PVC-U
RESIDENTIAL DOOR
SURVEYORS GUIDE

UN – DOUBLE GLAZED

TN – TRIPLE GLAZED

Anglian®
Home improvements

1. Size Parameter Table

All parameters are based on a 1200pa door.
All sizes quoted are **Mainframe** to **Mainframe.**
For Mainframe to Transom / Mullion break size deduct 32mm.
For Transom / Mullion to Transom / Mullion break size deduct 64mm.
All height sizes are based on a standard threshold – different thresholds will affect the max / min height. (Refer 1.6. Thresholds).

1.1. Size Parameters

Option (See Notes)	Light Colours UN	Dark Colours UN	Light Colours TN	Dark Colours TN
OVERALL FRAME PARAMETERS				
Frame Min Height	1708		1708	
Frame Min Width	550		550	
Frame Min Height + Width	1H + 1W = 2222		1H + 1W = 2222	
Frame Max Height	2500		2500	
Frame Max Width	3000	1916	3000	1916
Frame Max Height + Width	1H + 1W = 5000	1H + 1W = 4400	1H + 1W = 5000	1H + 1W = 4400
Transom / Mullion Max Length	1900		1900	
Min Distance Between Offset Transom / Mullion	405		405	
SINGLE DOORS				
Min Height	1708		1708	
Min Width	550		550	
Max Height	2400 *	2200	2200	
Max Width	1100	1000	1000	
DOUBLE DOORS (MAINFRAME TO MEETING STILE)				
Min Height	1638		1808	
Min Width	508		508	
Max Height	2400 *+	2200	2200	
Max Width	1058	958	958	
BIN DOORS (SINGLE LOCK)				
Min Height	700		N/A	
Min Width	550		N/A	
Max Height	1600		N/A	
Max Width	1100		N/A	

(All dimensions = mm)

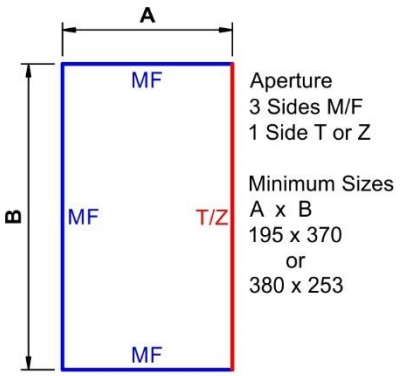
Parameter Notes:

Minimum recommended height of a door is 2060mm (total height), this gives a walk through height of 1930mm with a standard threshold.

* BSI Kitemark Limit 2200mm.

+ Maximum Depending on Wind Loading.

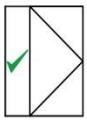
1.2. Minimum Weld Parameters - Frame

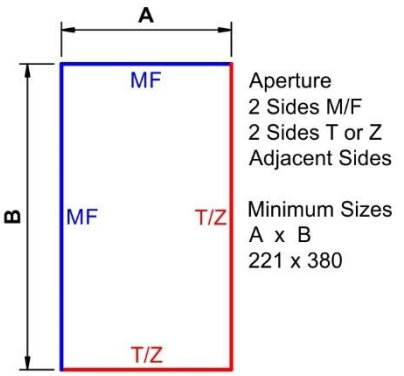


Aperture
3 Sides M/F
1 Side T or Z

Minimum Sizes
A x B
195 x 370
or
380 x 253

Example Designs Containing Aperture

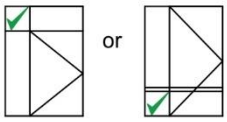


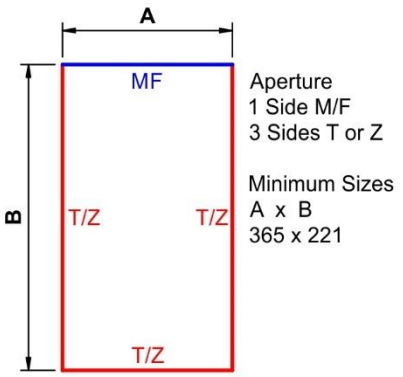


Aperture
2 Sides M/F
2 Sides T or Z
Adjacent Sides

Minimum Sizes
A x B
221 x 380

Example Designs Containing Aperture

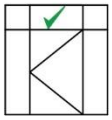




Aperture
1 Side M/F
3 Sides T or Z

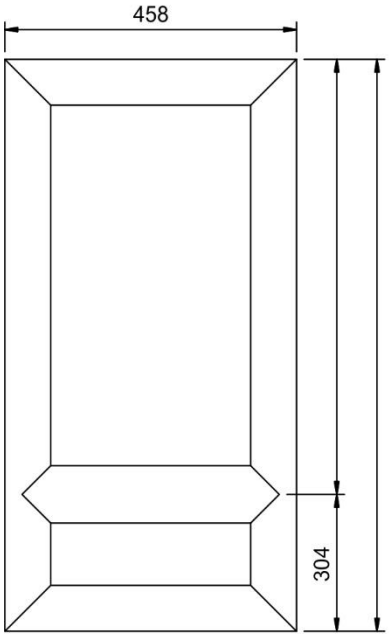
Minimum Sizes
A x B
365 x 221

Example Design Containing Aperture

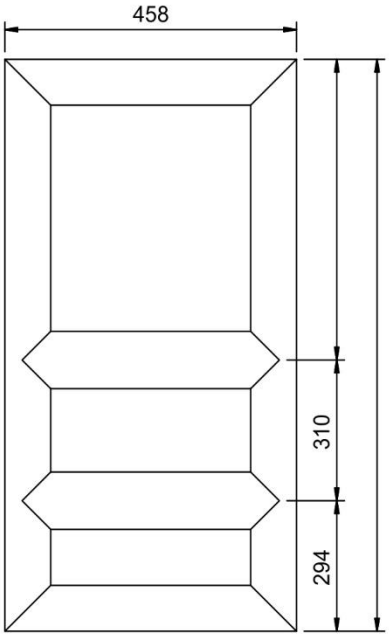


1.3. Minimum Weld Parameters - Leaf

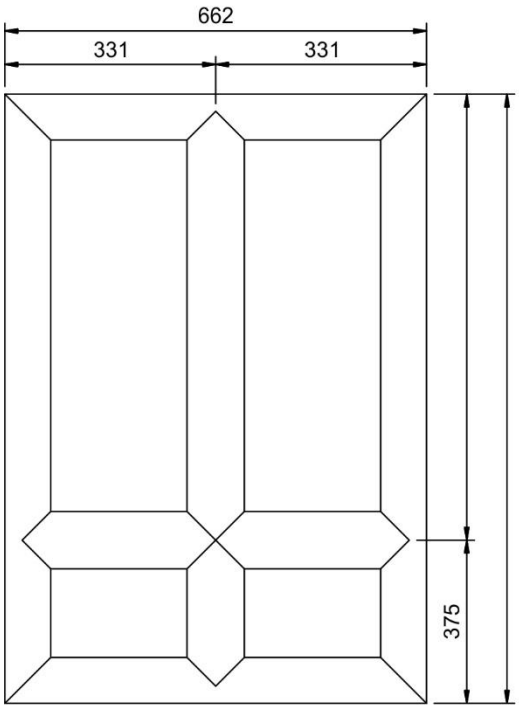
Door Leaf with single bar. This can run horizontal or vertical. 8902, 8962 and 8966 horizontally, only 8902, 8962 vertically. Please note the vertical leaf minimum is 632mm



