

TRADE
WINDOWS & DOORS



REHAU®

Unlimited Polymer Solutions



REHAU TOTAL70 WINDOW AND DOOR SYSTEMS

Glazing Recommendations

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Building Solutions

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Industry

REHAU TOTAL70 WINDOW AND DOOR SYSTEMS

GLAZING RECOMMENDATIONS

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REHAU TOTAL70 WINDOW AND DOOR SYSTEMS

GLAZING RECOMMENDATIONS

GENERAL GUIDELINES

Introduction

Glazing gaskets should be applied in one full length and cut approximately 1% oversize. This is then glued at the centre of the top member.

The correct glazing gaskets and beads for each glass thickness can be obtained from the relevant tables (refer to pages 5-7)

Only REHAU supplied gaskets should be used. The use of non-REHAU gaskets will invalidate any warranty or third party certification and the correct sealing pressures cannot be ensured.

The regulations of the glazing unit manufacturers and BS6262 requirements should be considered. Additionally, where glazing takes place on site, sashes should not be removed from frames.

At temperatures below 5°C extreme care should be taken when glazing as PVC-U becomes more brittle in these conditions.

The gap between the edge of the glass and the bottom of the rebate should be at least 6mm.

The glazing units must be properly packed according to the sash type, at a maximum 100mm from the corners, and evenly supported. The packers must not inhibit the drainage route and should be secured with an adhesive material to prevent slippage (See Page 11). After the packing is completed the sashes must be checked and in correct working order. If the sashes bind, the packers should be adjusted.

To avoid corner stresses, oversize beads should not be inserted and only a non-metallic hammer may be used to snap the beads in.

To remove the glass, remove the glazing seal before unclipping the bead. The longest beads

should be removed first by inserting a tool at the mid-point and easing out. Care should be taken at all times not to damage the beads. This applies especially to foiled or painted beads.

All normal types and thicknesses of glass and sealed units from 4mm-44mm can be used for glazing.

Where leaded lights are used the lead must not extend to the edge of the glazing units. Gaskets cannot adequately seal around such local variations. REHAU glazing tables are only applicable where the gaskets seal against a smooth surface.

Acrylic and polycarbonate sheets must not come into contact with co-extruded glazing beads or EPDM gaskets. Only silicone or foam gaskets can be used.

Types of Glazing

Internal glazing

Co-extruded glazing beads are fitted to the inside with RAU-SIK, EPDM or foam glazing seals on the outside.

External glazing

Co-extruded beads are fitted to the outside with RAU-SIK, EPDM or foam glazing seals on the inside.

For both internal and external glazing when using non-co-extruded beads, glazing gaskets in either RAU-SIK, EPDM or foam are inserted inside and outside. The wedge gaskets are used on the inside only.

Security Gasket

For increased security against intrusion when externally glazing windows, use the security gasket Art. No. 576130 on the inside.

The gasket has the same compression as the glazing seal Art. No. 863990. Art. No. 576130 should not be stored longer than 6 months.

Scribed Method

The beads installed by the scribed method are applied as follows:

- The horizontal beads are square cut, with the vertical beads cut at an angle to overlap the horizontal ones.
- Shaped beads are better scribed by end milling the vertical beads to give the appropriate form.
- Silicone sealant must be applied between the square cut end bead and the rebate corner. Also, the joining of the beads at the corners must be sealed.



Coloured and Foiled beads must always be scribed

Pressure Equalisation and Drainage of Glazing Rebate

Ventilation and drainage of the glazing rebate is achieved through slot-shaped apertures 5x25mm, in accordance with the cross-section, page 8 and 9. The necessary ventilation in the upper sash transverse member is also achieved by milling slots.

Integral Gasket (IG)

All profiles are supplied with Integral Gasket. The gasket width is predetermined, therefore is suited to the most common glazing thicknesses.

For glazing unit thicknesses that recommend a manually inserted gasket the Integral Gasket will need to be removed and replaced.

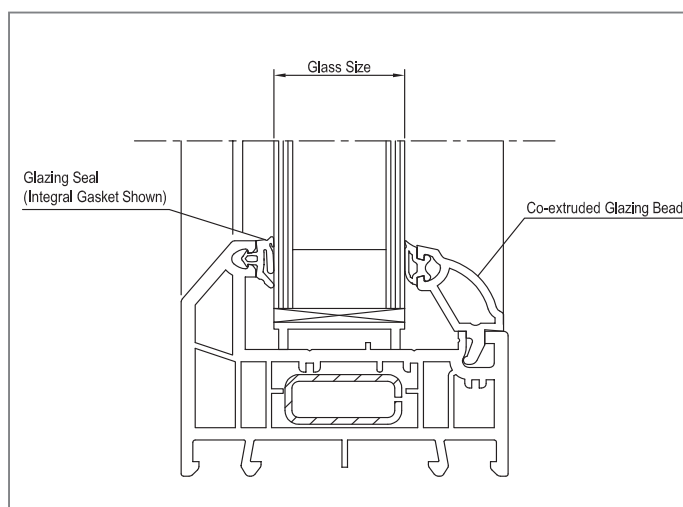
By only changing the bead, this may result in over/under compression of the Integral Gasket and therefore loose or tight fitting glazing units.

