Connecting Systems

for interior and exterior finishing, window construction, and wood structures



Connecting Your Ideas ...

KNAPP®
verbinder.com

patented by
KNAPP®

Innovative solutions Made in Austria Family Business since 1986 Your business partner for interior and exterior design window construction wood structures



For 40 years, our teams have been committed to working with our clients to offer cutting-edge and innovative assembly solutions. Drawing inspiration from the expectations and developments in the wood industry, our family business has made it its mission to develop high-quality products for creating invisible, self-tightening, and detachable joints for wood and wood materials.

Our story began with the development of a two-part connector named Champ, which has proven its worth millions of times to this day. Shortly thereafter, Friedrich Knapp invented the lamelloid solutions with self-clamping sharp edges, Fast, Silver, and Sunny. This avant-garde technology has since inspired many.

In this new catalog, you will find these still-relevant solutions, as well as our new generation of connectors for furniture bodies in lamelloid form, the FIYU family, along with several other product innovations.

This documentation now brings together all of our assembly and fixing systems for interior fittings and joinery, as well as our range of products for exterior joinery, including, among others, the FIXclip product family for invisible fixing and sealing of glazing beads, and the RICON® product family for post-and-beam structural assemblies for curtain walls. This latest range of small timber connectors allows for the creation of joints in wood sections from 20 mm thickness, with a capacity for glazing loads up to 1100 kg. The RICON® series is also available in an all-stainless version for the construction of uncovered outdoor wood structures, ideal for pergolas, for example, and is also adaptable for hybrid joints between wood, concrete, and steel.

Let yourself be inspired and find new ideas for your projects. We wish you many creative ideas with Knapp's assembly solutions!

The Knapp family

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Plastic biscuit connector with integrated locking tab, for RTA furniture, case goods, architectural millwork, gluing aid



SILVER 8

Aluminum die-cast biscuit connector with integrated locking tabs, for RTA furniture, case goods, miter joints



CHAMP 9

PA6 fiber-glass reinforced plastic biscuit connector, for furniture, case goods, and architectural millwork, without using clamps



METAL 9

Universal biscuit connector made of zinc die-casting, for pre-fabricated products, furniture, without using clamps



CHICO 10

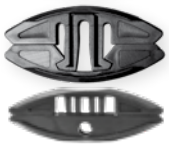
Aluminium die-cast slide-in connector, for furniture, interior design, hardwood cladding panels

KNAPP Snap-In Biscuit Connectors for Furniture and Architectural Millwork



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For façades, windows, stairs, paneling, cladding, handrails, and drip rails on exterior doors.



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For façades, windows, stairs, paneling, cladding, handrails, and drip rails on exterior doors.



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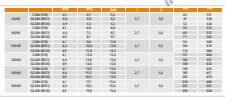
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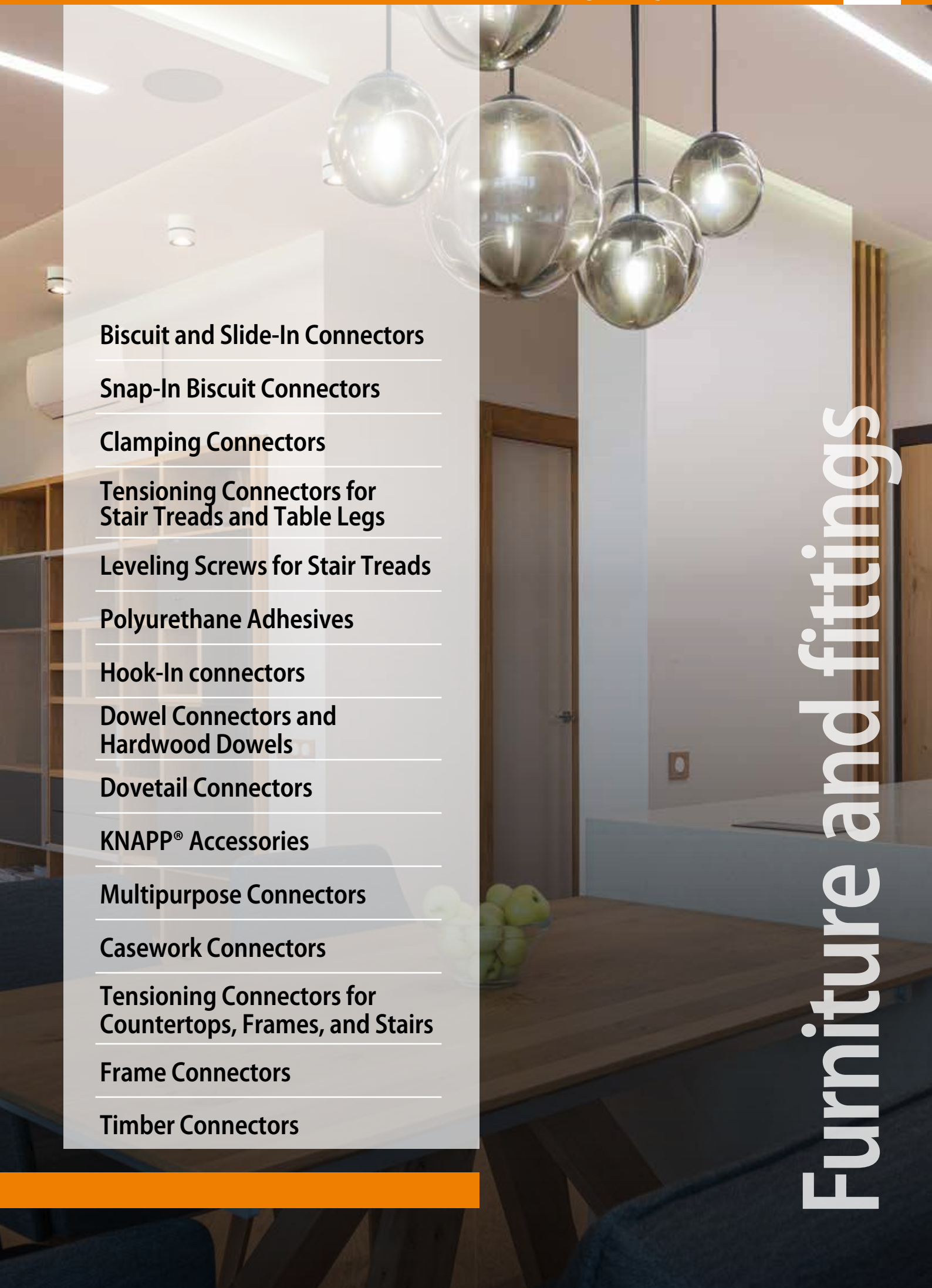
Connector sets with accessories and/or templates presented in ready-to-use boxes

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Small-quantity assortments of connectors

Symbols: these symbols can be found on every connectors' page in this brochure.

- H — Wood to wood connection
- G — Wood to glass connection
- S — Wood to steel connection
- K — Wood to plastic connection
- B — Wood to concrete connection
- Visible
- Concealed
- Enabling prefabrication in workshop
- Horizontal assembly
- Vertical assembly
- Assembly from all sides
- Flush installation
- Clamp-free
- Certifications



Furniture and fittings

Biscuit and Slide-In Connectors

Snap-In Biscuit Connectors

Clamping Connectors

Tensioning Connectors for Stair Treads and Table Legs

Leveling Screws for Stair Treads

Polyurethane Adhesives

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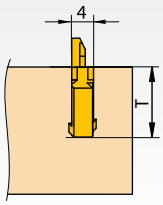
Timber Connectors

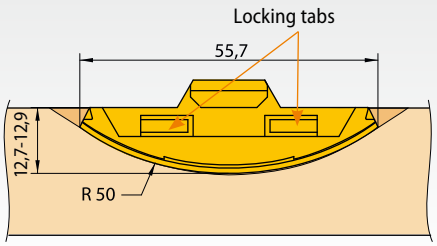
SUNNY

Slide-in biscuit connectors with integrated locking tab, plastic

Art.-No. K053







Applications:	Case goods, furniture, architectural millwork, shop fitting, clamping aid for miter joints and corners.
Advantages:	Concealed, self-tightening biscuit connector with integrated locking tabs.
Suitable materials:	All softwoods and board materials without laminate surfaces.
Installation:	Cut slot with biscuit joiner (#20) according to groove depth T. Knock-in both connector halves opposite of one another, following the radius of the biscuit cut using hammer and insertion tool.
Mounting:	Using the cutting edges on the side of the workpieces, which trace the base of the milling cut along the radius.
Accessorie:	Insert tool | Art.-No. K049/E



Cut #20 biscuit slot



Insert, knock in



Knock-in with the insert tool



Assemble

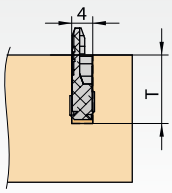
SUNNY

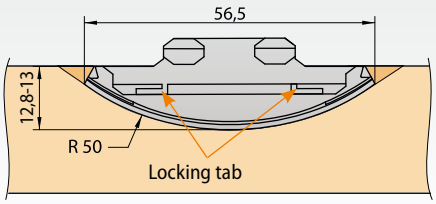
SILVER

Slide-in biscuit connector with integrated locking tabs, alloy-diecast

Art.-No. K049







Applications:	Case goods, furniture, architectural millwork, shop fitting, clamping aid for miter joints and corners.
Advantages:	Concealed, self-tightening, demountable connector with integrated locking tabs.
Suitable materials:	All softwood board materials.
Installation:	Cut slot with biscuit joiner (#20) according to groove depth T. Knock into the biscuit slot with a hammer following the radius of the cut.
Mounting:	Using the cutting edges on the side of the workpieces, which trace the base of the milling cut along the radius.
Accessorie:	Insert tool | Art.-No. K049/E



Cut #20 biscuit slot



Engage locking tabs (optional)



Insert, knock in



Knock-in with the insert tool



Assemble

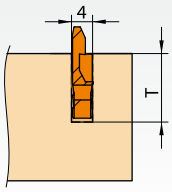
SILVER

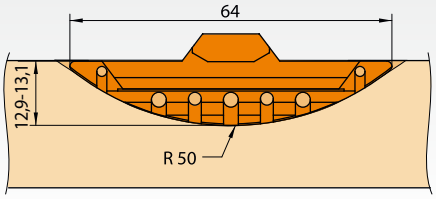
CHAMP

Slide-in biscuit connector, glass fiber reinforced plastic

Art.-No. K023







Tip: Moisten surface before gluing if wood is very dry.

Applications:	Case goods, furniture, architectural millwork, shop fitting, clamping aid for miter joints and corners.
Advantages:	Concealed, self-tightening, demountable.
Suitable materials:	All wood and board materials.
Installation:	Cut slot with biscuit joiner (#20) according to groove depth T. Apply KNAPP®-ADHESIVE PU+ into slot and insert connector halves.
Mounting:	By gluing with KNAPP®-ADHESIVE PU+.
Accessorie:	KNAPP®-ADHESIVE PU+ | Art.-No. Z011



Cut #20 biscuit slot



Glue



Position with template



Assemble

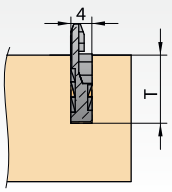
CHAMP

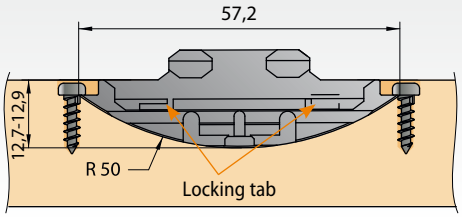
METAL

Slide-in biscuit connector, alloy-diecast

Art.-No. K026







Applications:	Case goods, furniture, architectural millwork, shop fitting, door frames.
Advantages:	Concealed, self-tightening, demountable connector with optional integrated locking tabs.
Suitable materials:	All wood and board materials.
Installation:	Cut slot with biscuit joiner (#20) according to groove depth T. Insert both connector halfs into the biscuit cuts and mount by means of PH-screws.
Mounting:	Screw in with PH-screws.
Accessories:	PH-screw 3x13 mm | Art.-No. Z600, PH-screw 3x25 mm | Art.-No. Z601





Cut #20 biscuit slot



Engage locking tabs (optional)



Screw in



Assemble

METAL

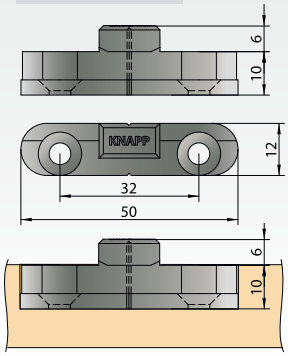
CHICO

Slide connector, alloy-diecast

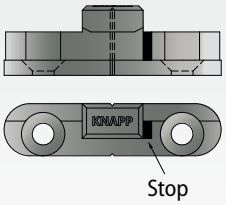
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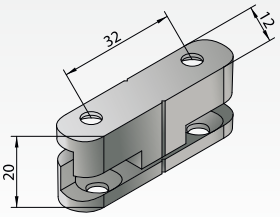


Art.-No. K030/OA

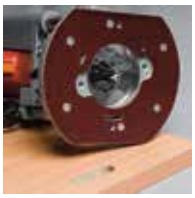


Art.-No. K030/MA





Applications:	Heavy furniture, case goods, panels.
Advantages:	Concealed, self tightening, demountable with integrated stop.
Suitable materials:	All wood and board materials.
Installation:	Cut mortise with plunge router or CNC machine.
Mounting:	Screw in with CS Ø 4,5 mm.



Cut #20 biscuit slot



Insert



Screw in **a**



Screw in **b**



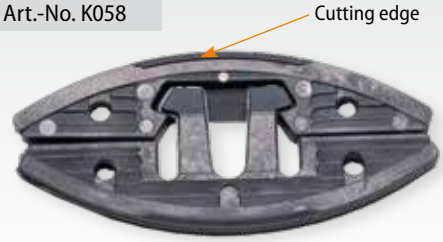
Assemble

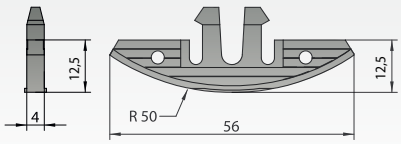
CHICO

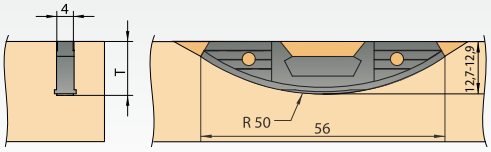
FAST

Clip-in biscuit connector, plastic

Art.-No. K058







Applications:	Case goods, furniture, architectural millwork, face frames, door and window casing, clamping device for miter joints and corners.
Advantages:	Concealed, self-tightening, demountable connector, immediately load bearing.
Suitable materials:	All softwoods and board materials without laminated surfaces.
Installation:	Cut slot with biscuit joiner (#20) according to groove depth T. Knock-in both connector halves following the radius of the biscuit cut using hammer and insertion tool.
Mounting:	Using the cutting edges on the side of the workpieces, which trace the base of the milling cut along the radius - Optionally, glue prior to insertion with KNAPP®-ADHESIVE PU+ for a stronger hold.
Accessories:	Insert tool | Art.-No. K049/E





Cut #20 biscuit slot



Insert, knock in



Knock-in with the insert tool



Assemble

FAST

FIYU® FAST 10 + FIYU® FAST 14

Knock-and-plug-In cabinet connector

Benefits:

- Flush-mounted, pre-assembled connector for optimal stackability
- Can be used as a connector for cabinet bodies, fronts, profile strips, and cladding
- Can withstand loads in three directions
- Self-locking
- Immediate, secure hold and high load-bearing capacity
- Can be dismantled and is concealed
- No need for mounting or installation
- Compact and precise guidance
- Suitable for both manual and industrial use
- Provides high clamping force with 100% accuracy

FIYU® FAST 10

Art.-No. K860

+ Optional tensioning screw M5x13 mm | Art.-No. K857



- For 12 mm material thickness and above
- For 10 mm pendulum groove milling



Installation



FIYU® FAST 10 can, for example, be used as a connector for honeycomb panels with a panel thickness of 12 mm or more.



Fit into the pre-milled grooves on the opposite side.



Position the connectors (do not install them offset!) and plug them together



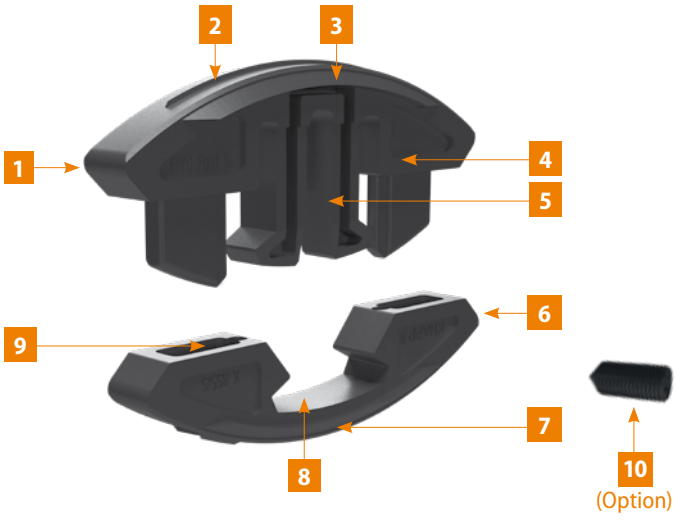
Join components with or without adhesive

FIYU® FAST 14

Art.-No. K855

+ Optional grub screw M6x12 mm | Art.-No. Z428

1	**FIYU® FAST 10 + 14 – Spreading lamella**
2	Fixing edge
3	Cutting edges
4	Guide pin
5	Spring hook
6	**FIYU® FAST 10 + 14 – Clamping lamella**
7	Cutting edge
8	Spring hook receiver
9	Slots for guide pins
10	Grub screw 6x12 mm (optional)



- For 16 mm material thickness and above
- For 14 mm pendulum groove milling

FIYU® LOCK 14

Knock-and-plug cabinet in connector, plastic

Standalone or two-part assembly

Art.-No. K856/S plug-in element	Art.-No. K859
= FIYU® LOCK 14 **plug-in part**	= FIYU® LOCK 14 **plug-in part** + **receiving element** | Art.-No. K856/S + Art.-No. K856/A



Benefits:

- Flexible assembly sequence
- Mechanically lockable
- Self-locking
- Dismantlable and concealed
- Immediate, secure hold and high load-bearing capacity
- No need for hanging or assembly
- Compact and precise guidance
- Suitable for both manual and industrial use
- Provides high clamping force with 100% accuracy

- For 16 mm material thickness and above
- 14 mm Pendelnutfräsung

(Option) for individual piece

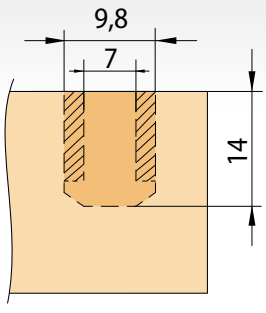
1	**FIYU® LOCK 14 – plug-in part**
2	Cutting edge
3	Spring lamella (3,6 mm)
4	Hole for optional fixation
5	Slot shaped recess for the spring lamella
6	**FIYU® LOCK 14 – receiving element**
7	Optional tensioning screw M5x13 mm

Installation for all FIYU® products

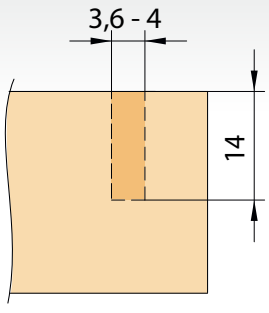


1. Insert the connector.
2. Activate the self-locking mechanism.
3. Join the parts together..
4. Assemble the piece of furniture.

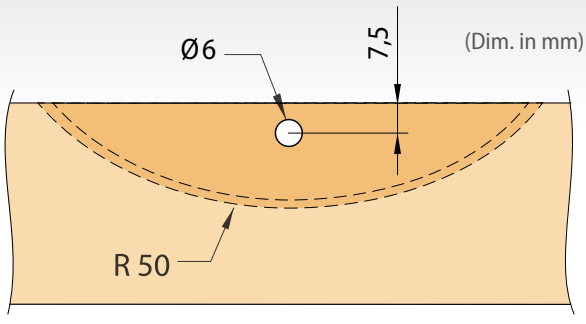
Groove dimensions



FIYU® FAST 14 and FIYU® LOCK



FIYU® LOCK



Applications:	For cabinet units, fixed shelves, mitre-cut junctions and intermediate uprights, or for fixing trim, removable covers and surface-mounted mouldings.
Advantages:	Concealed, self-tightening, re-assemblable tongue and groove connector, immediately ready for use.
Suitable materials:	All types of timber, wood-based and plastic materials (FIYU® LOCK 14 and FIYU® FAST 14), of 16 mm thickness and above. All softwoods and board materials (FIYU® FAST 10), of 12 mm thickness and above.
Installation:	With CNC machine or special biscuit machine, adjust depth setting accurately. Insert the parts into the milled groove.
Mounting:	insert plug-in part and holding part into milled groove, and clip the components together.
Accessories:	Grub screw FIYU® 6x12 mm (FIYU® FAST) | Art.-No. Z428, Tensioning screw M5x13 mm (FIYU® LOCK) | Art.-No. K857, Allen key with ball end | Art.-No. K647

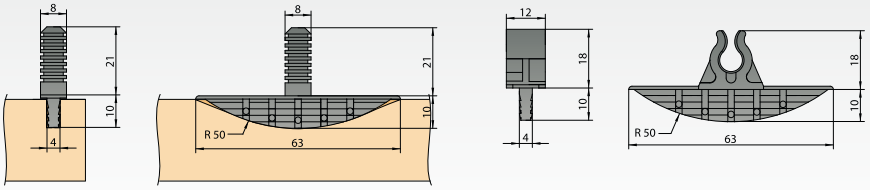
FIYU

CLIPS

Clip-in biscuit connector, plastic

Art.-No. K054





Tip: Moisten surface before gluing if wood is very dry.

Applications:	Cabinets, case goods, removable panels, toe kicks, miter joints, shop fittings.
Advantages:	Self-tightening, demountable connector, adjustable (with or without gap).
Suitable materials:	All wood and board materials.
Installation:	Cut slot with biscuit joiner (#20) according to groove depth T.10, apply KNAPP®-ADHESIVE PU+ into biscuit cut and insert connector halves.
Mounting:	With KNAPP®-ADHESIVE PU+.
Accessories:	KNAPP®-ADHESIVE PU+ | Art.-No. Z011







Cut #20 biscuit slot



Glue



Insert



Assemble

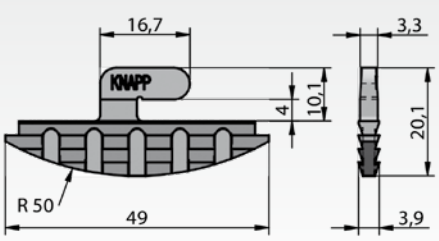
CLIPS

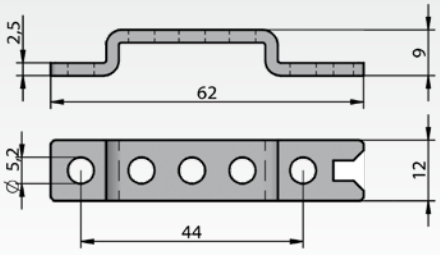
KOMBI

biscuit connector, alu/zinc diecast

Art.-No. K614 Art.-No. K615







Applications:	Architectural millwork, wall/facade paneling and cladding.
Advantages:	Concealed, self-tightening biscuit connector.
Suitable materials:	All wood and board materials.
Installation:	Cut slot with biscuit joiner (#20) adjusting depth to 10 mm.
Mounting:	install with PH-screws Ø 3x25 mm or glue with KNAPP-ADHESIVE PU+.
Accessories:	PH-screw 3x13 mm | Art.-No. Z600, PH-screw 3x25 mm | Art.-No. Z601, CS stainless steel screw A2 4,5x35 mm | Art.-No. Z409, KNAPP® Adhesive PU+ | Art.-No. Z011



Positioning



Mount KOMBI bracket with screws



Simply hook in the components



Can be detached if needed

KOMBI

DEKLICK® maxi

Clamp connector

Benefits:

- Quick snap-fit assembly – vertically and horizontally
- Efficient prefabrication and tool-free assembly
- Flexible joint design
- Stable – glued with KNAPP®-Adhesive PU+ for particularly high load-bearing capacity
- Quick assembly – the joint can be loaded immediately after assembly
- Longitudinal channels distribute the adhesive and prevent the surface from bulging



DEKLICK® maxi versions



Art.-No. K010/Set black

= DEKLICK® maxi lamellar clamp | Art.-No. K011/S

+ DEKLICK® maxi block | Art.-No. K010/S

Removable version, black (F_{max} = 8 kg)



Art.-No. K010/Set grey

= DEKLICK® maxi lamellar clamp | Art.-No. K011/G

+ DEKLICK® maxi block | Art.-No. K010/G

Extra grip version, grey (F_{max} = 20 kg)



Art.-No. K012/Set black

= DEKLICK® maxi screw clamp | Art.-No. K012/S

+ DEKLICK® maxi block | Art.-No. K010/S

Screw clamp version, black (F_{max} = 8 kg)

1	**DEKLICK® maxi clamp (plastic)**
2	Lamellar bar for gluing
3	Positioning lug
4	Stop pin for transverse fixation
5	Clamp hook with clip function
6	**DEKLICK® maxi block (plastic)**
7	Bloc coupling profile
8	Fixing screw
9	Crosswise holes for screw connection
10	Stop and latching lugs

DEKLICK® mini

Clamp connector



DEKLICK® mini



Art.-No. K016/Set black

= DEKLICK® mini screw clamp | Art.-No. K014

+ DEKLICK® mini block | Art.-No. K013

Screw clamp version, black (F_{max} = 10 kg)

1	**DEKLICK® mini screw clamp (plastic)**
2	Positioning lug
3	Clamp hook with clip function
4	**DEKLICK® mini block (plastic)**
5	Bloc coupling profile
6	Crosswise holes for screw connection

Applications:	For interior and exterior use, acoustic ceilings, wall panels as well as furniture and interior fittings.
Advantages:	4 variants for controlled resistance and more possible uses.
Materials:	POM -acetal plastic- (resilient) and polyamide (UV and weather resistant, recyclable).
Installation:	Cordless screwdriver, flat dowel machine, CNC milling machine, various milling machines, profile milling cutter for block strip and decorative strip.
Mounting:	Position, screw (e.g. SK stainless steel screw 5x50 mm), clip on, glue (KNAPP® adhesive PU+) and clip on.
Accessories:	CS screw inox A2 5x50 mm | Art.-No. Z950, CS screw inox A2 4,5x35 mm | Art.-No. Z409, CS-screw 4x16 mm | Art.-No. Z422, CS-screw 4x30 mm | Art.-No. Z429, EURO-screw 6,3x10 mm | Art.-No. Z510, PH-screw 4x16 mm | Art.-No. Z789, DEKLICK® mini punch | Art.-No. K015 square nut M6 DIN 562 | Art.-No. Z896, Torx Bit T15 | Art.-No. Z411, Torx Bit T25 | Art.-No. Z412, Milling cutter DEKLICK® | Art.-No. Z658, DEKLICK® shank milling cutter for block rail | Art.-No. Z893, Cutting head for DEKLICK® H 20/4 with Ø30 mm borehole | Art.-No. Z894, KNAPP®-ADHESIVE PU+ | Art.-No. Z011.

DEKLICK® clamp connector

For indoor and outdoor use - 4 versions: screw clamp (maxi & mini), removable, and extra grip

DEKLICK

DEKLICK® – Solution for elegant walls and ceilings



Acoustic ceilings

For invisible fastening, DEKLICK® combines a block or a block rail milled from wood as a base with a clamp as a counterpart which is simply clipped on and locks securely in place in a two-steps process.



Decorative walls

DEKLICK® block has both lateral and axial holes so that it meets a wide variety of screw connection requirements. With a centre screw connection in the axial direction, the connection is automatically aligned in the direction of alignment.



Partitions, Screens

The **screw clamp version** of DEKLICK® maxi is used for quick fastening. However, it offers additional processing possibilities. The clamps can be attached directly to the construction elements with EURO-screws, or in the 32 mm raster.

Installation on a wooden block rail - Final width ± 60 mm



As an alternative to the DEKLICK® maxi blocks, it is possible to fix the clamp to a wooden milled block rail (milling cutter available on request).



The milled block rail is screwed onto the load-bearing structure and placed in position. The clamps are easy and flexible to move along the length of



the block rail or are perfectly fixable if necessary. Assembly with block rails is ideal for large surfaces.

Pairing blocks, for easy assembly of several elements



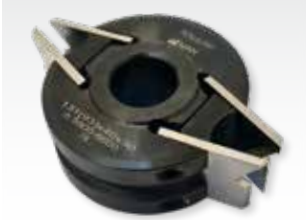
Join the blocks and screw them together with Ø4 mm CS-screws.

DEKLICK® shank milling cutter for block rail



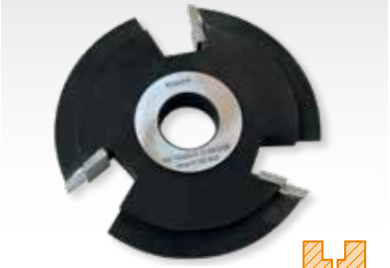


Milling cutter DEKLICK®





Grooving cutter for DEKLICK® H 20/4 with Ø30 mm borehole





Lamellar DEKLICK®maxi installation with wooden block rail



Position the block strip and screw it in place.



Clip the clip onto the block strip.



Mill 4x12 mm grooves and fill KNAPP® Adhesive PU+ into the groove or apply to the slat bar.



Attach the slats to the clamp. Allow the adhesive to bond.

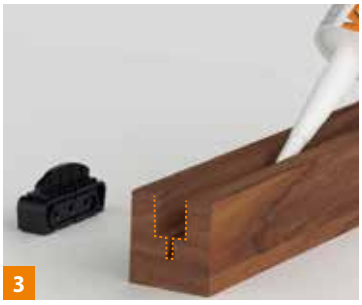
Lamellar DEKLICK®maxi installation with wooden block



Position and fix the block onto the base with screw.



Clip the clamp onto the blockk.



Mill a 2-level groove and fill it with KNAPP® Adhesive PU+ or apply the adhesive on the block rail. Clip the workpiece onto the clamp.



Clip the decorative wooden strips over the clamps and allow the glue to harden.

Safety advice:

If necessary, attach additional fasteners to ceilings or and elements. Observe the general building regulations in your application project.

Installing DEKLICK® screw clamp directly to the wall



Position DEKLICK® maxi screw clamp using the screw holes.



For fixing to wood-concrete or screw directly to the wall.

Panel installation with clamp screw



Pre-drill a Ø 5 mm hole for the EURO-screw.



Screw down.

Installing the screw clamp with fixed or adjustable positioning



Fasten with Ø 4 mm CS-screws.



Adjust ± 2 mm.

Screw clamp installation with block and block strip



DEKLICK® maxi block (extra grip) with screw clamp.



Block rail with lamellar clamp.

easy-con®

Tension element for table legs and stair treads





Art.-Nr. Z330 easy-con® M8-16-50



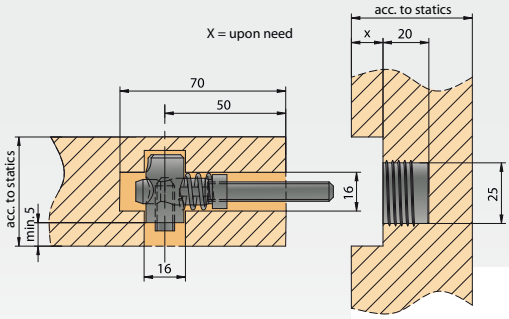
Art.-Nr. K883 easy-con® M8-16-40

NEW

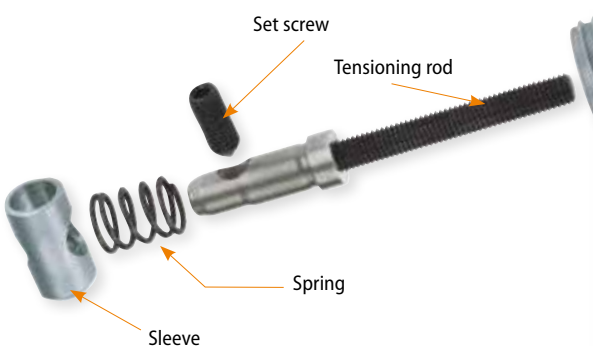


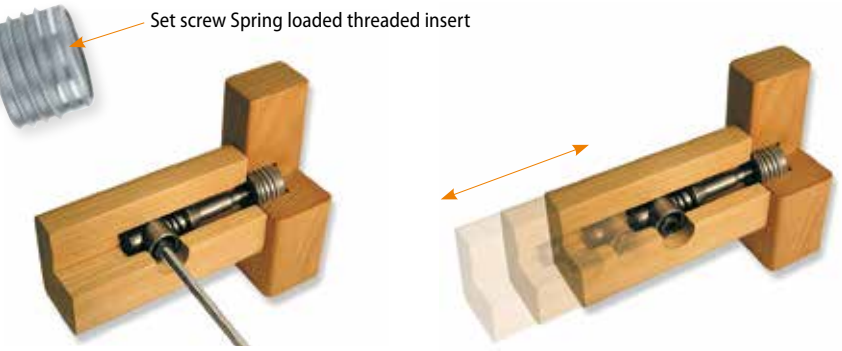
Art.-Nr. Z336 easy-con® M8-16-25





Applications:	Table leg to table tops and stair tread to stringer connections.
Advantages:	Non-visible, demountable, self-tightening, strong.
Suitable materials:	All wood materials (solid and composite).
Traction strength:	3 kN.
Installation:	Pre-drill holes and insert connector pieces.
Mounting:	Attach both components and tighten set screw.





