

Smart technology for doors and windows

NEW

G-FIX®03-S-00

G-FIX®04

A-FIX 02, A-FIX 03

E-FIX AL

**NDKH-ES** 

G-FIX®, T-FIX

Really pressurise the seal.



# G-FIX®, T-FIX

### Make dry glazing permanently tight.

Shrinkage in the wooden parts or weakening of the mounting with conventional glazing bead installation can reduce the contact pressure. This can cause the sealing systems of dry glazing elements made of wood or wood/aluminium constructions to leak in the long-term.

G-Fix solves this problem in an ingeniously simple way. When G-Fix is screwed on, the glass pane is moved outwards by approx. 1.5 mm. This exerts a permanent, constant contact pressure on the dry glazing seal. This ensures that the dry glazing is permanently sealed. Simple, fast and fixed!

With T-FIX, the correct position of the stepped rebate - depending on the frame width and the thickness of the glass pane - makes it possible to generate contact pressure on the dry glazing when screwing on the T-FIX.



#### Simply ingenious!

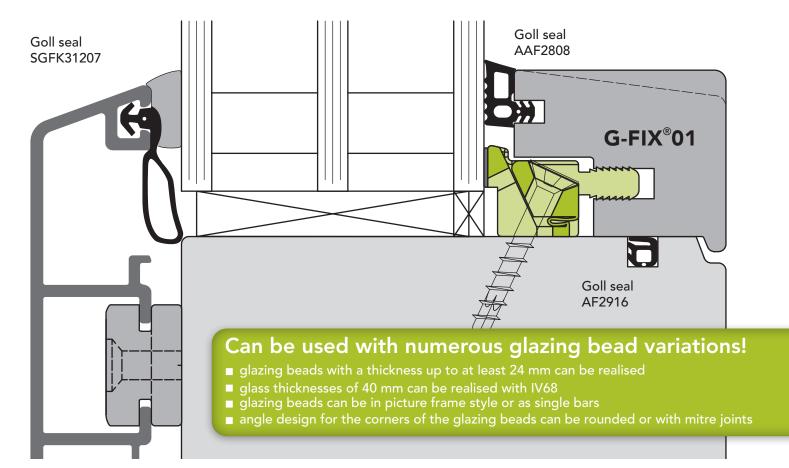
With G-FIX, the glass pane is pressed aginst th seal by approx. 1.5 mm.

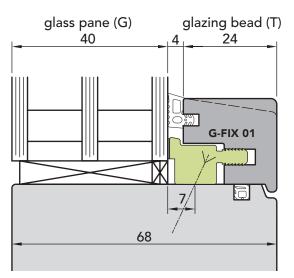
### A little movement that makes a big difference.

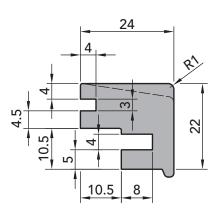
- permanent water and airtightness when fitting dry glazing seals
- reliable mechanical fixing of the glass pane
- specially designed for fixed glazing
- the glazing beads are not required to hold the glass and so bear none of the weight, even after installation
- quick and easy installation of the G-Fix, T-Fix and the glazing beads
- compatible with various designs of glazing beads

- also compatible with IV68 system with 44 mm thick triple glazing using rebated glazing beads.
- leaves no visible screws, nails or fasteners
- can be fitted using standard window tool sets
- without thermal bridge
- later disassembly and reassembly possible without damaging the glazing beads
- very attractive benefit-cost ratio

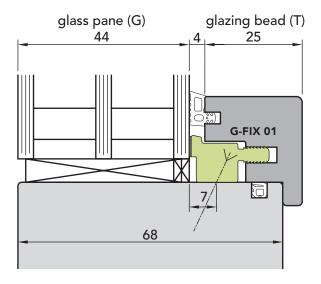


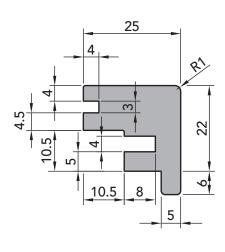






Example: Standard IV68		
glazing beads		
glass (G)	glazing bead (T)	
40 mm ma	x. 24 mm	
(4/14/4/14/	4)	
36 mm	28 mm	
(4/12/4/12/4	1)	
26 mm	38 mm	
(4/18/4)		





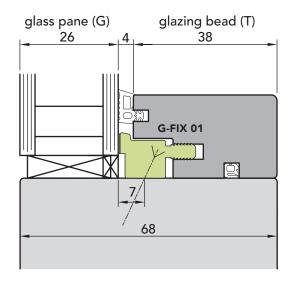
Zxampic. i	roo glazing min	
5 mm rebated glazing beads		
glass (G)	glazing bead (T)	
44 mm max	c. 25 mm	
(4/16/4/16/4	1)	
36 mm	33 mm	
(4/12/4/12/4	)	
26 mm	43 mm	
(4/18/4)		

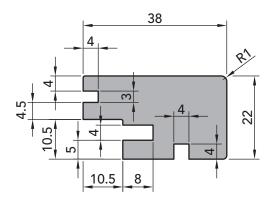
Example: IV68 glazing with

Diagrams on scale of 1:1

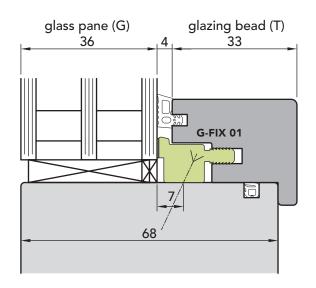
### Installation examples

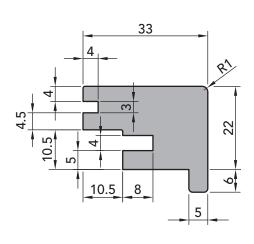






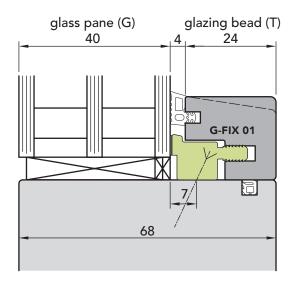
Example: Standard IV68 glazing beads		
glass (G)	glazing bead (T)	
40 mm max.	24 mm	
(4/14/4/14/4)		
36 mm	28 mm	
(4/12/4/12/4)		
26 mm	38 mm	
(4/18/4)		

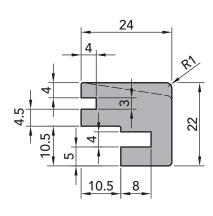




5 mm rebat	ed glazing beads
glass (G)	glazing bead (T)
44 mm max.	. 25 mm
(4/16/4/16/4)	
36 mm	33 mm
(4/12/4/12/4	)
26 mm	43 mm
(4/18/4)	

Example: IV68 glazing with





Example: Standard IV68		
glazing bea	ıds	
glass (G)	glazing bead (T)	
40 mm max	c. 24 mm	
(4/14/4/14/4	.)	
36 mm	28 mm	
(4/12/4/12/4)		
26 mm	38 mm	
(4/18/4)		



Glass holder

G-Fix 01, a	ı glass holder for ı	mechanical fixation of glass panes	
		pcs./	net price
item-no.	finish	box large box	per item
G-FIX 01	black	500 2500	0.49

**Application:** Glass holder for mechanical fixation of glass panes.

**Design:** Plastic with rubber protective layer for the glass pane.

**Important note:** A requirement for the proper functioning of the G-Fix 01 is the use of an appropriate sealing profile on the outside of the glass pane. With 2-pane glass, the sealing profile must be able to compensate for glass thickness tolerances of up to 1.6 mm, with 3-pane glass up to 2.4 mm.