REHAU TOTAL70 WINDOW AND DOOR SYSTEMS

GLAZING RECOMMENDATIONS

GLAZING BEADS AND GASKET DETAILS

Co-extruded Glazing beads and Sealed Unit Glazing options



Glass size (mm)	Glazing bead (GB)	Gasket (G)
8	GB 36.5	G 5 or 38
9	GB 36.5	G 4
10	GB 36.5	G ⁺ or 3 or 36/46 or 70/71 (or IG)
11	GB 36.5	G 2 or 46
12	GB 36.5	G 1
18	GB 26.5	G 5 or 38
19	GB 26.5	G 4
20	GB 26.5	G ⁺ or 3 or 36/46 or 70/71 (or IG)
21	GB 26.5	G 2 or 46
22	GB 22.5	G 5 or 38
23	GB 22.5	G 4
24	GB 22.5	G ⁺ or 3 or 36/46 or 70/71 (or IG)
25	GB 22.5	G 2 or 46
26	GB 18.5	G 5 or 38
27	GB 18.5	G 4
28	GB 18.5	G ⁺ or 3 or 36/46 or 70/71 (or IG)
29	GB 18.5	G 2 or 46
30	GB 14.5	G 5 or 38
31	GB 14.5	G 4
32	GB 14.5	G ⁺ or 3 or 36/46 or 70/71 (or IG)
33	GB 14.5	G 2 or 46
34	GB 10.5	G 5 or 38
35	GB 10.5	G 4
36	GB 10.5	G ⁺ or 3 or 36/46 or 70/71 (or IG)
37	GB 10.5	G 2 or 46
38	GB 6.5	G 5 or 38
39	GB 6.5	G 4
40	GB 6.5	G ⁺ or 3 or 36/46 or 70/71 (or IG)
41	GB 6.5	G 2 or 46
42	GB 6.5	G 1
44	GB 7.8	G ⁺ or 3 or 36/46 or 70/71 (or IG)



BS5713 (Specification for Hermetically Sealed Flat Double Glazing Units) permits a tolerance of ± 1 mm for overall thickness of sealed units. When referring to the glazing tables ensure that the actual sealed unit thickness is for the correct gaskets selected.

Due to the manufacturing tolerances, if glazing proves too loose or tight select the next size of gasket, larger or smaller as appropriate.

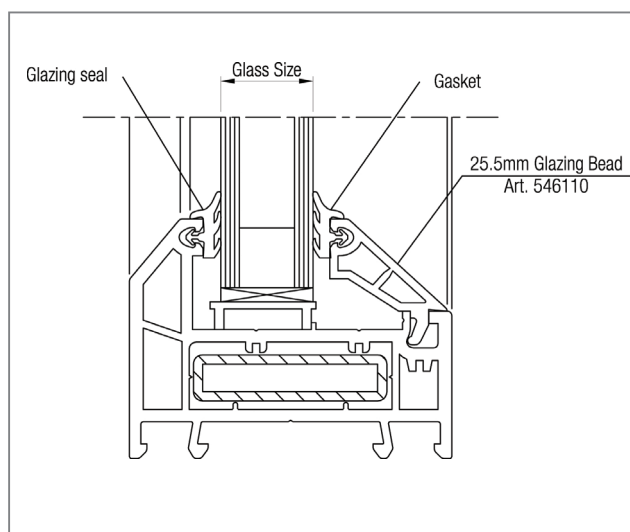
⁺Denotes RAUSECUR gasket Art. No. 576130. RAUSECUR is recommended in all external glazing options.

REHAU TOTAL70 WINDOW AND DOOR SYSTEMS

GLAZING RECOMMENDATIONS

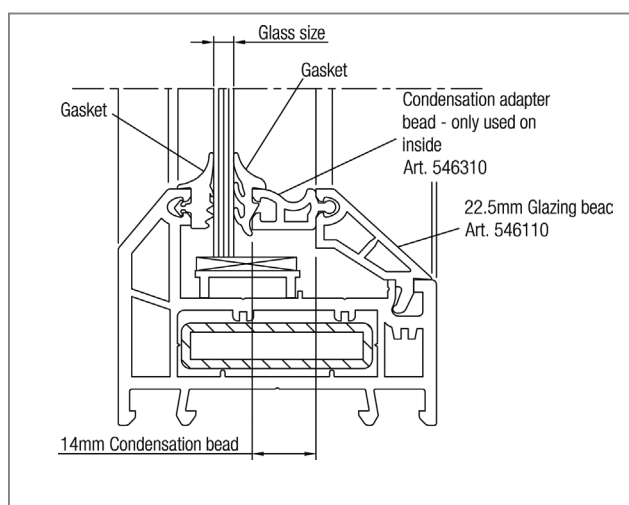
GLAZING BEADS AND GASKET DETAILS

Glazing beads with Insertable Gasket and Sealed Unit Glazing options

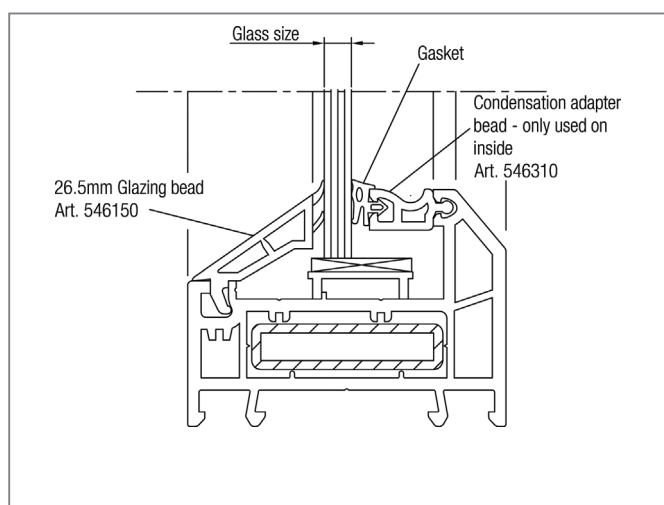


Glass size (mm)	Glazing bead (GB)	Gasket (G)
16	GB 25.5	G 5+5
17	GB 25.5	G 5+4 or 12+20 or 52+60
18	GB 25.5	G 4+4 or 12+20 or 52+60
19	GB 25.5	G 4+3* or 12+20 or 52+60
20	GB 25.5	G 3+3* or 11+20 or 51+60
21	GB 25.5	G 2+2 or 11+20 or 51+60
22	GB 25.5	G 2+1 or 11+20 or 51+60

