

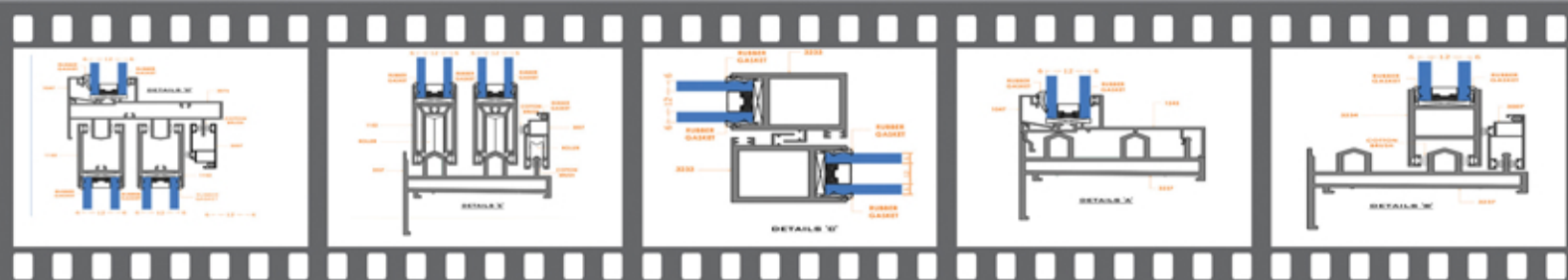


شركة

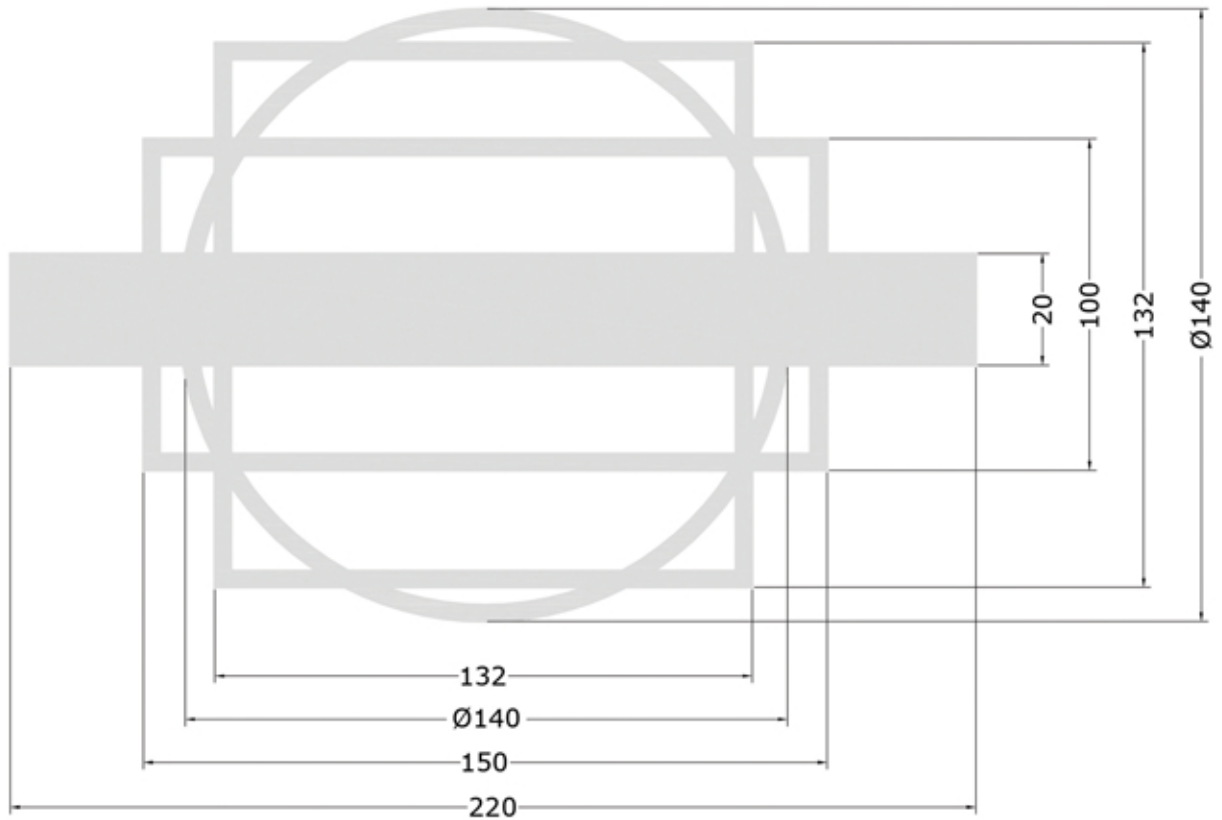
اشوار

LTD. المحدودة

# SLIDING WINDOWS & DOORS AND THERMAL BREAK SYSTEM



## **DIAGRAM SHOWING MAXIMUM EXTRUSION DIMENSIONS**



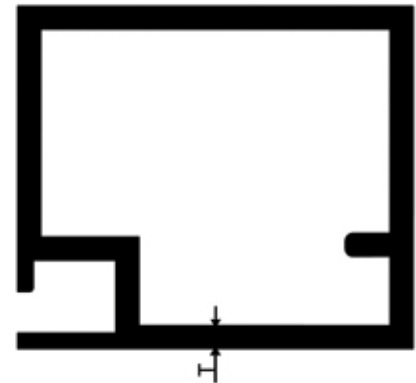
<b><i>CIRCULAR TUBE</i></b>	<b><i>140x4 MM</i></b>
<b><i>SQUARE TUBE</i></b>	<b><i>132x4 MM</i></b>
<b><i>RECTANGULAR TUBE</i></b>	<b><i>150x100x4 MM</i></b>
<b><i>FLAT BAR</i></b>	<b><i>220x20 MM</i></b>

## TOLERANCE

### STANDARD TOLERANCE - DIN1748

#### A. Wall thickness T

WALL THICKNESS T		
