

Connecting systems

for modern door and window construction

Certainly a great connection.



KNAPP[®]
connectors.com

Welcome to the World of KNAPP®!

As a manufacturer of patented connecting systems, we develop and produce high-quality products that are distributed worldwide. Not only our connecting systems convince, they also inspire you with the wide range of applications. The comprehensive service offers the possibility to find the best, most efficient and innovative solution for the realization of your projects. On the following pages, you will find our connecting systems for modern timber engineering.



Friedrich Knapp
Company founder

Our Service

The KNAPP® Team provides competent advice and excellent service for your projects.

I We offer a full-coverage service by representatives in Germany and Austria. You will find the right contact person easily and quickly.

 www.knapp-connectors.com

I You can reach our internal consultants in Germany and Austria, Monday – Tuesday 8 a.m. to 4.30 p.m. and on Friday 8 a.m. to 12 p.m.

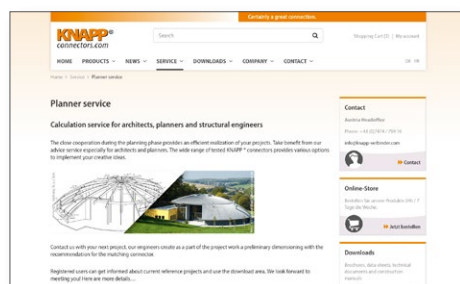
I You can reach our global sales manager by calling +43 (0)664 / 88 51 52 87 or via E-Mail: info@knapp-connectors.com

 www.knapp-connectors.com/contact


Our Planner Service



▶▶▶ Planner service



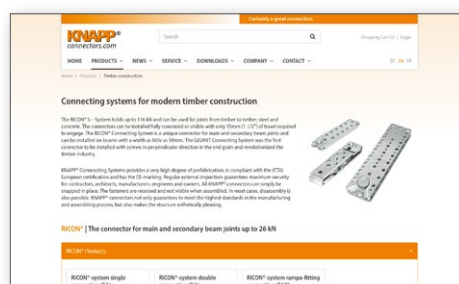
I We offer comprehensive planning and structural engineering calculations for architects, planners and structural engineers. Contact us for your next project! We also offer statics pre-dimensioning, recommending the right connector for KNAPP®. Take advantage of our engineers consulting, our “know-how”, and many years of experience.

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24h bestellen
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You want to be flexible and order at any time? No problem! In our online store you can easily find the perfect connecting system for your application and place an order with just one click. After a quick registration, you can immediately start buying online.

 www.knapp-connectors.com/downloads

KNAPP® offers the right connection for the areas of:

- I Timber construction** **I Post-beam wood-glass-facade** **I Prefab walls** **I Timber construction engineering** **I Door- and window construction**
- I Furniture and interior design** **I Glued glass elements for timber and metal construction**



 **More information**
www.knapp-connectors.com/downloads



FIXclip Profile

The innovative glazing system

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.

System advantages

The completely invisible mounted profile provides a perfect look due to a glazing bead finish. With this brand-new glazing method, problems such as a poor silicon finish or visible fixing parts no longer exist. GLE18, GLE20, and GLE20 Plus are well adapted systems for wood or wood/aluminum windows, no matter if the mounting process takes place in the facility or on the construction site.

Application

Universally applicable for all common window and door construction, 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.

Fixing

It will either be fixed with CS-Screws 3x20 (pre-drilled profile) or with a nailing gun and pin nails 1,2x25mm.

Varieties

The FIXclip profile can be supplied in the following modifications: GLE18, GLE20, and GLE20 Plus. The standard color is black, but the profile can be supplied in other RAL colors. A minimum purchase quantity of 1.000 lin. m. is required.

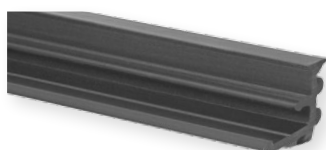
GLE18

Art.-Nr. K079



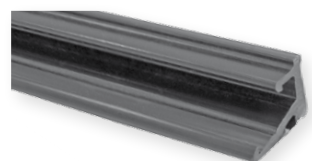
GLE20

Art.-Nr. K086



GLE20 Plus

Art.-Nr. K088/B



GLE20 Plus wedge-shaped

Art.-Nr. Z089



FIXclip-Profile available in the system data base: www.ce-fix.de

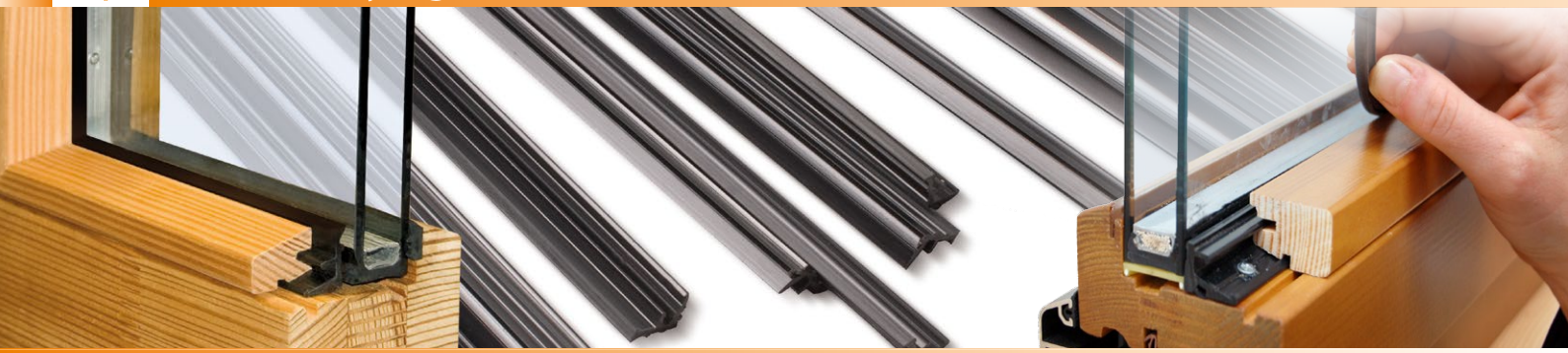
- | Easy and fast to the CE-mark and declaration of conformity
- | Valid throughout Europe