Single Glass Glazing options



Glass size (mm)	Glazing bead (GB)	Gasket (G)
3	GB 25.5 + 546310	G 12+20 or 52+60
4	GB 25.5 + 546310	G 12+20 or 52+60
5	GB 25.5 + 546310	G 12+20 or 52+60
6	GB 25.5 + 546310	G 11+20 or 51+60
7	GB 25.5 + 546310	G 11+20 or 51+60
8	GB 25.5 + 546310	G 11+20 or 51+60















Glass size (mm)	Glazing bead (GB)	Gasket (G)
4	GB 26.5 + 546310	G 5 or 38
5	GB 26.5 + 546310	G 4
6	GB 26.5 + 546310	G 3 or 36/46
7	GB 26.5 + 546310	G 2 or 46



























Drainage holes in the condensation bead are not necessary when the bead is square cut. This will allow the water to run to both ends.

GLAZING BEAD TABLE

Glazing bead identification	Scribed bead angle	Art. No	Drawing
Glazing bead with gasket groove			
GB 25.5	41.5°	White 546110 Foiled 576290*	
Co-extruded flipper glazing beads			
GB 6.5	24.8°	White 560580 Foiled 594330	
GB 7.8	Sculptured	White 546860 Foiled 586865	
GB 10.5	Sculptured	White 503720 Foiled 573720*	
GB 14.5	Sculptured	White 503681 Foiled 573679	
GB 22.5	39°	White 546140 Foiled 576320	
	Sculptured	White 551510 Foiled 581580*	
GB 26.5	35.0°	White 546150 Foiled 576330*	
	10.7°	White 560620	
GB 36.5	7.8°	White 560660	
Low level 'Bubble' glazing beads			
GB 18.5	44.5°	White 546132 Foiled 576132	
	Sculptured	White 546572 Foiled 576572	

GASKETS TABLE

Glazing bead identification	Art No.	Drawing
EPDM Gaskets		
G 1	Black 864010*	
G 2	Black 864000 White 241071	
G 3	Black 863990 White 241081	
G* RAUSECUR recommended for all external glazed options	Black 576130	
G 4	Black 863980* White 241091*	
G 5	Black 864260	

Glazing bead identification	Art No.	Drawing
G 36	Black 864780	
G 38	Black 864790*	
Silicone gasket		
G 46	White 833991	
EPDM single glazing gaskets		
G 11	Black 864440	
G 12	Black 864450*	
G 20 (wedge gasket for internal use only)	Black 864460	
Silicone single glazing gaskets		
G 51	White 836880*	
G 52	White 836890	
G 60 (wedge gasket for internal use only)	White 836900	
Foam gasket		
G 70	Black 240542 White 240532	
G 71 (Universal IG seal or glazing gasket)	Black 279316	
Casement gaskets		
Black EPDM White silicone	863930 835090	
Black EPDM	863940*	
Black EPDM White EPDM (Common window gasket)	864670 241061	
Black EPDM White EPDM (Common T&T/door gasket)	864610 241051	
Black EPDM	864230	
Black EPDM	864350*	
Black Foam White Foam	241141 241131	



* Denotes availability as a special order. Minimum order quantities may apply. Please contact your regional sales office for further information.

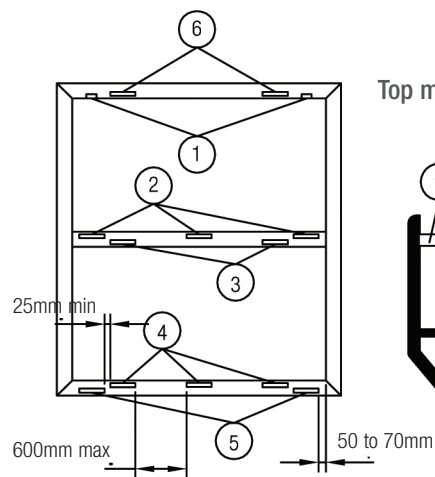
REHAU TOTAL70 WINDOW AND DOOR SYSTEMS

GLAZING RECOMMENDATIONS

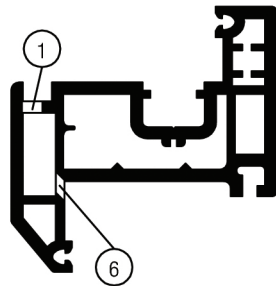
DRAINAGE

Drainage and Pressure Equalisation

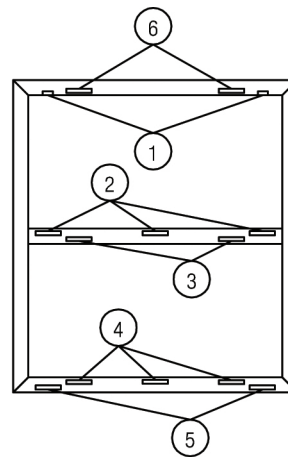
Sash with Transom/Mullion



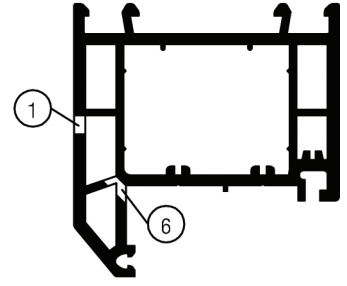
Top member



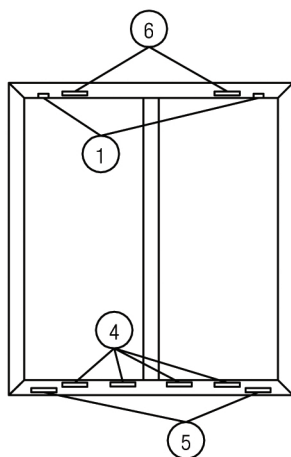
Fixed Glazing in Subframe with Transom/Mullion