Important installation information: The fixing point of the G-Fix 01 is crucial for creating the correct contact pressure on the glass pane. This must have a constant dimension from the stop edge. The G-Fix 01 mounting jig can be used for direct mounting. Alternatively, positioning holes can be pre-drilled using an automatic drill or by combining the G-Fix 01 drilling jig with the G-Fix 01 drilling adapter. A suitable stop rebate can also be pre-milled. Installation of the G-Fix 01 glass holders begins in the centre of each side of the frame. The first G-Fix 01 is best placed at the top. Then attach further G-Fix 01s from the centre towards the corners of the frame. A distance of at least 8 cm is required in the corners if an E-Fix corner bracket is used.

**Installation advantage**: For optimum installation, it is advantageous if the edges of the glass panes are hemmed.

**Important note:** To ensure proper function, a G-Fix 01 must be installed at a distance of approx. 20 cm.

E-Fix corner brackets: The E-Fix 01 and E-Fix 03 corner brackets fit the G-Fix 01.

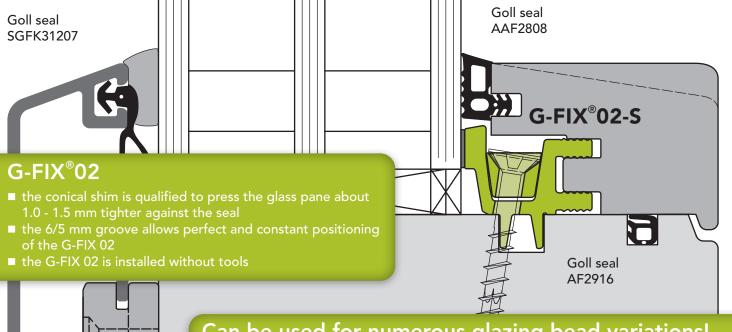
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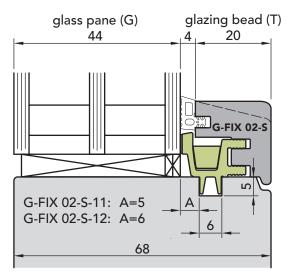


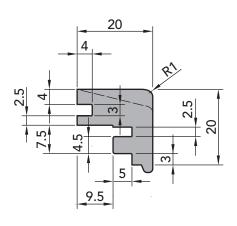




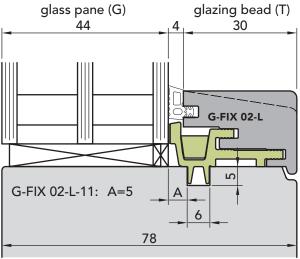
### Can be used for numerous glazing bead variations!

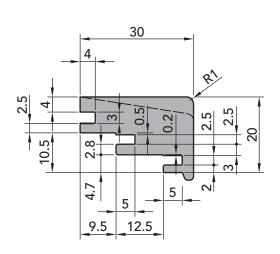
- glazing beads with a thickness up to at least 20 mm can be realised
- glass thicknesses of 44 mm (3-pane glass) can be realised with IV68
- glazing beads can be in picture frame style or as single bars
- angle design for the corners of the glazing beads can be rounded or with mitre joints





#### Example: Standard IV68 glazing beads glazing bead glass (G) (T) 20 mm 44 mm max. (4/16/4/16/4) 36 mm 28 mm (4/12/4/12/4) 26 mm 38 mm (4/18/4)





#### Example: Standard IV78 glazing beads

glass	glazing bead
(G)	(T)
44 mm	30 mm
(4/16/4/1	16/4)

Diagrams on a scale of 1:1



Glass holder

G-Fix 02-S, a glass holder for mechanical fixation of glass panes						
					pcs./	net price
item-no.	finish			box	large box	per item
Groove positi	on = distance between glass		groove			
and inner edg	e of the groove = 11 mm	length	position (N)			
G-FIX 02-S-11	black, rubber graphite grey	short	11 mm	500	2500	0,49
Groove positi	on = distance between glass		groove			
and inner edg	e of groove = 12 mm	length	position (N)			
G-FIX 02-S-12	l black, rubber black	short	12 mm	500	2500	0,49



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Accessories /	Technical	information	

depending on the screw-in depth.

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E-FIX 02 - Corner bracket	18
Glazing hovel	30





#### G-Fix 02-L, a glass holder for mechanical fixation of glass panes

			groove		pcs./	net price	
item-no.			position	box	large box	per item	
G-FIX 02-L-11	black, rubber graphite grey	long	11 mm	500	2500	0,52	

**Application:** Glass holder for mechanical fixation of glass panes. **Design:** Plastic with rubber protective layer for the glass pane.

**Colour rubber G-FIX 02-S**: For better differentiation, the rubber of the G-FIX 02-S-11 is graphite grey and the rubber of the G-FIX 02-S-12 is black.

Colour rubber G-FIX 02-L: The rubber of the G-FIX 02-L-11 is graphite grey.

Right contact pressure: The decisive factor for the permanent tightness of the entire system is that contact pressure is generated on the outer seal. With G-Fix 02, this is generated by the conical shim when screwing on and can be varied as required

**Important note:** A requirement for the proper functioning of the G-Fix 02 is the use of an appropriate sealing profile on the outside of the glass pane. With 2-pane glass, the sealing profile must be able to compensate for glass thickness tolerances of at least 1.6 mm, with 3-pane glass of at least 2.4 mm.

**Important installation information:** The G-Fix 02 is positioned using a continuous or interpolated 6/5 mm guide groove. The position of the guide groove depends on the frame width and the glass pane thickness. Installation can be carried out without tools. It starts in the centre of each side of the frame. The first G-Fix 02 is best placed at the top. Further G-Fix 02 are then attached from the centre towards the corners of the frame. A gap of at least 8 cm is required in the corners if an E-Fix 02 corner bracket is used.

**Important note:** To ensure proper function, a G-Fix 02 must be installed at a distance of at least 20 cm.

E-Fix corner bracket: The E-Fix 02 corner bracket matches the G-Fix 02.

