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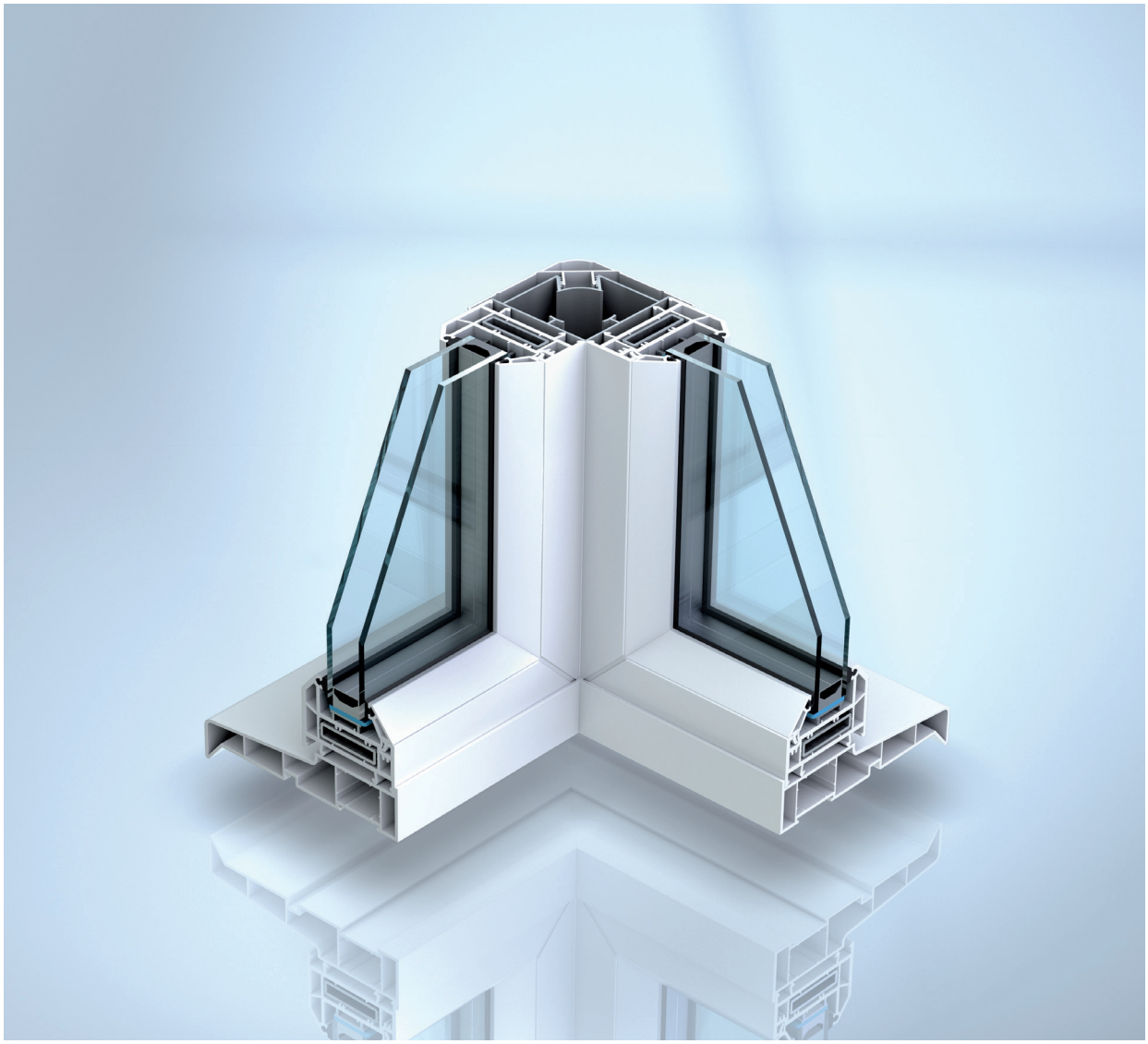

REHAU TOTAL70 BAYPOLE SYSTEM

INSTALLATION RECOMMENDATIONS

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Building Solutions
Automotive
Industry

REHAU TOTAL70 BAYPOLE SYSTEMS

INSTALLATION RECOMMENDATIONS

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REHAU TOTAL70 BAYPOLE SYSTEMS

INSTALLATION RECOMMENDATIONS

General

These recomendations regulate the installation of elements by the fabricator or the installation firm. If the elements are distributed via dealers, DIY centres, etc., attention has to be drawn to these recommendations. Additional information can be obtained from The British Plastics Federation Code of Practice documents and BS8213-4:2007-Code of Practice for the survey and installation of windows and external doorsets.

Transportation

When transporting the elements they must be protected against damage caused by slippage, distortion, twisting or bowing. Soft inter-layers should be used to prevent windows lying directly against each other. Packaging that completely encloses the window may cause a build up of heat. In this situation sealed transparent foils must not be used with coloured windows. The packaging must have no adverse effect on the quality of the element.

Storage

Windows stored on a construction site should be on a firm base of timber battens and protected from soiling. Elements must be protected against direct sunlight using tarpaulin or other similar material.

Installation Preparation

Clearance to proceed with the installation work must be obtained from the customer. The going-in allowance must be adhered to.

Fitting

Where possible it is recommended that installation of bay assemblies are completed working from one side of the opening to another, installing the frame and supports sequentially to allow clearance.

