

**ROCK  
DOOR<sup>®</sup>**

## Technical Manual

REVISION 9.1



Rockdoor Styles ►

Construction Details ►

## Rockdoor Styles

- ▶ Aspen
- ▶ Astoria
- ▶ Arcacia
- ▶ Campus
- ▶ Carolina
- ▶ Classic
- ▶ Classic French Door
- ▶ Colonial
- ▶ Cottage spy view
- ▶ Cottage view light
- ▶ Dakota
- ▶ Diamond
- ▶ Dune Retreat
- ▶ Dune Vision
- ▶ English cottage
- ▶ Georgia
- ▶ Illinois
- ▶ Indiana
- ▶ Jacobean
- ▶ Kentucky
- ▶ Manhattan
- ▶ Montana
- ▶ Newark
- ▶ Portland
- ▶ Philadelphia
- ▶ Regency
- ▶ Stable diamond view
- ▶ Stable spy view
- ▶ Stable view light
- ▶ Tennessee
- ▶ Tongue and groove 5
- ▶ Vermont
- ▶ Virginia
- ▶ Vogue
- ▶ Vogue French
- ▶ Warwick
- ▶ Windsor

### MINIMUM SIZE OVERRIDES

- ▶ Minimum Sash Size Overrides

### COLOURS

- ▶ Door and Frame Colour

# Construction Details

## Sections

- ▶ Inner Frame Detail
- ▶ Stable Door Centre Seal
- ▶ Double/ French Door Centre Seal

## Thresholds

- ▶ ALI Threshold Detail
- ▶ PVC Threshold Detail
- ▶ Cill Detail
- ▶ Tie Bar Detail
- ▶ Sealing a threshold to a cill or tie bar

## Frame

- ▶ Outer Frame Detail
- ▶ Add On / Frame Extension
- ▶ Side Frame Detail
- ▶ Coupling Bar Detail
- ▶ Side Frame / Coupling Bar Max Sizes
- ▶ Side Frame Min Sizes / Transoms
- ▶ Moulded Panels
- ▶ Clear Opening
- ▶ Internal Floor Level Clearance

## Locks

- ▶ 2 Hook Lock
- ▶ 4 Hook Lock
- ▶ AV Options
- ▶ Electric Latch Release
- ▶ Switch Latch
- ▶ Instant Lock Heritage Plus
- ▶ Cylinder
- ▶ Emergency Exit Lock

## Hinge

- ▶ Hinge

## Lever Handles

- ▶ Standard Lever Handle
- ▶ Escutcheon v Lever Handle Prep
- ▶ Stainless Steel Lever Handle
- ▶ Rose Handle Prep
- ▶ European Rose Handle
- ▶ Curved Rose Handle
- ▶ Twist Lever Handle
- ▶ Arched Lever Handle

## Bar Handles

- ▶ In line Bar Handle Details
- ▶ Offset Bar Handle Details
- ▶ Mitred Bar Handle Details
- ▶ Square 1200/900 Bar Handle
- ▶ Round In Line 600/1200/900 Bar Handle
- ▶ Square Offset 1200 Bar Handle
- ▶ Round Offset 1200 Bar Handle
- ▶ Mitered 900 Bar Handle
- ▶ Back to Back Fixing Kit

## Letterplates

- ▶ Standard Letterplate
- ▶ Stainless Steel Letterplate
- ▶ TS008 Letterplate

## Furniture

- ▶ Bull Ring Knocker
- ▶ Cat Flap
- ▶ Restrictor Details
- ▶ Furniture Colour Options

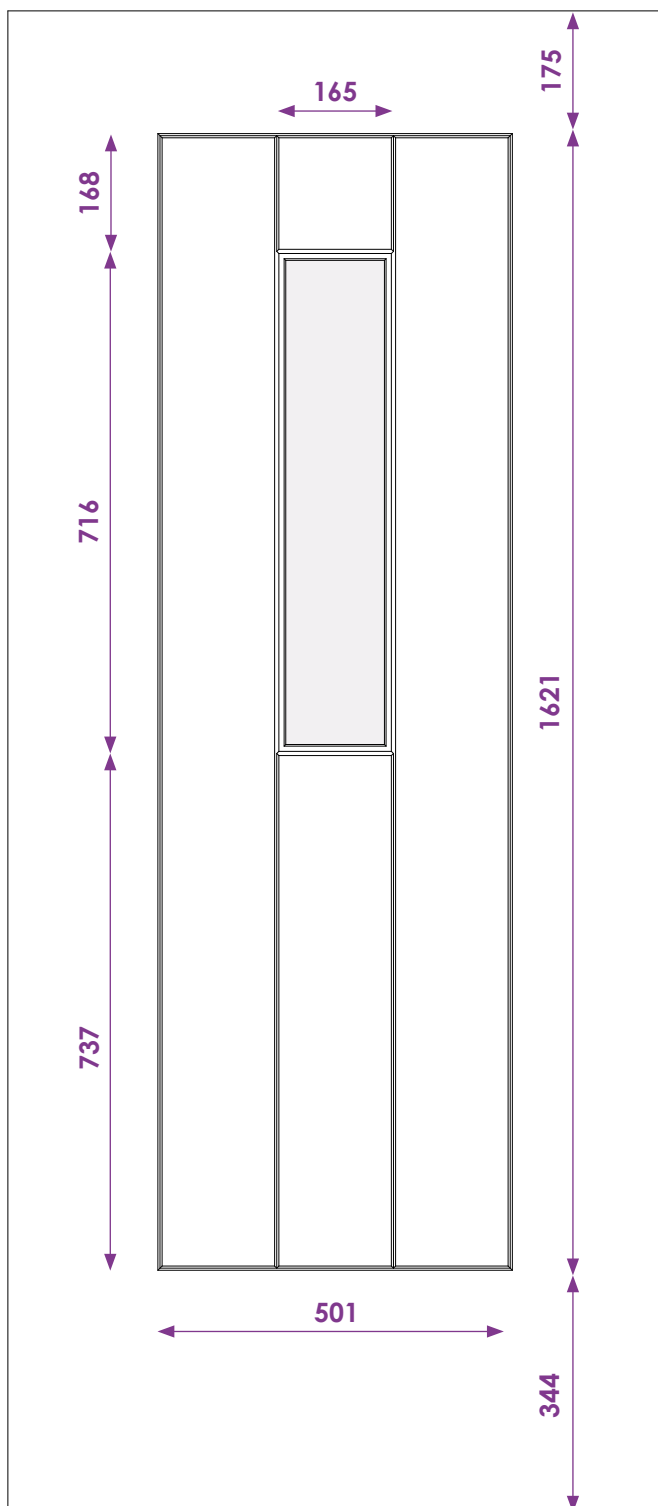
## Door Pulls

- ▶ Door Pull
- ▶ Round Knob

## OTHER INFORMATION

- ▶ Secured By Design
- ▶ PAS24
- ▶ Energy Ratings
- ▶ Condensation
- ▶ Replacement Parts

## New Forest Texture & 26mm Unit



### Door Sash

#### Width

Max: 908mm

Min: 674mm

#### Height

Max: 2098mm

Min: 1789mm

#### Profile Dimensions:

**72 Frame:** 52mm+4mm air gap = **56mm**

**52 Frame:** 32mm+4mm air gap = **36mm**

**Ali low threshold open IN** = **20mm**

**Ali low threshold open OUT** = **17mm**

**Cill** = **30mm**

#### Width

##### 72 Frame

Max = (Max sash width + 56mm + 56mm)

Min = (Min sash width + 56mm + 56mm)

##### 52 Frame

Max = (Max sash width + 36mm + 36mm)

Min = (Min sash width + 36mm + 36mm)

#### Height

##### 72 Frame low threshold open IN

Max = (Max sash height + 56mm + 20mm)

Min = (Min sash height + 56mm + 20mm)

##### 52 Frame low threshold open IN

Max = (Max sash height + 36mm + 20mm)

Min = (Min sash height + 36mm + 20mm)

#### Double Door Width 72mm Frame

Max = (Max sash width + Max sash width + 56mm + 56mm + 8mm)

Min = (Min sash width + Min sash width + 56mm + 56mm + 8mm)

#### PRESS GLAZING

**UNIT THICKNESS:** 26

**UNIT SIZE:** 177 x 729

**APERTURE:** 140x 690

Lock options and double doors and French doors can override the minimum sash heights stated above:

Minimum Sash Size Overrides ►

The overall frame dimensions can be increased or reduced by using other profiles:

Door Outer Frame ►

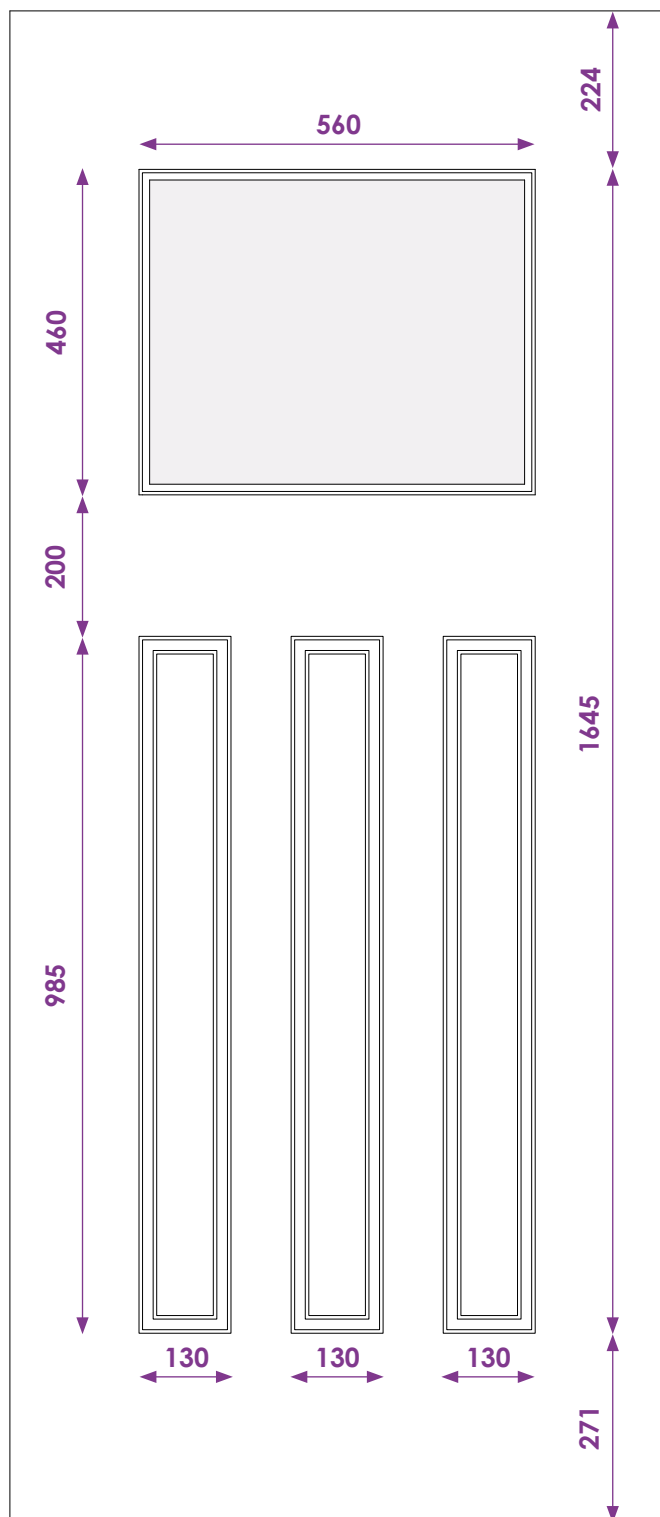
PVC-U Thresholds ►

Ali Thresholds / Tie Bars ►

Cills ►

Add On / Frame Extensions ►

## New Forest Texture &amp; 26mm Unit



## Door Sash

## Width

Max: 908mm

Min: 729mm

## Height

Max: 2098mm

Min: 1942mm

## Profile Dimensions:

**72 Frame:** 52mm+4mm air gap = **56mm****52 Frame:** 32mm+4mm air gap = **36mm****Ali low threshold open IN** = **20mm****Ali low threshold open OUT** = **17mm****Cill** = **30mm**

## Width

**72 Frame**

Max = (Max sash width + 56mm + 56mm)

Min = (Min sash width + 56mm + 56mm)

**52 Frame**

Max = (Max sash width + 36mm + 36mm)

Min = (Min sash width + 36mm + 36mm)

## Height

**72 Frame low threshold open IN**

Max = (Max sash height + 56mm + 20mm)

Min = (Min sash height + 56mm + 20mm)

**52 Frame low threshold open IN**

Max = (Max sash height + 36mm + 20mm)

Min = (Min sash height + 36mm + 20mm)

**Double Door Width 72mm Frame**

Max = (Max sash width + Max sash width + 56mm + 56mm + 8mm)

Min = (Min sash width + Min sash width + 56mm + 56mm + 8mm)

## PRESS GLAZING

**UNIT THICKNESS:** 26**UNIT SIZE:** 568 x 468**APERTURE:** 530 x 430

Lock options and double doors and French doors can override the minimum sash heights stated above:

Minimum Sash Size Overrides ►

The overall frame dimensions can be increased or reduced by using other profiles:

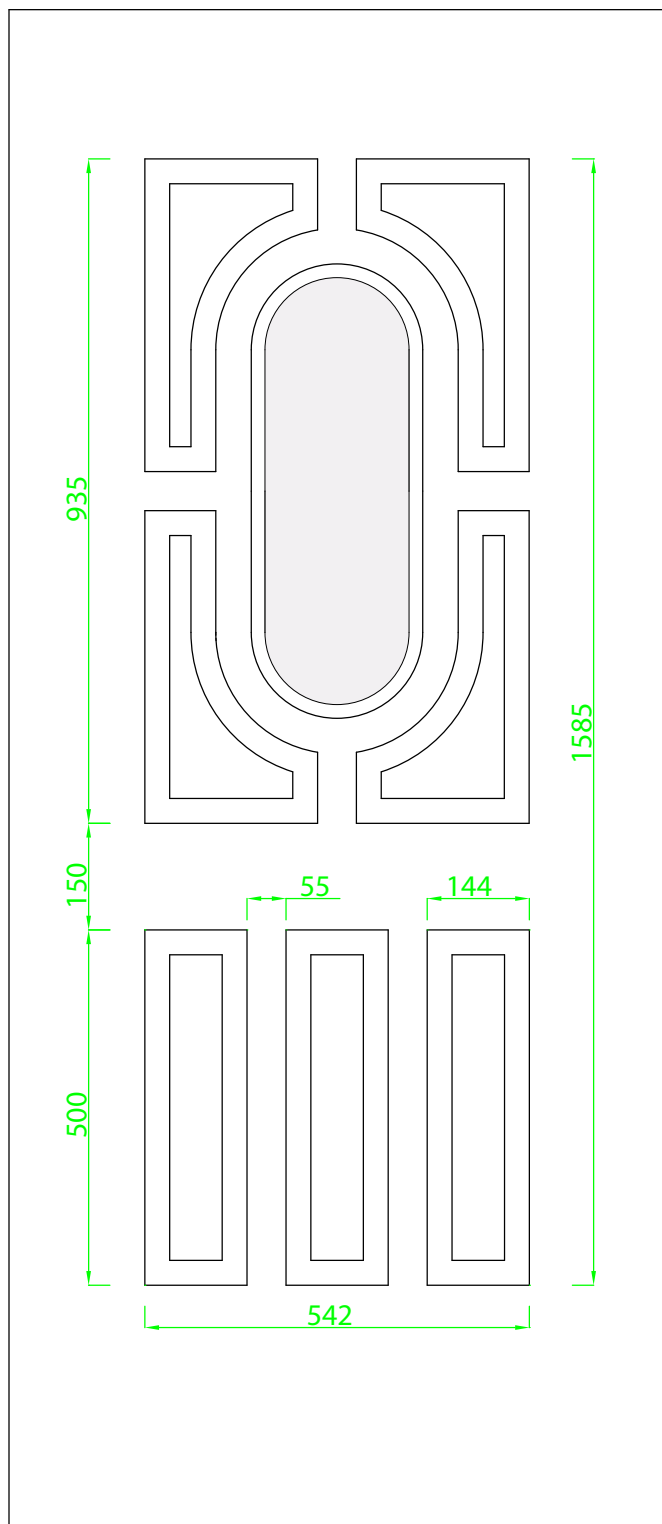
Door Outer Frame ►

PVC-U Thresholds ►

Ali Thresholds / Tie Bars ►

Cills ►

Add On / Frame Extensions ►



### Door Sash

#### Width

Max: 908mm

Min: 710mm

#### Height

Max: 2098mm

Min: 1763mm

#### Profile Dimensions:

**72 Frame:** 52mm+4mm air gap = **56mm**

**52 Frame:** 32mm+4mm air gap = **36mm**

**Ali low threshold open IN** = **20mm**

**Ali low threshold open OUT** = **17mm**

**Cill** = **30mm**

#### Width

##### 72 Frame

Max = (Max sash width + 56mm + 56mm)

Min = (Min sash width + 56mm + 56mm)

##### 52 Frame

Max = (Max sash width + 36mm + 36mm)

Min = (Min sash width + 36mm + 36mm)

#### Height

##### 72 Frame low threshold open IN

Max = (Max sash height + 56mm + 20mm)

Min = (Min sash height + 56mm + 20mm)

##### 52 Frame low threshold open IN

Max = (Max sash height + 36mm + 20mm)

Min = (Min sash height + 36mm + 20mm)

#### Double Door Width 72mm Frame

Max = (Max sash width + Max sash width + 56mm + 56mm + 8mm)

Min = (Min sash width + Min sash width + 56mm + 56mm + 8mm)

#### PRESS GLAZING

UNIT THICKNESS: 22

UNIT SIZE: 246 x 668

APERTURE: 208x 630

#### PRESS BEAD GLAZING

UNIT THICKNESS: 24

UNIT SIZE: 207 x 632

APERTURE: 182 x 604

Lock options and double doors and French doors can override the minimum sash heights stated above:

[Minimum Sash Size Overrides](#) ►

The overall frame dimensions can be increased or reduced by using other profiles:

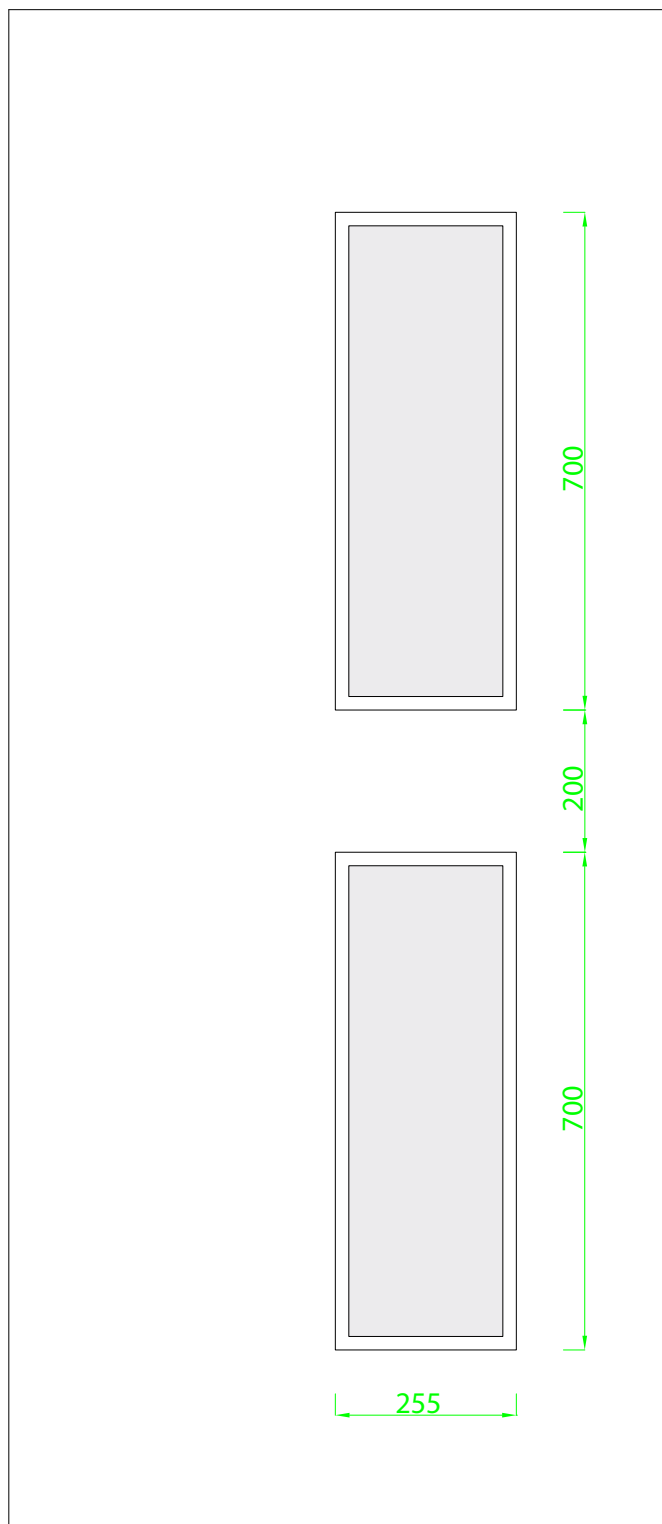
[Door Outer Frame](#) ►

[PVC-U Thresholds](#) ►

[Ali Thresholds / Tie Bars](#) ►

[Cills](#) ►

[Add On / Frame Extensions](#) ►

**Door Sash****Width**

Max: 908mm

Min: 713mm

**Height**

Max: 2098mm

Min: 1808mm

**Profile Dimensions:****72 Frame:** 52mm+4mm air gap = **56mm****52 Frame:** 32mm+4mm air gap = **36mm****Ali** low threshold open **IN** = **20mm****Ali** low threshold open **OUT** = **17mm****Cill** = **30mm****Width****72 Frame**

Max = (Max sash width + 56mm + 56mm)

Min = (Min sash width + 56mm + 56mm)

**52 Frame**

Max = (Max sash width + 36mm + 36mm)

Min = (Min sash width + 36mm + 36mm)

**Height****72 Frame low threshold open IN**

Max = (Max sash height + 56mm + 20mm)

Min = (Min sash height + 56mm + 20mm)

**52 Frame low threshold open IN**

Max = (Max sash height + 36mm + 20mm)

Min = (Min sash height + 36mm + 20mm)

**Double Door Width 72mm Frame**

Max = (Max sash width + Max sash width + 56mm + 56mm + 8mm)

Min = (Min sash width + Min sash width + 56mm + 56mm + 8mm)

**Press Glazing**

Unit Thickness: 22

Unit Size: 185 X 630

Aperture: 148 X 590

**Press Bead Glazing**

Unit Thickness: 24

Unit Size: 185 X 630

Aperture: 148 X 590

Lock options and double doors and French doors can override the minimum sash heights stated above:

Minimum Sash Size Overrides ►

The overall frame dimensions can be increased or reduced by using other profiles:

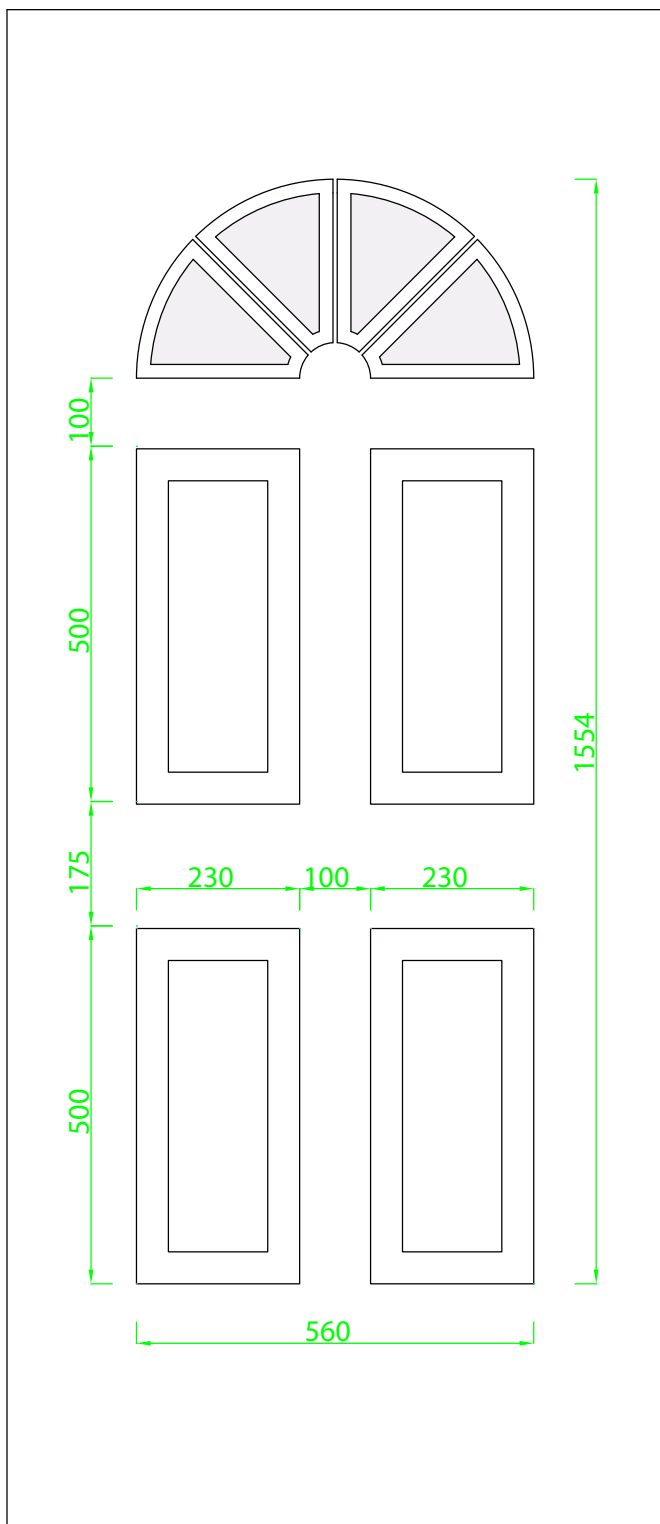
Door Outer Frame ►

PVC-U Thresholds ►

Ali Thresholds / Tie Bars ►

Cills ►

Add On / Frame Extensions ►



### Door Sash

#### Width

Max: 908mm

Min: 769mm

#### Height

Max: 2098mm

Min: 1758mm

#### Profile Dimensions:

**72 Frame:** 52mm+4mm air gap = **56mm**

**52 Frame:** 32mm+4mm air gap = **36mm**

**Ali low threshold open IN** = **20mm**

**Ali low threshold open OUT** = **17mm**

**Cill** = **30mm**

#### Width

##### 72 Frame

Max = (Max sash width + 56mm + 56mm)

Min = (Min sash width + 56mm + 56mm)

##### 52 Frame

Max = (Max sash width + 36mm + 36mm)

Min = (Min sash width + 36mm + 36mm)

##### 72 Frame low threshold open IN

Max = (Max sash height + 56mm + 20mm)

Min = (Min sash height + 56mm + 20mm)

#### Height

##### 52 Frame low threshold open IN

Max = (Max sash height + 36mm + 20mm)

Min = (Min sash height + 36mm + 20mm)

#### Double Door Width 72mm Frame

Max = (Max sash width + Max sash width + 56mm + 56mm + 8mm)

Min = (Min sash width + Min sash width + 56mm + 56mm + 8mm)

#### Press Glazing

Unit Thickness: 22

Unit Size: 560 X 275

Aperture: N/A

#### Press Bead Glazing

Unit Thickness: 24

Unit Size: 490 X 225

Aperture: 452 X 192

Lock options and double doors and French doors can override the minimum sash heights stated above:

Minimum Sash Size Overrides ►

The overall frame dimensions can be increased or reduced by using other profiles:

Door Outer Frame ►

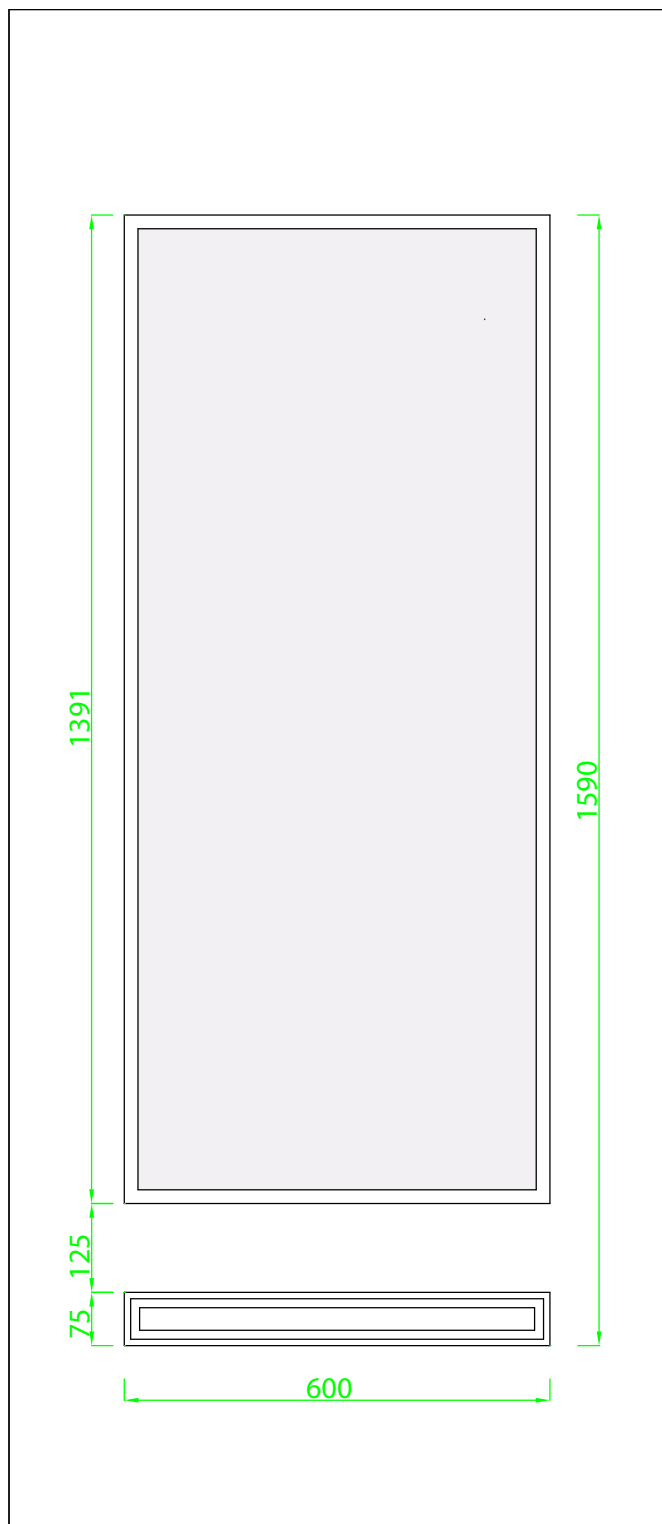
PVC-U Thresholds ►

Ali Thresholds / Tie Bars ►

Cills ►

Add On / Frame Extensions ►





## Door Sash

### Width

Max: 908mm

Min: 808mm

### Height

Max: 2098mm

Min: 1799mm Lock override 1893mm

### Profile Dimensions:

**72 Frame:** 52mm+4mm air gap = **56mm**

**52 Frame:** 32mm+4mm air gap = **36mm**

**Ali low threshold open IN** = **20mm**

**Ali low threshold open OUT** = **17mm**

**Cill** = **30mm**

### Width

#### 72 Frame

Max = (Max sash width + 56mm + 56mm)

Min = (Min sash width + 56mm + 56mm)

#### 52 Frame

Max = (Max sash width + 36mm + 36mm)

Min = (Min sash width + 36mm + 36mm)

### Height

#### 72 Frame low threshold open IN

Max = (Max sash height + 56mm + 20mm)

Min = (Min sash height + 56mm + 20mm)

#### 52 Frame low threshold open IN

Max = (Max sash height + 36mm + 20mm)

Min = (Min sash height + 36mm + 20mm)

### Double Door Width 72mm Frame

Max = (Max sash width + Max sash width + 56mm + 56mm + 8mm)

Min = (Min sash width + Min sash width + 56mm + 56mm + 8mm)

### Press Glazing

Unit Thickness: 22

Unit Size: 599 X 1390

Aperture: 565 X 1356

### Press Bead Glazing

N/A

The overall frame dimensions can be increased or reduced by using other profiles:

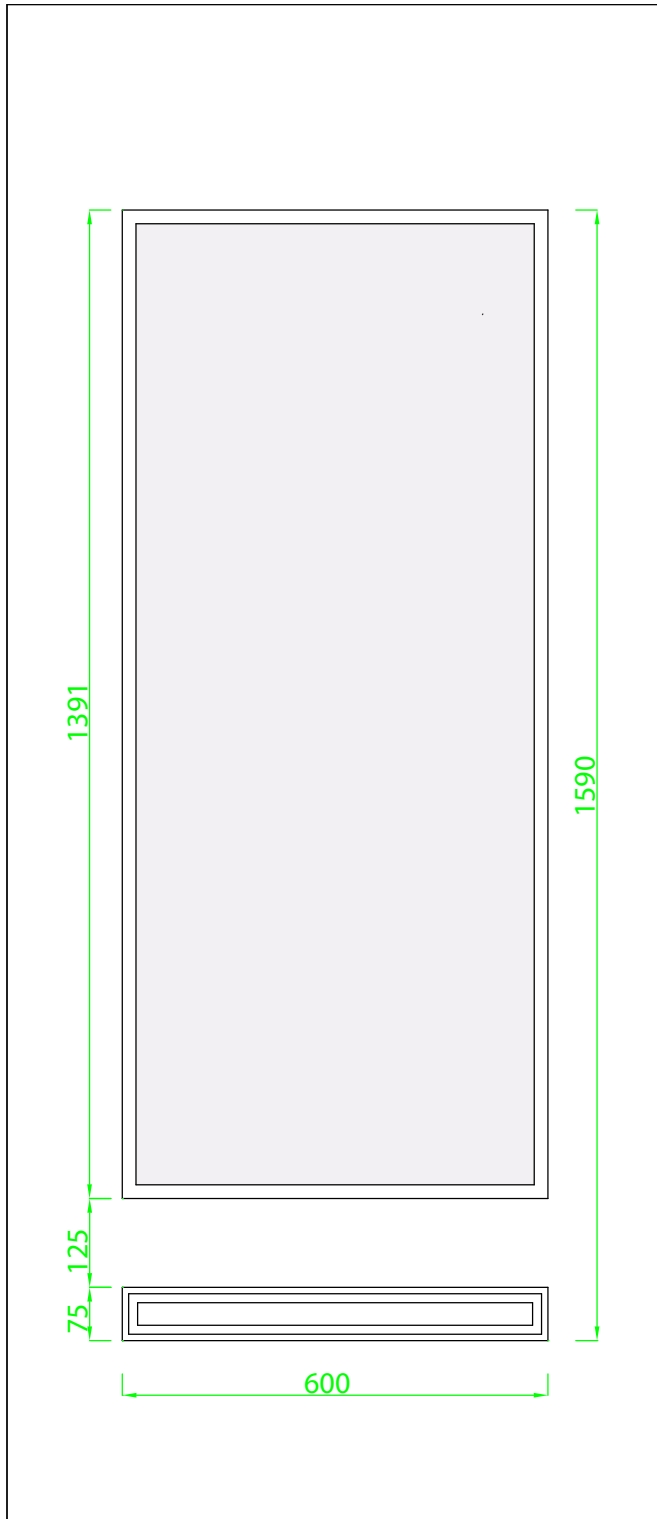
Door Outer Frame ►

PVC-U Thresholds ►

Ali Thresholds / Tie Bars ►

Cills ►

Add On / Frame Extensions ►



## Door Sashes

### Width

Max:  $908 + 7 + 908 = 1823\text{mm}$

Min:  $808 + 7 + 808 = 1623\text{mm}$

### Height

Max: 2098mm

Min: 1799mm

Profile Dimensions:

**72 Frame:**  $52\text{mm} + 4\text{mm air gap} = 56\text{mm}$

**52 Frame:**  $32\text{mm} + 4\text{mm air gap} = 36\text{mm}$

**Ali low threshold open IN** = 20mm

**Ali low threshold open OUT** = 17mm

**Cill** = 30mm

### Height

**72 Frame low threshold open IN**

Max = (Max sash height + 56mm + 20mm)

Min = (Min sash height + 56mm + 20mm)

**52 Frame low threshold open IN**

Max = (Max sash height + 36mm + 20mm)

Min = (Min sash height + 36mm + 20mm)

### Double Door Width 72mm Frame

Max = (Max sash width + Max sash width + 56mm + 56mm + 8mm)

Min = (Min sash width + Min sash width + 56mm + 56mm + 8mm)

## Press Bead Glazing

N/A



Lock options and double doors and French doors can override the minimum sash heights stated above:

Minimum Sash Size Overrides ►

The overall frame dimensions can be increased or reduced by using other profiles:

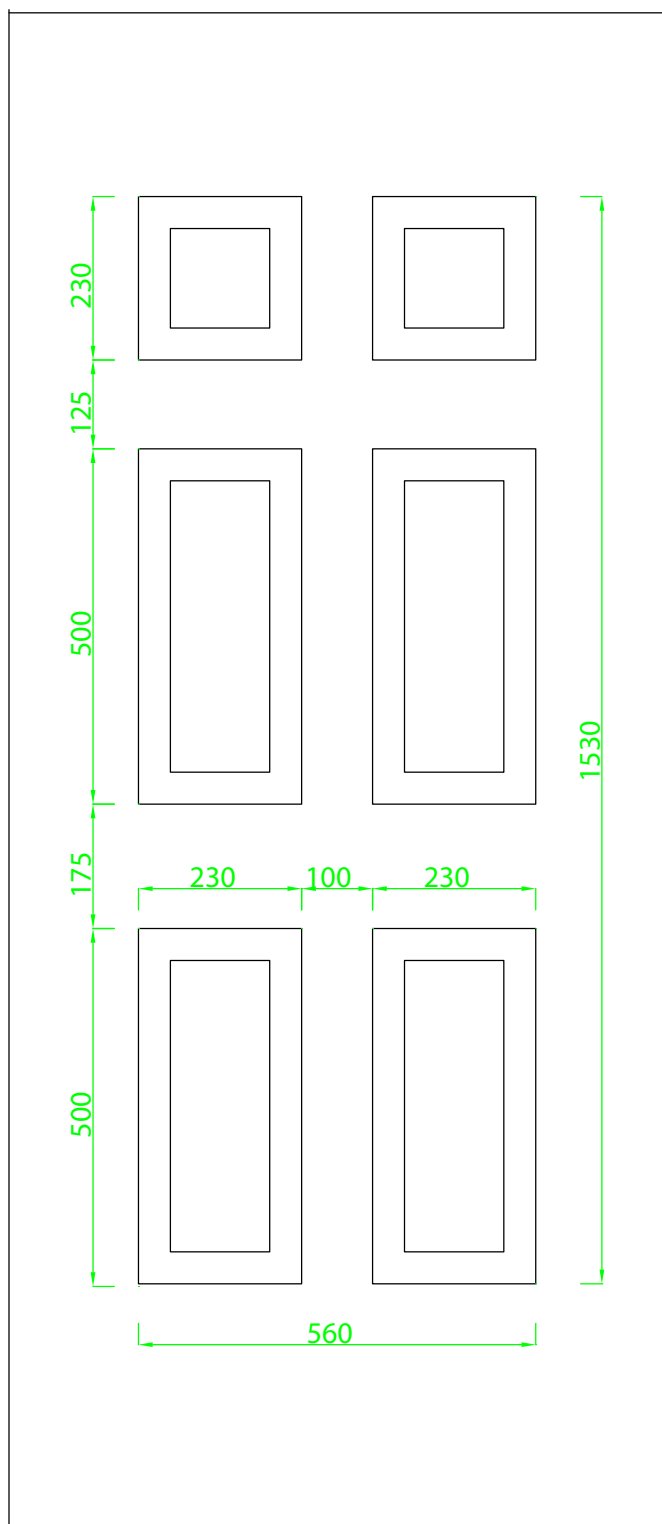
Door Outer Frame ►

PVC-U Thresholds ►

Ali Thresholds / Tie Bars ►

Cills ►

Add On / Frame Extensions ►



## Door Sash

### Width

Max: 908mm

Min: 729mm

### Height

Max: 2098mm

Min: 1728mm

### Profile Dimensions:

**72 Frame:** 52mm+4mm air gap = **56mm**

**52 Frame:** 32mm+4mm air gap = **36mm**

**Ali low threshold open IN = 20mm**

**Ali low threshold open OUT = 17mm**

**Cill = 30mm**

### Width

#### 72 Frame

Max = (Max sash width + 56mm + 56mm)

Min = (Min sash width + 56mm + 56mm)

#### 52 Frame

Max = (Max sash width + 36mm + 36mm)

Min = (Min sash width + 36mm + 36mm)

### Height

#### 72 Frame low threshold open IN

Max = (Max sash height + 56mm + 20mm)

Min = (Min sash height + 56mm + 20mm)

#### 52 Frame low threshold open IN

Max = (Max sash height + 36mm + 20mm)

Min = (Min sash height + 36mm + 20mm)

### Double Door Width 72mm Frame

Max = (Max sash width + Max sash width + 56mm + 56mm + 8mm)

Min = (Min sash width + Min sash width + 56mm + 56mm + 8mm)

### Press Glazing

N/A

### Press Bead Glazing

N/A

Lock options and double doors and French doors can override the minimum sash heights stated above:

[Minimum Sash Size Overrides](#) ►

The overall frame dimensions can be increased or reduced by using other profiles:

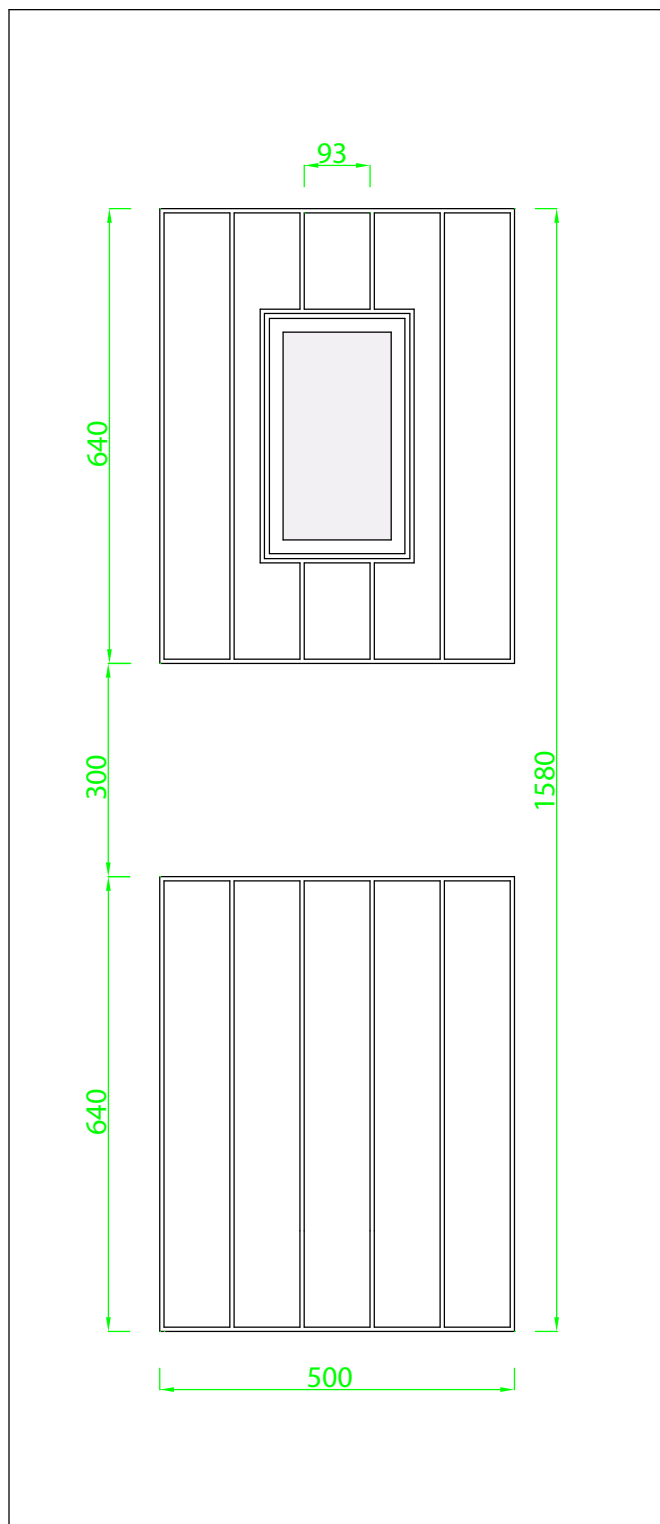
[Door Outer Frame](#) ►

[PVC-U Thresholds](#) ►

[Ali Thresholds / Tie Bars](#) ►

[Cills](#) ►

[Add On / Frame Extensions](#) ►



### Door Sash

#### Width

Max: 908mm

Min: 673mm

#### Height

Max: 2098mm

Min: 1748mm

#### Profile Dimensions:

**72 Frame:** 52mm+4mm air gap = **56mm**

**52 Frame:** 32mm+4mm air gap = **36mm**

**Ali low threshold open IN** = **20mm**

**Ali low threshold open OUT** = **17mm**

**Cill** = **30mm**

#### Width

##### 72 Frame

Max = (Max sash width + 56mm + 56mm)

Min = (Min sash width + 56mm + 56mm)

##### 52 Frame

Max = (Max sash width + 36mm + 36mm)

Min = (Min sash width + 36mm + 36mm)

##### 72 Frame low threshold open IN

Max = (Max sash height + 56mm + 20mm)

Min = (Min sash height + 56mm + 20mm)

#### Height

##### 52 Frame low threshold open IN

Max = (Max sash height + 36mm + 20mm)

Min = (Min sash height + 36mm + 20mm)

#### Double Door Width 72mm Frame

Max = (Max sash width + Max sash width + 56mm + 56mm + 8mm)

Min = (Min sash width + Min sash width + 56mm + 56mm + 8mm)

#### Press Glazing

Unit Thickness: 22

Unit Size: 150 X 300

Aperture: 109 X 252

#### Press Bead Glazing

Unit Thickness: 24

Unit Size: 114 X 255

Aperture: 85 X 226

Lock options and double doors and French doors can override the minimum sash heights stated above:

[Minimum Sash Size Overrides](#) ►

The overall frame dimensions can be increased or reduced by using other profiles:

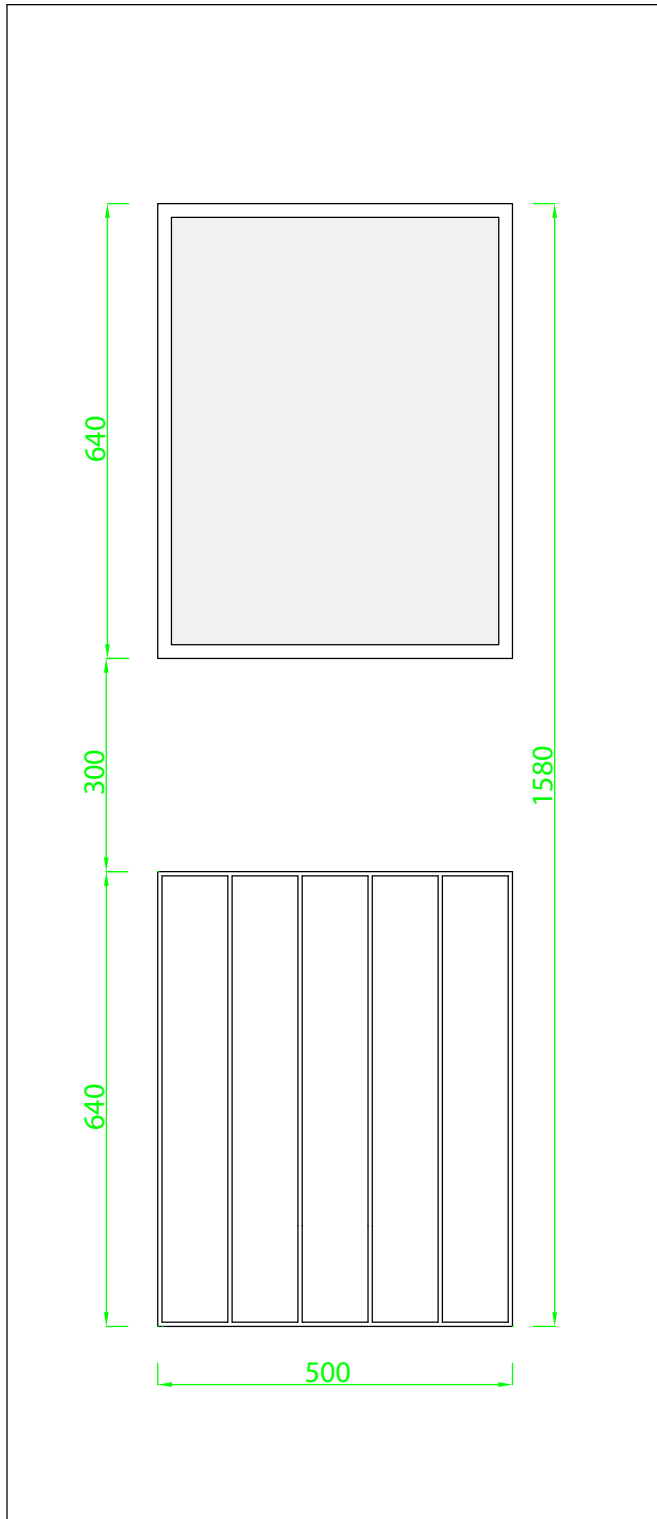
[Door Outer Frame](#) ►

[PVC-U Thresholds](#) ►

[Ali Thresholds / Tie Bars](#) ►

[Cills](#) ►

[Add On / Frame Extensions](#) ►



## Door Sash

### Width

Max: 908mm

Min: 708mm

### Height

Max: 2098mm

Min: 1788mm

### Profile Dimensions:

**72 Frame:** 52mm+4mm air gap = **56mm**

**52 Frame:** 32mm+4mm air gap = **36mm**

**Ali** low threshold open **IN** = **20mm**

**Ali** low threshold open **OUT** = **17mm**

**Cill** = **30mm**

### Width

#### 72 Frame

Max = (Max sash width + 56mm + 56mm)

Min = (Min sash width + 56mm + 56mm)

#### 52 Frame

Max = (Max sash width + 36mm + 36mm)

Min = (Min sash width + 36mm + 36mm)

### Height

#### 72 Frame low threshold open IN

Max = (Max sash height + 56mm + 20mm)

Min = (Min sash height + 56mm + 20mm)

#### 52 Frame low threshold open IN

Max = (Max sash height + 36mm + 20mm)

Min = (Min sash height + 36mm + 20mm)

### Double Door Width 72mm Frame

Max = (Max sash width + Max sash width + 56mm + 56mm + 8mm)

Min = (Min sash width + Min sash width + 56mm + 56mm + 8mm)

### Press Glazing

Unit Thickness: 22

Unit Size: 485 X 625

Aperture: 436 X 576

### Press Bead Glazing

Unit Thickness: 24

Unit Size: 440 X 580

Aperture: 410 X 550

Lock options and double doors and French doors can override the minimum sash heights stated above:

[Minimum Sash Size Overrides](#) ►

The overall frame dimensions can be increased or reduced by using other profiles:

[Door Outer Frame](#) ►

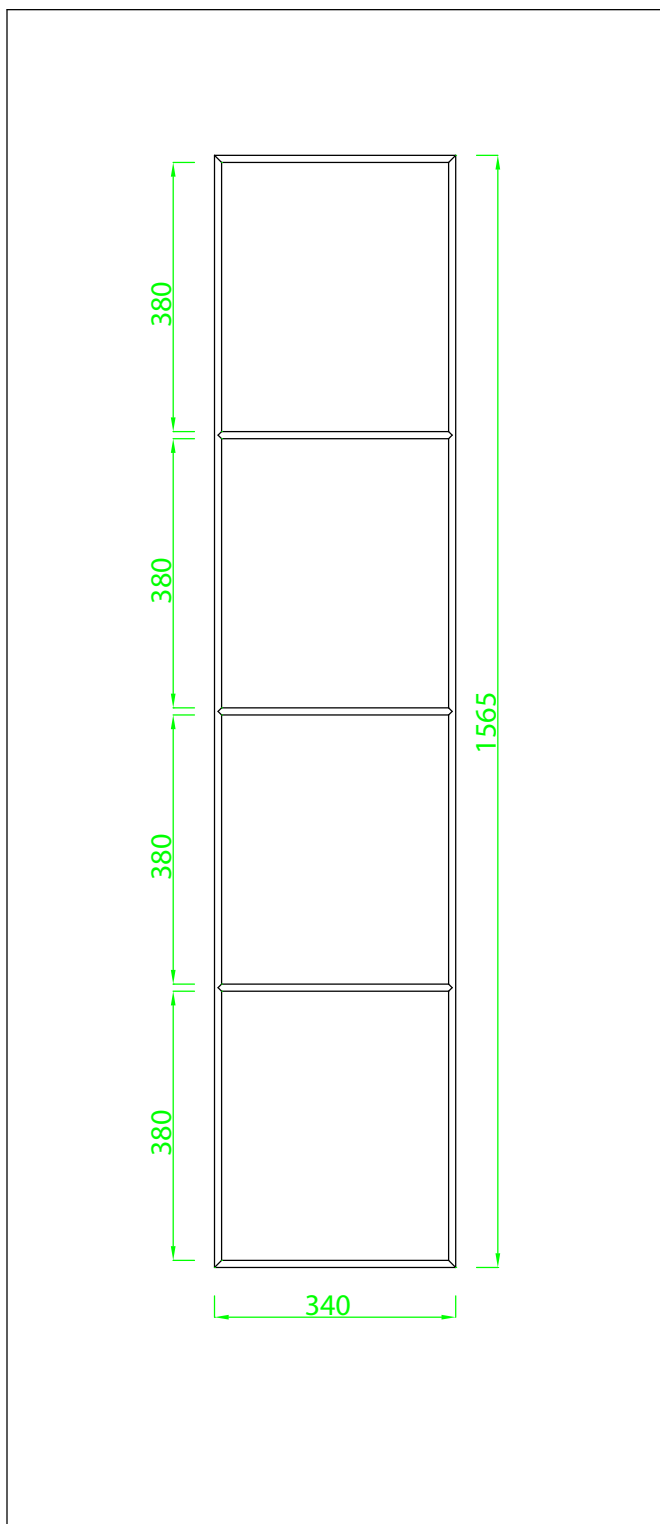
[PVC-U Thresholds](#) ►

[Ali Thresholds / Tie Bars](#) ►

[Cills](#) ►

[Add On / Frame Extensions](#) ►

## New Forest Texture



### Door Sash

#### Width

Max: 908mm

Min: 679mm

#### Height

Max: 2098mm

Min: 1768mm

#### Profile Dimensions:

**72 Frame:** 52mm+4mm air gap = **56mm**

**52 Frame:** 32mm+4mm air gap = **36mm**

**Ali low threshold open IN = 20mm**

**Ali low threshold open OUT = 17mm**

**Cill = 30mm**

#### Width

##### 72 Frame

Max = (Max sash width + 56mm + 56mm)

Min = (Min sash width + 56mm + 56mm)

##### 52 Frame

Max = (Max sash width + 36mm + 36mm)

Min = (Min sash width + 36mm + 36mm)

#### Height

##### 72 Frame low threshold open IN

Max = (Max sash height + 56mm + 20mm)