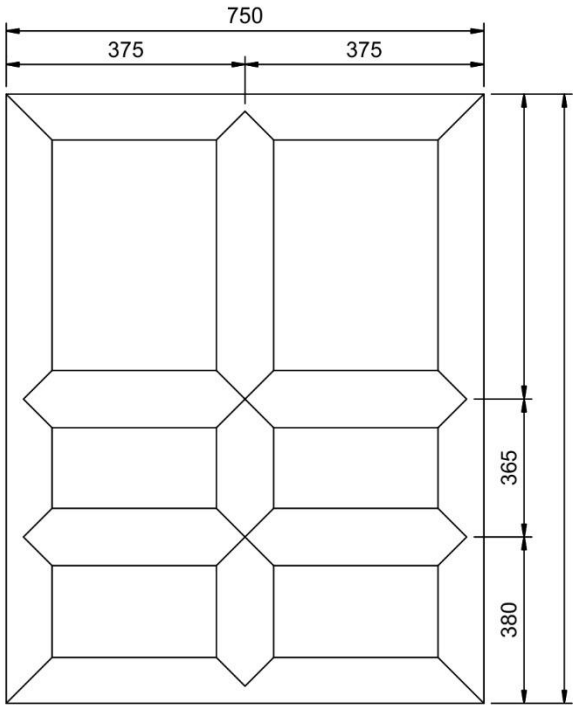
Door Leaf with double bars. These can run horizontal or vertical. 8902, 8962 and 8966 horizontally, only 8902, 8962 vertically



Door Leaf with cruciform. T bar 8902, 8962 and 8966 horizontally, only 8902, 8962 vertically



Door Leaf with double cruciform in either orientation, 1 bar vertical shown herer. T bar 8902, 8962 and 8966 horizontally, only 8902, 8962 vertically



Note:
One way sash minimum sizes based on minimum size parameters specified in Surveyors Guide
All other minimums based on combination of minimum sizes and welding parameters

From (PA/044 Rev: -)

1.4. Size Parameters – UN PAS 24 (All Colours)

Option	UN PAS 24
OVERALL FRAME PARAMETERS	
To suit Door sizes as below. No Fixed Panes. All Side & Fan Lights require Coupling	
SINGLE DOOR	
Min Height	1708
Min Width	550
Max Height	2200
Max Width	1000
DOUBLE DOOR (MAINFRAME TO MEETING STILE)	
Min Height	1638
Min Width	508
Max Height	2200
Max Width	1058

(All dimensions = mm)

1.5. Fixed Pane Size Parameters – Not UN PAS 24

All sizes quoted are finished **Mainframe** to **T Bar**.

1.5.1. Light Colours

Option	UN	TN
FIXED PANE FAN LIGHT		
Min Height	205	205
Min Height + Width	1H + 1W = 755	1H + 1W = 755
Max Height	800	800
FIXED PANE INTEGRAL SIDE PANEL (WHITE ONLY & MUST USE HIGH THRESHOLD)		
Min Width	205	205
Max Width	1000	1000
Min Width with Midrail	245	245

(All dimensions = mm)

1.5.2. Dark Colours

Option	UN	TN
FIXED PANE FAN LIGHT		
Min Height	205	205
Min Height + Width	1H + 1W = 755	1H + 1W = 755
Max Height	650	650

(All dimensions = mm)

1.6. Thresholds

Overall height of door thresholds.

Threshold	Threshold Height
High Threshold	77
Standard Threshold	53
Mobility Threshold Open-In	25
Mobility Threshold Open-Out	23

(All dimensions = mm)

1.7. Midrail

Midrails are recommended to be fitted at a break height of 830mm as standard (815mm if a mobility threshold is selected). This is the optimum height for the letterplate.

The use of a midrail in a UN / TN door at a particular range of heights can cause production issues.

If possible, it would be of assistance if the midrail was positioned outside the ranges as given in table below:

If there are good reasons for positioning the midrail in this area, then the product will be manufactured. If, however the customer expresses no preference then the recommended height should be selected.

Profile	Bottom Survey Break – Min to Max
Standard Threshold	844 to 1110
High Threshold	868 to 1134
Open-In Single Low Ali	855 to 1121
Open-Out Single Low Ali	829 to 1095
Open-In Double Low Ali	841 to 1107
Open-Out Double Low Ali	829 to 1095

(All dimensions = mm)

1.8. Minimum Survey Break Width For Letterplate

	Letterplate In Midrail	Letterplate In Flat Panel *
Letterplate		
Mainframe to Mainframe	606	620
Mainframe to Meeting Stile	564	578

(All dimensions = mm)

Note!
If the midrail is moved from the default position and a letterplate is required in a narrow width door a check must be made that the letterplate and handle do not clash.

It is the Surveyors responsibility to check if this is possible when the Mainframe to Mainframe width of the door is less than 734mm for singles or 1384mm for doubles.

* Not UN PAS 24

1.9. Minimum Survey Break Width For Nightvents – Not UN PAS 24

Survey break sizes for options are **Mainframe** to **Mainframe** and per break.

Option	Min Width
NIGHTVENT (IN DOOR LEAF)	
Single 2000EA	460
Single 4400EA	605
2 x 4400EA	1035
Single 5000EA Gas Regs	660
NIGHTVENT (IN MAINFRAME)	
Single 2000EA	327
Single 4400EA	472
2 x 4400EA	902
Single 5000EA Gas Regs	535
2 x 5000EA Gas Regs	1025

(All dimensions = mm)

1.10. Minimum Survey Break Width For 90 Degree Restrictors

Situation (MF to MF)	Mainframe to Mainframe	Mainframe to Meeting Stile
Single Door	637	N/A
Double Door	1250	625

(All dimensions = mm)

2. Product Specification

The UN / TN door system is designed to meet residential door usage requirements.

It is **not** suitable for use in commercial buildings, offices or shops and other high footfall locations.

2.1. Colours

UN / TN products are only available in the core Anglian Colours as detailed in the PVC-U General Information section.

2.2. Shaped Products

UN door products are available in all shapes, (curves and raked) as detailed in the Shaped Products Guide.

UN PAS 24 and TN products are **not** available as shapes.

2.3. Handles

Straight lever / lever handles are available. Slam shut versions are available for single doors only using a split spindle system. This option prevents the latch from being operated from the outside without the use of the key. It should be stressed to the customer that this facility is not considered a security option.

Double doors are supplied fitted with two pairs of handles as shootbolts in both leaves need to be operated prior to locking the door. Each door is provided with a cylinder and both need to be locked to provide security.

For handle colours and available options refer to Suited Furniture Guide.

The standard handle can be replaced by the Chrome Conexis handle on all Open-In doors covered by the parameters given in Section 1. When a Conexis handle is used there is no cylinder fitted.

Due to the swing through of the handle assembly on Open-Out doors, the Conexis handle will not fit below the following mainframe widths.

- Single Door Minimum 960mm
- Double Door Minimum 1846mm

Where a Conexis handle is selected on a double door, the assembly is fitted to the master leaf and a standard Chrome lever / lever handle with a nickel cylinder is fitted to the passive leaf.

2.4. Hinges

Three hinges are fitted as standard.

For hinge colours and available options refer to Suited Furniture Guide.

2.5. Open-Out Door Restrictor

It is possible to order a 90° opening restrictor for Open-Out doors, the item is fitted to the top of the leaf and so is only suitable for rectangular doors.

2.6. Door Closer

It is **not** possible to fit door closers to the UN / TN product.

