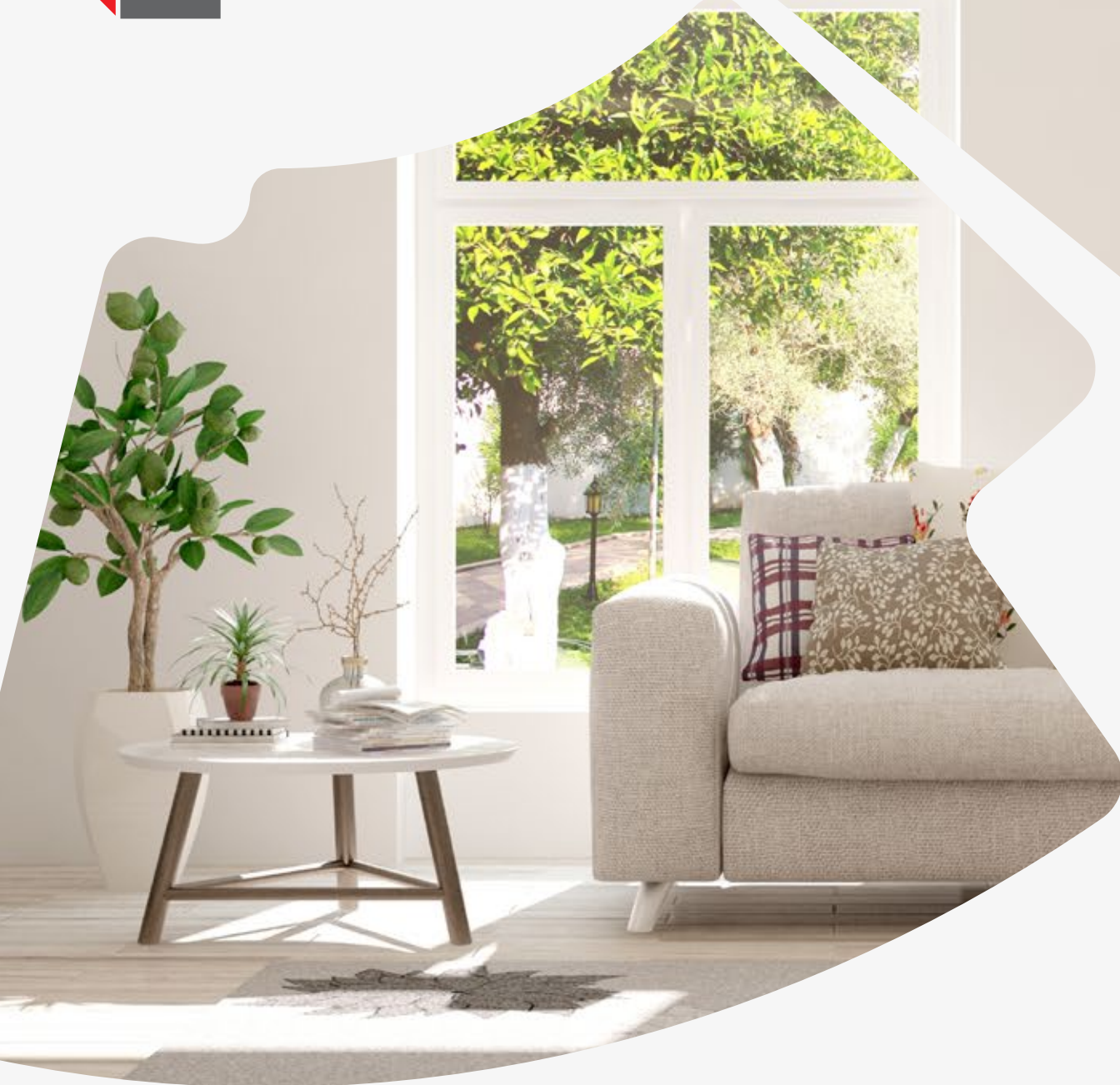




ALBENestra®



Performance Casement Window **SCW02**

Designed and tested according to MS832:2022



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

Product

ALBENestra SCW02

Typical Technical Features

Nominal Wall Thickness	: 1.30mm - 1.35mm
Standard Frame Depth	: 40.00mm
Mullion Depth	: 40.00mm & 80.00mm
Glazing Gap	: 12.00mm - 19.00mm
Locking System	: Single-point & Multipoint
Surface Finish	: Overlap
Hinges	: Friction Stay
Corner Joints	: Mitre Joints With Brackets (Inner)



Performance Test

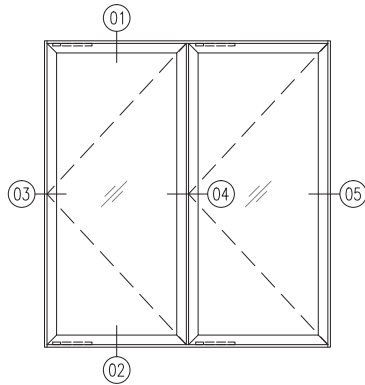
This casement window suite had been tested in compliance to MS 832:2022 performance test procedure for:

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

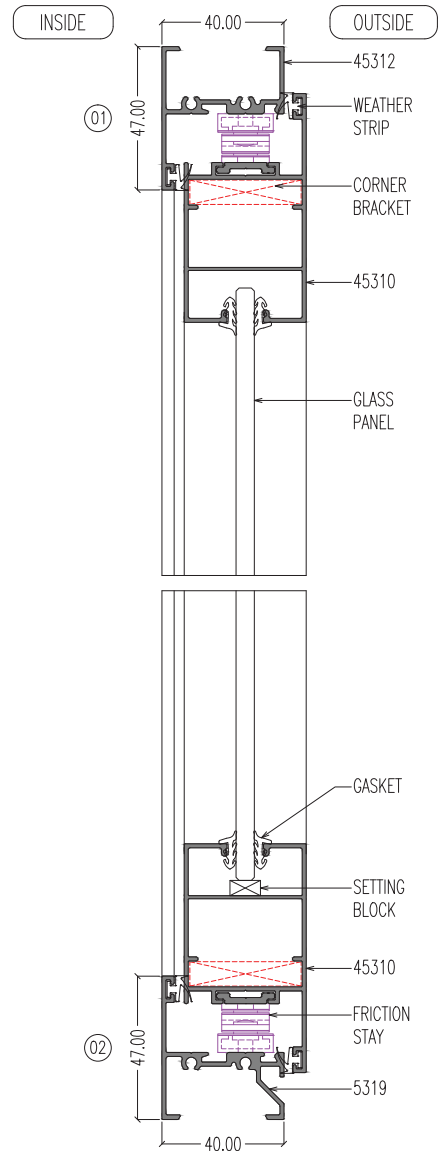
Note: Test report available upon request.



