



**Pakistan Cables Limited**

THE ONLY ISO 9001-2000 CERTIFIED COMPANY FOR ALUMINIUM EXTRUSIONS IN PAKISTAN

*Compliments  
from*



**Anodized aluminium for doors & windows**

**Pakistan Cables** has been manufacturing aluminium sections for Architectural and Industrial uses under the brand name of **ALUM-EX** for the last three decades.

**ALUM-EX** sections are extruded from imported prime quality billets of aluminium alloy AA6063, the internationally recommended alloy for architectural and structural applications. This conforms to ASTM-B221 and BS 1474. Chemical composition and properties of AA6063 is given below.

**PROPERTIES OF ALLOY AA6063**

CHEMICAL COMPOSITION			MECHANICAL PROPERTIES	
	Min.-----Max.			
SILICON	0.2	0.6%	Ultimate Tensile Strength	205 N / mm <sup>2</sup>
IRON		0.35%	Tensile Yield Strength	165 N / mm <sup>2</sup>
COPPER		0.15%	Elongation in 50 mm	12%
MANGANESE		0.15%	Hardness (BHN)	65
MAGNESIUM	0.45	0.9%	Shear Strength	125 N / mm <sup>2</sup>
CHROMIUM		0.10%	Fatigue Limit	70 N / mm <sup>2</sup>
ZINC		0.10%		
TITANIUM		0.10%		
OTHER ELEMENTS (Total)		0.15%		
ALUMINIUM	Remainder			

The extrusion is performed on a 2000 tons "Schloemann" extrusion press, the best aluminium extrusion plant in the business. Aluminium sections are anodized on a fully automatic plant with very high quality German origin chemicals in accordance with BS3987, BS1615 and AAMA Class I.

**Pakistan Cables** has installed facility for Powder Coating of aluminium sections. Unlike others we offer polyester, durable polyester and super durable polyester powders, all thermosetting types formulated to satisfy the requirements of the architectural application with regards to aesthetics, color variety, UV and humidity resistance.

PCL became the only company in Pakistan to be certified for ISO 9001:2000 for manufacturing & marketing of aluminium extrusions.

**ALUM-EX** sections are available in six elegant anodized colors as well as wide range of powder coated colors for complete architectural applications with a wall thickness ranging from 1.2mm to 2 mm.



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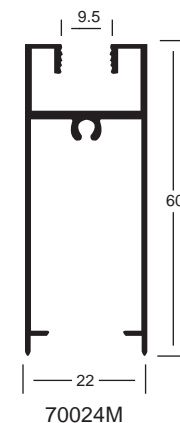
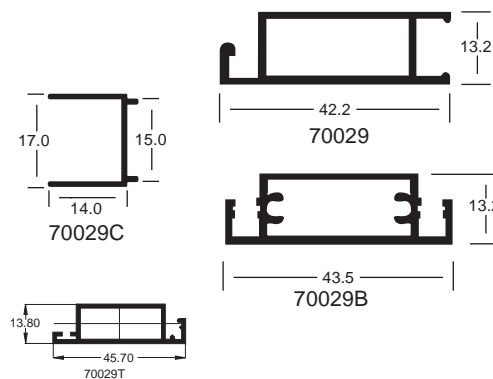
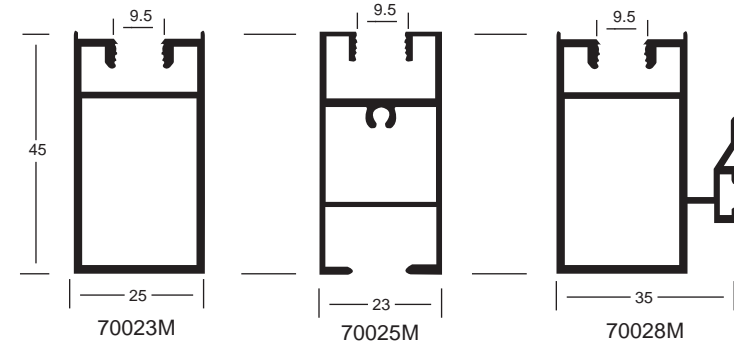
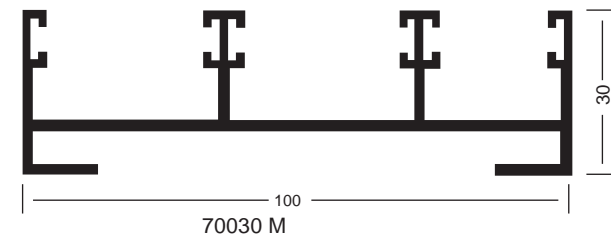
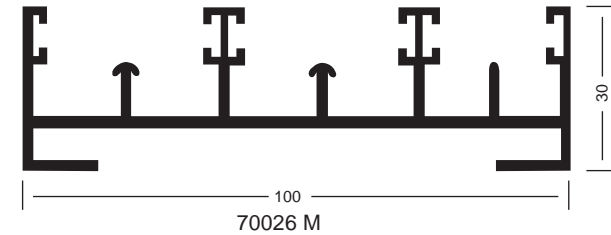
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## Box Series Sliding Door / Window Sections

(Normal, 1.6 mm & 2 mm)

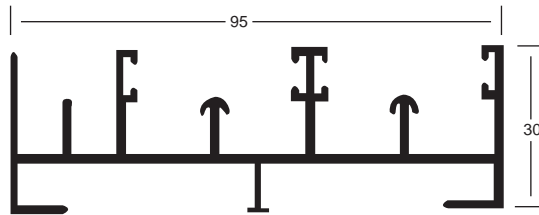


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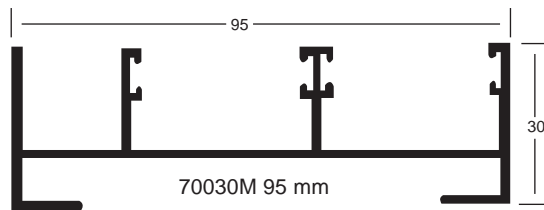


## Box Series Sliding Door / Window Sections

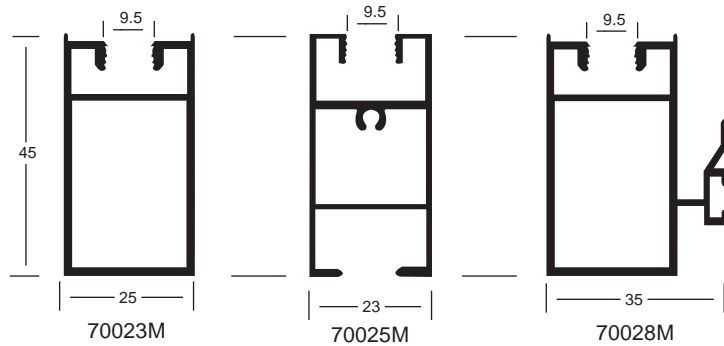
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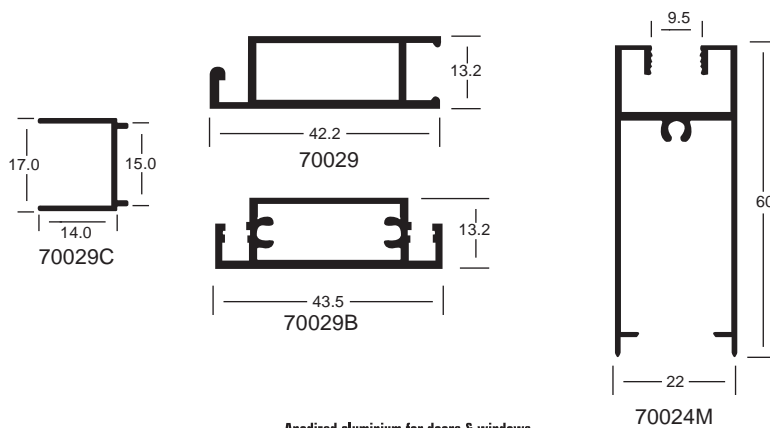
70030 M 95 mm



70023 M

70025 M

70028 M



70029C

70029

70029B

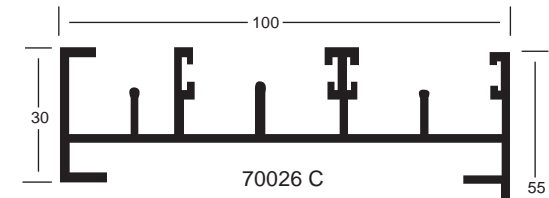
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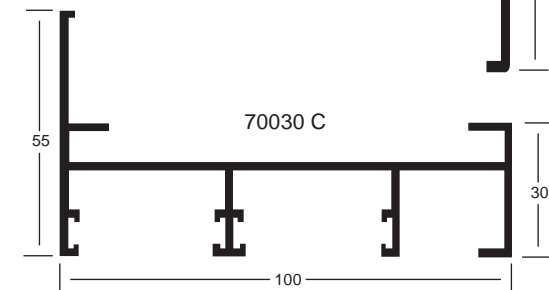
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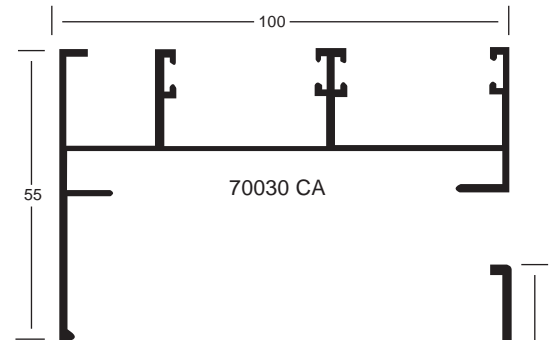
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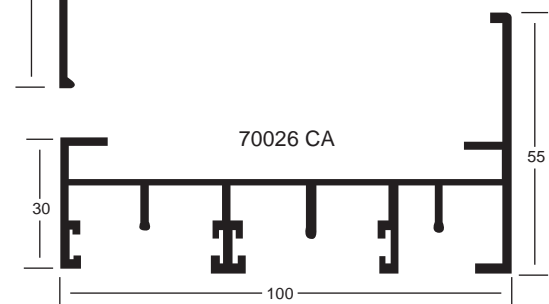
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70030 C



70030 CA



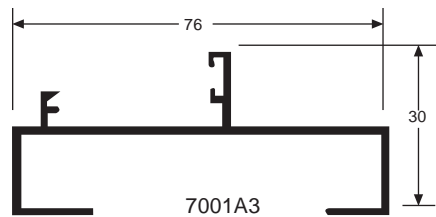
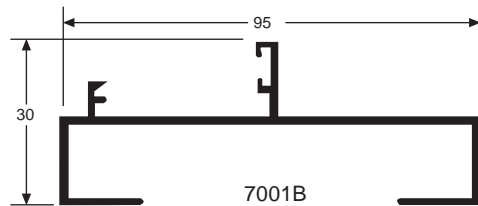
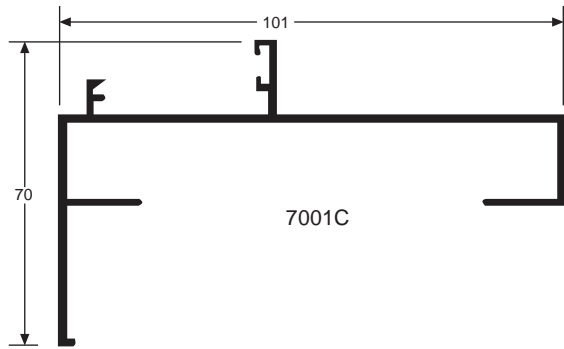
70026 CA

