



## COMMERCIAL RANGE 715 SYSTEM

Emporia™ Face Glazed – 100mm and 150mm

### Specifier Guide

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The Lidco Specifier's Guide contains technical information, maximum permissible sizes, typical configurations, energy ratings and key design features and benefits.





## Overview

A 100mm and 150mm face glazed commercial framing system ideally suited for shopping centres, offices, show rooms, commercial buildings. It is increasingly popular in architectural housing and apartments. Both systems can be either single or double glazed.

Glass can be fitted to the frame using external captive and internal roll-in glazing wedges or roll-in wedges on both sides. The use of an external captive glazing wedge and an internal roll-in wedge prevents vandalism in ground floor applications.

A range of entry doors are available and they can also be set up as sliding doors, either as top hung sliding or bottom rolling track mounted.

There are a number of awning/casement windows that can be incorporated into the 100mm and 150mm frames and the sash options include flat and bevelled faces.

Sub-sill and sub-head options for both frames are available to aid on-site installation.



## Features

- Single glazing options range from 5mm to 10.38mm
- The double glazed option is designed to accept a 25mm IGU
- A silicone glazed option is available for the 150mm frame on a per project basis. It can be single glazed (6mm and 10mm) or double glazed (25mm)
- In high wind load areas added structural strength is achieved with the use of heavy duty mullions – there is a wide range of transoms for manufacturers to choose from
- Lidco's Emporia™ Commercial Doors (716 System and 717 System) can be incorporated into the framing system both in hinged and sliding configurations
- The following Lidco awning/casement sashes can be incorporated into both the 100mm and 150mm frame:  
 DuoTherm awning flush sash from the 373 System  
 Thermaview awning overlap sash from the 413 system (flat face and beveled sashes available)\*
- Thermal expansion is controlled by using split mullions
- A 125mm face glazed frame alternative is available\* – refer to 718 System
- A panelised window wall system is available on a per project basis. It features captive or structurally glazed mullions and transoms and expansion stack joints

Maximum Glass Thickness	≤25mm IGU
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\*Single glazed



## How to Specify

- Aluminium frames to be manufactured using Lidco 715 System: Emporia™ Face Glazed Commercial Framing
- Selected framing to be engineered, manufactured and installed in accordance with:
  - AS 2047-2048 (Windows in Buildings)
  - AS/NZS 1170 (Loading Code)
  - AS/NZS 1664 (Aluminium Structures Code)
- Selected glazing to be in line with performance requirements as set out in AS 1288 (Glass in Buildings)
- Size limitations are governed by design intent, glass selection and local wind load and deflection requirements



For any specification assistance please call to speak to one of our friendly and knowledgeable technical sales team on 1300 663 848 or email [techsupport@lidco.com.au](mailto:techsupport@lidco.com.au)



715 System Specifier Guide, CAD, PDF files and more are available at [www.lidco.com.au](http://www.lidco.com.au)

## WERS Energy Ratings



Glazing	Cooling	Heating	Uw*	SHGC*	Tvw*
6.38mm ComfortPlus	36%	30%	4.4	0.45	0.51
10mm Clear	26%	11%	6.2	0.66	0.74
10.38mm Laminate	34%	7%	6.1	0.68	0.76
6mm Clear / 12mm Ar / 6mm Clear	45%	46%	3.5	0.62	0.68
6.38mm Lam / 12mm Air / 6.38mm CP	46%	48%	3.0	0.53	0.45
6.38mm Lam / 12mm Ar / 6.38mm CP	62%	41%	2.8	0.54	0.45

\*Notes: **Uw** is the whole window U-value  
**SHGC** is the whole window solar heat gain coefficient  
**Tvw** is the whole window visible (light) transmittance  
More energy ratings available at [www.lidco.com.au/energy-ratings](http://www.lidco.com.au/energy-ratings)



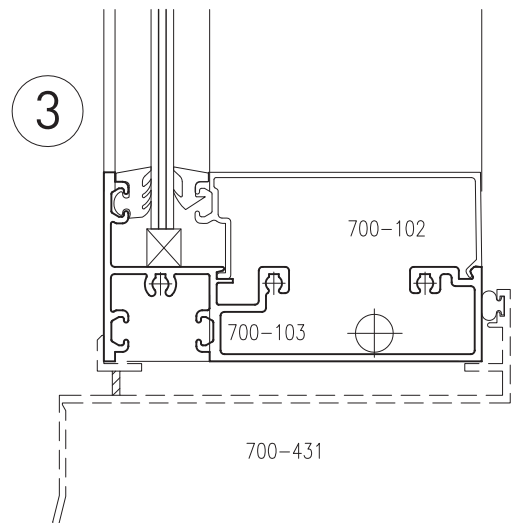
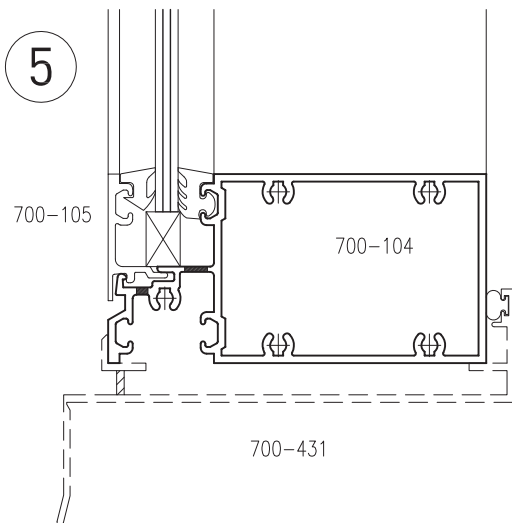
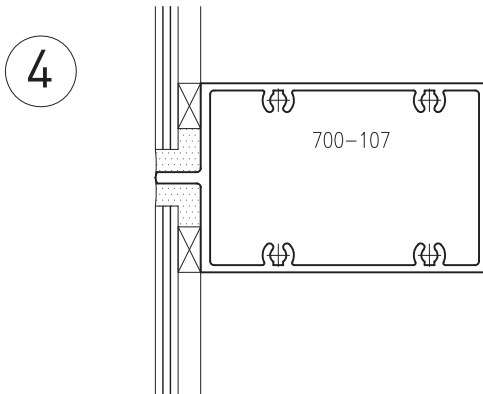
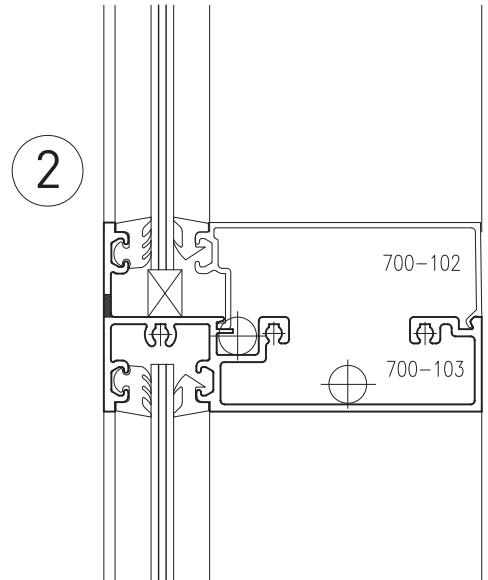
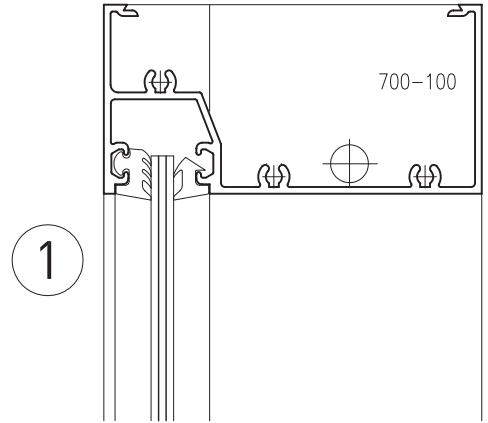
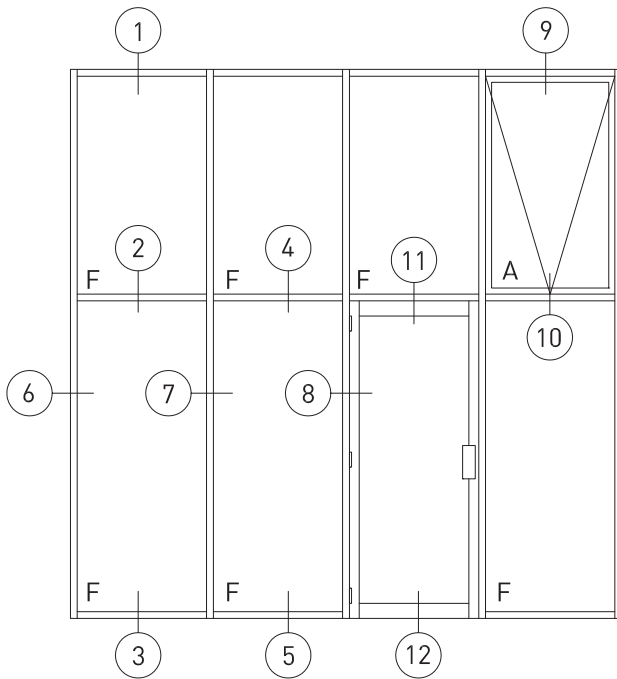
Lidco Corporation Pty Ltd  
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Founded in Australia over 65 years ago Lidco is a leading designer and supplier of contemporary and high performance residential and commercial aluminium window and door systems