- | 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



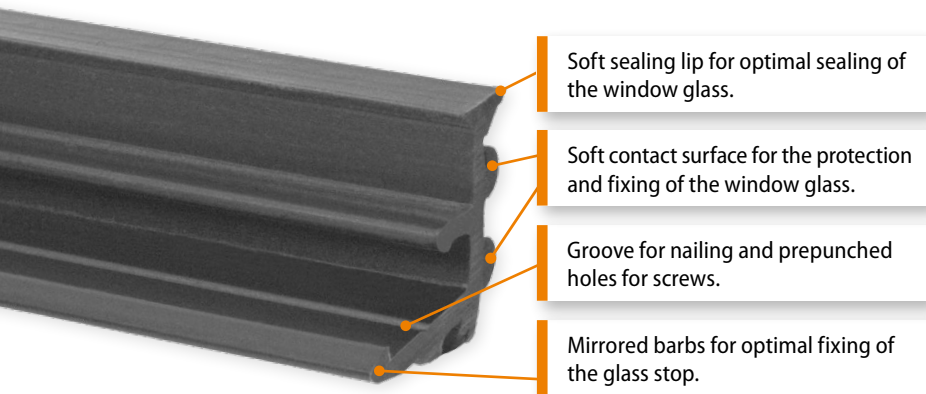
FIXclip-Profile GLE18 / GLE20

System advantages:

- ! Glazing and sealing in one system
- ! Saves labor – Effective production process guaranteed (also on site)
- ! The perfect look – No visible fasteners
- ! Simple mounting – Just clip in the glass stop
- ! Safe – No damage to the window glass by „faulty nailing“
- ! Tested – Meets all requirements for windows



Example: FIXclip-Profile GLE20 screwed.



Soft sealing lip for optimal sealing of the window glass.

Soft contact surface for the protection and fixing of the window glass.

Groove for nailing and prepunched holes for screws.

Mirrored bars for optimal fixing of the glass stop.

Material characteristics:

highly elastic, able to nail, UV and weather resistant, resistant against lacquer, clear finish, stain and cleaning agents.



New method with FIXclip Profile (no visible nails and tight joint).



Usually, glass bar is attached with exposed nails.

FIXclip-Profile GLE20 Plus

System advantages:

- ! Glazing and sealing in one system
- ! Saves labor – Effective production process guaranteed (also on site)
- ! Perfect look – No visible fasteners
- ! Simple mounting – Just clip in the glass stop
- ! Safe – No damage to the window glass by „faulty nailing“
- ! Tested – Meets all requirements for windows
- ! Clean – Easy snapping of the glass stop
- ! Demountable - Easy glass change possible, without a damage of the glass stop
- ! GLE20 Plus is either suitable for dry or wet glazing process
- ! Proven - Meets all requirements of the european standards

PLUS:

Version GLE 20 Plus with separate wedge sealing for a trouble-free glazing on site.

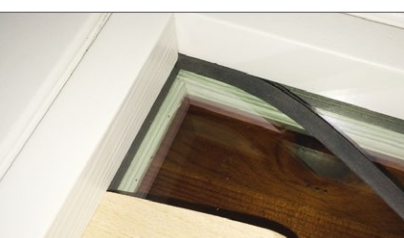
Soft contact surface for the protection and fixing of the window glass.

Groove for nailing and prepunched holes for screws.

Mirrored bars for optimal fixing of the glass stop.

Wedge-shaped sealing

FIXclip-Profile GLE20 Plus



Example: Mounting wedge-shaped sealing

Material characteristics:
highly elastic, UV and weather resistant, resistant against lacquer, clear finish, stain and cleaning agents.



Press in wedge-shaped sealing



Clean finish

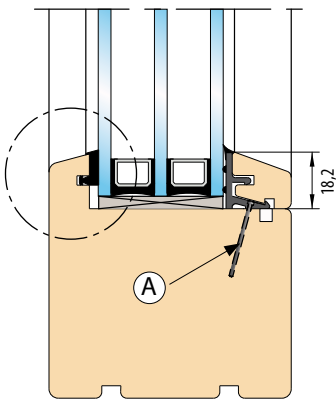
 **More information:**

www.knapp-connectors.com/product/fixclip-profile

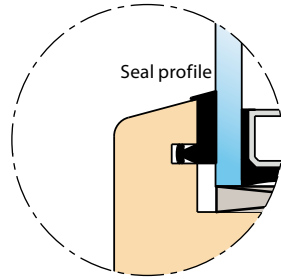
FIXclip-Profile

Processing options

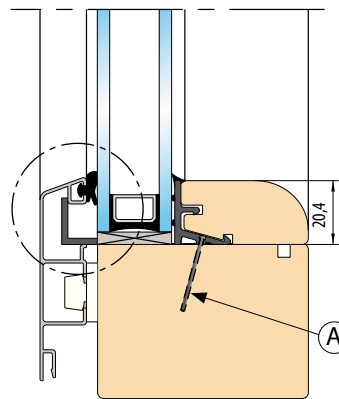
KNAPP® FIXclip profile is the best system for interior glazing. The FIXclip profile is flexible, because of dry glazing. Aluminum clad wood windows for fixed glazing, structural sealant glazing and glazing sealant are possible.



