

XT66 Casement & Tilt turn window system

The AMS XT66 window system offers unique patented architectural design features combined with market leading thermal performance. This window suite combines all the latest technology in window design to ensure all requirements of building regulations and project specifications are exceeded

Introduction:

The suite of profiles has equal leg and unequal leg sections to accommodate all anticipated framing options. Various additional profiles can be designed, and incorporated, allowing architects achieve project specific designs. The system can be glazed both internally and externally with double & triple glazed units from 28mm, through to 48mm. Sash options include side hung, top hung, bottom hung, parallel opening, open in and open out configurations. Not only does our XT66 window system offer CENsolutions 'gold' standard certification but also offers secured by design.

Thermal Performance:

XT66 is designed to offer the specifier excellent U-frame and U-window values to achieve and exceed overall project and building regulation requirements.

Scope:

This specification defines materials, fabrication, paint finishes, and size limitations for casement windows.

Materials:

Aluminium profiles are extruded from aluminium alloy 6063 T5 and T6 complying with BS EN 12020-2:2008 and BS EN 755: 1 – 9.

Paint Finishes

Polyester Powder Coatings:

Aluminium profiles are polyester powder coated to BS EN 12206-1:2004. AMS offers in house painting with the following Qualicoat approved paint suppliers –Valspar / Syntha Pulvin, AkzoNobel Interpon, Axalta.

Pre-treatment:

Pre-treatment is an 8 stage, chromate free, process and our painted finishes offer a minimum 25 year guarantee. Projects in close proximity to marine/ hazardous environments require a special application. Guarantees for these locations must be applied for prior to painting any material.

Decoral:

Aluminium profiles can be polyester powder coated with a woodgrain effect paint finish to BS EN 12206-1:2004. Woodgrain finishes include,

Mahogany, Golden oak, Dark oak, Natural oak, Winchester Oak, Teak, Raw teak, Teak softwood, Chestnut, Oregon, Natural Oregon, Yellow Oregon, Oregon pine, Knotty pine, Natural maple, Cinnamon, Worn ash, Rosewood,

Anodised:

Aluminium profiles can be anodised to BS EN ISO 7599:2010 or BS 3987:1991.

Fabrication:

Frame members shall be mitre cut at 45° and corners are reinforced with extruded aluminium crimping cleats and corner braces. A secure joint is achieved by means of a mechanical crimp along with the insertion of a two part epoxy adhesive. Intermediate mullion and transom bars shall be square cut, shaped and fixed securely to the frame by means of a fixing bracket which is securely fixed to the transom end with stainless steel screws.

All frame joints shall be sealed during construction against entry of water using a suitable low modulus silicone sealant.

Glazing:

Glass shall be set against EPDM gaskets externally which are fitted into gasket grooves in the frame. All Gaskets are EPDM and manufactured to BS 4255 and tested to BS EN 12365-4:2003. Internal vulcanised, EPDM corners, to be used around sash profiles for improved air and water tightness. Gaskets to be designed so as they are easily replaceable, if required, during scheduled maintenance work and EPDM gaskets offers a 10 year guarantee.

Snap in pvc bead clips and extruded aluminium retention plates shall be utilized to hold glazing beads in place.

Glazing shall be to BS 6262:2005 part 1 – 7, and Building Regulations Document N (UK).

For internal glazing, the XT66 rebate reverser should be utilised, these give excellent thermal performance whilst retaining the slim slight lines of the XT66 system and eliminates the requirement for scaffolding or lifting equipment when replacing glass units.

Installation:

AMS offer detailed installation instructions on all systems and these should be followed as per AMS's technical department's recommendations.

Casement Window Fittings:

The system is designed to suit heavy duty, 17mm stack height, friction hinges in conjunction with either cockspur handles or an espagnolette multi point locking. For larger sashes an espagnolette all round perimeter multi- locking system can be used which has enhanced security features.

Friction hinges:

Friction hinges are heavy duty and are supplied in different length up to 28". Hinges have a stack height of 17mm and are available in restricted or non restricted options. Heavy duty hinges are manufactured from high grade austenitic steel and have be proven to a lifetime of 50,000 cycles.

Opening Vents – Top Hung Open out Casement

Maximum Opening Vent Height:	1700mm
Maximum Opening Vent Width:	1400mm
Maximum Opening Vent Weight:	100KG

Opening Vents – Side Hung Open out Casement

Maximum Opening Vent Height:	1620mm
Maximum Opening Vent Width:	760mm
Maximum Opening Vent Weight:	42KG

Tilt & Turn gear limitations:

Sash size limitations for the XT6908 are based on Siegenia concealed Tilt & turn gear, Axxent 24+. Refer to page 2.6.26 of the manual for detailed size limitations, sizes are based on glazing weights. Below are the maximum limits but the sizing chart on 2.6.26 gives accurate guidance and should be referred to.

	Windows:
Sash rebate width (mm)	1500mm
Sash rebate height (mm)	3000mm
Sash weight (kg)	100 kg's

Note: the sash rebate width must not exceed 2 times the sash rebate height.

Structure:

Section performance requirements must be calculated from site conditions and all loading requirements. All structural profiles shall be designed so as the maximum deflection of any member shall not exceed L/175 of its span. Guidance on deflection limits can be found in the CWCT standard for systemised building envelopes. Guidance may also be sought from the glass manufacturer. There shall be no evidence of any permanent deformation once the load has been removed. Exposure categories to be determined by BS EN 1991-1-1-4:2005+A1:2010 or for low rise applications to BS 6375-1: 2015.

Performance:

The casement window system has been fully tested to the following exposure categories and standards BS 6375-1 & 2: 2009. The tests were undertaken at BM Trada test laboratories in the UK. Reports are available upon request.

Tested to BS 6375-1: 2009 & PAS 24:2012.

Air Classification – A4: 600 Pa.

Water Tightness – E900: 900 Pa.

Wind Resistance – E2400: 2400 Pa.

Tested to BS 6375 - 2: 2009:

Resistance to racking – Class 3.

Resistance to static torsion – Class 3.

Resistance to repeated opening and closing – Class3 (20,000 cycles).

Operating forces – Class 1.

BS 6375 – 3:2009, basic security test – Pass.

The XT Tilt & turn window system has been fully tested to BS 6375-1 : 2015. The tests were undertaken at ERC test laboratories in the UK. Reports are available upon request.

Tested to BS 6375-1: 2015 & PAS 24:2016.

Air Classification – A4: 600 Pa.

Water Tightness – E1050: 1050 Pa.

Wind Resistance – E2400: 2400 Pa.

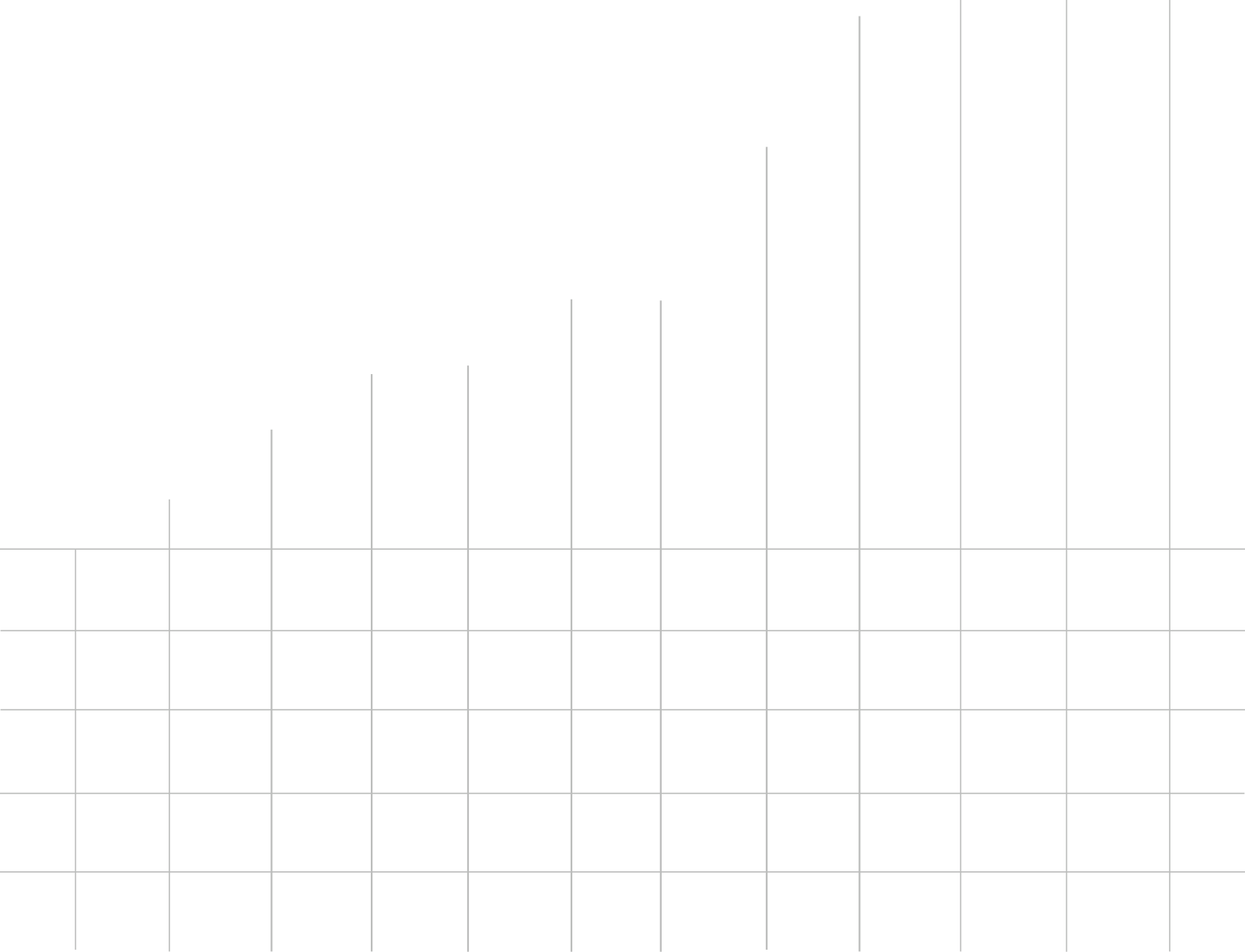
Thermal Performance:

The XT66 casement window system can achieve window U-values as low as 0.9 W/m²K with triple glazing or 1.34 W/m²K with double glazing, with warm edge spacer bars. Window and project U-values can be calculated and compliance demonstrated using Logikal software or finite element analysis software 'Bisco'. AMS are certified by the BFRC (British Fenestration Rating council) for carrying out thermal simulations and energy ratings of windows and doors. This ensures correct methodology for calculating the thermal performance of fenestration products.

Security:

The AMS XT66 casement window has passed the security test PAS 24:2012, enhanced security performance requirements for window and door sets. To conform to this standard the window system must be fitted with our Cotswold heavy duty hinges including Cotswold hinge guards, interlocking wedges, Nico espag locking system and Titon espag or pro-linea handles. The system can be either internally or externally glazed.

The AMS XT66 tilt & turn window has also passed the security test PAS 24:2016, enhanced security performance requirements for window and door sets. To conform to this standard the window system must be fitted with the Siegenia AF Axxent 24+ concealed tilt and turn gear. Fitting of keeps, run-up blocks and anti-lift device to be in accordance with the technical manual.



- 2.6.01 - 25-07-17 : Profile listing, frames / sashes.
- 2.6.02 - 25-07-17 : Profile listing, adapters, beads, gaskets.
- 2.6.03 - 25-07-17 : Accessories.
- 2.6.04 - 25-07-17 : Accessories.
- 2.6.05 - 10-01-17 : Sash limitations.
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- 2.6.09 - 25-07-17 : Assembly, XT6200 / XT6 923.
- 2.6.10 - 25-07-17 : Assembly, XT6200 / XT6 923.
- 2.6.11 - 25-07-17 : Assembly, XT6202 / XT6 923.
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- 2.6.13 - 25-07-17 : Assembly, XT6202 / XT6 908.
- 2.6.14 - 25-07-17 : Assembly, XT6011 / XT6 908.
- 2.6.15 - 25-07-17 : Transom / add on options.
- 2.6.16 - 25-07-17 : Fixing detail.
- 2.6.17 - 25-07-17 : Installation details.
- 2.6.18 - 25-07-17 : Glazing details.
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- 2.6.22 - 25-07-17 : XT66 coupler to TS66 Doors.
- 2.6.23 - 25-07-17 : Coupler details.
- 2.6.24 - 25-07-17 : Assembly, 48.8mm glazing with rebate reverser
- 2.6.25 - 25-07-17 : Curtain wall insert details.
- 2.6.26 : Sash limitations XT6 908 tilt & turn.

AMS Ltd. Wallingstown, Little Island, Co. Cork:

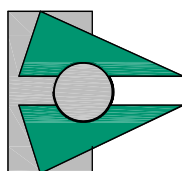
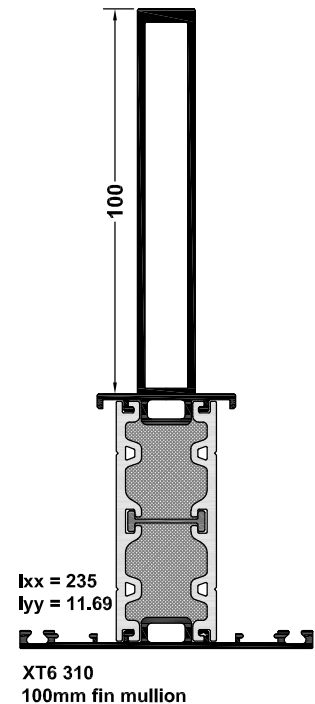
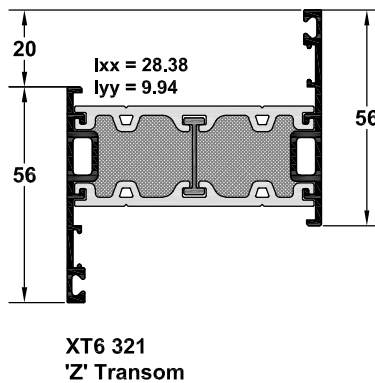
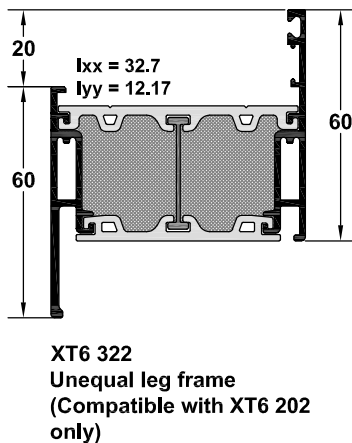
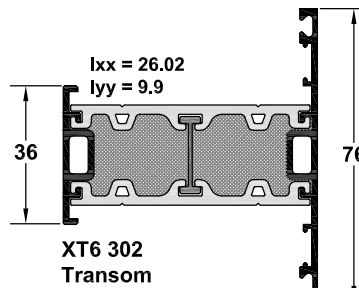
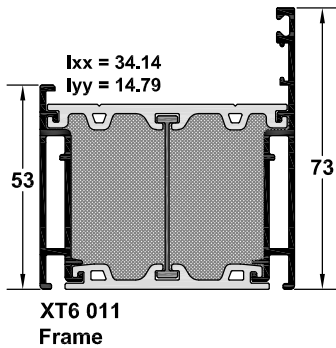
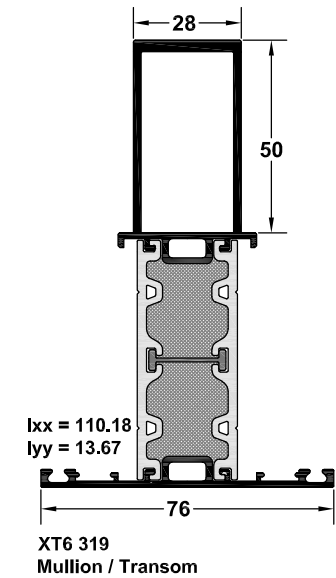
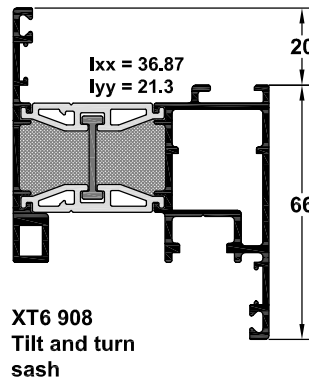
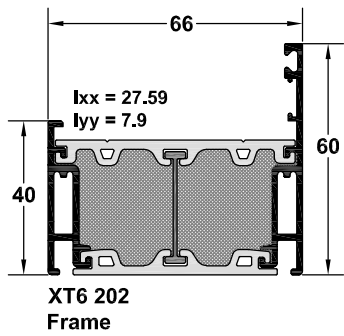
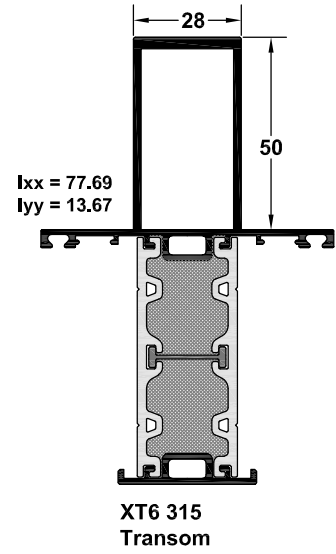
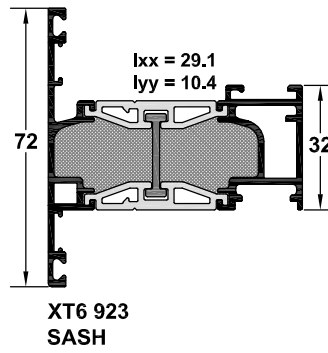
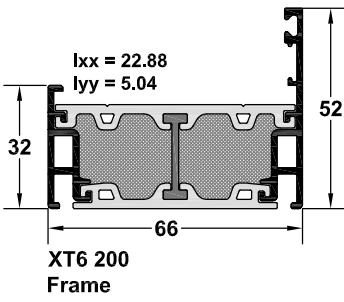
Tel: 021 4705100 **Fax:** 021 4705198, **E-mail:** pohara@ams.ie, **Web:** www.ams.ie



XT66 CASEMENT & TILT TURN WINDOW SYSTEM

Profile Listing

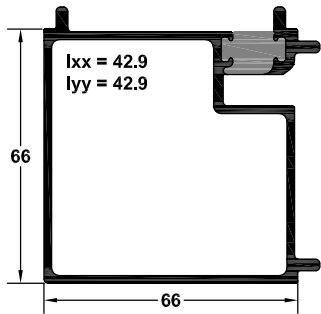
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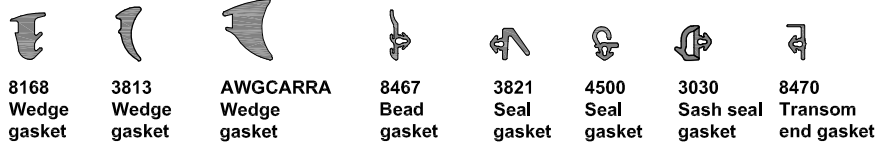
XT66 CASEMENT & TILT TURN WINDOW SYSTEM

Profile Listing

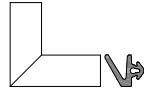
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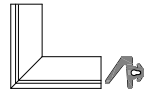
RBS 802
Corner post