Care should be taken to ensure that installations are perfectly level, vertically plumb and correctly aligned. The fabricator must notify the customer in writing of any deviation from these regulations. Failure to do so may invalidate the guarantee.

Jacking Posts

If jacking posts are used the sill should be pre-drilled with approximately 20mm (or as specified by jack supplier) to allow access. Jacking posts should be installed in accordance with manufacturers recommendations and sills should be adequately sealed to ensure that no water can penetrate the reinforcement chamber of the sill.

If no jacking post is used it is essential that the assembly is correctly packed from top to bottom ensuring the load is transferred through the sill in accordance with British Plastics Federation Code of Practice documents and BS8213-4:2007-Code of Practice for the survey and installation of windows and external doorsets.

Fixings

All anchoring materials must be protected against corrosion, be suitable for the building fabric and able to withstand the stresses transmitted.

Due to thermal expansion fixings must be at least 200mm externally - or 150mm internally - from any weld or joint. To spread the load the fixings should, if possible, be positioned close to the hinges.

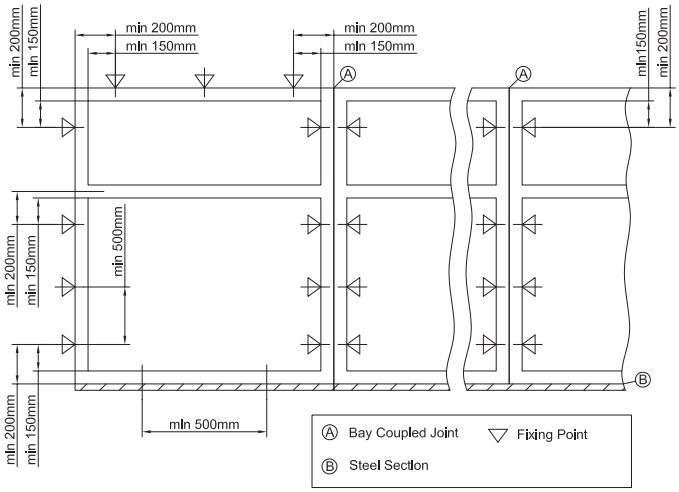


Figure 1: Bay window screw positions

Masonry Union

The joint between elements and masonry must contain a foam sealing strip, polyethylene foam or similar material to act as a backing for the pointing mastic. If thermal or sound insulation is critical then the joint can be completely filled with mineral or sound insulation wool. Filling the gaps with mortar or plaster is not permissible. If foam filling is to be used, the manufacturer's instructions must be carefully read and strictly adhered to. The foam must be compatible to the frame material and the sealing mastic. REHAU-PU foam Art. No. 257371 is recommended. Contact with any coloured or foiled surface must be avoided. Areas of cured PU foam must not remain exposed to the atmosphere. Bituminous materials must not be used for these joints. Windows should be attached by fixing bolts, not fixing brackets, if foam filling is to be applied to the areas between the elements and building fabric.

Sealing Bay Trims

Silicone sealant should be used to form a seal when installing internal and external bay cover trims. To ensure water tightness, sealant should also be applied behind the internal cap where it meets the sill. In the instance of the 90° Corner post a radius of silicone (matching profile colour) should be applied full height between frames.

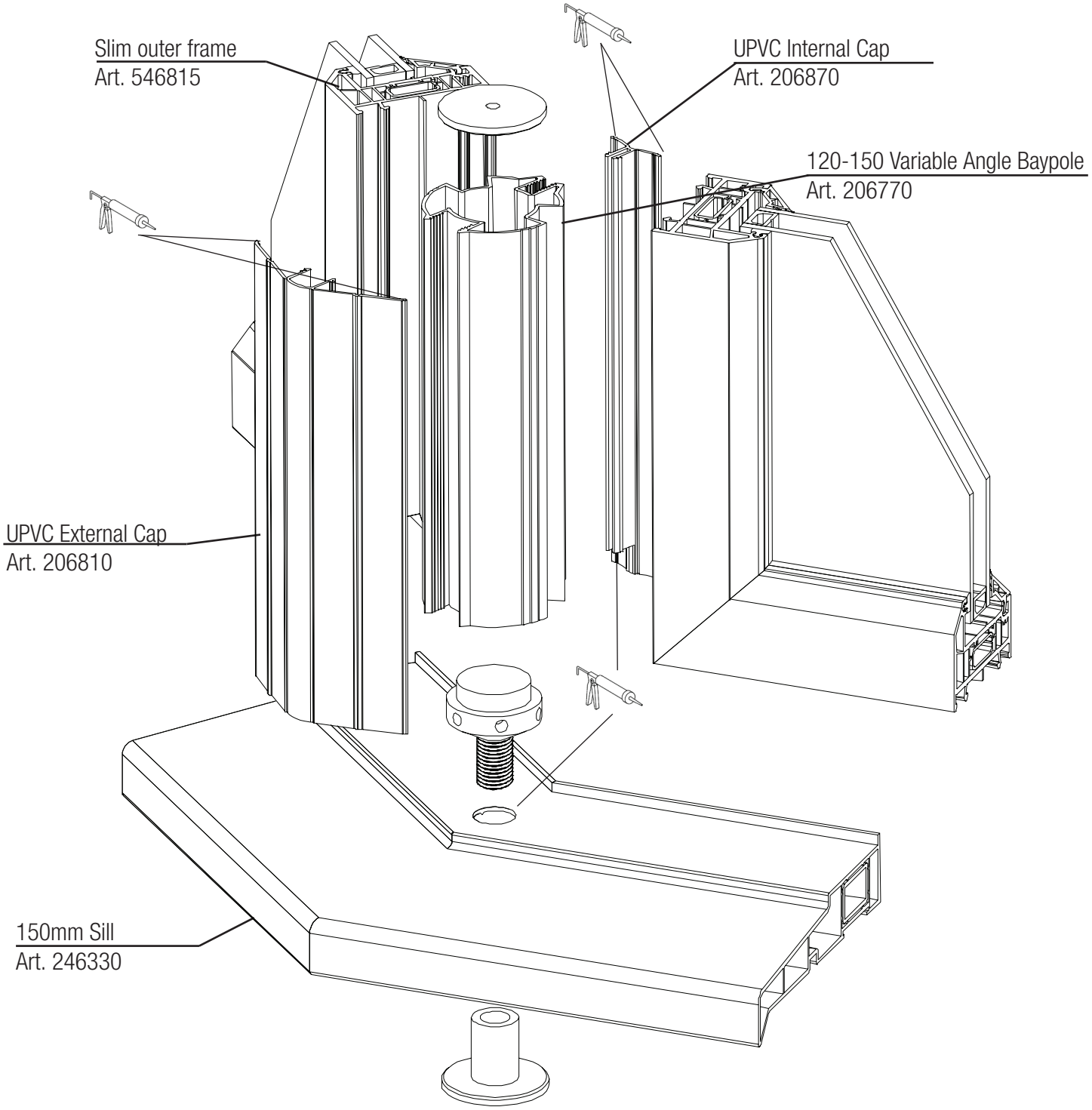
Sealant must be compatible with the frame material. The mastic manufacturer's instructions should be observed. If a damp proofing membrane has been specified, construction must be carried out in accordance with the prevailing circumstances and the architect or surveyors specifications.

