



ALBENestra®



Performance Casement Window **PCW03**

Designed and tested according to MS832:2022



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

Product

ALBENestra PCW03

Typical Technical Features

Nominal Wall Thickness	: 1.35mm
Standard Frame Depth	: 35.00mm
Mullion Depth	: 42.00mm, 65.00mm, 80.00mm & 100.00mm
Glazing Gap	: 15.00mm - 21.00mm
Locking System	: Single-point & Multipoint
Surface Finish	: Flush
Hinges	: Butt. Hinges (Exposed Only) & Friction Stay
Corner Joints	: Mitre Joints With Brackets

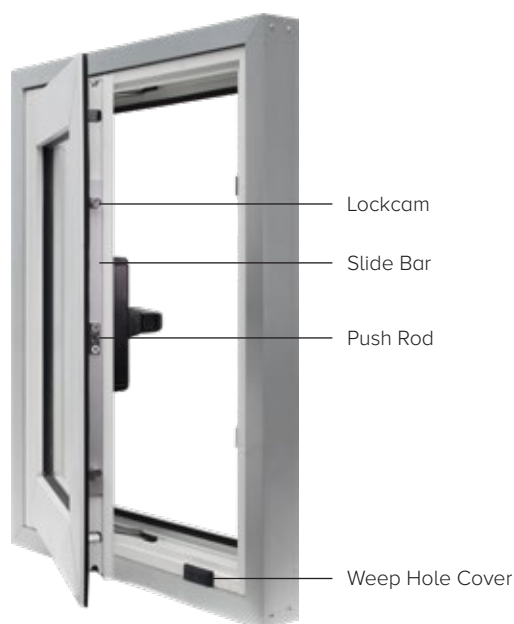


Performance Test

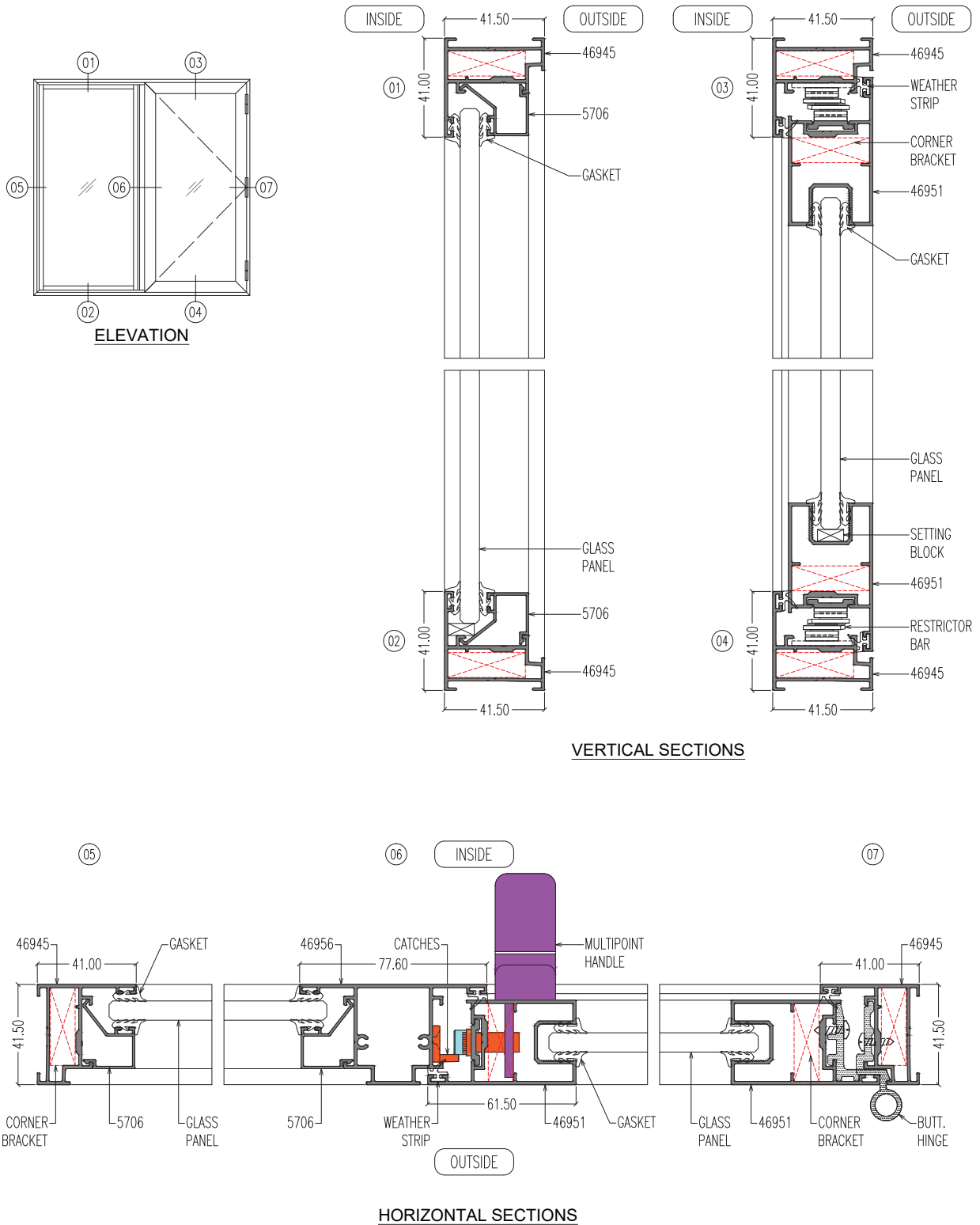
This casement window suite had been tested in compliance to MS 832:2022 performance test procedure for:

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

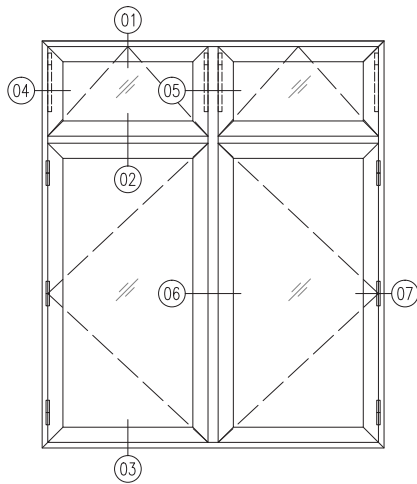
Note: Test report available upon request.



