



ALBENestra®



Performance Casement Window **SCW02**

Designed and tested according to MS832



**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

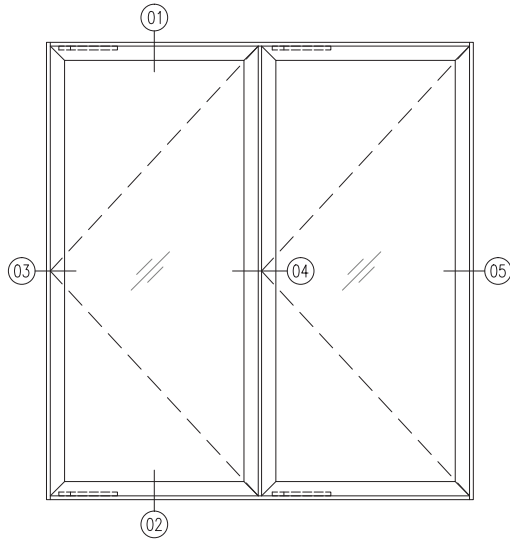
This casement window suite had been tested in compliance to MS 832:2022 performance test procedure for:

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

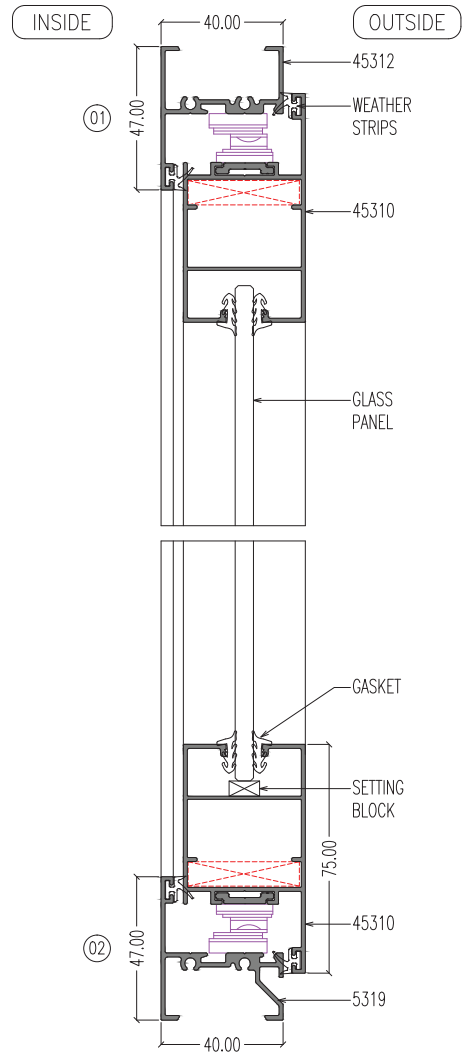
Note: Test report available upon request.



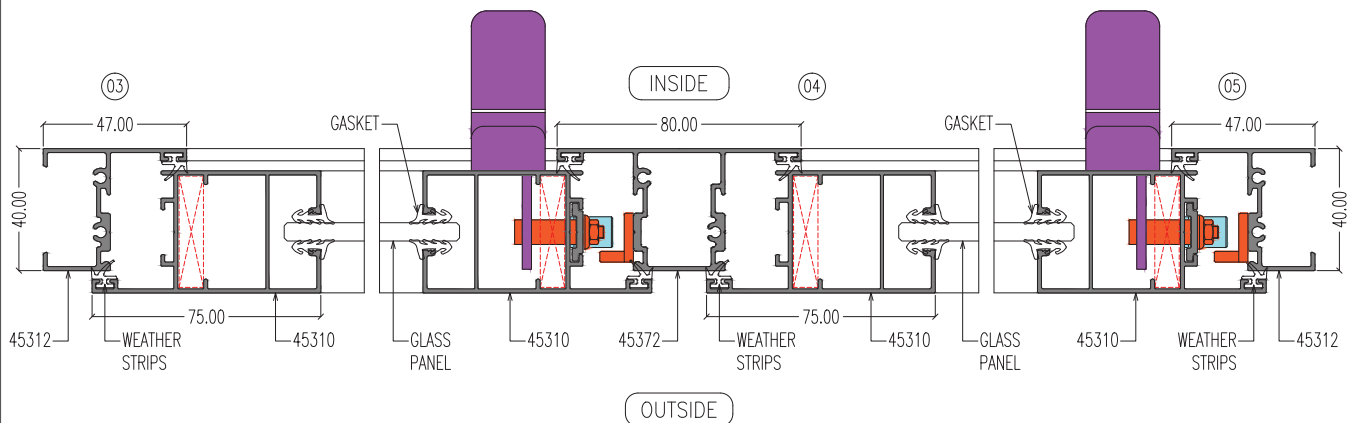
Typical Assembly Details



ELEVATION



VERTICAL SECTIONS



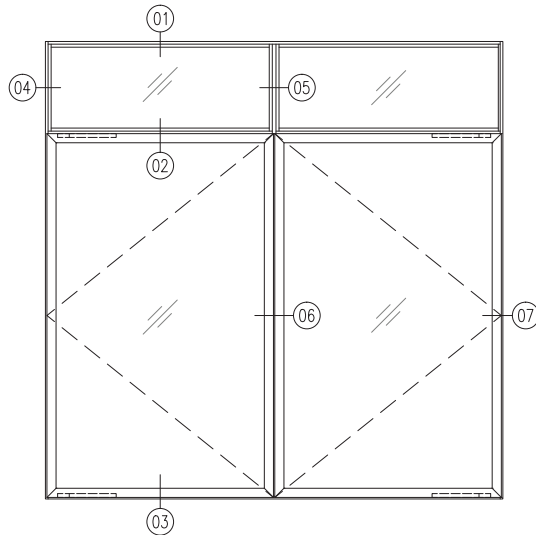
HORIZONTAL SECTIONS

The technical drawings show the cross-sections of two window profiles, 06 and 07. Profile 06 has a width of 47.00 and a height of 80.50. Profile 07 has a width of 80.00. The drawings include labels for the 'INSIDE' and 'OUTSIDE' views, and identify components such as the 'GLASS PANEL' and 'GASKET'. Specific part numbers are also indicated: 5310, 5313, 45377, and 5313.

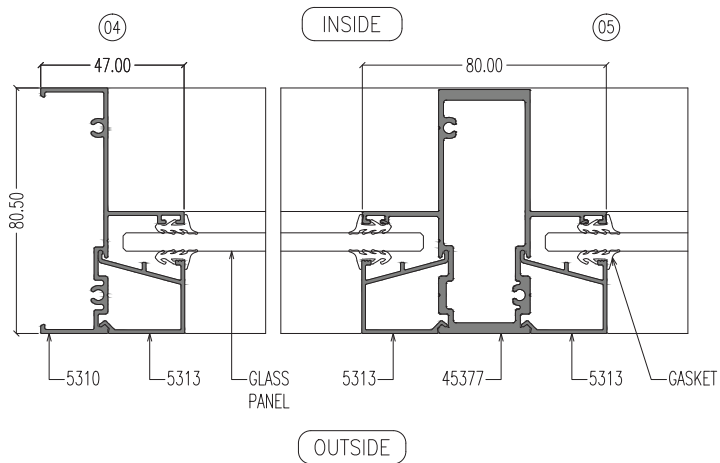
The technical drawings show the cross-section of the window frame from both the inside and outside perspectives. The inside view (left) shows a width of 80.00 and labels for the GASKET, 45310, 45377, 45310, and GLASS PANEL. The outside view (right) shows a width of 47.00 and a height of 80.50, with labels for the GASKET, 45310, WEATHER STRIPS, and 5310. Both views include a red dashed 'X' indicating the glass panel area.