Min = (Min sash height + 56mm + 20mm)

##### 52 Frame low threshold open IN

Max = (Max sash height + 36mm + 20mm)

Min = (Min sash height + 36mm + 20mm)

#### Double Door Width 72mm Frame

Max = (Max sash width + Max sash width + 56mm + 56mm + 8mm)

Min = (Min sash width + Min sash width + 56mm + 56mm + 8mm)

Lock options and double doors and French doors can override the minimum sash heights stated above:

[Minimum Sash Size Overrides](#) ►

The overall frame dimensions can be increased or reduced by using other profiles:

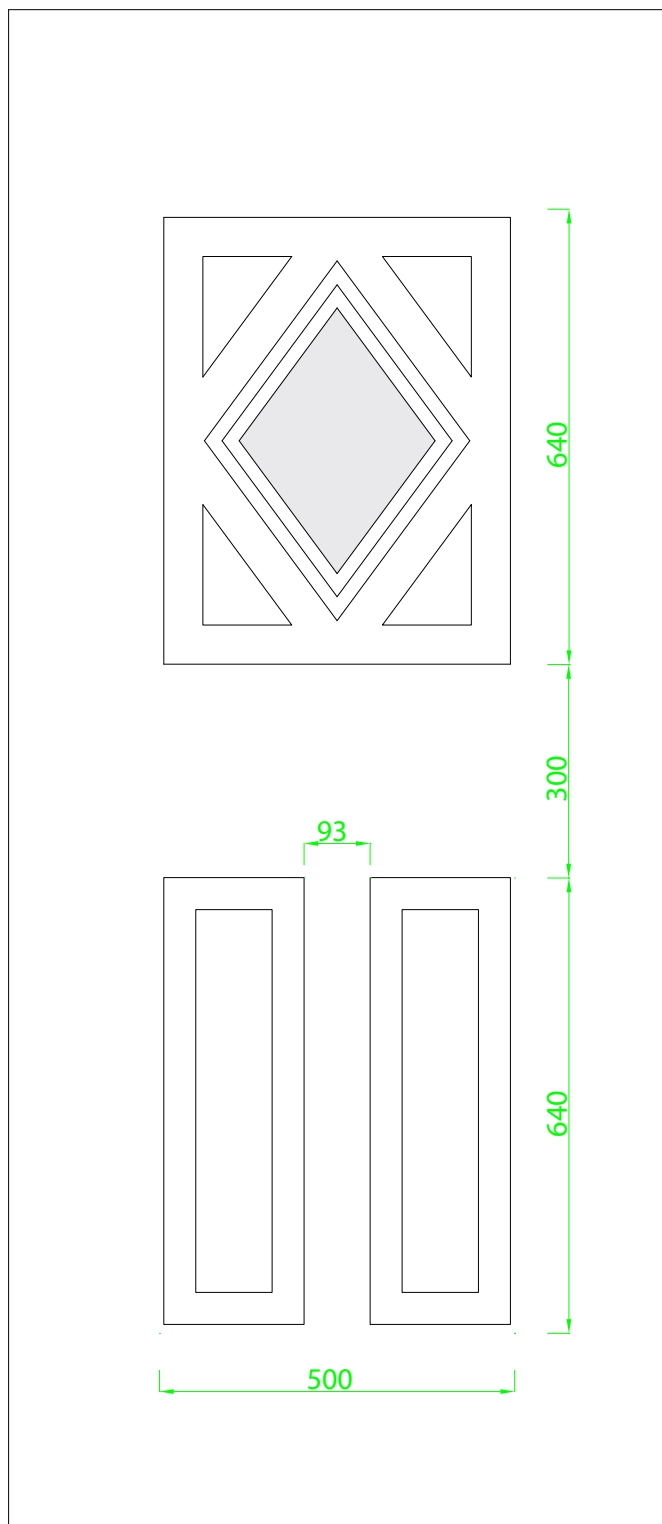
[Door Outer Frame](#) ►

[PVC-U Thresholds](#) ►

[Ali Thresholds / Tie Bars](#) ►

[Cills](#) ►

[Add On / Frame Extensions](#) ►



## Door Sash

### Width

Max: 908mm

Min: 696mm

### Height

Max: 2098mm

Min: 1764mm

### Profile Dimensions:

**72 Frame:** 52mm+4mm air gap = **56mm**

**52 Frame:** 32mm+4mm air gap = **36mm**

**Ali low threshold open IN** = **20mm**

**Ali low threshold open OUT** = **17mm**

**Cill** = **30mm**

### Width

#### 72 Frame

Max = (Max sash width + 56mm + 56mm)

Min = (Min sash width + 56mm + 56mm)

#### 52 Frame

Max = (Max sash width + 36mm + 36mm)

Min = (Min sash width + 36mm + 36mm)

### Height

#### 72 Frame low threshold open IN

Max = (Max sash height + 56mm + 20mm)

Min = (Min sash height + 56mm + 20mm)

#### 52 Frame low threshold open IN

Max = (Max sash height + 36mm + 20mm)

Min = (Min sash height + 36mm + 20mm)

### Double Door Width 72mm Frame

Max = (Max sash width + Max sash width + 56mm + 56mm + 8mm)

Min = (Min sash width + Min sash width + 56mm + 56mm + 8mm)

### Press Glazing

Unit Thickness: 22

Unit Size: 320 X 435

Aperture: 277 X 371

### Press Bead Glazing

N/A

Lock options and double doors and French doors can override the minimum sash heights stated above:

[Minimum Sash Size Overrides](#) ►

The overall frame dimensions can be increased or reduced by using other profiles:

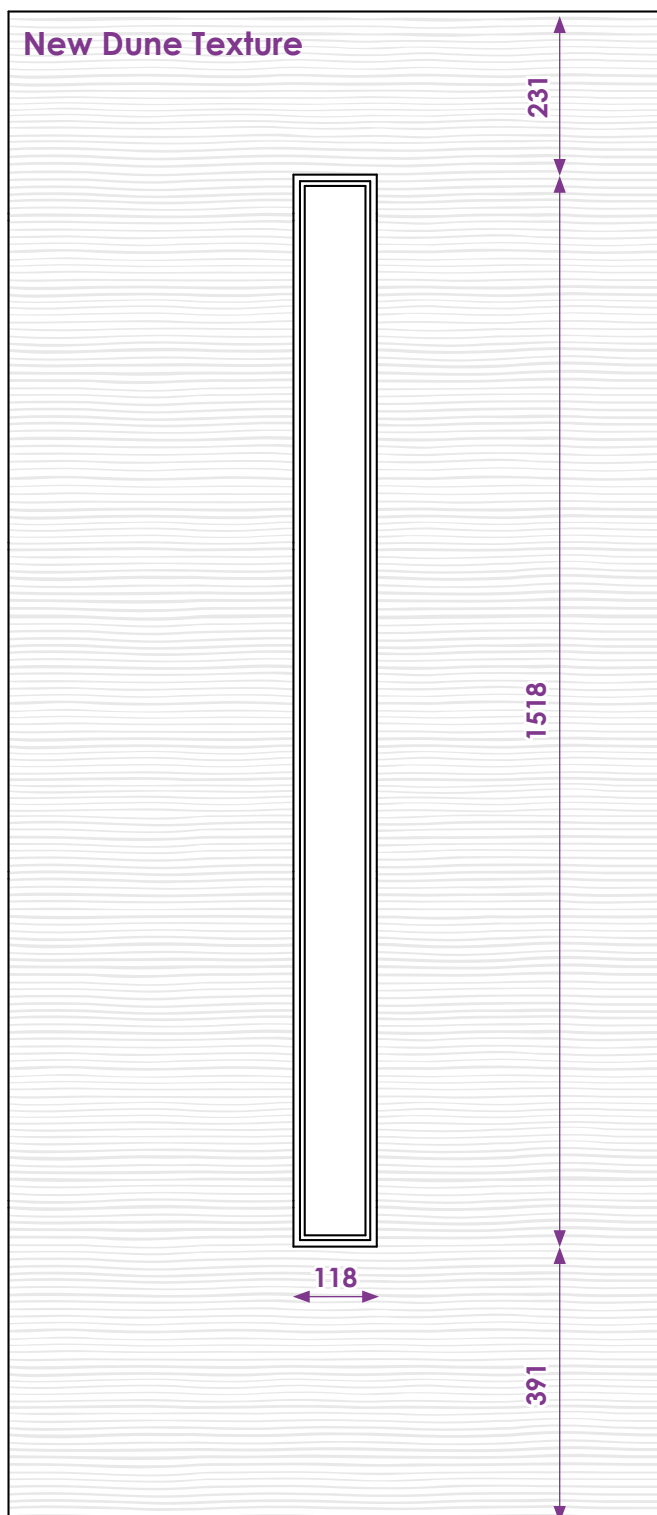
[Door Outer Frame](#) ►

[PVC-U Thresholds](#) ►

[Ali Thresholds / Tie Bars](#) ►

[Cills](#) ►

[Add On / Frame Extensions](#) ►



## Door Sash

## Width

Max: 908mm

Min: 679mm

## Height

Max: 2098mm

Min: 1880mm

### Profile Dimensions:

**72 Frame:** 52mm+4mm air gap = **56mm**

**52 Frame:** 32mm+4mm air gap = **36mm**

**Ali low threshold open IN = 20mm**

**Ali low threshold open OUT = 17mm**

**Cill = 30mm**

### Width

## 72 Frame

$$\text{Max} = (\text{Max sash width} + 56\text{mm} + 56\text{mm})$$
$$\text{Min} = (\text{Min sash width} + 56\text{mm} + 56\text{mm})$$

## 52 Frame

$$\text{Max} = (\text{Max sash width} + 36\text{mm} + 36\text{mm})$$
$$\text{Min} = (\text{Min sash width} + 36\text{mm} + 36\text{mm})$$

## Height

## 72 Frame low threshold open IN

$$\text{Max} = (\text{Max sash height} + 56\text{mm} + 20\text{mm})$$
$$\text{Min} = (\text{Min sash height} + 56\text{mm} + 20\text{mm})$$

52 Frame low threshold open IN

$$\text{Max} = (\text{Max sash height} + 36\text{mm} + 20\text{mm})$$
$$\text{Min} = (\text{Min sash height} + 36\text{mm} + 20\text{mm})$$

### Double Door Width 72mm Frame

$$\text{Max} = (\text{Max sash width} + \text{Max sash width} + 56\text{mm} + 56\text{mm} + 8\text{mm})$$
$$\text{Min} = (\text{Min sash width} + \text{Min sash width} + 56\text{mm} + 56\text{mm} + 8\text{mm})$$

## Press Glazing

Unit Thickness: 22

Unit Size: 118 X 1518

Aperture: 80 X 1480

## Press Bead Glazing

N/A

Lock options and double doors and French doors can override the minimum sash heights stated above:

## Minimum Sash Size Overrides

The overall frame dimensions can be increased or reduced by using other profiles:

Door Outer Frame ▶

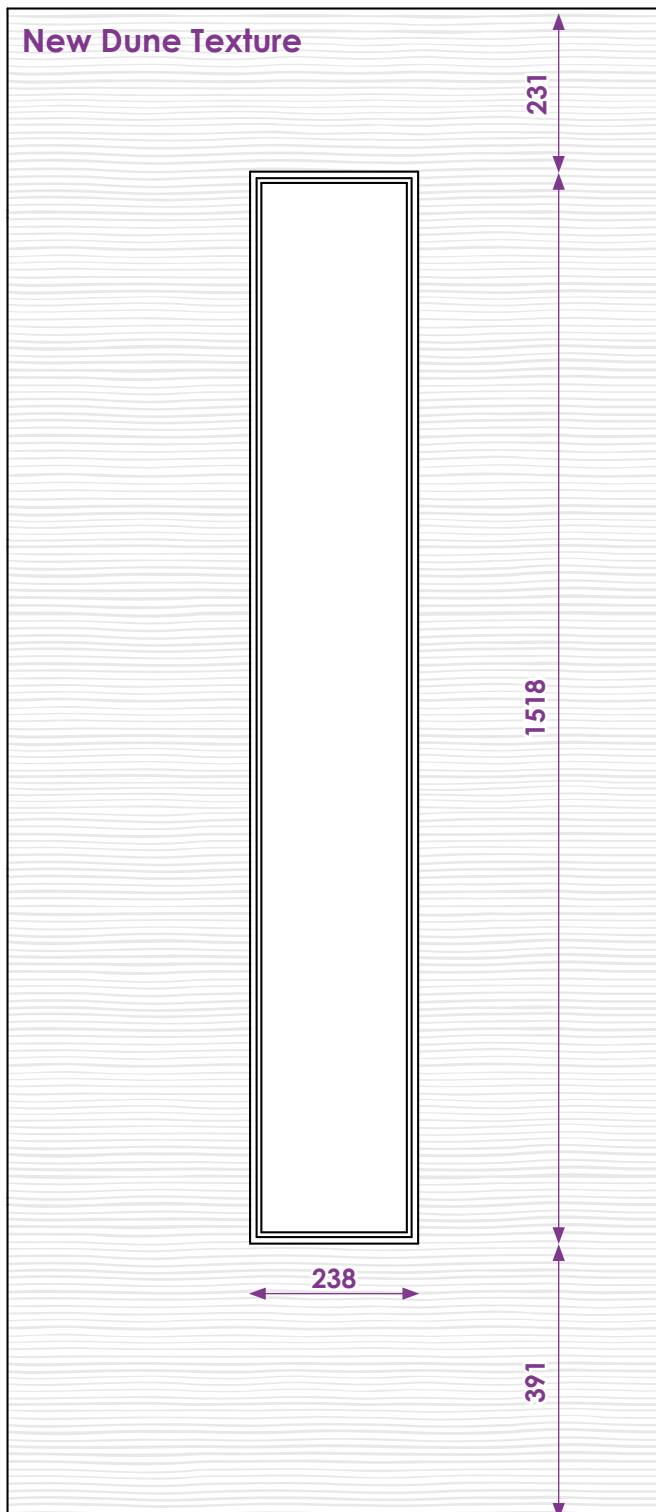
## PVC-U Thresholds

Ali Thresholds / Tie Bars ▶

Cills ▶

## Add On / Frame Extensions





## Door Sash

### Width

Max: 908mm

Min: 679mm

### Height

Max: 2098mm

Min: 1880mm

### Profile Dimensions:

**72 Frame:** 52mm+4mm air gap = **56mm**

**52 Frame:** 32mm+4mm air gap = **36mm**

**Ali low threshold open IN** = **20mm**

**Ali low threshold open OUT** = **17mm**

**Cill** = **30mm**

### Width

#### 72 Frame

Max = (Max sash width + 56mm + 56mm)

Min = (Min sash width + 56mm + 56mm)

#### 52 Frame

Max = (Max sash width + 36mm + 36mm)

Min = (Min sash width + 36mm + 36mm)

### Height

#### 72 Frame low threshold open IN

Max = (Max sash height + 56mm + 20mm)

Min = (Min sash height + 56mm + 20mm)

#### 52 Frame low threshold open IN

Max = (Max sash height + 36mm + 20mm)

Min = (Min sash height + 36mm + 20mm)

### Double Door Width 72mm Frame

Max = (Max sash width + Max sash width + 56mm + 56mm + 8mm)

Min = (Min sash width + Min sash width + 56mm + 56mm + 8mm)

### Press Glazing

Unit Thickness: 22

Unit Size: 238 X 1518

Aperture: 200 X 1480

### Press Bead Glazing

N/A

Lock options and double doors and French doors can override the minimum sash heights stated above:

Minimum Sash Size Overrides ►

The overall frame dimensions can be increased or reduced by using other profiles:

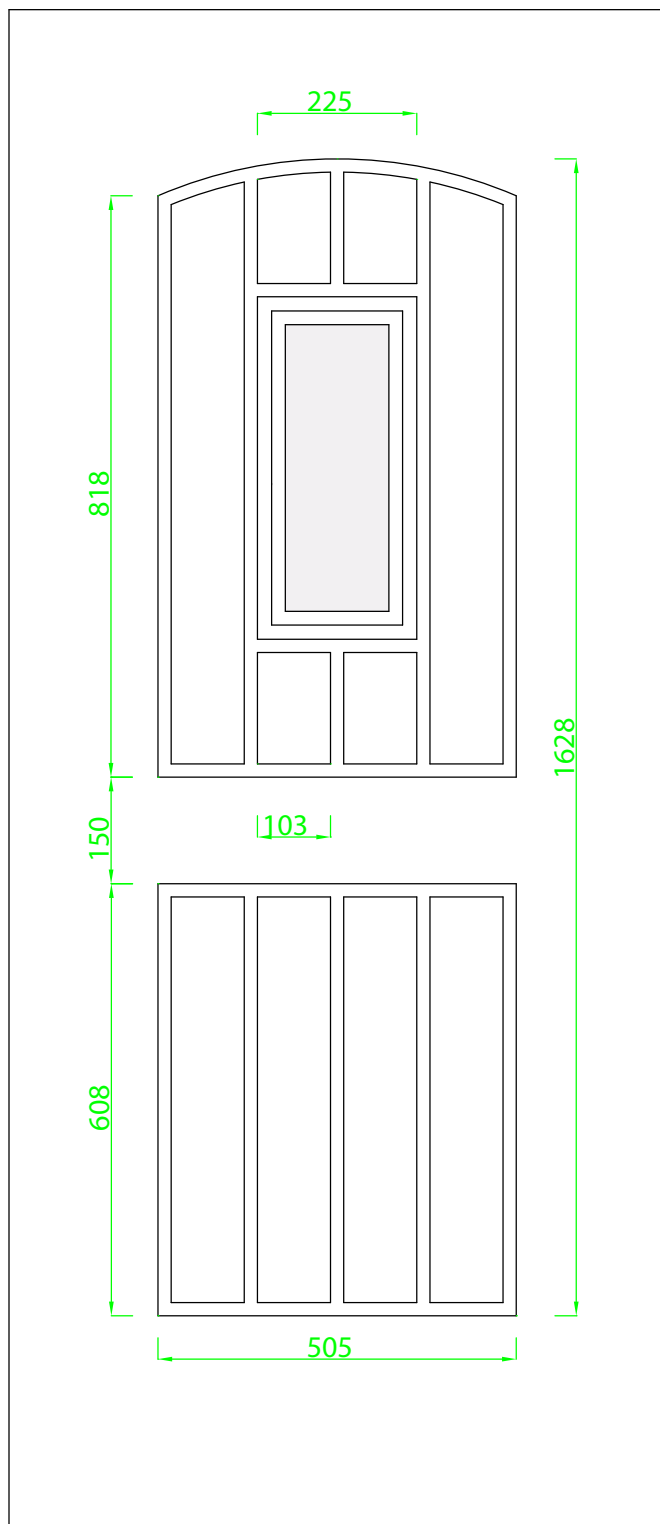
Door Outer Frame ►

PVC-U Thresholds ►

Ali Thresholds / Tie Bars ►

Cills ►

Add On / Frame Extensions ►



### Door Sash

#### Width

Max: 908mm

Min: 679mm

#### Height

Max: 2098mm

Min: 1796mm

#### Profile Dimensions:

**72 Frame:** 52mm+4mm air gap = **56mm**

**52 Frame:** 32mm+4mm air gap = **36mm**

**Ali low threshold open IN** = **20mm**

**Ali low threshold open OUT** = **17mm**

**Cill** = **30mm**

#### Width

##### 72 Frame

Max = (Max sash width + 56mm + 56mm)

Min = (Min sash width + 56mm + 56mm)

##### 52 Frame

Max = (Max sash width + 36mm + 36mm)

Min = (Min sash width + 36mm + 36mm)

#### Height

##### 72 Frame low threshold open IN

Max = (Max sash height + 56mm + 20mm)

Min = (Min sash height + 56mm + 20mm)

##### 52 Frame low threshold open IN

Max = (Max sash height + 36mm + 20mm)

Min = (Min sash height + 36mm + 20mm)

#### Double Door Width 72mm Frame

Max = (Max sash width + Max sash width + 56mm + 56mm + 8mm)

Min = (Min sash width + Min sash width + 56mm + 56mm + 8mm)

#### Press Glazing

Unit Thickness: 22

Unit Size: 192 X 447

Aperture: 152 X 413

#### Press Bead Glazing

N/A

Lock options and double doors and French doors can override the minimum sash heights stated above:

Minimum Sash Size Overrides ►

The overall frame dimensions can be increased or reduced by using other profiles:

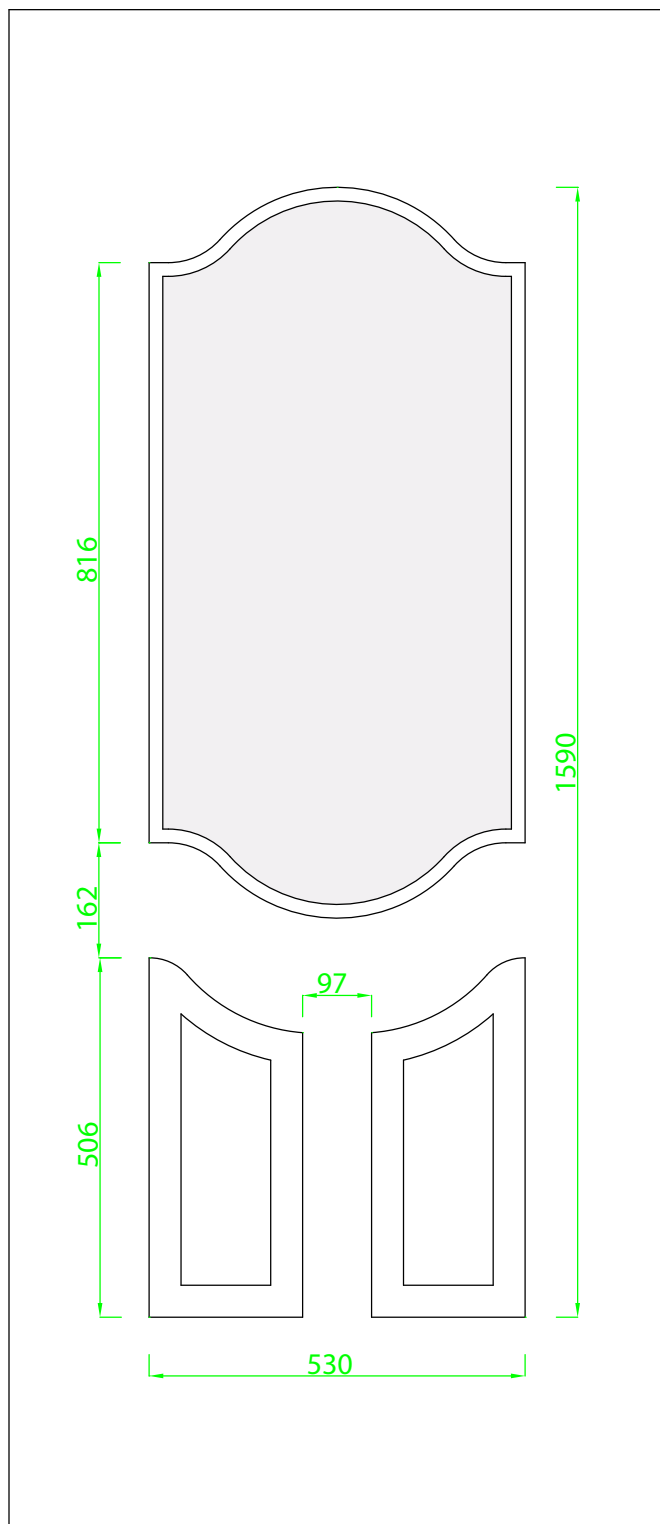
Door Outer Frame ►

PVC-U Thresholds ►

Ali Thresholds / Tie Bars ►

Cills ►

Add On / Frame Extensions ►



## Door Sash

### Width

Max: 908mm

Min: 724mm

### Height

Max: 2098mm

Min: 1797mm

### Profile Dimensions:

**72 Frame:** 52mm+4mm air gap = **56mm**

**52 Frame:** 32mm+4mm air gap = **36mm**

**Ali low threshold open IN** = **20mm**

**Ali low threshold open OUT** = **17mm**

**Cill** = **30mm**

### Width

#### 72 Frame

Max = (Max sash width + 56mm + 56mm)

Min = (Min sash width + 56mm + 56mm)

#### 52 Frame

Max = (Max sash width + 36mm + 36mm)

Min = (Min sash width + 36mm + 36mm)

### Height

#### 72 Frame low threshold open IN

Max = (Max sash height + 56mm + 20mm)

Min = (Min sash height + 56mm + 20mm)

#### 52 Frame low threshold open IN

Max = (Max sash height + 36mm + 20mm)

Min = (Min sash height + 36mm + 20mm)

### Double Door Width 72mm Frame

Max = (Max sash width + Max sash width + 56mm + 56mm + 8mm)

Min = (Min sash width + Min sash width + 56mm + 56mm + 8mm)

### Press Glazing

Unit Thickness: 22

Unit Size:

512 X 1008

Aperture:

462X (752 /961/752)

### Press Bead Glazing

N/A

Lock options and double doors and French doors can override the minimum sash heights stated above:

Minimum Sash Size Overrides ►

The overall frame dimensions can be increased or reduced by using other profiles:

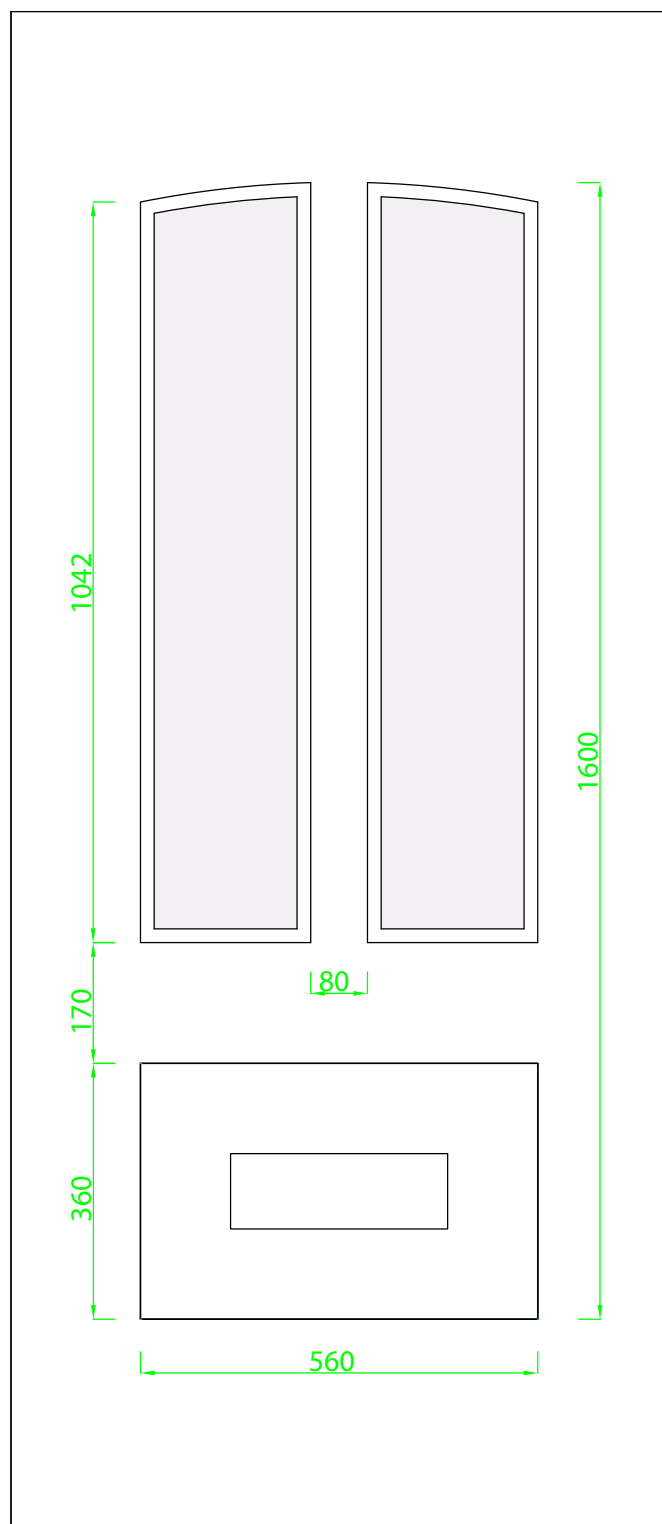
Door Outer Frame ►

PVC-U Thresholds ►

Ali Thresholds / Tie Bars ►

Cills ►

Add On / Frame Extensions ►



## Door Sash

### Width

Max: 908mm

Min: 768mm

### Height

Max: 2098mm

Min: 1808mm

### Profile Dimensions:

**72 Frame:** 52mm+4mm air gap = **56mm**

**52 Frame:** 32mm+4mm air gap = **36mm**

**Ali low threshold open IN** = **20mm**

**Ali low threshold open OUT** = **17mm**

**Cill** = **30mm**

### Width

#### 72 Frame

Max = (Max sash width + 56mm + 56mm)

Min = (Min sash width + 56mm + 56mm)

#### 52 Frame

Max = (Max sash width + 36mm + 36mm)

Min = (Min sash width + 36mm + 36mm)

### Height

#### 72 Frame low threshold open IN

Max = (Max sash height + 56mm + 20mm)

Min = (Min sash height + 56mm + 20mm)

#### 52 Frame low threshold open IN

Max = (Max sash height + 36mm + 20mm)

Min = (Min sash height + 36mm + 20mm)

### Double Door Width 72mm Frame

Max = (Max sash width + Max sash width + 56mm + 56mm + 8mm)

Min = (Min sash width + Min sash width + 56mm + 56mm + 8mm)

### Press Glazing

Unit Thickness: 22

Unit Size: 240 X 1067 (2 Off)

Aperture: 202 X 1030 (2 Off)

### Press Bead Glazing

N/A

Lock options and double doors and French doors can override the minimum sash heights stated above:

Minimum Sash Size Overrides ►

The overall frame dimensions can be increased or reduced by using other profiles:

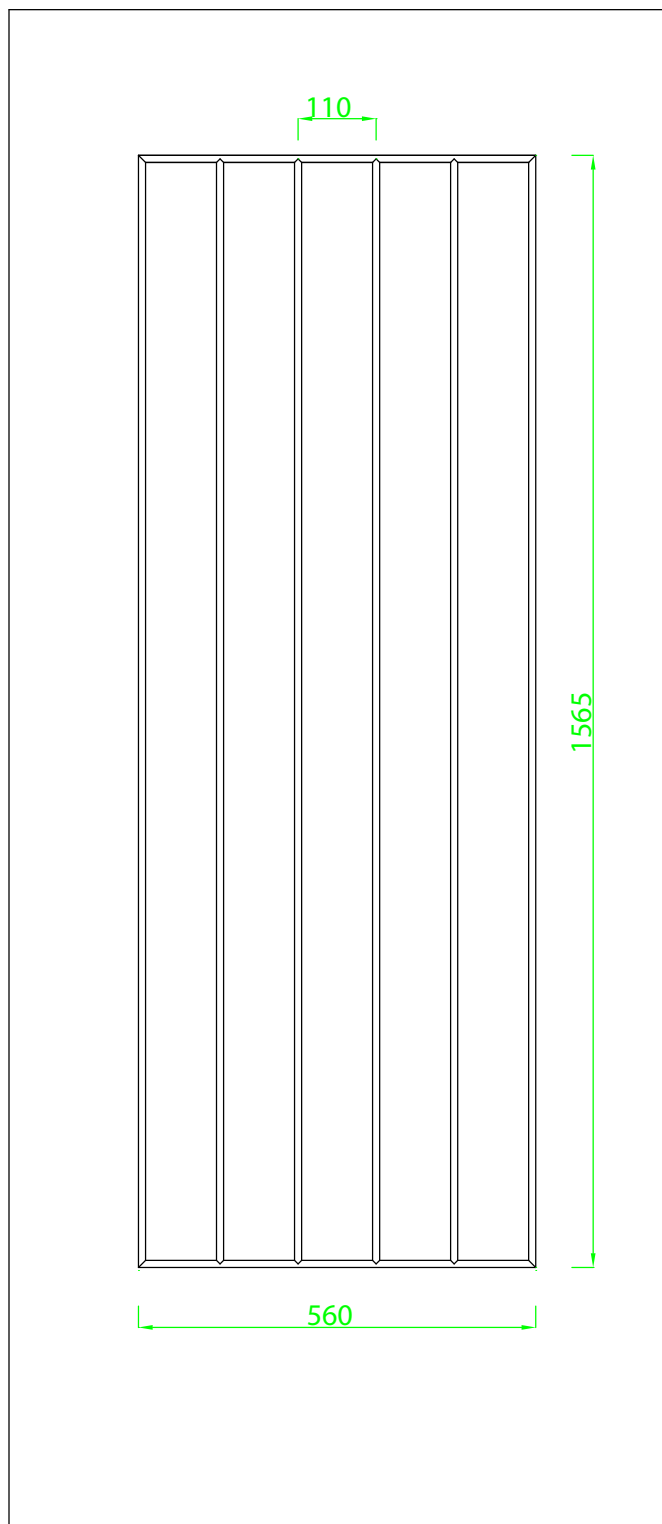
Door Outer Frame ►

PVC-U Thresholds ►

Ali Thresholds / Tie Bars ►

Cills ►

Add On / Frame Extensions ►



### Door Sash

#### Width

Max: 908mm

Min: 768mm

#### Height

Max: 2098mm

Min: 1808mm

#### Profile Dimensions:

**72 Frame:** 52mm+4mm air gap = **56mm**

**52 Frame:** 32mm+4mm air gap = **36mm**

**Ali low threshold open IN** = **20mm**

**Ali low threshold open OUT** = **17mm**

**Cill** = **30mm**

#### Width

##### 72 Frame

Max = (Max sash width + 56mm + 56mm)

Min = (Min sash width + 56mm + 56mm)

##### 52 Frame

Max = (Max sash width + 36mm + 36mm)

Min = (Min sash width + 36mm + 36mm)

#### Height

##### 72 Frame low threshold open IN

Max = (Max sash height + 56mm + 20mm)

Min = (Min sash height + 56mm + 20mm)

##### 52 Frame low threshold open IN

Max = (Max sash height + 36mm + 20mm)

Min = (Min sash height + 36mm + 20mm)

#### Double Door Width 72mm Frame

Max = (Max sash width + Max sash width + 56mm + 56mm + 8mm)

Min = (Min sash width + Min sash width + 56mm + 56mm + 8mm)

Lock options and double doors and French doors can override the minimum sash heights stated above:

Minimum Sash Size Overrides ►

The overall frame dimensions can be increased or reduced by using other profiles:

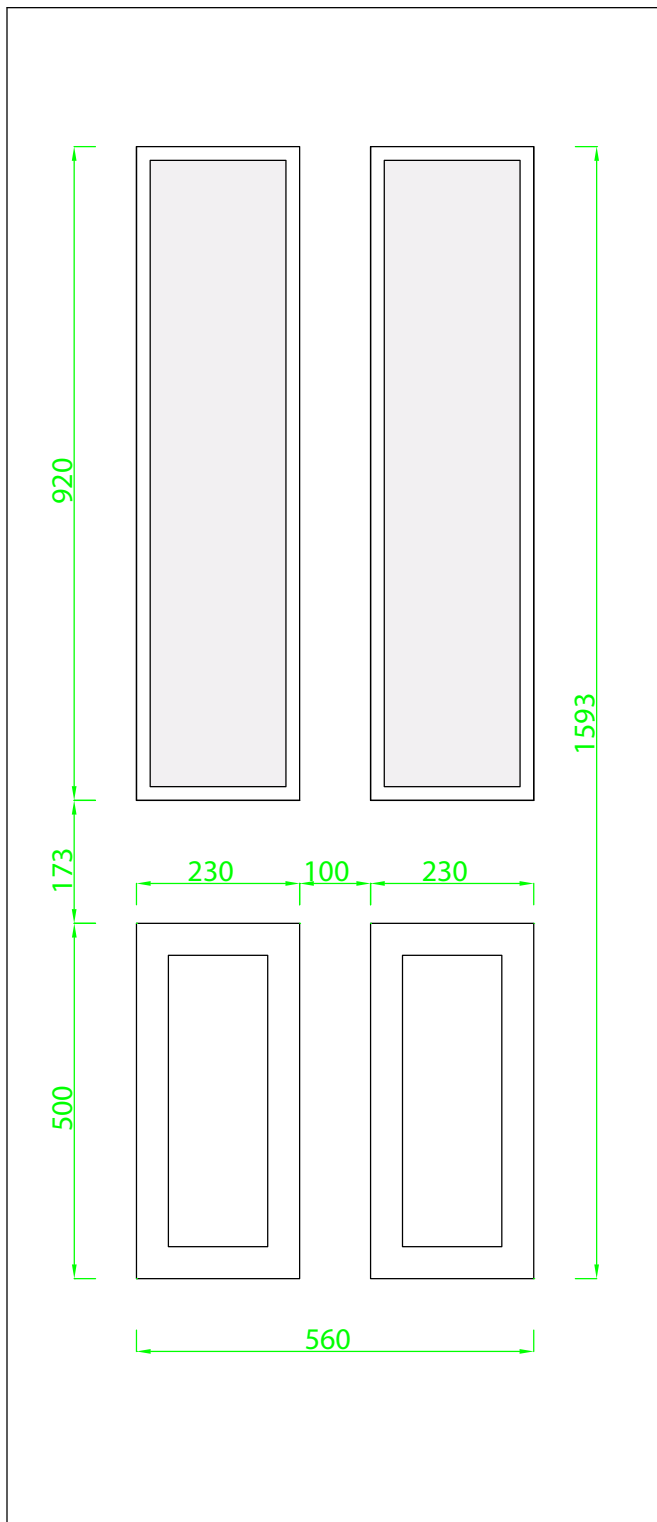
Door Outer Frame ►

PVC-U Thresholds ►

Ali Thresholds / Tie Bars ►

Cills ►

Add On / Frame Extensions ►



## Door Sash

### Width

Max: 908mm

Min: 753mm

### Height

Max: 2098mm

Min: 1801mm

### Profile Dimensions:

**72 Frame:** 52mm+4mm air gap = **56mm**

**52 Frame:** 32mm+4mm air gap = **36mm**

**Ali low threshold open IN** = **20mm**

**Ali low threshold open OUT** = **17mm**

**Cill** = **30mm**

### Width

#### 72 Frame

Max = (Max sash width + 56mm + 56mm)

Min = (Min sash width + 56mm + 56mm)

#### 52 Frame

Max = (Max sash width + 36mm + 36mm)

Min = (Min sash width + 36mm + 36mm)

### Height

#### 72 Frame low threshold open IN

Max = (Max sash height + 56mm + 20mm)

Min = (Min sash height + 56mm + 20mm)

#### 52 Frame low threshold open IN

Max = (Max sash height + 36mm + 20mm)

Min = (Min sash height + 36mm + 20mm)

### Double Door Width 72mm Frame

Max = (Max sash width + Max sash width + 56mm + 56mm + 8mm)

Min = (Min sash width + Min sash width + 56mm + 56mm + 8mm)

### Press Glazing

Unit Thickness: 22

Unit Size: 220 X 910

Aperture: 180 X 866

### Press Bead Glazing

Unit Thickness: 24

Unit Size: 188 X 875

Aperture: 155 X 842

Lock options and double doors and French doors can override the minimum sash heights stated above:

Minimum Sash Size Overrides ►

The overall frame dimensions can be increased or reduced by using other profiles:

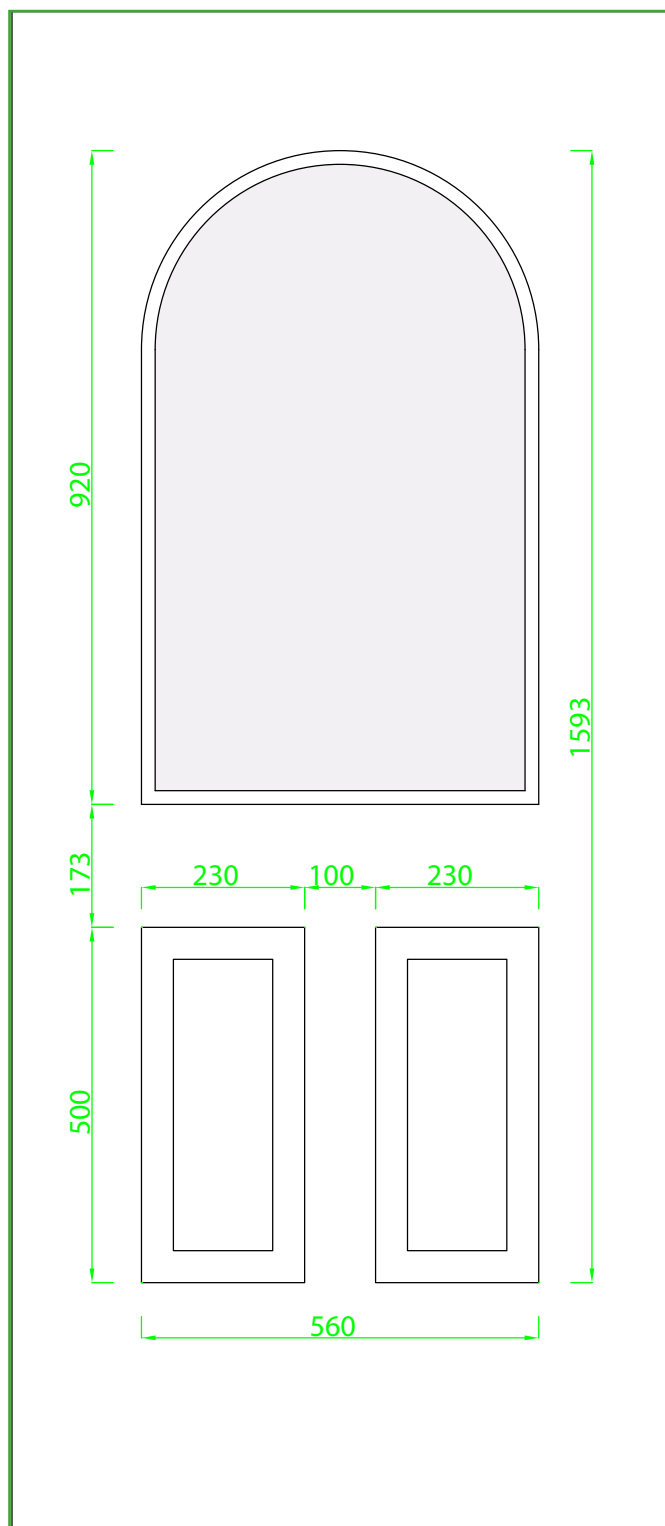
Door Outer Frame ►

PVC-U Thresholds ►

Ali Thresholds / Tie Bars ►

Cills ►

Add On / Frame Extensions ►



## Door Sash

### Width

Max: 908mm

Min: 768mm

### Height

Max: 2098mm

Min: 1801mm

### Profile Dimensions:

**72 Frame:** 52mm+4mm air gap = **56mm**

**52 Frame:** 32mm+4mm air gap = **36mm**

**Ali low threshold open IN** = **20mm**

**Ali low threshold open OUT** = **17mm**

**Cill** = **30mm**

### Width

#### 72 Frame

Max = (Max sash width + 56mm + 56mm)

Min = (Min sash width + 56mm + 56mm)

#### 52 Frame

Max = (Max sash width + 36mm + 36mm)

Min = (Min sash width + 36mm + 36mm)

### Height

#### 72 Frame low threshold open IN

Max = (Max sash height + 56mm + 20mm)

Min = (Min sash height + 56mm + 20mm)

#### 52 Frame low threshold open IN

Max = (Max sash height + 36mm + 20mm)

Min = (Min sash height + 36mm + 20mm)

### Double Door Width 72mm Frame

Max = (Max sash width + Max sash width + 56mm + 56mm + 8mm)

Min = (Min sash width + Min sash width + 56mm + 56mm + 8mm)

### Press Glazing

Unit Thickness: 22

Unit Size: 560 X 912

Aperture: 508 X 867

### Press Bead Glazing

Unit Thickness: 24

Unit Size: 516 X 875

Aperture: 482 X 840

Lock options and double doors and French doors can override the minimum sash heights stated above:

[Minimum Sash Size Overrides](#) ►

The overall frame dimensions can be increased or reduced by using other profiles:

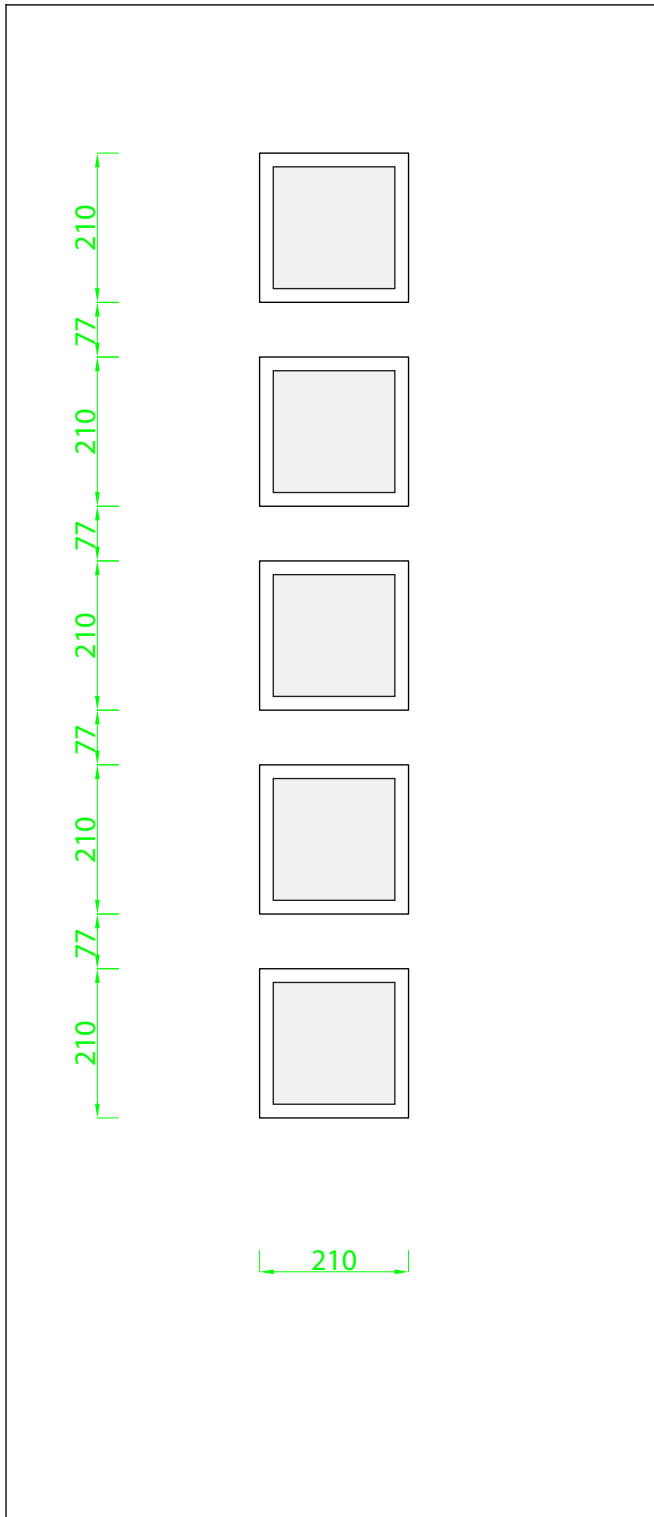
[Door Outer Frame](#) ►

[PVC-U Thresholds](#) ►

[Ali Thresholds / Tie Bars](#) ►

[Cills](#) ►

[Add On / Frame Extensions](#) ►



## Door Sash

## Width

Max: 908mm

Min: 679mm

## Height

Max: 2098mm

Min: 1800mm

### Profile Dimensions:

**72 Frame:** 52mm+4mm air gap = **56mm**

**52 Frame:** 32mm+4mm air gap = **36mm**

**Ali low threshold open IN = 20mm**

**Ali** low threshold open **OUT** = 17mm

Cill = 30mm

### Width

## 72 Frame

$$\text{Max} = (\text{Max sash width} + 56\text{mm} + 56\text{mm})$$
$$\text{Min} = (\text{Min sash width} + 56\text{mm} + 56\text{mm})$$

## 52 Frame

$$\text{Max} = (\text{Max sash width} + 36\text{mm} + 36\text{mm})$$
$$\text{Min} = (\text{Min sash width} + 36\text{mm} + 36\text{mm})$$

## Height

## 72 Frame low threshold open IN

$$\text{Max} = (\text{Max sash height} + 56\text{mm} + 20\text{mm})$$
$$\text{Min} = (\text{Min sash height} + 56\text{mm} + 20\text{mm})$$

## 52 Frame low threshold open IN

$$\text{Max} = (\text{Max sash height} + 36\text{mm} + 20\text{mm})$$
$$\text{Min} = (\text{Min sash height} + 36\text{mm} + 20\text{mm})$$

### Double Door Width 72mm Frame

$$\text{Max} = (\text{Max sash width} + \text{Max sash width} + 56\text{mm} + 56\text{mm} + 8\text{mm})$$
$$\text{Min} = (\text{Min sash width} + \text{Min sash width} + 56\text{mm} + 56\text{mm} + 8\text{mm})$$

## Press Glazing

Unit Thickness: 22

Unit Size: 212 X 212

Aperture: 172 X 172

Lock options and double doors and French doors can override the minimum sash heights stated above:

## Minimum Sash Size Overrides

The overall frame dimensions can be increased or reduced by using other profiles:

Door Outer Frame ▶

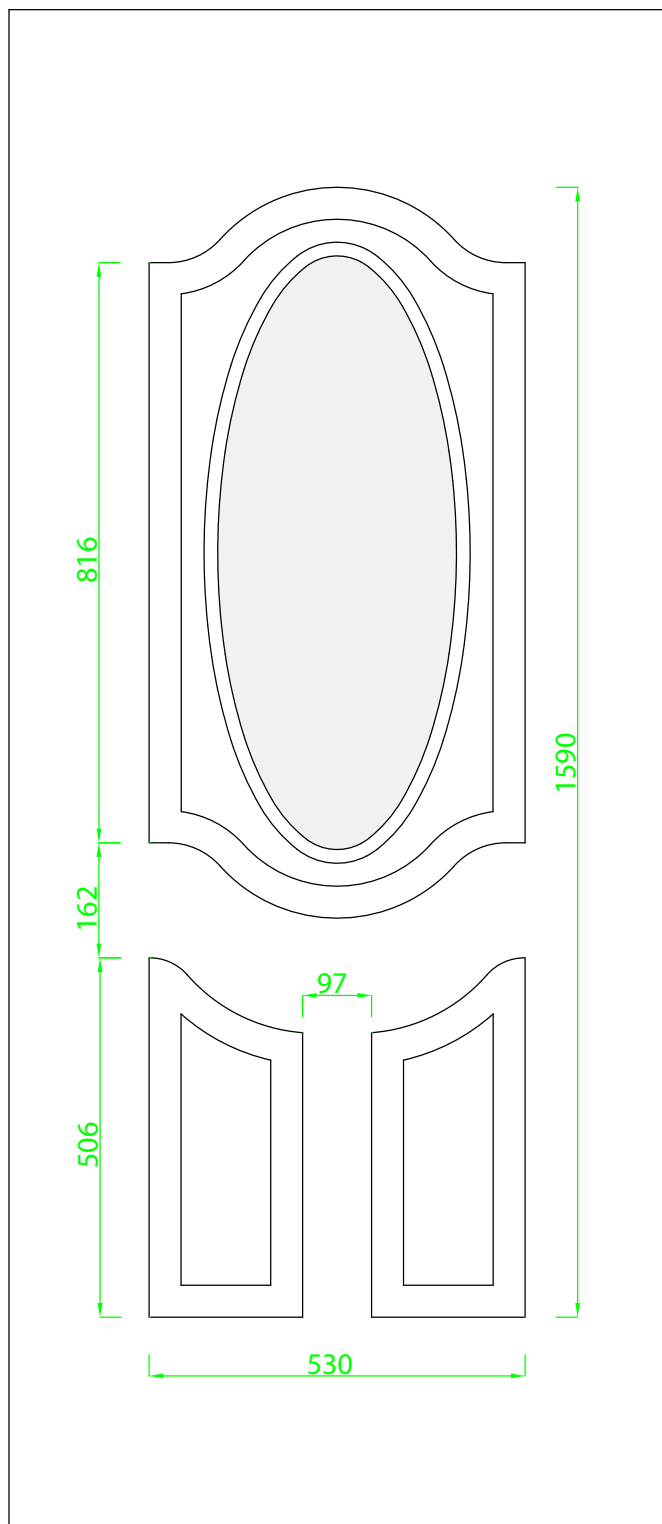
## PVC-U Thresholds

Ali Thresholds / Tie Bars ▶

Cills ▶

Add On / Frame Extensions ▶



**Door Sash****Width**

Max: 908mm

Min: 684mm

**Height**

Max: 2098mm

Min: 1797mm

**Profile Dimensions:****72 Frame:** 52mm+4mm air gap = **56mm****52 Frame:** 32mm+4mm air gap = **36mm****Ali** low threshold open **IN** = **20mm****Ali** low threshold open **OUT** = **17mm****Cill** = **30mm****Width****72 Frame**

Max = (Max sash width + 56mm + 56mm)

Min = (Min sash width + 56mm + 56mm)

**52 Frame**

Max = (Max sash width + 36mm + 36mm)

Min = (Min sash width + 36mm + 36mm)

**Height****72 Frame low threshold open IN**

Max = (Max sash height + 56mm + 20mm)

Min = (Min sash height + 56mm + 20mm)

**52 Frame low threshold open IN**

Max = (Max sash height + 36mm + 20mm)

Min = (Min sash height + 36mm + 20mm)

**Double Door Width 72mm Frame**

Max = (Max sash width + Max sash width + 56mm + 56mm + 8mm)

Min = (Min sash width + Min sash width + 56mm + 56mm + 8mm)

**Press Glazing**

Unit Thickness: 22

Unit Size: 365 X 862

Aperture: 320 X 819

**Press Bead Glazing**

N/A

Lock options and double doors and French doors can override the minimum sash heights stated above:

Minimum Sash Size Overrides ►

The overall frame dimensions can be increased or reduced by using other profiles:

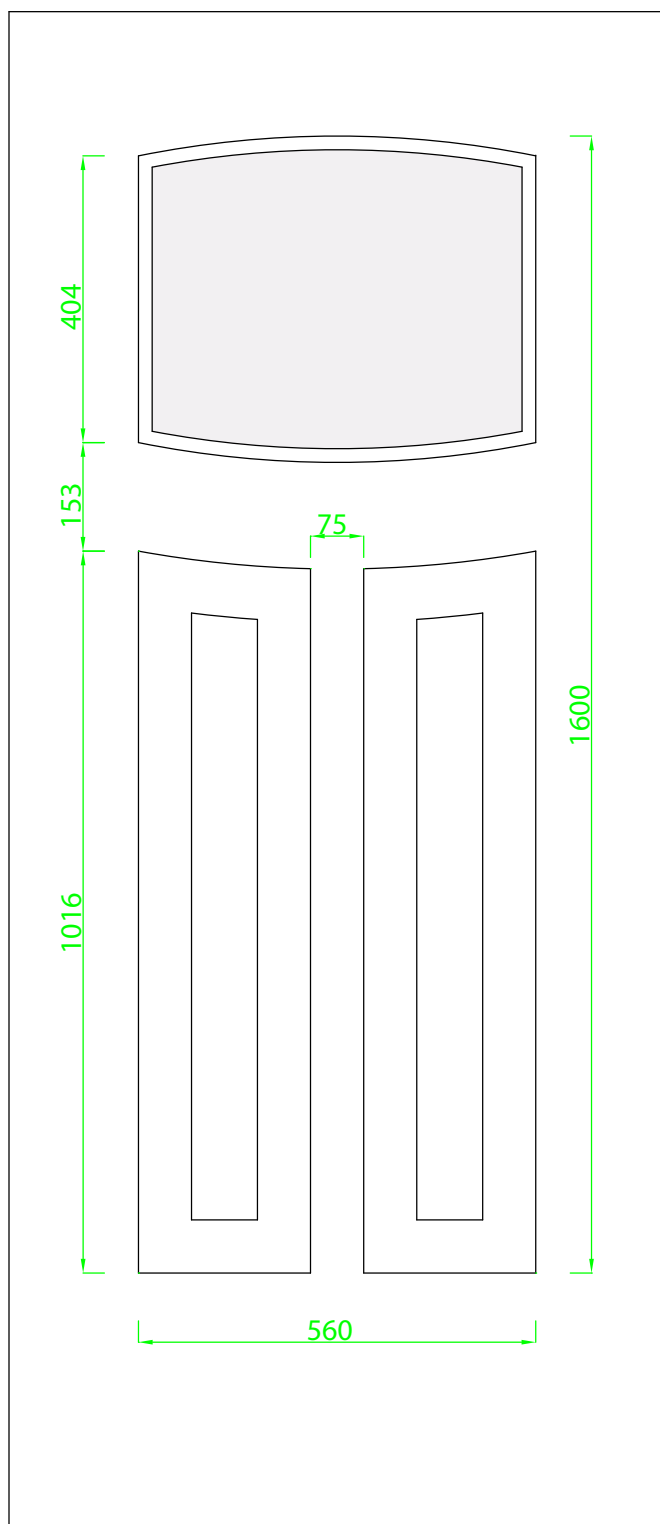
Door Outer Frame ►

PVC-U Thresholds ►

Ali Thresholds / Tie Bars ►

Cills ►

Add On / Frame Extensions ►



### Door Sash

#### Width

Max: 908mm

Min: 769mm

#### Height

Max: 2098mm

Min: 1809mm

#### Profile Dimensions:

**72 Frame:** 52mm+4mm air gap = **56mm**

**52 Frame:** 32mm+4mm air gap = **36mm**

**Ali low threshold open IN** = **20mm**

**Ali low threshold open OUT** = **17mm**

**Cill** = **30mm**

#### Width

##### 72 Frame

Max = (Max sash width + 56mm + 56mm)

Min = (Min sash width + 56mm + 56mm)

##### 52 Frame

Max = (Max sash width + 36mm + 36mm)

Min = (Min sash width + 36mm + 36mm)

#### Height

##### 72 Frame low threshold open IN

Max = (Max sash height + 56mm + 20mm)

Min = (Min sash height + 56mm + 20mm)

##### 52 Frame low threshold open IN

Max = (Max sash height + 36mm + 20mm)

Min = (Min sash height + 36mm + 20mm)

#### Double Door Width 72mm Frame

Max = (Max sash width + Max sash width + 56mm + 56mm + 8mm)

Min = (Min sash width + Min sash width + 56mm + 56mm + 8mm)

#### Press Glazing

Unit Thickness: 22

Unit Size: 547 X 447

Aperture: 512 X 409

#### Press Bead Glazing

N/A

Lock options and double doors and French doors can override the minimum sash heights stated above:

[Minimum Sash Size Overrides](#) ►

The overall frame dimensions can be increased or reduced by using other profiles:

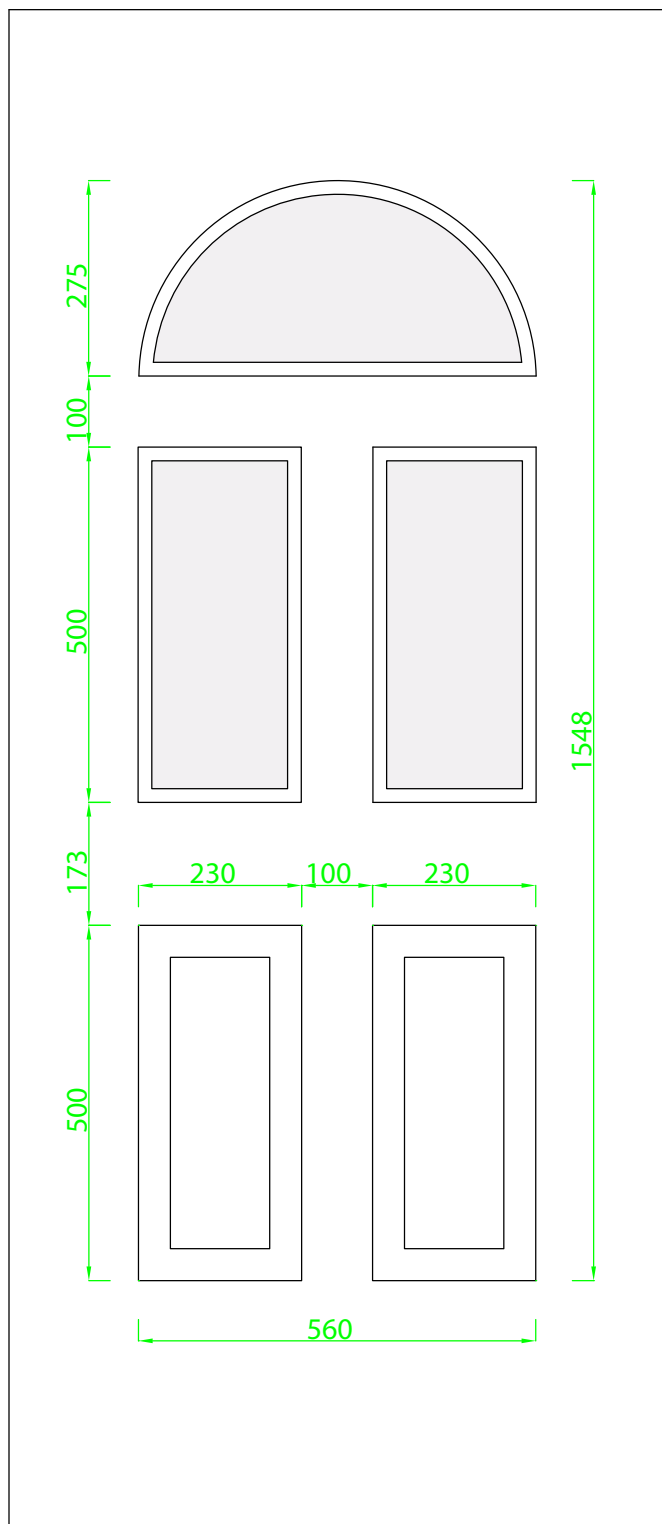
[Door Outer Frame](#) ►

[PVC-U Thresholds](#) ►

[Ali Thresholds / Tie Bars](#) ►

[Cills](#) ►

[Add On / Frame Extensions](#) ►



## Door Sash

### Width

Max: 908mm

Min: 748mm

### Height

Max: 2098mm

Min: 1748mm

### Profile Dimensions:

**72 Frame:** 52mm+4mm air gap = **56mm**

**52 Frame:** 32mm+4mm air gap = **36mm**

**Ali low threshold open IN** = **20mm**

**Ali low threshold open OUT** = **17mm**

**Cill** = **30mm**

### Width

#### 72 Frame

Max = (Max sash width + 56mm + 56mm)

Min = (Min sash width + 56mm + 56mm)

#### 52 Frame

Max = (Max sash width + 36mm + 36mm)

Min = (Min sash width + 36mm + 36mm)

### Height

#### 72 Frame low threshold open IN

Max = (Max sash height + 56mm + 20mm)

Min = (Min sash height + 56mm + 20mm)

#### 52 Frame low threshold open IN

Max = (Max sash height + 36mm + 20mm)

Min = (Min sash height + 36mm + 20mm)

### Double Door Width 72mm Frame

Max = (Max sash width + Max sash width + 56mm + 56mm + 8mm)

Min = (Min sash width + Min sash width + 56mm + 56mm + 8mm)

Lock options and double doors and French doors can override the minimum sash heights stated above:

Minimum Sash Size Overrides ►

The overall frame dimensions can be increased or reduced by using other profiles:

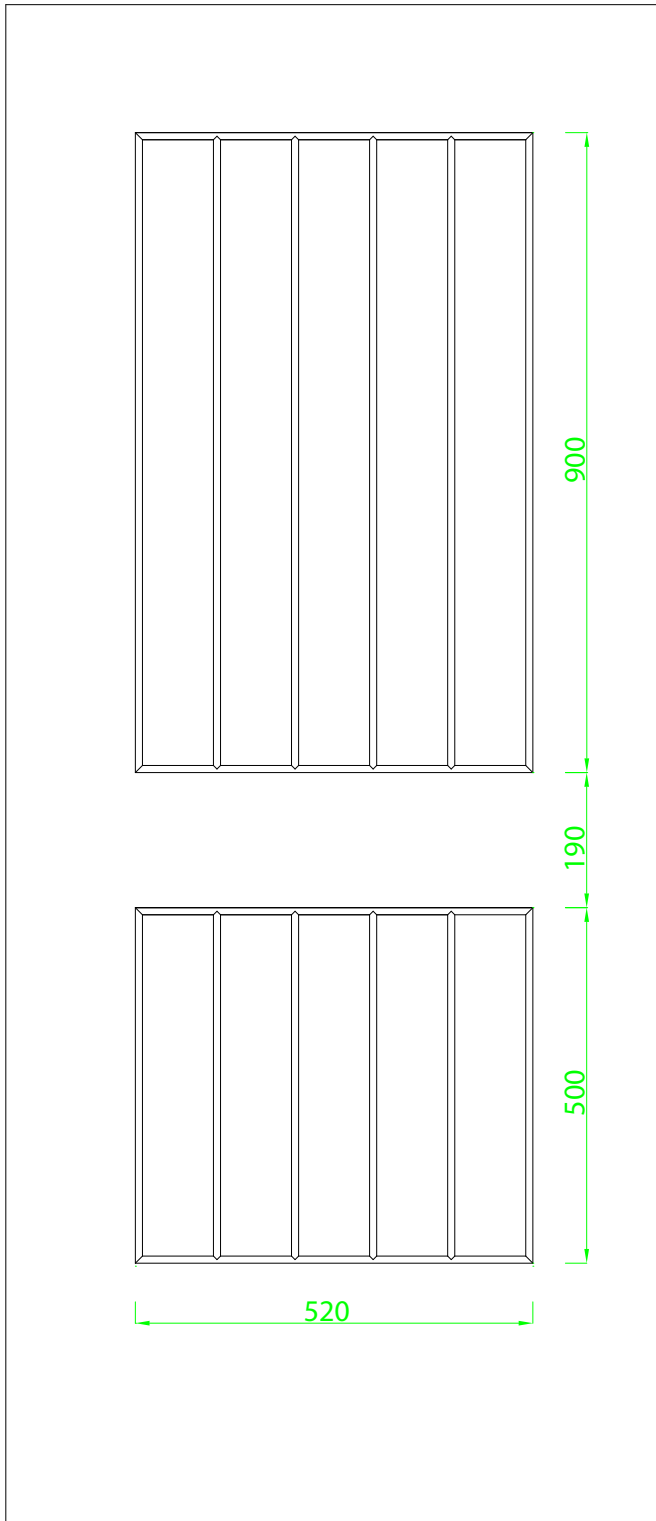
Door Outer Frame ►

PVC-U Thresholds ►

Ali Thresholds / Tie Bars ►

Cills ►

Add On / Frame Extensions ►



## Door Sash

### Width

Max: 904mm

Min: 688mm

### Height

Max: 2098mm

Min: 1768mm

### Profile Dimensions:

**72 Frame:** 52mm+4mm air gap = **56mm**

**52 Frame:** 32mm+4mm air gap = **36mm**

**Ali low threshold open IN** = **20mm**

**Ali low threshold open OUT** = **17mm**

**Cill** = **30mm**

### Width

#### 72 Frame

Max = (Max sash width + 56mm + 56mm)

Min = (Min sash width + 56mm + 56mm)

#### 52 Frame

Max = (Max sash width + 36mm + 36mm)

Min = (Min sash width + 36mm + 36mm)

### Height

#### 72 Frame low threshold open IN

Max = (Max sash height + 56mm + 20mm)

Min = (Min sash height + 56mm + 20mm)

#### 52 Frame low threshold open IN

Max = (Max sash height + 36mm + 20mm)

Min = (Min sash height + 36mm + 20mm)

### Double Door Width 72mm Frame

Max = (Max sash width + Max sash width + 56mm + 56mm + 8mm)

Min = (Min sash width + Min sash width + 56mm + 56mm + 8mm)

Lock options and double doors and French doors can override the minimum sash heights stated above:

Minimum Sash Size Overrides ►

The overall frame dimensions can be increased or reduced by using other profiles:

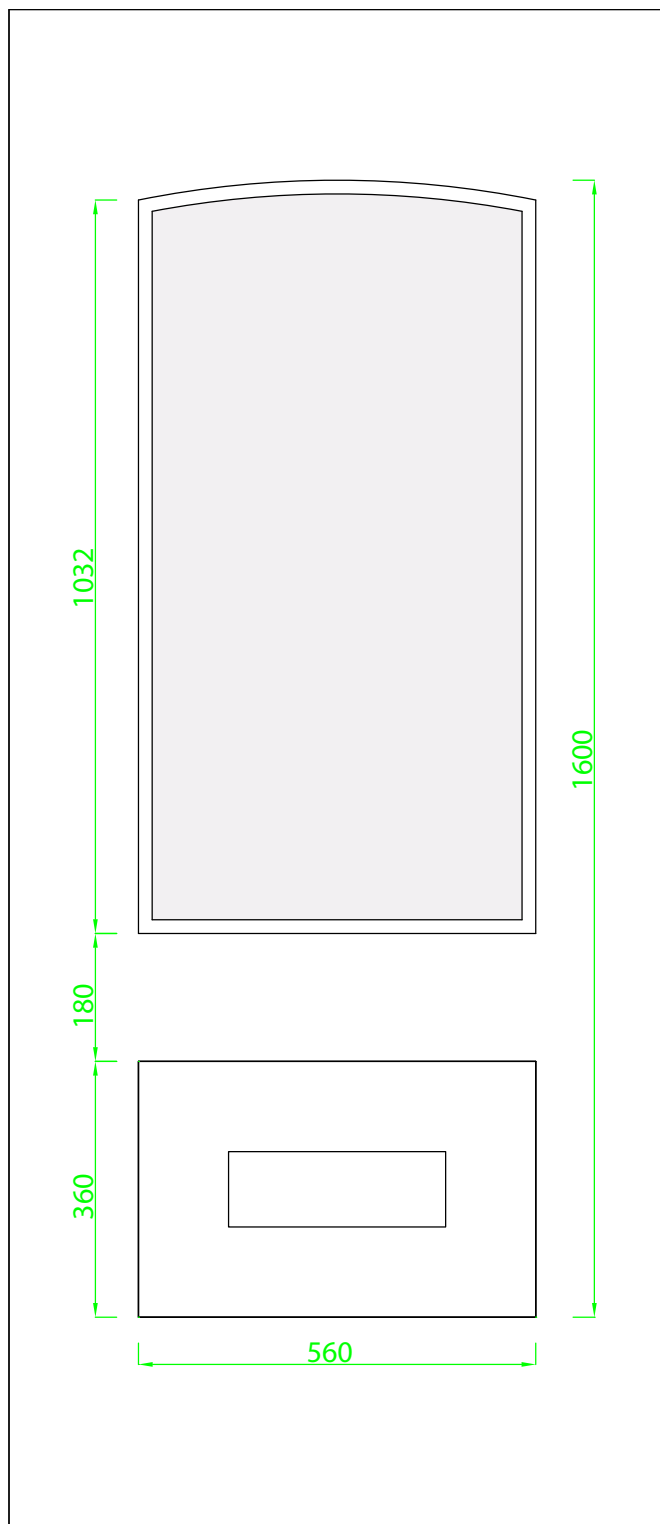
Door Outer Frame ►

PVC-U Thresholds ►

Ali Thresholds / Tie Bars ►

Cills ►

Add On / Frame Extensions ►



## Door Sash

### Width

Max: 908mm

Min: 768mm

### Height

Max: 2098mm

Min: 1808mm

### Profile Dimensions:

**72 Frame:** 52mm+4mm air gap = **56mm**

**52 Frame:** 32mm+4mm air gap = **36mm**

**Ali low threshold open IN** = **20mm**

**Ali low threshold open OUT** = **17mm**

**Cill** = **30mm**

### Width

#### 72 Frame

Max = (Max sash width + 56mm + 56mm)

Min = (Min sash width + 56mm + 56mm)

#### 52 Frame

Max = (Max sash width + 36mm + 36mm)

Min = (Min sash width + 36mm + 36mm)

### Height

#### 72 Frame low threshold open IN

Max = (Max sash height + 56mm + 20mm)

Min = (Min sash height + 56mm + 20mm)

#### 52 Frame low threshold open IN

Max = (Max sash height + 36mm + 20mm)

Min = (Min sash height + 36mm + 20mm)

### Double Door Width 72mm Frame

Max = (Max sash width + Max sash width + 56mm + 56mm + 8mm)

Min = (Min sash width + Min sash width + 56mm + 56mm + 8mm)

### Press Glazing

Unit Thickness: 22

Unit Size: 547 X 1047

Aperture: 512 X 1011

### Press Bead Glazing

N/A

Lock options and double doors and French doors can override the minimum sash heights stated above:

[Minimum Sash Size Overrides](#) ►

The overall frame dimensions can be increased or reduced by using other profiles:

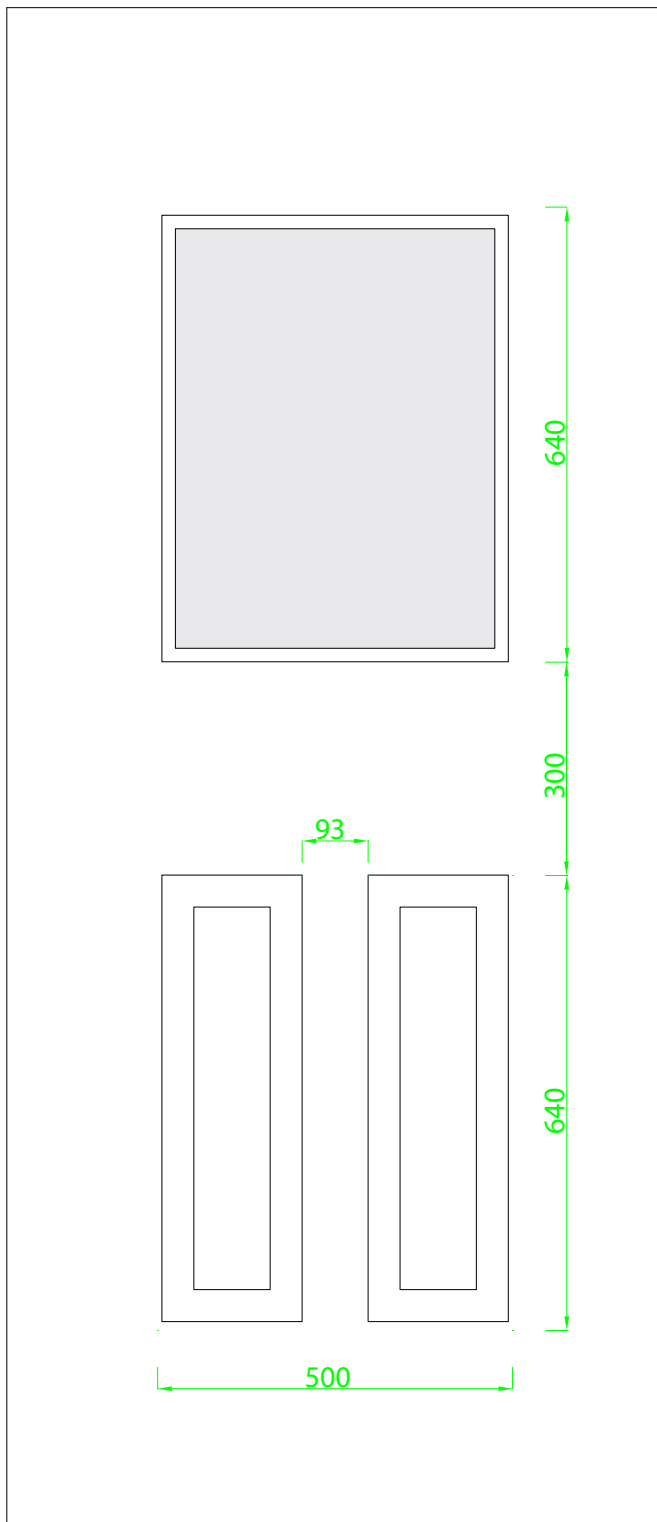
[Door Outer Frame](#) ►

[PVC-U Thresholds](#) ►

[Ali Thresholds / Tie Bars](#) ►

[Cills](#) ►

[Add On / Frame Extensions](#) ►



## Door Sash

### Width

Max: 908mm

Min: 696mm

### Height

Max: 2098mm

Min: 1764mm

#### Profile Dimensions:

**72 Frame:** 52mm+4mm air gap = **56mm**

**52 Frame:** 32mm+4mm air gap = **36mm**

**Ali low threshold open IN** = **20mm**

**Ali low threshold open OUT** = **17mm**

**Cill** = **30mm**

### Width

#### 72 Frame

Max = (Max sash width + 56mm + 56mm)

Min = (Min sash width + 56mm + 56mm)

#### 52 Frame

Max = (Max sash width + 36mm + 36mm)

Min = (Min sash width + 36mm + 36mm)

### Height

#### 72 Frame low threshold open IN

Max = (Max sash height + 56mm + 20mm)

Min = (Min sash height + 56mm + 20mm)

#### 52 Frame low threshold open IN

Max = (Max sash height + 36mm + 20mm)

Min = (Min sash height + 36mm + 20mm)

### Double Door Width 72mm Frame

Max = (Max sash width + Max sash width + 56mm + 56mm + 8mm)

Min = (Min sash width + Min sash width + 56mm + 56mm + 8mm)

### Press Glazing

N/A

### Press Bead Glazing

Unit Thickness: 24

Unit Size: 440 X 580

Aperture: 410 X 550

Lock options and double doors and French doors can override the minimum sash heights stated above:

[Minimum Sash Size Overrides](#) ►

The overall frame dimensions can be increased or reduced by using other profiles:

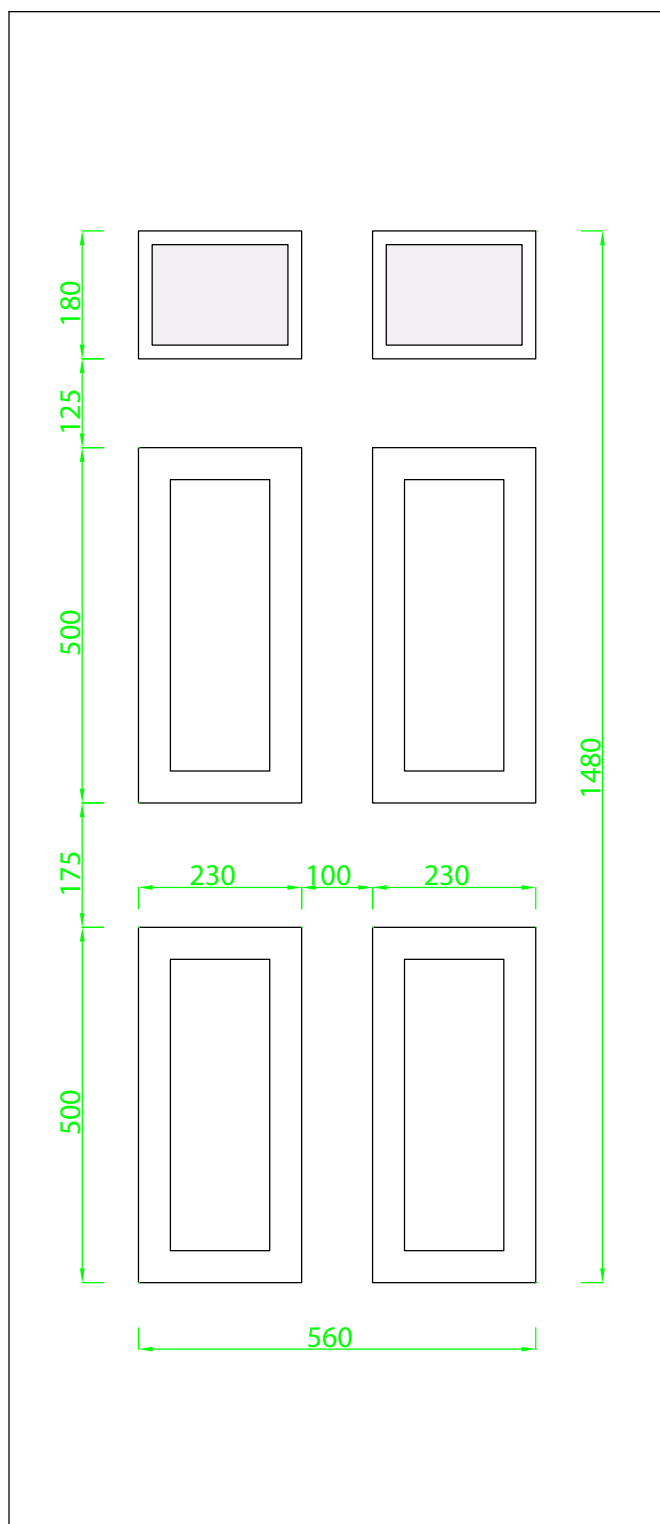
[Door Outer Frame](#) ►

[PVC-U Thresholds](#) ►

[Ali Thresholds / Tie Bars](#) ►

[Cills](#) ►

[Add On / Frame Extensions](#) ►



## Door Sash

### Width

Max: 908mm

Min: 769mm

### Height

Max: 2098mm

Min: 1728mm

### Profile Dimensions:

**72 Frame:** 52mm+4mm air gap = **56mm**

**52 Frame:** 32mm+4mm air gap = **36mm**

**Ali low threshold open IN = 20mm**

**Ali low threshold open OUT = 17mm**

**Cill = 30mm**

### Width

#### 72 Frame

Max = (Max sash width + 56mm + 56mm)

Min = (Min sash width + 56mm + 56mm)

#### 52 Frame

Max = (Max sash width + 36mm + 36mm)

Min = (Min sash width + 36mm + 36mm)

### Height

#### 72 Frame low threshold open IN

Max = (Max sash height + 56mm + 20mm)

Min = (Min sash height + 56mm + 20mm)

#### 52 Frame low threshold open IN

Max = (Max sash height + 36mm + 20mm)

Min = (Min sash height + 36mm + 20mm)

### Double Door Width 72mm Frame

Max = (Max sash width + Max sash width + 56mm + 56mm + 8mm)

Min = (Min sash width + Min sash width + 56mm + 56mm + 8mm)

### Press Glazing

Unit Thickness: 22

Unit Size: 230 X 175

Aperture: 187 X 140

### Press Bead Glazing

N/A

Lock options and double doors and French doors can override the minimum sash heights stated above:

Minimum Sash Size Overrides ►

The overall frame dimensions can be increased or reduced by using other profiles:

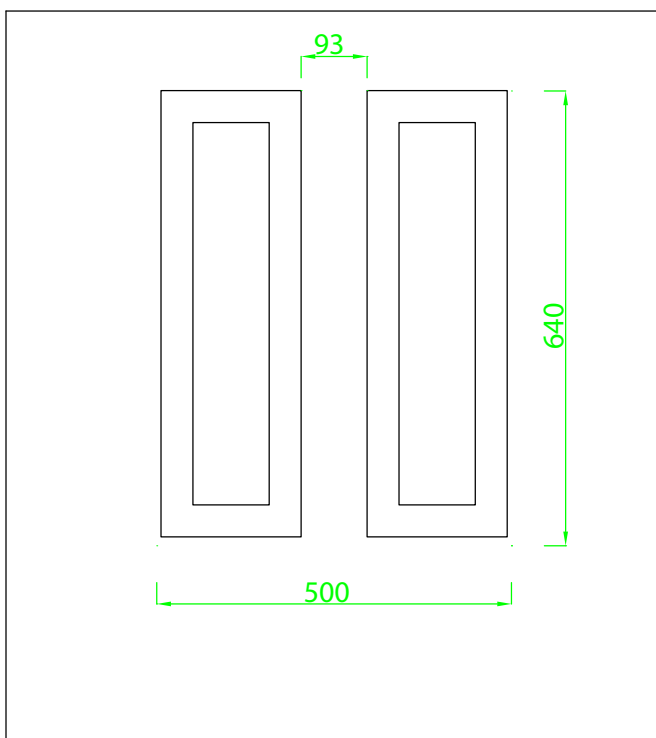
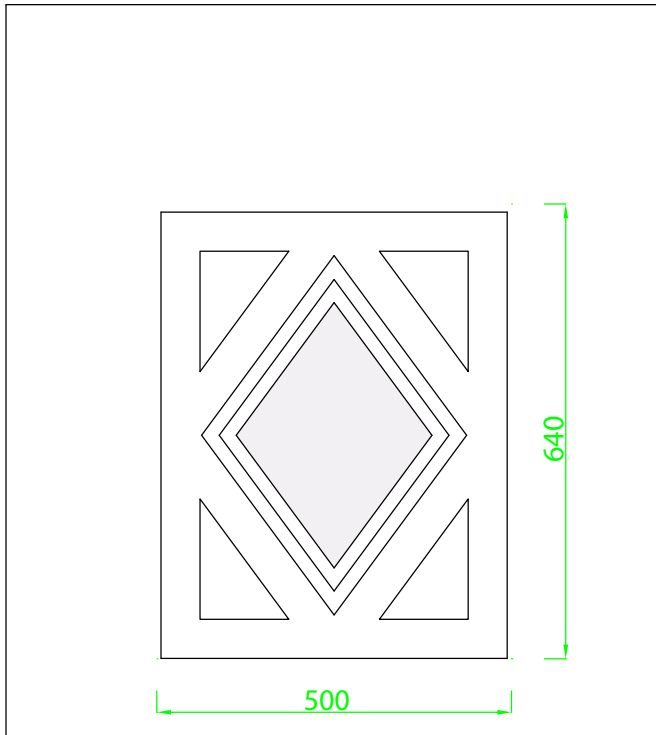
Door Outer Frame ►

PVC-U Thresholds ►

Ali Thresholds / Tie Bars ►

Cills ►

Add On / Frame Extensions ►



## Door Sash

### Width

Max: 908mm

Min: 696mm

### Height

Max: 2018mm

Min: 1708mm

### Profile Dimensions:

**72 Frame:** 52mm+4mm air gap = **56mm**

**52 Frame:** 32mm+4mm air gap = **36mm**

**Ali low threshold open IN** = **20mm**

**Ali low threshold open OUT** = **17mm**

**Cill** = **30mm**

### Width

#### 72 Frame

Max = (Max sash width + 56mm + 56mm)

Min = (Min sash width + 56mm + 56mm)

#### 52 Frame

Max = (Max sash width + 36mm + 36mm)

Min = (Min sash width + 36mm + 36mm)

### Height

#### 72 Frame low threshold open IN

Max = (Max sash height + 56mm + 20mm)

Min = (Min sash height + 56mm + 20mm)

#### 52 Frame low threshold open IN

Max = (Max sash height + 36mm + 20mm)

Min = (Min sash height + 36mm + 20mm)

### Double Door Width 72mm Frame

N/A

### Press Glazing

Unit Thickness: 22

Unit Size: 320 X 435

Aperture: 277 X 371

### Press Bead Glazing

N/A

The overall frame dimensions can be increased or reduced by using other profiles:

Door Outer Frame ►

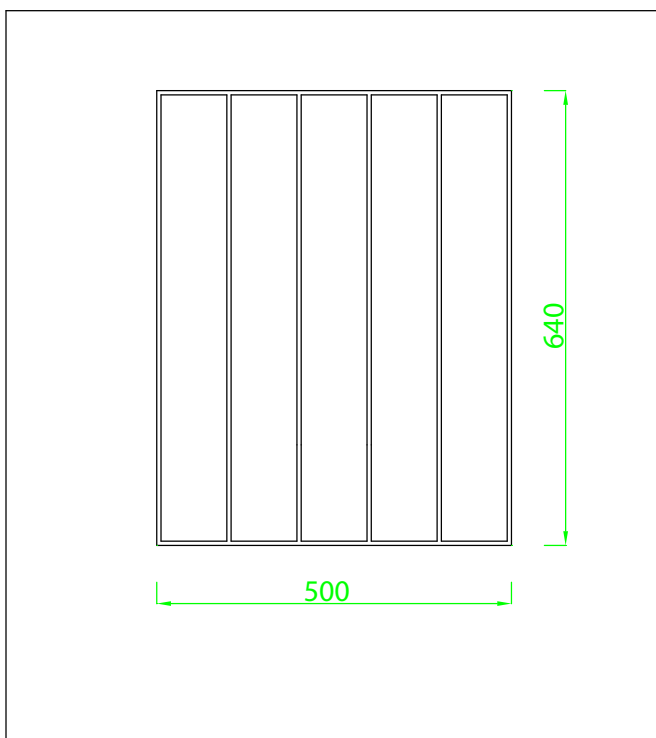
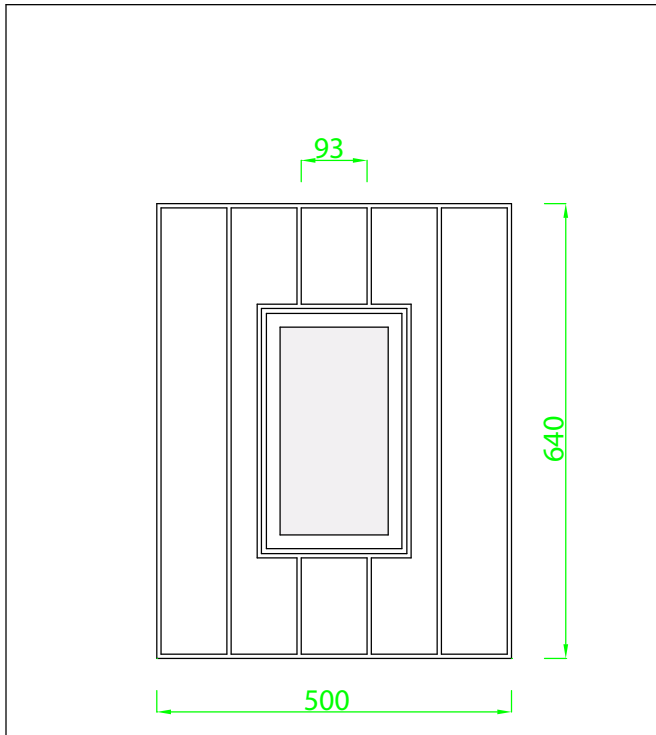
PVC-U Thresholds ►

Ali Thresholds / Tie Bars ►

Cills ►

Add On / Frame Extensions ►





## Door Sash

### Width

Max: 908mm

Min: 673mm

### Height

Max: 2018mm

Min: 1668mm

### Profile Dimensions:

**72 Frame:** 52mm+4mm air gap = **56mm**

**52 Frame:** 32mm+4mm air gap = **36mm**

**Ali low threshold open IN** = **20mm**

**Ali low threshold open OUT** = **17mm**

**Cill** = **30mm**

### Width

#### 72 Frame

Max = (Max sash width + 56mm + 56mm)

Min = (Min sash width + 56mm + 56mm)

#### 52 Frame

Max = (Max sash width + 36mm + 36mm)

Min = (Min sash width + 36mm + 36mm)

### Height

#### 72 Frame low threshold open IN

Max = (Max sash height + 56mm + 20mm)

Min = (Min sash height + 56mm + 20mm)

#### 52 Frame low threshold open IN

Max = (Max sash height + 36mm + 20mm)

Min = (Min sash height + 36mm + 20mm)

### Double Door Width 72mm Frame

N/A

### Press Glazing

Unit Thickness: 22

Unit Size: 150 X 300

Aperture: 109 X 252

### Press Bead Glazing

N/A

The overall frame dimensions can be increased or reduced by using other profiles:

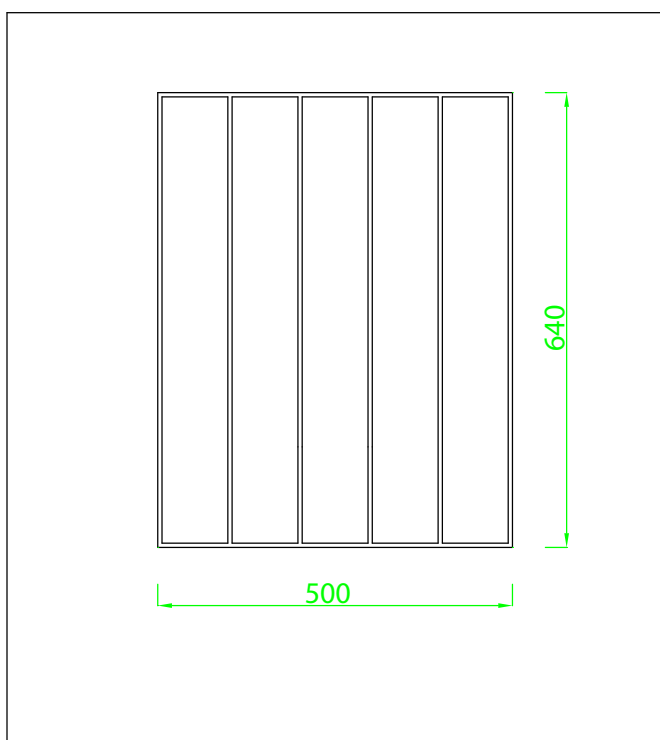
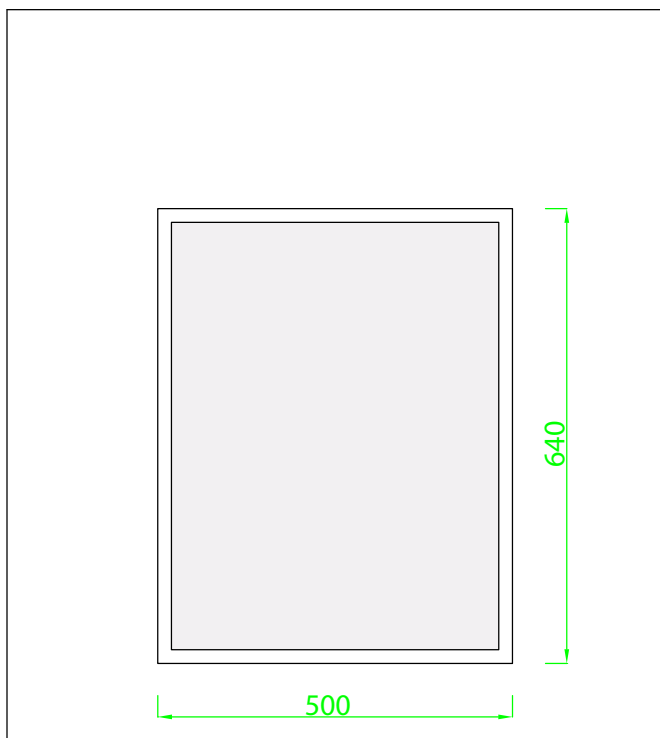
Door Outer Frame ►

PVC-U Thresholds ►

Ali Thresholds / Tie Bars ►

Cills ►

Add On / Frame Extensions ►



## Door Sash

### Width

Max: 908mm

Min: 708mm

### Height

Max: 2018mm

Min: 1708mm

### Profile Dimensions:

**72 Frame:** 52mm+4mm air gap = **56mm**

**52 Frame:** 32mm+4mm air gap = **36mm**

**Ali low threshold open IN** = **20mm**

**Ali low threshold open OUT** = **17mm**

**Cill** = **30mm**

### Width

#### 72 Frame

Max = (Max sash width + 56mm + 56mm)

Min = (Min sash width + 56mm + 56mm)

#### 52 Frame

Max = (Max sash width + 36mm + 36mm)

Min = (Min sash width + 36mm + 36mm)

### Height

#### 72 Frame low threshold open IN

Max = (Max sash height + 56mm + 20mm)

Min = (Min sash height + 56mm + 20mm)

#### 52 Frame low threshold open IN

Max = (Max sash height + 36mm + 20mm)

Min = (Min sash height + 36mm + 20mm)

### Double Door Width 72mm Frame

N/A

### Press Glazing

Unit Thickness: 22

Unit Size: 485 X 625

Aperture: 436 X 576

### Press Bead Glazing

N/A

The overall frame dimensions can be increased or reduced by using other profiles:

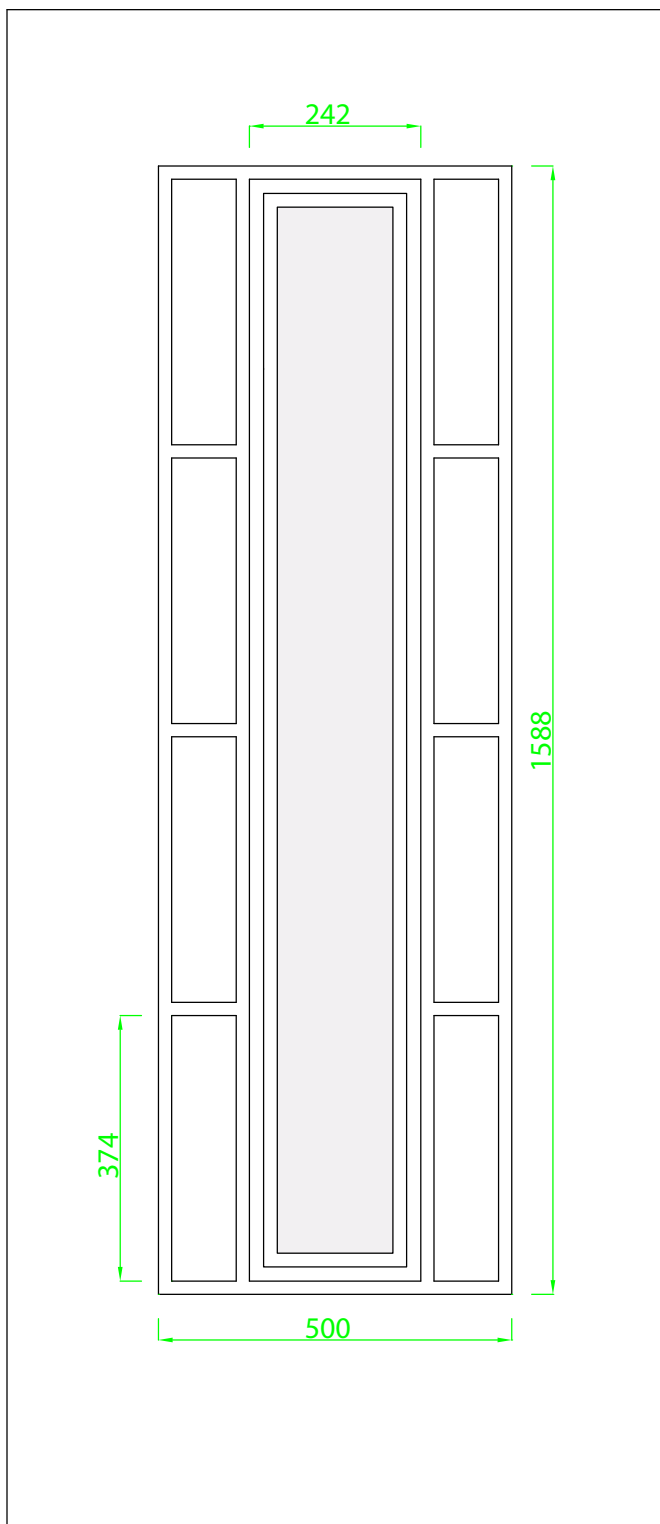
Door Outer Frame ►

PVC-U Thresholds ►

Ali Thresholds / Tie Bars ►

Cills ►

Add On / Frame Extensions ►



## Door Sash

### Width

Max: 908mm

Min: 675mm

### Height

Max: 2098mm

Min: 1850mm

### Profile Dimensions:

**72 Frame:** 52mm+4mm air gap = **56mm**

**52 Frame:** 32mm+4mm air gap = **36mm**

**Ali** low threshold open **IN** = **20mm**

**Ali** low threshold open **OUT** = **17mm**

**Cill** = **30mm**

### Width

#### 72 Frame

Max = (Max sash width + 56mm + 56mm)

Min = (Min sash width + 56mm + 56mm)

#### 52 Frame

Max = (Max sash width + 36mm + 36mm)

Min = (Min sash width + 36mm + 36mm)

### Height

#### 72 Frame low threshold open IN

Max = (Max sash height + 56mm + 20mm)

Min = (Min sash height + 56mm + 20mm)

#### 52 Frame low threshold open IN

Max = (Max sash height + 36mm + 20mm)

Min = (Min sash height + 36mm + 20mm)

### Double Door Width 72mm Frame

Max = (Max sash width + Max sash width + 56mm + 56mm + 8mm)

Min = (Min sash width + Min sash width + 56mm + 56mm + 8mm)

### Press Glazing

Unit Thickness: 22

Unit Size: 200 X 1510

Aperture: 163 X 1472

### Press Bead Glazing

N/A

Lock options and double doors and French doors can override the minimum sash heights stated above:

Minimum Sash Size Overrides ►

The overall frame dimensions can be increased or reduced by using other profiles:

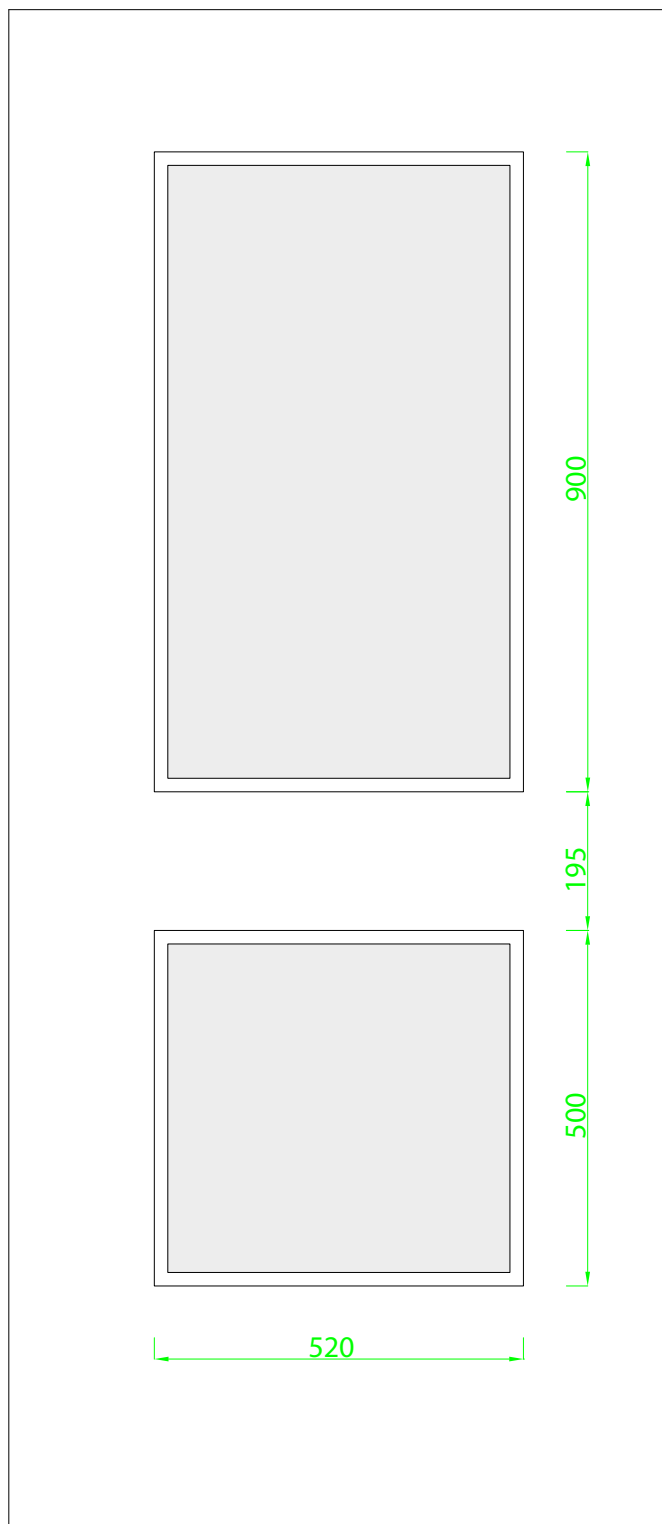
Door Outer Frame ►

PVC-U Thresholds ►

Ali Thresholds / Tie Bars ►

Cills ►

Add On / Frame Extensions ►



## Door Sash

### Width

Max: 908mm

Min: 728mm

### Height

Max: 2098mm

Min: 1803mm

### Profile Dimensions:

**72 Frame:** 52mm+4mm air gap = **56mm**

**52 Frame:** 32mm+4mm air gap = **36mm**

**Ali low threshold open IN** = **20mm**

**Ali low threshold open OUT** = **17mm**

**Cill** = **30mm**

### Width

#### 72 Frame

Max = (Max sash width + 56mm + 56mm)

Min = (Min sash width + 56mm + 56mm)

#### 52 Frame

Max = (Max sash width + 36mm + 36mm)

Min = (Min sash width + 36mm + 36mm)

### Height

#### 72 Frame low threshold open IN

Max = (Max sash height + 56mm + 20mm)

Min = (Min sash height + 56mm + 20mm)

#### 52 Frame low threshold open IN

Max = (Max sash height + 36mm + 20mm)

Min = (Min sash height + 36mm + 20mm)

### Double Door Width 72mm Frame

Max = (Max sash width + Max sash width + 56mm + 56mm + 8mm)

Min = (Min sash width + Min sash width + 56mm + 56mm + 8mm)

### Press Glazing

Unit Thickness: 22

Unit Size: 510 X 890 510 X 490

Aperture: 466 X 846 466 X 448

### Press Bead Glazing

Unit Thickness: 24

Unit Size: 470 X 1852 470 X 455

Aperture: 438 X 818 438 X 422

Lock options and double doors and French doors can override the minimum sash heights stated above:

Minimum Sash Size Overrides ►

The overall frame dimensions can be increased or reduced by using other profiles:

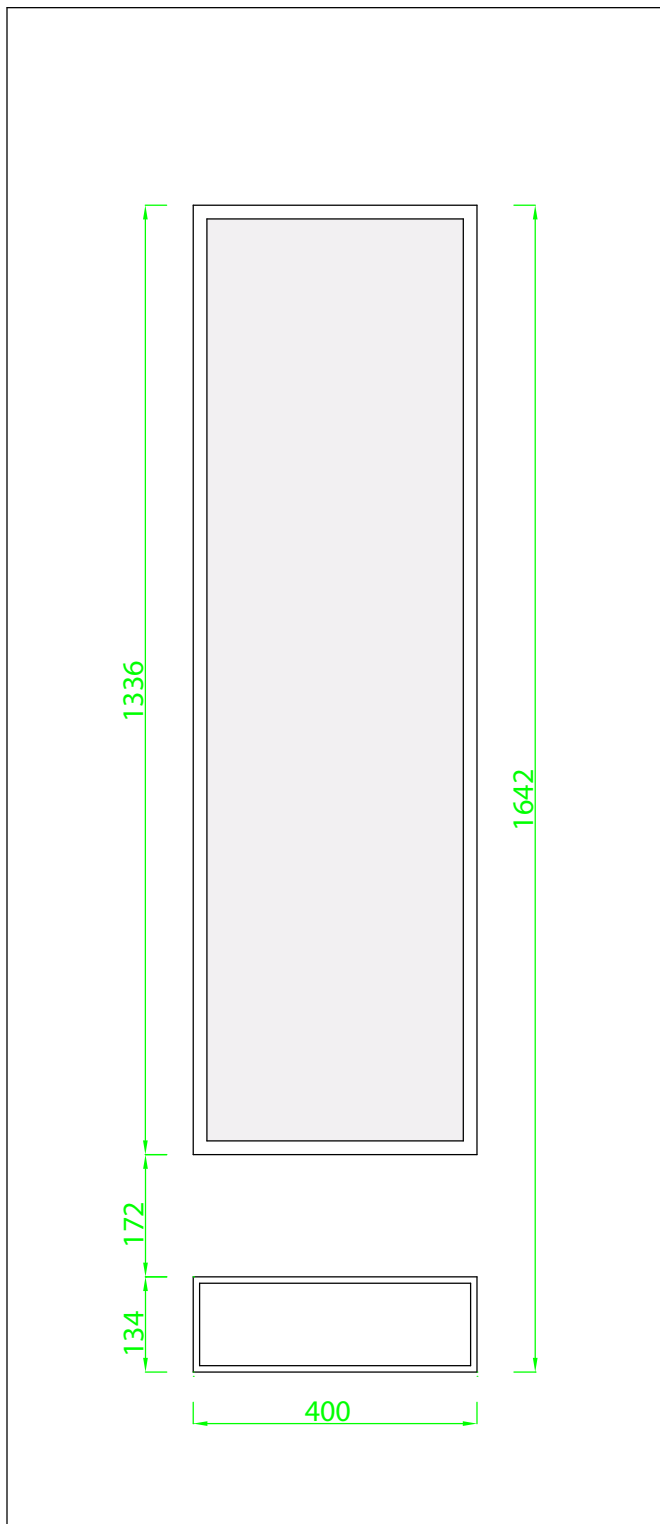
Door Outer Frame ►

PVC-U Thresholds ►

Ali Thresholds / Tie Bars ►

Cills ►

Add On / Frame Extensions ►



### Door Sash

#### Width

Max: 908mm

Min: 675mm

#### Height

Max: 2098mm

Min: 1850mm

#### Profile Dimensions:

**72 Frame:** 52mm+4mm air gap = **56mm**

**52 Frame:** 32mm+4mm air gap = **36mm**

**Ali low threshold open IN** = **20mm**

**Ali low threshold open OUT** = **17mm**

**Cill** = **30mm**

#### Width

##### 72 Frame

Max = (Max sash width + 56mm + 56mm)

Min = (Min sash width + 56mm + 56mm)

##### 52 Frame

Max = (Max sash width + 36mm + 36mm)

Min = (Min sash width + 36mm + 36mm)

#### Height

##### 72 Frame low threshold open IN

Max = (Max sash height + 56mm + 20mm)

Min = (Min sash height + 56mm + 20mm)

##### 52 Frame low threshold open IN

Max = (Max sash height + 36mm + 20mm)

Min = (Min sash height + 36mm + 20mm)

#### Double Door Width 72mm Frame

Max = (Max sash width + Max sash width + 56mm + 56mm + 8mm)

Min = (Min sash width + Min sash width + 56mm + 56mm + 8mm)

#### Press Glazing

Unit Thickness: 22

Unit Size: 387 X 1323

Aperture: 352 X 1288

#### Press Bead Glazing

N/A

Lock options and double doors and French doors can override the minimum sash heights stated above:

[Minimum Sash Size Overrides](#) ►

The overall frame dimensions can be increased or reduced by using other profiles:

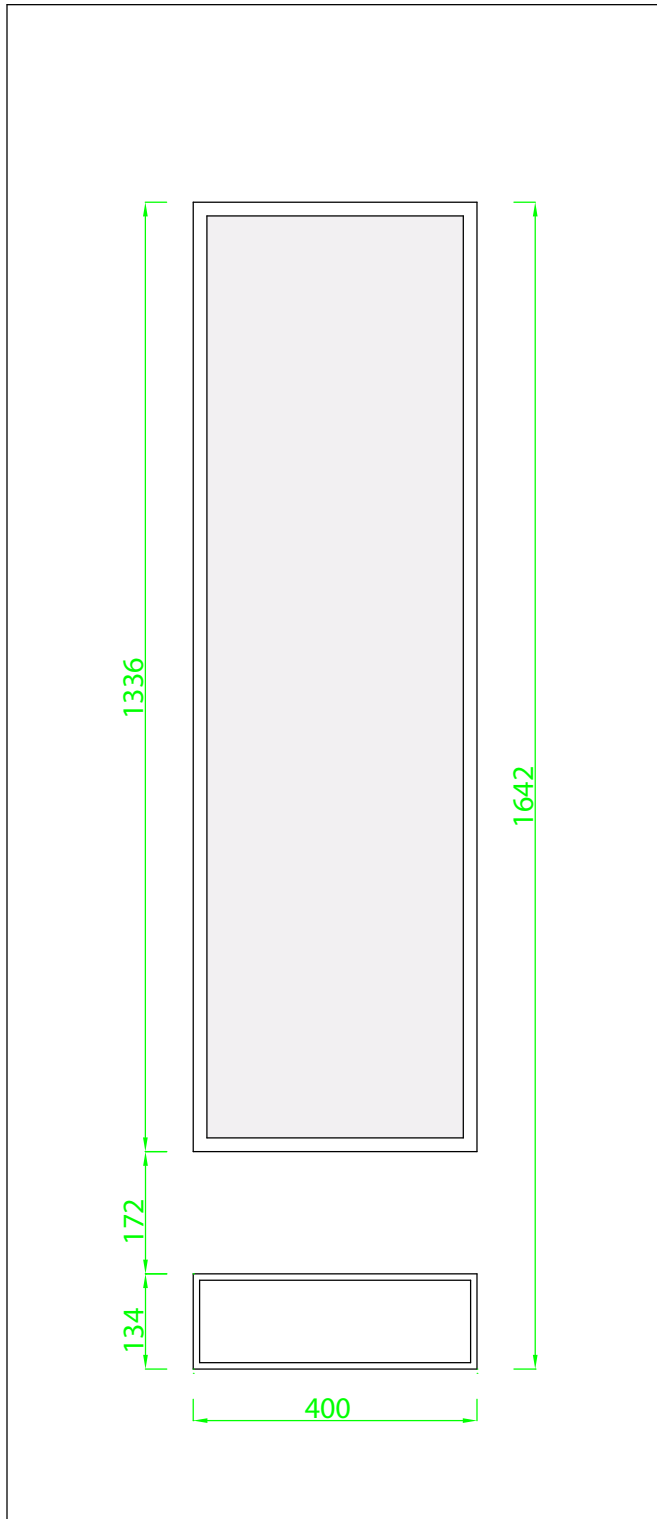
[Door Outer Frame](#) ►

[PVC-U Thresholds](#) ►

[Ali Thresholds / Tie Bars](#) ►

[Cills](#) ►

[Add On / Frame Extensions](#) ►



## Door Sash2

### Width

Max:  $908 + 7 + 908 = 1823\text{mm}$

Min:  $675 + 7 + 675 = 1357\text{mm}$

### Height

Max: 2098mm

Min: 1850mm Lock override 1893mm

Profile Dimensions:

**72 Frame:**  $52\text{mm} + 4\text{mm air gap} = 56\text{mm}$

**52 Frame:**  $32\text{mm} + 4\text{mm air gap} = 36\text{mm}$

**Ali low threshold open IN** = 20mm

**Ali low threshold open OUT** = 17mm

**Cill** = 30mm

### Height

**72 Frame low threshold open IN**

Max = (Max sash height + 56mm + 20mm)

Min = (Min sash height + 56mm + 20mm)

**52 Frame low threshold open IN**

Max = (Max sash height + 36mm + 20mm)

Min = (Min sash height + 36mm + 20mm)

### Double Door Width 72mm Frame

Max = (Max sash width + Max sash width + 56mm + 56mm + 8mm)

Min = (Min sash width + Min sash width + 56mm + 56mm + 8mm)

### Press Glazing

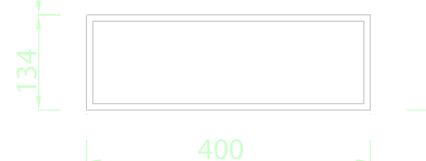
Unit Thickness: 22

Unit Size: 387 X 1323

Aperture: 352 X 1288

### Press Bead Glazing

N/A



The overall frame dimensions can be increased or reduced by using other profiles:

Door Outer Frame ►

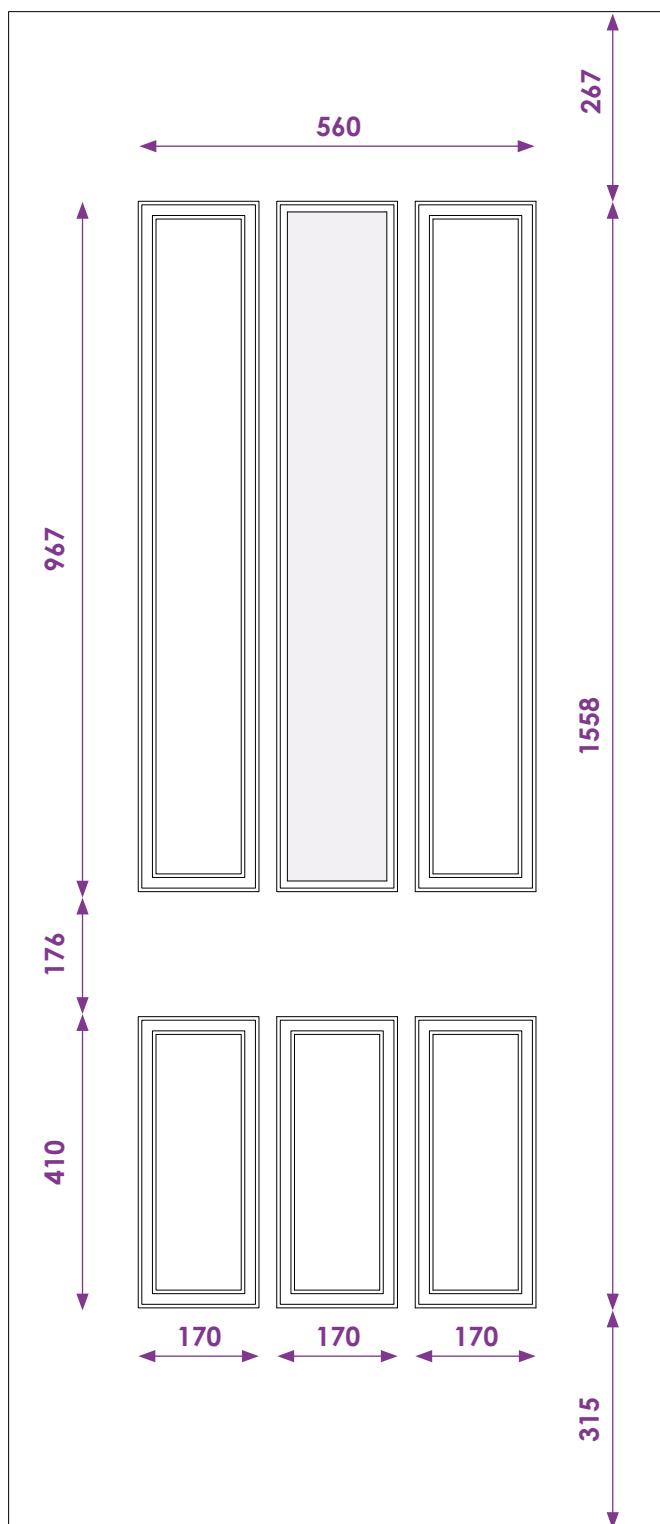
PVC-U Thresholds ►

Ali Thresholds / Tie Bars ►

Cills ►

Add On / Frame Extensions ►

## New Forest Texture & 26mm Unit



### Door Sash

#### Width

Max: 908mm

Min: 769mm

#### Height

Max: 2098mm

Min: 1897mm

#### Profile Dimensions:

**72 Frame:** 52mm+4mm air gap = **56mm**

**52 Frame:** 32mm+4mm air gap = **36mm**

**Ali low threshold open IN** = **20mm**

**Ali low threshold open OUT** = **17mm**

**Cill** = **30mm**

#### Width

##### 72 Frame

Max = (Max sash width + 56mm + 56mm)

Min = (Min sash width + 56mm + 56mm)

##### 52 Frame

Max = (Max sash width + 36mm + 36mm)

Min = (Min sash width + 36mm + 36mm)

#### Height

##### 72 Frame low threshold open IN

Max = (Max sash height + 56mm + 20mm)

Min = (Min sash height + 56mm + 20mm)

##### 52 Frame low threshold open IN

Max = (Max sash height + 36mm + 20mm)

Min = (Min sash height + 36mm + 20mm)

#### Double Door Width 72mm Frame

Max = (Max sash width + Max sash width + 56mm + 56mm + 8mm)

Min = (Min sash width + Min sash width + 56mm + 56mm + 8mm)

#### PRESS GLAZING

UNIT THICKNESS: 26

UNIT SIZE: 177 x 977

APERTURE: 140x 940

Lock options, double doors and French doors can override the minimum sash heights stated above:

[Minimum Sash Size Overrides](#) ►

The overall frame dimensions can be increased or reduced by using other profiles:

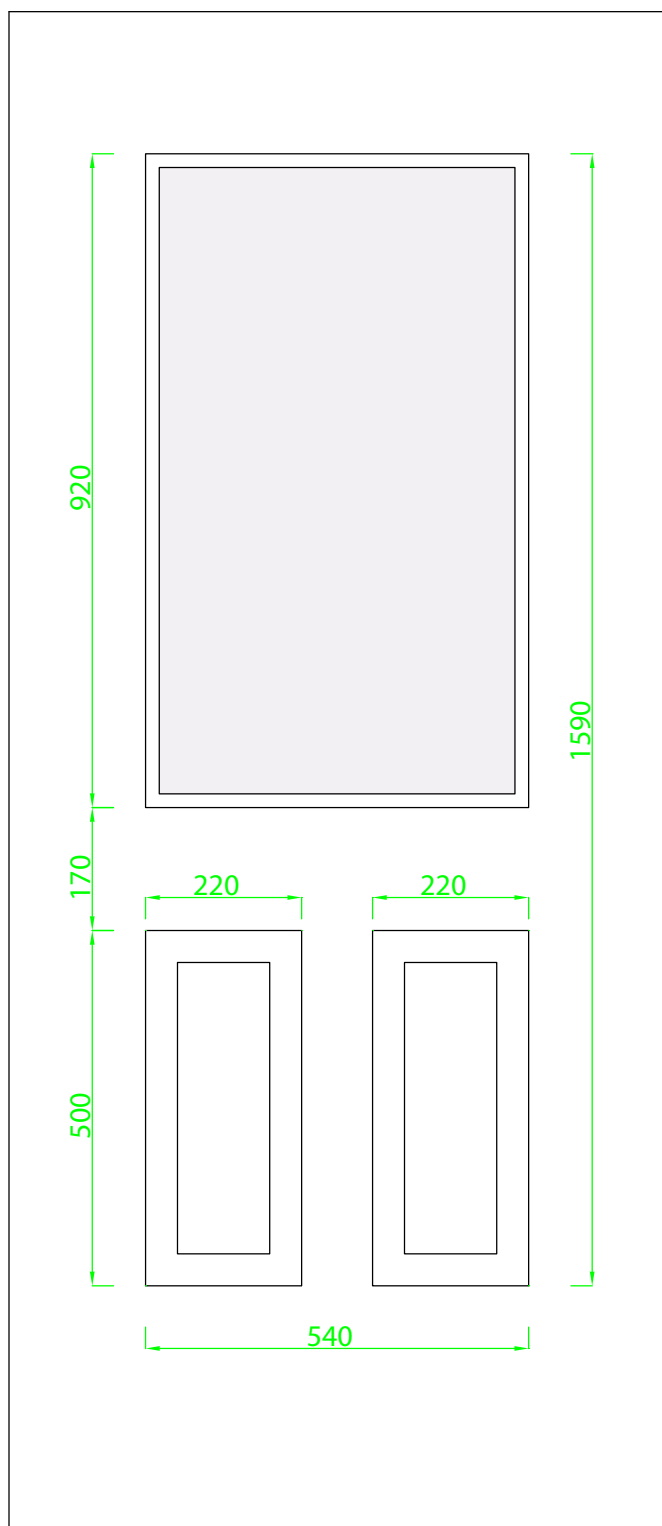
[Door Outer Frame](#) ►

[PVC-U Thresholds](#) ►

[Ali Thresholds / Tie Bars](#) ►

[Cills](#) ►

[Add On / Frame Extensions](#) ►



## Door Sash

### Width

Max: 908mm

Min: 748mm

### Height

Max: 2098mm

Min: 1801mm

### Profile Dimensions:

**72 Frame:** 52mm+4mm air gap = **56mm**

**52 Frame:** 32mm+4mm air gap = **36mm**

**Ali low threshold open IN** = **20mm**

**Ali low threshold open OUT** = **17mm**

**Cill** = **30mm**

### Width

#### 72 Frame

Max = (Max sash width + 56mm + 56mm)

Min = (Min sash width + 56mm + 56mm)

#### 52 Frame

Max = (Max sash width + 36mm + 36mm)

Min = (Min sash width + 36mm + 36mm)

### Height

#### 72 Frame low threshold open IN

Max = (Max sash height + 56mm + 20mm)

Min = (Min sash height + 56mm + 20mm)

#### 52 Frame low threshold open IN

Max = (Max sash height + 36mm + 20mm)

Min = (Min sash height + 36mm + 20mm)

### Double Door Width 72mm Frame

Max = (Max sash width + Max sash width + 56mm + 56mm + 8mm)

Min = (Min sash width + Min sash width + 56mm + 56mm + 8mm)

### Press Glazing

Unit Thickness: 22

Unit Size: 530 X 910

Aperture: 495 X 872

### Press Bead Glazing

Unit Thickness: 24

Unit Size: 495 X 875

Aperture: 462 X 842

Lock options, double doors and French doors can override the minimum sash heights stated above:

[Minimum Sash Size Overrides](#) ►

The overall frame dimensions can be increased or reduced by using other profiles:

[Door Outer Frame](#) ►

[PVC-U Thresholds](#) ►

[Ali Thresholds / Tie Bars](#) ►

[Cills](#) ►

[Add On / Frame Extensions](#) ►





## Minimum Sash Size Overrides

### 2 Hook Lever Lock and Key Lock

Minimum sash height is 1880mm

Below 1880mm a 3 hook lock will be used (Charged for a 4 hook lock)

### Double Doors

Minimum sash height is 1996mm

Below 1996mm a 3 hook lock will be used (Charged for a 4 hook lock)

### French Doors

Minimum sash height is 1893mm

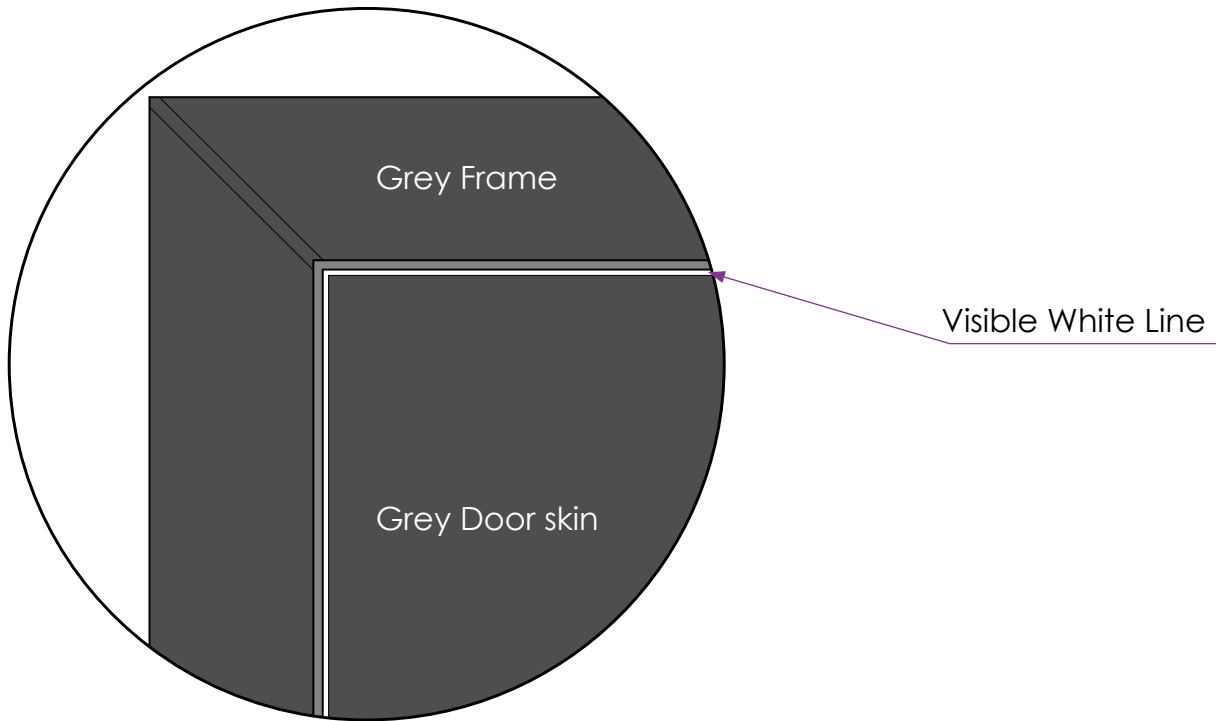


## Door and Frame Colour

Where the sash and frame meet on the flush side, there is a chamfer on the door which is visible. It is more noticeable when the door and frame are dark colours.

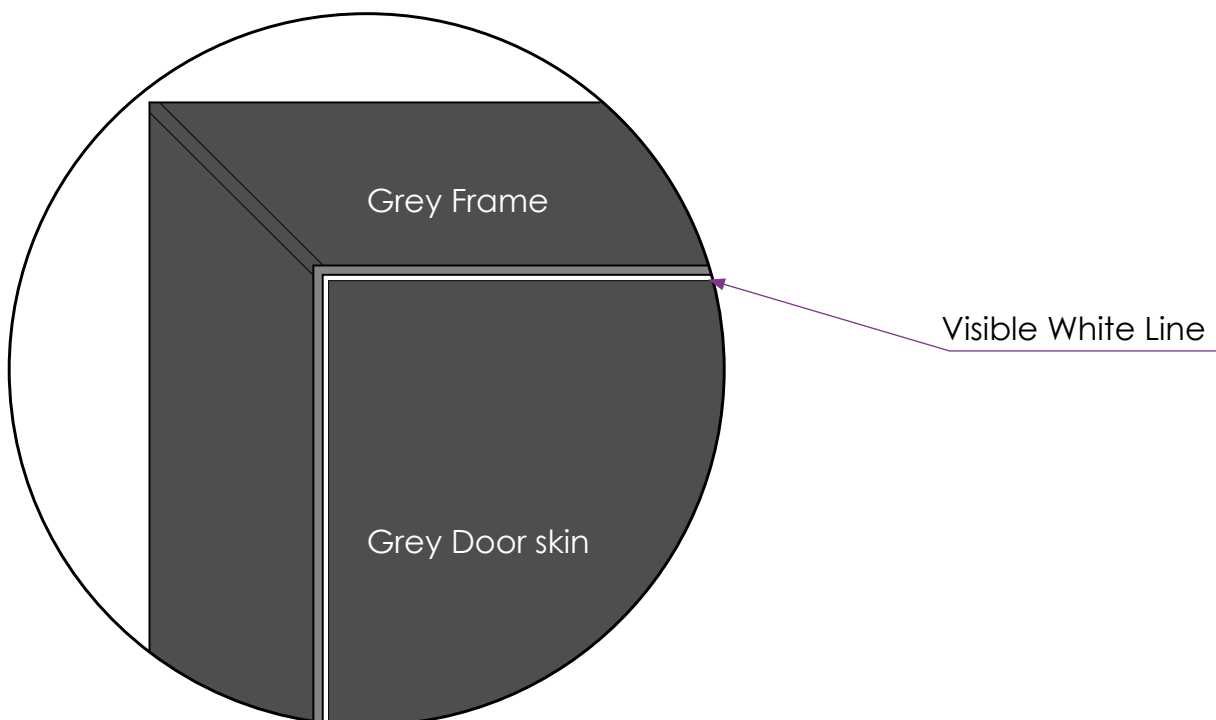
### Open Out Doors with matching sash and frame colours

External View



### Open In Doors with matching sash and frame colours

Internal View



## Door and Frame Colour Options



### WHITE

*Available with matching outerframe.*



### ROSEWOOD

*Available with matching outerframe.*



### CREAM (RAL9001)

*Available with matching outerframe.*



### LIGHT OAK

*Available with matching outerframe.*



### BLACK (RAL8022)

*Available with matching outerframe.*



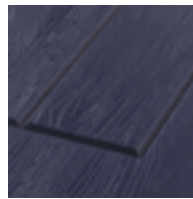
### IRISH OAK

*Available with matching outerframe.*



### ANTHRACITE GREY (RAL7016)

*Available with matching outerframe.*



### SAPPHIRE BLUE (RAL5011)



### SLATE GREY (RAL7015)

*Available with matching outerframe.*



### EMERALD GREEN (RAL6009)



### AGATE GREY (RAL7038)

*Available with matching outerframe.*



### RUBY RED (RAL3011)

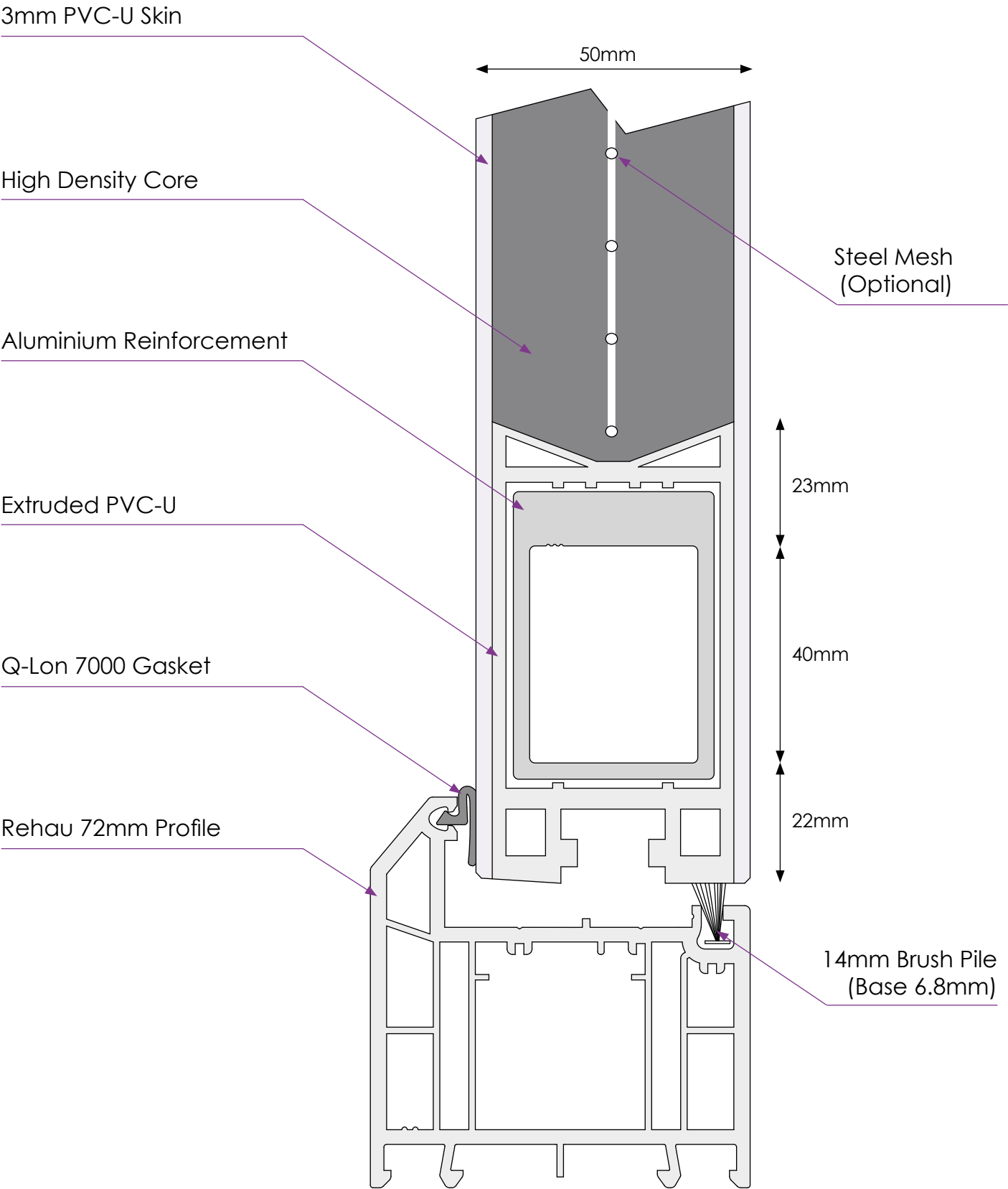


### CHARTWELL GREEN

*Available with matching outerframe.*

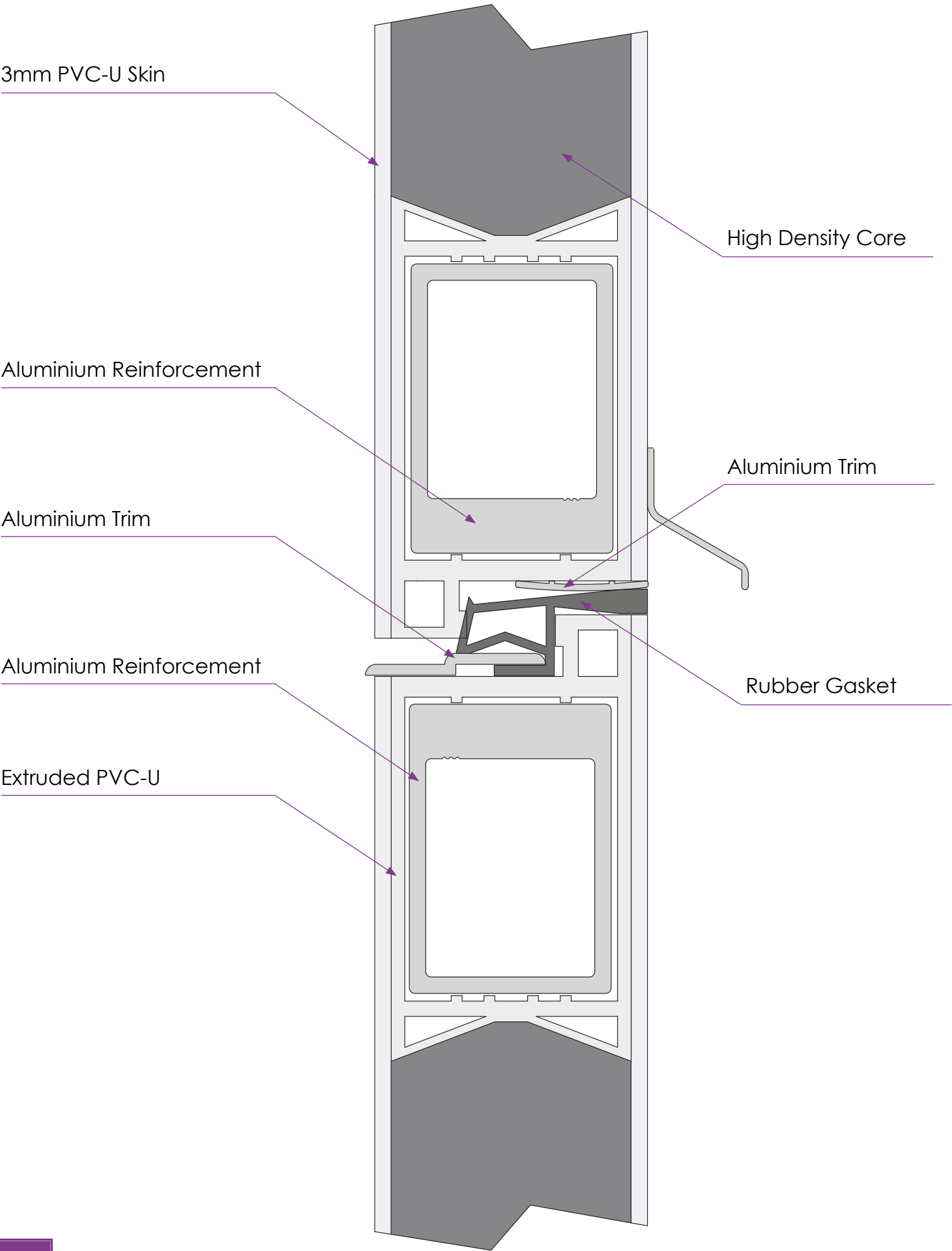


Inner Frame Detail

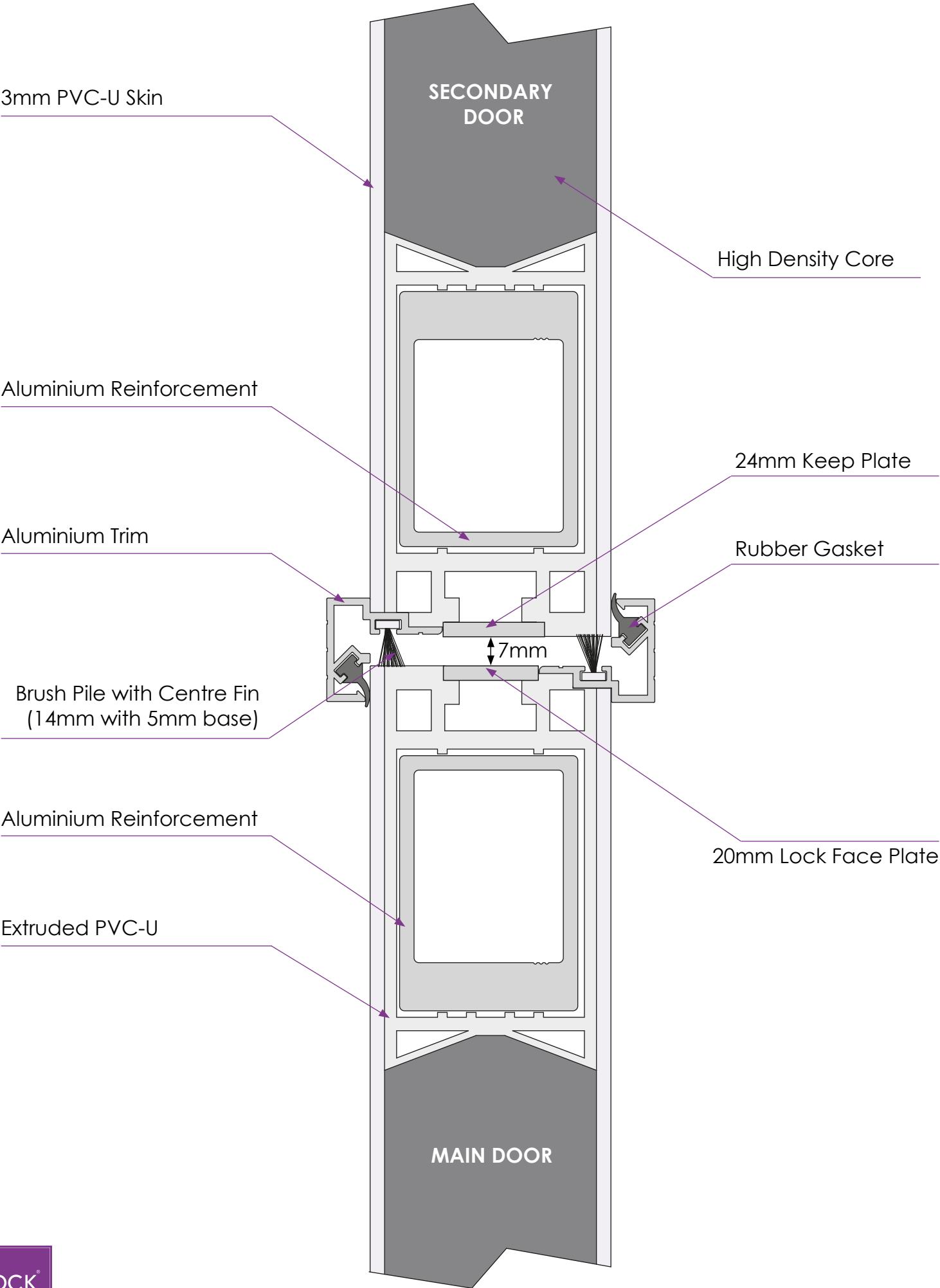




# Stable Door Centre Seal

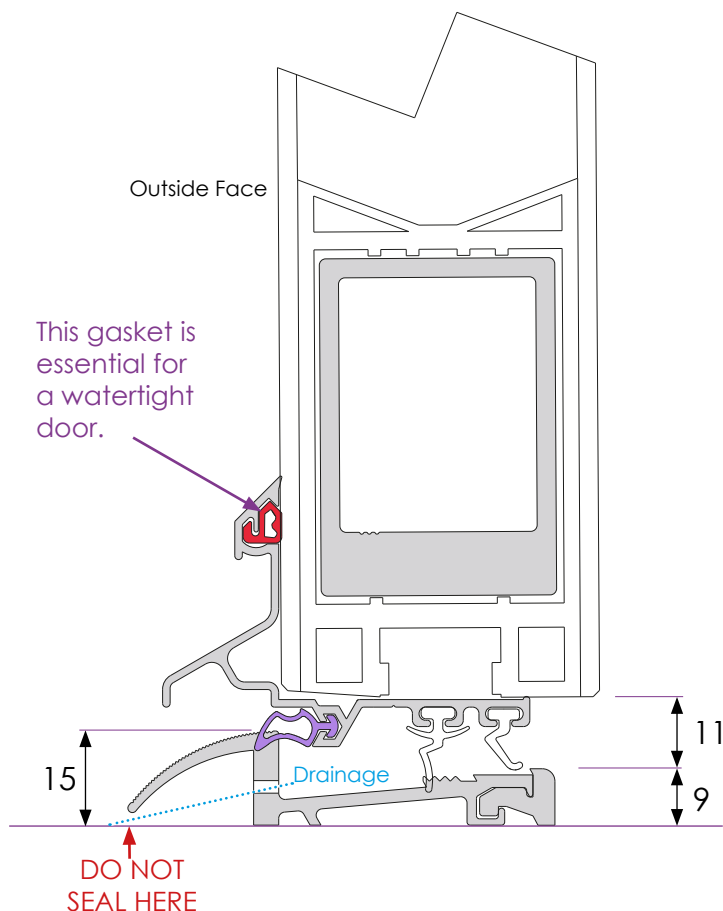


**French / Double Door Centre Seal**

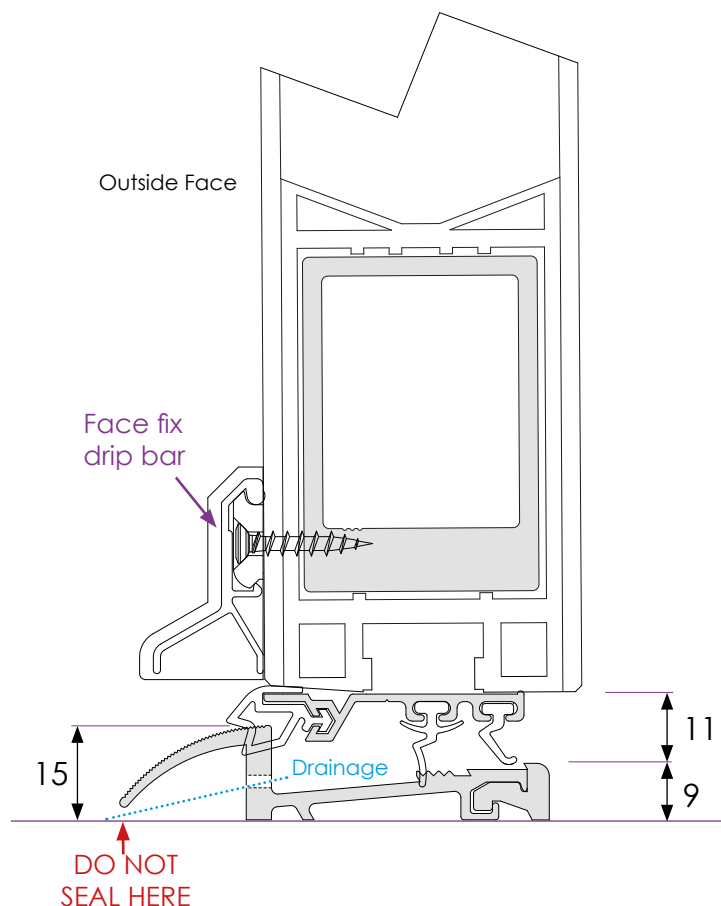


## Open IN Aluminium Threshold

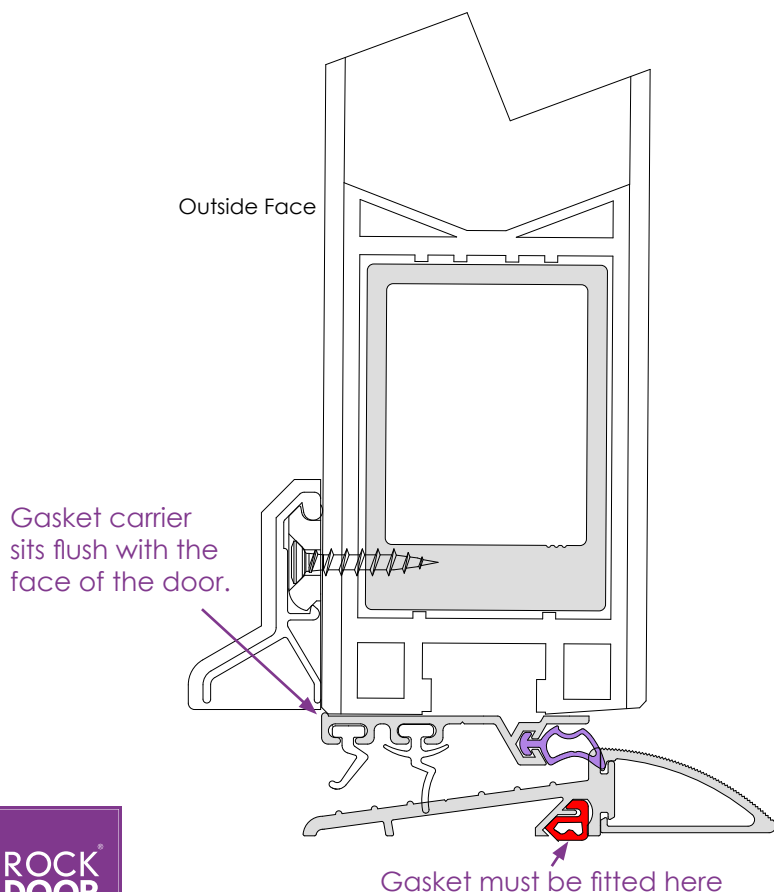
Drip bar and gasket carrier one piece, colour matched to the furniture.



Face fix drip bar with separate gasket carrier, colour matched to the door.



## Open OUT Aluminium Threshold



### Gasket Codes



R149



Comes with the carrier



R149A



R149B

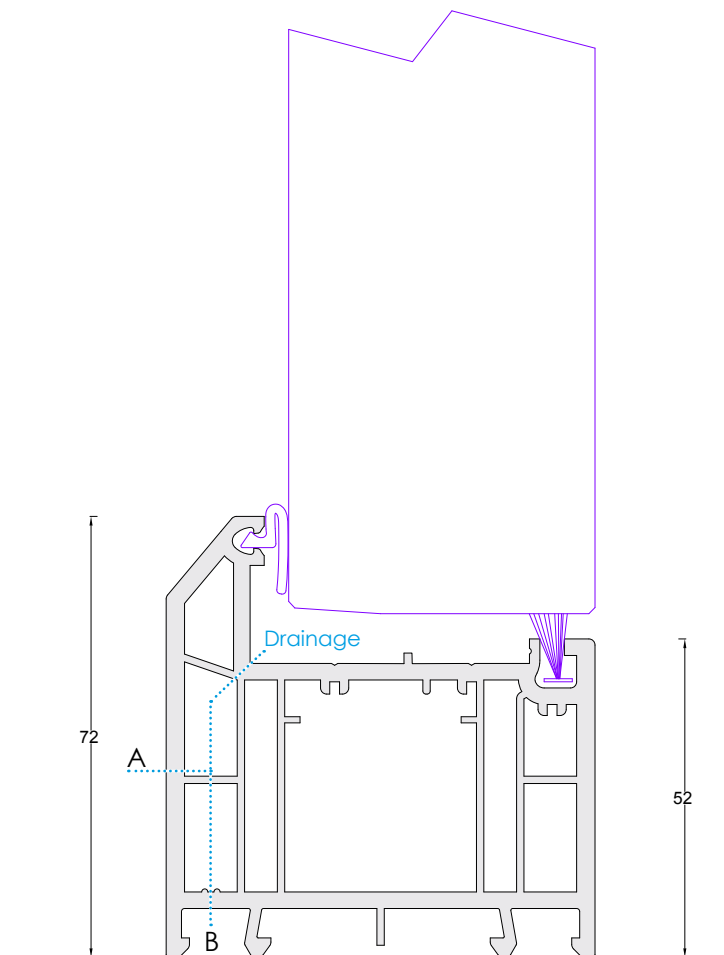


## Threshold Detail

### 72mm PVC-U Threshold

A= Face Drainage  
(Slots 5mm x 35mm)

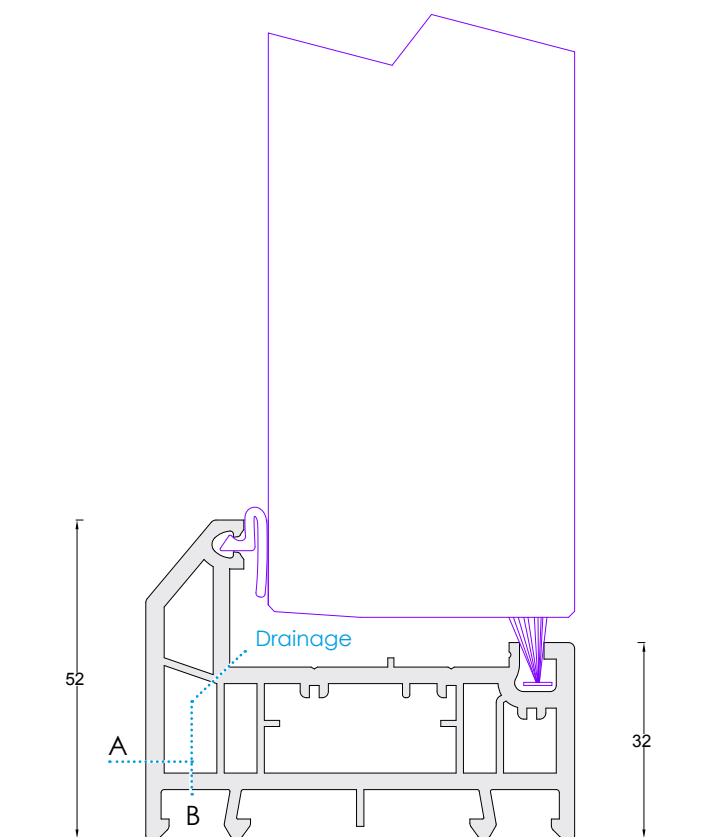
B= Concealed Drainage



### 52mm PVC-U Threshold

A= Face Drainage  
(Slots 5mm x 35mm)

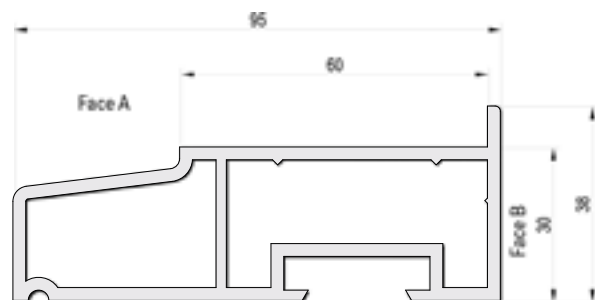
B= Concealed Drainage



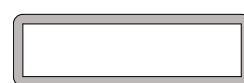


If a cill is required on a Rockdoors with a sideframe a reinforced cill must be used.

**95mm Cill**  
**Art.546360**

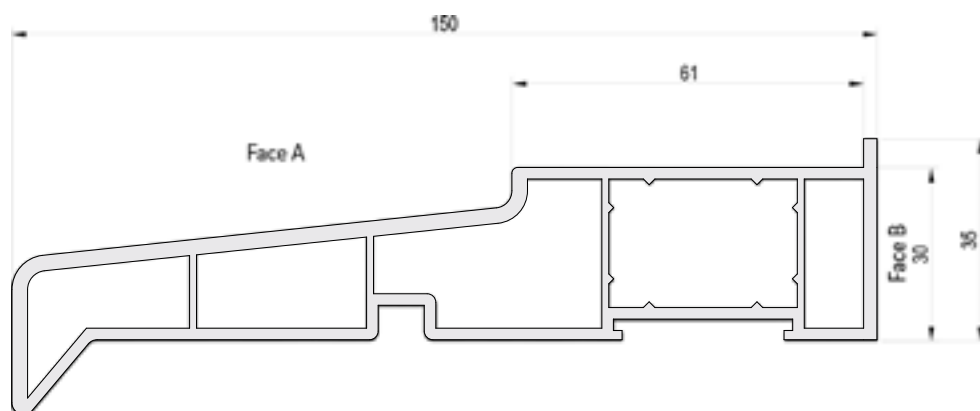


**Reinforcement**  
**Art.251355**

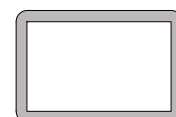


50mm x 15mm

**150mm Cill**  
**Art.246330**



**Reinforcement**  
**Art.324971**



30mm x 20mm

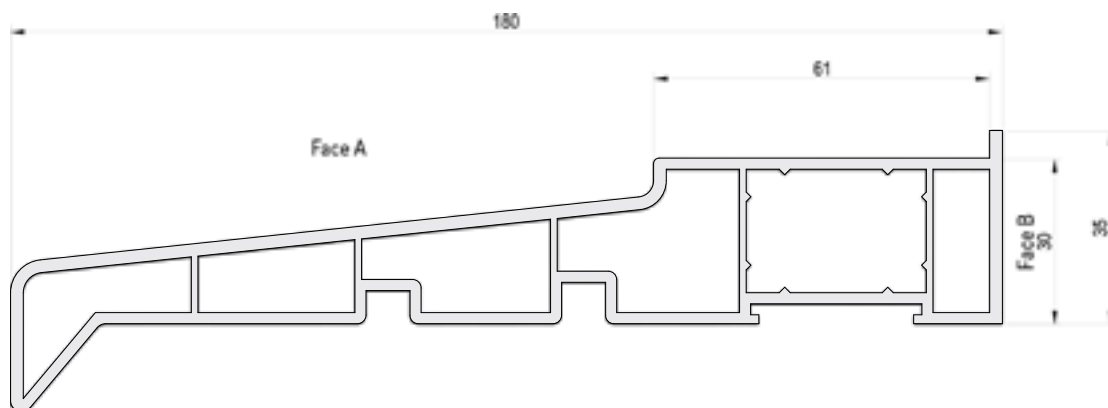
Face A & Face B used to identify foiled face

If a cill is required on a Rockdoors with a sideframe a reinforced cill **must** be used.

### 180mm Cill

Art.246340

Reinforcement 30 x 20

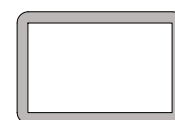


### Reinforcement for BOTH 180mm and 225mm cill

Art.324971

50 x 15

Reinforcement 30 x 20

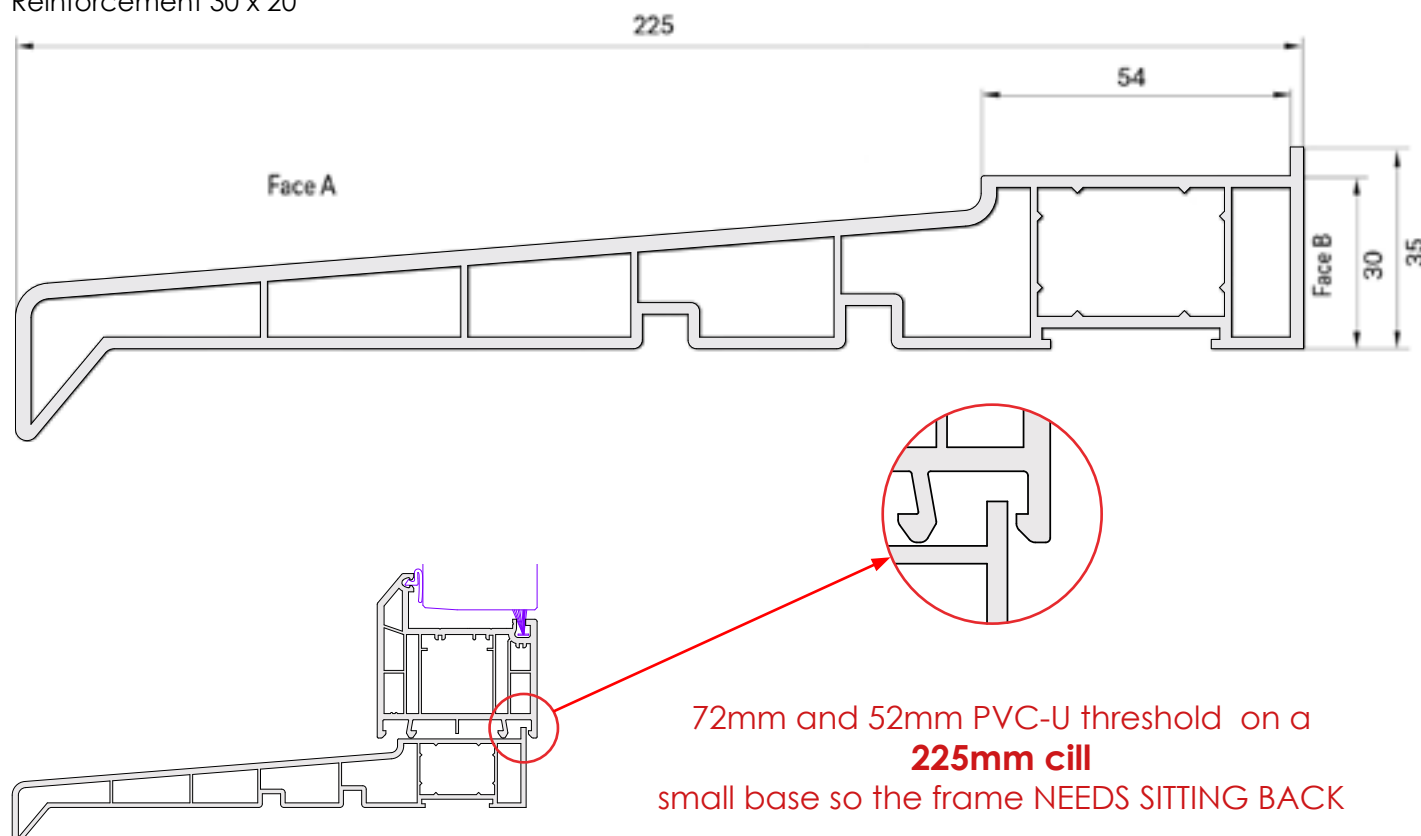


30mm x 20mm

### 225mm Cill

Art.503940

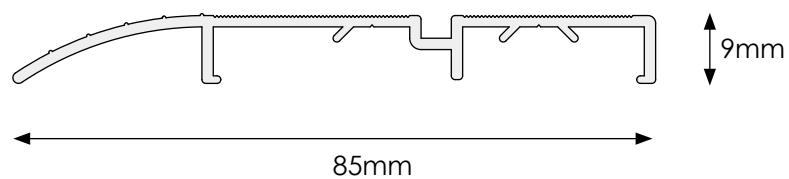
Reinforcement 30 x 20



Face A & Face B used to identify foiled face



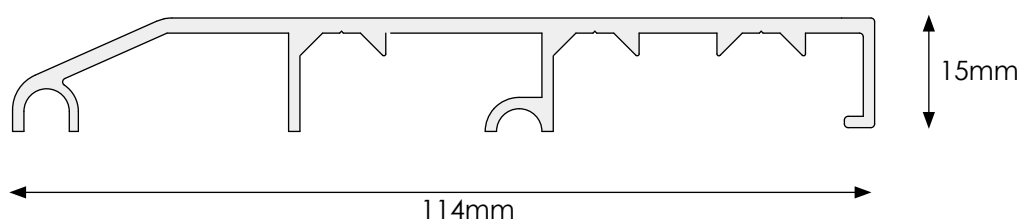
## Tie Bar 9mm x 85mm (Max 3m in length)



Aluminium

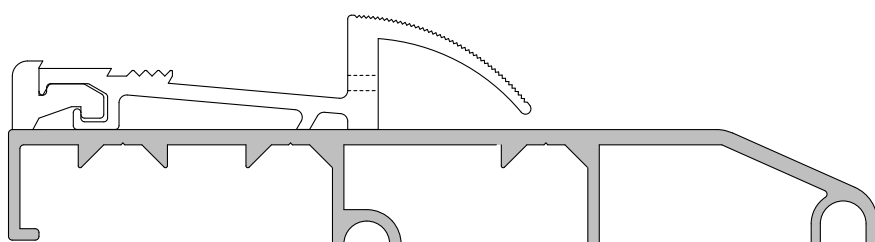
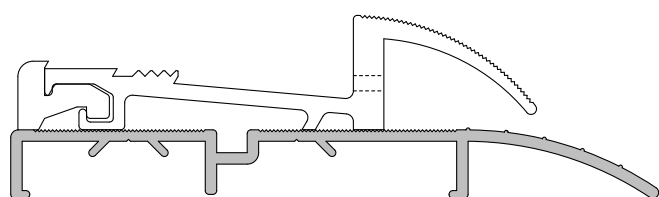
Available in Gold and Silver

## Tie Bar 15mm x 114mm (Max 3m in length)

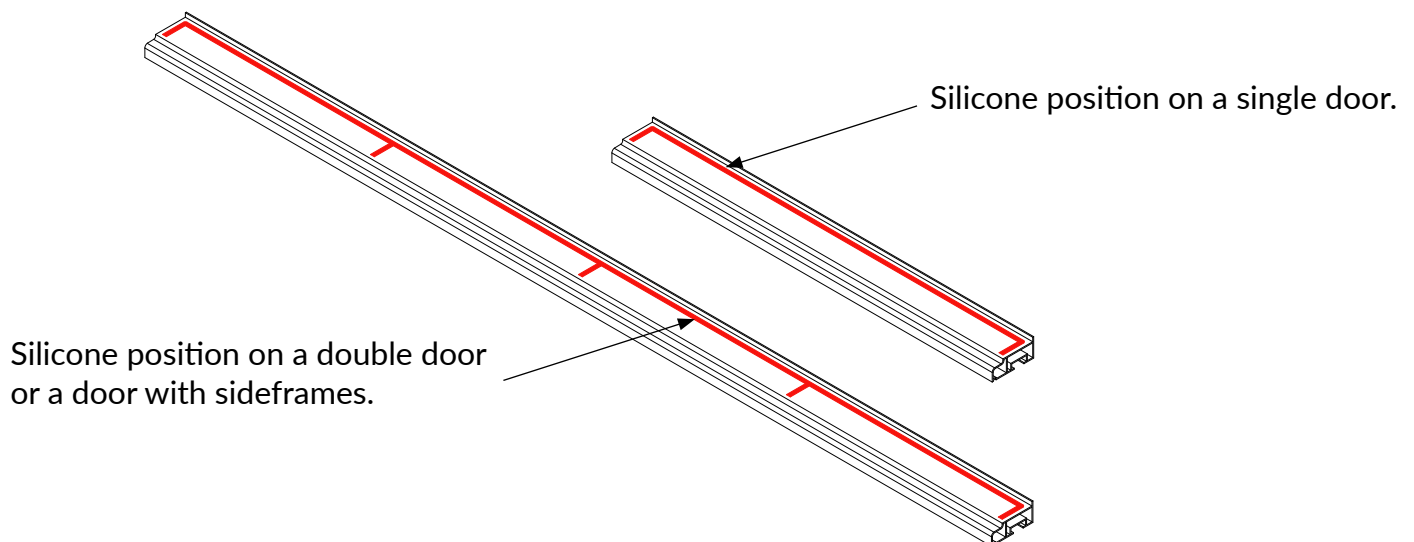


Tie bars can be used with all threshold types and can be positioned to suit the application.