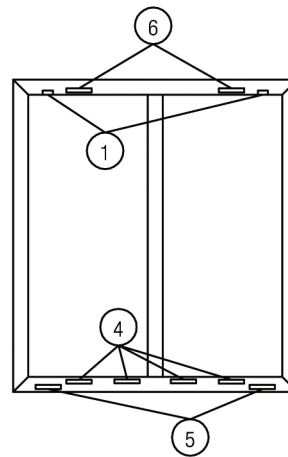
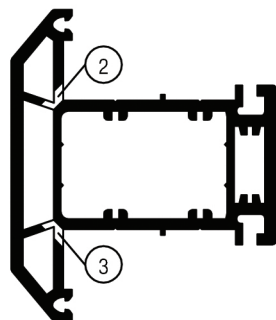
Top member



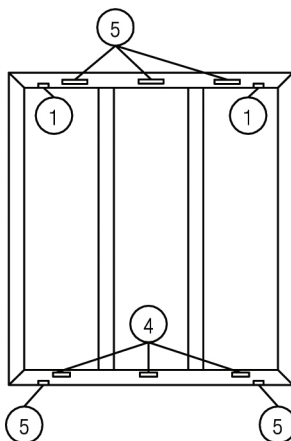
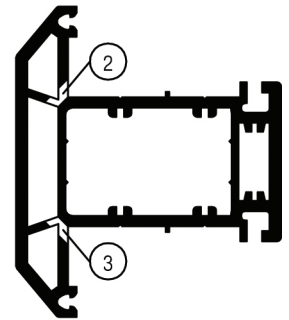
① Optional detail to optimise ventilation



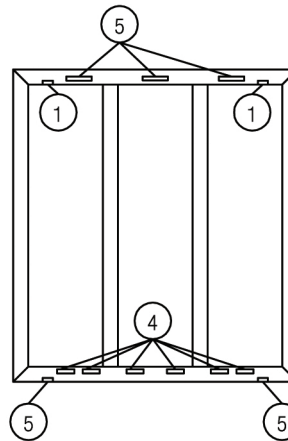
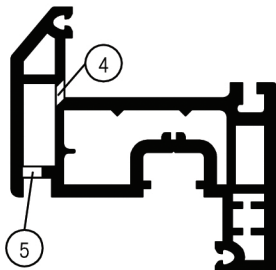
Transom