Over	Upto	Tolerance( ± )
-	1.5	±0.20
1.5	3.0	±0.25
3.0	6.0	±0.30
6.0	10.0	±0.35
10.0	15.0	±0.40
15.0	20.0	±0.50
20.0	30.0	±0.60
30.0	40.0	±0.70
40.0	50.0	±0.80



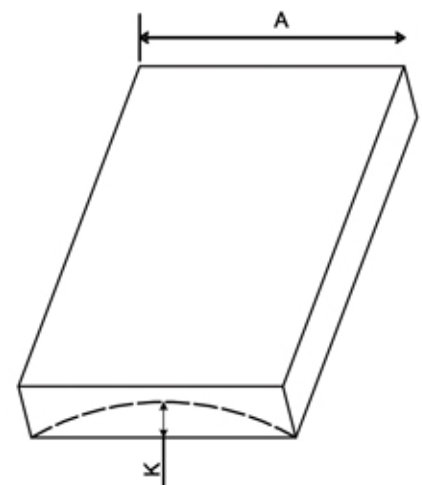
#### B. Dimensions Width (A) and Hieght (h)

Over	Upto	Tolerance( ± )
-	10.0	0.20
10.0	15.0	0.30
15.0	30.0	0.40
30.0	50.0	0.50
50.0	80.0	0.60
80.0	110.0	0.80
110.0	150.0	1.00
150.0	180.0	1.20
180.0	250.0	1.50

*A = Side of face of the section*  
*K = Concavity or Convexity*

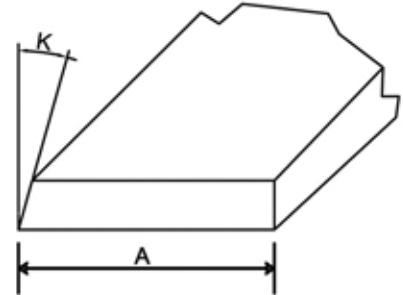
#### C. Concavity/Convexity (k)

