



ALBENestra®



Performance Casement Window **SCW03**

Designed and tested according to MS832



**LB
ALUMINIUM
BERHAD**
198501006093 (138535-V)

Product

ALBENestra SCW03

Typical Technical Features

Nominal Wall Thickness	: 1.35mm
Standard Frame Depth	: 35.00mm
Mullion Depth	: 35.00mm, 60.00mm, 80.00mm & 100.00mm
Glazing Gap	: 12.00mm
Locking System	: Single-point & Multipoint
Surface Finish	: Overlap
Hinges	: Friction Stay
Corner Joints	: Mitre Joints With Brackets (Inner)



Performance Test

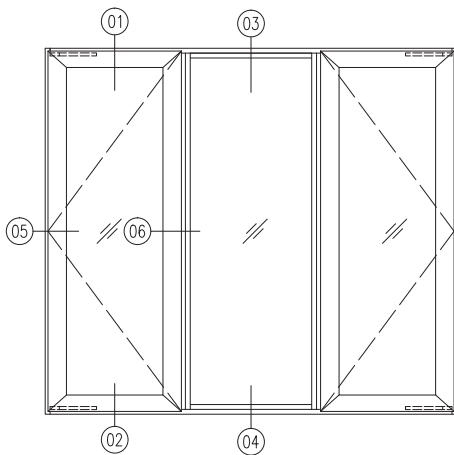
This casement window suite had been tested in compliance to MS 832:2022 performance test procedure for:

1. 1500Pa windload : Passed
2. 300Pa air leakage : Passed
3. 450Pa water infiltration : Passed

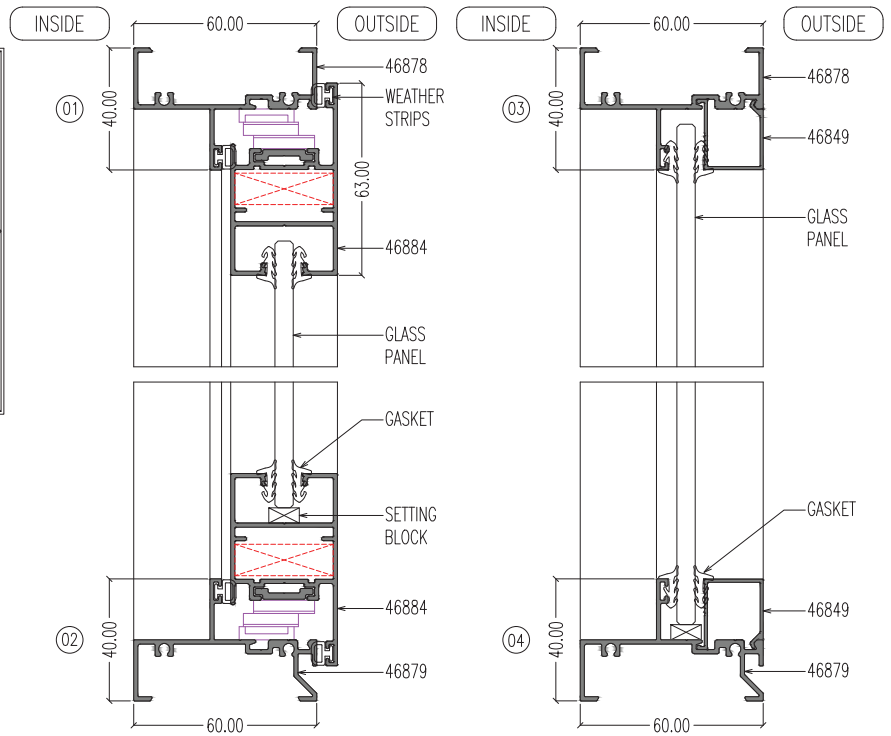
Note: Test report available upon request.