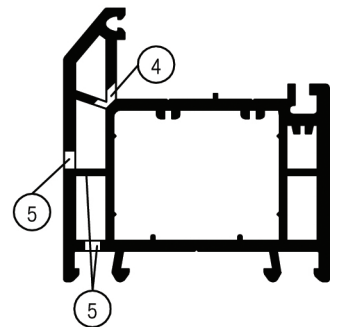
Transom



Bottom member



Bottom member



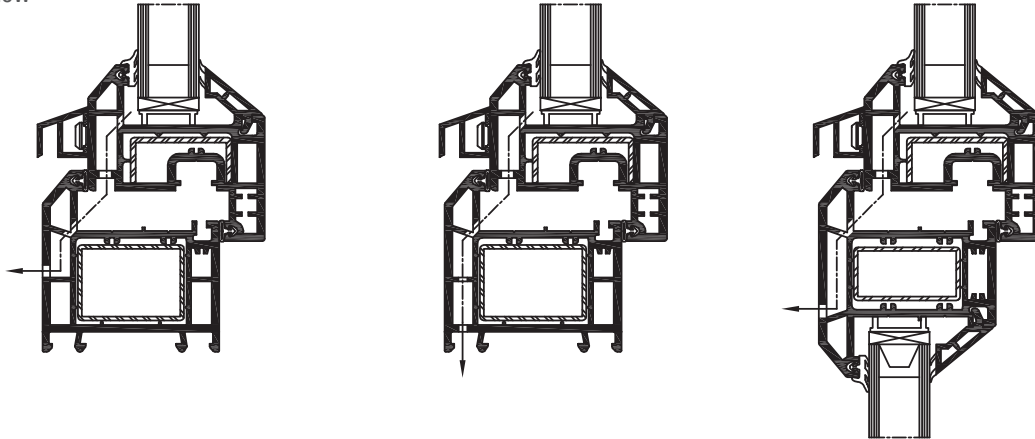
REHAU TOTAL70 WINDOW AND DOOR SYSTEMS

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DRAINAGE

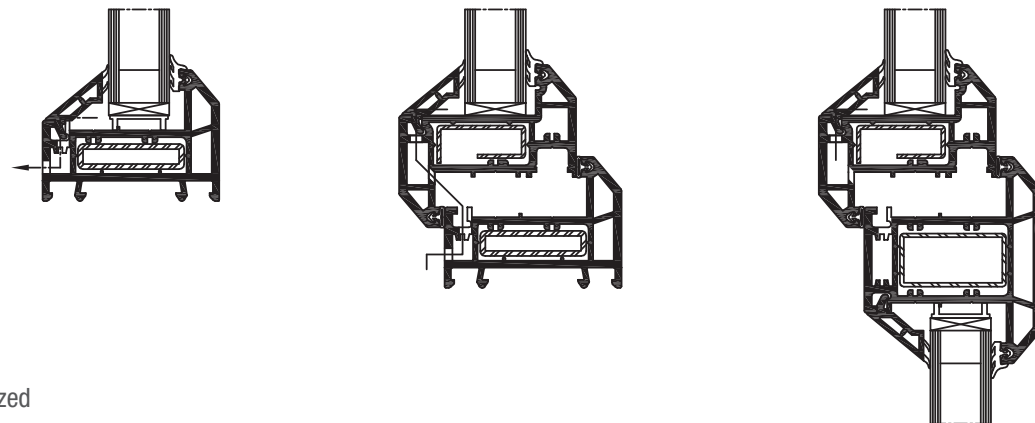
Drainage Paths

1. Tilt/Turn Window

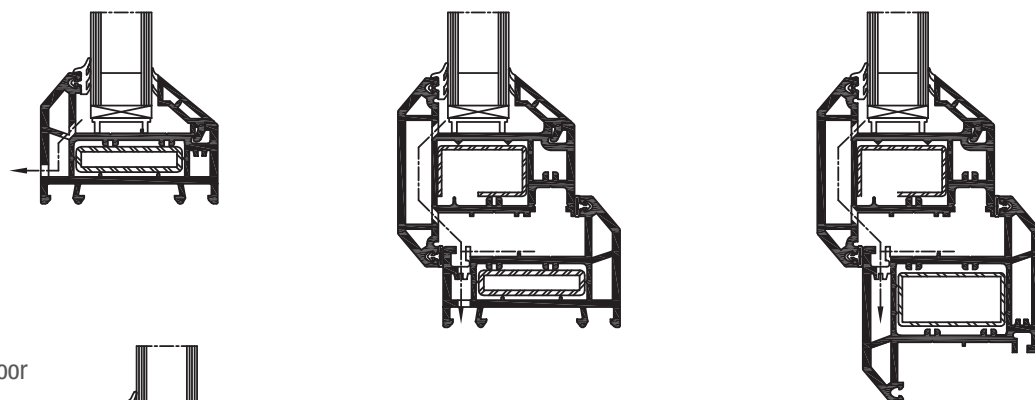


2. Casement Window

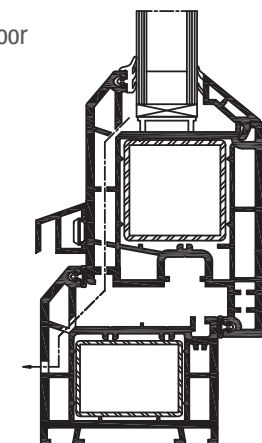
a) Externally glazed



b) Internally glazed



3. Residential door

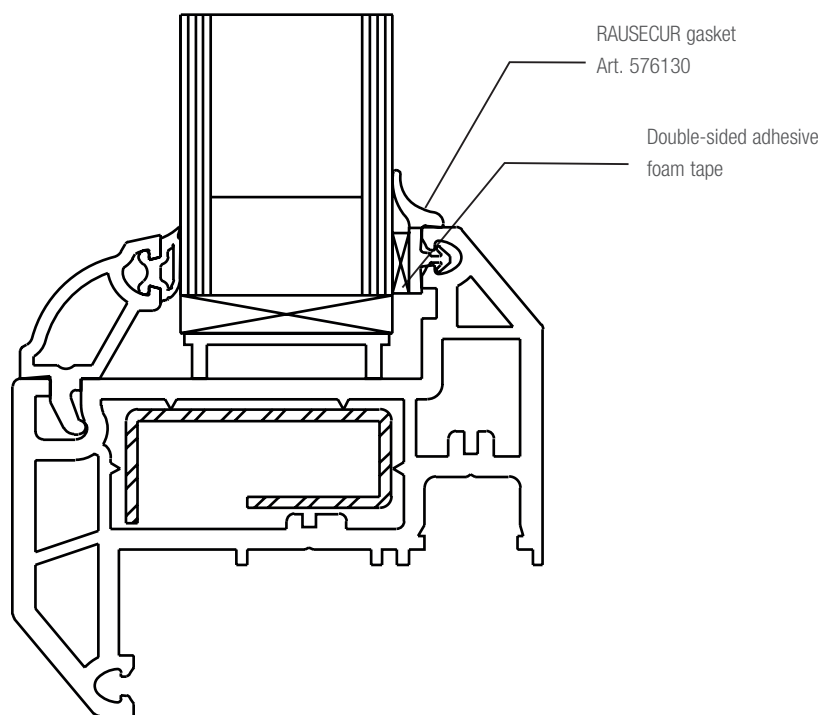


Pressure equalisation and drainage of glazing rebate
Ventilation to and drainage is achieved by 5mm x 25mm slots.

REHAU TOTAL70 WINDOW AND DOOR SYSTEMS

GLAZING RECOMMENDATIONS

RAUSECUR INSTALLATION INSTRUCTIONS



Outside of window

Installation Instructions

- 1 Make sure that the glass is absolutely clean.
- 2 Mitre cut the RAUSECUR as other glazing gaskets (Bending around corners is not possible).
- 3 Insert the gasket into glazing seal groove and ensure that it is properly held along its whole length. Apply a little sealing mastic to the corners of the glazing gasket.

When additional security is demanded, put adhesive on the ends of the RAUSECUR and glue it for 10-20mm into the glazing groove.

Security can also be increased by the use of glazing clips which are available through various suppliers.

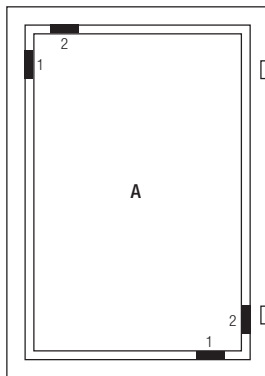
- 4 Turn up the protective tape for approximately 250mm in each corner. Place the glazing unit into the rebate and pack the sealed unit correctly as detailed in the 'Packing instructions'.

- 5 Fit the glazing beads and, whilst applying localised hand pressure against the glass, remove the protective tape by pulling the previously turned-up ends.