Example of table leg to table top connection

Stair installation: Tread can be mounted both on top or on the side of the stringer.



Screw-in threaded insert (SW 10)



Insert clamping elements in holes



Tighten elements (SW 4)



Stair steps attached and secured, connected with easy-con®

made in Germany

EASY-CON

TREPPO

Levelling screw for stair treads



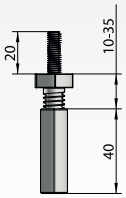




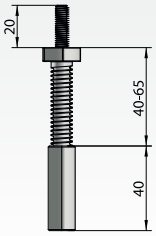


Art.-No. Z300	Art.-No. Z310	Art.-No. Z320
40 mm	70 mm	100 mm

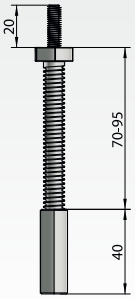




Treppo 40



Treppo 70



Treppo 100

Tip: Moisten surface before gluing if wood is very dry..

Applications:	Stair tread assembly for new construction and renovations.
Advantages:	Height-adjustable mounting screw for steps to compensate for height diff erences with concrete steps.
Suitable materials:	Wood stair treads attached to concrete, stone, and metal.
Installation:	Concrete Ø 14 mm and If wood Ø 6 mm drilling. Bonding with KNAPP®-ADHESIVE PM+ in the borehole.
Mounting:	By gluing into the holes with KNAPP®-ADHESIVE PM+.
Accessories:	KNAPP®-ADHESIVE PM+ | Art.-No. Z010

Installation


Pre-drill hole


Glue and insert


Transfer bore holes


Glue and assemble

TREPPO

Other assembly or fixing solutions for staircases, balustrades and handrails available:
DUO30 (p.20), ZIPBOLT (p. 34), DUO-System (p. 39), RICON® (p. 48)

KNAPP®-ADHESIVE

One-component polyurethane adhesives



+++ Solvent-free +++ Thixotropic – no drip +++ Coatable + + +

NEW glass fibre reinforced

KNAPP®-ADHESIVE PU+
Fibre reinforced
- Glass fibre reinforced
- High strength
- Viscoplastic adhesive joint

KNAPP®-ADHESIVE PU+
- For thin adhesive joints
- For smooth surfaces
- Semi-hard adhesive joint

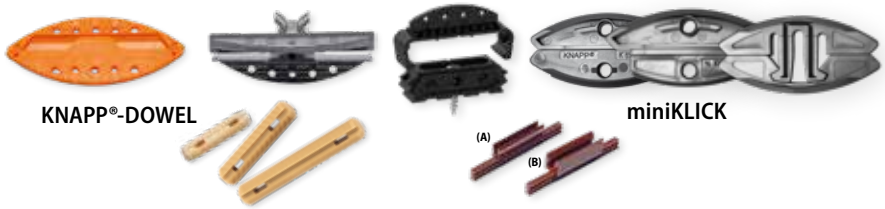
KNAPP®-ADHESIVE PM+
- Joint-filling for thick adhesive joints
- Foams only lightly
- Strong elastic adhesive joint

Article	KNAPP®-ADHESIVE PU+ Fibre reinforced (Z012)	KNAPP®-ADHESIVE PU+ (Z011)	KNAPP®-ADHESIVE PM+ (Z010)
Application	Craftsmanship, stairs, window, and door construction for universal assembly adhesives in industry and trade, renovations, and overhead installations.	From furniture to window production on smooth surfaces.	For assembly work on uneven surfaces.
Properties	Newly developed polyurethane-based construction adhesive, has a particularly force-reinforcing effect thanks to fibre-glass fibres, water-resistant according to EN 204 class D4.	Easy to use one-component polyurethane adhesive, water-resistant according to EN 204 Class D4.	Easy to use, all purpose, one component polyurethane adhesive, joint-filling, water-resistant according to EN 204 class D4.
Processing	Apply on one side, swells during curing, skin forming time approx. 7 min, functional strength after approx. 20 min, curing time approx. 24 h, processing temperature min. +7 °C, material humidity <8%, bonding tests recommended.	Apply on one side, swells during curing, skin forming time approx. 10 min, functional strength after approx. 20 min, curing time approx. 24 h, processing temperature min. +7 °C, material humidity 8-18%, bonding tests recommended.	Apply on one side, swells during curing, skin forming time approx. 7 min, functional strength after approx. 20 min, curing time approx. 24 h, processing temperature min. +7 °C, material humidity 8-18%, bonding tests recommended.
Materials	Various wood and building materials and ceramics. Gluing of wood e.g. larch and metals e.g. aluminium, copper, brass, thermosets and thermoplastics. Colour: transparent-opaque.	Various types of wood and building materials, as well as plastics, stone, ceramics, metal and KNAPP® connectors, e.g. TREPPO (2-3 cartridges for 100 drill holes). Colour: beige.	A wide variety of wood materials, as well as plastics, stone, metal and all the recommended KNAPP® connectors. Colour: white.
	High bonding strength for end grain gluing. Can be subsequently powder-coated (30 min/+200°C) Polyurethane adhesive - also suitable for sauna construction - Resistant to permanent temperatures up to 120°C. By using spray mist, the curing time is reduced by 50%.		
Bonding	Apply to clean, grease- and dust-free surfaces. General processing instructions in the Technical and Safety Data Sheet for download.		

ADHESIVE PU+ FIBRE REINFORCED | ADHESIVE PU+ | ADHESIVE PM+

KNAPP®-ADHESIVE PU+ is recommended for:

CHAMP | CLIPS | DEKLICK® | FIYU®



KNAPP®-DOWEL | miniKLICK

KNAPP®-ADHESIVE PM+ is recommended for TREPPO:



DUO 30, DUO 35

Panel / Hook-in connectors made of steel

Benefits:

- Easy to mount, concealed and immediately load bearing
- Shallow drilling depth – only 3 mm
- Available in Ø 30 and 35 mm
- Optionally mL / oL (with / without sideways tolerance)
- Installed with standard CS-screws or EURO-screws
- Latch the connection with optional locking clip



Installation example:
Fixing of door panel linings, water discharges, decorative parts.

DUO 30 mL

Art.-No. K070



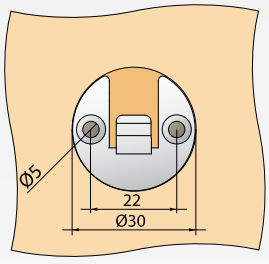
CS-screws 3,5x16 mm
(not included)
Art.-No. Z502

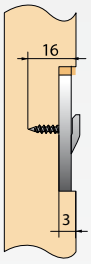


DUO 30 oL

Art.-No. K074







Hooking way 15 mm
Drilling depth 3 mm

DUO 35 mL

Art.-No. K061

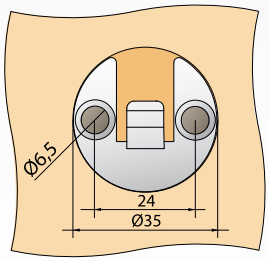


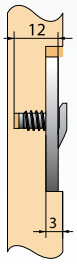
Optimized for CNC-processing:
Euro-screws 6x10 mm



DUO 35 oL

Art.-No. K062





Hooking way 12 mm
Drilling depth 3 mm

Installation example:
Handrail mounting



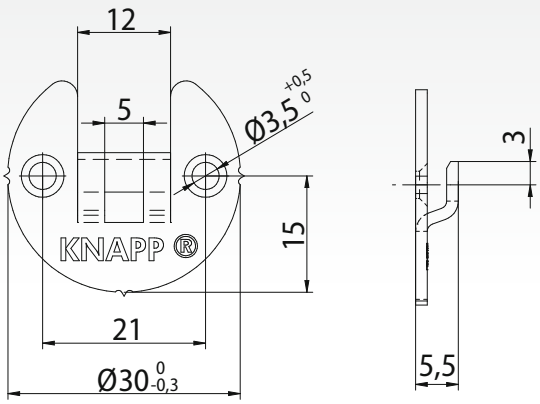
Applications:	Facades and windows, staircases and handrails, cabinet end panels, door and window casing.
Advantages:	Concealed, self-tightening, demountable connector which allows shrinkage and expansion moving (mL = with tolerances) or for exact placing (oL = with no tolerances).
Suitable materials:	All kinds of wood and particle boards.
Installation:	Drill 3 mm deep holes using the KNAPP® Forstner Bit Ø 30/35 mm with drilling jig or with CNC equipment.
Mounting:	Mount DUO 30 with (suggested) CS-screws 3,5x16 mm / DUO 35 with (suggested) Euro-screws 6x10 mm. Screws length depends on application.
Accessories:	KNAPP® Forstner Bit (Ø 30/35 mm, adjustable depth gauge) | Art.-No. Z070 / Art.-No. Z071 Center punch DUO 30/35 | Art.-No. K071 / Art.-No. K069, Handrail punch DUO 30 | Art.-No. K075 Adjustable boring template DUO 30/35 | Art.-No. K563.

DUO 30-35

DUO 30 inox A5

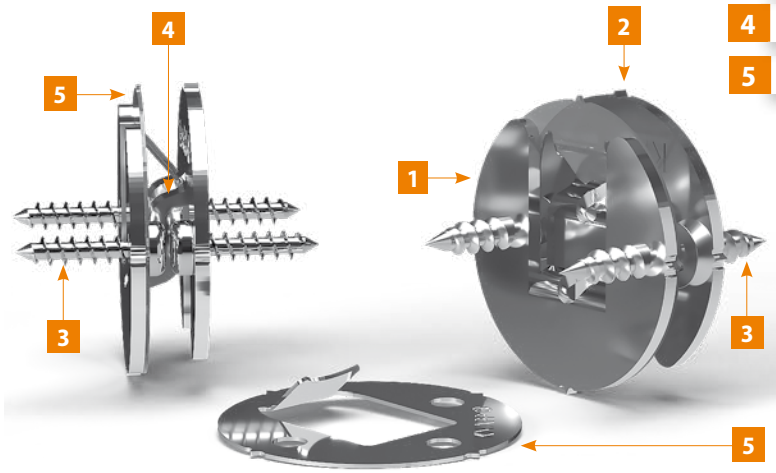
The inox A5 suspension hook connector

Art.-No. K350

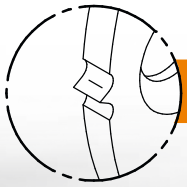


Benefits:

- Precise and invisible
- Extremely weatherproof
- High degree of corrosion resistance (A5)
- Immediate tensile strength, demountable
- Easy to install - simple positioning and mechanical retention in the drill hole thanks to the holding tips
- Easy to fit together without additional tools



1. Round shaped steel bracket (A5)
2. Positioning and holding tips
3. Fix with PH screws 3x13 mm (A2)
4. Dovetail hook
5. Locking clip (A2)



Applications:	For façades, wall and ceiling cladding, panels, mouldings (ship and yacht building, sauna construction, outdoor), and constructions that require a high degree of weathering and corrosion resistance.
Advantages:	Corrosion resistance (A5)
Suitable materials:	All woods, wood-based materials and plastics
Installation:	Screw in with PH screws TCT Forstner drill bit 30 with adjustable brad point, bench drill or CNC
Mounting:	Position, press in and screw or glue together
Accessories:	Locking clip inox (A2)| Art.-No. K121, Centre punch DUO 30 | Art.-No. K071 PH-screw inox A2 3x13 mm | Art.-No. Z631 TCT Forstner drill bit 30 with adjustable brad point (Ø 30 mm) | Art.-No. Z070 Drilling template suitable for DUO 30 | Art.-No. K563

DUO 30 INOX

Installing DUO 30 inox A5


Drilling with template or according to mark


Mark counter part drilling position with centre punch


Install the locking clip to secure the assembly


Position the connector using the holding tips


Secure with PH screws


Assemble

UNO 30

Stainless steel A2 hook connector with optional locking clip

Art.-No. K117	UNO 30 inox set
Art.-No. K120/B	UNO 30



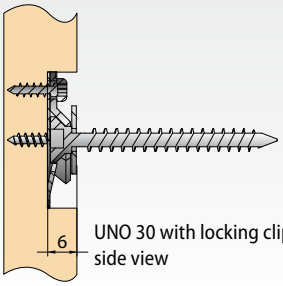


Art.-No. K120	UNO 30 garniture

(with CS-holding screw 5x50 mm)

PH-screw inox A2 3x13 mm
CS-holding screw A2 5x50 mm

Additional screw lengths
available upon request



UNO 30 with locking clip, side view

Applications:	Paneling, facades, handrails, furniture (use with or without locking clip).
Advantages:	Concealed, self tightening, demountable connector for 30 mm drills.
Suitable materials:	All wood materials including concrete and drywall with use of wall anchor.
Installation:	Drill a 7 mm deep hole using the KNAPP Forstner Bit Ø 30 mm using center punch and drilling jig or with CNC.
Mounting:	Screw-fastening with PH-screw Ø 3.5 mm, only 6 mm recess depth.
Accessories:	KNAPP® Forstner bit with adjustable depth stop (Ø 30 mm) | Art.-No. Z070 Center punch UNO 30 | Art.-No. K073 Adjustable boring template UNO 30 | Art.-No. K563





Drill with jig



or according to mark



Screw in the connector part



Mark counter part with center punch



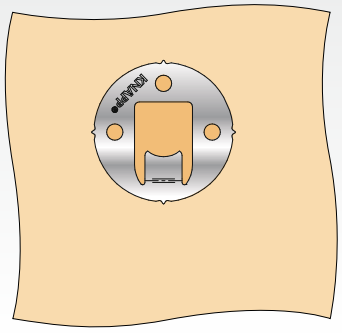
Install with screws

UNO 30

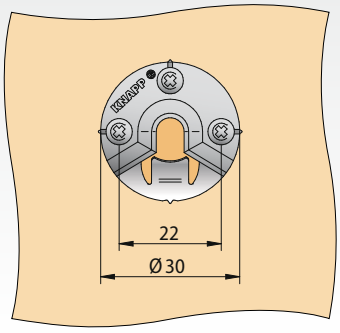
Locking clip

Spring steel locking clip for DUO 30 inox and UNO 30

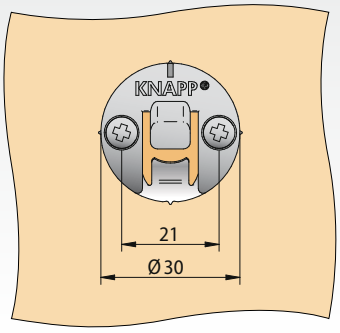
Art.-No. K121



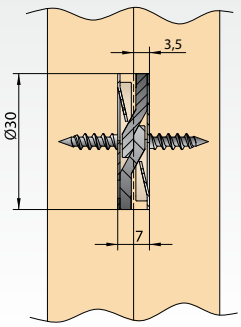
UNO 30 with locking clip



DUO 30 with locking clip



DUO 30 with locking clip , side view



Applications:	For securing joints in the opposite direction to assembly.
Mounting:	Insert beneath DUO 30, DUO 30 inox A5 or UNO 30 bracket prior to mounting with screws.
Advantages:	Locking clip holds up to 24 kg (failure load approx. 73 kg).

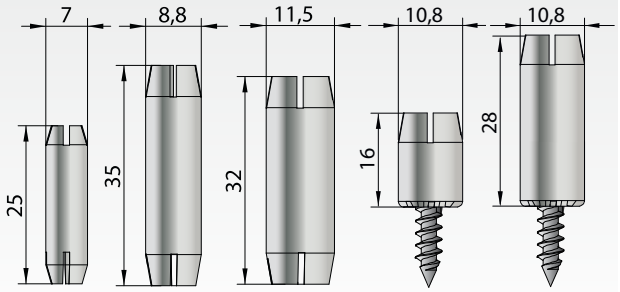
TUCK

Spring steel dowels

Art.-No. Z5052	Art.-No. Z5053	Art.-No. Z5055	Art.-No. Z5055B	Art.-No. Z5055A
6x28 mm	8x35 mm	10x32 mm	10x16 mm	10x28 mm



TUCK Screw-In Version



Applications:	Cabinets, case goods, architectural millwork, shop fitting. Anywhere standard wood dowels are used.
Advantages:	Concealed, self-tightening compression dowel, immediately load bearing.
Suitable materials:	All kind of wood materials (solid and composite).
Installation:	Dowel drilling jig, Doweling joiner, CNC drilling.
Mounting:	Insert or screw on the TUCK.



Multi-spindle boring machine



or Duo Dowel machine



Knock in



or screw-in



Assemble

TUCK

MILLER DOWEL

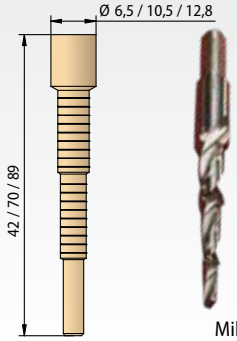
Timber pegs for natural wooden furniture

Art.-No. Check online-store

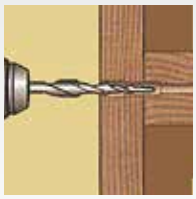
Miller Dowel Mini-X: Ø 6,5x42 mm

Miller Dowel 1x: Ø 10,5x70 mm

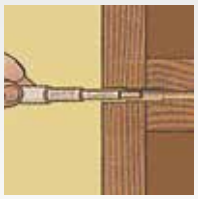
Miller Dowel 2x: Ø 12,8x89 mm



Miller Dowel TruFit Drill Bit



Drill



Apply wood glue and position



Knock in

Applications:	For connecting ecologically decorative furniture.
Advantages:	Easy installation, decorative design, and ECO - friendly material.
Suitable materials:	Solid wood, plywood, MDF.
Installation:	Drill with custom stepped drill bit, apply adhesive in borehole and insert dowel.
Mounting:	Drill and knock in.
Accessories:	MILLER® TruFit Drill Bit | Art.-No. Z01D, Z02D, Z03D (check online-store).



Available in Birch, Oak, American nut and Cherry woods.



Case goods



Load bearing connections



Frame connections

MILLER DOWEL

KNAPP®-DOWEL

Selftightening plastic dowels

Benefits:

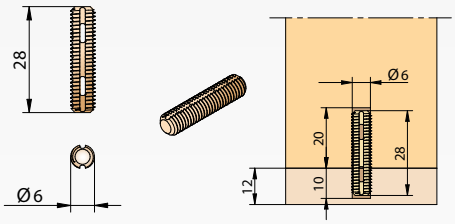
- Effective prefabrication – doweling jig or automatic doweling machine
- Fast installation – connection can be used immediately after insertion
- Design - channel along dowel allows for smooth distribution of adhesive and prevents surface from bulging
- No shrinking or swelling will occur, thus no risk of breaking or splitting as with wooden dowels
- Weather resistant – high quality polyacetal (POM) plastic for interior and exterior use
- Strong hold – through additional bonding with KNAPP® ADHESIVE PU+

KNAPP®-DOWEL 6 mm

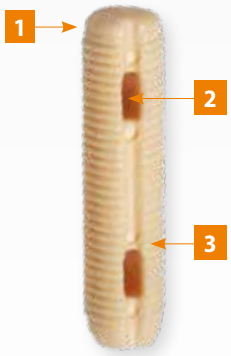
Art.-No. K066

6x28 mm





Tip : Moisten the surface of very dry wood before gluing.



1 High strength and weather-resistant plastic.

2 Slots and longitudinal channels ensure anchoring in tension when using KNAPP®-Adhesive PU+, The adhesive creates a force-locking connection between the components during curing.

3 Threaded design allows for quick installation and unscrewing of KNAPP® Dowel if necessary.

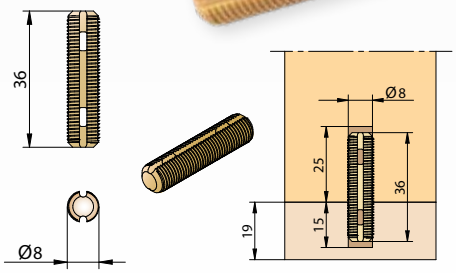
KNAPP DOWEL

KNAPP®-DOWEL 8 mm

Art.-No. K067

8x36 mm





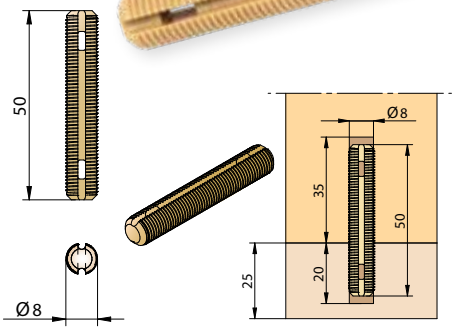
Applications:	Case goods, furniture, architectural millwork and shop fitting, windows. Wherever wood dowels can be used.
Advantages:	UV-resistant, self-tightening dowel.
Suitable materials:	All kind of wood materials (solid and composite).
Installation:	Drill holes with doweling jig or doweling joiner. Insert by hand with hammer or automated dowel insertion machine. Optionally, insert adhesive before inserting dowel.
Mounting:	Gluing with KNAPP®-ADHESIVE PU+.
Accessories:	KNAPP®-ADHESIVE PU+ | Art.-No. Z011

KNAPP®-DOWEL 8 mm

Art.-No. K169

8x50 mm





Tourillons KNAPP®

Installation



Drill a hole with Multi-spindle boring machine



or DUO Dowel machine



For stronger hold use KNAPP Adhesive PU+"



Knock in



Assemble

Application: Panel materials and example of processing dowel insertion tools



Serial installation of KNAPP® dowels with the dowel insertion machine GANNOMAT Selekta.



Drilling machine GANNOMAT Optima



Dowel inserter GANNOMAT Selekta

KNAPP®-Dowels are also used for wooden windows and doors.

Find more details about this application on page 67 and on our website.

Other machine suggestions for the installation of our connectors on page 30.

VIDEO

Outdoor and indoor areas applications: wooden windows, boat, garden furniture, laboratory equipment, door frames



Drill



Glue



Assemble



Boat building



Outdoor furniture



Door frames

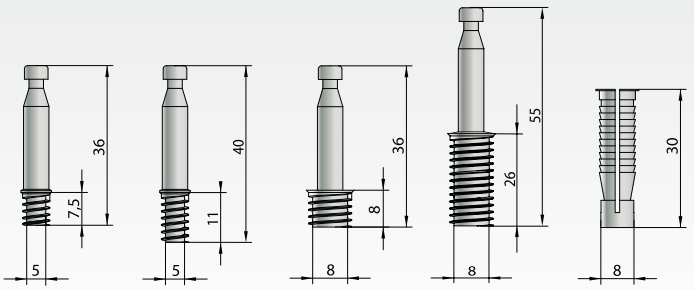
Andi Brandner

QUICK-SET

2-parts locking dowels

Art.-No. Z5058	Art.-No. Z5056	Art.-No. Z5057	Art.-No. Z5059
5 x 7,5 mm bolt	5 x 11 mm bolt	8 x 8 mm bolt	8 x 26 mm bolt





Treaded stud for Ø 5 mm hole | Treaded stud for Ø 5 mm hole | Treaded stud for Ø 8 mm hole | Treaded stud for Ø 8 mm hole | Plastic sleeve for Ø 8 mm hole

Applications:	Furniture, architectural millwork, shop fitting. Wherever wooden dowels are used.
Advantages:	Concealed, self-tightening, no glue necessary.
Suitable materials:	All kind of wood materials (solid and composite).
Installation:	Drill holes with doweling jig or doweling joiner.
Mounting:	Screw-in threaded stud, then insert plastic sleeve on counter part and insert threaded stud into plastic sleeve.

Note: the drilling depth 31 - 32 mm for plastic plugs must be observed to ensure that the system operates correctly.



Drill a hole with Multi-spindle boring



or DUO Dowel machine



Screw-in metal stud



Insert plastic sleeve



Join the parts by pressing or tapping with a rubber mallet

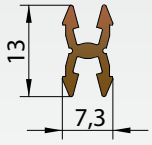
QUICK-SET

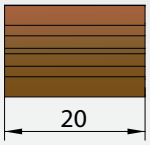
KLICK

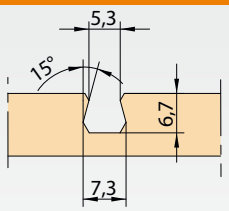
Snap-in dovetail connector, plastic

Art.-No. K045









Applications:	Furniture, shopfitting, conceal mouldings or cleats, trims and mitered corners, decorative inserts, ceilings, yacht interiors as well as gluing aid.
Advantages:	Concealed, self-tightening, demountable.
Suitable materials:	All kind of wood materials (solid and composite).
Installation:	Use a router table or CNC to make dovetail router and snap KLICK into groove. Can also be used in combination with KLICKpro.
Mounting:	By hooking into the dovetail groove.
Accessories:	TCT router bits - with Ø 6 mm ; Ø 6,35 mm and Ø 8 mm shank | Art.-No. K045/F; K048/F; K046/F



Installation



Make a groove using a Gannomat ProTec another CNC machine, or any hand-held router



Insert KLICK Dovetail Connector in the groove



Position/adjust



Snap-in

TCT router bit
with Ø 8 mm shank
Art.-No. K046/F



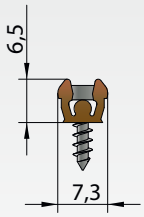
KLICK

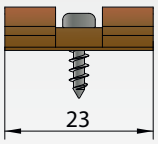
sKLICK

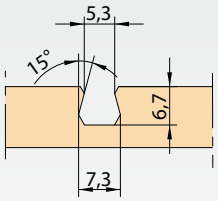
Screw-on dovetail connector, plastic incl. PH-screws 3×13 mm

Art.-No. K048









Applications:	Furniture, fittings, fixing mouldings or cleats, decorative inserts, ceilings, yacht interiors as well as gluing aid.
Advantages:	Selftightening, demountable connector for any angles 0-90°.
Suitable materials:	All kind of wood materials (solid and composite).
Installation:	With router, circular saw, portable router or CNC, with the original TCT ROUTER, full-length or spot router - can be combined with KLICKpro.
Mounting:	By fastening with screw.
Accessories:	TCT router bits - with Ø 6 mm ; Ø 6,35 mm and Ø 8 mm shank | Art.-No. K045/F; K048/F; K046/F, PH screw 3x13 mm | Art.-No. Z600



Installation



Route groove



Screw-on



Adjust position



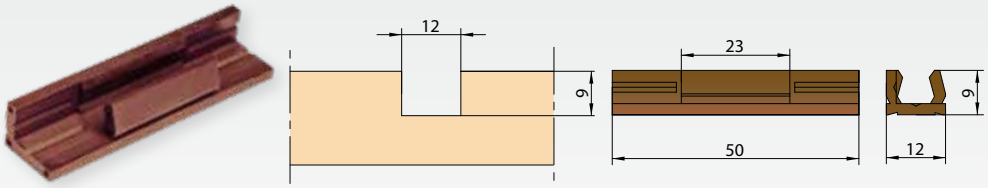
Snap-in

S-KLICK

KLICKpro

Dovetail adapter, plastic

Art.-No. K060





Applications:	Concealed mounting of filler panels, covers and moldings.
Advantages:	Concealed adapter, selftightening dovetail housing suitable for KLICK ou sKLICK.
Suitable materials:	All kind of wood materials (solid and composite).
Installation:	Cut either groove or rebate (9x12 mm by using a spindle moulder or CNC) or install KLICKpro surface mounted.
Mounting:	Fixed KLICKpro by either screwing, nailing or gluing.

Installation



Route groove



Mount with screws or nails



Snap together



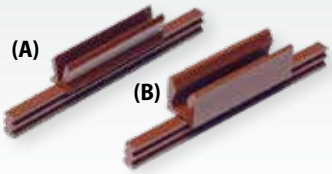
Combination sKLICK and KLICKpro

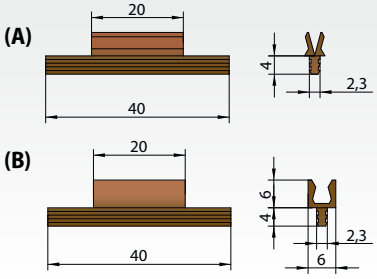
KLICKPRO

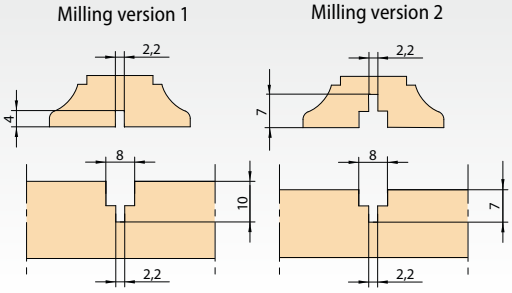
miniKLICK

2-parts dovetail snap connector, plastic

Art.-No. K059







Applications:	Concealed mounting of small moldings and glazing beads e.g. interior doors.
Advantages:	Invisible, self-tightening, removable, space-saving.
Suitable materials:	All kind of wood materials (solid and composite).
Installation:	With spindle moulder and original KNAPP® cutting saw blade (2.2-6×120 mm, with Ø 30 bore).
Mounting:	Gluing into pre-cutted groove with KNAPP®-ADHESIVE PU+.
Accessories:	miniKLICK grooving 120 mm saw blade, Ø 30 mm drillhole | Art.-No. Z065 (other Ø on request) Insert tool miniKLICK | Art.-No. K068 KNAPP®-ADHESIVE PU+ | Art.-No. Z011



Installation



Route groove



Insert



Snap together



Glue (Option)

MINIKLICK

Installation: soulevant coulissant MACO-InfinityView







A glass fiber reinforced plastic core, which is covered on the outside with an aluminium shell and on the inside with a wooden frame.

The miniKlick ensures the optimal connection of the wooden sash frame with the glass fiber reinforced plastic core.

Accessories



Lock

Art.-No. K121	Locking clip (A2) For securing joists in the opposite direction to insertion, use in combination with UNO 30, DUO 30 and DUO 30 inox A5

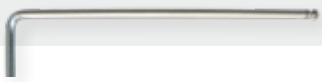
Insert Tool

Art.-No. K049/E	Biscuit Connector Insert Tool (SUNNY, SILVER, FAST and FIYU®)



Allen key with ball end

Art.-No. Z647	To fasten FIYU® tensionning screws M5x13 mm



Center punches DUO 30/35

Art.-No. K071	Center punch DUO 30
Art.-No. K075	Handrail punch DUO 30
Art.-No. K069	Center punch DUO 35 with Ø 5 mm for pre-drilling holes for Euro-screws



Center punch UNO 30

Art.-No. K073	Transfer center mark to opposing wood component when using UNO 30



Square nut DEKLICK®

Art.-No. Z896	Square nut M6 DIN 562, zinc-coated steel



KNAPP® Forstner bit Ø 30 mm/35 mm

Art.-No. Z070	Forstner bit with adjustable depth stop (for UNO 30, DUO 30 and DUO 30 inox A5)
Art.-No. Z072	Forstner bit with adjustable depth stop and adjustable centering point (for UNO 30, DUO 30 and DUO 30 inox A5)
Art.-No. Z071	Forstner bit with adjustable depth stop (for DUO 35)



KLICK dovetail router bit and 2 flute straight router bit

Art.-No. K045/F	KLICK router bit with Ø 6 mm shank (to route dovetail KLICK and sKLICK)
Art.-No. K046/F	KLICK router bit with Ø 8 mm shank (to route dovetail KLICK and sKLICK)
Art.-No. K048/FQ	KLICK router bit with Ø 6,35 mm shank (to route dovetail KLICK and sKLICK)
Art.-No. Z066	2 Flute straight router bit Ø 15 mm, 25 mm length, with Ø 8 mm shank (for CONTRA 800, DUO-System)



Accessories



Routing tools

Art.-No. Z658	Milling cutter DEKLICK® with profiling knives
Art.-No. Z893	Shank profiling cutter DEKLICK®
Art.-No. Z065	miniKLICK grooving saw blade 2.2-6 x 120 mm with Ø 30 mm bore (other Ø on request)
Art.-No. Z894	Grooving cutter DEKLICK® h20/4 with Ø 30 mm bore (other Ø on request)

Adjustable drill jig



Art.-No. K563	Drilling jig suitable for KNAPP® Forstner bit Ø 30-35 mm to drill holes for DUO 30, DUO 35 and UNO 30

Vis



Art.-No. Z510	Euro screw 6.3x10 mm (for CONTRA, DUO35 and DEKLICK®)
Art.-No. Z427	Euro screw 6.3x14 mm
Art.-No. Z518	Euro screw 6,3x30 mm (for CONTRA)
Art.-No. Z600	PH-screw 3x13 mm (for METAL, UNO 30 and sKLICK)
Art.-No. Z601	PH-screw 3x25 mm (for METAL)
Art.-No. Z502	CS-screw 3.5x16 mm (for DUO 30)
Art.-No. Z422	CS-screw 4x16 mm (for CONTRA and DEKLICK®)
Art.-No. Z423	CS-screw 4x40 mm (for CONTRA)
Art.-No. Z409	CS-screw inox A2 4.5x35 mm (for KOMBI and DEKLICK®)
Art.-No. Z514	CS-screw inox A2 5x25 mm with cutter tip (for QUATRO and UNO 30)
Art.-No. Z515	CS-screw inox A2 5x30 mm with cutter tip (for QUATRO and UNO 30)
Art.-No. Z950	CS-screw inox A2 RICON® 5x50 mm (for DEKLICK® and UNO 30)
Art.-No. K857	Tensionning screw M5x13 mm (for FIYU® LOCK)
Art.-No. Z428	Grub screw M6x12 mm (for FIYU® FAST)

Bits



Art.-No. Z411	Torx bit T15 | (for DEKLICK® and Z-DECK)
Art.-No. Z412	Torx bit T25 | (for DEKLICK® and UNO 30)

Templates, drill bits, adhesives



Art.-No. Z01D, Z02D, Z03D	MILLER® Dowel TruFit Bit I Art.-No. Z01D, Z02D, Z03D (see online store)
Art.-No. K617, K618, K619	Drill and test-jig (for positioning and drilling MODULAR) (available in different sizes: M32/11, M44/11, M64/11, see online store)
Art.-No. Z010	KNAPP®-ADHESIVE PM+, see page 19 (TREPPO)
Art.-No. Z011	KNAPP®-ADHESIVE PU+, see page 19 (CHAMP, CLIPS, KOMBI, DEKLICK®, KNAPP® Dowel, miniKLICK)
Art.-No. Z012	KNAPP®-ADHESIVE PU+, fibre reinforced, see page 19

Our machine partner

Machining for the implementation of KNAPP® connectors can be carried out in an automated, simple, fast, and professional manner with Gannomat machines.