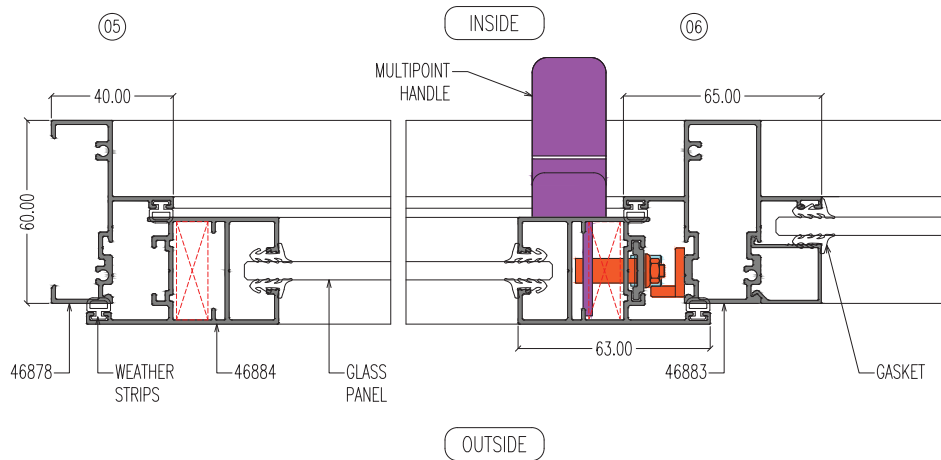
Typical Assembly Details



ELEVATION

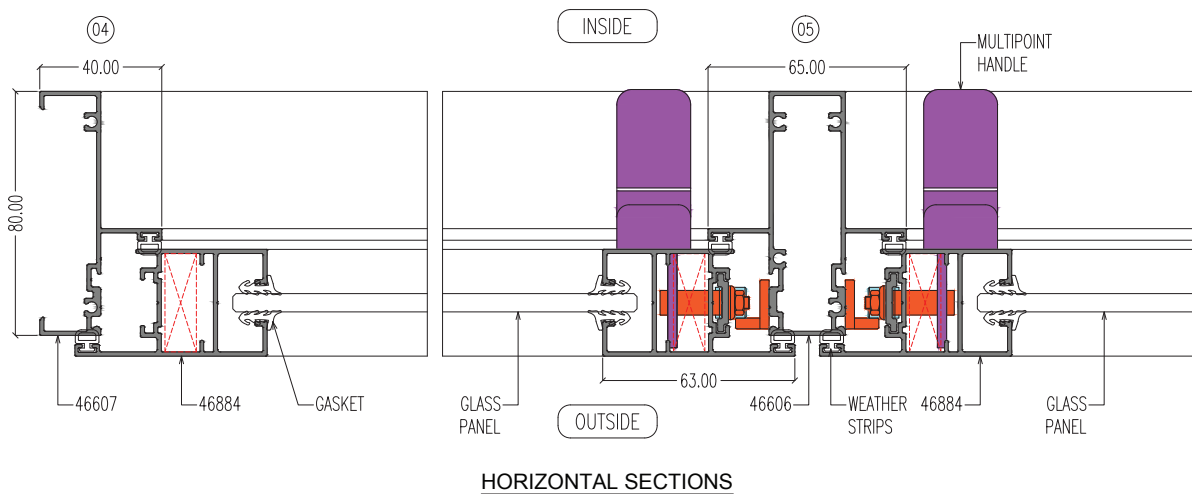
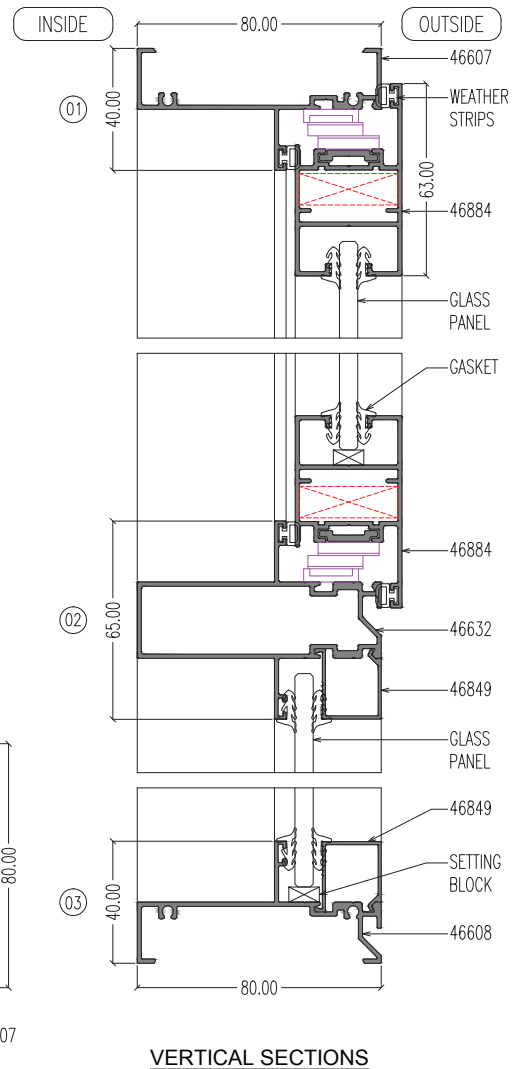
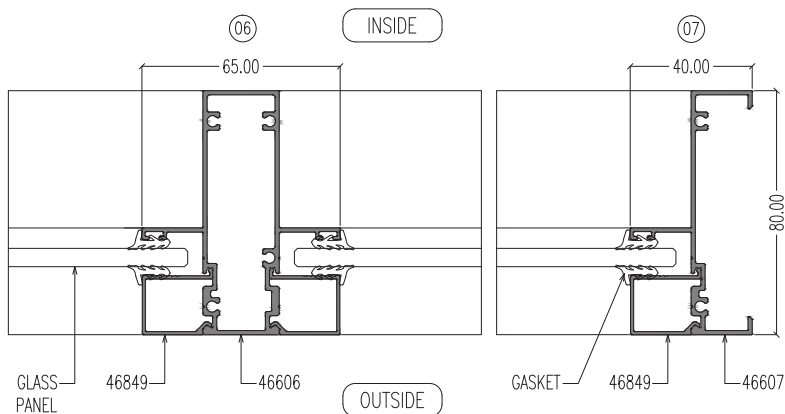
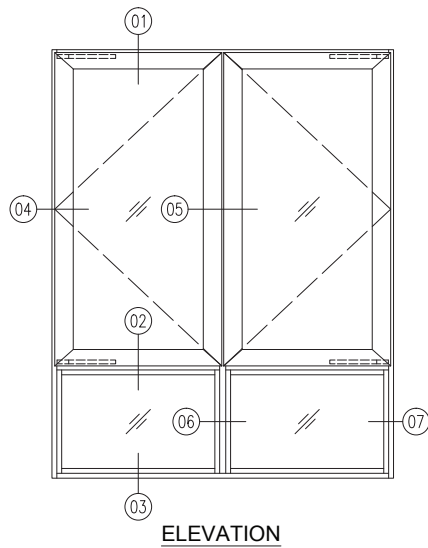


VERTICAL SECTIONS



HORIZONTAL SECTIONS

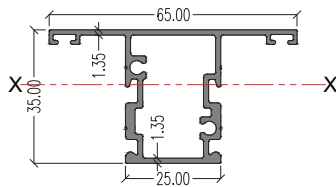
Typical Assembly Details



Wind Load Chart

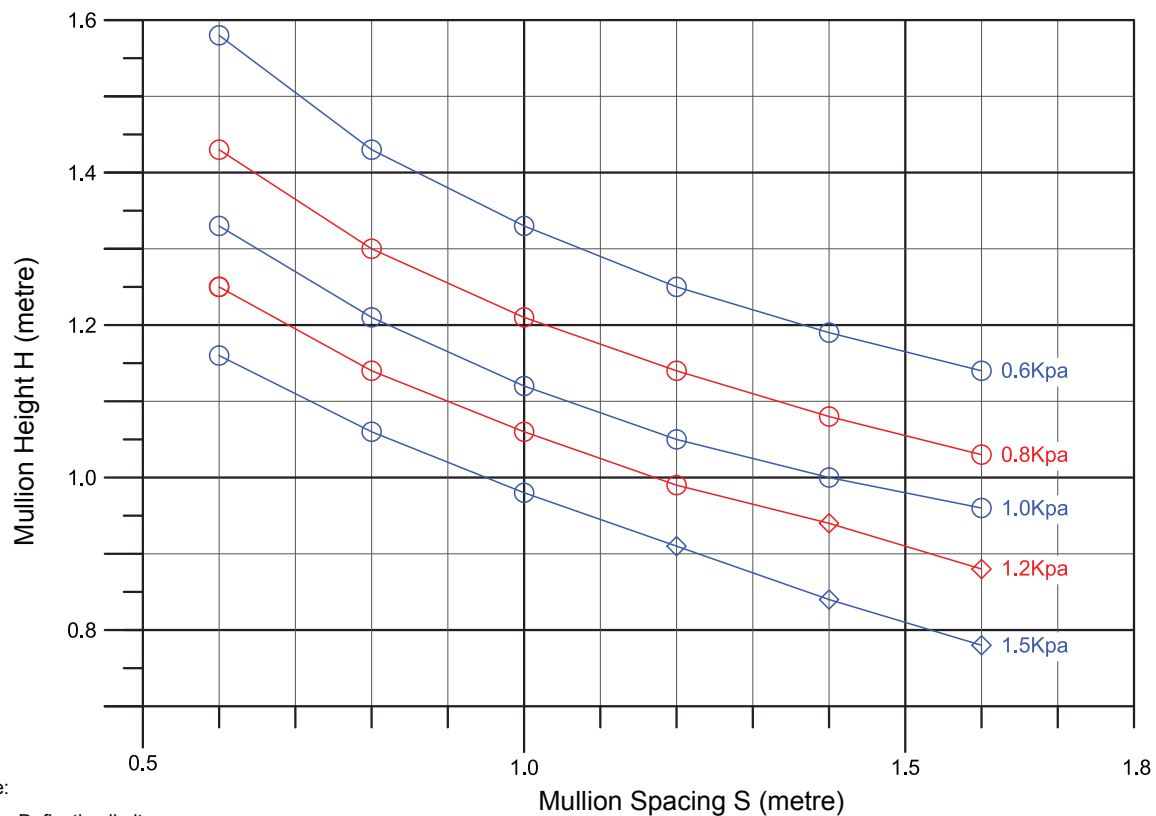
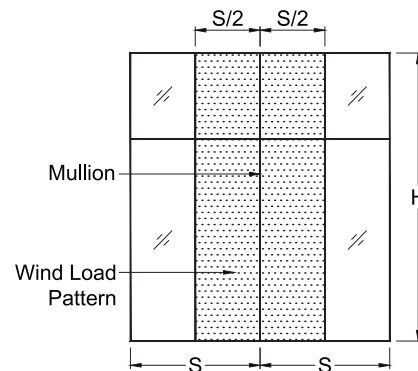
MULLION SECTION : 46882
 Alum. alloy : 6063-T5
 Moment of inertia I_{xx} : 4.6 cm^4
 Mod. of section Z_{xx} : 2.2 cm^3