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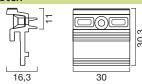
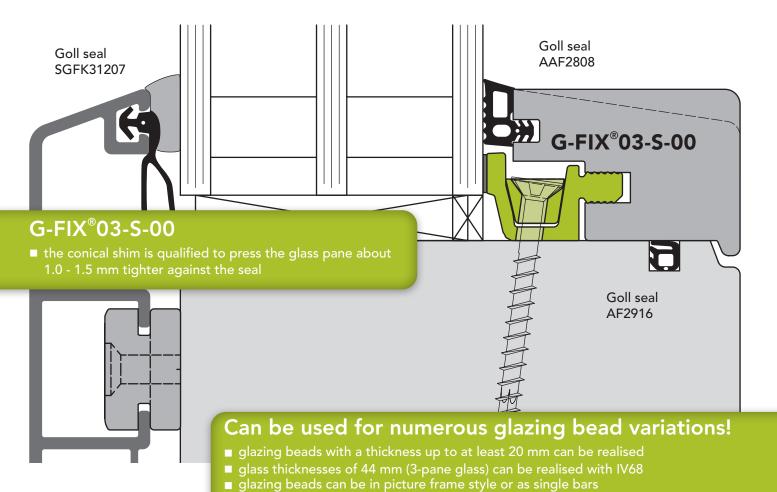
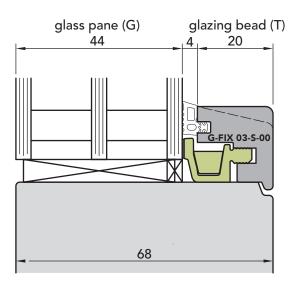


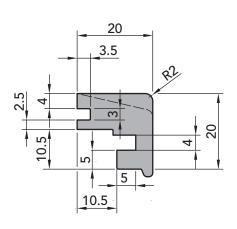


Fig.: G-Fix 02-L









■ angle design for the corners of the glazing beads can be rounded or with mitre joints

naara beads
ng bead (T)
(T) 20 mm
28 mm
38 mm



glass holder

G-Fix 03-S-00, a g	lass holder for me	chanical fixation of	f glass panes
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				groove		pcs./	net price
item-no.	finish	NEW	length	position	box	large box	per item
G-FIX 03-S-00	black, rubber graphite grey	•	short	00 mm	500	2500	0,49

**Application:** Glass holder for mechanical fixation of glass panes. **Design:** Plastic with rubber protective layer for the glass pane.

**Right contact pressure:** The decisive factor for the permanent tightness of the entire system is that a contact pressure is generated on the outer seal. With G-Fix 03, this is generated by the conical shim when screwing on and can be varied as required depending on the screw-in depth.

**Important note:** A requirement for the proper functioning of the G-Fix 03 is the use of an appropriate sealing profile on the outside of the glass pane. With 2-pane glass, the sealing profile must be able to compensate for glass thickness tolerances of at least 1.6 mm, with 3-pane glass of at least 2.4 mm.

**Important installation instructions:** Start installation in the centre of each side of the frame. The first G-Fix 03 is best placed at the top. Then attach further G-Fix 03 from the centre towards the corners of the frame. A gap of at least 8 cm is required in the corners if an E-Fix 03 corner bracket is used.

**Important note:** To ensure proper function, a G-Fix 03 must be installed at a distance of at least 20 cm.

E-Fix corner brackets: The E-Fix 01 and E-Fix 03 corner brackets fit the G-Fix 03.

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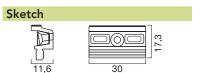
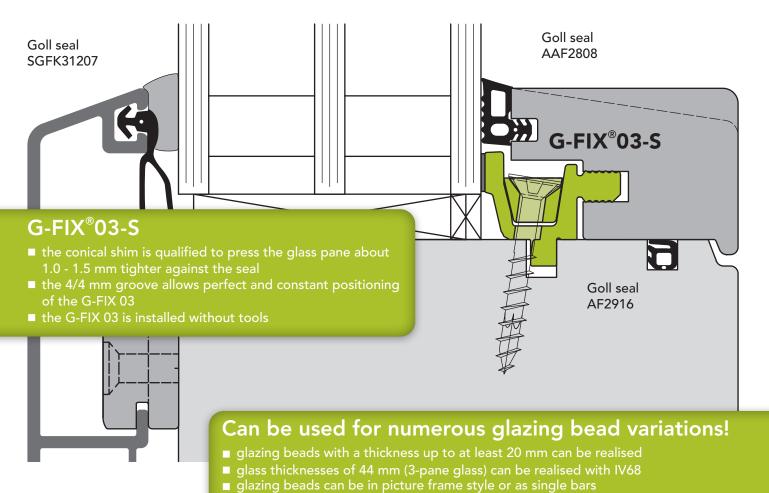
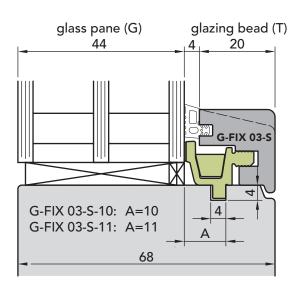


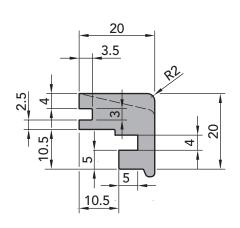


Fig.: G-Fix 03-S-00









■ angle design for the corners of the glazing beads can be rounded or with mitre joints

Example: Standard  IV68 glazing beads							
glass glazing beads							
(G)	(T)						
44 mm max.	20 mm						
(4/16/4/16/4)							
36 mm	28 mm						
(4/12/4/12/4)							
26 mm	38 mm						
(4/18/4)							



Glass holder

G-Fix 03, a glass holder for mechanical fixation of glass panes												
				pcs.	net price							
item-no. finish			box	large box	per item							
Groove position = distance between glass		groove										
and inner edge of groove = 10 mm	length	position (N)										
G-FIX 03-S-10 black, rubber graphite grey	short	10 mm	500	2500	0,49							
Groove position = distance between glass		groove										
and inner edge of groove = 11 mm	length	position (N)										
G-FIX 03-S-11 black, rubber black	short	11 mm	500	2500	0,49							



Fig.: G-Fix 03-S-10

**Application:** Glass holder for mechanical fixation of glass panes.

**Design:** Plastic with rubber protective layer for the glass pane.

**Right contact pressure:** The decisive factor for the permanent tightness of the entire system is that a contact pressure is generated on the outer seal. With G-Fix 03, this is generated by the conical shim when screwing on and can be varied as required depending on the screw-in depth.

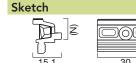
**Important note:** A requirement for the proper functioning of the G-Fix 03 is the use of an appropriate sealing profile on the outside of the glass pane. With 2-pane glass, the sealing profile must be able to compensate for glass thickness tolerances of at least 1.6 mm, with 3-pane glass of at least 2.4 mm.

**Important installation instructions:** The G-Fix 03 is positioned using a continuous or interpolated 4/4 mm guide groove. The position of the guide groove depends on the frame width and the glass pane thickness. Installation can be carried out without tools. It starts in the centre of each side of the frame. The first G-Fix 03 is best placed at the top. Further G-Fix 03 are then attached from the centre towards the corners of the frame. A gap of at least 8 cm is required in the corners if an E-Fix 03 corner bracket is used.