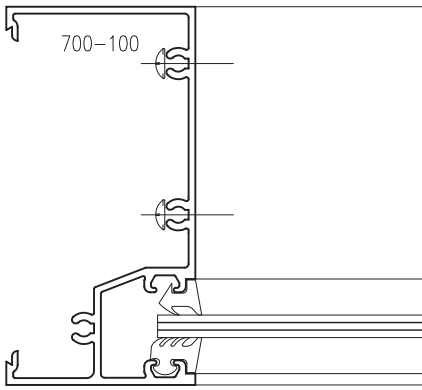
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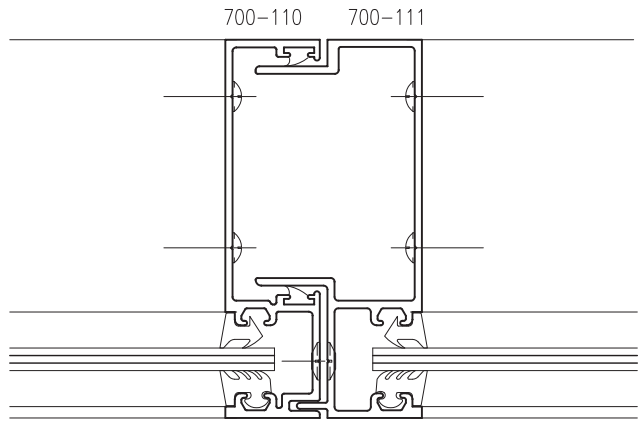
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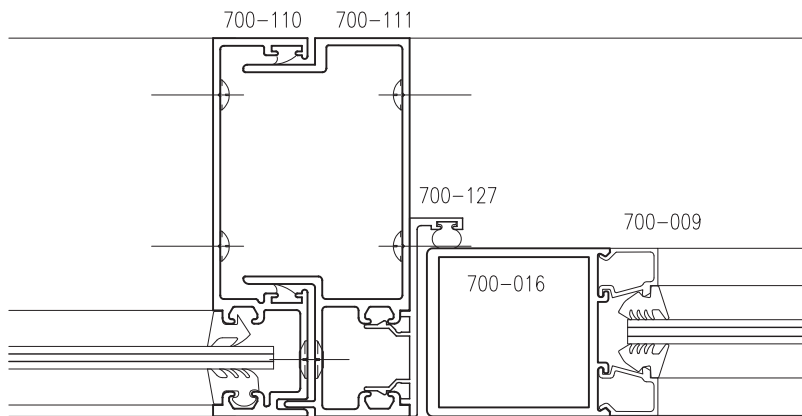
Typical Configurations



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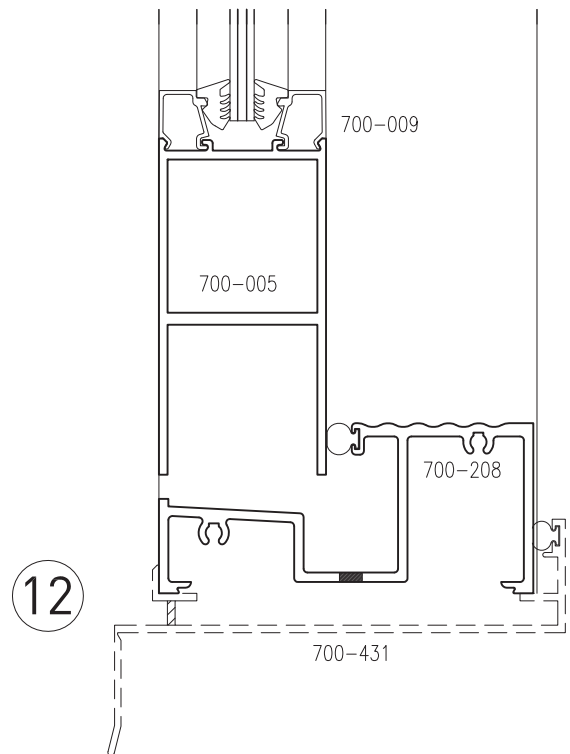
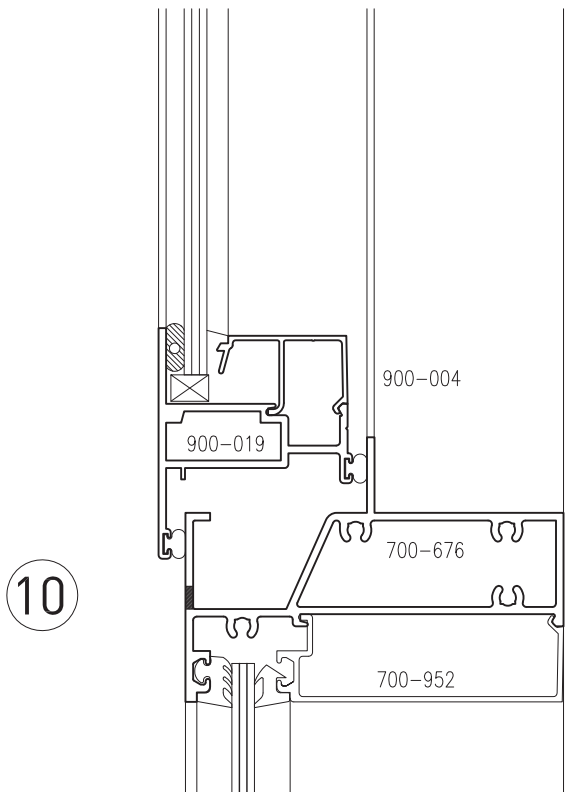
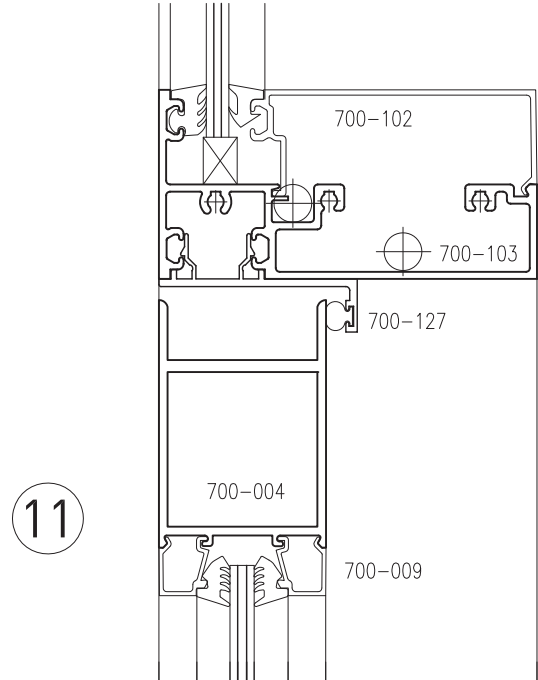
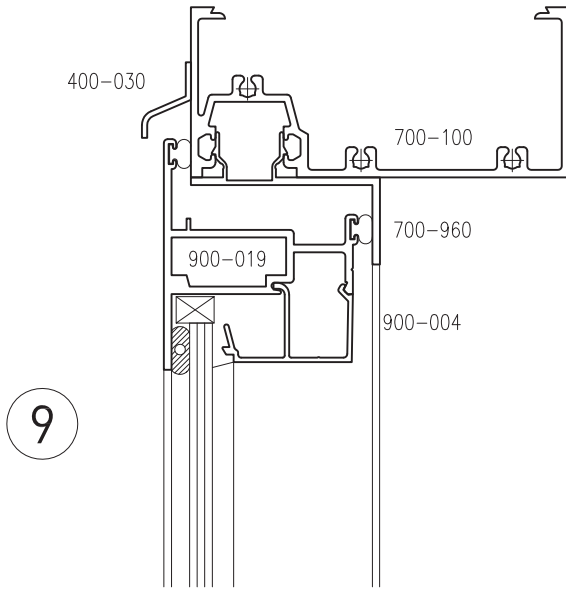