Mod. of elasticity : $70 \times 10^9 \text{ N/m}^2$
 Design bend. stress : $1.25 \times 67^6 \text{ N/m}^2$
 Deflection limit : $\frac{\text{Span}}{175}$, up to max. 20mm
 Nature of anchor : Simply supported at both ends



Note:
 Suffix xx denotes axis perpendicular to wind load

Typical configuration of window:



Note:

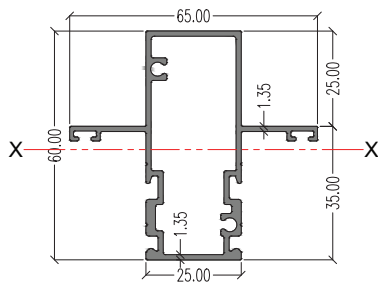
- Deflection limit governs
- ◇ Design bending stress governs

:- Buckling has not been taken into account in this chart

:- This windload chart is solely for reference only

Wind Load Chart

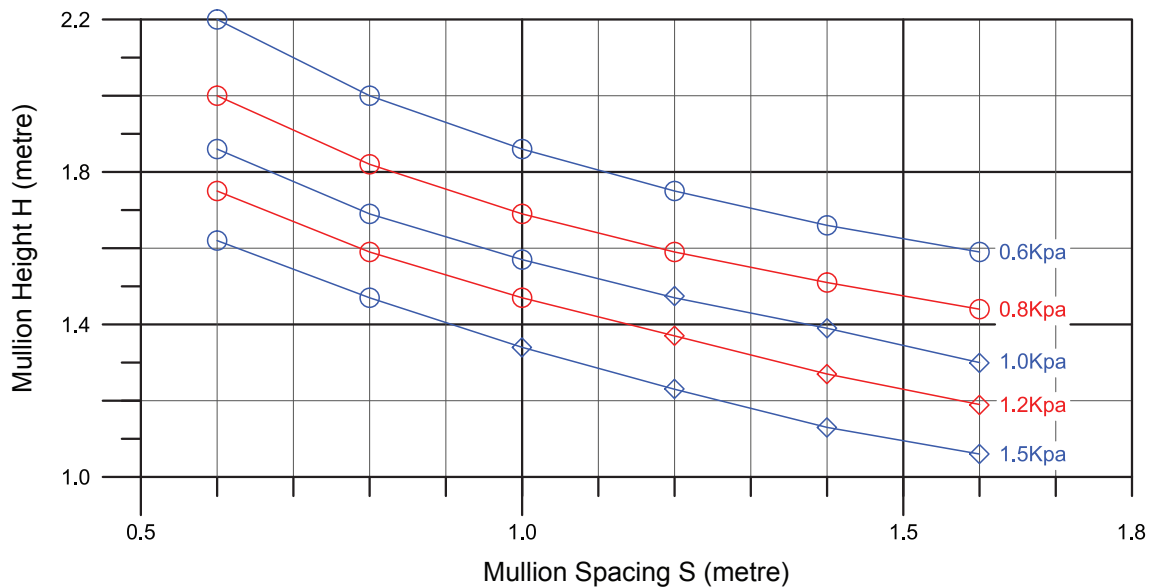
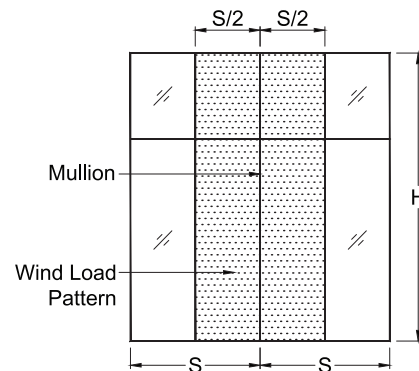
MULLION SECTION : 46883
 Alum. alloy : 6063-T5
 Moment of inertia I_{xx} : 12.5 cm^4
 Mod. of section Z_{xx} : 4.0 cm^3



Note:
 Suffix xx denotes axis perpendicular to wind load

Mod. of elasticity : $70 \times 10^9 \text{ N/m}^2$
 Design bend. stress : $1.25 \times 67^6 \text{ N/m}^2$
 Deflection limit : $S_{pan}/175$, up to max. 20mm
 Nature of anchor : Simply supported at both ends

Typical configuration of window:



Note:

- Deflection limit governs
- ◇ Design bending stress governs

:- Buckling has not been taken into account in this chart

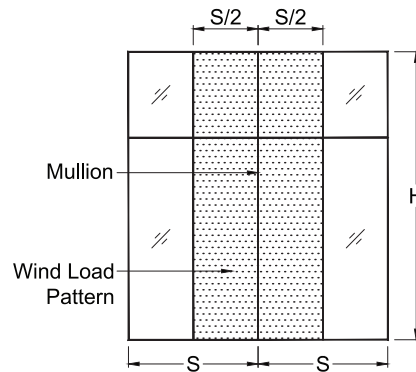
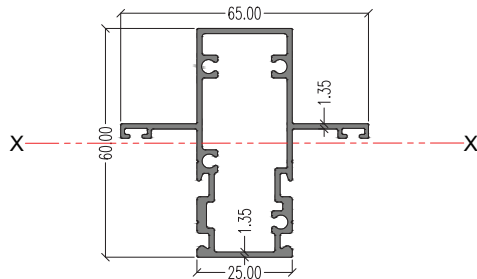
:- This windload chart is solely for reference only