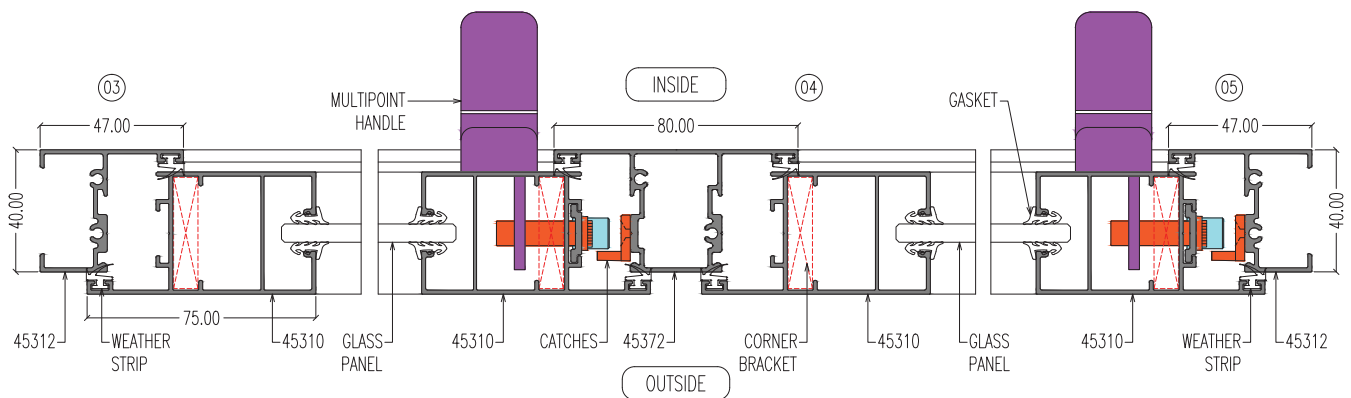
Typical Assembly Details



ELEVATION

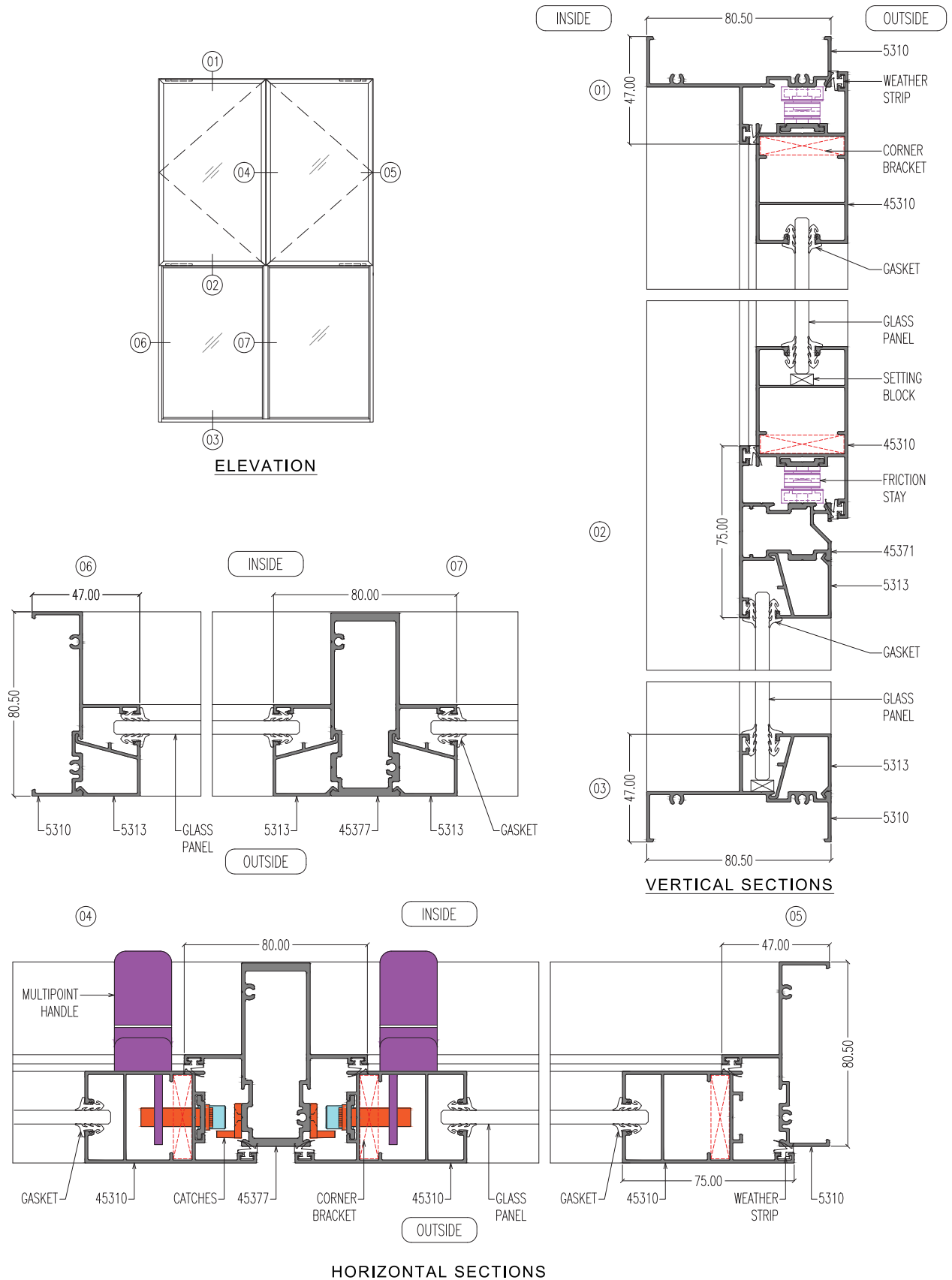


VERTICAL SECTIONS

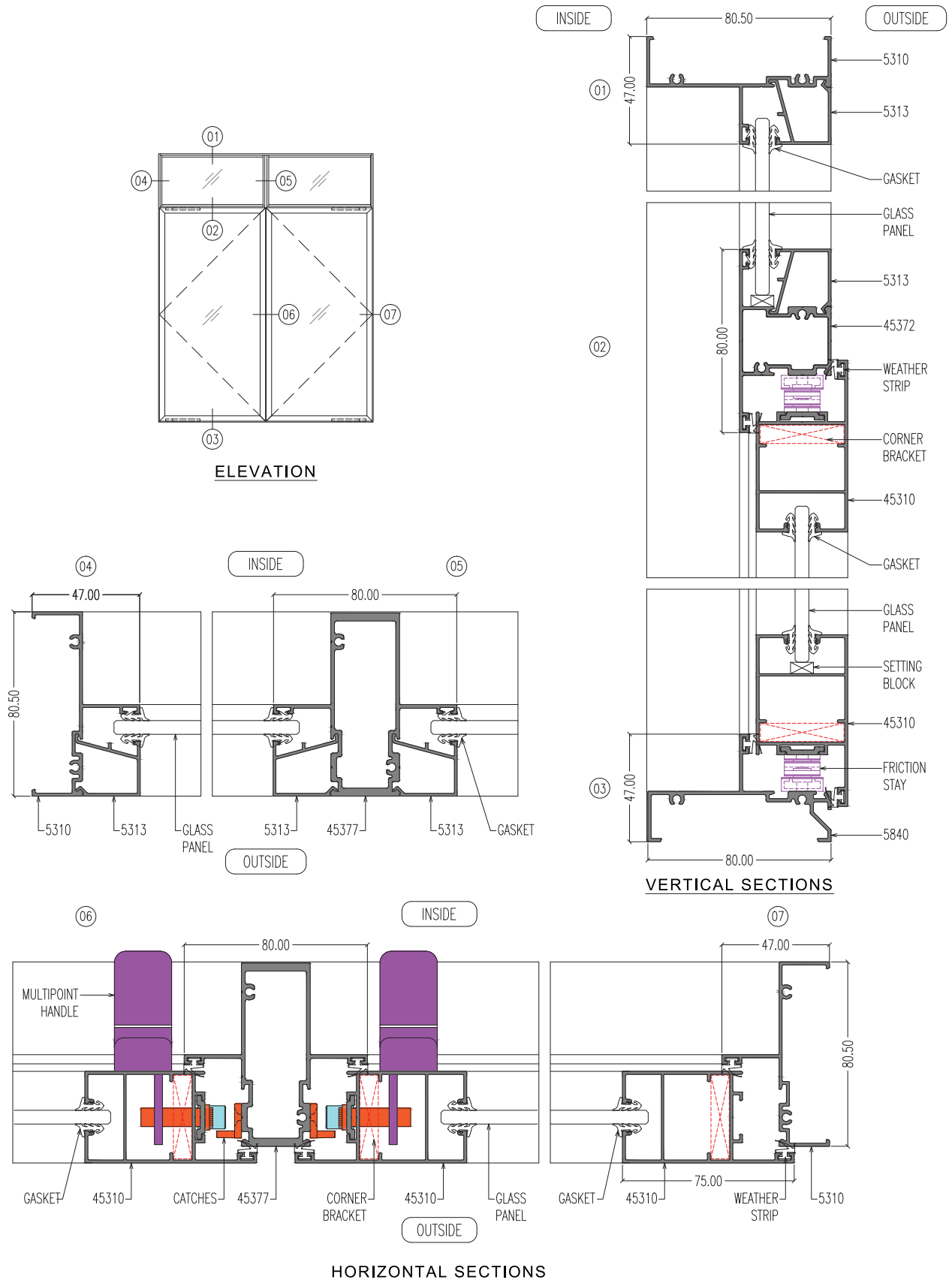


HORIZONTAL SECTIONS

Typical Assembly Details



Typical Assembly Details