4 All design are properties of LB Aluminium Berhad

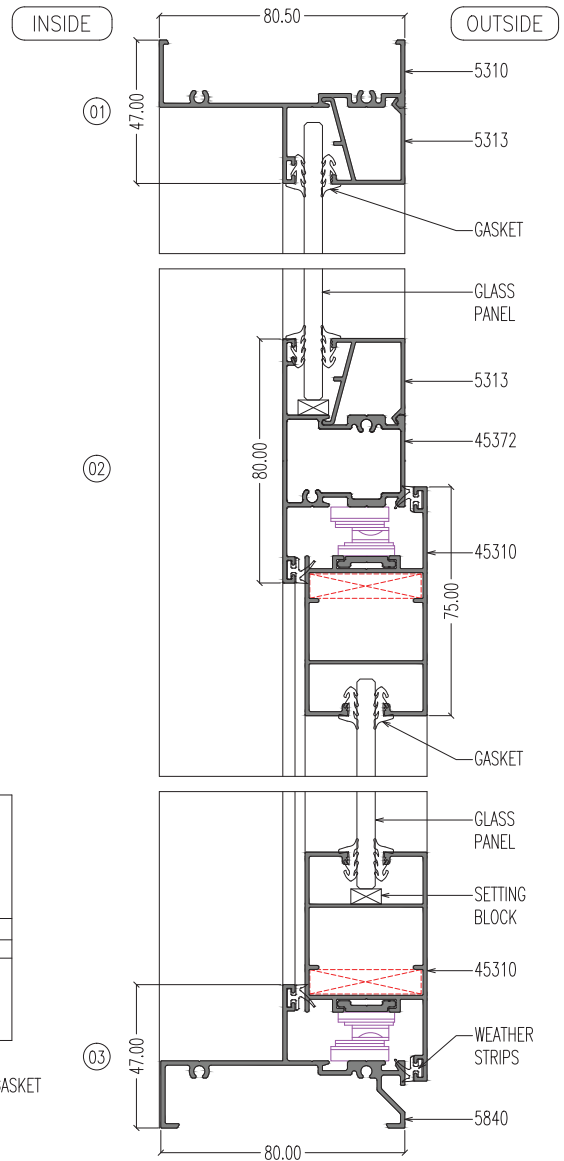
Typical Assembly Details



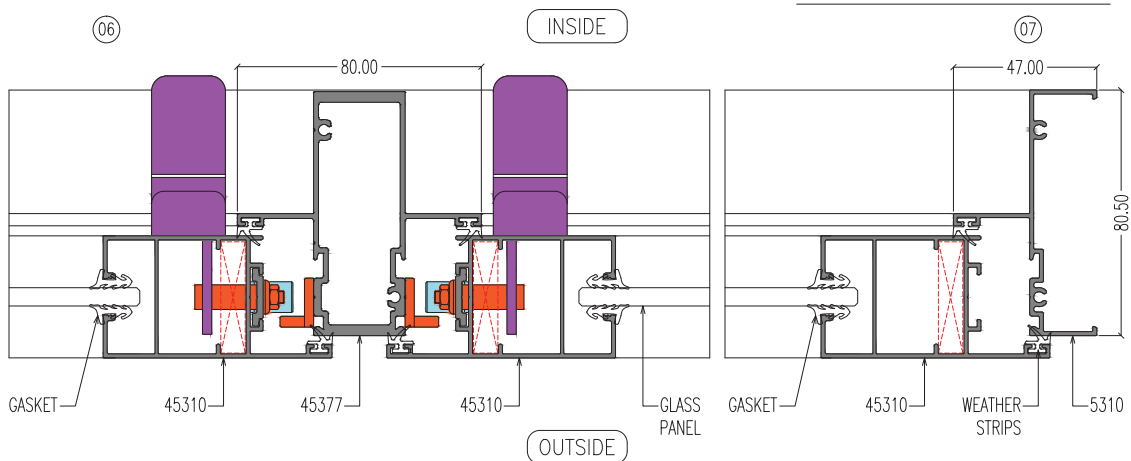
ELEVATION



OUTSIDE



VERTICAL SECTIONS

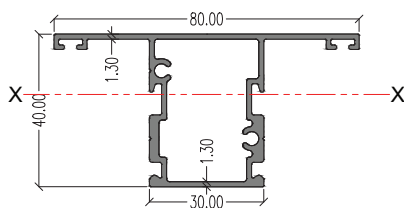


HORIZONTAL SECTIONS

Wind Load Chart

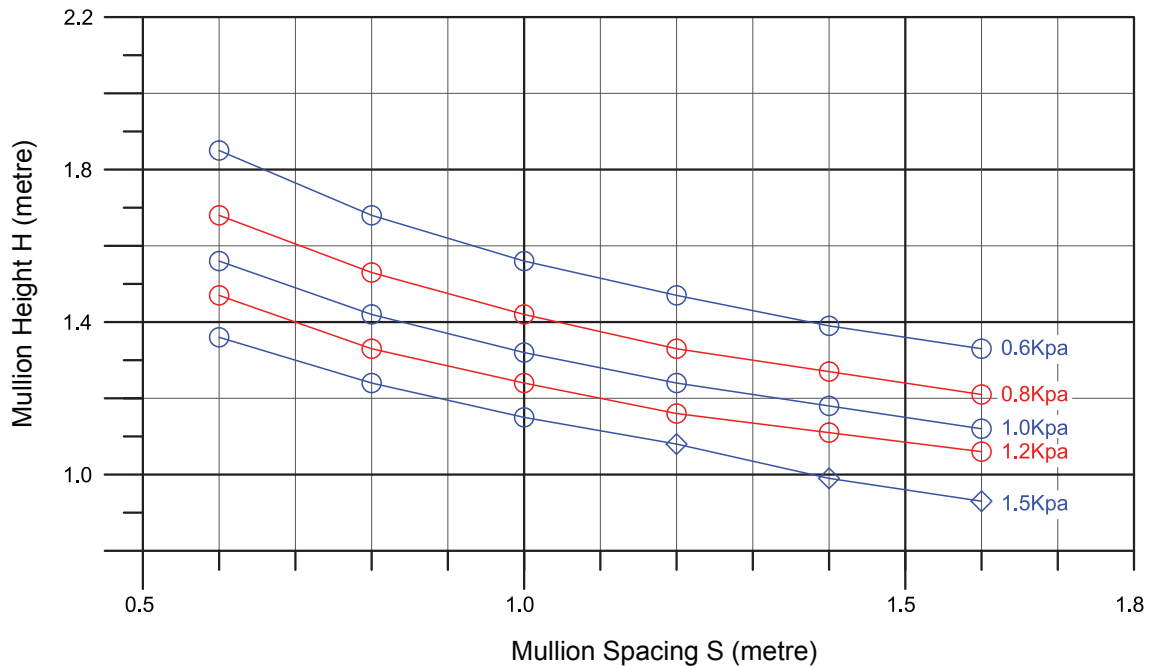
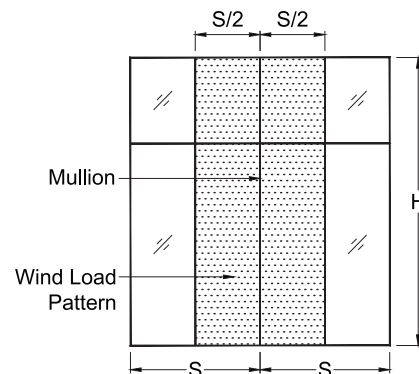
MULLION SECTION : 45372
 Alum. alloy : 6063-T5
 Moment of inertia I_{xx} : 7.4 cm^4
 Mod. of section Z_{xx} : 3.1 cm^3