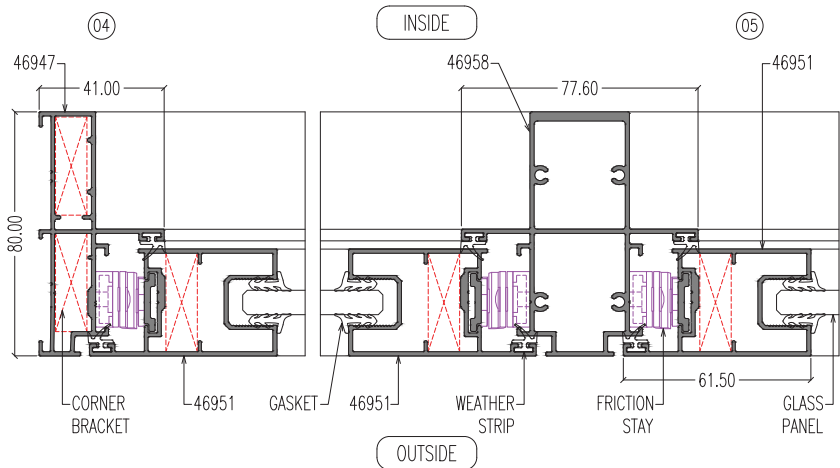
Typical Assembly Details



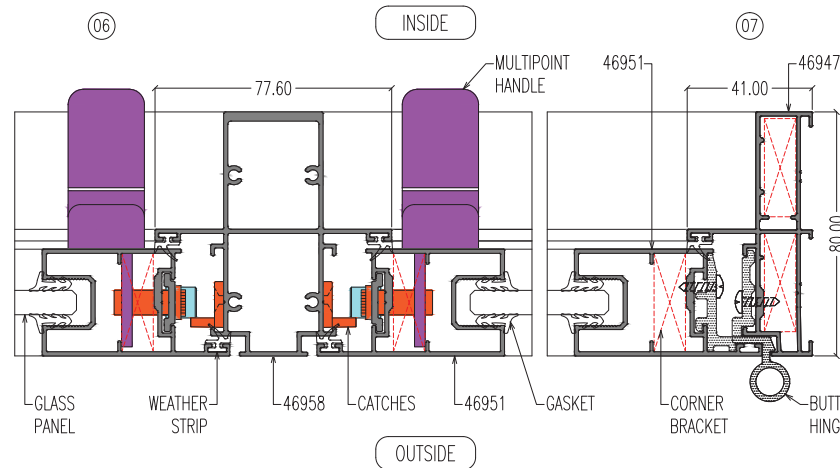
Typical Assembly Details



ELEVATION

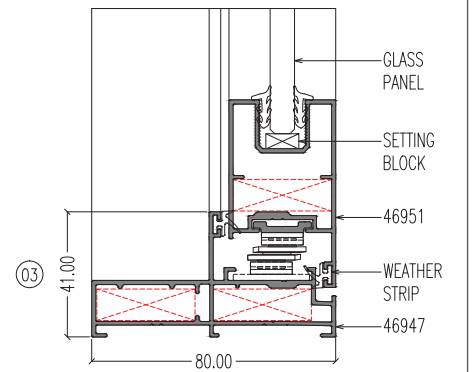
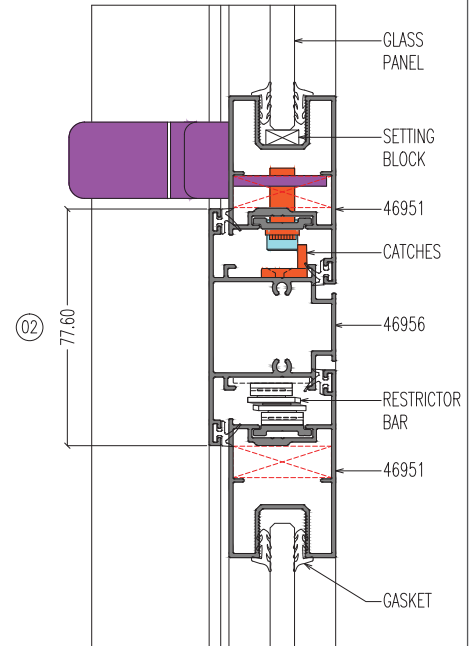
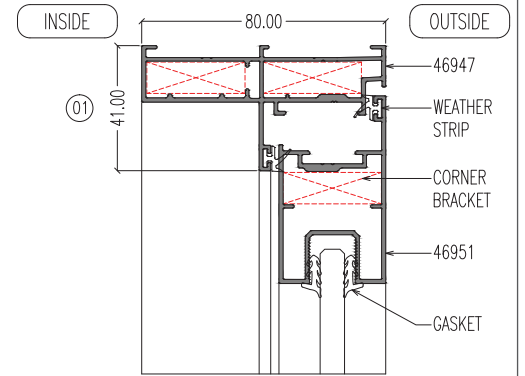


