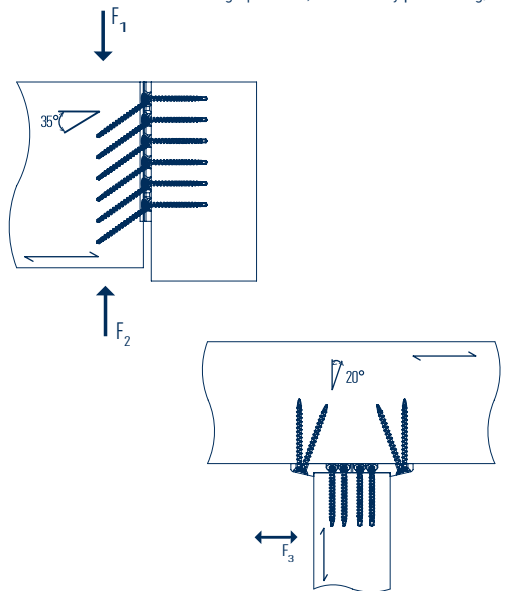
SIHGA® Feature

YOUR Benefit

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

SIHGA® objektpack® Art. No.	WabaFix® WF PU	Secondary Beam Type	Drill		GoFix® S+ d1 x L	Characteristic Values*			Recommended Values Wood - Concrete		
			Width [mm]	Height [mm]		Load Direction [kN]			Load Direction [kN]		
43146	6 ¹	210	100	250	8,0 x 95	F ₁ 54,72	F ₂ 32,28	F ₃ 32,28	F ₁ 18,96	F ₂ 18,96	F ₃ 18,96
43156	6 ¹	210	100	270	8,0 x 125	71,04	35,52	35,52	18,96	18,96	18,96
43206	4 ¹	280	100	320	8,0 x 95	72,96	43,04	43,04	25,28	25,28	25,28
43216	4 ¹	280	100	340	8,0 x 125	94,72	47,36	47,36	25,28	25,28	25,28

¹ corresponds to 3 or 2 connections
² recommended values for concrete at least C 20/25, without edging influence
 attachment by means of BeziFix® anchor ZF 7.5 x 60 mm, screws, available separately
 * characteristic values for design per EC 5, bulk density $\rho_k = 380 \text{ kg/m}^3$



Dimension [mm]
WabaFix® WF

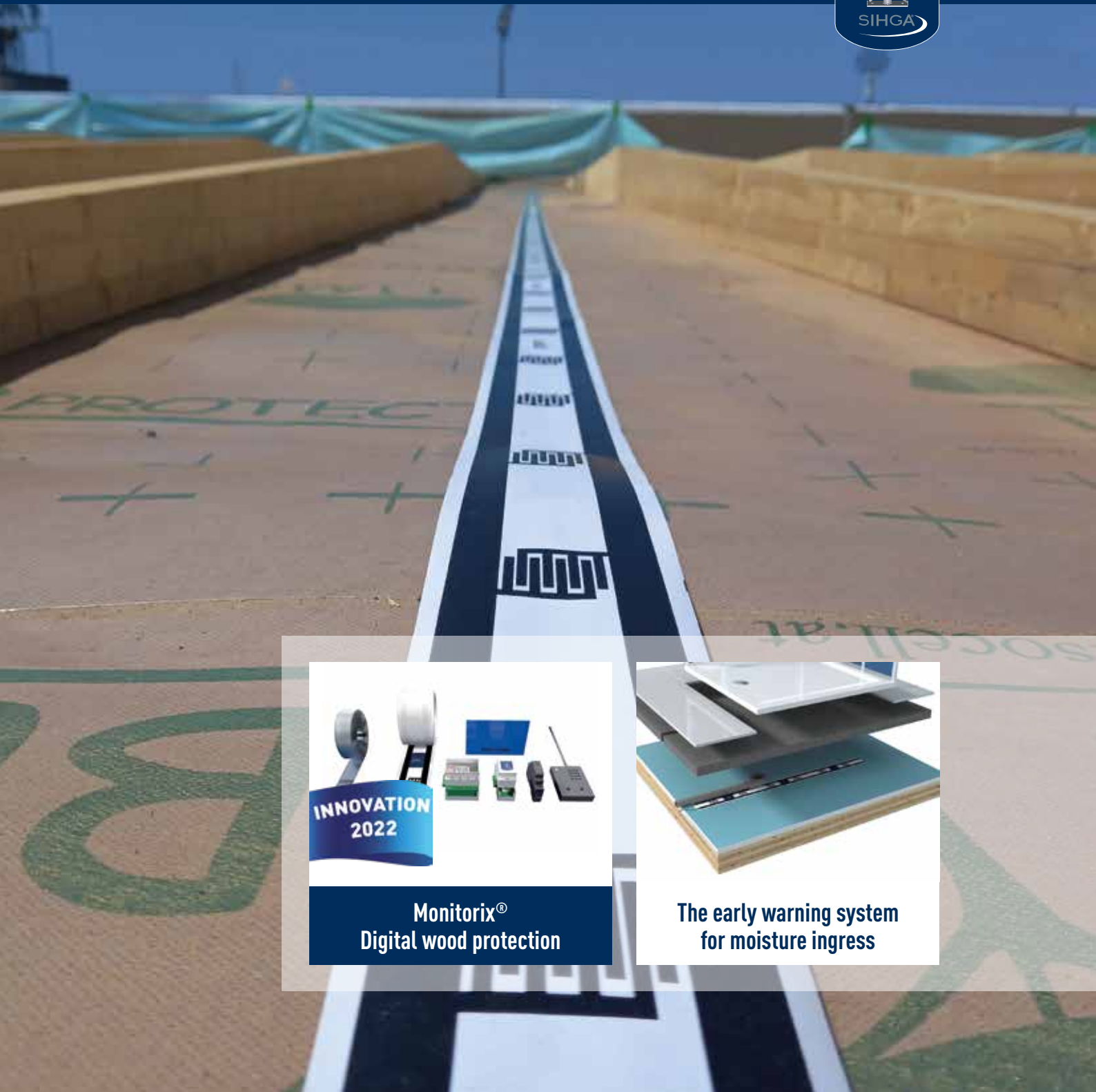
Type	L	B	S	S II
WF 210	210	79	12	17
WF 280	280	79	12	17