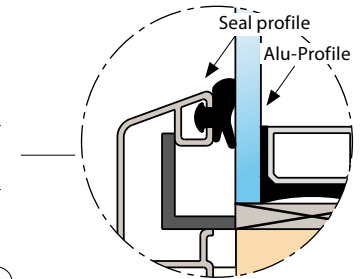
Dry glazing



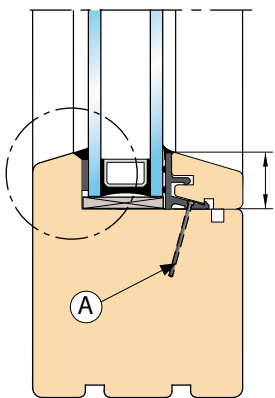
Triple glazing IV78
FIXclip-Profile GLE 18



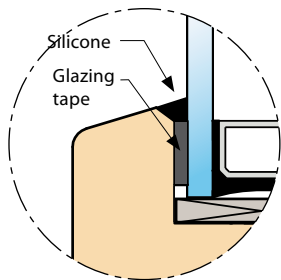
Wood-Alu-fixed glazing



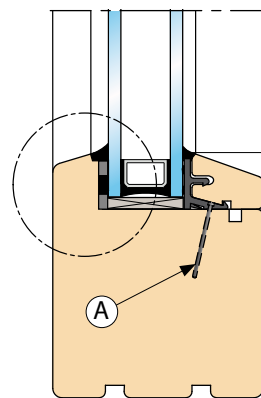
Aluminum clad wood double fixed glazing IV68
FIXclip Profile GLE 20



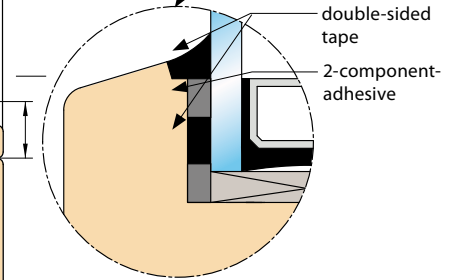
Wet sealant glazing



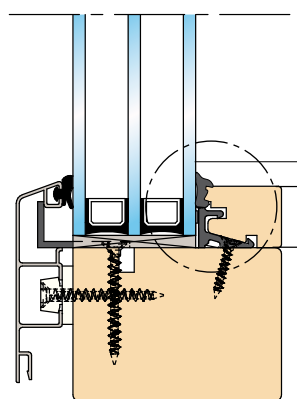
Double glazing IV68
FIXclip-Profile GLE 18



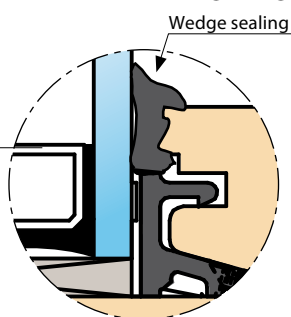
Structural sealant glazing



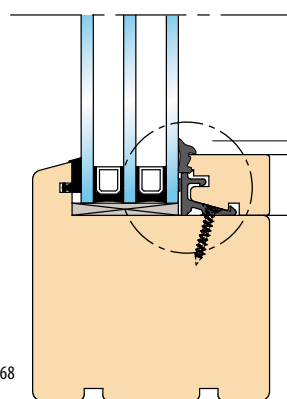
Double glazing IV68
FIXclip-Profile GLE 18



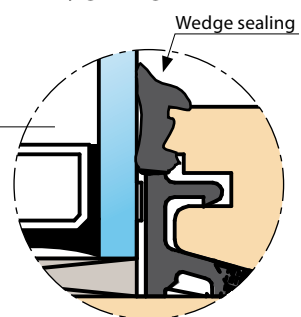
Wood-Alu-fixed glazing



Aluminum clad wood triple fixed glazing IV68
FIXclip-Profile GLE 20 Plus



Dry glazing



Triple glazing IV78
FIXclip-Profile GLE 20 Plus

A Fixation with wire nails 1,2x25 mm or CS-screws 3x20 mm

FIXclip-Profile GLE18 / GLE20

Installation



1) Cut to size glass bar and FIXclip-Profile



2) Pressing pane of glass against outer seal



3) Screwing or nailing the FIXclip-Profile



4) Clip on glass bar

FIXclip-Profile GLE20 Plus

Installation



1) Cut to size glass bar and FIXclip-Profile



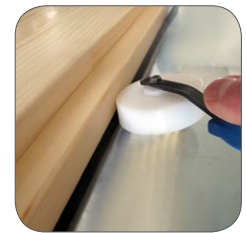
2) Fix FIXclip-Profile with nail/screw



3) Snap in glass stop



4) Press in wedge-shaped sealing

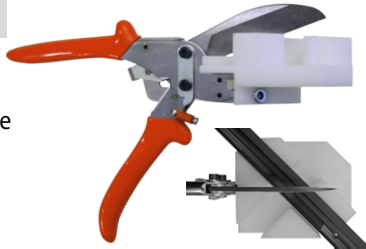


5) Clean finish with usual sealing roller

FIXclip-Profile Accessoires

Art.-Nr. Z088

Slat cutter for FIXclip-Profile (45° miter cut)



Art.-Nr. Z085



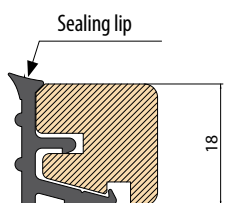
Mounting tool for FIXclip-Profile



Cutter for FIXclip-Profile and FIXclip GLE20 Plus profile strips

Art.-Nr. K655

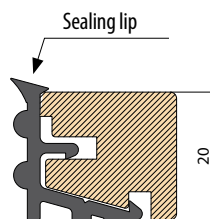
FIXclip-Profile moulding knives GLE18 with integrated sealing lip compatible with universal milling head