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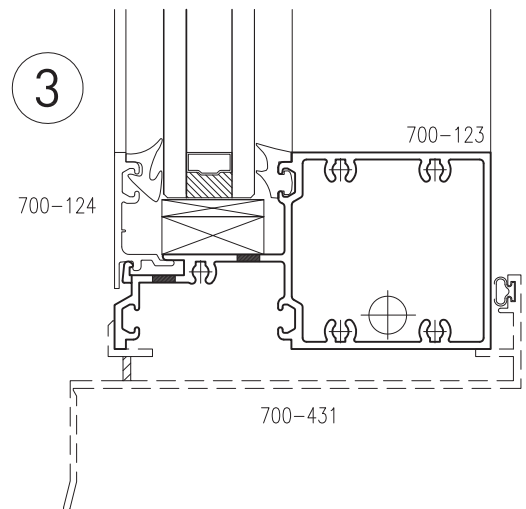
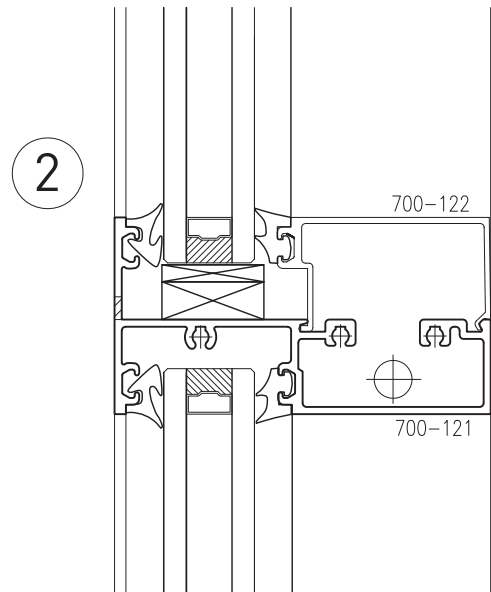
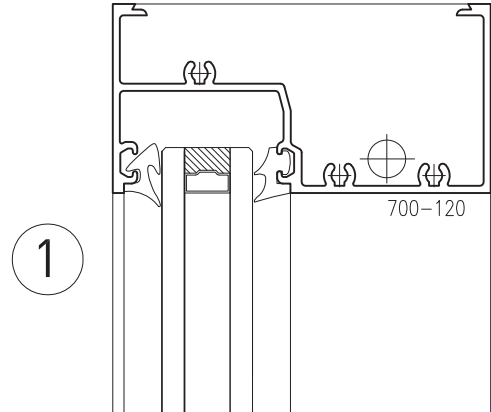
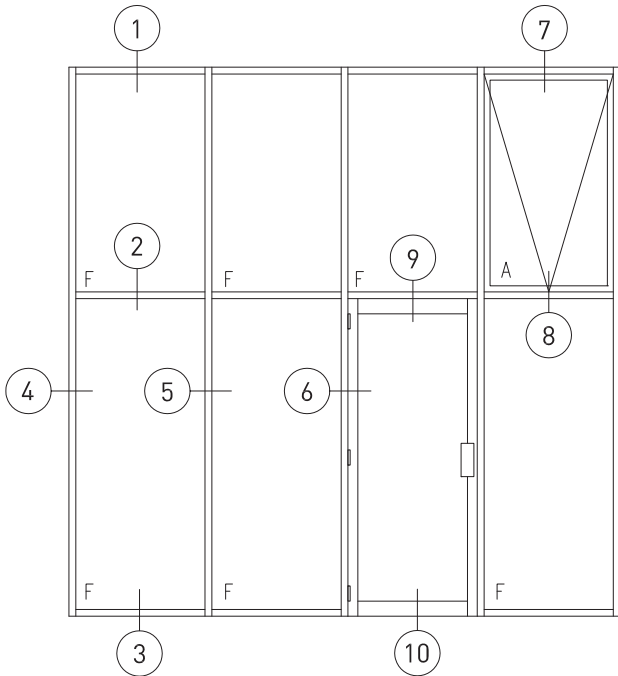


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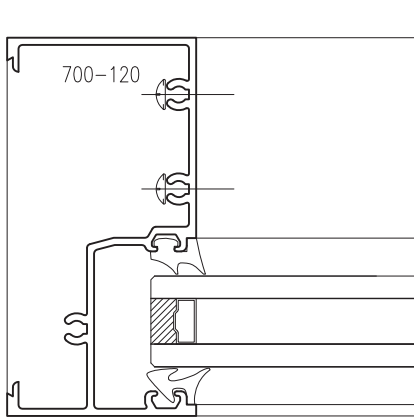
**Typical Configurations**