Examples using an open in low aluminium threshold.

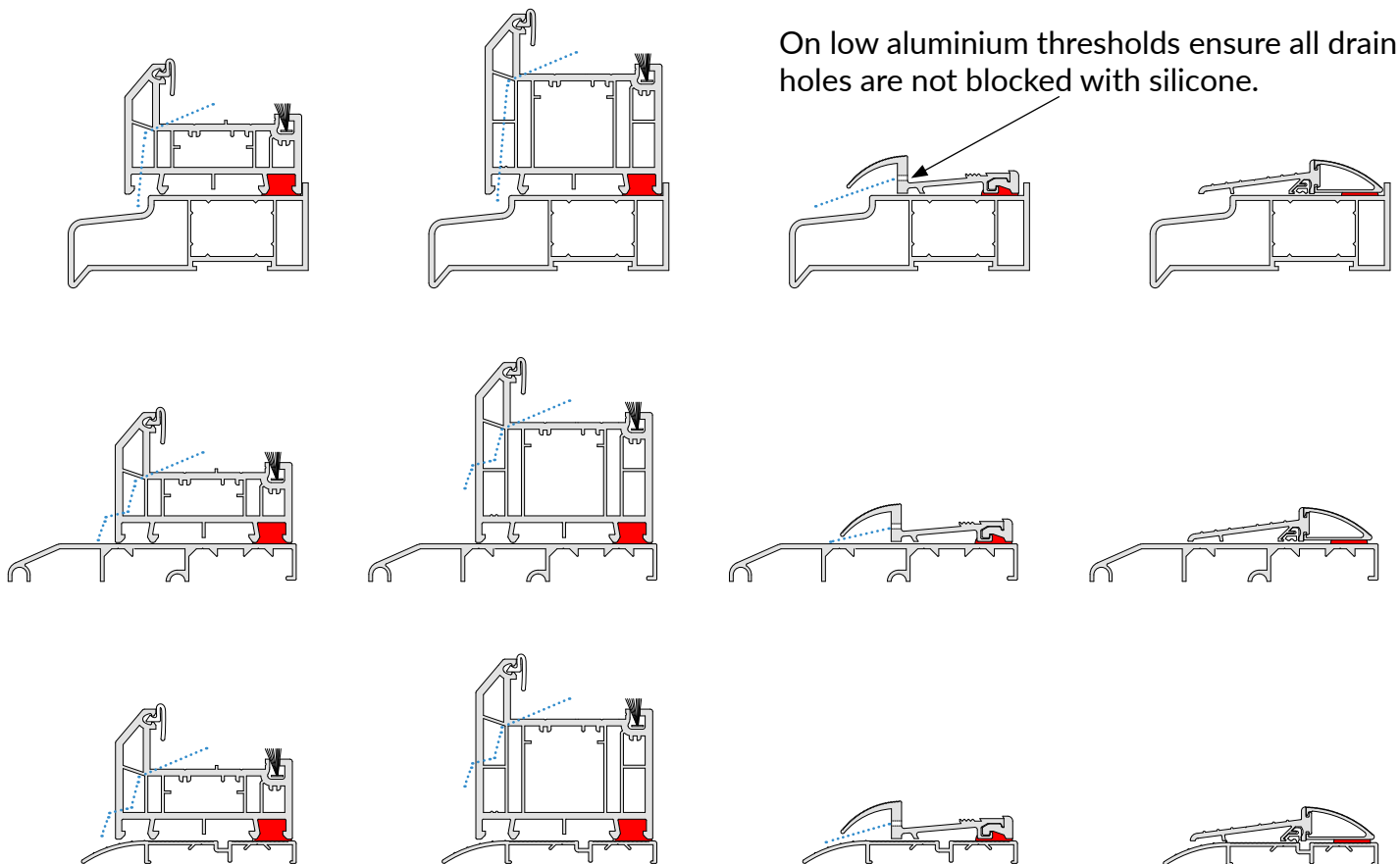


## Sealing a threshold to a cill or tie bar



The position of the silicone seal is marked in red.

On low aluminium thresholds ensure all drain holes are not blocked with silicone.

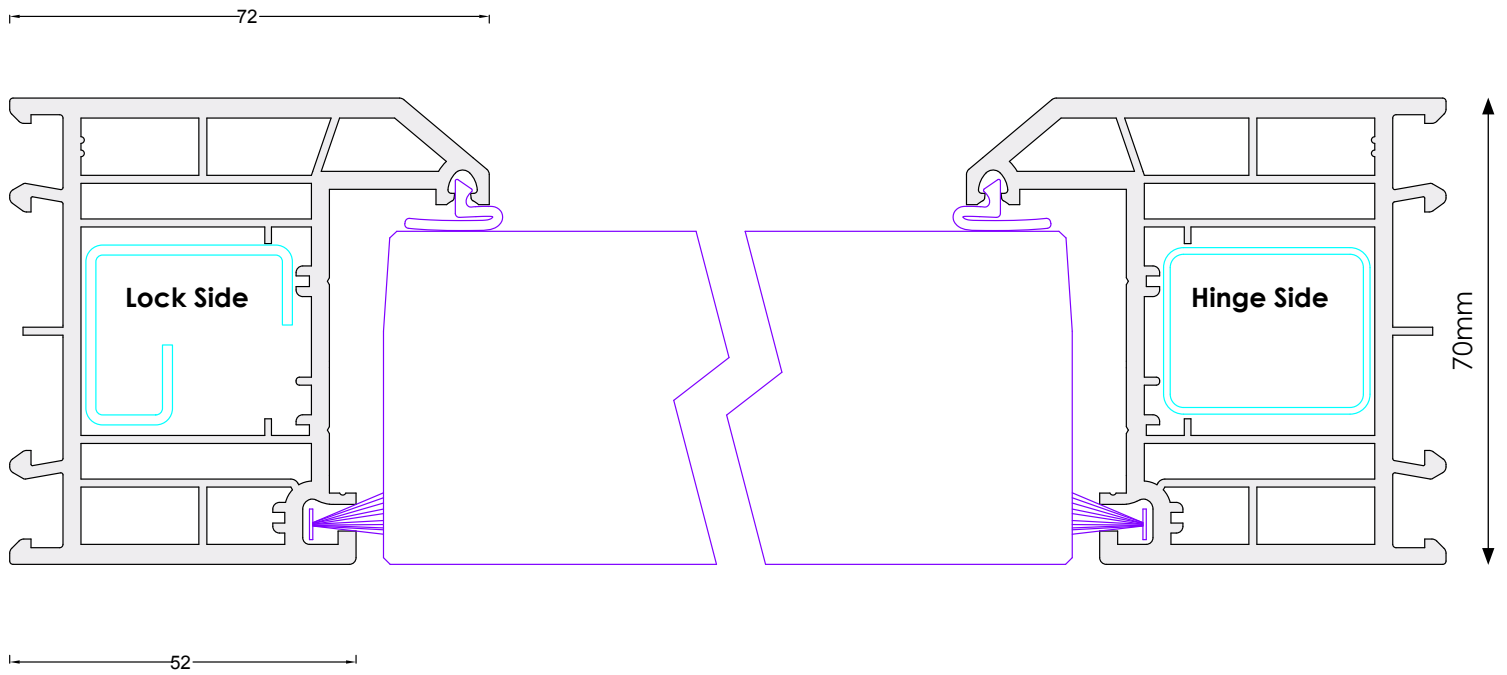


### NOTE:

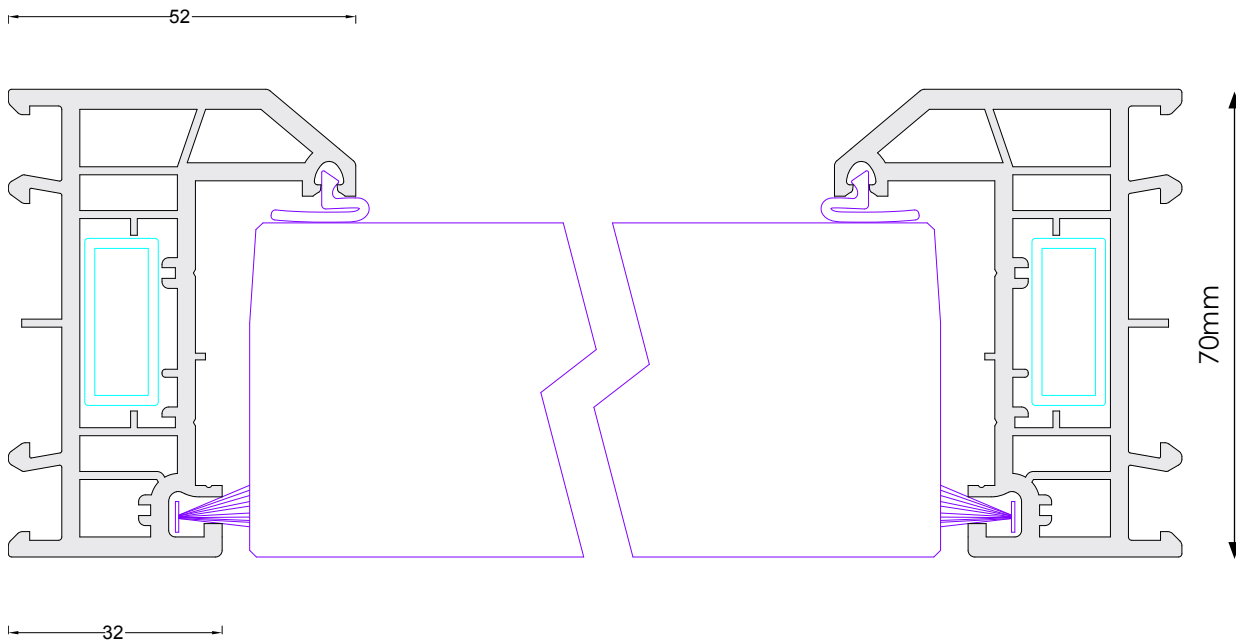
The full perimeter of the door and under the cill / tie bar must be externally sealed in addition to the sealing listed above.

## Outer Frame Detail

## 72mm Outer Frame



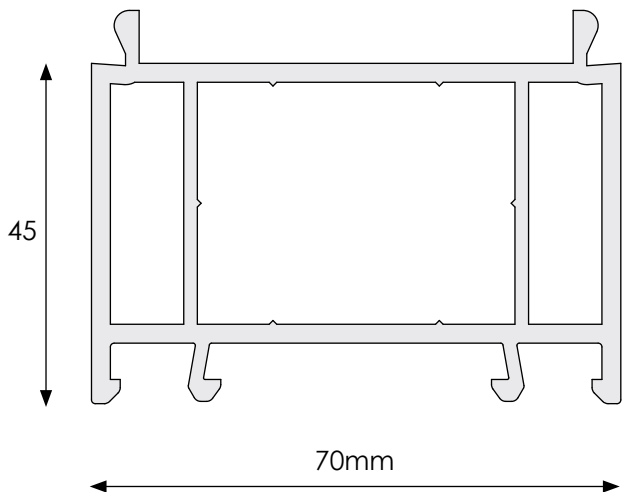
## 52mm Outer Frame



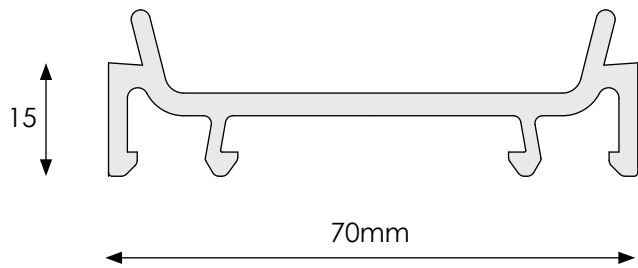


Add On / Frame Extension

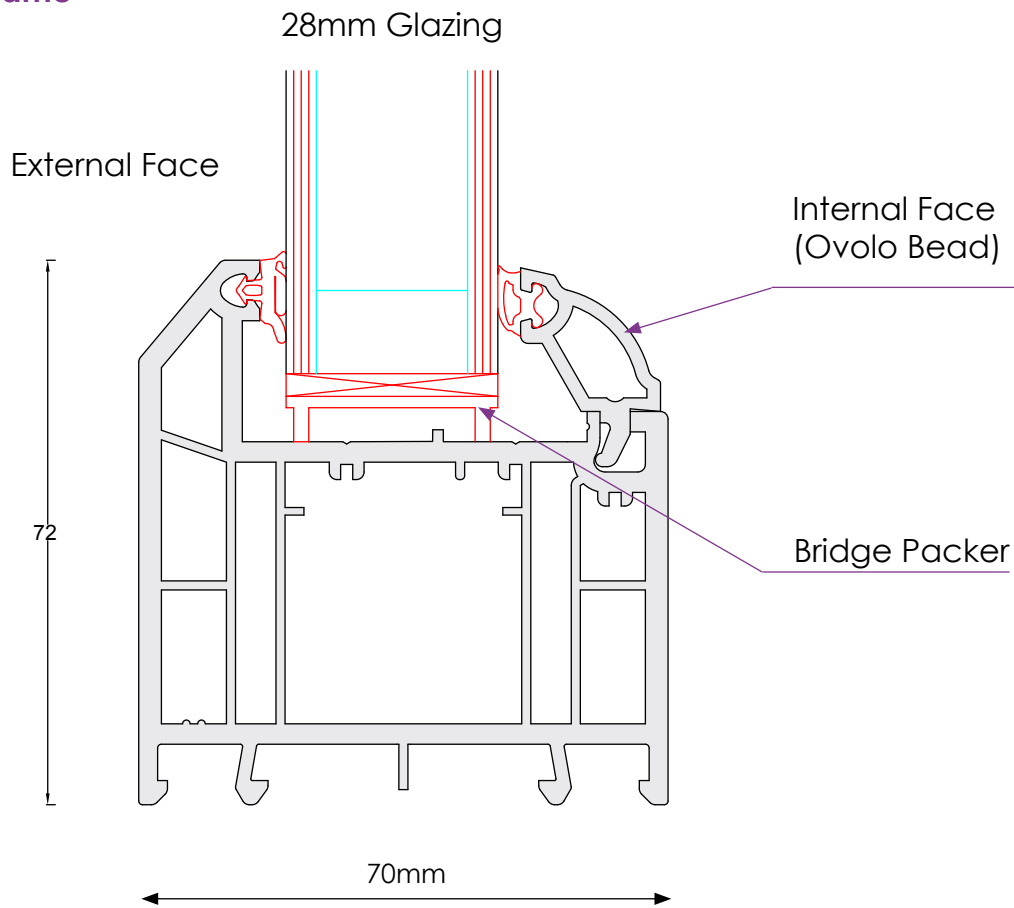
45mm Add On / Frame Extension



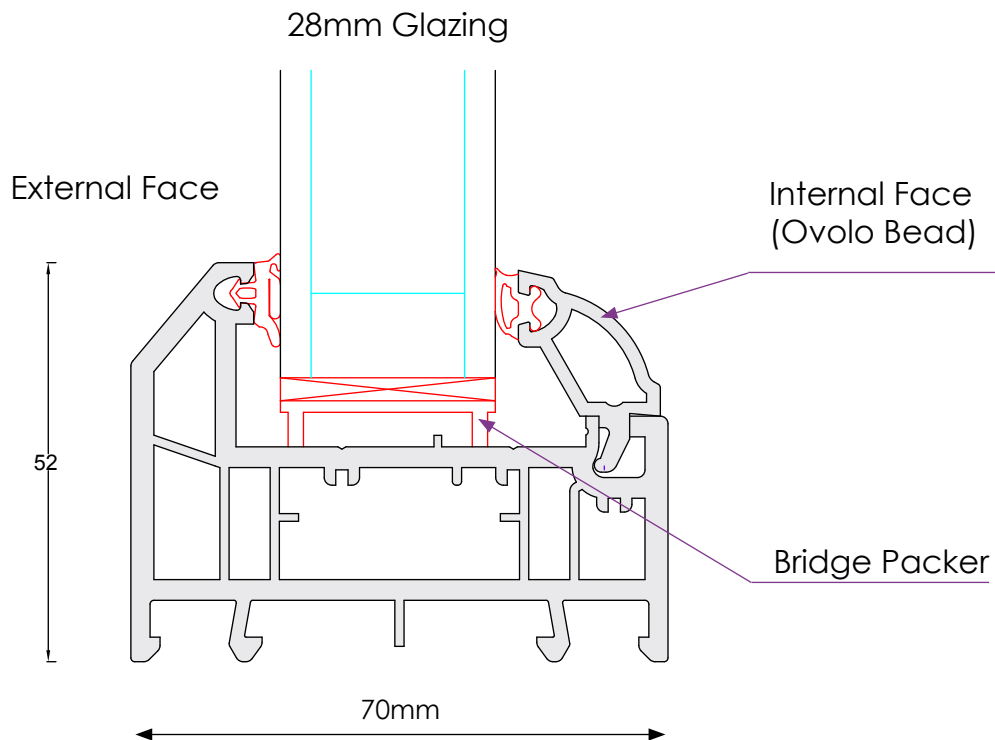
15mm Add On / Frame Extension



## 72mm Side Frame



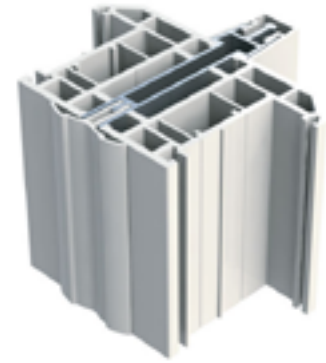
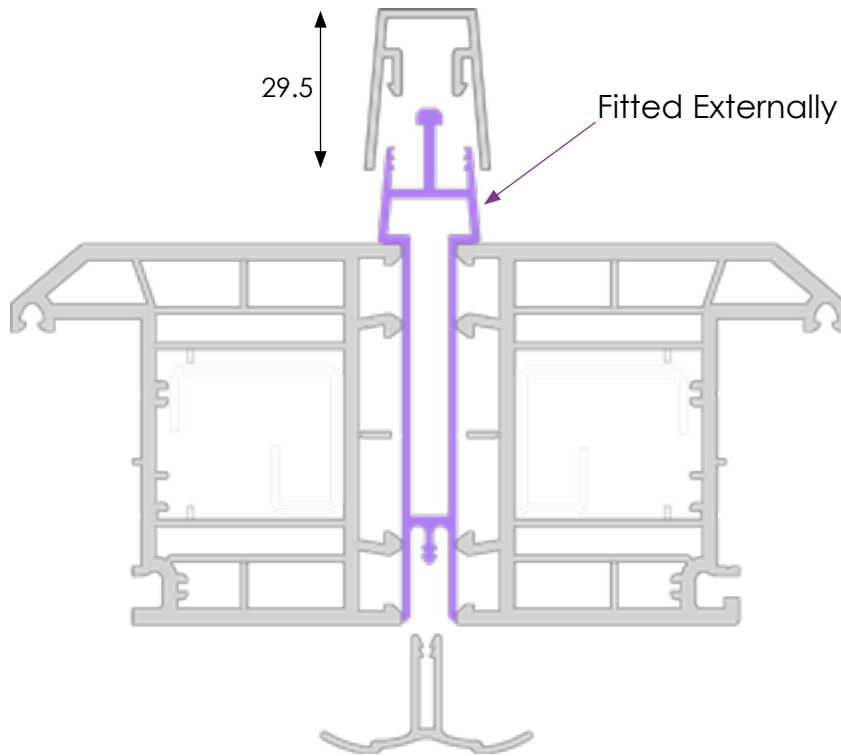
## 52mm Side Frame



## Heavy Weight Coupler (10mm wide)

### Protruding

Recommended for the higher exposure category. The coupler protrudes this makes it the strongest design of all couplers offered.

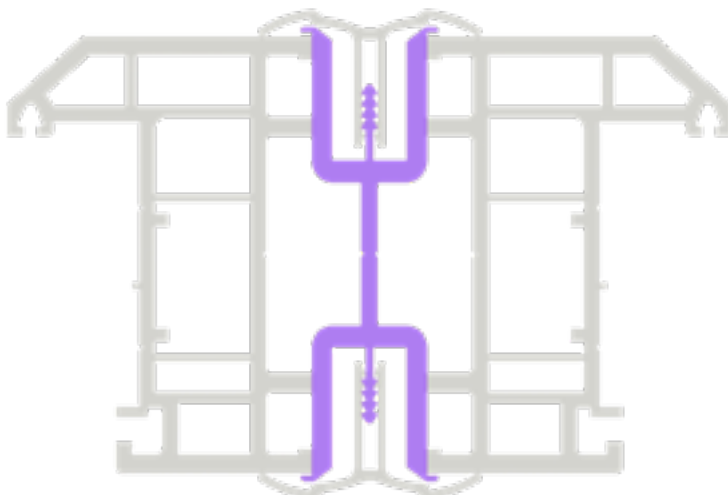


CODE	WWL153
IXX (cm )	27.95
IYY (cm )	0.79
DEDUCTION	5mm Per Frame

## Medium Weight Coupler (20mm wide)

### Flush Fitting

Recommended where a higher exposure category or larger side frames is requested and the couplers remain Flush to the door frame



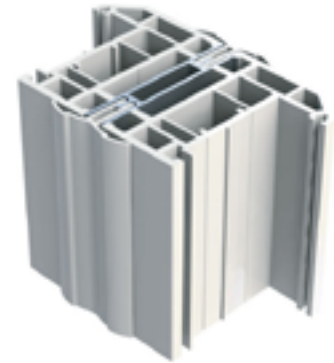
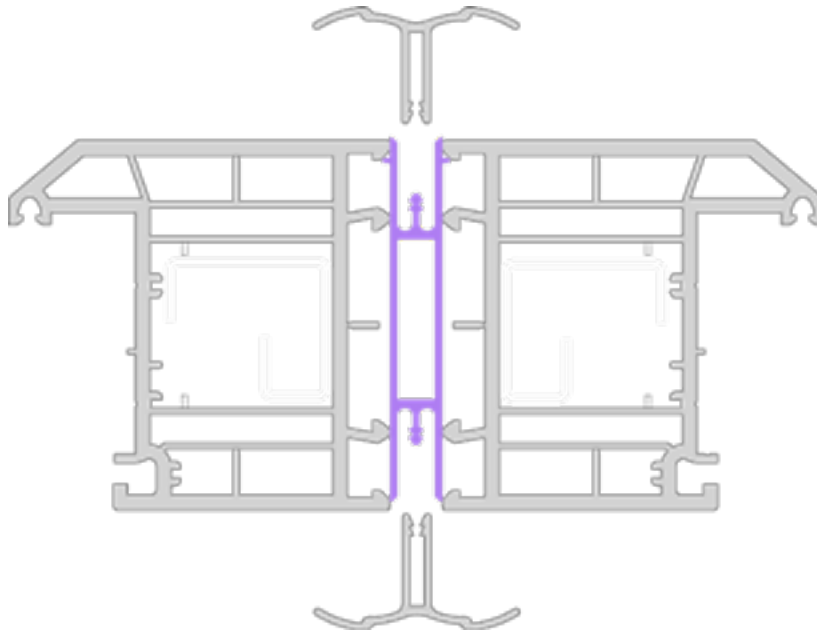
CODE	WWL106
IXX (cm )	24.5
IYY (cm )	2.4
DEDUCTION	10mm Per Frame



## Light Weight Coupler (10mm wide)

### Flush Fitting

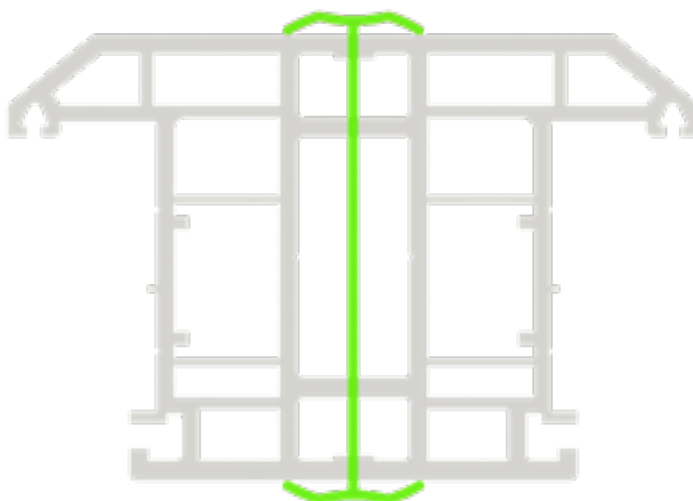
Recommended in lower exposure zones and for the narrower side frames.



CODE	WWL150
IXX (cm )	9.97
IYY (cm )	0.40
DEDUCTION	5mm Per Frame

## 1.5mm Coupler (1.5mm wide) PVC-U

**Only** use on single door fanlights

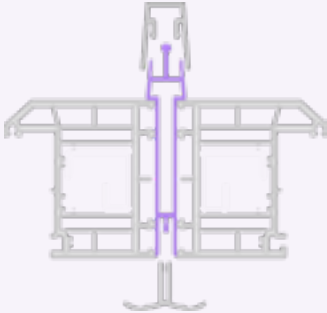


CODE	PFC70
IXX (cm )	0
IYY (cm )	10
DEDUCTION	0.75mm Per Frame

## Side Frame / Coupling Bar Max Sizes

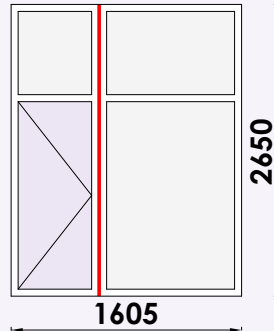
**72mm** Reinforced Outer Frame to achieve 800PA.

**Heavy Duty** (10mm wide)  
Rigidity : **Very High**

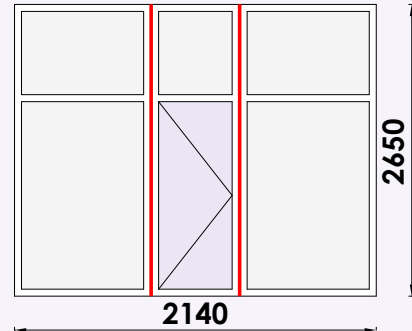


**The door size cannot be larger than 900mm x 2070mm**

MAX Size with  
**ONE**  
Sideframe

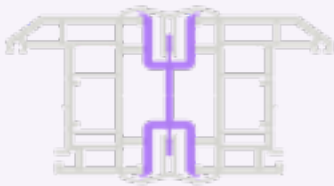


MAX Size with  
**TWO**  
Sideframes



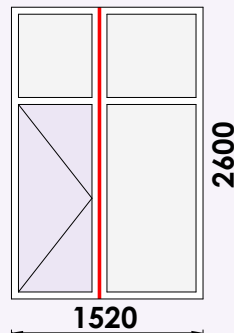
MAX Sizes for Side Frames constructed from  
**72mm Reinforced Outer Frame** using **Heavy Duty Coupler**

**Medium Duty Coupler** (20mm Wide)  
Rigidity : **High**

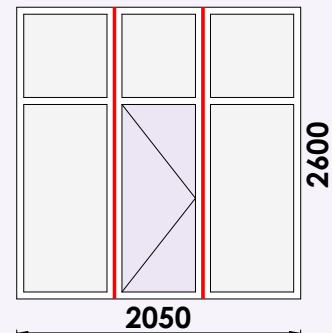


**The door size cannot be larger than 900mm x 2070mm**

MAX Size with  
**ONE**  
Sideframe

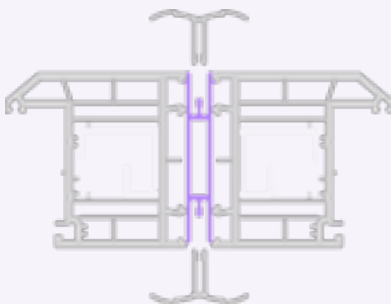


MAX Size with  
**TWO**  
Sideframes



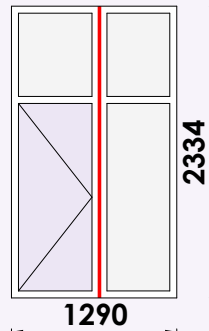
MAX Sizes for Side Frames constructed from  
**72mm Reinforced Outer Frame** using **Medium Duty Coupler**

**Light Duty Coupler** (10mm wide)  
Rigidity : **Standard**

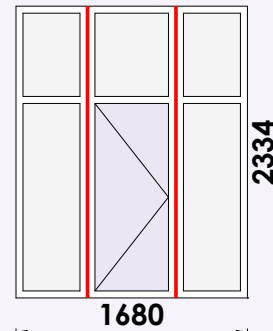


**The door size cannot be larger than 900mm x 2070mm**

MAX Size with  
**ONE**  
Sideframe



MAX Size with  
**TWO**  
Sideframes



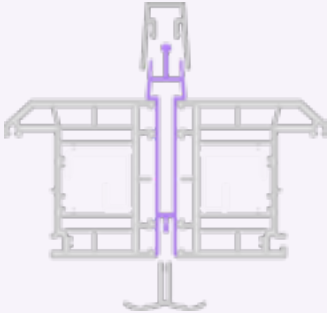
MAX Sizes for Side Frames constructed from  
**72mm Reinforced Outer Frame** using **Light Duty Coupler**

# Side Frame / Coupling Bar Max Sizes

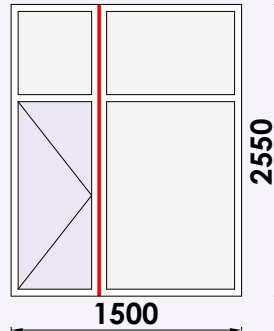
**52mm** Reinforced Outer Frame to achieve 800PA.

**The door size cannot be larger than 900mm x 2070mm**

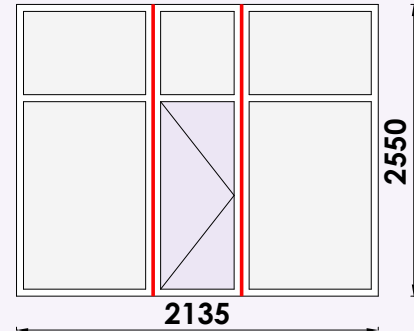
**Heavy Duty** (10mm wide)  
Rigidity : **Very High**



MAX Size with  
**ONE**  
Sideframe



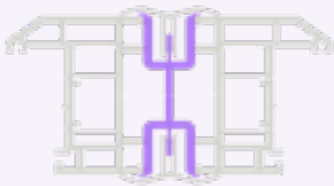
MAX Size with  
**TWO**  
Sideframes



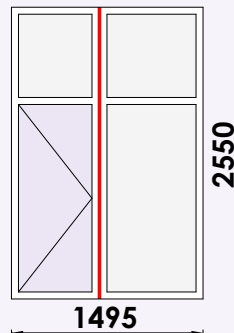
MAX Sizes for Side Frames constructed from  
**72mm Reinforced Outer Frame** using **Heavy Duty Coupler**

**The door size cannot be larger than 900mm x 2070mm**

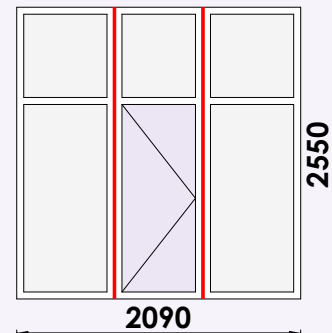
**Medium Duty Coupler** (20mm Wide)  
Rigidity : **High**



MAX Size with  
**ONE**  
Sideframe

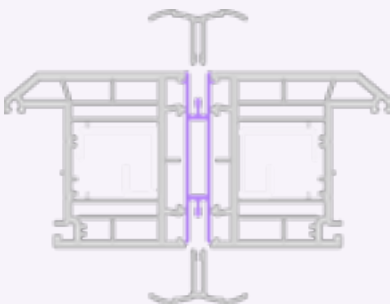


MAX Size with  
**TWO**  
Sideframes

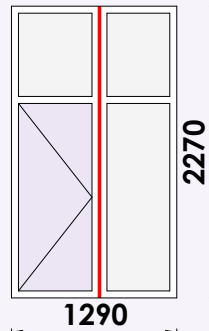


MAX Sizes for Side Frames constructed from  
**72mm Reinforced Outer Frame** using **Medium Duty Coupler**

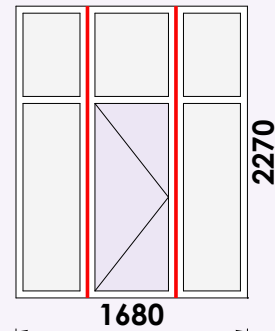
**Light Duty Coupler** (10mm wide)  
Rigidity : **Standard**



MAX Size with  
**ONE**  
Sideframe



MAX Size with  
**TWO**  
Sideframes



MAX Sizes for Side Frames constructed from  
**72mm Reinforced Outer Frame** using **Light Duty Coupler**

### Sideframe with MIDRAIL

72mm outer with 105.5 Midrail: **min width =323.5mm**

72mm outer with 69 Midrail: **min width =360mm**

52mm outer with 69 Midrail: **min width =320mm**

### Sideframe with NO Midrail GROOVED

72mm outer: **min width =295mm**

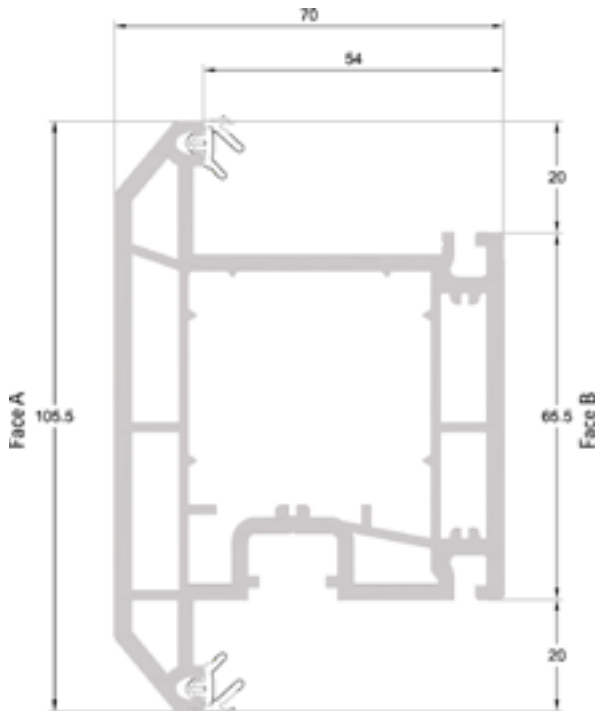
52mm outer: **min width =275mm**

### Sideframe with NO Midrail KNIFED OFF by hand

72mm outer: **min width =190mm**

52mm outer: **min width =190mm**

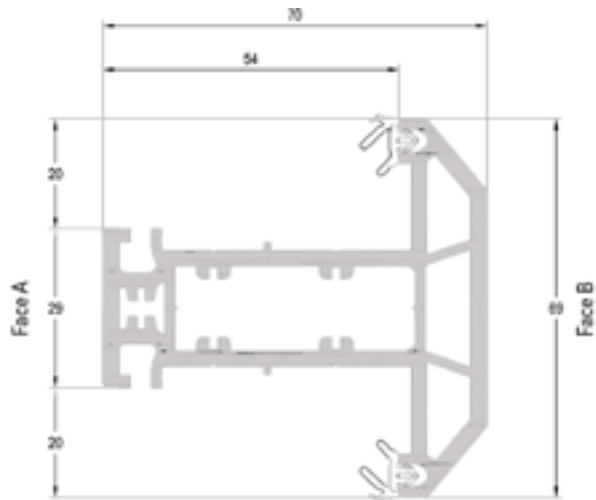
Standard and the stainless steel option letterplates cannot be fitted into midrails.



**Door T Sash / Midrail 105.5mm**

Standard Midrail in sideframes

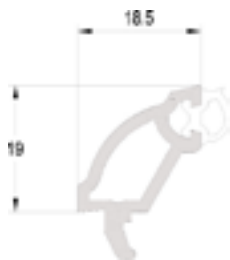
**Art.546635**



**Slim Transom / Mullion T 69mm**

Standard Mullion in Fanlights

**Art.546085**



**Co-extruded Glazing Bead 18.5**

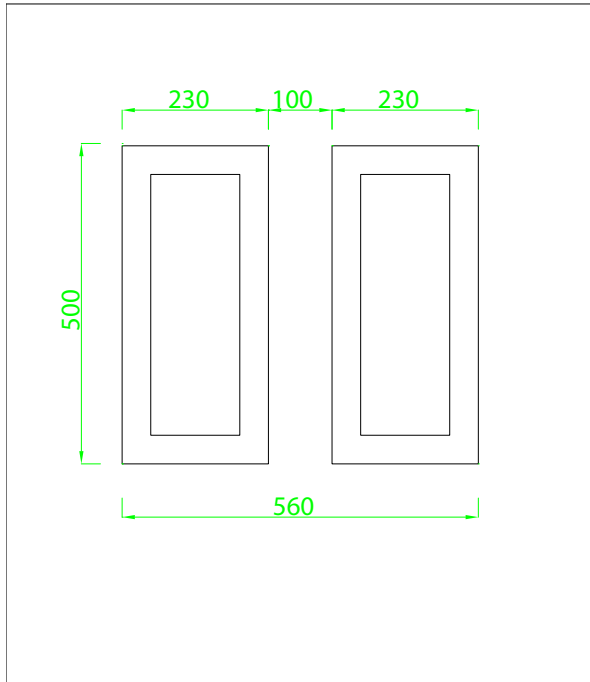
For 28mm sealed units

**Art.546572**

## DOUBLE MOULDED PANELS

MAX SIZE: w785 x h950

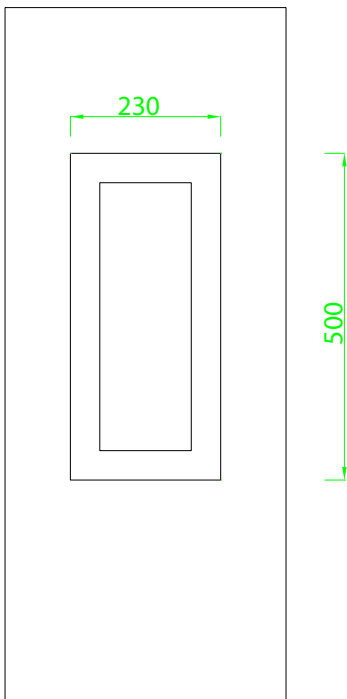
MIN SIZE: w620 x h580



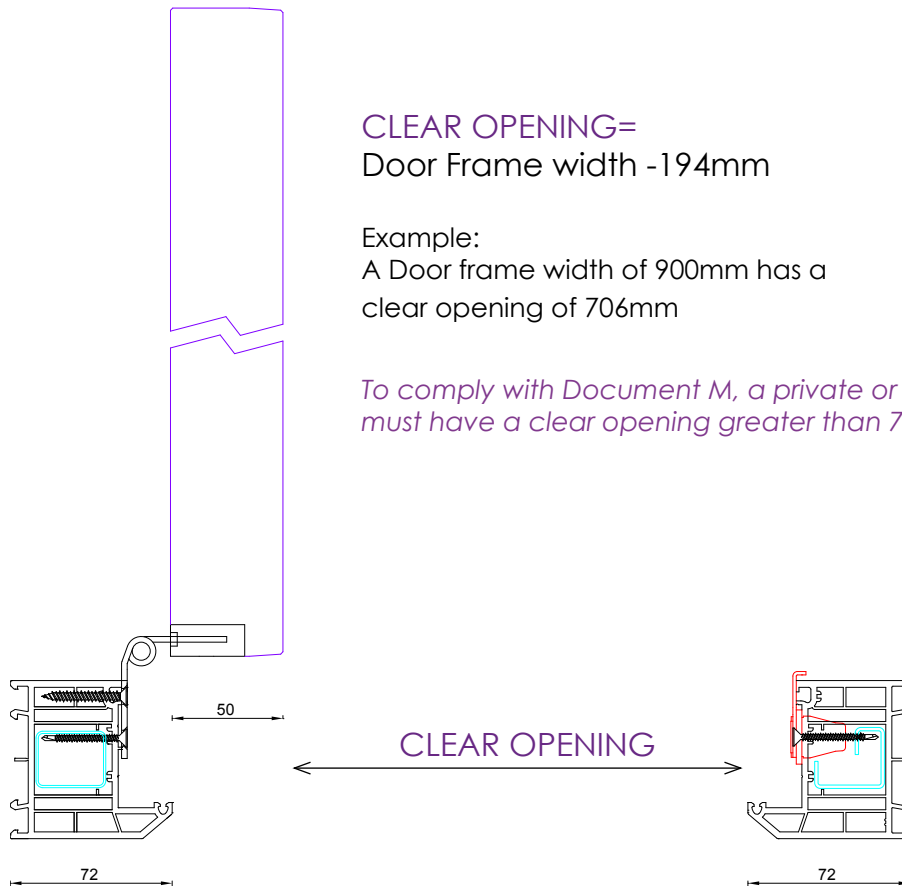
## SINGLE MOULDED PANELS

MAX SIZE: w420 xh950

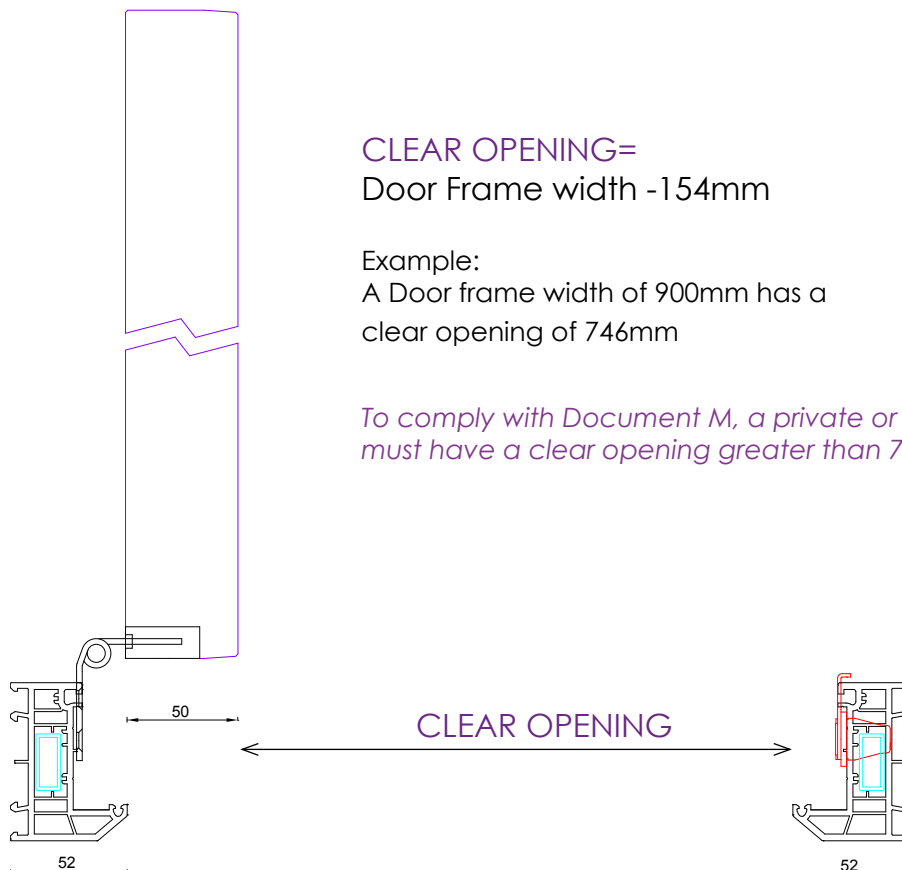
MIN SIZE: w290 x h580



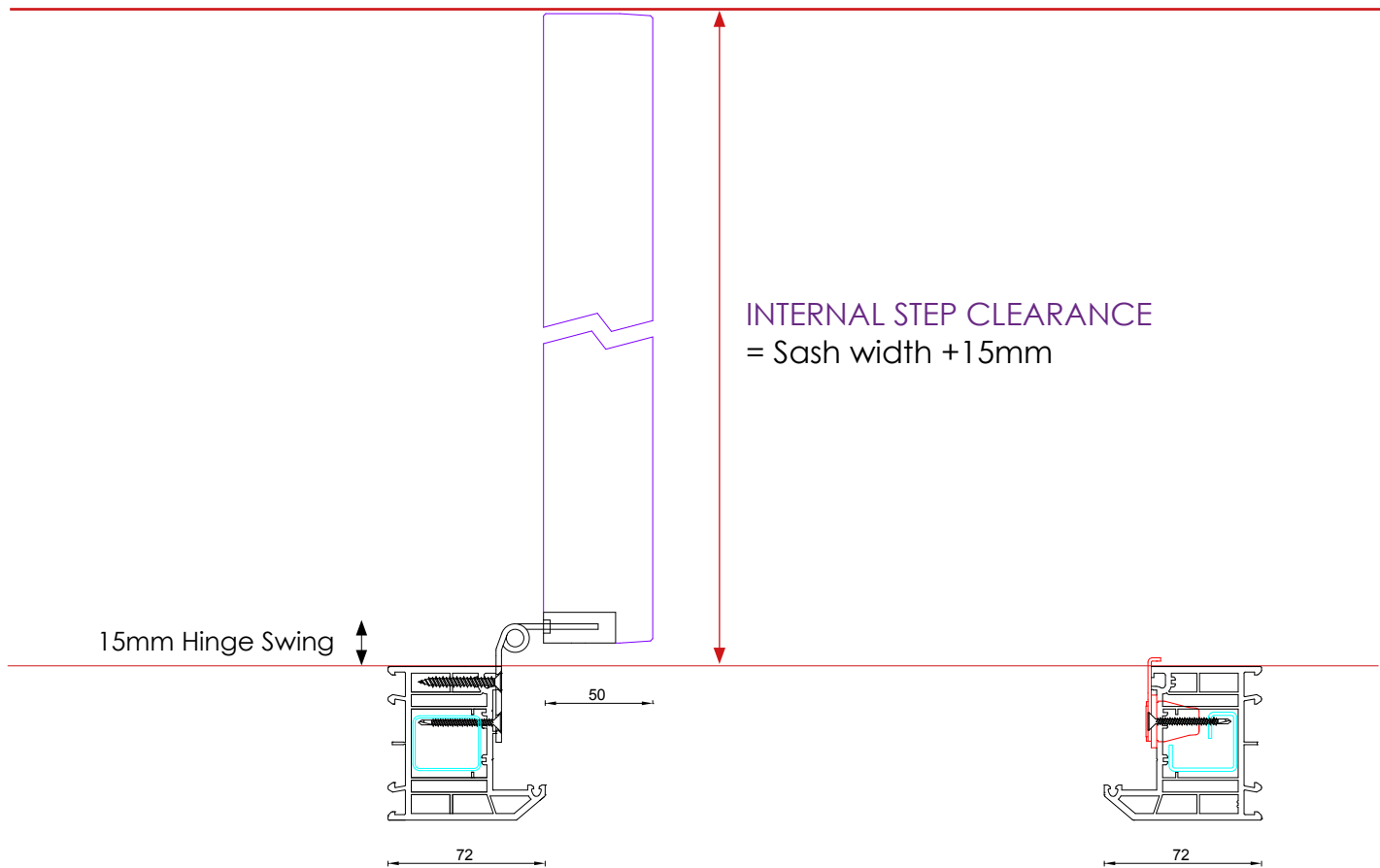
## 72mm Outer Frame



## 52mm Outer Frame



## INTERNAL STEP

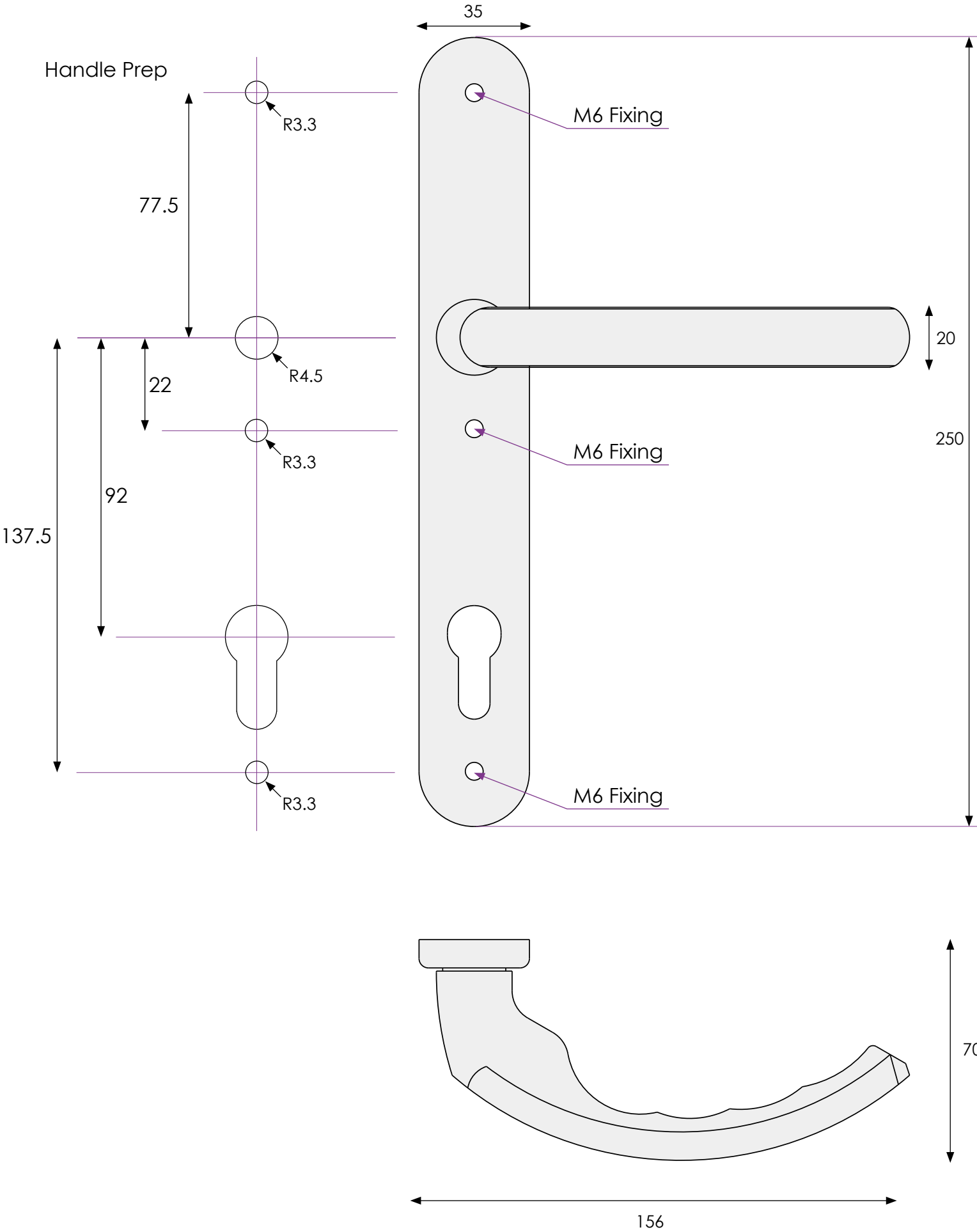


For **72mm** Profile Sash Width = Overall Frame Width **-112**

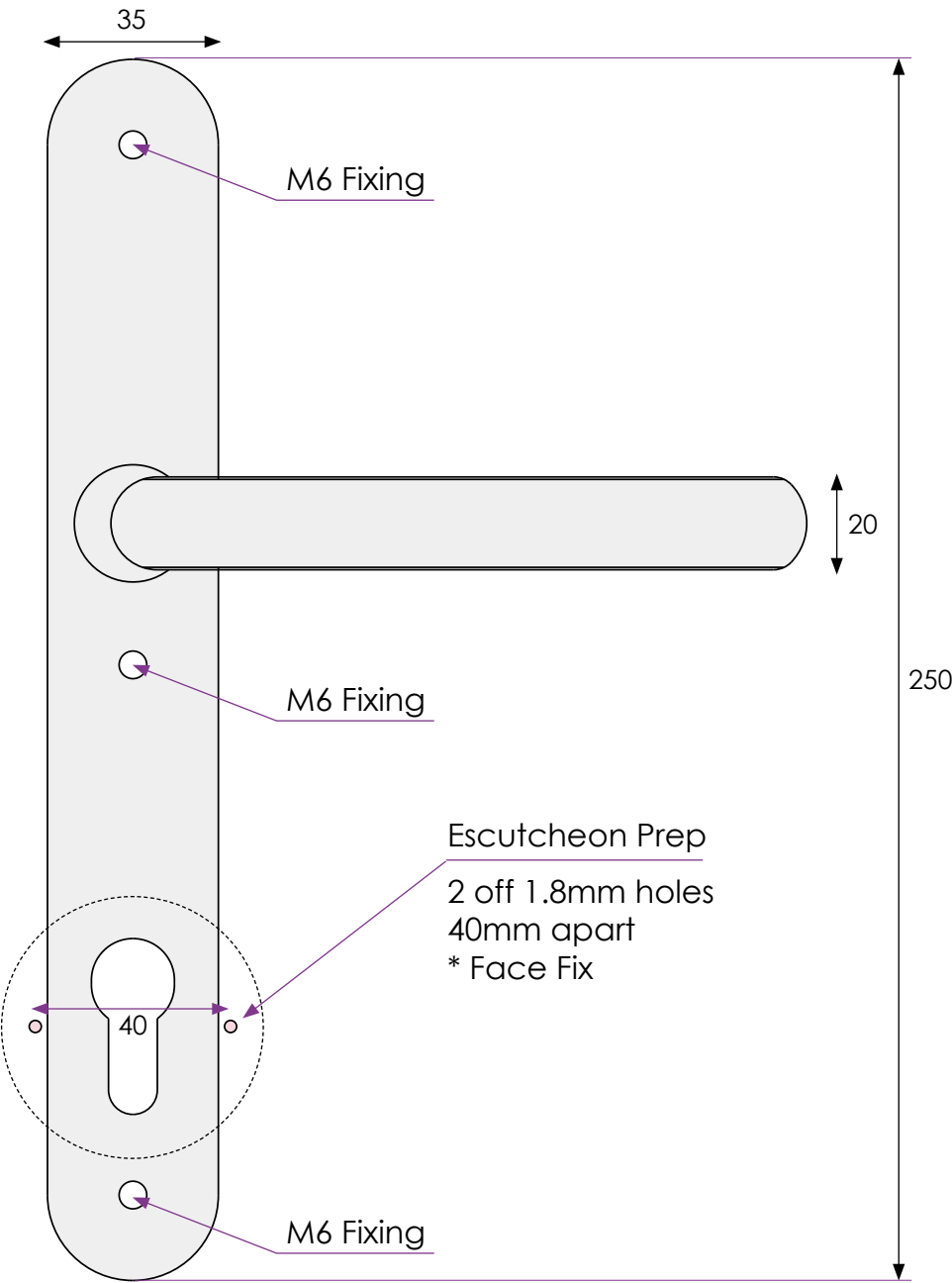
For **52mm** Profile Sash width = Overall Frame Width **-72**

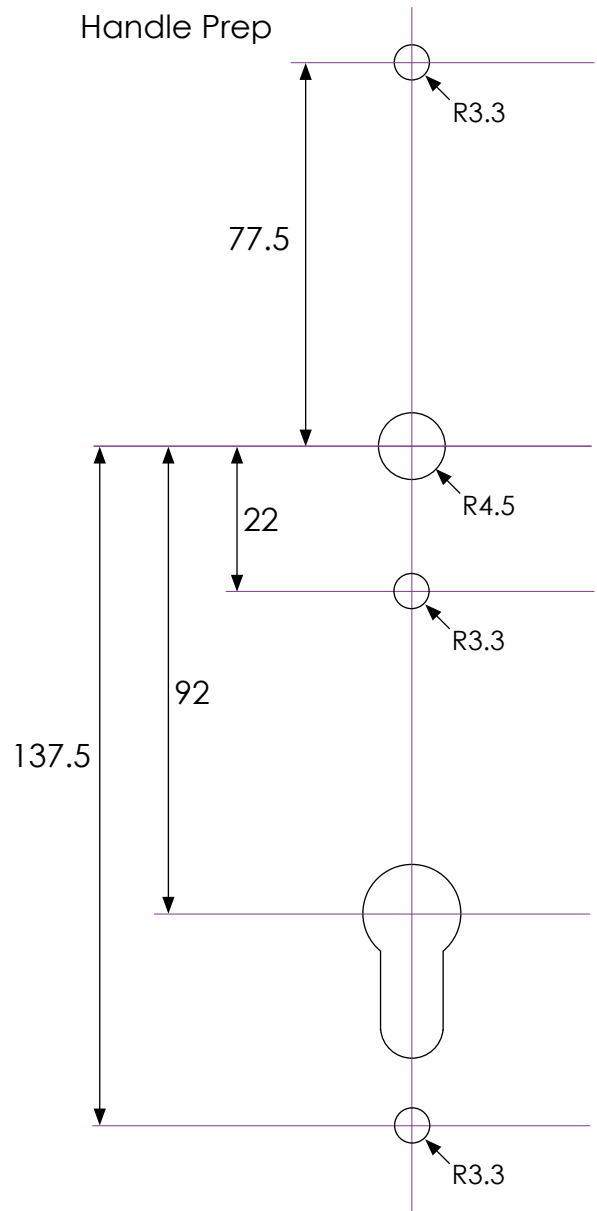
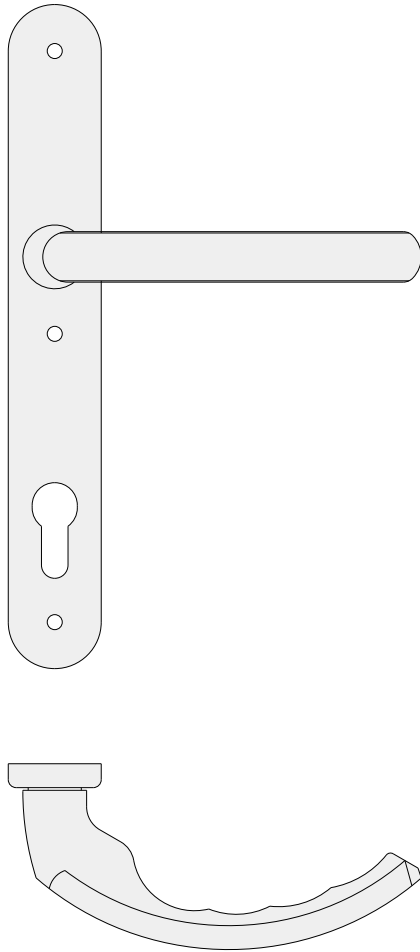


Standard Lever Handle

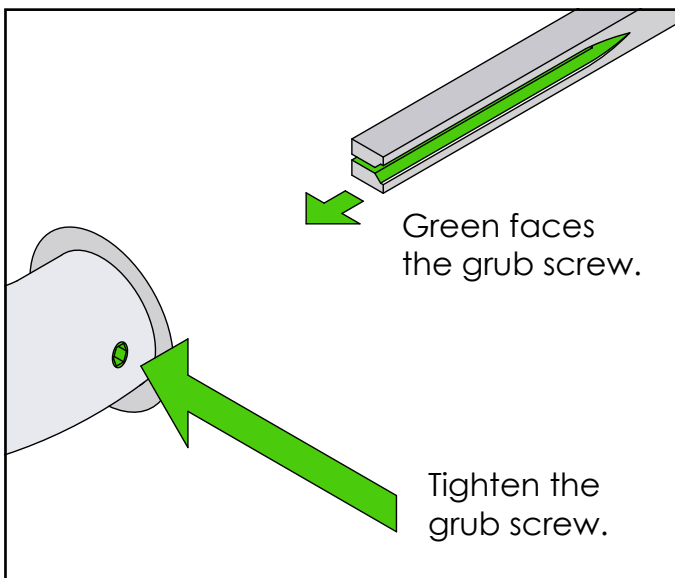






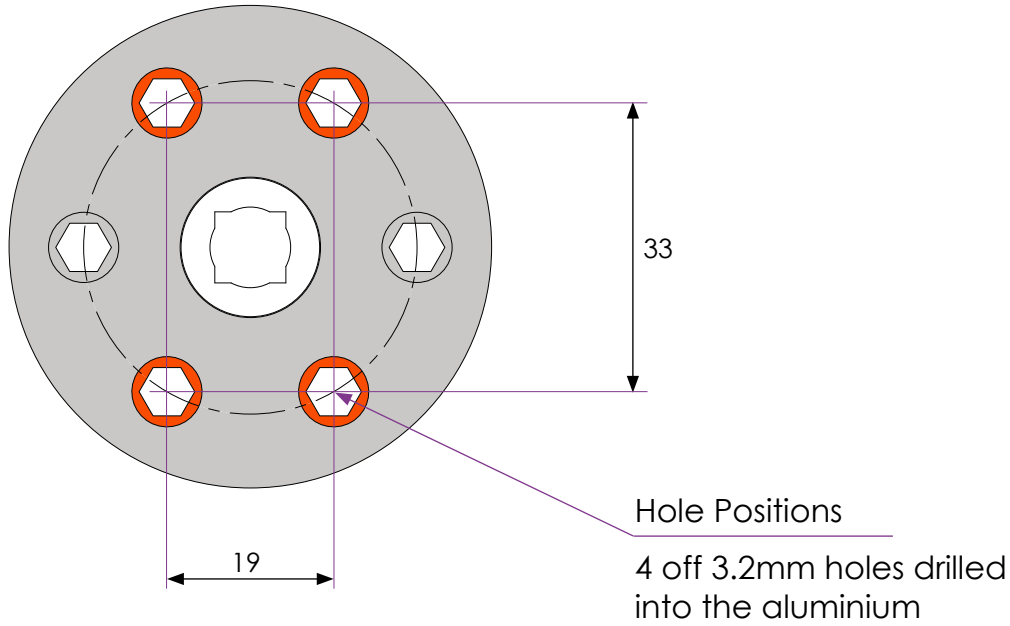


## Important fitting Detail



Insert the spindle so the exposed dish (or spindle groove) as shown in green faces the grub screw. Then tighten the grub screw clockwise to 'splay' the spindle and secure the handle in place.