OUTSIDE



OUTSIDE

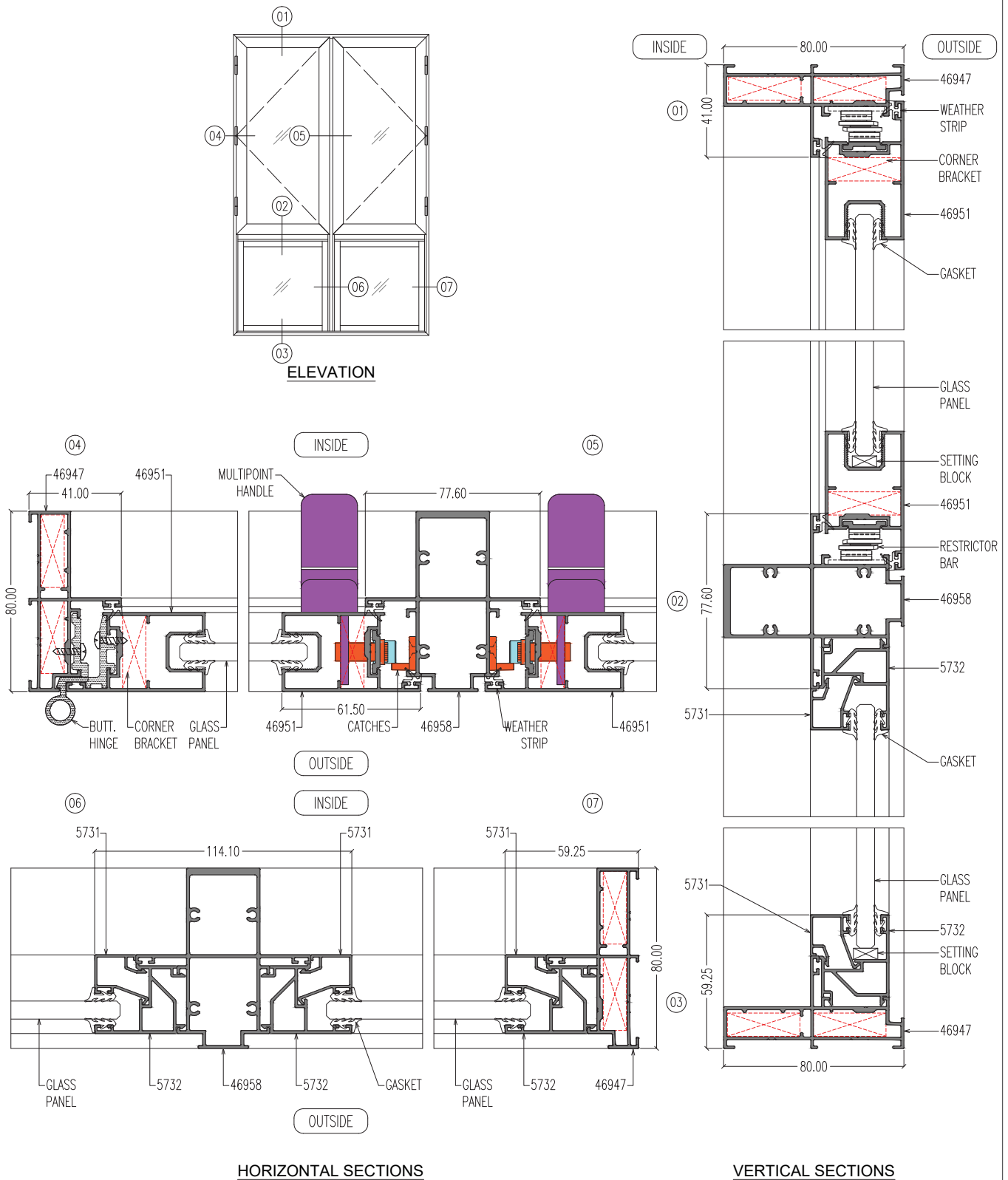
HORIZONTAL SECTIONS



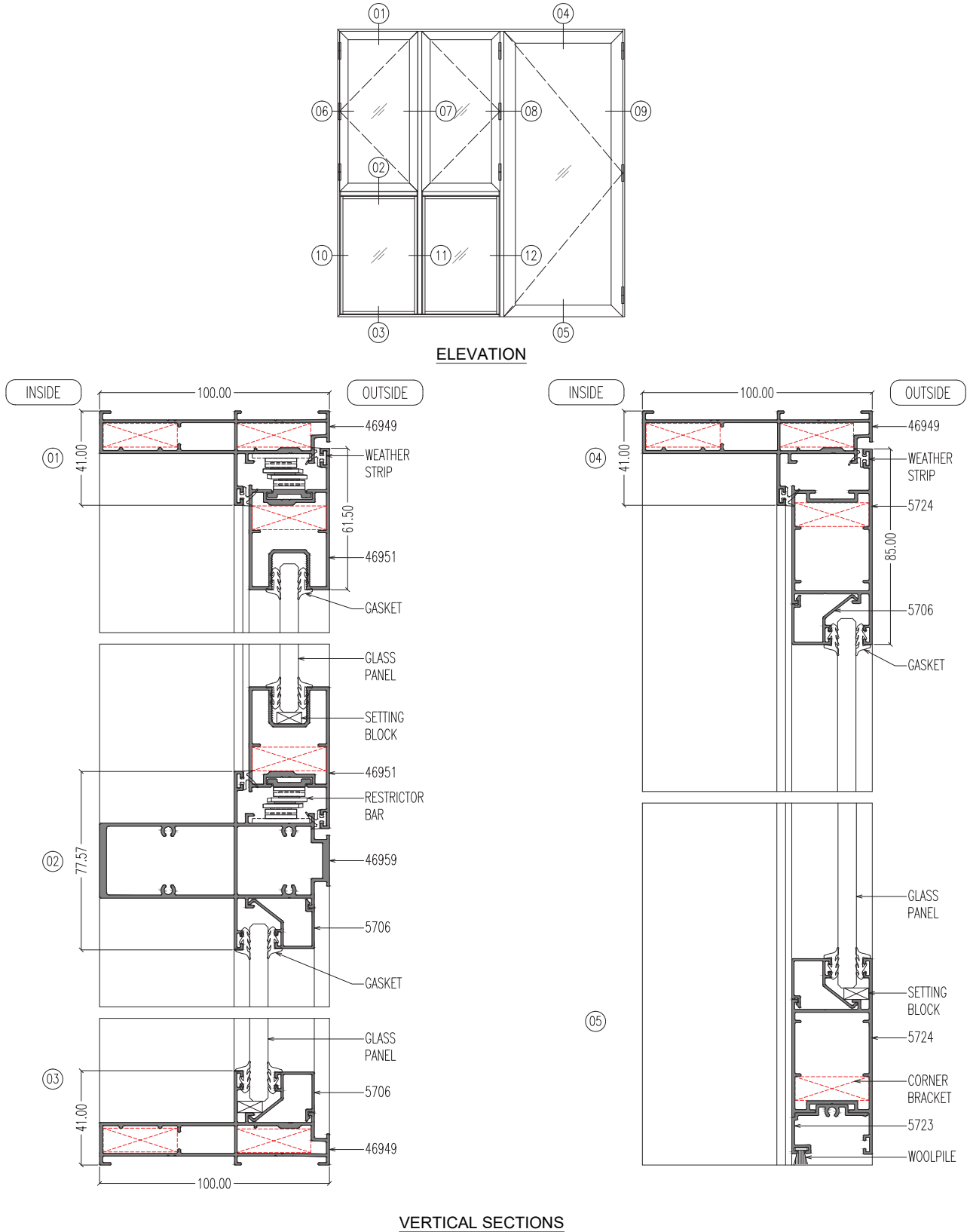
VERTICAL SECTIONS

Typical Assembly Details

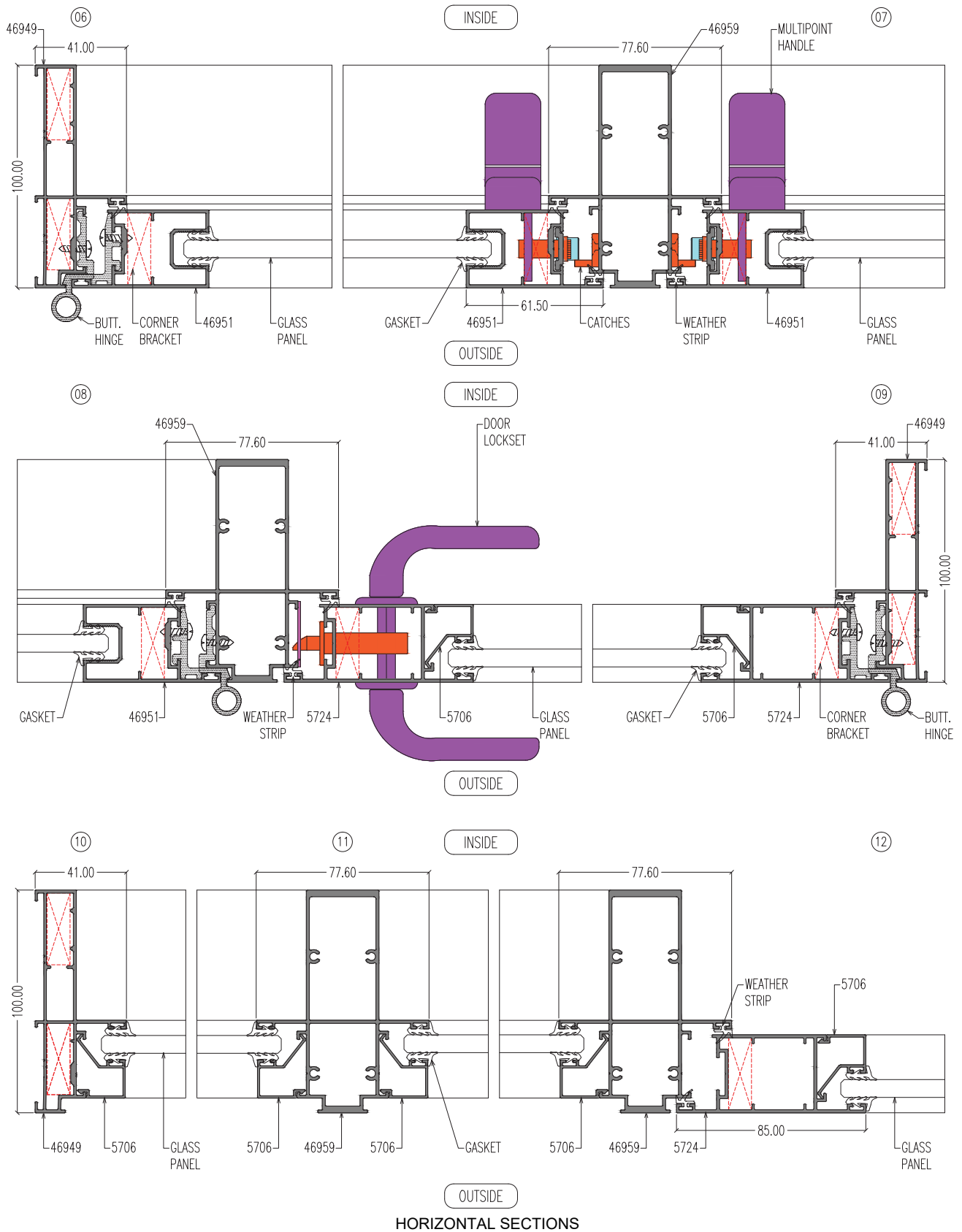
(Internal Beading)



Typical Assembly Details