Wind Load Chart

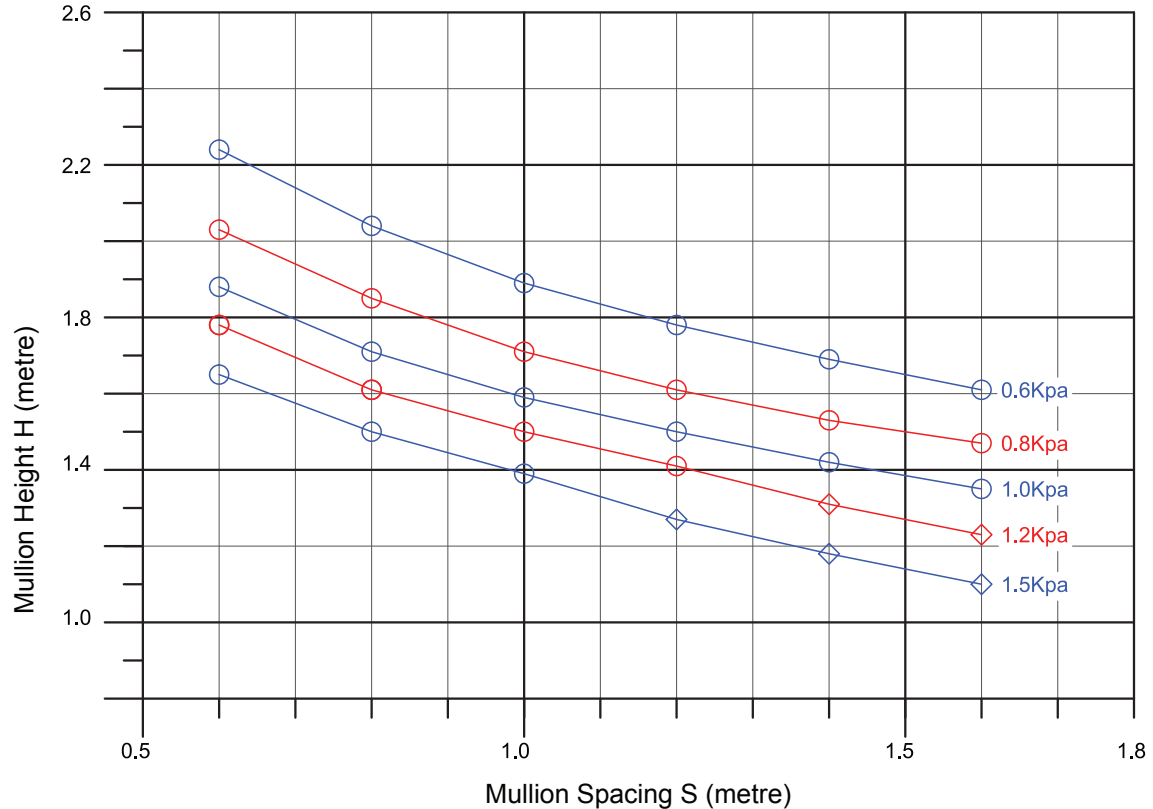
MULLION SECTION : 46631
Alum. alloy : 6063-T5
Moment of inertia I_{xx} : 13.1 cm⁴
Mod. of section Z_{xx} : 4.3 cm³

Mod. of elasticity : 70×10^9 N/m²
Design bend. stress : 1.25×67^6 N/m²
Deflection limit : $\text{Span}_{/175}$, up to max. 20mm
Nature of anchor : Simply supported at both ends

Typical configuration of window:



Note:
 Suffix xx denotes axis perpendicular to wind load



Note:

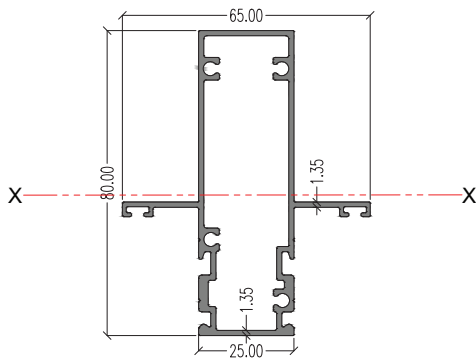
- Deflection limit governs
- ◇ Design bending stress governs

:- Buckling has not been taken into account in this chart

:- This windload chart is solely for reference only

Wind Load Chart

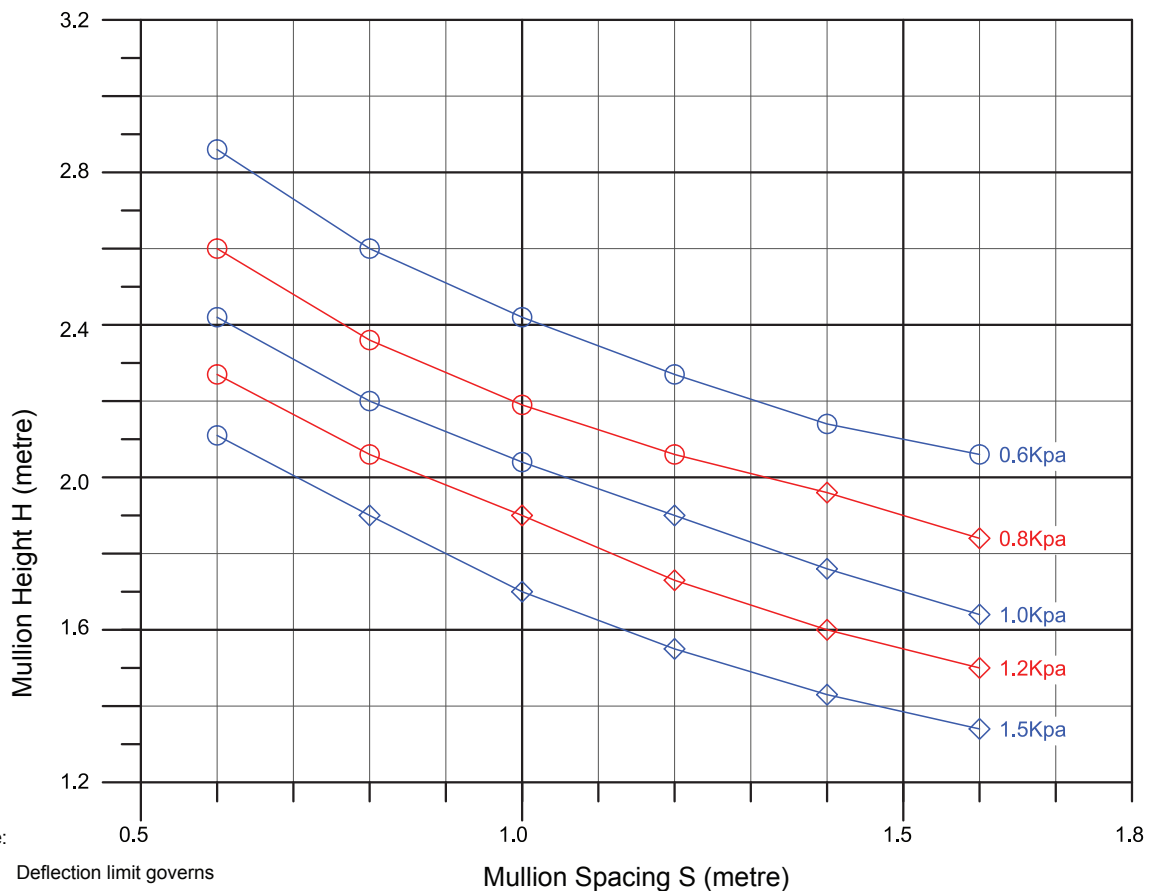
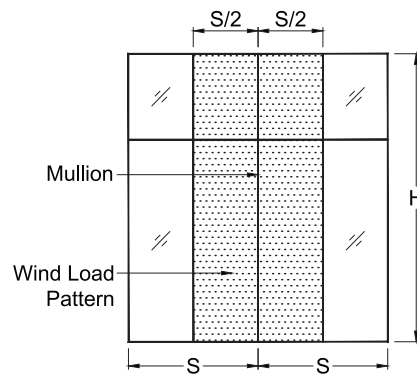
MULLION SECTION : 46606
Alum. alloy : 6063-T5
Moment of inertia I_{xx} : 27.5 cm⁴
Mod. of section Z_{xx} : 6.4 cm³



Note:
 Suffix xx denotes axis perpendicular to wind load

Mod. of elasticity : 70×10^9 N/m²
Design bend. stress : 1.25×67^6 N/m²
Deflection limit : $\text{Span}_{/175}$, up to max. 20mm
Nature of anchor : Simply supported at both ends

Typical configuration of window:



Note:

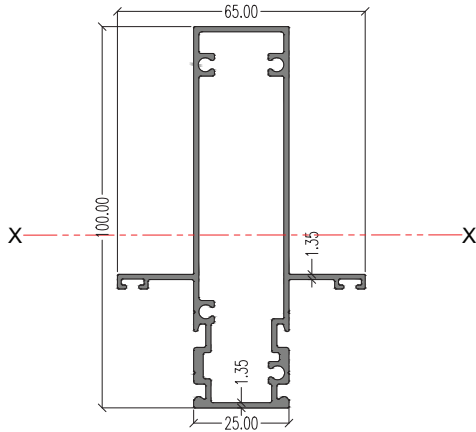
- Deflection limit governs
- ◇ Design bending stress governs

:- Buckling has not been taken into account in this chart

:- This windload chart is solely for reference only

Wind Load Chart

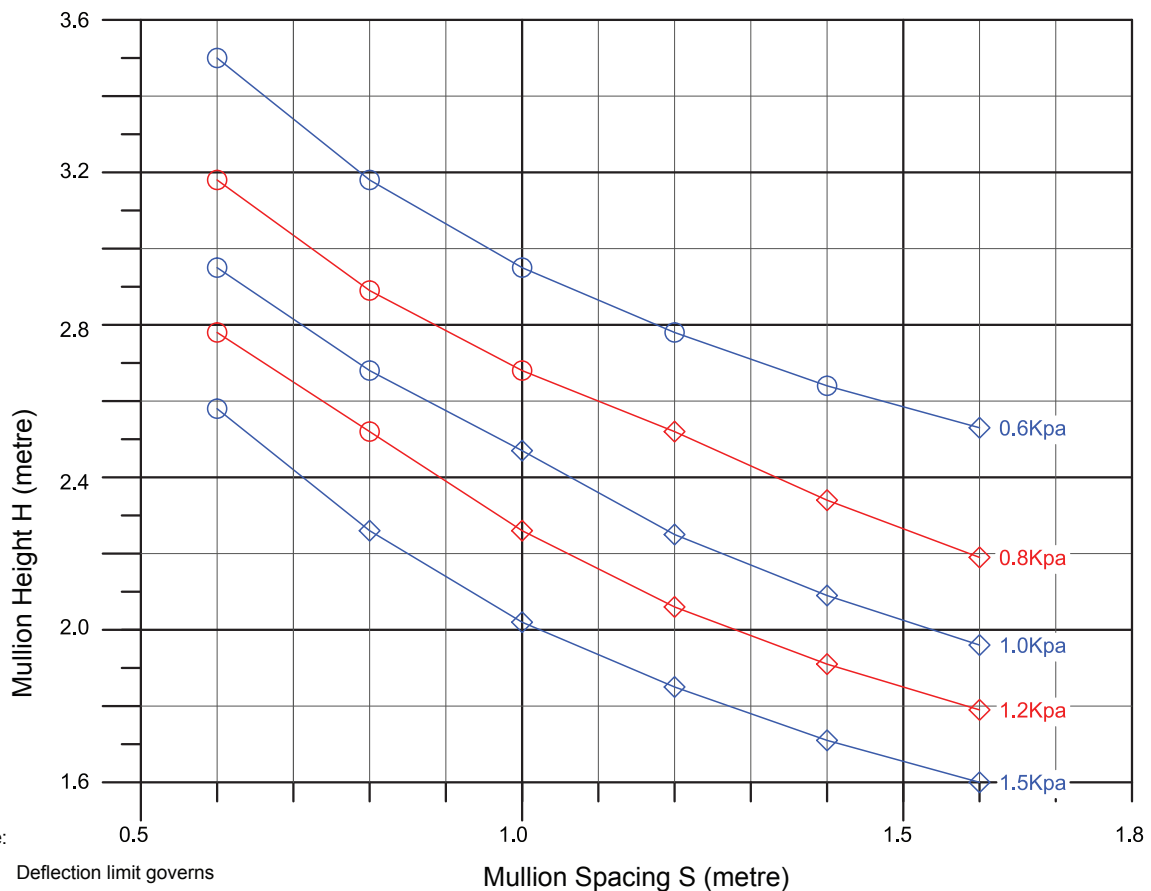
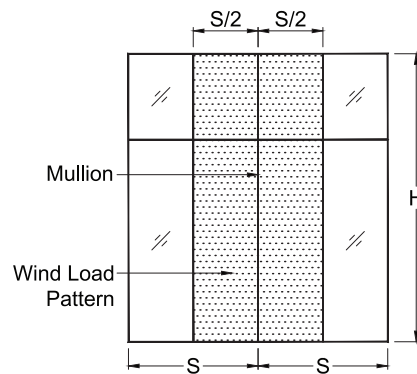
MULLION SECTION : 46609
Alum. alloy : 6063-T5
Moment of inertia I_{xx} : 50.2 cm⁴
Mod. of section Z_{xx} : 9.1 cm³



Note:
 Suffix xx denotes axis perpendicular to wind load

Mod. of elasticity : 70×10^9 N/m²
Design bend. stress : 1.25×67^6 N/m²
Deflection limit : $\text{Span}/175$, up to max. 20mm
Nature of anchor : Simply supported at both ends

Typical configuration of window:



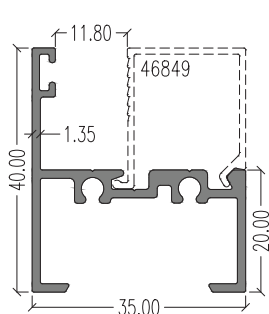
Note:

- Deflection limit governs
- ◇ Design bending stress governs

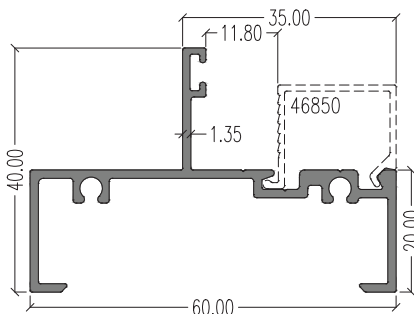
:- Buckling has not been taken into account in this chart

:- This windload chart is solely for reference only

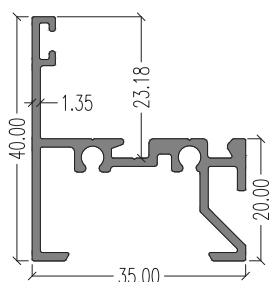
Sectional Details



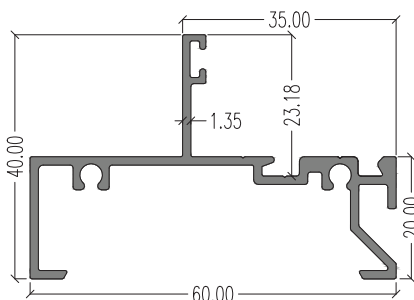
46876 (Outer)
LW : 0.489 kg/m
AP : 254.76 mm



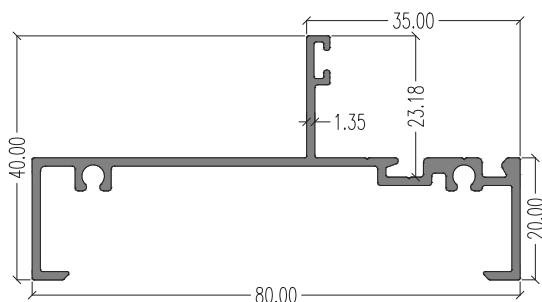
46878 (Outer)
LW : 0.590 kg/m
AP : 310.01 mm