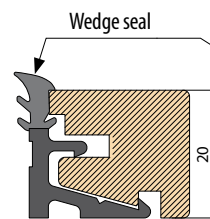
FIXclip-Profile GLE18

Art.-Nr. K656

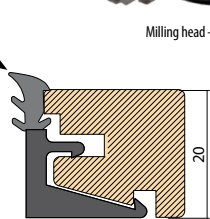
FIXclip-Profile moulding knives GLE20 / GLE20 Plus and FIXclip GLE20 Plus with integrated sealing lip or separate wedge seal compatible with universal milling head



FIXclip-Profile GLE20



FIXclip-Profile GLE20 Plus



Fixclip GLE20 Plus

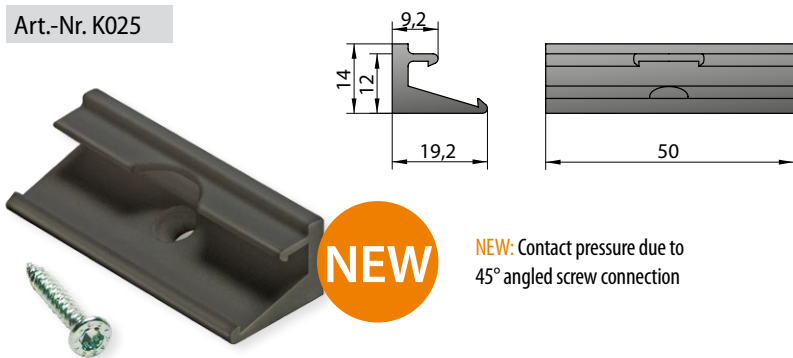


Milling head - sample image

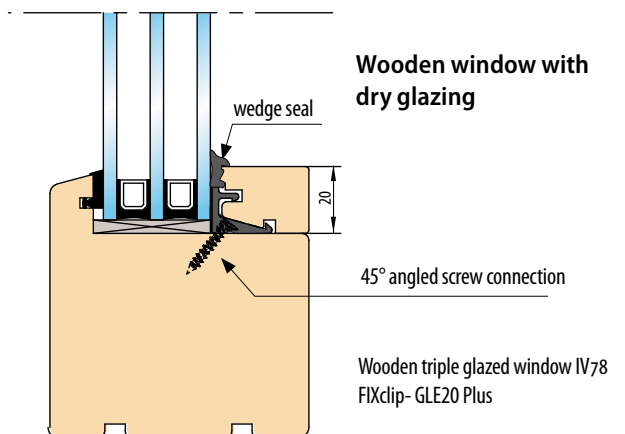


FIXclip GLE20 Plus

Art.-Nr. K025



NEW: Contact pressure due to 45° angled screw connection

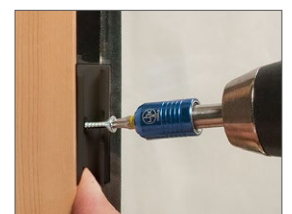


GLE20 Plus wedge seal

Art.-Nr. Z089



Mounting:	By screwing with KNAPP stainless steel PH-screws 3,5x25 mm or SK screws 3,5x25.
Advantages:	Contact pressure due to 45° angled screw connection Hidden montage of glass stops and profile strips. Removeable with no damage.
Processing options:	Removable spindle moulder with moulding knives (Art.-Nr. K656)
Suitable materials:	Glass profiles, sectional strip made of wood or plastic.
Application:	For glazing of doors and windows.
Accessories:	FIXclip-Profile moulding knives GLE20 / GLE20 Plus and FIXclip GLE20 Plus (Art.-Nr. K656), GLE20 Plus wedge seal (Art.-Nr. Z089)



Contact pressure due to 45° angled screw connection

Installation



1) Tailor the glazing beads



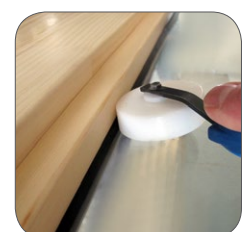
2) Connect FIXclip GLE20 with a 45° angled screw connection



3) Clip in the glass stop



4) press in the wedge seal



5) Easy finishing with sealing roller

FIXclip

Glazing stop and profile connector, plastic



Resistance to wind load – EN 12210



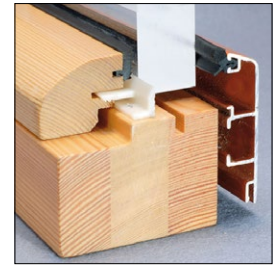
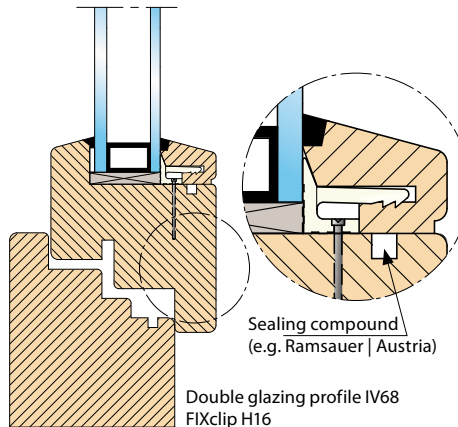
Class 5

Impact resistance – EN 13049



Class 3

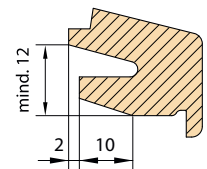
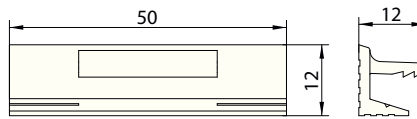
(screwed)



The FIXclip was tested at ift-Rosenheim, which stated the given requirement classes.