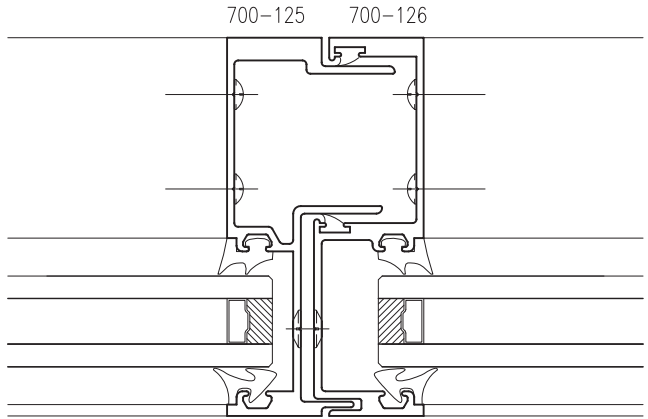
**Typical Configurations**



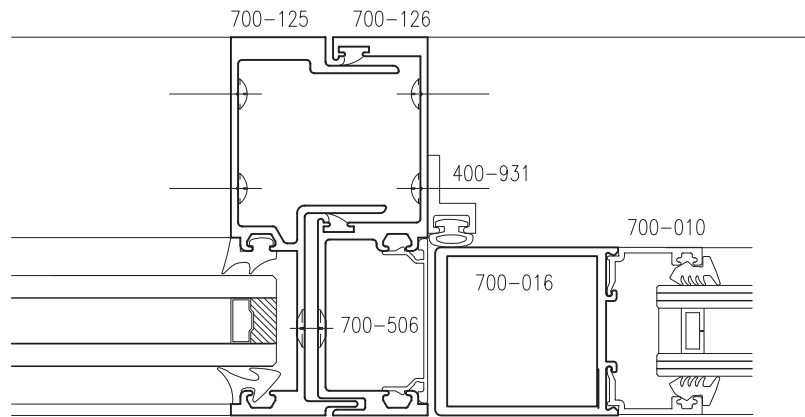
**Typical Configurations**



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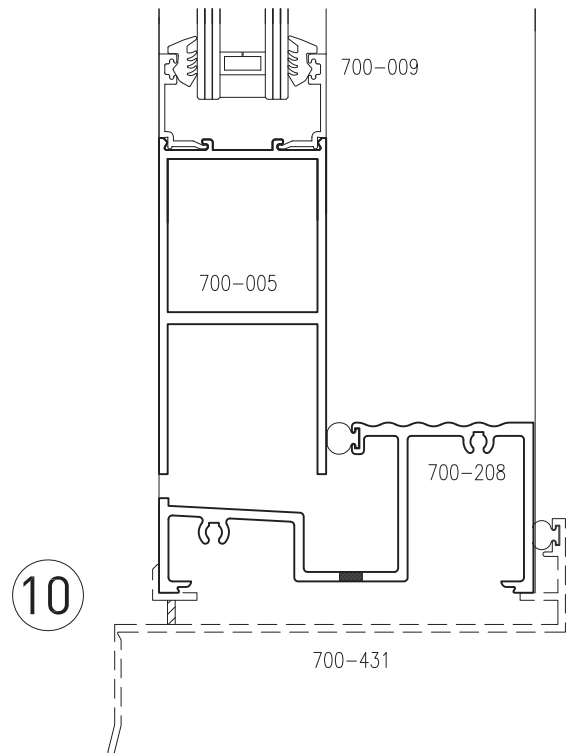
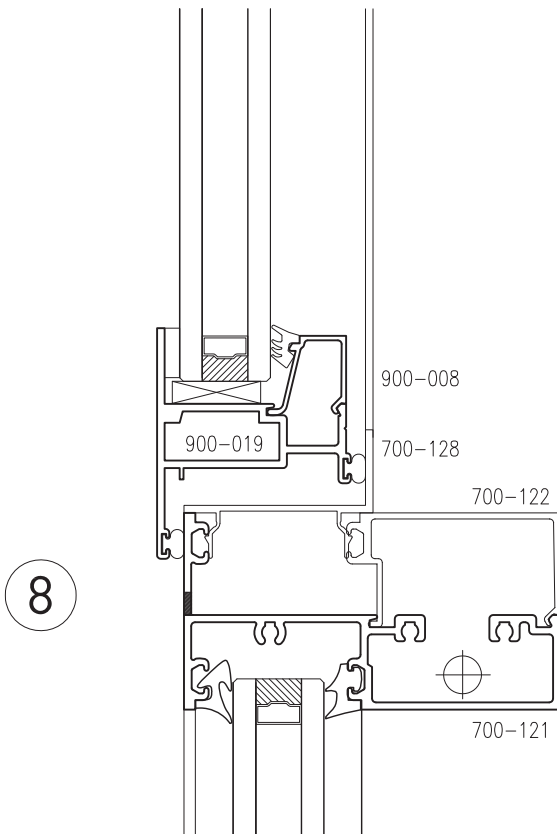
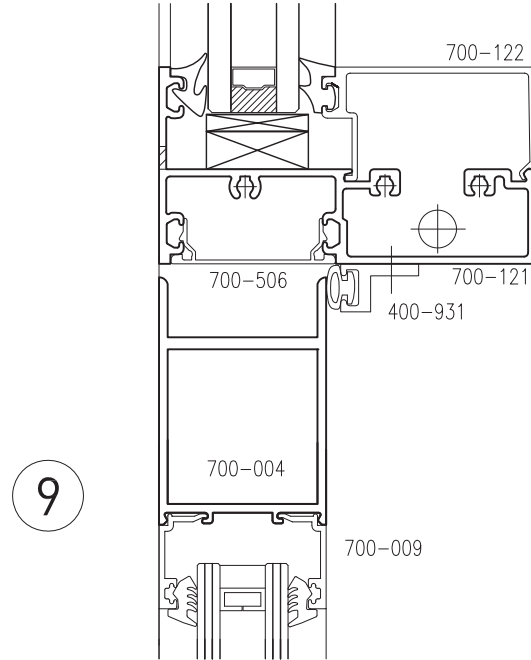
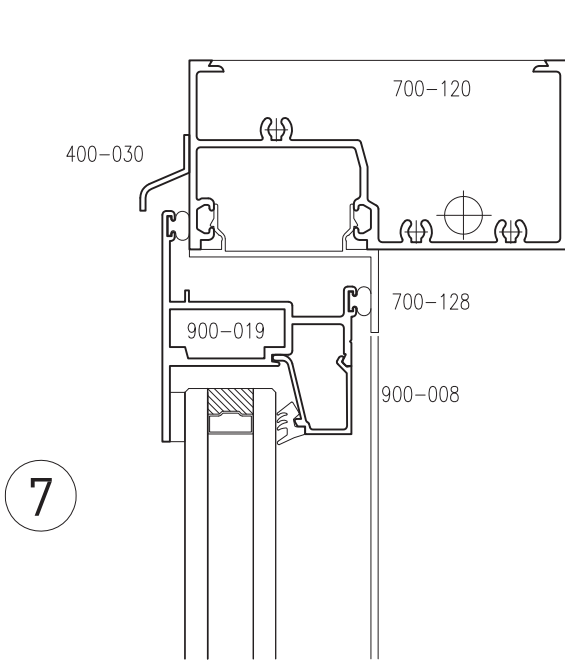
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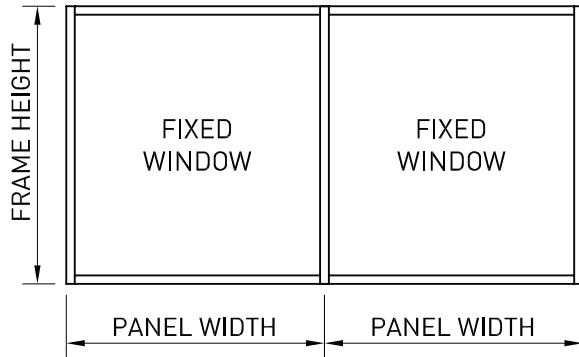
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**Typical Configurations**



### Loading Tables



The following calculations are based on theoretical section properties, not on approved tests as specified by AS2047. The Design Wind Pressure (Serviceability Wind Pressure) is used to calculate the theoretical maximum panel size and does not account for Water Penetration. For more detailed information on suitability please contact Lidco directly.

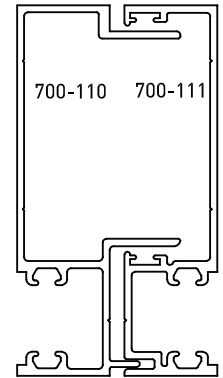
Residential Deflection ratio,  $K = 180$   
Commercial Deflection ratio,  $K = 250$

Note:  
The following figure is calculated based on fixed window only.