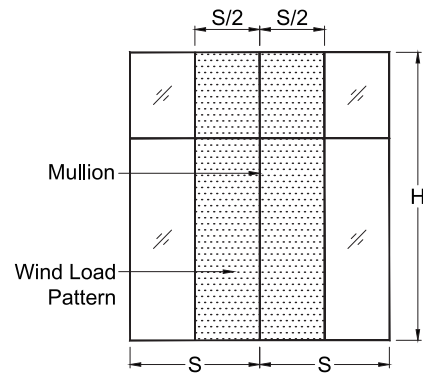
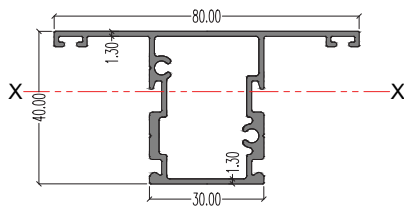


Wind Load Chart

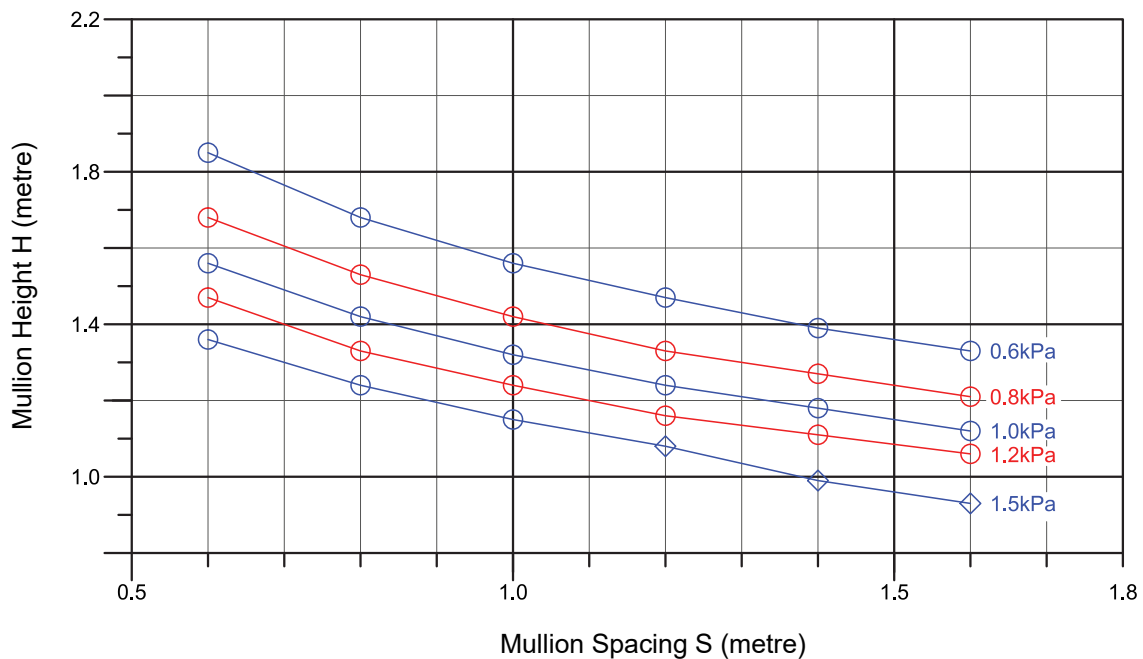
MULLION SECTION : 45372
 Alum. alloy : 6063-T5
 Moment of inertia I_{xx} : 7.4 cm^4
 Mod. of section Z_{xx} : 3.1 cm^3