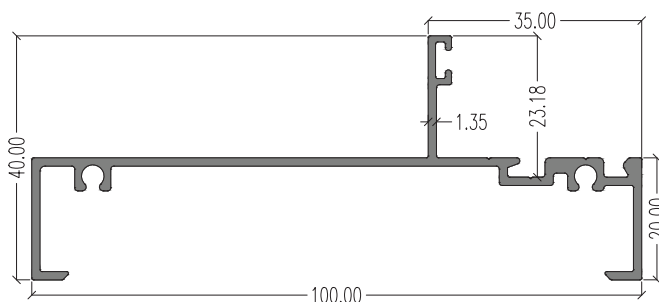
46877 (Bottom Outer)
LW : 0.510 kg/m
AP : 265.88 mm



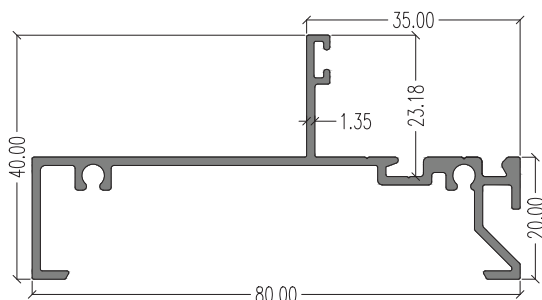
46879 (Bottom Outer)
LW : 0.613 kg/m
AP : 331.30 mm



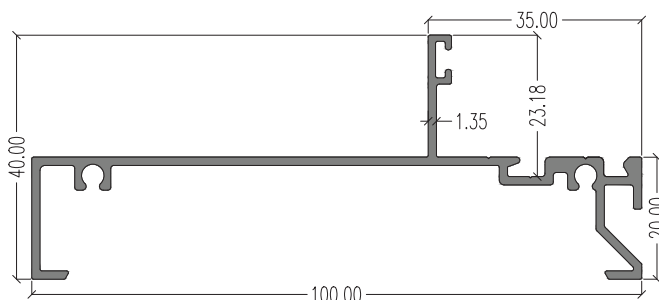
46607 (Outer)
LW : 0.663 kg/m
AP : 350.01 mm



46610 (Outer)
LW : 0.736 kg/m
AP : 390.01 mm

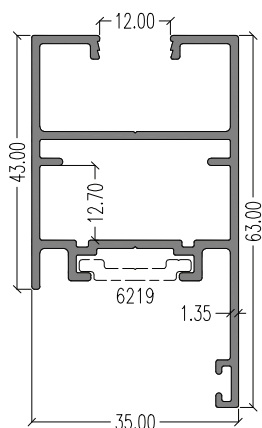


46608 (Bottom Outer)
LW : 0.687 kg/m
AP : 371.30 mm

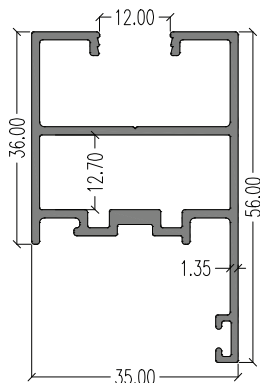


46611 (Bottom Outer)
LW : 0.758 kg/m
AP : 402.36 mm

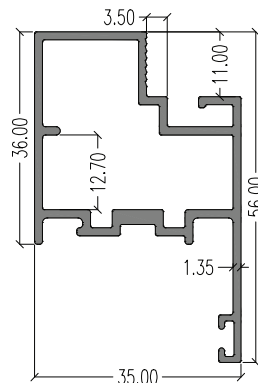
Sectional Details



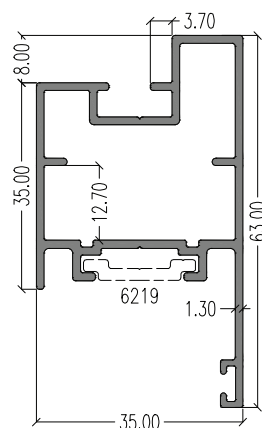
46884 (Inner)
LW : 0.828 kg/m
AP : 333.99 mm



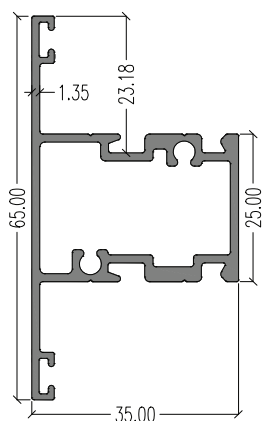
46897 (Inner)
LW : 0.778 kg/m
AP : 272.93 mm



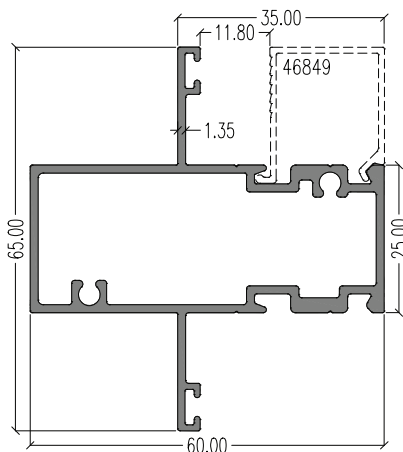
46899 (Inner)
LW : 0.717 kg/m
AP : 238.20 mm



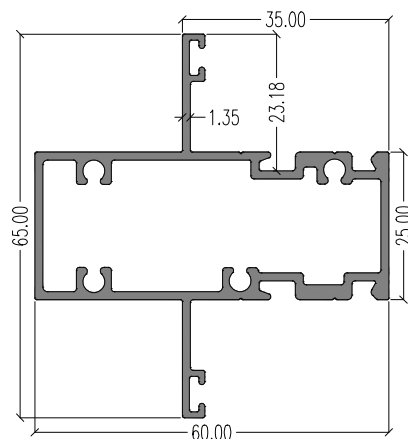
46898 (Inner)
LW : 0.762 kg/m
AP : 297.53 mm



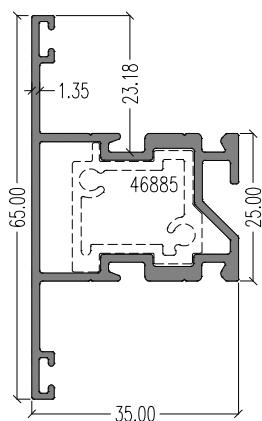
46882 (Mullion)
LW : 0.779 kg/m
AP : 257.43 mm
Ixx : 6.015 cm⁴
Iyy : 4.671 cm⁴



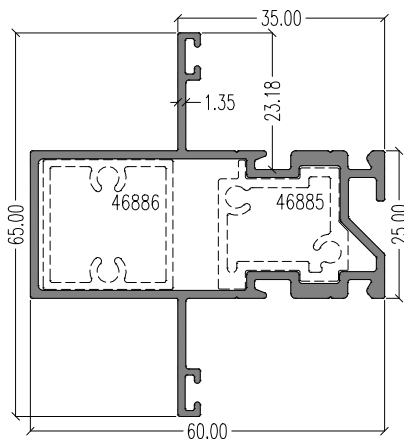
46883 (Mullion)
LW : 0.978 kg/m
AP : 306.82 mm
Ixx : 6.995 cm⁴
Iyy : 12.55 cm⁴