2.7. Letterplates

2.7.1. Standard Letterplate For UN / TN

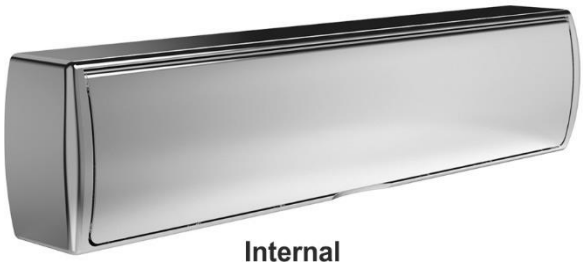
The letterplates shown in the Suited Furniture Guide are available for selection.

Letterplates are applied to the midrail of a UN / TN door.

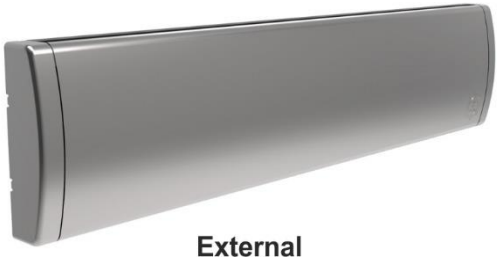
Alternatively, letterplates can be positioned in the central or bottom section of a suitable sculptured panel design or in a flat panel as defined in the Flat & Sculptured Infill Panels Guide.

2.7.2. TS008 Approved Letterplate For UN PAS 24

The security letterplate shown below can be applied to the midrail of a UN PAS 24 door. It is available in White, Black, Chrome and Gold finishes.



Internal



External

2.8. Cat Flap – Not UN PAS 24

Cat flaps can be provided fitted into suitably sized flat panels as detailed in the Flat & Sculptured Infill Panels Guide.

2.9. Spy Hole, Door Knocker, Door Chain

These items are available as stores options and should be fitted on site to suit customers' requirements. Refer to Suited Furniture Guide for available options and colours. A door chain must be fitted to a single UN PAS 24 door.

2.10. Locks

Single Residential Doors are fitted with a multi-point locking system comprising of 3 bolts with a throw greater than 20mm, exceeding the requirements of BS8220:2000 Guide for security of buildings against crime Part 1 Dwellings. Clause 8.3.

Double Residential Doors are fitted with a multi-point locking system comprising of 3 hook bolts with a throw greater than 20mm, exceeding the requirements of BS8220:2000 Guide for security of buildings against crime Part 1 Dwellings. Clause 8.3. Both the master and slave door are locked to the head and threshold by upper and lower stainless steel shootbolts that engage into the upper and lower frame strikers.

2.11. Cylinder Locks

Brass or Nickel Cylinders used on UN / TN doors are Yale 3* rated cylinder; Kitemark approved to TS007.

Keyed alike thumbturn cylinders are available and can be retro fitted if required. Obtained from Purchasing Department.

Half cylinders options are **not** available. "No cylinder" options are only available with the Conexis lock or locks detailed in Sections 2.12. and 2.13.

Double doors are provided with two key matched cylinders as standard.

2.12. Electric Strike Door Locks – Not UN PAS 24

This is not a normal requirement for residential installations however an electric strike can be provided where it is required and appropriate; the UN door fitted with this means of operation is not fully secure and also is not suited for heavy use.

For Further details refer to the Anglian Intranet Technical pages Frequently Asked Questions.

2.13. Emergency Exit Device – Not UN PAS 24

As an option Open-Out UN / TN doors can be fitted with an emergency exit device (Panic Latch) which replaces the standard lock and handle mechanism. This facility can be supplied to all standard sized doors but not to double doors with Low Aluminium thresholds. This equipment is provided for emergency exit only and cannot be combined with other locking systems.

There are two options available:

- Panic Latch has a horizontal bar to operate the lock.
- Panic Latch Pad has no horizontal bar, the lock is operated by pressing a pad at the edge of the leaf.

External key operated panic locks (EED's) are not normally a requirement of a residential door system and are **not** available.

2.14. Mobility Threshold

Approved Document M Amended 2016 - Changes to Access Requirements for Dwellings

Requirement.

Approved Document Part M (AD (M)) specifies the requirements for provision of suitable access to a dwelling for all Disabled, Elderly, Infirm or wheelchair user visitors to a property and redefines the requirements for a suitable accessible door threshold.

Existing Buildings.

Where a suitable accessible threshold currently exists then it should **not** be replaced with one that is unsatisfactory to the requirements of the regulation.

AD (M) Definitions.

Clear Opening Width:

Clear distance measured between the inside face of the doorframe (or door stop) and the face of the door when open at 90 degrees. Door furniture and ironmongery may be disregarded when measuring the clear opening width.

Accessible Threshold:

A threshold that is level, or if raised, has a total height of not more than 15mm, a minimum number of upstands and slopes and with any upstand higher than 5mm chamfered.

Approach Route:

Internal or external path or corridor usually leading to the principal private entrance of a dwelling form a defined starting point (typically the pavement immediately outside of the curtilage or plot boundary).

Steps.

Where a step into a dwelling is unavoidable the rise is a maximum of 150mm and aligned with the outside face of the threshold (i.e.in line with the door not at an angle).

Survey Considerations.

When carrying out a survey where a Low Ali threshold has been specifically sold as an AD (M) compliant threshold the surveyor must also consider the suitability of the door to meet the all of the requirements of AD (M) with specific consideration being given to the approach route, any steps , the provision of ramps or any alteration to the door clear opening width, e.g.

- Where one door has been sold with an accessible threshold then the surveyor should consider the suitability against the requirements and advise the customer accordingly.
- Where a sale has more than one door one of which has been specifically sold with an AD (M) accessible threshold. Should that door be not in compliance with the other access requirements and cannot be modified to comply, but another door does or could be made to comply, then the surveyor should discuss this with the customer and agree to amend the survey to change the mobility threshold to the more suitable door.

Clear Opening Width for Doors.

EXISTING DWELLING	
	Clear Opening Width
Private Entrance to a Dwelling	775
Communal Entrance of a Building containing the Dwelling (Flats)	775

(All dimensions = mm)

Anglian Thresholds.

The terminology within the Anglian survey system for an accessible threshold has been changed to:-

- Low Ali – In
- Low Ali – Out.

This denotes that the threshold can be used as part of a solution to meet the access requirements of AD (M) for suitable doors, when used with the additional internal and external access ramps and when the approach route and clear opening width of the door complies with the requirements of the regulation.

2.15. Weather Bar

In order to ensure the weather tightness performance Open-In doors are fitted with a weather bar in the same colour as the leaf.

Open-In Doors **cannot** be supplied without a weather bar fitted.

2.16. Bin Door

For use as a small height bin door, a standard UN product (not available as UN PAS 24 or TN Product) can be ordered in White or Foil both sides.

- The door is fitted with two hinges and a single point lock.
- Open-Out only with standard threshold or no threshold.
- The handles are external only with a half cylinder and internal blank.

2.17. Side Panels & Top Lights

2.17.1. Composite Door Side Panels

Composite side panels are **not** available for coupling to UN / TN door products.

2.17.2. Fully Glazed Side Panels & Top Lights

All fully glazed side panels and top lights are to be ordered using the standard Anglian UH / TH or UJ / TJ products in the standard range of Anglian Core Colours.

Couplings from the Anglian Standard coupling range must be ordered to the side panel or top light.