Dimension A		Tolerance( k )	
Over	To	Solid	Hollow
0.0	30.0	0.20	0.30
30.0	60.0	0.30	0.50
60.0	90.0	0.40	0.70
90.0	120.0	0.60	1.00
120.0	150.0	0.80	1.20
150.0	200.0	1.00	1.50
200.0	250.0	1.20	2.00



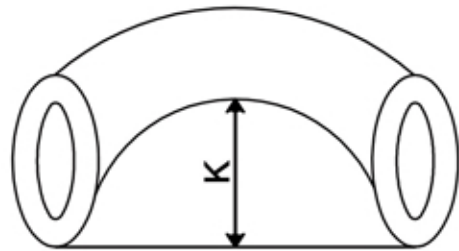
**D. ANGULARITY**

Dimensions A ( MM )		Tolerance k ( DEG )
Over	To	
0.0	30.0	0.50
30.0	75.0	0.80
75.0	150.0	1.25
150.0	250.0	1.50



**E. BOW**

Length		Tolerance
Over	To	
0.0	1.0	0.75
1.0	2.0	1.5
2.0	3.0	2.0
3.0	4.0	2.5
4.0	5.0	3.0
5.0	6.0	3.5
6.0 and above		4.0

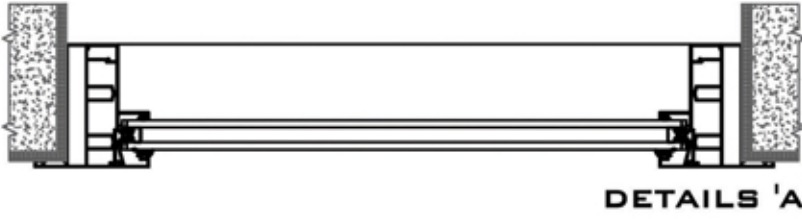


*No Single deviation Per 300mm shall Exceed 0.3mm*

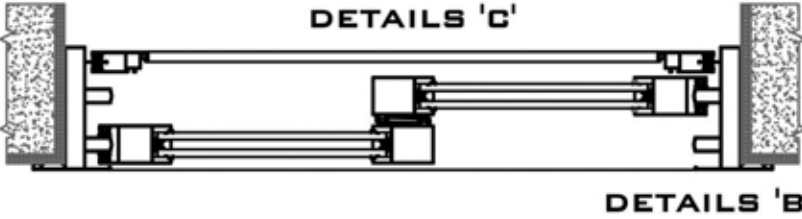
**F. Torsion/twist**

Width ( A ) MM		Tolerance ( V ) for length l ( M )		
Over	To	Total length		
		Every 1	Upto 6	Over 6
-	30.0	1.2	2.5	3.0
30.0	50.0	1.5	3.0	4.0
50.0	100.0	2.0	3.5	5.0
100.0	200.0	2.5	5.0	7.0
200.0	300.0	2.5	6.0	8.0