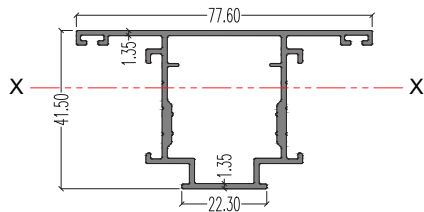
Typical Assembly Details



Wind Load Chart

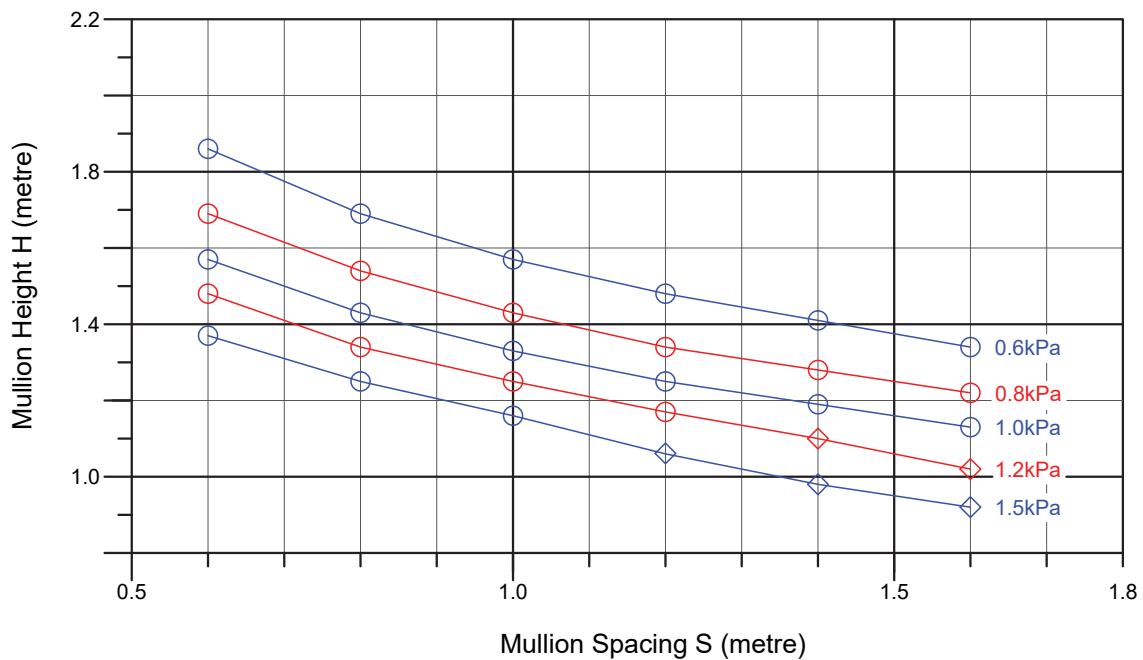
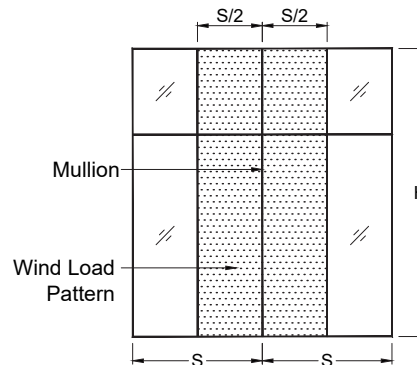
MULLION SECTION : 46946
 Alum. alloy : 6063-T5
 Moment of inertia I_{xx} : 7.6 cm^4
 Mod. of section Z_{xx} : 3.0 cm^3