Mod. of elasticity : $70 \times 10^9 \text{ N/m}^2$
 Design bend. stress : $1.25 \times 67^6 \text{ N/m}^2$
 Deflection limit : $S_{pan}/175$, 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:

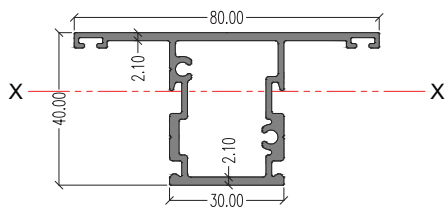
- Deflection limit governs
- ◇ Design bending stress governs

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

:- This windload chart is solely for reference only

Wind Load Chart

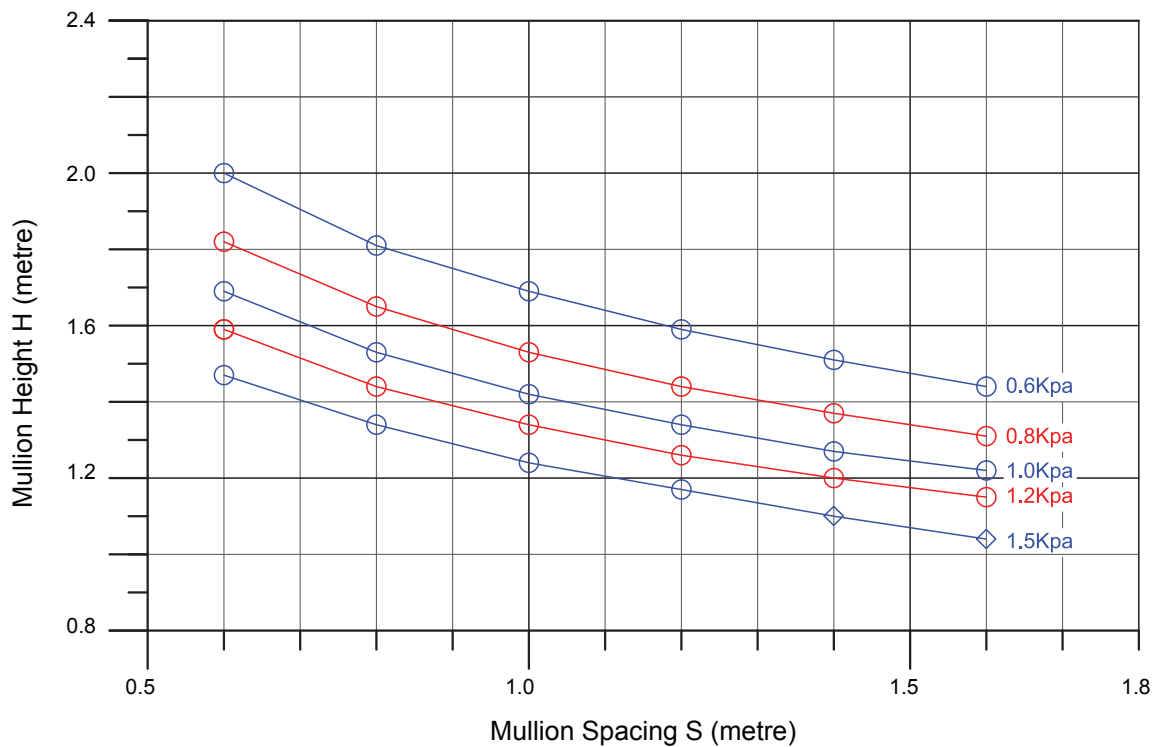
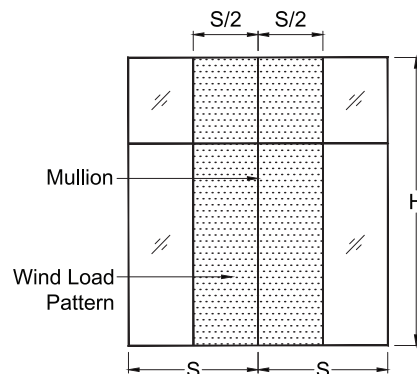
MULLION SECTION : 45376
 Alum. alloy : 6063-T5
 Moment of inertia I_{xx} : 9.4 cm⁴
 Mod. of section Z_{xx} : 3.8 cm³



Note:
 Suffix xx denotes axis perpendicular to wind load

Mod. of elasticity : 70 x 10⁹ N/m²
 Design bend. stress : 1.25 x 67⁶ N/m²
 Deflection limit : $S_{pan}/175$, up to max. 20mm
 Nature of anchor : Simply supported at both ends

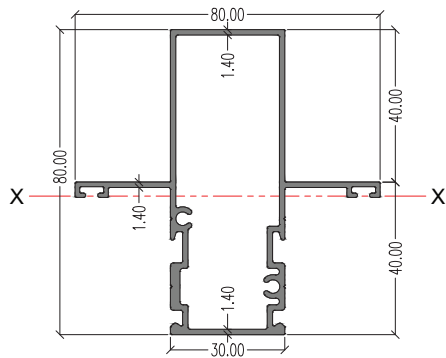
Typical configuration of window:



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

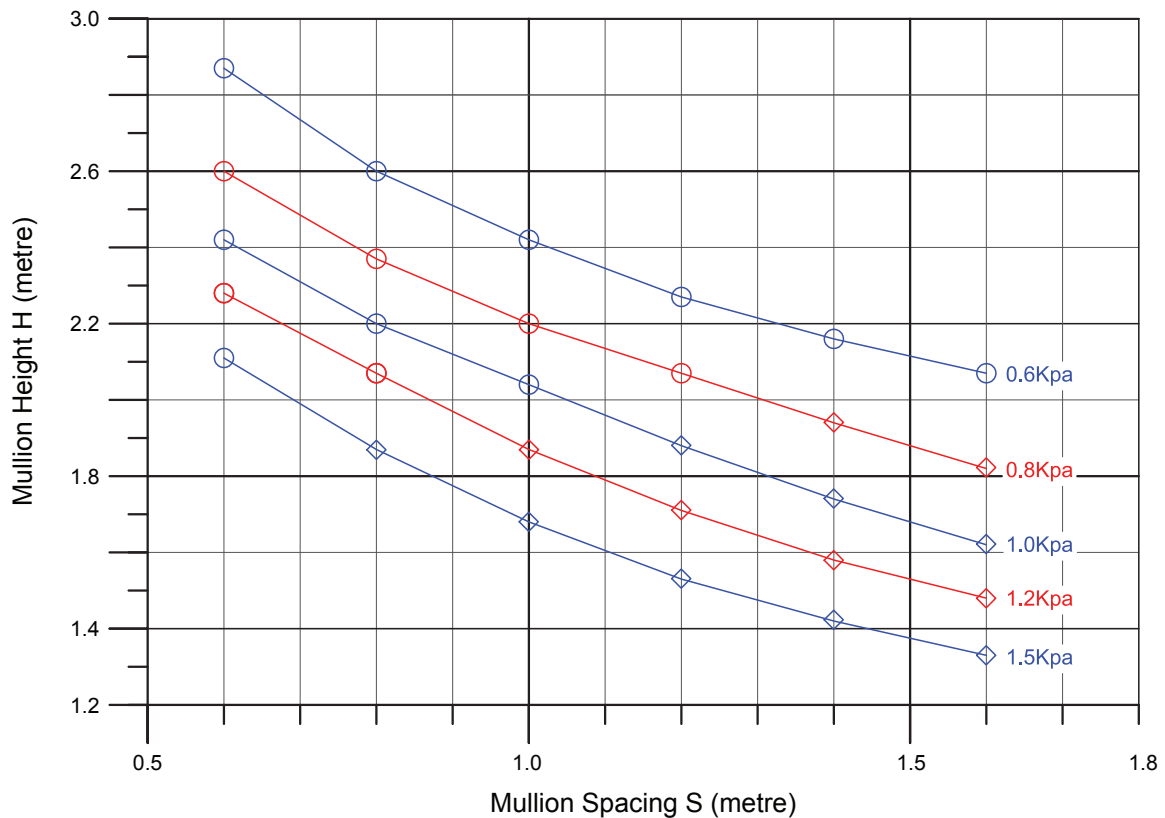
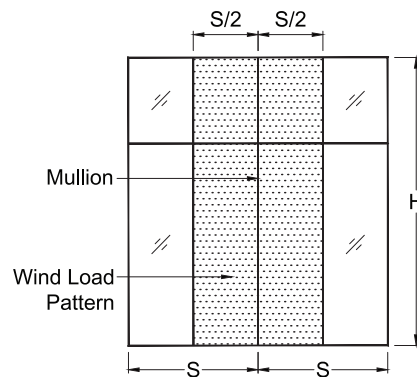
MULLION SECTION : 45373
 Alum. alloy : 6063-T5
 Moment of inertia I_{xx} : 27.6 cm⁴
 Mod. of section Z_{xx} : 6.3 cm³



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 : $\frac{\text{Span}}{175}$, up to max. 20mm
 Nature of anchor : Simply supported at both ends

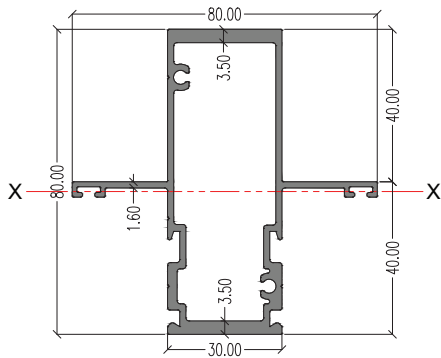
Typical configuration of window:



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

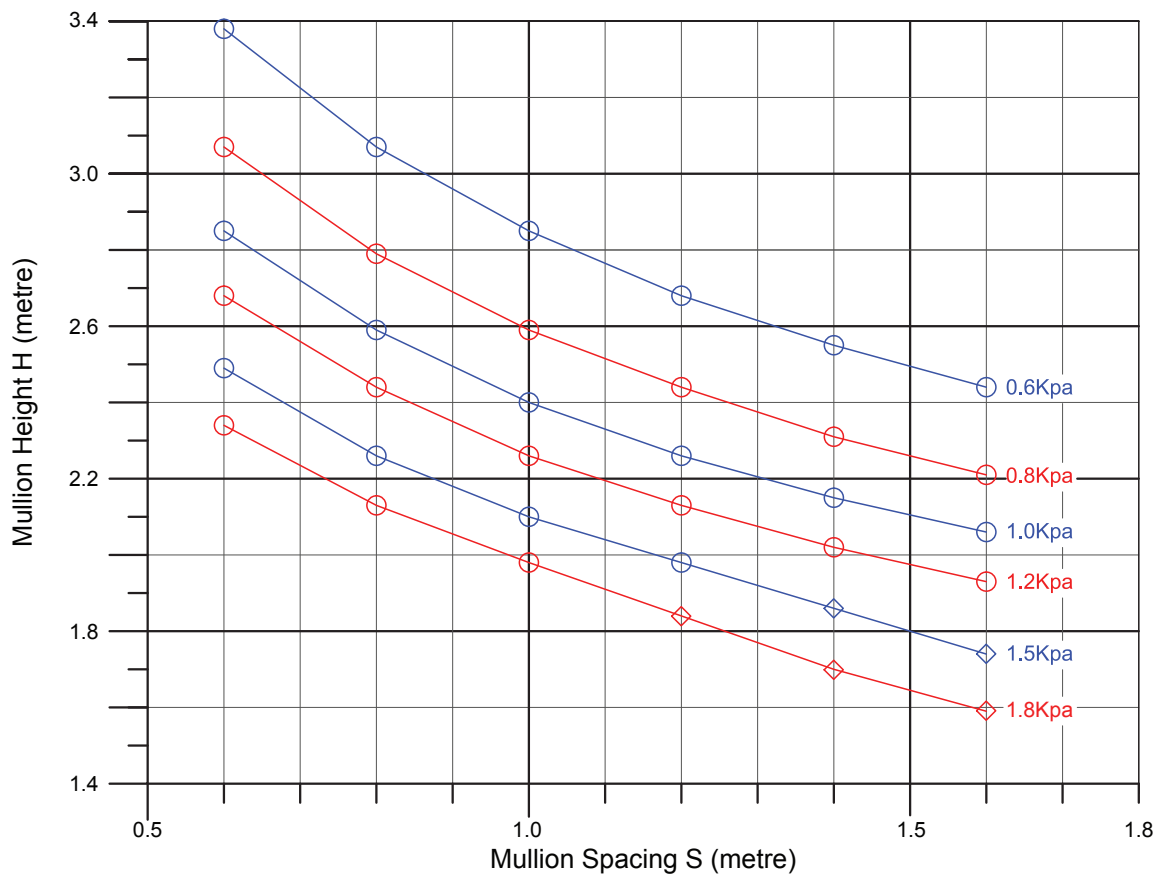
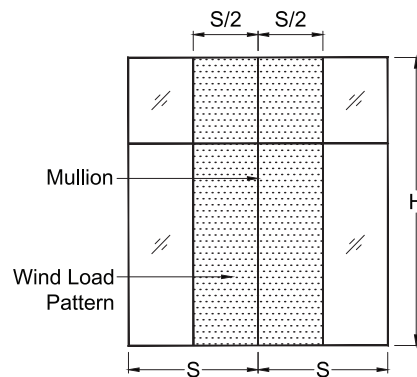
MULLION SECTION : 45377
 Alum. alloy : 6063-T5
 Moment of inertia I_{xx} : 45.2 cm⁴
 Mod. of section Z_{xx} : 10.8 cm³