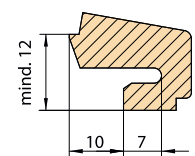
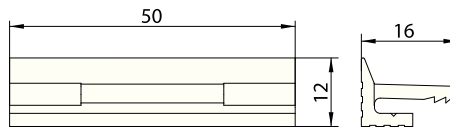
FIXclip H12

Art.-No. K078



FIXclip H16

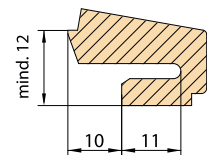
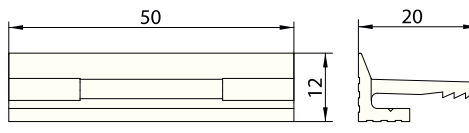
Art.-No. K076



Upon request and as long as stock lasts, the FIXclip H16 is also available in black.

FIXclip H20

Art.-No. K077



Mounting: By nailing 1,2x25 mm (head diameter 2 mm) or screwing with PH-screw 3x25 mm.

Advantages: Invisible fixing of glass and glass stops, removable without damage, tested for wind load Class C5 (EN 12210) and shock resistance Class 3 (EN 13049).

Installation: With spindle moulder and cutting saw blade.

Suitable materials: Glass profiles, sectional strip made of solid wood and composite materials.

Application: For glazing of doors and windows.

Accessories: Cutter FIXclip for spindle $\varnothing = 30$ mm in the FIXclip sizes H16/H20 (H12 on request) available
Cutter FIXclip for spindle $\varnothing = 40$ oder $\varnothing = 50$ mm available on request



Installation



1) Cut grooves



2) Fasten with nails



3) Click on the glazing beads



4) Assemble

KNAPP® Slot Cutter FIXclip

Cutter FIXclip H12	Art.-Nr. Z082
Cutter FIXclip H16	Art.-Nr. Z076
Cutter FIXclip H20	Art.-Nr. Z077

For construction manuals, .DXF drawings for FIXclip as well as your personal consultant in your area, please visit:
www.knapp-connectors.com/downloads

DUO 30, DUO 35

The hook connector made of steel

Features :

- | Easy to mount, concealed and immediately loadable
- | Low cutting depth – only 3 mm
- | Available in two sizes and two kinds $\varnothing = 30$ and 35 mm
- | Optional mL / oL (with / without tolerance)
- | Can be installed with standard industrial screws
- | Hooking way 15 mm

DUO 30 mL

Art.-No. K070

DUO 30 oL

Art.-No. K074



CS-screws 3,5x16 mm
(not included)

Art.-Nr. Z502

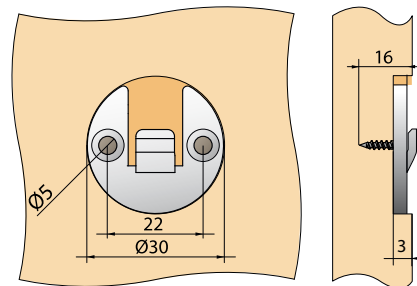


More information:

www.knapp-connectors.com/en/product/duo-35
www.knapp-connectors.com/en/product/duo-30

Installation example:

Mounting on door leaf and facing element.



Hooking way 15 mm



Blinds for doors and windows

Installation DUO 30



1) drilling according to mark



2) Mark with center punch



3) Screwing with CS-screws



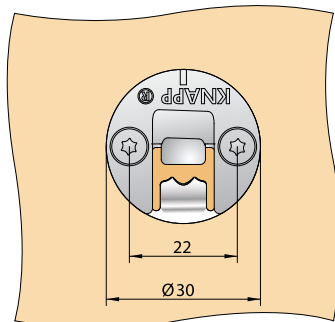
Schröder door and window construction (DE)

Locking clip

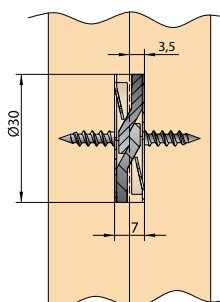
for DUO 30

Art.-No. K121

DUO 30 with locking clip



DUO 30 with locking clip



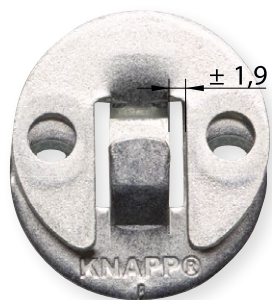
Schröder door and window construction (DE)

Mounting: By underlaying and screwing with DUO 30.

Advantages: Safety catch loads up to 24 kg (failure load approx. 73 kg).

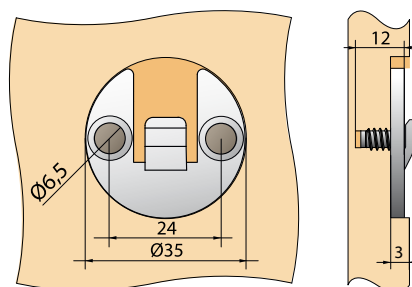
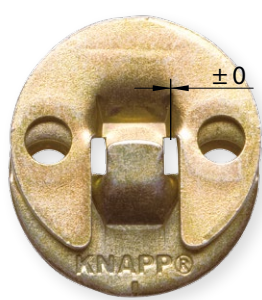
DUO 35 mL

Art.-No. K061



DUO 35 oL

Art.-No. K062



Hooking way 15 mm

Optimized for CNC-processing:
Euro screws 6x10 mm



Installation DUO 35



1) Drilling according to mark to mark



2) Copy drill position with center punch and pre-drill with $\varnothing = 5$ mm 12 mm deep.