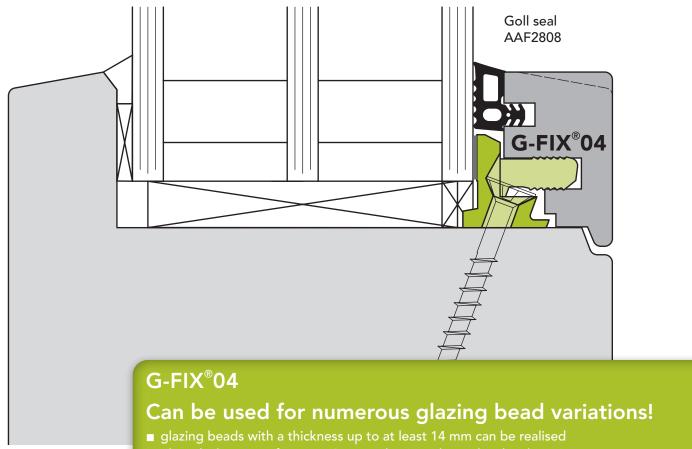
**Important note:** To ensure proper function, a G-Fix 03 must be installed at a distance of approx. 20 cm.

E-Fix corner bracket: The E-Fix 03 corner bracket fits the G-Fix 03.

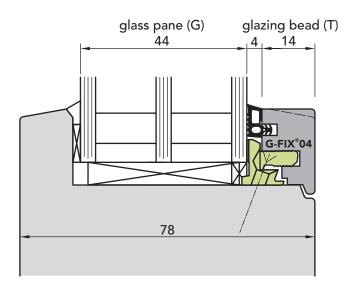
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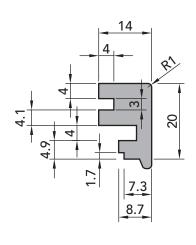






- glass thicknesses of 44 mm (3-pane glass) can be realised with IV78
- glazing beads can be in picture frame style or as single bars
- angle design for the corners of the glazing beads can be rounded or with mitre joints





IV78 glazing beads
glass glazing bead
(G) (T)

44 mm max. 14 mm
(4/16/4/16/4)

36 mm 22 mm
(4/12/4/12/4)

**Example: Standard** 





Glass holder

G-Fix 04, a	glass hol	der for	mechanical fixation of glass panes		
				pcs./	net price
item-no.	finish	NEW	box	large box	per item
G-FIX 04	black	•	500	2500	0.47

**Application:** Glass holder for mechanical fixation of glass panes. **Design:** Plastic with rubber protective layer for the glass pane.

**Important note:** For the G-Fix 04 to function properly, an appropriately wide sealing profile or sealing tape must be used on the outside of the glass pane. In the case of 2-pane glass, the sealing profile or topping tape must be able to compensate for glass thickness tolerances of up to 1.6 mm, and up to 2.4 mm in the case of 3-pane

**Important installation instructions:** Installation of the G-Fix 04 glass holders begins in the centre of each side of the frame. The first G-Fix 04 is best placed at the top. Then attach further G-Fix 04s from the centre towards the corners of the frame. A distance of at least 8 cm is required in the corners if an E-Fix corner bracket is used. **Installation advantage:** For optimum installation, it is advantageous if the edges of the glass panes are hemmed.

**Important note:** To ensure proper function, a G-Fix 04 must be installed at a distance of approx. 20 cm.

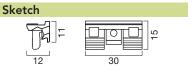
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**E-Fix corner bracket**: The E-Fix 01 corner bracket fits the G-Fix 04.

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E-FIX 01 - Corner bracket

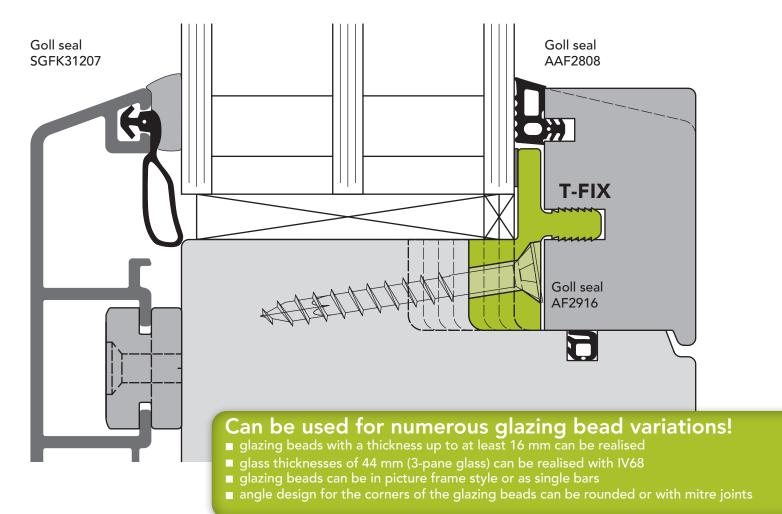
Tools

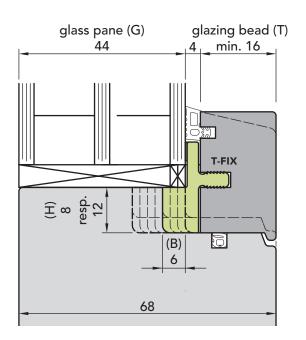


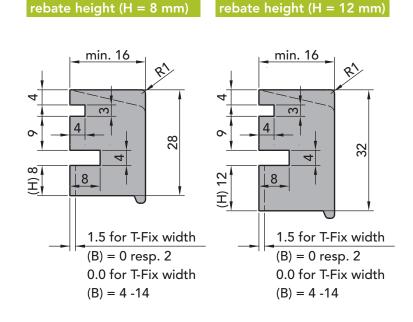


### **T-FIX**









- T-FIX is available for 8 resp. 12 mm rebate height and in item widths of 0, 2, 4, 6, 8, 10, 12 and 14 mm
- the choice of the item width depends on the window frame width, the glass thickness and the glazing bead width

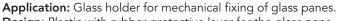
Diagrams on a scale of 1:1





T-Fix, a glass holder for mechanical fixation of glass panes											
		width	rebate		pcs./	net price					
item-no.	finish	(B) mm	heigth (H)	box	large box	per item					
T-FIX 08-00	black	0	8	500	3000	0,47					
T-FIX 08-02	black	2	8	500	3000	0,47					
T-FIX 08-04	black	4	8	500	3000	0,47					
T-FIX 08-06	black	6	8	500	3000	0,48					
T-FIX 08-08	black	8	8	500	3000	0,48					
T-FIX 08-10	black	10	8	500	3000	0,48					
T-FIX 08-12	black	12	8	500	3000	0,49					
T-FIX 08-14	black	14	8	500	3000	0,49					

T-Fix, a glass holder for mechanical fixation of glass panes										
		width	rebate		pcs./	net price				
item-no.	finish	(B) mm	heigth (H)	box	large box	per item				
T-FIX 12-00	black	0	12	500	3000	0,47				
T-FIX 12-02	black	2	12	500	3000	0,47				
T-FIX 12-04	black	4	12	500	3000	0,47				
T-FIX 12-06	black	6	12	500	3000	0,48				
T-FIX 12-08	black	8	12	500	3000	0,48				
T-FIX 12-10	black	10	12	500	3000	0,48				
T-FIX 12-12	black	12	12	500	3000	0,49				
T-FIX 12-14	black	14	12	500	3000	0,49				



**Design:** Plastic with rubber protective layer for the glass pane.

**Important note:** A requirement for the proper functioning of the T-Fix is the use of an appropriate sealing profile on the outside of the glass pane.