Note:
 Suffix xx denotes axis perpendicular to wind load

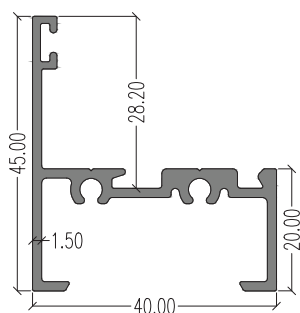
Mod. of elasticity : 70×10^9 N/m²
 Design bend. stress : 1.25×67^6 N/m²
 Deflection limit : $S_{pan}/175$, up to max. 20mm
 Nature of anchor : Simply supported at both ends

Typical configuration of window:

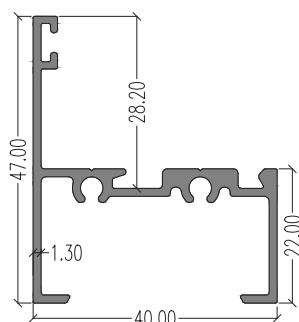


Note:
 ○ Deflection limit governs , ◇ Design bending stress governs
 :- Buckling has not been taken into account in this chart
 :- This windload chart is solely for reference only

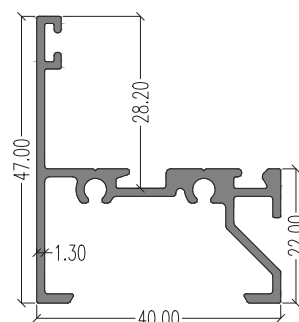
Sectional Details



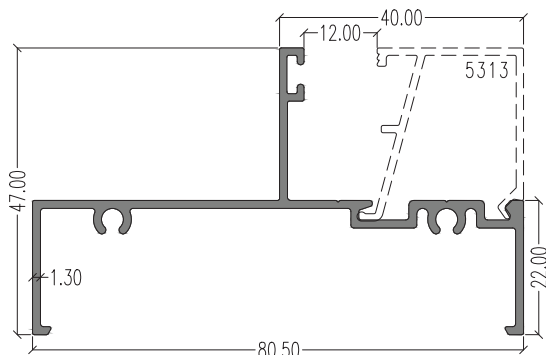
5321 (Outer)
LW : 0.607 kg/m
AP : 274.19 mm



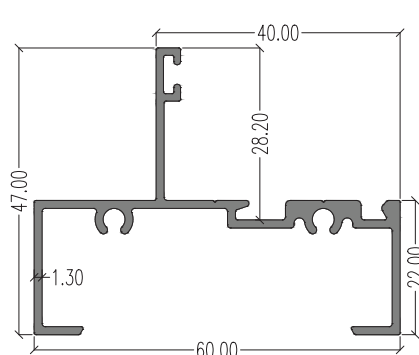
45312 (Outer)
LW : 0.562 kg/m
AP : 283.73 mm



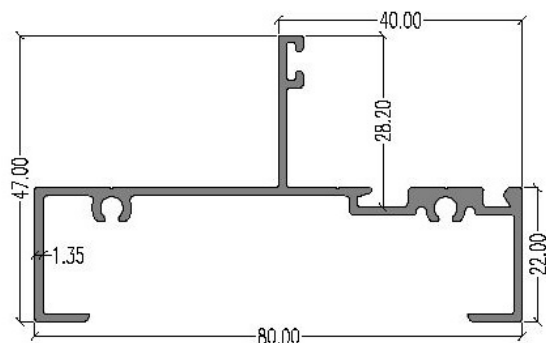
5319 (Bottom Outer)
LW : 0.607 kg/m
AP : 294.73 mm



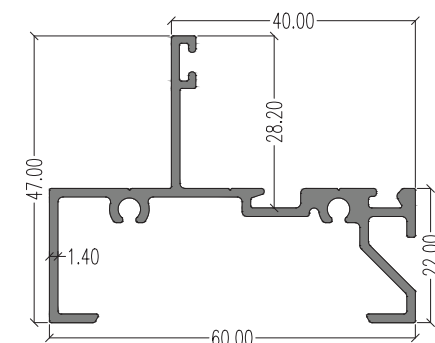
5310 (Outer)
LW : 0.672 kg/m
AP : 365.03 mm



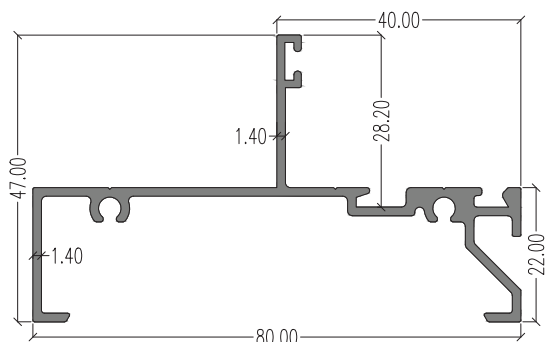
45379 (Outer)
LW : 0.651 kg/m
AP : 337.85 mm



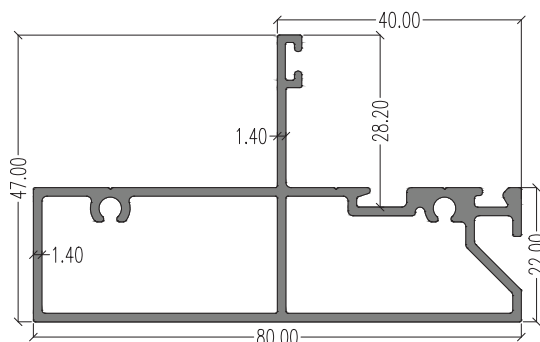
5838 (Outer)
LW : 0.760 kg/m
AP : 380.73 mm