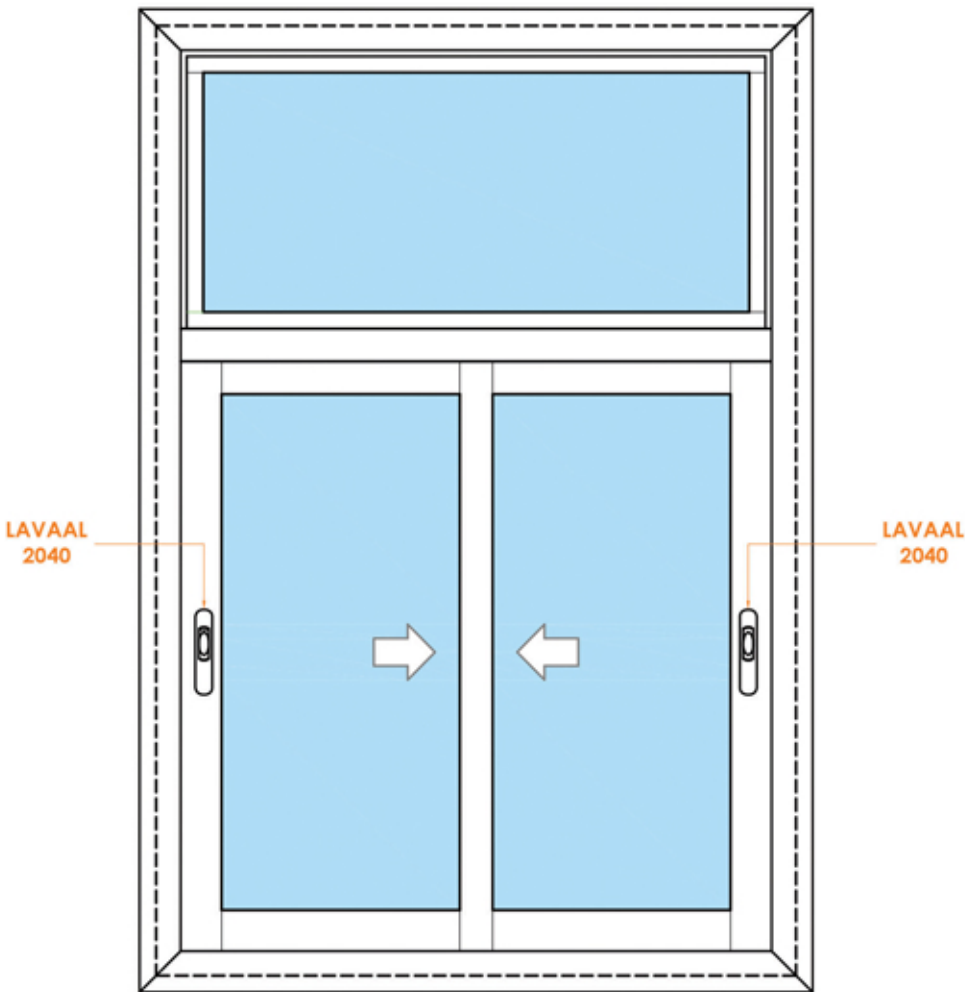


DETAILS 'A'



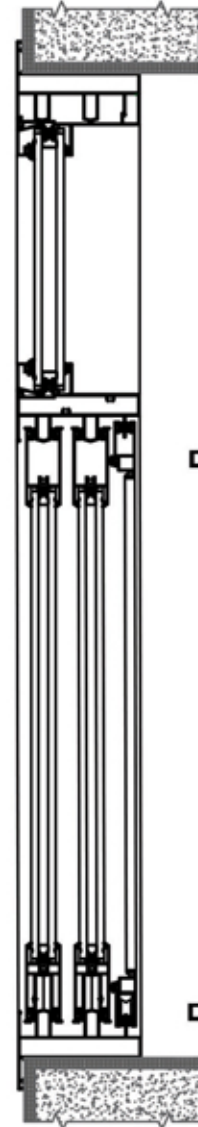
DETAILS 'C'

DETAILS 'B'