Cleaning and Acceptance

The elements should be cleaned up after installation and accepted by the customer.
Failure to do so may result in later complaints about dirt or damage. REHAU special cleaner Art. No. 252190 can easily clean the elements as can normal domestic washing up liquids in luke-warm water. The use of abrasive cleaners and particularly solvents such as acetone, cellulose thinners, etc. must be avoided, as the surface will be degraded. Where soiling is of a strong greasy or oily nature, special cleaners can be used. Details of cleaning agents that have been tested by REHAU can be obtained from the Technical Applications Department.

REHAU TOTAL70 BAYPOLE SYSTEMS

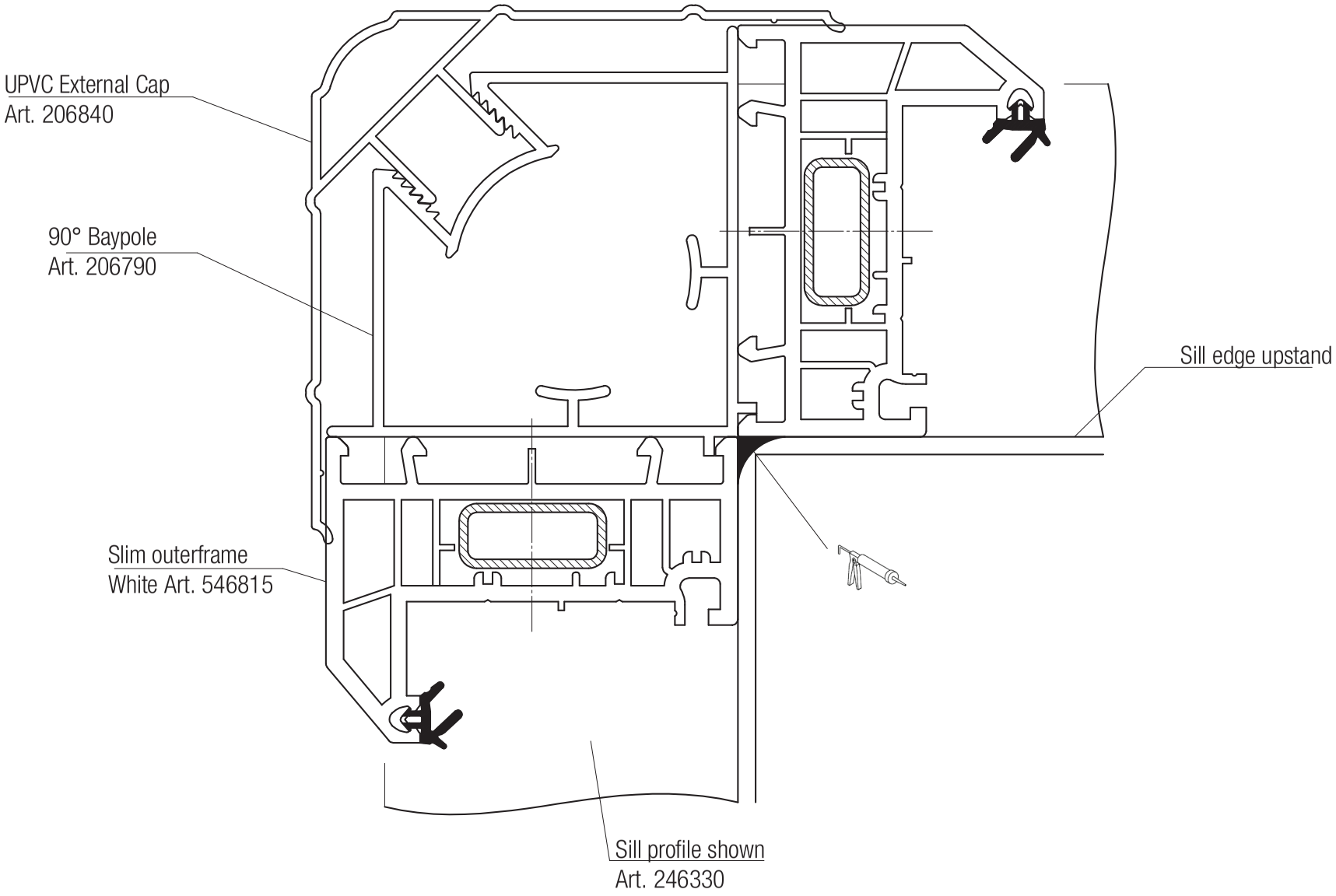