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## Fixed & Openable (Hinged) Door / Windows Sections

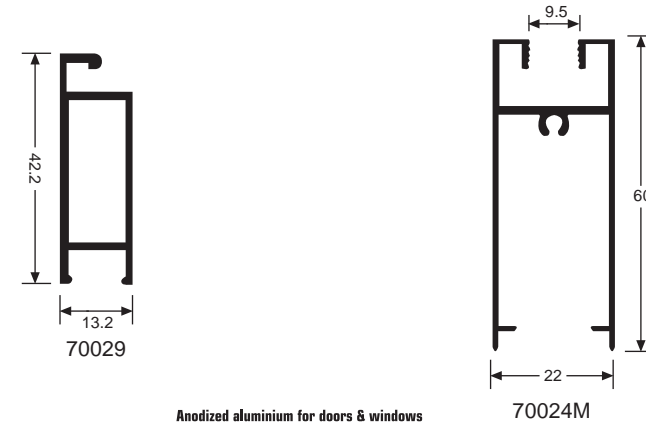
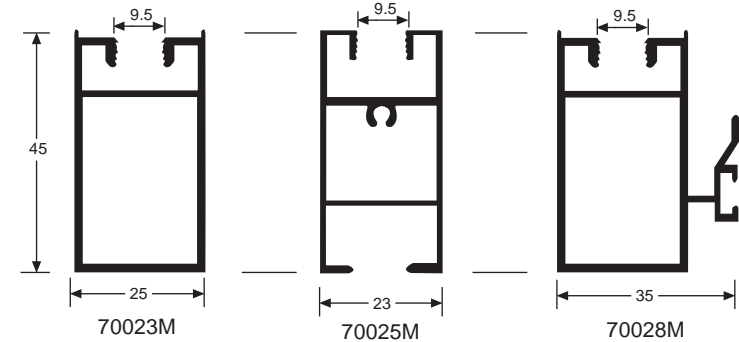
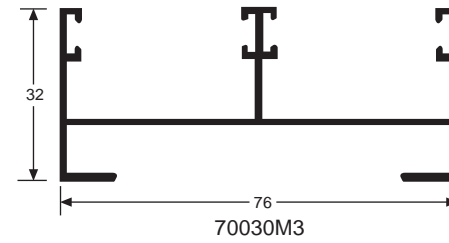
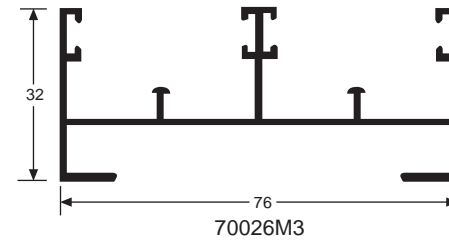


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## Semi Box Sliding Door / Window Sections

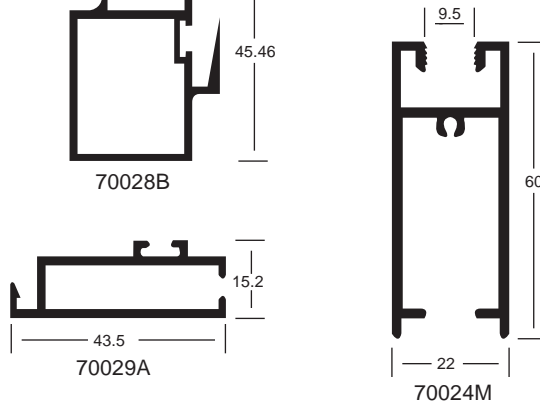
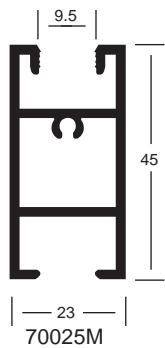
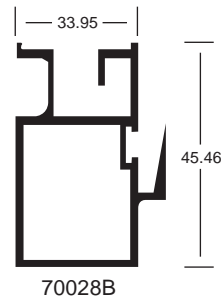
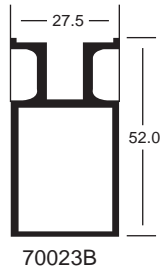
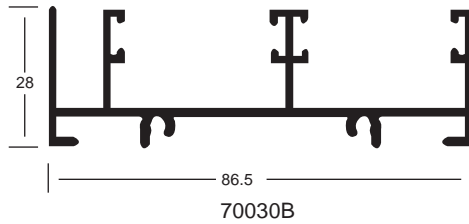
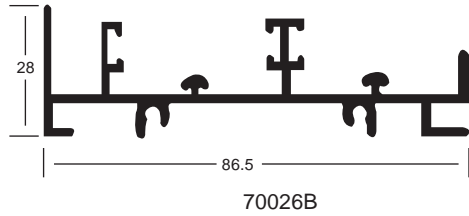


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## Semi Deluxe Sliding Door / Window Sections

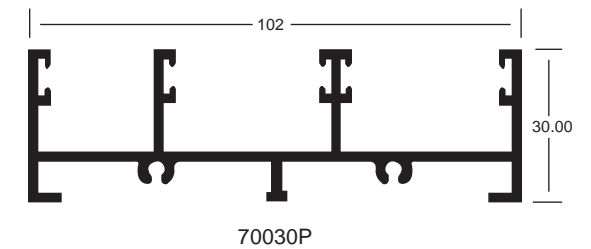
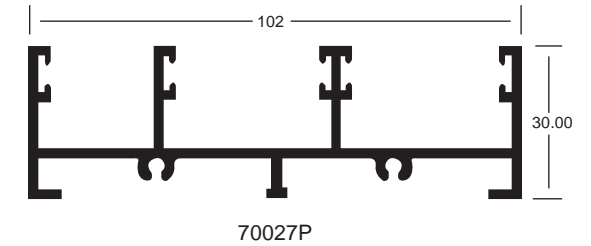
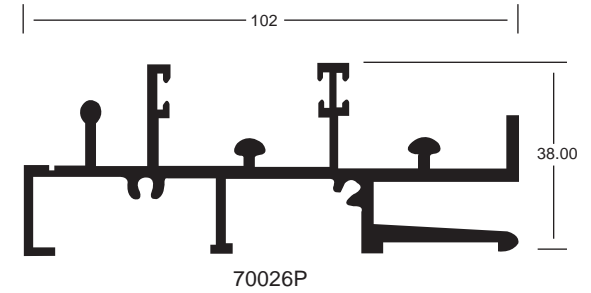


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## Super Deluxe Sliding Door / Window Sections

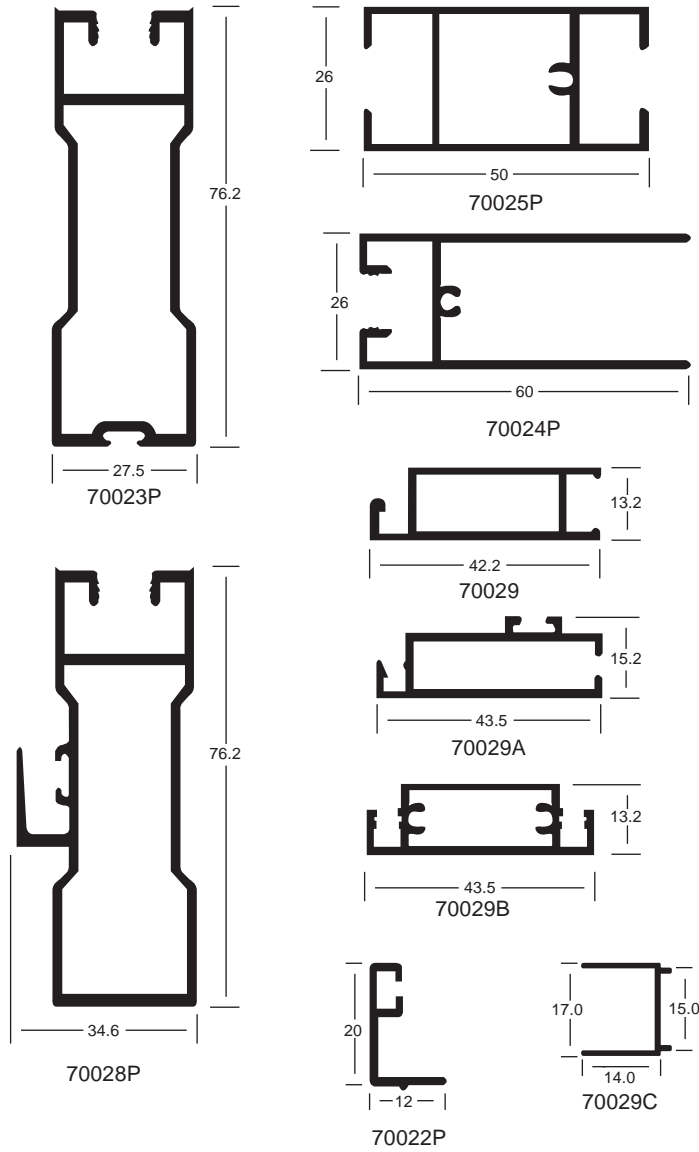


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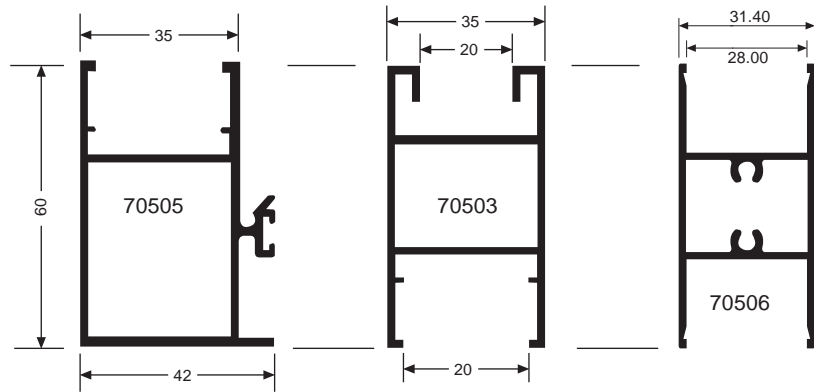
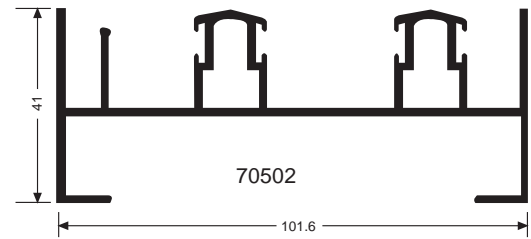
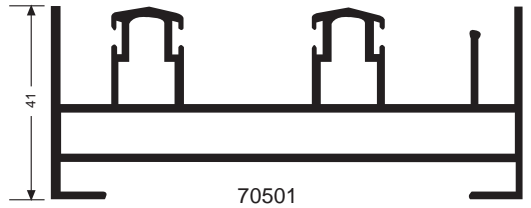
## Super Deluxe Sliding Door / Window Sections