Matching half panels below a mid-rail or transom are available

2.17.3. Coupling to UN PAS 24 Doors

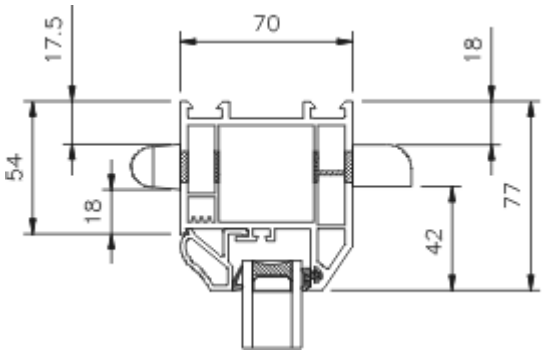
TH / TJ Products must **not** be coupled to UN PAS 24 Doors.

UH / UJ Products ordered as side panels or fanlights must be ordered with laminated glazing. Infill panels are **not** permitted.

2.18. Frame Extensions

15mm & 30mm packers, in colours to match the frame colour, can be selected from the Anglian Standard range of extensions.

2.19. Ventilation



Ventilation through the frame head

Trickle (Background) ventilation can be fitted to UN and TN products, either through the head of the mainframe or through the head of a suitably sized vent. (Refer 1.9.).

Alternatively, ventilation in a 30mm packer or glazed in ventilation is available.

(Refer to PVC-U General Information for full details).

3. Glass & Glazing

All Sealed Units supplied as standard are as specified in the Retail Surveyors Glazing Guide.

	UN	TN
Overall Thickness	24mm	36mm
SU Construction	4–16–4mm	4–12–4–12–4mm
External Pane	Toughened Clear Float	Toughened Clear Float Low Iron
Spacer Type	Black Thermal Insulating (TGI)	Black Thermal Insulating (Swiss)
Fill Material	Argon Gas Filled	Argon Gas Filled
Centre Pane	N/A	Tough Low e
Spacer Type	N/A	Black Thermal Insulating (Swiss)
Fill Material	N/A	Argon Gas Filled
Internal Pane	Toughened Low e	Toughened Low e

Size parameters for double and triple glazed sealed units are as stated in the Retail Surveyor Glazing Guide.

3.1. Obscure Glass

All current obscure glass as specified in the Retail Surveyors Glazing Guide is available for use in both UN (Double Glazed) products and TN (Triple Glazed) products.

3.2. Safety Glazing

Class A toughened glass or 6.8mm laminated glass is available for selection where required to comply with BS 6262: Part 4.

Size parameters for double and triple glazed sealed units are as stated in the Retail Surveyor Glazing Guide.

3.3. PAS 24 Glazing

	UN	TN
Overall Thickness	24.8mm	N/A
SU Construction	4–14–6.8mm	
External Pane	Toughened Clear Float	
Spacer Type	Black Thermal Insulating	
Fill Material	Argon Gas Filled	
Internal Pane	Laminated Low e	

3.4. Standard Effects

Unless stated otherwise effects are **not** available in TN (Triple Glazed) products.

3.4.1. Leads

All lead patterns and lead types, as detailed in the Retail Surveyors Glazing Guide & Standard Effects, are available for use in UN (Double Glazed) products only.

3.4.2. Georgian Inserts

All Geo insert patterns and insert types, as detailed in the Retail Surveyors Glazing Guide & Standard Effects, are available for use in UN (Double glazed) products only.

Georgian Inserts are available in all colours to suit the frame colour.

3.4.3. Anglian Decorative Glass

All designs detailed in the Retail Surveyors Guide to Anglian Decorative Glass (ADG) section are available for use in UN (Double Glazed) products only.

Etched glass effect for TN (Triple Glazed) products is applied to the inside surface of the external pane of glass.

3.4.4. Cottage Bars

All Cottage Bar patterns and insert types, as detailed in the Retail Surveyors Glazing Guide & Standard Effects, are available for use in UN (Double Glazed) products only

Cottage Bars are available in all core colours to suit the frame colour.

3.4.5. Hole In Glass

Hole in glass is **not** available.

3.5. Anti-Sun Glazing

Anti-Sun glass is **not** available.

3.6. Panels – Not UN PAS 24

As specified in the Flat & Sculptured Infill Panels Guide: -

Flat and all sculptured panels are available for UN (Double Glazed Products).

Flat panels and sculptured (half and quarter panels only) are available for TN (Triple Gazed) products.

A pet flap can be fitted as detailed in the Panels Guide.

3.7. Panels – PAS 24

A flat 36mm panel is available for use with PAS 24 doors. This will be supplied in half and quarter size apertures.

No sculptured panel options are available.

Pet flaps are **not** available in PAS 24 doors.

4. Performance

4.1. Weather Tightness

The UN / TN products within the parameters given in Section 1 are designed and tested to meet the requirements of exposure category 1200 as defined by BS6375 Part 1. This means a design wind loading resistance of 1200 Pa.

In practice the weather tightness of UN/TN products with standard thresholds will exceed these minimum requirements for most dwelling installations in the United Kingdom. However, for exposed, coastal and elevated locations a check should be made on the actual wind load required.

BS6375:1 allows lower performance for air and water penetration for doors fitted with wheelchair accessible thresholds. Although Anglian's products meet a higher performance care should be taken not to specify these options in exposed locations.

Technical Services can assist in this assessment.

Kitemark approval is limited to PAS 24 doors.

4.2. Thermal Performance - DSER Ratings

Details of current thermal performance and DSER ratings are on the intranet. (Link below).

Thermal Performance - DSER Ratings

4.3. Fire Performance

UN / TN doors must **not** be installed in locations where fire rated products are required by building regulations.