Important installation instructions: The T-Fix is positioned using a stepped rebate. T-Fix is available for rebate heights of 8 mm or 12 mm. T-Fix is available in various widths from 0 to 14 mm so that different glass thicknesses can be realised. Installation can be carried out without tools. It starts in the centre of each side of the frame. The first T-Fix is best placed at the top. Further T-Fix are then attached from the centre towards the corners of the frame. A distance of at least 8 cm is required in the corners if an E-Fix 01 corner bracket is used.

**Important note:** To ensure proper function, a T-Fix must be installed at a distance of at least 20 cm.

**Installation advantage:** Bevelled glass pane edges are advantageous for optimum installation.

**Correct fastening screws:** Due to the low material thickness, T-Fix with a construction height of 0 and 2 mm should be fastened with furniture rear wall screws. These screws have a low flat head with collar and thus ensure a perfect hold of the T-Fix. T-Fix from a height of 4 mm can be fastened with chipboard screws with countersunk heads.

**E-Fix corner brackets:** The E-Fix 01 and E-Fix 03 corner brackets are suitable for T-Fix.

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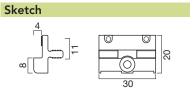




Fig.: T-Fix 08-14



Fig.: T-Fix 12-14

### T-FIX-N



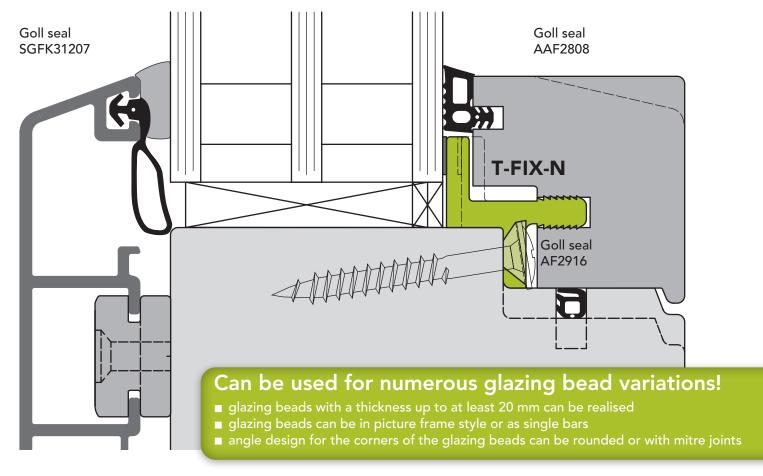
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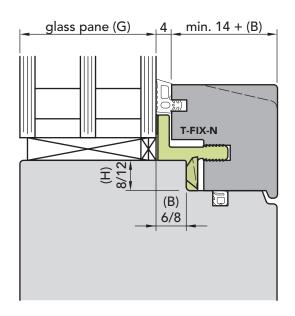
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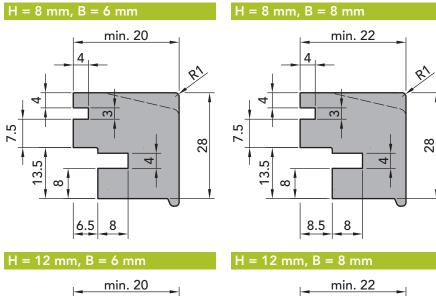
8.5

8





- T-FIX-N is designed for window frames with a rebate heigth of 8 and 12 mm and a negative glass pane position
- the choice of the item width depends on the window frame width, the glass thickness and the glazing bead width



RI

32

4

12

6.5 8

7.5



T-FIX-N



T-Fix-N, a glass holder for mechanical fixation of glass panes								
		width	rebate		pcs./	net price		
item-no.	finish	(B) mm	heigth (H)	box	large box	per item		
T-FIX 08-N-06	black	-6	8/12	500	3000	0,49		
T-FIX 08-N-08	black	-8	8/12	500	3000	0,49		

**Application:** Glass holder for mechanical fixation of glass panes. **Design:** Plastic with rubber protective layer for the glass pane.

**Important note:** The use of an appropriate sealing profile on the outside of the glass

pane is a requirement for the proper functioning of the T-Fix-N.

Important installation instructions: The T-Fix-N is positioned using a stepped rebate. T-Fix-N is suitable for a rebate height of 8 mm as well as 12 mm. T-Fix-N is available in widths of -6 and -8 mm so that different glass thicknesses can be realised with a negative recess to the rebate edge. Installation can be carried out without tools. It starts in the centre of each side of the frame. The first T-Fix-N is best placed at the top. Further T-Fix-Ns are then attached from the centre towards the corners of the frame. A gap of at least 8 cm is required in the corners if an E-Fix corner bracket is used.

**Important note:** To ensure proper function, a T-Fix-N must be installed at a distance of at least 20 cm.

**Correct fixing screws:** Due to the low material thickness, T-Fix-N should be fastened with furniture back panel screws. These screws have a low flat head with collar and thus ensure a perfect hold of the T-Fix-N.

E-Fix corner brackets: The E-Fix 01 corner brackets fit the T-Fix-N.

Accessories / Technical information	
	from page
E-FIX 01 - Corner bracket	18
Glazing hovel	30

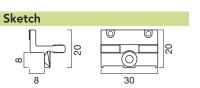




Fig.: T-Fix 08-N08





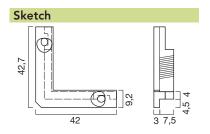


E-Fix 01, a corner bracket for the frame of the glazing beads							
		pcs./	net price				
item-no.	finish	box large box unit	per item				
for use with G-Fix 01 and T-Fix(-N)							
E-FIX 01	black	200 2400 pcs.	0,41				

**Application:** Corner bracket for joining glazing bead frames together.

Important note: The E-Fix 01 corner bracket can be used together with the glass

holders G-Fix 01, G-Fix 03 and T-Fix(-N). **Design:** Plastic reinforced with glass fibre.





#### E-Fix 02, a corner bracket for the frame of the glazing beads

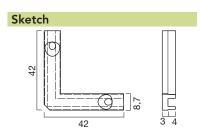
				pcs./		net price
item-no.	finish	length	box	large box	unit	per item
E-FIX 02-S	black	short	200	2400	pcs.	0,41

**Application:** Corner bracket for joining glazing bead frames together.

**Important note:** The corner bracket E-Fix 02 can be used together with the glass

holders G-Fix 02.