## Double Glazed Sliding Door / Windows



## Double Glazed Sliding Door / Windows



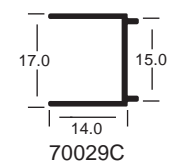
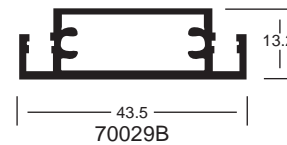
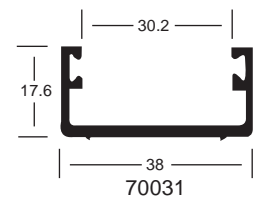
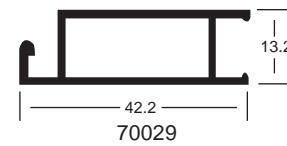
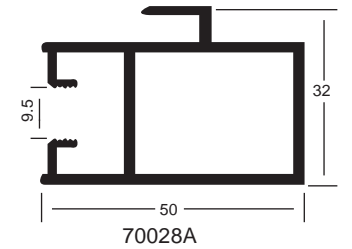
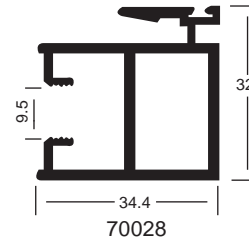
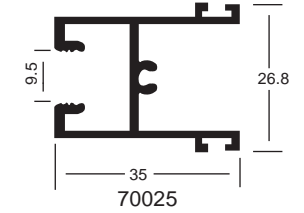
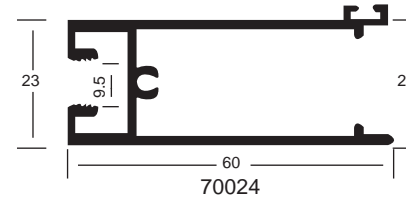
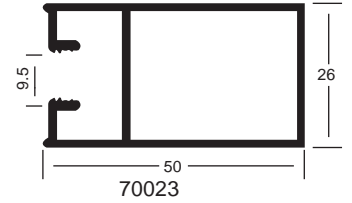
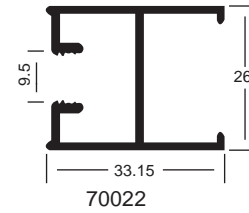
70508

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## Deluxe Sliding Door / Window Sections

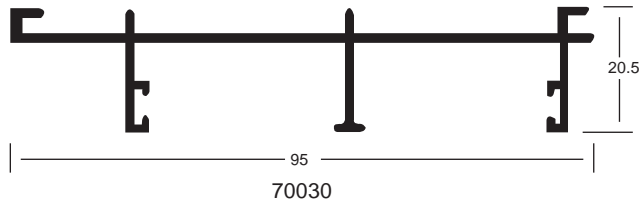
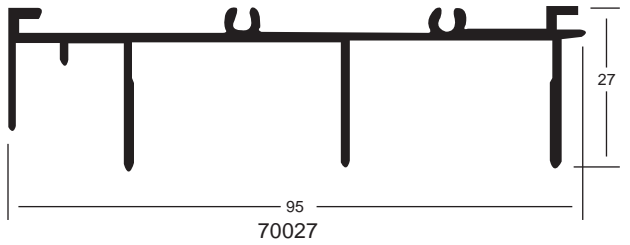
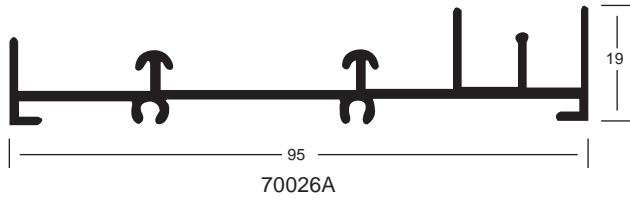
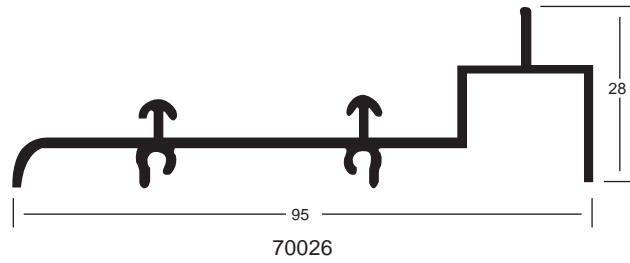


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## Deluxe Sliding Door / Window Sections



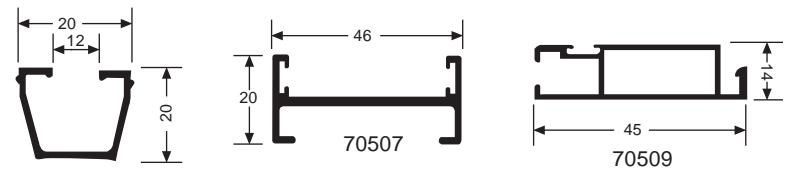
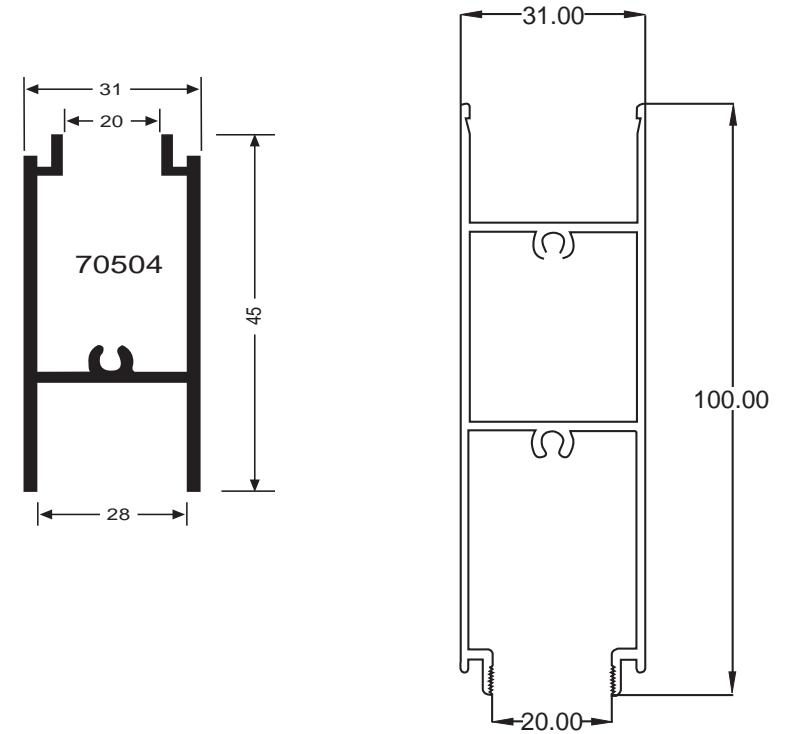
Anodized aluminium for doors & windows

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## Double Glazed Sliding Door / Windows

### SECTION # 70504-A

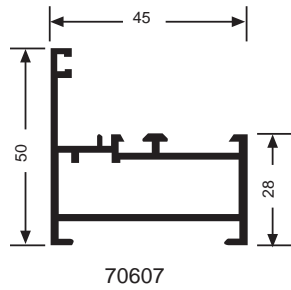
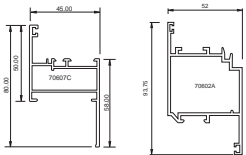
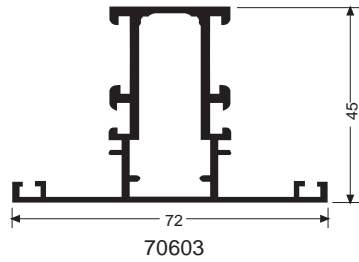
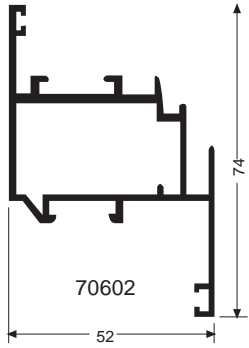


Anodized aluminium for doors & windows

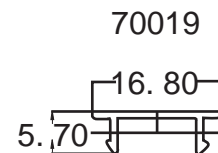
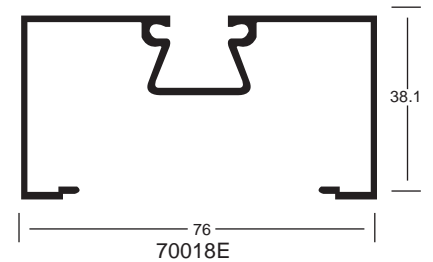
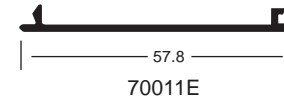
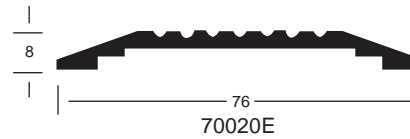
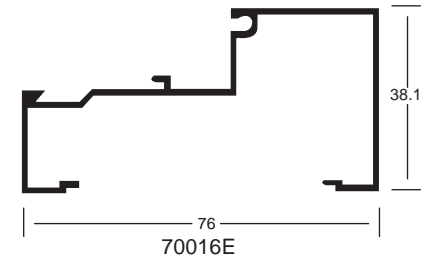
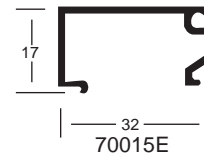
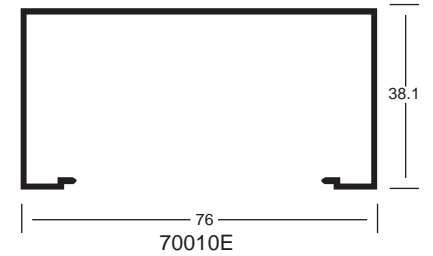
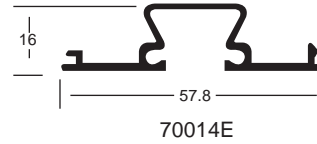
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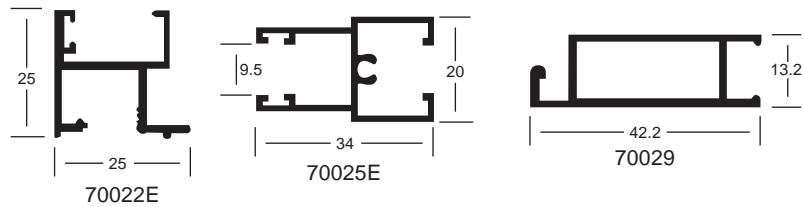
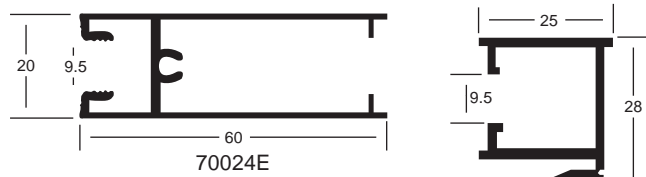
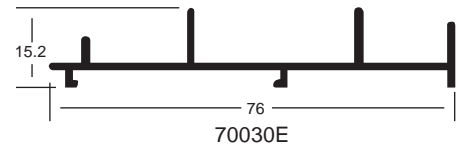
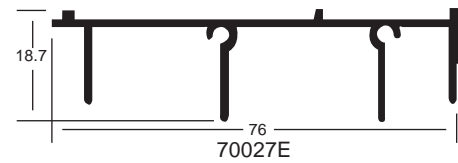
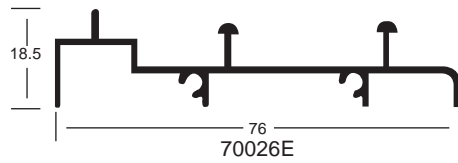