4.4. Security Performance – PAS 24

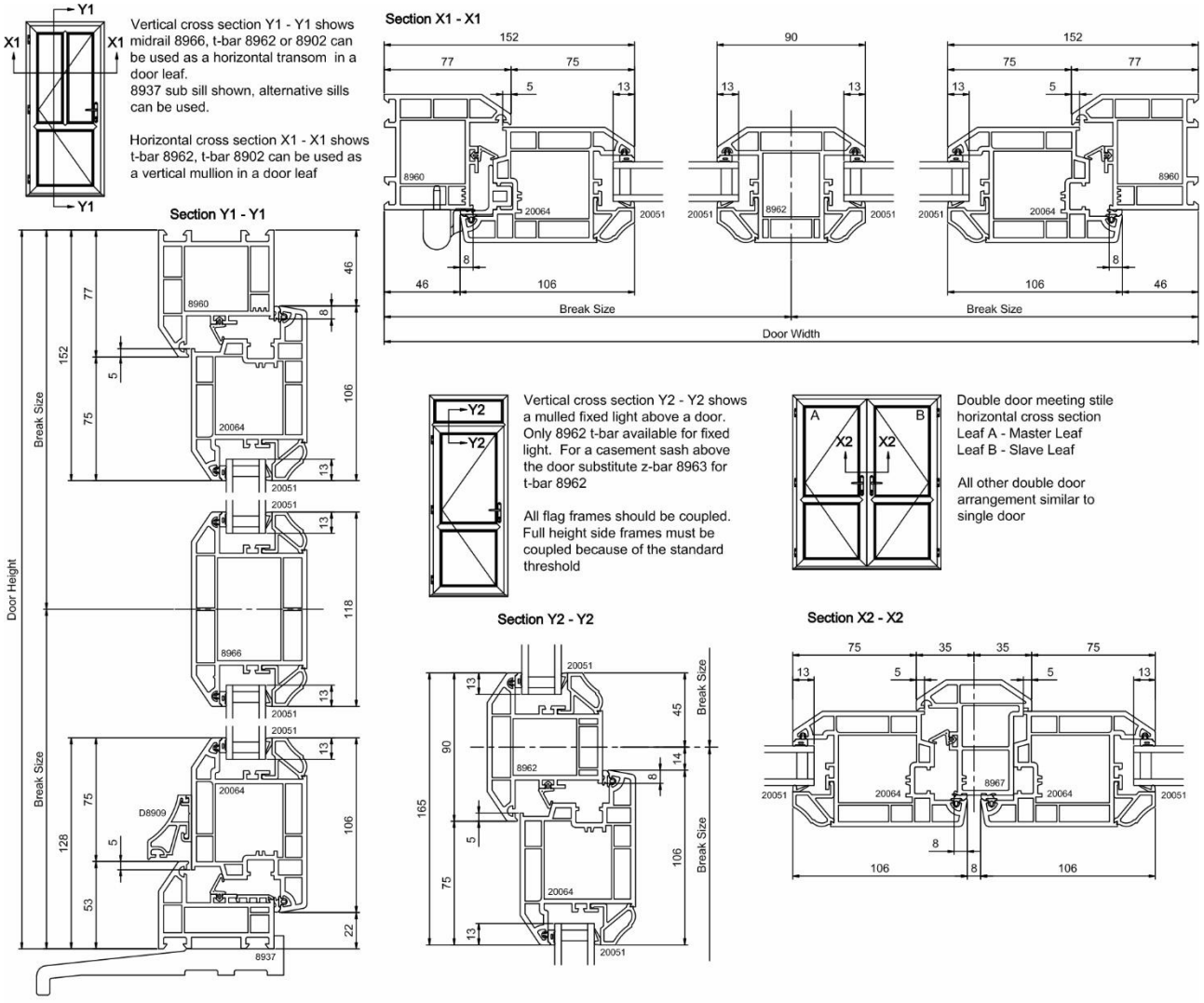
The UN door system has been tested and assessed to the requirements of PAS 24:2016 and is listed on the SBD website.

See Document Q Guide for details.

The TN door **cannot** comply with PAS 24 because it **cannot** be glazed with laminated glass.

5. General Arrangement Drawings

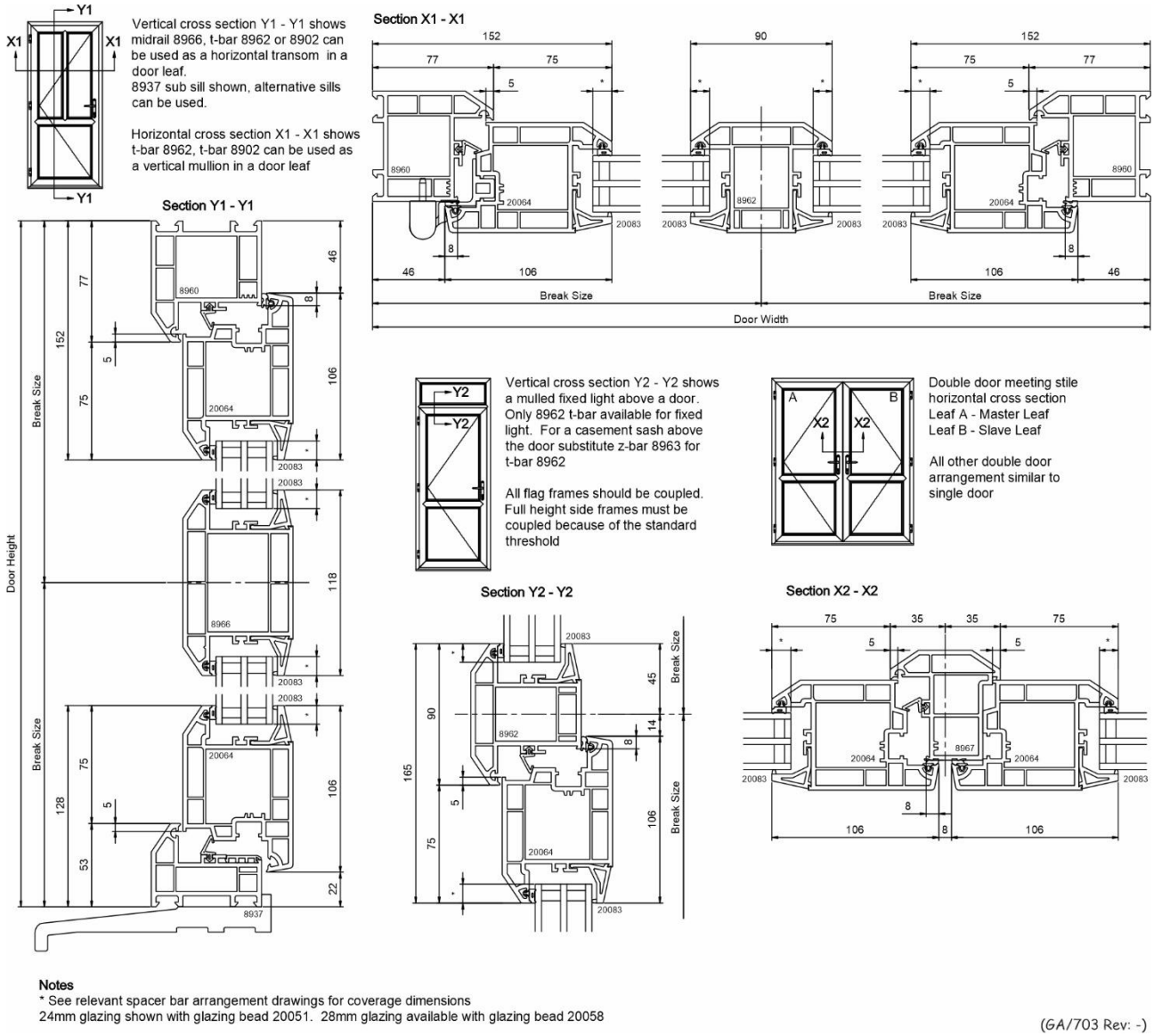
5.1. Open-In Residential Door Vertical & Horizontal Sections (UN)



Notes
24mm glazing shown with glazing bead 20051. 28mm glazing available with glazing bead 20058

(GA/696 Rev: A)