LAVAAL  
2040

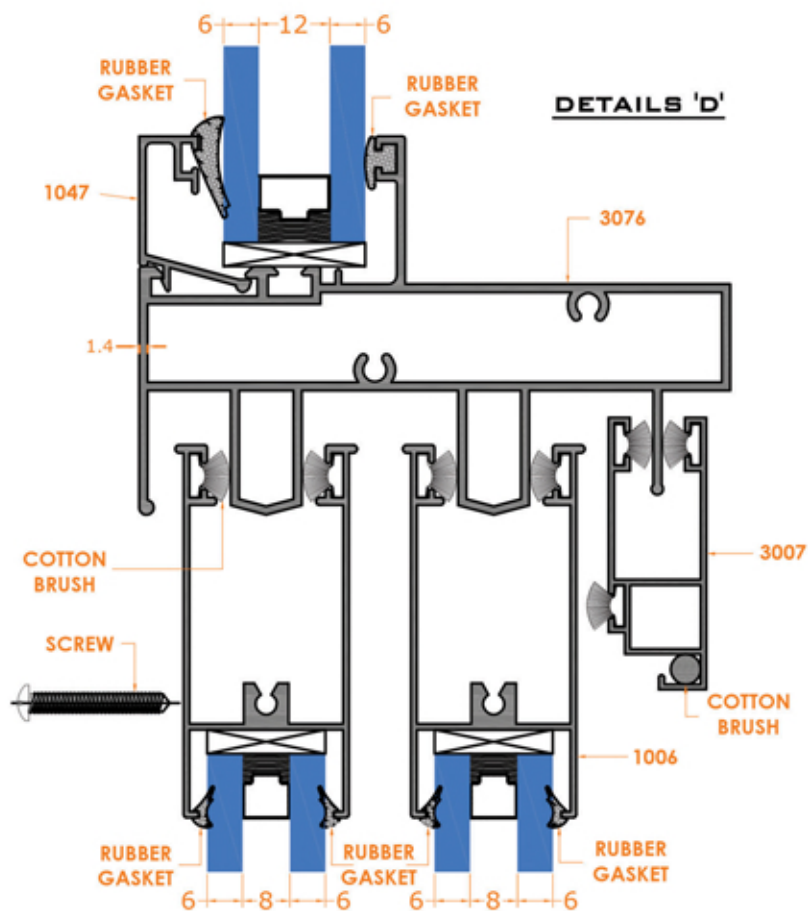
LAVAAL  
2040




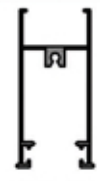


DETAILS 'D'

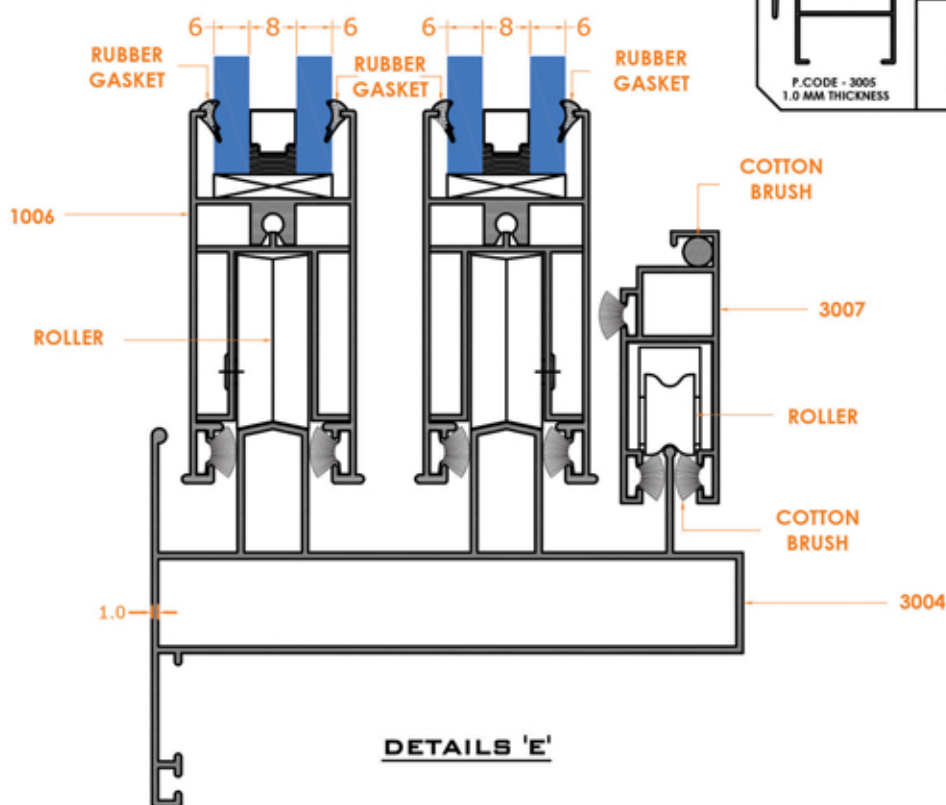
DETAILS 'E'