Design: Plastic reinforced with glass fibre.





#### E-Fix 03, a corner bracket for the frame of the glazing beads

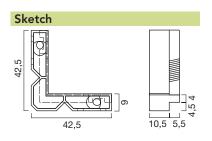
		pcs./		net price	
item-no.	finish	box large box	unit	per item	
E-FIX 03	black	200 2400	pcs.	0,46	

**Application:** Corner bracket for joining glazing bead frames together.

**Important note:** The E-Fix 03 corner bracket can be used together with the glass holders G-Fix 01, G-Fix 03 and T-Fix.

**Significant processing advantage:** The E-Fix 03 is designed to accommodate a spacer clip, which makes it easier to paint the glazing bead frame at the same time as the window frame.

Design: Plastic reinforced with glass fibre.





Design: Plastic reinforced with glass fibre.

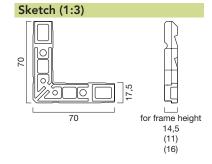
# E-FIX AL

E-Fix AL, a corner bracket for aluminium frames							
			for frame				net price
item-no.	finish	NEW	height mm	box	large box	unit	per item
E-FIX AL-11	black	•	11	100	2500	pcs.	0,95
E-FIX AL-14.5	black	•	14,5	100	2500	pcs.	0,98
E-FIX AL-16	black	•	16	100	2500	pcs.	1,03

**Insert:** Corner bracket for 90° corner joints of aluminium shells. Can be punched.

Important advantage: The use of glass fibre-reinforced plastic makes the corner brackets ideal for both high and low temperatures. Particularly at low temperatures, this can prevent the corner brackets from breaking at low temperatures. **Installation note**: The corner brackets are equipped with both a filling chamber for silicone sealing of the mitre and a filling chamber for construction adhesive.









#### A-Fix 01, a glass holder for mechanical fixation of glass panes from the outside

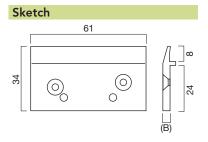
				pcs./		net price
item-no.	finish	width bo	X	large box	unit	per item
A-FIX 01	black	3,8 50	00	2500	pcs.	0,38

#### A-Fix 02, a glass holder for mechanical fixation of glass panes from the outside

				F	ocs./		net price
item-no.	finish	NEW	width	box	large box	unit	per item
A-FIX 02	black	•	2,8	500	2500	pcs.	0,38

**Application:** Glass holder for mechanical fixing of glass panes from the outside. A-FIX 01: For a gap of at least 4 mm between the timber frame and aluminium shell. A-FIX 02: For a gap of at least 3 mm between the wooden frame and aluminium shell. **Design:** Plastic reinforced with glass fibre.

**Important note:** In order to guarantee the function, an A-Fix must be installed at a distance of approx. 25 cm.



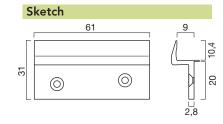


#### A-Fix 03, a glass holder for mechanical fixation of glass panes from the outside

					pcs./		net price
item-no.	finish	NEW	width	box	large box	unit	per item
A-FIX 03	black	•	2,8	500	2500	pcs.	0,38

**Application:** Glass holder for mechanical fixing of glass panes from the outside. A-FIX 03: For a gap of at least 3 mm between the wooden frame and aluminium shell. **Design:** Plastic reinforced with glass fibre.

**Important note:** In order to guarantee the function, an A-Fix must be installed at a distance of approx. 25 cm.







# NDH®, NDKH®

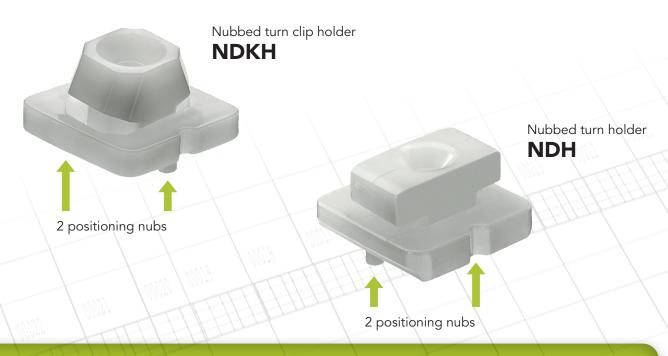
### Nubbed turn holder®, Nubbed turn clip holder®

The nubbed turn holder® and nubbed turn clip holder® are inserted into a mounting groove using positioning nubs and then fastened with a screw. In this way, they are precisely positioned in relation to the axis of the aluminium shell holder and also aligned parallel to it.

This prevents any possible shifting of the holders due to annual rings in the wood or twisting of the holders when tightening the screws, and the system is immediately ready to receive the aluminium shell.

With the nubbed turn holder®, the aluminium shell is attached by a 90° turning movement. The positioning nubs are separated from their base plate via a predetermined breaking point. This predetermined breaking point is recessed in the base plate so that the rotary movement is not hindered and no damage can occur to the wooden surface.

In the case of the nubbed turn clip holder®, the positioning nubs are only separated from the base plate when the aluminium shell needs to be dismantled.

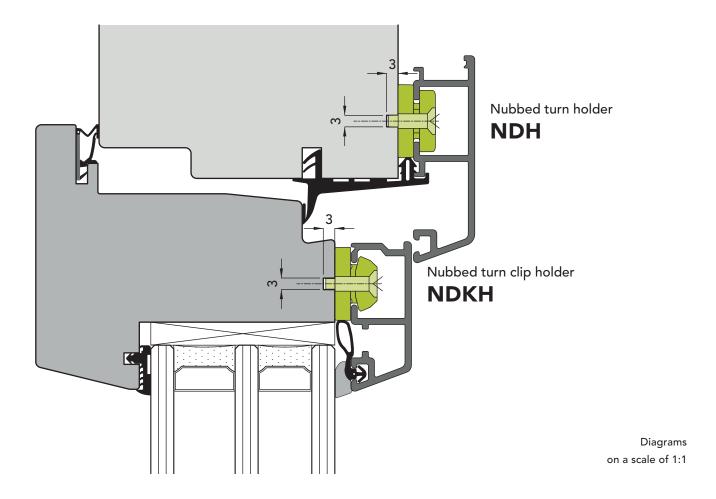


### Reliable and quick attachment of the holders.

- simple positioning of the holders along a mounting groove. Depending on the requirements different numbers of holders can be fitted
- reliable and precise positioning of the holders in relation to the axis of the holder in the aluminium shell
- automatic parallel alignment of the holders when tightening. The holders cannot twist due to the mounting groove.
- the positioning nubs are removed when the holder is rotated, without splinters hindering the rotation or damaging the wooden surface