Doing this **external** and **internal** ensures the handles are secured to the spindle.



Door Edge

### Hole position Jig



Its important the jig lines up with the spindle hole on the door.



Its important the jig lines up with the spindle hole on the door.



When everything is lined up, place the pin into the jig and spindle hole to lock the position.

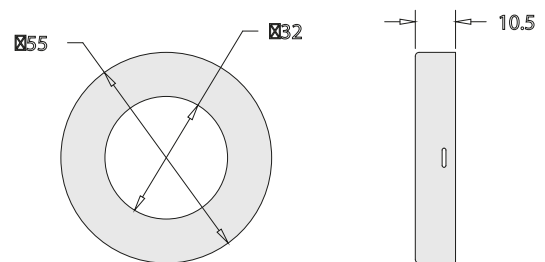
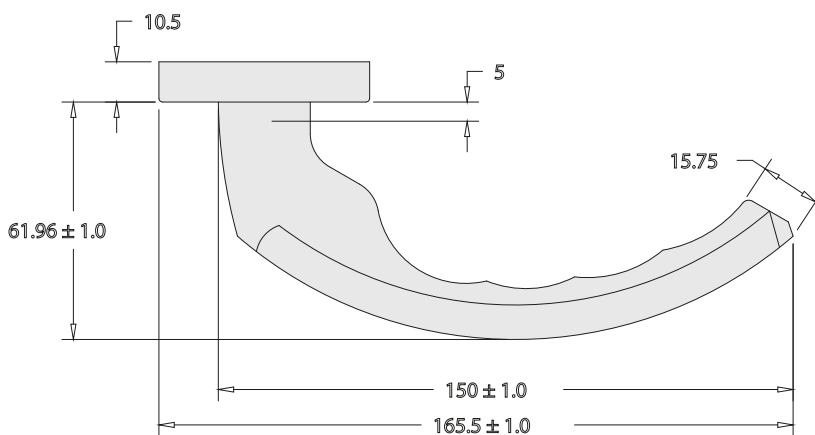
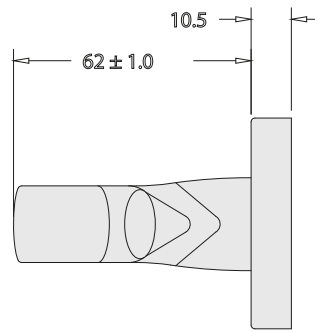
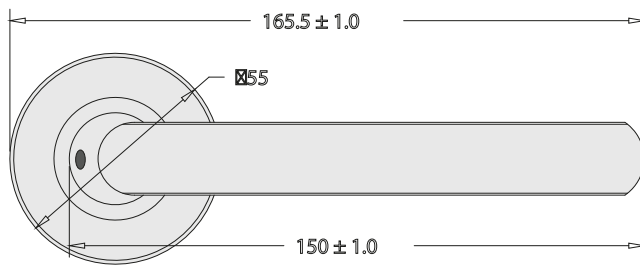


Drill four holes with a 3.2mm drill bit see picture below holding the jig firmly.

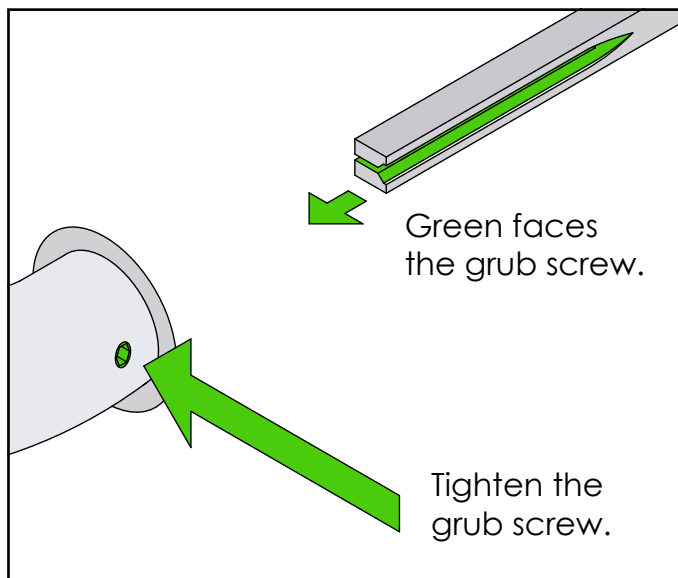


You MUST DRILL INTO THE SKIN AND THE ALUMINIUM REPEAT THE PROCESS ON THE OTHER SIDE OF THE DOOR.

# European Rose Handle



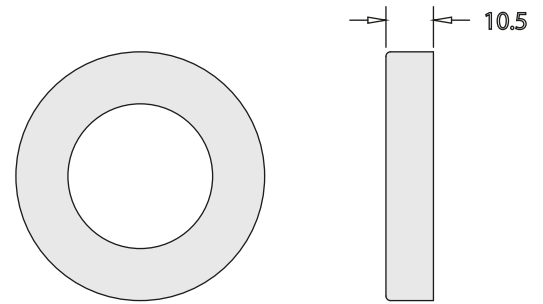
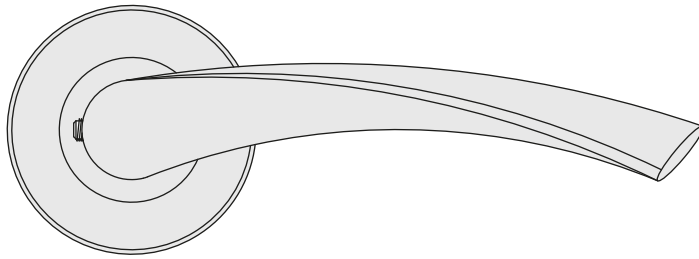
## Important fitting Detail



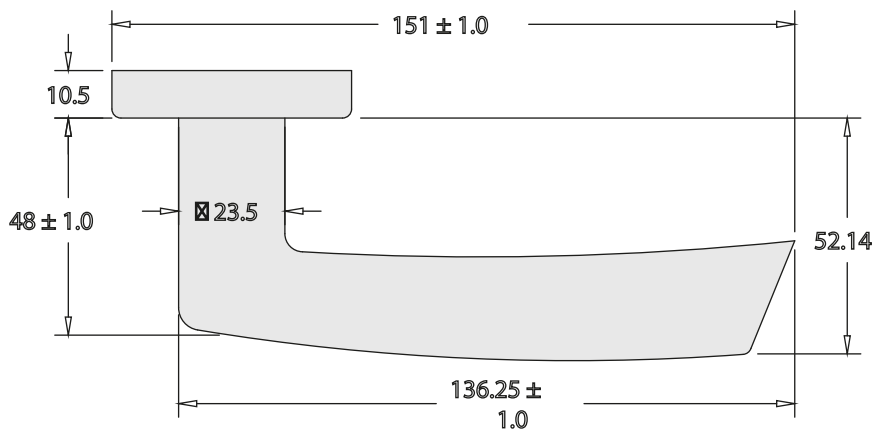
Insert the spindle so the exposed dish (or spindle groove) as shown in green faces the grub screw. Then tighten the grub screw clockwise to 'splay' the spindle and secure the handle in place.

Doing this **external** and **internal** ensures the handles are secured to the spindle.

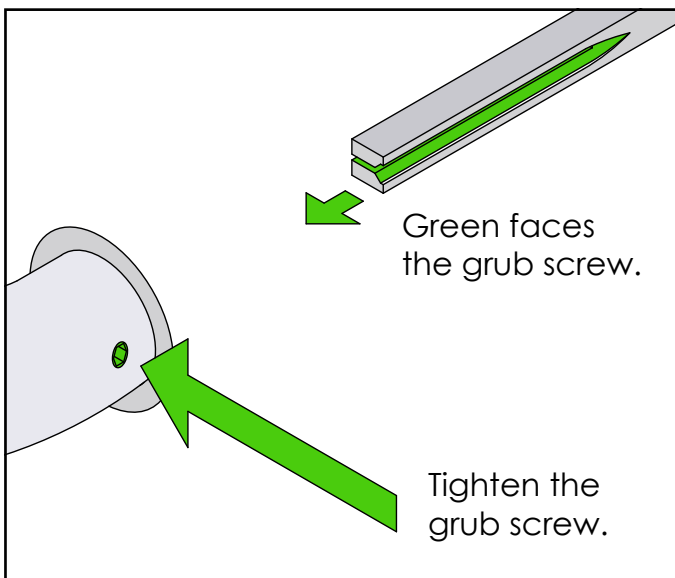
## Curved Rose Handle



Cover Plate



### Important fitting Detail

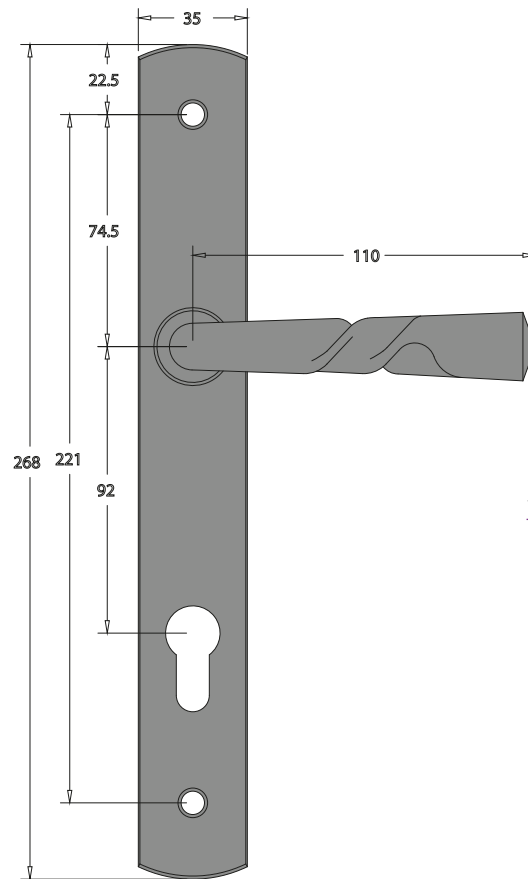
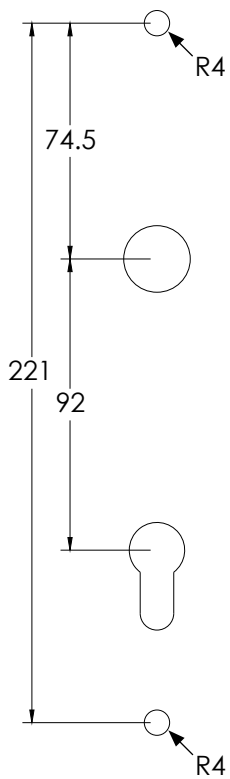


Insert the spindle so the exposed dish (or spindle groove) as shown in green faces the grub screw. Then tighten the grub screw clockwise to 'splay' the spindle and secure the handle in place.

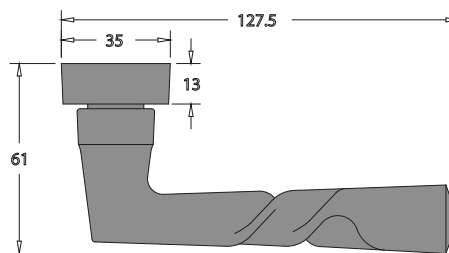
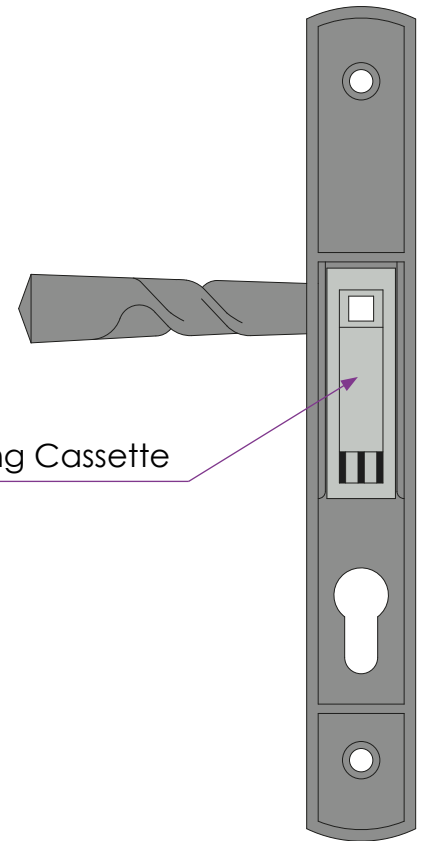
Doing this **external** and **internal** ensures the handles are secured to the spindle.

# Twist Lever Handle

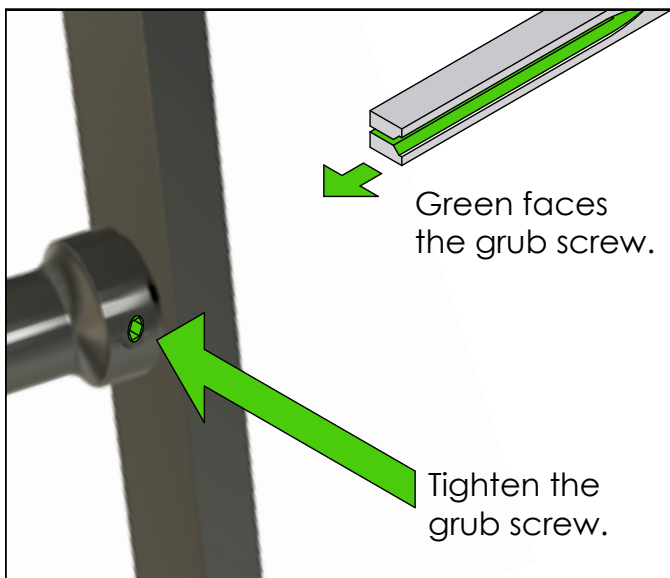
## Handle Prep



Spring Cassette



## Important fitting Detail

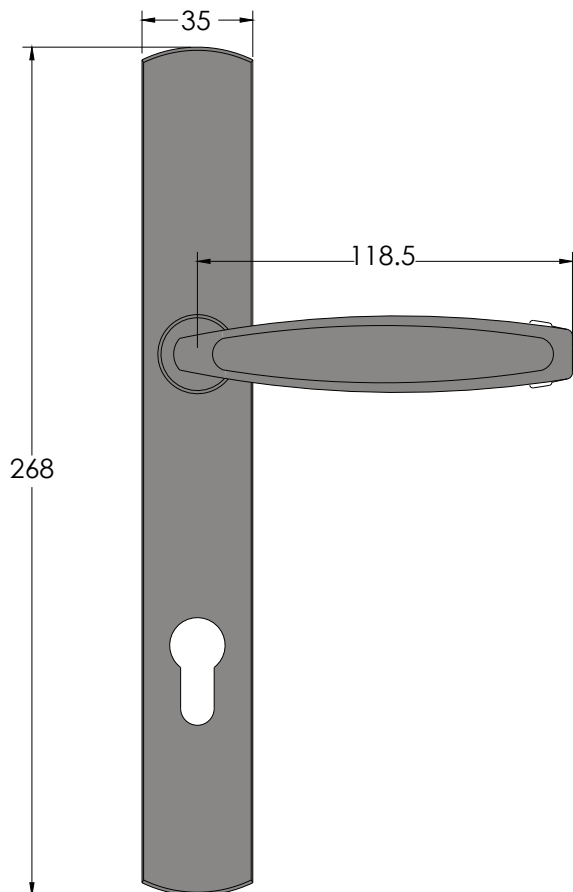
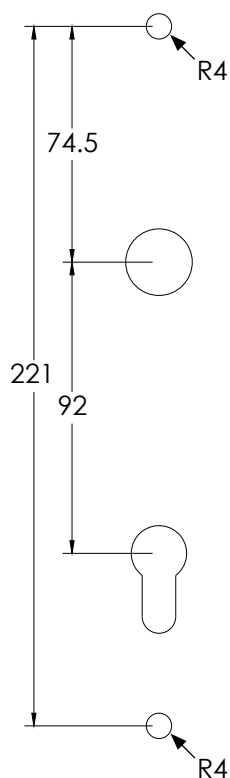


Insert the spindle so the exposed dish (or spindle groove) as shown in green faces the grub screw. Then tighten the grub screw clockwise to 'splay' the spindle and secure the handle in place.

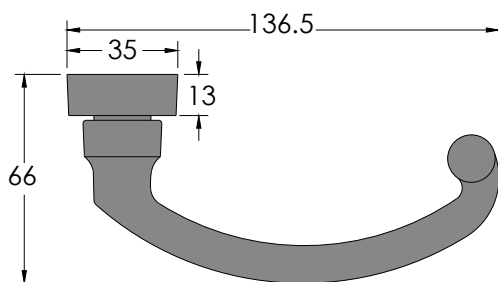
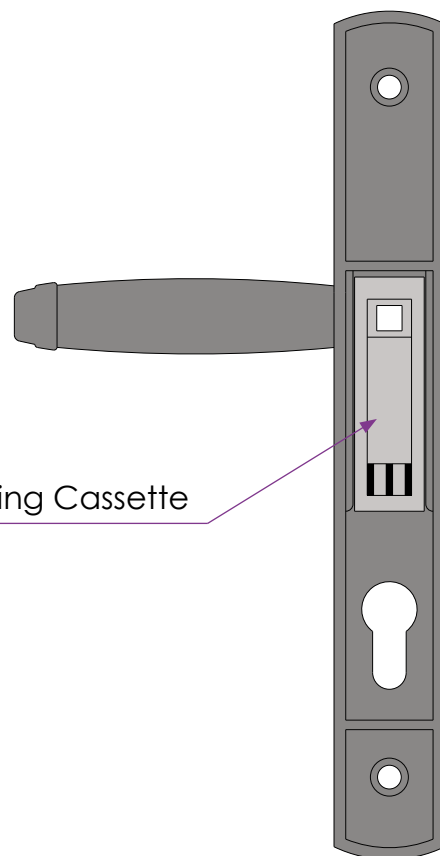
Doing this **external** and **internal** ensures the handles are secured to the spindle.

# Arched Lever Handle

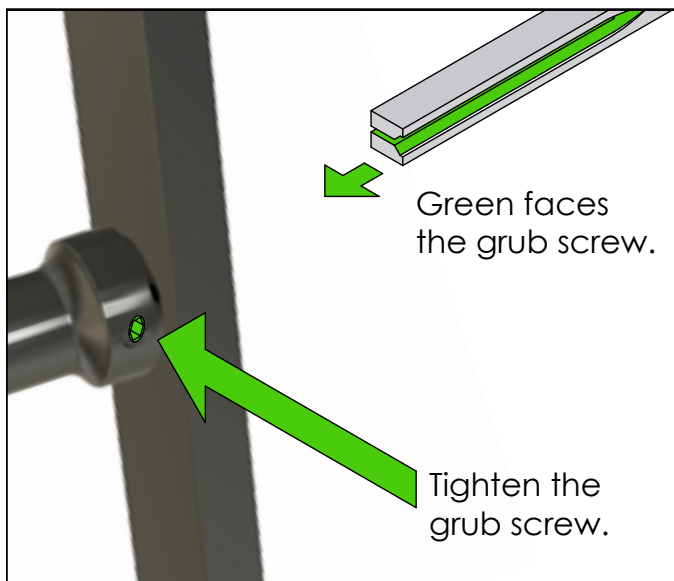
## Handle Prep



Spring Cassette



## Important fitting Detail

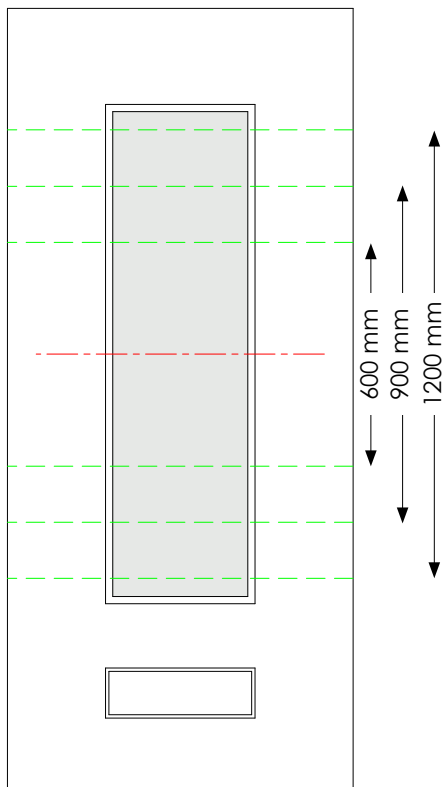


Insert the spindle so the exposed dish (or spindle groove) as shown in green faces the grub screw. Then tighten the grub screw clockwise to 'splay' the spindle and secure the handle in place.

Doing this **external** and **internal** ensures the handles are secured to the spindle.

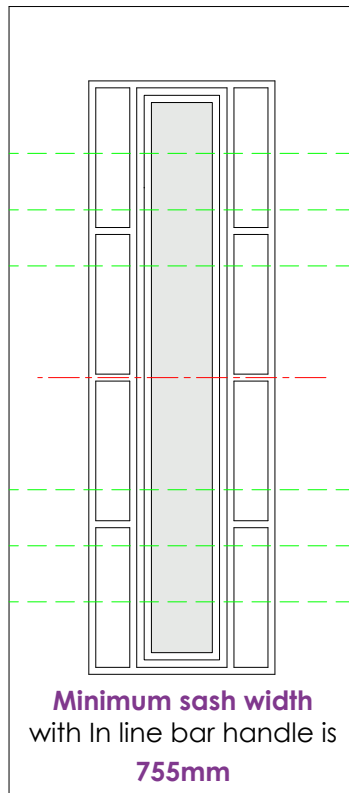
## 600mm, 900mm and 1200mm Fitting Position

### Vogue



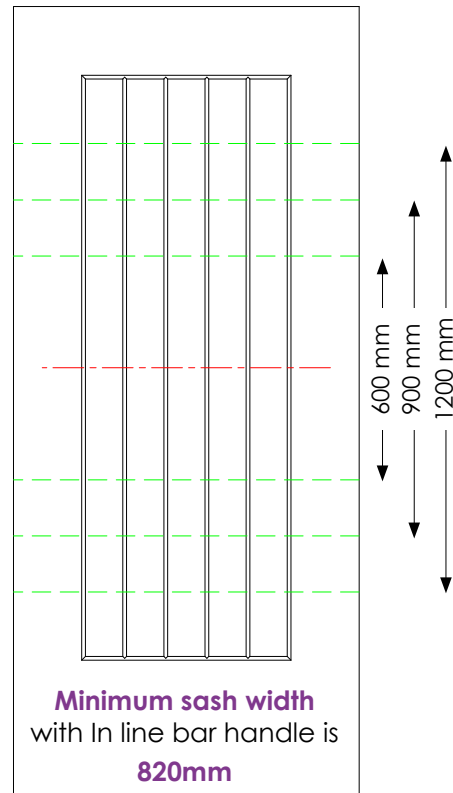
Centred with the glass

### Vermont



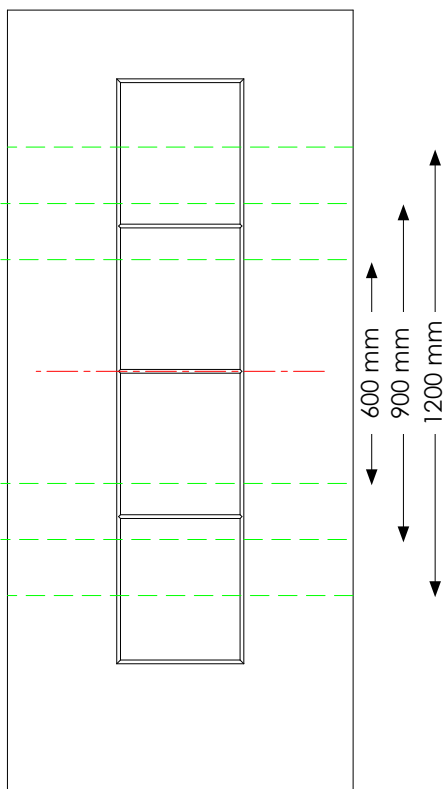
Centred with the glass

### Indiana



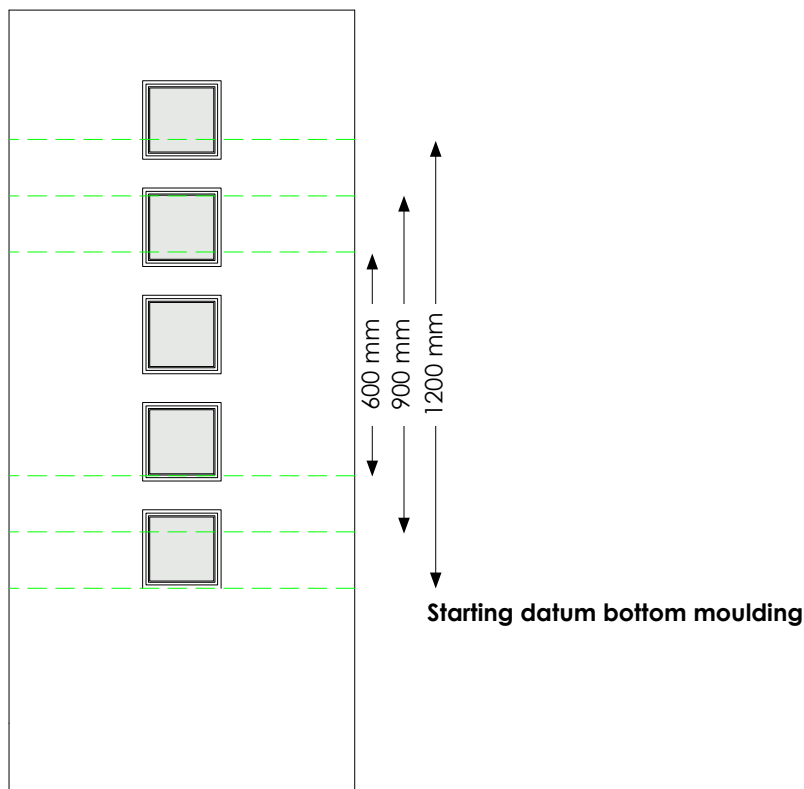
Centred with the mouldings

### Dakota



Centred with the mouldings

### Manhattan



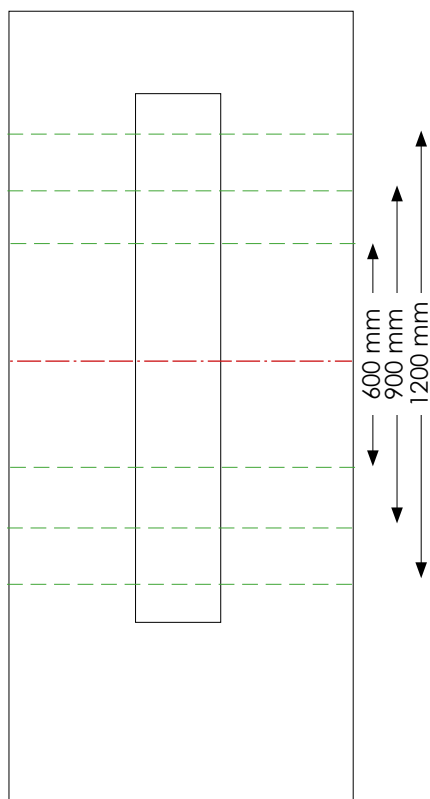
### In line bar handles

are fitted **115mm** from the edge of the door to the centre of the fixing hole.



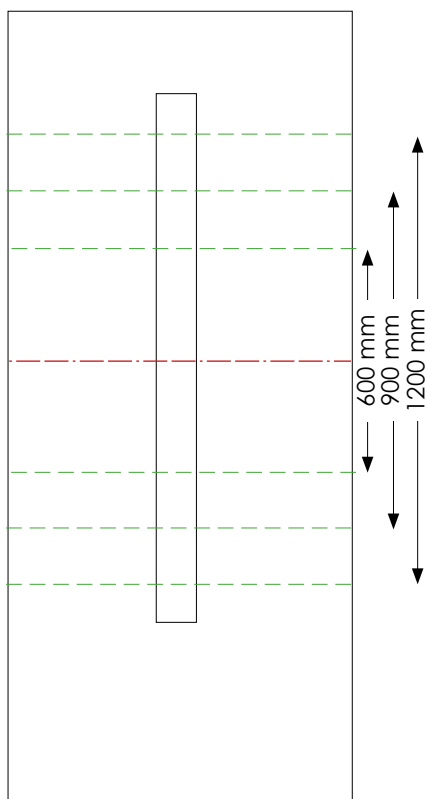
## 600mm, 900mm and 1200mm Fitting Position

## Dune Vision



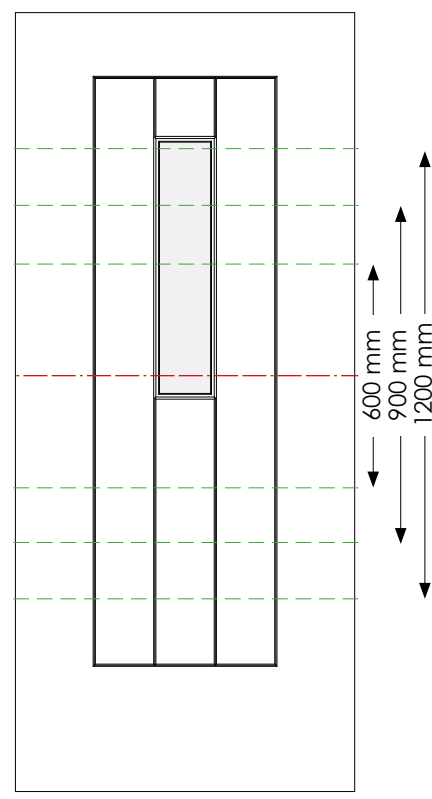
Centred with the glass

## Dune Retreat



Centred with the glass

## Aspen



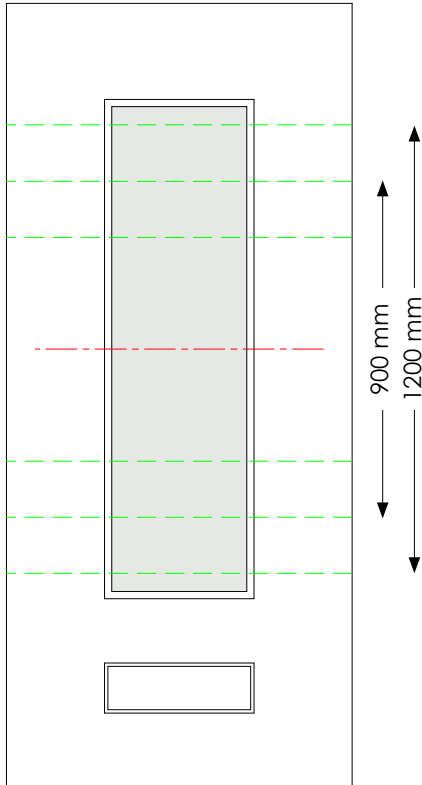
Centred with the mouldings

## In line bar handles

are fitted **115mm** from the edge of the door to the centre of the fixing hole.

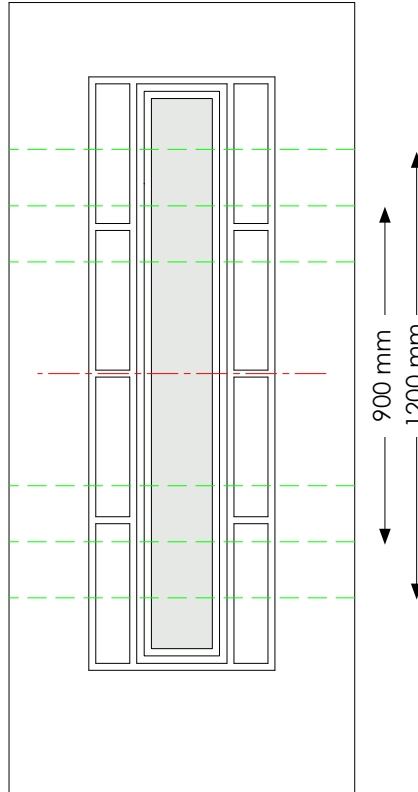
## 900mm and 1200mm Fitting Position

**Vogue**



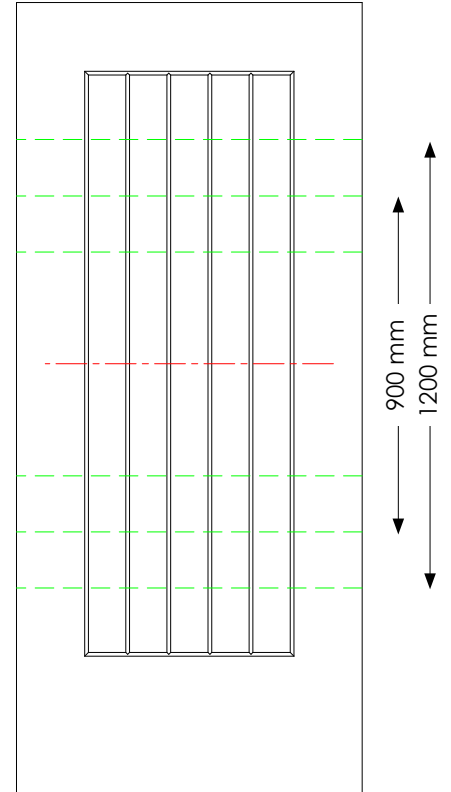
Centred with the glass

**Vermont**



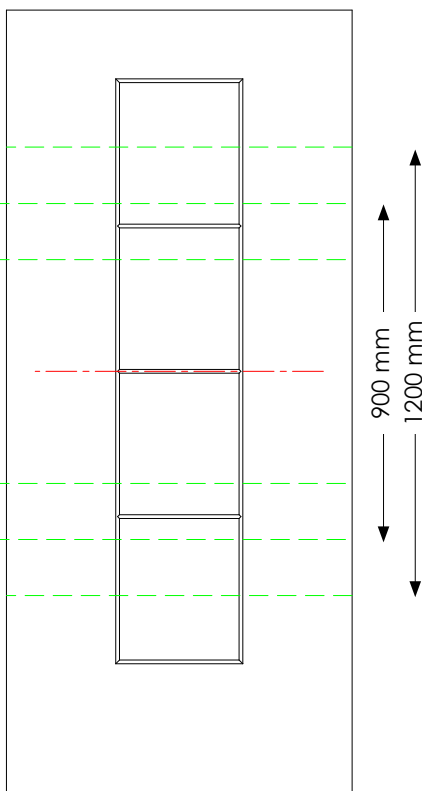
Centred with the glass

**Indiana**



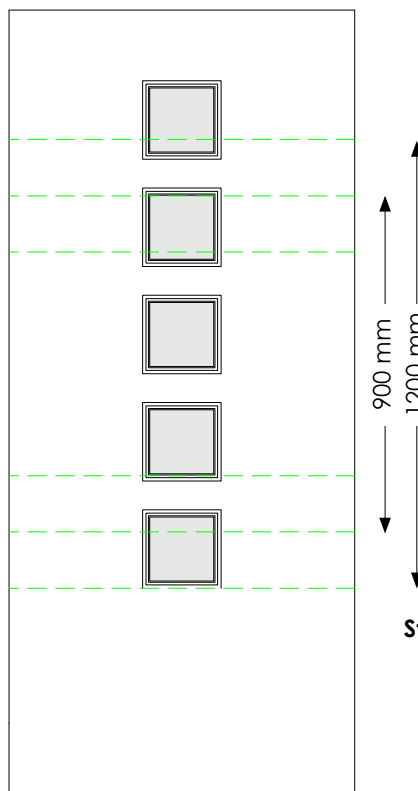
Centred with the mouldings

**Dakota**



Centred with the mouldings

**Manhattan**



Starting datum bottom moulding

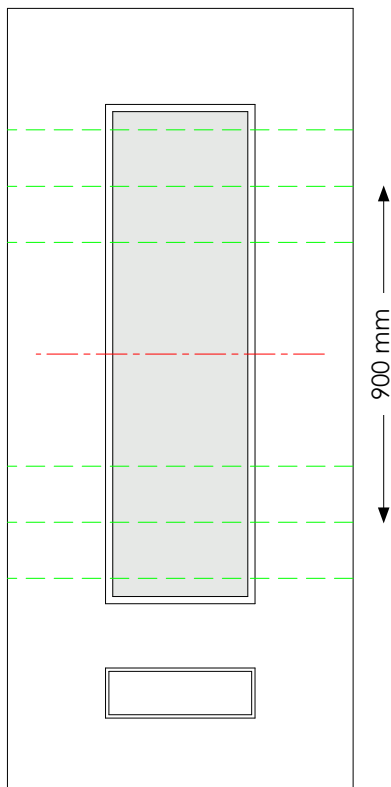
### Off set bar handles

are fitted **45mm** from the edge of the door to the centre of the fixing hole.



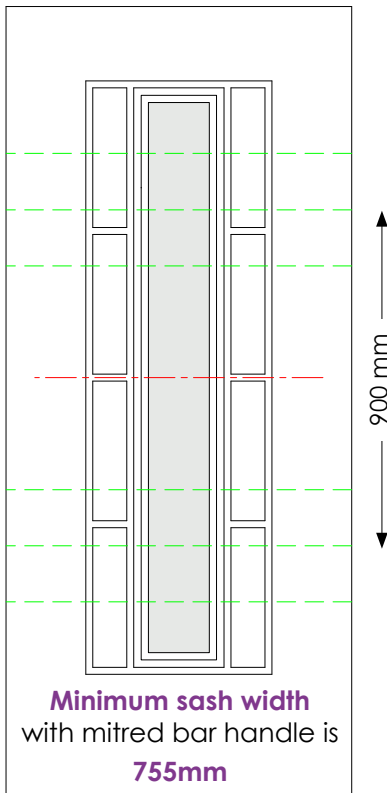
## 900mm Fitting Position

### Vogue



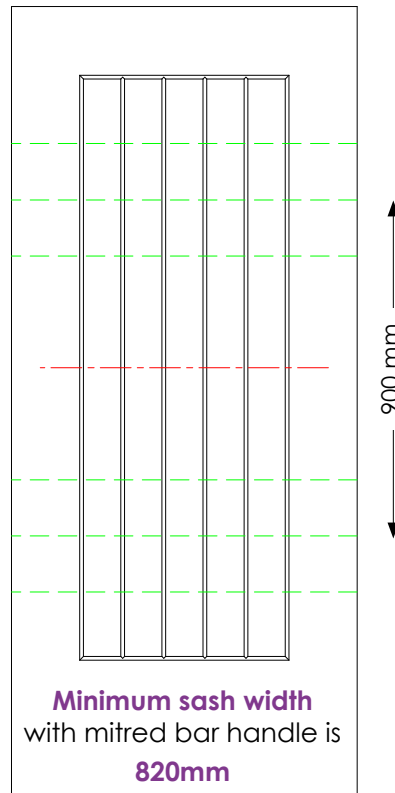
Centred with the glass

### Vermont



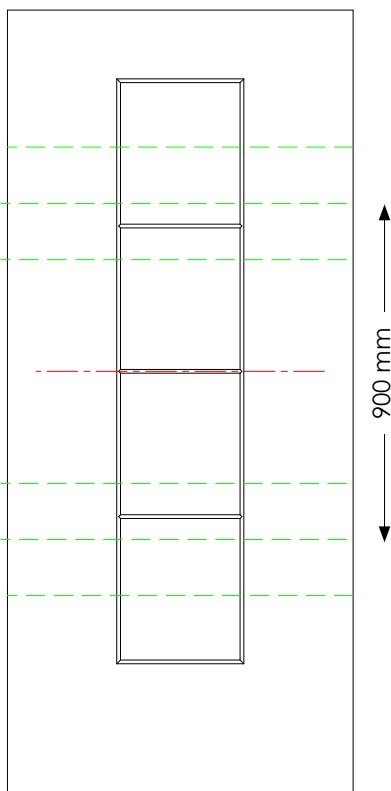
Centred with the glass

### Indiana



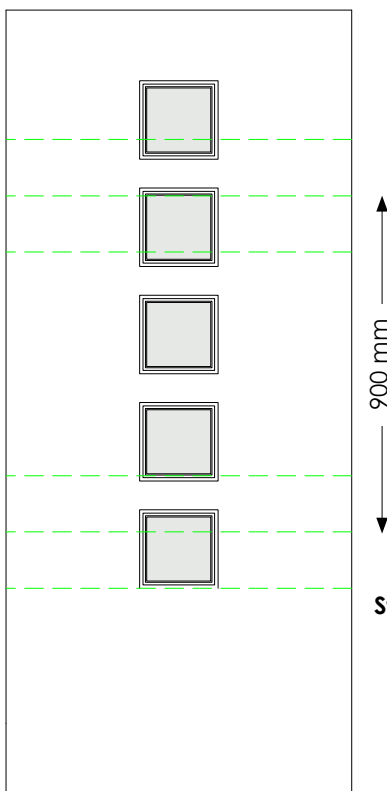
Centred with the mouldings

### Dakota



Centred with the mouldings

### Manhattan



Starting datum bottom moulding

### Mitred bar handles

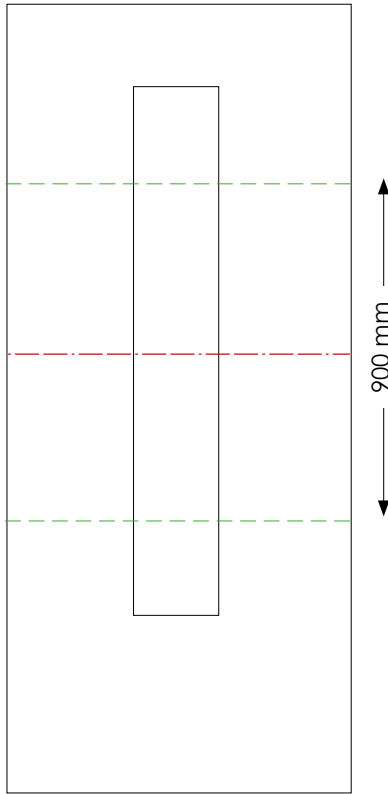
are fitted **115mm** from the edge of the door to the centre of the fixing hole.



## Mitred Bar Handle

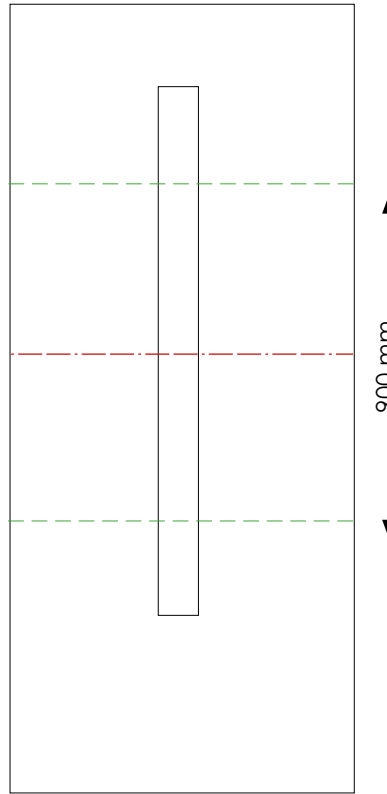
### 900mm Fitting Position

#### Dune Vision



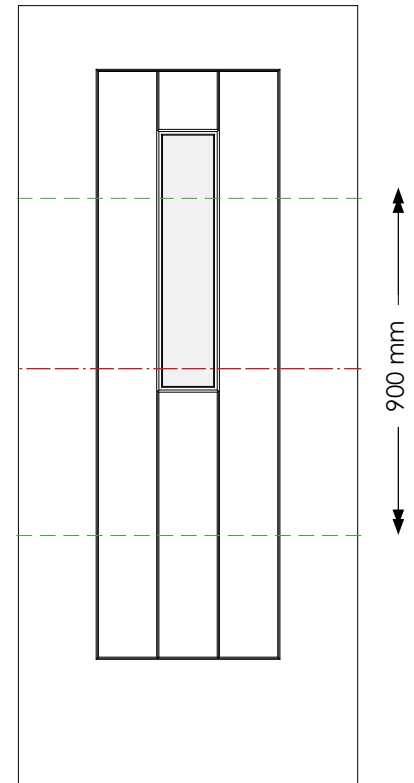
Centred with the glass

#### Dune Retreat



Centred with the glass

#### Aspen



Centred with the mouldings

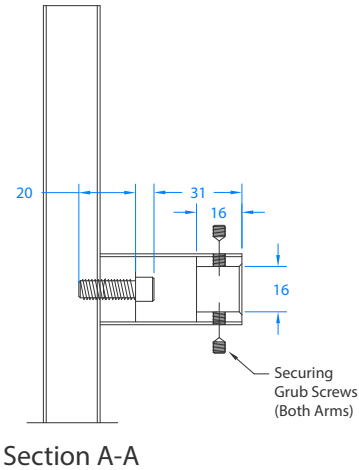
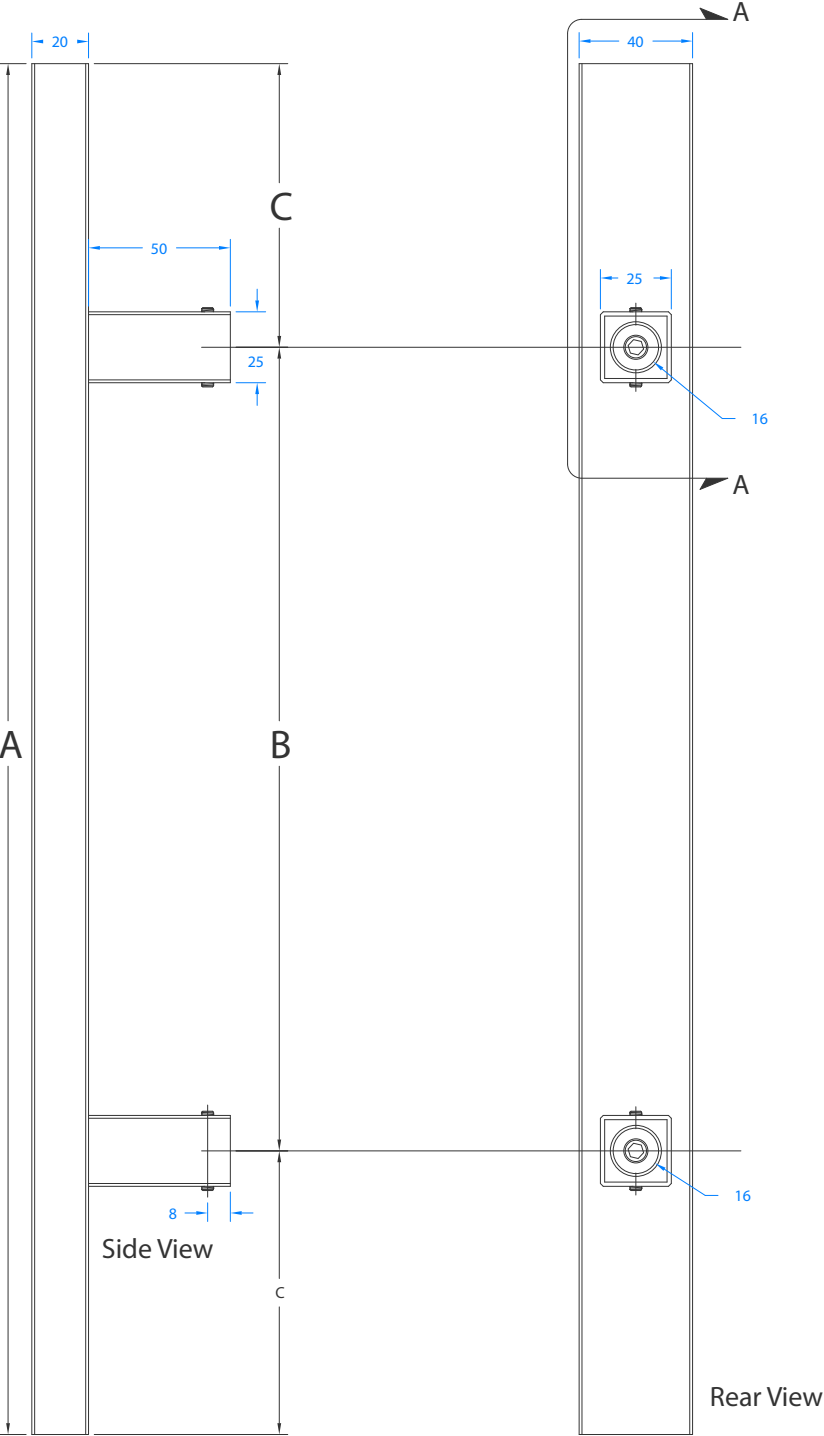
#### Mitred bar handles

are fitted **115mm** from the edge of the door to the centre of the fixing hole.