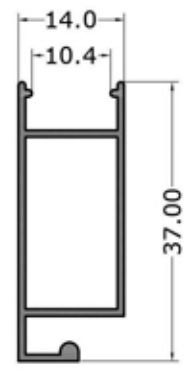
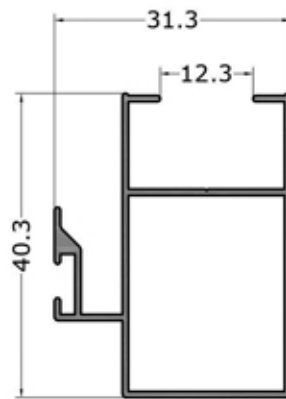
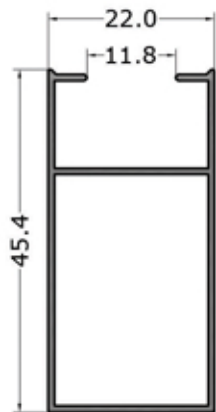
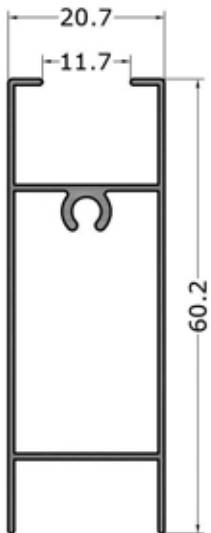
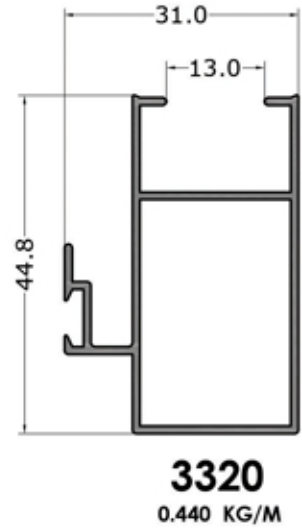
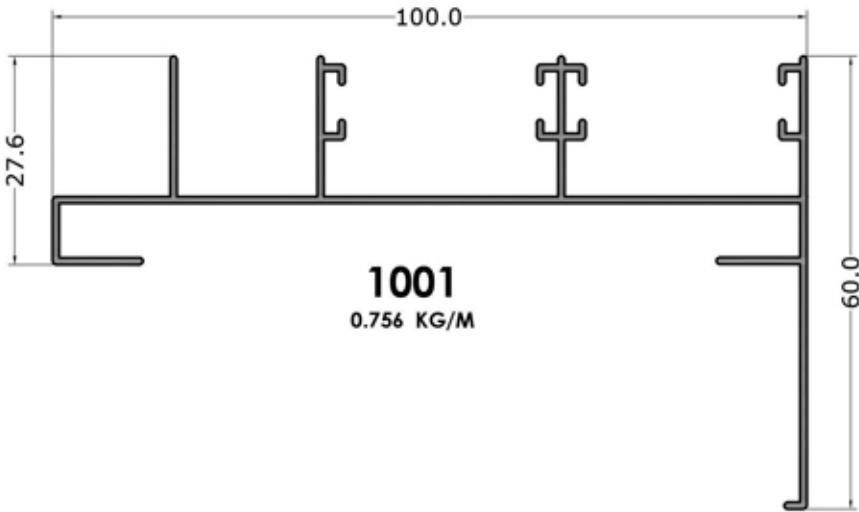
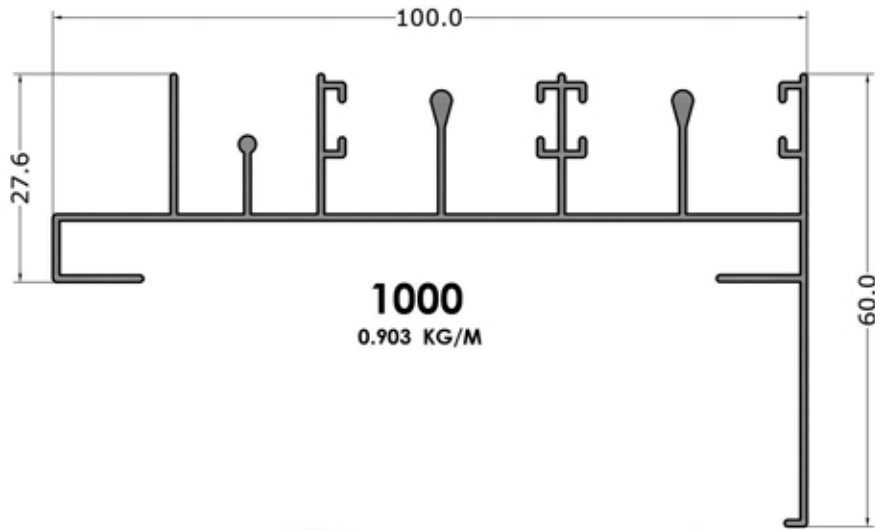