3) Screwing



Door panel | Schröder door and window construction (DE)

Mounting:	DUO 30 with 3,5x16 mm CS-screws / DUO 35 with 6x10 mm Euro screws, only 3 mm cutting depth.
Advantages:	Concealed, self-tightening, demountable connector that allows shrinkage and expansion moving (mL = with tolerances) or for exact placing (oL = without tolerances).
Installation:	Drill installation holes using the TCT boring bit according to marking or by using depth gauge or center punches or with CNC equipment.
Suitable materials:	All kinds of wood and particle boards.
Application:	Facades and windows, staircases and handrails, coverings and door covering layers.
Accessories:	TCT boring bit ($\varnothing = 30/35$ 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



Joinery Tiedemann GmbH & Co.KG



TCT BORING BIT $\varnothing 30$ Art.-Nr. Z070

TCT BORING BIT $\varnothing 35$ Art.-Nr. Z071

Construction example:

Mounting of window elements with DUO30

Construction manuals, .DXF drawings for DUO 30, DUO 35 as well as your personal consultant in your area, please visit:

www.knapp-connectors.com/downloads

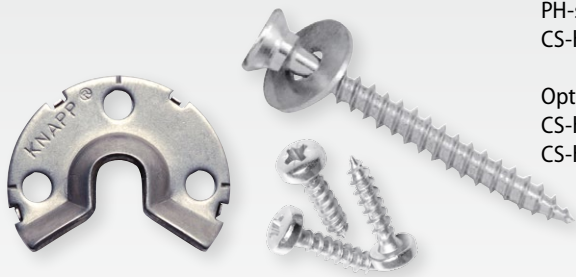
Tischlerei Tiedemann GmbH & Co.KG

UNO 30

Universal stainless steel hanging connector with locking clip (optional)

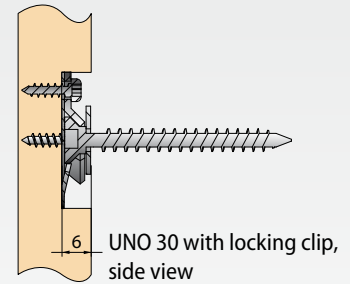
Art.-Nr. K120 UNO 30 SET

Art.-Nr. K120/B UNO 30



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

Optional also available with:
CS-holding screw 5x30 mm or
CS-holding screw stainless steel A2 5x25 mm



- Mounting:** Screwing in with CS screws $\varnothing = 3$ mm, only 7 mm drill depth.
- Advantages:** Concealed, self tightening, demountable connector for 30 mm drills.
- Installation:** Drilling hole by using the TCT boring bit according to distance marks or by using the drilling jig. Copy the hole by using the center punch and screw in.
- Suitable materials:** All kind of wood boards (solid and composite materials).
- Application:** With or without locking clip, for furniture, interior design, facades, panelling.
- Accessories:** TCT boring bit ($\varnothing = 30$ mm, with adjustable depth stop) | Art.-No. Z070
Center punch UNO 30 | Art.-No. K073
Adjustable boring template UNO 30 | Art.-No. K563



Installation UNO 30



1) Drilling according to mark



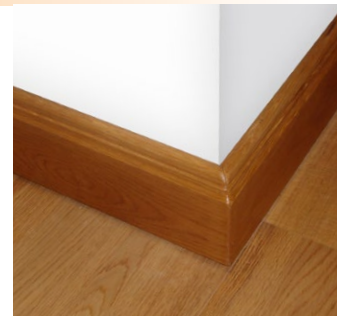
2) Screwing



3) Transfer with the center punch



4) Screwing



Skirting board | Nova Tecnica (GR)

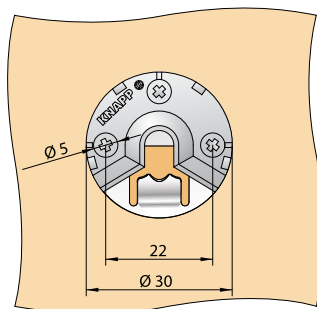
Locking clip

for UNO 30

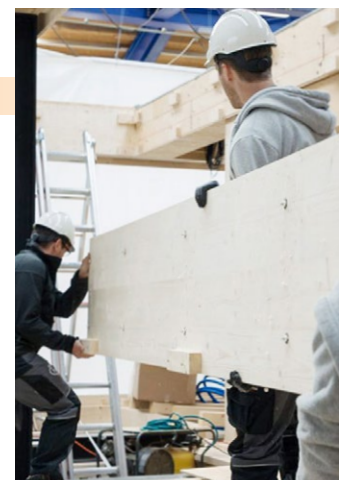
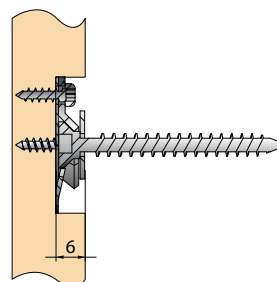
Art.-No. K121



UNO 30 with locking clip



UNO 30 with locking clip



Wooden screen | Solar Decathlon 2013

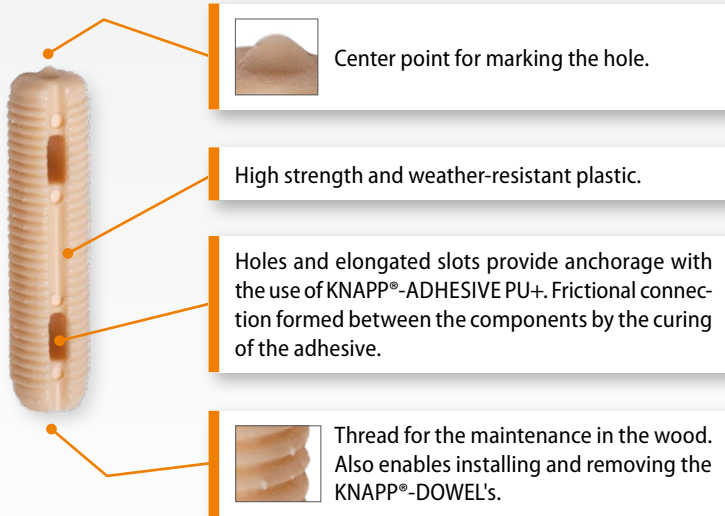
- Mounting:** By underlaying and screwing with UNO 30.
- Advantages:** Safety catch loads up to 24 kg (failure load approx. 73 kg).