GANNOmat
www.GANNOMAT.com
VIDEO

Fast, Accurate, and Compact CNC Dowel Insertion Machines

GANNOMAT Index



ONE-4-ALL:
Horizontal and vertical drilling
Gluing and insertion of dowels
Horizontal milling with a router bit with shank
Horizontal milling/sawing with a groove cutter



Multi-Spindle boring machine

GANNOMAT DB 21-27-35



Versatile dowel drilling compatible with our complete product line, including KNAPP Quick-Set, and TUCK dowels.



Universal boring machine for frames and horizontal mortiser

GANNOMAT Junior



Drilling and slotted holes for KNAPP® connectors, simple machining, fast and precise, even in solid wood.



CNC machining center

GANNOMAT ProTec



CNC precision machinig center for complete processing: **drilling**, **grooving**, **routing**.

ProTec allows compact design and high performance technology with through feed technique for KNAPP® connectors installation in cabinets, furniture, interior design and much more.

Compact - Stronger - Faster.

Handheld gun as glue and dowel inserter

GANNOMAT Selekta

Dowel insertion machine with a dowel gun, fully compatible with our KNAPP® dowels. Designed for use in furniture manufacturing, frame assembly, and window production. Performs gluing and insertion in a single operation.



CONTRA 800

Connector for case goods

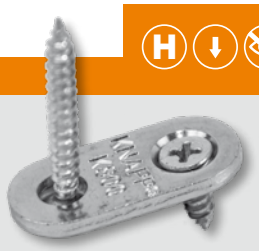
Art.-No. K800/B





Screw recommendation

1 EURO-screw CS 6.3x13 mm and
1 EURO-screw CS 6.3x35 mm
(Depending on the requirement, different lengths can be used)



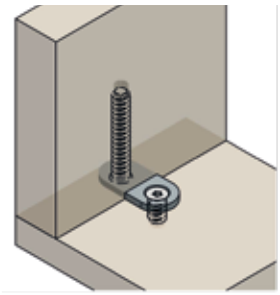
or

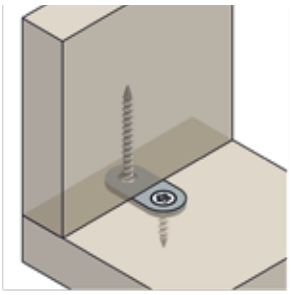
1 CS screw 4.0x16 mm and
1 CS screw 4.0x40 mm
(Depending on the requirement, different lengths can be used)

Applications:	The screw connector CONTRA 800 is simply screwed-on and can be used indoors and outdoors. Material thickness as little as 8 mm can be used when CONTRA 800 is combined with Euro-screws. An ideal connector with rebate cuts. CONTRA can be used with Euro screws as little as 6 mm long.
Advantages:	Fast and versatile - alternative to angle square.
Suitable materials:	All materials in wood, plastic, steel or masonry.
Installation:	Only one saw cut or rout a milling or stump screwed on.
Mounting:	Screw with CS or EURO screw.

Furniture components / corner joints

Recessed on edge in 90° or Recessed on face grain in 90°

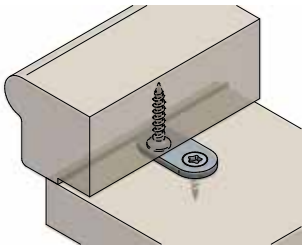






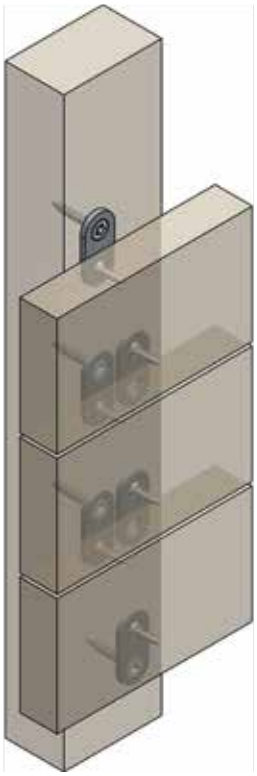
Crown molding and trim

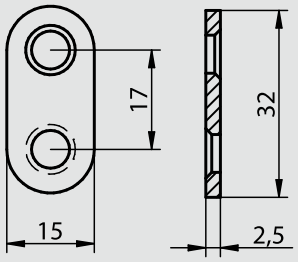
Plinth block





Facades, siding, and decking





CONTRA 800 dimensions and material:

Length: 32 mm

Width: 15 mm

Thickness: 2.5 mm

Material: steel, blue galvanized surface (other finishes on request)



Flute Straight Router
Art.-No. Z066

CONTRA

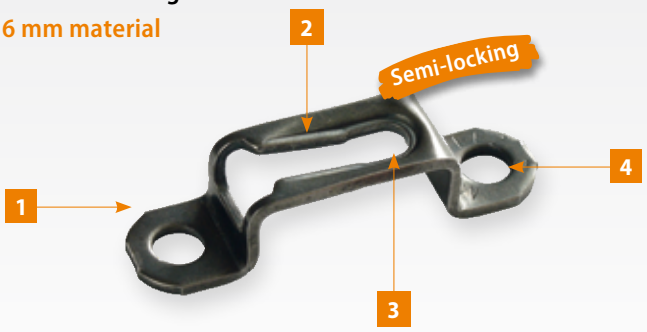
MODULAR Single Clip

Single Clip Spring Steel Connector, designed for use with Shoulder Screws

NEW

Benefits

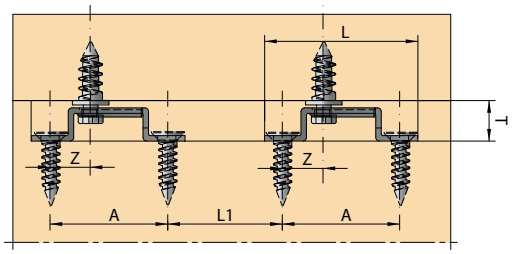
- Quick assembly
- Fully concealed connector for cabinet bodies and frames
- Efficient and ideally suited for use in mass production
- Components can be assembled in seconds
- Reduces labour and equipment costs
- High degree of pre-assembly
- Perfect for industrial production using CNC
- Suitable for use with 16 mm material thickness and above

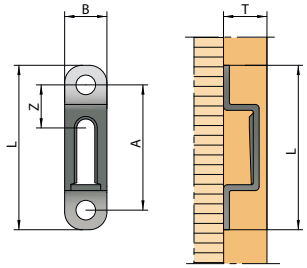


MODULAR

Also available in other sizes!

1	MODULAR, made of spring steel, difficult to unlock
2	Tapered profile design for increased stress absorption
3	Hook with screw lock
4	Screw hole for easy installation





	MODULAR	4031, 4032, 4035	5030, 5031, 5032, 5032/A
	Panel thickness from	16 mm	19 mm
A	Hole-line	32 mm	32 mm
B	Routing width	11 mm	13 mm
L	Routing length	42 mm	42 mm
T	Routing depth	11 mm	11 mm
Z	Center distance	11 mm	11 mm

Art.-No. Z5030 or Z4031

Pass-thru

= MODULAR single clip 5030

For 32 mm hole centers



Art.-No. Z5032 or Z4032

Non-locking

= MODULAR single clip 5032

For 32 mm hole centers



Art.-No. Z5032/A or Z4035

Semi-locking

= MODULAR single clip 5032/A

For 32 mm hole centers



Art.-No. Z5031

locking

= MODULAR single clip 5031

For 32 mm hole centers



Applications:	Flat pack, RTA cabinets, case goods, and furniture.
Advantages:	Concealed, self-tightening connector for 32 mm system, demountable, and can be used with wood to wood connections or wood to metal.
Suitable materials:	For all solid wood, wood based panels and plastic materials from 16 mm thickness up.
Installation:	Make groove with spindle moulder, plunge router, CNC equipment. Pre-drill with drill-jig. and install clips.
Mounting:	Install clips with PH or CS-screws up to Ø 4.5 mm (length depending on application) Shoulder head screw engages with the clip when sliding them into each other.
Accessories:	Drill and test-jig | Art.-No. K617 (M32/11), Art.-No. K618 (M44/11), Art.-No. K619 (M64/11)



Installation of MODULAR single clip with shoulder-head screws



Mill the panels to the desired depth



Check using the drill and test-jig



Position the drilling guide



Drill the holes using the drilling guide



Insert the MODULAR clip



Screw it in place



Drill holes for the shoulder-head screws.



Screw in the shoulder-head screws.



Attach the MODULAR pieces together.

Find new pieces of MODULAR in our Onlineshop!

- Quick installation
- Self-tensioning
- Versatile
- Concealed connection

VIDEO




LOUIS DESIGN, (FR) © Briag Courteaux

The perfect connector for efficient mass production of furniture!

- The components can be transported and easily assembled on site
- Efficient and ideally suited for use in series production
- The components can be slotted together in a matter of seconds
- The clips can be dismantled and reassembled
- Reduces labour and equipment costs
- Efficient: high degree of prefabrication



Machine recommendations for all MODULAR products

All MODULAR connectors can be machined, for example, using a Gannomat CNC machine. This promises significant time savings in the manufacture of the components and their assembly.

PARTNER

MODULAR Double Clip

For even greater durability and a stronger hold

Benefits

- Quick assembly
- Fully concealed connector for cabinet bodies and frames
- Efficient and ideally suited for use in mass production
- Components can be assembled in seconds
- Reduces labour and equipment costs
- High degree of pre-assembly
- Perfect for industrial production using CNC
- Even greater load-bearing capacity
- Stable and anti-rotation
- Suitable for use with 16+ mm material



Also available in other sizes!

PRODUCT

Art.-No. Z5033 — Non-locking

= MODULAR Double Clip 5033

For 32 mm hole centers



Art.-No. Z5035 or Z4037 — Semi-locking

= MODULAR Double Clip 5035

For 32 mm hole centers



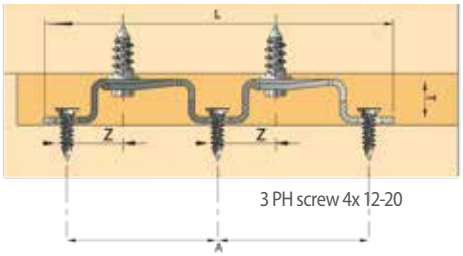
Art.-No. Z5034 or Z4038 — locking

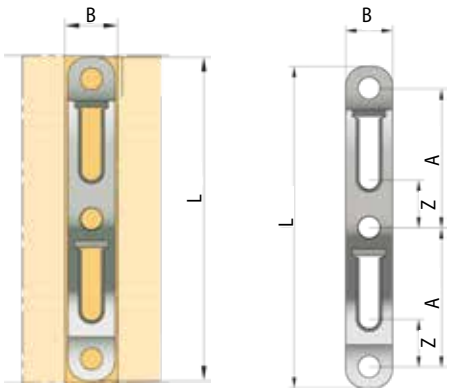
= MODULAR Double Clip 5034

For 32 mm hole centers



2 head-screw





Manufacture furniture for mass production and pack it in a space-saving manner.



The MODULAR connector enables the industrial production of furniture that can be packed flat and compactly.

This makes it easy to store, transport and deliver the furniture – clever, practical and cost-effective.

Enables tool-free assembly.



Thanks to MODULAR, furniture can be assembled in no time at all – without the need for any tools.

The connectors make assembly simple, secure and quick.

	MODULAR	4037, 4038, 4039	5033, 5034, 5035
	Panel thickness from	16 mm	19 mm
A	Hole-line	32 mm	32 mm
B	Routing width	11 mm	13 mm
L	Routing length	74,5 mm	74,5 mm
T	Routing depth	11 mm	11 mm
Z	Center distance	11 mm	11 mm



MODULAR Flat Double Clip Non-Locking

CNC-compatible connector for furniture and interior construction



Modular
Double clip CNC

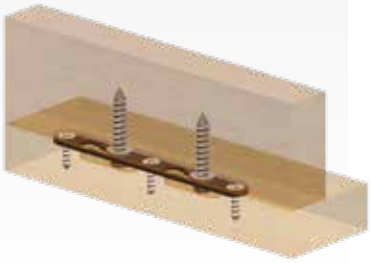
Art.-No. Z4036/B

The new **MODULAR Double Clip** is a flat connector designed for concealed face-mounted connections that requires no end-grain machining.
This enables a particularly efficient, precise, and material-friendly installation – ideal for modern interior fit-outs and high-quality furniture constructions.

In combination with **MODULAR shoulder screws**, it creates a self-tightening, immediately load-bearing, and fully removable connection.

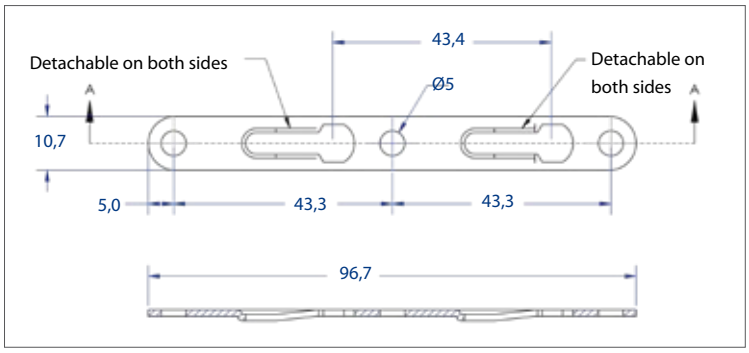
The double clip geometry allows reversible installation and makes the connector an ideal solution for modular systems. High-strength spring steel ensures long-lasting stability and durability.





Benefits for industrial manufacturing

- **CNC-optimized: simple, standardised milling geometry for series processes**
- **Process-reliable: self-clamping connection without readjustment**
- **Detachable & reusable: ideal for modular systems and disassembly concepts**
- **Concealed connection: no visible screws or fittings**
- **Time-efficient: quick assembly and disassembly**
- **Material-independent: suitable for solid wood, MDF, chipboard, multiplex and composite materials**
- **Suitable for series production: consistent quality for large quantities**
- **Flat packing possible**



To ensure optimum fastening, we recommend using M4.8 × 10 Euro screws. Alternatively, depending on the material thickness and application, countersunk screws with a nominal diameter of approx. 3.5 mm and a length of 13 mm or 16 mm can be used.

Applications:	Ready-to-assemble furniture (RTA) and cabinet furniture; furniture construction and shopfitting; tables, chairs and interior wall panelling; modular furniture systems and interior fittings
Advantages:	Concealed fastener for industrial series production, CNC machining and modular furniture and interior fitting systems, flat packing possible.
Suitable material:	Spring steel, phosphated surface
Installation:	Pocket depth (milling depth): 3.1 mm nominal (up to max. 3.3 mm to increase preload) Milling dimensions: 97 × 11 mm
Mounting:	Mount using Euro Screws M4.8 x 10. Alternatively, use #6 x 1/2 or #6 x 5/8 Flat Head Screws, depending on panel thickness and application.
Accessories:	Modular shoulder screws, e.g. Art.-No. 2055, 2155, 5068, 5070



All MODULAR connectors are available in the online shop!

PRODUCT **VIDEO**

MODULAR Anti-Torsion

For torsion-resistant cabinet or frame joints

100% TAMPER-PROOF!

Benefits

- Quick assembly
- Fully concealed connector for cabinet bodies and frames
- Efficient and ideally suited for use in mass production
- Components can be assembled in seconds
- Reduces labour and equipment costs
- High degree of pre-assembly
- Perfect for industrial production using CNC
- Even greater load-bearing capacity
- Optimised resistance to twisting
- Suitable for use with 16 mm material thickness and above



Also available in other sizes!

PRODUCT

Art.-No. Z5071 / Z5072
= MODULAR Anti-Torsion
Pass-thru
For 32 mm hole centers



Art.-No. Z5075 / Z5076 or Z2075/Z2076
= MODULAR Anti-Torsion
non-locking
For 32 mm hole centers

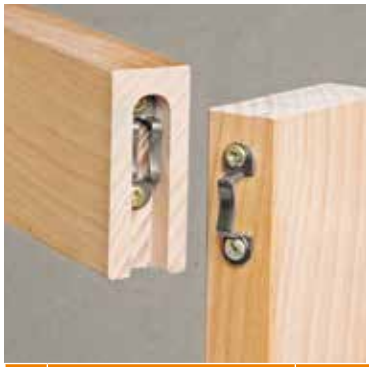


Art.-No. Z5073 / Z5074
= MODULAR Anti-Torsion
locking
For 32 mm hole centers

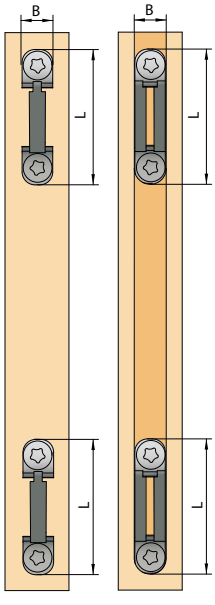


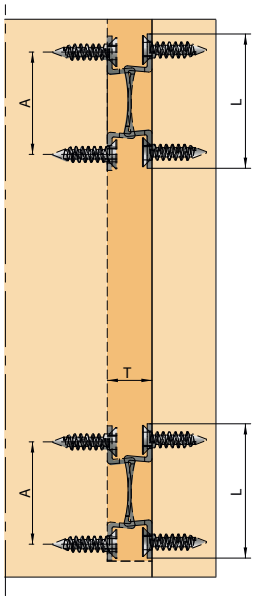
Sturdy connections for flat-pack furniture

The two-part MODULAR Anti-Torsion clips are designed specifically for ready-to-assemble (RTA) furniture and are used by cabinet makers in interior design and the furniture industry. Two spring steel clips that slide precisely into one another ensure a strong, torsion-resistant connection, ideal for cabinet and frame construction, e.g. for chairs and tables.









	MODULAR	2075, 2076	5071, 5072, 5075, 5076
	Panel thickness from	16 mm	19 mm
A	Hole-line	32 mm	32 mm
B	Routing width	10 mm	13,5 mm
L	Routing length	42 mm	42 mm
T	Routing depth	14 mm	12 mm

Applications:	Frames, chairs, furniture, cabinets, bookcases and shelving with heavy loads, fittings.
Advantages:	No rotation, concealed, self-tightening connector for 32 mm system, demountable.
Suitable materials:	For all solid wood, wood based panels and plastic materials from 16 mm thickness up.
Installation:	Make groove with spindle moulder, horizontal router table, CNC equipment.
Mounting:	Pre-drill with drill-jig and install clips with PH or CS-screws Ø 4.5 mm (length depending on application).

MODULAR screws and accessories

Suitable screws for all MODULAR connectors	
Art.-No. Z513	MODULAR mounting-screw 513 PH screw 25,4 mm (clip)
Art.-No. Z1065	MODULAR 1065 screw 12,7 mm
Art.-No. Z1165	MODULAR 1165 screw 15,9 mm
Art.-No. Z2053	MODULAR 2053 screw 10 mm
Art.-No. Z2055	MODULAR 2055 screw 13 mm
Art.-No. Z2065	MODULAR 2065 screw M4 12 mm
Art.-No. Z2066	MODULAR 2066 screw M4 16 mm
Art.-No. Z2069	MODULAR 2069 sleeve bolt M4 15mm
Art.-No. Z2155	MODULAR 2155 screw 16 mm
Art.-No. Z5043	MODULAR 5043 screw M5 9,53 mm
Art.-No. Z5045	MODULAR 5045 screw M5 11,12 mm
Art.-No. Z5065	MODULAR 5065 screw M5 15,9 mm
Art.-No. Z5067	MODULAR 5067 screw 11,12 mm
Art.-No. Z5068	MODULAR 5068 screw 32 mm
Art.-No. Z5069	MODULAR 5069 screw 6,4 mm
Art.-No. Z5070	MODULAR 5070 screw 22,23 mm
Art.-No. Z5565	MODULAR 5565 screw M5 13 mm
Art.-No. Z5066	MODULAR 5565/5066 (dual connection) screw M5 15 mm
Art.-No. Z6043	MODULAR 6043 screw 6,4 mm x 11,12 mm
Art.-No. Z6065	MODULAR 6065 screw 6,04 mm x 19,05 mm
Art.-No. Z6066	MODULAR 6065/66 (dual connection) screw 6,4 mm x 19,05 mm
Art.-No. Z6068	MODULAR 6068 screw 32 mm
Art.-No. Z6069	MODULAR 6069 screw 22,23 mm
Art.-No. Z6165	MODULAR 6165 screw 15,9 mm

NEW

2 Flute straight router bit	
Art.-Nr. Z100/08	2 Flute straight router bit Ø 11, 16 mm length, with Ø 8 mm shank
Applications: To recess the rebate for MODULAR.	

MODULAR drill and test-jig	
Art.-Nr. K617	32 mm line drilling
Art.-Nr. K618	44 mm line drilling
Art.-Nr. K619	64 mm line drilling



BOX





MODULAR Box
32mm hole centers- cabinet connectors

Art.-No. Z4031/Box

125 pcs. each of MODULAR 4031 and 4032
250 pcs MODULAR 2055 screw 13 mm
56 pcs each MODULAR 2069 screw M4 15 mm
and MODULAR 2066 sleeve screw M4 16 mm
1 pc Z4032C depth gauge for connector groove

Symbols:

- Assembly from 3 or 4 sides
- Concealed
- Wood to wood connection
- Prefabrication in workshop
- Clamp-free

MODULAR

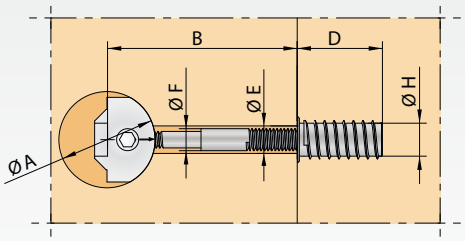
ZIPBOLT™ 90 KD

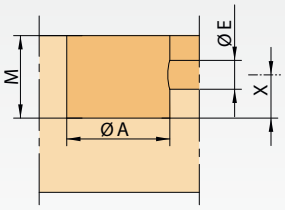
(M = Drilling depth)

Joint connector for frames ≥ 22 mm

Art.-No. Z372







With metal housing:
Load capacity up to 60 kg tension load (failure load approx. 100 kg)

M	X	Ø A	B	D	Ø H	Ø F	E
20 mm	10 mm	35 mm	60-65 mm	32 mm	12 mm	8 mm	9 mm

Applications:	Frame connector for beds and RTA furniture.
Advantages:	Fast and easily installed by using a SW5 hex bit in conjunction with cordless drill.
Suitable materials:	For all solid wood and wood based panels.
Installation:	Pre-drill holes using plunge router or CNC.
Mounting:	Insert connector parts into holes and assemble.

ZIPBOLT

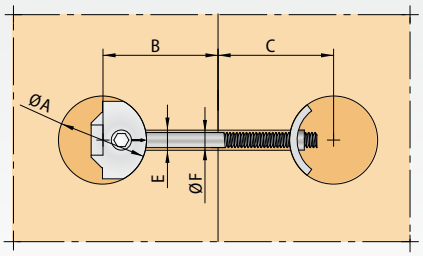


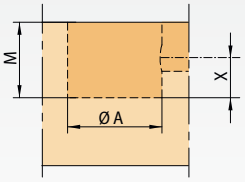
ZIPBOLT™ 85

Joint connector for countertops ≥ 22 mm

Art.-No. Z358







With metal housing:
Load capacity up to 60 kg tension load (failure load approx. 100 kg)

M	Length	X	Ø A	B	C	Ø F	E
20 mm	85 mm	10 mm	35 mm	33-44 mm	33-44 mm	6 mm	8 mm

Applications:	Joint connector for worktops, countertops and panels.
Advantages:	Fast and easily installed by using a SW5 hex bit and a cordless drill.
Suitable materials:	For all solid wood and wood based panels.
Installation:	Pre-drill holes using plunge router or CNC.
Mounting:	Insert connector parts into holes and assemble.



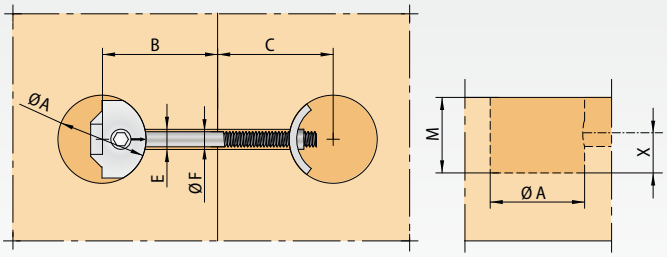
ZIPBOLT™ 120

(M = Drilling depth)

Joint connector for countertops ≥ 22 mm

Art.-No. Z366





With metal housing:
Load capacity up to 60 kg tension load (failure load approx. 100 kg)

M	Length	X	Ø A	B	C	Ø F	E
20 mm	120 mm	10 mm	35 mm	50-62 mm	50-62 mm	6 mm	8 mm

Applications:	Joint connector for worktops, countertops and panels.
Advantages:	Fast and easily installed by using a SW5 hex bit SW5 and a cordless drill.
Suitable materials:	All kind of wood materials (solid and composite).
Installation:	Pre-drill holes using plunge router or CNC.
Mounting:	Insert connector parts into holes and assemble.

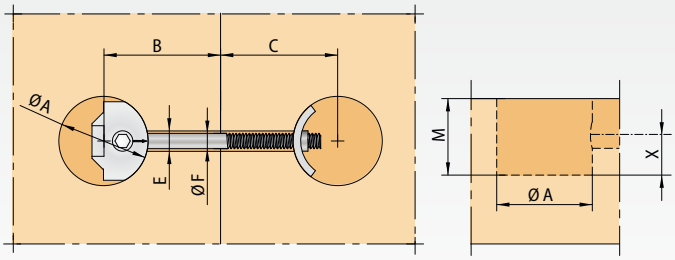


ZIPBOLT™ 170

Joint connector for countertops ≥ 22 mm

Art.-No. Z367





With metal housing:
Load capacity up to 60 kg tension load (failure load approx. 100 kg)

M	Length	X	Ø A	B	C	Ø F	E
20 mm	170 mm	10 mm	35 mm	74-87 mm	74-87 mm	6 mm	8 mm

Applications:	Joint connector for worktops, countertops and panels.
Advantages:	Fast and easily installed by using a SW5 hex bit and a cordless drill.
Suitable materials:	For all solid wood and wood based panels.
Installation:	Pre-drill holes using plunge router or CNC.
Mounting:	Insert connector parts into holes and assemble.

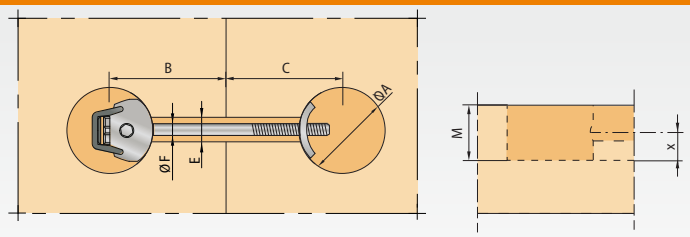


ZIPBOLT™ 100 Mini

Joint connector for countertops ≥ 16 mm

Art.-Nr. Z355





With metal housing:
Load capacity up to 60 kg tension load (failure load approx. 100 kg)

M	Length	X	Ø A	B	C	Ø F	E
13 mm	100 mm	7 mm	25 mm	42-49 mm	42-49 mm	7 mm	11 mm

Applications:	Countertop and panel connectors for straight butt joints.
Advantages:	Fast and easily installed by using a SW4 hex bit and a cordless drill.
Suitable materials:	All kind of wood materials (solid and composite).
Installation:	Pre-drill holes using plunge router or CNC.
Mounting:	Insert connector parts into holes and assemble.

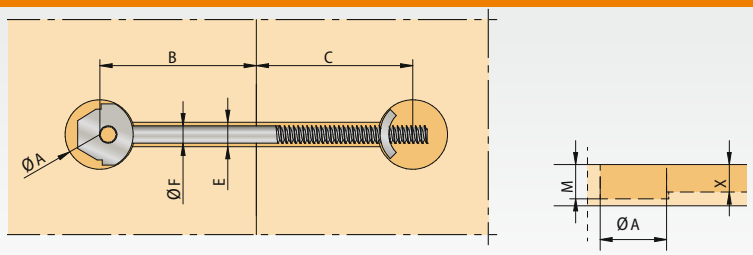


ZIPBOLT™ 100 Mini Ultra Slim

Joint connector for countertops ≥ 13 mm

Art.-Nr. Z373





With metal housing:
Load capacity up to 60 kg tension load (failure load approx. 100 kg)

M	Length	X	Ø A	B	C	Ø F	E
10 mm	100 mm	8 mm	20 mm	43-50 mm	43-50 mm	4 mm	8 mm

Applications:	Countertop and panel connectors for straight butt joints.
Advantages:	Fast and easily installed by using a TX25 Torx bit and a cordless drill.
Suitable materials:	All kind of wood materials (solid and composite).
Installation:	Pre-drill holes using plunge router or CNC.
Mounting:	Insert connector parts into holes and assemble.



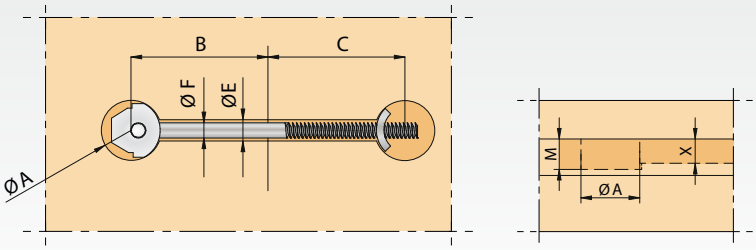
ZIPBOLT™ Superslim

Joint connector for countertops ≥ 12 mm

Art.-Nr. Z382

NEW





With metal housing:
Load capacity up to 60 kg tension load (failure load approx. 100 kg)

M	Length	X	Ø A	B	C	Ø F	E
10 mm	100 mm	8 mm	20 mm	43-50 mm	43-50 mm	3,5 mm	6 mm

Applications:	Countertop and panel connectors for straight butt joints.
Advantages:	Fast and easily installed by using a TX25 Torx bit and a cordless drill.
Suitable materials:	All kind of wood materials (solid and composite).
Installation:	Pre-drill holes using plunge router or CNC.
Mounting:	Insert connector parts into holes and assemble.

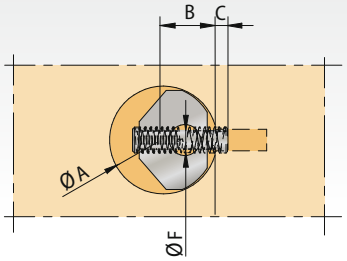


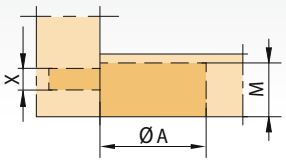
ZIPBOLT™ Mini UT 30 KD

Joint connector for countertops ≥ 16 mm

Art.-No. Z376







M	Length	X	Ø A	B	C	Ø F	E
12,8 mm	30 mm	5 mm	25 mm	12 mm	12 mm	5 mm	5 mm

Applications:	Countertop and panel connectors for straight butt joints.
Advantages:	Fast and easily installed by using a SW4 hex bit and a cordless drill.
Suitable materials:	All kind of wood materials (solid and composite).
Installation:	Pre-drill holes using plunge router or CNC.
Mounting:	Insert connector parts into holes and assemble.



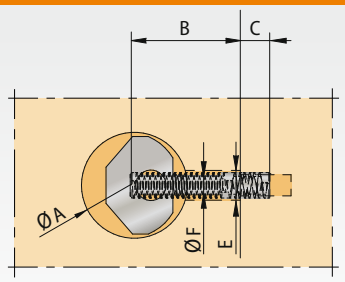
ZIPBOLT™ Mini UT 43 KD

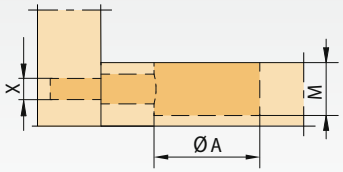
(M = Drilling depth)

Joint connector for countertops ≥ 16 mm

Art.-No. Z377







M	Length	X	Ø A	B	C	Ø F	E
12,8 mm	43 mm	5 mm	25 mm	25 mm	12 mm	6 mm	7 mm

Applications:	Countertop and panel connectors for straight butt joints.
Advantages:	Fast and easily installed by using a SW4 hex bit and a cordless drill.
Suitable materials:	All kind of wood materials (solid and composite).
Installation:	Pre-drill holes using plunge router or CNC.
Mounting:	Insert connector parts into holes and assemble.