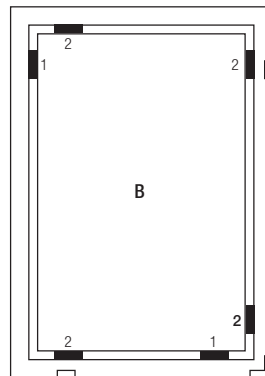
REHAU TOTAL70 WINDOW AND DOOR SYSTEMS

GLAZING RECOMMENDATIONS

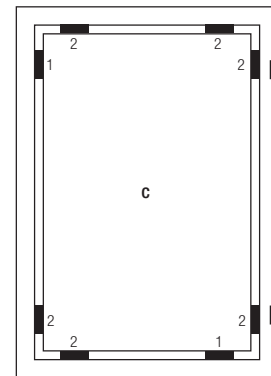
SEALED UNIT PACKING INSTRUCTIONS



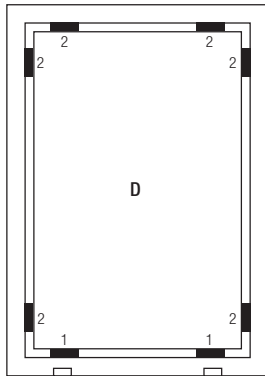
Side hung sash



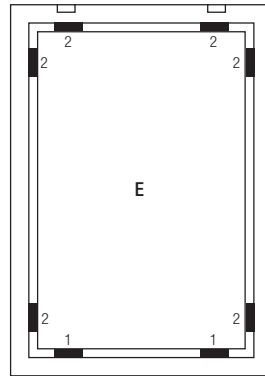
Tilt & turn sash



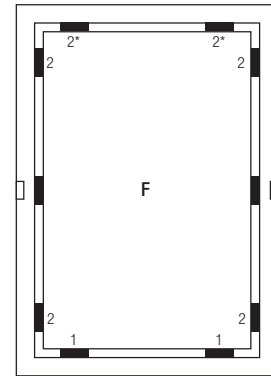
Lift & turn sash



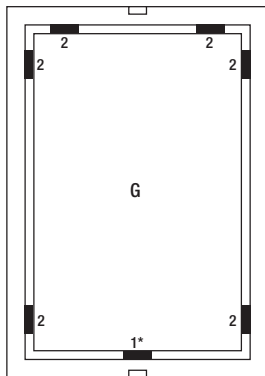
Tilt sash



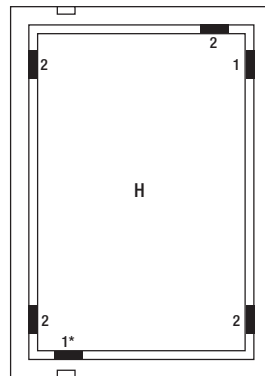
Top hung sash



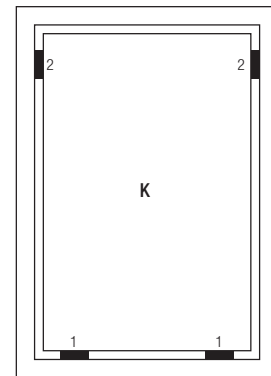
Horizontal pivot



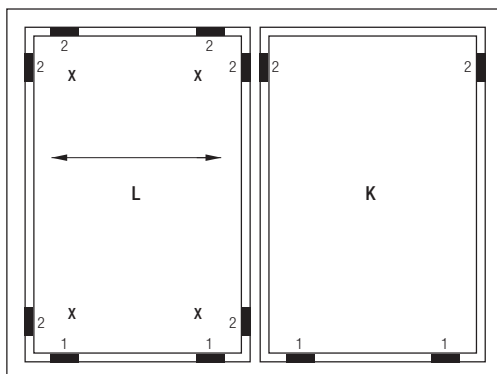
Symmetrical vertical pivot



Unsymmetrical vertical pivot



Fixed light



Sliding element

- 1 = Load bearing setting blocks, 100mm long, approx. 100mm from each corner
- 1* = With units wider than 1m, two load-bearing setting blocks of at least 60mm should be positioned over the pivot to spread the load
- 2 = Location blocks
- 2* = Become load bearing blocks with sash rotated
- X = Location blocks of shock absorbing material

Note:- That additional packing may be required around the hardware keeps, pull-in wedges etc.

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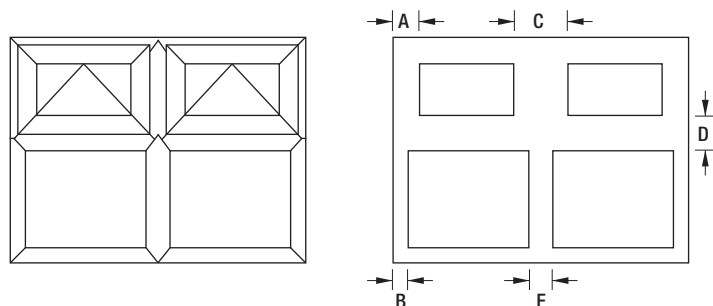
GLASS DEDUCTIONS FOR LEADED/GEORGIAN SEALED UNITS

Internally glazed

Listed below are the glazing distances between unit edges

A = Frame edge to sash glass edge
 B = Frame edge to fixed glass edge
 C = Sash glass edge to sash glass edge
 D = Sash glass edge to fixed glass edge
 E = Fixed glass edge to fixed glass edge

Note: Sizes are based on a 5mm Bridge Packer and 4mm Glazing Packer.