## Economy Fixed Glazing / Shop Front Sections

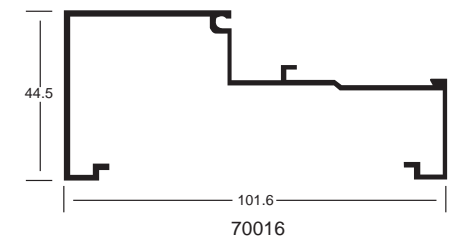
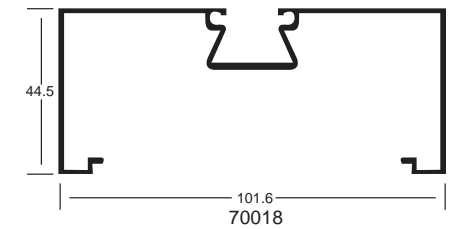
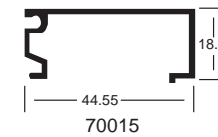
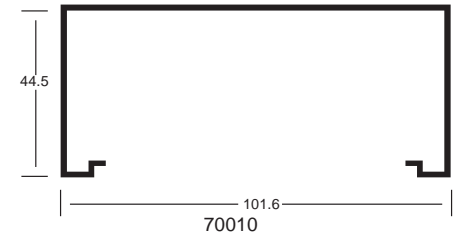
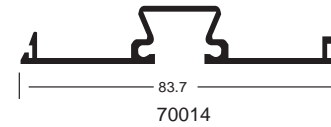
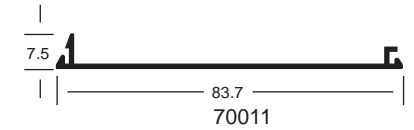




## Economy Sliding Door / Window Sections

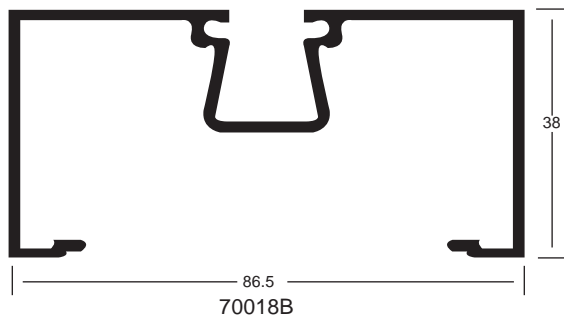
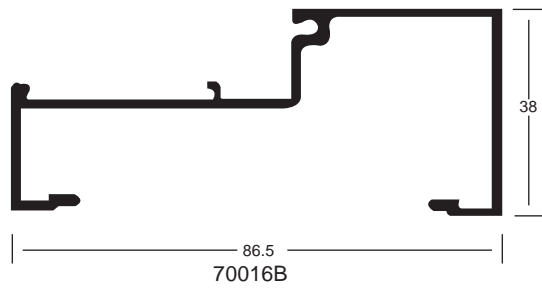
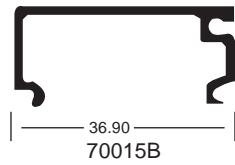
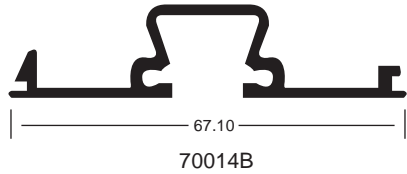


## Deluxe Fixed Glazing / Shop Front Sections





## Semi Deluxe Fixed Glazing / Shop Front Sections

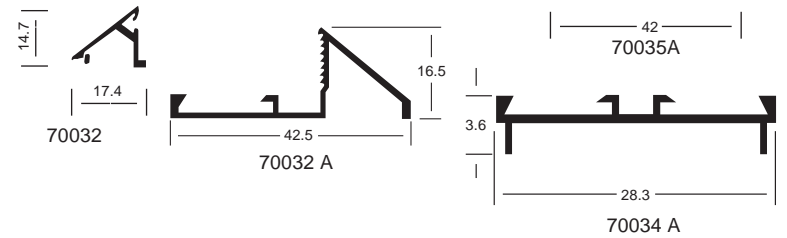
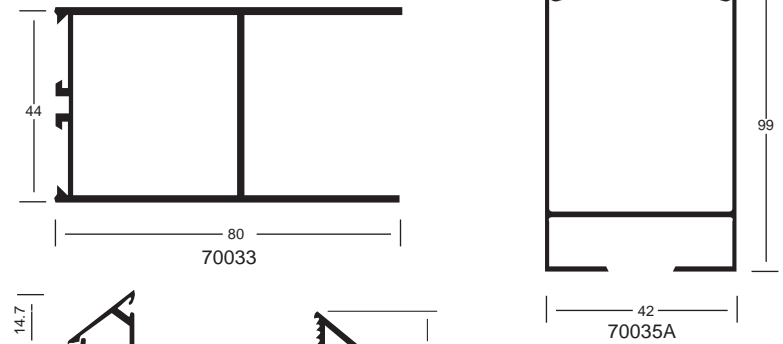
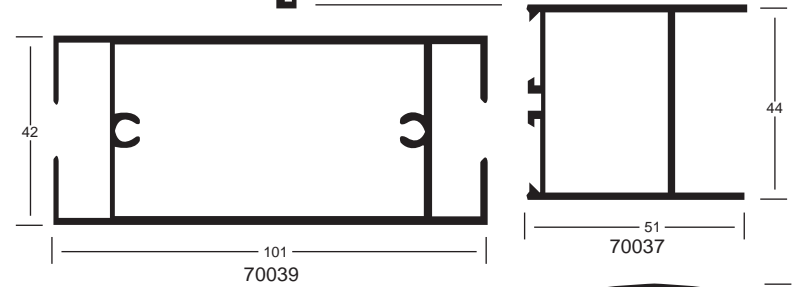
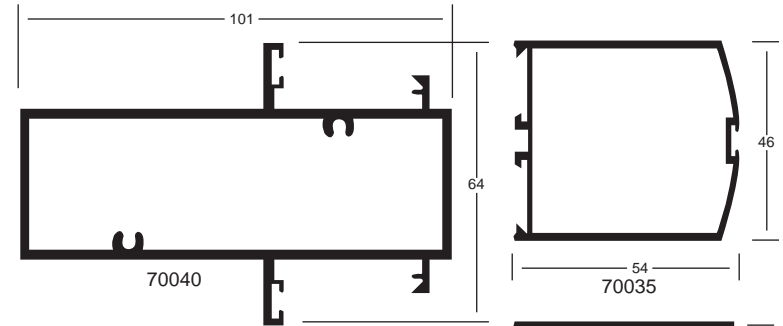


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## Deluxe Swing Door Sections

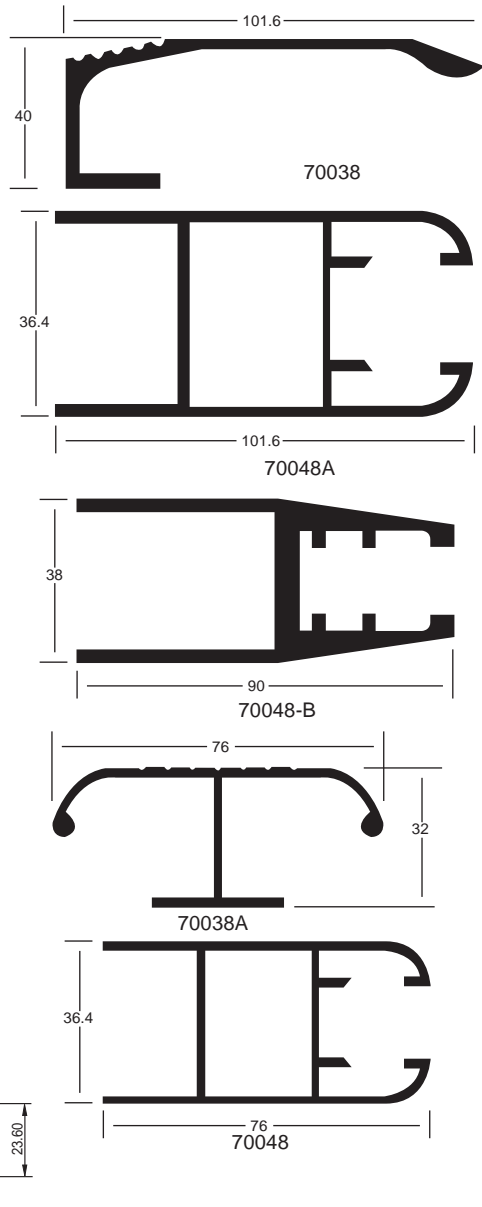


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# Deluxe Swing Door Sections

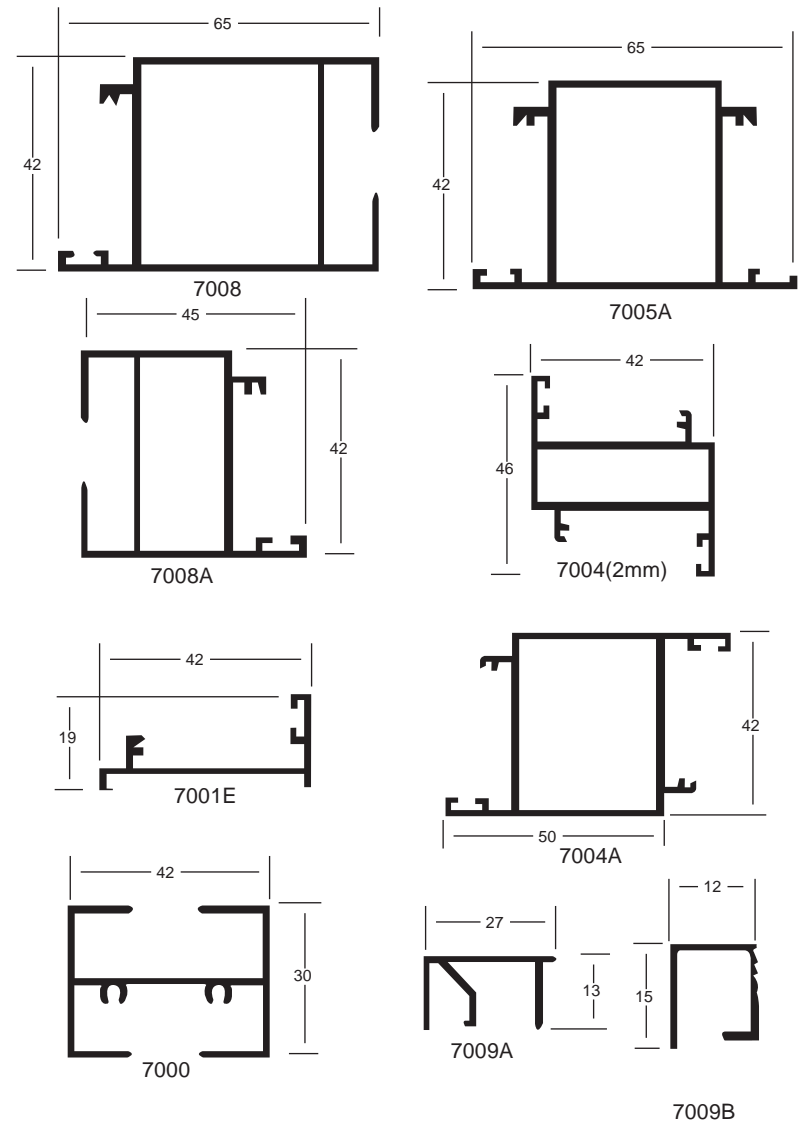


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# Fixed & Openable (Hinged) Door / Windows Sections