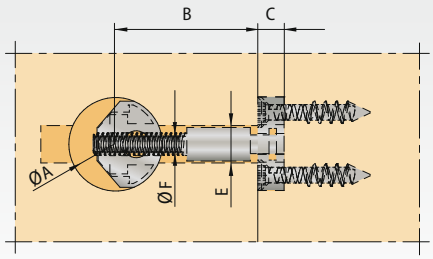


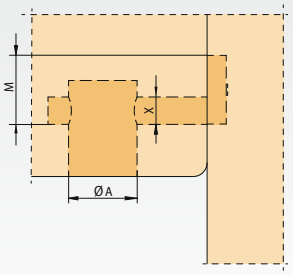
ZIPBOLT™ Slipfix Railbolt

90° handrail connector

Art.-No. Z374







M	Length	X	Ø A	B	C	Ø F	E
35 mm	49 mm	10 mm	25 mm	± 38 mm	7 mm	6	9,5-10 mm

Applications:	Countertop and panel connectors for straight butt joints.
Advantages:	Fast and easily installed by using a 5mm hex bit and a cordless drill.
Suitable materials:	All kind of wood materials (solid and composite).
Installation:	Pre-drill holes using plunge router or CNC.
Mounting:	Insert connector parts into holes and assemble.

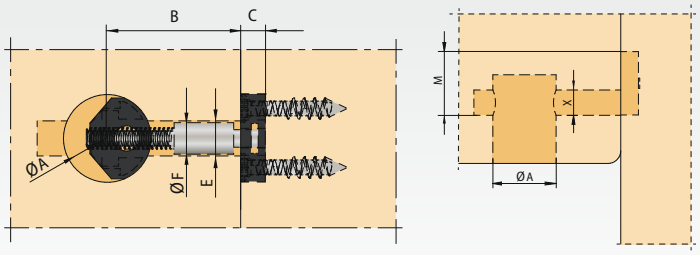


ZIPBOLT™ Exterior Slipfix

Exterior 90° handrail connector

Art.-Nr. Z378





M	Length	X	Ø A	B	C	Ø F	E
35 mm	49 mm	10 mm	25 mm	± 38 mm	7 mm	6	9,5-10 mm

Applications:	Countertop and panel connectors for straight butt joints.
Advantages:	Fast and easily installed by using a 5mm hex bit and a cordless drill.
Suitable materials:	All kind of wood materials (solid and composite).
Installation:	Pre-drill holes using plunge router or CNC.
Mounting:	Insert connector parts into holes and assemble.

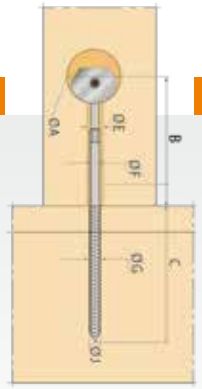


ZIPBOLT™ UT Post Anchor

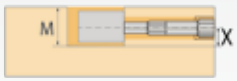
Post connector

Art.-Nr. Z381





G = 13,5 | J = +/- 10 mm



M	Height	X	Ø A	B	C	Ø F	E
> 28 mm	260 mm	14 mm	35 mm	125 mm	143 mm	11 mm	13 mm

Applications:	Fixing staircase posts.
Advantages:	Fast and easily installed by using a T40 Torx Bit and a cordless drill.
Suitable materials:	All kind of solid wood materials.
Installation:	Pre-drill holes using plunge router or CNC.
Mounting:	Insert connector parts into holes and assemble.

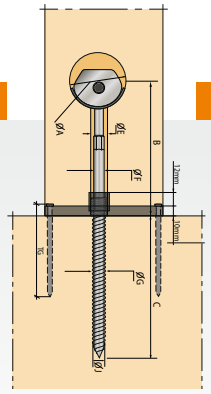


ZIPBOLT™ XT Post Anchor

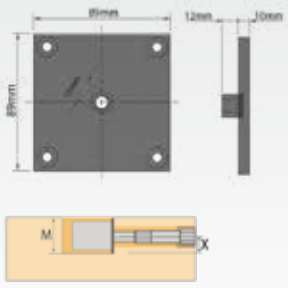
External post connector

Art.-Nr. Z379





G = 13,5 | J = +/- 10 mm



M	Height	X	Ø A	B	C	Ø F	E
37 mm	260 mm	18 mm	38 mm	124 mm	130 mm	11mm	16 mm

Applications:	Connection for external posts on terraces and verandas.
Advantages:	Fast and easily installed by using a 6mm hex bit and a cordless drill.
Suitable materials:	All kind of solid wood materials.
Installation:	Pre-drill holes using plunge router or CNC.
Mounting:	Insert connector parts into holes and assemble.



DUO-System

Frame connectors









Applications:	Furniture frames, stairs, exhibition booths, and architectural millwork.
Advantages:	Invisible, self-tightening, adjustable assembly pressure thanks to the fixing screw. Only 13 mm recess depth.
Suitable materials:	All solid wood and plywood materials from ≥ 21 mm.
Installation:	Make mortise with plunge router or CNC.
Mounting:	Install with CS-screws Ø 5 mm or Ø 6 mm (screw length depending on application) and PH-holding screws Ø 5 mm or Ø 6 mm.
Note:	The system consists of two identical brackets and are manufactured from high strength galvanized steel in Austria.

Accessories



Routing-jigs MULTI F (plywood)

Routing-jig MULTI F15, | Art.-No. K500 (for DUO 46/15, DUO 62/15, DUO 100/15)
Routing-jig MULTI F20, | Art.-No. K506 (for DUO 90/20)
Routing-jig MULTI F30, | Art.-No. K501 (for DUO 46/30, DUO 62/30)
Routing-jig MULTI F46, | Art.-No. K503 (for DUO 90/46)

Remarque : All routing-jigs are suitable for a Ø 30 mm guide bushing (for plunge router) and a Ø 15 mm 2 Flute Straight Router Bit.

2 flute straight router bit Ø 15 mm, 25 mm length with Ø 8 mm shank | Art.-No. Z066

Mounting screws - pan-head screws, full threaded (PH - FT)

PH-screw 5x40 (200 pcs./package) | Art.-No. Z702 (for DUO and MODULAR Anti-Torsion)
PH-screw 5x60 (200 pcs./package) | Art.-No. Z704 (for DUO and MODULAR Anti-Torsion)
PH-screw 6x40 (250 pcs./package) | Art.-No. Z800 (for DUO)
PH-screw 6x60 (200 pcs./package) | Art.-No. Z802 (for DUO)



Mounting screws - countersunk screws, full threaded (CS - FT)

CS-screws 5x40 (500 pcs./package) | Art.-No. Z500 (for DUO and ACRO)
CS-screws 5x60 (250 pcs./package) | Art.-No. Z498 (for DUO, ACRO and BASIS)
CS-screws 6x40 (250 pcs./package) | Art.-No. Z501 (for DUO and ACRO)
CS-screws 6x60 (200 pcs./package) | Art.-No. Z499 (for DUO, ACRO and BASIS)



Installation


Route mortise


Screw in **a**


Screw in **b**



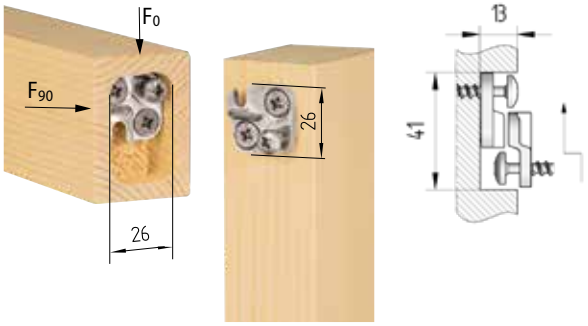
Assemble

DUO-SYSTEM

DUO 26

DUO 26/26

Art.-No. K047



Mounting screws	5x40	5x60
PH - FT	1	1
CS - FT	2	2

Load capacity	
zul F_0	zul F_{90}
Slide-in direction	Right angle to slide-in direction
0.97 kN	1.07 kN

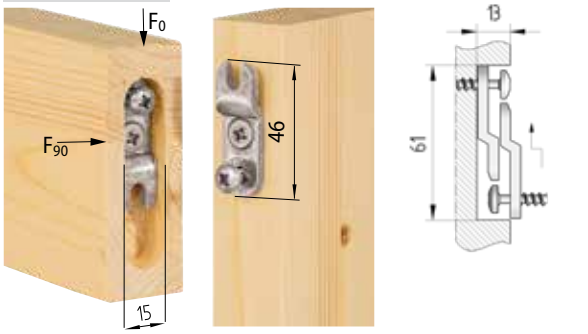
Recommended timber dimension
Width/Height: 50x50 mm

Size of rebate		
Width	Height	Depth
26 mm	41 mm	13 mm

DUO Serie 15

DUO 46/15

Art.-No. K041



Mounting screws	5x40	5x60
PH - FT	1	1
CS - FT	1	1

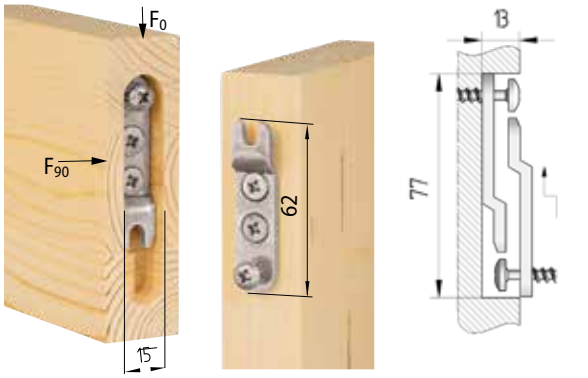
Load capacity	
zul F_0	zul F_{90}
Slide-in direction	Right angle to slide-in direction
0.86 kN	0.62 kN

Recommended timber dimension
Width/Height: 30/80 mm

Size of rebate		
Width	Height	Depth
15 mm	61 mm	13 mm

DUO 62/15

Art.-No. K036



Mounting screws	5x40	5x60
PH - FT	1	1
CS - FT	2	2

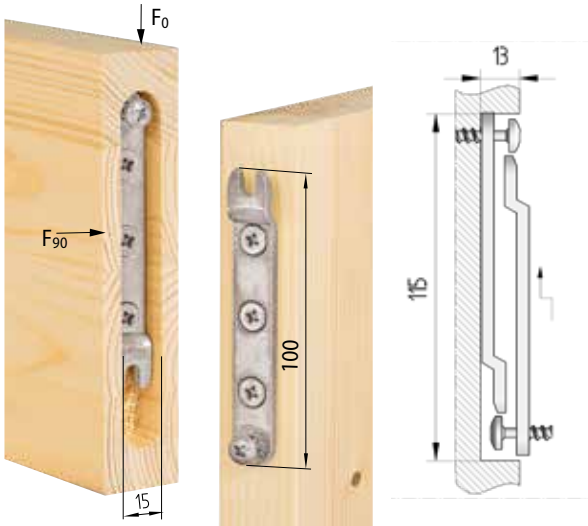
Load capacity	
zul F_0	zul F_{90}
Slide-in direction	Right angle to slide-in direction
1.29 kN	0.71 kN

Recommended timber dimension
Width/Height: 30/100 mm

Size of rebate		
Width	Height	Depth
15 mm	77 mm	13 mm

DUO 100/15

Art.-No. K055



Mounting screws	5x40	5x60
PH - FT	1	1
CS - FT	3	3

Load capacity	
zul F_0	zul F_{90}
Slide-in direction	Right angle to slide-in direction
2.00 kN	0.92 kN

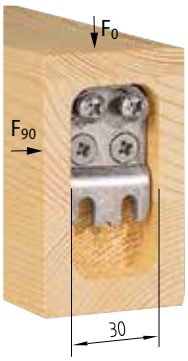
Recommended timber dimension
Width/Height: 30/140 mm

Size of rebate		
Width	Height	Depth
15 mm	115 mm	13 mm

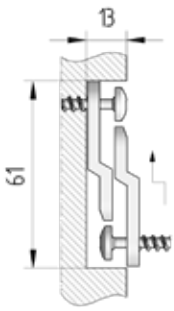
DUO Serie 30

DUO 46/30

Art.-No. K046







Mounting screws	5x40	5x60
PH - FT	2	2
CS - FT	2	2

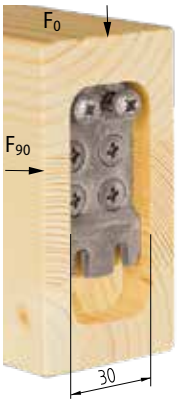
Load capacity	
zul F_0	zul F_{90}
Slide-in direction	Right angle to slide-in direction
1.30 kN	1.12 kN

Recommended timber dimension
Width/Height: 50/80 mm

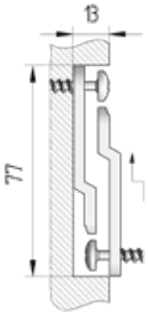
Size of rebate		
Width	Height	Depth
30 mm	61 mm	13 mm

DUO 62/30

Art.-No. K022







Mounting screws	5x40	5x60
PH - FT	2	2
CS - FT	4	4

Load capacity	
zul F_0	zul F_{90}
Slide-in direction	Right angle to slide-in direction
2.15 kN	1.67 kN

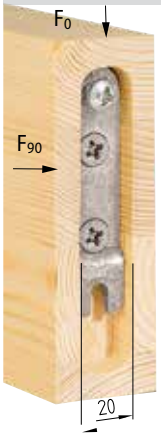
Recommended timber dimension
Width/Height: 50/100 mm

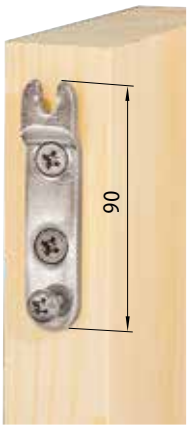
Size of rebate		
Width	Height	Depth
30 mm	77 mm	13 mm

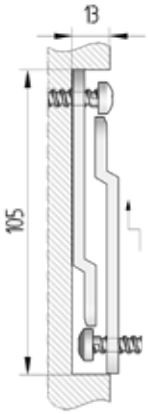
DUO 20 and 46

DUO 90/20

Art.-No. K037







Mounting screws	6x40	6x60
PH - FT	1	1
CS - FT	2	2

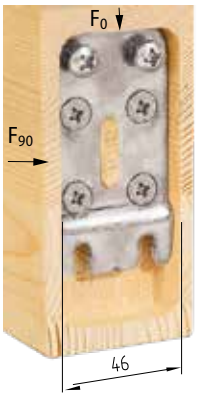
Load capacity	
zul F_0	zul F_{90}
Slide-in direction	Right angle to slide-in direction
2.37 kN	1.03 kN

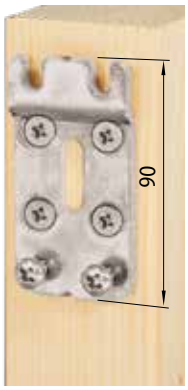
Recommended timber dimension
Width/Height: 40/120 mm

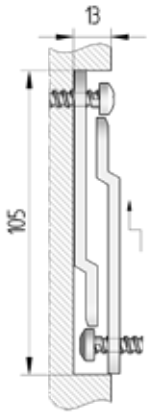
Size of rebate		
Width	Height	Depth
20 mm	105 mm	13 mm

DUO 90/46

Art.-No. K040







Mounting screws	6x40	6x60
PH - FT	2	2
CS - FT	4	4

Load capacity	
zul F_0	zul F_{90}
Slide-in direction	Right angle to slide-in direction
4.35 kN	2.28 kN

Recommended timber dimension
Width/Height: 60/120 mm

Size of rebate		
Width	Height	Depth
46 mm	105 mm	13 mm

The load value refers to the shear force in the insertion direction. Commercially available CS-screws and PH-screws (5x40, 5x60, 6x40, 6x60 mm) in accordance with ÖNORM M 5027 must be used in DUO systems. The test was carried out by Holzforschung Austria.

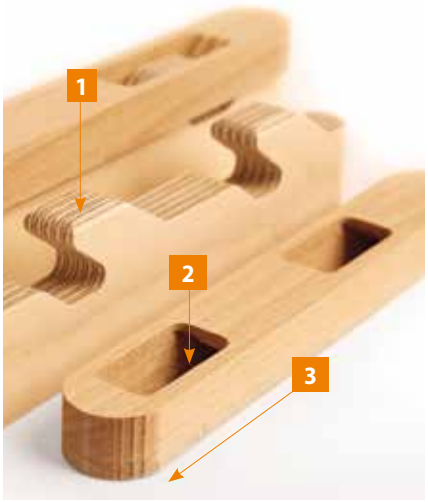
SOLID, SOLID SL

Wooden connector (metal-free) for bed rails









1 The birch multiplex connector reduces mechanical stresses thanks to its self-locking notched hook principle, guaranteeing stable, play-free assembly.

2 With their shallow installation depth of just 15 mm, SOLID SL connectors offer a wide range of applications in high-end furniture manufacturing.

3 Available in size M (164 mm) as a versatile all-around tool or in size L (210 mm) for heavy-duty construction.

Benefits:

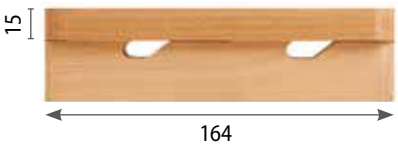
- Rigid material
- Metal-free
- Highly stable junction
- Easy to assemble
- Tool-free disassembly and refitting
- Invisible after final assembly
- Cost-effective

SOLID SL – Available in 2 variants

NEW

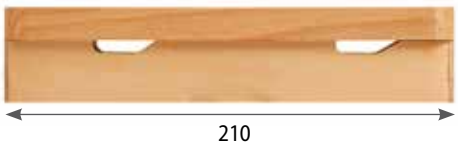
Art.-Nr. Z993

SOLID SL-M



Art.-Nr. Z994

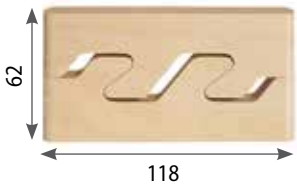
SOLID SL-L



SOLID – Available in 9 variants (3 lengths and 3 thicknesses)

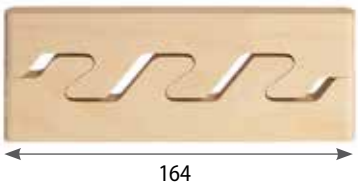
Art.-Nr. Z970, Z971, Z972

SOLID S



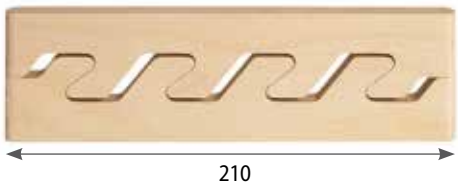
Art.-Nr. Z973, Z974, Z975

SOLID M



Art.-Nr. Z976, Z977, Z978

SOLID L



Applications:	Assembling bed frames without metal parts or screws, furniture, lightweight wooden constructions.
Advantages:	The use of birch multiplex material reduces mechanical stress, making for a very stable assembly. Tool-free mounting and dismounting.
Suitable materials:	Multiplex birch in thicknesses of 8, 12 and 15 mm x width 40 mm. Groove depth is 32 mm.
Technical data :	Recommended timber dimension ≥ 32 mm.
Installation:	Quick and easy machining with the right cutters and milling jigs.
Mounting:	By gluing in the groove with white glue or KNAPP® ADHESIVE PU+.
Accessories:	**Solid S** Routing-jig 8/12/15 x 118 mm | Art.-No. Z979, Z980, Z981 **Solid M + Solid SL M** Routing-jig 8/12/15 x 164 mm | Art.-No. Z982, Z983, Z984 **Solid L + Solid SL L** Routing-jig 8/12/15 x 210 mm | Art.-No. Z982, Z983, Z984 **2 flute straight router 8 mm** | Art.-No. Z988, **12 mm** | Art.-No. Z989, **15 mm** | Art.-No. Z990



Light timber structures

Column/Post and beam mounting connectors

ACRO-System

Frame, post and beam connectors.

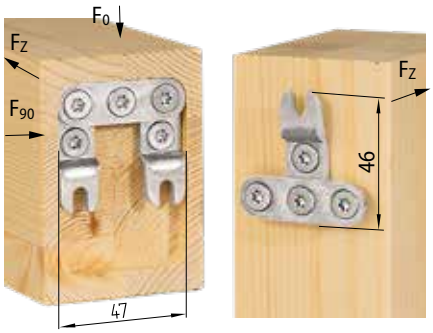
Applications:	Post and beam joints for light timber construction.
Advantages:	Invisible, self-tightening, very shallow recess depth (8.5 mm).
Suitable materials:	Solid wood material.
Installation:	Mill pocket with plunge router and MULTI F routing jig.
Mounting:	Install connector with countersunk screws, full threaded (CS - FT) Ø 5 mm ou Ø 6 mm and and PH-holding screws Ø 5 mm or Ø 6 mm (screw length depending on application).
Accessories:	2 Flute Straight Router Bit | Art.-No. Z066, routing-jig MULTI F, marking template, Various CS-screw lengths available on demand.

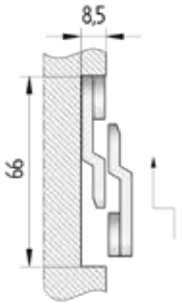


ACRO Serie 47

ACRO 46/47

Art.-No. K042





Mounting screws	5x40	5x60
CS - FT	4	5

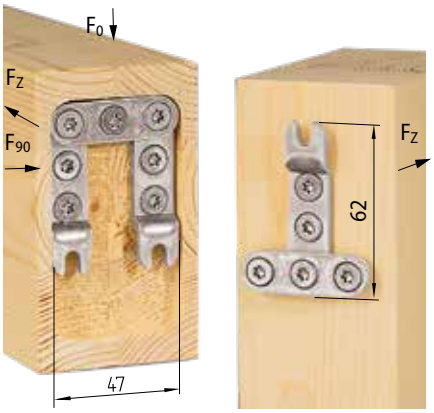
Load capacity		
zul F_0	zul F_{90}	zul F_Z
Slide-in direction	Right angle to slide-in direction	Traction
1.43 kN	0.98 kN	1.93 kN

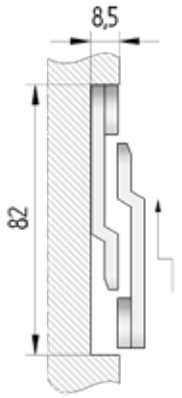
Recommended timber dimension
Width/Height: 60/80 mm

Size of rebate		
Width	Height	Depth
47 mm	66 mm	8,5 mm

ACRO 62/47

Art.-No. K033





Mounting screws	5x40	5x60
CS - FT	5	7

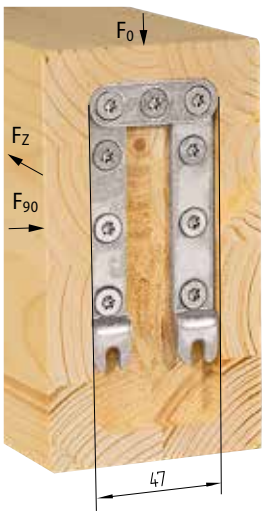
Load capacity		
zul F_0	zul F_{90}	zul F_Z
Slide-in direction	Right angle to slide-in direction	Traction
2.47 kN	1.64 kN	1.55 kN

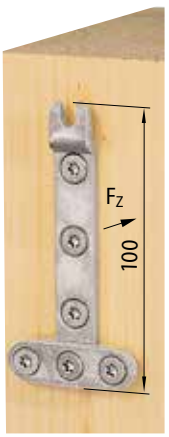
Recommended timber dimension
Width/Height: 60/100 mm

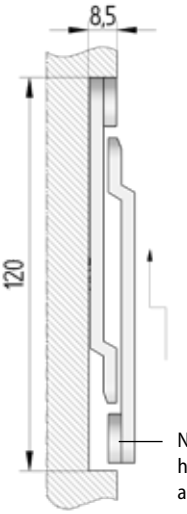
Size of rebate		
Width	Height	Depth
47 mm	82 mm	8,5 mm

ACRO 100/47

Art.-No. K057







Mounting screws	5x40	5x60
CS - FT	6	9

Load capacity		
zul F_0	zul F_{90}	zul F_Z
Slide-in direction	Right angle to slide-in direction	Traction
4.14 kN	2.78 kN	1.75 kN

Recommended timber dimension
Width/Height: 75/135 mm

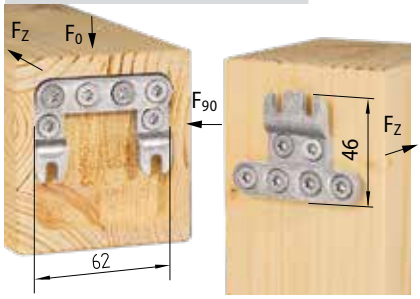
Size of rebate		
Width	Height	Depth
47 mm	120 mm	8.5 mm

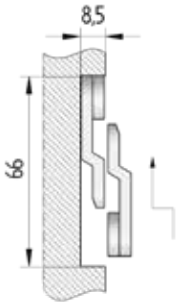
Note: It is possible to adjust the height of the attachment screws and therefore the assembly pressure.

ACRO Serie 62

ACRO 46/62

Art.-No. K043





Mounting screws	5x40	5x60
CS - FT	6	6

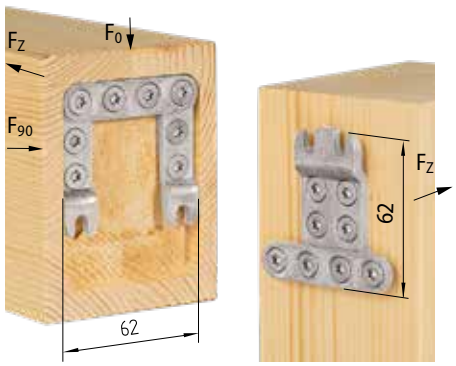
Load capacity		
zul F_0	zul F_{90}	zul F_Z
Slide-in direction	Right angle to slide-in direction	Traction
2.11 kN	1.55 kN	2.85 kN

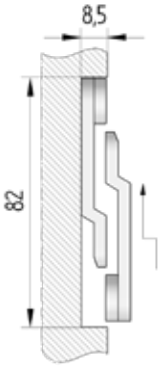
Recommended timber dimension
Width/Height: 80/80 mm

Size of rebate		
Width	Height	Depth
62 mm	66 mm	8.5 mm

ACRO 62/62

Art.-No. K031





Mounting screws	5x40	5x60
CS - FT	8	8

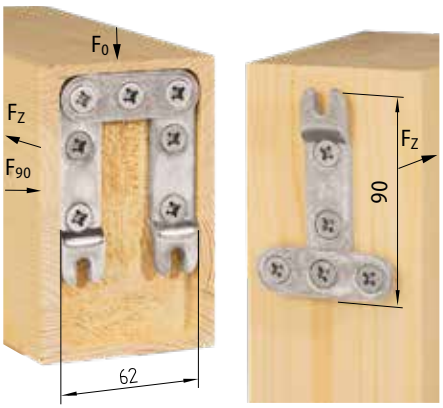
Load capacity		
zul F_0	zul F_{90}	zul F_Z
Slide-in direction	Right angle to slide-in direction	Traction
2.53 kN	1.80 kN	2.33 kN

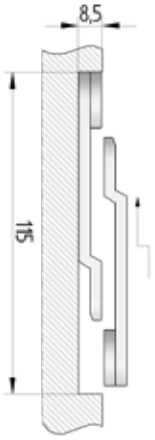
Recommended timber dimension
Width/Height: 80/100 mm

Size of rebate		
Width	Height	Depth
62 mm	82 mm	8.5 mm

ACRO 90/62

Art.-No. K034





Mounting screws	6x40	6x60
CS - FT	5	7

Load capacity		
zul F_0	zul F_{90}	zul F_Z
Slide-in direction	Right angle to slide-in direction	Traction
4.49 kN	1.81 kN	2.60 kN

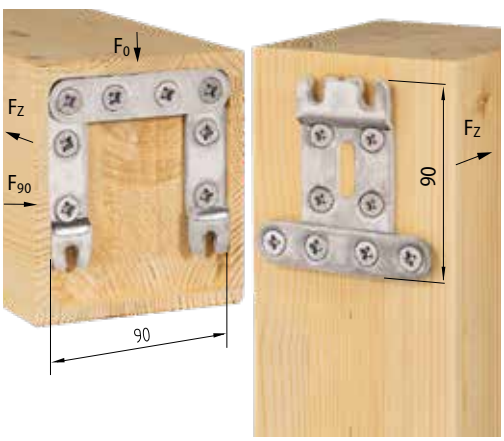
Recommended timber dimension
Width/Height: 80/135 mm

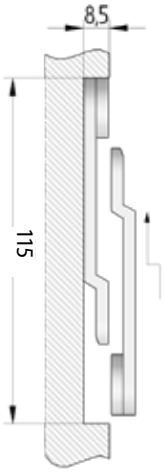
Size of rebate		
Width	Height	Depth
62 mm	115 mm	8.5 mm

ACRO Serie 90

ACRO 90/90

Art.-No. K032





Mounting screws	6x40	6x60
CS - FT	8	8

Load capacity		
zul F_0	zul F_{90}	zul F_Z
Slide-in direction	Right angle to slide-in direction	Traction
5.40 kN	2.80 kN	2.39 kN

Recommended timber dimension
Width/Height: 115/135 mm

Size of rebate		
Width	Height	Depth
90 mm	115 mm	8.5 mm

The load value refers to the shear force in the insertion direction. Commercially available, CS screws (5x40, 5x60, 6x40, 6x60 mm) in accordance with ÖNORM M 5027 must be used with the ACRO system. The test was carried out by Holzforschung Austria.

Installation



Route mortise with plunge router and routing jig.