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

Typical configuration of window:



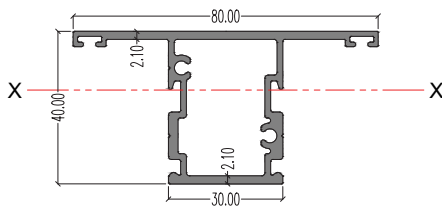
Note:
 Suffix xx denotes axis perpendicular to wind load



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

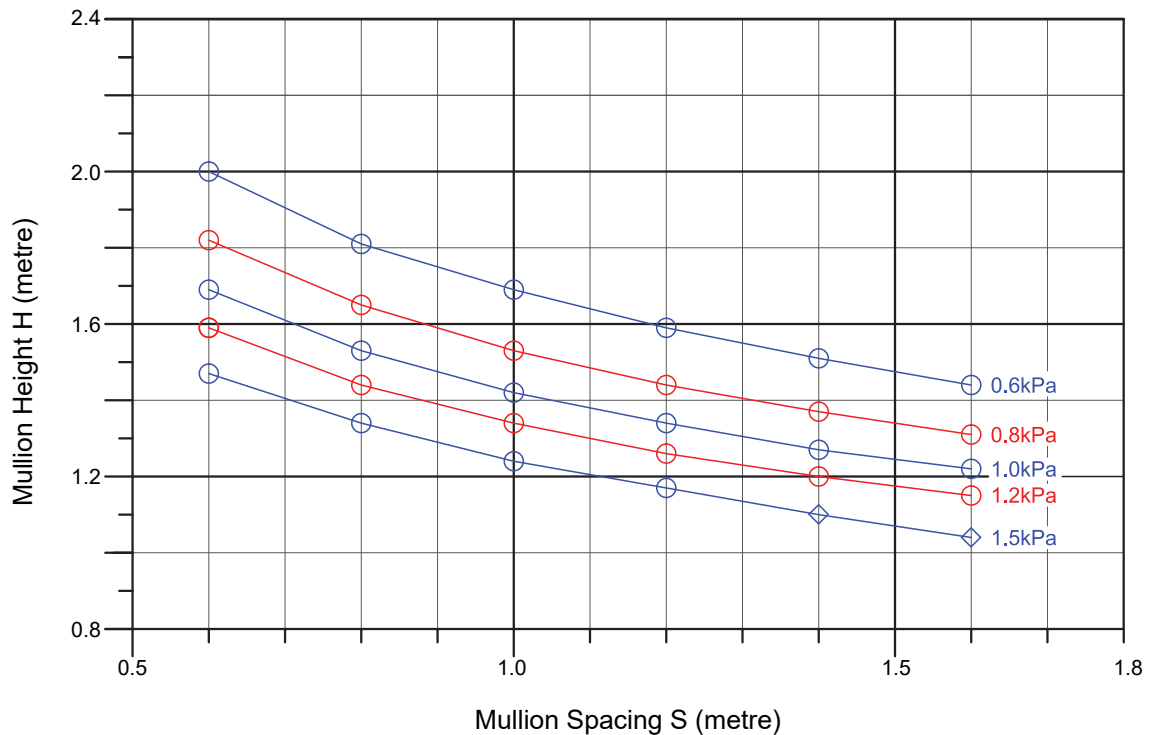
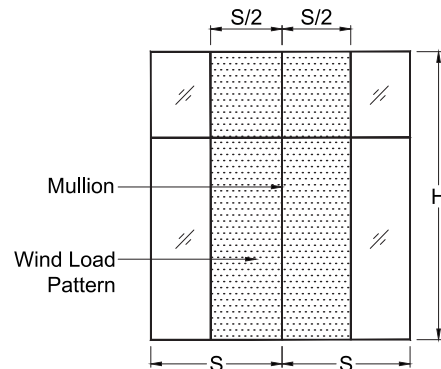
MULLION SECTION : 45376
 Alum. alloy : 6063-T5
 Moment of inertia I_{xx} : 9.4 cm⁴
 Mod. of section Z_{xx} : 3.8 cm³



Note:
 Suffix xx denotes axis perpendicular to wind load

Mod. of elasticity : 70 x 10⁹ N/m²
 Design bend. stress : 1.25 x 67 MPa
 Deflection limit : $\frac{\text{Span}}{175}$, up to max. 20mm
 Nature of anchor : Simply supported at both ends

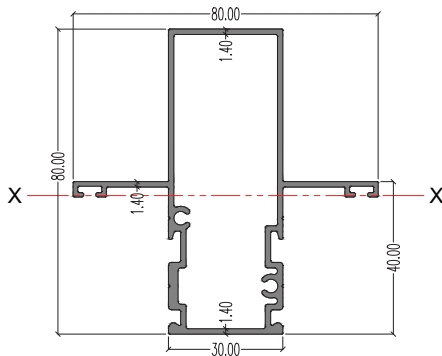
Typical configuration of window:



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

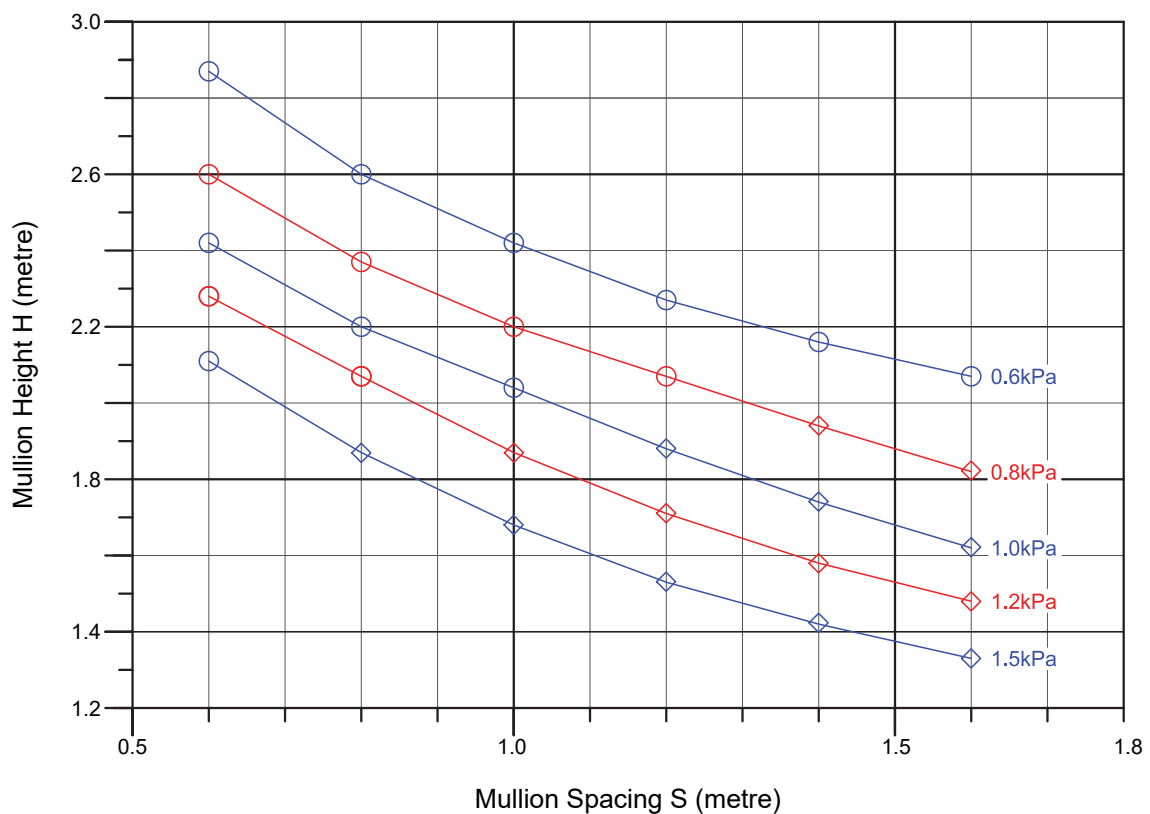
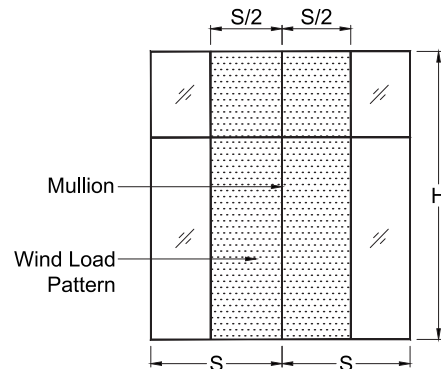
MULLION SECTION : 45373
 Alum. alloy : 6063-T5
 Moment of inertia : $I_{xx} : 27.6 \text{ cm}^4$
 Mod. of section : $Z_{xx} : 6.3 \text{ cm}^3$



Note:
 Suffix xx denotes axis perpendicular to wind load

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

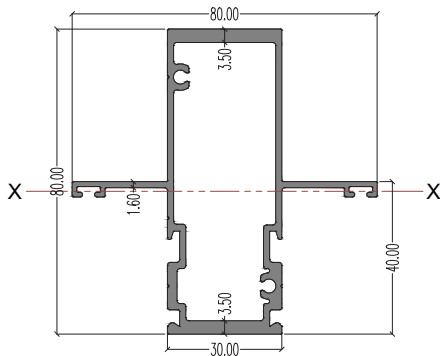
Typical configuration of window:



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

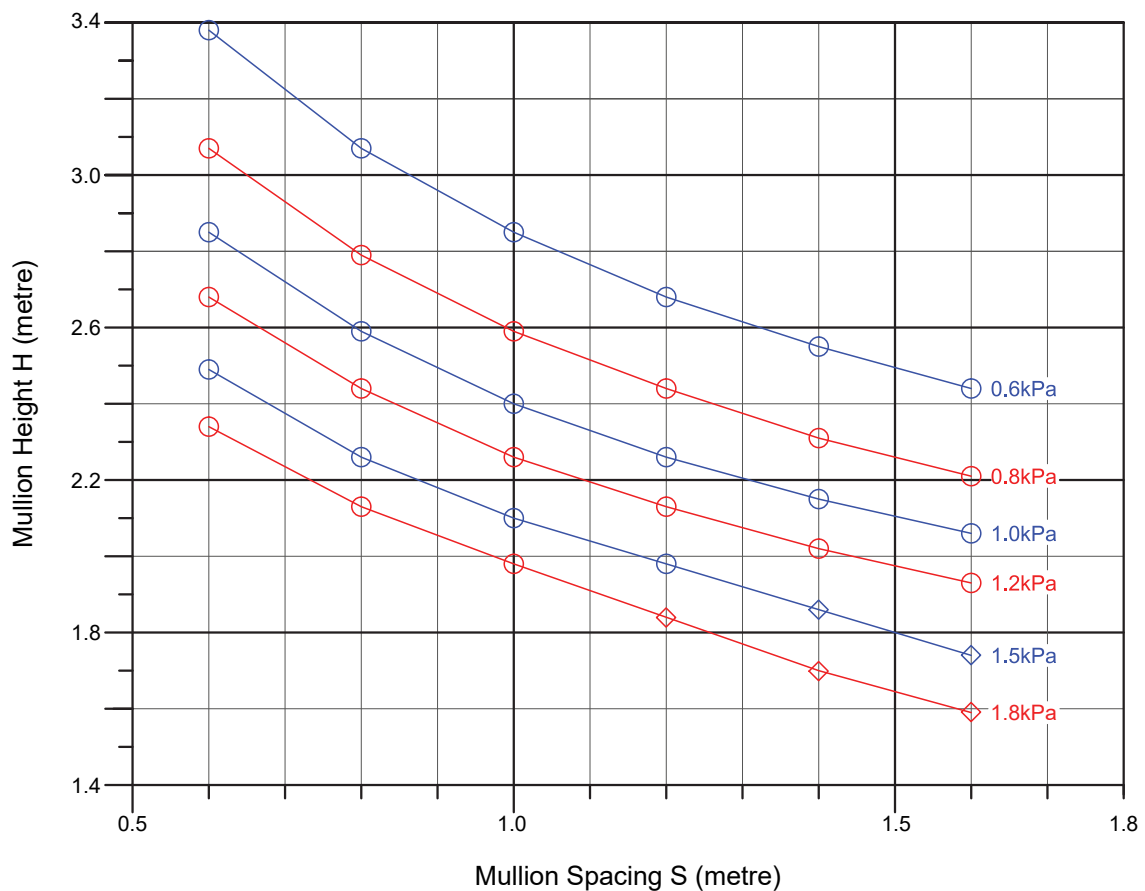
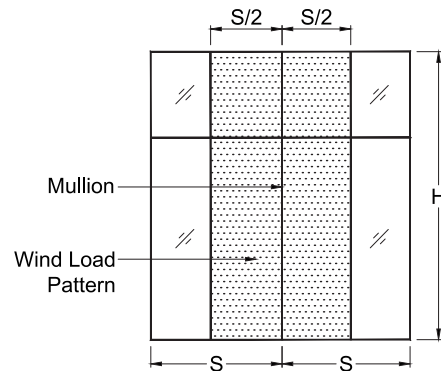
MULLION SECTION : 45377
 Alum. alloy : 6063-T5
 Moment of inertia I_{xx} : 45.2 cm⁴
 Mod. of section Z_{xx} : 10.8 cm³