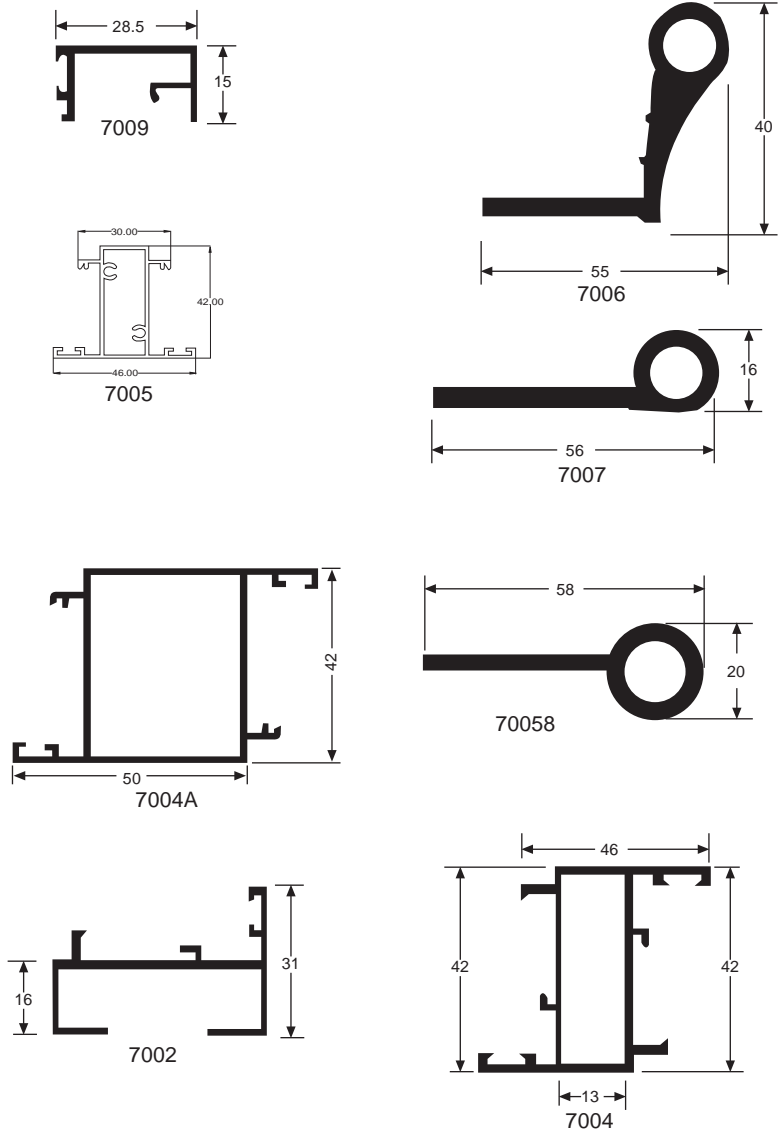
(Normal, 1.6 mm & 2 mm)



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## Hinged Casement Windows Sections

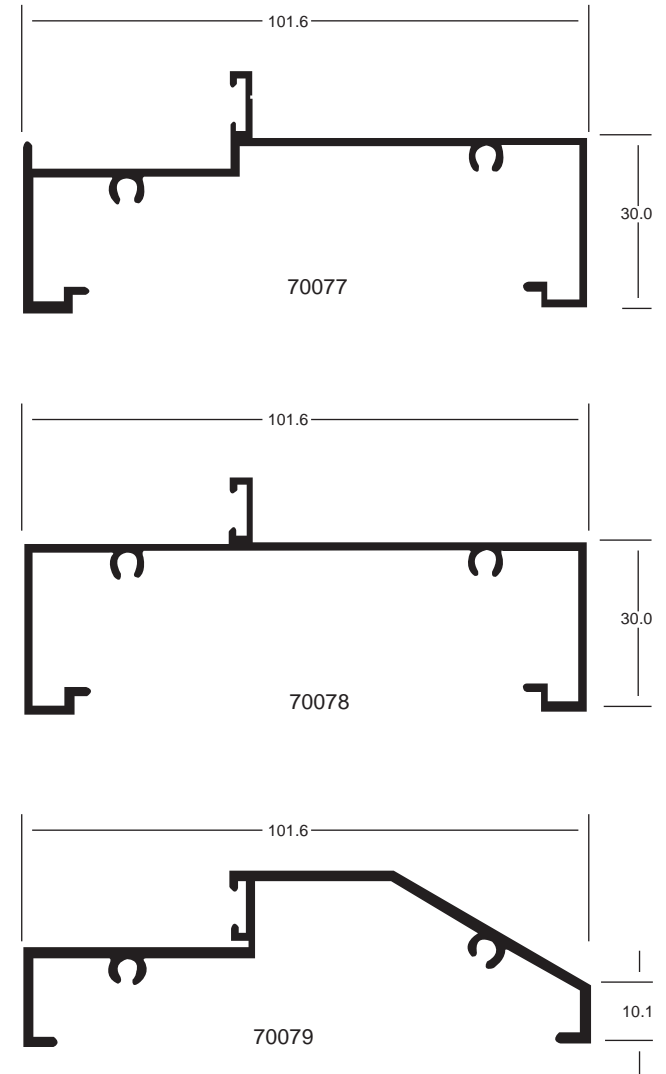


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## Hinged Door Sections - 4"

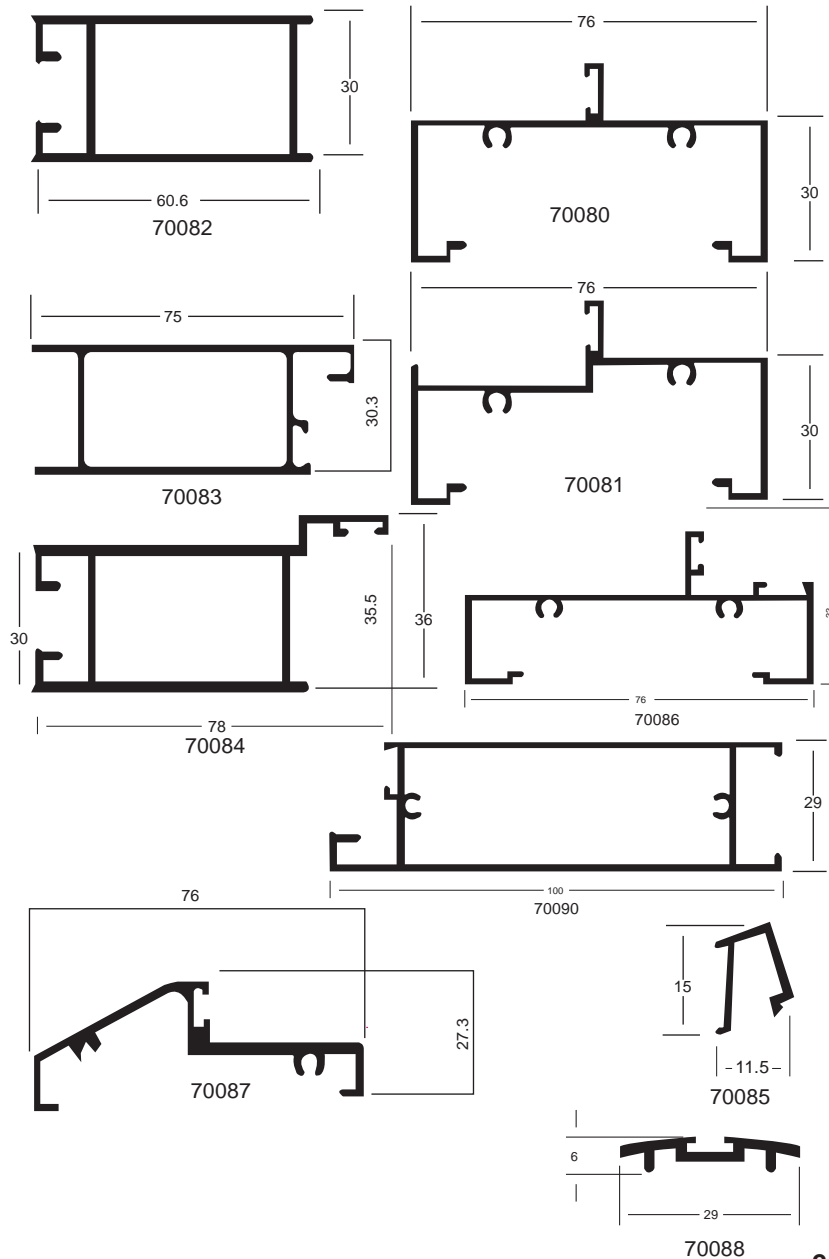


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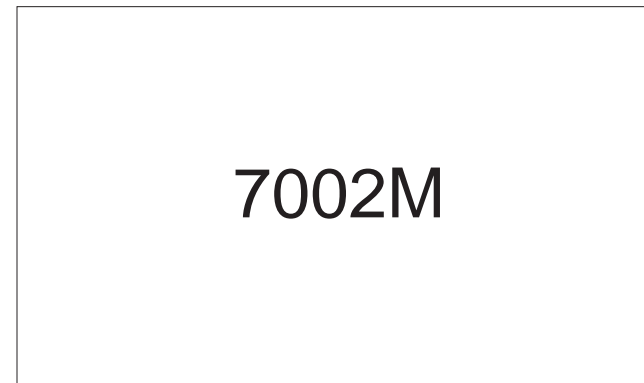
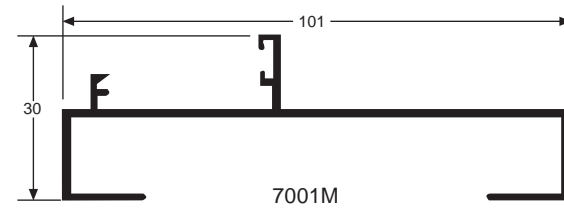
## Hinged Door Sections - 3"



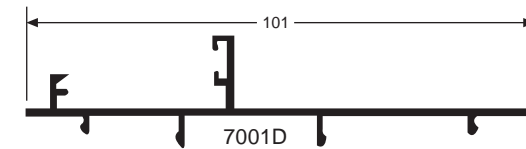
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## Fixed & Openable (Hinged) Door / Windows Sections