Install ACRO connector brackets with screws



Assemble





Steps on central stringer fixed with Acro

ACRO

BASIS-System

Column/Post mounting connectors

Applications:	For direct mounting columns and posts on solid surfaces.
Advantages:	Quick-fit, heavy-duty push-in connector.
Suitable materials:	Timber post to firm ground i.e. concrete slab, tiles, stone, wood etc.
Installation:	With a portable router, bit mortiser or CNC machine.
Mounting:	One part of the BASIS System is pre-assembled on a galvanised steel plate and the whole unit is fixed to the ground. The second part is screwed to the end of the post and then fitted onto the plate.
Accessories:	**For 62/62 :** Routing-jig MULTI F62 | Art.-No. K504, 2 Flute Straight Router Bit | Art.-No. Z066, CS-screws 5x60 mm | Art.-No. Z498 **For 90/90 :** Routing-jig MULTI F90 | Art.-No. K505, 2 Flute Straight Router Bit | Art.-No. Z066, CS-screws 6x60 mm | Art.-No. Z499

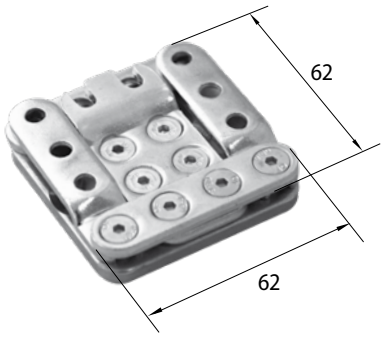


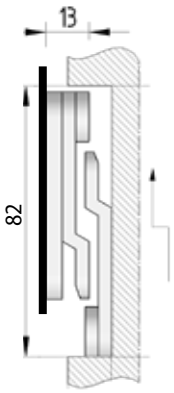
Bowbridge



BASIS 62/62

Art.-No. K039





Mounting screws	5x60	M8
CS - FT	8	2

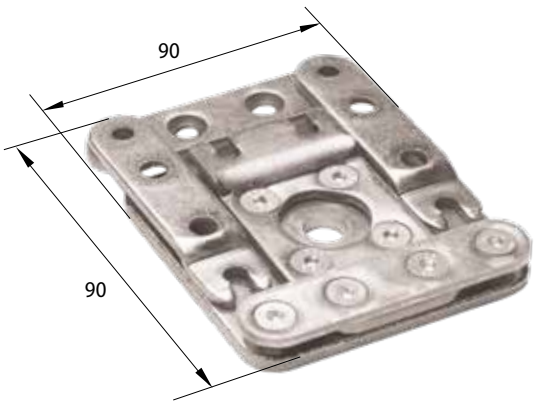
Load capacity		
zul F_0	zul F_{90}	zul F_Z
Slide-in direction	Right angle to slide-in direction	Traction
2.90 kN	2.47 kN	3.67 kN

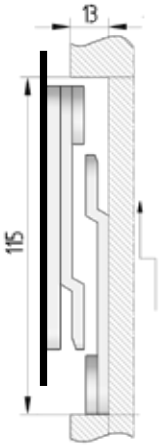
Recommended timber dimension
Width/Height: 78/95 mm

Size of rebate		
Width	Height	Depth
62 mm	82 mm	13 mm

BASIS 90/90

Art.-No. K038





Mounting screws	5x60	M12
CS - FT	8	1

Load capacity		
zul F_0	zul F_{90}	zul F_Z
Slide-in direction	Right angle to slide-in direction	Traction
3.99 kN	2.07 kN	4.72 kN

Recommended timber dimension
Width/Height: 115/135 mm

Size of rebate		
Width	Height	Depth
90 mm	115 mm	13 mm

The load value refers to the shear force in the insertion direction.
Commercially available, CS screws (5x40, 5x60 mm) in accordance with ÖNORM M 5027 and M8 CS screws or M12 screws must be used with the BASIS system.
The test was carried out by Holzforschung Austria



Post and beam connectors

Post and beam connectors

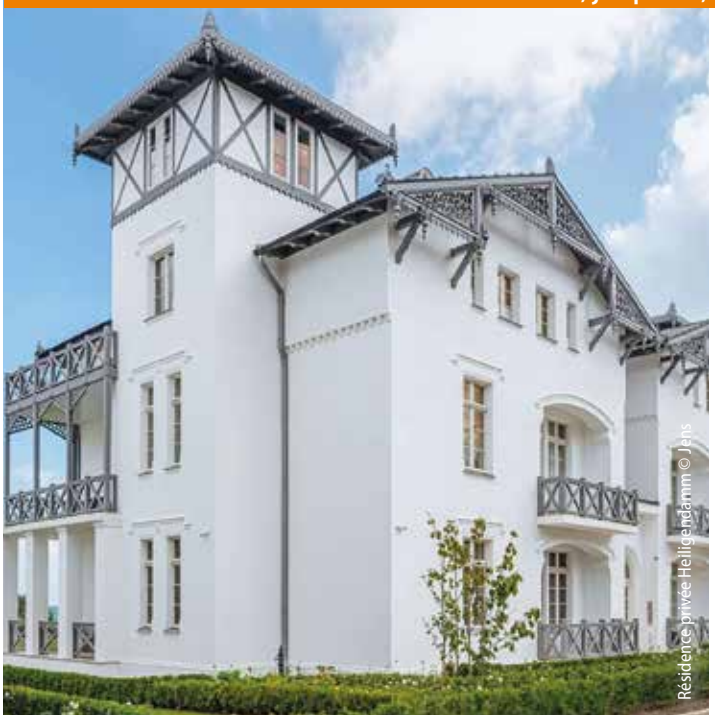
Beam connectors and secondary beams connectors

Connectors for outdoor use

Curtain wall connectors

RICON® inox

Connectors inox A2 for sPHuctures bois en extérieur, jusqu'à 17,4 kN











Applications:	Indoor and outdoor: furniture, balcony, deck, carport, playground and sports equipment, pergola, and light timber construction for usage classification 3.
Advantages:	Can be mounted visibly or invisibly, indoors or outdoors. Secure assembly with locking pin.
Suitable materials:	All wood species, such as oak, douglas fir, larch and impregnated woods, such as Accoya.
Technical details:	Used with narrow timber widths starting from 20 mm upwards. High strength capacity up to 17.4 kN, made of A2 stainless steel for usage classification 1, 2 ou 3.
Installation:	Quick and easy with a machining centre, router or portable router and the KNAPP® routing-jig.
Mounting:	Install plates with CS-screws Ø 5 mm and Ø 8 mm.
Accessories:	2 Flute Straight Router Bit | Art.-No. Z066, routing-jig Multi F30 | Art.-No. K501 and K506, mounting set RICON® | Art.-No. K065

VIDEO

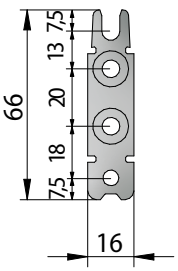
RICON® inox 66/16

(Dimensions in mm)

RICON® 66/16 inox - single connection (EA)

Art.-No. K267



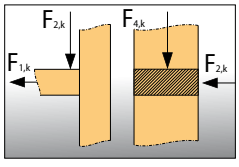


Connector	Connection	Screw connection		Charact. charge. [GL24h] C.SER.1*	
		Joist	Header	$F_{1,RK}$ [kN]	$F_{2,RK}$ [kN]**
66/16	EA	3 CS 5x80	3 CS 5x50	3.5	4.8
1 locking clip: $F_{3,Rk}$ = 1,0 kN			2 locking clips: $F_{3,Rk}$ = 2,0 kN		

Minimum timber cross section: 30 x 86 mm

Alternative screws: **load varies.
3 CS-screws 5x25 — 3 CS-screws 5x30
3 CS-screws 5x50 — 3 CS-screws 5x60

* Homogeneous glulam - indoor



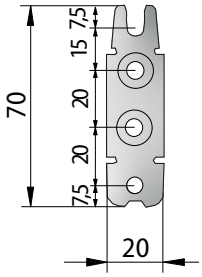
RICON® inox 70/20

(Dimensions in mm)

RICON® 70/20 inox - single connection (EA)

Art.-No. K271



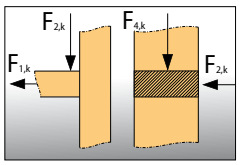


Connector	Connection	Screw connection		Charact. charge. [GL24h] C.SER.1*	
		Joist	Header	$F_{1,RK}$ [kN]	$F_{2,RK}$ [kN]**
70/20	EA	3 CS 5x80	3 CS 5x50	3.5	4.8
1 locking clip: $F_{3,Rk}$ = 1,0 kN			2 locking clips: $F_{3,Rk}$ = 2,0 kN		

Minimum timber cross section: 30 x 90 mm

* Homogeneous glulam - indoor

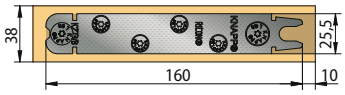
Alternative screws: **load varies.
3 CS-screws 5x25
3 CS-screws 5x50
3 CS-screws 5x30
3 CS-screws 5x60



RICON® inox series 25

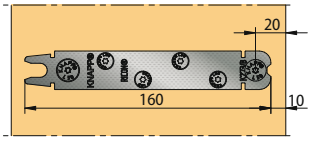
Minimum timber cross section

Inserted in the beam and screwed



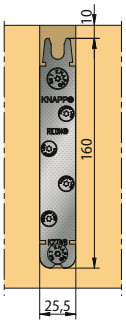
Built-in depth: 11 - 11,5 mm

Screwed onto post



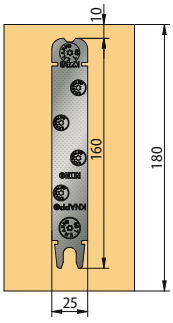
Minimum timber thickness: 50 mm

Inserted in the main beam and screwed



Minimum timber thickness: 60 mm

Screwed into the secondary beam

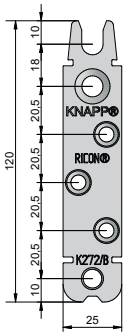


RICON® inox series 25

RICON® 120/25 inox - single connection (EA)

Art.-No. K272

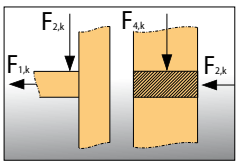




Connector	Connection	Screw connection		Charact. charge. [GL24h] C.SER.1*	
		Joist	Header	$F_{1,RK}$ [kN]	$F_{2,RK}$ [kN]
120/25	EA	2 CS 8x80 3 CS 5x80	2 CS 8x50 3 CS 5x50	4.4	8.9
1 locking clip: $F_{3,Rk}$ = 1,0 kN			2 locking clips: $F_{3,Rk}$ = 2,0 kN		

Minimum timber cross section: 38 x 140 mm

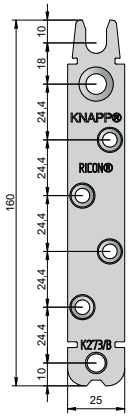
* Homogeneous glulam - indoor



RICON® 160/25 inox - single connection (EA)

Art.-No. K273

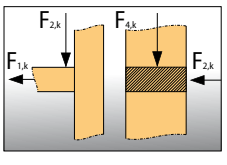




Connector	Connection	Screw connection		Charact. charge. [GL24h] C.SER.1*	
		Joist	Header	$F_{1,RK}$ [kN]	$F_{2,RK}$ [kN]
160/25	EA	2 CS 8x80 4 CS 5x80	2 CS 8x50 4 CS 5x50	4.4	10.4
1 locking clip: $F_{3,Rk}$ = 1,0 kN			2 locking clips: $F_{3,Rk}$ = 2,0 kN		

Minimum timber cross section: 38 x 180 mm

* Homogeneous glulam - indoor

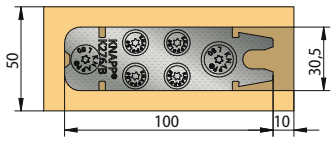


RICON® inox series 30

(Dimensions in mm)

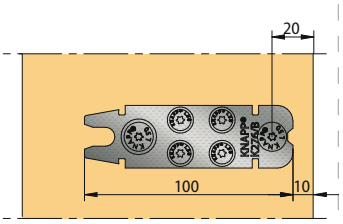
Minimum timber cross section

Inserted in the beam and screwed



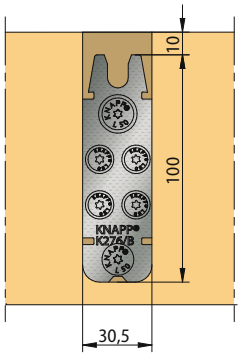
Built-in depth: 11 -11,5 mm

Screwed onto post



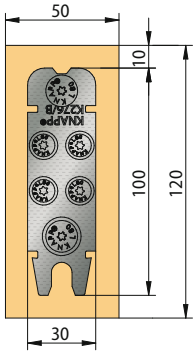
Minimum timber thickness: 50 mm

Inserted in the main beam and screwed



Minimum timber thickness: 60 mm

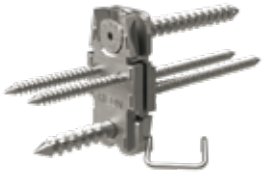
Screwed into the secondary beam

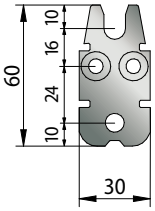


RICON® inox series 30

RICON® 60/30 inox - single connection (EA)

Art.-No. K274

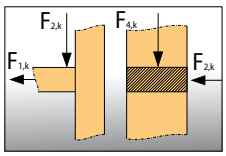




Connector	Connection	Screw connection		Charact. charge. [GL24h] C.SER.1*	
		Joist	Header	$F_{1,RK}$ [kN]	$F_{2,RK}$ [kN]
60/30	EA	2 CS 5x80 1 CS 8x80	2 CS 5x50 1 CS 8x50	4.4	5.2
1 locking clip: $F_{3,Rk}$ = 1.9 kN			2 locking clips: $F_{3,Rk}$ = 3.8 kN		

Minimum timber cross section: 50 x 80 mm

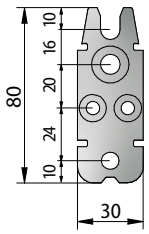
* Homogeneous glulam - indoor



RICON® 80/30 inox - single connection (EA)

Art.-No. K275

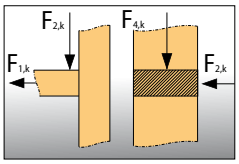




Connector	Connection	Screw connection		Charact. charge. [GL24h] C.SER.1*	
		Joist	Header	$F_{1,RK}$ [kN]	$F_{2,RK}$ [kN]
80/30	EA	2 CS 8x80 2 CS 5x80	2 CS 8x50 2 CS 5x50	4.4	7.5
1 locking clip: $F_{3,Rk}$ = 1.9 kN			2 locking clips: $F_{3,Rk}$ = 3.8 kN		

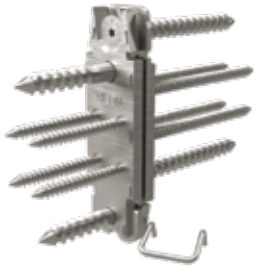
Minimum timber cross section: 50 x 100 mm

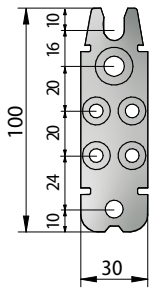
* Homogeneous glulam - indoor



RICON® 100/30 inox - single connection (EA)

Art.-No. K276

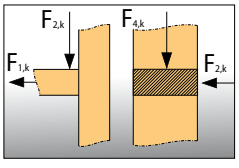




Connector	Connection	Screw connection		Charact. charge. [GL24h] C.SER.1*	
		Joist	Header	$F_{1,RK}$ [kN]	$F_{2,RK}$ [kN]
100/30	EA	2 CS 8x80 4 CS 5x80	2 CS 8x50 4 CS 5x50	4.4	10.4
1 locking clip: $F_{3,Rk}$ = 1.9 kN			2 locking clips: $F_{3,Rk}$ = 3.8 kN		

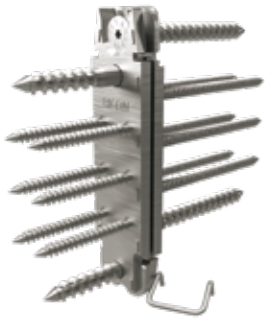
Minimum timber cross section: 50 x 120 mm

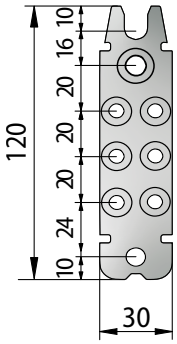
* Homogeneous glulam - indoor



RICON® 120/30 inox - single connection (EA)

Art.-No. K277

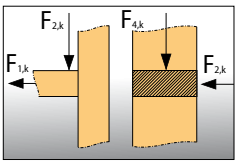




Connector	Connection	Screw connection		Charact. charge. [GL24h] C.SER.1*	
		Joist	Header	$F_{1,RK}$ [kN]	$F_{2,RK}$ [kN]
120/30	EA	2 CS 8x80 6 CS 5x80	2 CS 8x50 6 CS 5x50	4.4	13.2
1 locking clip: $F_{3,Rk}$ = 1.9 kN			2 locking clips: $F_{3,Rk}$ = 3.8 kN		

Minimum timber cross section: 50 x 140 mm

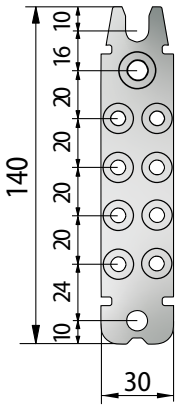
* Homogeneous glulam - indoor



RICON® 140/30 inox - single connection (EA)

Art.-No. K278

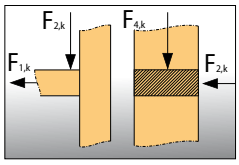




Connector	Connection	Screw connection		Charact. charge. [GL24h] C.SER.1*	
		Joint	Header	$F_{1,RK}$ [kN]	$F_{2,RK}$ [kN]
140/30	EA	2 CS 8x80 8 CS 5x80	2 CS 8x50 8 CS 5x50	4.4	16.1
1 locking clip: $F_{3,Rk}$ = 1.9 kN			2 locking clips: $F_{3,Rk}$ = 3.8 kN		

Minimum timber cross section: 50 x 160 mm

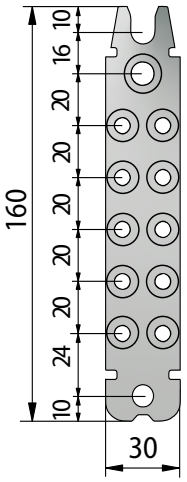
* Homogeneous glulam - indoor



RICON® 160/30 inox - single connection (EA)

Art.-No. K279

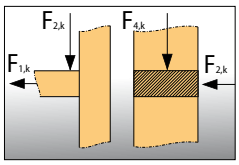




Connector	Connection	Screw connection		Charact. charge. [GL24h] C.SER.1*	
		Joist	Header	$F_{1,RK}$ [kN]	$F_{2,RK}$ [kN]
160/30	EA	2 CS 8x80 10 CS 5x80	2 CS 8x50 10 CS 5x50	4.4	17.4
1 locking clip: $F_{3,Rk}$ = 1.9 kN			2 locking clips: $F_{3,Rk}$ = 3.8 kN		

Minimum timber cross section: 50 x 180 mm

* Homogeneous glulam - indoor



Installing RICON® inox - Main-secondary beam connection type



Mill a pocket with routing-jig



Pre-drill holes and install brackets



Install locking clip (optional)



Assemble



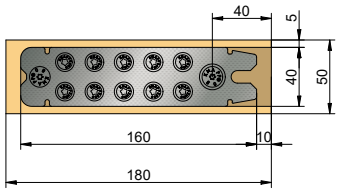
Features a locking clip for a secure connection.

RICON® inox series 40

(Dimensions in mm)

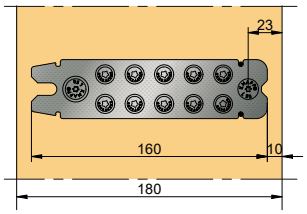
Minimum timber cross section

Inserted in the beam and screwed



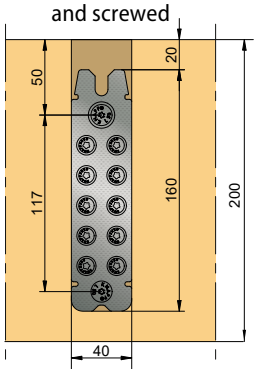
Built-in depth: 11 - 11,5 mm

Screwed onto post



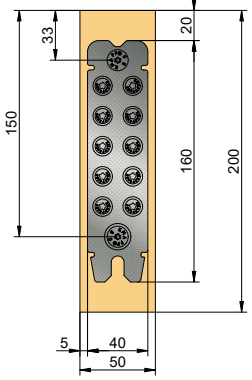
Minimum timber thickness: 50 mm

Inserted in the main beam and screwed



Minimum timber thickness: 60 mm

Screwed into the secondary beam

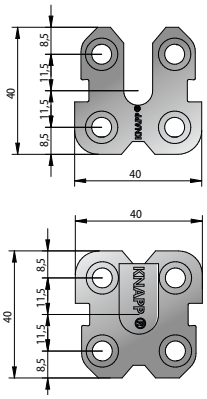


RICON® inox series 40

RICON® 40/40 inox - single connection (EA)

Art.-No. K378

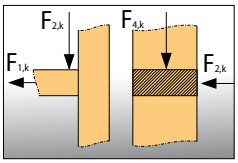




Connector	Connection	Screw connection		Charact. charge. [GL24h] C.SER.1*	
		Joist	Header	$F_{1,RK}$ [kN]	$F_{2,RK}$ [kN]
40/40	EA	4 CS 5x80	4 CS 5x50	7.5	4.0
1 locking clip: $F_{3,Rk}$ = 2.7 kN			2 locking clips: $F_{3,Rk}$ = 5.4 kN		

Minimum timber cross section: 50 x 60 mm

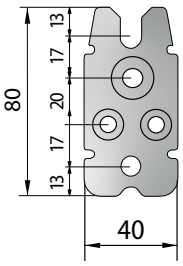
* Homogeneous glulam - indoor



RICON® 80/40 inox - single connection (EA)

Art.-No. K372

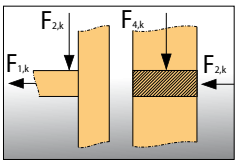




Connector	Connection	Screw connection		Charact. charge. [GL24h] C.SER.1*	
		Joist	Header	$F_{1,RK}$ [kN]	$F_{2,RK}$ [kN]
80/40	EA	2 CS 8x80 2 CS 5x80	2 CS 8x50 2 CS 5x50	4.4	7.5
1 locking clip: $F_{3,Rk}$ = 2.7 kN			2 locking clips: $F_{3,Rk}$ = 5.4 kN		

Minimum timber cross section: 50 x 100 mm

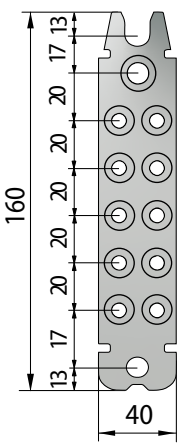
* Homogeneous glulam - indoor



RICON® 160/40 inox - single connection (EA)

Art.-No. K376

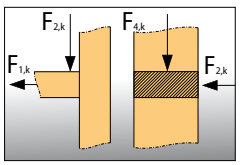




Connector	Connection	Screw connection		Charact. charge. [GL24h] C.SER.1*	
		Joist	Header	$F_{1,Rk}$ [kN]	$F_{2,Rk}$ [kN]
160/40	EA	2 CS 8x80 10 CS 5x80	2 CS 8x50 10 CS 5x50	4.4	17.4
1 locking clip: $F_{3,Rk}$ = 2.7 kN			2 locking clips: $F_{3,Rk}$ = 5.4 kN		

Minimum timber cross section: 50 x 180mm

* Homogeneous glulam - indoor



RICON® inox DA and EAR for all sizes

Double connection with connecting nuts and RICON® inox CS-screws (available upon request)

DA



RICON DA

Single or double connection with inserts and RICON® inox CS-screws (available upon request)

EAR

RICON EAR



RICON® inox screws

RICON® Self-tapping CS-screws with reinforced shaft
(delivery includes CS-screws with the matching RICON® connectors)

Art.-No. Z950	Inox A2 CS-screws 5x50
Art.-No. Z953	Inox A2 CS-screws 8x50

Application: to screw the RICON® inox plate into the side grain of main beam/post.



Art.-No. Z952	Inox A2 CS-screws 5x80
Art.-No. Z954	Inox A2 CS-screws 8x80

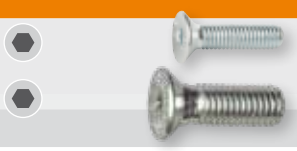
Application: to screw the RICON® inox plate into the side grain of secondary beam/latch.



RICON® inox DA - EAR CS-screws

Art.-No. Z955	Inox A2 CS-screws M5x16 (for RICON® 60/40 DA)
Art.-No. Z956	Inox A2 CS-screws M8x18 (for RICON® DA and EAR)

Application: to mount RICON® plate in a cross joint double connector (DA or EAR).



RICON® DA connecting nuts
(delivery includes connecting nuts with the matching RICON® connectors)

Art.-No. K540	Connecting nut M5 8x48	50 mm post thickness
Art.-No. K541	Connecting nut M5 8x53	55 mm post thickness
Art.-No. K542	Connecting nut M5 8x58	60 mm post thickness
Art.-No. K543	Connecting nut M5 8x78	80 mm post thickness

Application: to mount RICON® inox 60/40 double connector (DA).



Art.-No. K544	Connecting nut M8 10x36	<50 mm post thickness
Art.-No. K545	Connecting nut M8 10x48	50 mm post thickness
Art.-No. K546	Connecting nut M8 10x53	55 mm post thickness
Art.-No. K547	Connecting nut M8 10x58	60 mm post thickness
Art.-No. K548	Connecting nut M8 10x68	70 mm post thickness
Art.-No. K549	Connecting nut M8 10x78	80 mm post thickness

Application: to mount RICON® and RICON® inox bigger sizes double connectors (DA).



Insert RICON® inox EAR
(delivery for connecting nuts with the matching RICON® connectors are available upon request)

Art.-No. Z540	Insert M5x14 for RICON® 60/40
Art.-No. Z541	Insert M8x18

Application: to mount unique applications and post sizes.



RICON®

Post and beam connectors, main and secondary beams, curtain walls



1 The dovetail shape ensures optimum reception of the RICON® retaining CS-screws. The short clamping distance makes it easy to hook in, while engaging the plates, ensuring tightness and fast assembly of the elements.

2 RICON® consists of two identical parts. It is made in Austria from a premium quality steel and is also available hot-dip galvanized.

3 Ø 5 mm and Ø 8 mm RICON® CS-screws. These adjustable holding screws compensate fabrication tolerances. The reinforced shaft with integrated stop guarantees exact positioning.

4 The stainless spring steel locking clip can be installed into the locating slots prior to final assembly. It locks the connection against the slide-indirection and can be released again.

Fire rating: Fire resistance (EN 1995-1-2) through 3-4 sided concealed, joint-tight installation (R30 ≥ 28 mm, R60 ≥ 49 mm)

AUSTRIA

RICON


© Stefan GmbH & Co. KG


© Rossmanith GmbH & Co. KG


© Nova Tecnica, Pergolas (GR)


Holz-Alu Glasfassade © Dietel

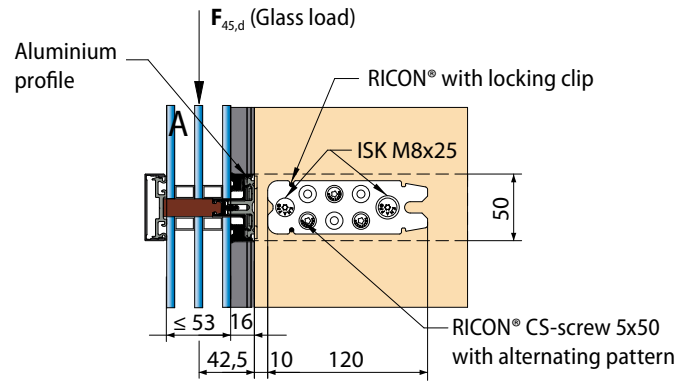
Applications:	Aluminium timber curtain walls, conservatories, overhanging roofs, roof structures.
Advantages:	Invisible connection, assembly of curtain wall rails, from the inside or outside, secure connections with automatic locking pins, removable.
Suitable materials:	Solid wood and wood materials, softwood or hardwood, LVL, BauBuche, steel and concrete.
Technical details:	For timber sections from 50 mm thick, up to 700 kg load capacity for curtain walls and 23 kN load capacity for main and secondary beam connections.
Installation:	Simple and fast with a machining centre, router or portable router and the KNAPP® routing-jig.
Mounting:	Install plates with CS-screws Ø 5 mm and Ø 8 mm.
Accessories:	2 Flute Straight Router Bit | Art.-No. Z066, routing-jig Multi F30 | Art.-No. K501 and K506, mounting set RICON® | Art.-No. K065.

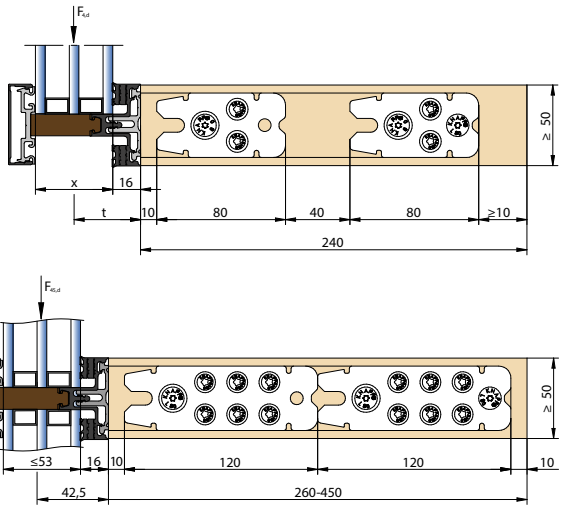
RICON®

Application examples and connection details

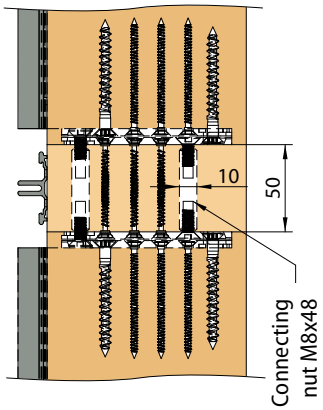
Wood curtain wall up to 700 kg

(Dimensions in mm)



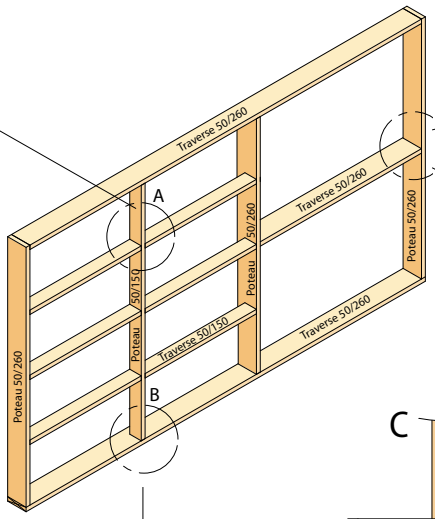


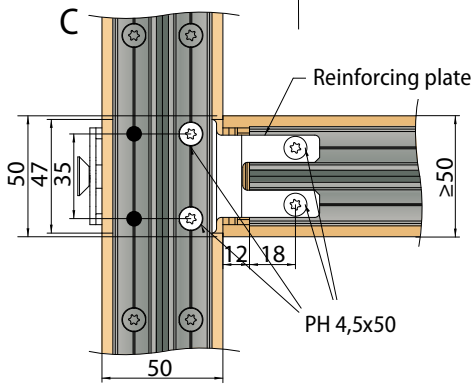
A



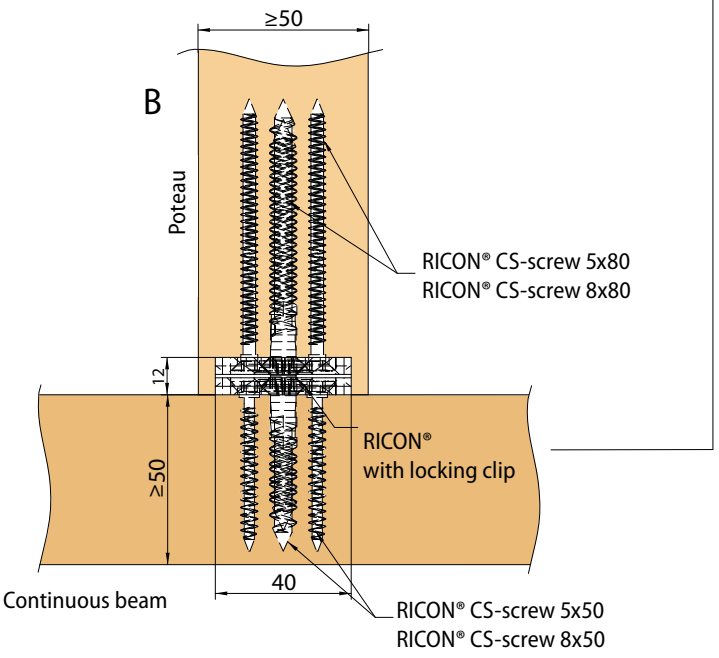
RICON® double connection

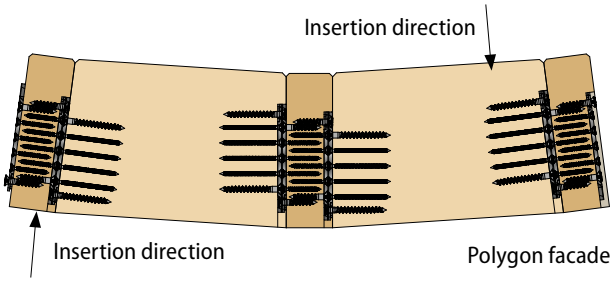
C





RICON® double connection
with reinforcing plate (RP)





RICON®

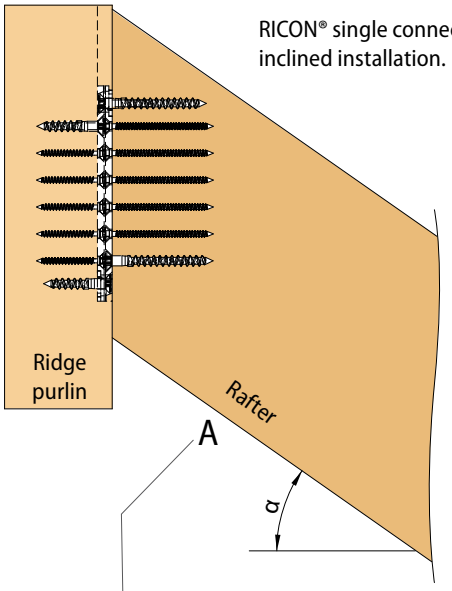
Exemples d'applications and détails d'assemblages

Main-secondary beam connections
e.g. wood beam ceilings, roofs and sunrooms.

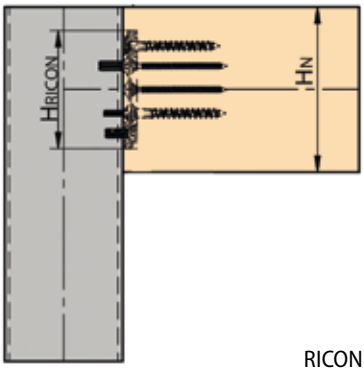
Wood to steel connection

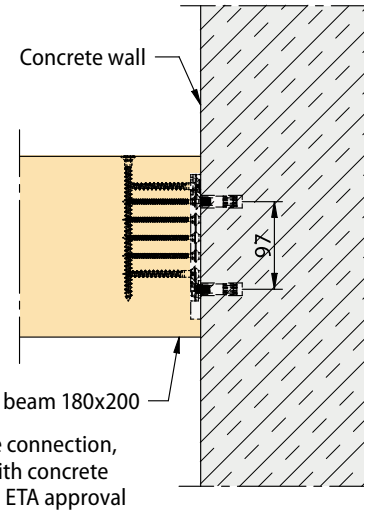
Wood to concrete connection
e.g. with RICON® 140/40

(Dimensions in mm)



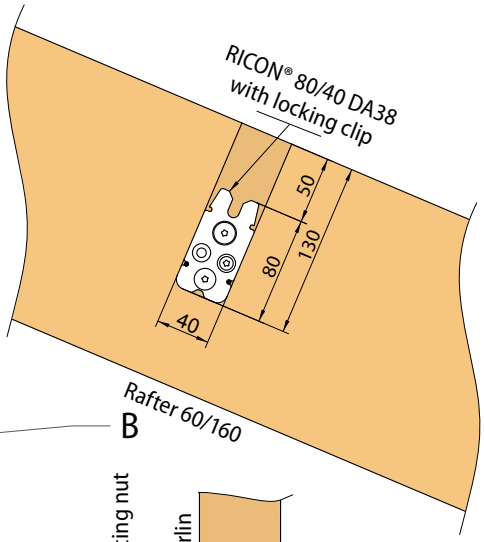
RICON® single connection, inclined installation.