INSTALLATION RECOMMENDATIONS



Indicative baypole jack and bearing plate shown. Installtion must be in accordance with manufacturers recomendations.

REHAU TOTAL70 BAYPOLE SYSTEMS

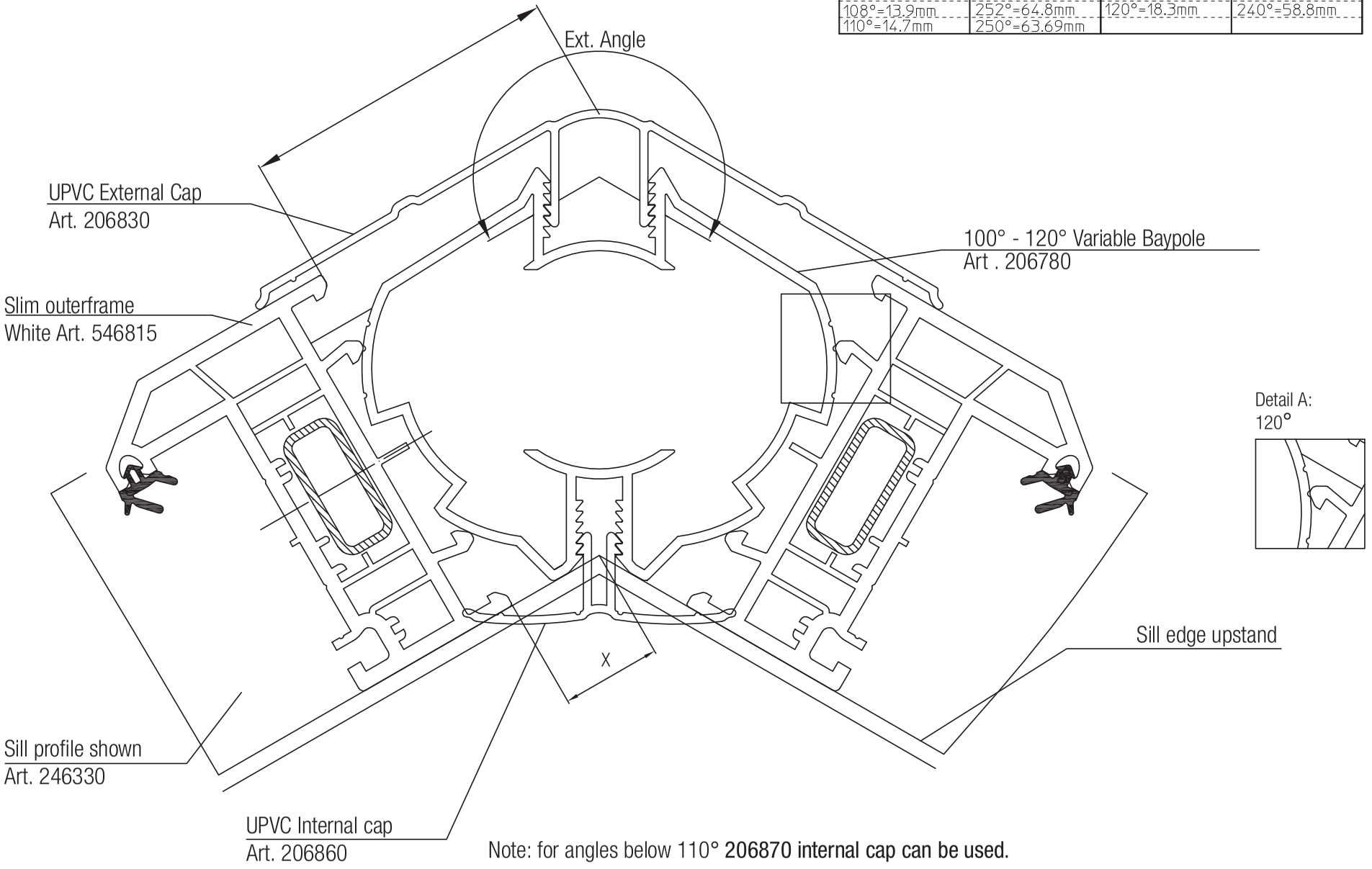
ASSEMBLY & DEDUCTIONS - 90° FIXED ANGLE



REHAU TOTAL70 BAYPOLE SYSTEMS

ASSEMBLY & DEDUCTIONS - 100° - 120° VARIABLE ANGLE

Internal Angle X	External Angle Y	Internal Angle X	External Angle Y
100°=16.7mm	260°=69.4mm	112°=15.4mm	248°=62.6mm
102°=11.5mm	258°=68.2mm	114°=16.2mm	246°=61.6mm
104°=12.3mm	256°=67.0mm	115°=16.5mm	245°=61.1mm
105°=12.74mm	255°=66.5mm	116°=16.9mm	244°=60.63mm
106°=13.1mm	254°=65.9mm	118°=17.6mm	242°=59.7mm
108°=13.9mm	252°=64.8mm	120°=18.3mm	240°=58.8mm
110°=14.7mm	250°=63.69mm		