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



Note:
 Suffix xx denotes axis perpendicular to wind load

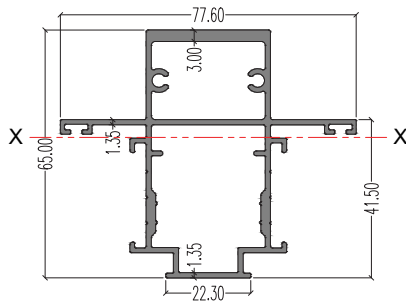
Typical configuration of window:



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

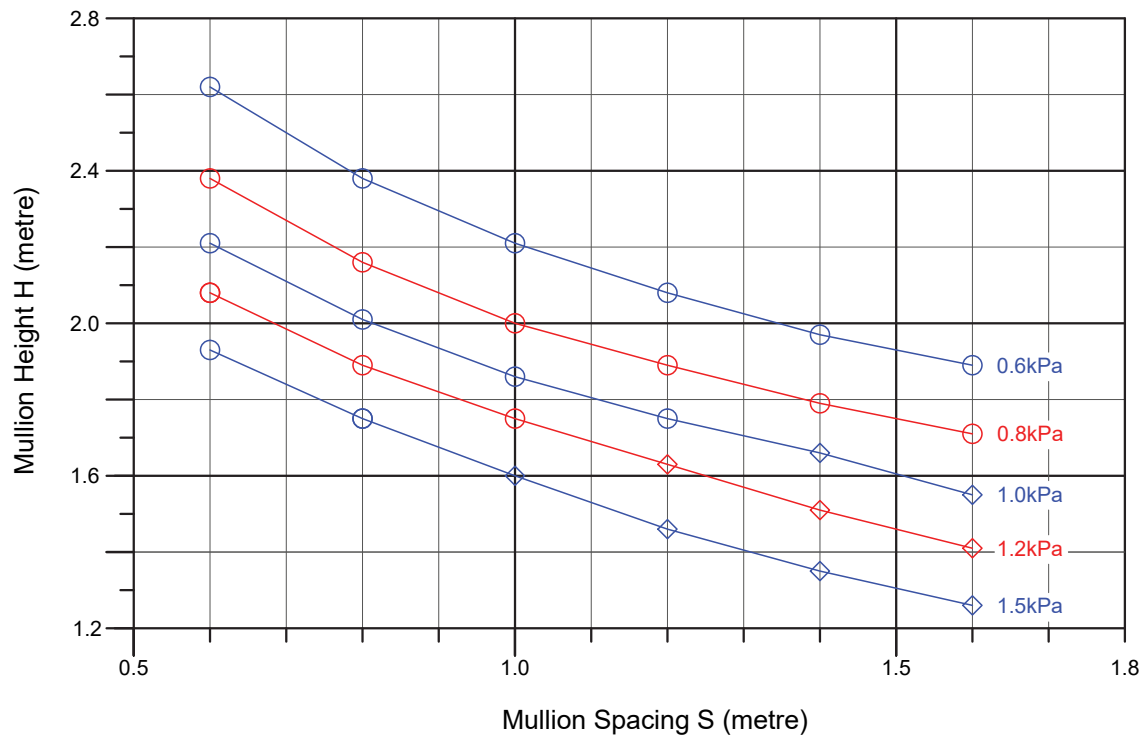
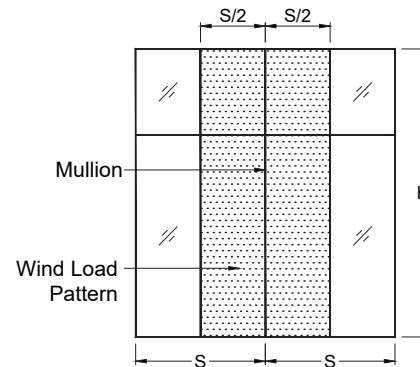
MULLION SECTION : 46954
 Alum. alloy : 6063-T5
 Moment of inertia I_{xx} : 21.0 cm^4
 Mod. of section Z_{xx} : 5.7 cm^3



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

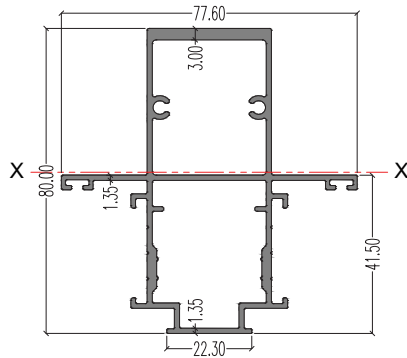
Typical configuration of window:



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

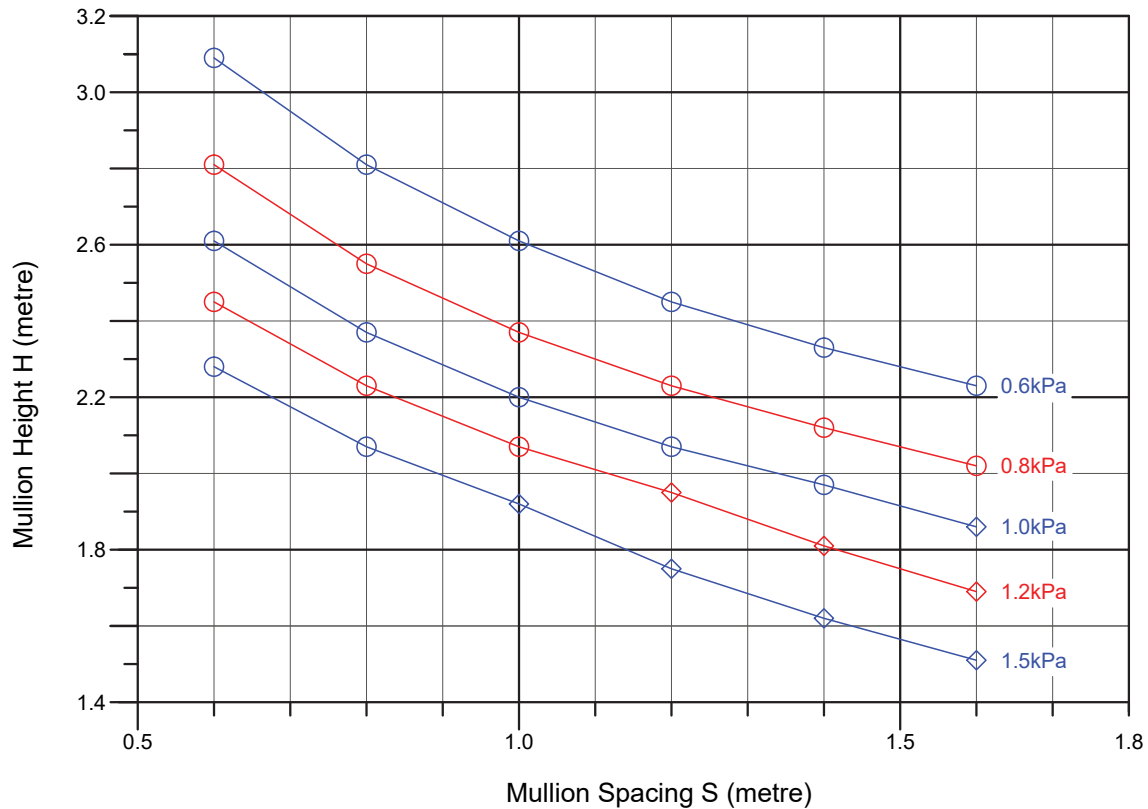
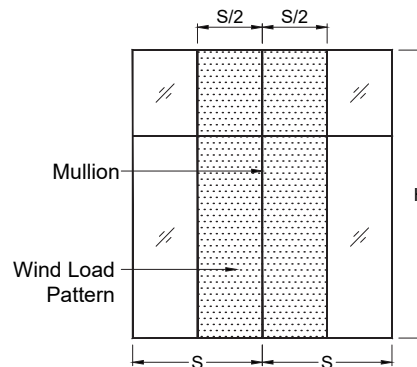
MULLION SECTION : 46948
 Alum. alloy : 6063-T5
 Moment of inertia I_{xx} : 34.6 cm^4
 Mod. of section Z_{xx} : 8.2 cm^3



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

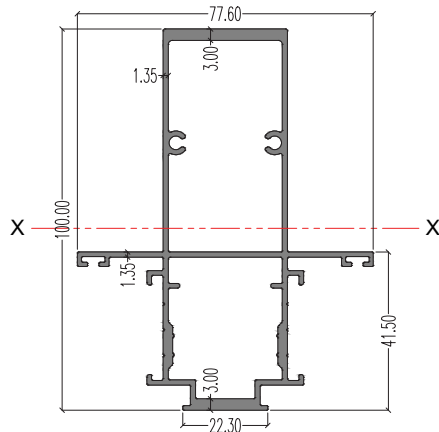
Typical configuration of window:



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

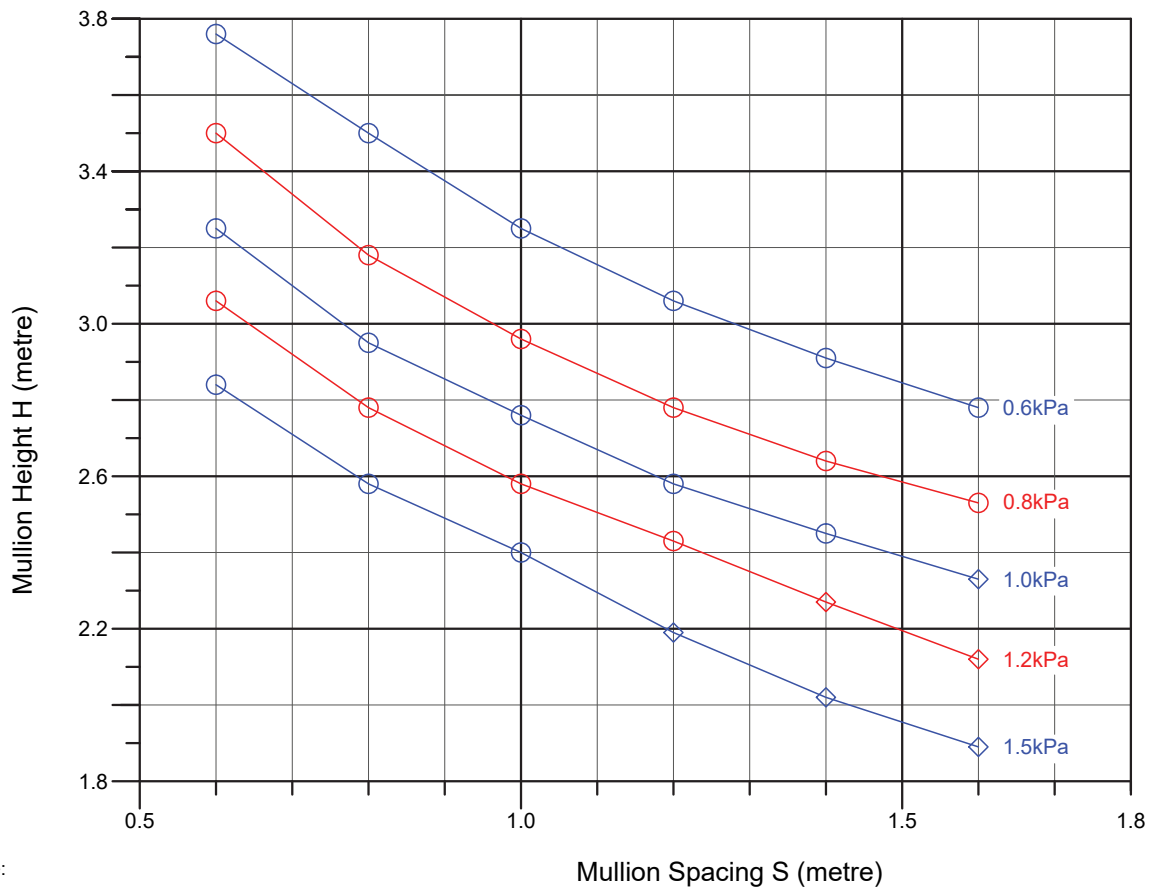
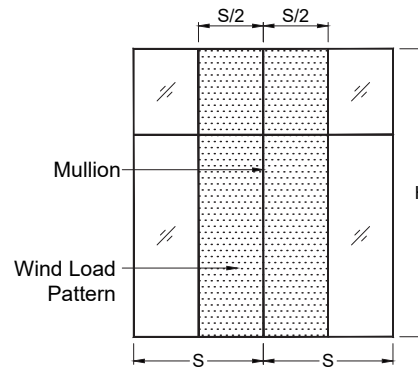
MULLION SECTION : 46950
 Alum. alloy : 6063-T5
 Moment of inertia I_{xx} : 67.2 cm^4
 Mod. of section Z_{xx} : 12.9 cm^3