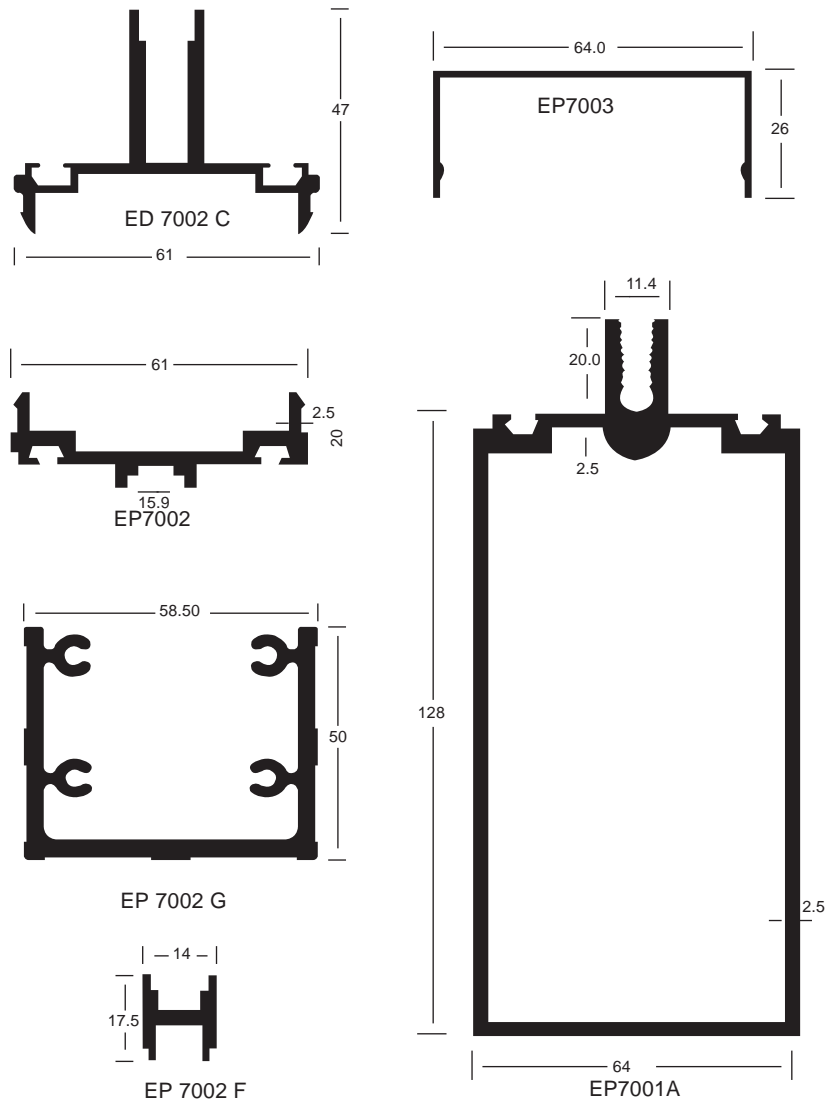
7002M



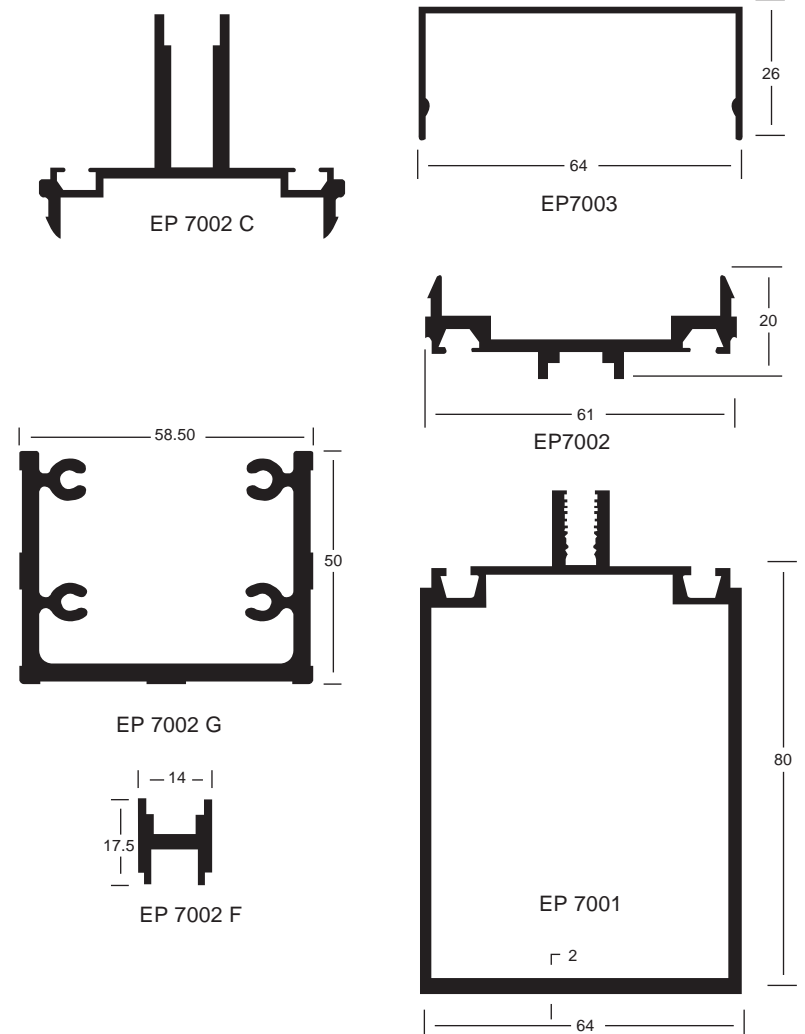
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# Curtain Wall Sections