Square Bar1200mm /Square Bar 900mm

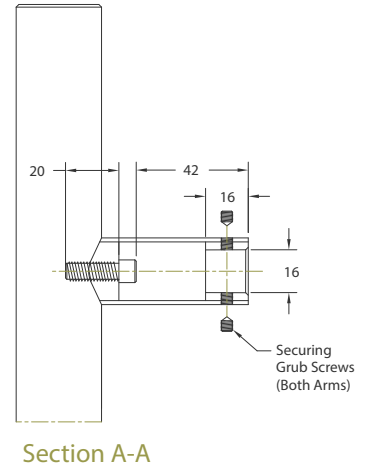
SIZE:1200 Bar Handle  
A=1200mm  
B=1000mm  
C=100mm

SIZE:900 Bar Handle  
A=900mm  
B=700mm  
C=100mm





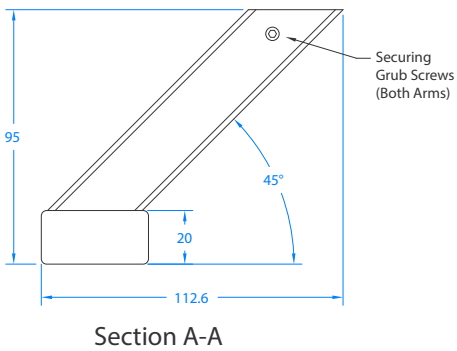
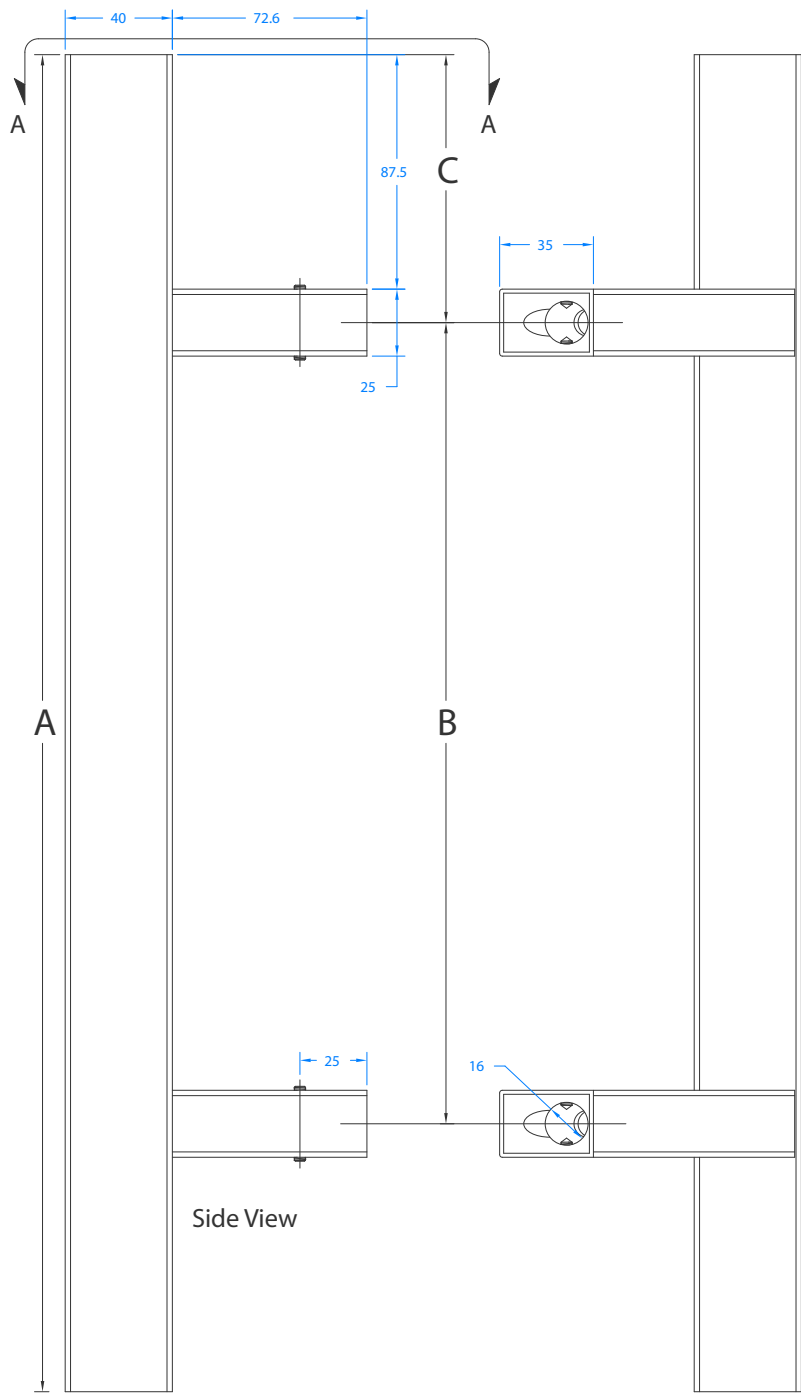
**C=100mm**





# Square Bar 1200mm (Offset)

SIZE:  
A=1200mm  
B=1000mm  
C=100mm







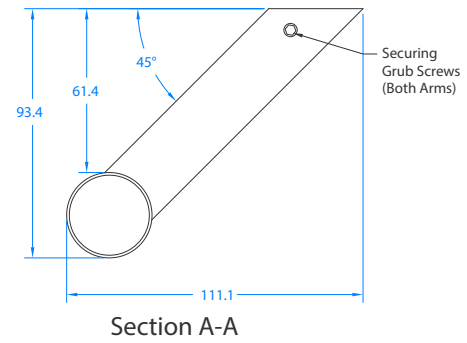
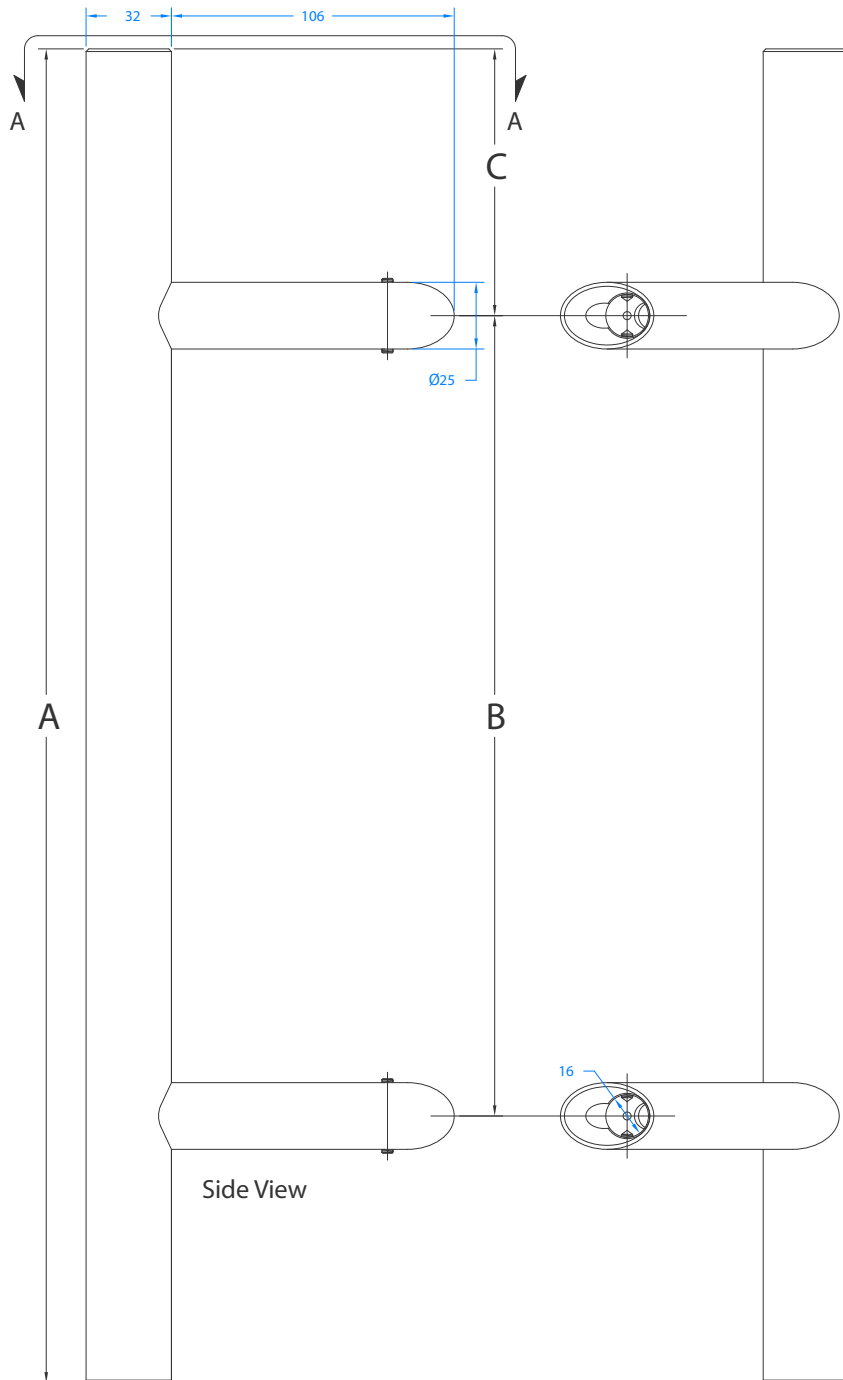
## Round Bar 1200mm (Offset)

### SIZE:

A=1200mm

B=1000mm

C=100mm



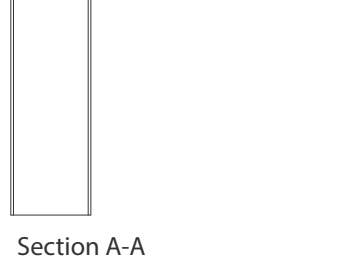
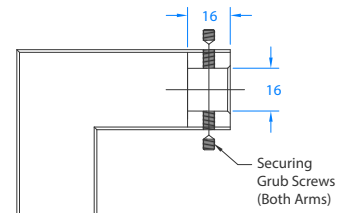
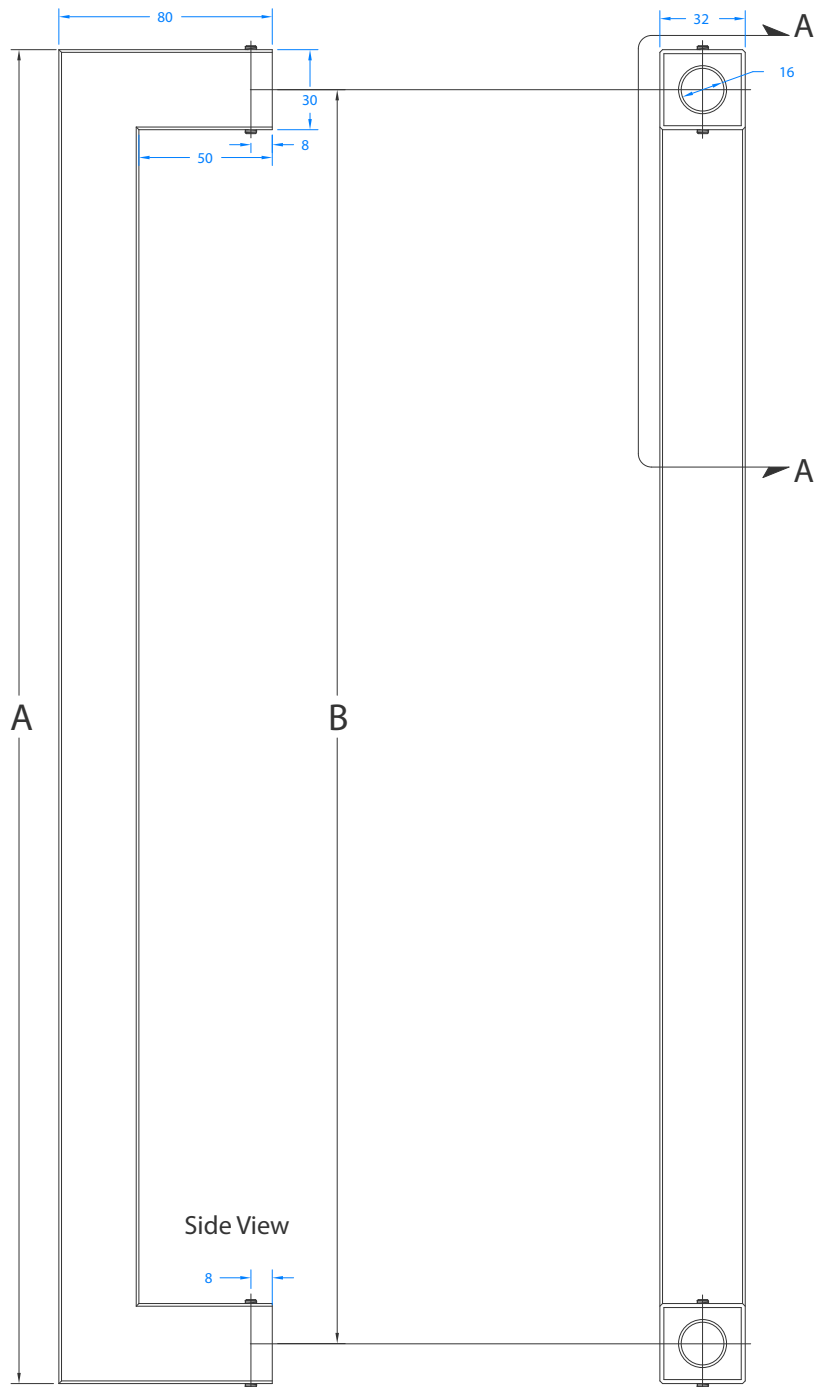


## Mitre Bar 900mm

**SIZE:**

**A=930mm**

**B= 900mm**



Section A-A

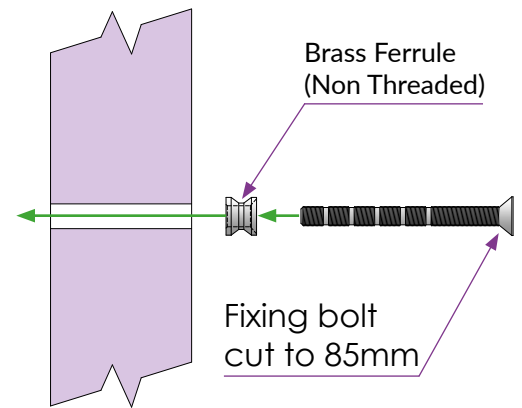
## Fitting Instructions

(Do the same on the top and the bottom fixing position)

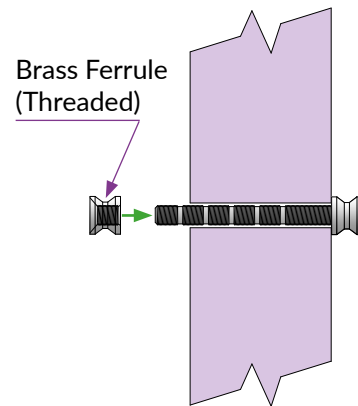
The metal washers can be used if required they fit between the brass ferrules and the Rockdoor.

1. From the inside slide the non threaded brass ferrule over the fixing bolt so the counter sunk head fits into the counter sink of the ferrule.

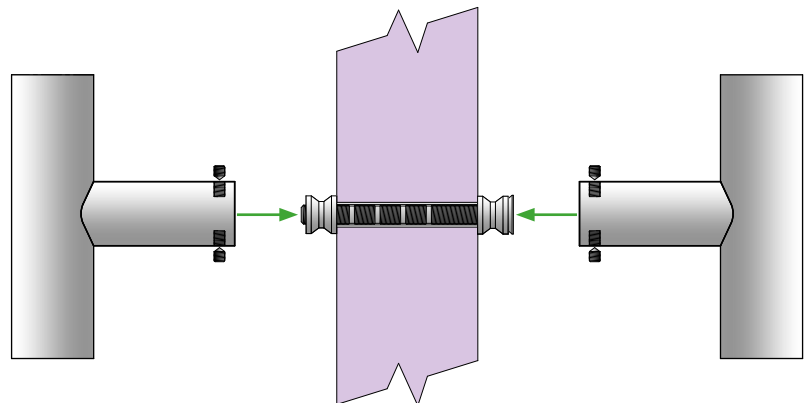
Slide the 8mm fixing bolt through the pre drilled hole in the Rockdoor.



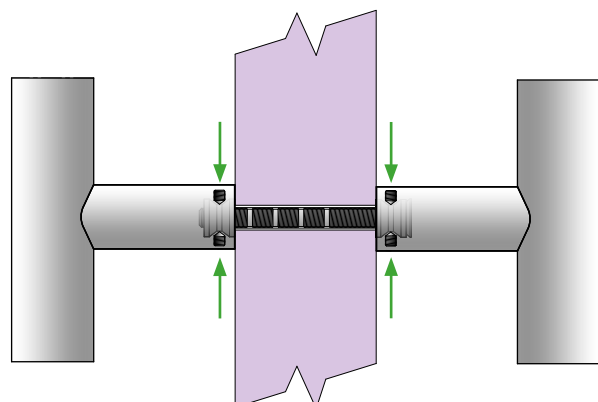
2. Screw the threaded ferrule to the fixing bolt from the outside.



3. Fit the handles in position



4. Tighten all the grub screws to secure.

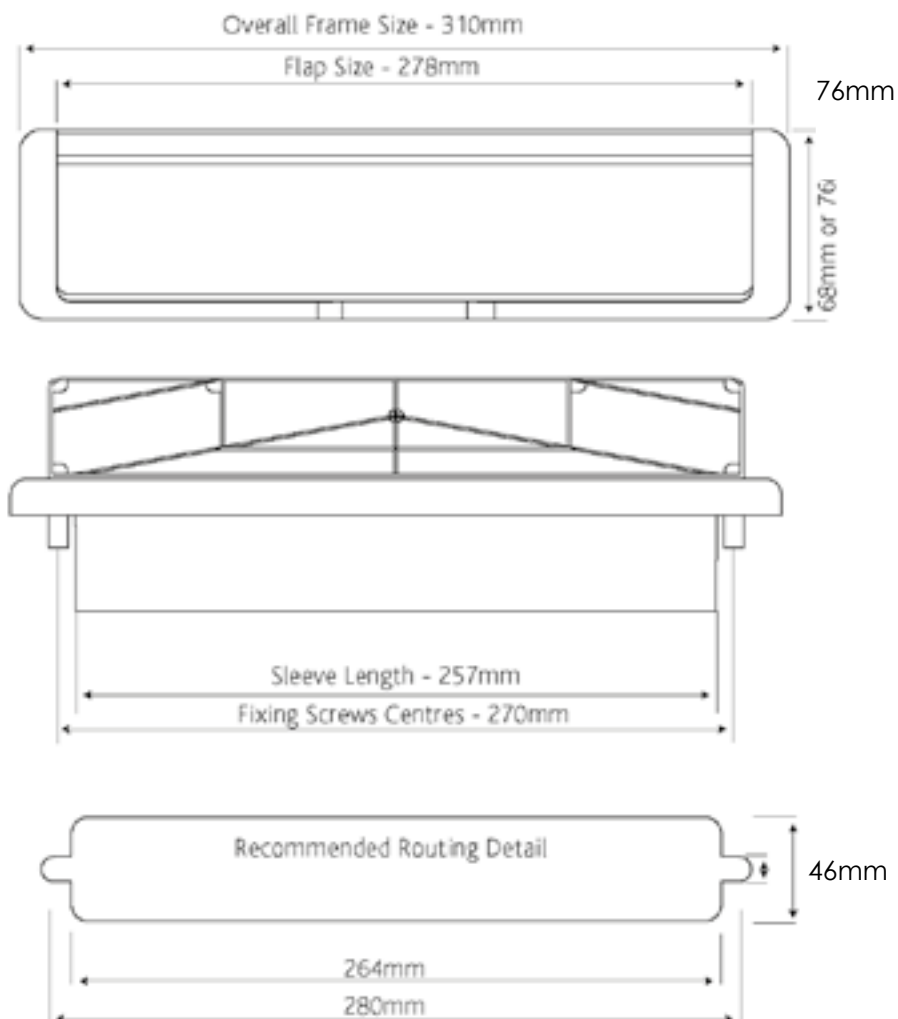


## Standard Letterplate

Meets the requirements of BS EN 1670:2007 Grade 5 (480 hours)

Flap cycle tested to 30,000 cycles Conforms to the requirements of BS EN 13724: 2002

Zinc construction with hardex coating.

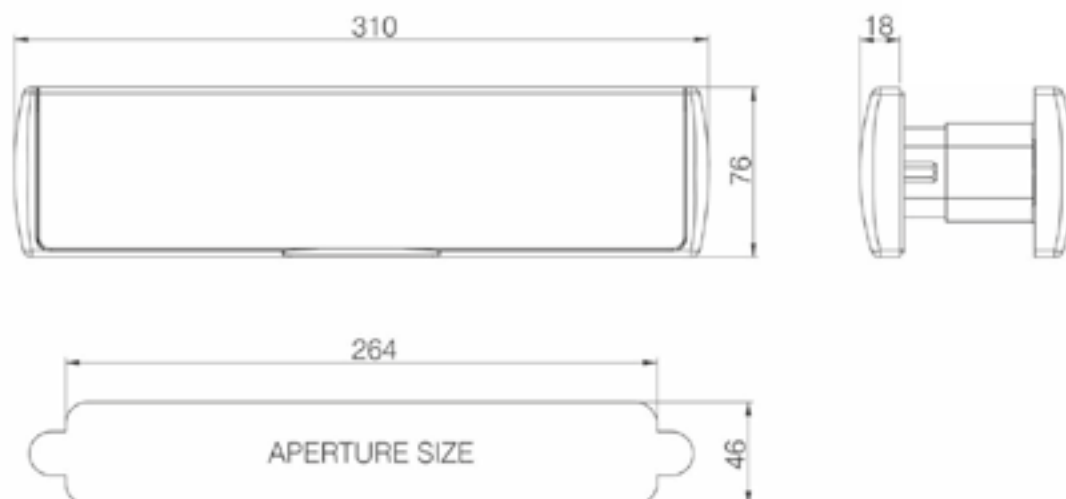


## Stainless Steel Letterplate

Cycle tested to 20,000 cycles

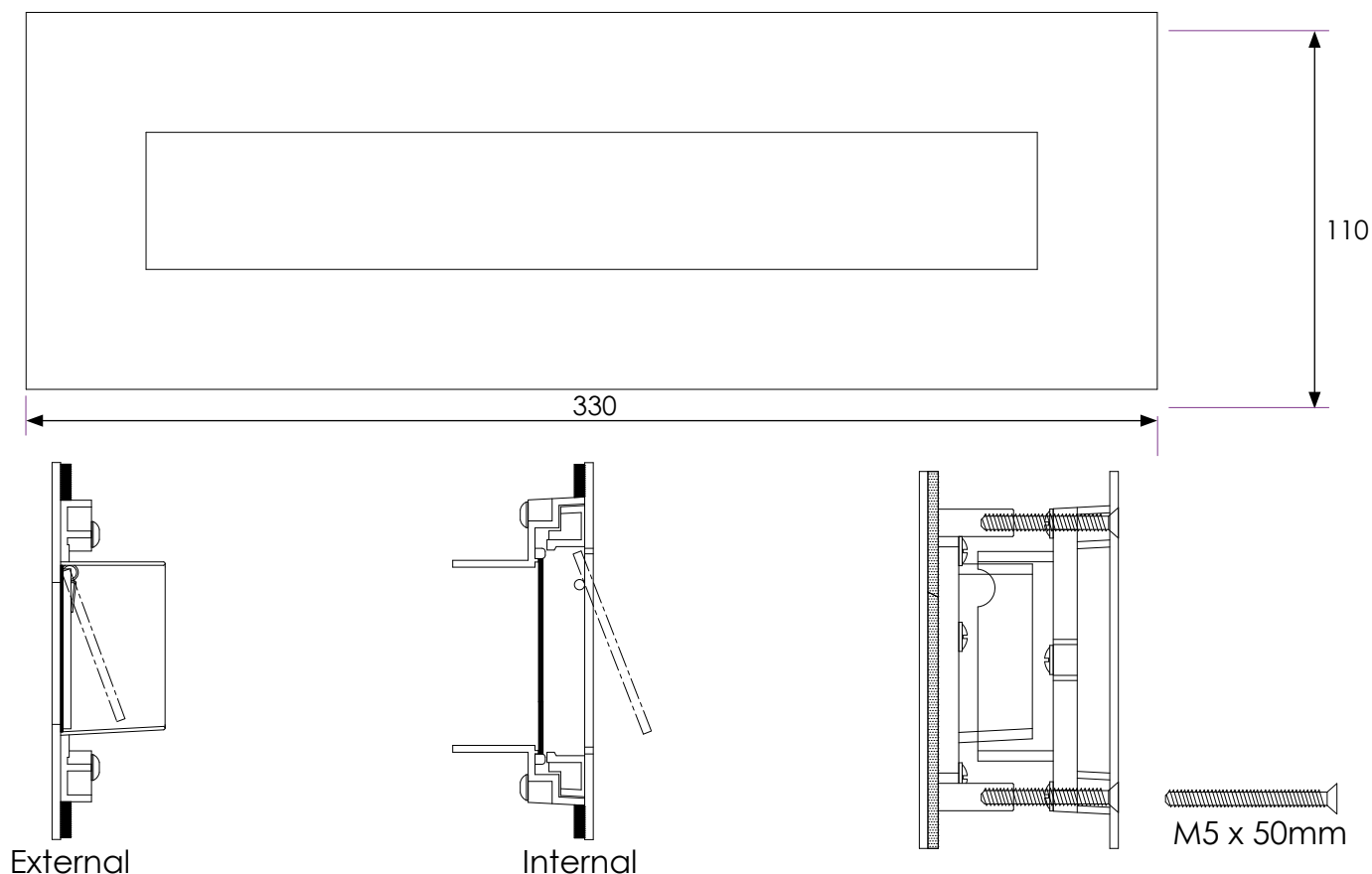
Corrosion tested in excess of 1,000 hours based on BS EN 1670

304 stainless steel construction

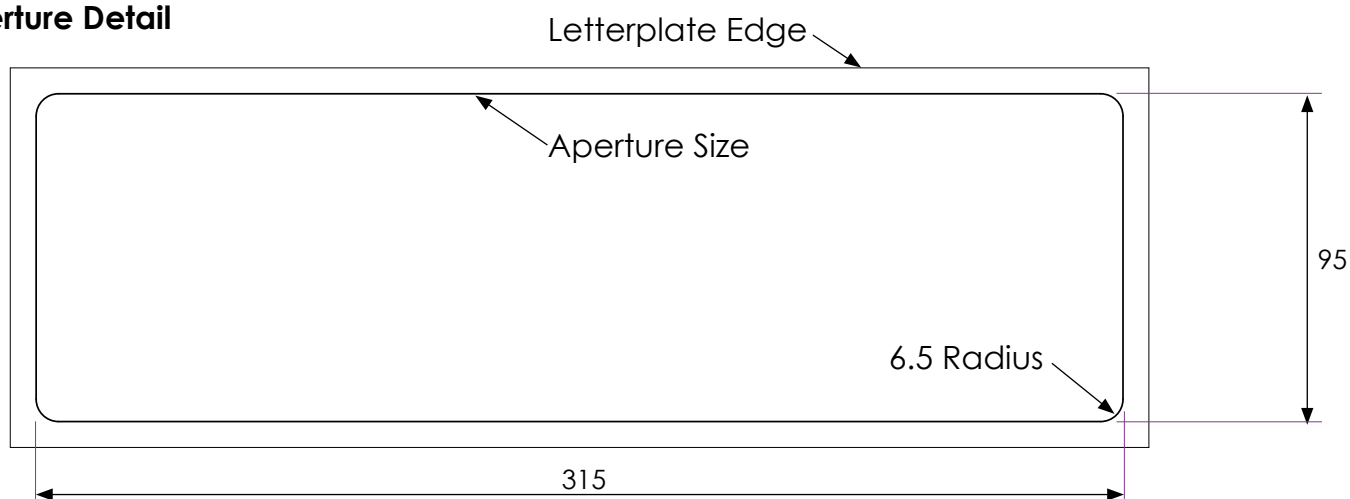


## Stainless Steel Contemporary Letterplate

- Achieved 'Best in Class' BS6375-1 Weather Test results against air, wind and water.  
Weather Test : Air Permeability: Class 4, Water Tightness: Class A9, Wind Resistance: Class 5
- Integral gaskets, brushes and telescopic liner for enhanced weather and draught protection.
- Built-in inner security flap helps prevent 'fishing'.
- Manufactured from 316 Grade Stainless Steel.
- Ideal for use where corrosion levels are high such as coastal environments.



## Aperture Detail



## Fitting in the bottom rail

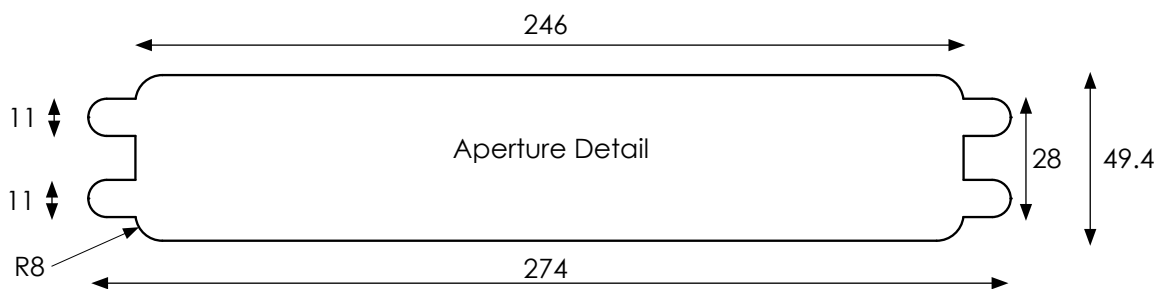
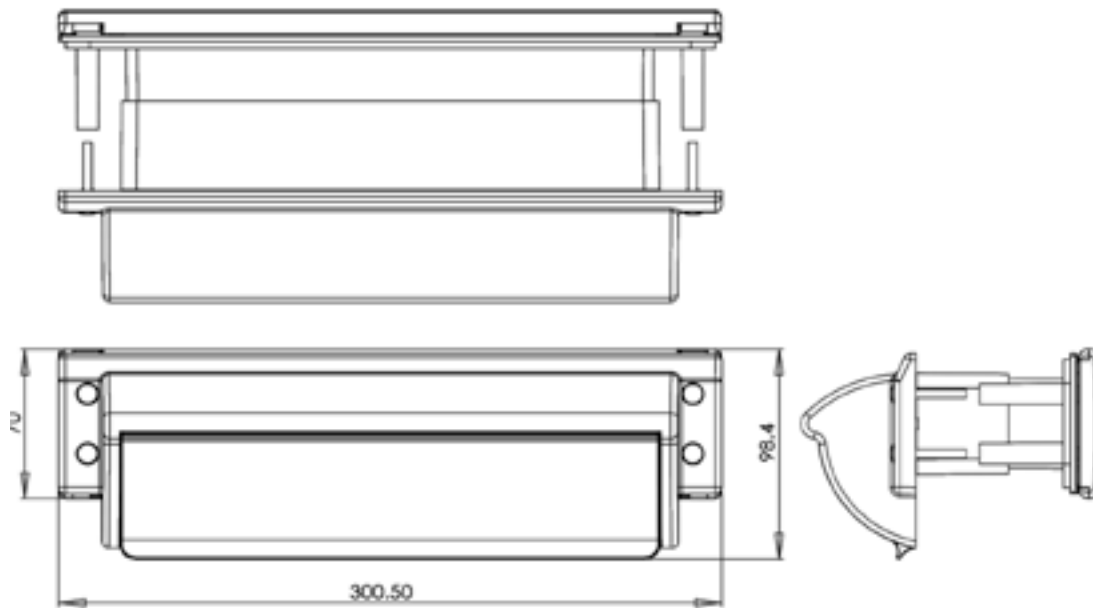
Check online using the portal as it is sash height dependant.

**Not available under the glass on the Georga, the Montana and the Newark.**



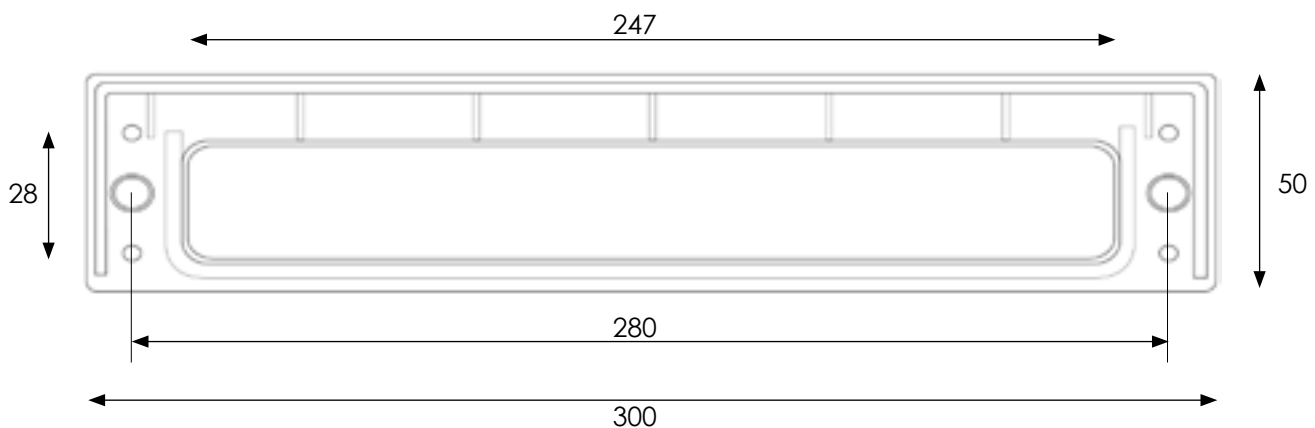
## TS008 Letterplate

Cycle tested to 20,000 cycles  
Corrosion tested in excess of 1,000 hours based on BS EN 1670  
White PVC-U internal  
304 stainless steel construction external  
Concealed hinge mechanism for attack resistance



## Sideframe Letterplate

180 Opening  
Black plastic frame  
Aperture size 247mm x 28mm



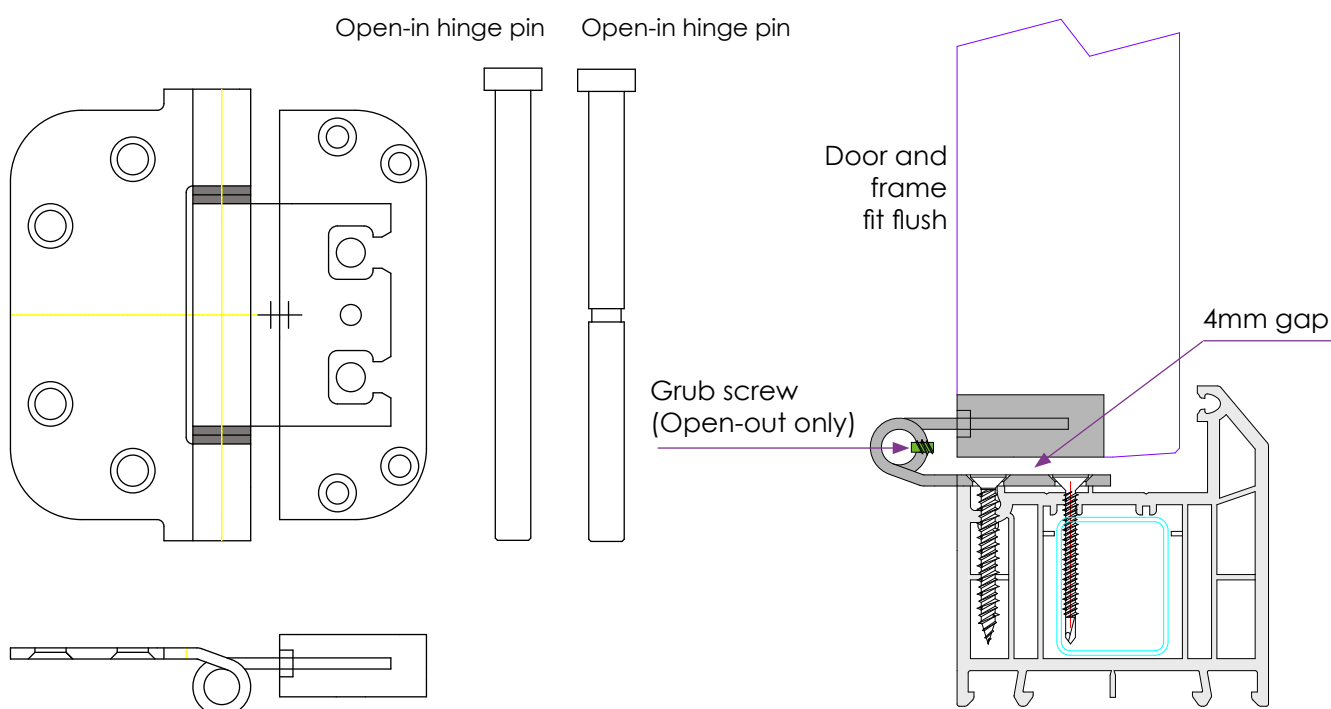
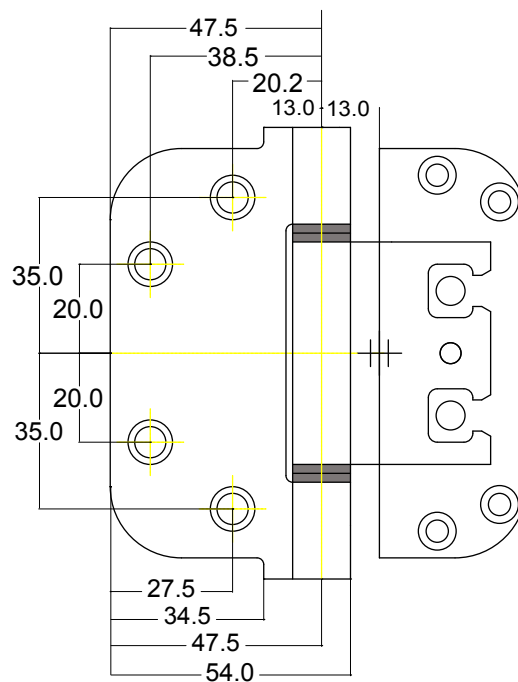
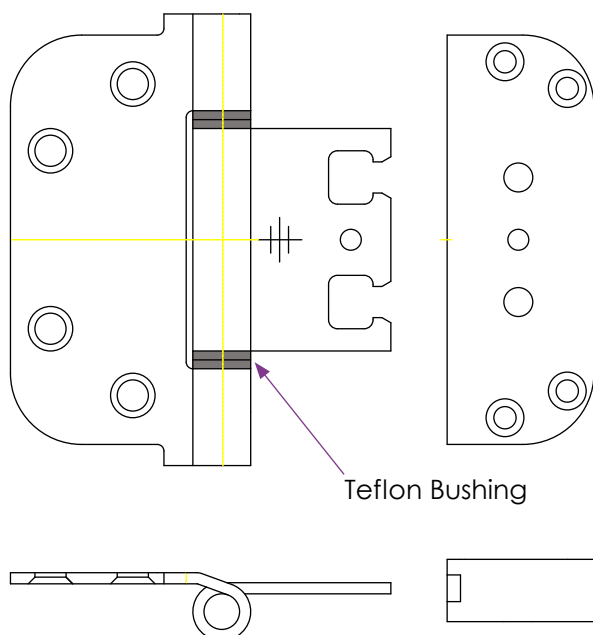
## Rockdoor Standard Hinge

Adjustable using a 4mm allen key.

Up/Down +/-3mm

In/Out +/-2mm

Left/Right +/-2mm



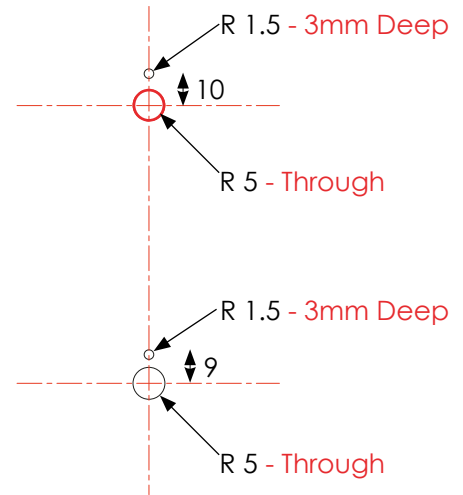
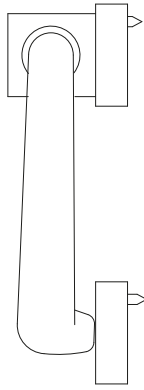
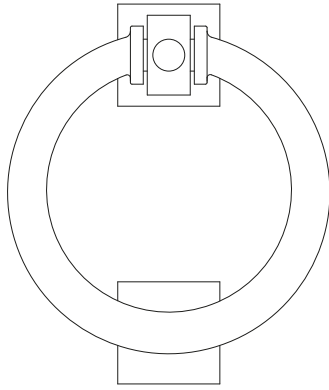
## Open-out Doors

Open-out doors are fitted with concealed grub screws. The grub screws engage into a groove in the hinge pin; this stops the hinge pin from being removed. The grub screws are only accessible when the door is in the open position.

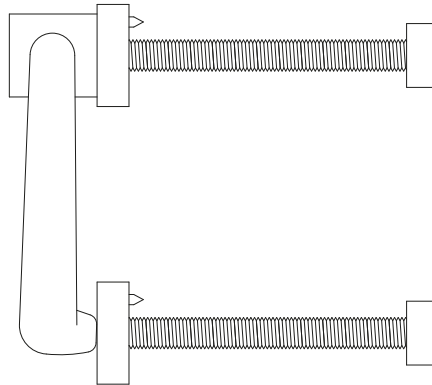


## Bull Ring Knocker

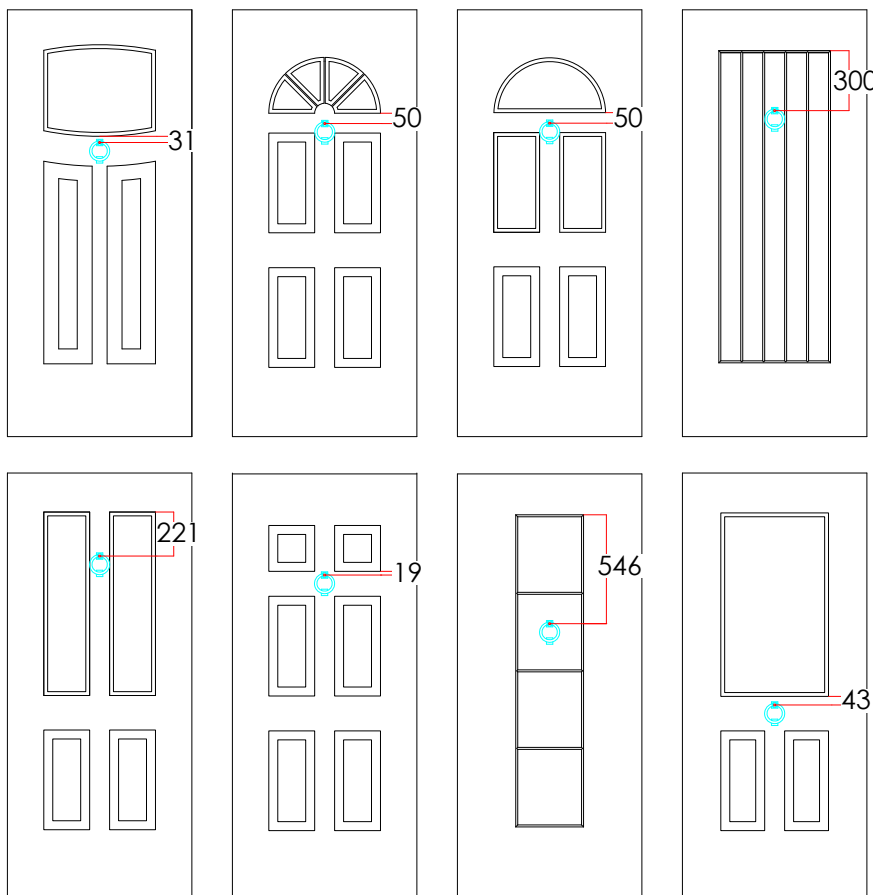
### Stainless Steel Bull Ring Knocker



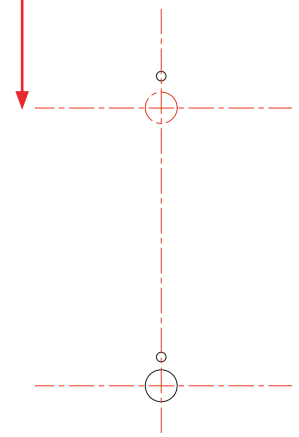
### Bolt through fixing



### Fitting Positions



All measurements are taken from the moulding to the centre line of the top hole.

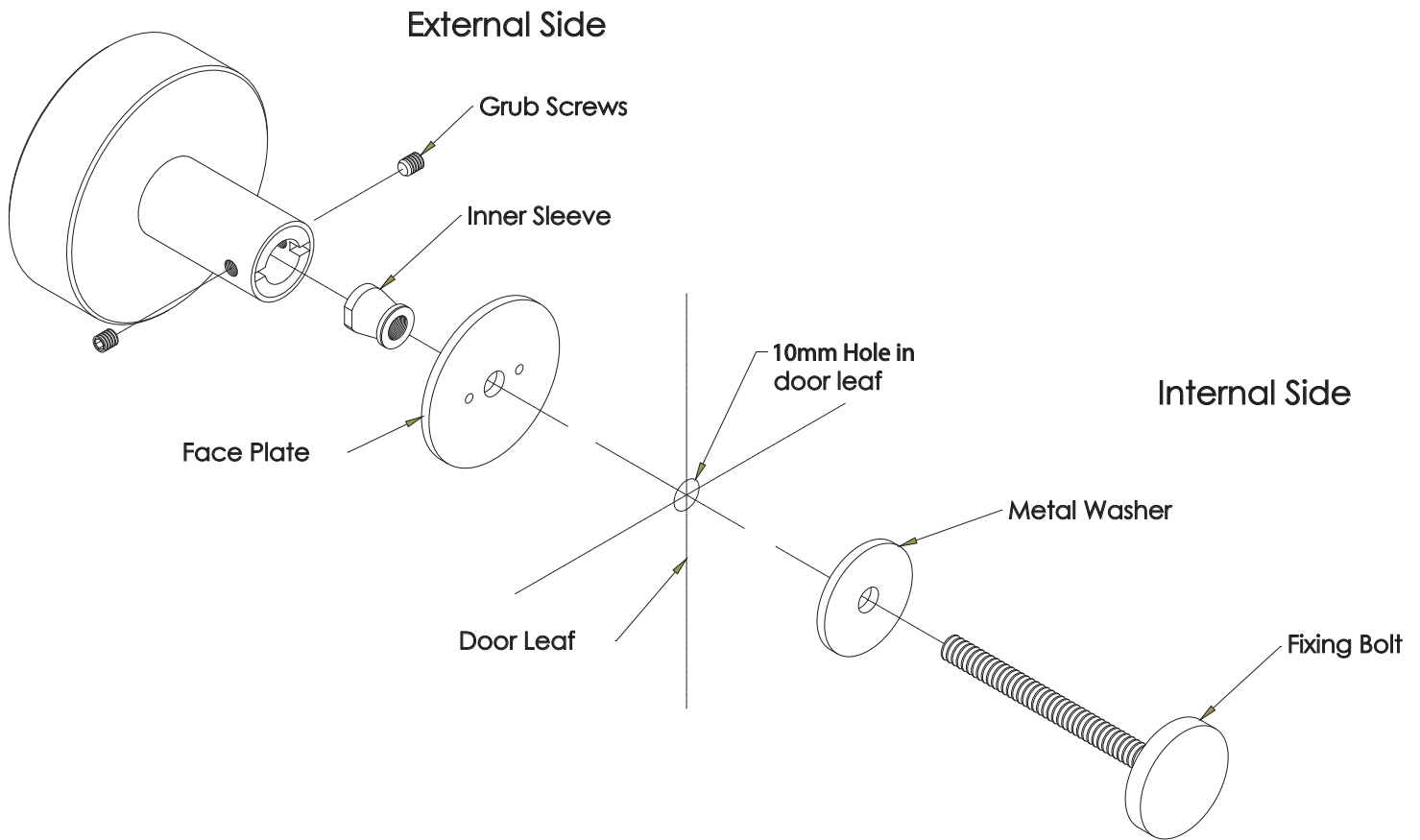




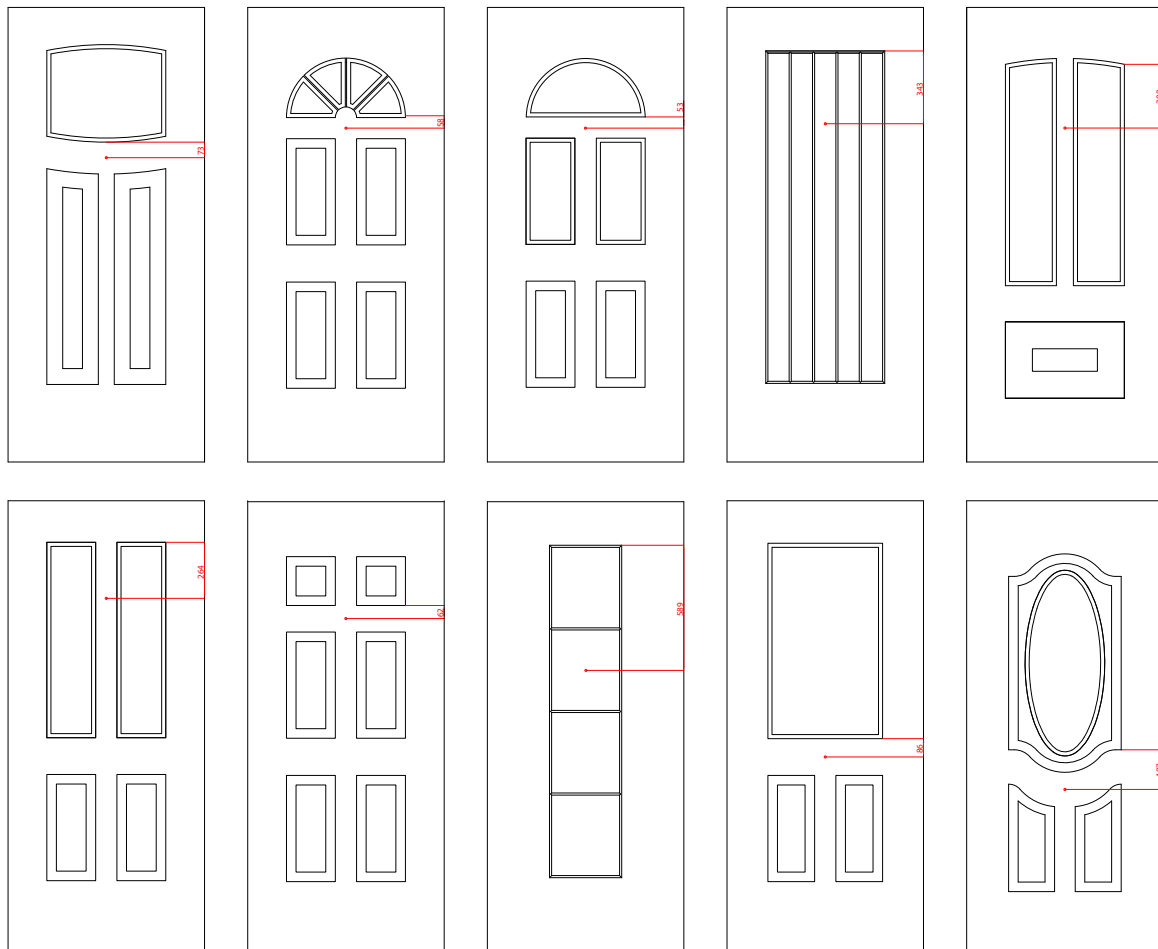


## Round Knob

### Stainless Steel Knob



### Fitting Positions 10mm Diameter Hole

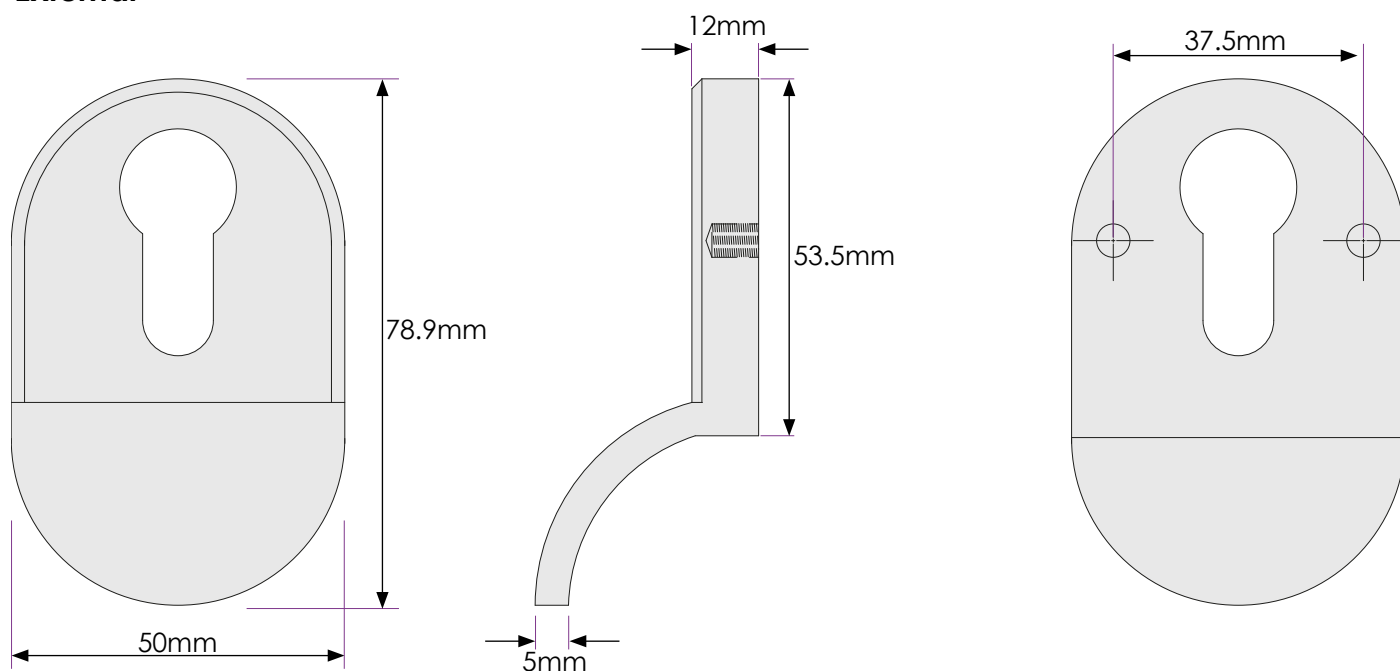




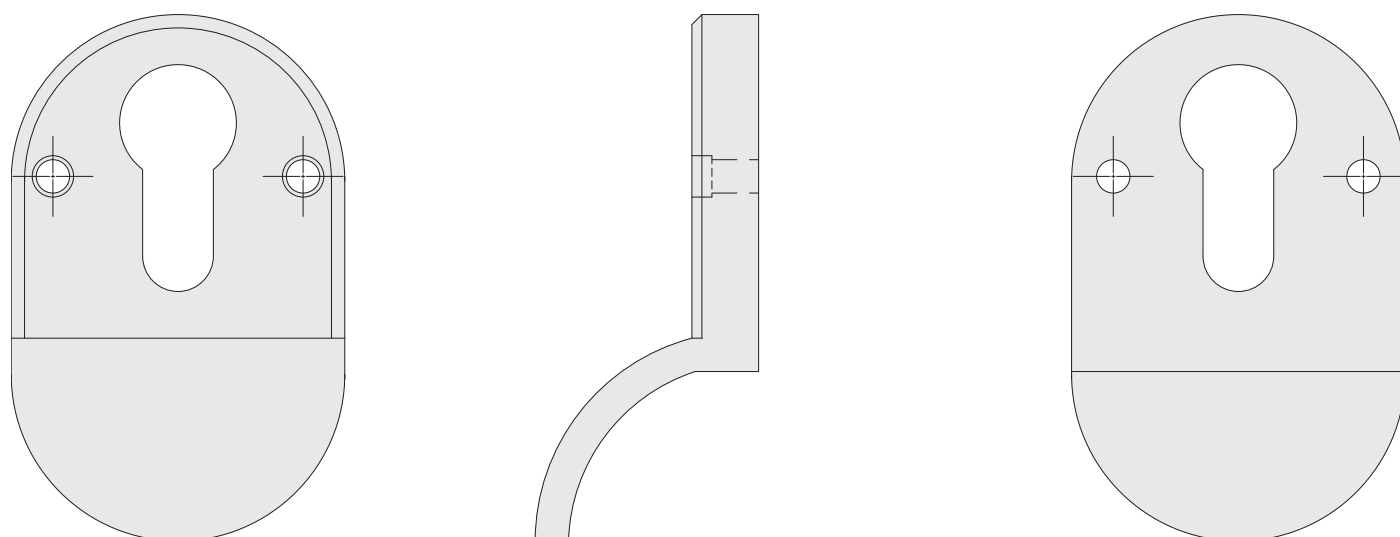
## Door Pull

### Stainless Steel Door Pull

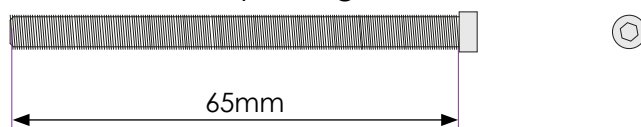
#### External



#### Internal



Hex Socket Cap Fixings x 2





## Cat Flap



**Magnetic Cat Flap** Available in White and Brown

### Magnetic Lock

The magnetic operation requires no batteries the cat simply wears a collar key which is then used to open the locking mechanism of the cat door. Although not 100% secure (no cat flap is) this does help to keep out unwanted strays and other small animals.