Note:
 Suffix xx denotes axis perpendicular to wind load

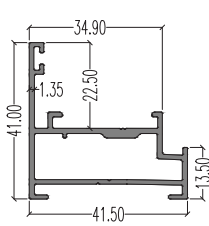
Mod. of elasticity : $70 \times 10^9 \text{ N/m}^2$
 Design bend. stress : $1.25 \times 67 \text{ MPa}$
 Deflection limit : $\text{Span}/175$, up to max. 20mm
 Nature of anchor : Simply supported at both ends

Typical configuration of window:

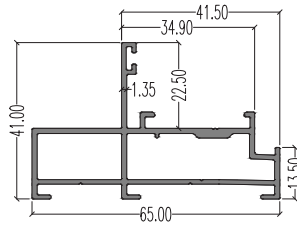


Note:
 ○ Deflection limit governs, ◇ Design bending stress governs
 :- Buckling has not been taken into account in this chart
 :- This windload chart is solely for reference only

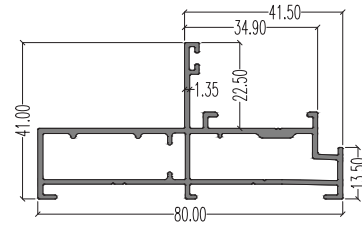
Sectional Details



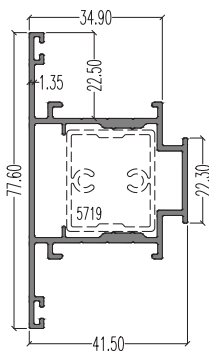
46945 (Outer)
LW : 0.599 kg/m
AP : 227.81 mm



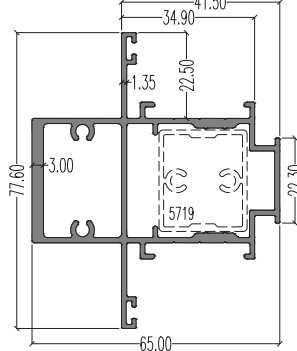
46953 (Outer)
LW : 0.826 kg/m
AP : 289.00 mm



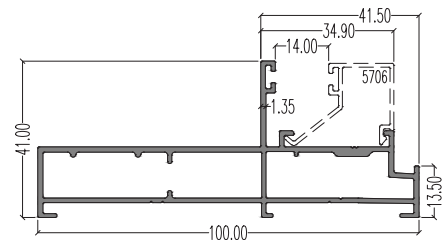
46947 (Outer)
LW : 0.938 kg/m
AP : 315.69 mm



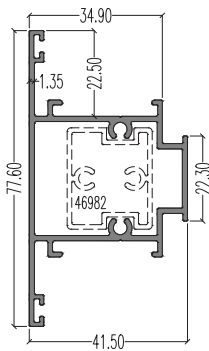
46946 (Mullion)
LW : 0.915 kg/m
AP : 322.10 mm
Ixx : 11.51 cm⁴
Iyy : 7.581 cm⁴



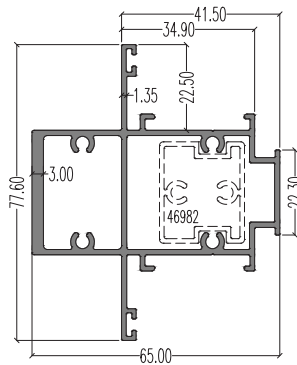
46954 (Mullion)
LW : 1.410 kg/m
AP : 368.42 mm
Ixx : 14.24 cm⁴
Iyy : 21.00 cm⁴



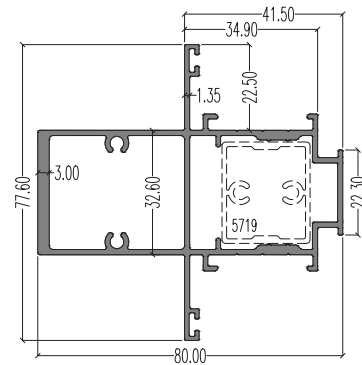
46949 (Outer)
LW : 1.069 kg/m
AP : 356.18 mm



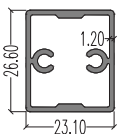
46956 (Mullion)
LW : 0.896 kg/m
AP : 321.38 mm
Ixx : 11.34 cm⁴
Iyy : 7.52 cm⁴



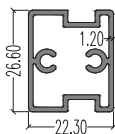
46957 (Mullion)
LW : 1.385 kg/m
AP : 367.69 mm
Ixx : 14.02 cm⁴
Iyy : 20.92 cm⁴



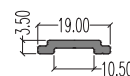
46948 (Mullion)
LW : 1.520 kg/m
AP : 398.42 mm
Ixx : 15.23 cm⁴
Iyy : 34.61 cm⁴



5719 (Bracket)
LW : 0.428 kg/m
AP : 97.68 mm
Ixx : 1.328 cm⁴
Iyy : 1.135 cm⁴
(For 46946, 46954,
46948 & 46950)