Note:
 Suffix xx denotes axis perpendicular to wind load

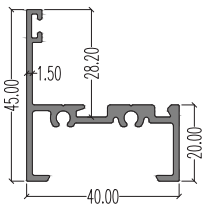
Mod. of elasticity : 70 x 10⁹ N/m²
 Design bend. stress : 1.25 x 67 MPa
 Deflection limit : $\frac{Span}{175}$, up to max. 20mm
 Nature of anchor : Simply supported at both ends

Typical configuration of window:

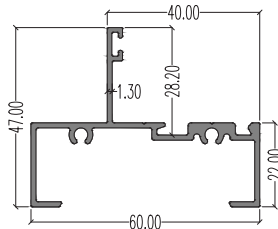


Note:
 ○ Deflection limit governs, ◇ Design bending stress governs
 :- Buckling has not been taken into account in this chart
 :- This windload chart is solely for reference only

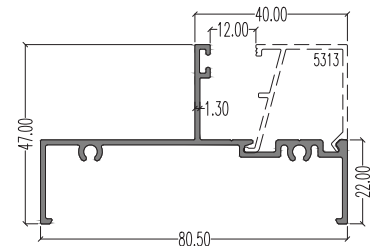
Sectional Details



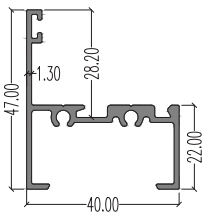
5321 (Outer)
LW : 0.607 kg/m
AP : 274.19 mm



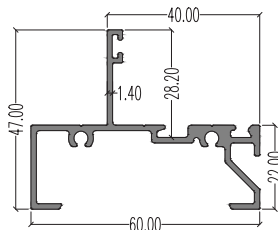
45379 (Outer)
LW : 0.651 kg/m
AP : 337.85 mm



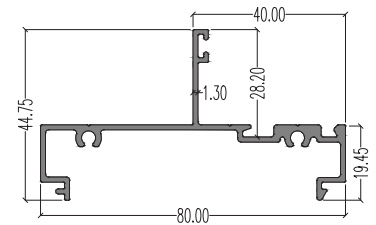
5310 (Outer)
LW : 0.672 kg/m
AP : 365.03 mm



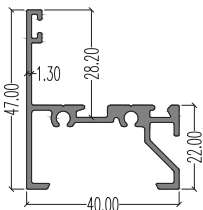
45312 (Outer)
LW : 0.562 kg/m
AP : 283.73 mm



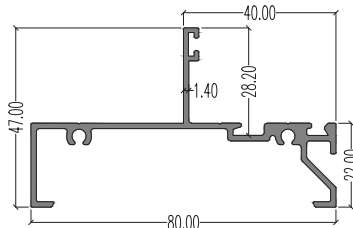
45380 (Bottom Outer)
LW : 0.726 kg/m
AP : 346.65 mm



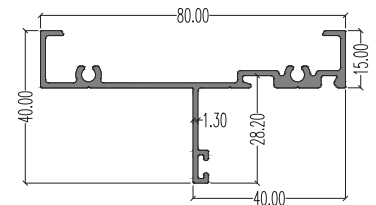
45390 (Mullion)
LW : 0.737 kg/m
AP : 370.73 mm
Ixx : 2.235 cm⁴
Iyy : 19.06 cm⁴



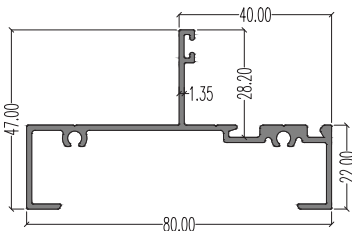
5319 (Bottom Outer)
LW : 0.607 kg/m
AP : 294.73 mm



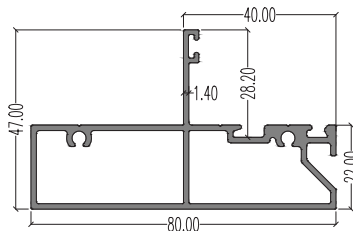
5840 (Bottom Outer)
LW : 0.786 kg/m
AP : 380.05 mm



45391 (Mullion)
LW : 0.681 kg/m
AP : 340.70 mm
Ixx : 1.724 cm⁴
Iyy : 16.71 cm⁴

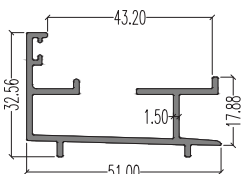
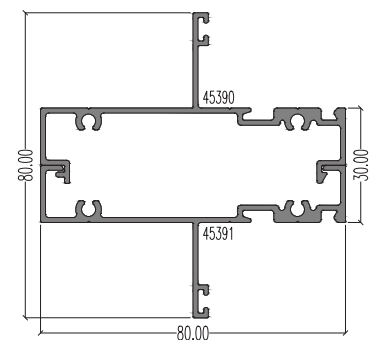