KNAPP®-DOWEL

The modern dowel made of plastic

Features:

- Effective prefabrication – drill in with dowel inserting machine (chamfer opposite drill hole 1 mm).
- Fast mounting – connection is immediately loadable because traversal grooves raise the stability.
- Depending on the material, up to 6 KNAPP®-DOWELS are recommended for 600 mm.
- Longitudinal grooves distribute the glue and prevent bulging of the panels (PVA glue).
- When the gluing is double-sided deeper drilling is recommended (+6 up to 8mm).
- No shrinking, swelling, risk of breakage, or cleaving, which is common with a hardwood dowel.
- Weather resistant compound for interior and exterior use.
- Stable – through additional bonding with KNAPP®-ADHESIVE PU+ particularly high loads.



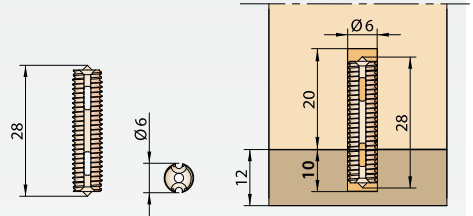
More information:

www.knapp-connectors.com/en/product/knapp-dowel

KNAPP®-DOWEL 6 mm

Art.-No. K066

6x28 mm

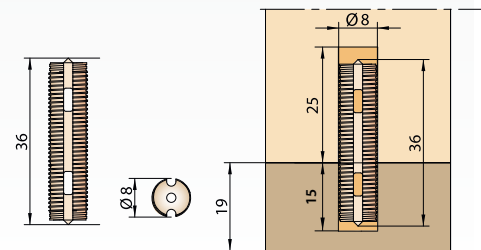


Info: Moisten the surface of very dry wood before gluing.

KNAPP®-DOWEL 8 mm

Art.-No. K067

8x36 mm



Mounting:	Knock in, optionally gluing with KNAPP®-ADHESIVE PU+
Advantages:	UV-resistant, self-tightening dowel
Installation:	Dowel-jig, power drill, dowel inserting machine
Suitable materials:	All kinds of wood materials (solid and composite materials)
Application:	Cabinets, furniture, windows and doors and overall shop fittings and interior design
Accessories:	KNAPP®-ADHESIVE PU+ Art.-No. Z011 see page 23

KNAPP®-DOWEL

Installation



1) Drill with dowel inserting machine



or with table dowel drill



2) Gluing (optional)



3) Knock in



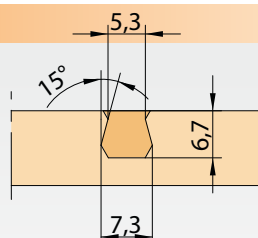
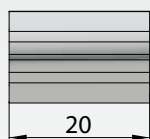
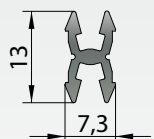
4) Assemble

For construction manuals, .DXF drawings for KNAPP®-DOWEL as well as your personal consultant in your area, please visit:
www.knapp-connectors.com/downloads

KLICK

Dovetail clip connector, plastic

Art.-No. K045



Mounting: Clips into the dovetail groove.

Advantages: Concealed, self-tightening connector.

Installation: Using a plunge router or CNC and an original KNAPP® dovetail router, make a pocket groove or continuous groove. Can also be used without groove in conjunction with KLICKpro.

Suitable materials: Solid wood, wood panels and boards, composite materials.

Application: For invisible fastening of trim or as an aid for gluing mitered corners.

Accessories: TCT router with $\varnothing = 8$ mm shank | Art.-No. K046/F

Installation



1) Cut grooves



2) Insert



3) Positioning



3) Assemble

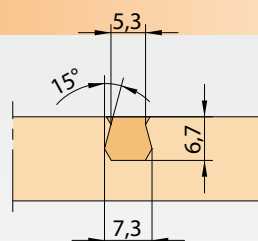
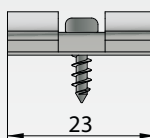
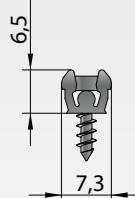
TCT ROUTER with
 $\varnothing 8$ mm shaft
Art.-Nr. K046/F



sKLICK

Dovetail clip connector for screw mounting, plastic

Art.-No. K048



Mounting: By screwing with PH-screw.

Advantages: Self-tightening, demountable connector for any angles 0-90°.

Installation: Using a plunge router or CNC and an original KNAPP® dovetail router, make a pocket groove or continuous groove. Can also be used without groove in conjunction with KLICKpro.

Suitable materials: Solid wood, wood panels and boards, composite materials.

Application: For concealed fixing of panels, covers and trim.