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

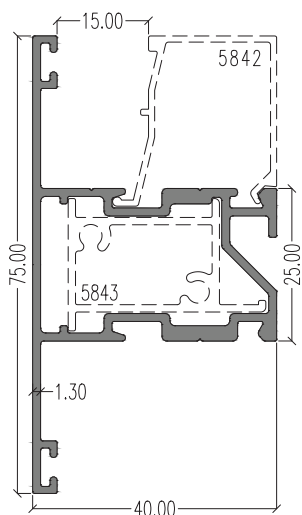


5840 (Bottom Outer)
LW : 0.786 kg/m
AP : 380.05 mm

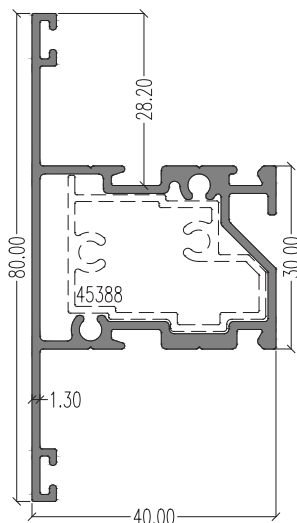


46231 (Bottom Outer)
LW : 1.120 kg/m
AP : 302.31 mm

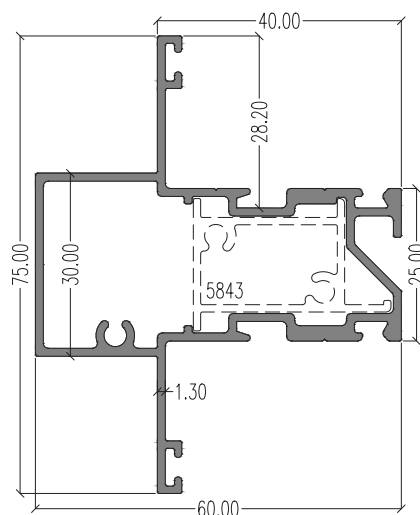
Sectional Details



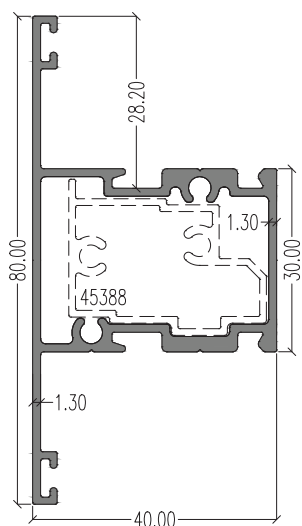
45371 (Transom)
 LW : 0.869 kg/m
 AP : 310.09 mm
 Ixx : 8.696 cm⁴
 Iyy : 6.749 cm⁴



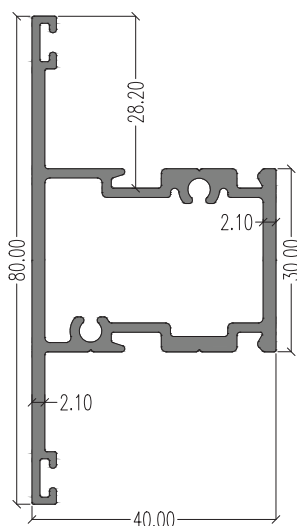
45387 (Transom)
 LW : 0.941 kg/m
 AP : 320.35 mm
 Ixx : 11.26 cm⁴
 Iyy : 7.40 cm⁴



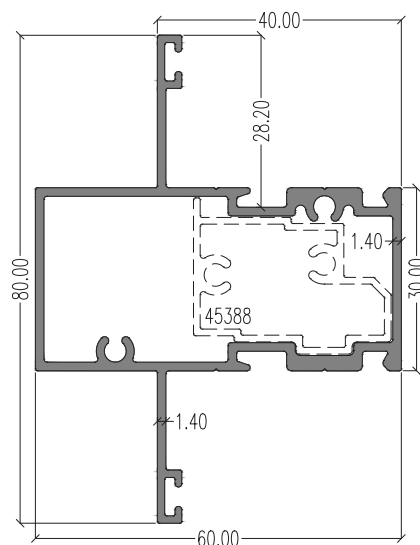
45381 (Transom)
 LW : 1.070 kg/m
 AP : 350.30 mm
 Ixx : 10.12 cm⁴
 Iyy : 13.45 cm⁴



45372 (Mullion)
 LW : 0.921 kg/m
 AP : 300.50 mm
 Ixx : 11.25 cm⁴
 Iyy : 7.375 cm⁴

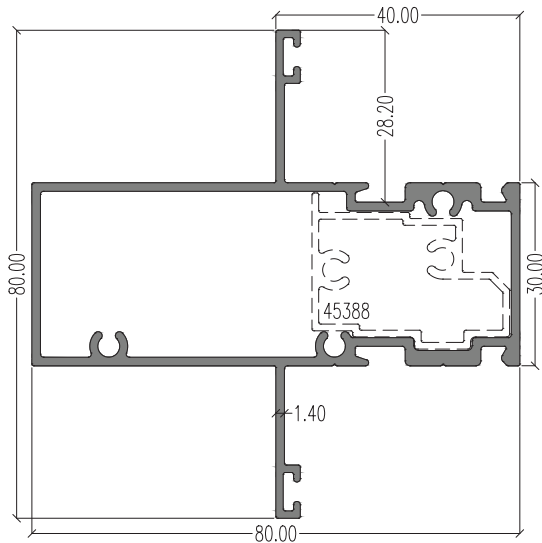


45376 (Mullion)
 LW : 1.143 kg/m
 AP : 297.30 mm
 Ixx : 13.14 cm⁴
 Iyy : 9.378 cm⁴

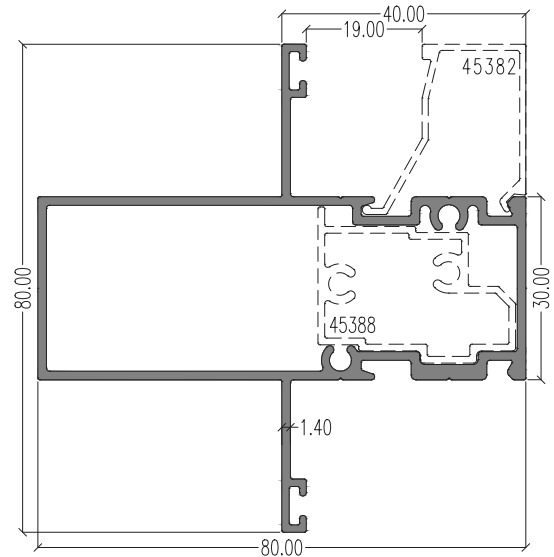


45378 (Mullion)
 LW : 1.116 kg/m
 AP : 340.17 mm
 Ixx : 12.59 cm⁴
 Iyy : 14.69 cm⁴