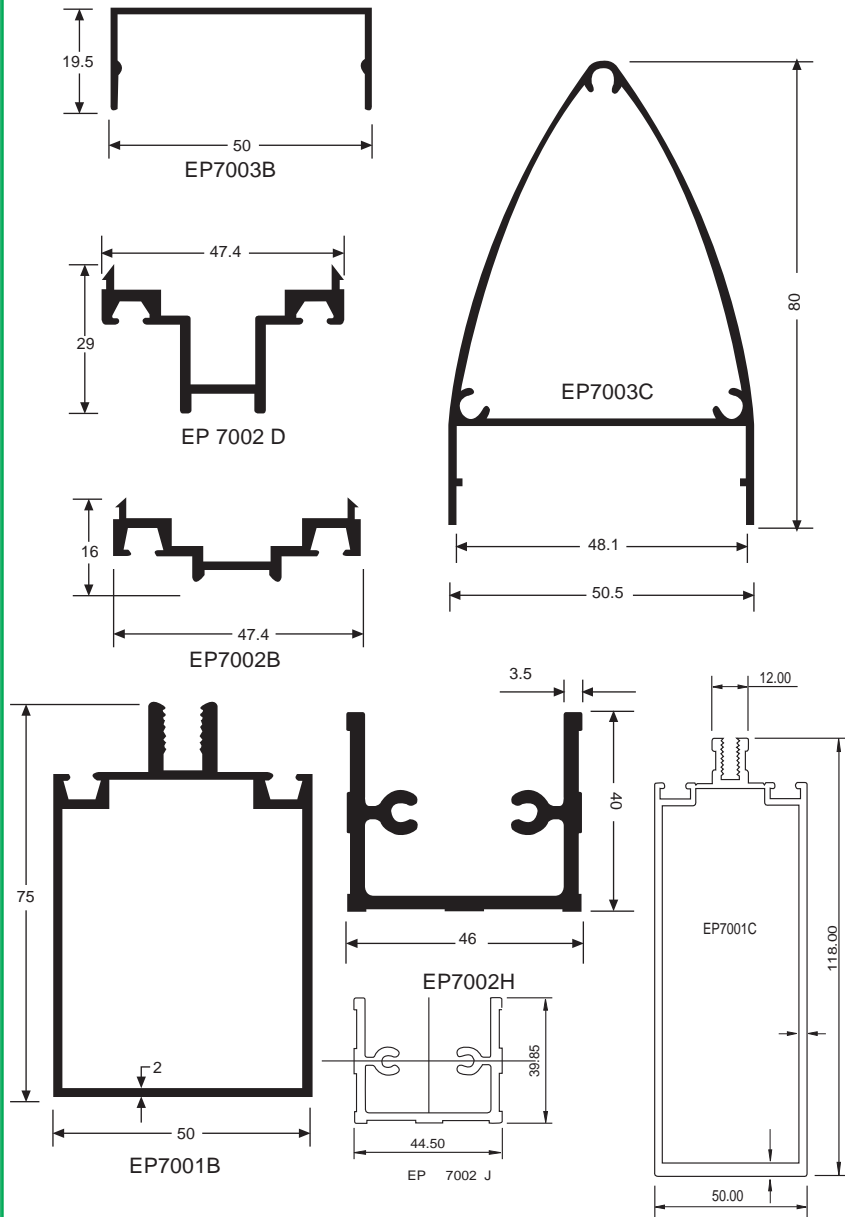


# Curtain Wall Sections





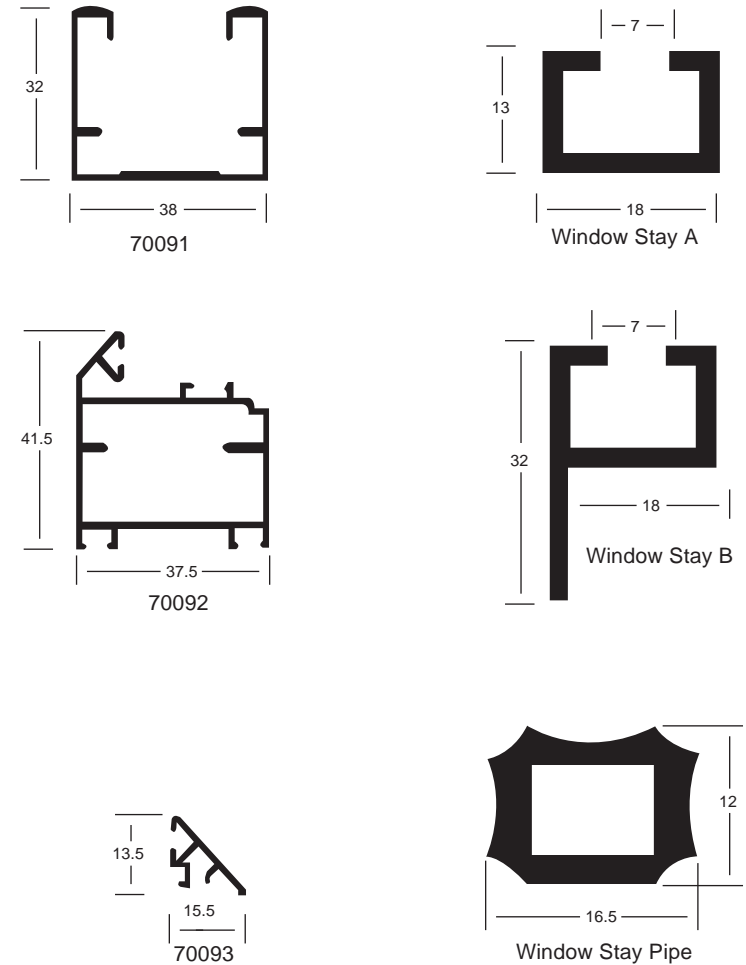
## Curtain Wall Sections



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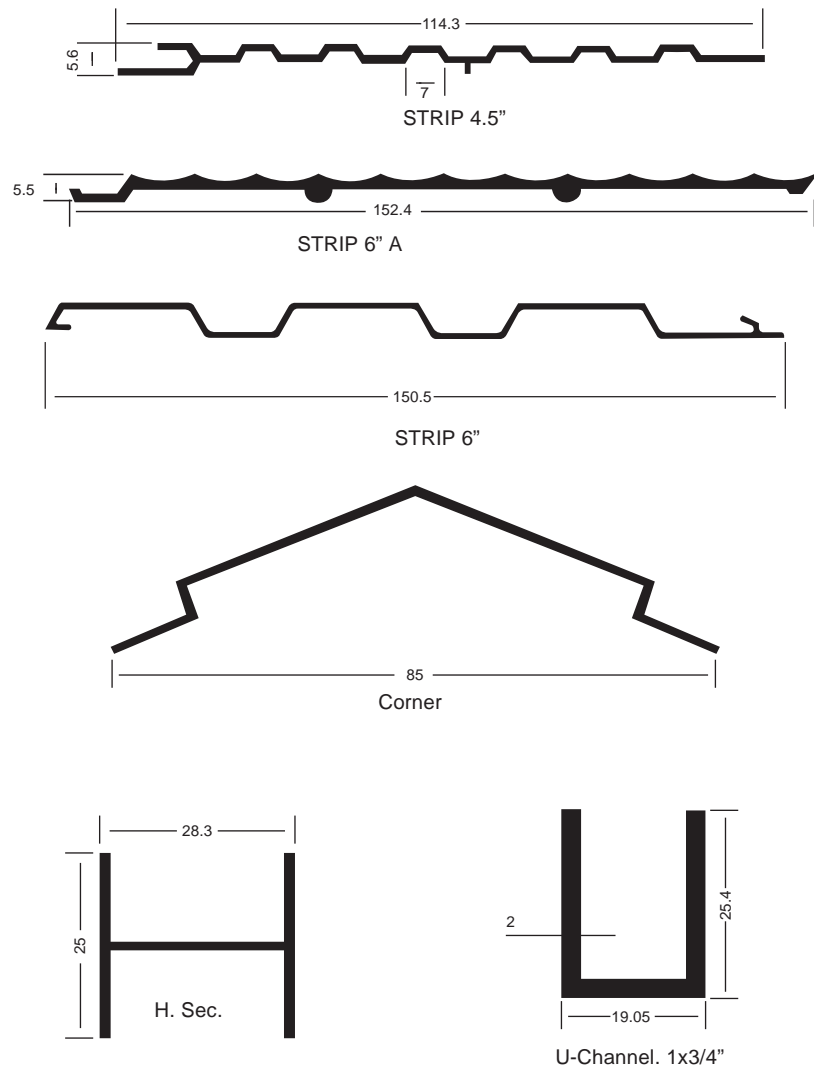
## Centrally Pivoted Windows / Stay Sections



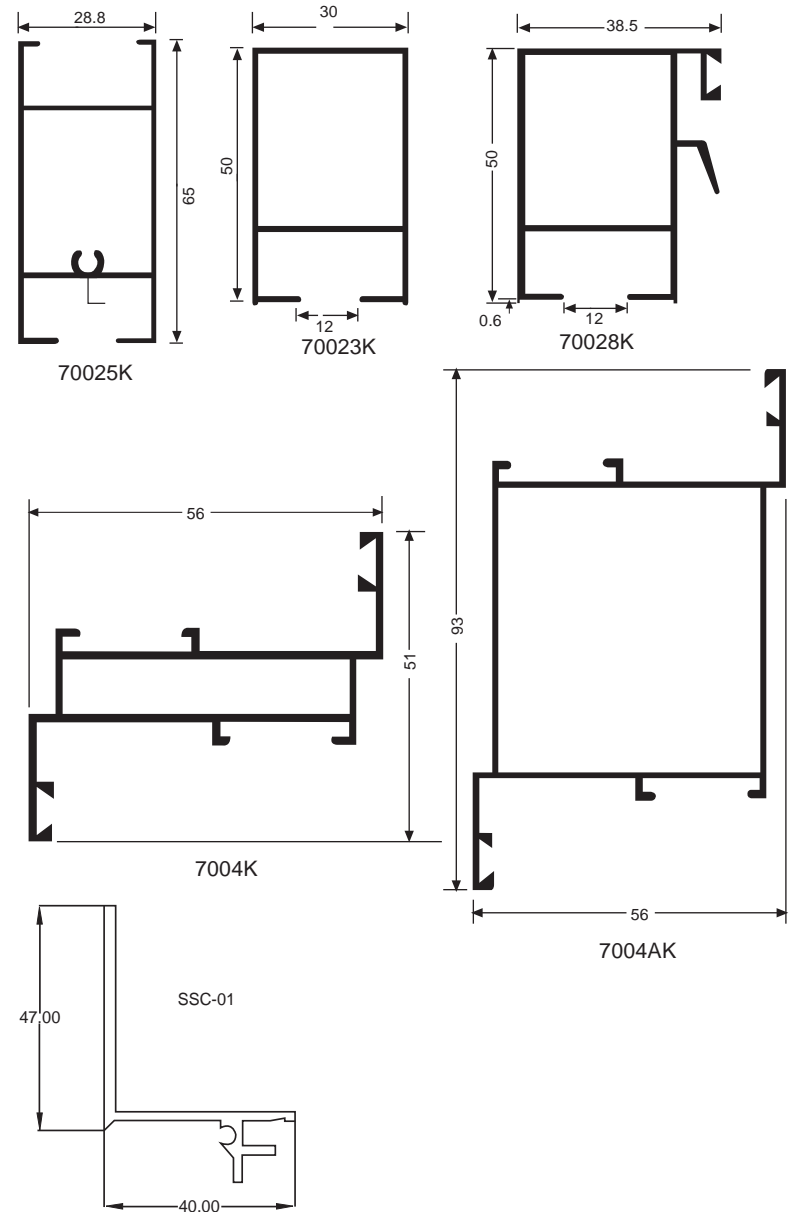
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# Miscellaneous

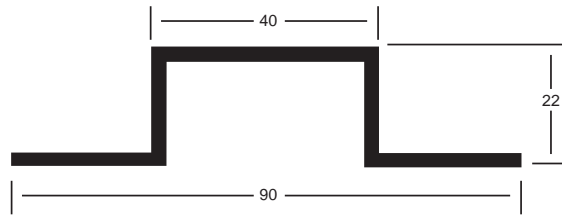


# Miscellaneous





## Miscellaneous



CLADDING

2.0mm

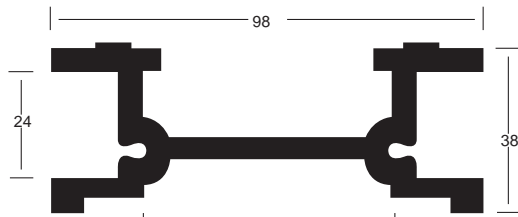


STRIP - 2"

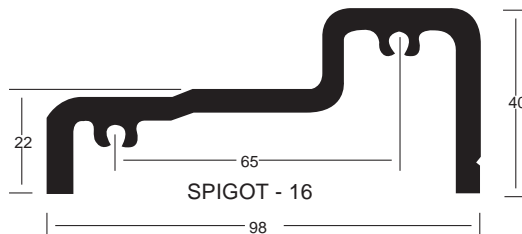
2.0mm



STRIP - 4"



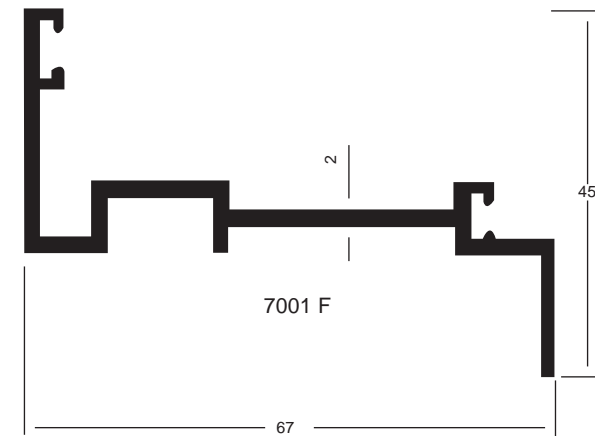
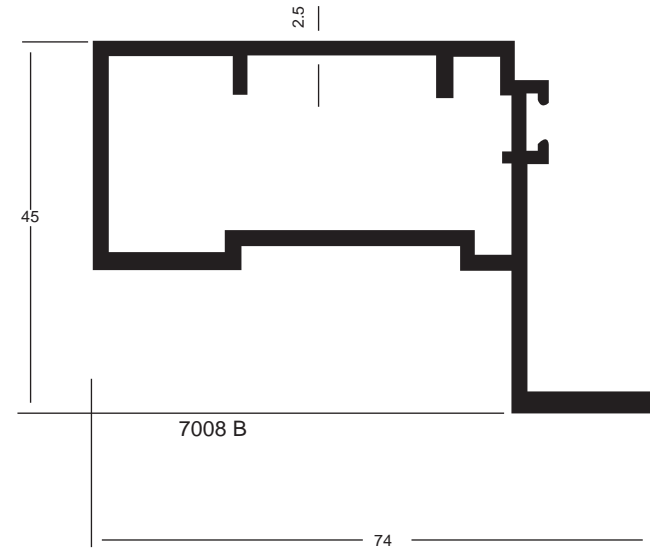
SPIGOT - 18



SPIGOT - 16

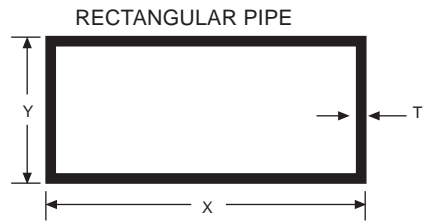


## Miscellaneous

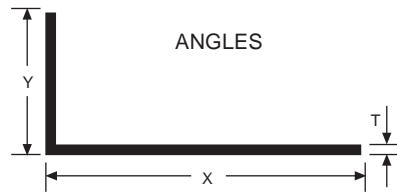




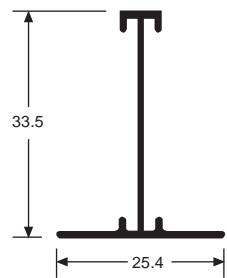
## Miscellaneous



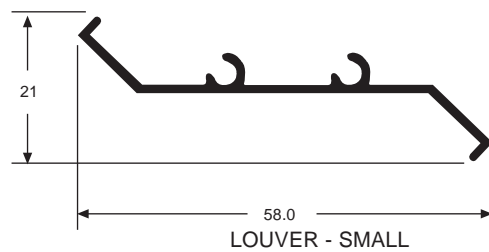
S.No.	S I Z E S		THICKNESS T (mm)
	X	Y	
1	2"	1"	1.4
2	3"	1"	1.4
3	3"	1 1/2"	1.5
4	4"	1 3/4"	1.6
5	4"	1 3/4"	2.0
6	1.75	1.75	2.0
7	6"	4"	3.0