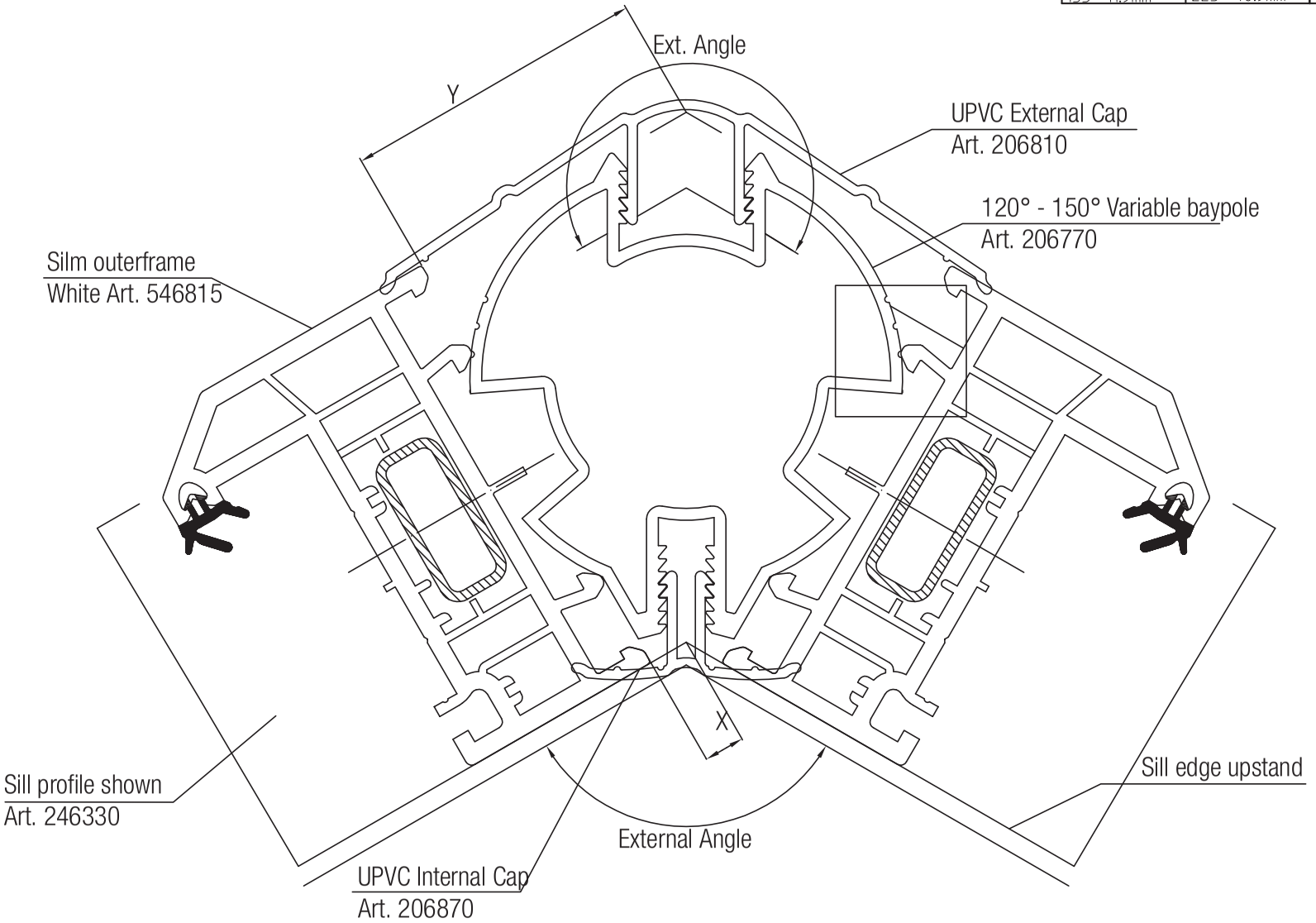


Note: for angles below 110° **206870 internal cap can be used.**

REHAU TOTAL70 BAYPOLE SYSTEMS

ASSEMBLY & DEDUCTIONS - 120° - 150° VARIABLE ANGLE

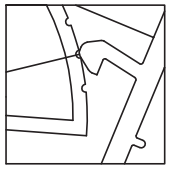
Internal Angle X	External Angle Y	Internal Angle X	External Angle Y
120°=6.2mm	240°=46.6mm	136°=12.3mm	224°=40.6mm
122°=7.0mm	238°=45.8mm	138°=13.0mm	222°=39.9mm
124°=7.8mm	236°=45mm	140°=13.7mm	220°=39.2mm
125°=8.2mm	235°=44.6mm	142°=14.4mm	218°=38.5mm
126°=8.6mm	234°=44.2mm	144°=15.1mm	216°=37.8mm
128°=9.4mm	232°=43.5mm	145°=15.4mm	215°=37.5mm
130°=10.1mm	230°=42.8mm	146°=15.7mm	214°=37.1mm
132°=10.9mm	228°=42.0mm	148°=16.4mm	212°=36.5mm
134°=11.6mm	226°=41.3mm	150°=17.0mm	210°=35.8mm
135°=11.9mm	225°=40.9mm		