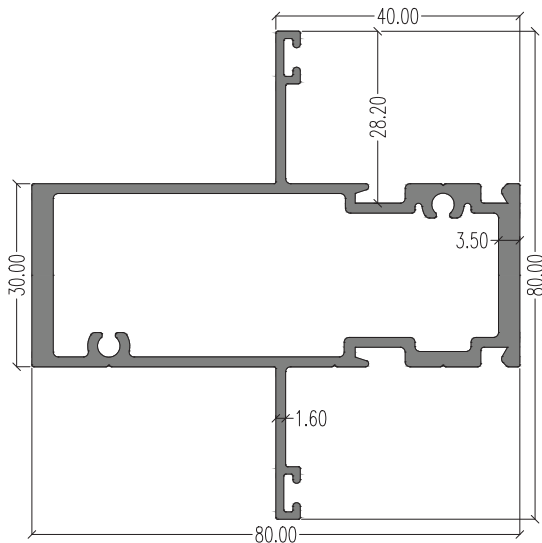
Sectional Details



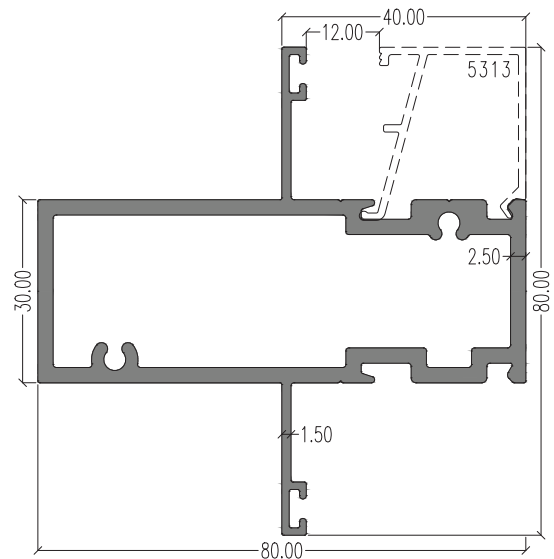
45389 (Mullion)
 LW : 1.292 kg/m
 AP : 380.17 mm
 Ixx : 13.85 cm⁴
 Iyy : 29.05 cm⁴



45373 (Mullion)
 LW : 1.245 kg/m
 AP : 380.17 mm
 Ixx : 13.60 cm⁴
 Iyy : 27.59 cm⁴

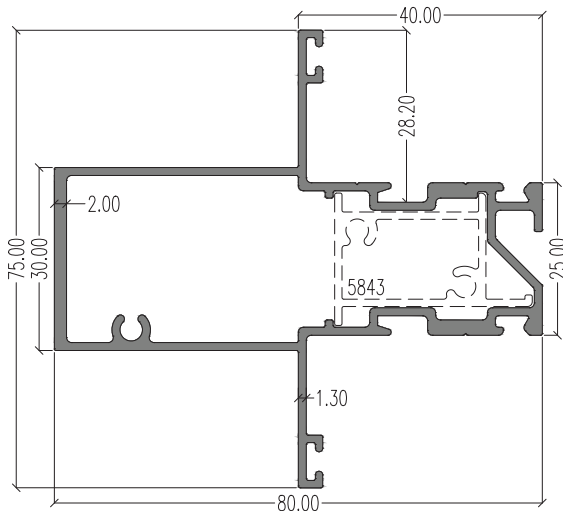


45377 (Mullion)
 LW : 1.659 kg/m
 AP : 380.94 mm
 Ixx : 15.37 cm⁴
 Iyy : 45.21 cm⁴



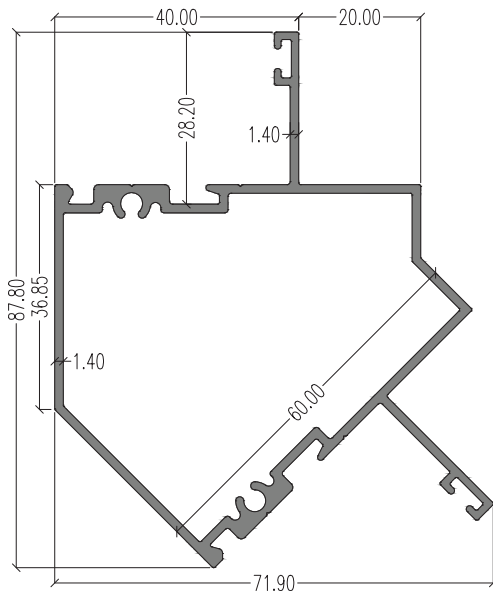
45362 (Mullion)
 LW : 1.897 kg/m
 AP : 379.55 mm
 Ixx : 16.73 cm⁴
 Iyy : 45.15 cm⁴

Sectional Details



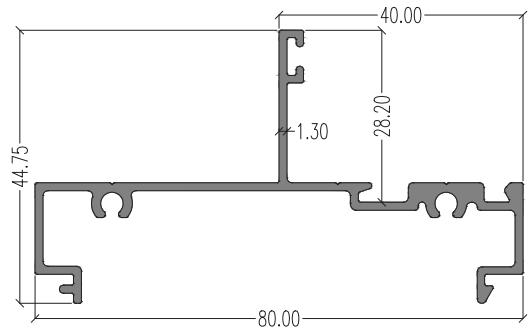
45370 (Transom)

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



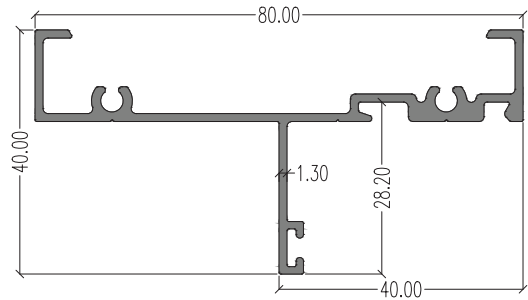
45384 (Corner Frame)

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



45390 (Mullion)

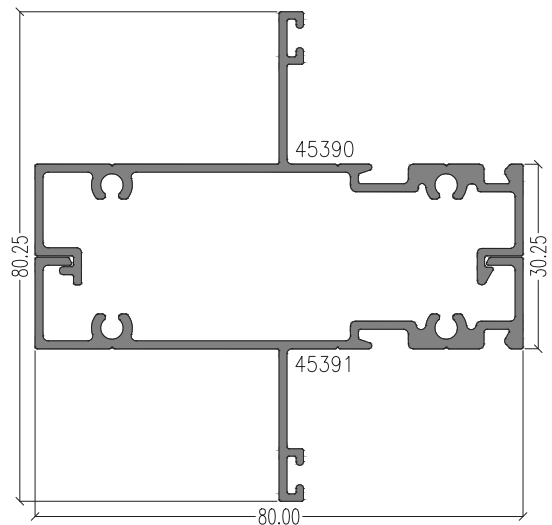
LW : 0.737 kg/m
AP : 370.73 mm
Ixx : 2.235 cm⁴
Iyy : 19.06 cm⁴



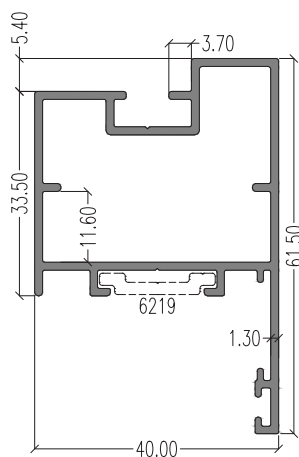
45391 (Mullion)