5.2. Open-In Residential Door Vertical & Horizontal Sections (TN)



Notes

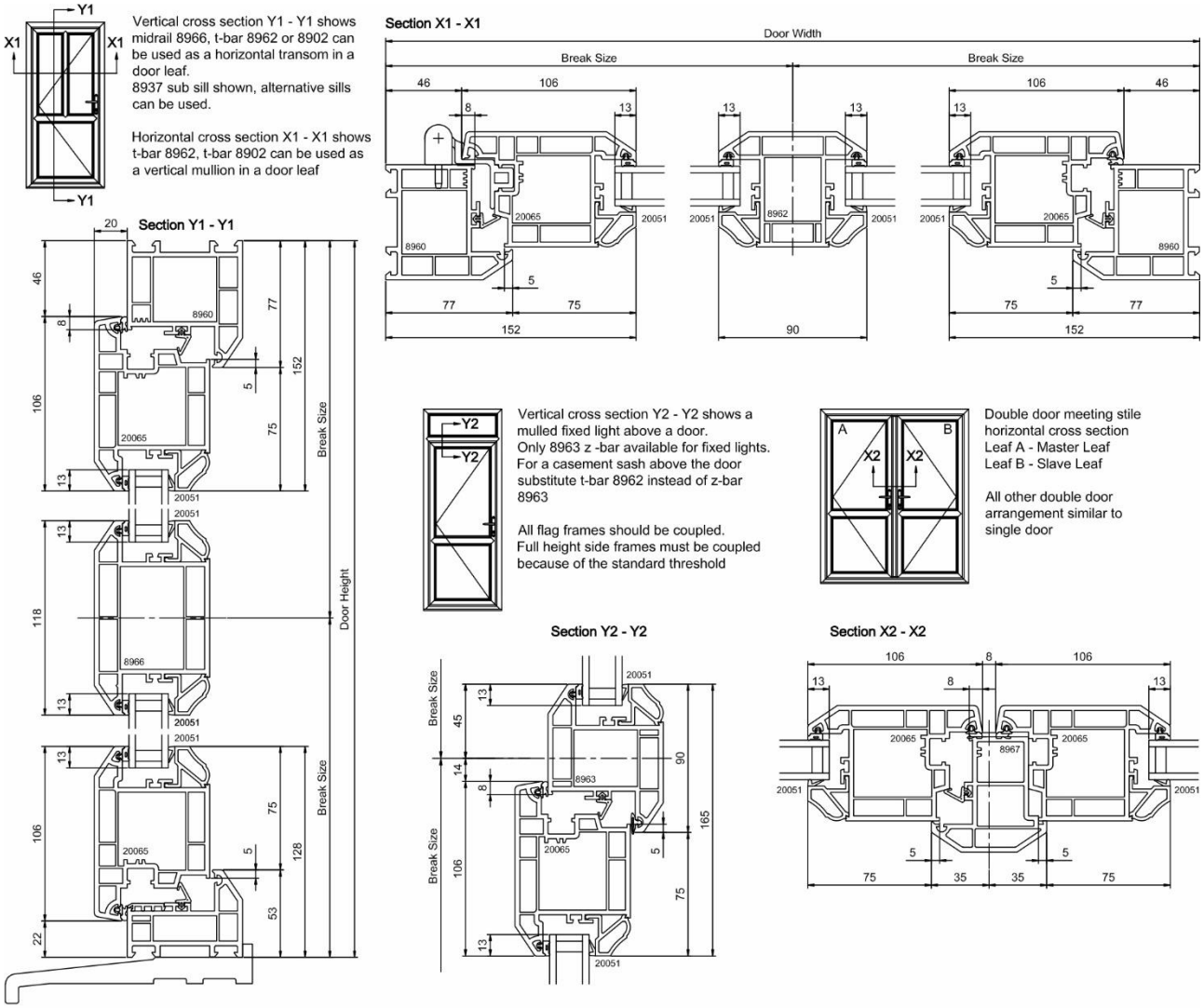
* See relevant spacer bar arrangement drawings for coverage dimensions

24mm glazing shown with glazing bead 20051. 28mm glazing available with glazing bead 20058

(GA/703 Rev: -)

5.3. Open-Out Residential Door Vertical & Horizontal Sections

(UN shown - TN similar)

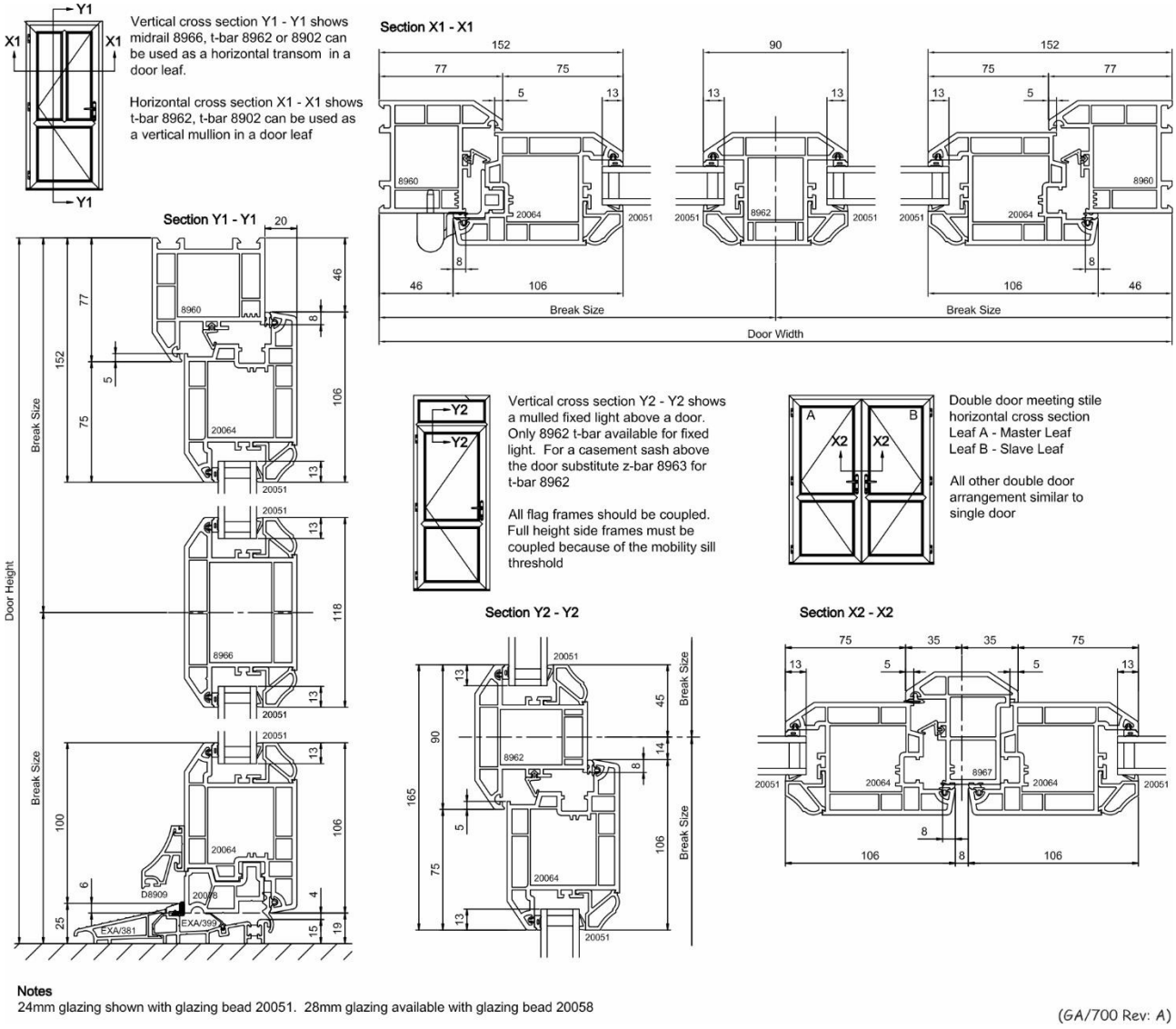


Notes
24mm glazing shown with glazing bead 20051. 28mm glazing available with glazing bead 20058

(GA/697 Rev: A)

5.4. Open-In Low Aluminium Vertical & Horizontal Sections

(UN shown - TN similar)