5838 (Outer)
LW : 0.760 kg/m
AP : 380.73 mm

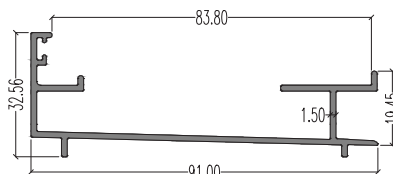


46231 (Bottom Outer)
LW : 1.120 kg/m
AP : 302.31 mm

Assembly of 45390 & 45391

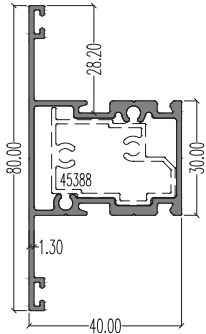


45392 (Subsill)
LW : 0.578 kg/m
AP : 285.59 mm
(For 5321, 45312 & 5319)



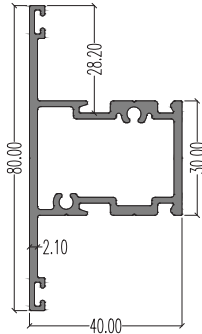
45393 (Subsill)
LW : 0.744 kg/m
AP : 376.55 mm
(For 5310 & 45393)

Sectional Details



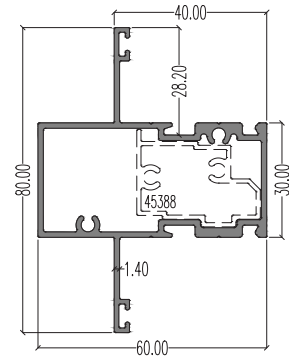
45372 (Mullion)

LW : 0.921 kg/m
AP : 300.50 mm
Ixx : 11.25 cm⁴
Iyy : 7.375 cm⁴



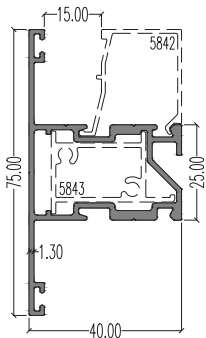
45376 (Mullion)

LW : 1.143 kg/m
AP : 297.30 mm
Ixx : 13.14 cm⁴
Iyy : 9.378 cm⁴



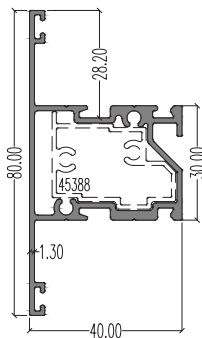
45378 (Mullion)

LW : 1.116 kg/m
AP : 340.17 mm
Ixx : 12.59 cm⁴
Iyy : 14.69 cm⁴



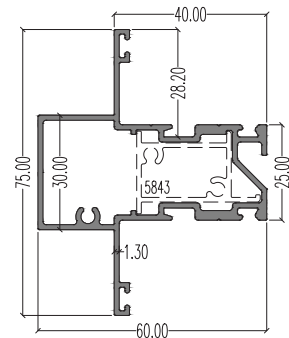
45371 (Transom)

LW : 0.869 kg/m
AP : 310.09 mm
Ixx : 8.696 cm⁴
Iyy : 6.749 cm⁴



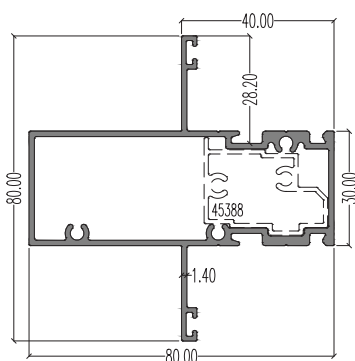
45387 (Transom)

LW : 0.941 kg/m
AP : 320.35 mm
Ixx : 11.26 cm⁴
Iyy : 7.40 cm⁴



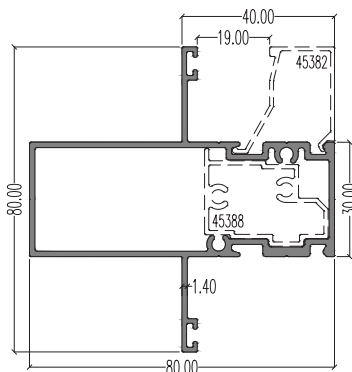
45381 (Transom)

LW : 1.070 kg/m
AP : 350.30 mm
Ixx : 10.12 cm⁴
Iyy : 13.45 cm⁴



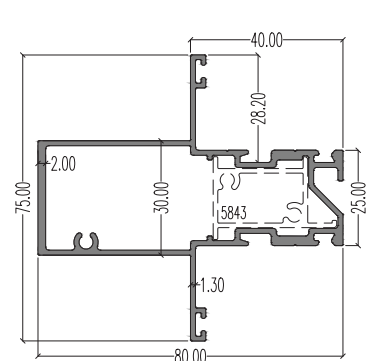
45389 (Mullion)

LW : 1.292 kg/m
AP : 380.17 mm
Ixx : 13.85 cm⁴
Iyy : 29.05 cm⁴



45373 (Mullion)

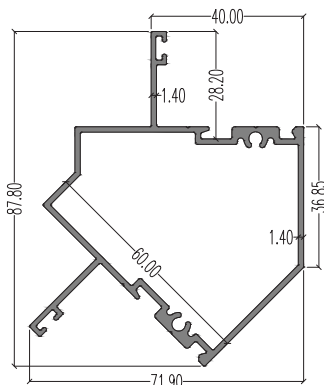
LW : 1.245 kg/m
AP : 380.17 mm
Ixx : 13.60 cm⁴
Iyy : 27.59 cm⁴



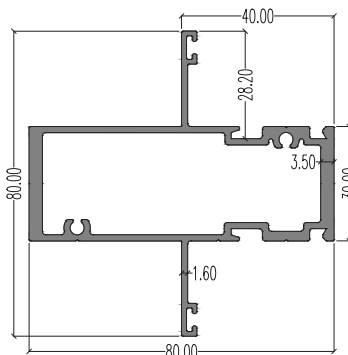
45370 (Transom)

LW : 1.263 kg/m
AP : 390.68 mm
Ixx : 11.32 cm⁴
Iyy : 29.97 cm⁴

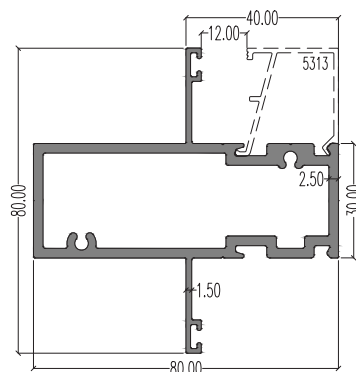
Sectional Details


45384 (Corner Frame)