46631 (Mullion)
LW : 1.030 kg/m
AP : 306.63 mm
Ixx : 7.172 cm⁴
Iyy : 26.07 cm⁴

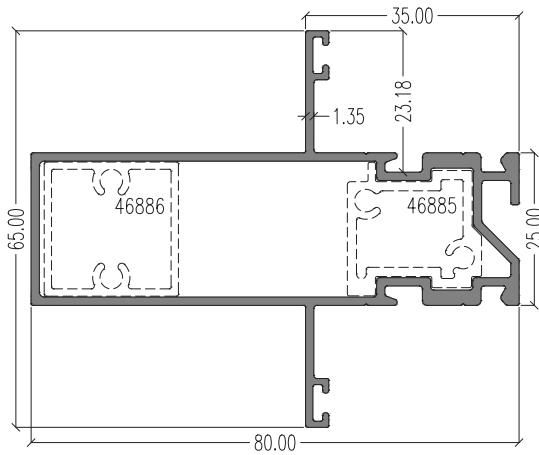


46880 (Transom)
LW : 0.777 kg/m
AP : 274.28 mm
Ixx : 5.976 cm⁴
Iyy : 4.638 cm⁴



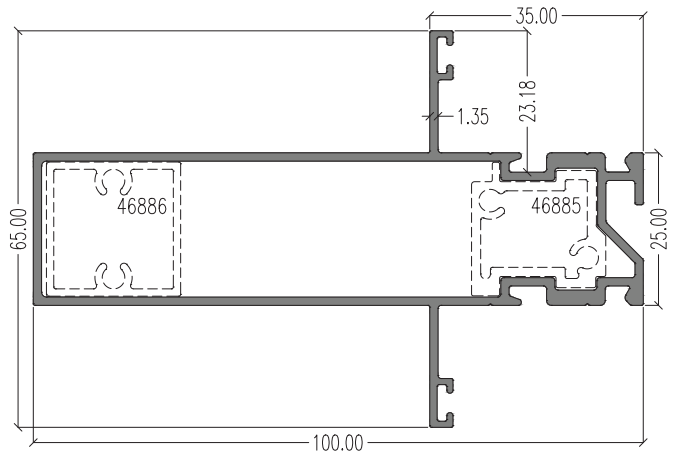
46881 (Transom)
LW : 0.961 kg/m
AP : 323.76 mm
Ixx : 6.923 cm⁴
Iyy : 12.12 cm⁴

Sectional Details



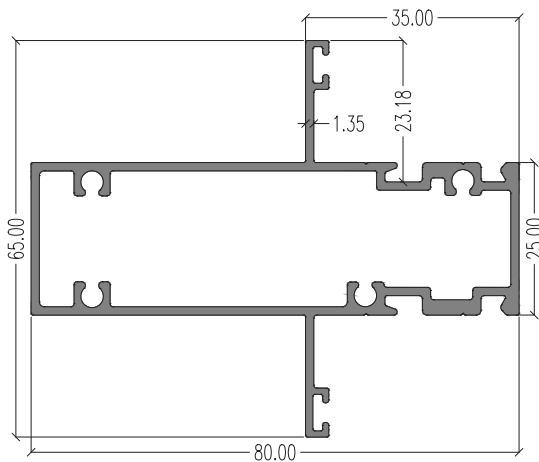
46632 (Transom)

LW : 1.108 kg/m
AP : 362.42 mm
Ixx : 7.680 cm⁴
Iyy : 24.99 cm⁴



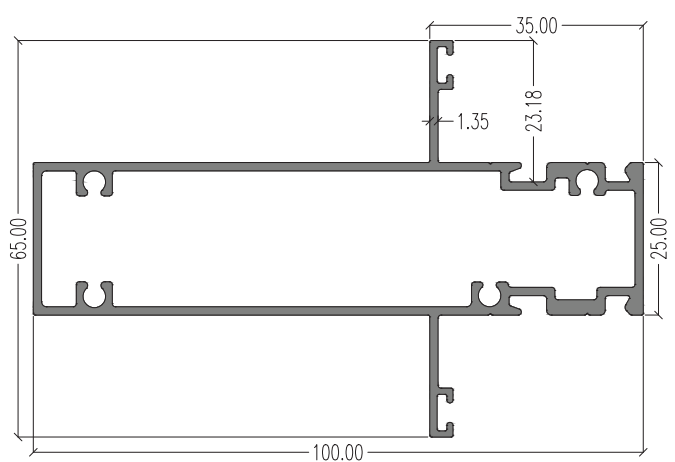
46633 (Transom)

LW : 1.254 kg/m
AP : 402.42 mm
Ixx : 8.436 cm⁴
Iyy : 45.47 cm⁴



46606 (Mullion)

LW : 1.176 kg/m
AP : 346.63 mm
Ixx : 7.928 cm⁴
Iyy : 2.754 cm⁴

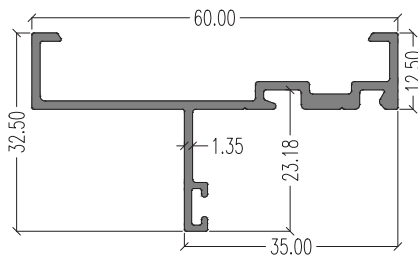
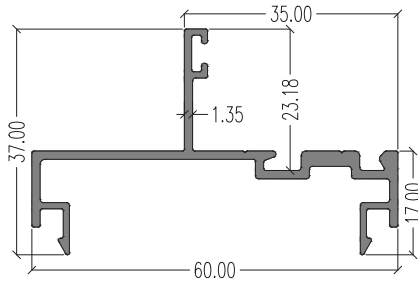


46609 (Mullion)

LW : 1.322 kg/m
AP : 386.63 mm
Ixx : 8.684 cm⁴
Iyy : 50.22 cm⁴

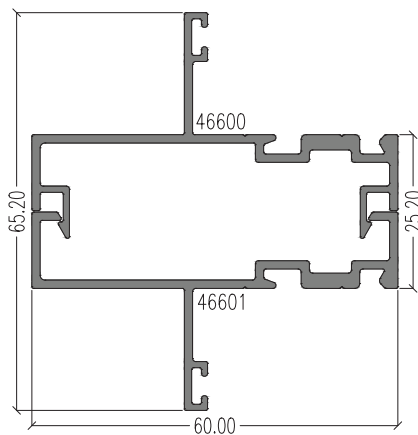
Sectional Details

46600 (Mullion)
 LW : 0.539 kg/m
 AP : 285.73 mm
 I_{xx} : 1.083 cm⁴
 I_{yy} : 7.613 cm⁴

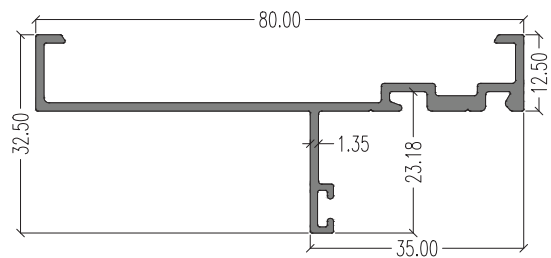
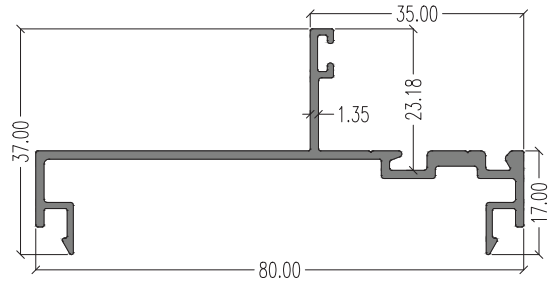