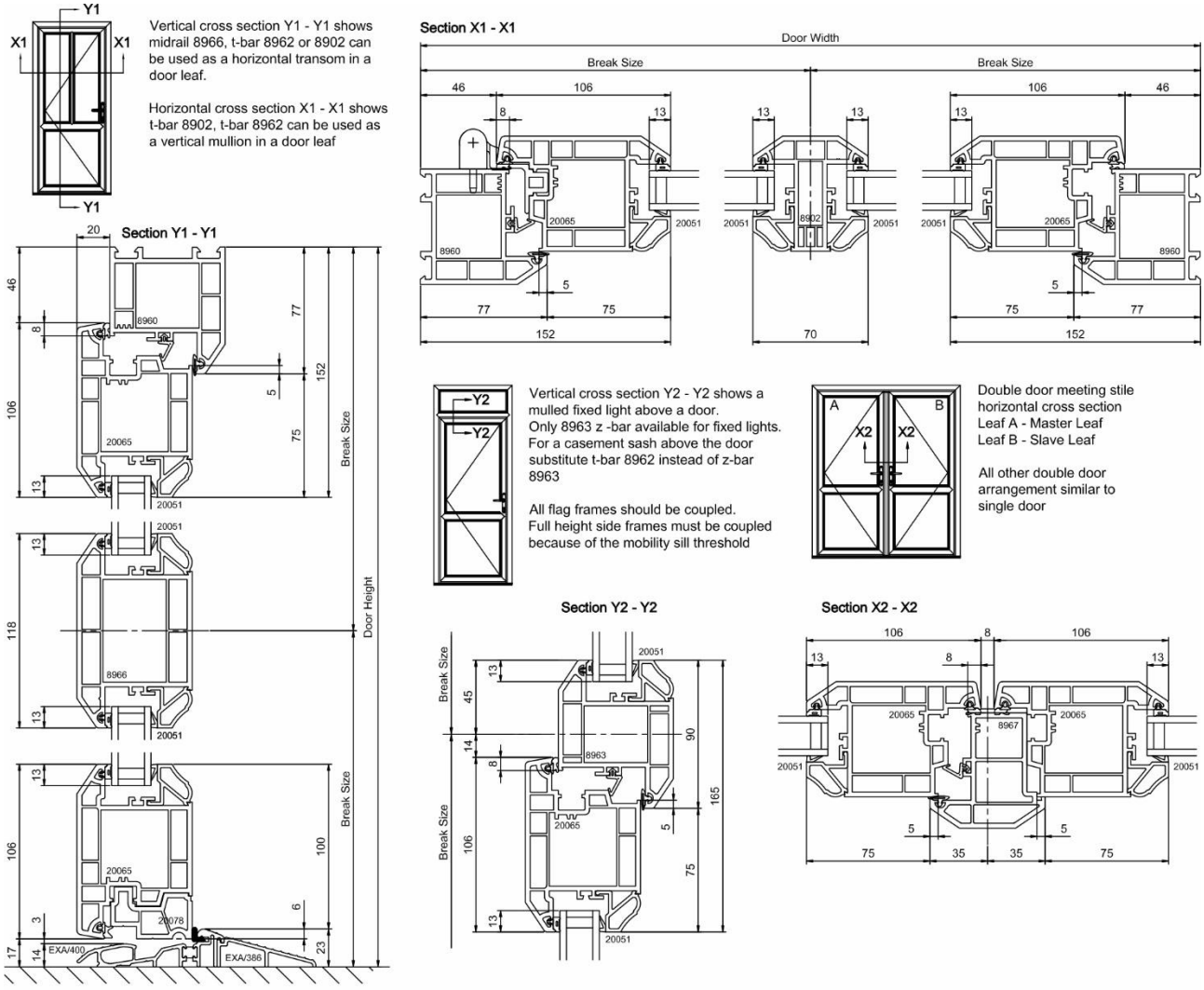
Notes
24mm glazing shown with glazing bead 20051. 28mm glazing available with glazing bead 20058

(GA/700 Rev: A)

Ramps supplied as optional extras.

5.5. Open-Out Low Aluminium Vertical & Horizontal Sections

(UN shown - TN similar)

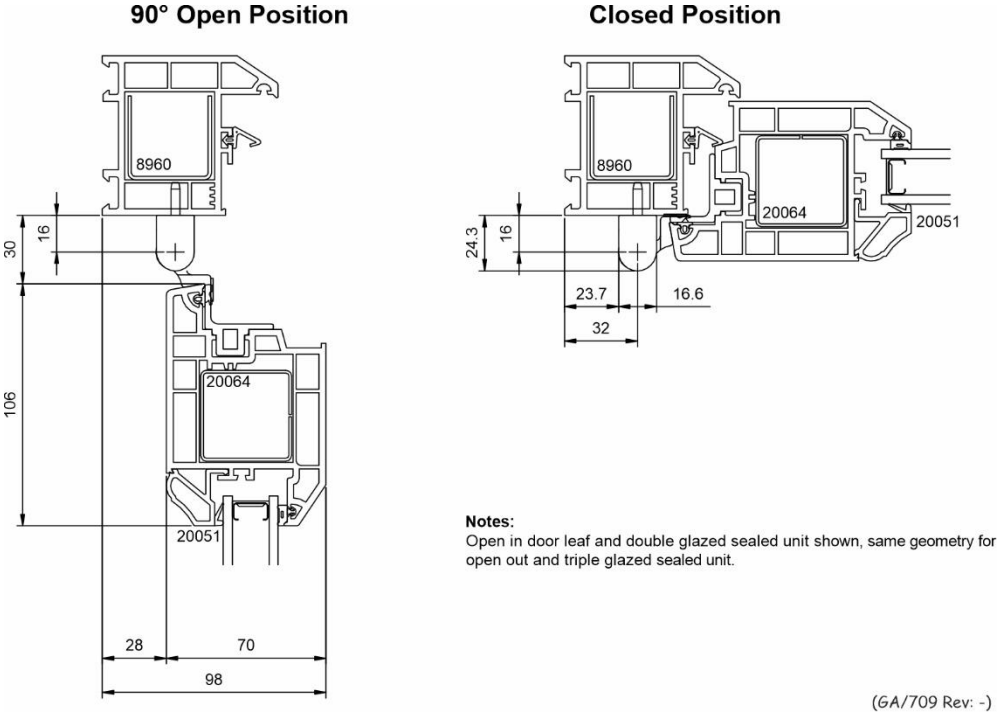


Notes
24mm glazing shown with glazing bead 20051. 28mm glazing available with glazing bead 20058

(GA/701 Rev: A)

Ramps supplied as optional extras.

5.6. Door Hinge Pivot Position Detail



Notes:
Open in door leaf and double glazed sealed unit shown, same geometry for open out and triple glazed sealed unit.

(GA/709 Rev: -)

5.7. Effective Door Widths

The effective door widths are shown through a single door leaf (as shown in drawings overleaf) or one leaf of a double door (similar).