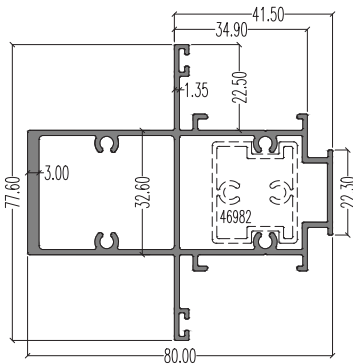


46982 (Bracket)
LW : 0.448 kg/m
AP : 107.94 mm
Ixx : 1.196 cm⁴
Iyy : 1.075 cm⁴
(For 46956, 46957,
46958 & 46959)

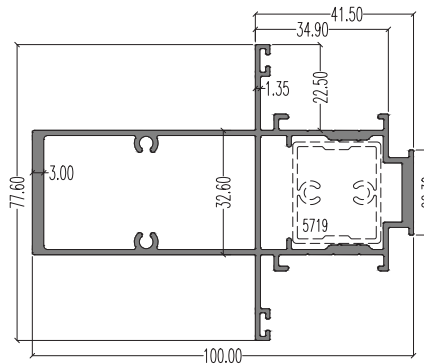


6219 (Slide Bar)
LW : 0.117 kg/m
AP : 45.58 mm

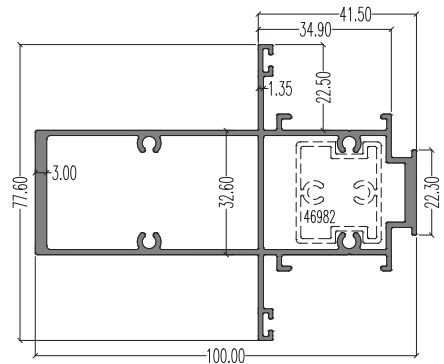
Sectional Details



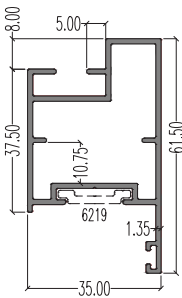
46958 (Mullion)
LW : 1.495 kg/m
AP : 397.69 mm
Ixx : 15.01 cm⁴
Iyy : 34.45 cm⁴



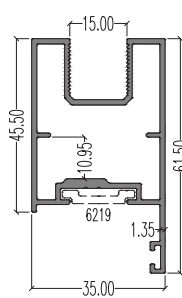
46950 (Mullion)
LW : 1.735 kg/m
AP : 438.59 mm
Ixx : 16.59 cm⁴
Iyy : 67.15 cm⁴



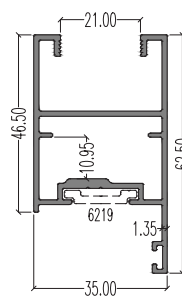
46959 (Mullion)
LW : 1.710 kg/m
AP : 437.86 mm
Ixx : 16.37 cm⁴
Iyy : 66.88 cm⁴



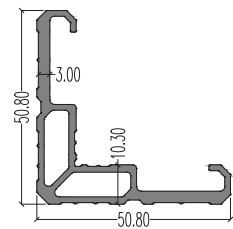
46955 (Inner)
LW : 0.774 kg/m
AP : 262.73 mm
(For Friction Stay Only)



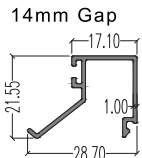
46951 (Inner)
LW : 0.844 kg/m
AP : 269.12 mm



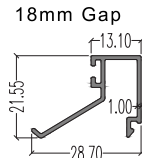
46952 (Inner)
LW : 0.826 kg/m
AP : 311.15 mm



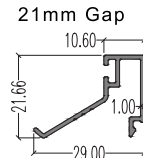
5714 (Corner Bracket)
LW : 0.955 kg/m
AP : 240.10 mm



5706 (Beading)
LW : 0.209 kg/m
AP : 150.65 mm

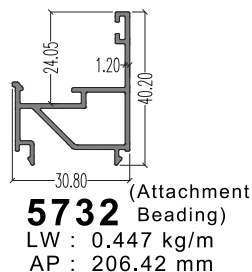


5705 (Beading)
LW : 0.207 kg/m
AP : 149.07 mm

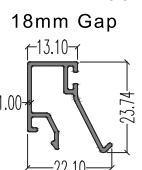


46980 (Beading)
LW : 0.201 kg/m
AP : 145.52 mm

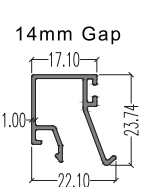
For Internal Beading



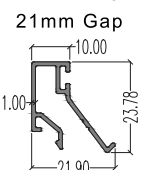
5732 (Attachment Beading)
LW : 0.447 kg/m
AP : 206.42 mm



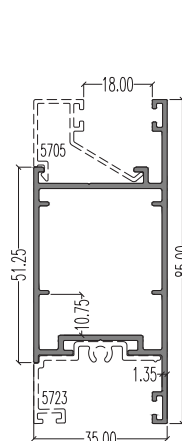
5733 (Beading)
LW : 0.216 kg/m
AP : 155.53 mm



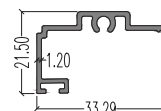
5731 (Beading)
LW : 0.226 kg/m
AP : 162.89 mm



46981 (Beading)
LW : 0.207 kg/m
AP : 150.34 mm



5724 (Inner)
LW : 0.872 kg/m
AP : 312.78 mm



5723 (Attachment)
LW : 0.251 kg/m
AP : 151.97 mm

For Swing Door Frames

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

Corner Bracket



MP580A
(31.5mm)

Friction Stays



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



8", 12", 16" SS304
Side Hung

Butt. Hinge



MP95

Door Lockset



LH216

Restrictor Bars



CB08, CB12



CB04

Lockcam



MP950
(10mm, 12mm)

Push Rod



MP941KS (L22 mm)

Weather Strip



PLG 5903
Suntoprene
(100m / roll)

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

Now available at:



HEAD OFFICE & FACTORY

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43700 Beranang, Selangor Darul Ehsan, Malaysia.

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F : +603-8725 8828 (Gen)

E : enquiry@lbalum.com.my

+603-8725 8866 (Export)

W : www.lbalum.com



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CERT NO: QMS 00216



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CERT NO: EMS 01118