46601 (Mullion)
 LW : 0.492 kg/m
 AP : 249.93 mm
 I_{xx} : 0.871 cm⁴
 I_{yy} : 6.608 cm⁴

Assembly of 46600 & 46601

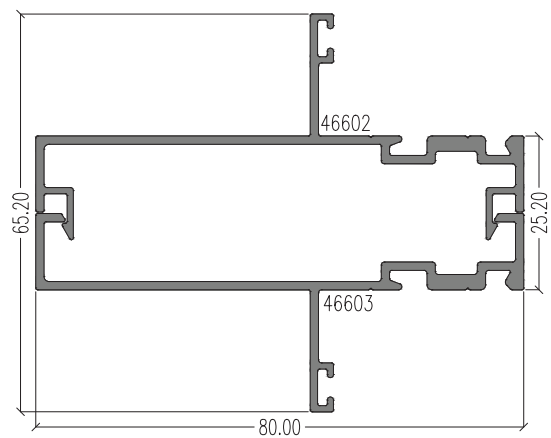


46602 (Mullion)
 LW : 0.612 kg/m
 AP : 325.73 mm
 I_{xx} : 1.085 cm⁴
 I_{yy} : 15.53 cm⁴



46603 (Mullion)
 LW : 0.566 kg/m
 AP : 289.93 mm
 I_{xx} : 0.871 cm⁴
 I_{yy} : 13.49 cm⁴

Assembly of 46602 & 46603



Sectional Details

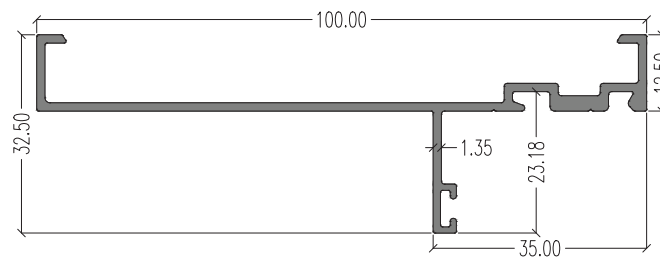
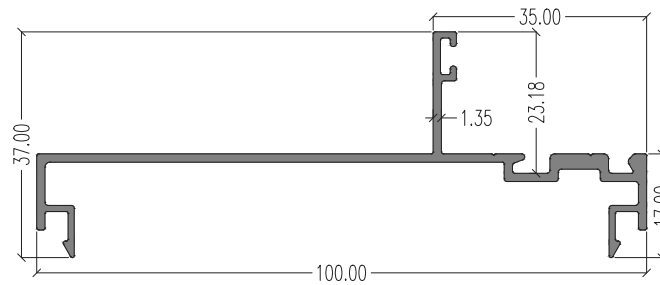
46604 (Mullion)

LW : 0.685 kg/m

AP : 365.73 mm

Ixx : 1.086 cm⁴

Iyy : 27.71 cm⁴



46605 (Mullion)

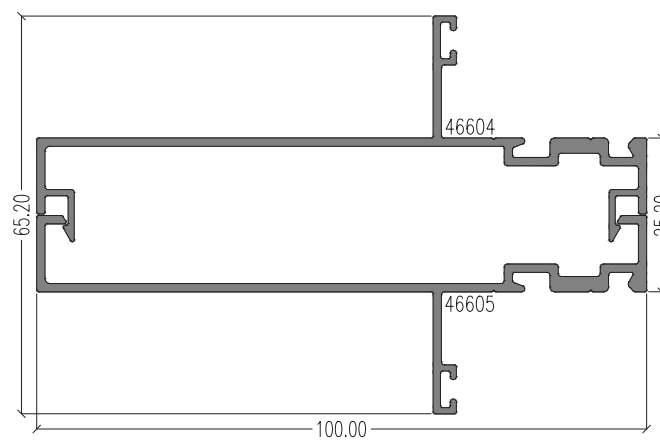
LW : 0.639 kg/m

AP : 329.93 mm

Ixx : 0.872 cm⁴

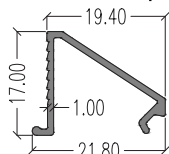
Iyy : 24.30 cm⁴

Assembly of 46604 & 46605



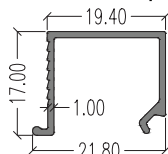
Sectional Details

12mm Gap



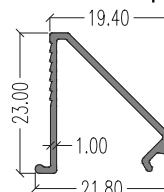
46852 (Beading)
LW : 0.134 kg/m
AP : 98.02 mm

12mm Gap



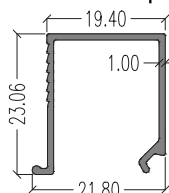
46850 (Beading)
LW : 0.154 kg/m
AP : 113.23 mm

12mm Gap



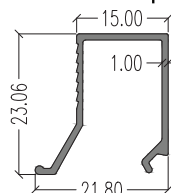
46230 (Beading)
LW : 0.161 kg/m
AP : 118.69 mm

12mm Gap

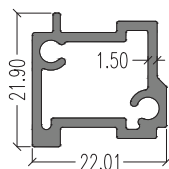


46849 (Beading)
LW : 0.187 kg/m
AP : 137.46 mm

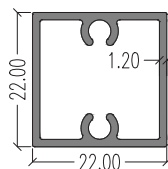
16mm Gap



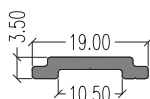
46630 (Beading)
LW : 0.176 kg/m
AP : 131.04 mm



46885 (Bracket)
LW : 0.388 kg/m
AP : 92.08 mm



46886 (Bracket)
LW : 0.332 kg/m
AP : 87.49 mm



6219 (Slide Bar)
LW : 0.117 kg/m
AP : 45.58 mm

Accessories

Handles



CH100 Single-Point



CH200 Single-Point



MPH3903 Multi-Point
Single Fork



MPH3707A Multi-Point
Single/Double Fork



MPH3701A Multi-Point
Single/Double Fork

Catches



MP930S

Weather Strip



PLG 2474
Suntoprene
(153m/roll)

Friction Stay



12", 18" SS304 (2.0mm)
Top Hung



8", 12", 16", SS304 (2.0mm)
Side Hung

Push Rod



MP941KS (L22mm)

Corner Bracket



MP580B

Lockcam



MP950
(10mm, 12mm)

Restrictor Bar



CB8, CB12



CB04



**LB
ALUMINIUM
BERHAD**
198501006093 (138535-V)

Now available at:



HEAD OFFICE & FACTORY

Lot 11, Jalan Perusahaan 1, Kawasan Perusahaan Beranang,
43700 Beranang, Selangor Darul Ehsan, Malaysia.

T : +603-8725 8822 (Gen)

F : +603-8725 8828 (Gen)

E : enquiry@lbalum.com.my

+603-8725 8866 (Export)

W : www.lbalum.com



MS ISO 9001:2015 Cert. No: QMS 00216