Accessories: TCT router with $\varnothing = 8$ mm shank | Art.-No. K046/F
PH-screw 3x13 mm | Art.-No. Z600

Installation



1) Cut grooves



2) Screwing



3) Positioning



3) Assemble

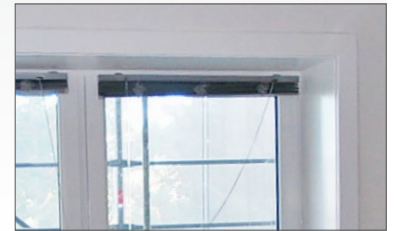
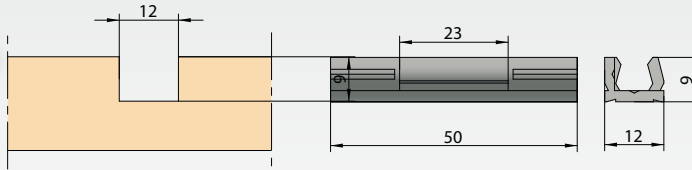
TCT ROUTER with
 $\varnothing 8$ mm shaft
Art.-Nr. K046/F



KLICKpro

Dovetail groove connector, plastic

Art.-No. K060



- Mounting:** KLICKpro can either be surface mounted or mounted into a groove. It is fixed by screwing, nailing or gluing.
- Advantages:** Concealed, self-tightening dovetail housing suitable for KCLICK and sKCLICK.
- Installation:** Cut either groove or rebate (9x12 mm by using a spindle moulder) or install KLICKpro surface mounted. For use with KCLICK or sKCLICK.
- Suitable materials:** Solid wood, wood panels, composite materials.
- Application:** For mouldings and cover plates, for furniture.

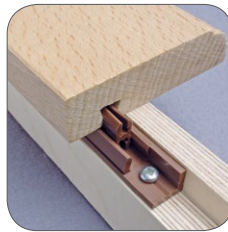
Installation



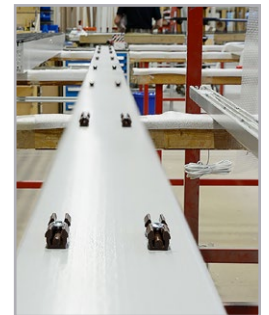
1) Cut grooves



2) Screwing



3) Assemble

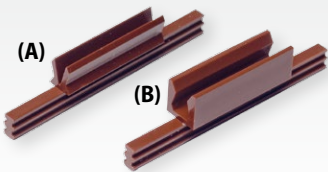


Blends | Solarlux (DE)

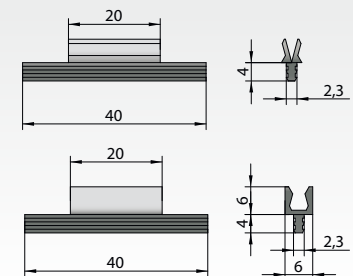
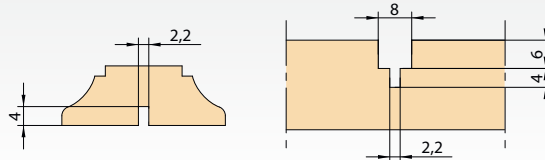
miniKCLICK

2-part dovetail clip connector, plastic

Art.-No. K059

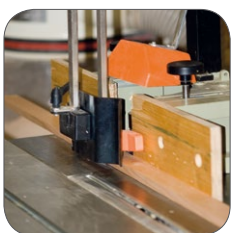


Info: Moisten the surface of very dry wood before gluing.



- Mounting:** Gluing into pre-cutted groove with KNAPP®-ADHESIVE PU+.
- Advantages:** Concealed, self-tightening dovetail connector for glue on mounting.
- Installation:** With spindle moulder and original Knapp cutting saw blade.
- Suitable materials:** Solid wood, wood panels, composite materials.
- Application:** All kinds of mouldings, interior glazing e.g. for interior doors.
- Accessories:** Cutting saw blade 120 mm, Ø = 30 mm spindle | Art.-No. Z065, insert tool miniKCLICK | Art.-No. K068
KNAPP®-ADHESIVE PU+ | Art.-No. Z011

Installation



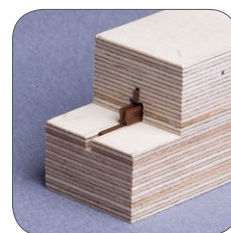
1) Cut grooves



2) Gluing



3) Installation with insert tool



3) Assemble



Grooving saw 120 | Art.-Nr. Z065



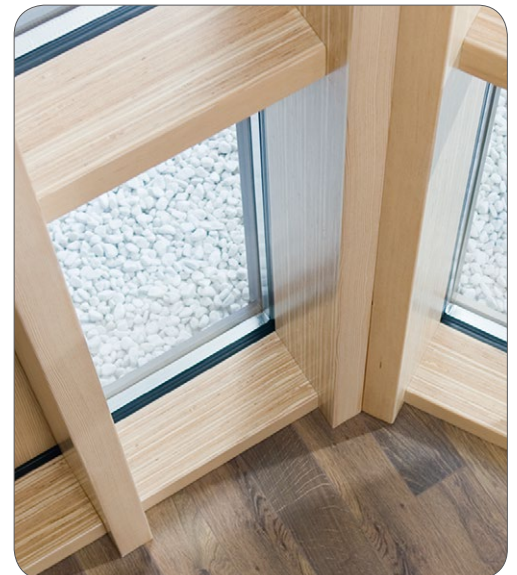
KNAPP®-GLUE PU+ | Art.-Nr. Z011

Door and window construction

Selected reference project



THERMOSECUR front door, noblesse GmbH & Co. KG, www.thermosecur.de



EGE HOLZBAU GMBH & CO. KG
www.ege.de



Contact

+49 (0) 8106 / 99 55 99 0
+43 (0) 7474 / 799 10
info@knapp-connectors.com

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Concealed | Self-tightening | Demountable



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Knapp GmbH | Wassergasse 31 | A-3324 Euratsfeld | Tel.: +43 (0)7474 / 799 10 | Fax: +43 (0)7474 / 799 10 99

Knapp GmbH Niederlassung Deutschland | Föhrenweg 1 | D-85591 Vaterstetten
Tel.: +49 (0)8106 / 99 55 99 0 | Fax: +49 (0)8106 / 99 55 99 20 | E-Mail: info@knapp-verbinder.com

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