Profile Combination	TOTAL70c Art. No	TOTAL70s Art. No.	Position	Dimension (mm)
52mm Outer frame	546075/815	546645/415	A =	86.0
75mm T Sash	546106/855/586	546685/455	B =	37.0
69mm Transom/Mullion T	546085	546665	C =	137.0
69mm Transom/Mullion Z	546095	546675	D =	88.0
			E =	39.0
62mm Outer frame	546605/825	546735/425	A =	96.0
75mm T Sash	546106/855/586	546685/455	B =	47.0
69mm Transom/Mullion T	546085	546665	C =	137.0
69mm Transom/Mullion Z	546095	546675	D =	88.0
			E =	39.0
72mm Outer frame	546185/835	546655/435	A =	106.0
75mm T Sash	546106/855/586	546685/455	B =	57.0
69mm Transom/Mullion T	546085	546665	C =	137.0
69mm Transom/Mullion Z	546095	546675	D =	88.0
			E =	39.0

52mm Outer frame	546075/815	546645/415	A =	86.0
75mm T Sash	546106/855/586	546685/455	B =	37.0
82mm Transom/Mullion T	546475	546745	C =	150.0
82mm Transom/Mullion Z	546465	546755	D =	101.0
			E =	52.0
62mm Outer frame	546605/825	546735/425	A =	96.0
75mm T Sash	546106/855/586	546685/455	B =	47.0
82mm Transom/Mullion T	546475	546745	C =	150.0
82mm Transom/Mullion Z	546465	546755	D =	101.0
			E =	52.0
72mm Outer frame	546185/835	546655/435	A =	106.0
75mm T Sash	546106/855/586	546685/455	B =	57.0
82mm Transom/Mullion T	546475	546745	C =	150.0
82mm Transom/Mullion Z	546465	546755	D =	101.0
			E =	52.0

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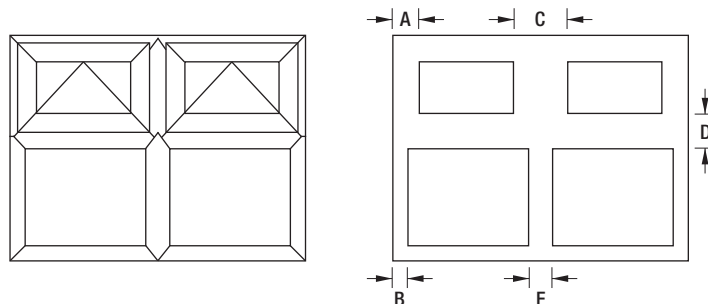
GLASS DEDUCTIONS FOR LEADED/GEORGIAN SEALED UNITS

Externally glazed

Listed below are the glazing distances between unit edges

A = Frame edge to sash glass edge
 B = Frame edge to fixed glass edge
 C = Sash glass edge to sash glass edge
 D = Sash glass edge to fixed glass edge
 E = Fixed glass edge to fixed glass edge

Note: Sizes are based on a 5mm Bridge Packer and 4mm Glazing Packer.



Profile Combination	TOTAL70c Art. No	Position	Dimension (mm)
52mm Outer frame	546075/815	A =	73.5
64.5mm Z Sash	546066	B =	37.0
69mm Transom/Mullion T	546085	C =	112.0
69mm Transom/Mullion Z	546095	D =	75.5
		E =	39.0
62mm Outer frame	546605/825	A =	83.5
64.5mm Sash Z	546066	B =	47.0
69mm Transom/Mullion T	546085	C =	112.0
69mm Transom/Mullion Z	546095	D =	75.5
		E =	39.0
72mm Outer frame	546185/835	A =	93.5
64.5mm Sash Z	546066	B =	57.0
69mm Transom/Mullion T	546085	C =	112.0
69mm Transom/Mullion Z	546095	D =	75.5
		E =	39.0

52mm Outer frame	546075/815	A =	73.5
64.5mm Z Sash	546066	B =	37.0
82mm Transom/Mullion T	546475	C =	125.0
82mm Transom/Mullion Z	546465	D =	88.5
		E =	52.0
62mm Outer frame	546605/825	A =	83.5
64.5mm Z Sash	546066	B =	47.0
82mm Transom/Mullion T	546475	C =	125.0
82mm Transom/Mullion Z	546465	D =	88.5
		E =	52.0
72mm Outer frame	546185/835	A =	93.5
64.5mm Z Sash	546066	B =	57.0
82mm Transom/Mullion T	546475	C =	125.0
82mm Transom/Mullion Z	546465	D =	88.5
		E =	52.0

REHAU TOTAL70 WINDOW AND DOOR SYSTEMS

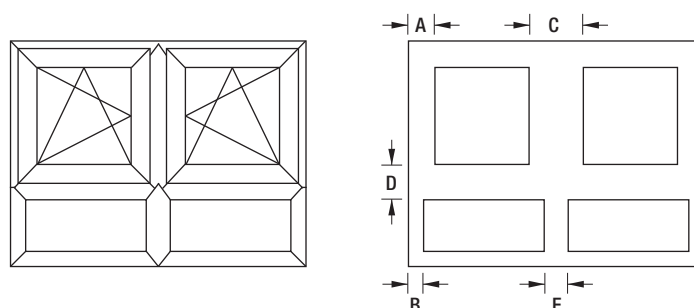
GLAZING RECOMMENDATIONS

GLASS DEDUCTIONS FOR LEADED/GEORGIAN SEALED UNITS

Tilt and Turn

Listed below are the glazing distances between unit edges

- A = Frame edge to sash glass edge
- B = Frame edge to fixed glass edge
- C = Sash glass edge to sash glass edge
- D = Sash glass edge to fixed glass edge
- E = Fixed glass edge to fixed glass edge



Note: Sizes are based on a 5mm Bridge Packer and 4mm Glazing Packer.