#### MULLION TYPE 1 - RESIDENTIAL (FIXED WINDOW) - (100mm Single Glazed)

Panel Width	500	600	700	800	900	1000	1100	1200	1300	1400	1500
Frame Height											
1800	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa
2000	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa
2200	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	2.2kPa	2.2kPa
2400	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	2.2kPa	2.2kPa	2.2kPa	2.2kPa	1.5kPa	1.5kPa
2600	3.0kPa	3.0kPa	2.2kPa	2.2kPa	2.2kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa
2800	3.0kPa	2.2kPa	2.2kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa
3000	2.2kPa	2.2kPa	1.5kPa	1.5kPa	1.5kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	0.7kPa
3200	1.5kPa	1.5kPa	1.5kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	0.7kPa	0.7kPa	0.7kPa	0.7kPa
3400	1.5kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	0.7kPa	0.7kPa	0.7kPa	0.7kPa	0.5kPa	0.5kPa
3600	1.0kPa	1.0kPa	1.0kPa	0.7kPa	0.7kPa	0.7kPa	0.7kPa	0.5kPa	0.5kPa	0.5kPa	0.5kPa
3800	1.0kPa	1.0kPa	0.7kPa	0.7kPa	0.7kPa	0.5kPa	0.5kPa	0.5kPa	0.5kPa	-	-
4000	1.0kPa	0.7kPa	0.7kPa	0.5kPa	0.5kPa	0.5kPa	0.5kPa	-	-	-	-
4200	0.7kPa	0.7kPa	0.5kPa	0.5kPa	0.5kPa	-	-	-	-	-	-

MULLION TYPE 1  
(100mm Single Glazed)



$l \times 1100.95 \times 10^3 \text{ mm}^4$

#### MULLION TYPE 1 - COMMERCIAL (FIXED WINDOW) - (100mm Single Glazed)

Panel Width	500	600	700	800	900	1000	1100	1200	1300	1400	1500
Frame Height											
1800	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa
2000	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	2.2kPa	2.2kPa
2200	3.0kPa	3.0kPa	3.0kPa	3.0kPa	2.2kPa	2.2kPa	2.2kPa	2.2kPa	2.2kPa	1.5kPa	1.5kPa
2400	3.0kPa	3.0kPa	2.2kPa	2.2kPa	2.2kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa	1.0kPa
2600	2.2kPa	2.2kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa
2800	2.2kPa	1.5kPa	1.5kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	0.7kPa	0.7kPa	0.7kPa
3000	1.5kPa	1.5kPa	1.0kPa	1.0kPa	1.0kPa	0.7kPa	0.7kPa	0.7kPa	0.7kPa	0.7kPa	0.5kPa
3200	1.5kPa	1.0kPa	1.0kPa	0.7kPa	0.7kPa	0.7kPa	0.7kPa	0.5kPa	0.5kPa	0.5kPa	0.5kPa
3400	1.0kPa	1.0kPa	0.7kPa	0.7kPa	0.7kPa	0.5kPa	0.5kPa	0.5kPa	0.5kPa	-	-
3600	1.0kPa	0.7kPa	0.7kPa	0.5kPa	0.5kPa	0.5kPa	0.5kPa	-	-	-	-
3800	0.7kPa	0.7kPa	0.5kPa	0.5kPa	0.5kPa	-	-	-	-	-	-
4000	0.7kPa	0.5kPa	0.5kPa	-	-	-	-	-	-	-	-
4200	0.5kPa	0.5kPa	-	-	-	-	-	-	-	-	-

### Loading Tables

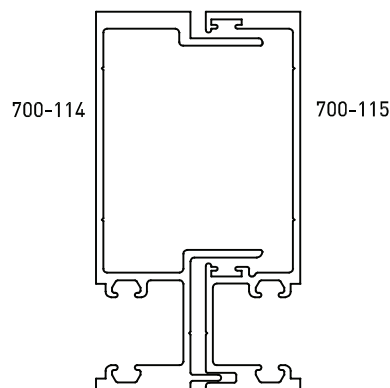
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Panel Width	500	600	700	800	900	1000	1100	1200	1300	1400	1500
Frame Height											
1800	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa
2000	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa
2200	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa
2400	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	2.2kPa	2.2kPa
2600	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	2.2kPa	2.2kPa	2.2kPa	2.2kPa	2.2kPa	1.5kPa
2800	3.0kPa	3.0kPa	3.0kPa	2.2kPa	2.2kPa	2.2kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa
3000	3.0kPa	3.0kPa	2.2kPa	2.2kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa	1.0kPa	1.0kPa	1.0kPa
3200	2.2kPa	2.2kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa
3400	2.2kPa	1.5kPa	1.5kPa	1.5kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	0.7kPa	0.7kPa	0.7kPa
3600	1.5kPa	1.5kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	0.7kPa	0.7kPa	0.7kPa	0.7kPa	0.7kPa
3800	1.5kPa	1.0kPa	1.0kPa	1.0kPa	0.7kPa	0.7kPa	0.7kPa	0.7kPa	0.7kPa	0.5kPa	0.5kPa
4000	1.0kPa	1.0kPa	1.0kPa	0.7kPa	0.7kPa	0.7kPa	0.5kPa	0.5kPa	0.5kPa	0.5kPa	0.5kPa
4200	1.0kPa	1.0kPa	0.7kPa	0.7kPa	0.7kPa	0.5kPa	0.5kPa	0.5kPa	0.5kPa	-	-

#### MULLION TYPE 2 - COMMERCIAL (FIXED WINDOW) - (100mm Single Glazed)

Panel Width	500	600	700	800	900	1000	1100	1200	1300	1400	1500
Frame Height											
1800	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa
2000	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa
2200	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	2.2kPa	2.2kPa
2400	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	2.2kPa	2.2kPa	2.2kPa	2.2kPa	1.5kPa	1.5kPa
2600	3.0kPa	3.0kPa	2.2kPa	2.2kPa	2.2kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa
2800	3.0kPa	2.2kPa	2.2kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa
3000	2.2kPa	1.5kPa	1.5kPa	1.5kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	0.7kPa
3200	1.5kPa	1.5kPa	1.5kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	0.7kPa	0.7kPa	0.7kPa	0.7kPa
3400	1.5kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	0.7kPa	0.7kPa	0.7kPa	0.7kPa	0.5kPa	0.5kPa
3600	1.0kPa	1.0kPa	1.0kPa	0.7kPa	0.7kPa	0.7kPa	0.5kPa	0.5kPa	0.5kPa	0.5kPa	0.5kPa
3800	1.0kPa	1.0kPa	0.7kPa	0.7kPa	0.7kPa	0.5kPa	0.5kPa	0.5kPa	0.5kPa	-	-
4000	1.0kPa	0.7kPa	0.7kPa	0.5kPa	0.5kPa	0.5kPa	0.5kPa	-	-	-	-
4200	0.7kPa	0.7kPa	0.5kPa	0.5kPa	0.5kPa	-	-	-	-	-	-

#### MULLION TYPE 2 (100mm Single Glazed)



Ixx 1515.56 x10<sup>3</sup> mm<sup>4</sup>

### Loading Tables

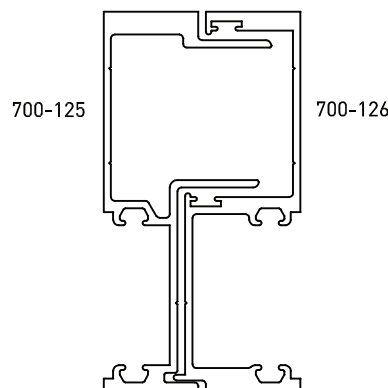
#### MULLION TYPE 1 - RESIDENTIAL (FIXED WINDOW) - (100mm Double Glazed)