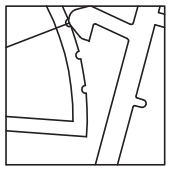
Detail A :

120°

135°



150°

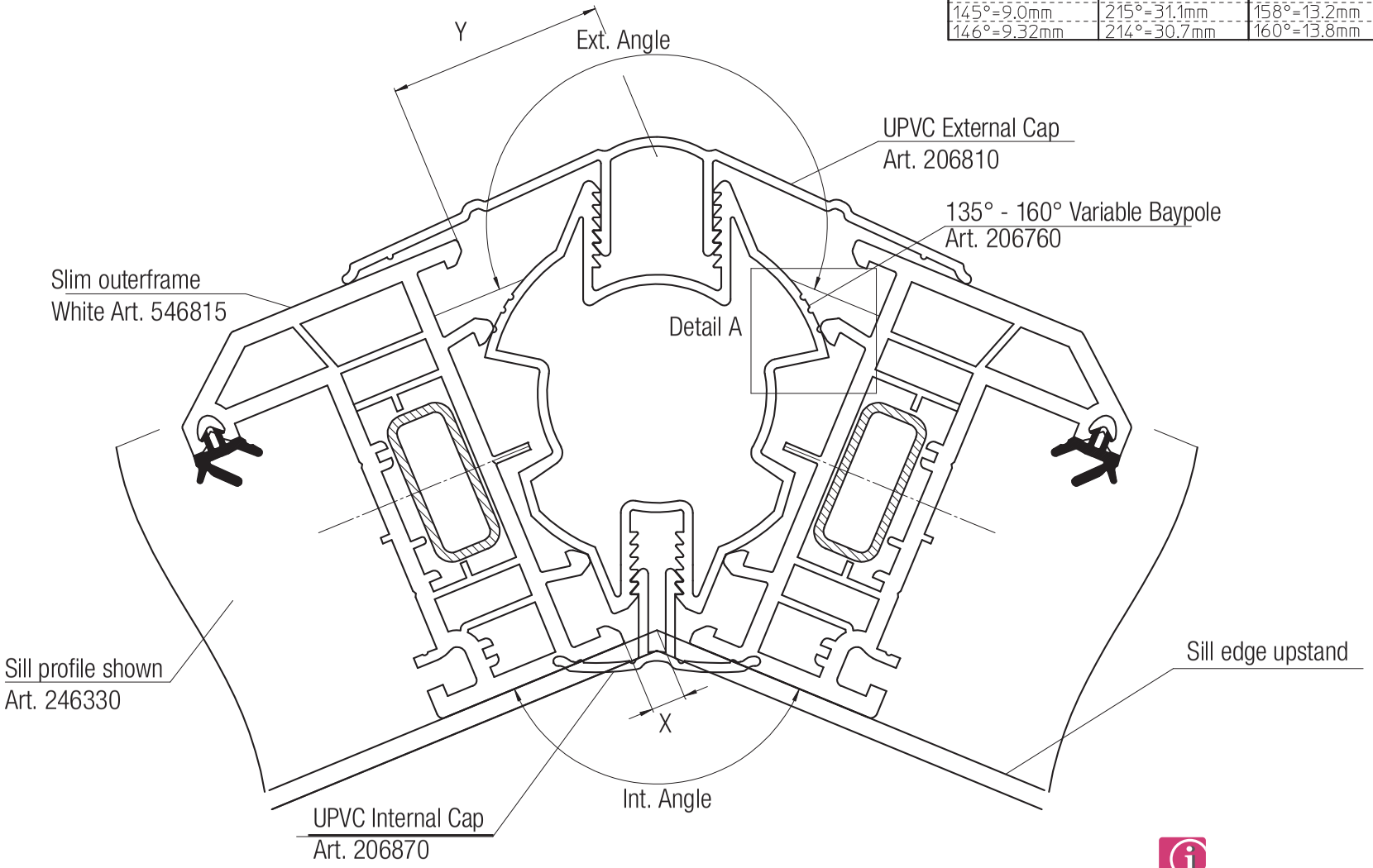


Note : For angles above 140° **206860 internal cap should be used.**

REHAU TOTAL70 BAYPOLE SYSTEMS

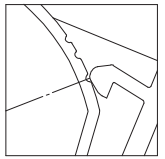
ASSEMBLY & DEDUCTIONS - 135° - 160° VARIABLE ANGLE

Internal Angle X	External Angle Y	Internal Angle X	External Angle Y
135°=5.5mm	225°=34.5mm	148°=10.0mm	212°=30.0mm
136°=5.9mm	224°=34.1mm	150°=10.7mm	210°=29.4mm
138°=6.7mm	222°=33.5mm	152°=11.3mm	208°=28.8mm
140°=7.3mm	220°=32.8mm	154°=12.0mm	206°=28.1mm
142°=7.9mm	218°=32.0mm	155°=12.3mm	205°=27.8mm
144°=8.7mm	216°=31.4mm	156°=12.6mm	204°=27.5mm
145°=9.0mm	215°=31.1mm	158°=13.2mm	202°=26.8mm
146°=9.32mm	214°=30.7mm	160°=13.8mm	200°=26.2mm