S.No.	S I Z E S		THICKNESS T (mm)
	X (mm)	Y (mm)	
1	19	19	1.5
2	19	19	3.0
3	25	25	1.0
4	30	30	2.5
5	32	32	1.8
6	40	15	3.0
7	40	40	3.0
8	40	40	4.0
9	75	50	4.0
10	76	56	6.0



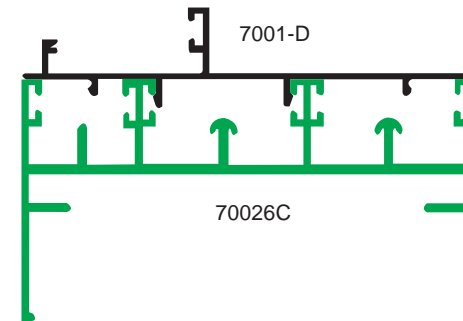
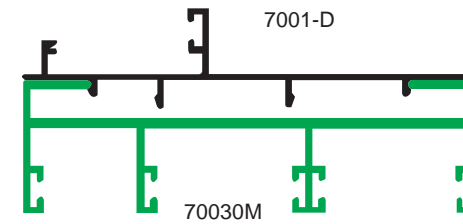
FALSE CIELING TEE-2



LOUVER - SMALL



## Assembly





# Weights & Measures

## METRIC MEASURES AND EQUIVALENTS

<b>LENGTH</b>		
1 millimetre (mm)		=0.0394 in
1 centimetre (cm)	= 10mm	=0.3937 in
1 metre (m)	= 100cm	=1.0936 yds
1 kilometre (km)	= 1000m	=0.6214 mile
<b>SURFACE OR AREA</b>		
1 sq.cm (cm <sup>2</sup> )	= 100mm <sup>2</sup>	=0.1550sq in
1 sq metre (m <sup>2</sup> )	= 10,000cm <sup>2</sup>	=1.1960 sq.yds
1 are (a)	=100m <sup>2</sup>	=119.60 sq yds
1 sq.km (km <sup>2</sup> )	=100hectares	=0.3861 sq miles
<b>CAPACITY</b>		
1 cu cm (cm <sup>3</sup> )	0.0610 cu in	
1 cu decimetre (dm <sup>3</sup> )	1000cm <sup>3</sup>	=0.0351 cu ft
1cu metre (m <sup>3</sup> )	1000dm <sup>3</sup>	=1.3080 cu yds
1 litre (l)	1 dm <sup>3</sup>	=0.2642 US gallon
1 hectolitre (hl)	100 litres	=2.7497 bushels
<b>WEIGHT</b>		
1 milligramme (mg)	=0.0154 grain	
1 gramme (g)	=1000mg =0.0353 oz	=0.017 chattak
1 kilogramme (kg)	=1000g =2.2046 lb	=1.07 seers
1 tonne (t)	=1000kg = 0.9842 ton	=26.75 maunds

## BRITISH MEASURES AND EQUIVALENTS

<b>LENGTH</b>		
1 inch	= 2.54 cm	
1 foot	= 12 inches	= 0.3048 m
1 yard	= 3 feet	= 0.9144 m
1 rod	=55 yards	= 5.0292m
1 chain	=22 yards	= 20.117 m
1 furlong	=220 yards	= 201.17 m
1 mile	=1760 yards	= 1.6093 km
1 nautical mile	=6080 feet	= 1.853 km
<b>SURFACE OR AREA</b>		
1 sq inch	=6.4516 cm <sup>2</sup>	
1 sq foot	=144 sq.inches	= 0.0929 m <sup>2</sup>
1 sq.yard	=9 sq.feet	= 0.8361m <sup>2</sup>
1 acre	= 4840 sq.yards	= 4046.9 m <sup>2</sup>
1 sq.mile	= 640 acres	= 259.0 hectares
<b>CAPACITY</b>		
1 cu inches	= 16.387 cm <sup>3</sup>	
1 cu foot	= 1728 cu inches	= 0.0283 m <sup>3</sup>
1 cu yard	= 27 cu feet	= 0.7646 m <sup>3</sup>
1 pint	= 4 gills	= 0.5683 litre
1 quart	= 2 pints	= 1.1365 litres
1 imperial gallon	= 8 pints	= 4.5461 litres
1 bushel	= 8 gallons	= 36.369 litres
<b>APOTHECARIES</b>		
1 fluid ounce	= 8 fl drams	= 28.413 cm <sup>3</sup>
1 pint	= 20 fl ounce	= 568.26 cm <sup>3</sup>
<b>WEIGHT</b>		
<b>Avoirdupois</b>		
1 tola	= 0.41 oucnes	= 11.6363 g
1 ounce	= 437.5 grains	= 28.350 g
1 pound	= 16 unce	= 0.4536 kg
1 seer	= 16 chattak	= 0.93 kg
1 stone	= 14 pounds	= 6.3503 kgs
1 hundredweight	= 112 pounds	= 50.802 kgs
1 ton	= 20 cwt	= 1.0161 tonnes
<b>USA Dry Measure Equivelants</b>		
1 pints	= 0.9689 UK pt	= 0.5506 litre
1 bushel	= 0.9689 UK bu	= 35.238 litres
<b>USA Liquid Measure Equivalents</b>		
1 fluid ounce	= 1.0408 UK fl oz	= 0.0296 litre
1 pint (16 oz)	= 0.8327 UK pt	= 0.4732 litre
1 gallon US	= 0.8327 UK gal	= 3.7853 litres
1 barrel	= 42 US gallon	= 158.98 litres

## THERMOMETER COMPARISON

$$E = 2 \times C$$

$$C = F - 32 \times 5 \div 9$$

$$F = C \times 9 \div 5 + 32$$

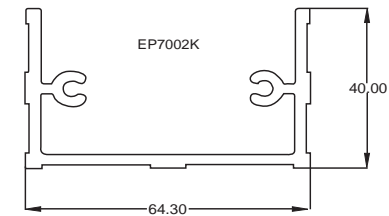
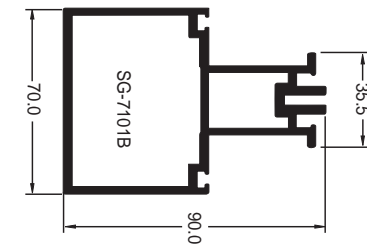
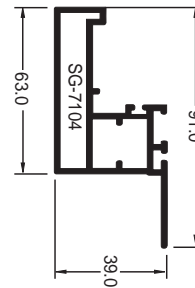
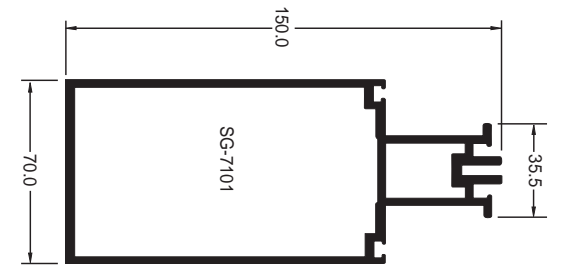
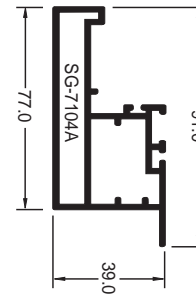
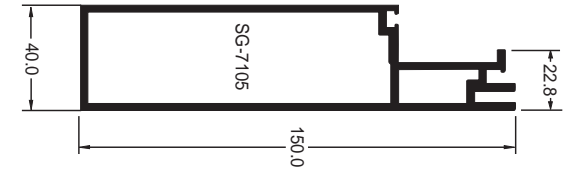
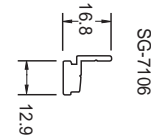
## Fever Chart

E	F	C
81.0	105	40.5
80.0	104	40
78.0	103	39.4
77.6	102	38.8
76.6	101	38.3
75.4	100	37.7
74.0	98.6	37
72.2	97	36.1

	Fahrenheit	Centigrade	Environment
Water Freezes	32	0	0
Water Boils	212	100	200
Absolute Zero*	-459.6	-273.15	-546.3
Max.Global Human Env.	122	50	100

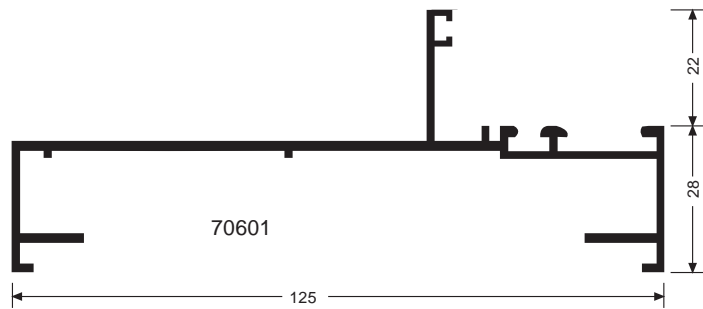
\*(Hypothetically the lowest, possible temperature at which all motion would cease.

E	F	C
100	122	50
90	113	45
80	104	40
70	95	35
60	86	30
50	77	25
40	68	20
30	59	15
20	50	10
10	41	5
0	32	0
-10	23	-5
-20	14	-10
-30	5	-15
-35.6	0	-17.8
-40	-4	-20
-50	-13	-25

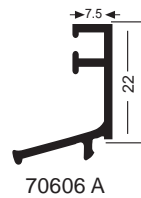
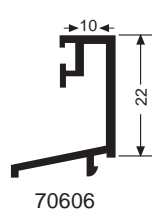
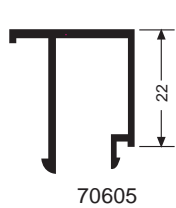
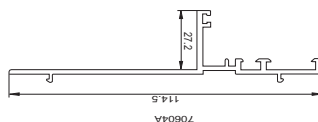
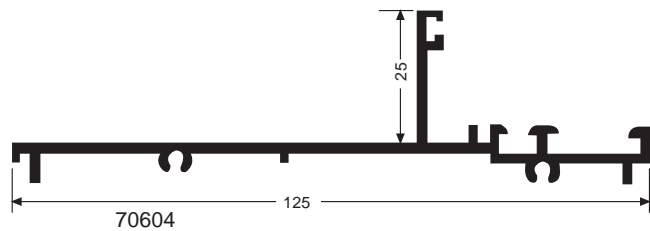




## Double Glazed Openable Door / Windows



601-A to be added



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## Colour Spectrum

- ★ Natural
- ★ Bronze
- ★ Champagne
- ★ Terracotta
- ★ Black
- ★ Gold

Plus

Wide Range of Polyester Powder Coated Colours

### Features & Benefits:

- Uniform Colour & Pleasing Aesthetics
- Smooth Finish
- Scratch- free & Corrosion Resistant
- Strength & Durability
- No Extrusion Defects

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