Panel Width	500	600	700	800	900	1000	1100	1200	1300	1400	1500
Frame Height											
1800	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa
2000	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa
2200	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa
2400	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	2.2kPa	2.2kPa	2.2kPa
2600	3.0kPa	3.0kPa	3.0kPa	3.0kPa	2.2kPa	2.2kPa	2.2kPa	2.2kPa	1.5kPa	1.5kPa	1.5kPa
2800	3.0kPa	3.0kPa	2.2kPa	2.2kPa	2.2kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa
3000	3.0kPa	2.2kPa	2.2kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa
3200	2.2kPa	2.2kPa	1.5kPa	1.5kPa	1.5kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	0.7kPa
3400	2.2kPa	1.5kPa	1.5kPa	1.0kPa	1.0kPa	1.0kPa	0.7kPa	0.7kPa	0.7kPa	0.7kPa	0.7kPa
3600	1.5kPa	1.5kPa	1.0kPa	1.0kPa	1.0kPa	0.7kPa	0.7kPa	0.7kPa	0.7kPa	0.7kPa	0.5kPa
3800	1.5kPa	1.0kPa	1.0kPa	1.0kPa	0.7kPa	0.7kPa	0.7kPa	0.5kPa	0.5kPa	0.5kPa	0.5kPa
4000	1.0kPa	1.0kPa	0.7kPa	0.7kPa	0.7kPa	0.5kPa	0.5kPa	0.5kPa	0.5kPa	0.5kPa	-
4200	1.0kPa	0.7kPa	0.7kPa	0.7kPa	0.5kPa	0.5kPa	0.5kPa	0.5kPa	-	-	-

#### MULLION TYPE 1 - COMMERCIAL (FIXED WINDOW) - (100mm Double Glazed)

Panel Width	500	600	700	800	900	1000	1100	1200	1300	1400	1500
Frame Height											
1800	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa
2000	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa
2200	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	2.2kPa	2.2kPa	2.2kPa	2.2kPa
2400	3.0kPa	3.0kPa	3.0kPa	3.0kPa	2.2kPa	2.2kPa	2.2kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa
2600	3.0kPa	3.0kPa	2.2kPa	2.2kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa	1.0kPa	1.0kPa
2800	2.2kPa	2.2kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa
3000	2.2kPa	1.5kPa	1.5kPa	1.5kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	0.7kPa	0.7kPa	0.7kPa
3200	1.5kPa	1.5kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	0.7kPa	0.7kPa	0.7kPa	0.7kPa	0.7kPa
3400	1.5kPa	1.0kPa	1.0kPa	1.0kPa	0.7kPa	0.7kPa	0.7kPa	0.7kPa	0.5kPa	0.5kPa	0.5kPa
3600	1.0kPa	1.0kPa	0.7kPa	0.7kPa	0.7kPa	0.5kPa	0.5kPa	0.5kPa	0.5kPa	0.5kPa	-
3800	1.0kPa	0.7kPa	0.7kPa	0.7kPa	0.5kPa	0.5kPa	0.5kPa	-	-	-	-
4000	0.7kPa	0.7kPa	0.7kPa	0.5kPa	0.5kPa	0.5kPa	-	-	-	-	-
4200	0.7kPa	0.7kPa	0.5kPa	0.5kPa	-	-	-	-	-	-	-

#### MULLION TYPE 1 (100mm Double Glazed)



1 x 1389.24 x 10<sup>3</sup> mm<sup>4</sup>

### Loading Tables

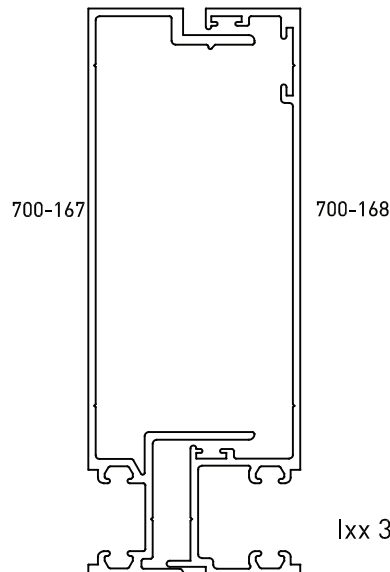
#### MULLION TYPE 1 - RESIDENTIAL (FIXED WINDOW) - (150mm Single Glazed)

Panel Width	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
Frame Height											
2400	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa
2600	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa
2800	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	2.2kPa
3000	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	2.2kPa	2.2kPa	2.2kPa	2.2kPa	2.2kPa	2.2kPa
3200	3.0kPa	3.0kPa	2.2kPa	2.2kPa	2.2kPa	2.2kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa
3400	2.2kPa	2.2kPa	2.2kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa
3600	2.2kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa
3800	1.5kPa	1.5kPa	1.5kPa	1.5kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa
4000	1.5kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	0.7kPa	0.7kPa	0.7kPa
4200	1.0kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	0.7kPa	0.7kPa	0.7kPa	0.7kPa	0.7kPa	0.7kPa
4400	1.0kPa	1.0kPa	1.0kPa	0.7kPa	0.7kPa	0.7kPa	0.7kPa	0.7kPa	0.7kPa	0.5kPa	0.5kPa
4600	1.0kPa	0.7kPa	0.7kPa	0.7kPa	0.7kPa	0.7kPa	0.5kPa	0.5kPa	0.5kPa	0.5kPa	0.5kPa
4800	0.7kPa	0.7kPa	0.7kPa	0.7kPa	0.5kPa	0.5kPa	0.5kPa	0.5kPa	0.5kPa	0.5kPa	-

#### MULLION TYPE 1 - COMMERCIAL (FIXED WINDOW) - (150mm Single Glazed)

Panel Width	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
Frame Height											
2400	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa
2600	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	2.2kPa	2.2kPa	2.2kPa
2800	3.0kPa	3.0kPa	3.0kPa	2.2kPa	2.2kPa	2.2kPa	2.2kPa	2.2kPa	2.2kPa	2.2kPa	1.5kPa
3000	2.2kPa	2.2kPa	2.2kPa	2.2kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa
3200	2.2kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa	1.0kPa	1.0kPa	1.0kPa
3400	1.5kPa	1.5kPa	1.5kPa	1.5kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa
3600	1.5kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	0.7kPa	0.7kPa	0.7kPa
3800	1.0kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	0.7kPa	0.7kPa	0.7kPa	0.7kPa	0.7kPa	0.7kPa
4000	1.0kPa	1.0kPa	0.7kPa	0.7kPa	0.7kPa	0.7kPa	0.7kPa	0.7kPa	0.5kPa	0.5kPa	0.5kPa
4200	1.0kPa	0.7kPa	0.7kPa	0.7kPa	0.7kPa	0.5kPa	0.5kPa	0.5kPa	0.5kPa	0.5kPa	0.5kPa
4400	0.7kPa	0.7kPa	0.7kPa	0.5kPa	0.5kPa	0.5kPa	0.5kPa	0.5kPa	0.5kPa	-	-
4600	0.7kPa	0.5kPa	0.5kPa	0.5kPa	0.5kPa	0.5kPa	-	-	-	-	-
4800	0.5kPa	0.5kPa	0.5kPa	0.5kPa	-	-	-	-	-	-	-