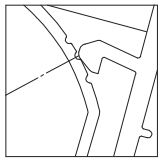


Detail A :

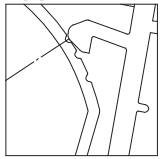
135°



150°



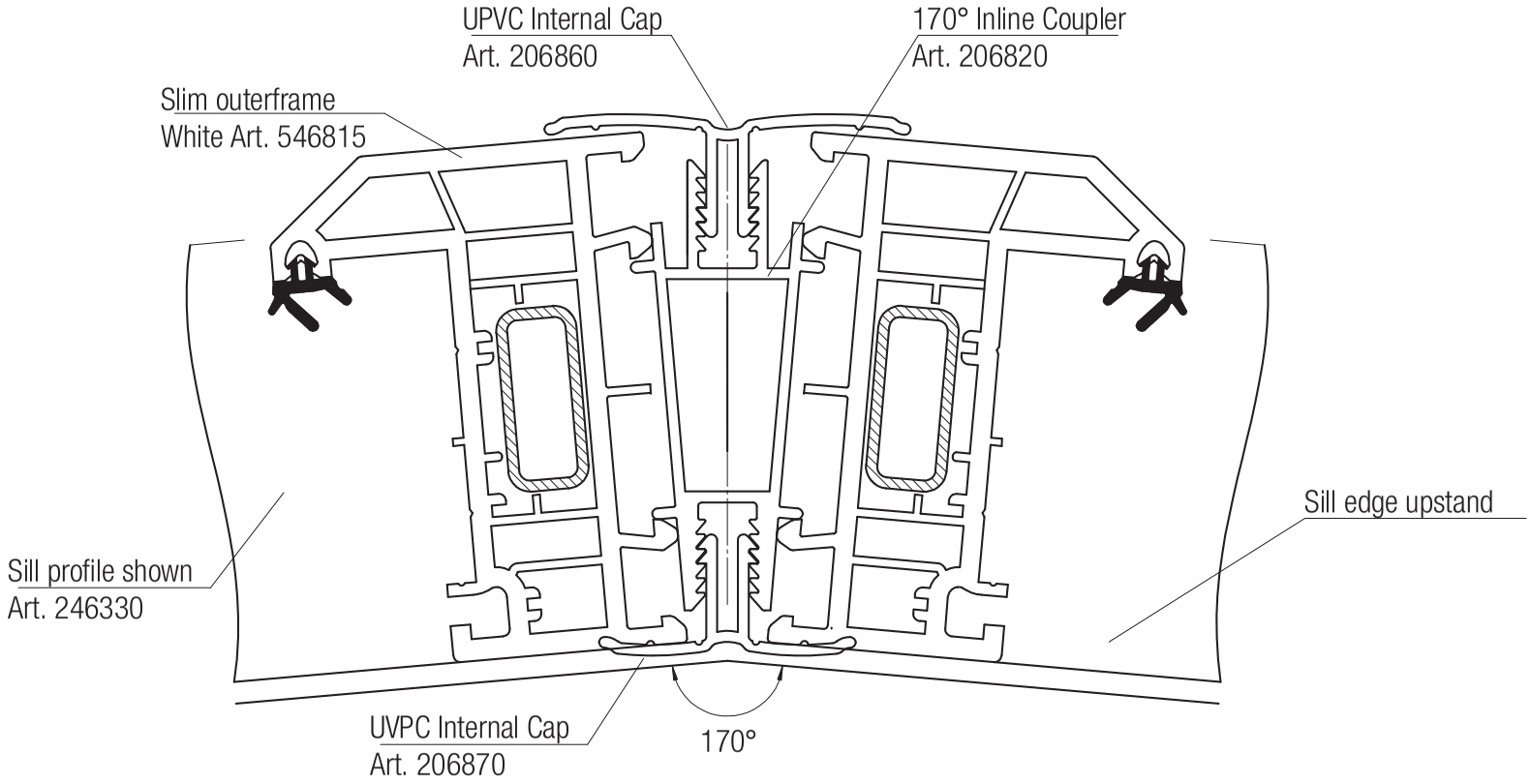
160°



For angles above 150° **62mm intermediate outer frame should be used too when opening sashes are required to ensure clearance**