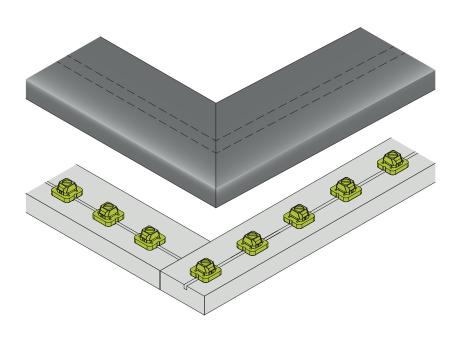


# NDH®, NDKH®



### Diagram

- the holders can be moved and fastened along the positioning groove in any required number
- all holders are positioned neatly under the axis of the aluminium shell's locating groove and are aligned parallel



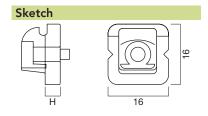


#### Nubbed turn clip holder





Nubbed turn clip holder one-sided, P16									
			dimensions	pcs./		dimensions pcs./ net		net price/	
item-no.	finish	NEW	mm	box	large box	100			
NDKH-ES-16-04	white	•	16x16xH4 1	1000	6000	7,73			



	T	

Fig.:	NDKH-ES-19-04	

Nubbed turn clip holder one-sided, P19								
item-no.	finish	NEW	dimensions mm		pcs./ large box	net price/ 100		
NDKH-ES-19-04	white	•	19x19xH4	1000	6000	7.73		

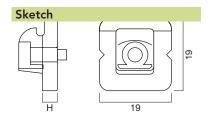




Fig.: NDKH-DS-19-04

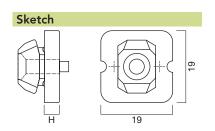
Nubbed turn clip holder double-sided, P19								
			dimensions		pcs./	net price/		
item-no.	finish	NEW	mm	box	large box	100		
NDKH-DS-19-02	white		19x19xH2	1000	6000	7,08		
NDKH-DS-19-03	graphite grey	•	19x19xH3	1000	6000	7,08		
NDKH-DS-19-035	light grey		19x19xH35	1000	6000	7,08		
NDKH-DS-19-04	white		19x19xH4	1000	6000	7,73		
NDKH-DS-19-05	graphite grey		19x19xH5	1000	6000	8,35		

**Application:** Nubbed turn clip holder for fastening aluminium shells to wooden elements. With single-sided or double-sided holder for fastening the aluminium shell by knocking or pressing on. The nubbed turn clip holder is suitable for use in a positioning groove with a 3/3 mm recess and is fastened through the positioning groove using a suitable screw.

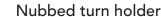
**Advantage:** By inserting them into the mounting groove, the two positioning nubs of the nubbed clip holders are positioned precisely and axially to the mounting groove of the aluminium shell. This prevents displacement during installation, e.g. due to growth rings in the wood and/or twisting of the nubbed turn clip holders when tightening. After fastening, all nubbed turn clip holders are therefore precisely positioned and aligned to accommodate the aluminium shell.

**Dismantling:** If the aluminium shell needs to be dismantled, the nubbed turn clip holders can still be easily rotated. The positioning nubs are separated from the base plate via predetermined breaking points. These predetermined breaking points are recessed in the base plate so that no splinters can protrude under the base plate during separation.

**Packaging:** The nubbed turn clip holders are packed in bulk.









Nubbed turn holder double-sided, P19								
			dimensions		pcs./	net price/		
item-no.	finish	NEW	mm	box	large box	100		
NDH-DS-19-02	white		19x19xH2	1000	6000	7,08		
NDH-DS-19-03	graphite grey		19x19xH3	1000	6000	7,08		
NDH-DS-19-035	light grey		19x19xH35	1000	6000	7,08		
NDH-DS-19-04	white		19x19xH4	1000	6000	7,73		
NDH-DS-19-05	graphite grey		19x19xH5	1000	6000	8,35		
NDH-DS-19-06	light grey	•	19x19xH6	1000	6000	8,81		
NDH-DS-19-07	white	•	19x19xH7	1000	6000	11,98		



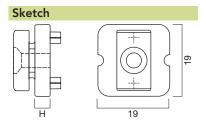
Fig.: NDH-DS-19-04

**Application:** Nubbed turn holder for fastening aluminium shells to wooden elements. With double-sided holder for fastening the aluminium shell by turning it clockwise or anti-clockwise. The nubbed turning bracket is suitable for use in a 3/3 mm positioning groove and is fastened through the positioning groove using a suitable screw. Advantage: By inserting them into the mounting groove, the nubbed turn holders

with their two positioning nubs are positioned precisely and axially to the mounting groove of the aluminium shell. This prevents displacement during installation, e.g. due to growth rings in the wood and/or twisting of the nubbed turn holders during tightening. After fastening, all nubbed turn holders are therefore precisely positioned and aligned to accommodate the aluminium shell.

**Installation:** To attach the aluminium shell, the nubbed turn holder must be rotated. The positioning nubs are separated from the base plate via predetermined breaking points. These predetermined breaking points are recessed in the base plate so that no breakage splinters can protrude under the base plate during separation.

Packaging: The nubbed turn holders are packed in bulk.







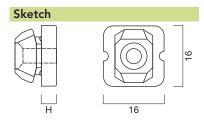


Turn clip holder one-sided, P16								
		dimensions		pcs./	net price/			
item-no.	finish	mm	box	large box	100			
DKH-ES-16-04	white	16x16xH4	1000	6000	7,08			

**Application:** Turn clip holder for fastening aluminium shells to wooden elements. With one-sided holder for fastening the aluminium shell by knocking or pressing on. **Important installation advantage for the DKH-ES-16:** The turn clip bracket-16 has a base plate measuring 16x16 mm. This is so small that it cannot pinch the cold bag during the rotary movement when installing a glazing seal with a cold bag.

Packaging: The turn clip holders are packed in bulk.

Design: Plastic reinforced.





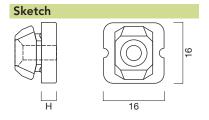
Fia.: [	NKH.	-DS-1	1 K_N4

Turn clip holder double-sided, P16								
		dimensions		pcs./	net price/			
item-no.	finish	mm	box	large box	100			
DKH-DS-16-02	white	16x16xH2	1000	6000	7,08			
DKH-DS-16-03	graphite grey	16x16xH3	1000	6000	7,08			
DKH-DS-16-035	light grey	16x16xH3.5	1000	6000	7,08			
DKH-DS-16-04	white	16x16xH4	1000	6000	7,08			
DKH-DS-16-05	graphite grey	16x16xH5	1000	6000	7,73			

**Application:** Turn clip holder for fastening aluminium shells to wooden elements. With double-sided holder for fastening the aluminium shell by knocking or pressing on.

**Important installation advantage for the DKH-DS-16:** The turn clip holder-16 has a base plate measuring 16x16 mm. This is so small that it cannot pinch the cold bag during the rotary movement when installing a glazing seal with a cold bag.

Packaging: The turn clip holders are packed loose.