#### MULLION TYPE 1 (150mm Single Glazed)



$I_{xx} 3251.64 \times 10^3 \text{ mm}^4$

### Loading Tables

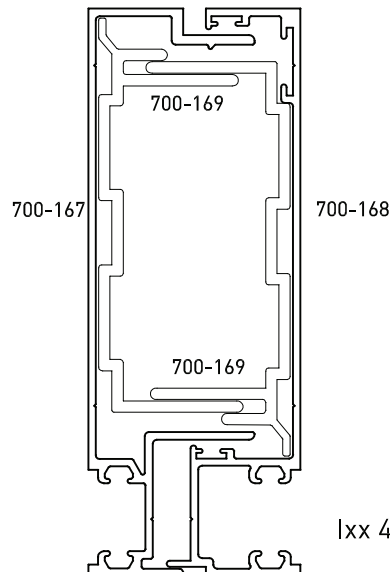
#### MULLION TYPE 2 - RESIDENTIAL (FIXED WINDOW) - (150mm Single Glazed)

Panel Width	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
Frame Height											
2400	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa
2600	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa
2800	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa
3000	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa
3200	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	2.2kPa	2.2kPa	2.2kPa
3400	3.0kPa	3.0kPa	3.0kPa	3.0kPa	2.2kPa	2.2kPa	2.2kPa	2.2kPa	2.2kPa	2.2kPa	1.5kPa
3600	3.0kPa	2.2kPa	2.2kPa	2.2kPa	2.2kPa	2.2kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa
3800	2.2kPa	2.2kPa	2.2kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa
4000	2.2kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa
4200	1.5kPa	1.5kPa	1.5kPa	1.5kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa
4400	1.5kPa	1.5kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	0.7kPa	0.7kPa
4600	1.5kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	0.7kPa	0.7kPa	0.7kPa	0.7kPa	0.7kPa
4800	1.0kPa	1.0kPa	1.0kPa	1.0kPa	0.7kPa	0.7kPa	0.7kPa	0.7kPa	0.7kPa	0.7kPa	0.7kPa

#### MULLION TYPE 2 - COMMERCIAL (FIXED WINDOW) - (150mm Single Glazed)

Panel Width	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
Frame Height											
2400	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa
2600	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa
2800	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa
3000	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	2.2kPa	2.2kPa	2.2kPa	2.2kPa	2.2kPa	2.2kPa
3200	3.0kPa	3.0kPa	2.2kPa	2.2kPa	2.2kPa	2.2kPa	2.2kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa
3400	2.2kPa	2.2kPa	2.2kPa	2.2kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa
3600	2.2kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa
3800	1.5kPa	1.5kPa	1.5kPa	1.5kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa
4000	1.5kPa	1.5kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	0.7kPa	0.7kPa	0.7kPa
4200	1.0kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	0.7kPa	0.7kPa	0.7kPa	0.7kPa	0.7kPa	0.7kPa
4400	1.0kPa	1.0kPa	1.0kPa	0.7kPa	0.7kPa	0.7kPa	0.7kPa	0.7kPa	0.7kPa	0.7kPa	0.5kPa
4600	1.0kPa	1.0kPa	0.7kPa	0.7kPa	0.7kPa	0.7kPa	0.7kPa	0.5kPa	0.5kPa	0.5kPa	0.5kPa
4800	0.7kPa	0.7kPa	0.7kPa	0.7kPa	0.5kPa	0.5kPa	0.5kPa	0.5kPa	0.5kPa	0.5kPa	0.5kPa

#### MULLION TYPE 2 (150mm Single Glazed)



Ixx 4682.22 x 10<sup>3</sup> mm<sup>4</sup>

### Loading Tables

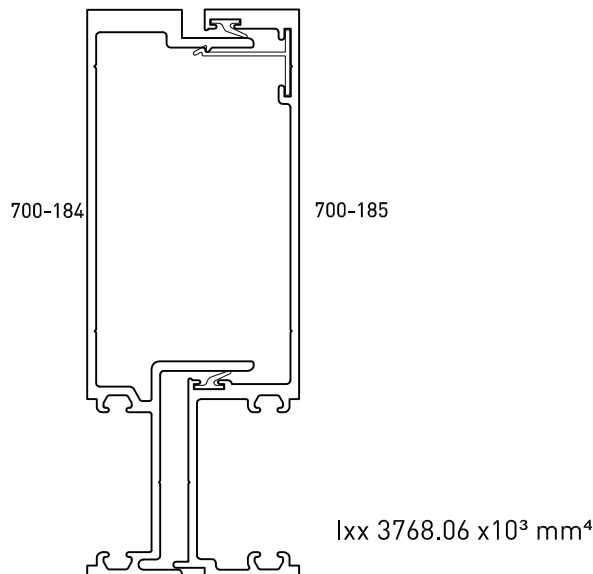
#### MULLION TYPE 1 - RESIDENTIAL (FIXED WINDOW) - (150mm Double Glazed)

Panel Width	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
Frame Height											
2400	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa
2600	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa
2800	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa
3000	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	2.2kPa	2.2kPa	2.2kPa
3200	3.0kPa	3.0kPa	3.0kPa	3.0kPa	2.2kPa	2.2kPa	2.2kPa	2.2kPa	2.2kPa	2.2kPa	1.5kPa
3400	3.0kPa	2.2kPa	2.2kPa	2.2kPa	2.2kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa
3600	2.2kPa	2.2kPa	2.2kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa	1.0kPa
3800	2.2kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa
4000	1.5kPa	1.5kPa	1.5kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa
4200	1.5kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	0.7kPa	0.7kPa	0.7kPa	0.7kPa
4400	1.0kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	0.7kPa	0.7kPa	0.7kPa	0.7kPa	0.7kPa	0.7kPa
4600	1.0kPa	1.0kPa	1.0kPa	0.7kPa	0.7kPa	0.7kPa	0.7kPa	0.7kPa	0.7kPa	0.5kPa	0.5kPa
4800	1.0kPa	0.7kPa	0.7kPa	0.7kPa	0.7kPa	0.7kPa	0.5kPa	0.5kPa	0.5kPa	0.5kPa	0.5kPa

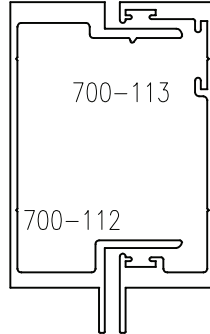
#### MULLION TYPE 1 - COMMERCIAL (FIXED WINDOW) - (150mm Double Glazed)

Panel Width	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
Frame Height											
2400	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa
2600	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa
2800	3.0kPa	3.0kPa	3.0kPa	3.0kPa	3.0kPa	2.2kPa	2.2kPa	2.2kPa	2.2kPa	2.2kPa	2.2kPa
3000	3.0kPa	3.0kPa	2.2kPa	2.2kPa	2.2kPa	2.2kPa	2.2kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa
3200	2.2kPa	2.2kPa	2.2kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa
3400	2.2kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa	1.5kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa
3600	1.5kPa	1.5kPa	1.5kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa
3800	1.5kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	1.0kPa	0.7kPa	0.7kPa	0.7kPa	0.7kPa
4000	1.0kPa	1.0kPa	1.0kPa	1.0kPa	0.7kPa	0.7kPa	0.7kPa	0.7kPa	0.7kPa	0.7kPa	0.7kPa
4200	1.0kPa	1.0kPa	0.7kPa	0.7kPa	0.7kPa	0.7kPa	0.7kPa	0.7kPa	0.5kPa	0.5kPa	0.5kPa
4400	1.0kPa	0.7kPa	0.7kPa	0.7kPa	0.7kPa	0.5kPa	0.5kPa	0.5kPa	0.5kPa	0.5kPa	0.5kPa
4600	0.7kPa	0.7kPa	0.7kPa	0.5kPa	0.5kPa	0.5kPa	0.5kPa	0.5kPa	0.5kPa	-	-
4800	0.7kPa	0.7kPa	0.5kPa	0.5kPa	0.5kPa	0.5kPa	-	-	-	-	-