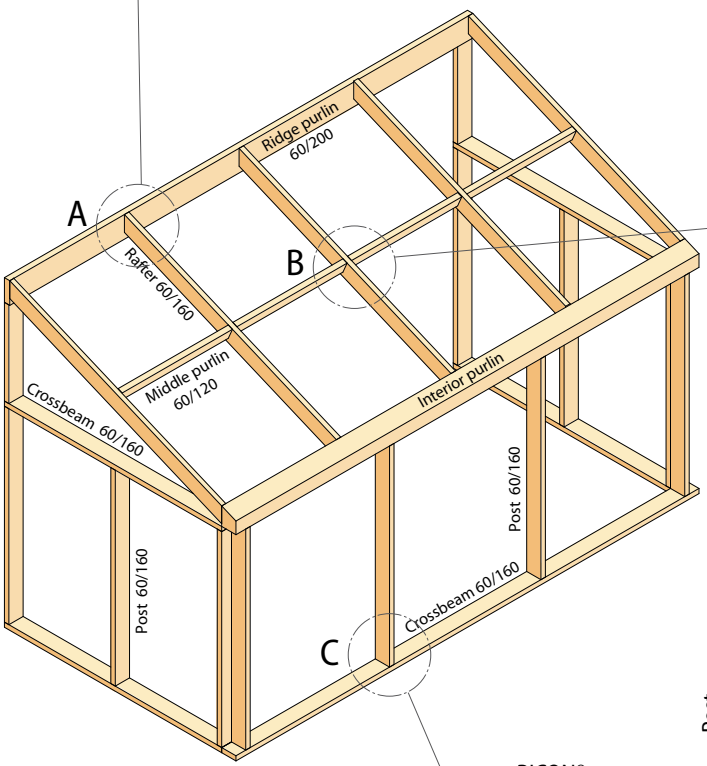


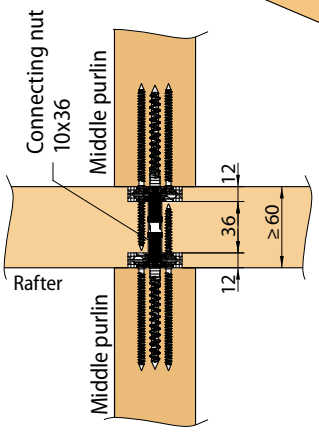


RICON® single connection, installation with concrete anchors upon ETA approval

RICON® double connection



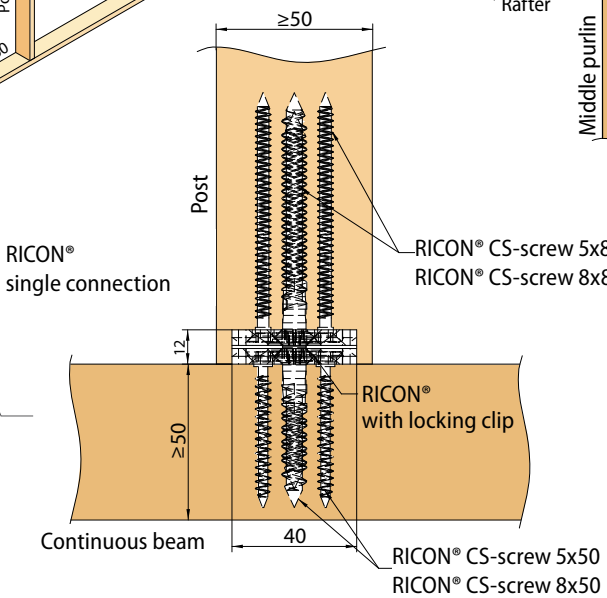






© Solarlux

Construction of a sunroom.

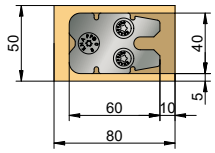


RICON® 60/40

(Dimensions in mm)

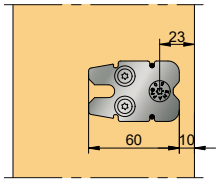
Minimum timber cross section

Inserted in the beam and screwed



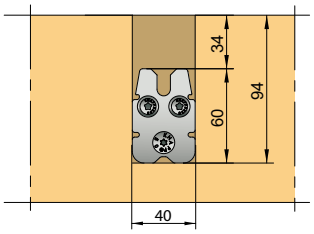
Built-in depth: 12 - 12.5 mm

Screwed onto post



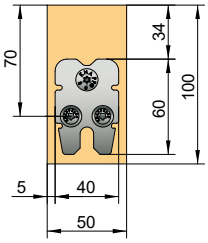
Min. width of beam and post: 50 mm

Inserted in the main beam and screwed



Min. width of of main beam: 60 mm

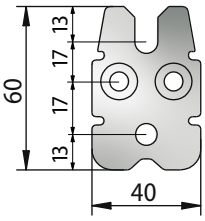
Screwed into the secondary beam



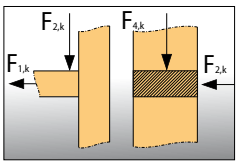
RICON® 60/40 EA - single connection

Art.-No. K360





Connector	Connection	Screw connection		Charact. charge. [GL24h] C.SER.1*	
		Joist	Header	$F_{1,RK}$ [kN]	$F_{2,Rk}$ [kN]
60/40	**EA**	2 CS 5x80 1 CS 8x80	2 CS 5x50 1 CS 8x50	4.4	5.0
1 locking clip: $F_{3,Rk}$ = 2.7 kN			2 locking clips: $F_{3,Rk}$ = 5.15 kN		



Minimum timber dimensions: 50 x 80 mm

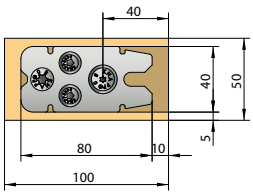
Single connection for post and beam connection with a minimum timber cross section of 50 mm (stress at mid to the axis of beam)

* alternatively, longer screws can be used in end grain.
1 CS-screw 8x160 - $F_{2,RK}$ = 6.3 kN

RICON® 80/40

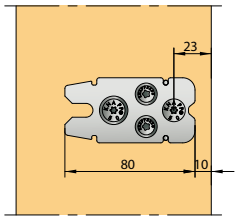
Minimum timber cross section

Inserted in the beam and screwed



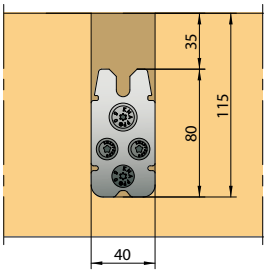
Built-in depth: 12 - 12.5 mm

Screwed onto post



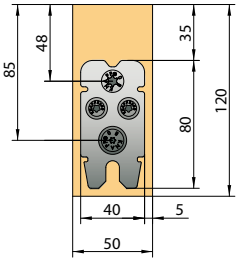
Min. width of beam and post: 50 mm

Inserted in the main beam and screwed



Min. width of of main beam: 60 mm

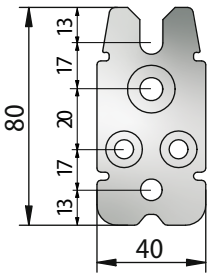
Screwed into the secondary beam



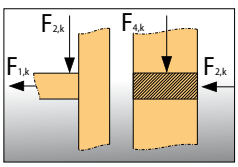
RICON® 80/40 EA - single connection

Art.-No. K361





Connector	Connection	Screw connection		Charact. charge. [GL24h] C.SER.1*	
		Joist	Header	$F_{1,RK}$ [kN]	$F_{2,Rk}$ [kN]
80/40	**EA**	2 CS 5x80 2 CS 8x80	2 CS 5x50 2 CS 8x50	4.4	7.3
1 locking clip: $F_{3,Rk}$ = 2.7 kN			2 locking clips: $F_{3,Rk}$ = 5.4 kN		



Minimum timber dimensions: 50 x 100 mm

Single connection for post and beam connection with a minimum timber cross section of 50 mm (stress at mid to the axis of beam)

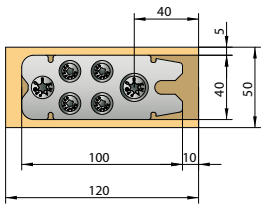
* alternatively, longer screws can be used in end grain.
2 CS-screws 8x160 - $F_{2,Rk}$ = 10.3 kN

RICON® 100/40

(Dimensions in mm)

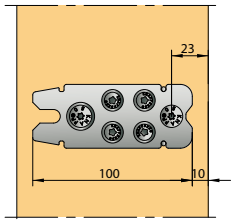
Minimum timber cross section

Inserted in the beam and screwed



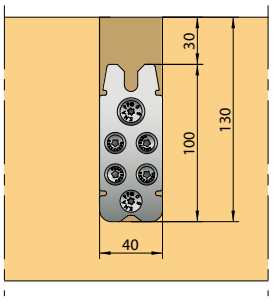
Built-in depth: 12 - 12.5 mm

Screwed onto post



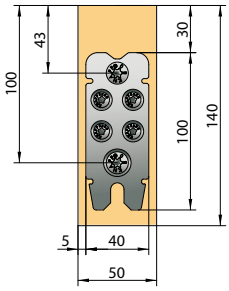
Min. width of beam and post: 50 mm

Inserted in the main beam and screwed



Min. width of of main beam: 60 mm

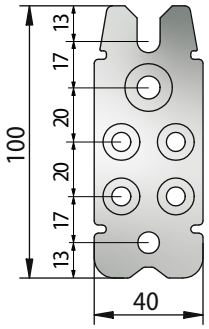
Screwed into the secondary beam



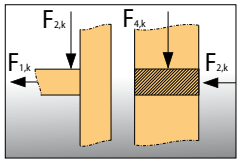
RICON® 100/40 EA - single connection

Art.-No. K362





Connector	Connection	Screw connection		Charact. charge. [GL24h] C.SER.1*	
		Joist	Header	$F_{1,RK}$ [kN]	$F_{2,Rk}$ [kN]
100/40	**EA**	4 CS 5x80 2 CS 8x80	4 CS 5x50 2 CS 8x50	4.4	10.0
1 locking clip: $F_{3,Rk}$ = 2.7 kN			2 locking clips: $F_{3,Rk}$ = 5.4 kN		



Minimum timber dimensions: 50 x 120 mm

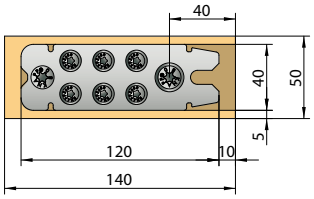
Single connection for post and beam connection with a minimum timber cross section of 50 mm (stress at mid to the axis of beam)

* alternatively, longer screws can be used in end grain.
2 CS-screws 8x160 - $F_{2,RK}$ = 13.9 kN

RICON® 120/40

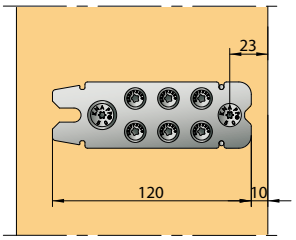
Minimum timber cross section

Inserted in the beam and screwed



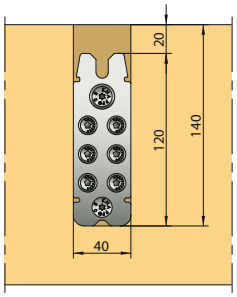
Built-in depth: 12 - 12.5 mm

Screwed onto post



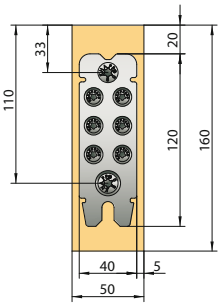
Min. width of beam and post: 50 mm

Inserted in the main beam and screwed



Min. width of of main beam: 60 mm

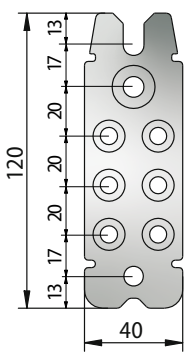
Screwed into the secondary beam



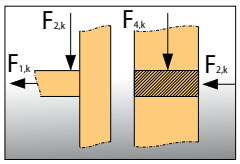
RICON® 120/40 EA - single connection

Art.-No. K363





Connector	Connection	Screw connection		Charact. charge. [GL24h] C.SER.1*	
		Joist	Header	$F_{1,RK}$ [kN]	$F_{2,Rk}$ [kN]
120/40	**EA**	6 CS 5x80 2 CS 8x80	6 CS 5x50 2 CS 8x50	4.4	12.8
1 locking clip: $F_{3,Rk}$ = 2.7 kN			2 locking clips: $F_{3,Rk}$ = 5.4 kN		



Minimum timber dimensions: 50 x 140 mm

Single connection for post and beam connection with a minimum timber cross section of 50 mm (stress at mid to the axis of beam)

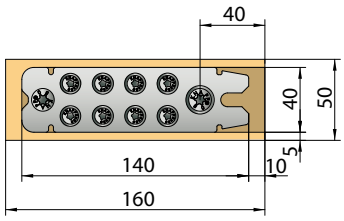
* alternatively, longer screws can be used in end grain.
2 CS-screws 8x160 - $F_{2,RK}$ = 16.6 kN

RICON® 140/40

(Dimensions in mm)

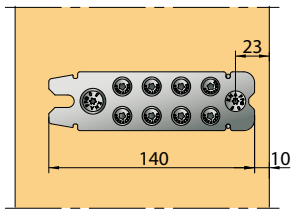
Minimum timber cross section

Inserted in the beam and screwed



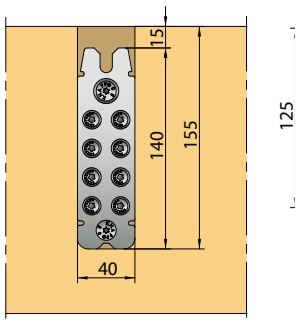
Built-in depth: 12 - 12.5 mm

Screwed onto post



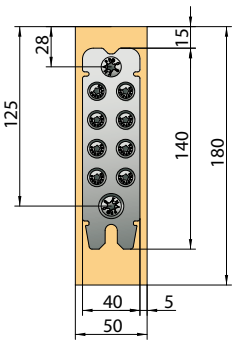
Min. width of beam and post: 50 mm

Inserted in the main beam and screwed



Min. width of of main beam: 60 mm

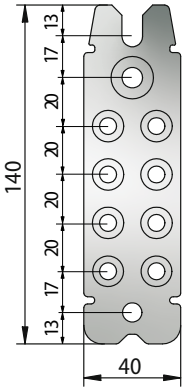
Screwed into the secondary beam



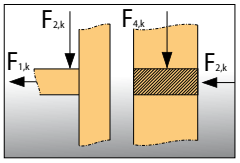
RICON® 140/40 EA - single connection

Art.-No. K365





Connector	Connection	Screw connection		Charact. charge. [GL24h] C.SER.1*	
		Joist	Header	$F_{1,RK}$ [kN]	$F_{2,Rk}$ [kN]
140/40	**EA**	8 CS 5x80 2 CS 8x80	8 CS 5x50 2 CS 8x50	4.4	15.5
1 locking clip: $F_{3,Rk}$ = 2,7 kN			2 locking clips: $F_{3,Rk}$ = 5,4 kN		



Minimum timber dimensions: 50 x 160 mm

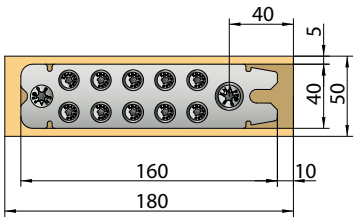
Single connection for post and beam connection with a minimum timber cross section of 50 mm (stress at mid to the axis of beam)

* alternatively, longer screws can be used in end grain.
2 CS-screws 8x160 - $F_{2,RK}$ = 19,3 kN

RICON® 160/40

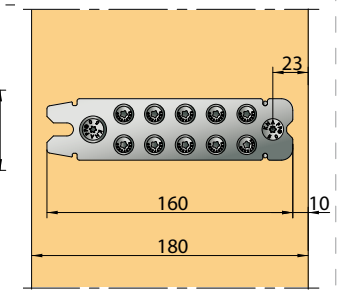
Minimum timber cross section

Inserted in the beam and screwed



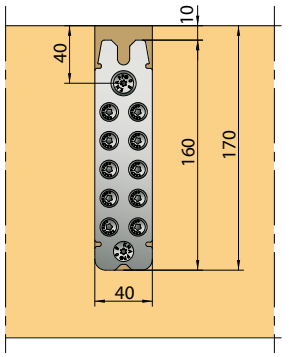
Built-in depth: 12 - 12.5 mm

Screwed onto post



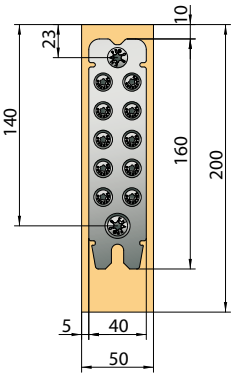
Min. width of beam and post: 50 mm

Inserted in the main beam and screwed



Min. width of of main beam: 60 mm

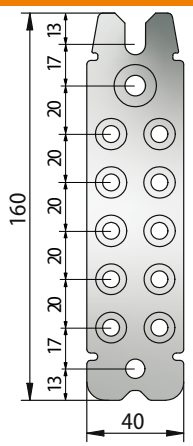
Screwed into the secondary beam



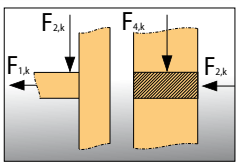
RICON® 160/40 EA - single connection

Art.-No. K364





Connector	Connection	Screw connection		Charact. charge. [GL24h] C.SER.1*	
		Joist	Header	$F_{1,RK}$ [kN]	$F_{2,Rk}$ [kN]
160/40	**EA**	10 CS 5x80 2 CS 8x80	10 CS 5x50 2 CS 8x50	4.4	18.2
1 locking clip: $F_{3,Rk}$ = 2.7 kN			2 locking clips: $F_{3,Rk}$ = 5.4 kN		



Minimum timber dimensions: 50 x 180 mm

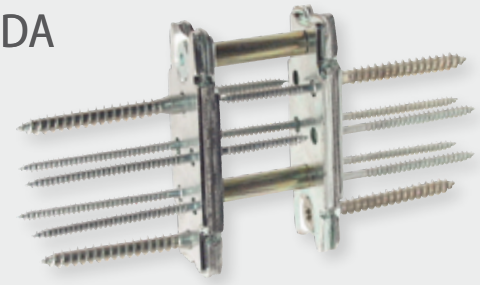
Single connection for post and beam connection with a minimum timber cross section of 50 mm (stress at mid to the axis of beam)

* alternatively, longer screws can be used in end grain.
2 CS-screws 8x160 - $F_{2,RK}$ = 22.0 kN

RICON® DA and EAR for all sizes

Double connection with connecting nuts and RICON® CS-screws

DA



RICON DA

Single- or dual connection with insert and RICON® CS-screws

EAR



RICON EAR

RICON® screws

RICON® Self-tapping CS-screws with reinforced shaft
(CS-screws are included with all RICON® connectors)

Art.-No. Z533	CS-screws 5x50
Art.-No. Z531	CS-screws 8x50

Application: to mount RICON plate into the side grain of main beam/post.



Art.-No. Z534	CS-screws 5x80
Art.-No. Z532	CS-screws 8x80
Art.-No. Z581	CS-screws 8x160

Application: to mount RICON plate into the end grain of secondary beam.



CS-screws (CS) RICON® DA

Art.-No. Z545	CS-screws RICON® M5x20 (for RICON® 60/40 DA)
Art.-No. Z548	CS-screws RICON® M8x25

Application: to mount RICON plate in a cross joint double connector application.



Connecting nuts RICON® DA
(Connecting nuts are included with all RICON DA connectors)

Art.-No. K540	Connecting nut M5 8x48	50 mm post thickness
Art.-No. K541	Connecting nut M5 8x53	55 mm post thickness
Art.-No. K542	Connecting nut M5 8x58	60 mm post thickness
Art.-No. K543	Connecting nut M5 8x78	80 mm post thickness

Application: to mount RICON® 60/40 double connector (DA).



Art.-No. K544	Connecting nut M8 10x36	<50 mm post thickness
Art.-No. K545	Connecting nut M8 10x48	50 mm post thickness
Art.-No. K546	Connecting nut M8 10x53	55 mm post thickness
Art.-No. K547	Connecting nut M8 10x58	60 mm post thickness
Art.-No. K548	Connecting nut M8 10x68	70 mm post thickness
Art.-No. K549	Connecting nut M8 10x78	80 mm post thickness

Application: to mount RICON 80/40 and bigger sizes double connectors.



Inserts RICON® EAR
(connecting inserts can be included upon request)

Art.-No. Z540	Insert M5x14 for RICON® 60/40
Art.-No. Z541	Insert M8x18

Application: for unique applications and post sizes.



RICON® accessories

Routing-jig for all RICON® sizes

Art.-No. K502	Routing-jig MULTI F40 (plywood)

Note: the routing-jig MULTI F is suitable for a Ø 30 mm bushing guide (for plunge router) and a Ø 15 mm TCT router cutter.



Application: for milling the pocket to recess connector for concealed mounting.

RICON® EA/DA drilling-jig guide (galvanized steel)

Art.-No.	K621	K622	K623	K624	K629	K630
	60/40	80/40	100/40	120/40	140/40	160/40



Application: for installation into the drilling-jig and exact pre-drilling of the positioning srews.

TCT slotting cutter

Art.-No. Z066	2 flute straight router bits Ø 15 mm, 25 mm length with Ø 8 mm shank



Application: to recess the rebate for RICON® and GIGANT.

RICON® locking clip (stainless spring steel)

Art.-No. K064	RICON® locking clip



Application: to lock the connectors against slide-in direction. If necessary, the connection can be released again.

RICON® EA/DA drilling-jig for post-beam connections

Art.-No.	K634	K635	K636	K637	K638	K639
	60/40 Set	80/40	100/40	120/40	140/40	160/40

RICON® EA/DA drilling-jig for header-joint connections

Art.-No.	K634	K642	K643	K644	K645	K646
	60/40 Set	80/40	100/40	120/40	140/40	160/40



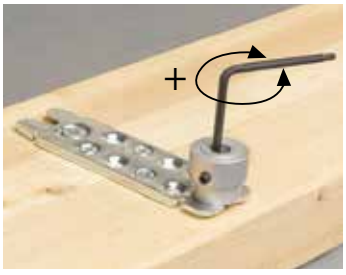
Application: guide for pre-drilling holes of all RICON® connectors.

RICON® drilling-jig with adjustable drilling blocks

Art.-No.	-	K647	K647	K647	K647	K647
Drilling blocks:	-	80/40	100/40	120/40	140/40	160/40



Application: guide for pre-drilling holes of all RICON® connectors.



RICON® mounting set

Art.-No. K065	Consisting of: 1 RICON®-depth gauge incl. 1 Torx wrench T25 combined with Allen key SW5

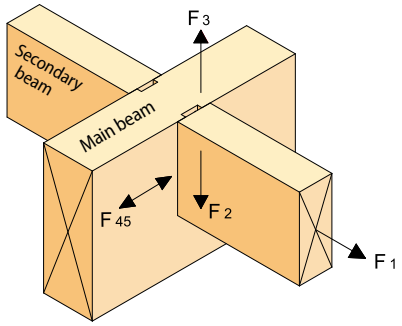


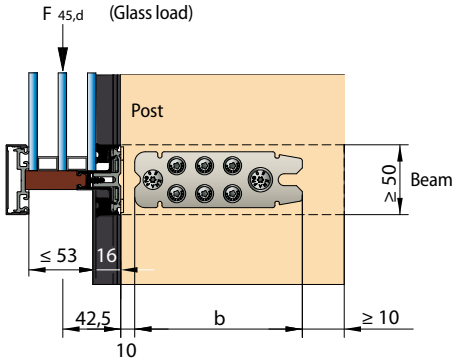
Application: for fine tuning of RICON® CS-screws.

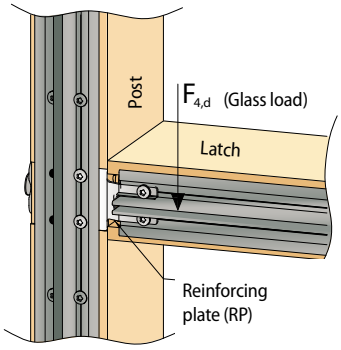
RICON®

Load bearing capacities for timber curtain wall example

(Dimensions in mm)







RICON®	Timber grade	Characteristic values			Charact. charge. [kN] $F_{3,Rk}$		Eccentric glass loads/post $F_{4,Rd}$	
		$F_{1,Rk}$ [kN]	$F_{2,Rk}$ [kN]	Centred $F_{45,Rk}$ [kN]	Locking clip(s) 1	Locking clip(s) 2	without VP [kg]	with VP [kg]
60/40	C24	4,1	4,7	5,2	2,7	5,0	43	317
	GL24h	4,4	5,0	5,2			47	320
	GL32h	4,9	5,5	5,2			52	326
80/40	C24	4,1	6,8	8,0	2,7	5,4	59	332
	GL24h	4,4	7,3	8,7			64	337
	GL32h	4,9	8,1	9,7			71	345
100/40	C24	4,1	9,4	11,8	2,7	5,4	94	368
	GL24h	4,4	10,0	12,8			102	376
	GL32h	4,9	11,0	14,3			114	388
120/40	C24	4,1	12,0	15,4	2,7	5,4	131	404
	GL24h	4,4	12,8	15,6			142	415
	GL32h	4,9	14,0	15,6			158	432
140/40	C24	4,1	14,5	15,6	2,7	5,4	169	443
	GL24h	4,4	15,5	15,6			183	457
	GL32h	4,9	16,9	15,6			205	478
160/40	C24	4,1	17,1	15,6	2,7	5,4	210	484
	GL24h	4,4	18,2	15,6			227	501
	GL32h	4,9	19,9	15,6			254	528
2 x 80/40	C24	4,1	11,5	10,4	2,7	5,4	180	453
	GL24h	4,4	12,3	10,4			195	468
	GL32h	4,9	13,6	10,4			218	491
2 x 100/40	C24	4,1	16,6	15,6	2,7	5,4	270	543
	GL24h	4,4	17,8	15,6			292	566
	GL32h	4,9	19,5	15,6			327	600
2 x 120/40	C24	4,1	21,8	15,6	2,7	5,4	356	630
	GL24h	4,4	23,2	15,6			385	659
	GL32h	4,9	25,4	15,6			431	704

Tested at the University of Karlsruhe (KIT), **Building certification:** ETA-10/0189
Monitored by Univ.-Prof. Dr.-Ing. Blaß. at the University of Karlsruhe (KIT) Research Center for Steel, Timber and Masonry.

$F_{1,Rk}/F_{1,Rd}$ Characteristic/Design values of load-bearing capacity in the case of single stress perpendicular to the connector plate (tension)
$F_{2,Rk}/F_{2,Rd}$ Characteristic/Design values in slide-in direction
$F_{3,Rk}/F_{3,Rd}$ Characteristic/Design values against the slide-in direction
$F_{45,Rk}/F_{45,Rd}$ Characteristic/Design values perpendicular to slide-in direction

SCHÜCO

Glazing up to 1100 kg with the Schüco AOC.TI curtain wall profile system:

In combination with RICON® connectors for the assembly of the wooden supporting structure and with the help of suitable glazing supports, this system allows glazing loads of up to 1,100 kg per crossbar.
www.schueco.com

RICON® reinforcing plate (inox)**

K519	K523	K530	K531	K533	K534	K535	K536	K537	K538	K539
Schüco GP 50/50 50 mm*	Schüco GP 50/60 60 mm*	RP RP-tecline 50A0-HA 50mm*	RP RP-tecline 60A0-HA 60mm*	RP RP-tecline 80A0-HA 80mm*	Gutmann P GF 50 50 mm*	Gutmann P GF 60 60 mm*	Gutmann P GF 80 80 mm*	RAICO GP 41 and 47 50 mm*	RAICO GP 41 and 47 60 mm*	RAICO GP 67 80 mm*

Application: The reinforcing plate connects the base aluminium profiles and increases the load capacity of the post and beam connection. The reinforcing plate is available for different base profiles (see table). Reinforcing plates for other profiles on request.

*width of post and beam

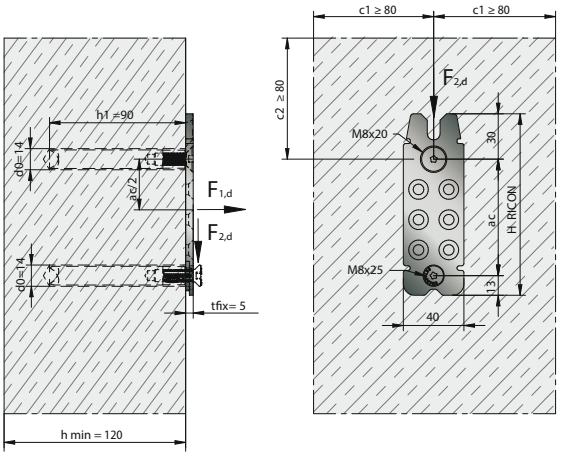


** Reinforcing plates are approved by the building authorities for all common systems as shown in ETA-10/0189.

RICON® wood to concrete connection

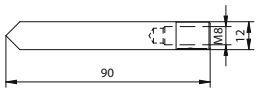
Header-joist connection with glued anchor

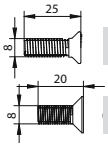
(Dimensions in mm)



Concrete strength class C20/25

fischer RG 12x90 M18 I (8.8) with CS M8x25 and CS M8x20 (zinc-coated steel)





CS M8x25 with hexagon socket

CS M8x20 with hexagon socket

fischer Superbond-System: FIS SB 390 S

Drill hole diameter d_0 =	14 mm
Drill hole depth h_1 =	90 mm
Total fixing thickness C_{Six} =	5 mm
Spacing a_c =	cf. table
Minimal edge distance $c_{1,min} = c_{2,min}$ =	80 mm
Minimal concrete wall thickness h_{min} =	120 mm
Approval:	ETA-12/0258



Wood to concrete connection in slide-in direction F_2

F_2 load-bearing values in the direction of insertion

KNAPP® connector	Concrete connection		Timber connection						
	$F_{2,Rd,béton}$	Spacing	Wood material		$F_{2,Rd,bois}$				
	Shear force $F_{2,Rd,béton}$ [kN]	Dowel spacing ac [mm]	Wood type	Char. Density ρ_k [kg/m³]	Characteristic values [kN]		Design values $F_{2,Rd}$, $\gamma_M = 1,3$ [kN]		
					$F_{2,KCC,Rk}$, γ_M =1,0	$F_{2,Rk}$	$k_{mod} = 0,6$	$k_{mod} = 0,8$	$k_{mod} = 0,9$
RICON® 100/40	14,00	57,00	C24	350	14,00	9,40	4,34	5,78	6,51
			GL24h	385		10,00	4,62	6,15	6,92
RICON® 120/40	18,00	77,00	C24	350		12,00	5,54	7,38	8,31
			GL24h	385		12,80	5,91	7,88	8,86
RICON® 140/40	18,00	97,00	C24	350	18,00	14,50	6,69	8,92	10,04
			GL24h	385		15,50	7,15	9,54	10,73
RICON® 160/40	18,00	117,00	C24	350		17,10	7,89	10,52	11,84
			GL24h	385		18,20	8,40	11,20	12,60

Service class: 1-2
$\gamma_{M,timber} = 1,3$

Calculation of $F_{2,Rd}$ for timber-concrete connection:

$$F_{2,Rk} = \min \begin{cases} \min F_{2,Rd,\,timber} \\ \min F_{2,Rd,\,concrete} \end{cases}$$

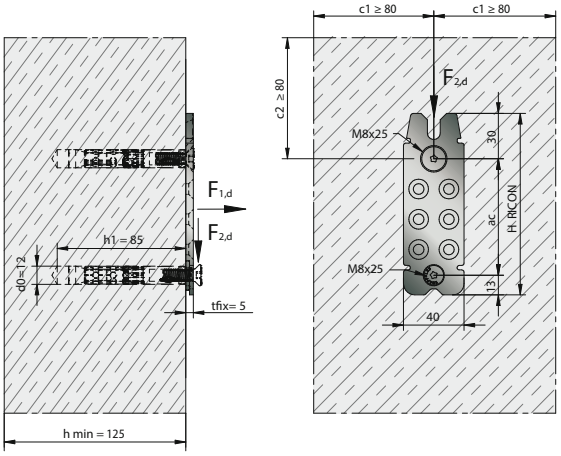
$$F_{2,Rk,\,timber} = \min \begin{cases} \min F_{2,KCC,\,Rk} / \gamma_M \\ \min F_{2,Rk} \cdot k_{mod} \end{cases} \Big/ \gamma_{M,\,timber}$$

Note:
The fischer anchors for KNAPP wood-to-concrete connections were determined according to the above tables and on the basis of a concrete class C20/25 with the fischer C-FIX calculation tool. They have been specially checked by fischer. Any cases outside the tables must be checked by KNAPP®, fischer or a competent engineer. In many cases, dimensioning with the C-FIX calculation tool is sufficient. The complete analysis of concrete fasteners is available on request from KNAPP®. KNAPP® accepts no liability for the incorrect use of the tables in this document. The condition of the concrete elements (strength classes and surfaces) must be checked by a professional, KNAPP® accepts no responsibility for this. KNAPP® products and KNAPP® connectors must be installed in accordance with the respective installation rules and instructions as well as the respective Technical Assessments.

Other anchoring solutions are possible, they must be technically suitable and have an ETA technical assessment.

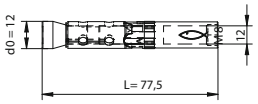
(Dimensions in mm)

Header-joist connection with heavy duty anchor



Concrete strength class C20/25

fischer FH II 12/M8 I (8.8) with CS M8x30 (zinc-coated steel)





CS M8x30 with hexagon socket

Drill hole diameter d_0 =	12 mm
Drill hole depth h_1 =	85 mm
Total fixing thickness C_{Six} =	5 mm
Spacing a_c =	cf. table
Minimal edge distance $c_{1,min} = c_{2,min}$ =	80 mm
Minimal concrete wall thickness h_{min} =	125 mm
Approval:	ETA-07/0025, Option 1

Wood to concrete connection in slide-in direction F_2

F_2 load-bearing values in the direction of insertion

KNAPP® connector	Concrete connection		Timber connection					
	$F_{2,Rd,concrete}$	Spacing	Wood material		$F_{2,Rd,timber}$			
	Shear force $F_{2,Rd,concrete}$ [kN]	Dowel spacing ac [mm]	Wood type	Char. Density. ρ_k [kg/m³]	Characteristic values [kN]		Design values $F_{2,Rd}$, $\gamma_M = 1,3$ [kN]	
					$F_{2,KCC,Rk}$, γ_M =1,0	$F_{2,Rk}$	k_{mod} = 0,6	k_{mod} = 0,8	k_{mod} = 0,9
RICON® 100/40	14,00	57,00	C24	350	14,00	9,40	4,34	5,78	6,51
			GL24h	385		10,00	4,62	6,15	6,92
RICON® 120/40	16,00	77,00	C24	350		12,00	5,54	7,38	8,31
			GL24h	385		12,80	5,91	7,88	8,86
RICON® 140/40	18,00	97,00	C24	350	18,00	14,50	6,69	8,92	10,04
			GL24h	385		15,50	7,15	9,54	10,73
RICON® 160/40	18,00	117,00	C24	350		17,10	7,89	10,52	11,84
			GL24h	385		18,20	8,40	11,20	12,60

Service class : 1-2
$\gamma_{M,bois}$ = 1,3

Calculation of $F_{2,Rd}$ for timber-concrete connection:

$$F_{2,Rk} = \min \begin{cases} \min F_{2,Rd,\,timber} \\ \min F_{2,Rd,\,concrete} \end{cases}$$

$$F_{2,Rk,\,timber} = \min \begin{cases} \min F_{2,KCC,\,Rk} / \gamma_M \\ \dfrac{\min F_{2,Rk} \cdot k_{mod}}{\gamma_{M,\,timber}} \end{cases}$$

Note:
The fischer anchors for KNAPP wood-to-concrete connections were determined according to the above tables and on the basis of a concrete class C20/25 with the fischer C-FIX calculation tool. They have been specially checked by fischer. Any cases outside the tables must be checked by KNAPP®, fischer or a competent engineer. In many cases, dimensioning with the C-FIX calculation tool is sufficient. The complete analysis of concrete fasteners is available on request from KNAPP®. KNAPP® accepts no liability for the incorrect use of the tables in this document. The condition of the concrete elements (strength classes and surfaces) must be checked by a professional, KNAPP® accepts no responsibility for this. KNAPP® products and KNAPP® connectors must be installed in accordance with the respective installation rules and instructions as well as the respective Technical Assessments.

Other anchoring solutions are possible, they must be technically suitable and have an ETA technical assessment.

RICON® and RICON® inox

Post-beam connection for curtain walls (EA and DA)


Recess with routing-jig


Pre-drill with drilling-jig


Screw connection


Install the locking clip


Slide together


Secure connection with locking clip

Locking clip

Depending on load requirements, the locking clip can be inserted on one or onboth sides. If the connection is accessible, it can be unlocked.



To unlock the connection, it is necessary tobend up the locking clip in its center e.g. with a screwdriver.

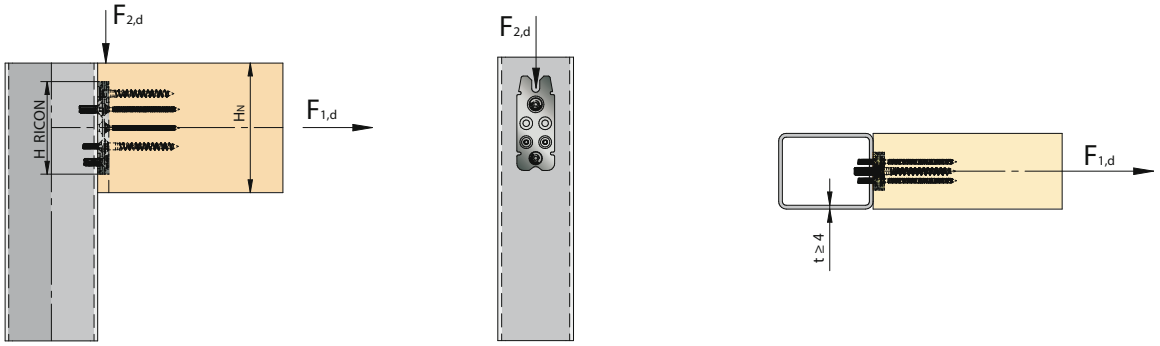
Routing dimension RICON® inox		
Width	**Height**	**Depth**
40.5 mm	**variable**	**11.5$^{+0,5}$ mm**
30.5 mm	**variable**	**11.5$^{+0,5}$ mm**
20.0 mm	**80 mm**	**11.0$^{+0,5}$ mm**
16.0 mm	**66 mm**	**11.0$^{+0,5}$ mm**

Routing dimension RICON®		
Width	**Height**	**Depth**
40 mm	**variable**	**12 mm**

The recess can be routed on either side depending on the application. In this case (left picture), the connector plate is recessed into the beam/latch.


Rafter connection with RICON® 160/40.

RICON® wood to steel connection



KNAPP® connector	Traction		Shear force	
	$F_{t,Rk}$ [kN]* on 4 mm steel	$F_{1,Rk}$ [kN]* on glulam GL24h	$F_{v,Rk}$ [kN]* on 4 mm steel	$F_{2,Rk}$ [kN]* on glulam GL24h
RICON 60x40	30,8	4,4	31,6	5,0
RICON 80x40				7,3
RICON 100x40				10,0
RICON 120x40				12,8
RICON 140x40				15,5
RICON 160x40				18,2
Sizing value calculation	$F_{t,Rd} = F_{t,Rk} / \gamma_{M,2}$	$F_{1,Rd} = k_{mod} \times F_{1,Rk} / \gamma_M$	$F_{v,Rd} = F_{v,Rk} / \gamma_{M,2}$	$F_{1,Rd} = k_{mod} \times F_{1,Rk} / \gamma_M$
	$\gamma_{M,2} = 1,25$	$\gamma_M = 1,3$	$\gamma_{M,2} = 1,25$	$\gamma_M = 1,3$
		$k_{mod} = 0,8$ KLED medium		$k_{mod} = 0,8$ KLED medium
		$k_{mod} = 0,9$ KLED short		$k_{mod} = 0,9$ KLED short
*Screw connection	2 CS M8x25	RICON® end-grain screw connection	2 CS M8x25	RICON® end-grain screw connection
	2 CS M5x20	CS 8x80, CS 5x80	2 CS M5x20	CS 8x80, CS 5x80

RICON® EA Startbox

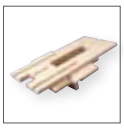
RICON® boxes for post-beam and main-secondary beam connections up to 23.4 kN

Art.-No. K364/B




RICON®


TCT slotting cutter 15x25 mm


Routing-jig MULTI F


Drilling-jig


Depth gauge


Locking clip

Each RICON® Box includes:
6, 12 or 24 pairs of RICON®,
1 TCT slotting cutter,
1 routing-jig MULTI F 40/R,
1 drilling-jig,
1 depth gauge, CS-screws and the locking clips

Application: curtain wall, sunrooms, carport, etc.

RICON® EA Box | Art.-No. K364/B
6 pairs of 60/40 EA, 80/40 EA, 100/40 EA and 120/40 EA, 24 locking clips and RICON® CS-screws

AUSTRIA CE
ETA ETA-10/0189 (2022/08/25)
RICON

RICON® EA Boxes

RICON® EA 60 Box

Art.-No. K366	24 pairs of RICON 60/40
	48 CS-screws RICON® 5x50 mm
	48 CS-screws RICON® 5x80 mm
	24 CS-screws RICON® 8x50 mm
	24 CS-screws RICON® 8x80 mm
	24 locking clips

RICON® EA 80

Art.-No. K367	24 pairs of RICON® 80/40
	48 CS-screws RICON® 5x50 mm
	48 CS-screws RICON® 5x80 mm
	48 CS-screws RICON® 8x50 mm
	48 CS-screws RICON® 8x80 mm
	24 locking clips

RICON® EA 100

Art.-No. K368	24 pairs of RICON® 100/40
	96 CS-screws RICON® 5x50 mm
	96 CS-screws RICON® 5x80 mm
	48 CS-screws RICON® 8x50 mm
	48 CS-screws RICON® 8x80 mm
	24 locking clips

RICON® EA 120

Art.-No. K369	12 pairs of RICON® 120/40
	72 CS-screws RICON® 5x50 mm
	72 CS-screws RICON® 5x80 mm
	24 CS-screws RICON® 8x50 mm
	24 CS-screws RICON® 8x80 mm
	12 locking clips

RICON® EA 140

Art.-No. K370	12 pairs of RICON® 140/40
	96 CS-screws RICON® 5x50 mm
	96 CS-screws RICON® 5x80 mm
	24 CS-screws RICON® 8x50 mm
	24 CS-screws RICON® 8x80 mm
	12 locking clips

RICON® EA 160

Art.-No. K371	12 pairs of RICON® 160/40
	120 CS-screws RICON® 5x50 mm
	120 CS-screws RICON® 5x80 mm
	24 CS-screws RICON® 8x50 mm
	24 CS-screws RICON® 8x80 mm
	12 locking clips

RICON® connector is also available in A2 inox (stainless steel), with a load capacity of up to 17.4 kN, in 17 sizes.



External woodwork

Fixing glazing and glazing beads with seal for external woodwork

u.Bu © tyc



FIXclip-Profile, solution for fixed and openable frames

YOUTUBE



FIXclip-Profile

Fixing and sealing systems for doors, glazing beads on wood and fixed or opening wood-aluminium joinery

As the first and only mounting system of its kind, the FIXclip-Profile makes it possible to combine the glazing and sealing process in one. Its innovative profile geometry saves time and reduces labor.

Benefits

The completely invisibly mounted FIXclip rail enables a perfect appearance due to flawless glazing beads. With this new glazing method, typical problems such as messy silicone joints or visible screw connections are a thing of the past.

GLE17, GLE17 plus, GLE18, GLE20 and GLE20 plus are a perfectly coordinated system for timber and timber/aluminium windows, regardless of whether glazing takes place in the factory or on site.

Application

Universally applicable for all common window and door systems, such as IV68/IV78 or fixed windows. As a stand-alone part, the FIXclip-Profile does not require a special outer sealing and can therefore be used in combination with a wet, dry or glued system method. The systems are used for flush and overlapped glazing beads.

Fastening

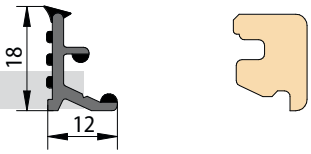
It will either be fixed with CS-Screws 3x20 (pre-drilled profile) or with a nailing gun and 16 gauge x 1“ finish nails (1.2 x 25mm).

Alternatives

The FIXclip profile is available in the following designs: GLE17, GLE17 plus, GLE18, GLE20, GLE20 plus and GLE20 N. The standard colour is black. Other RAL colours are available on request at an extra charge for orders of 1,000 running meters or more.

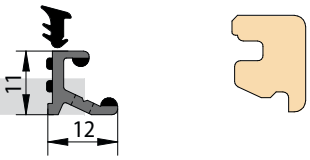
GLE17

Art.-No. K311



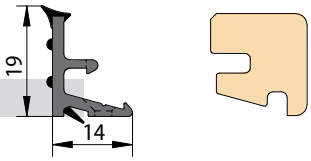
GLE17 Plus

Art.-No. K310



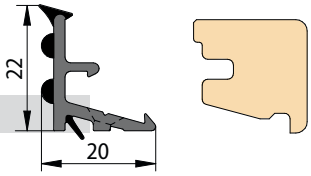
GLE18

Art.-No. K079



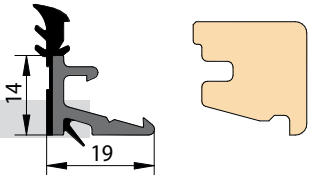
GLE20

Art.-No. K086



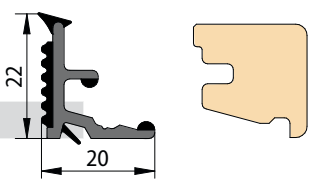
GLE20 Plus

Art.-No. K088/B



GLE20 N

Art.-No. K450





Conventionally fixed glazing bead with visible nails.



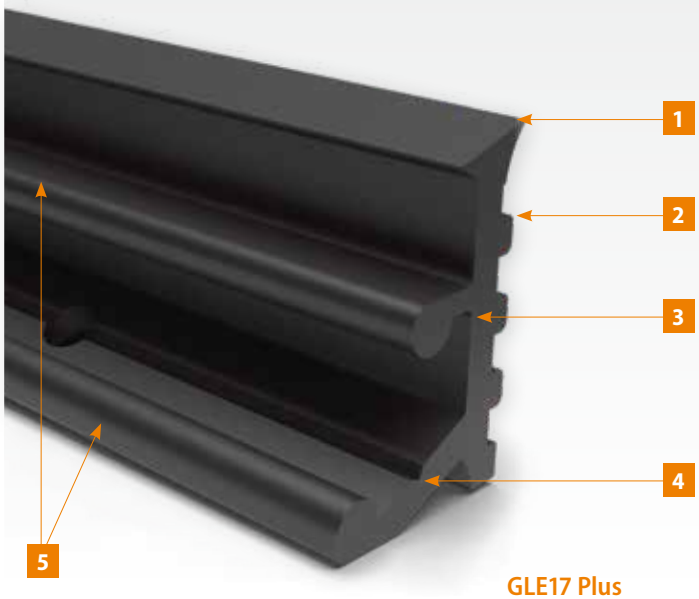
With FIXclip-Profile, no visible nails and tight joints.

FIXclip-Profile GLE17 / GLE17 Plus

Fixing and sealing systems for window construction

Art.-No. K311 + K310

GLE17



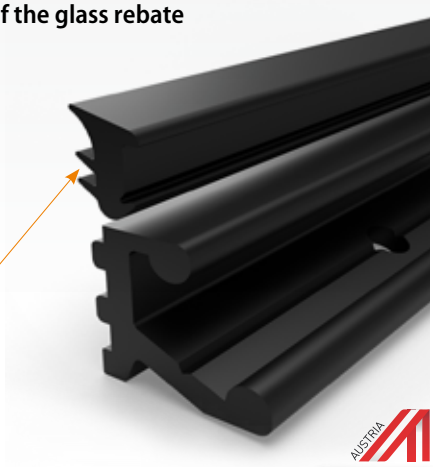
Benefits:

- Glazing and sealing in one system
- Saves labor – Effective production process guaranteed (also on site)
- Perfect aesthetics - No visible fastening
- Clean - Easy clipping on of the wooden glazing bead
- Safe – No damage to the window glass by „faulty nailing“
- Tested – Meets all of the highest standards of window manufacturing
- Automatic sealing of the glass rebate

GLE17 Plus

Version Plus :

Separate wedge seal for easy and fast mounting directly on the construction site



1. Soft sealing lip for optimal sealing of the window glass.
2. Soft contact surface for the protection and fixing of the window glass.
3. Elastic, can be nailed, UV and weather resistant, resistant to varnishes, glazes and cleaning detergents.
4. Groove for nailing and prepunched holes for screws
5. Soft rounded clamping ribs (for GLE17, GLE17 Plus and GLE20 N), or perfect fastening of the glazing bars, higher tolerance compensation, dismounting without damage.

PRODUCTS

VIDEO

Application:	Wooden windows, wood-aluminum windows, wood-aluminum fixed glazing and doors
Choice of materials:	Glazing beads made of wood and wood-based materials.
Installation:	Milling the glazing bead by KNAPP® universal milling cutter, length cut,Fixing the profile and snap in glazing bead
Mounting:	Using CS screws (3x20 mm) or 16 gauge x 1“ finish nails (1.2 x 25 mm).
Dimensions :	Profile length 6 meters. Pre-cutting possible on request.
Accessories:	Universal milling head | Art.-No. K657, profile cutter | Art.-No. Z088 and assembly tool | Art.-No. Z085.

Installation

FIXclip-Profile



Cut to size glazing bead and FIXclip-profile



Pressing pane of glass against outer seal



Screw or nail the FIXclip-profile in place

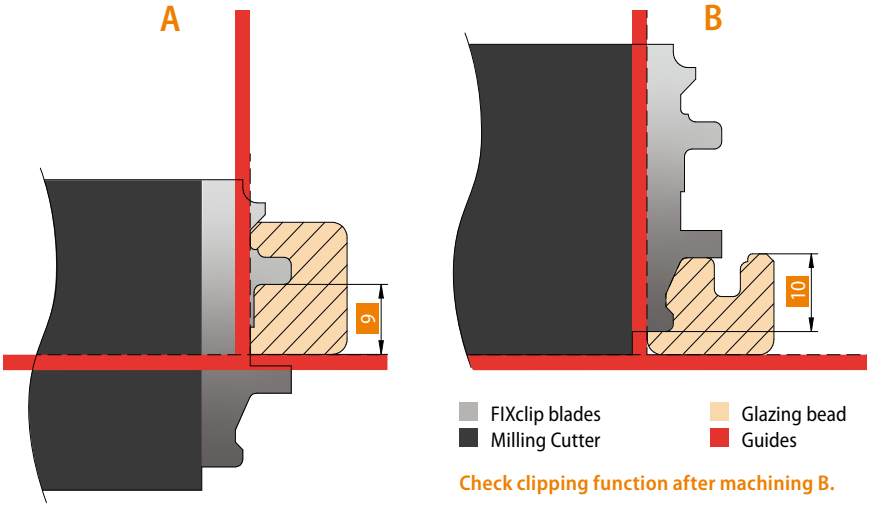




Clip on glazing bead.

FIXclip-Profile GLE17 and GLE17 Plus

Adjustments for machining with universal milling cutter FIXclip-Profile GLE17 + GLE17 plus



Check clipping function after machining B.

Milling cutter + profiling blades

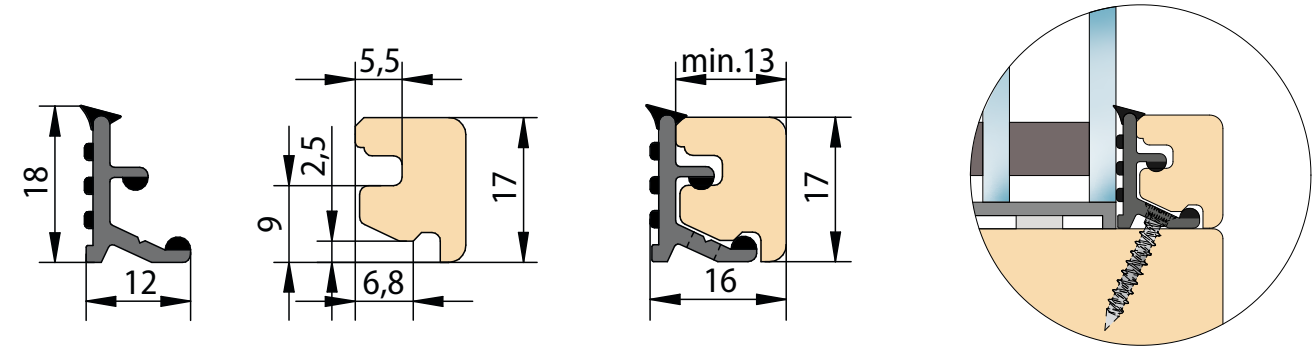


Milling Cutter GLE17

Art.-No. K657/SET

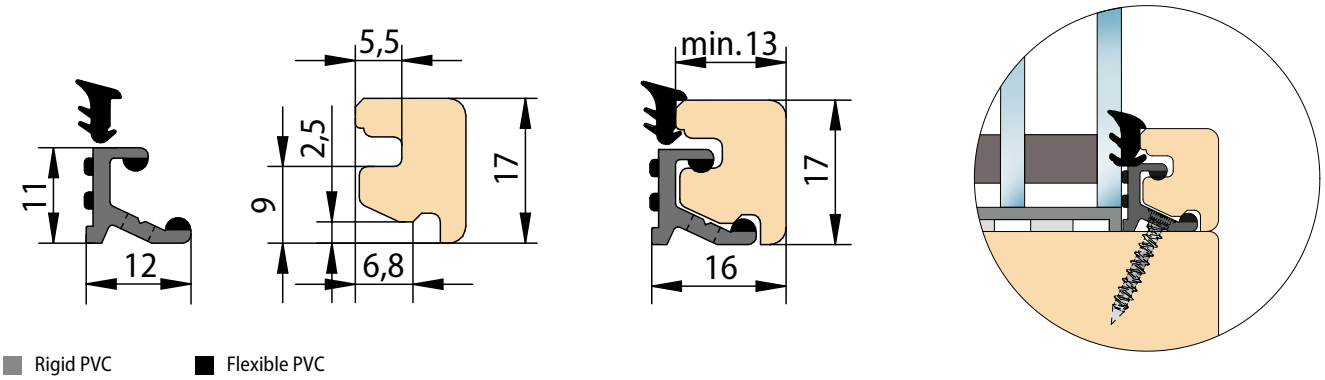
Milling cutter with profiling blades for
FIXclip-Profile GLE17 and
FIXclip-Profile GLE17 Plus
(with Ø 30 mm bore)

FIXclip-Profile GLE17 dimensions



Rigid PVC Flexible PVC

FIXclip-Profile GLE17 Plus dimensions



Rigid PVC Flexible PVC

FIXclip-Profile GLE17 Plus and GLE20 Plus installation



Cut to size glazing bead and FIXclip-profile



Install FIXclip



Clipping on the glass bead



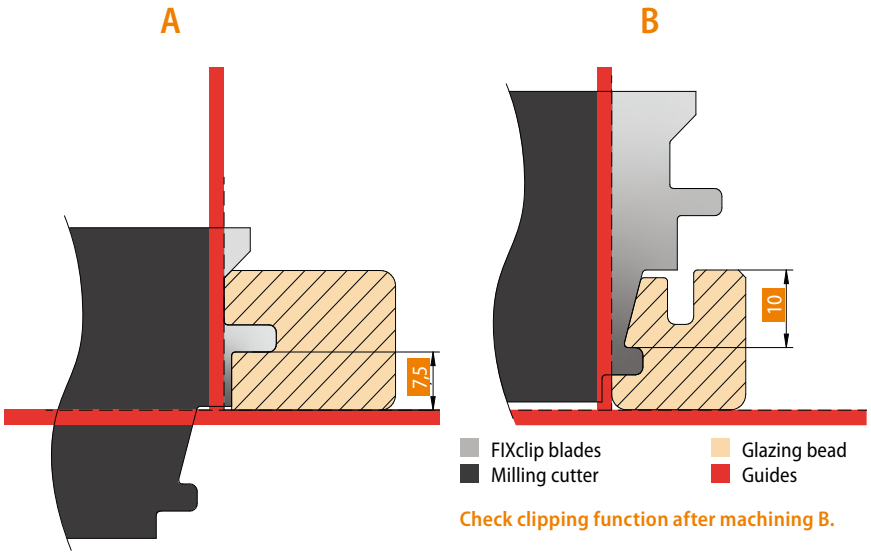
Press in wedge seal



Easy handling with wedge roller

FIXclip-Profile GLE18

Adjustments for machining with universal milling cutter FIXclip-Profile GLE18



Check clipping function after machining B.

Milling cutter + profiling blades



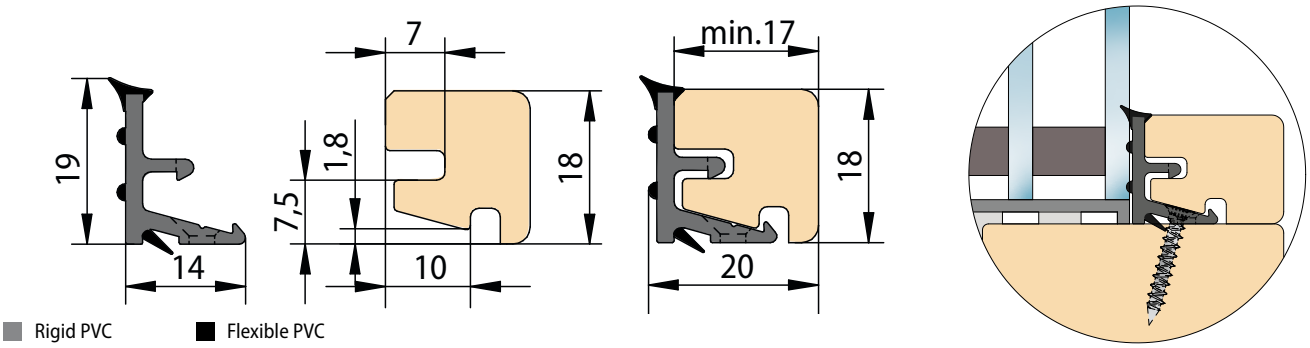
Milling Cutter GLE18

Art.-No. K655/SET

Milling cutter with profiling blades for FIXclip-Profile GLE18 (with Ø 30 mm bore)

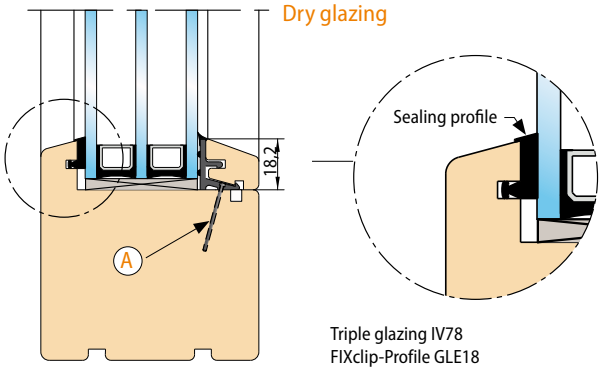
PRODUCT

FIXclip-Profile GLE18 dimensions



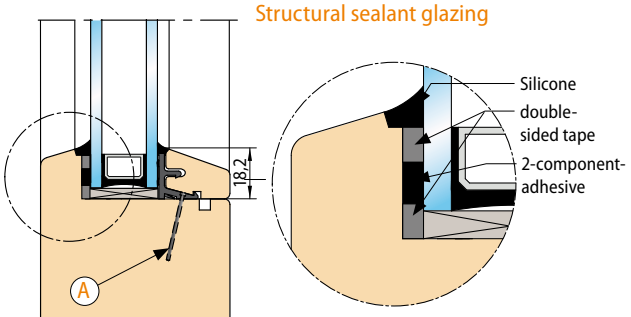
Processing options with FIXclip GLE18

Dry glazing



Triple glazing IV78
FIXclip-Profile GLE18

Structural sealant glazing



Double glazing IV68
FIXclip-Profile GLE18

Installation of FIXclip-Profile GLE18 and GLE20 Plus



Cut to size glazing bead and FIXclip-profile



Screw in FIXclip-Profile



Clipping on the glass bead



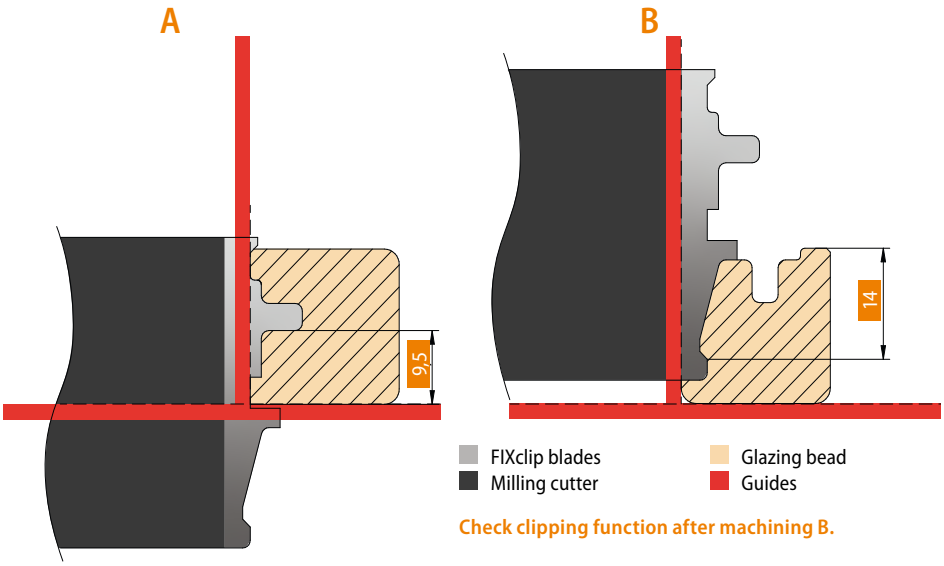
Press in wedge seal



Easy handling with wedge roller

FIXclip-Profile GLE20, GLE20 Plus and GLE20 N

Adjustments for machining with universal milling cutter FIXclip-Profile



Check clipping function after machining B.

Milling cutter + profiling blades



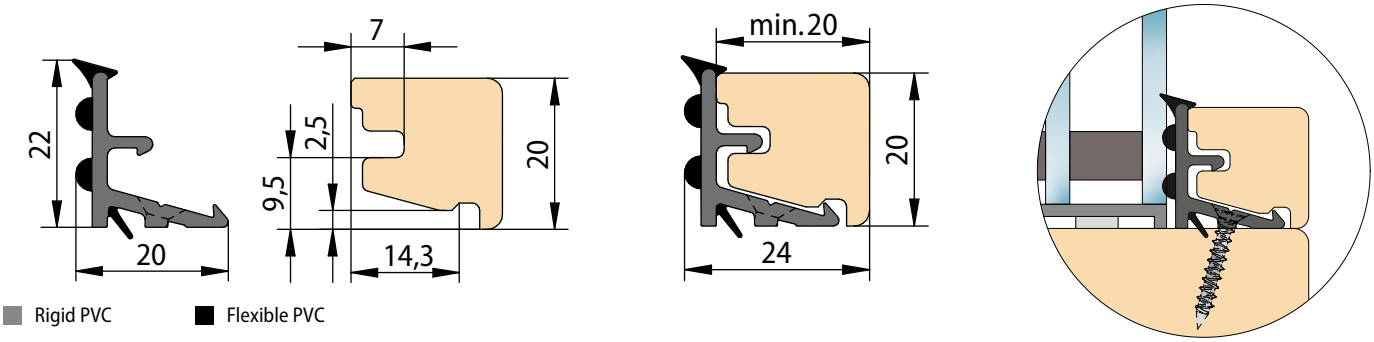
Milling Cutter GLE20

Art.-No. K659/SET

Milling cutter with profiling blades for FIXclip-Profile GLE20, FIXclip-Profile GLE20 Plus, and FIXclip-Profile GLE20 N (with Ø 30 mm bore)

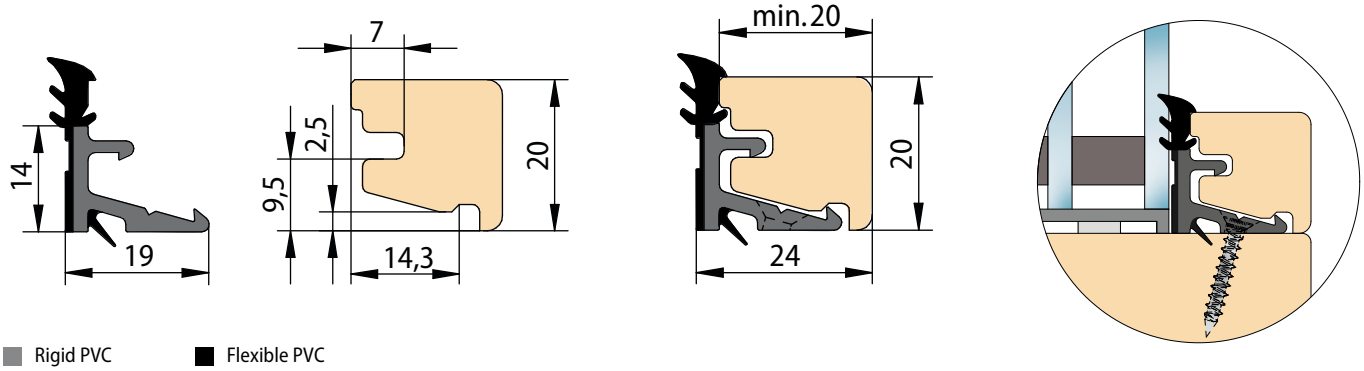
PRODUCT

FIXclip-Profile GLE20 dimensions



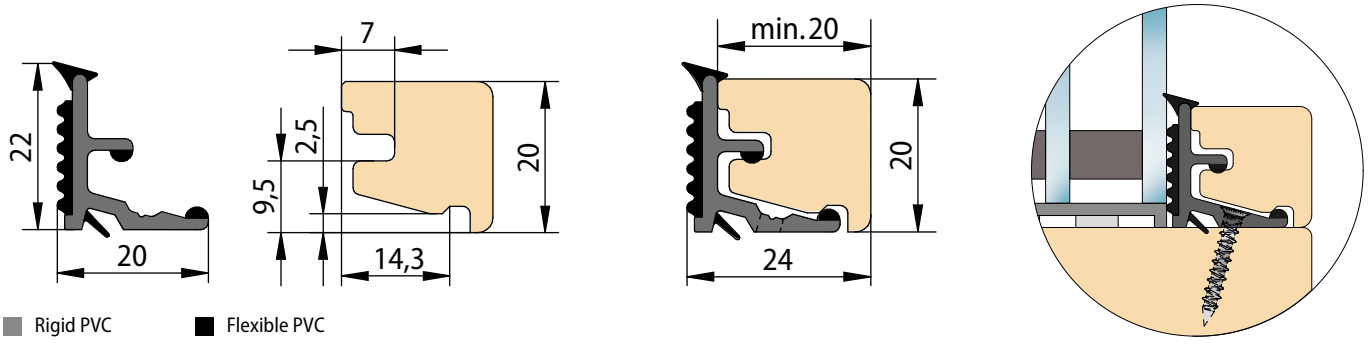
Rigid PVC Flexible PVC

FIXclip-Profile GLE20 Plus dimensions



Rigid PVC Flexible PVC

FIXclip-Profile GLE20 N dimensions



Rigid PVC Flexible PVC

FIXclip-Profile accessories

Profiling blades FIXclip-Profile GLE17 and GLE17 Plus



Art.-No. K657

Application: machining of milling cutter for FIXclip-Profile GLE17 and GLE17 Plus.