LW : 0.681 kg/m
AP : 340.70 mm
Ixx : 1.724 cm⁴
Iyy : 16.71 cm⁴

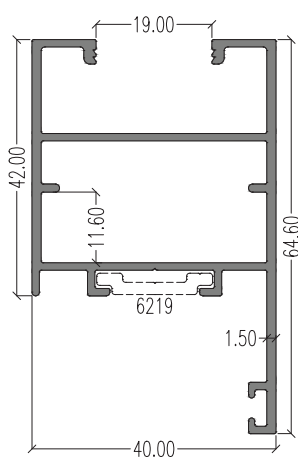
Assembly of 45390 & 45391



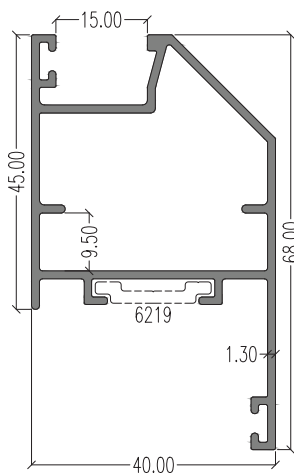
Sectional Details



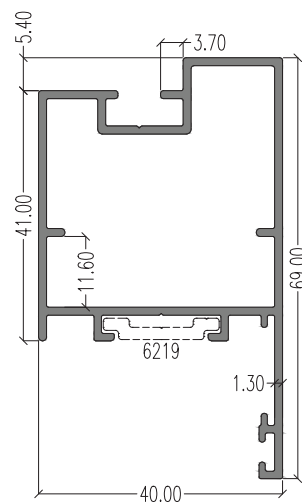
45331 (Inner)
LW : 0.773 kg/m
AP : 276.36 mm



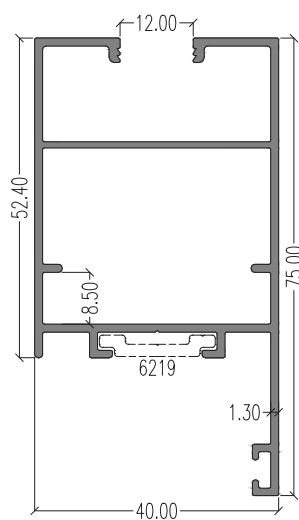
45383 (Inner)
LW : 0.847 kg/m
AP : 334.50 mm



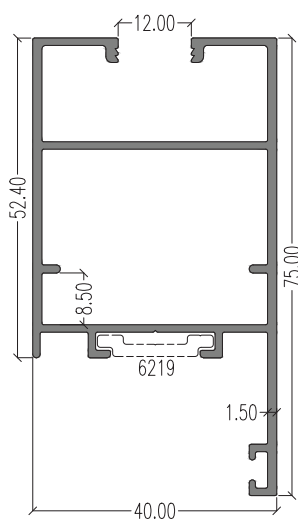
45358 (Inner)
LW : 0.804 kg/m
AP : 293.28 mm



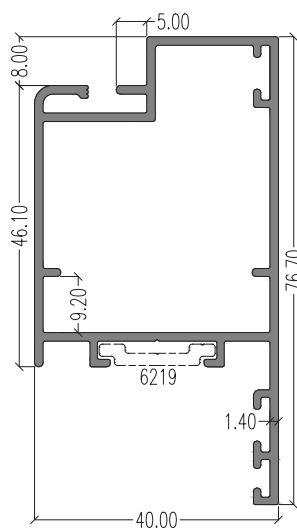
45307 (Inner)
LW : 0.826 kg/m
AP : 291.36 mm



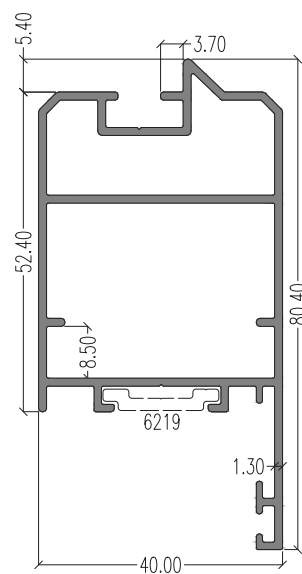
45310 (Inner)
LW : 0.889 kg/m
AP : 372.86 mm



5312 (Inner)
LW : 0.954 kg/m
AP : 372.50 mm



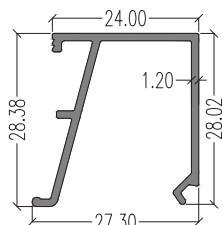
6287 (Inner)
LW : 0.972 kg/m
AP : 321.99 mm



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

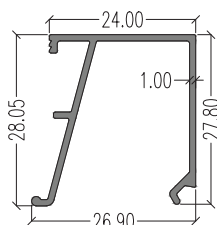
Sectional Details

12mm Gap



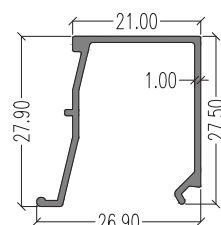
5313 (Beading)
LW : 0.287 kg/m
AP : 176.59 mm

12mm Gap



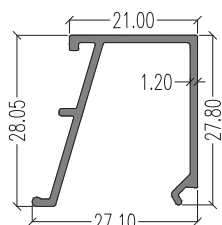
45308 (Beading)
LW : 0.244 kg/m
AP : 176.23 mm

15mm Gap



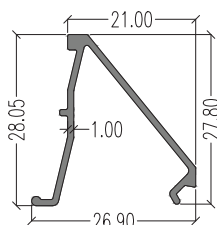
5842 (Beading)
LW : 0.233 kg/m
AP : 163.07 mm

15mm Gap



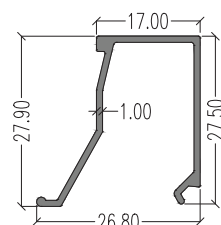
5323 (Beading)
LW : 0.275 kg/m
AP : 167.77 mm

15mm Gap

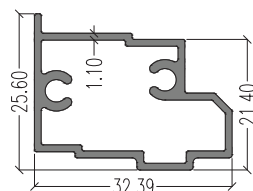


45309 (Beading)
LW : 0.204 kg/m
AP : 140.22 mm

19mm Gap

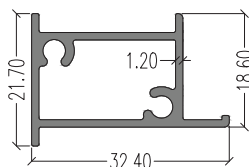


45382 (Beading)
LW : 0.222 kg/m
AP : 155.36 mm



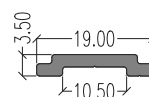
45388 (Bracket)
LW : 0.409 kg/m
AP : 111.70 mm

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

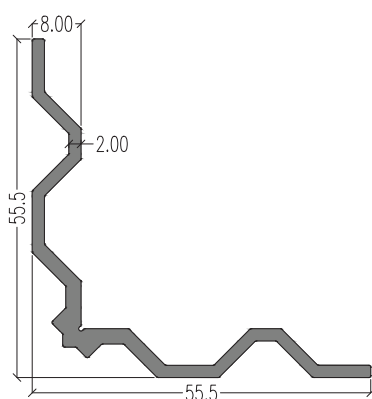


5843 (Bracket)
LW : 0.366 kg/m
AP : 113.70 mm

(For 45370, 45371 & 45381)



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



6905 (Corner Bracket)
LW : 0.681 kg/m
AP : 232.60 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 3785
Suntoprene
(153m / roll)

Friction Stay



12", 14", 16", 18", 20" SS304
Top Hung



8", 12", 16", SS304
Side Hung

Push Rod



MP943KS (L30mm)

Corner Bracket



MP580A

Lockcam



MP950
(10mm, 12mm)

Restrictor Bar



CB8, CB12



CB04



**LB
ALUMINIUM
BERHAD**
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