HL 561
28mm BEAD



3821 VCT
Vulcanised corner for external sash seal (Tilt and turn)



3821 VC
Vulcanised corner for internal sash seal



8469
Seal gasket (Tilt & turn windows)



TBM DRIP
DRIP



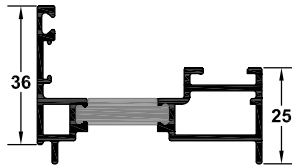
HL 560
28mm glazing (Sloped bead)



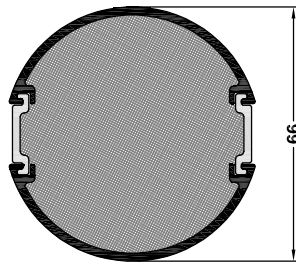
DRIP RDRIP



HL 565
35mm BEAD



TBS 161
Rebate reverser (28mm glazing only)



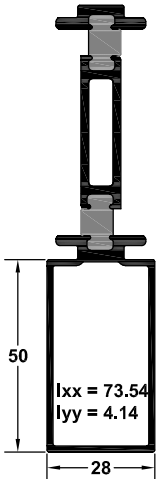
XT6 800
Bay Pole



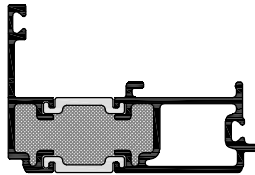
Drip15
15mm Drip section



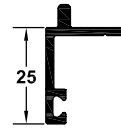
HL 506
40mm BEAD



RBS 351
50mm coupler



XT6 161
Rebate reverser 48.8mm glazing

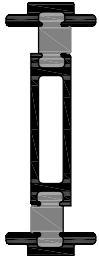


XT DRIP
Rebate drip for frame

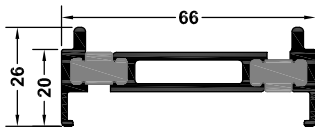


HL 502
44mm BEAD

$l_{xx} = 17.56$
 $l_{yy} = 0.98$



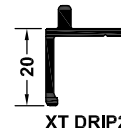
RBS 350
In line coupler



RBS280
20mm add on & Adapter for coupling XT frames to TS Bulb couplers



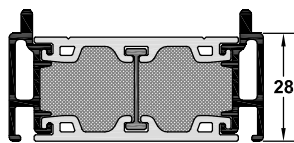
XT6 810
Bay Pole Fillet



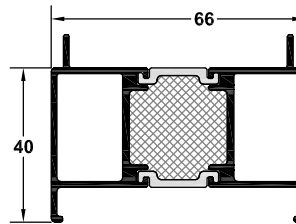
XT DRIP2
20mm Rebate drip for frame



HL 501
48mm BEAD



XT6028
28mm add on

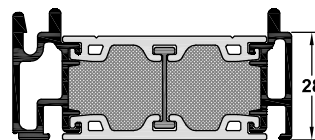
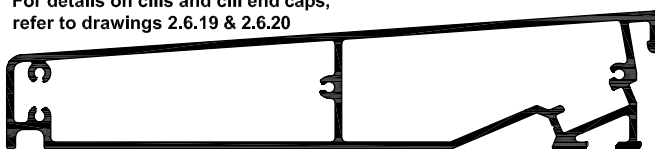


XT6040
40mm add on

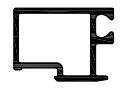


HL 588
48.8mm frame bead (Internal glazing only)

Note:
For details on cills and cill end caps, refer to drawings 2.6.19 & 2.6.20



XT6260
Cill riser profile



HL 562
Rebate reverser bead (28mm only)

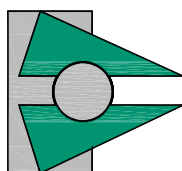
- CILL200 - 200mm cill
- CILL170 - 170mm cill
- CILL145 - 145mm cill
- CILL120 - 120mm cill
- CILL100 - 100mm cill
- CILL60 - 60mm cill
- CILL30 - 30mm cill
- CILLE60 - Cill extender

- CEC230 - End cap for 230mm cill
- CEC200 - End cap for 200mm cill
- CEC170 - End cap for 170mm cill
- CEC145 - End cap for 145mm cill
- CEC120 - End cap for 120mm cill
- CEC100 - End cap for 100mm cill
- CEC60 - End cap for 60mm cill
- CILLE030S - End cap for 30mm cill

- CILLE230D - End cap with drip for 230mm cill
- CILLE170D - End cap with drip for 170mm cill
- CILLE145D - End cap with drip for 145mm cill
- CILLE120D - End cap with drip for 120mm cill
- CILLE100D - End cap with drip for 100mm cill
- CILLE060D - End cap with drip for 60mm cill
- CILLE030D - End cap with drip for 30mm cill

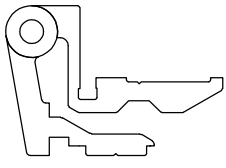


HL 568
48mm rebate reverser bead

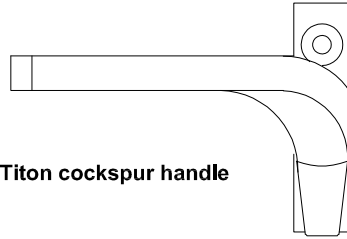


XT66 CASEMENT & TILT TURN WINDOW SYSTEM

Accessories Scale NTS

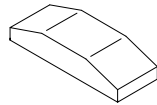


Crest butt hinge - 100mm
TSHB - BLACK
TSHW - WHITE
TSHN - SILVER
TSHM - MILL FINISH



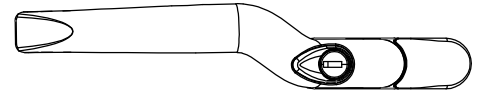
Titon cockspur handle

Code	Description	Colour
HB001	Titon right hand	Silver
HB002	Titon left hand	Silver
HB005	Titon right hand	Black
HB006	Titon left hand	Black
HB007	Titon right hand	White
HB008	Titon left hand	White



7mm locking wedge

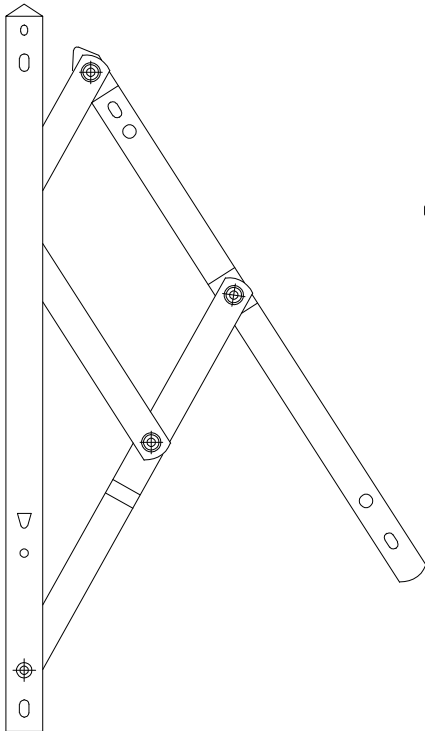
AWH019 Black
AWH020 White



Prolinea espag handle with 15mm spindle

Code	Description	Colour
EHWL	Prolinea left hand	White
EHWR	Prolinea Right hand	White
EHBL	Prolinea left hand	Black
EHBR	Prolinea Right hand	Black
EHGL	Prolinea left hand	Gold
EHGR	Prolinea Right hand	Gold
EHSL	Prolinea left hand	Silver
EHSR	Prolinea Right hand	Silver
EHCL	Prolinea left hand	Chrome
EHCR	Prolinea Right hand	Chrome
EHWKP	Prolinea left hand	Key plug
EHWKP	Prolinea Right hand	Key plug

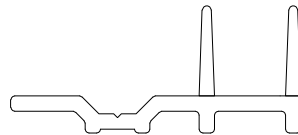
Handle specification for TS6 913,
TS6 923, TS6 915 & TS6 911



Heavy duty 17mm
stack height hinge

HD10 - 10" hinge
HD16 - 16" hinge
HD22 - 22" hinge (Self balancing)
HD26 - 26" hinge
HD28 - 28" hinge

Heavy duty 'Egress Hinge'
HD12E - 12" HD side hung hinge
HD16E - 16" HD side hung hinge



TSCS2
Cavity separator
(For enhanced thermal
performance)

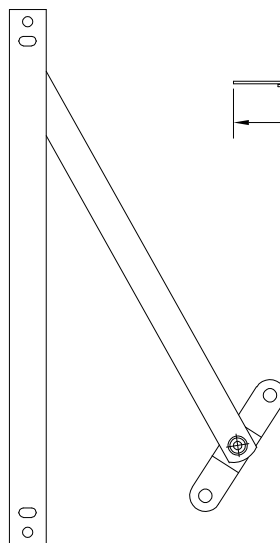
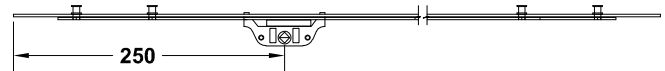
Espag locks - TS6 915, TS6 913 & TS6 923

EN1150 - 1150mm espag (22mm backset)
EN 950 - 950mm espag (22mm backset)
EN 750 - 750mm espag (22mm backset)
EN 550 - 550mm espag (22mm backset)
EN 350 - 350mm espag (22mm backset)
EN 280 - 280mm espag (22mm backset)

Offset - disabled access handle

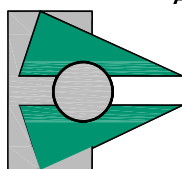
Espag locks - XT6 923

EDA1150 - 1150mm espag (22mm backset)
EDA 950 - 950mm espag (22mm backset)
EDA 750 - 750mm espag (22mm backset)



Heavy duty restrictor
HD102 - 6" restrictor
HD102x - 10" restrictor

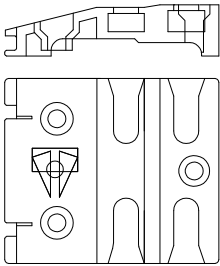
MILA releasable restrictor:
AWRAR - R/H releasable restrictor arm
AWRAL - L/H releasable restrictor arm
AWRAS - Fixing stud for restrictor arm



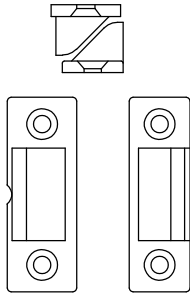
XT66 CASEMENT & TILT TURN WINDOW SYSTEM

Accessories

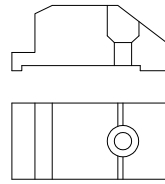
Scale NTS



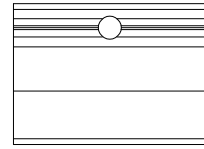
TS6K3
New TS keep
(No packer required
available Oct 2017)



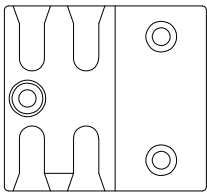
Interlocking wedge
LWBK - Black
LWW - White



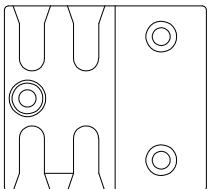
Run up block
TSA 010



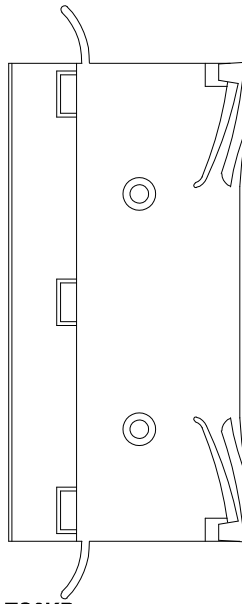
BCLIPA
Bead retaining clip



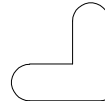
TS6K2
TS modified espag
keep with night vent
position



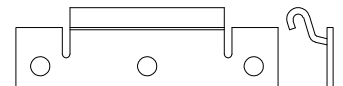
TS6KS2
TS modified espag
security keep



TS6KP
Keep location packer for
TS6K2 & TS6KS2



TBA002
Chevron



HDHP
Hinge
protector



520109
Fixing stud for
R drip profile

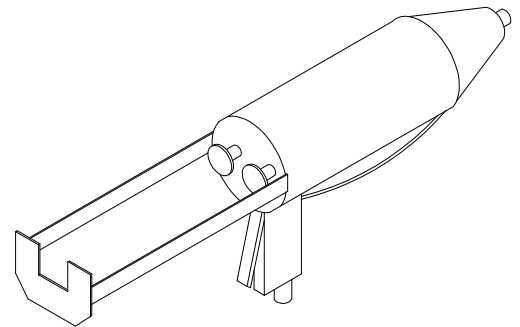


TBM drip2



Cosmofin 900g
two part adhesive
CF010

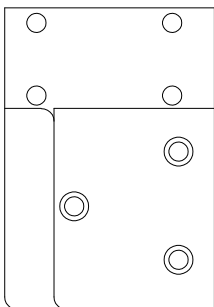
Cosmofin
mixing tube
CF030



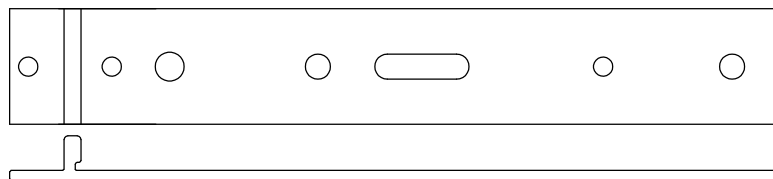
Cosmofin applicator
CF020 Manual applicator
CF021 Pneumatic applicator



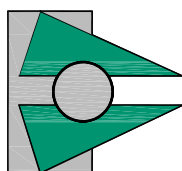
Drain cap:
DHCB - Brown
DHCB1 - Black
DHCG - Oak
DHCS - Grey
DHCW - White



Transom bracket
XT6CL - Left hand
XT6CR - Right hand



XTFL - 30 x 200mm foam frame
fixing lug



XT66 CASEMENT & TILT TURN WINDOW SYSTEM

Sash Limitations

Profile reference: XT6 923

TOP HUNG	Maximum Width (mm)	Maximum Height (mm)	Maximum weight (kg)	Angle of opening
HD 10	1800	750	50kg @ 50° 40kg @ 84°	50° or 84°
HD 16	1800	800	100kg @ 30° 55kg @ 50° 50kg @ 90°	30°, 50° or 90°
HD 22 SB	1600	1500	100 @ 20° 80 @ 40°	20 & 40°
HD 28	1400	1700	100 kg	15°

Profile reference: XT6 923

SIDE HUNG	Maximum Width (mm)	Maximum Height (mm)	Maximum weight (kg)	Angle of opening
HD 10	650	1530	34.5	50° or 84°
HD 16	765	1620	42	30°, 50° or 90°

Profile reference: TS6 908 - Tilt and turn

	Windows	Doors
Sash rebate width (mm)	For maximum widths / heights, refer to gearing supplier technical literature and also page 2.6.26. Maximum weights and sizes are dependant on the glass weights and height / width ratios.	
Sash rebate height (mm)		

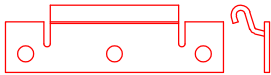
HD EGRESS HINGE

Profile reference: XT6 923

SIDE HUNG	Maximum Width (mm)	Maximum Height (mm)	Maximum weight (kg)	Angle of opening
HD 12E	700	1200	30.0	84°
HD 16E	900	1300	40.0	88°

Hinge protectors:

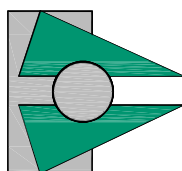
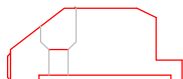
For Gold standard & security windows, fit hinge protectors, Hinge protectors to be located within 75mm of each friction stay. Also fit interlocking wedge, sash up to 1.0m no interlocking wedge required. Sashes 1.0m to 1.6m one interlocking wedge required in the centre



GUIDE BLOCKS:

Guide block to be fitted to each jamb on all top hung sashes and on bottom of all side hung sashes.

Guide block to be positioned 100mm approx. from edge of sash. Position of guide block should not interfere with operation of hinge.



Top Hung Locking:

Cockspur handles:

Sash widths from 1.0 to 1.6m, 2 handles required.

Espagnolette Locking :

Espag locks to be used on vents with widths greater than 1.6m and heights less than 1.4m

Side Hung Locking:

Cockspur handles:

Sash heights from 0.8 to 1.4m, 2 handles required.

Espagnolette Locking :

Espag locks to be used on vents with heights greater than 1.4m.

SECTION WEIGHTS:

Allow 1.85 kg/lm for XT6 200 (Includes HL561 bead)

Allow 1.96 kg/lm for XT6 202 (Includes HL561 bead)

Allow 1.98 kg/lm for XT6 302 (Includes HL561 bead x 1)

Allow 2.31 kg/lm for XT6 302 (Includes HL561 bead x 2)

Allow 1.92 kg/lm for XT6 923 (Includes HL561 bead)

Allow 2.34 kg/lm for XT6 908 (Includes HL561 bead)

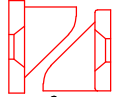
INTERLOCKING WEDGE Ref LWBK / LWWK :

Top hung:

- Up to 1.0m wide: 2 No. interlocks, 1 in 50mm from each end.
- 1.0m to 1.6m wide: 3 No. interlocks, 1 in the centre and 1 in 50mm from each end.

Side hung:

- Up to 1.0m high: 2 No. interlocks, 1 in 50mm from each end.
- 1.0m to 1.6m high: 3 No. interlocks, 1 in the centre and 1 in 50mm from each end.



BUTT HINGES:

Top hung sashes with butt hinges should not be hung from transom sections, should this occur contact AMS technical dept. for advice.

Top hung:

Maximum sizes width = 1.5m (XT6 923), maximum height 1.4m.

Sashes from 1.0m to 1.5m to have 3 No. fittings minimum. When utilising cockspur handles, sashes over 1.4m high to have handles fitted to the jambs, contact AMS technical dept. for advice on handle location.

Side hung:

- Maximum sizes width = 0.7m, maximum height 1.65m.
- Sashes from 1.0m to 1.65m high to have 3 No. fittings minimum.

Minimum sizes of casement sash window

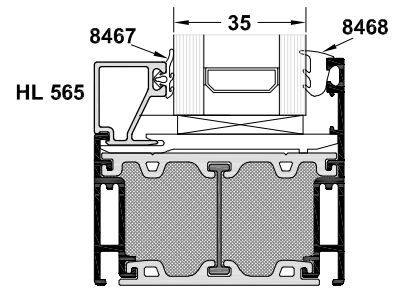
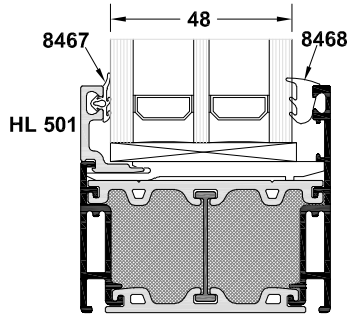
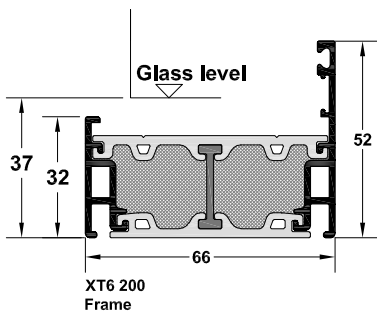
Note:

Minimum cut size of sash XT6 923, for fitting hinge / espags is 350mm

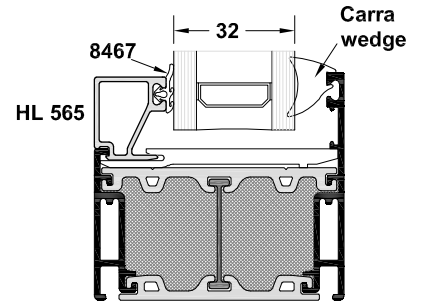
XT66 CASEMENT & TILT TURN WINDOW SYSTEM

Glazing options - XT200 / XT6 200 / XT6 011 / XT6 322

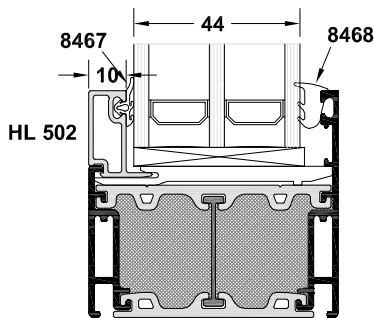
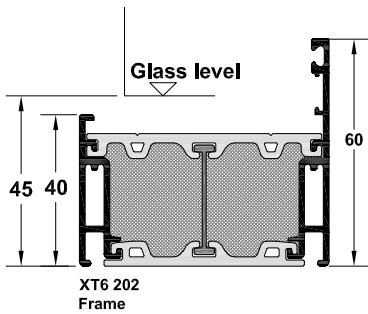
Scale 1:2



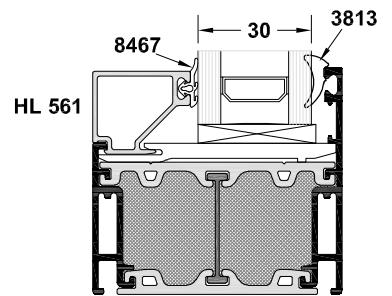
XT6 202 35mm glazed unit



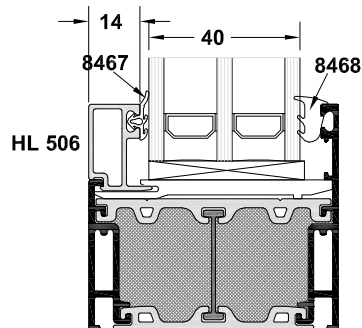
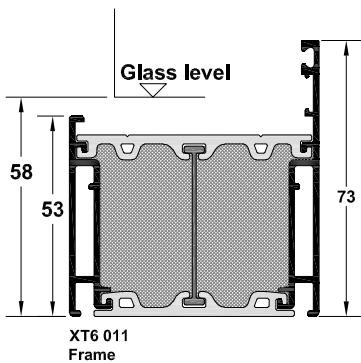
XT6 202 32mm glazed unit



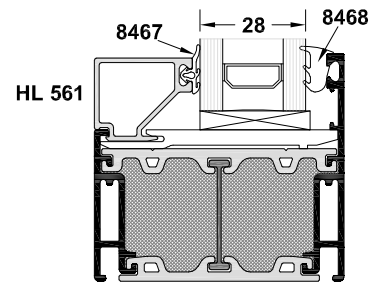
XT6 202 44mm glazed unit



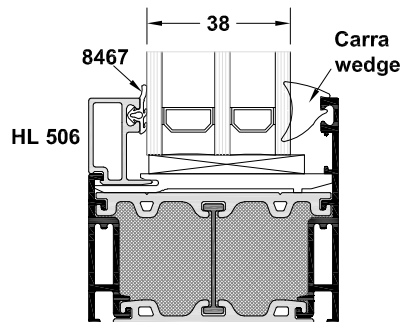
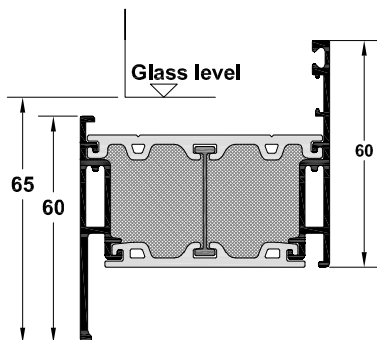
XT6 202 30mm glazed unit



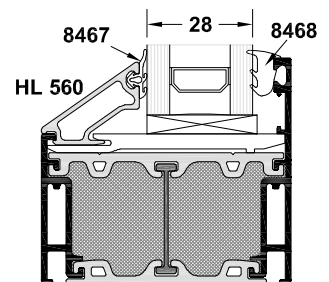
XT6 202 40mm glazed unit



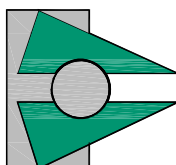
XT6 202 28mm glazed unit



XT6 202 38mm glazed unit



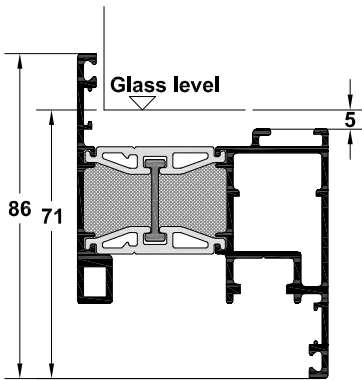
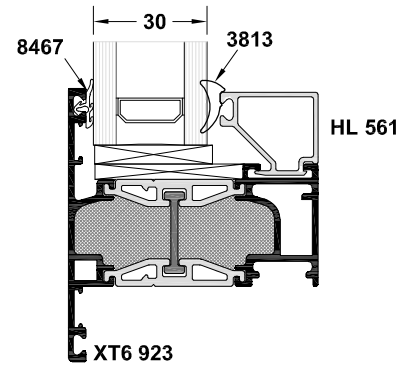
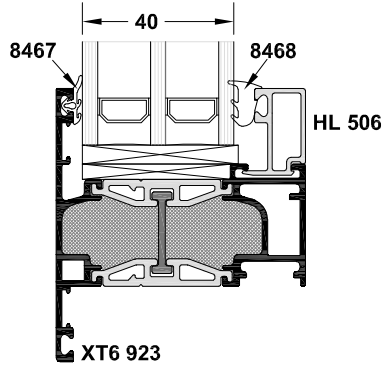
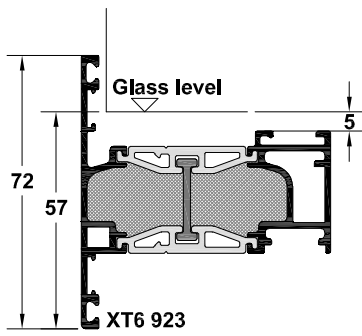
XT6 202 28mm glazed unit - sloped bead



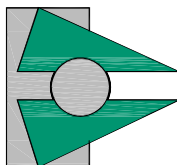
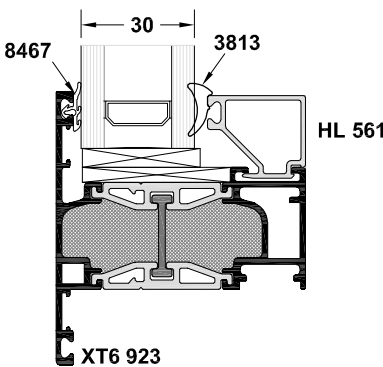
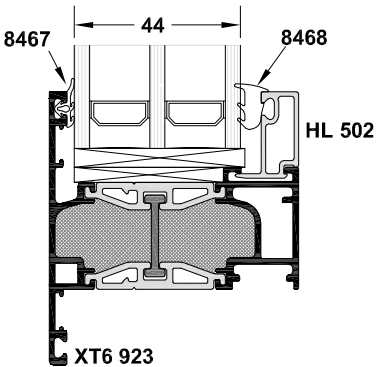
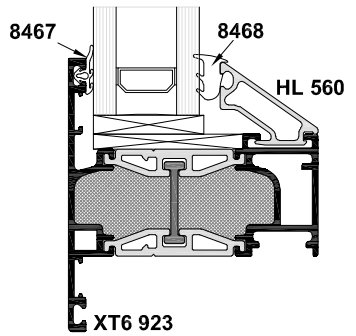
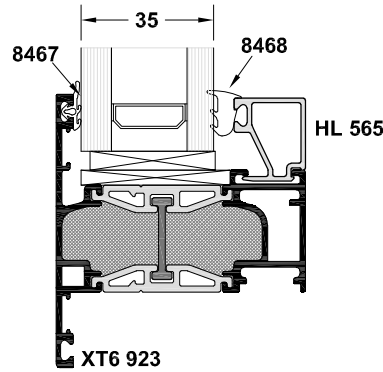
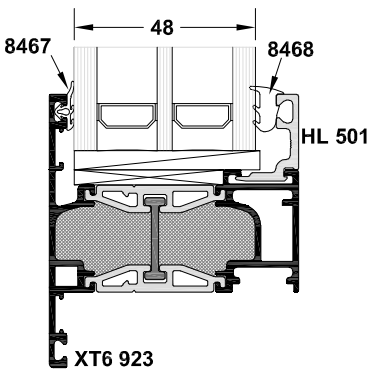
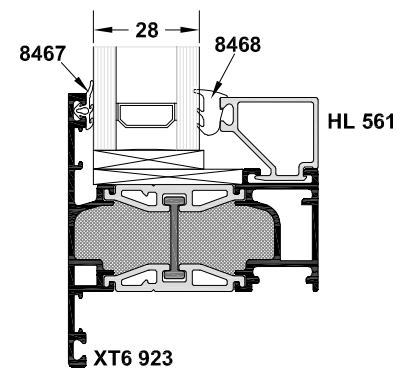
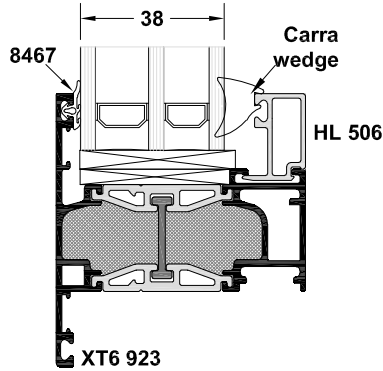
XT66 CASEMENT & TILT TURN WINDOW SYSTEM

Glazing options - XT6 923

Scale 1:2



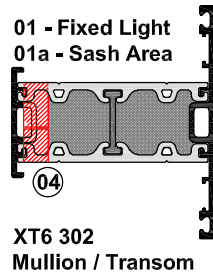
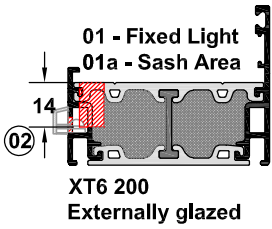
XT6 908
Tilt and turn
sash



XT66 CASEMENT & TILT TURN WINDOW SYSTEM

Drainage treatment

Scale NTS



01 25 X 20x 14mm deep slot - Fixed lights (Can be used under sash area also)

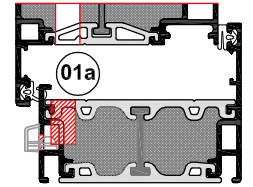
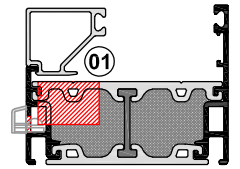
01a 25 X 8x 14mm deep slot - Sash area only (Not to be used in fixed light areas)

02 5 x 25mm slot with drainage cap

03 20mm notch in bead hook. Bead hook notched so it is flush with horizontal surface of transom, seal gasket and gasket channel on sash to be completely cut away in same location as notch

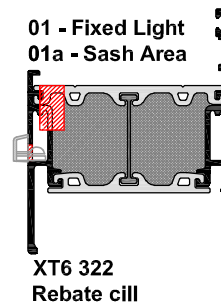
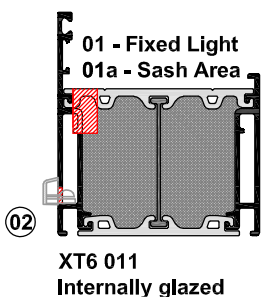
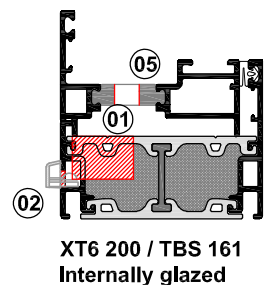
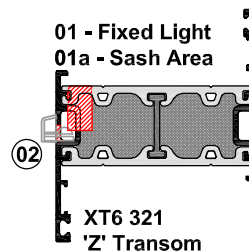
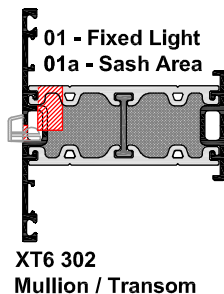
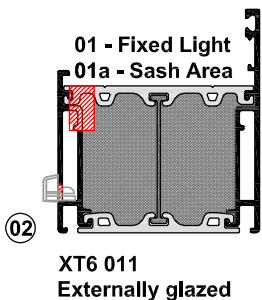
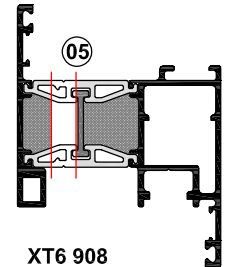
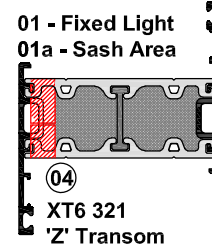
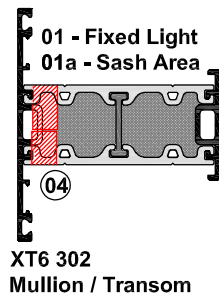
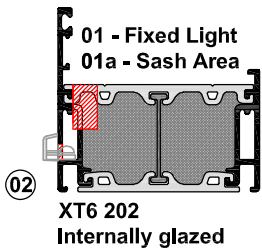
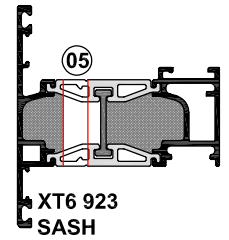
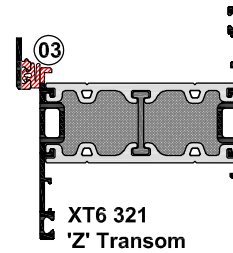
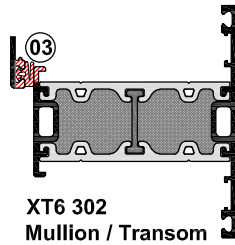
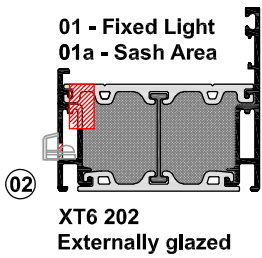
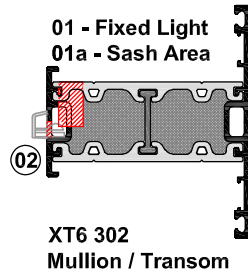
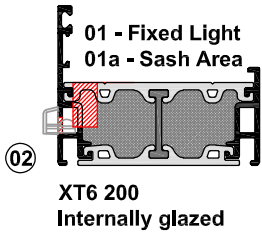
04 At each end of the transom, notch an extra 6 x 8mm slot or drill 8mm hole to allow for extra room for drainage

05 8mm Ø drilled through at 400mm c/c approx.

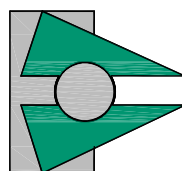
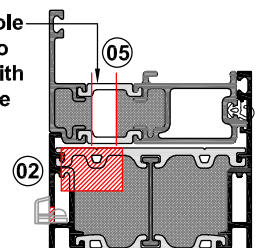


Note A:
For use of alternative drainage arrangements please consult our technical department.

Note B:
Slots and drainage holes to be staggered by 150mm minimum



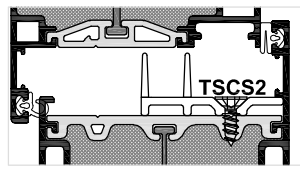
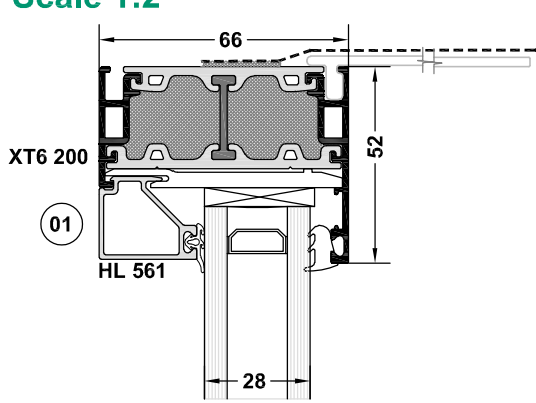
Drainage hole in XT6161 to be in line with the drainage slot in the frame



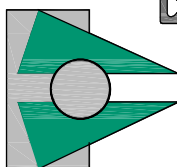
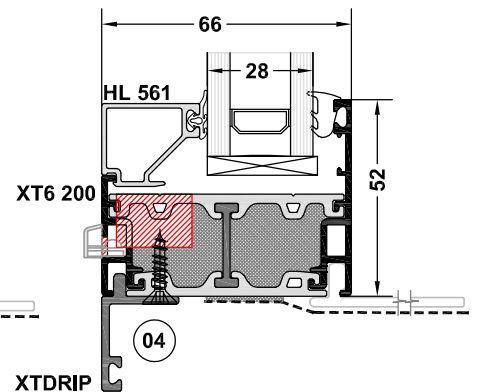
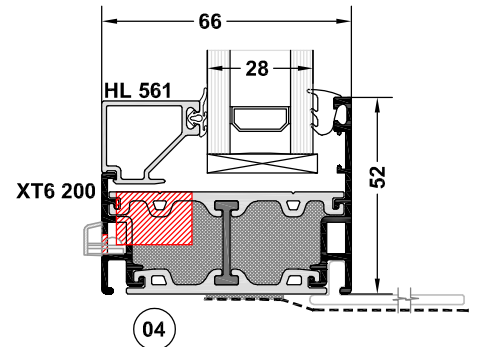
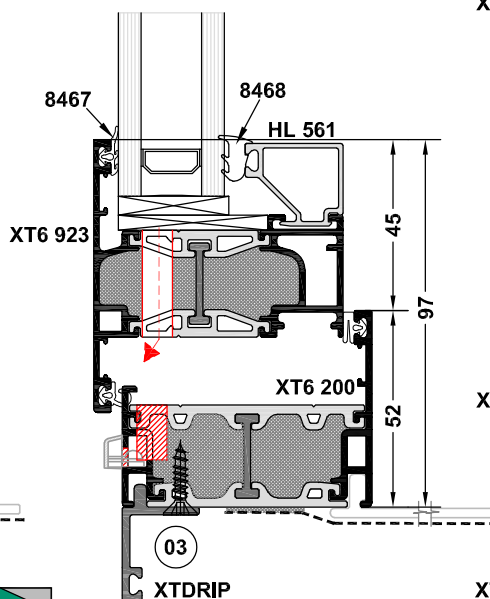
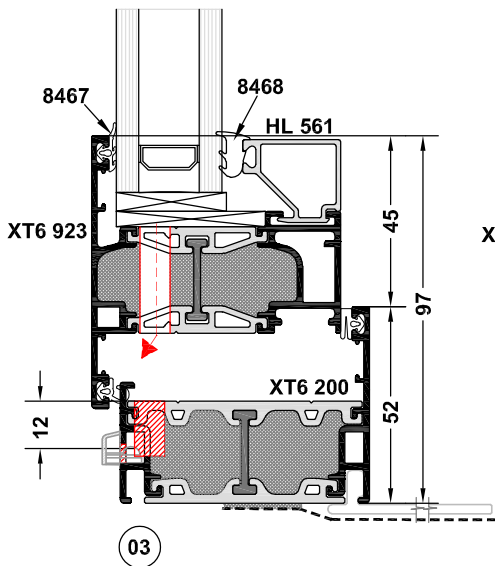
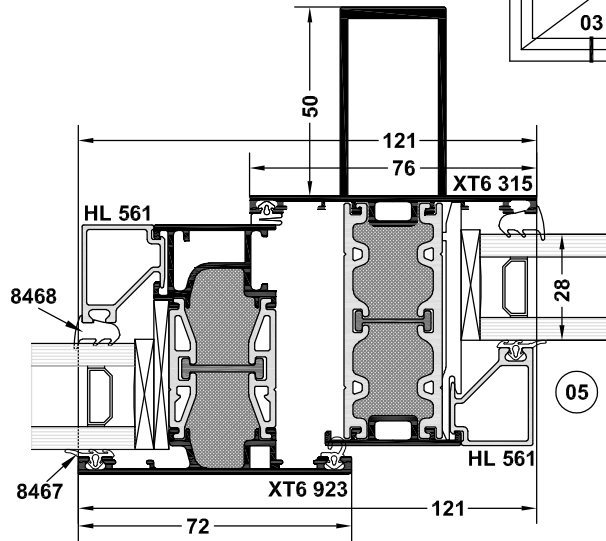
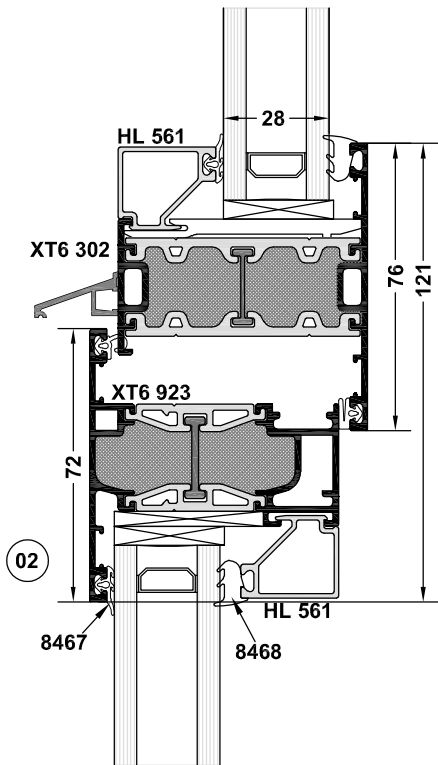
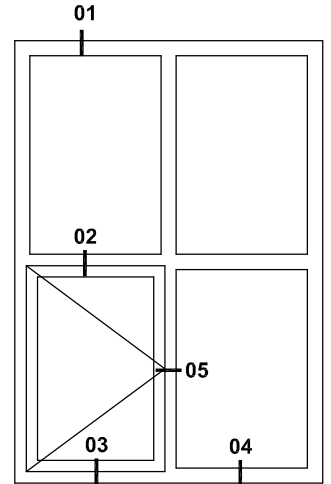
XT66 CASEMENT & TILT TURN WINDOW SYSTEM

XT6 200 With XT6 923 (fixed light externally beaded)

Scale 1:2



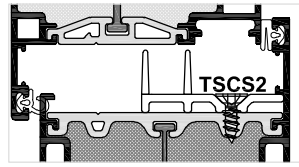
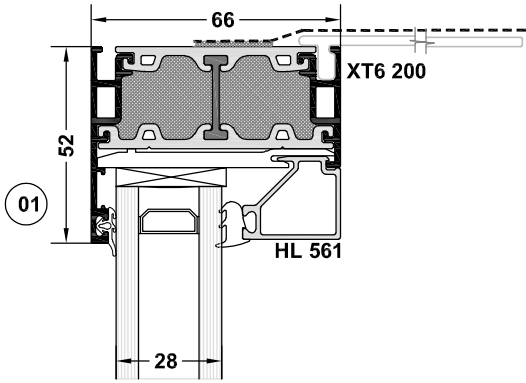
Note:
As an optional extra, the cavity separator (TSCS2) can be fitted between the sash and the frame so as to improve the thermal performance of the window.



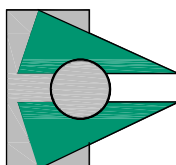
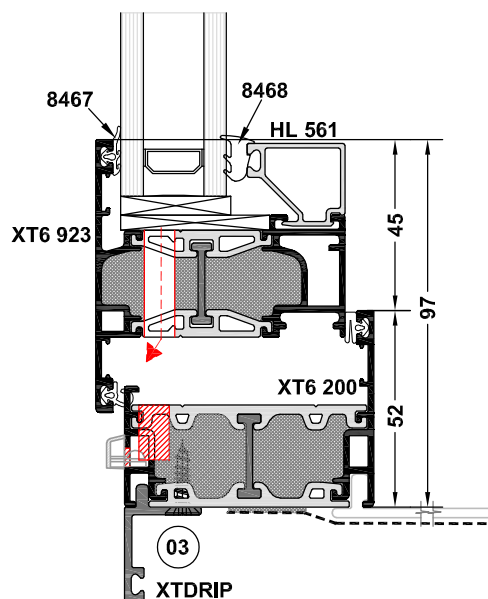
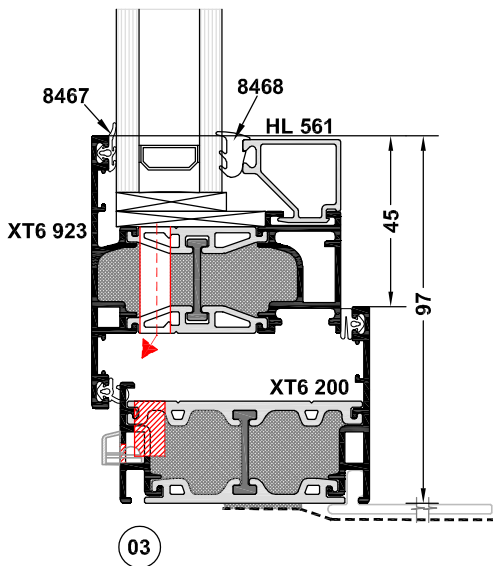
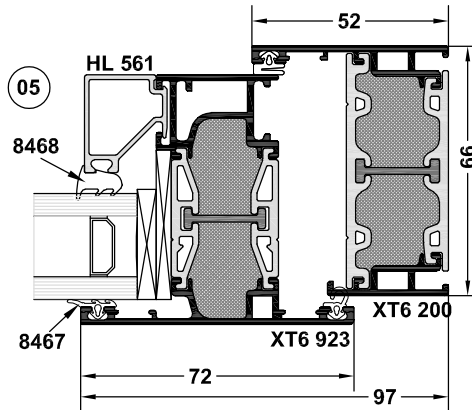
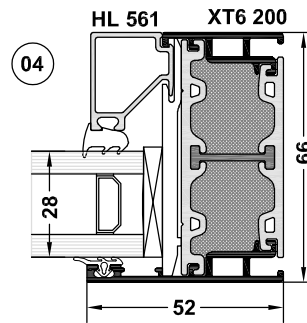
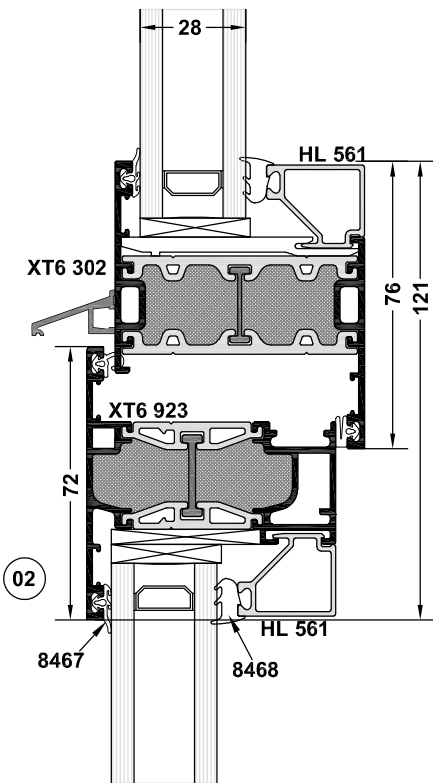
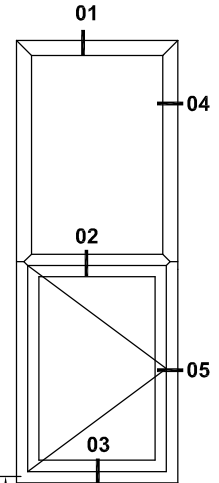
XT66 CASEMENT & TILT TURN WINDOW SYSTEM

XT6 200 With XT6 923 (Reverse butt crimp window)

Scale 1:2



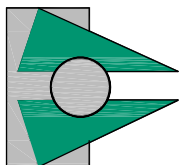
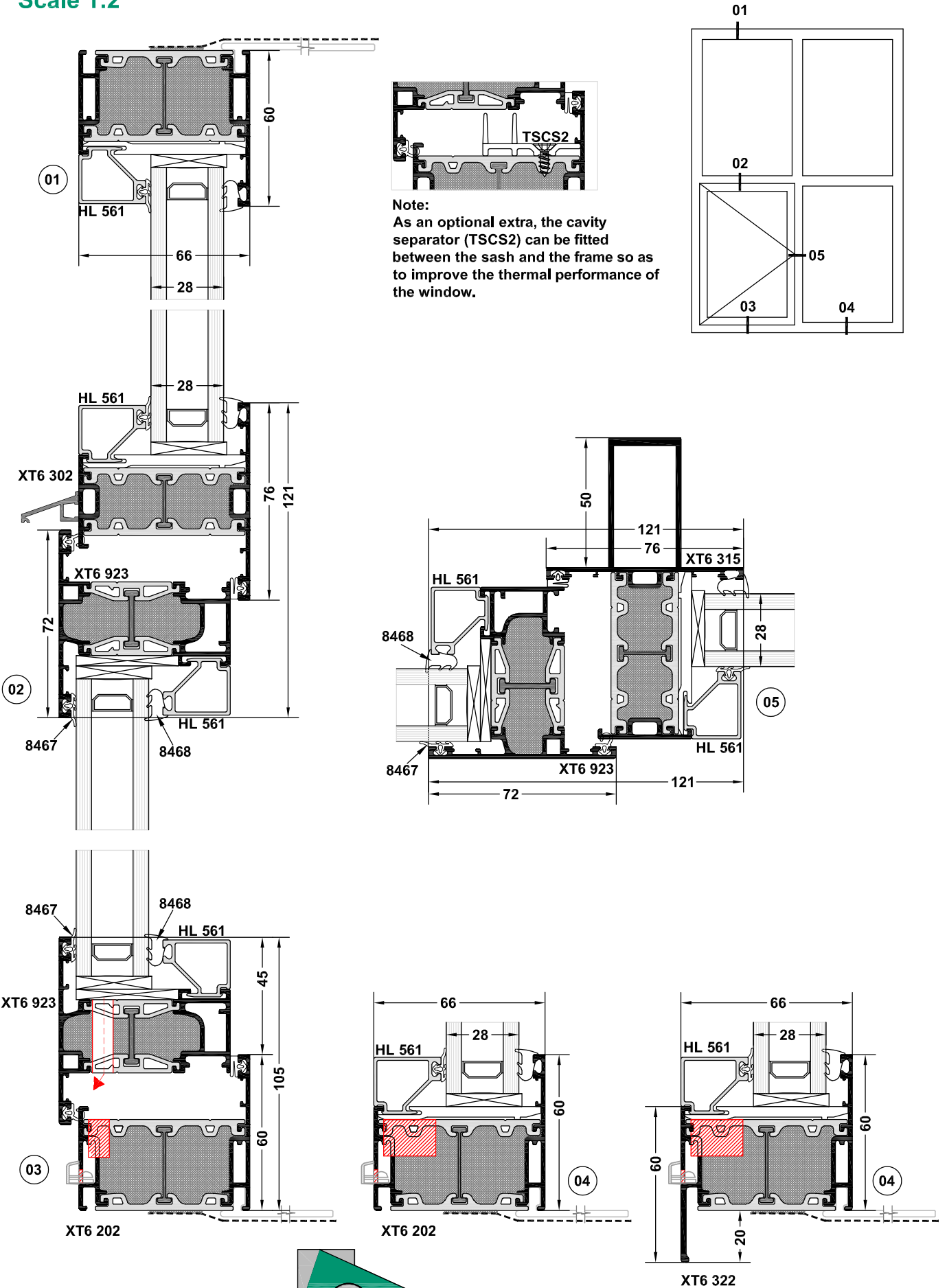
Note:
As an optional extra, the cavity separator (TSCS2) can be fitted between the sash and the frame so as to improve the thermal performance of the window.



XT66 CASEMENT & TILT TURN WINDOW SYSTEM

XT6 202 With XT6 923 (fixed light externally beaded)

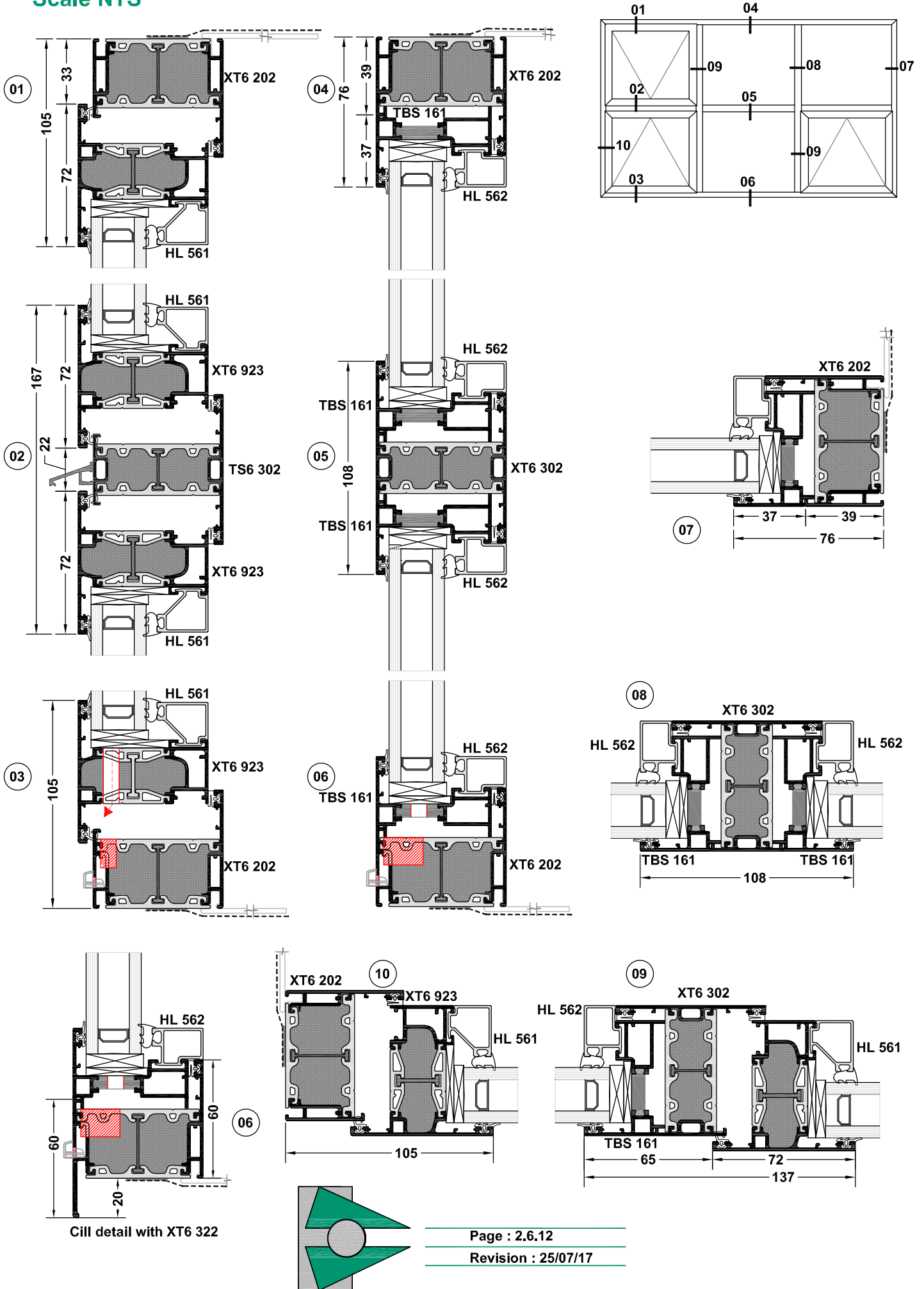
Scale 1:2



XT66 CASEMENT & TILT TURN WINDOW SYSTEM

XT6 202 with XT6 923 (Internally beaded window using TBS 161)

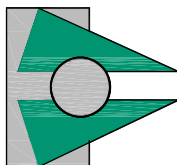
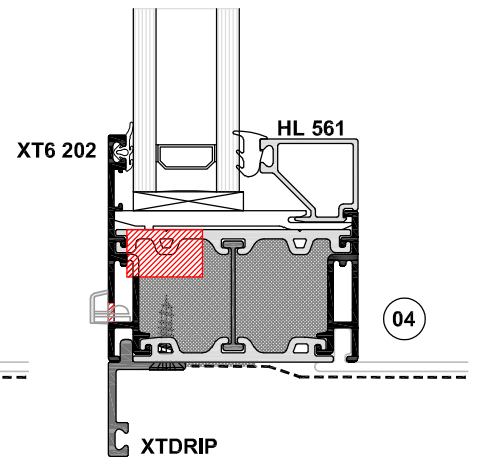
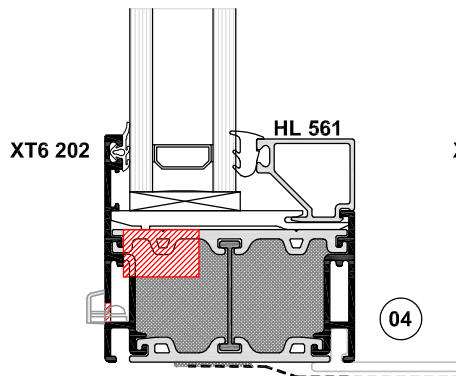
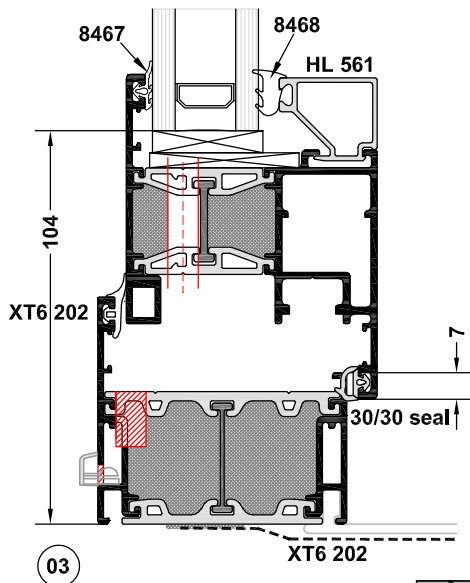
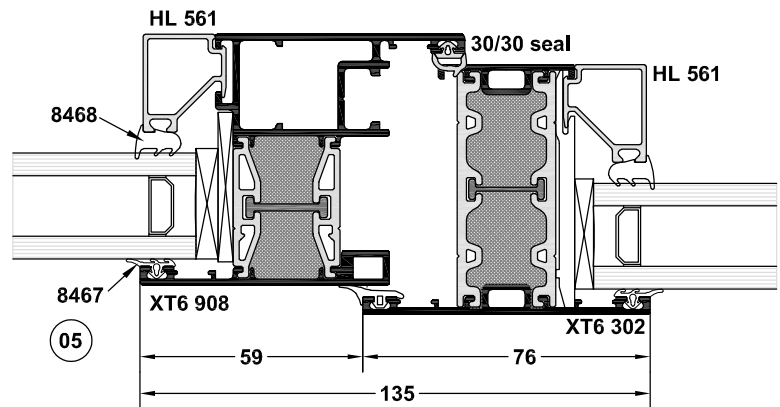
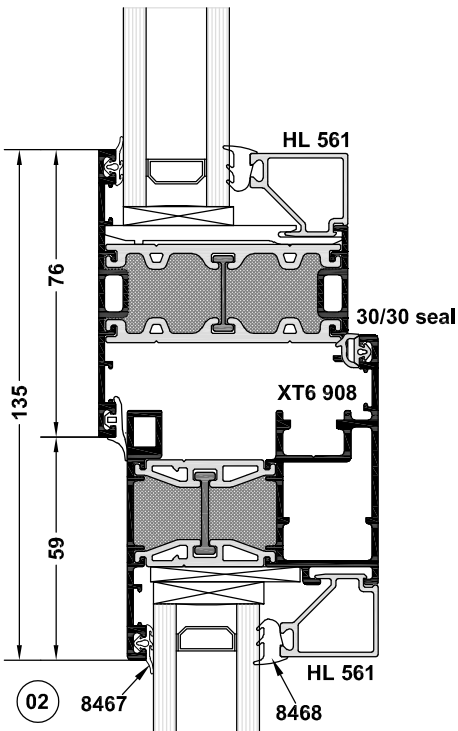
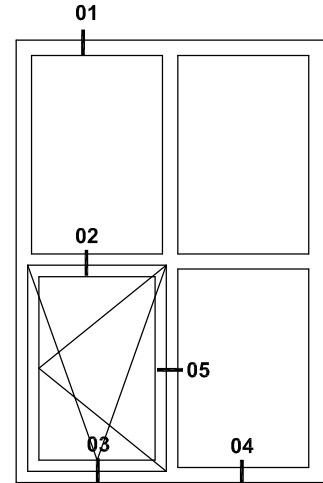
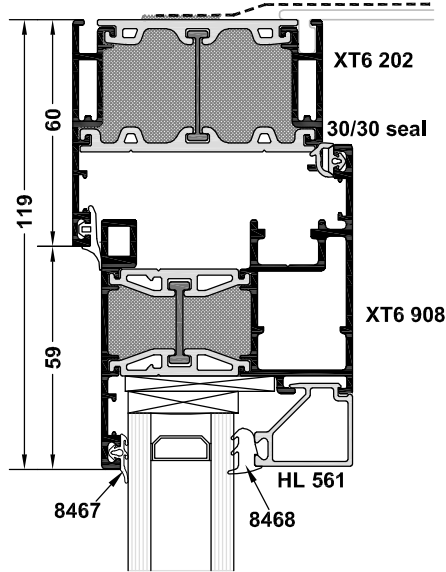
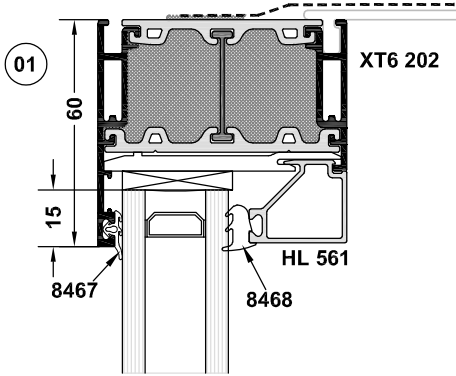
Scale NTS



XT66 CASEMENT & TILT TURN WINDOW SYSTEM

XT6 202 With XT6 908 (Tilt and turn, concealed gear)

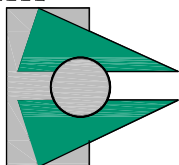
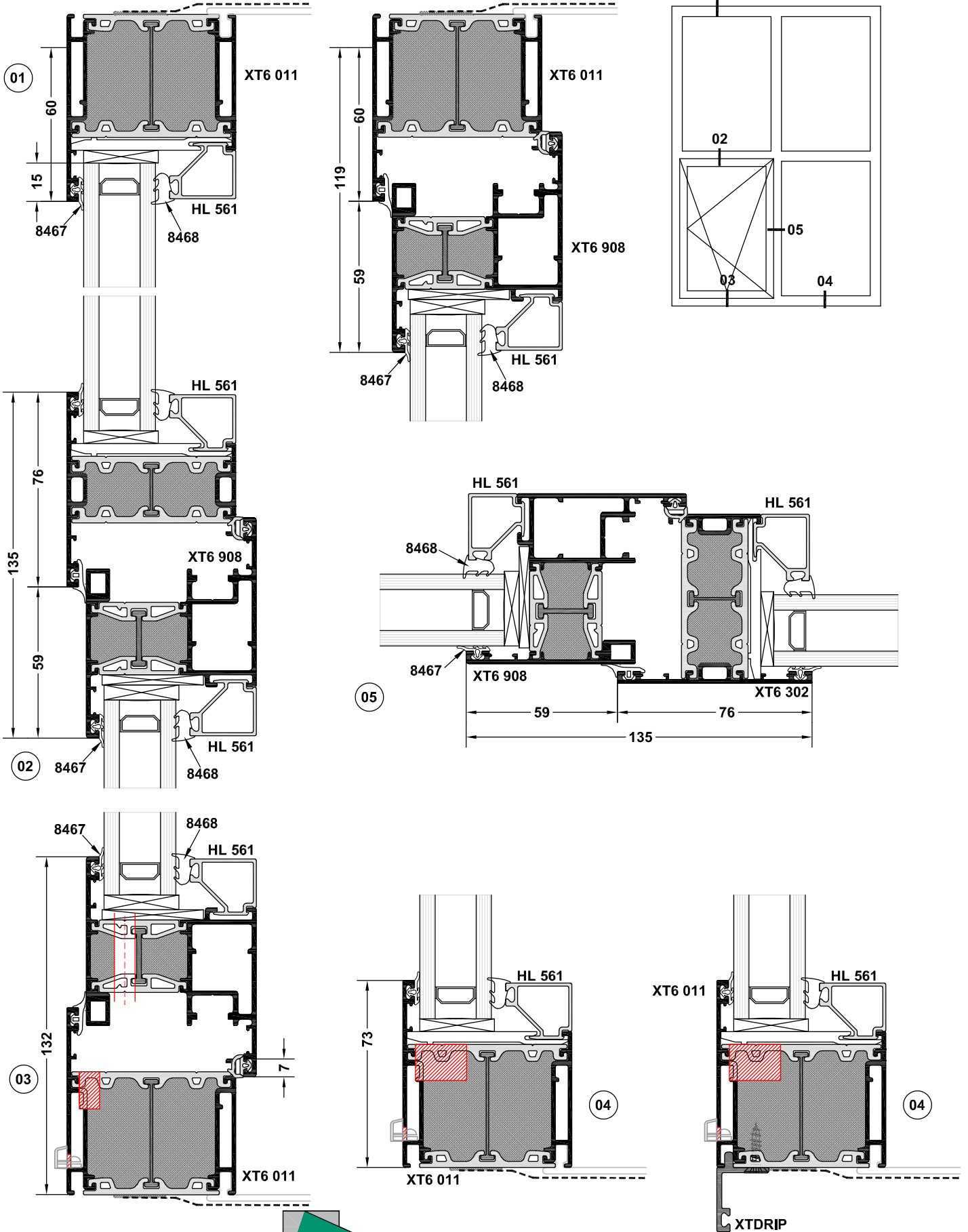
Scale 1:2



XT66 CASEMENT & TILT TURN WINDOW SYSTEM

XT6 011 With XT6 908 (Tilt and turn, concealed gear)

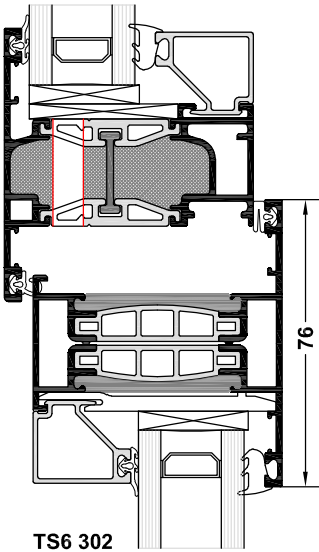
Scale 1:2



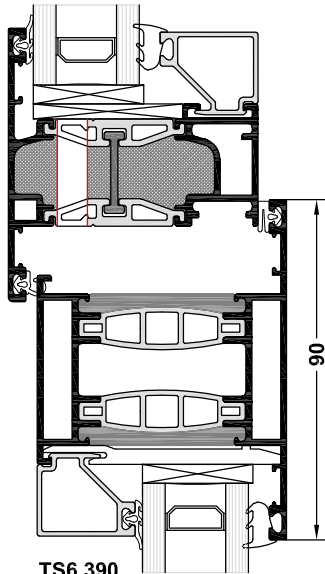
XT66 CASEMENT & TILT TURN WINDOW SYSTEM

Transom options & Add on details

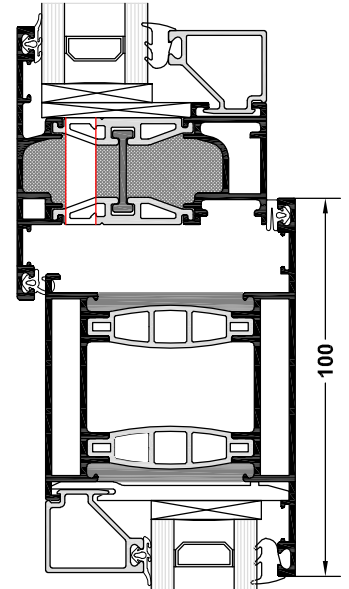
Scale 1:2



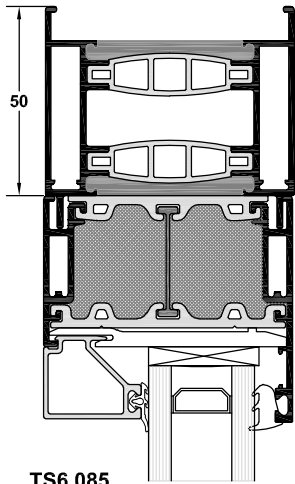
TS6 302
76mm Transom



TS6 390
90mm Transom

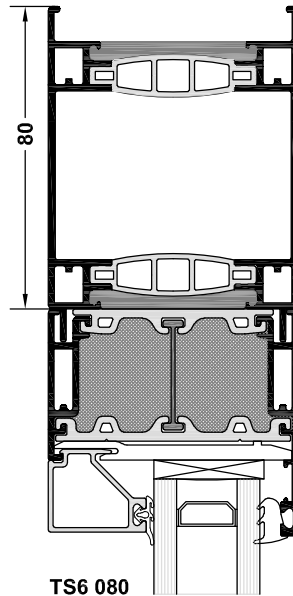


TS6 340
100mm Transom



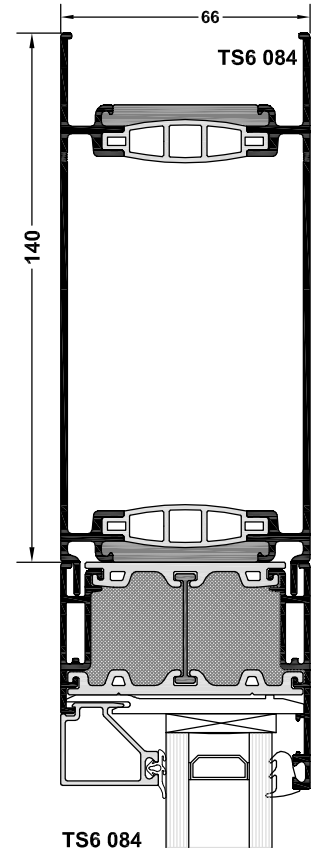
TS6 085

TS6 085
80mm extender
For extra height on
width or jambs



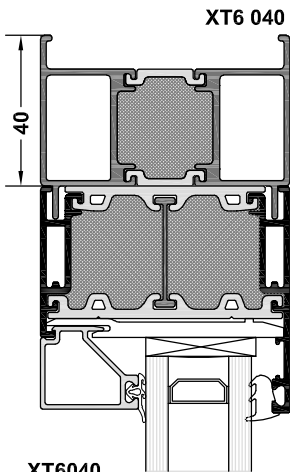
TS6 080

TS6 080
80mm extender
For extra height on width or jambs
or for fitting slot vents to the head
of a window



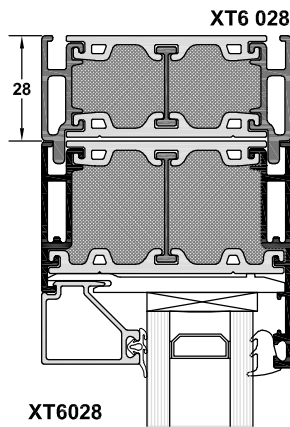
TS6 084

TS6 084
140mm extender
For extra height on width or
jambs or for fitting slot vents
to the head of a window



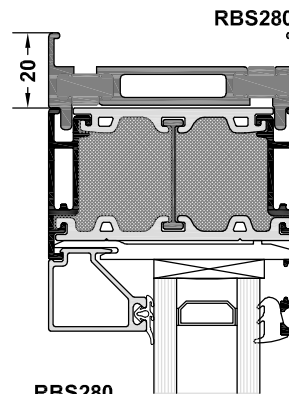
XT6 040

XT6040
40mm extender



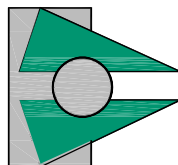
XT6 028

XT6028
28mm extender



RBS280

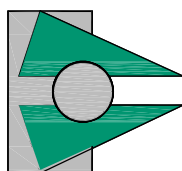
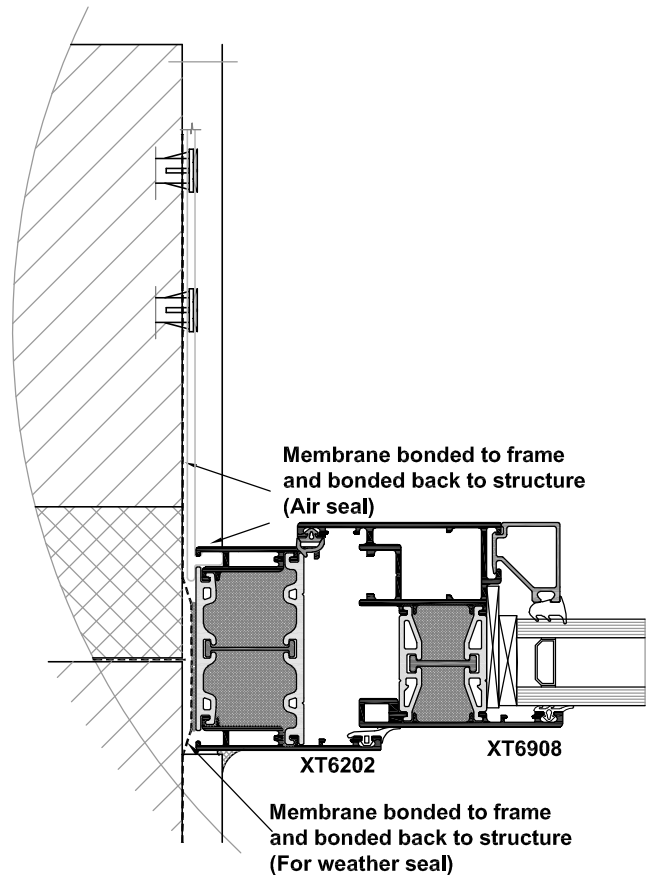
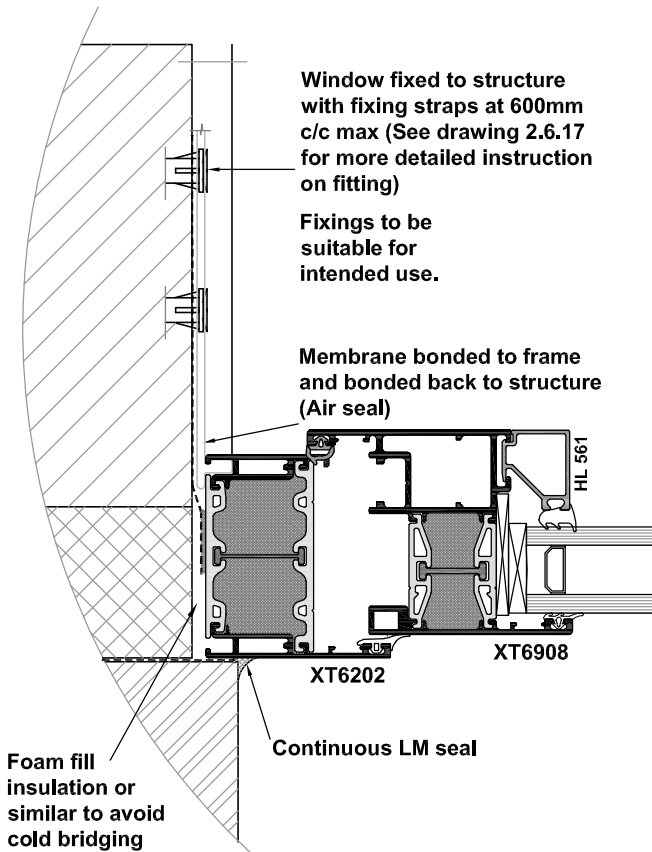
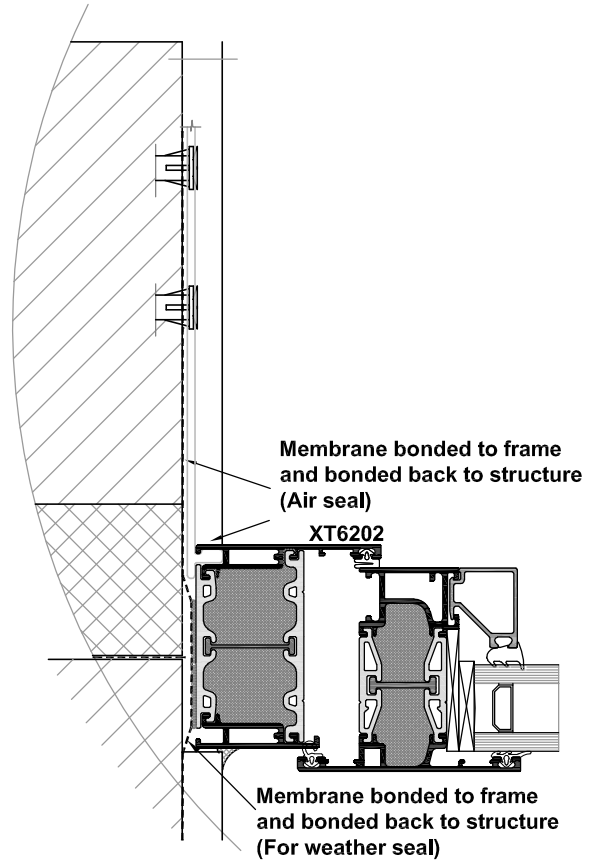
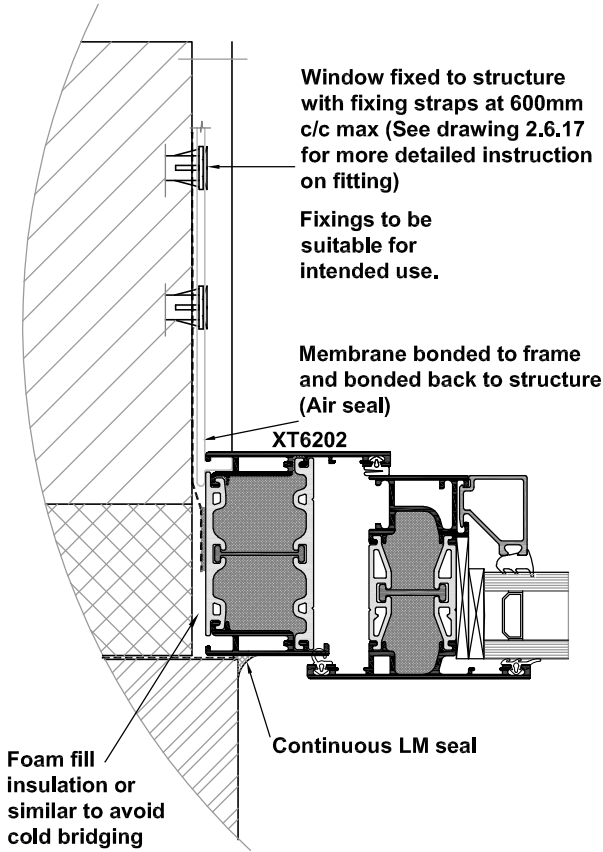
RBS280
20mm extender



XT66 CASEMENT & TILT TURN WINDOW SYSTEM

Detail into brick / blockwork.

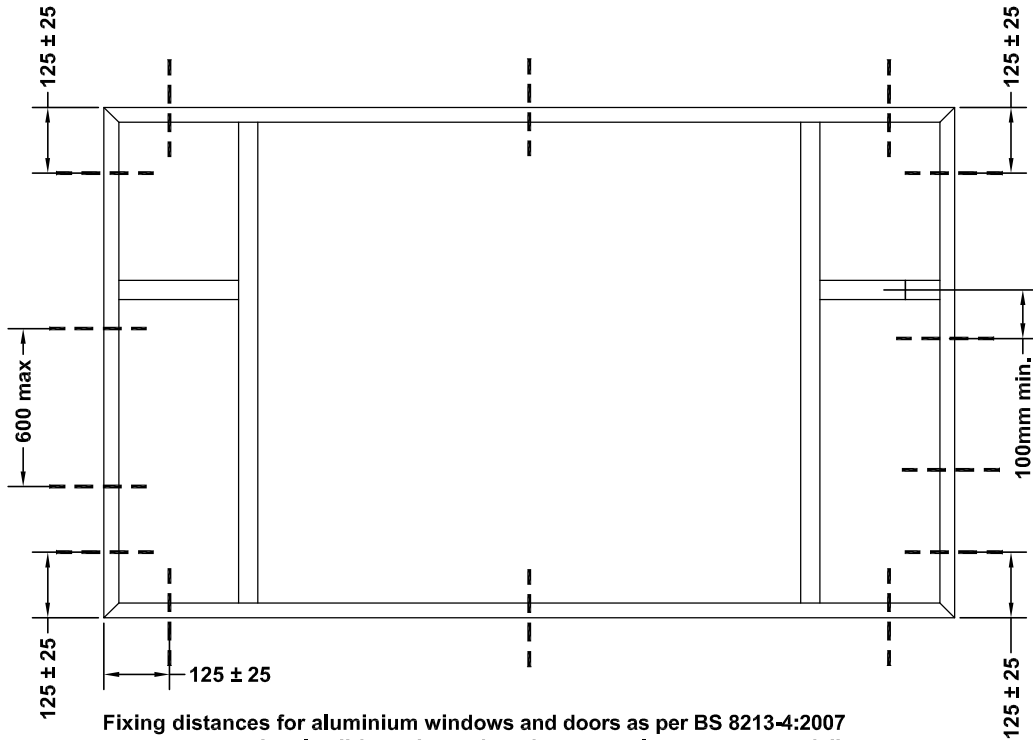
Scale NTS



XT66 CASEMENT & TILT TURN WINDOW SYSTEM

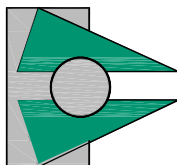
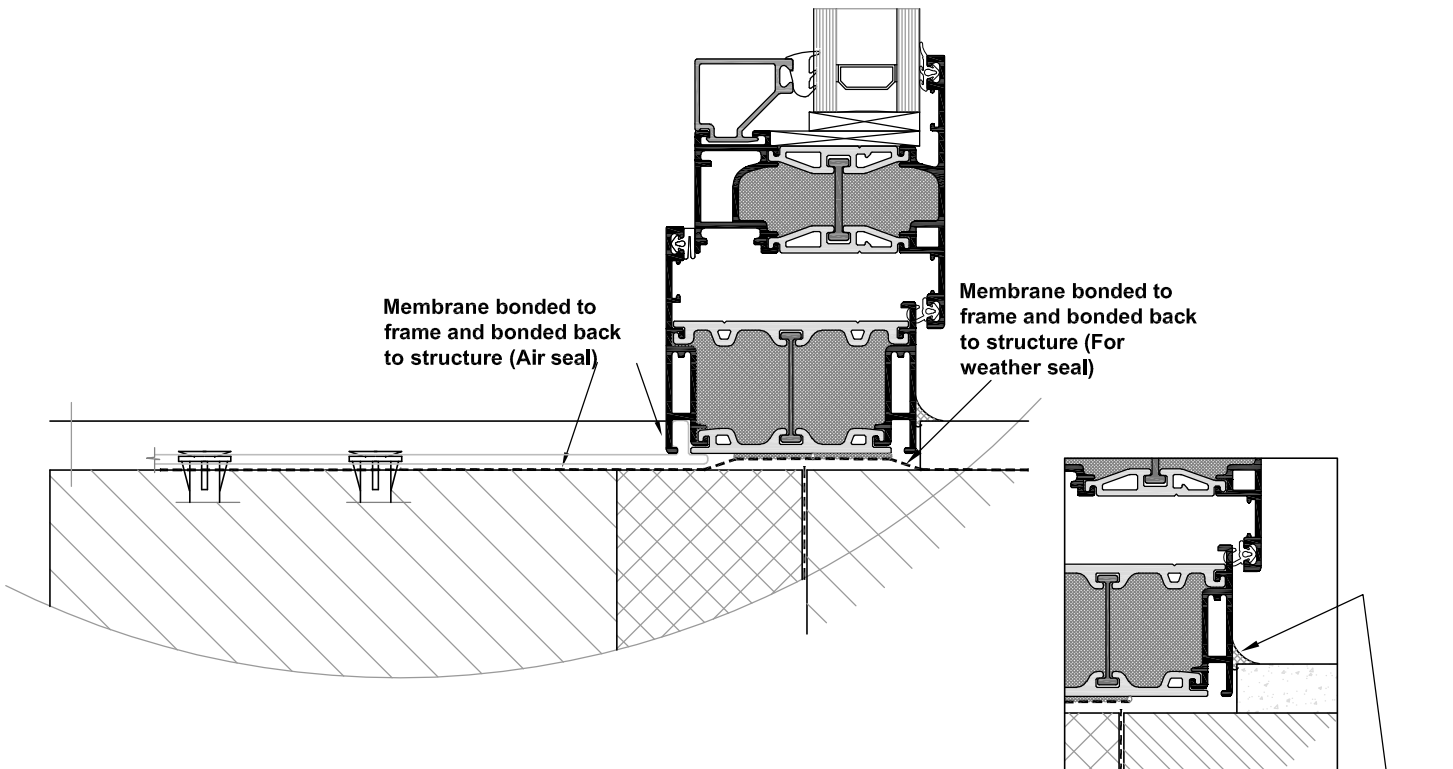
Fixing point locations.

Scale 1:2



Fixing distances for aluminium windows and doors as per BS 8213-4:2007
Wherever practicable all four sides of the frame should be secured as follows:

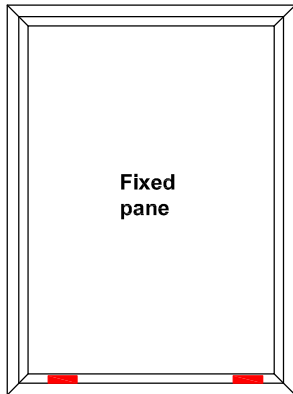
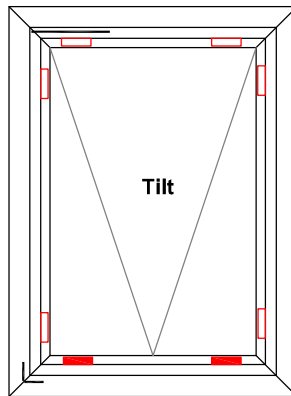
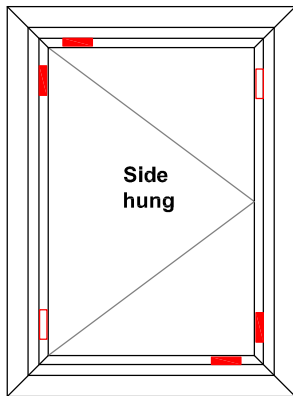
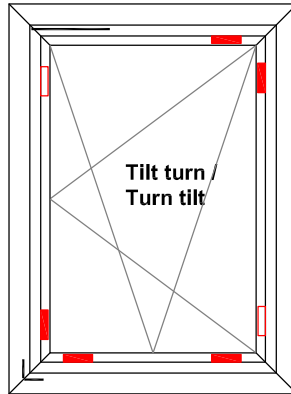
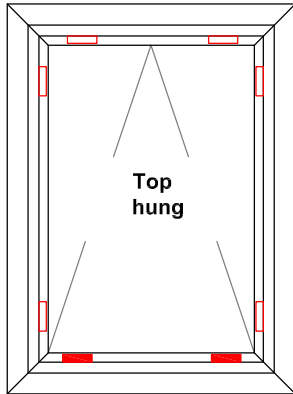
1. Corner jamb fixings should be between 100mm and 150mm from the external corner
2. No fixings should be less than 100mm from the centre line of a mullion or transom
3. Intermediate fixings should be at centres no greater than 600mm
4. There should be a minimum of two fixings on each jamb.
5. On windows over 1800mm wide, central head and sub sill fixings should be provided.



XT66 CASEMENT & TILT TURN WINDOW SYSTEM

Glass spacing

Scale NTS

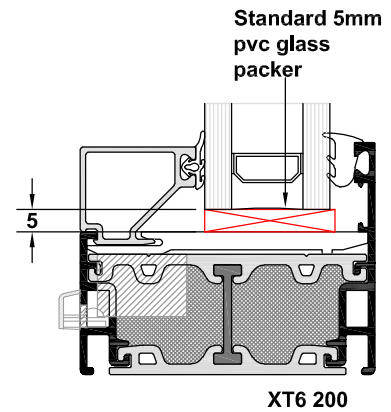


-  Indicates spacer only
-  Indicates load bearing packer

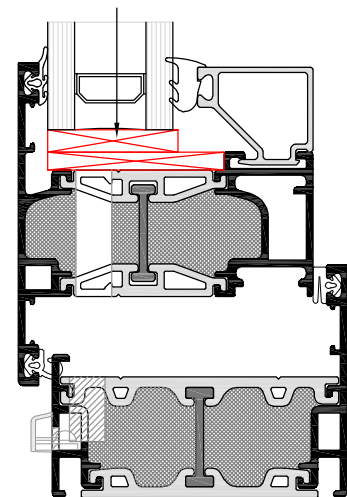
Note: Load bearing packers to be located close to gearing points, typically 160mm from edge.

Notes:

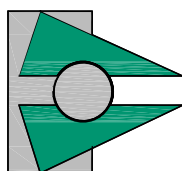
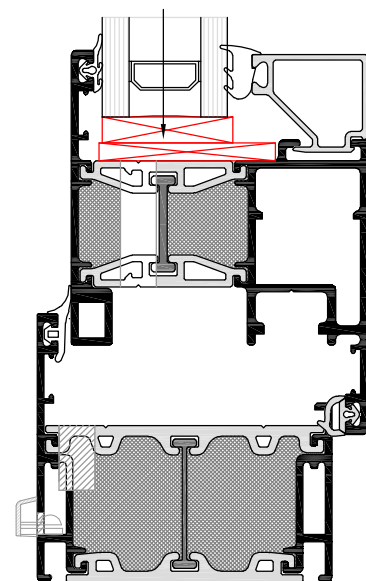
1. Ensure glass packers do not cover drainage slots and holes.
2. Silicone should not be used when fitting glass packers as excessive amounts may hinder drainage.
3. Packers to be of suitable material and fit for purpose.
4. Refer to BS 8213-4:2007, BS 6262 & BS 8000-7 for further recommendations.
5. In addition to the above any glass or insulating glass unit manufacturer's instructions should be followed.



Standard 5mm & 4mm pvc glass packer



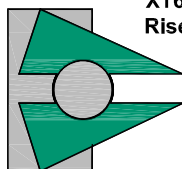
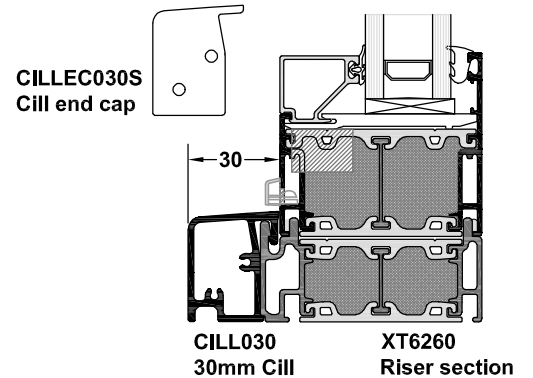
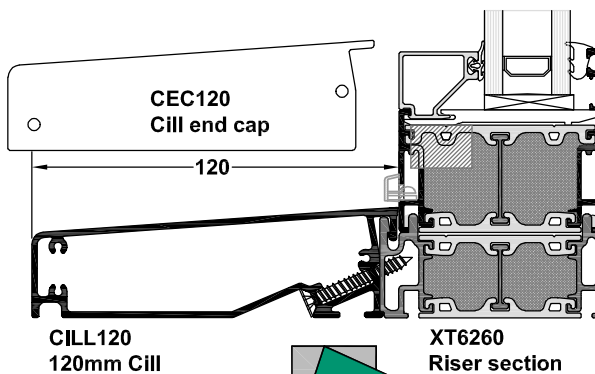
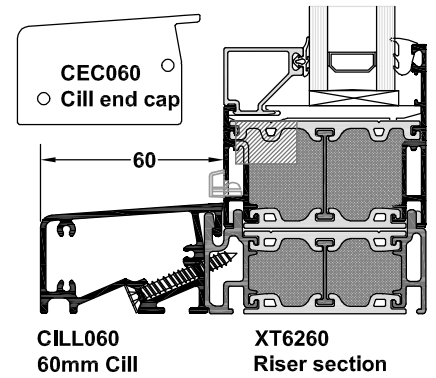
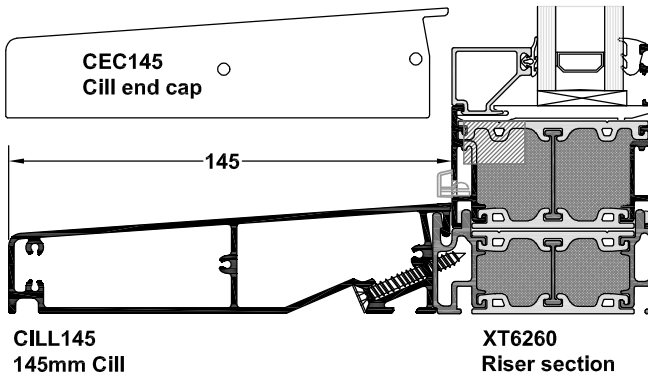
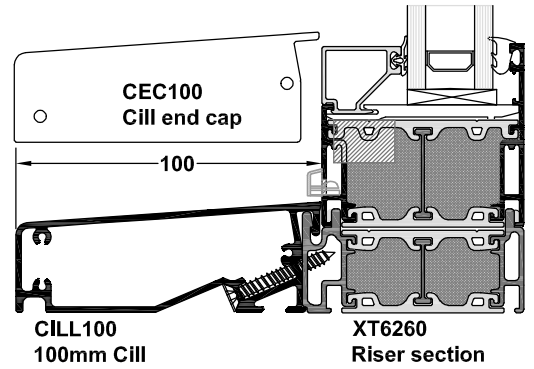
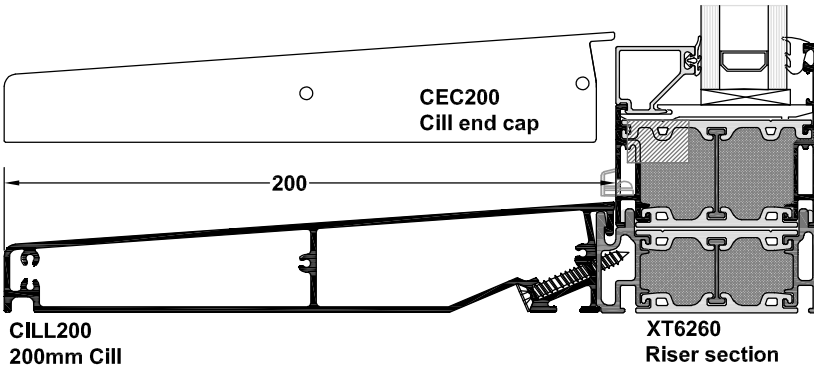
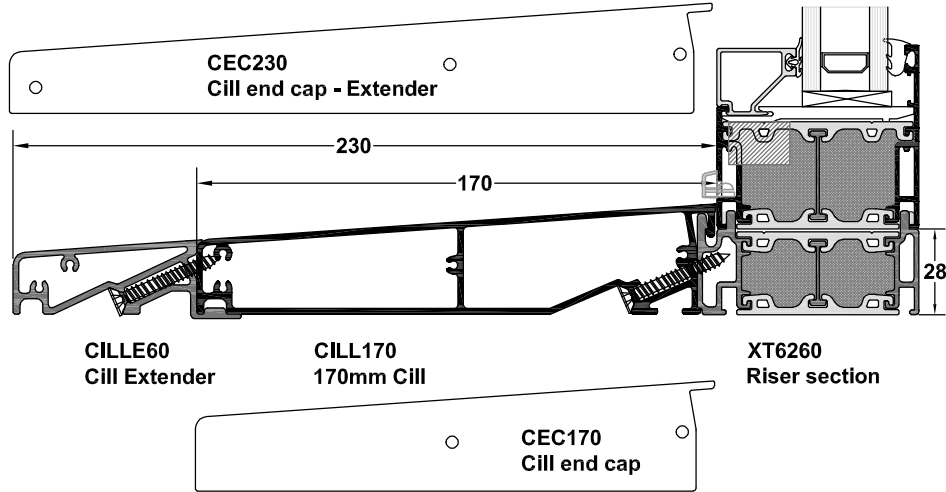
Standard 5mm & 4mm pvc glass packer



XT66 CASEMENT & TILT TURN WINDOW SYSTEM

Cill Options without drip

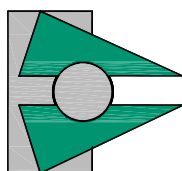
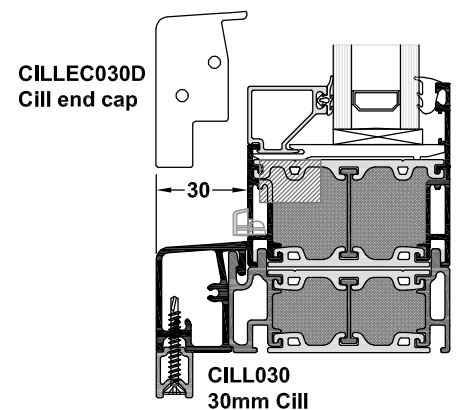
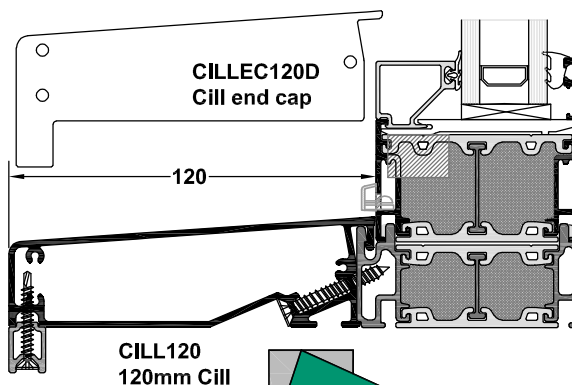
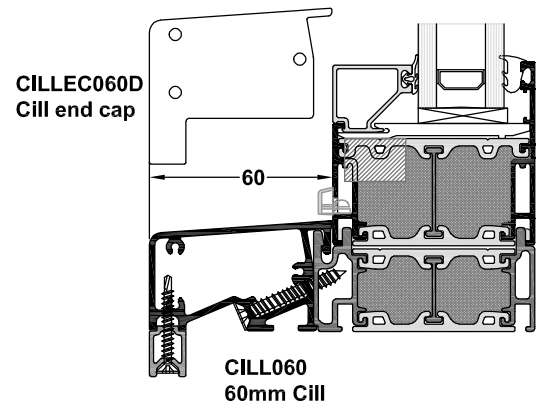
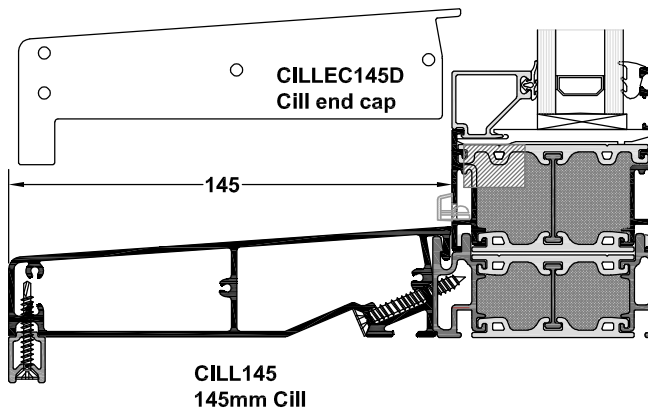
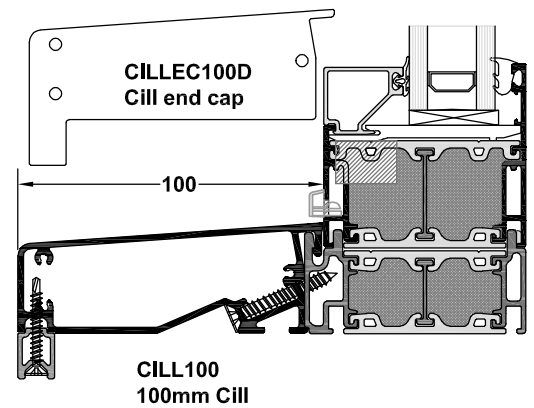
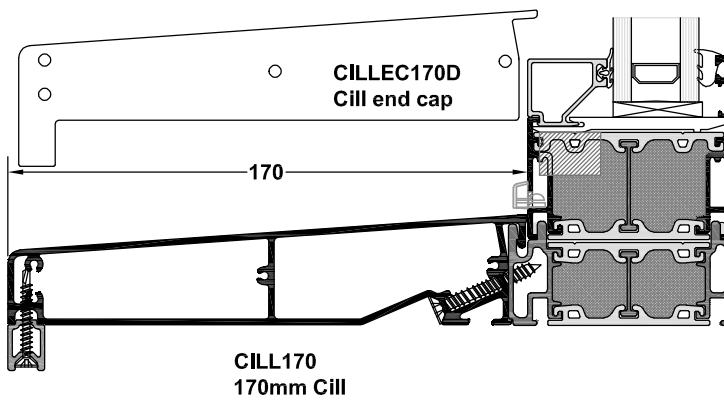
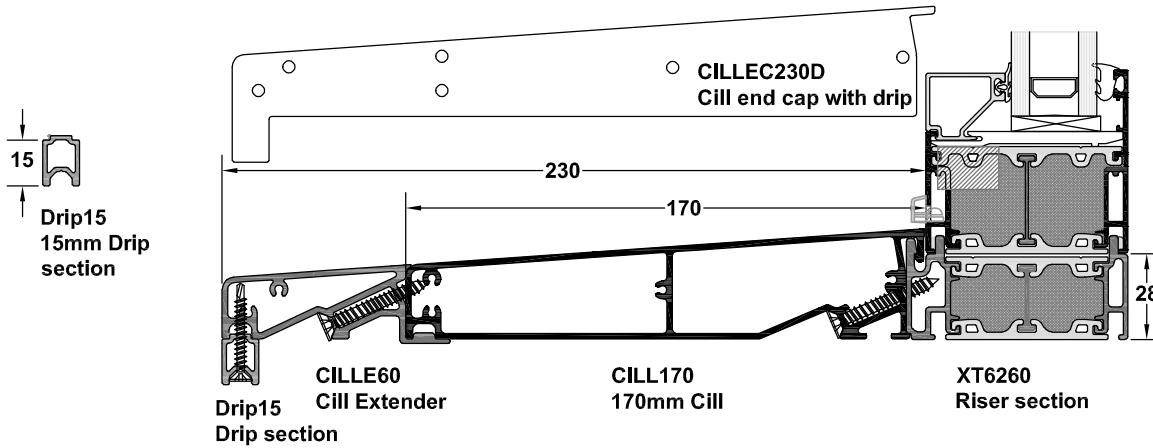
Scale NTS



XT66 CASEMENT & TILT TURN WINDOW SYSTEM

Cill Options with drip

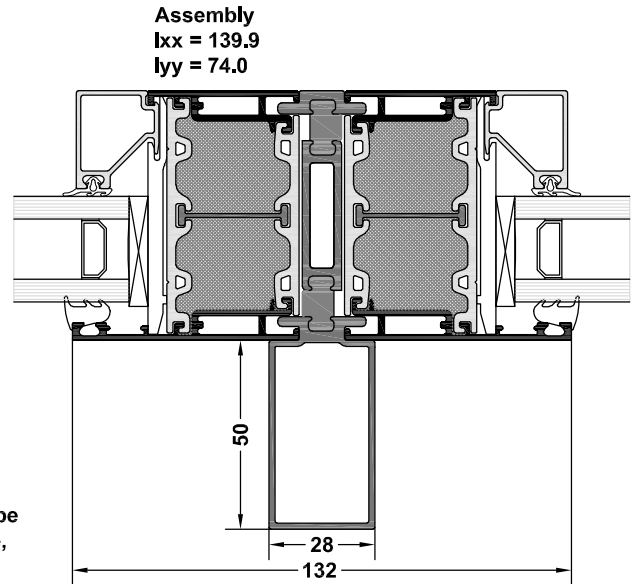
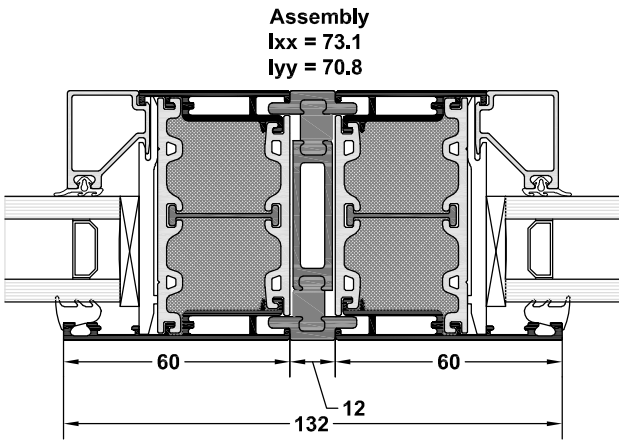
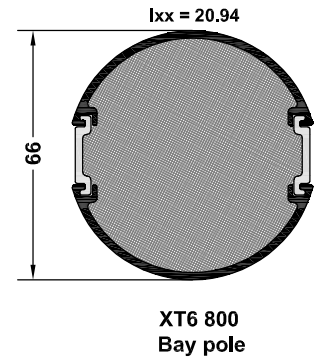
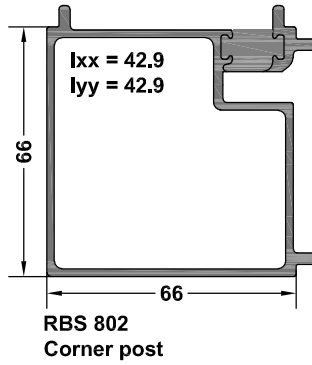
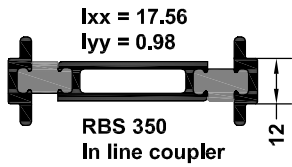
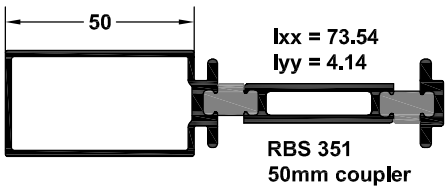
Scale NTS



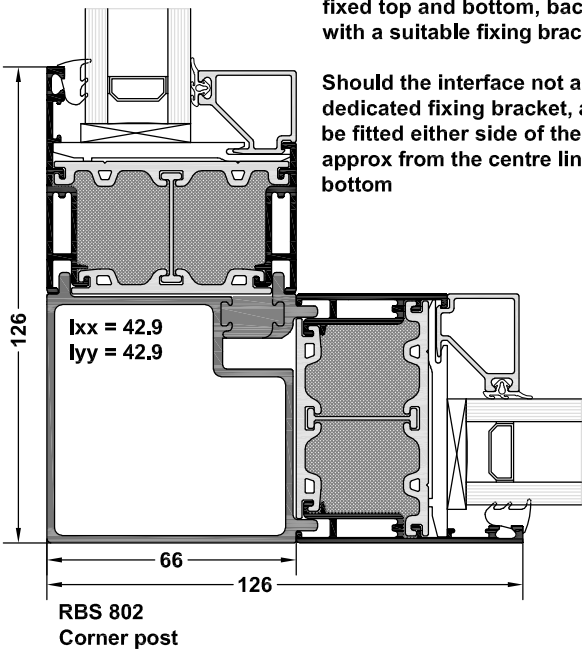
XT66 CASEMENT & TILT TURN WINDOW SYSTEM

Coupler and corner post options

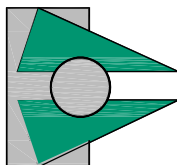
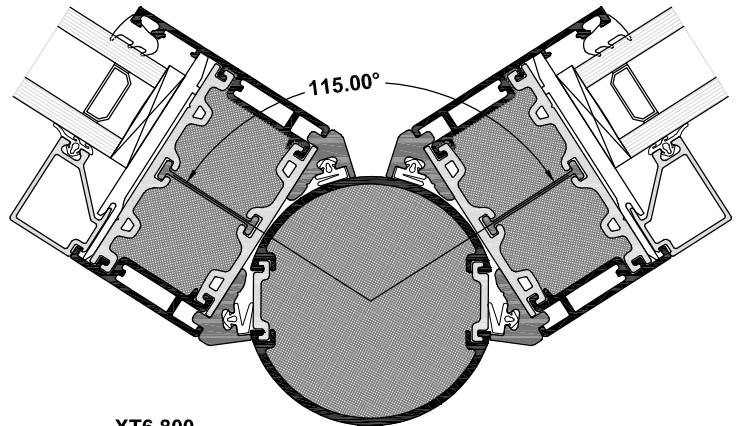
Scale 1:2



Note:
For structural stability the coupler should be fixed top and bottom, back to the structure, with a suitable fixing bracket.



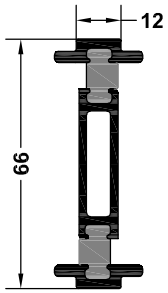
Should the interface not allow the use of a dedicated fixing bracket, a fixing strap should be fitted either side of the coupler, at 100mm approx from the centre line, both top and bottom



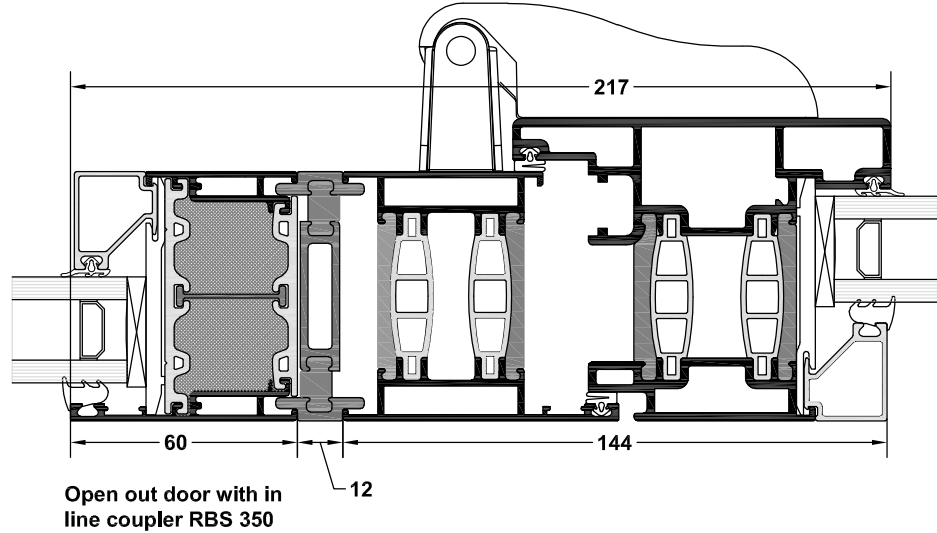
XT66 CASEMENT & TILT TURN WINDOW SYSTEM

XT66 coupled to TS66 door

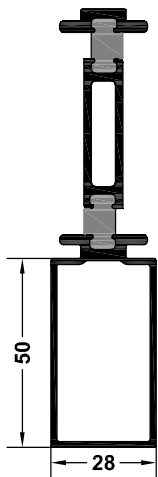
Scale 1:2



RBS 350
In line coupler
Ixx = 17.56
Iyy = 0.98

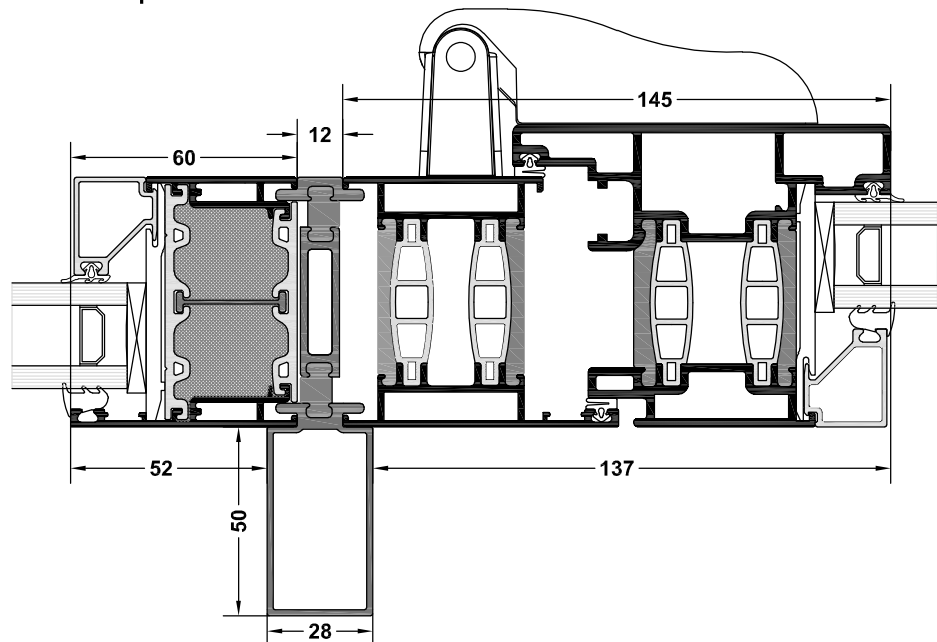


Open out door with in line coupler RBS 350

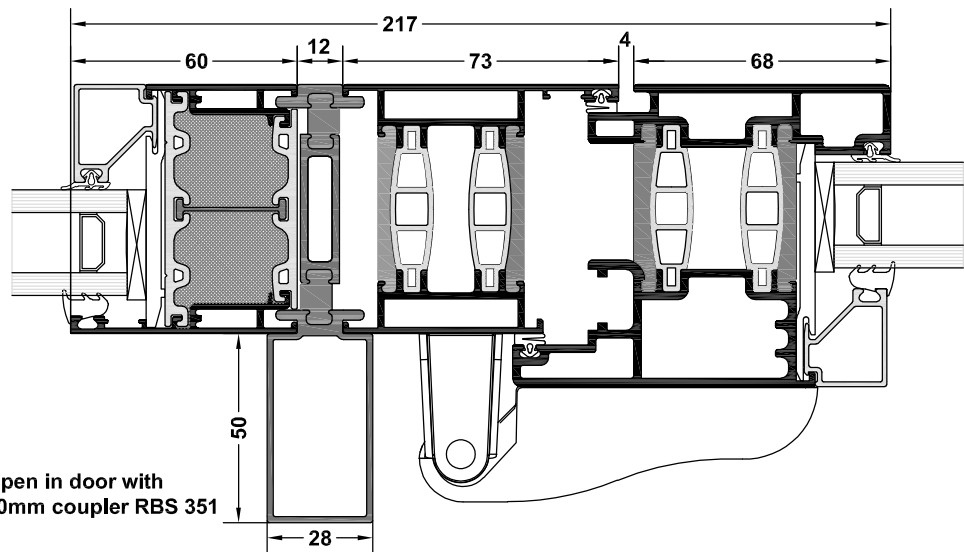


Ixx = 73.54
Iyy = 4.14

RBS 351
50mm coupler



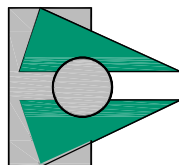
Open out door with 50mm coupler RBS 351



Open in door with 50mm coupler RBS 351

Note:
For structural stability the coupler should be fixed top and bottom, back to the structure, with a suitable fixing bracket.

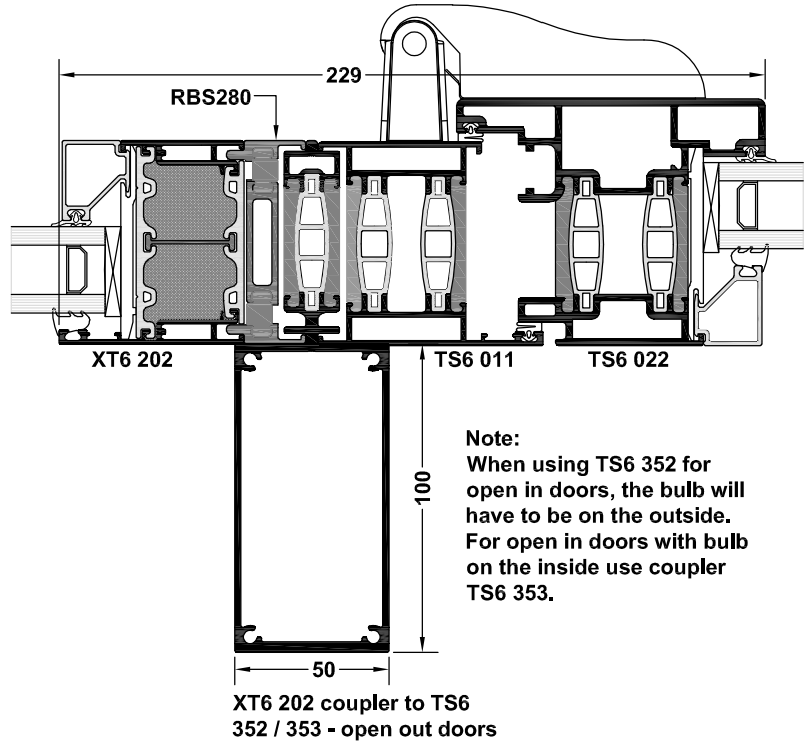
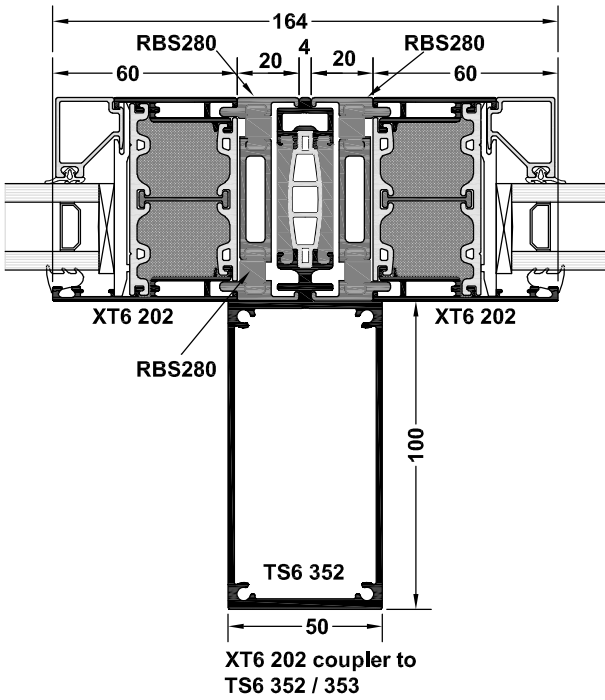
Should the interface not allow the use of a dedicated fixing bracket, a fixing strap should be fitted either side of the coupler, at 100mm approx from the centre line, both top and bottom



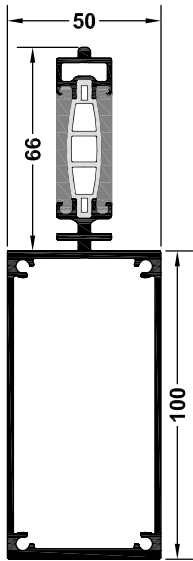
XT66 CASEMENT & TILT TURN WINDOW SYSTEM

Coupler details

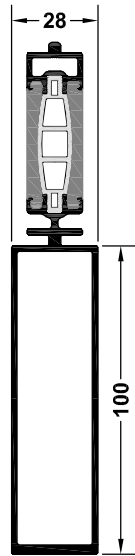
Scale 1:2.5



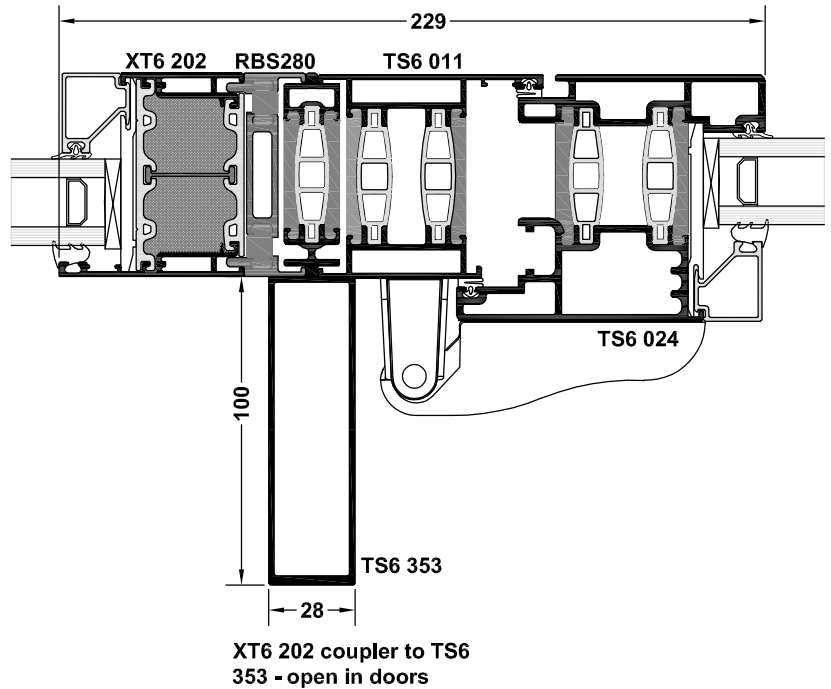
Note:
When using TS6 352 for open in doors, the bulb will have to be on the outside. For open in doors with bulb on the inside use coupler TS6 353.



TS6 352
100mm COUPLER
Ixx = 248.9 cm⁴
Iyy = 30.89 cm⁴

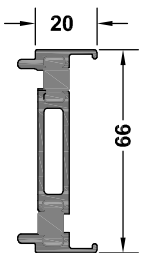


TS6 353
100mm slim COUPLER
Ixx = 185.65 cm⁴
Iyy = 7.38 cm⁴

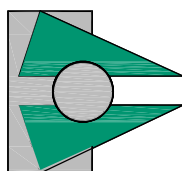


Note:
For structural stability the coupler should be fixed top and bottom, back to the structure, with a suitable fixing bracket.

Should the interface not allow the use of a dedicated fixing bracket, a fixing strap should be fitted either side of the coupler, at 100mm approx from the centre line, both top and bottom



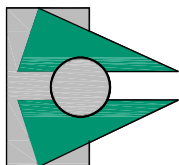
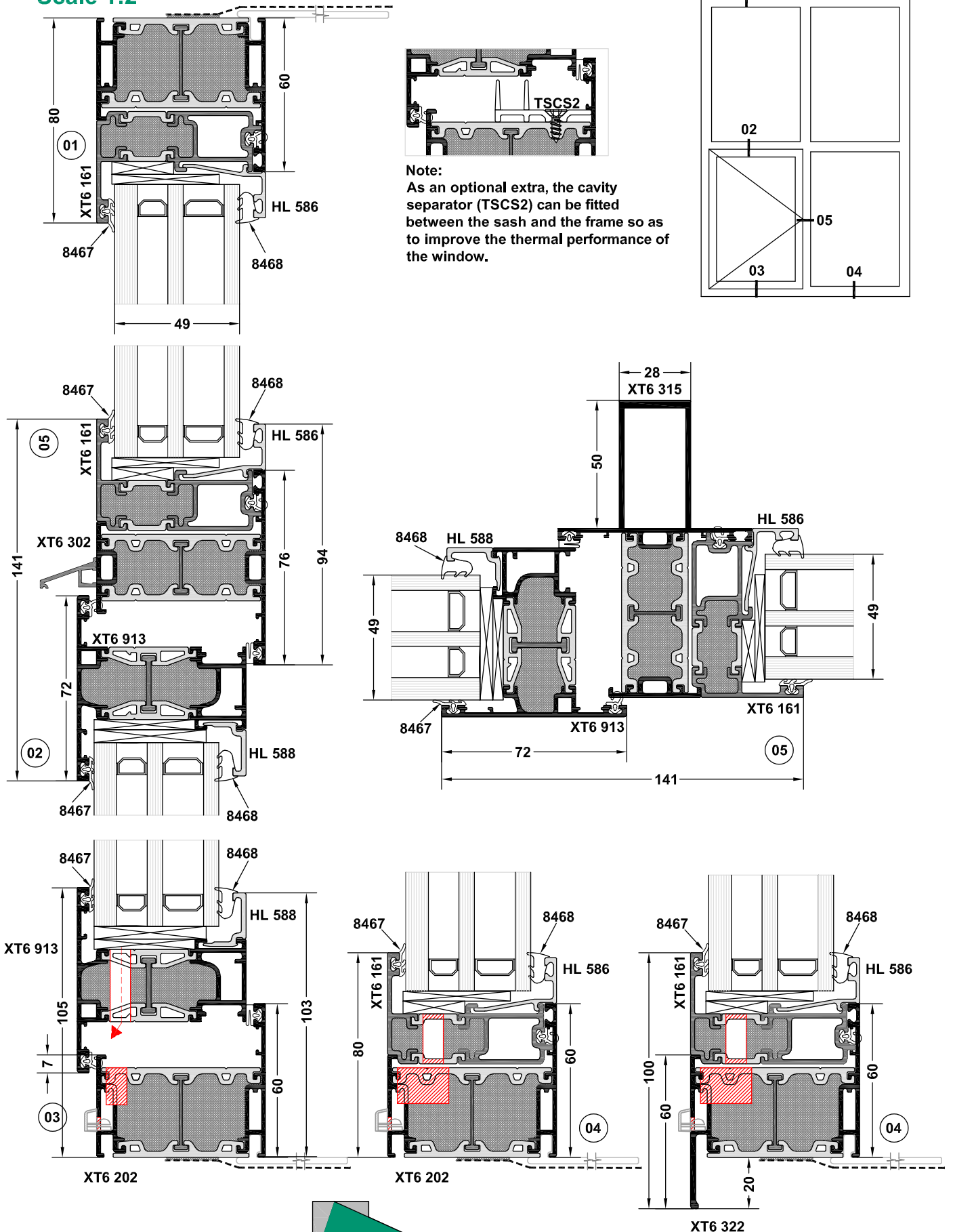
RBS280
20mm add on & Adapter
for coupling XT frames to TS Bulb couplers



XT66 CASEMENT & TILT TURN WINDOW SYSTEM

XT6 202 With XT6 913 - 48.8mm glazing (fixed light internally beaded)

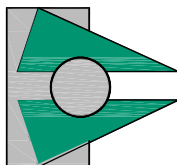
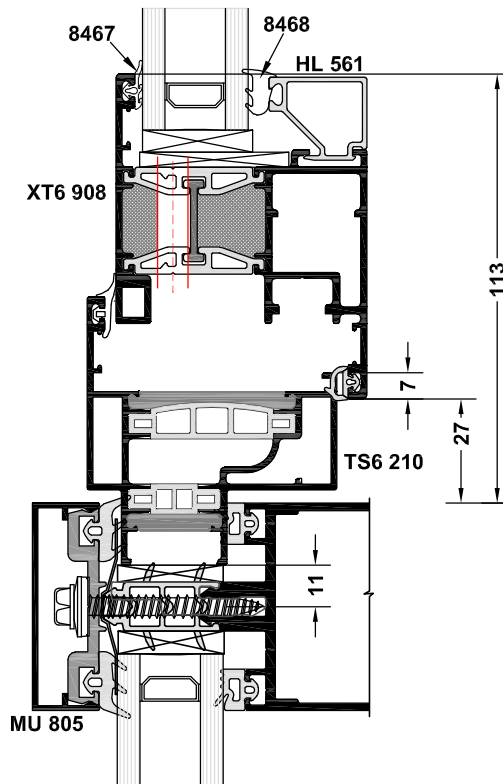
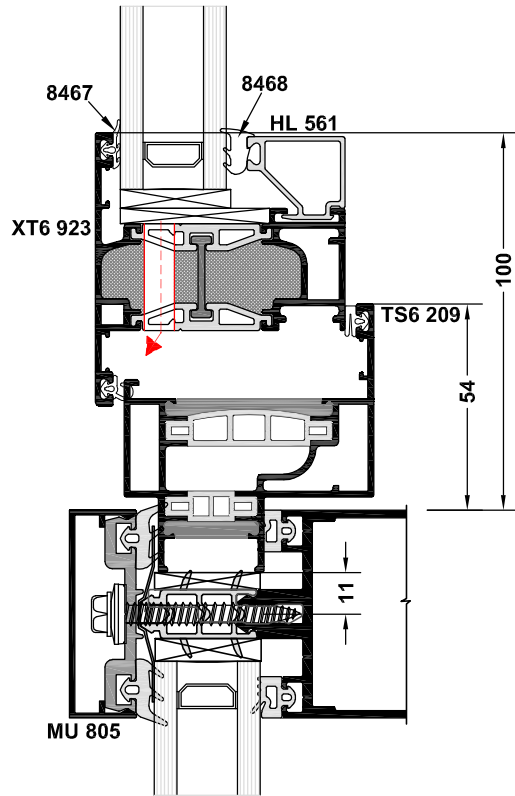
Scale 1:2



XT66 CASEMENT & TILT TURN WINDOW SYSTEM

Curtain wall insert details

Scale 1:2

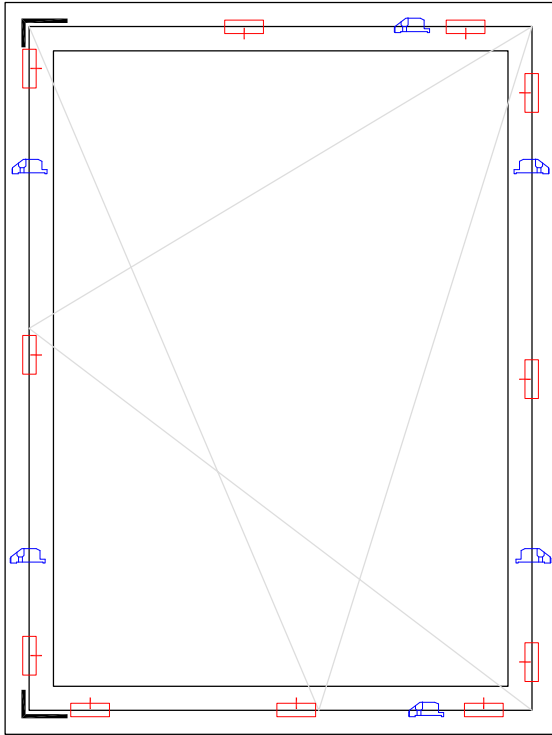


XT66 CASEMENT & TILT TURN WINDOW SYSTEM

Sash Limitations

Note:

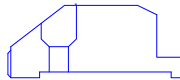
Information on max sizes is based on Siegenia concealed tilt and turn gear, reference axxent 24+



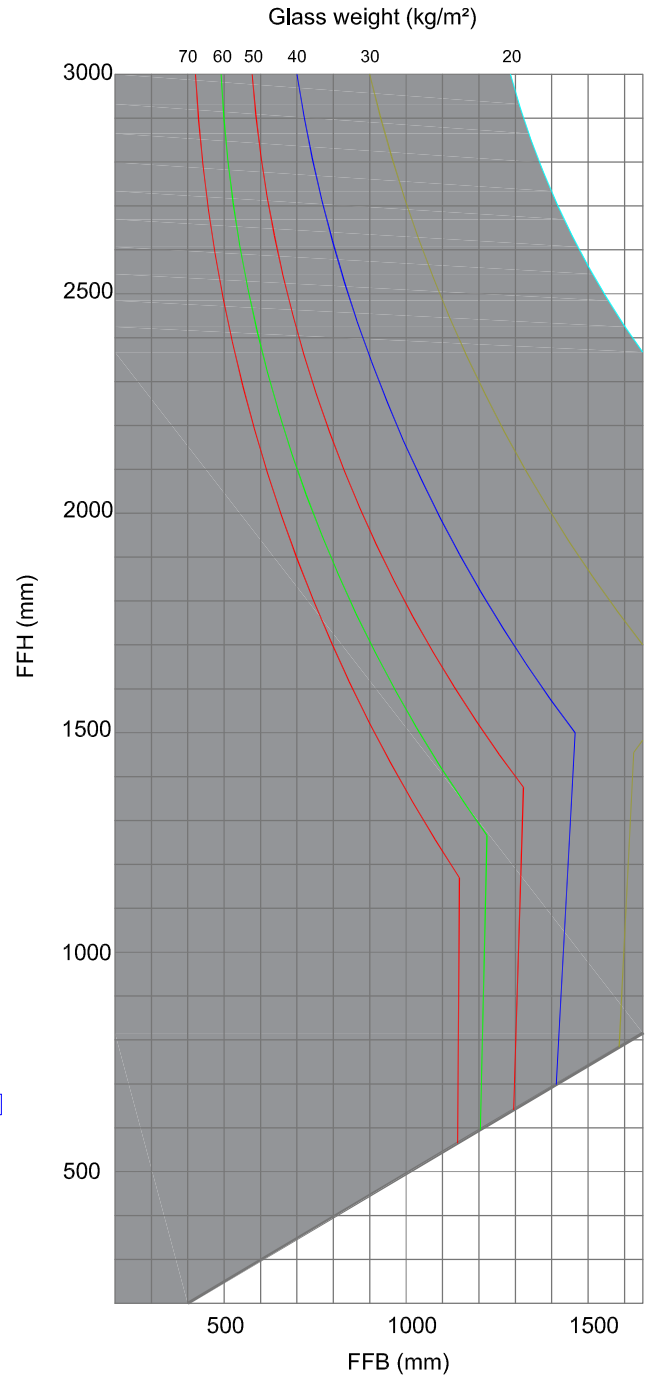
Setout of locking points and guide blocks

GUIDE BLOCKS:

Guide blocks to be fitted as shown above, 2 on the lock stile, 2 on the hinge stile and one each on the top and bottom approximately 200 from the corner.



Locking point to be positioned on each side of the corner and as close to the gearing as possible.



FFH = Sash rebate height
FFB = Sash rebate width

Shaded area is permissible range

The following values must be adhered to for all applications:

- a. Max width to height ratio $Q w/h < 2.0$ (Sash rebate width must not exceed 2.0 times the sash rebate height)
- b. Profile weight $PW \leq 3.25$ kg/lm.
- c. Max sash weight of 100kg's.
- d. Minimum sash with wiht axxent24 gear is 420mm.

SECTION WEIGHTS:

Allow 2.34 kg/lm for XT6 908 & HL561 bead.