Profiling blades FIXclip-Profile GLE18



Art.-No. K655

Application: machining of milling cutter for FIXclip-Profile GLE18.

Profiling blades FIXclip-Profile GLE20, GLE20 Plus and GLE20 N



Art.-No. K659

Application: machining of milling cutter for FIXclip-Profile GLE20, GLE20 Plus and GLE20 N.

FIXclip-Profile wedge seal

Art.-No. Z096 Wedge seal FIXclip-Profile GLE17 Plus (Flexible PVC, black)



Wedge seal for easy installation and removal of glazing beads with FIXclip-Profile GLE17 Plus, even on site.

Wedge seal properties: high elasticity, heat resistant, UV and weather resistant, very good resilience, resistant to varnishes, stains and other common finishing products and cleaners.

Art.-No. Z091 Wedge seal FIXclip-Profile GLE20 Plus (Flexible PVC, black)

Art.-No. Z089 Wedge seal FIXclip-Profile GLE20 Plus (Flexible PVC, dark gray)



Wedge seal for easy installation and removal of glazing beads with FIXclip-Profile GLE20 Plus, even on site.
Properties: high elasticity, resistant to high temperatures, UV and weathering, very good elastic recovery of initial shape, resistant to varnishes, stains and other common finishing products and cleaners.

Available colours: black and dark grey. Other colours available on request. Delivered in rolls.

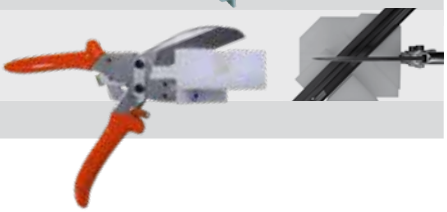
FIXclip-Profile tools

Art.-No. Z085 Mounting tool



Application: for pressing FIXclip-Profile with the Euro groove.

Art.-No. Z088 Slat cutter



Application: for fast and perfect cutting of FIXclip-Profile.

FIXclip-Profile screws

Art.-No. K502 CS-screws 3x20 mm



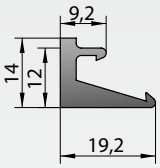
Alternative: finishing nails 1,2x25 mm.

FIXclip GLE20 plus

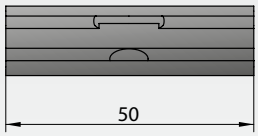
Fixing system for glazing and beading

Art.-No. K025 / K025 SET

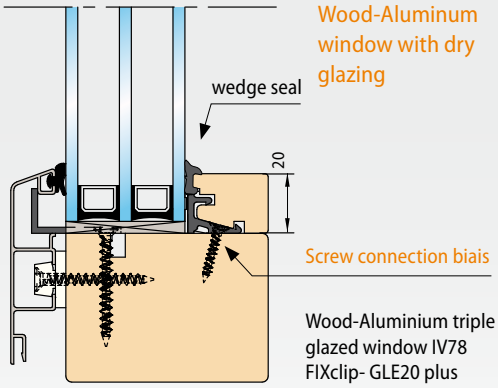




On request the FIXclip is also available in white.



Increased contact pressure due to fastening with tilted screw



Wood-Aluminum window with dry glazing

Wood-Aluminium triple glazed window IV78 FIXclip- GLE20 plus

Benefits:

- Perfect for fixed glazing, an ideal solution for wedge sealing and also for wet glazing.
- Contact pressure is applied by means of a tilted screw connection
- Easy click-on of the glazing bead is guaranteed
- Easy removal of the glass pane after removal of the wedge seal
- Concealed installation of glazing beads, removeable damage-free

The invisible fixing system for glazing bead FIXclip GLE20 Plus completes the FIXclip-Profile range.
This is a simplified alternative to the to the profile bar.

FIXCLIP







Application:	Concealed fixing of wood and wood-aluminium window glazing beads, wood-aluminium fixed frames and doors.
Installation:	Machining the glazing beads on a router or machining centre with a special tool | Art.-No. K656. Finished with glazing bead or silicone sealant.
Suitable materials:	Glazing beads and profiles in wood or plastic materials.
Mounting:	By screwing with KNAPP® SK inox screws 3.5x25 mm with drill point | Art.-No. Z420.
Accessories:	FIXclip universal milling cutter | Art.-No. K656, Wedge seal | Art.-No. Z089.



Screw connection with KNAPP® 3.5x25 mm inox countersunk screw

Installation



Cut glazing bead to size



Screw in FIXclip GLE20 in a 45° angle



Clipping on the glass bead



Press in wedge seal



Easy handling with wedge roller

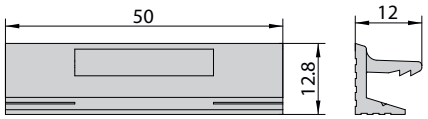
FIXclip

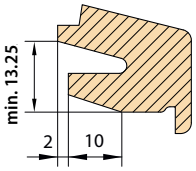
Moulding connectors for window construction (for fixing of glazing beads)

FIXclip H12

Art.-No. K078



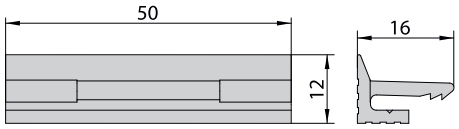


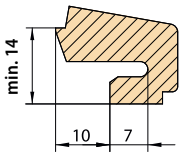


FIXclip H16

Art.-No. K076



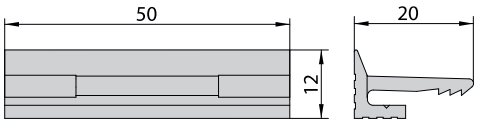


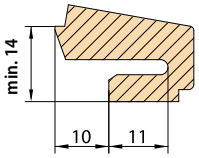


FIXclip H20

Art.-No. K077

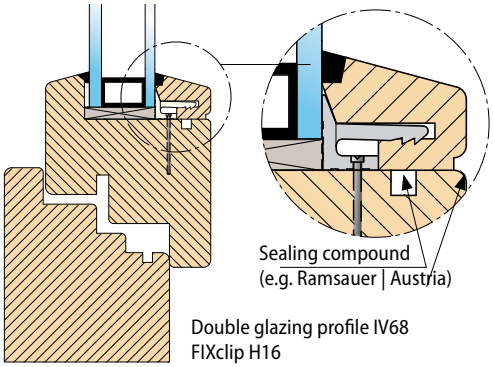






Benefits:

- Concealed installation of glass and profile moldings, can be disassembled without damage, tested for wind load C5 (EN 12210) and impact resistance class 3 (EN 13049).
- Perfect aesthetics - no visible fasteners
- Time-saving - effective production process guaranteed
- Fastening - by nailing or screwing
- For glazing bead frames and glazing beads, profiles made of wood or plastic materials



Double glazing profile IV68
FIXclip H16

The glass and profile strip connectors have been tested by ift Rosenheim and HFA Vienna.

Proof of resistance to wind load, watertightness, air permeability and impact resistance



Proof resistance at wind load



Impact resistance proof



Test in accordance with ÖNORM EN 14351-1 and ÖNORM B5300 (partial tests of air permeability, watertightness, wind resistance)



ift windows product passport, according to EN 14351-1



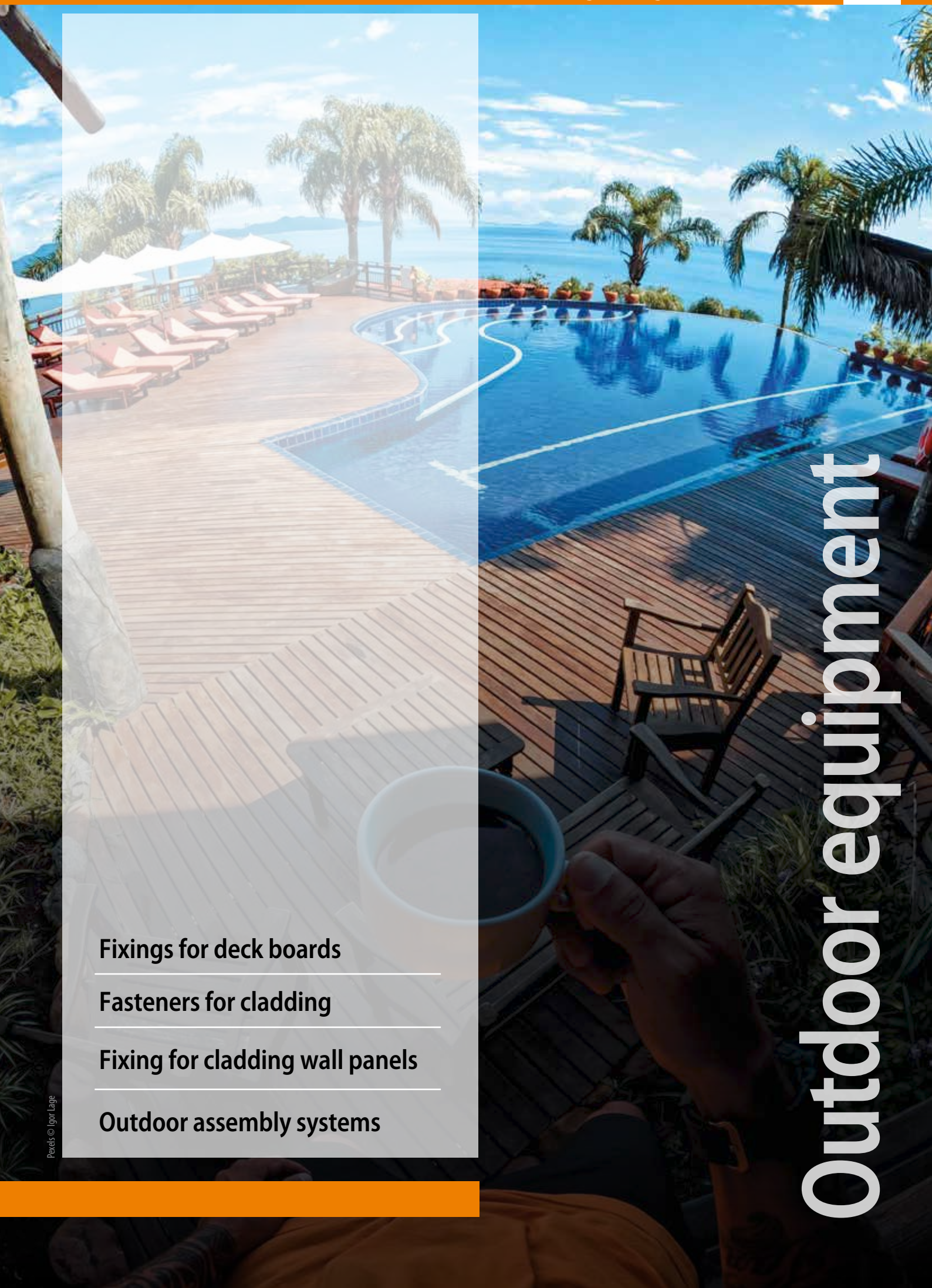
HOLZ FORSCHUNG AUSTRIA

ift ROSENHEIM

- Resistance to wind load – EN 12210 – Class C5/B5
- Driving rain tightness – EN 12208 – Class E1050
- Air permeability – EN 12207 – Class 4
- Impact resistance – EN 13049 – Class 5

CE-fix

- FIXclip-Profile available in the system data base: www.ce-fix.de
- Easy and fast to the CE-mark and declaration of conformity
- Valid throughout Europe



Outdoor equipment

Fixings for deck boards

Fasteners for cladding

Fixing for cladding wall panels

Outdoor assembly systems

Pexels © Igor Lage

QUATRO 65, Z-DECK – Invisible fasteners for deck boards

Concealed fastening systems for terraces, cladding and wall cladding, indoors or outdoors


Kulmer Xenonlight (AT)

QUATRO 65

Art.-No. K080: Quatro 65/30 | Art.-No. K081: Quatro 65/25

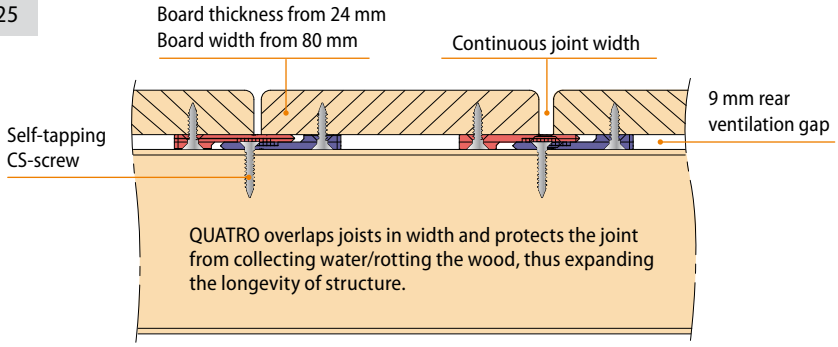
For decking boards and wall panels

- Recommended for spacing no smaller than 7 mm



Quatro 65/25
Art.-No. K081

Quatro 65/30
Art.-No. K080




Self-tapping Stainless steel CS-screw A2 5x25 mm for board thicknesses 24-26 mm


Self-tapping Stainless steel CS-screw A2 5x30 mm for board thicknesses >26 mm

Approximate quantity per square meters		
Board width	Pairs / m²	Nb of m² / package unit
150 mm	approx. 17 pairs	6 m²
100 mm	approx. 25 pairs	4 m²
(For a joist spacing of 500 mm)		

- Concealed from the first to the last board
- Constructive wood protection of the substructure against rotting
- Rear ventilation due to distance between boards and joists
- Used also for wooden facades and formwork
- Easy installation with installation template
- Allows swelling and shrinkage of the boards
- UV and weather resistant plastic

Tips:

- Even the best connecting system cannot compensate for poor quality of wood. Make sure that the wood is dry and especially avoid boards from the core of the trunk and boards with a tendency to twist.
- Recommended length of boards: max. 3 m.
- Pre-drill, especially for hardwoods such as oak.
- Follow the installation recommendations of your quality wood supplier

QUATRO

QUATRO 65 installation

- Pre-drilling and continuous positioning of the joint spacing with the mounting template



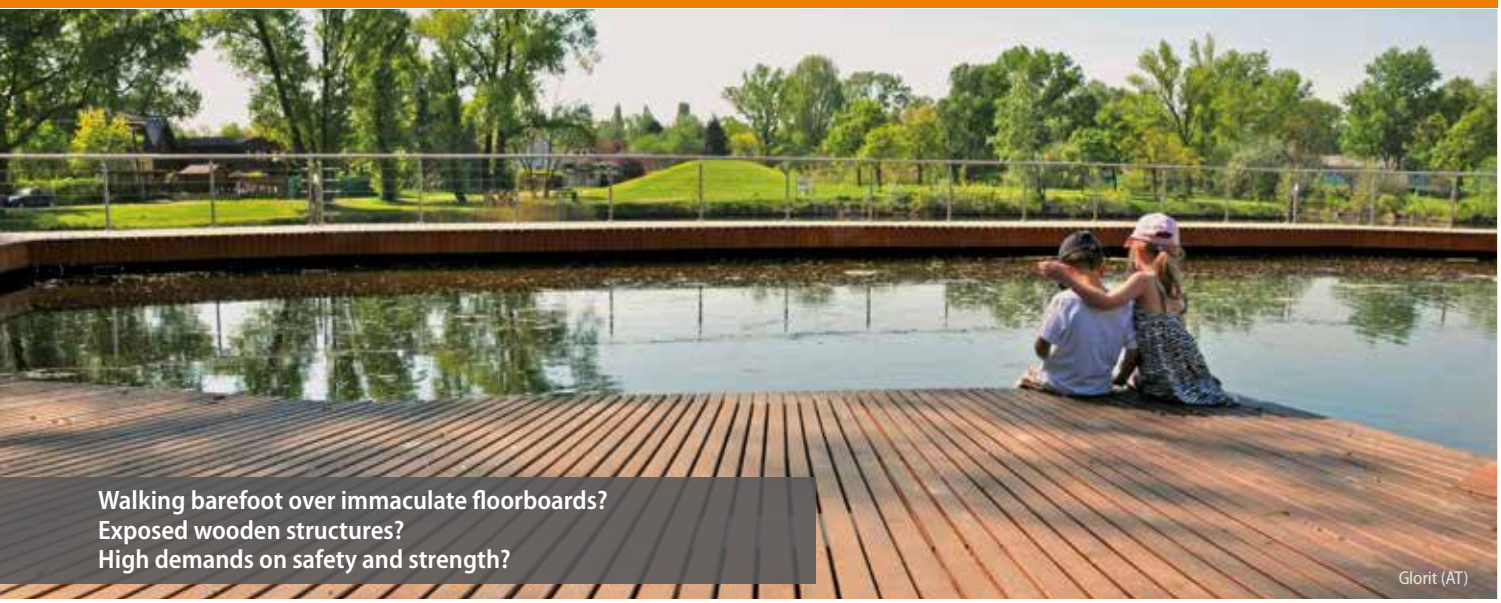

Pre-drill with the template


Fasten to the boards with screws


Fasten to the joists with screws


Use QUATRO 65 as spacer


Mount the final board



Z-DECK

Art.-No. K082

For decking boards that are completely exposed to the weather

- Recommended for rebated boards and gab of 7 mm or more



Self-tapping Stainless steel
CS-screws A2 4,5x35 mm





Approximate quantity per square meters		
Board width	Pairs / m²	Nb of m² / package unit
150 mm	approx. 28 pairs	9 m²
100 mm	approx. 40 pairs	6 m²
(For a joist spacing of 500 mm)		

- Robust - even suitable for beach and boat decks
- Boards can be replaced quickly and individually
- Optimum wood protection through self-cleaning joint design
- More stable than visible screwing from above
- Increased resistance agains twisting of the boards
- Connectors and screws made of stainless steel

Z-DECK

Tips:

- UneEven the best connecting system cannot compensate poor quality of wood. Make sure that the wood is dry and especially avoid boards from the core of the trunk and boards with a tendency to twist.
- Pre-drill, especially for hardwoods such as oak..
- Follow the installation recommendations of your quality wood supplier.

Z-DECK installation

- Create groove with rebate groove profile cutter

Art.-No. Z408





Use router to make a groove (optional)



Drive in



Screw in



Z-DECK is completely mounted



Pergola sunshade with UNO 30



Garden furniture with KNAPP® dowels



Fitting out your boat with KLICK System and KNAPP® dowels.

Overview of Knapp solutions for outdoor use:

Concealed connecting system for outdoor- gardens, balconies, boat, and ship interior fittings.



QUATRO 65

Made of highly resistant composite plastic

Quatro 65/25
Art.-No. K081

Quatro 65/30
Art.-No. K080

Page 82



Z-DECK

in inox
Art.-No. K082

Page 83

DECKING



ZIPBOLT™ Exterior Slipfix

Handrail-post connection
Art.-No. Z374

Page 41

SLIPFIX



RICON® inox

Connectors for wooden structures, 13 sizes from 66/16, use in service class 3

Page 52

RICON INOX



UNO 30 (Set)

Hook connector in inox



Art.-No. K120
Set UNO 30

Art.-No. K120/B
UNO 30 (connector only)

Page 22

UNO 30



DUO 30 inox A5

hook connector in A5 stainless steel

Art.-No. K350

Art.-No. K350/P
Mini Pack

Art.-No. K121
A2 locking clip (option)

Page 21

DUO30 INOX



KNAPP®-DOWEL

selftightening plastic dowels

Art.-No. K066
6x28 mm

Art.-No. K067
8x36 mm

Art.-No. K169
8x50 mm

Page 24

DOWEL



Boxes & Mini Packs

Assortments and small volumes

KNAPP®-Boxes

For joiners, carpenters, window manufacturers, stair constructors and installer

Extensive range of boxes for carpenters, joiners, window / stair manufacturers and cabinetmakers

- A wide range of connectors including accessories
- Sets of assorted articles
- To all intents and purposes
- Custom-made in small quantities



online-store
www.knapp-connectors.com/en



DEKLICK® Box – Clamp connectors

50 DEKLICK blocks removable (black)
50 DEKLICK blocks extra grip (grey)
50 DEKLICK lamellar clamps removable (black)
50 DEKLICK lamellar clamps extra grip (grey)
50 DEKLICK screw clamps removable (black)
100 CS-screws inox A2 5x50 mm,
50 CS-screws inox 4x16 mm,
25 Euro-screws 6,3x10 mm,
300 CS-screws inox A2 4,5x35 mm,
100 square nuts M6,
1 Torx bit T15 with long shaft,
1 Torx bit T25,
1 DEKLICK wood sample,
1 KNAPP®-ADHESIVE PU+

Art.-No. K010/BOX

Application: for vertical and horizontal fastening of acoustic panels, decorative walls and ceiling coverings for indoor and outdoor use.



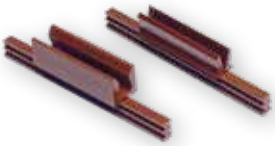
miniKLICK Box Dovetail connectors

400 miniKLICK pairs,
1 grooving saw blade Ø 120 mm with Ø 30 mm borehole for spindle moulder (more Ø on request)

Art.-No. K059/BOX

Application:
Invisible assembly of small decorative parts, glazing beads on interior doors







KLICK Box – Dovetail connectors

200 pcs. KLICK,
400 pcs. sKLICK,
400 PH-screws 3x13mm,
100 pcs. KLICKpro,
1 Dovetail Router bit with Ø 8 mm shank

Art.-No. K045/BOX

Applications:
Concealed fasteners for precisely fitting, and concealed interior design.



QUICK-SET Box 2-parts dowel connectors

125 pcs. QUICK Set 5 x 11 mm,
125 pcs. QUICK Set 5 x 7,5 mm,
125 pcs. QUICK Set 8 x 8 mm,
125 pcs. QUICK Set 8 x 26 mm

Art.-No. Z056/BOX

Applications:
Concealed, immediately functional without glue, 2-parts cabinet connector.



KOMBI-Box Hook connectors

100 pcs. G10 KOMBI hook connector,
100 pcs. holding bracket, KOMBI G12/62, inox
200 PH-screws 3x25 mm,
200 CS-screws inox 4,5x35 mm,
1 KNAPP®-ADHESIVE PU+

Art.-No. K616/BOX

Applications: Decorative claddings, exhibitons stands, shop and interior fitting.





DUO 30 Box 100 – Hook connectors

50 pairs of each:
DUO 30 mL and DUO 30 oL,
400 CS-screws 3,5x16 mm,
6 center punches,
2 handrail punches,
1 Forstner Bit Ø 30 mm,
with Ø 10 mm shank and
adjustable depth gauge,
1 drilling template

Art.-No. K070/BOX



DUO 30 Box 150 – Hook connectors

75 pairs of each:
DUO 30 mL and DUO 30 oL,

6 center punches, 2 handrail punches,
1 Forstner Bit (Ø 35 mm, Ø 10 mm shank
and adjustable depth gauge)

Recommended screws (not included):
CS-screws 3,5x16 mm (Art.-No. Z502)

Art.-No. K074/BOX



DUO 35 Box 100 – Hook connectors

50 pairs of each:
DUO 35 mL and DUO 35 oL,
400 Euro-screws 6,3x10 mm,
6 center punches DUO 35,
1 Forstner Bit (Ø 35 mm, Ø 10 mm shank
and adjustable depth gauge)

Art.-No. K061/BOX

Application: Concealed, self-locking, removable, suitable to a CNC-routing machine and to EURO screws.



DUO 35 Box 150
Hook connectors

75 pairs of each:
DUO 35 mL and DUO 35 oL,
6 center punches DUO 35

Recommended screws (not included):
EURO-screws 6,3x10 mm (Art.-No. Z510)

Art.-No. K062/BOX



Application:
Handrail, windowsb and doors,
facades, cladding, weatherboard,
decorative panels.



UNO 30 Box 100
Hook connector

100 UNO 30,
100 locking clips, inox,
100 CS-screws KNAPP® 5x50 mm
with washers TX25,
6 center punches UNO 30,
55 universal plastic dowels Ø 8 mm,
1 Forstner Bit (Ø 35 mm, Ø 10 mm shank
and adjustable depth gauge),
300 PH-screws KNAPP® A2 3x13 mm,
1 drilling template, 1 T25 Bit

Art.-No. K123/BOX
with KNAPP 5x50 mm galvanized screws

Art.-No. K123/EDEL
UNO 30 Box 100, inox



FIYU® Box

100 pairs FIYU® LOCK
100 pairs FIYU® FAST,
100 grub screws 6x12 mm,
100 tensioning screws 5x13 mm
1 Allen key with ball end

Art.-No. K856/BOX

Application: Furniture, cabinets, and fittings connections





CONTRA 800 Box
Connector for case goods

500 pcs. CONTRA 800,
250 EURO-(CS)-screws 6.3 x 10 mm,
250 EURO-(CS)-screws 6.3 x 30 mm,
250 CS-screws 4 x 16 mm,
250 CS-screws 4 x 40 mm,
1 Dovetail Router bit
with Ø 8 mm shank

Art.-No. K800/BOX

Application: All-purpose product for mounting crown and cover profiles, surface-mount fastener.



MODULAR Box
Cabinet connectors for 32 mm hole centers

125 pcs. each of MODULAR 4031 and 4032,
250 MODULAR 2055 shoulder screws, flat tip 13 mm,
56 MODULAR 2069 M4 shoulder screw M4 thread 15 mm,
56 MODULAR 2066 shoulder screw M4 bushing thread 16 mm,
1 Drill-and-test jig for groove.

Art.-No. Z4031/BOX

Application: Concealed junction of uprights - shelf, for wardrobe, bookcase, storage, cabinet unit.





HITLINE Box 125
Biscuit connectors

125 pairs of SUNNY, SILVER and FAST, 1 Insert tool to put the connectors in place

Art.-No. K053/BOX

Application: Heavy-duty fasteners (SILVER, FAST), concealed gluing helps (SUNNY).



CLASSIC Box
Biscuit connectors

80 pairs each CHAMP and METAL,
50 pairs CLIPS,
160 PH-screws 3 x 13 mm,
160 PH-screws 3 x 25 mm,
2 CHAMP templates,
1 KNAPP®-ADHESIVE PU+

Art.-No. K301/BOX

Applications: Invisible and removable for mitres and corners, furniture, and interior design.

TREPPO Box
Levelling screws
for stair treads

70 TREPPO 40, 10 TREPPO 70,
5 TREPPO 100, 6 threaded pins,
3 KNAPP®-ADHESIVE PM+

Art.-No. Z320/BOX

Applications: Fixing wooden stair treads on concrete.









KNAPP®-DOWEL Box

500 KNAPP®-DOWEL 8 mm,
1000 KNAPP®-DOWEL 6 mm,
1 KNAPP®-ADHESIVE PU+

Art.-No. K066/BOX

Applications:
Weatherproof plastic dowel for force-fit connection of wooden materials and windows.

Processing recommendation:
Dowel Inserter Gannomat Selekta.

BOX

NEW



DEKLICK® mini Box
Screw clamp version

100 pcs. DEKLICK® mini blocks
100 pcs. DEKLICK® mini screw clamps
100 pcs. PH-screws 4x16mm
100 pcs. CS-screws 4x30mm
10 pcs. DEKLICK® DEKLICK® mini punch

Art.-No.K016/mini Box SK



DEKLICK® maxi Box
Screw clamp version

50 pcs. DEKLICK® maxi blocks
50 pcs. DEKLICK® maxi screw clamps
100 pcs. CS-screws inox 4,5x35mm
100 pcs. EURO-screws 6,3x10mm
50 pcs. square nuts M6

Art.-No. K010/maxi Box SK





Application: for vertical and horizontal installation of acoustic, wall and ceiling cladding in both indoor and outdoor environments.

DEKLICK® maxi Box
Extra grip version

50 pcs. DEKLICK® maxi blocks grey
50 pcs. DEKLICK® maxi lamellar clamps extra grip
50 pcs. CS-screws inox 4,5x35mm
50 pcs. square nuts M6

Art.-No. K010/maxi Box G



DEKLICK® maxi Box
Removable version, black

50 pcs. DEKLICK® maxi blocks black
50 pcs. DEKLICK® maxi lamellar clamps removable
50 pcs. CS-screws inox 4,5x35mm
50 pcs. square nuts M6

Art.-No. K010/maxi Box S

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online-store

Mini Packs



Where I can order small amounts of my connectors!

All 32 Minipacks are available in our online-store

- small volumes
- accessories included
- wide range of installation options



DEKLICK Pack

35 set | Art.-No. K010/PS (removable, black)
Alternative:
35 set | Art.-No. K010/PG (extra grip, grey),

- including square nuts and CS-screws



DEKLICK maxi Pack to screw in

35 set | Art.-No. K012/PS (removable, black),

- including square nuts and CS-screws



DEKLICK mini Pack to screw in

40 set | Art.-No. K016/P

- including punch and screws



FAST Pack

90 pairs | Art.-No. K058/P

- 1 Insert tool



CLIPS Pack

44 pairs | Art.-No. K054/P

CLASSIC-SET Pack

24 pairs CHAMP, **24 pairs** METAL, **8 pairs** CLIPS PH-screw | 1 setting template | Art.-No. K301/P



HITLINE-SET Pack

25 pairs SUNNY, **25 pairs** SILVER, **25 pairs** FAST 1 Insert tool | Art.-No. K302/P





KLICK Pack

250 pcs. | Art.-No. K045/P



sKLICK Pack

250 pcs. | Art.-No. K048/P

- PH-screws 3x13



sKLICK + KLICKpro Pack

125 pcs. | Art.-No. K092/P

- PH-screws 3x13



DUO 46/15 Pack

18 pairs | Art.-No. K041/P

- CS-screws 5x40/5x60
- PH-screws 5x40/5x60



SUNNY Pack

110 pairs | Art.-No. K053/P

- 1 Insert tool



SILVER Pack

50 pairs | Art.-No. K049/P

- 1 Insert tool



CHAMP Pack

80 pairs | Art.-No. K023/P

- 1 template CHAMP



CHICO Pack

25 pairs | Art.-No. K030/P



METAL Pack

40 pairs | Art.-No. K026/P

- PH-screws 3x13/3x25



KLICK + Cutter Pack

50 pcs. | Art.-No. K093/P

- 1 TCT-Router





sKLICK + Cutter Pack

50 pcs. | Art.-No. K094/P

- PH-screws 3x13
- 1 TCT-Router





DUO 62/15 Pack

16 pairs | Art.-No. K036/P

- CS-screws 5x40/5x60
- PH-screws 5x40/5x60



DUO 30 inox A5 PACK

25 pairs | Art.-No. K350/P
2 center punches DUO 30



DUO 30 mL Pack

42 pairs | Art.-No. K070/P

- 2 center punches DUO 30

DUO 30 oL Pack

42 pairs | Art.-No. K074/P

- 2 center punches DUO 30



DUO 35 mL Pack

32 pairs | Art.-No. K061/P

- 2 center punches DUO 35

DUO 35 oL Pack

32 pairs | Art.-No. K062/P

- 2 center punches DUO 35



UNO 30 Pack

30 set | Art.-No. K120/P
25 set | Art.-No. K117/P
(with CS-screws A2 5x50)



- CS-screws 5x50
- PH-screws 3x13 mm A2 inox
- Washers, inox A2
- 15 Locking clips
- 2 center punches UNO 30



DUO 100/15 Pack

12 pairs | Art.-No. K055/P

- CS-screws 5x40/5x60
- PH-screws 5x40/5x60



DUO 46/30 Pack

10 pairs | Art.-No. K046/P

- CS-screws 5x40/5x60
- PH-screws 5x40/5x60



DUO 62/30 Pack

8 pairs | Art.-No. K022/P

- CS-screws 5x40/5x60
- PH-screws 5x40/5x60



On-site consultation

For international requests, we are also available via video call or through our business partners.
All contact details are available on our website:

www.knapp-connectors.com/en/contacts/

Contact

+43 (0) 7474 / 799 10
+43 (0) 7474 / 799 10 28

info@knapp-connectors.com

Downloads

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Knapp GmbH | Wassergasse 31 | A-3324 Euratsfeld | Tél. : +43 (0)7474 / 799 10

E-Mail : info@knapp-connectors.com | www.knapp-connectors.com/en

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