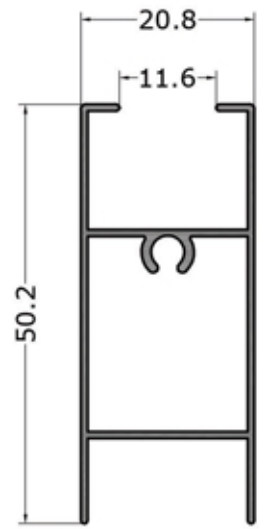
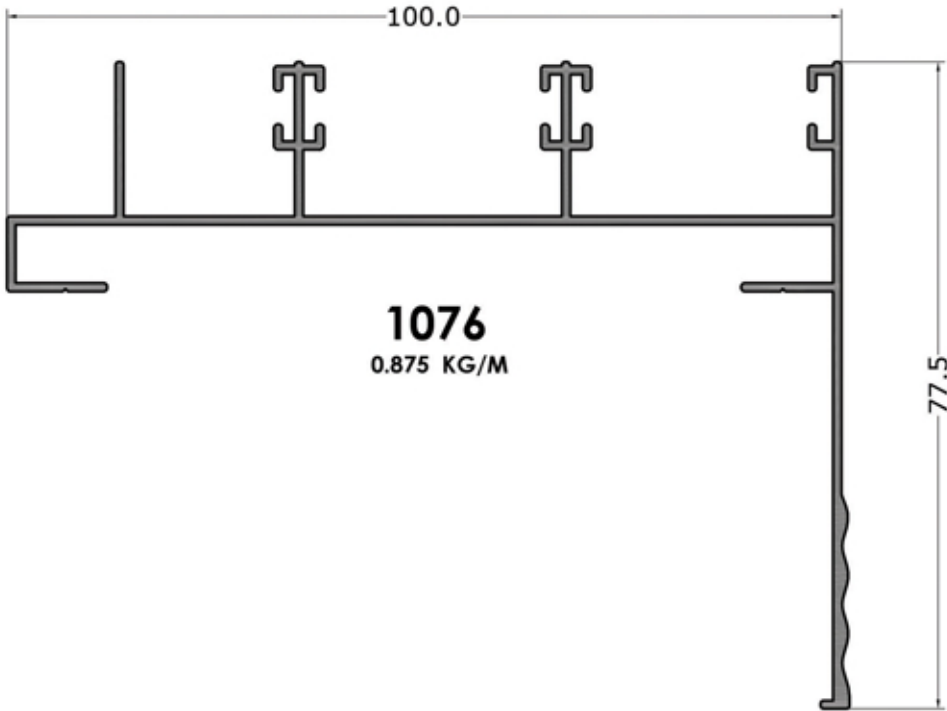
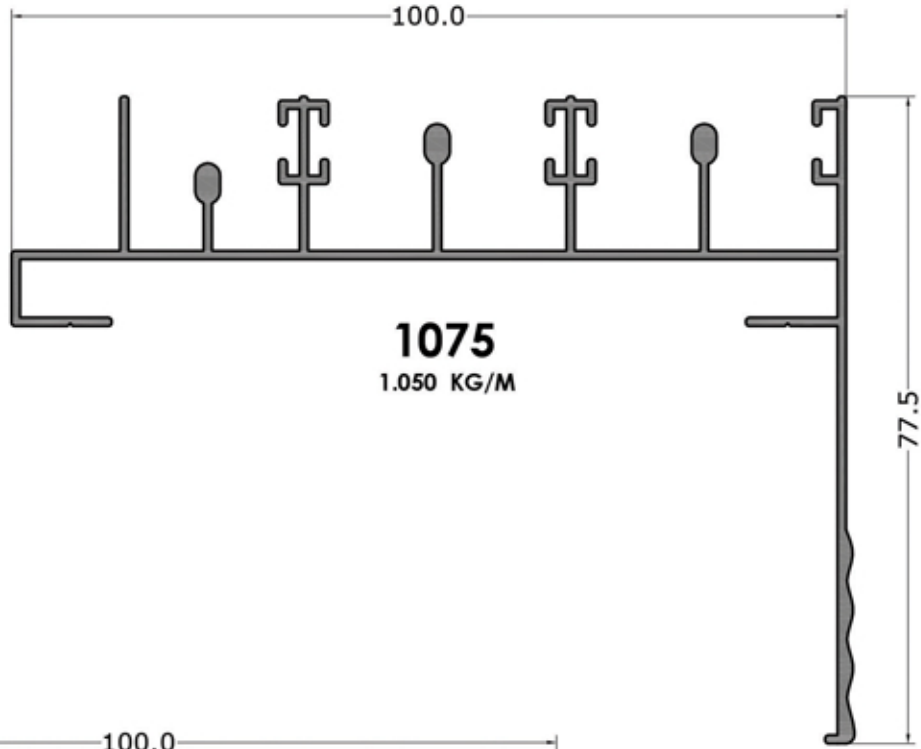
### GLASS TYPE USING