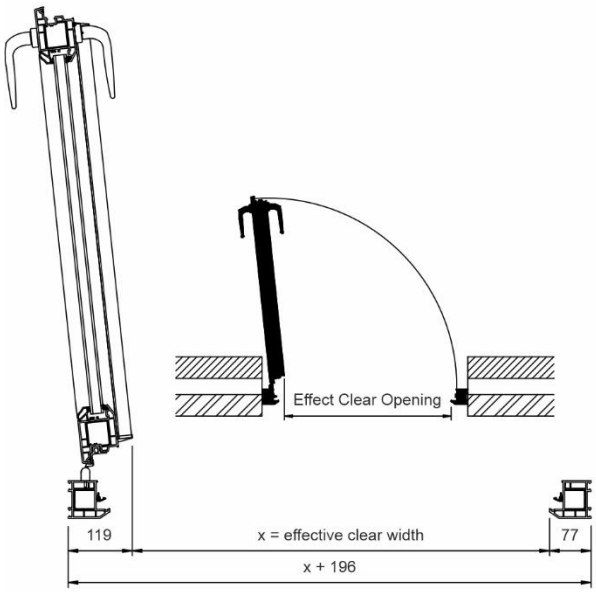
The effective clear width is the width of the opening measured at right angles to the wall in which the door is situated from the outside of the door stop (edge of mainframe) on the door closing side to any obstruction on the hinge side, whether this be projecting door opening furniture, a weather board (door drip) the door or the door stop.

Door handle projection from front face of door to outer edge of handle = 64mm

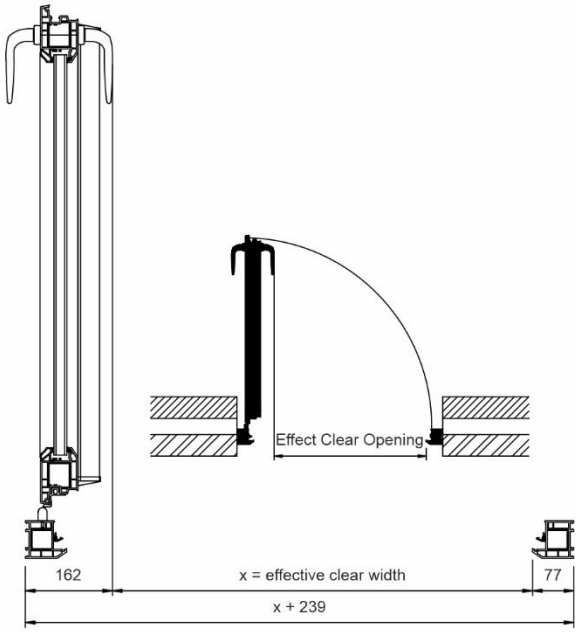
Note!
For Low Ali threshold do **not** include the door handle.

5.7.1. Effective Clearance Widths On Single Doors

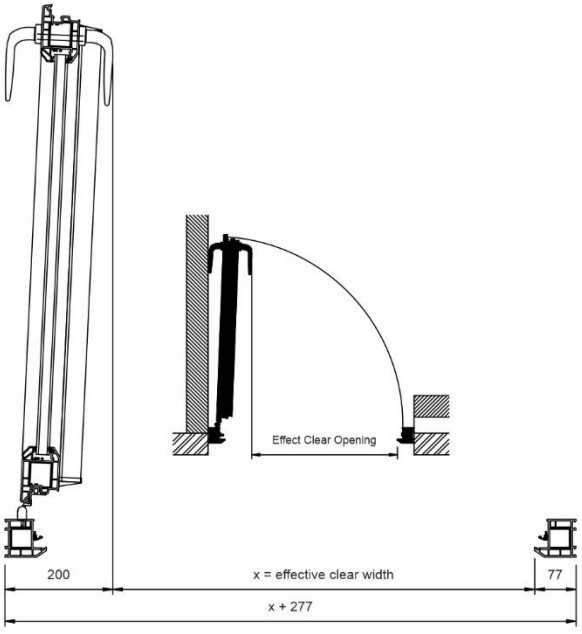
Effective Clear Width
(Door Stop to Projecting Ironmongery)



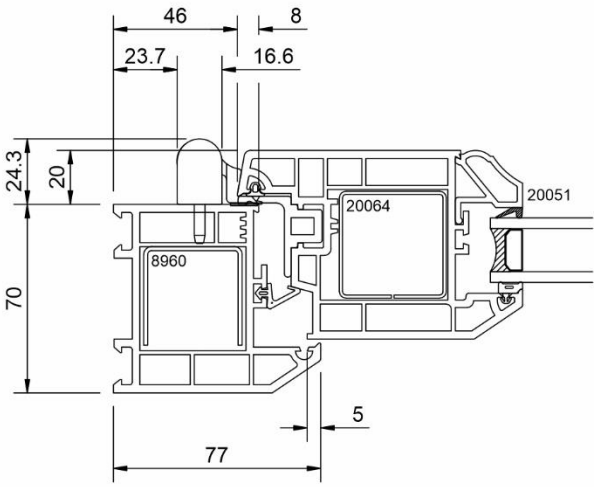
Effective Clear Width
(Door Stop to Door Leaf)



Effective Clear Width
(Door Stop to Projecting Ironmongery Door Opening Restricted by Adjacent Wall)



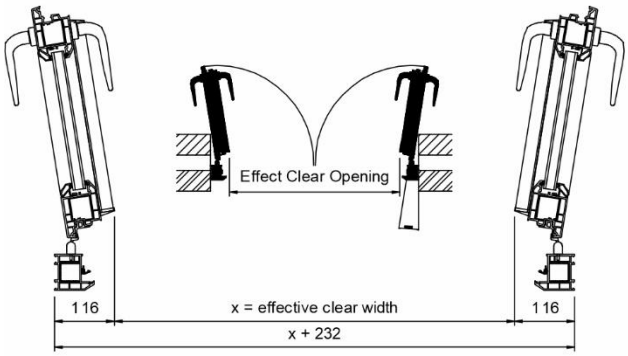
Hinge External Dimension



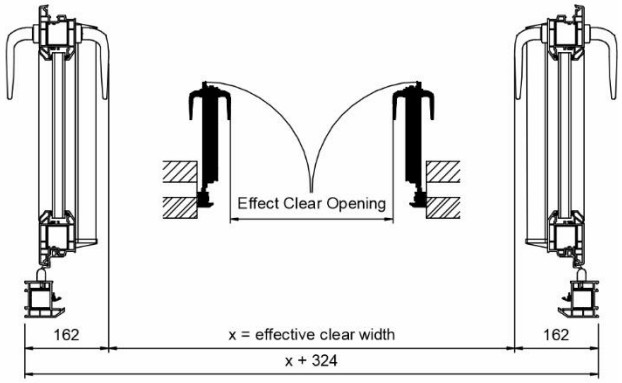
(SI/016 Rev: A)

5.7.2. Effective Clearance Widths On Double Doors

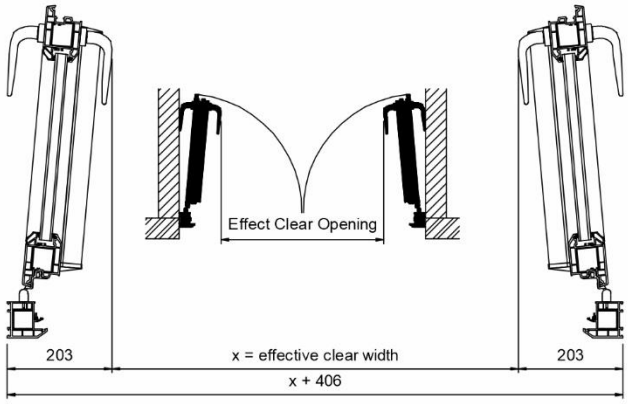
Effective Clear Width
(Door Stop to Projecting Ironmongery)



Effective Clear Width
(Door Stop to Door Leaf)



Effective Clear Width
(Door Stop to Projecting Ironmongery Door Opening Restricted by Adjacent Wall)



(SI/017 Rev: A)