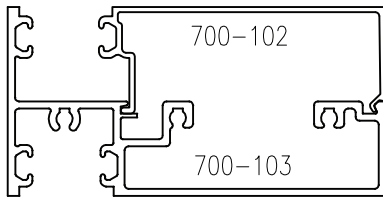
#### MULLION TYPE 1 (150mm Double Glazed)



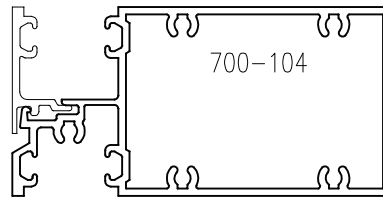
**Loading Tables**



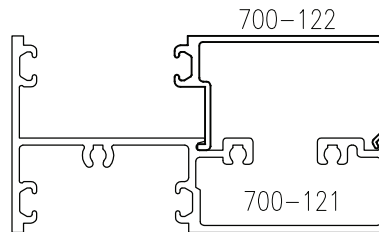
lxx  $849.04 \times 10^3 \text{mm}^4$



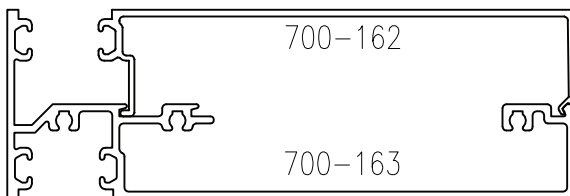
lxx  $864.19 \times 10^3 \text{mm}^4$



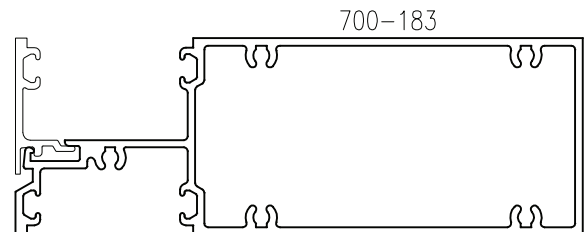
lxx  $753.88 \times 10^3 \text{mm}^4$



lxx  $780.71 \times 10^3 \text{mm}^4$



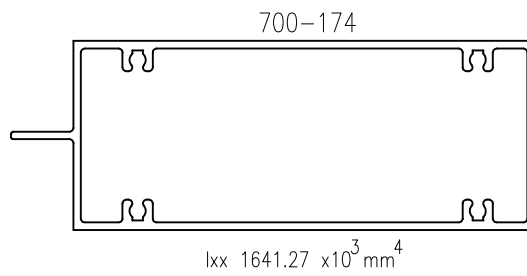
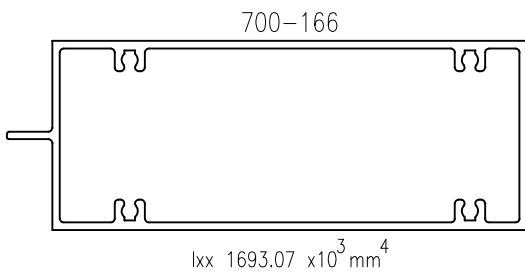
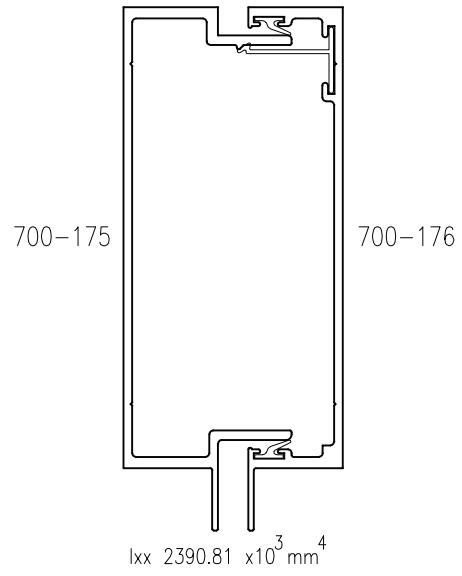
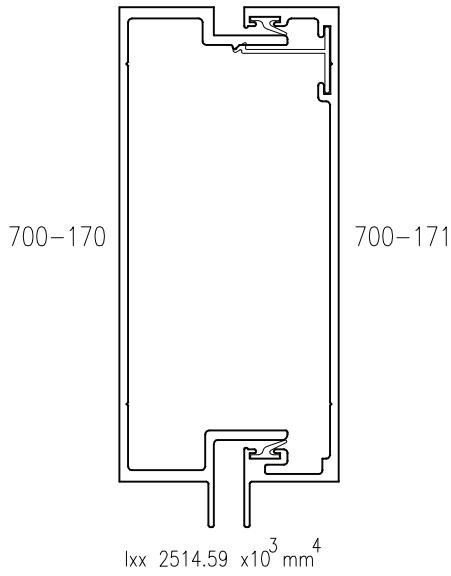
lxx  $2591.66 \times 10^3 \text{mm}^4$



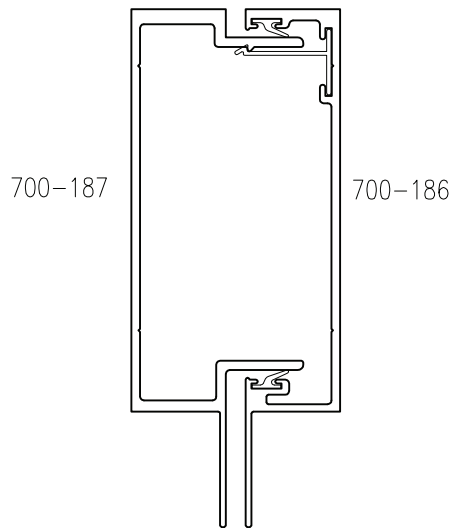
lxx  $2074.96 \times 10^3 \text{mm}^4$



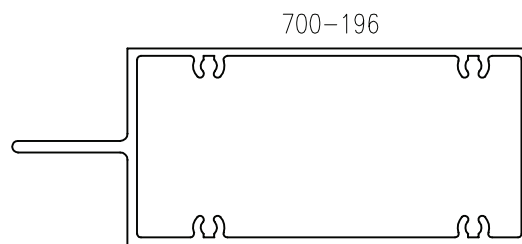
Loading Tables



**Loading Tables**



lxx 1942.86 x10<sup>3</sup> mm<sup>4</sup>



lxx 1480.93 x10<sup>3</sup> mm<sup>4</sup>

**Test Results**

**715 EMPORIA centre glazed fixed light – 5mm clear float – using sub-sill**

Serviceability load .....	N/A
Ultimate load .....	N/A
Water penetration .....	600 Pa
Air infiltration @75Pa .....	N/A N/A
Operating force (initiating) .....	N/A
Operating force (maintaining) .....	N/A
Test sample size .....	0.625m high x 1.94m wide
Test report number .....	QLD-Q004

**715 EMPORIA 9 panel with sub-sill – 8 fix light with 413 System awning window – 5mm clear float**

Serviceability load .....	+/-2.4 kPa
Ultimate load .....	+/-3.0 kPa
Water penetration .....	600 Pa
Air infiltration @75Pa .....	+ 0.548 l/s/m <sup>2</sup> - 0.711 l/s/m <sup>2</sup>
Operating force (initiating) .....	N/A
Operating force (maintaining) .....	N/A
Test sample size .....	2.17m high x 1.21m wide
Test report number .....	NSW-303-90108