REHAU TOTAL70 BAYPOLE SYSTEMS

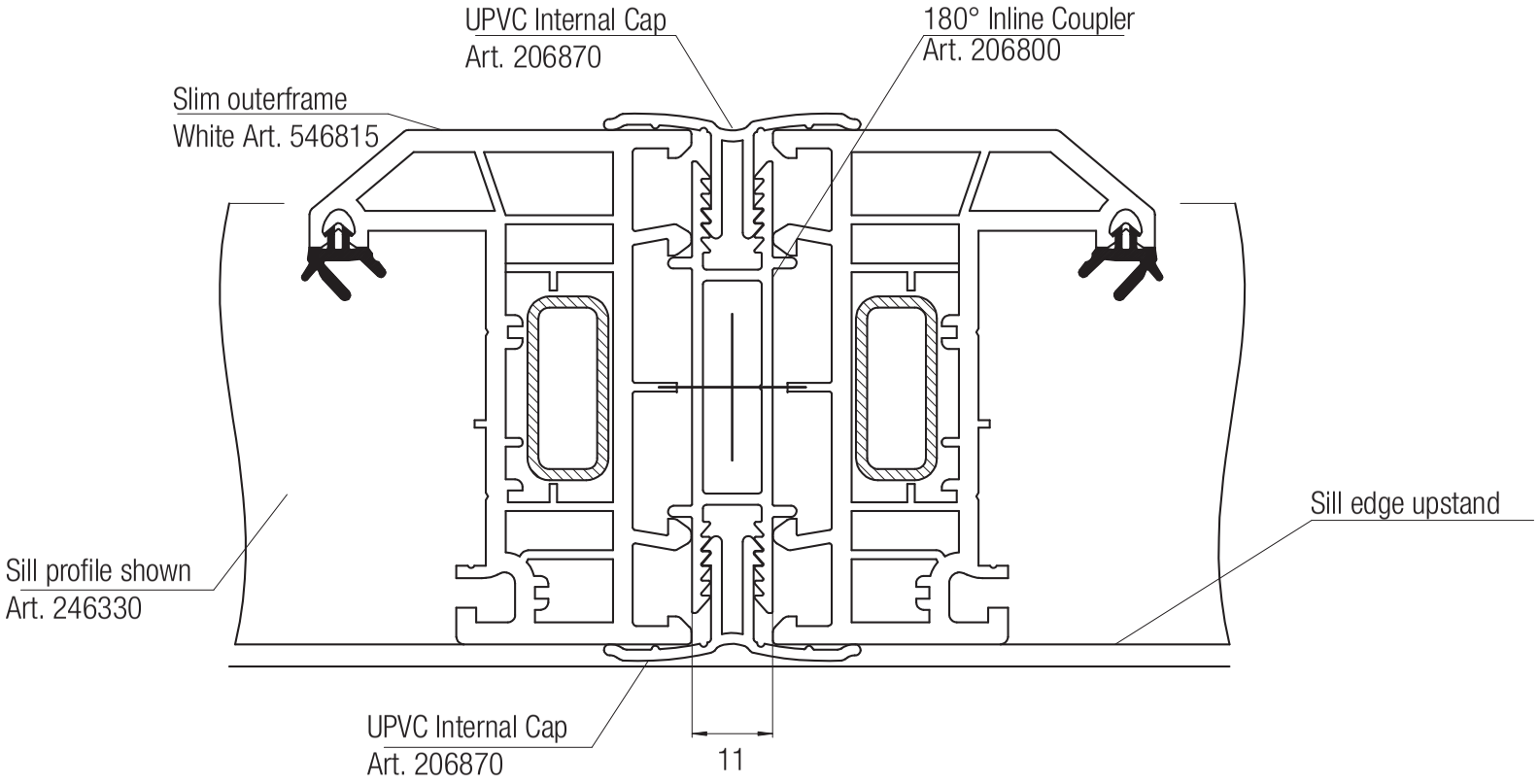
ASSEMBLY & DEDUCTIONS - 170° FIXED



206870 is a coupling profile only not for vertical load.

REHAU TOTAL70 BAYPOLE SYSTEMS

ASSEMBLY & DEDUCTIONS - 180° FIXED

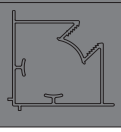
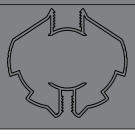


206870 is a coupling profile only not for vertical load.

REHAU TOTAL70 BAYPOLE SYSTEMS

INSTALLATION RECOMMENDATIONS

The table below outlines allowable compressive loads for the baypole in isolation.

Article		206790	206780	206770	206760
					
1200mm	Allowable Stress (N/mm²)	65	65	59	50
	Max. Load (KN)	39.0	43.3	34.6	22.6
	Max. Tonnes (Tonnes/Pole)	3.97	4.42	3.53	2.31
1500mm	Allowable Stress (N/mm²)	59	60	49	33
	Max. Load (KN)	35.4	40	28.8	14.9
	Max. Tonnes (Tonnes/Pole)	3.61	4.08	2.93	1.52
1750mm	Allowable Stress (N/mm²)	53	55	36	23
	Max. Load (KN)	31.8	36.7	21.1	10.4
	Max. Tonnes (Tonnes/Pole)	3.24	3.74	2.15	1.06
2100mm	Allowable Stress (N/mm²)	40	43	26	-
	Max. Load (KN)	24	28.7	15.3	-
	Max. Tonnes (Tonnes/Pole)	2.45	2.92	1.55	-

The table below outlines allowable compressive loads for baypoles when using corresponding jack kits referenced.

Article		206790	206780	206770	206760
Cap Design Ltd Jack Ref:		Kit For: 206790	Kit For: 206780	Kit For: 206770	Kit For: 206760
1200mm	Max. Tonnes (Tonnes/Pole)	3.0	3.0	3.0	2.0
1500mm	Max. Tonnes (Tonnes/Pole)	3.0	3.0	2.9	1.5
1750mm	Max. Tonnes (Tonnes/Pole)	3.0	3.0	2.2	1.1
2100mm	Max. Tonnes (Tonnes/Pole)	2.4	2.9	1.5	1.0

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