### 4-way Locking

The 4-way latch offers the ultimate in flexibility. Set the cat flap to open, closed, in only or out only.



**Manual Cat Flap** Available in White and Brown

### 4-way Locking

The 4-way latch offers the ultimate in flexibility. Set the cat flap to open, closed, in only or out only.

## Door Styles available with a cat flap:

Aspen

Stable spy view

Stable view light

Cottage spy view

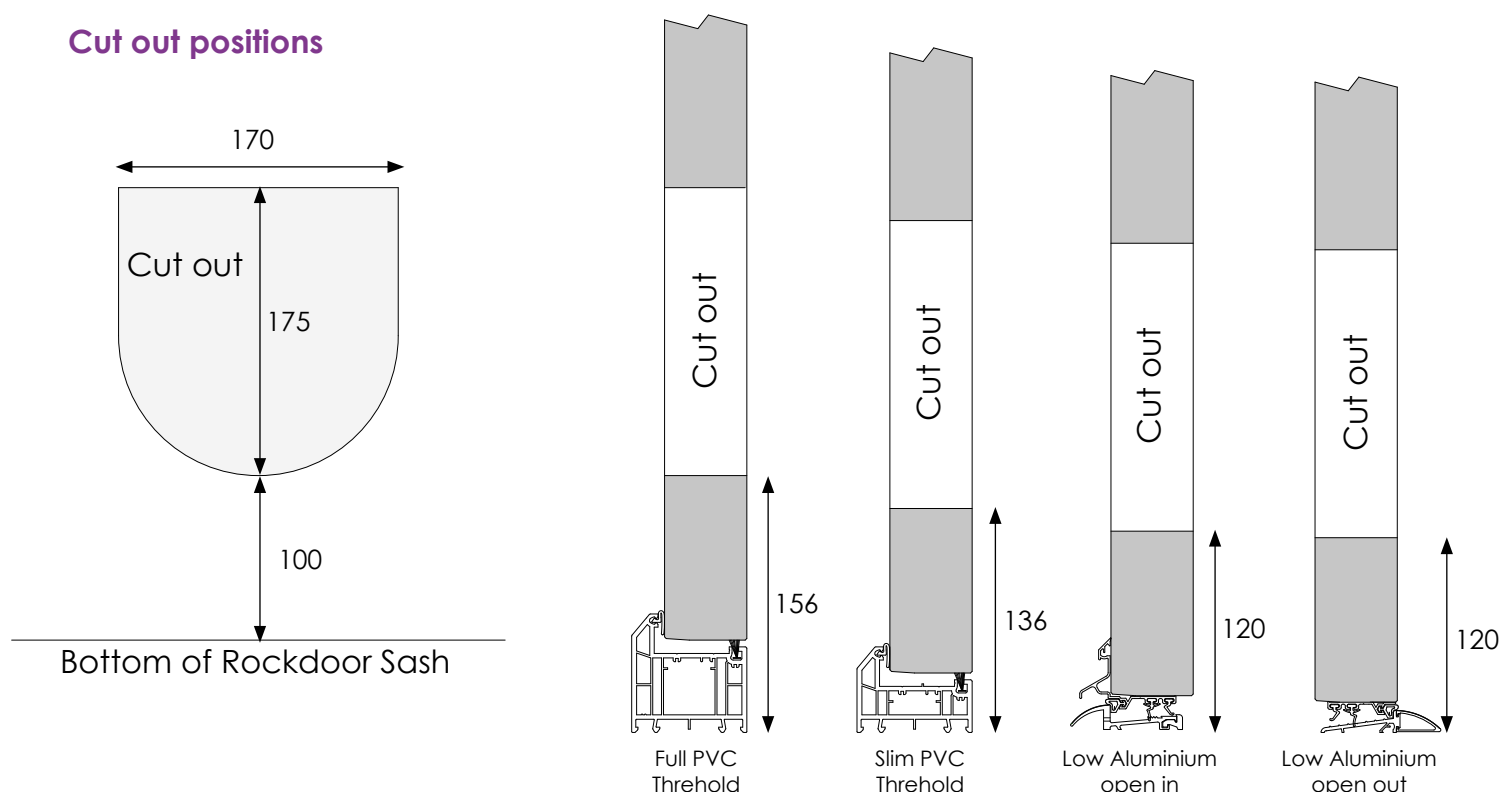
Cottage view light

T & G 5

Indiana

Dakota

## Cut out positions







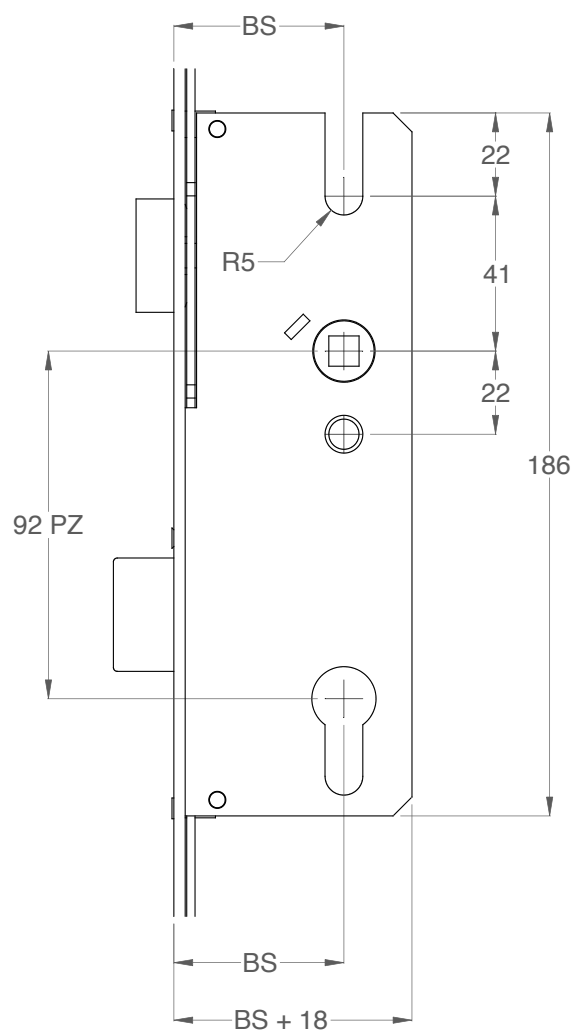
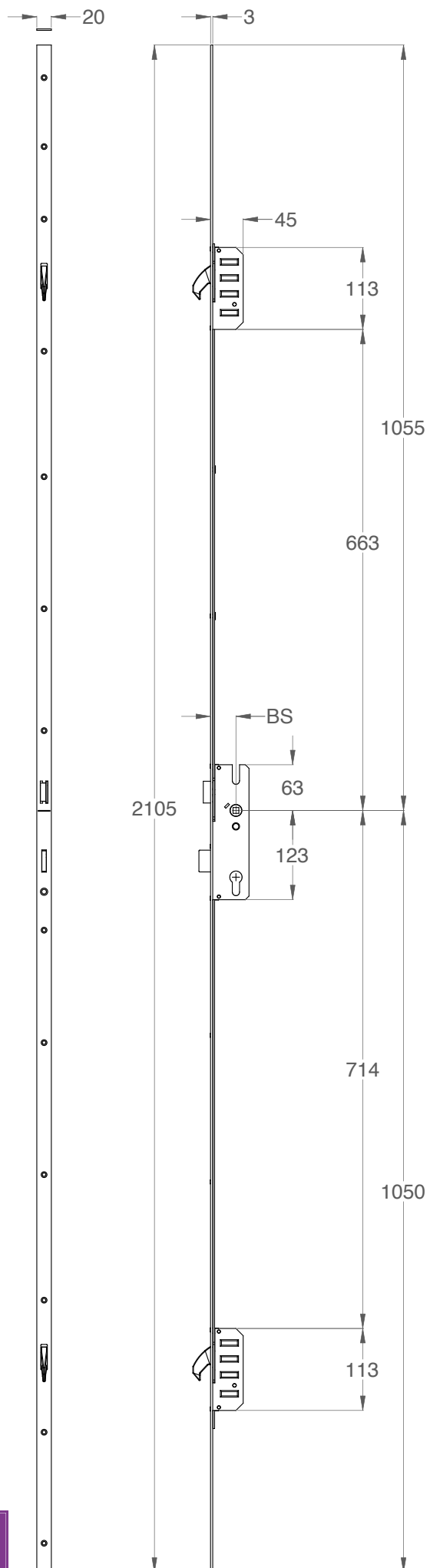
Furniture Colour Options

Polished chrome matches polished stainless.  
Polished gold matches gold stainless.  
Graphite matches brushed stainless.  
Midnight black, black stainless  
and wrought iron are all slightly  
different in colour finish.

	Polished Chrome	Graphite	Polished Gold	Midnight Black	White	Wrought Iron	Brushed Stainless	Polished Stainless	Black Stainless	Gold Stainless
Lever Handle	✓	✓	✓	✓	✓		✓			
Pad Handle	✓	✓	✓	✓	✓					
D Handle	✓	✓	✓							
Twist Lever Handle					✓					
Arched Lever Handle					✓					
European Rose Handle						✓				
Curved Rose Handle						✓				
Finger Pull						✓	✓	✓	✓	
Escutcheon	✓	✓	✓	✓		✓		✓		
Standard Letterplate	✓	✓	✓	✓	✓					
Stainless Letterplate						✓				
TS008 Letterplate (Matching)	✓	✓	✓	✓						
Sideframe Letterplate (Black outer)	✓	✓	✓	✓	✓					
Contemporary Letterplate						✓	✓	✓	✓	
Victorian Centre Knob	✓	✓	✓							
Urn Knocker	✓	✓	✓	✓						
Spy View	✓		✓							
Architectural Knocker	✓	✓	✓	✓						
Numerals	✓	✓	✓	✓						
Contemporary Numerals						✓				
Bull Ring Knocker						✓	✓	✓	✓	
Square Centre Knob						✓				
Round Bar Handle 600 900 1200						✓				
Offset Round Bar Handle 1200						✓				
Square Bar Handle 1200						✓				
Square Bar Handle 900						✓		✓		
Offset Square Bar Handle 1200						✓				
Mitred Bar Handle 900						✓				
Yale Latch	✓	✓	✓							
Yale Finger Pull	✓	✓	✓							
Slide Bolt	✓	✓	✓							
Door Chain	✓		✓							
Hinges		✓	✓	✓	✓					
Cylinder		✓	✓							
Cylinder with thumbturn		✓	✓							

Rockdoor Styles

Construction Details

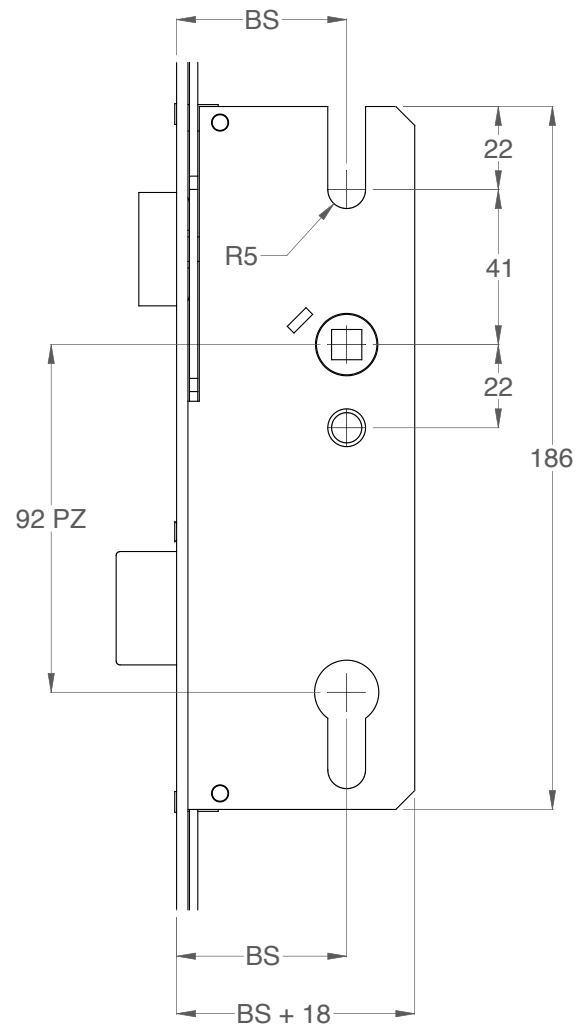
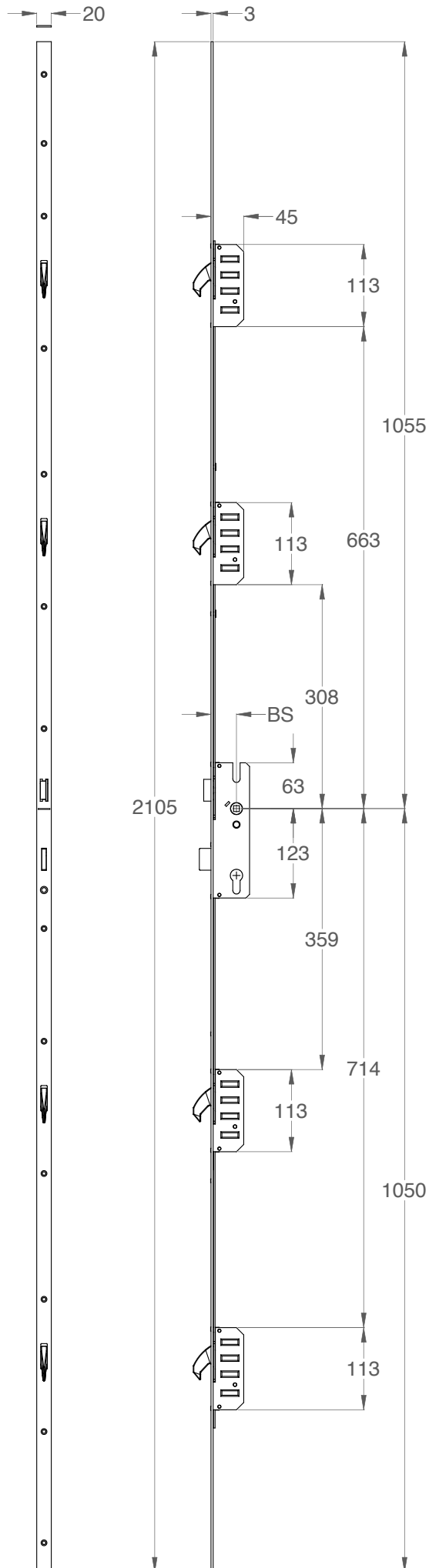
Drawing Description:

Dimensional Details Of Winkhaus'  
Standard STV Two Hook  
Residential Multi-point Door-lock  
System on a F20 rail.



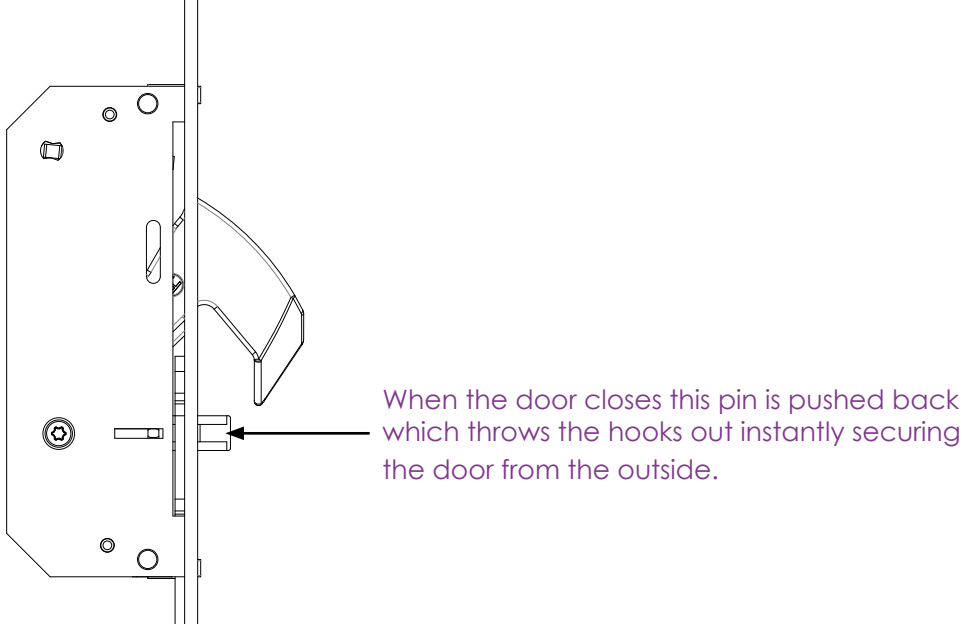
## STV-FG 2060 M4

## 4 Hook Lock



### Drawing Description:

Dimensional Details Of Winkhaus' Standard STV Four Hook Residential Multi-point Door-lock System on a F20 rail.



## AV2 with Lever/ Fixed D Handle

### Locking from the inside

- Closing the door automatically throws the top and bottom hooks making the door instantly weathered and secure from the outside.
- The handle can still be operated from the inside for instant exit.
- Insert the key and rotate one revolution to deadlock the door. This throws the central deadbolt and blocks the handle from operating. The door is now fully weathered and secure.

### Unlocking from the inside

- Insert the key and rotate one revolution. This retracts the central deadbolt and allows the handle to be operated. The door remains weathered and secure from the outside.
- Depress the handle to retract the top and bottom hooks and open the door.

### Locking from the outside

- Closing the door automatically throws the top and bottom hooks making the door instantly weathered and secure.
- Insert the key and rotate one revolution to deadlock the door. This throws the central deadbolt and blocks the internal handle from operating. The door is now fully weathered and secure.

### Unlocking from the outside

- Insert the key and rotate one revolution. This retracts the deadbolt.
- Turn the key a further 45 degrees to retract the top and bottom hooks and open the door.



### Instant Lock Heritage Plus

Cylinder height centre is 1395mm from the bottom of the door sash.

The lock mechanism has 2 hooks, a central latch and a high-level cylinder position.

This is fitted with either a finger pull, or an escutcheon and a thumbturn internally.

The magnetic triggering of the automatic locking reduces stress marks on the door frame and dampens the closing noise of the automatic locking system.

The magnetic trigger and hook design also improves the reliability of the product, as it can work with slightly larger tolerances which can accommodate any slight door/frame movement over time.

### Instant Locking

The Heritage plus system is an instant multi-point locking system with independently acting hooks.

The action of closing the door fully secures the door. There is no further action needed to lock the door.

To open the door the hooks and latch are retracted manually using a key or thumbturn, you are only required to turn a quarter of a turn.

**Magnetic Switch Latch.** (Different to standard switch latch)

#### UP position

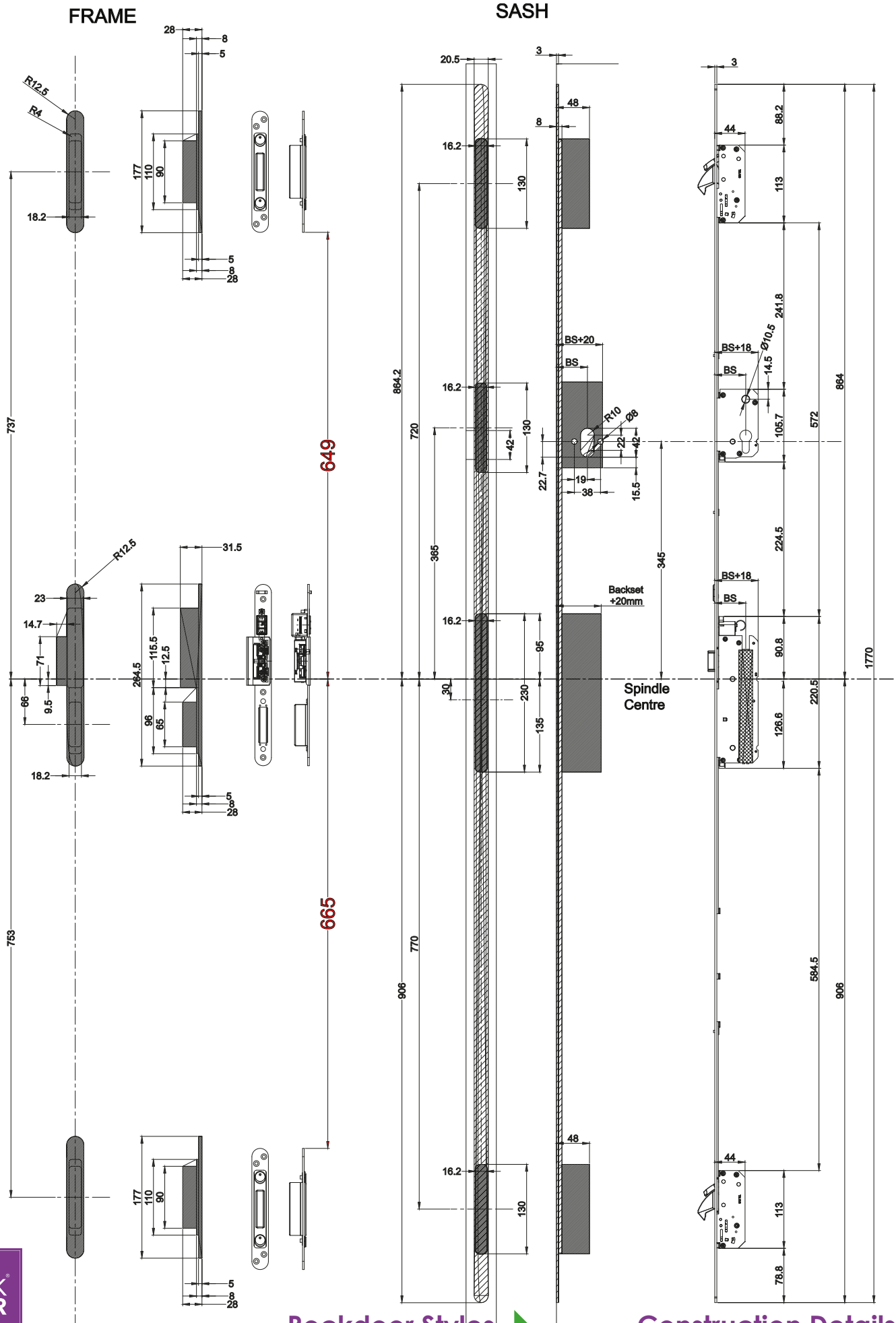
When the switch latch is in the **UP** position, the door instantly locks upon closing. A key is required to regain entry to the property. The door can be opened internally with the thumbturn.

#### DOWN position

When the Switch Latch is in the **DOWN** position, no key is required allowing you to regain entry to the property and the door can open or close freely.

The door cannot be locked with a key or thumb-turn when the switch latch is in the down position. To lock the door move the switch latch into the up position and then close the door to lock.

## Routing details for Instant Lock Heritage plus



## Up Position

When the Switch Latch is in the **UP** position a key is required to gain entry to the property. Don't get caught out and **lock yourself out**.

*For total security, the key or thumbturn still needs fully engaging to ensure the hook locks are secured in place.*



## Down Position

When the Switch Latch is in the **DOWN** position no key is required allowing you to gain entry to the property and the door can **open or close freely**.

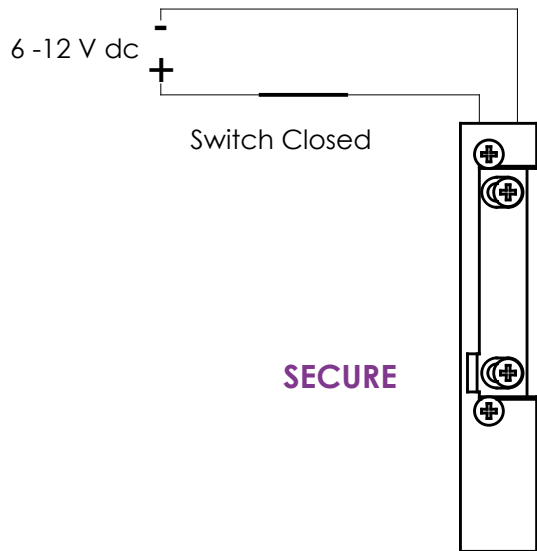
*For total security, the key or thumbturn still needs fully engaging to ensure the hook locks are secured in place.*



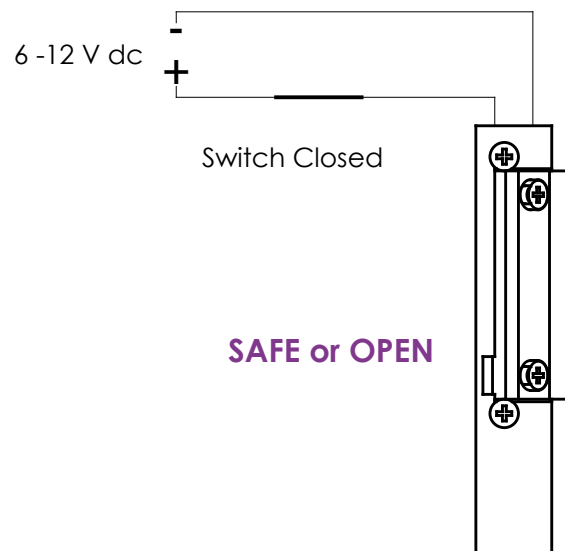
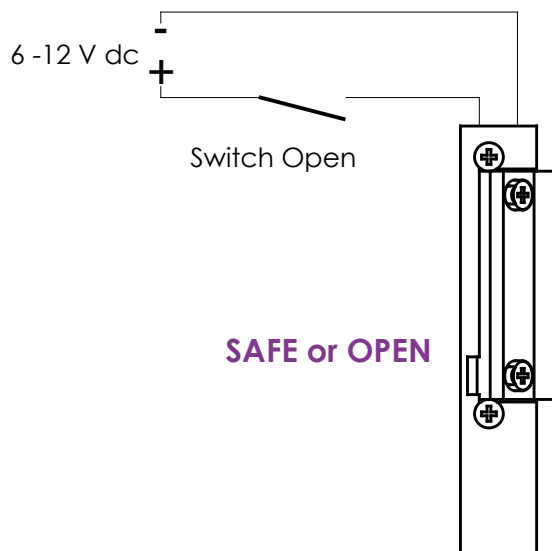
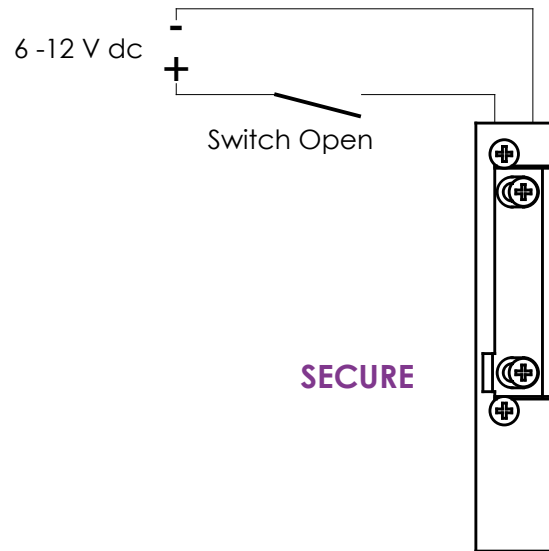
Unlike the magnetic switch latch fitted to the Heritage Plus lock the door can be locked in the down position.

## Electric Latch Release

Fail **SAFE** Electric Latch Release  
(no power)



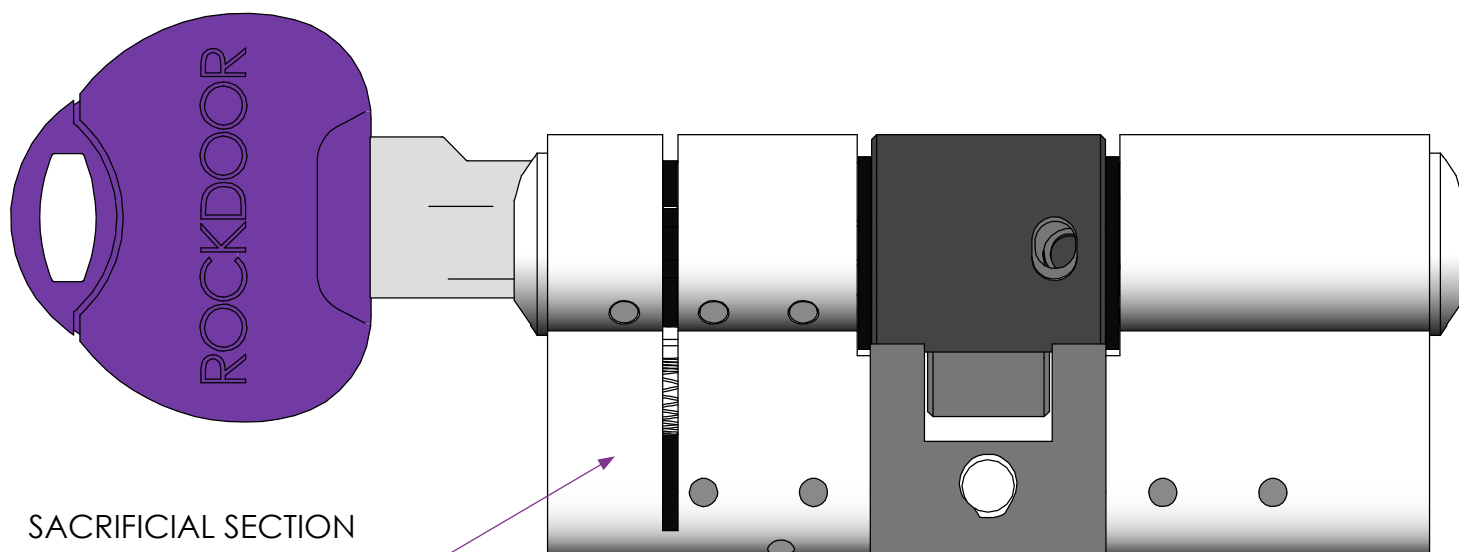
Fail **SECURE** Electric Latch Release  
(no power)



### Technical Details (for Both Options)

Handing	Universal
potential	12 V DC
Adjustable latch (FF, FaFix®)	Yes
Fail-unlocked	Yes
Rated operating voltage tolerance range	± 1 V
Rated resistance	60 Ohm
Current consumption DC (50% Residual ripple)	225 mA
Current consumption DC (stabilised)	200 mA
Break-in resistance	3000 N
Height	90 mm
Width	16 mm
Operating temperature range	-15 °C to +40 °C
Max. keeper pre-load DC (50% residual ripple)	10 N
Max. latch preload DC (stabilised)	10 N
Depth	28 mm
Material housing	Zinc die-cast
Latch material	Zinc die-cast
Material surface-mounted attachment	MESSING

### 3 Star Cylinder



The cylinder must be installed with the sacrificial section to the external of the property.

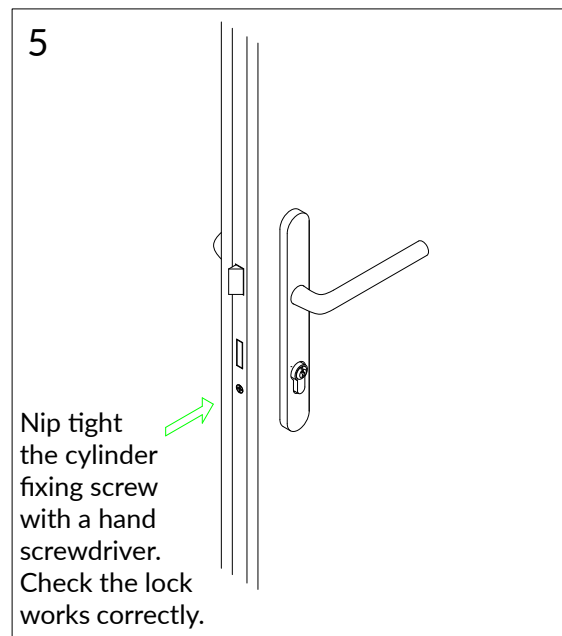
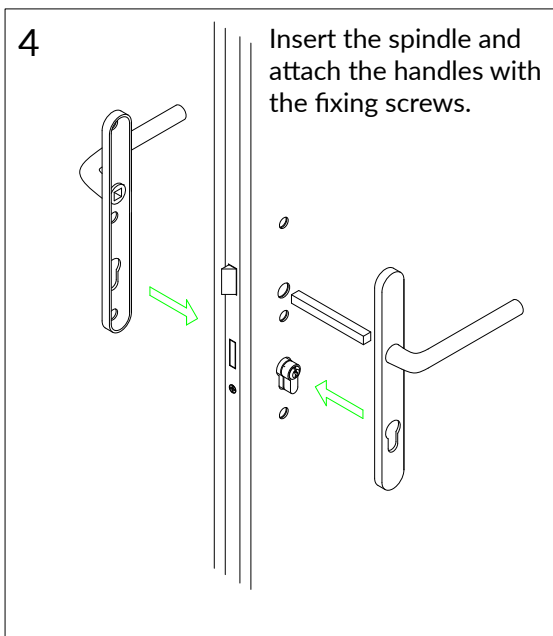
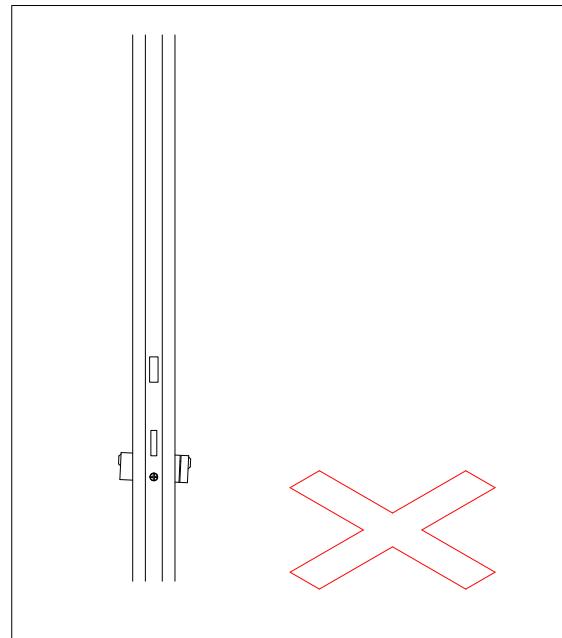
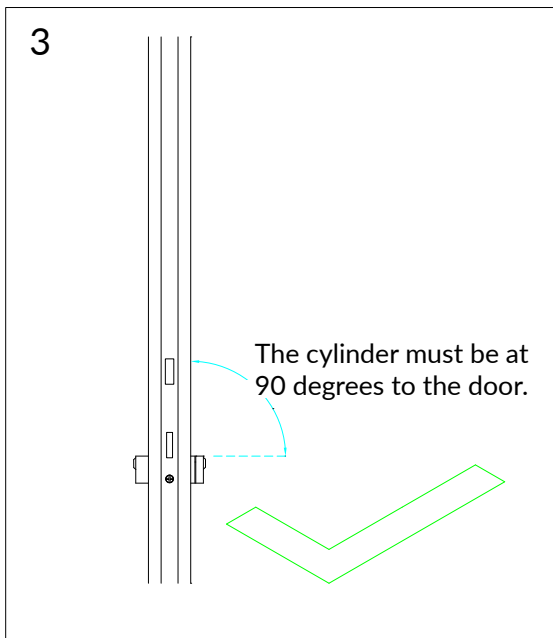
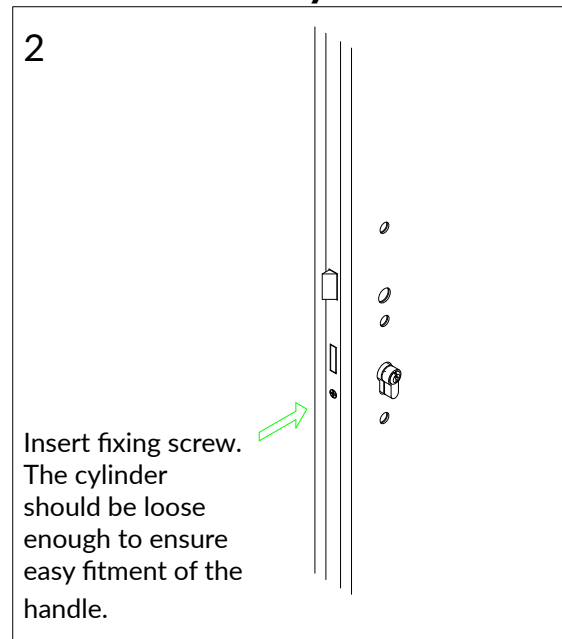
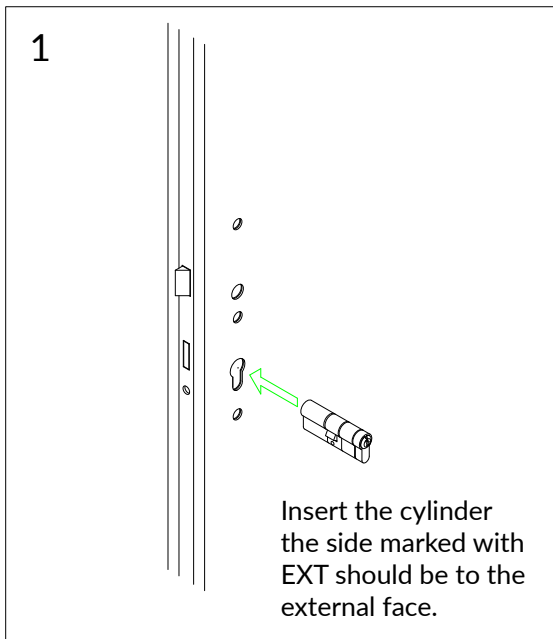
#### FEATURES:

- SS312 Solid Secure Diamond Grade
- 3 Star British Kitemark - TS007:2014 (KM 586153)
- Secured by Design Accredited (Police preferred specification)
- Patented Snap Secure Technology
- Pick, Drill & Bump Resistant
- 6 Trap Pins for advance pick resistance
- 10 Anti-drill pins
- Three Rockdoor branded keys per cylinder
- Keyed alike key/key pairs are available ex stock
- Size 40mm/40mm

The key must be removed from the cylinder for the full security features to be enabled.



## Cylinder Installation



## Emergency Exit Door

Rockdoors emergency exit door is customised with a hardware solution that allows the door to be opened quickly and easily in a 'panic' situation. This includes typical emergency exits used in public places such as shopping centres, schools, cinemas and commercial use buildings.



### External Operation

**Lock:** To lock the door from the outside, the key provided must be used to wind out the bolts into position. If the door is locked from the inside the external handle will not open the door.

**Unlock:** To open the door from the outside, use a key to unwind the bolts and then open the door using the external lever handle.



### Internal Operation

**Lock:** To lock the door from the inside, use the thumbturn to wind out the bolts.

**Unlock:** To open the door from the inside, push firmly down on the push bar which will instantly retract the locks and allow the door to open freely. This will open the door regardless of whether the door has been left in the locked or unlocked position.

## High Security, Quick Escape

Our emergency exit door ensures buildings can remain extremely secure, whilst providing a quick and safe method of exit to members of the public.

## When to use Emergency Exit Doors

In accordance with EN1125, Rockdoor emergency exit doors should be used as a single door set that members of the public will have access to. The high concentration of people makes 'panic' situations more likely in public buildings. The occupants will not necessarily be familiar with the locations of the emergency exits, or how to open them. They therefore need to be able to open the doors intuitively using the horizontal push bar.

Rockdoor emergency exit doors, in accordance with EN 1125, are always outward-opening doors. All emergency exit doors must bear the CE mark.

## Door Specification:

### 1. Door styles

All door styles except stable doors and double doors.

### 2. Glazing

P1A compliant glass (6.8mm Laminated)

### 3. Outer frame

72mm Rehau Outer frame or 52mm Rehau Outer frame

### 4. Reinforcing

Security Mesh

### 5. Handle

Standard lever/lever handle or Bar Handle

### 6. Hinges

Standard 3D Rockdoor hinge

### 7. Lock

Winkhaus 2 hook lock

### 8. Cylinder

Standard Rockdoor 3 star cylinder

### 9. Keeps

Standard Rockdoor full length keeps

### 10. Threshold

Aluminium low threshold

### 11. Letterplate

Must be TS008 compliant



## Methods of test.

### 1. Operating Forces

The operating forces acting on the sample were determined by the methods given in BS EN 12046-2:2000.

### 2. Air Permeability

The air permeability of the sample was determined by the method given in BS 6375-1:2015.

### 3. Watertightness

The watertightness of the sample was determined by the method given in BS 6375-1:2015.

### 4. Wind Resistance

The wind resistance of the samples was determined by the methods (P1 and P2) given in BS 6375-1:2015.

### 5. Repeat Tests

After testing for resistance to wind loading (P1 and P2) the air permeability test was repeated.

### 6. Wind Resistance

The wind resistance of the samples was determined by the method (P3) given in BS 6375-1:2015.

### 7. Resistance to Vertical Loads

The resistance to vertical loads test was carried out using the method given in BS EN 947:1999.

### 8. Resistance to Static Torsion

The resistance to static torsion test was carried out using the method given in BS EN 948:1999.

### 9. Soft and Heavy Body Impact

The resistance to soft and heavy body impact was carried out using the method given in BS EN 949:1999.

### 10. Hard Body Impact

The resistance to hard body impact was carried out using the method given in BS EN 950:1999.

## Results of test.

### 1. Air Permeability

The test sample met the requirements of the Specification, in respect of Clause 6, for Test Pressure **Class 4**.

### 2. Watertightness

The test sample met the requirements of the Specification, in respect of Clause 7, for Test Pressure **Class 3A**

### 3. Wind Resistance

The test sample met the requirements of the Specification, in respect of BS6375-2:2009, for Exposure Category **C3 (1200Pa)**.

### 4. Operational Strength

The test sample **met the requirements** of the Specification in respect of BS6375-2:2009.

### 5. Basic Security

The test sample **met the requirements** of the Specification in respect of BS6375-3:2009.

Secured by Design (SBD) is the official police security initiative that works to improve the security of buildings and their immediate surroundings to provide safe places to live.

For Rockdoor to meet the specification they should be fitted with:

- 1 P1A Compliant glass (6.8mm laminated)**
- 2 Security mesh.**
- 3 Letterplates must conform to requirements of TS008.**

For solid door styles with no glass, please refer to the Clear Backing glass section for the doors energy rating

### Door Style

Door Style	CLEAR BACKING GLASS				OBSCURE BACKING GLASS			
	72mm threshold	52mm threshold	Ali threshold open out	Ali threshold open in	72mm threshold	52mm threshold	Ali threshold open out	Ali threshold open in
Aspen	A	A	A	A	A	A	A	A
Astoria	A	A	A	A	A	A	A	A
Arcacia	A	A	A	A	A	A	A	A
Campus	A	A	A	A	A	A	A	A
Carolina	A	A	A	A	A	A	A	A
Classic	B	B	B	B	B	B	B	B
Colonial	A	A	A	A				
Cottage spy view	A	A	A	A	A	A	A	A
Cottage view light	A	A	A	A	A	A	A	A
Dakota	A	A	A	A				
Diamond	A	A	A	A	A	A	A	A
Dune Retreat	A	A	A	A	A	A	A	A
Dune Vision	B	B	B	B	B	B	B	B
English cottage	A	A	A	A	A	A	A	A
Georgia	B	B	B	B	B	B	B	B
Illinois	B	B	B	B	B	B	B	B
Indiana	A	A	A	A				
Jacobean	B	B	B	B	B	B	B	B
Kentucky	B	B	B	B	B	B	B	B
Manhattan	A	A	A	A	A	A	A	A
Montana	A	A	A	A	A	A	A	A
Newark	A	A	A	A	A	A	A	A
Portland	B	B	B	B	B	B	B	B
Philadelphia	A	A	A	A	A	A	A	A
Regency	A	A	A	A	A	A	A	A
Stable diamond view	B	B	B	B	B	B	B	B
Stable spy view	B	B	B	B	B	B	B	B
Stable view light	B	B	B	B	B	B	B	B
Tennessee	B	B	B	B	B	B	B	B
Tongue and groove 5	A	A	A	A	A	A	A	A
Vermont	A	A	A	A	A	A	A	A
Virginia	B	B	B	B	B	B	B	B
Vogue	B	B	B	B	B	B	B	B
Warwick	A	A	A	A	A	A	A	A
Windsor	B	B	B	B	B	B	B	B

## WHAT CREATES CONDENSATION?

### Water vapour content in the air

This is produced by normal living activities such as washing, cooking, bathing, etc., and can be controlled using extractor fans, cowlings, and ventilation at appropriate places.

### Inside room temperature

This can be controlled to some extent, thereby maintaining a higher surface temperature of items in the room, and by increasing the air temperature to enable it to hold more water vapour without condensing.

### Coldest surface in the home

Modern aids to home comfort have created rooms which are warmer, but which often have less ventilation and fewer air changes. The result is that the water vapour produced by normal living activities, is no longer able to escape up the chimney or through door jambs, window joints and other outlets.

In certain circumstances, all these aids to comfort combine to create ideal conditions for the formation of condensation, which could form on the coldest surfaces within the home.

### What is the coldest part of a Rockdoor.

Thermally efficient PVC-U skins, a 50mm thick sash, S-Glaze, performance gaskets, Multi chamber PVC-U door frame and high-density polyurethane foam work together to achieve industry leading thermal performance ratings.

However, there are areas on a Rockdoor that when the outside temperatures are low can be colder than other areas, especially if the internal temperatures are also low.

These areas are the locking cylinder, the hinges, Aluminium thresholds, and the area where the aluminium reinforcement is inside the door (around the perimeter).

If the conditions for condensation are present, it can start to appear on the above parts of the door.

## Examples of where water vapour comes from

**Breathing:** Two sleeping adults produce approximately 1 litre of moisture in 8 hours, which is absorbed as water vapour into the atmosphere.

**Cooking:** Steam clouds can be seen near saucepans and kettles, and then seem to disappear. The clouds have been absorbed into the atmosphere. The heat source itself may be a source of water vapour, e.g. an average gas cooker could produce approximately 1 litre of moisture per hour.

**Washing up:** Vapour clouds given off by hot water are rapidly absorbed into the atmosphere. Bathing, laundry, and wet outer clothing: these are often major sources of water vapour in the home.

**Heaters:** A flueless gas heater can produce up to 350cc of moisture per hour. Paraffin heaters produce 4 litres of moisture for every 3.5 litres of fuel burned.

**Indoor plants:** A frequently unrecognised but nevertheless significant source of water vapour.

**New property/building work:** The bricks, timber, concrete, and other materials in an average 3-bedroomed house absorb about 7,000 litres of water during construction. Much of this is dissipated into the indoor atmosphere during the drying out period.

## How do you reduce the condensation in the home?

- It is important to remove excess moisture by ventilating rooms.
- A room can be ventilated without making draughts or causing it to become cold. One way to do this is to open the window slightly or use the trickle vent if fitted.
- By opening windows or ventilating your home it may appear that you are losing some heat, but what you are doing is allowing warm moisture laden air to escape and permitting cool dry air to enter your home. Dry cool air is cheaper to heat than warm moist air.
- Provide natural ventilation through an opening section of the window, through a proprietary ventilating unit, or through an airbrick. Check that trickle vents are in the open position.
- Where there is no open fire, or where existing flues have been blocked off (and cannot be unblocked), ensure that wall vents are fitted and kept clear.
- Open at least one window in each room for some part of the day to permit a change of air. Ensure permanent ventilation of all rooms where gas and oil heaters are used. NOTE: This is a statutory requirement which will be monitored by the heating engineer.

- Fix hoods over cookers and other equipment producing steam and ventilate them to the outside air.
- Ensure that bathrooms and kitchens are ventilated in accordance with National Standards.
- Draught proof internal doors and keep them closed, to prevent transfer of air with high water vapour content from the main moisture producing rooms –kitchens, bathrooms, and drying rooms. It should be borne in mind that water vapour does not remain in the room where it is first generated but tends to migrate to other parts of the home generally where the rooms are colder.
- Increase slightly the air temperature within the room where the condensation occurs.
- In cold weather, keep some form of heating on permanently in the room where the condensation occurs.
- In winter months to help with atmospheric moisture control the introduction of a dehumidifier will help maintain a healthy living space and help reduce the chances of condensation forming on cooler surfaces.

### Summary

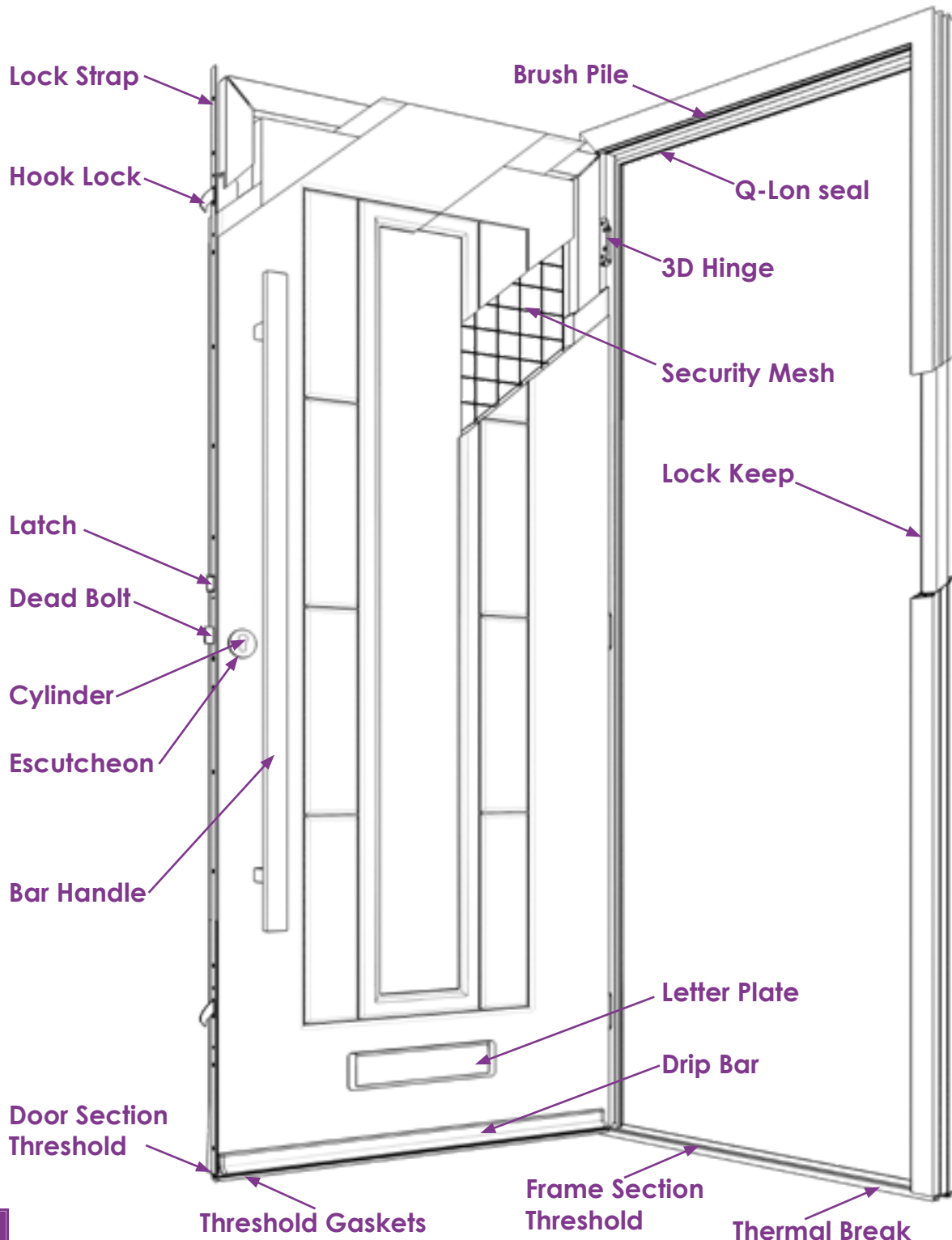
Whilst we pride ourselves on creating a thermally efficient industry leading door, it is important we raise awareness to customers on the issues experienced by all window and door manufacturers. The nature of modern-day living has created cosy warm homes where moist damp air is stored, but it is this damp air that manifests itself as condensation unless the air is dealt with and removed from the property. This issue is highlighted by the government's building regulations that now stipulate the use of trickle vents on all newly installed windows, both in new build house and replacement windows.

## Replacement Parts

To ensure you receive the correct replacement part, you firstly need to find the Rockdoor production number of the door that requires parts. This can be found on the hinge side of the inner frame and is a 6 or 7 digit reference number. Contact can then be made to GAP's customer service team ([customerservice@gap.uk.com](mailto:customerservice@gap.uk.com)) who can help you.

Our team can then use our systems to find the correct part for the door and arrange for its delivery to the depot.

With lots of parts used to construct the door, it's useful to make sure we have the correct part, so please refer to the illustration below.





The Original **Composite Door**.

Rockdoor must be installed in-line with the five star installation guide. ★★★★★