SIHGA® TIP:

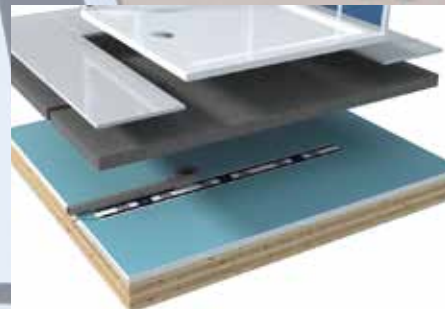
For installation of WabaFix® on concrete, we recommend BeziFix® Anchor.





**INNOVATION
2022**

**Monitorix®
Digital wood 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 (expert opinion from TU Chemnitz)

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

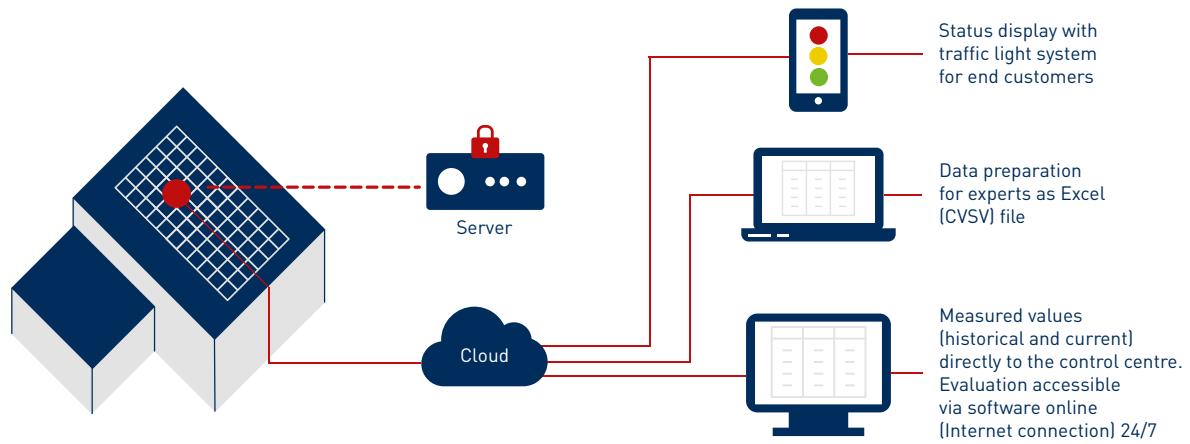
In a property monitored with Monitorix® there will hardly be any cases that you will have to remedy under warranty. And that remains the case for a (building's) lifetime!



SIHGA® TIP:

Low building insurance premiums: 3 months free of premium on contract signing + 10 percent additional discount on mains water insurance with Zürich insurance.

How it works



1 Permanent, area-wide data collection

2 Real-time data transmission to the server

3 Automatic data preparation

From practice



Art.No.: 20242

www.sihga.com

TAKE THE BEST



SIHGA® GmbH | Austria

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

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