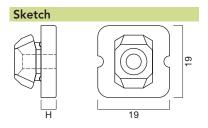
Turn clip holde	er double-side	d, P19				
			dimensions		pcs./	net price/
item-no.	finish	NEW	mm	box	large box	100
DKH-DS-19-02	white		19x19xH2	1000	6000	7,08
DKH-DS-19-03	graphite grey		19x19xH3	1000	6000	7,08
DKH-DS-19-035	light grey		19x19xH3.5	1000	6000	7,08
DKH-DS-19-04	white		19x19xH4	1000	6000	7,08
DKH-DS-19-05	graphite grey		19x19xH5	1000	6000	7,73
DKH-DS-19-06	light grey	•	19x19xH6	1000	6000	8,39
DKH-DS-19-07	white	•	19x19xH7	1000	6000	11,40



Fig.: DKH-DS-19-04

**Application:** Turn clip holder for fastening aluminium shells to wooden elements. With double-sided holder for fastening the aluminium shell by knocking or pressing

Packaging: The turn clip holders are packed in bulk.







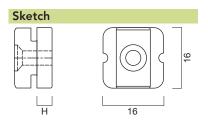
Turn holder,	for aluminium				
		dimensions		pcs./	net price/
item-no.	finish	mm	box	large box	100
DH-DS-16-02	white	16x16xH2	1000	6000	7,08
DH-DS-16-03	graphite grey	16x16xH3	1000	6000	7,08
DH-DS-16-04	white	16x16xH4	1000	6000	7,08
DH-DS-16-05	graphite grey	16x16xH5	1000	6000	7,73
DH-DS-16-06	light grey	16x16xH6	1000	6000	8,39
DH-DS-16-07	white	16x16xH7	1000	6000	11,40

**Application:** Turn holder for fastening aluminium shells to wooden elements. With double-sided holder for fastening the aluminium shell by turning it clockwise or anticlockwise

**Important installation advantage for the DH-DS-16:** The turn holder-16 has a 16x16 mm base plate. This is so small that it cannot pinch the cold bag during the rotary movement when installing a glazing seal with a cold bag.

Packaging: The turn holders are packed in bulk.

Design: Plastic reinforced.

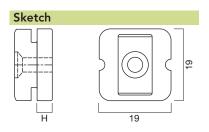




Turn holder, for aluminium shells, double-sided, P19								
		dimensions		pcs./	net price/			
item-no.	finish	mm	box	large box	100			
DH-DS-19-02	white	19x19xH2	1000	6000	7,08			
DH-DS-19-03	graphite grey	19x19xH3	1000	6000	7,08			
DH-DS-19-035	light grey	19x19xH3,5	1000	6000	7,08			
DH-DS-19-04	white	19x19xH4	1000	6000	7,08			
DH-DS-19-05	graphite grey	19x19xH5	1000	6000	7,73			
DH-DS-19-06	light grey	19x19xH6	1000	6000	8,39			
DH-DS-19-07	white	19x19xH7	1000	6000	11,40			

**Application:** Turn holder for fastening aluminium shells to wooden elements. With double-sided holder for fastening the aluminium shell by turning it clockwise or anticlockwise.

Packaging: The turn holders are packed in bulk.





Installation spanner					
		for		pcs./	net price/
item-no.	finish	holder	thickness	box	piece
for 16 mm holder,					
90°/45° bevelled, 2.5mm thick					
MONTAGESCHLÜSSEL16-S25	steel	16x16	2,5 mm	1	15,02
for 16 mm holder,					
90°/45° bevelled, 1.5mm thick					
MONTAGESCHLÜSSEL16-S15	steel	16x16	1,5 mm	1	15,02
for 19 mm holder,					
90°/45° bevelled, 2.5mm thick					
MONTAGESCHLÜSSEL19-S25	steel	19x19	2,5 mm	1	15,02
for 19 mm holder,					
90°/45° bevelled, 1.5mm thick					
MONTAGESCHLÜSSEL19-S15	steel	19x19	1,5 mm	1	15,02



**Design:** Stainless steel with plastic-coated handle.





G-Fix 01 mounting jig for direct mounting

G-Fix 01 Assembly jig, drilling adapter									
		pcs./		net price/					
item-no.	finish	box	unit	piece					
G-FIX01 MONTAGELEHRE	aluminium	1	pcs.	214,80					
G-FIX03-S-00 MONTAGE	aluminium	1	pcs.	214,80					
G-FIX04 MONTAGELEHRE	aluminium	1	pcs.	214,80					

**Application:** For direct mounting of a G-Fix glass holder.

**Design:** The G-Fix mounting jig is made of aluminium and equipped with a hardened steel sleeve that is suitable for holding a 3.5 mm chipboard screw. The chipboard screws should be at least 35 mm long.

The G-Fix assembly jig has an adjustable depth stop that can be fixed with a knurled screw.

**Accessories:** The G-Fix assembly jig can be supplemented with the G-Fix drilling adapter, which is inserted into the steel sleeve. This means that the G-Fix assembly jig can also be used to pre-drill 3 mm diameter positioning holes.

#### Mounting instructions





#### Assembly of a G-Fix:

Once the depth stop has been set according to the design, a G-Fix glass holder is inserted into the G-Fix assembly jig and can be fixed directly to the window with a 3.5 mm chipboard screw (at least 35mm long).

G-Fix 01 Assembly jig, drilling adapter							
		pcs./		net price/			
item-no.	finish	box	unit	piece			
G-FIX BOHRADAPTER	steel for Ø 3 mm	1	pcs.	12.00			

**Application:** The G-Fix drilling adapter can be inserted into the steel sleeve of the G-Fix mounting jig and used to pre-drill 3 mm dia. positioning holes.



G-Fix Assembly jig incl. G-Fix drilling adapter For pre-drilling the positioning holes with  $\varnothing$  3 mm



Glazing hovel						
		pcs./		net price/		
item-no.	finish	box	unit	piece		
KLOTZHEBEL	wood/plastic	1	pcs.	27,42		

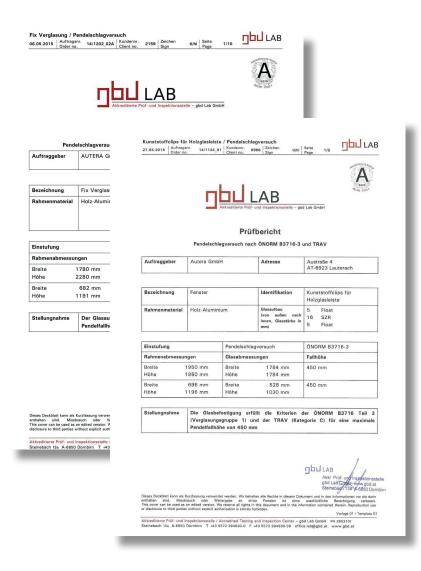
**Application:** For non-destructive removal of glazing beads (frames) that have been installed with G-Fix or T-Fix

**Design:** Wood/plastic.



#### Safety-approved

Load tests: G-Fix and T-Fix succeeded ÖNorm B3716-3 and TRAV load tests and fullfilled class 3 of DIN EN13049.



#### Videos on our website

On our homepage you will find helpful videos explaining the G-Fix principle, demonstrating the installation and a recording of the load test.

Basics:



Assembly:













