

## XT66 Rebated door system

The AMS XT66 rebated door system offers unique patented architectural design features combined with a market leading thermal performance. This door system combines all the latest technology in door design and contains a polyurethane foam thermal barrier to ensure all the requirements of building regulations and project specifications are exceeded.

### Introduction:

XT66 rebated door system is 66mm in depth and can be glazed internally or externally with double & triple glazed units from 28mm to 48mm. It is available in dual colour as standard and offers a wide range of midrail and threshold options. Various additional profiles can be designed, and incorporated, allowing architects achieve project specific designs. The system is available with heavy duty doors sash options to achieve higher and wider door leaf combinations. On double doors the system can have a rebated meeting stile offering a master and slave option. The system offers internally beaded option on all doors whether open in or open out, can be dual or single colour and can also have 'decoral' wood finishes applied.

Not only does our XT66 rebated door system offer CENsolutions 'Gold' standard certification but it also offers 'Secured by Design'.

### Scope:

This specification defines materials, fabrication, paint finishes, and size limitations for our rebated door system.

### Materials:

Aluminium profiles are extruded from aluminium alloy 6063 T5 and T6 complying with BS EN 12202-2:2008 and BS EN 755: 1 – 9.

### Paint Finishes

#### Polyester Powder Coatings:

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

#### 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 polyurethane powder coated with a woodgrain effect paint finish to BS EN 12206-1:2004. Woodgrain finishes include:

Chestnut, Cinnamon, Dark Oak, Finest Black, Golden Oak, Knotted Pine, Mahogany, Natural Maple, Natural Oak, Natural Oregon, Oregon, Raw Teak, Rosewood, Teak, Wengen Walnut, Mandal Maple, Winchester Oak, Worn Ash, Burnt Oak, Barn Oak, Truffle Oak, Mid Oak and Teak Softwood

Most Decoral colours are UV stable, but some are not recommended for outdoor use. Please consult AMS prior to order.

#### 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 are 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 in accordance with current standards & Building Regulations.

## Installation:

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

## Door Thresholds

AMS offer several door threshold options. All door threshold details are contained in our technical manuals.

In most common commercial applications it is required that DDA legislation be conformed with and this can be achieved with AMS low-rise thresholds.

## Opening Door – Side Hung Open In or Open Out

Maximum Opening Door Height:	2400mm
Maximum Opening Door Width:	1300mm
Maximum Opening Door Weight:	100KG (depends on hinge selection & glass spec.)



## 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 BS 6375-1: 2015 for low rise applications.

## Performance:

Tested to BS 6375-1 2015 & Pas 24:2016.  
Air Permeability – Class 4, 600 Pa.  
Water Tightness – Class AE750, 750 Pa  
Wind Resistance – Class E2400C, 2400 Pa

## Thermal Performance:

For system U-values contact AMS technical department. U-values given below are based on a single door 1.23m x 2.18m high with a midrail and a double door 2.0m wide x 2.18m high fully glazed with no midrail. Glass psi value taken as 0.05 for double glazing and 0.04 for triple glazing.

All U-values based on threshold option A ( frame all-around).

Door, 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 rating of window and doors systems . This ensures correct methodology for calculating the thermal performance of fenestration products.

Glass U-value:	0.5 W/m <sup>2</sup> K	1.0 W/m <sup>2</sup> K	1.2 W/m <sup>2</sup> K
<b>Single Door U-value:</b>	<b>1.09 W/m<sup>2</sup>K</b>	<b>1.43 W/m<sup>2</sup>K</b>	<b>1.56 W/m<sup>2</sup>K</b>
<b>Double door U-value :</b>	<b>1.06 W/m<sup>2</sup>k</b>	<b>1.41 W/m<sup>2</sup>K</b>	<b>1.54 W/m<sup>2</sup>K</b>

## Security:

The AMS XT66 rebated door has passed the security test PAS 24:2016, enhanced security performance requirements for window and door sets. To conform to this standard the door must be fitted with our SBD lever/lever handle, heavy duty Ingenious door locks, AMS security cylinder and either our Loira+, Fab N fix or SFS door hinges. All doors are to be internally glazed.

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- 3.4.06 : Sash limitations - SFS hinge
- 3.4.07 : Sash limitations - Loira+ hinge
- 3.4.08 : Sash limitations - Fab&Fix hinge
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- 3.4.11 : Glazing options - XT6 022
- 3.4.12 : Glazing options - XT6 026
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- 3.4.14 : Threshold options - C & D
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- 3.4.25 : Clear opening dimensions - Fab&Fix hinge
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- 3.4.28 : Standard details - Double door, open in
- 3.4.29 : Standard details - Double door with side lights, open out
- 3.4.30 : Standard details - Single door with a top light
- 3.4.31 : Standard details - Door integrated into curtain wall
- 3.4.32 : Standard details - Louvre door, open out
- 3.4.33 : Standard details - Meeting stile & Plank door
- 3.4.34 : Standard details - Dormer overhead door closer

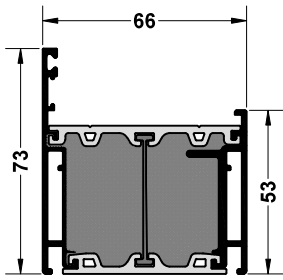
**AMS Ltd. Wallingstown, Little Island, Co. Cork:**

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

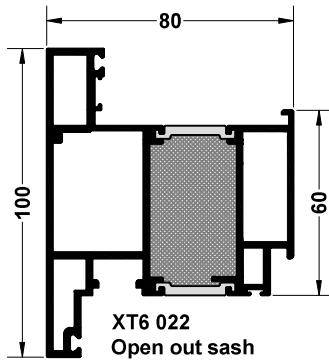


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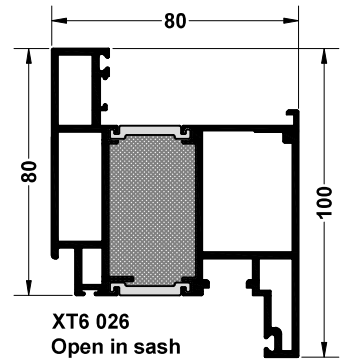
## Profile listing



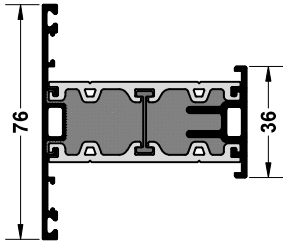
**XT6 011**  
Frame



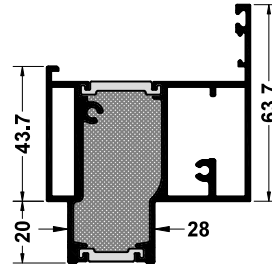
**XT6 022**  
Open out sash



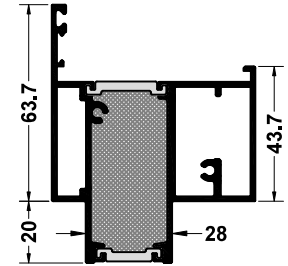
**XT6 026**  
Open in sash



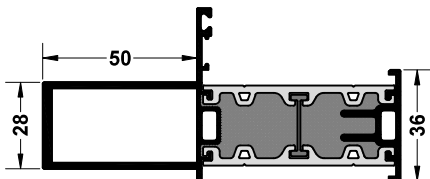
**XT6 302**  
Mullion / Transom



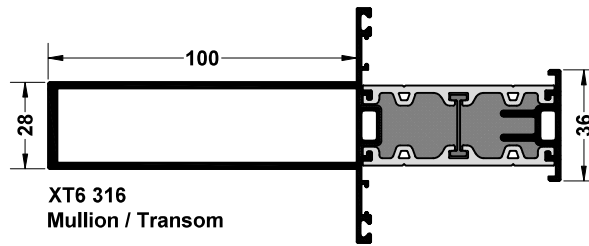
**XT6 211**  
Curtain wall insert  
for open out doors



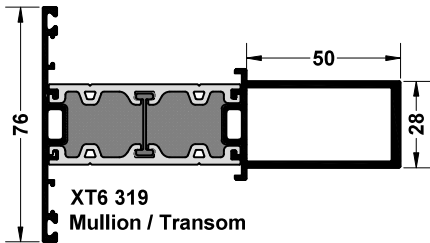
**XT6 212**  
Curtain wall insert  
for open in doors



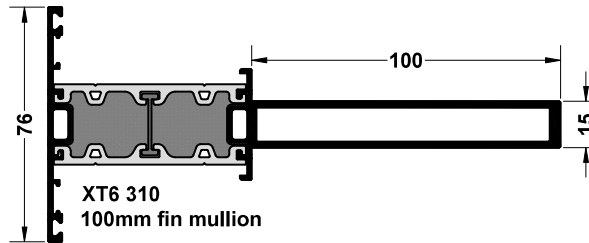
**XT6 315**  
Mullion / Transom



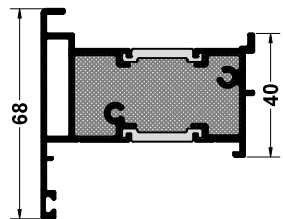
**XT6 316**  
Mullion / Transom



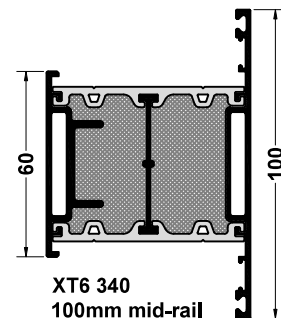
**XT6 319**  
Mullion / Transom



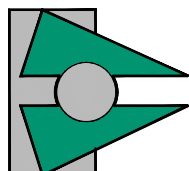
**XT6 310**  
100mm fin mullion



**XT6 030**  
Rebated meeting stile

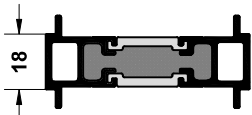


**XT6 340**  
100mm mid-rail

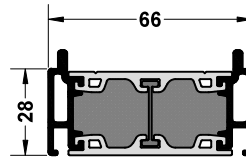


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## Profile listing



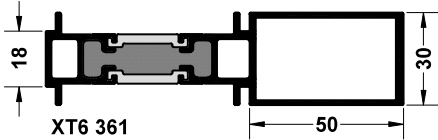
**XT6 360**  
In line coupler



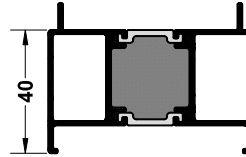
**XT6 028**  
28mm add on



**HL 561**  
28mm glazing bead



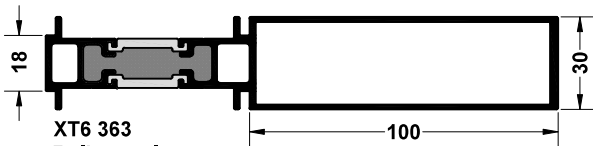
**XT6 361**  
Bulb coupler



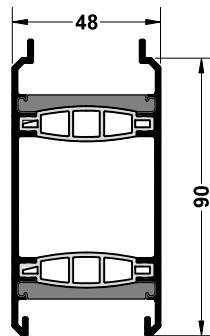
**XT6 040**  
40mm add on



**HL 560**  
28mm glazing bead



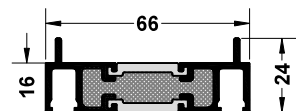
**XT6 363**  
Bulb coupler



**DPP-66**  
48mm Door plank



**HL 532**  
32mm glazing bead



**XT6 350C**  
Split coupler



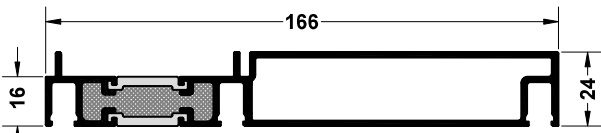
**XT80 drip**  
Drip



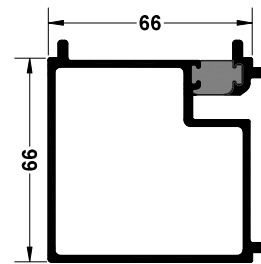
**RDRIP**  
Drip



**HL 565**  
36mm glazing bead



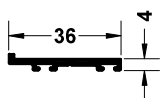
**XT6 353**  
Split coupler



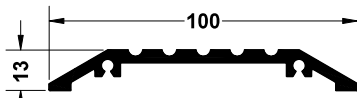
**RBS 802**  
90° Corner post



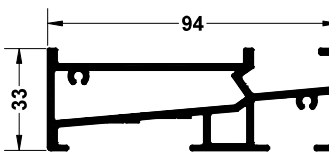
**HL 538**  
38mm glazing bead



**CDM 199**  
Woolpile carrier  
(Option B threshold)



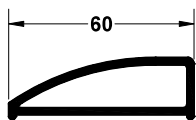
**CDTM**  
Threshold option B



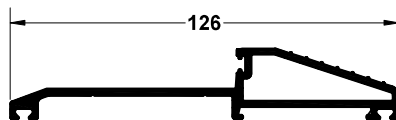
**RDPBS**  
Threshold option D



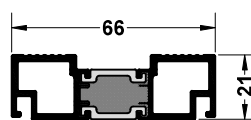
**HL 506**  
40mm glazing bead



**RDPCS**  
Threshold filler



**CDM580**  
Threshold option C



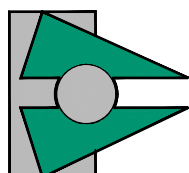
**XT6TM**  
Threshold option E



**HL 502**  
44mm glazing bead

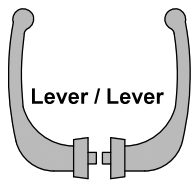


**HL 501**  
48mm glazing bead



# XT66 REBATED DOOR SYSTEM

## Accessories



Lever / Lever

Code	Colour
ARDALLB	Black
ARDALLW	White
ARDALLN	Natural
ARDALLG	Gold
ARDALLC	Chrome
ARDALLSS	Stainless steel
ARDALLGR	Graphite



Lever / pad handles

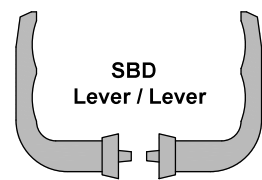
Code	Colour
ARDALPB	Black
ARDALPW	White
ARDALPG	Gold
ARDALPC	Chrome



Moving lever pad handles

Code	Colour
MLPB	Black
MLPW	White
MLPG	Gold

Split spindle required  
(D017 - 54/54 spindle)



SBD  
Lever / Lever

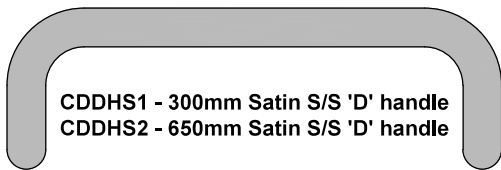
Lever / Lever security handle. (GOLD standard and SBD doors)	
SBDLLW	Prosecure SBD white
SBDLLC	Prosecure SBD Chrome
SBDLLS	Prosecure SBD silver
SBDLLB	Prosecure SBD black
SBDLLG	Prosecure SBD Gold

Note:

ARDA004 - 100mm M5 screws for Standard handles (ARDALL\*)

ARDA006 - 130mm spindle

ARDA007 - 100mm M6 screw for security handles (SBDLL\*)



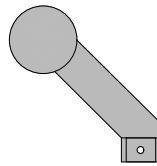
CDDHS1 - 300mm Satin S/S 'D' handle  
CDDHS2 - 650mm Satin S/S 'D' handle

Full height S/S tubular handle

CDDHS3 - Satin S/S tubular handle x 3.0m

CDDHS4 - Satin S/S top bracket for CDDHS3

CDDHS5 - Satin S/S bottom bracket for CDDHS3



CDSPH1 - 600mm S/S pull handle

CDSPH2 - 800mm S/S pull handle

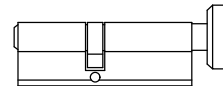
CDSPH3 - 1200mm S/S pull handle

CDSPH4 - 1800mm S/S pull handle



RA038

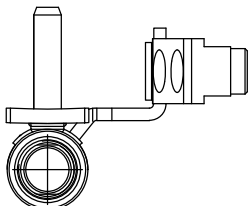
35 / 70 Security Cylinder  
(GOLD standard & SBD)



Thumb turn cylinder

RA034 - 40 / 70 (open in)

RA035 - 70 / 40 (open out)



SFS, pencil hinge

DDHB - Black SFS Dynamic 3D hinge

DDHG - 7012 Matt SFS Dynamic 3D hinge

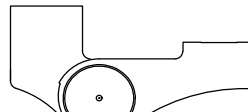
DDHM - Mill finish Dynamic 3D hinge

DDHS - Silver SFS Dynamic 3D hinge

DDHW - White SFS Dynamic 3D hinge

DDG7042 - 7042 SFS Matt Dynamic 3D hinge

DDHJ - SFS Dynamic 3D hinge jig



Fapim Loira+, two part hinge

FAPW - White hinge

FAPM - Mill finish hinge

FAPWS - 10mm fapim shim

FAPMS - 10mm fapim shim

FAPWS4 - 4mm fapim shim

FAPMS4 - 4mm fapim shim

FAPB - Black hinge

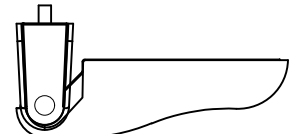
FAPS - Silver hinge

FAPBS - 10mm fapim shim

FAPSS - 10mm fapim shim

FAPBS4 - 4mm fapim shim

FAPSS4 - 4mm fapim shim



Fab&Fix, heavy duty hinge

FFAHW - White hinge

FFAHB - Black hinge

FFAHGR - Graphite hinge

FFAHG - Gold hinge

FFAHM - Mill finish hinge

FFAHC - Chrome hinge

FFAHGR - Graphite hinge

FFAHJ - F&F hinge jig

Note:

Each Loira+ hinge will require  
1 No. 10mm shim, 1 no. 4mm shim  
and 4 No. fixing bolts



FAPFB

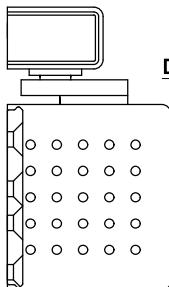
Fapim 60mm  
hinge fixing bolt



FFM640  
M6 x 40  
CSK screw



FFM665  
M6 x 65  
CSK screw



Dorma door closer

Note:

Open out doors with XT6 022 sash  
Open in doors with XT6 026 sash

Max sash size using the TS93 is  
1250mm wide, max door weight for  
TS93 is 100kg.

OHDC10 - Dorma TS93G closer (Open out)

OHDC20 - Dorma TS93B closer (open in)

OHDC30 - Dorma TS93 arm and channel (Open in)

OHDC31 - Modified Dorma TS93 arm & channel (Open out)

OHDC40 - Dorma limit stay for TS93 (Open in & out)

OHDC60 - Arm fixing pack for OHDC31 (Open out)



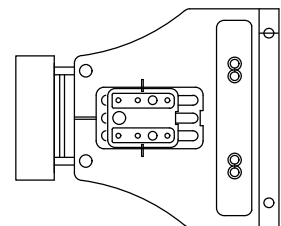
RA068  
Fapim shootbolt keep

RA060 - 140mm

RA065 - 450mm

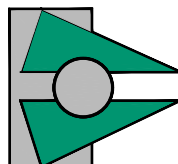
RA064 - 675mm

Fapim flush bolt



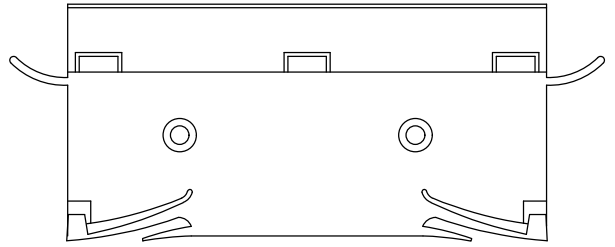
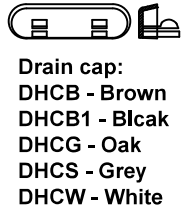
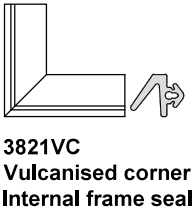
FFAHJ

Fab&Fix anchorage hinge jig

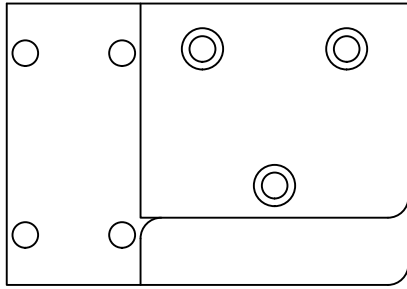


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## Accessories

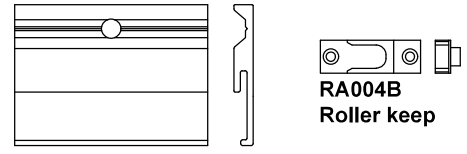


**BCLIP66**  
Bead clip

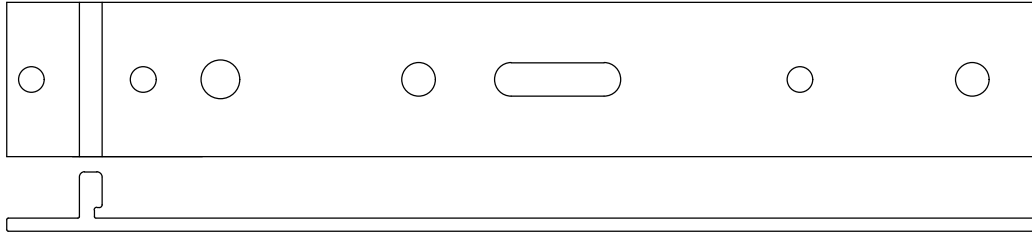


**XT6 340 mid rail bracket**  
XT6C2R - right hand side  
XT6C2L - left hand side

**XT6 mullion / transom bracket**  
XT6CR - right hand side  
XT6CL - left hand side

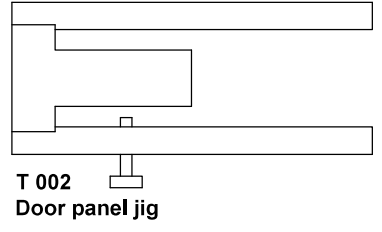


**BCLIPA**  
Bead retaining clip

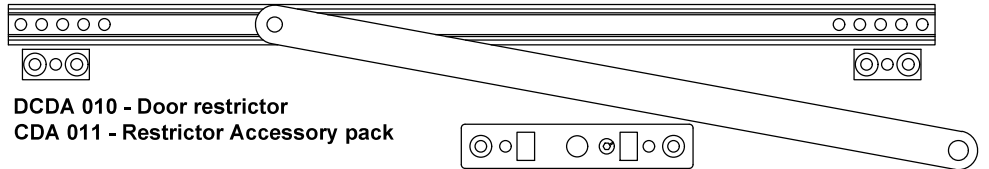


**XTFL**  
30 x 200mm foam frame fixing lug

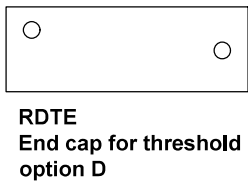
**XTFL3**  
fixing lug for Threshold option E



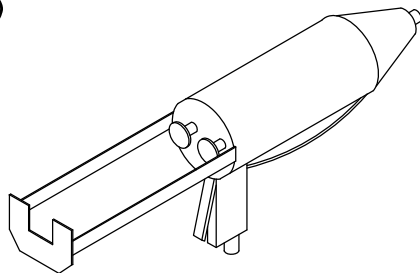
**T 002**  
Door panel jig



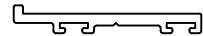
**DCDA 010** - Door restrictor  
**CDA 011** - Restrictor Accessory pack



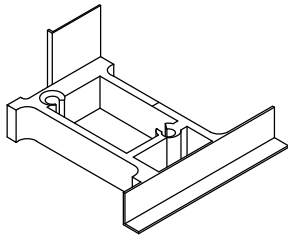
**RDTE**  
End cap for threshold option D



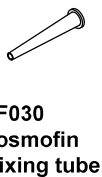
**Cosmofin applicator**  
CF020 - Manual applicator  
CF021 Pneumatic applicator



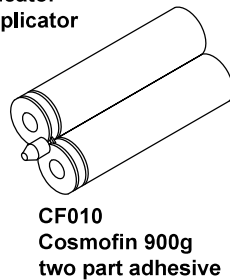
**CDM 199**  
Woolpile carrier  
(Option B threshold)



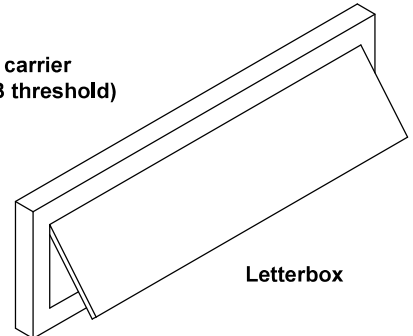
**Meeting stile end cap**  
RB110 - Black R/H end cap  
RB111 - Black L/H end cap



**CF030**  
Cosmofin mixing tube

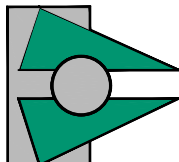


**CF010**  
Cosmofin 900g two part adhesive



**Letterbox**

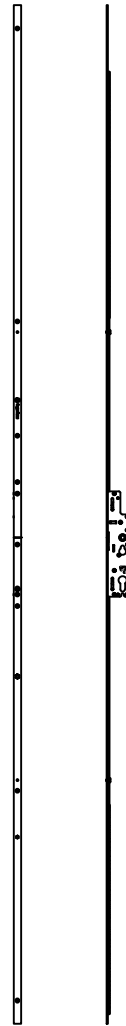
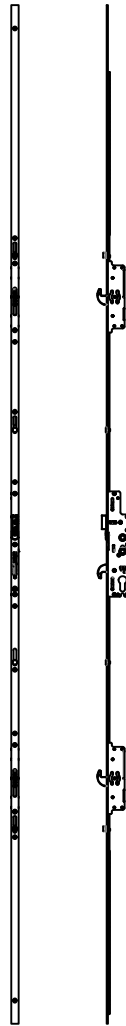
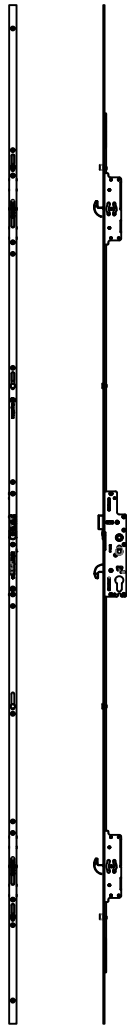
STANDARD		SLIM LINE	
Code	Colour	Code	Colour
ARDLBB	Black	ARDLBBS	Black
ARDLBW	White	ARDLBWS	White
ARDLBN	Natural	ARDLBNS	Natural
ARDLBG	Gold	ARDLBGS	Gold





# XT66 REBATED DOOR SYSTEM

## Lock options



**ARDISL1**  
Ingenious 3H / 2R Security lock  
(min. door height = 2201mm)

**ARDISL2**  
Ingenious 3H / 2R Security lock  
(max. door height = 2200mm)

**ARDISL3**  
Ingenious Slave Door lock  
(all sizes double doors)

**ARDISLKL1**  
Ingenious LH onepiece keep  
c/w packers

**ARDISLKL2**  
Ingenious LH onepiece keep  
c/w packers

**ARDISLKR1**  
Ingenious RH onepiece keep  
c/w packers

**ARDISLKR2**  
Ingenious RH onepiece keep  
c/w packers

**ARDISLE2**  
Ingenious 376mm extension  
without cam

Panic Exit Devices:	
Code	Description
ED030	3pt. double door latch.
ED060	5pt. double door latch.
ED040	Outside access device

For double doors, minimum width of a slave leaf is 450mm when using ED030 or ED040.

RA055 - Centre keep (LH out, RH in)  
RA056 - Centre keep (RH out, LH in)  
RA057 - Centre keep packer

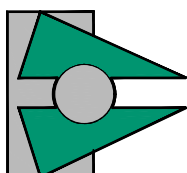
ARDISLHT - Ingenious Single door top shootbolt  
ARDISLSK2 - Ingenious Single shootbolt keep

ARDISLSH - Ingenious Double door shootbolt  
ARDISLK - Ingenious Double door shootbolt keep

ARDISLKP - Ingenious keep packer  
ARDISLS - M3.5 x 6 keep packer scrow

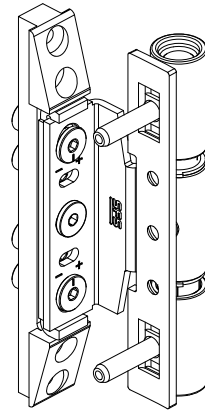
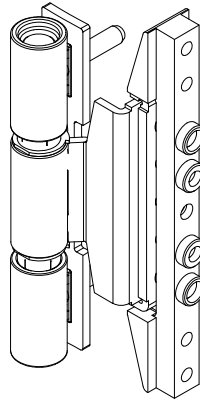
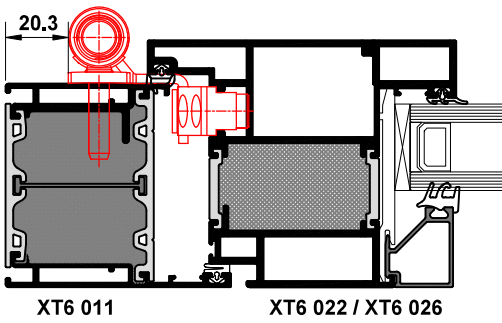
ARDISLE1 - Ingenious 150mm extension with cam

**Electric lock:**  
Electric lock option only available on doors fabricated by AMS. For information on electric locks contact our fabrication department.



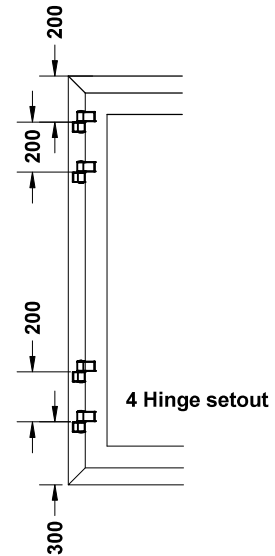
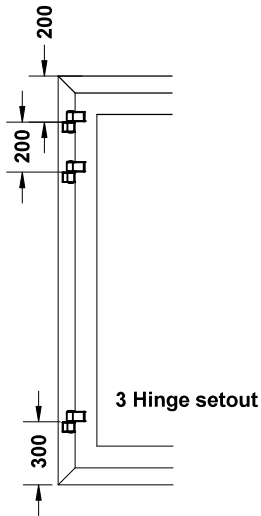
# XT66 REBATED DOOR SYSTEM

## Sash limitations - SFS hinge



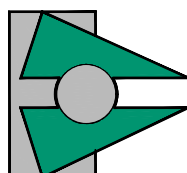
SFS adjustable hinge			3 Hinges
Location	Max leaf weight	Hinges Per leaf	
Residential doors	95 kg	3 No.	
Public doors	95 kg	3 No.	
Public doors with closer and back check off	80 kg	3 No.	
Public doors with closer and back check on	55 kg	3 No.	

SFS adjustable hinge			4 Hinges
Location	Max leaf weight	Hinges Per leaf	
Residential doors	105 kg	4 No.	
Public doors	105 kg	4 No.	
Public doors with closer and back check off	90 kg	4 No.	
Public doors with closer and back check on	60 kg	4 No.	



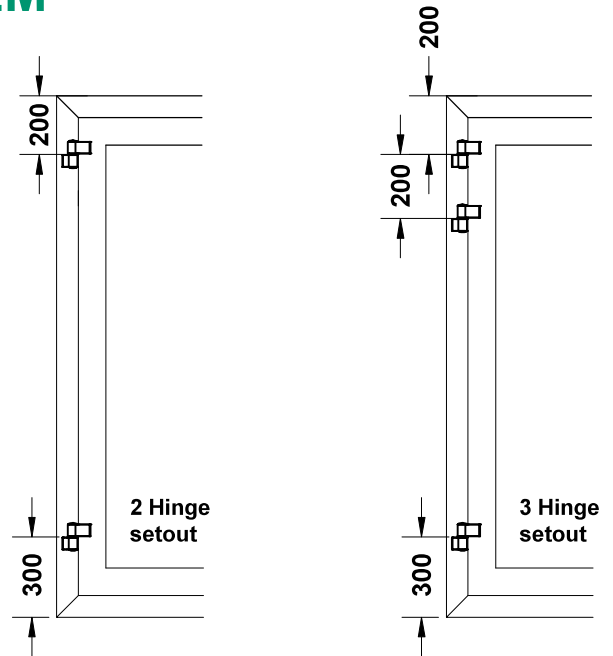
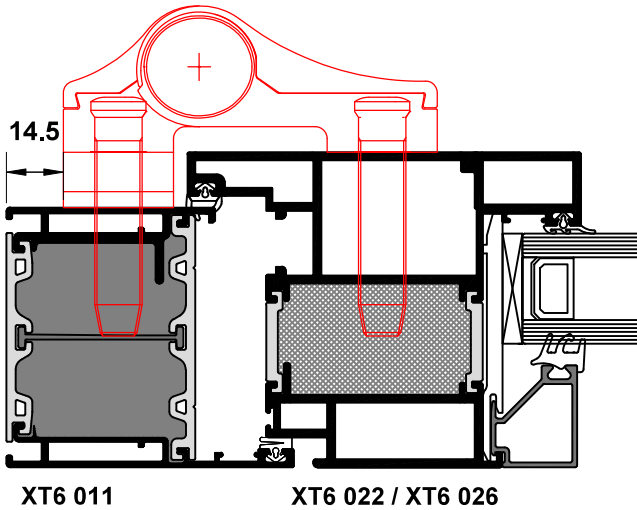
**Note :**

Door closers increase the loading on door hinges and their rate of wear. For closers without backcheck it is normal to allow for this by assuming the effective door weight to be 20% greater than the actual door weight. For back-check closers the effect is much greater, and the effective door mass is calculated to be 75% greater.



# XT 66 REBATED DOOR SYSTEM

## Sash Limitations - Loira+ hinge



2 Hinges		
Loira+, adjustable hinge		
Location	Max leaf weight	Hinges Per leaf
Residential doors	160 kg	2 No.
Public doors	145 kg	2 No.
Public doors with closer and back check off	130 kg	2 No.
Public doors with closer and back check on	115 kg	2 No.

3 Hinges		
Loira+, adjustable hinge		
Location	Max leaf weight	Hinges Per leaf
Residential doors	184 kg	3 No.
Public doors	166 kg	3 No.
Public doors with closer and back check off	149 kg	3 No.
Public doors with closer and back check on	132 kg	3 No.

Note :  
On doors over 2.2m high, fit a 4th hinge to ensure seal compression.

Door sash weights (XT6022 / XT6026)				
Door sash Width	Door sash Height	Glass @ 30kg/m <sup>2</sup>	Glass @ 40kg/m <sup>2</sup>	Glass @ 50kg/m <sup>2</sup>
1.240m	2.160m	96 kg	119 kg	142 kg
1.240m	2.360m	105 kg	129 kg	154 kg

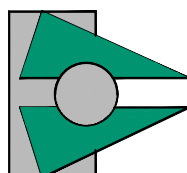
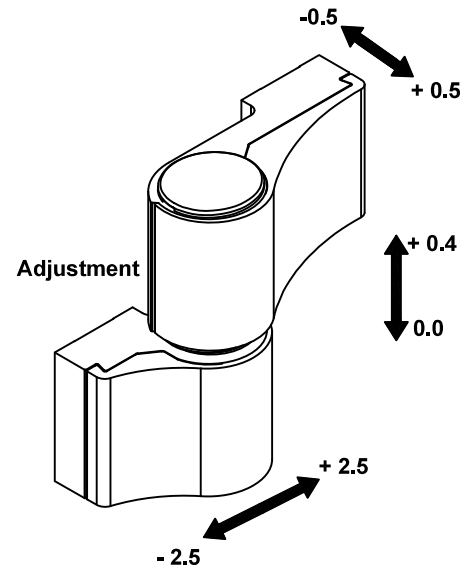
See note 7 below, height to width ratio is less than 2.

### Notes:

1. A frame width of 1330mm, using the Panama panic exit device, will give a clear opening of 1.0m with the door in the 90° position using TS6011 with TS6 022 / 024. For double doors, ensure slave leaf is a minimum of 450mm when using ED030 or ED 040
2. To achieve a 1.0m clear opening on a standard door with lever/lever handles, the frame width must be a minimum of 1290mm (This includes the lever/lever handle).
3. The hinge pin is to be lubricated every 25,000 cycles or once a year with polylub Kluber WH2 or similar.
4. Sizes based on Option C threshold.
5. Allow 4.0kg/lm for door sash and bead combination.
6. Maximum allowable weight per door leaf is 160 kg's (Based in 2 hinges, for 3 hinges capacity increases to 184 kg's).
7. If the height to width ratio is less than 2 then this will reduce the capacity of the hinge. For every 0.1 below 2, the capacity is reduced by 10% e.g. for a width of 1.3m and height of 2.3m the ratio =  $2.3/1.3 = 1.77$ , therefore  $2-1.77 = 0.23$  which equates to a 23% reduction in capacity. For further advice on hinge capacity contact AMS Technical department.
8. On doors over 2.30m high, use lock extensions and corner drives to ensure sufficient weathering seal on the gaskets.
9. When ordering 'Gold' standard doors, the security lock, security cylinder and security handle is to be fitted.

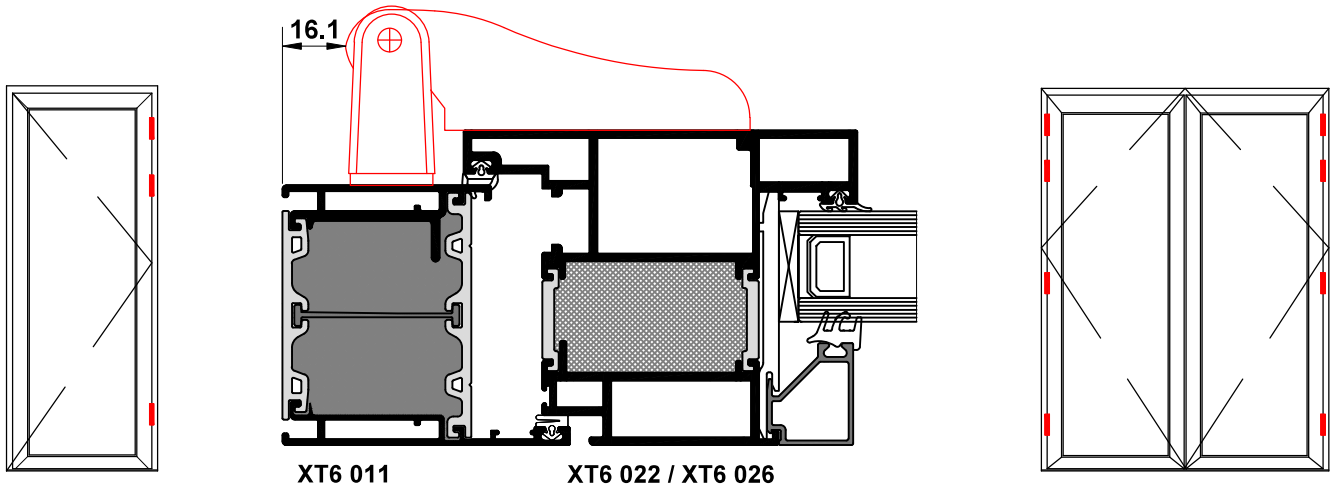
### Note:

A door sash width of 1.240m will give a clear opening of 1.0m when using the panama panic exit device



# XT66 REBATED DOOR SYSTEM

## Sash Limitations - Fab N Fix hinge



Door sizes based on glass units with a weight of 30 kg/m<sup>2</sup>.

Single door : Fab N Fix adjustable hinge			
Door Height	Door Width	Hinges per leaf	Sash Weight
2.20m	1.30m	4 No.	89 kg
2.30m	1.30m	4 No.	93 kg
2.40m	1.30m	4 No.	97 kg

Double door : Fab N Fix adjustable hinge			Per leaf
Door Height	Door Width	Hinges per leaf	Sash Weight
2.20m	2.60m	4 No.	89 kg
2.30m	2.60m	4 No.	93 kg
2.40m	2.60m	4 No.	97 kg

Door sizes based on glass units with a weight of 40 kg/m<sup>2</sup>.

Single door : Fab N Fix adjustable hinge			
Door Height	Door Width	Hinges per leaf	Sash Weight
2.20m	1.30m	4 No.	110 kg
2.30m	1.25m	4 No.	110 kg
2.40m	1.20m	4 No.	110 kg

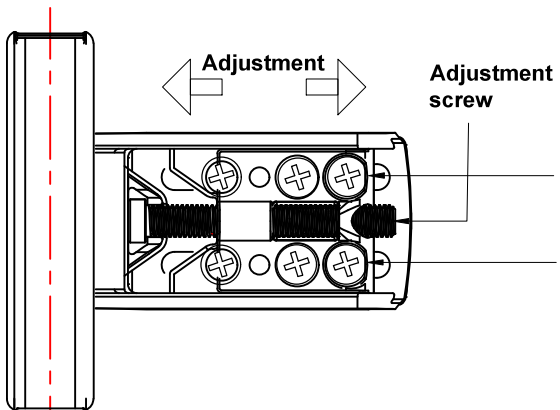
Double door : Fab N Fix adjustable hinge			Per leaf
Door Height	Door Width	Hinges per leaf	Sash Weight
2.20m	2.60m	4 No.	110 kg
2.30m	2.50m	4 No.	110 kg
2.40m	2.40m	4 No.	110 kg

**Notes:**

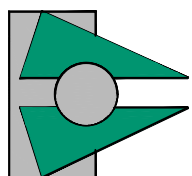
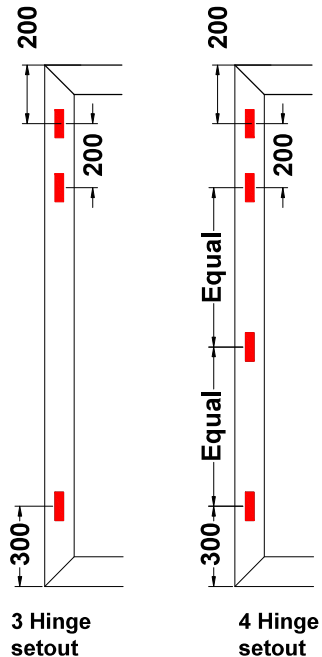
1. A frame width of 1300mm, using the Panama panic exit device, will give a clear opening of 1.0m with the door in the 90° position using XT6011 with XT6 022 / 026. For double doors, ensure slave leaf is a minimum of 450mm when using ED030 or ED040
2. To achieve a 1.0m clear opening on a standard door, the frame width must be a minimum of 1200mm (Does not include handle).
3. Allow 4.0kg/lm for door sash and bead combination.
4. Maximum allowable weight per door leaf is 110 kg.
5. For doors up to 2.1m high fit 3 hinges per leaf. On doors over 2.1m fit a 4th hinge in the middle, this is to ensure good compression on the weather seals.
6. For doors over 2.4m high, contact AMS Technical department.

**Notes:**

When ordering quality scheme doors, the security lock, security cylinder and security handle are to be specified.

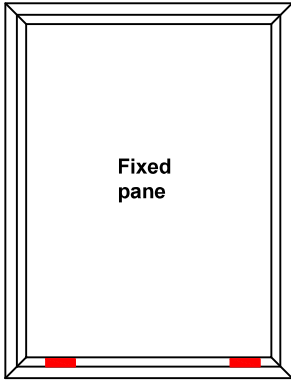


**Note:**  
When adjusting the hinge horizontally i.e. moving the hinge left or right, loosen the 6 fixing screws first to allow the hinge to slide. If the screws are not loosened, the hinge will not move and the adjustment screw will be damaged

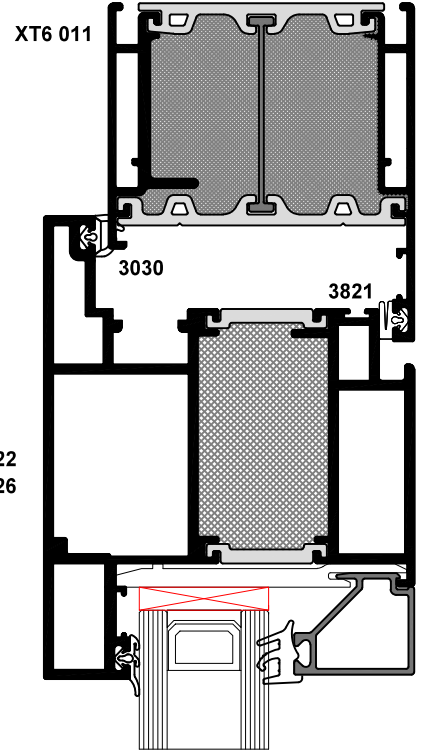
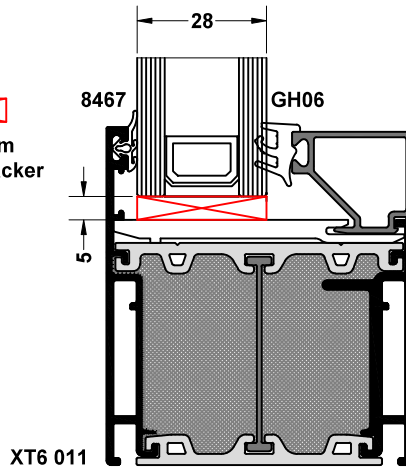


# XT66 REBATED DOOR SYSTEM

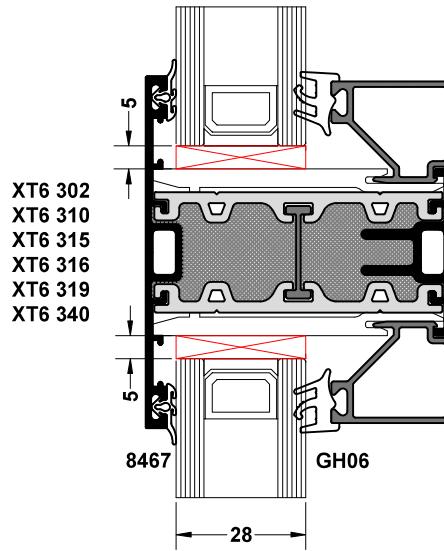
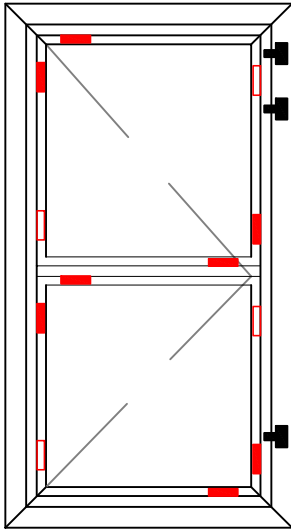
## Glazing



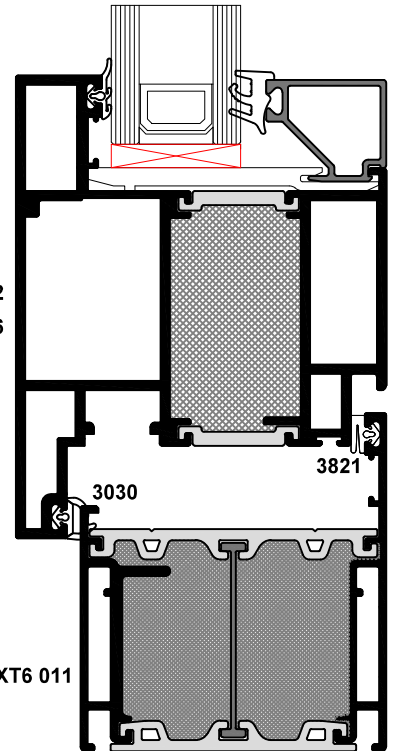
Standard 5mm  
PVC glass packer



XT6 022  
XT6 026



XT6 022  
XT6 026



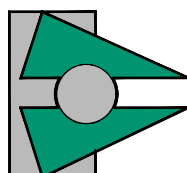
### Notes:

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 8213-4:2207, BS 6262 & BS 8000-7 for further recommendations.
5. In addition to the above, glass unit manufacturer's instructions should be followed.

Indicates spacer only

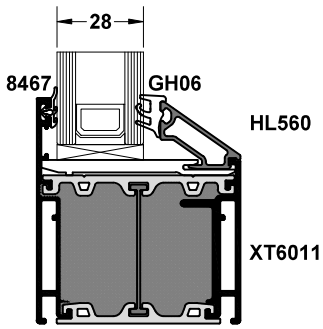
Indicates load bearing packer

Note: Load bearing packers to be located close to gearing points, typically 150mm from the edge.

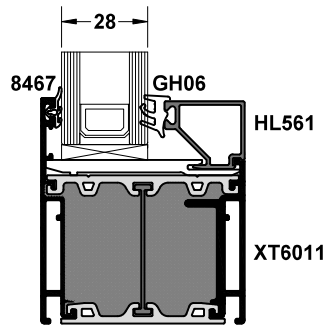


# XT66 REBATED DOOR SYSTEM

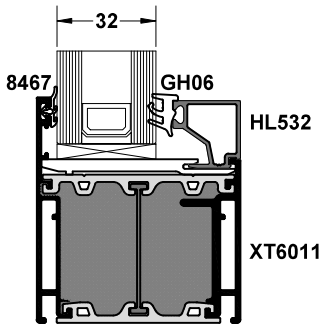
## Glazing options - XT6 011



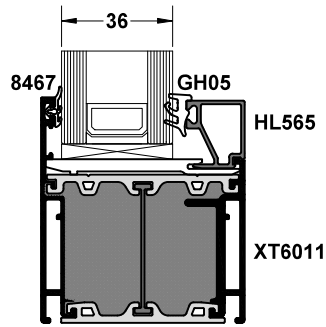
XT6 011  
28mm glazed unit



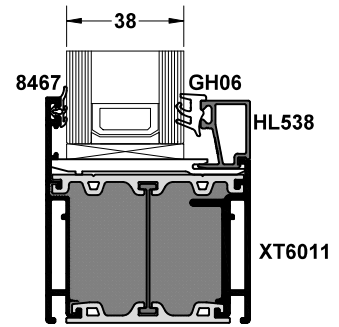
XT6 011  
28mm glazed unit



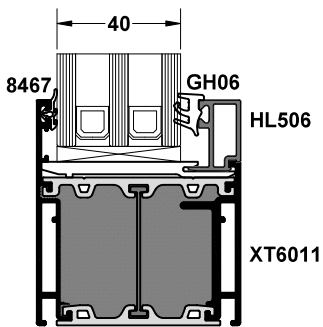
XT6 011  
32mm glazed unit



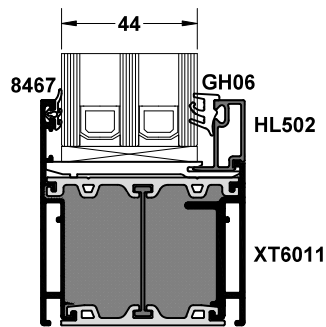
XT6 011  
36mm glazed unit



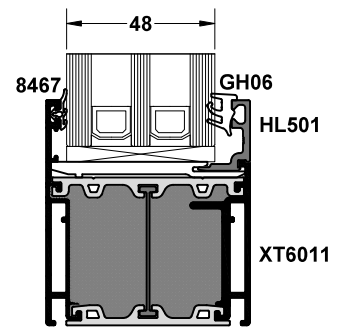
XT6 011  
38mm glazed unit



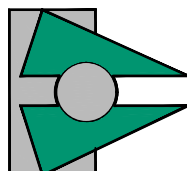
XT6 011  
40mm glazed unit



XT6 011  
44mm glazed unit

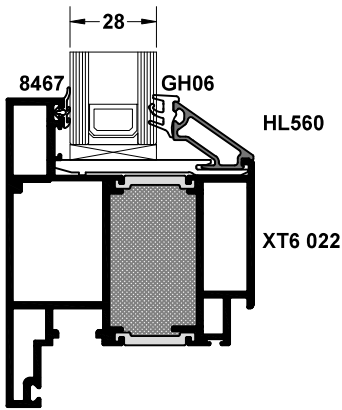


XT6 011  
48mm glazed unit

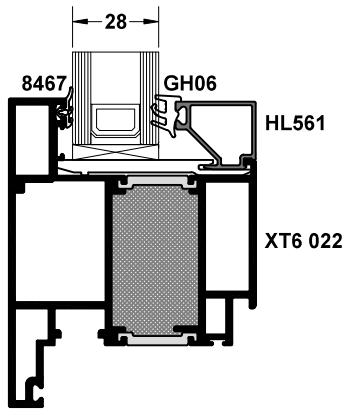


# XT66 REBATED DOOR SYSTEM

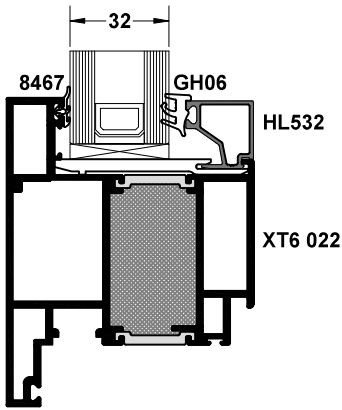
## Glazing options - XT6 022



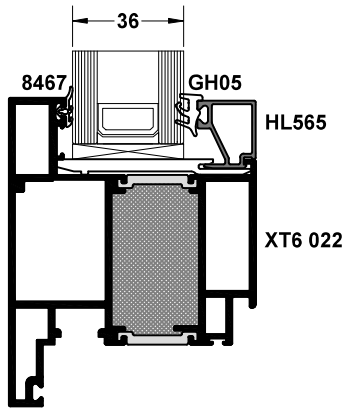
XT6 022  
28mm glazed unit



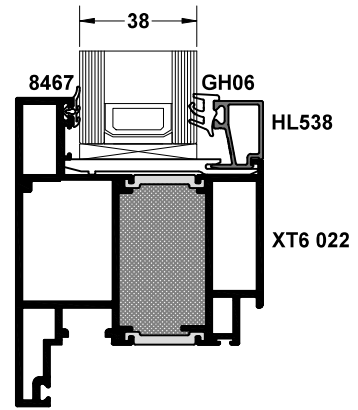
XT6 022  
28mm glazed unit



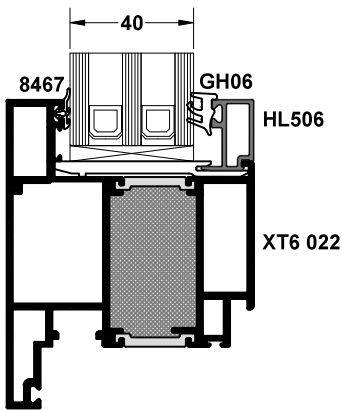
XT6 022  
32mm glazed unit



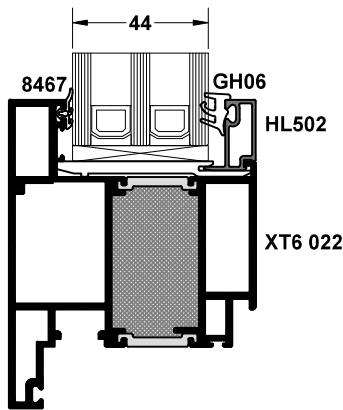
XT6 022  
36mm glazed unit



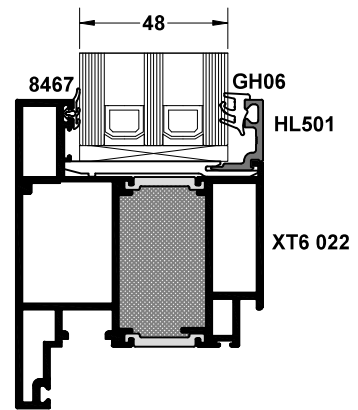
XT6 022  
38mm glazed unit



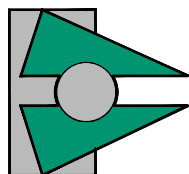
XT6 022  
40mm glazed unit



XT6 022  
44mm glazed unit

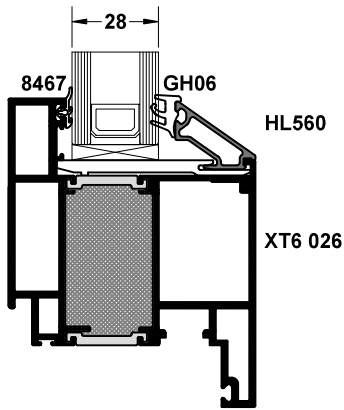


XT6 022  
48mm glazed unit

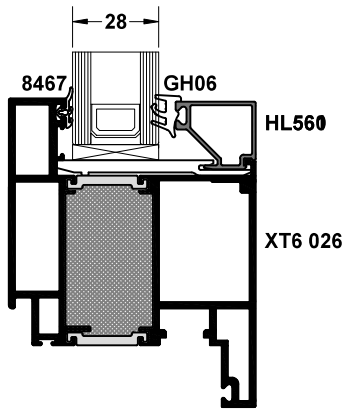


# XT66 REBATED DOOR SYSTEM

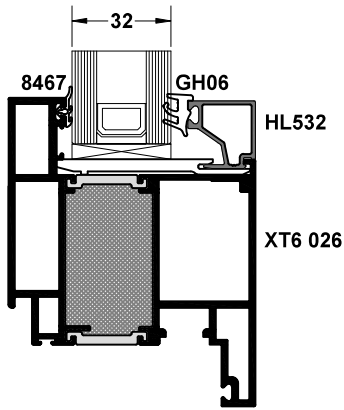
## Glazing options - XT6 026



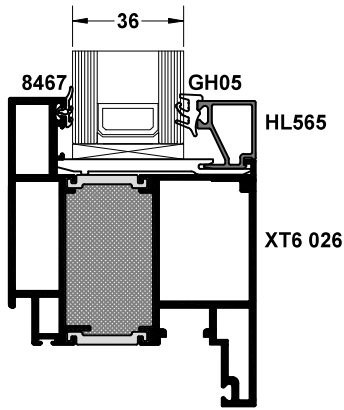
XT6 026  
28mm glazed unit



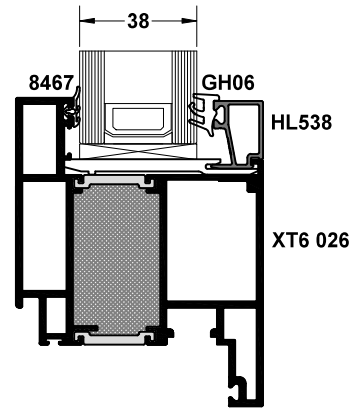
XT6 026  
28mm glazed unit



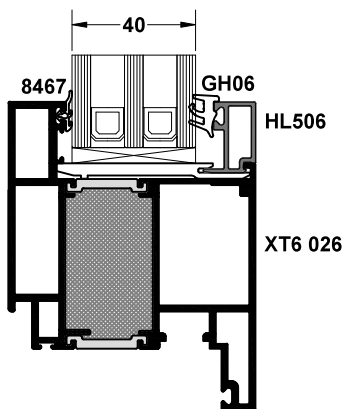
XT6 026  
32mm glazed unit



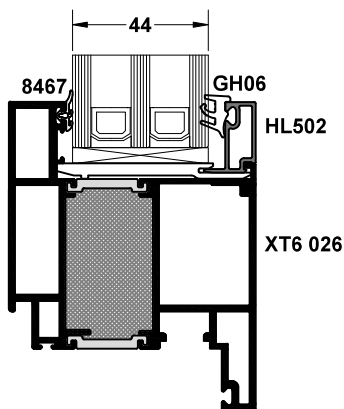
XT6 026  
36mm glazed unit



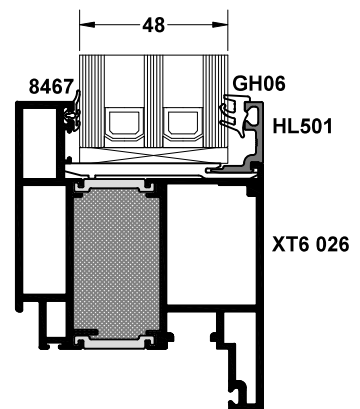
XT6 026  
38mm glazed unit



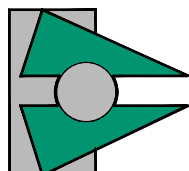
XT6 026  
40mm glazed unit



XT6 026  
44mm glazed unit



XT6 026  
48mm glazed unit

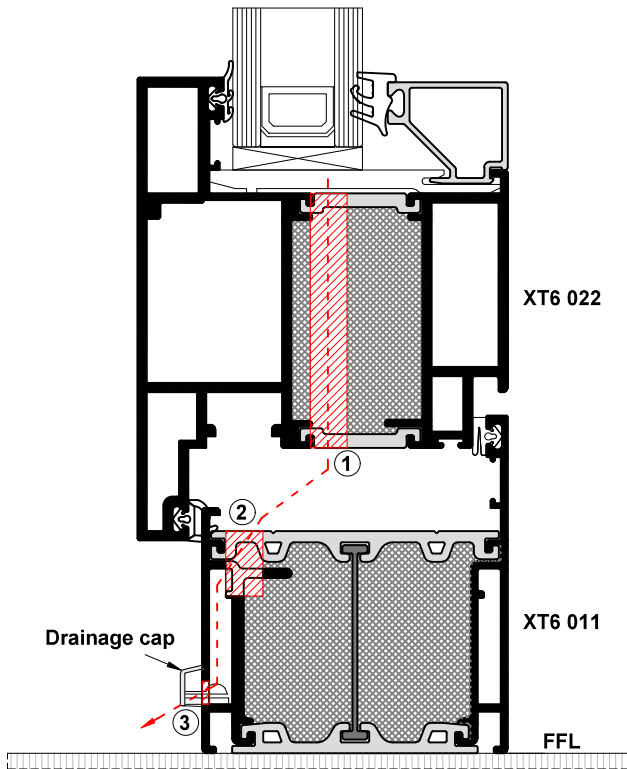




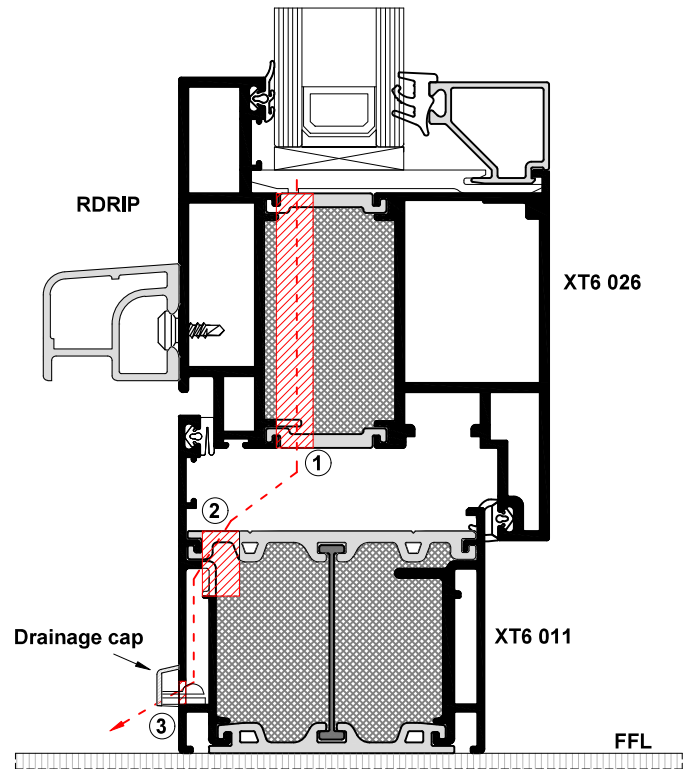
# XT66 REBATED DOOR SYSTEM

## Threshold options - A & B

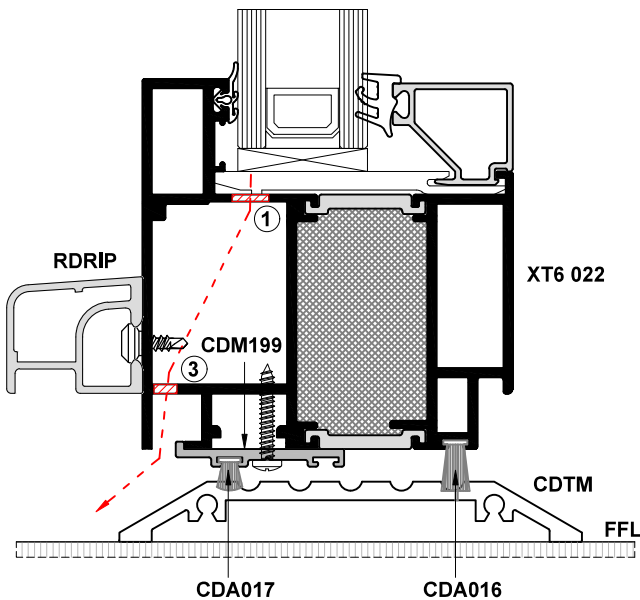
OPTION A (FRAME ALL AROUND)  
-open out doors



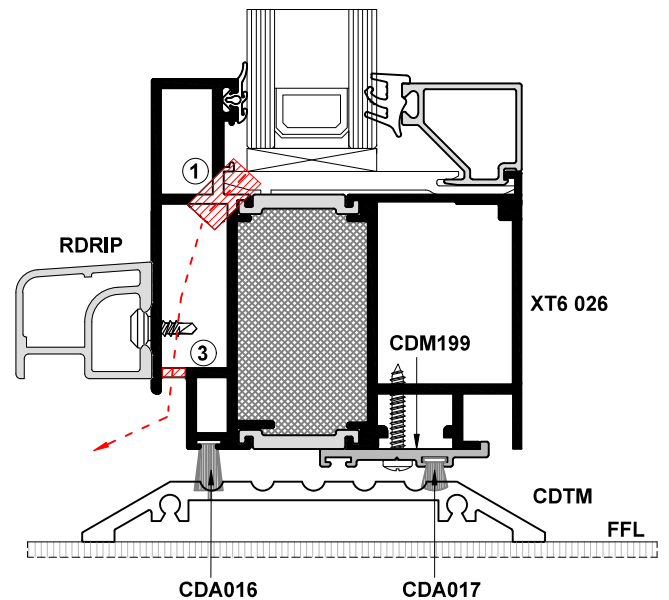
OPTION A (FRAME ALL AROUND)  
-open in doors



OPTION B  
-open out doors

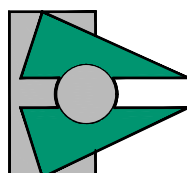


OPTION B  
-open in doors



- ① Ø8mm hole drilled through sash at approx. 400mm c/c
- ② 25 x 8mm drainage slot, 14mm deep
- ③ 25 x 5mm drainage slot

Note :  
Drainage slots and holes to be staggered by 150mm minimum.  
For use of alternative drainage arrangements please consult our technical department.

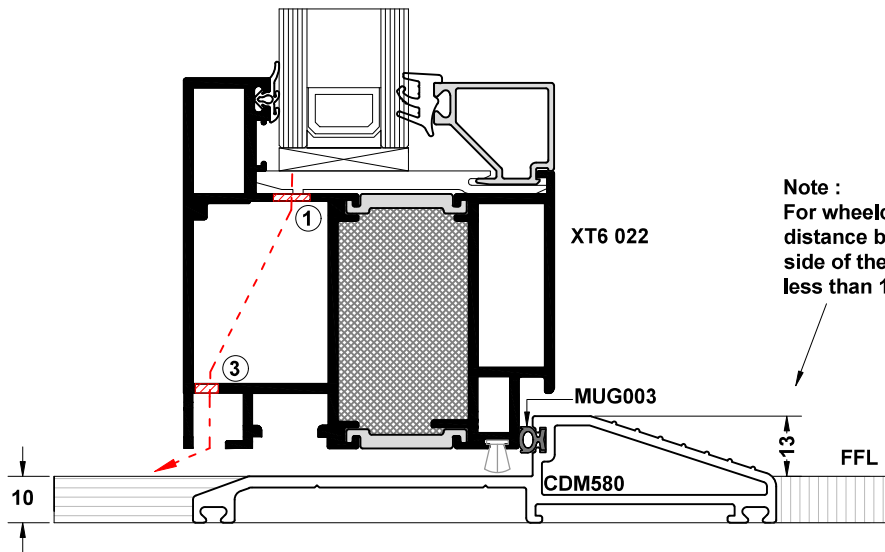


# XT66 REBATED DOOR SYSTEM

## Threshold options - C & D

### OPTION C

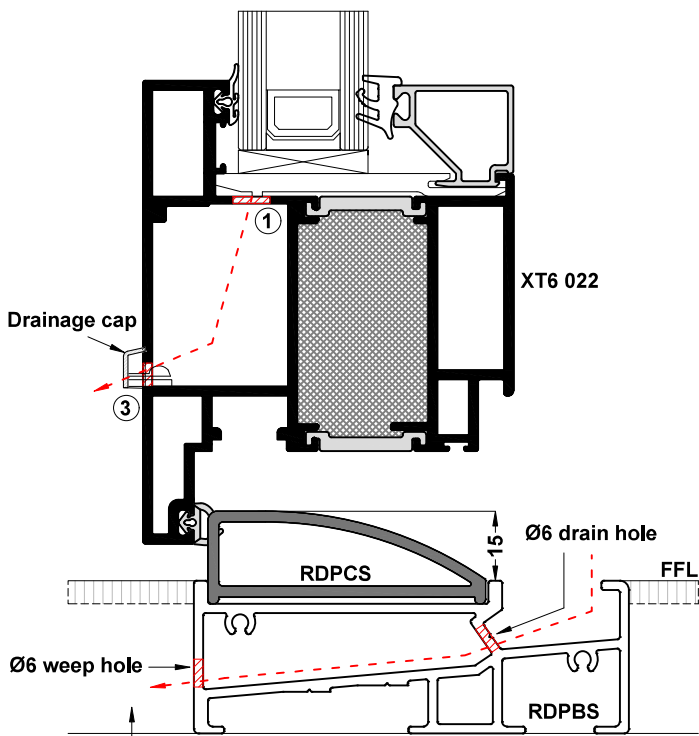
-open out doors only



Note :  
For wheelchair access,  
distance between FFL and top  
side of the threshold should be  
less than 15 mm.

### OPTION D

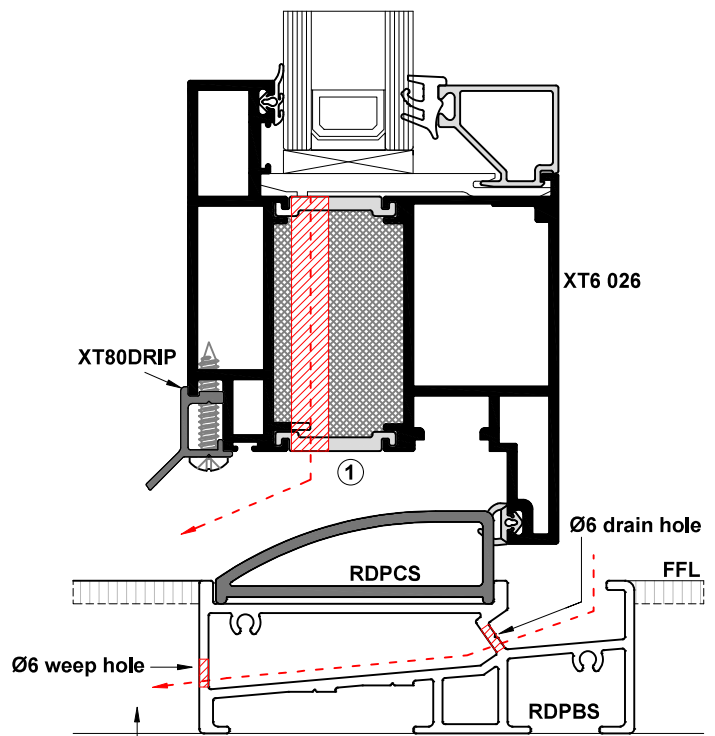
-open out doors



Aqua drain or similar  
to be provided to  
accommodate  
threshold drainage

### OPTION D

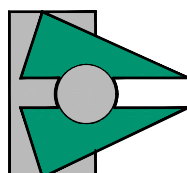
-open in doors



Aqua drain or similar  
to be provided to  
accommodate  
threshold drainage

- ① Ø8mm hole drilled through sash at approx. 400mm c/c
- ② 25 x 8mm drainage slot, 14mm deep
- ③ 25 x 5mm drainage slot

Note :  
Drainage slots and holes to be staggered by  
150mm minimum.  
For use of alternative drainage arrangements  
please consult our technical department.



# XT66 REBATED DOOR SYSTEM

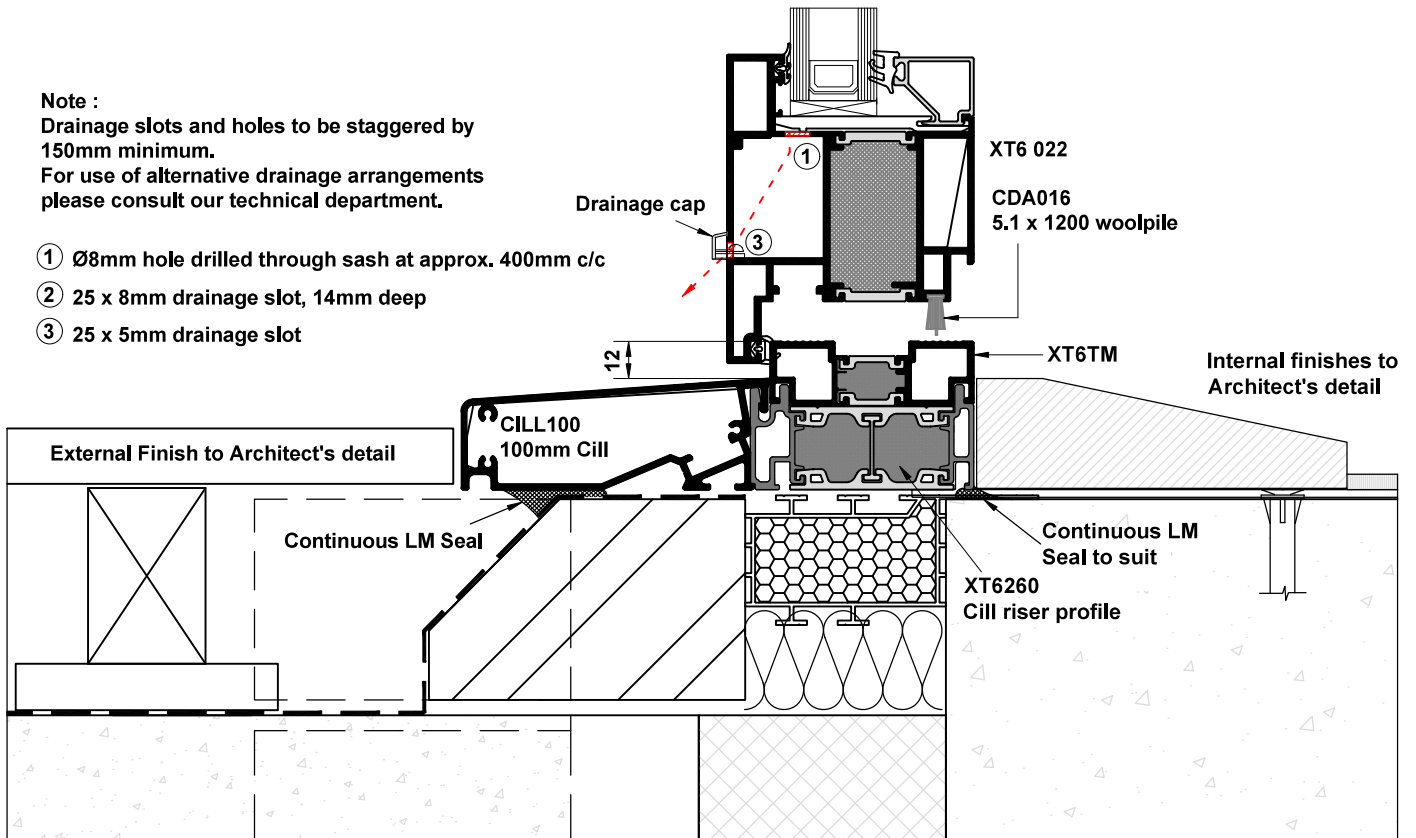
## Threshold option E - Balcony detail

**Note :**

Drainage slots and holes to be staggered by 150mm minimum.

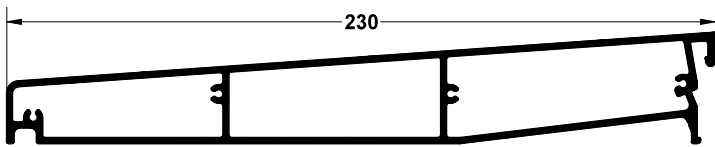
For use of alternative drainage arrangements please consult our technical department.

- ① Ø8mm hole drilled through sash at approx. 400mm c/c
- ② 25 x 8mm drainage slot, 14mm deep
- ③ 25 x 5mm drainage slot

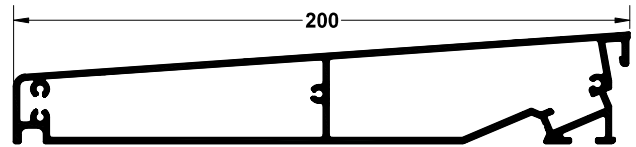


Balcony Detail

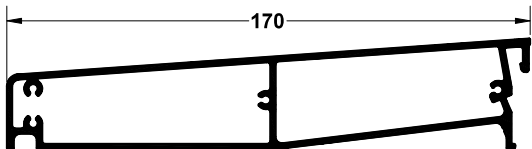
### CILL OPTIONS



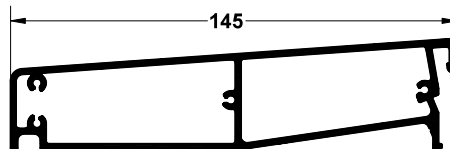
CILL230  
230mm Cill



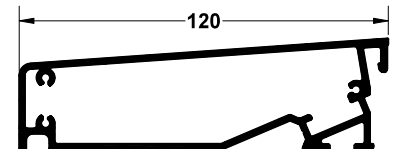
CILL200  
200mm Cill



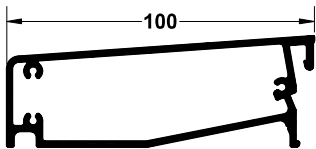
CILL170  
170mm Cill



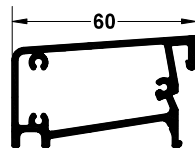
CILL145  
145mm Cill



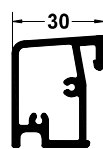
CILL120  
120mm Cill



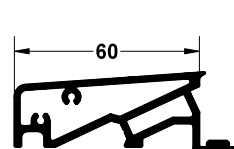
CILL100  
100mm Cill



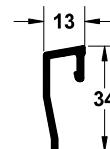
CILL060  
60mm Cill



CILL030  
30mm Cill



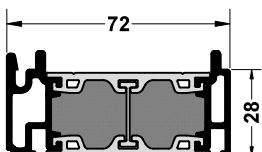
CILLE60  
Cill Extender



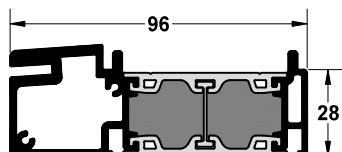
CILL CLIP  
Flashing clip



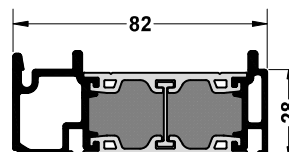
DRIP15  
15mm Drip



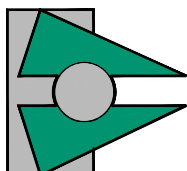
XT6 260  
Cill riser profile



XT6 265  
Cill riser profile with pressing slot

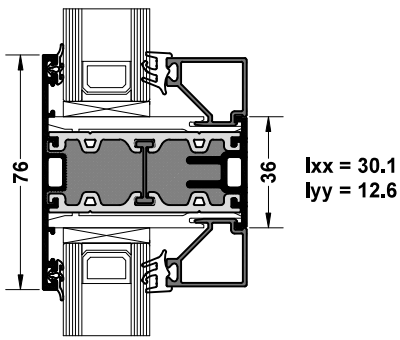


XT6 266  
Shadowline cill riser

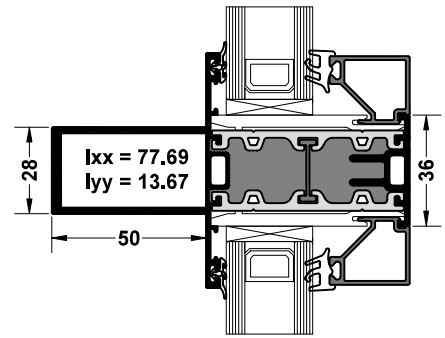


# XT66 REBATED DOOR SYSTEM

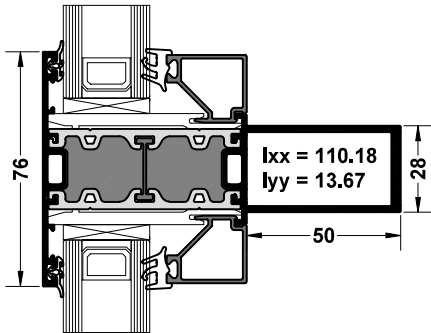
## Transom / Midrail options



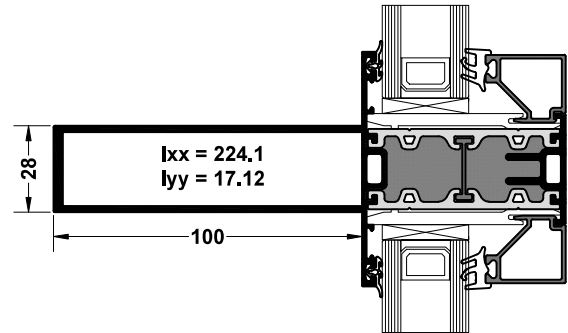
**XT6 302**  
Mullion / Transom



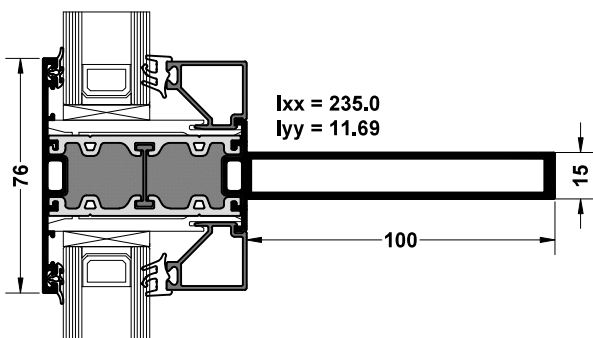
**XT6 315**  
Mullion / Transom



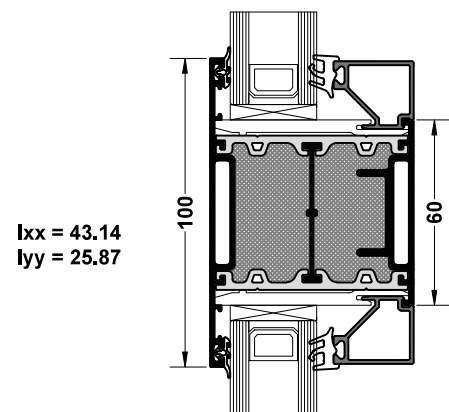
**XT6 319**  
Mullion / Transom



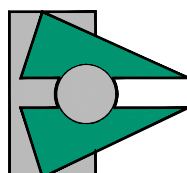
**XT6 316**  
Mullion / Transom



**XT6 310**  
100mm fin mullion

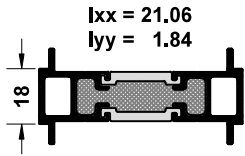


**XT6 340**  
100mm midrail



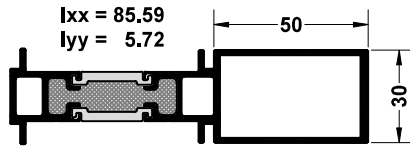
# XT66 REBATED DOOR SYSTEM

## Coupler options



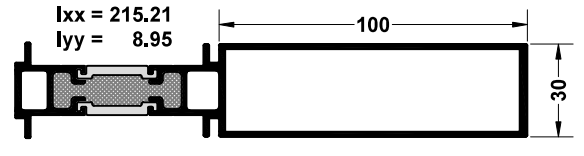
$I_{xx} = 21.06$   
 $I_{yy} = 1.84$

XT6 360  
In line coupler



$I_{xx} = 85.59$   
 $I_{yy} = 5.72$

XT6 361  
50mm bulb coupler

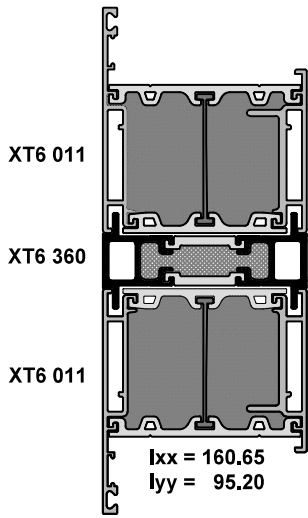


$I_{xx} = 215.21$   
 $I_{yy} = 8.95$

XT6 363  
100mm bulb coupler

Note:

Area moments of inertia for combinations shown below

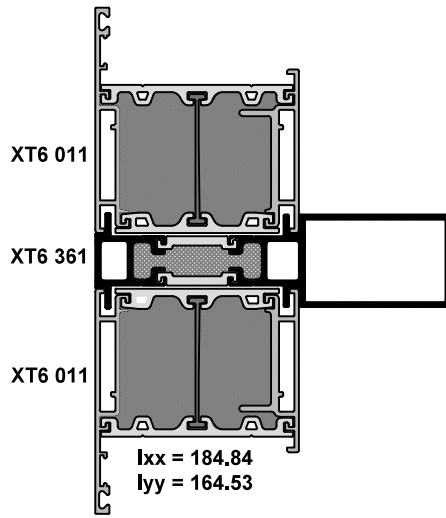


XT6 011

XT6 360

XT6 011

$I_{xx} = 160.65$   
 $I_{yy} = 95.20$

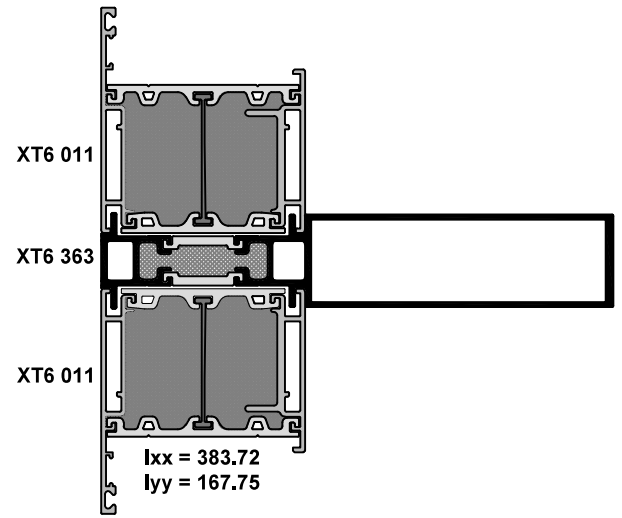


XT6 011

XT6 361

XT6 011

$I_{xx} = 184.84$   
 $I_{yy} = 164.53$

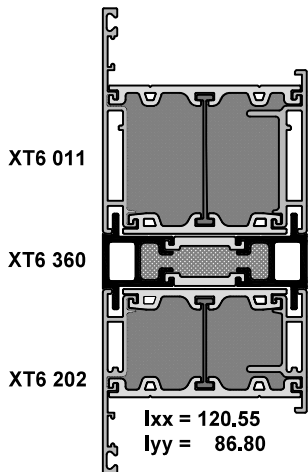


XT6 011

XT6 363

XT6 011

$I_{xx} = 383.72$   
 $I_{yy} = 167.75$

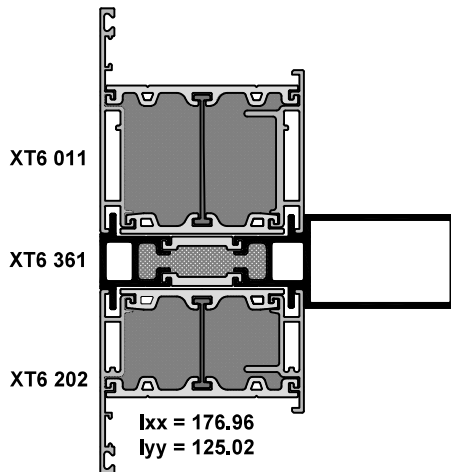


XT6 011

XT6 360

XT6 202

$I_{xx} = 120.55$   
 $I_{yy} = 86.80$

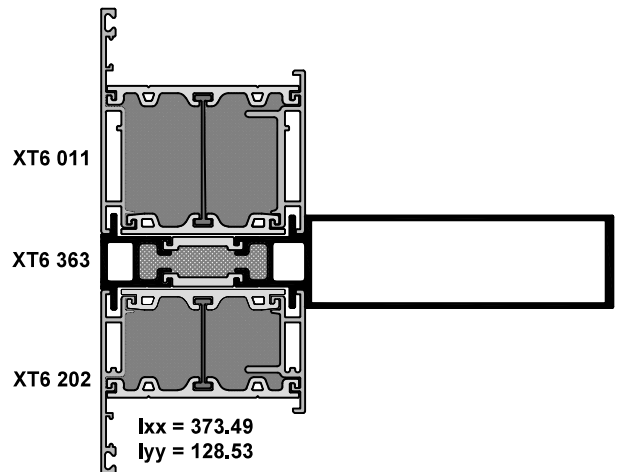


XT6 011

XT6 361

XT6 202

$I_{xx} = 176.96$   
 $I_{yy} = 125.02$

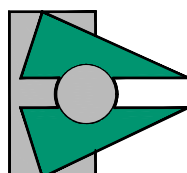


XT6 011

XT6 363

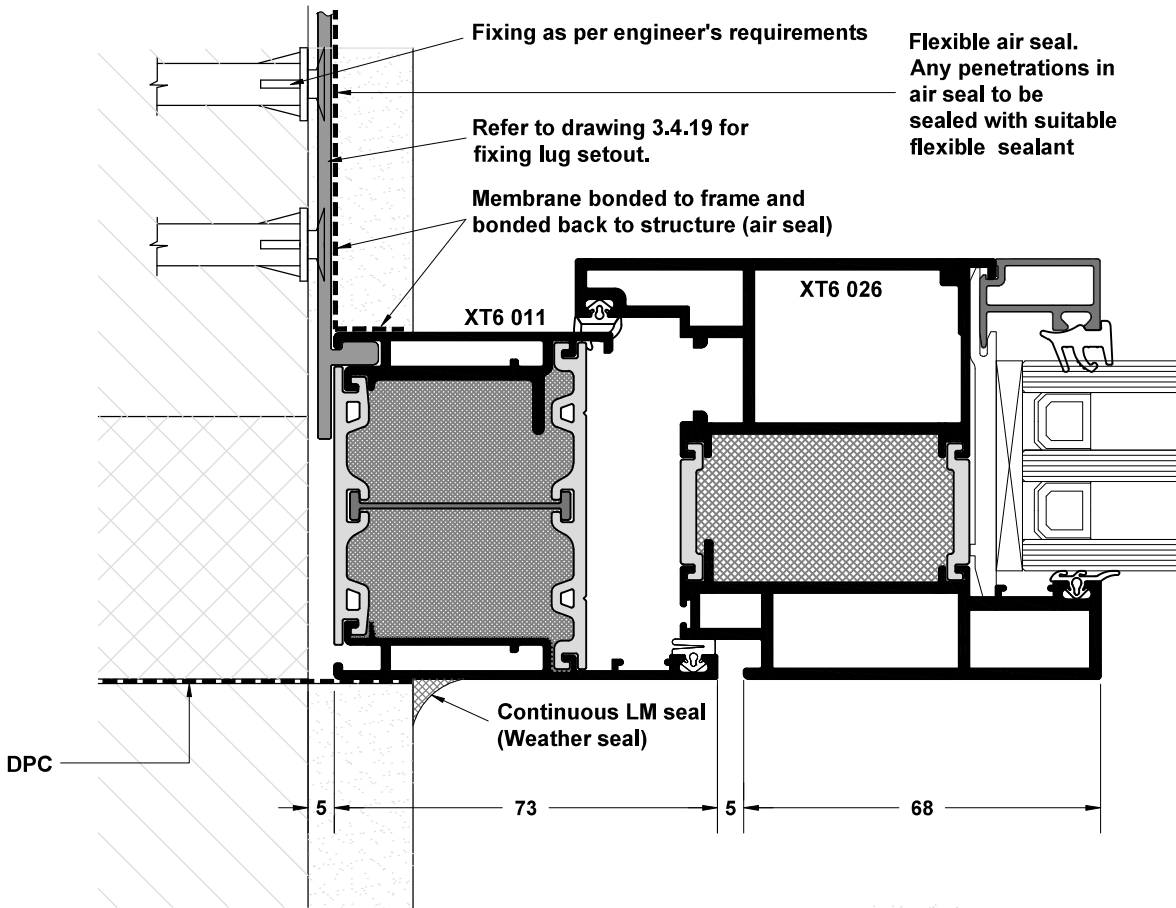
XT6 202

$I_{xx} = 373.49$   
 $I_{yy} = 128.53$

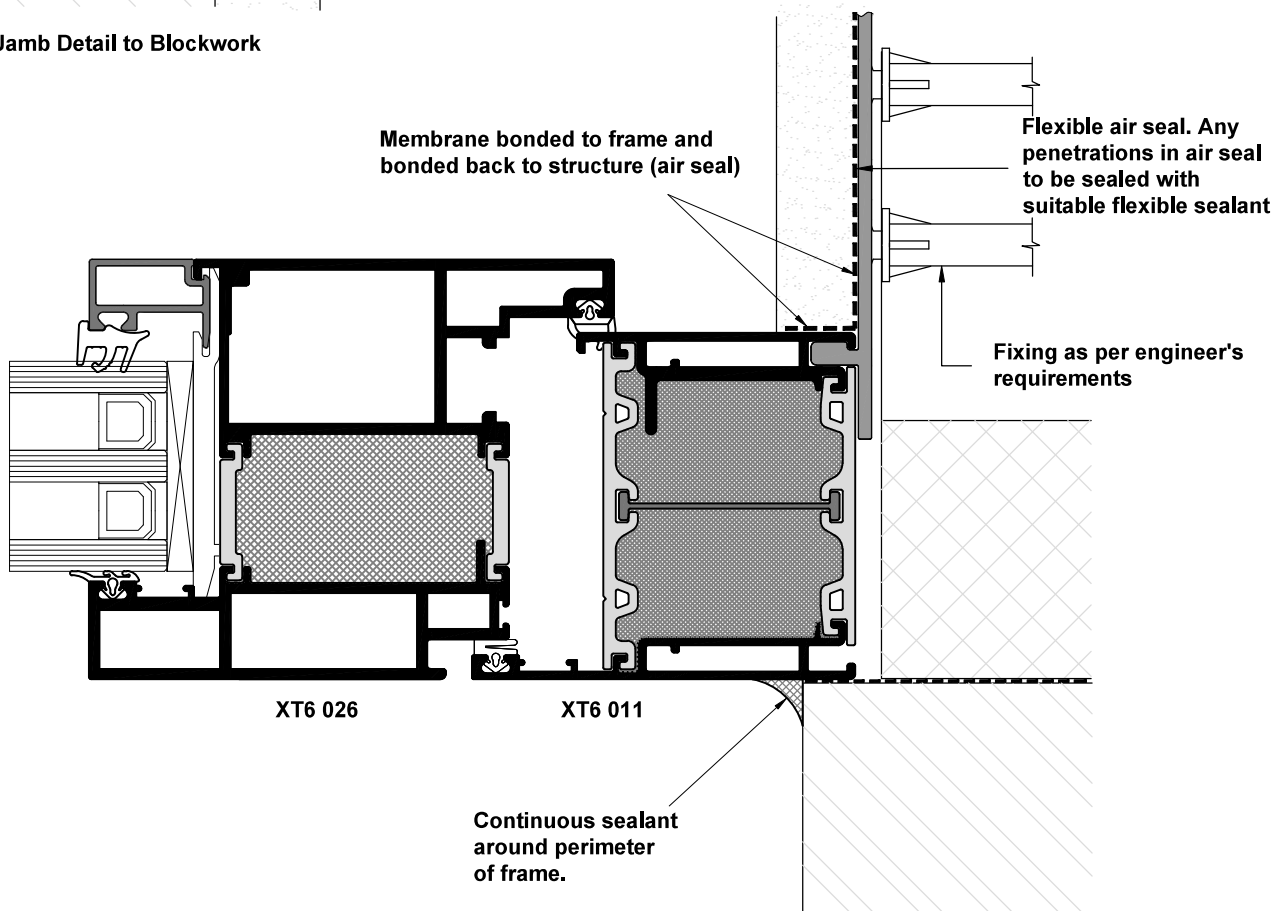


# XT66 REBATED DOOR SYSTEM

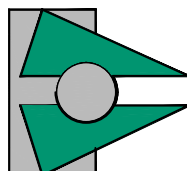
## Jamb options - Open in doors



Jamb Detail to Blockwork

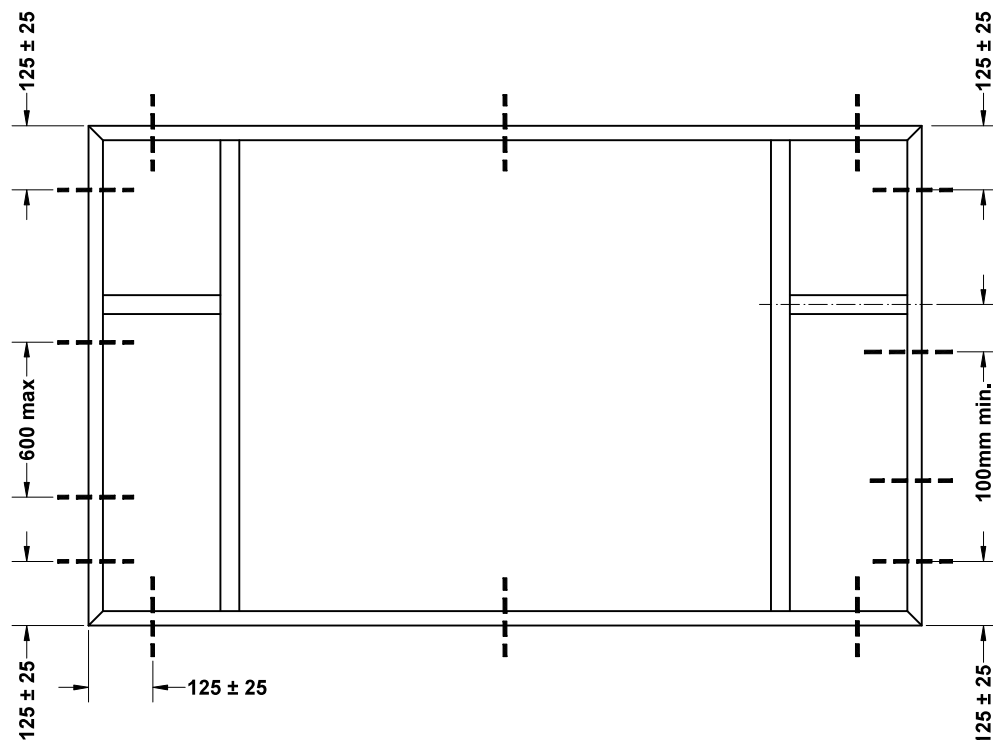


Jamb Detail to Brickwork



# XT66 REBATED DOOR SYSTEM

## Fixing point locations

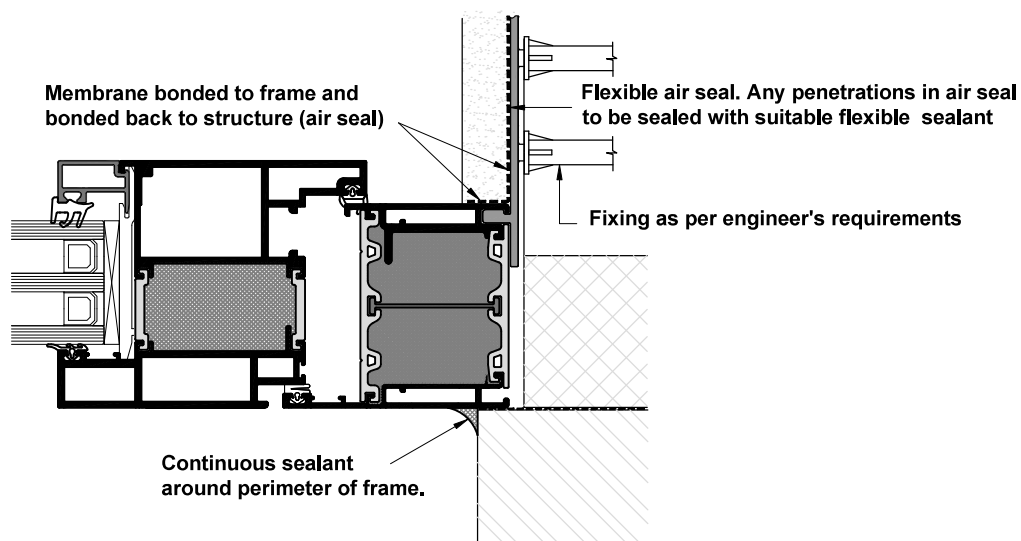


**Note:**

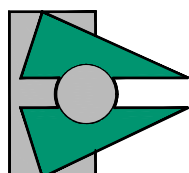
For detailed information on installation, refer to the AMS installation and maintenance manual.

Fixing distances for aluminium windows and doors as per BS 8213-4:2016  
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 doors over 1800mm wide, central head and sub cill fixings should be provided.



Jamb Detail to Brickwork



# XT66 REBATED DOOR SYSTEM

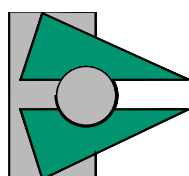
## Profile weights

DOOR PROFILES		
CODE	POSITION	WEIGHT (kg / lm)
XT6 011	FRAME	2.20
XT6 022	SASH	3.07
XT6 026	SASH	3.07
XT6 030	MEETING STILE	1.71
XT6 211	CW INSERT FRAME	2.09
XT6 212	CW INSERT FRAME	1.98
XT6 302	MULLION / TRANSOM	1.83
XT6 310	MULLION / TRANSOM	2.94
XT6 315	MULLION / TRANSOM	2.56
XT6 316	MULLION / TRANSOM	3.10
XT6 319	MULLION / TRANSOM	2.45
XT6 340	MID-RAIL	2.47

AUXILIARY PROFILES		
CODE	POSITION	WEIGHT (kg / lm)
XT6 028	28mm ADDON	1.53
XT6 040	40mm ADDON	1.41
XT6 260	CILL RISER	1.41
XT6 265	CILL RISER WITH PRESSING SLOT	2.40
XT6 266	SHADOWLINE CILL RAISER	1.85
XT6 353	SPLIT COUPLER	2.26
XT6 350C	SPLIT COUPLER	1.04
XT6 360	IN LINE COUPLER	1.21
XT6 361	50mm BULB COUPLER	1.91
XT6 363	100mm BULB COUPLER	2.34

BEAD PROFILES		
CODE	POSITION	WEIGHT (kg / lm)
HL 501	48mm BEAD	0.24
HL 502	44mm BEAD	0.24
HL 506	40mm BEAD	0.26
HL 532	32mm BEAD	0.29
HL 538	38mm BEAD	0.26
HL 560	28mm BEAD	0.27
HL 561	28mm BEAD	0.31
HL 565	35mm BEAD	0.28

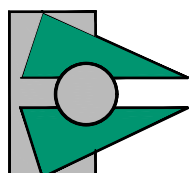
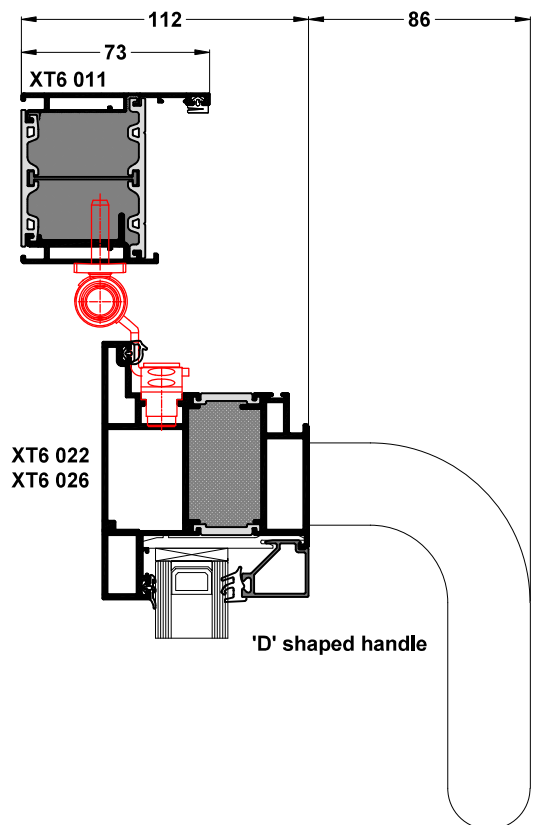
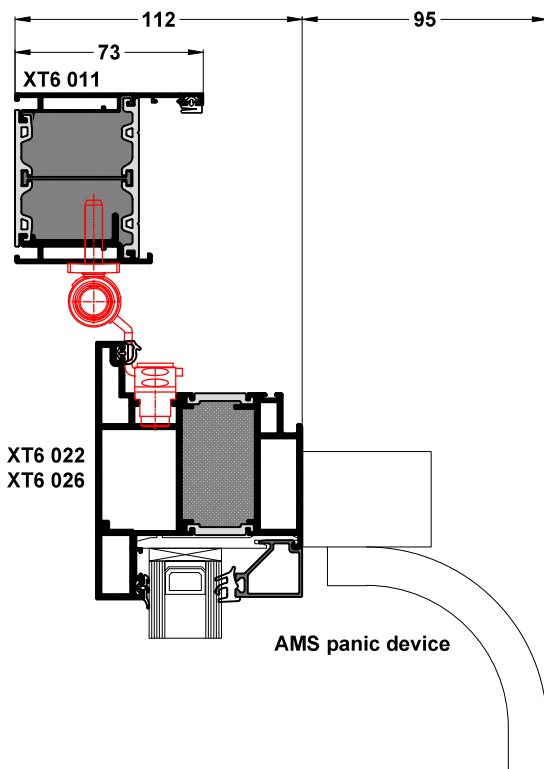
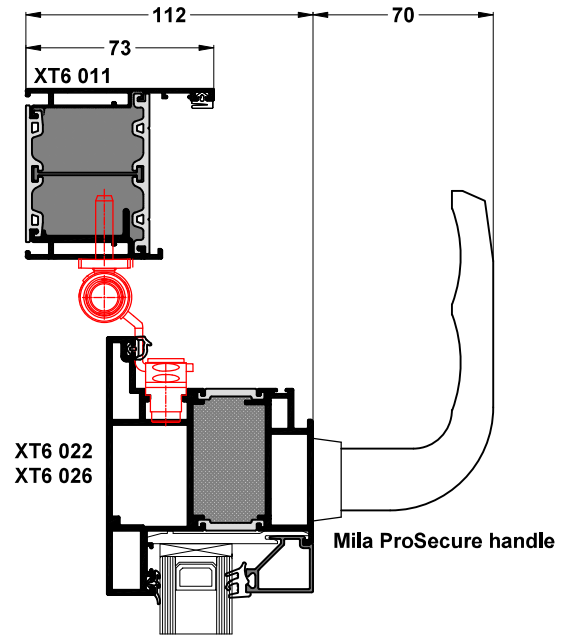
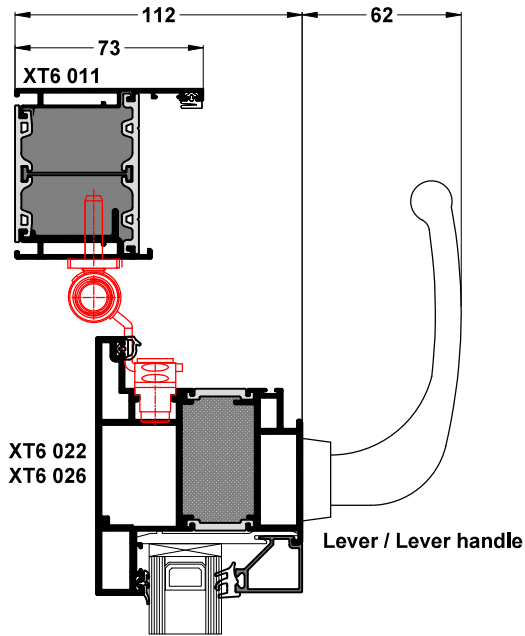
CILL PROFILES		
CODE	POSITION	WEIGHT (kg / lm)
CILL030	30mm CILL	0.75
CILL060	60mm CILL	1.12
CILL100	100mm CILL	1.48
CILL120	120mm CILL	1.77
CILL145	145mm CILL	2.08
CILL170	170mm CILL	2.31
CILL200	200mm CILL	2.68
CILL230	230mm CILL	2.96
CILLE60	CILL EXTENDER	1.23





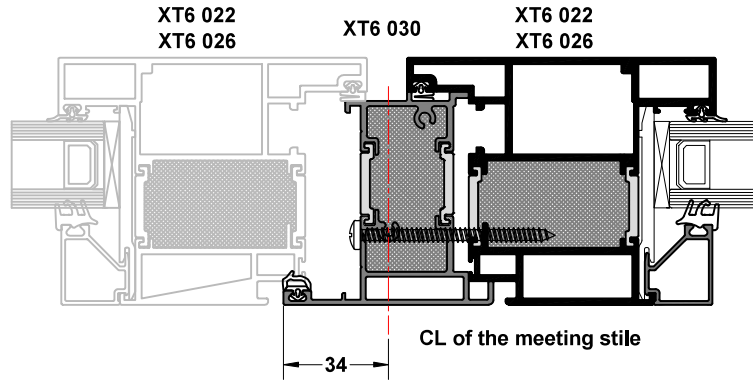
# XT66 REBATED DOOR SYSTEM

Clear opening dimensions - SFS hinge

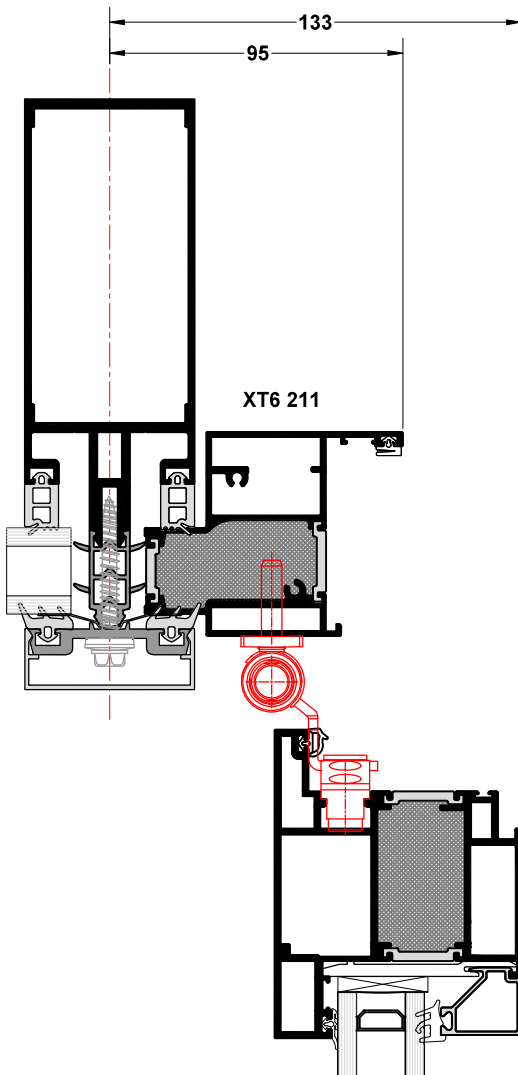


# XT66 REBATED DOOR SYSTEM

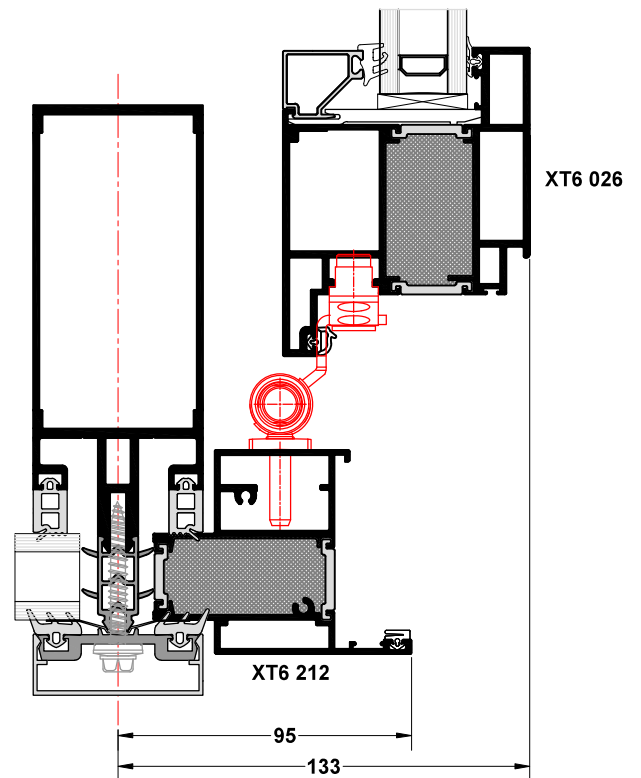
## Clear opening dimensions - SFS hinge



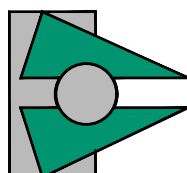
Double door with rebated meeting stile



Open out door integrated into curtain wall

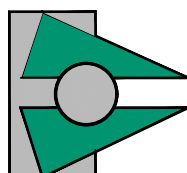
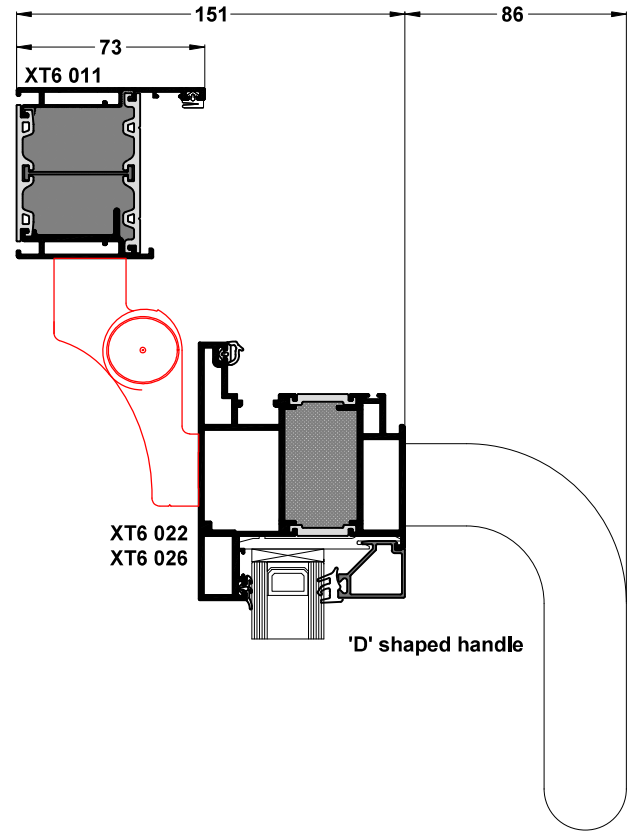
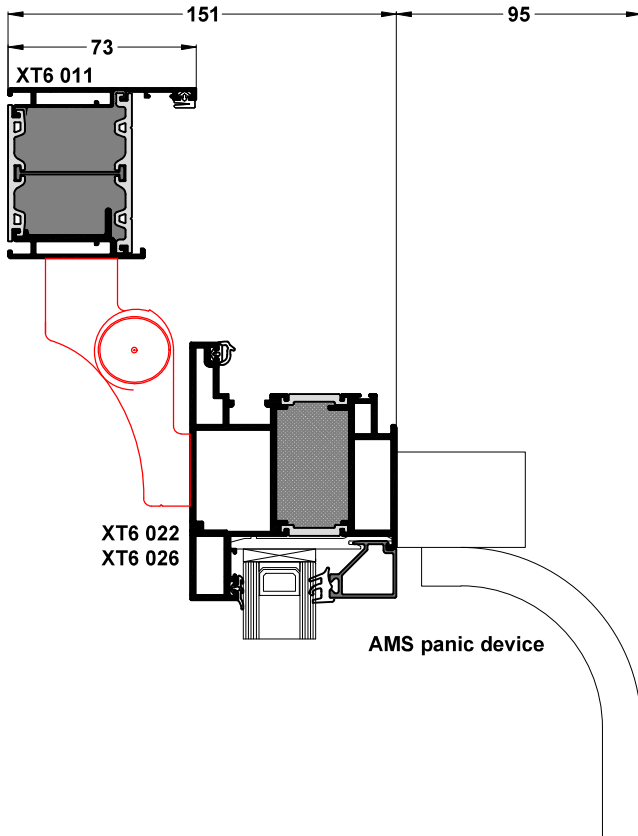
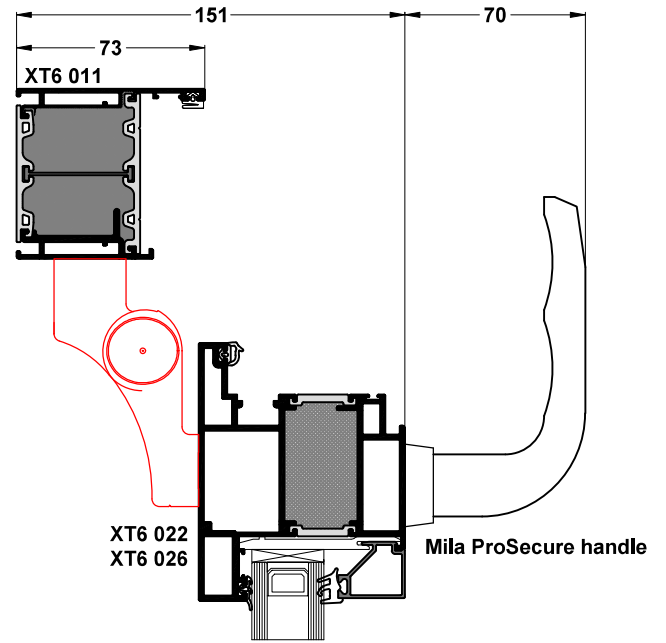
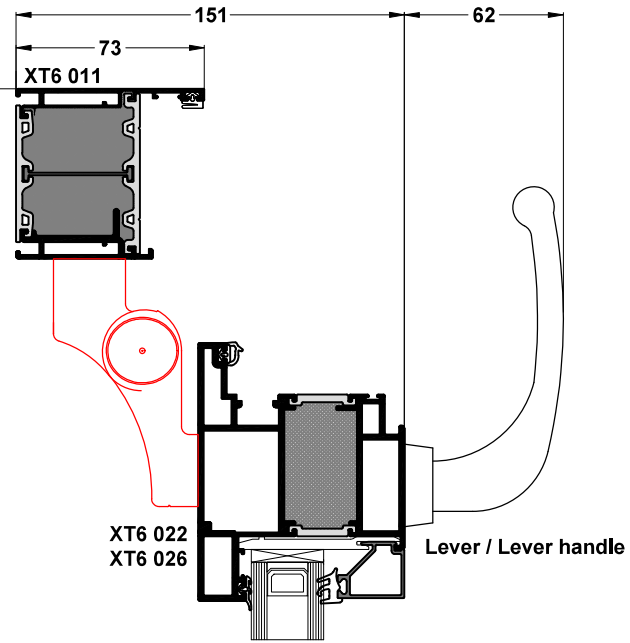


Open in door integrated into curtain wall



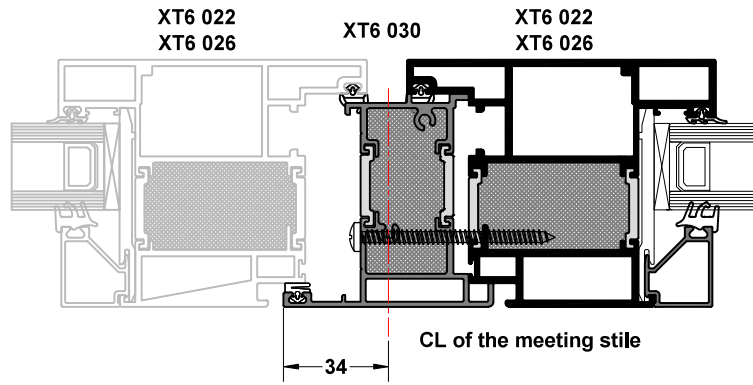
# XT66 REBATED DOOR SYSTEM

Clear opening dimensions - Loira+ hinge

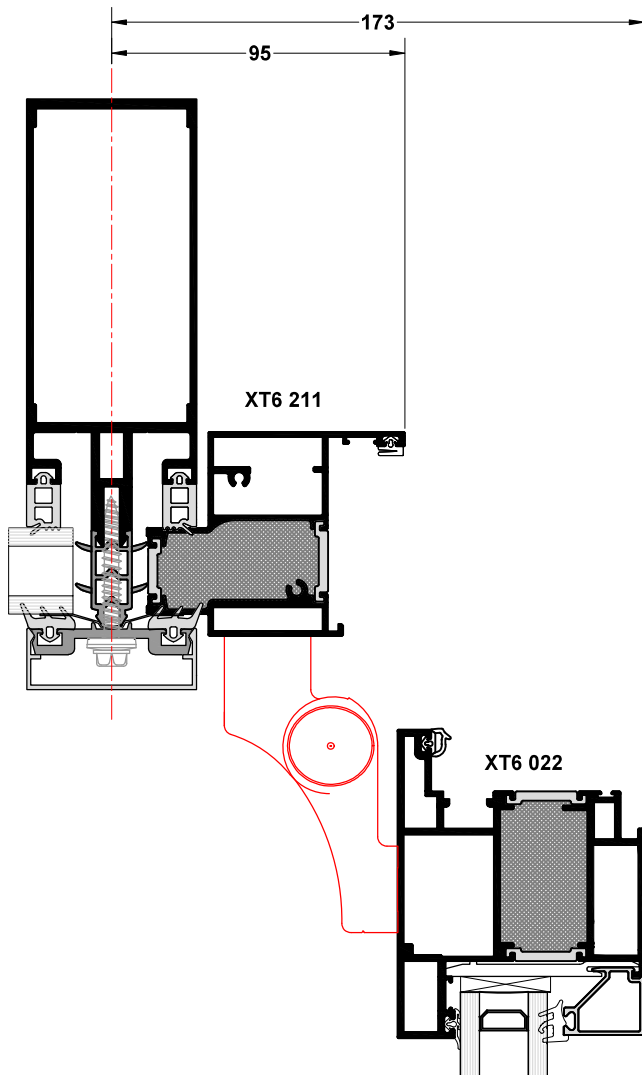


# XT66 REBATED DOOR SYSTEM

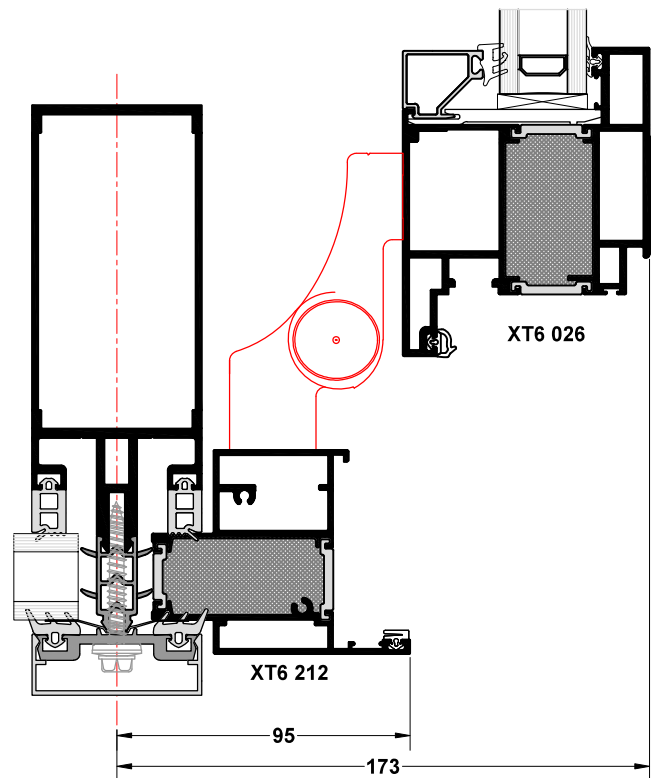
Clear opening dimensions - Loira+ hinge



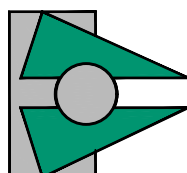
Double door with rebated meeting stile



Open out door integrated into curtain wall

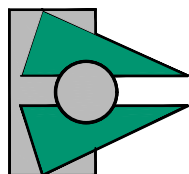
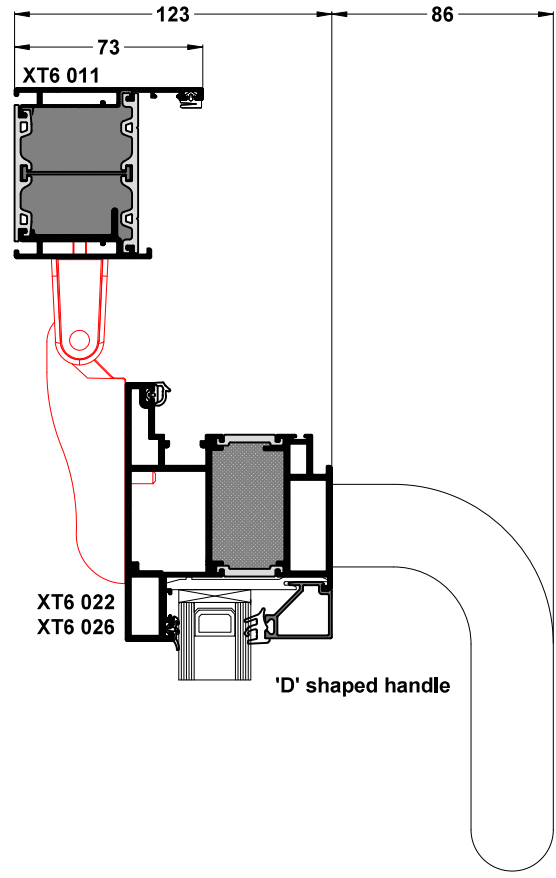
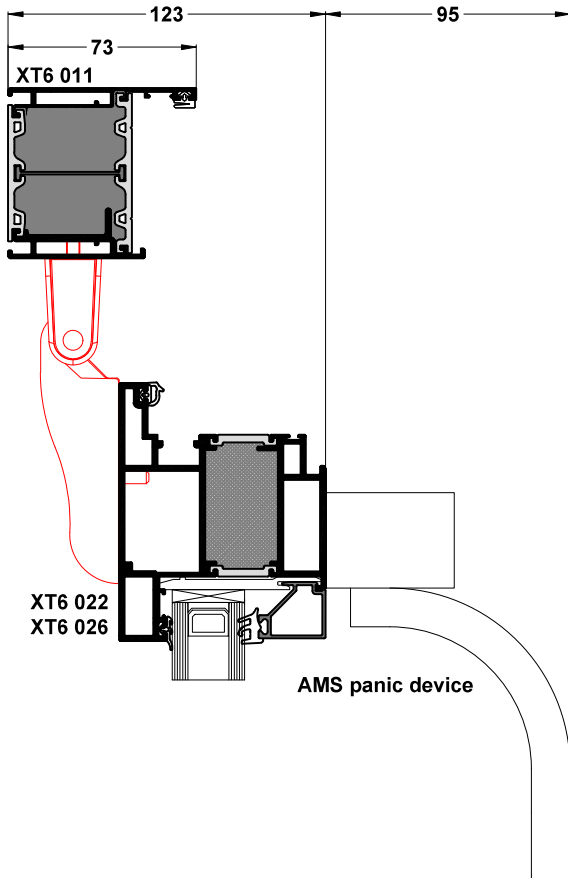
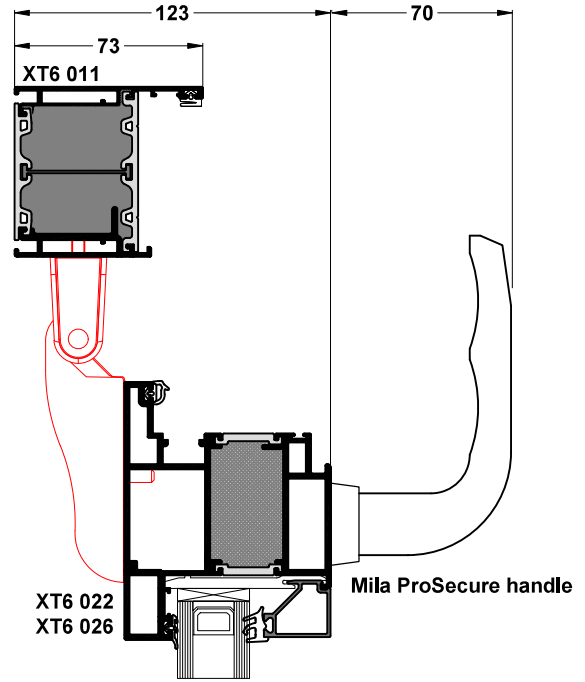
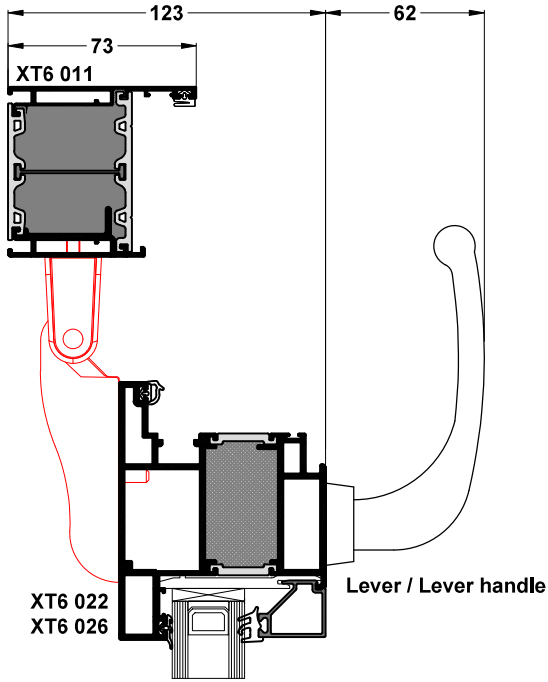


Open in door integrated into curtain wall



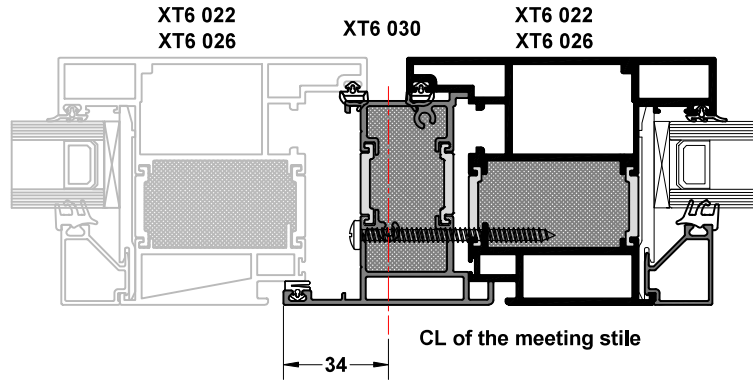
# XT66 REBATED DOOR SYSTEM

Clear opening dimensions - Fab&Fix hinge

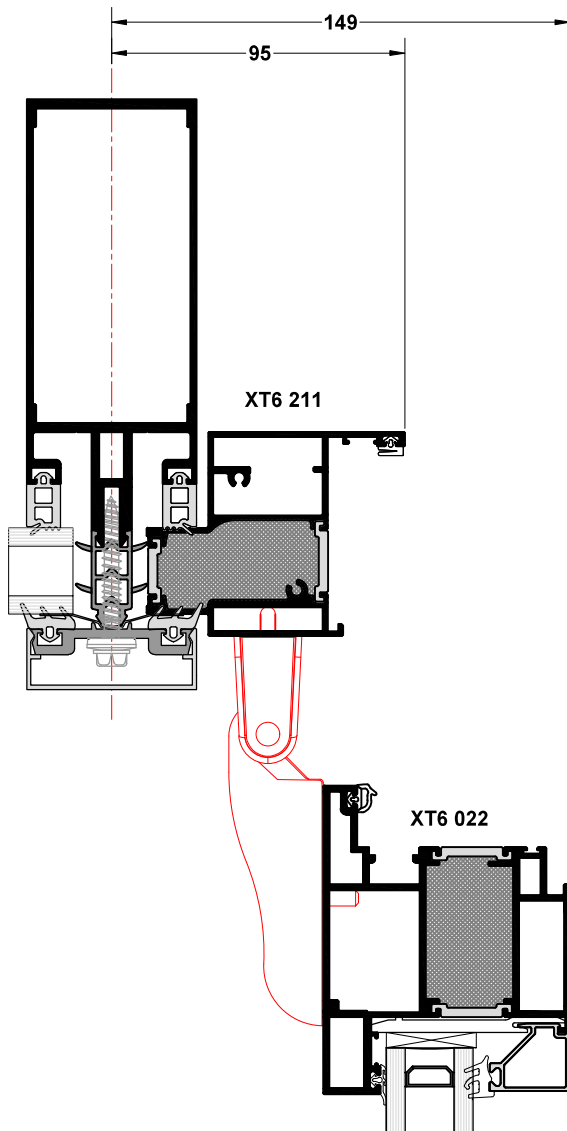


# XT66 REBATED DOOR SYSTEM

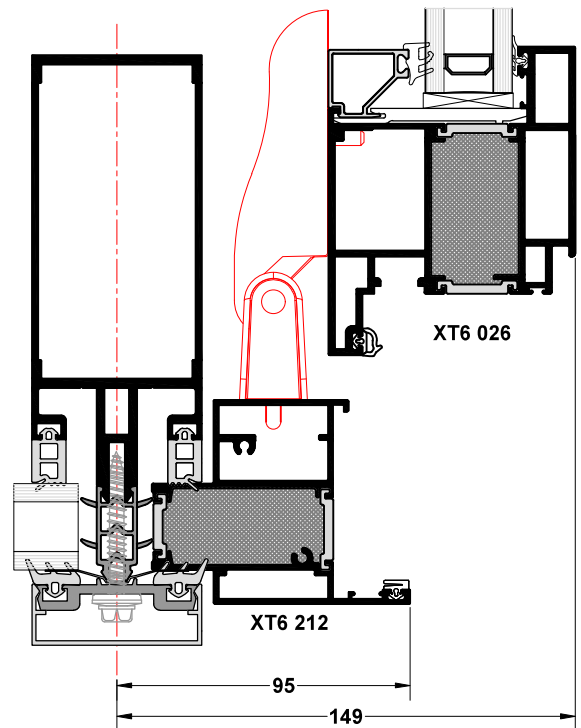
Clear opening dimensions - Fab&Fix



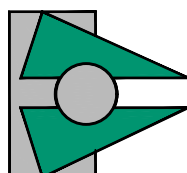
Double door with rebated meeting stile



Open out door integrated into curtain wall

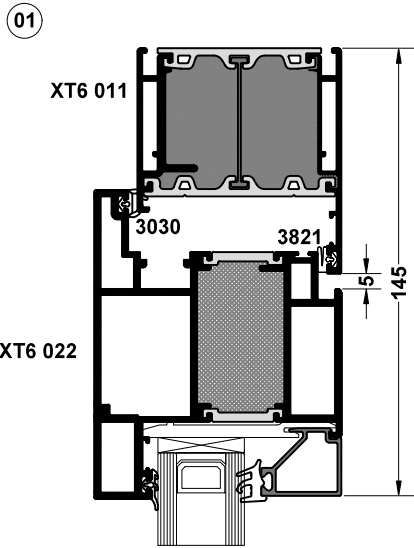


Open in door integrated into curtain wall

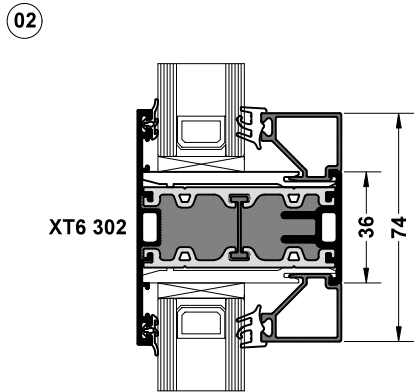
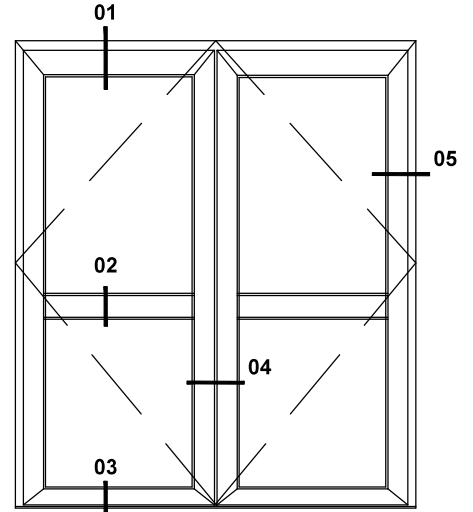


# XT66 REBATED DOOR SYSTEM

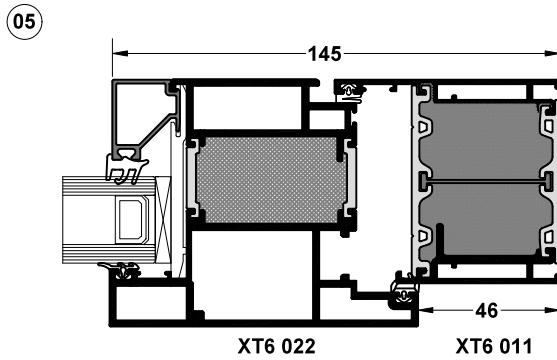
Standard details - Double door, open out



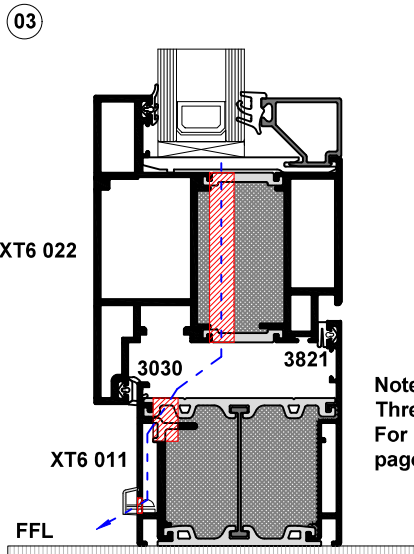
XT6 022



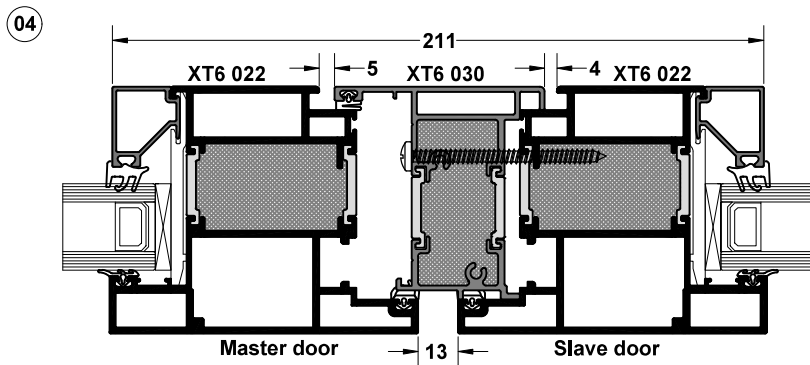
XT6 302



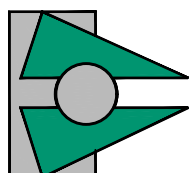
Note :  
For transom options  
see page 3.4.16.



Note :  
Threshold option A shown.  
For different threshold options see  
pages 3.4.13, 3.4.14 and 3.4.15.

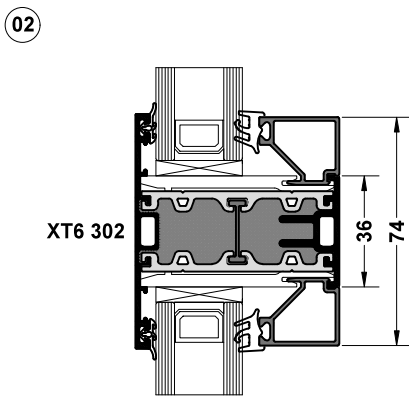
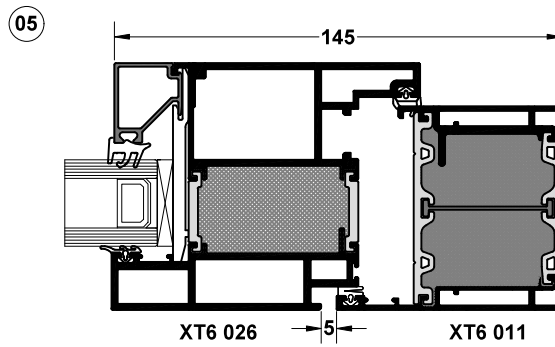
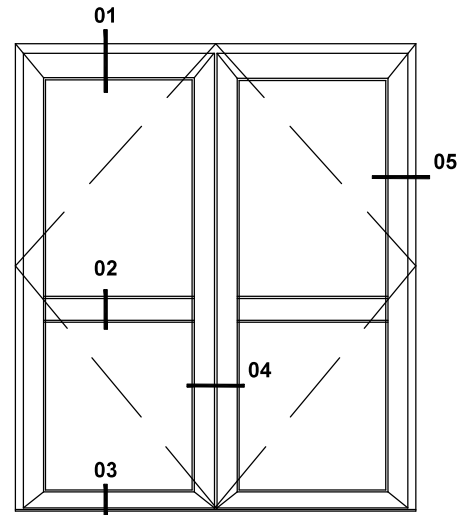
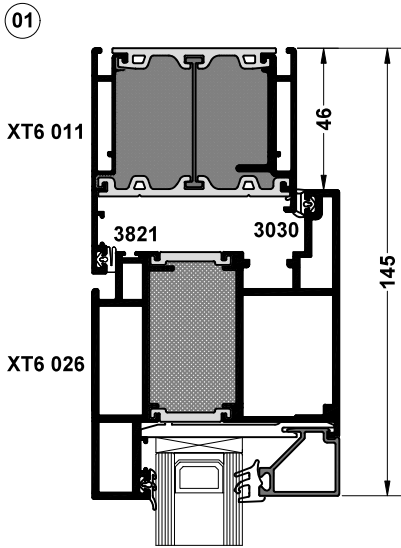


Meeting stile detail - Master and slave door, internally beaded  
- Open out

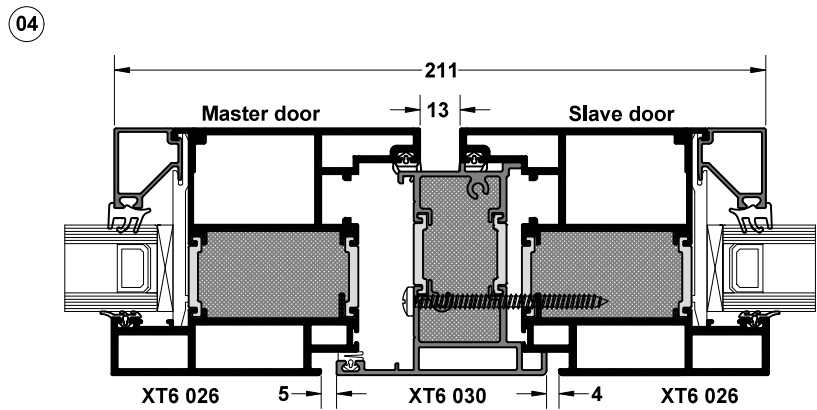


# XT66 REBATED DOOR SYSTEM

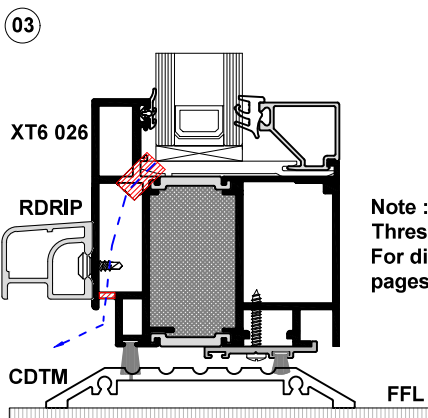
Standard details - Double door, open in



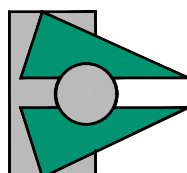
Note :  
For transom options  
see page 3.4.16.



Meeting stile detail - Master and slave door, internally beaded  
- Open in



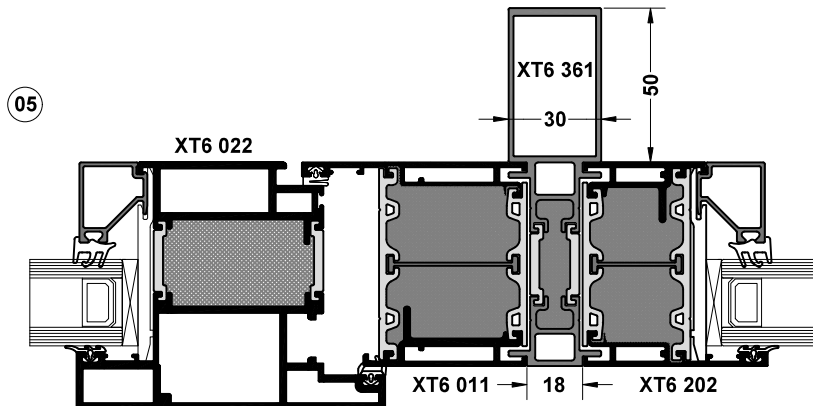
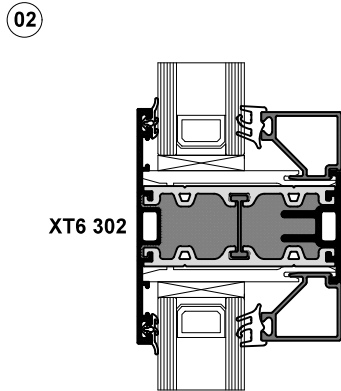
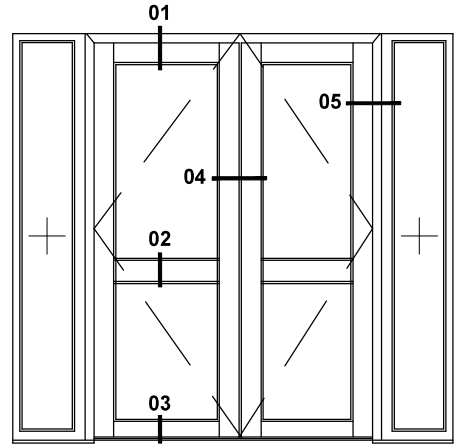
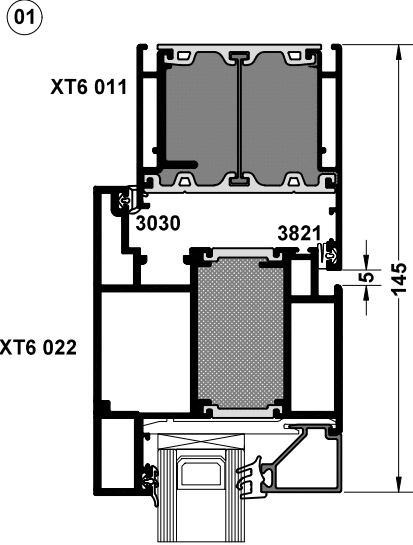
Note :  
Threshold option B shown.  
For different threshold options see  
pages 3.4.13, 3.4.14 and 3.4.15.





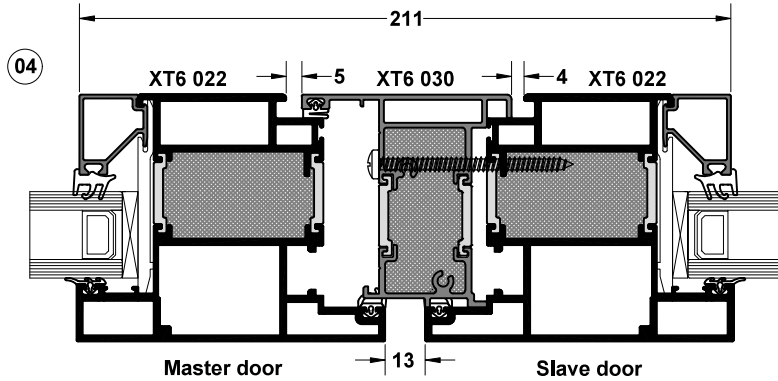
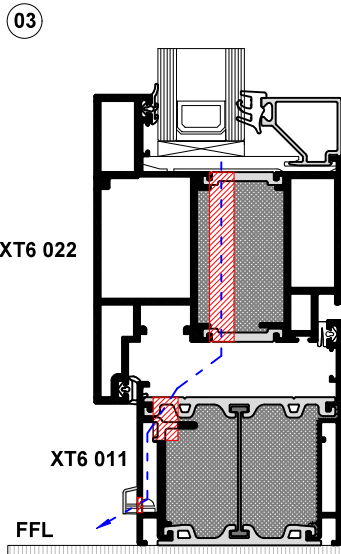
# XT66 REBATED DOOR SYSTEM

Standard details - Double door with side lights, open out



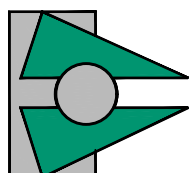
50mm Bulb coupler detail  
- Door and fixed light internally beaded

Note :  
For transom options  
see page 3.4.16.



Meeting stile detail - Master and slave door, internally beaded  
- Open out

Note :  
Threshold option A shown.  
For different threshold options see  
pages 3.4.13, 3.4.14 and 3.4.15.



# XT66 REBATED DOOR SYSTEM

## Standard details - Single door with a top light

**OPEN OUT DOOR**  
 -internally beaded door  
 -externally beaded top light

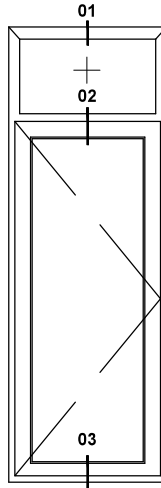
**OPEN IN DOOR**  
 -internally beaded door  
 -internally beaded top light

01

01

XT6 011

XT6 011

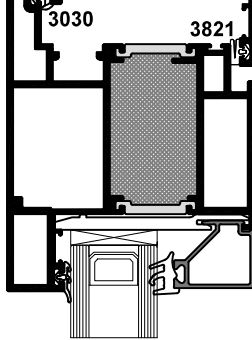


02

02

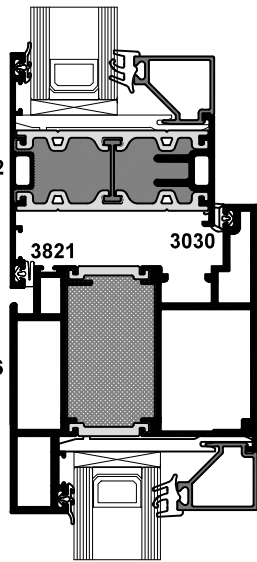
XT6 302

XT6 302



XT6 022

XT6 026



Note :  
 For transom options  
 see page 3.4.16.

03

03

XT6 022

XT6 026

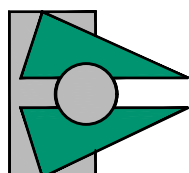
XT6 011

XT6 011

FFL

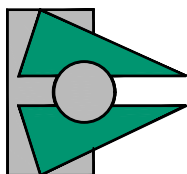
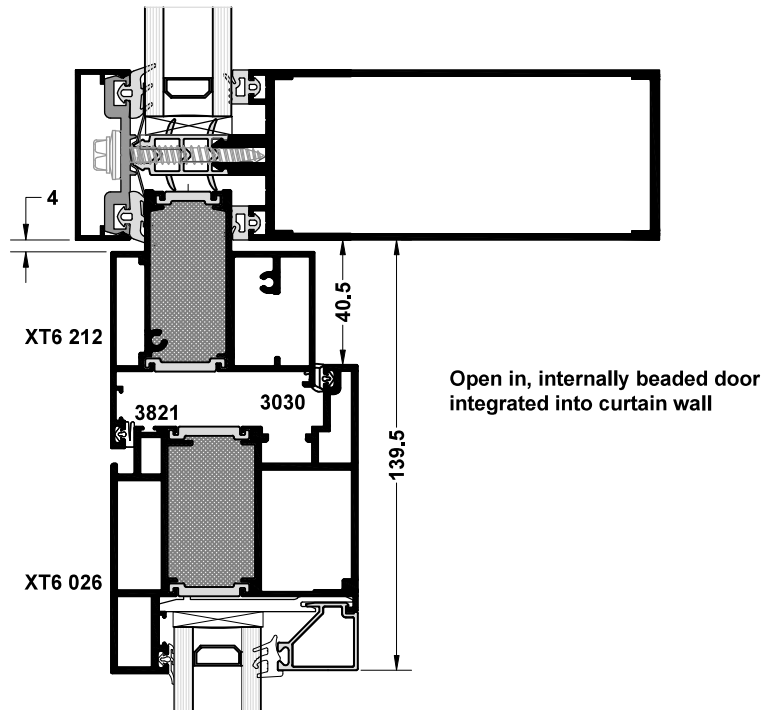
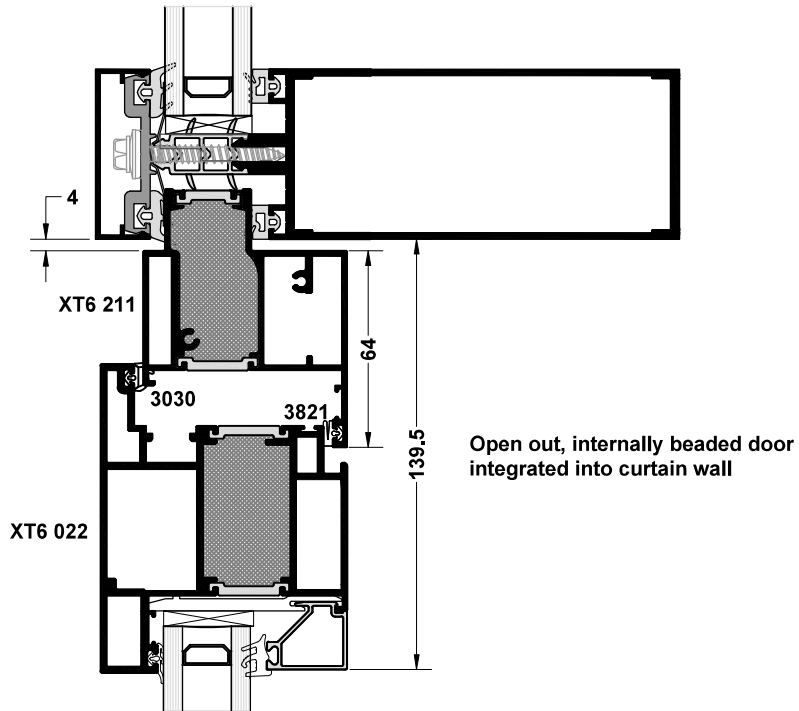
FFL

Note :  
 Threshold option A shown.  
 For different threshold options see  
 pages 3.4.13, 3.4.14 and 3.4.15.



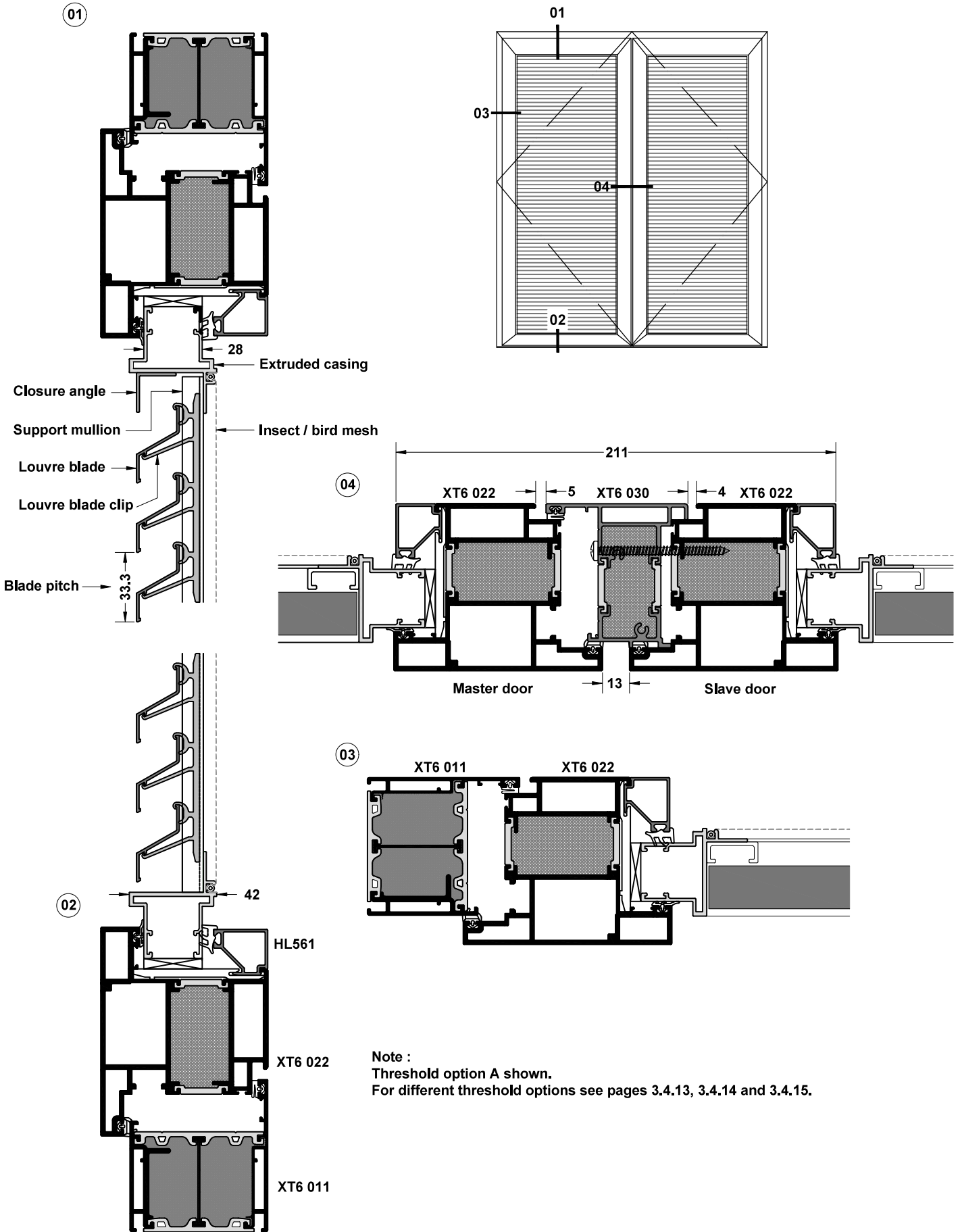
# XT66 REBATED DOOR SYSTEM

Standard details - Door integrated into curtain wall

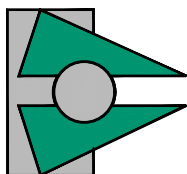


# XT66 REBATED DOOR SYSTEM

Standard details - Louvre door, open out

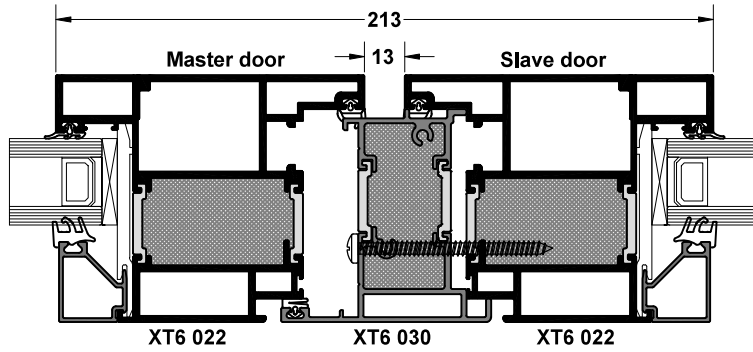


Note :  
Threshold option A shown.  
For different threshold options see pages 3.4.13, 3.4.14 and 3.4.15.

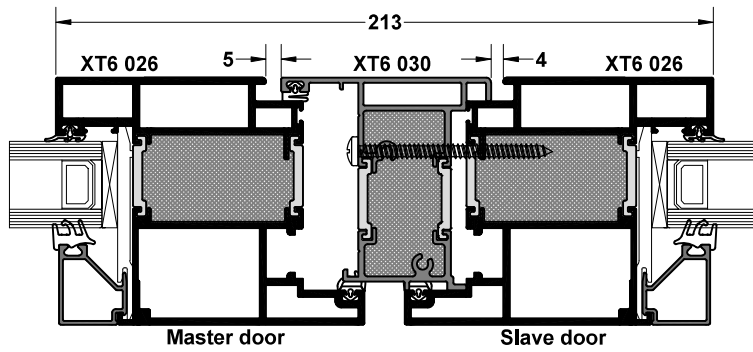


# XT66 REBATED DOOR SYSTEM

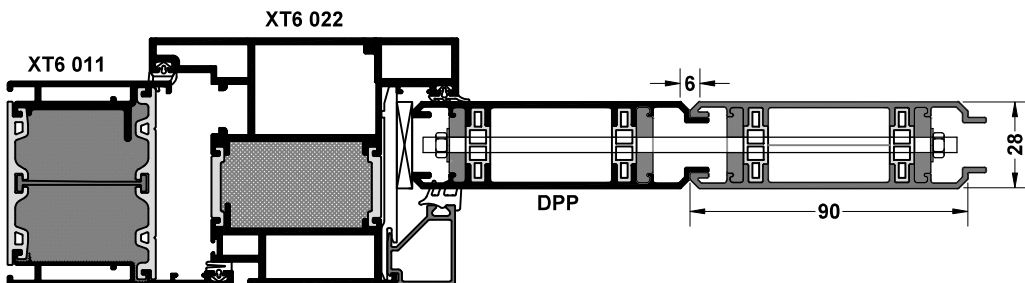
## Standard details - Meeting stile & Plank door



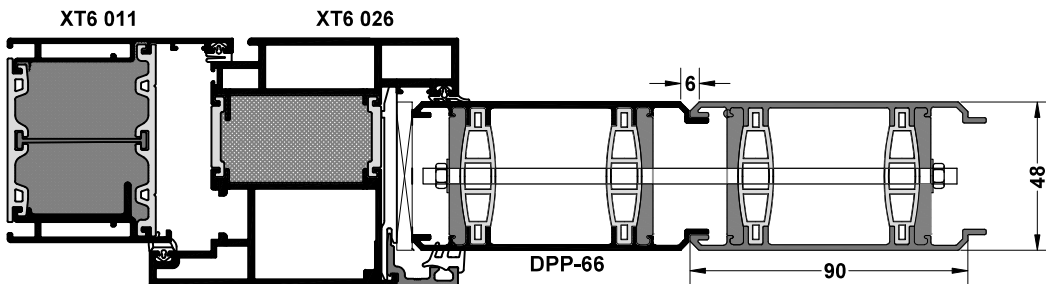
Meeting stile detail - Master and slave door, internally beaded  
- Open out



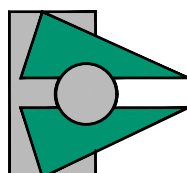
Meeting stile detail - Master and slave door, internally beaded  
- Open in



Open out internally beaded plank door detail - 28mm T&G panel

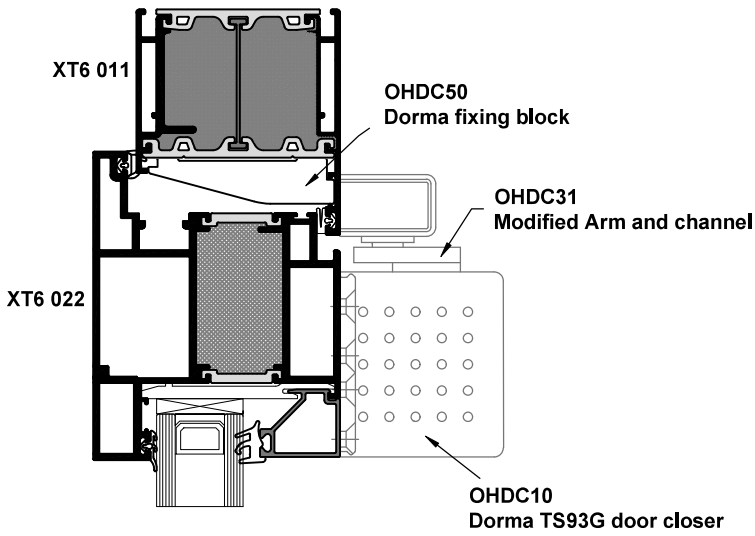


Open in internally beaded plank door detail - 48mm T&G panel

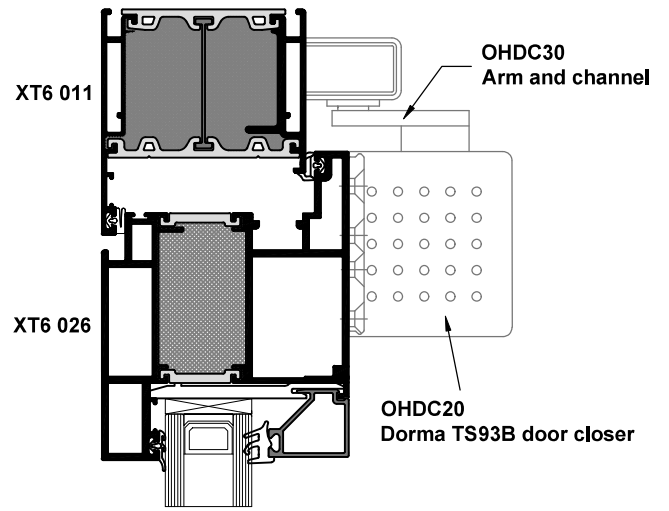


# XT66 REBATED DOOR SYSTEM

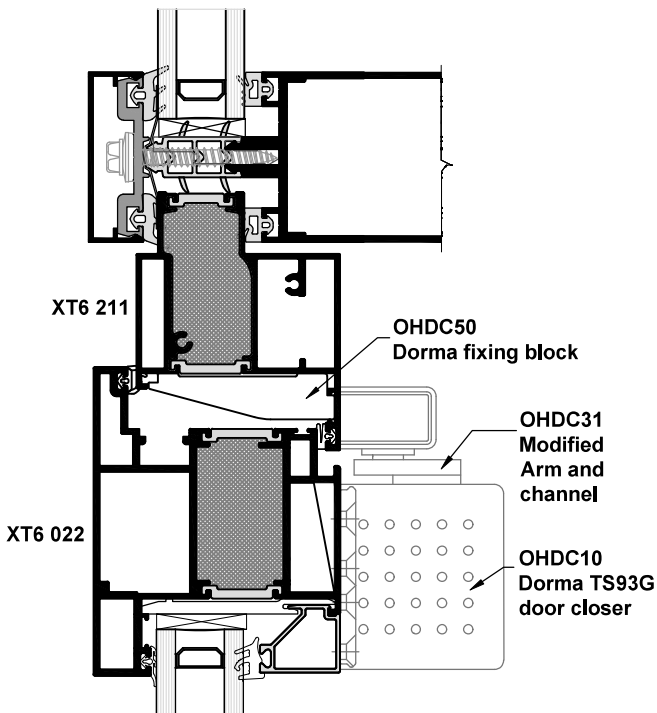
## Standard details - Dorma overhead door closer



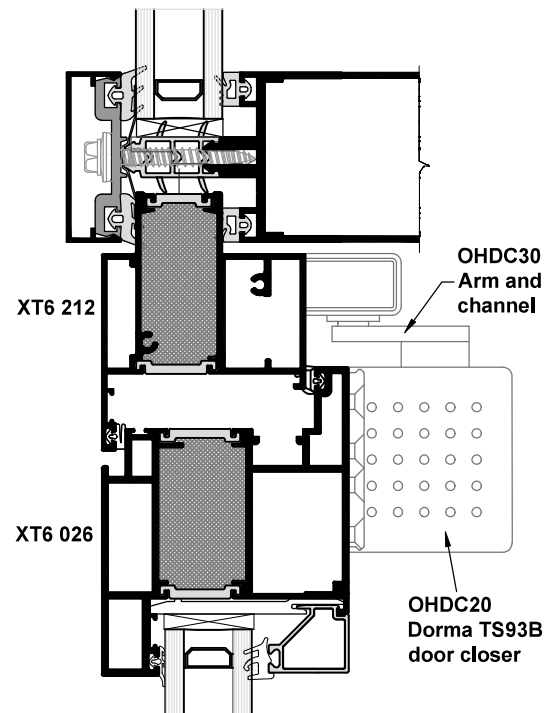
Open out, internally beaded door.



Open out, internally beaded door.



Open out, internally beaded door.  
Integrated into curtain wall.



Open in, internally beaded door.  
Integrated into curtain wall.

### Notes:

Whenever a Dorma TS93 closer is fitted, a 90° restrictor arm is also to be fitted. This aids in the prevention of damage to the door and closer .

To ensure operating forces on self-closing doors are compliant with the current building regulations, a power operated door closer should be fitted.