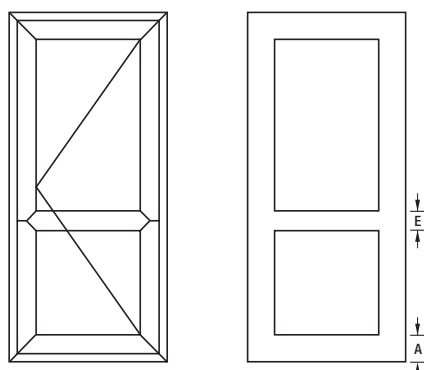
Profile Combination	TOTAL70c Art. No	TOTAL70s Art. No.	Position	Dimension (mm)
72mm Outer frame	546185/835	546655/435	A =	99.0
70mm Tilt & Turn Sash	546776	546695	B =	57.0
69mm Transom/Mullion T	546085	546665	C =	123.0
69mm Transom/Mullion Z	546095	546675	D =	81.0
			E =	39.0
72mm Outer frame	546185/835	546655/435	A =	99.0
70mm Tilt & Turn Sash	546776	546695	B =	57.0
82mm Transom/Mullion T	546475	546745	C =	136.0
82mm Transom/Mullion Z	546465	546755	D =	94.0
			E =	52.0

Doors

Listed below are the glazing distances between unit edges

- A = Frame edge to sash glass edge
- E = Fixed glass edge to fixed glass edge

Note: Sizes are based on a 5mm Bridge Packer and 4mm Glazing Packer.



Profile Combination	TOTAL70c Art. No	TOTAL70s Art. No.	Position	Dimension (mm)
72mm Outer frame	546185/835	546655/435	A =	134.5
105.5mm T Sash	546635	546725	E =	75.5
105.5mm Z Sash	546625	546715		
105.5mm Midrail	546635	546725		
72mm Outer frame	546185/835	546655/435	A =	134.5
105.5mm T Sash	546635	546725	E =	52.0
105.5mm Z Sash	546625	546715		
82mm Midrail	546475	546745		

REHAU TOTAL70 WINDOW AND DOOR SYSTEMS

GLAZING RECOMMENDATIONS

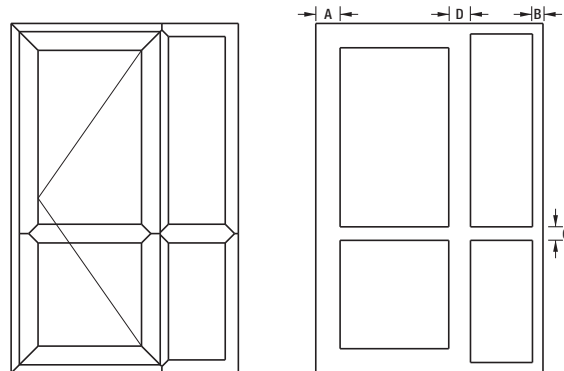
GLASS DEDUCTIONS FOR LEADED/GEORGIAN SEALED UNITS

Door and Side panels

Listed below are the glazing distances between unit edges

- A = Frame edge to sash glass edge
- B = Frame edge to fixed glass edge
- C = Sash glass edge to sash glass edge
- D = Sash glass edge to fixed glass edge

Note: Sizes are based on a 5mm Bridge Packer and 4mm Glazing Packer.



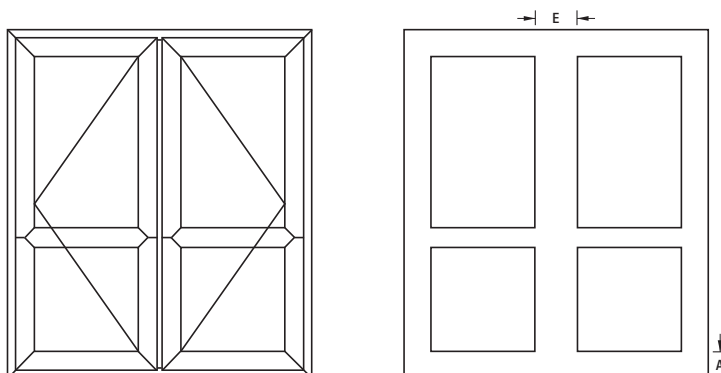
Profile Combination	TOTAL70c Art. No	TOTAL70s Art. No.	Position	Dimension (mm)
72mm Outer frame	546185/835	546655/435	A =	134.5
105.5mm Z Sash	546625	546715	B =	57.0
105.5mm Mullion (D)	546635	546725	C =	75.5
105.5mm Midrail (C)	546635	546725	D =	153.0
72mm Outer frame	546185/835	546655/435	A =	134.5
105.5mm T & Z Sash	546635/625	546725/715	B =	57.0
82mm Mullion T & Z (D)	546475/465	546745/755	C =	75.5
105.5mm Midrail (C)	546635	546725	D =	129.5
72mm Outer frame	546185/835	546655/435	A =	134.5
105.5mm T & Z Sash	546635/625	546725/715	B =	57.0
105.5mm Mullion (D)	546635	546725	C =	52.0
82mm Midrail T & Z (C)	546475/465	546745/755	D =	153.0
72mm Outer frame	546185/835	546655/435	A =	134.5
105.5mm T & Z Sash	546635/625	546725/715	B =	57.0
82mm Mullion T & Z (D)	546475/465	546745/755	C =	52.0
82mm Midrail (C)	546475	546745	D =	129.5

French Doors

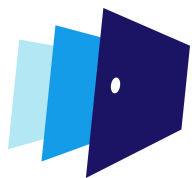
Listed below are the glazing distances between unit edges

- A = Frame edge to sash glass edge
- E = Fixed glass edge to fixed glass edge

Note: Sizes are based on a 5mm Bridge Packer and 4mm Glazing Packer.



Profile Combination	TOTAL70c Art. No	TOTAL70s Art. No.	Position	Dimension (mm)
72mm Outer frame	546185/435	546655/435	A =	134.5
105.5mm T & Z Sash	546635/625	546725/715	E =	194.0
Dummy Mullion	546085	546665		



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