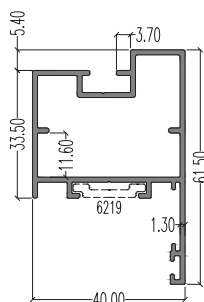
LW : 1.240 kg/m
AP : 379.52 mm
Ixx : 25.39 cm⁴
Iyy : 21.11 cm⁴


45377 (Mullion)

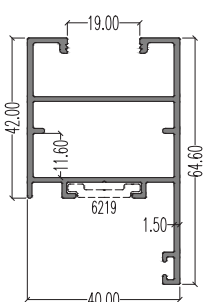
LW : 1.659 kg/m
AP : 380.94 mm
Ixx : 15.37 cm⁴
Iyy : 45.21 cm⁴


45362 (Mullion)

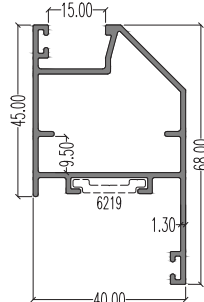
LW : 1.897 kg/m
AP : 379.55 mm
Ixx : 16.73 cm⁴
Iyy : 45.15 cm⁴


45331 (Inner)

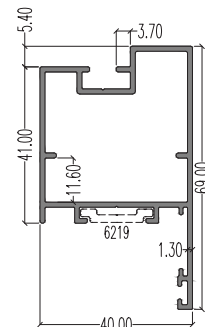
LW : 0.773 kg/m
AP : 276.36 mm


45383 (Inner)

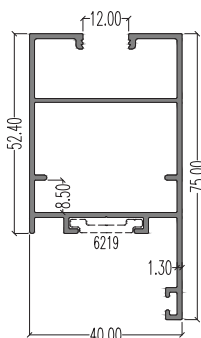
LW : 0.847 kg/m
AP : 334.50 mm


45358 (Inner)

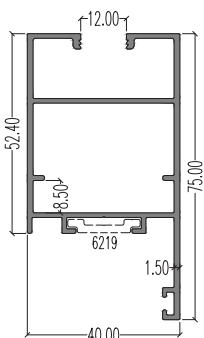
LW : 0.804 kg/m
AP : 293.28 mm


45307 (Inner)

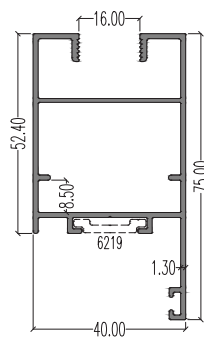
LW : 0.826 kg/m
AP : 291.36 mm


45310 (Inner)

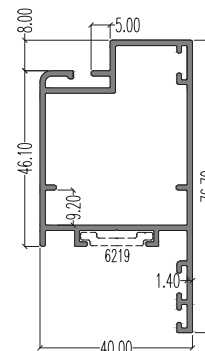
LW : 0.889 kg/m
AP : 372.86 mm


5312 (Inner)

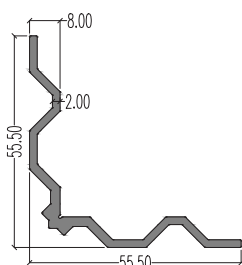
LW : 0.954 kg/m
AP : 372.50 mm


45394 (Inner)

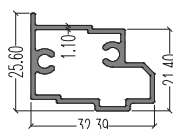
LW : 0.903 kg/m
AP : 381.24 mm


6287 (Inner)

LW : 0.972 kg/m
AP : 321.99 mm

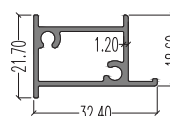

6905 (Corner Bracket)

LW : 0.681 kg/m
AP : 232.60 mm


45388 (Bracket)

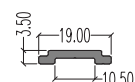
LW : 0.409 kg/m
AP : 111.70 mm
Ixx : 0.828 cm⁴
Iyy : 1.728 cm⁴

(For 45372, 45373, 45378,
45387 & 45389)


5843 (Bracket)

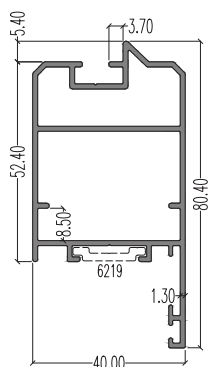
LW : 0.366 kg/m
AP : 113.70 mm
Ixx : 0.539 cm⁴
Iyy : 1.331 cm⁴

(For 45370, 45371 & 45381)


6219 (Slide Bar)

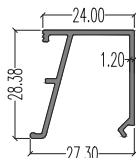
LW : 0.117 kg/m
AP : 45.58 mm

Sectional Details



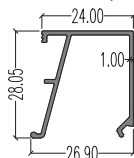
5377 (Inner)
LW : 1.021 kg/m
AP : 312.10 mm

12mm Gap



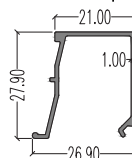
5313 (Beading)
LW : 0.287 kg/m
AP : 176.59 mm

12mm Gap



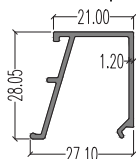
45308 (Beading)
LW : 0.244 kg/m
AP : 176.23 mm

15mm Gap



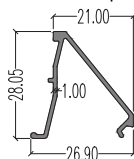
5842 (Beading)
LW : 0.233 kg/m
AP : 163.07 mm

15mm Gap



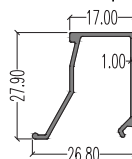
5323 (Beading)
LW : 0.275 kg/m
AP : 167.77 mm

15mm Gap



45309 (Beading)
LW : 0.204 kg/m
AP : 140.22 mm

19mm Gap



45382 (Beading)
LW : 0.222 kg/m
AP : 155.36 mm

Accessories

Handles



CH100 Single-Point



CH200 Single-Point



CH300 Single-Point



MPH3903 Multi-Point
Single Fork



MPH3907 Multi-Point
Single Fork



MPH3701A Multi-Point
Single/Double Fork



MPH3707A Multi-Point
Single/Double Fork



MPH3709A Multi-Point
Single/Double Fork

Catches



MP930S

Weather Strip



PLG 3785
Suntoprene
(153m / roll)

Friction Stays



12", 14", 16", 20" SS304
Top Hung



8", 12", 16" SS304
Side Hung

Push Rod



MP943KS (L30mm)

Corner Bracket



MP580A
(36.5mm)

Lockcam



MP950
(10mm, 12mm)

Restrictor Bar



CB04

THIS PAGE IS INTENTIONALLY LEFT BLANK



**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



CERTIFIED ISO 9001:2015
CERT NO: QMS 00216



CERTIFIED ISO 14001:2015
CERT NO: EMS 01118