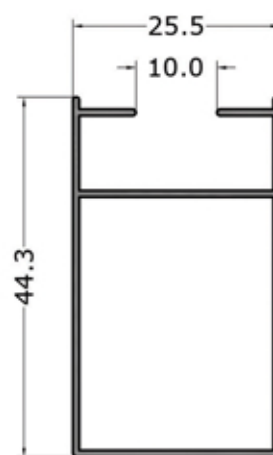
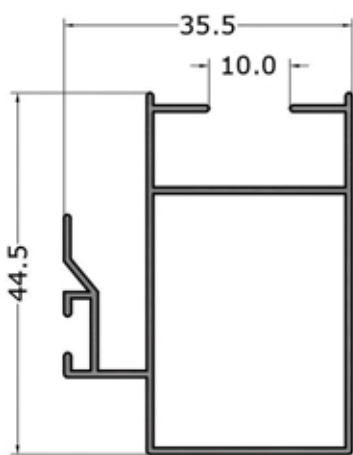
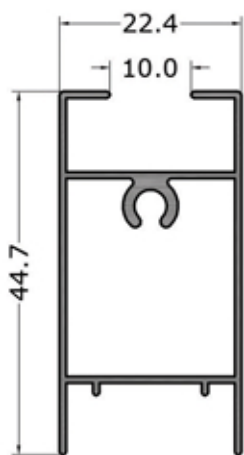
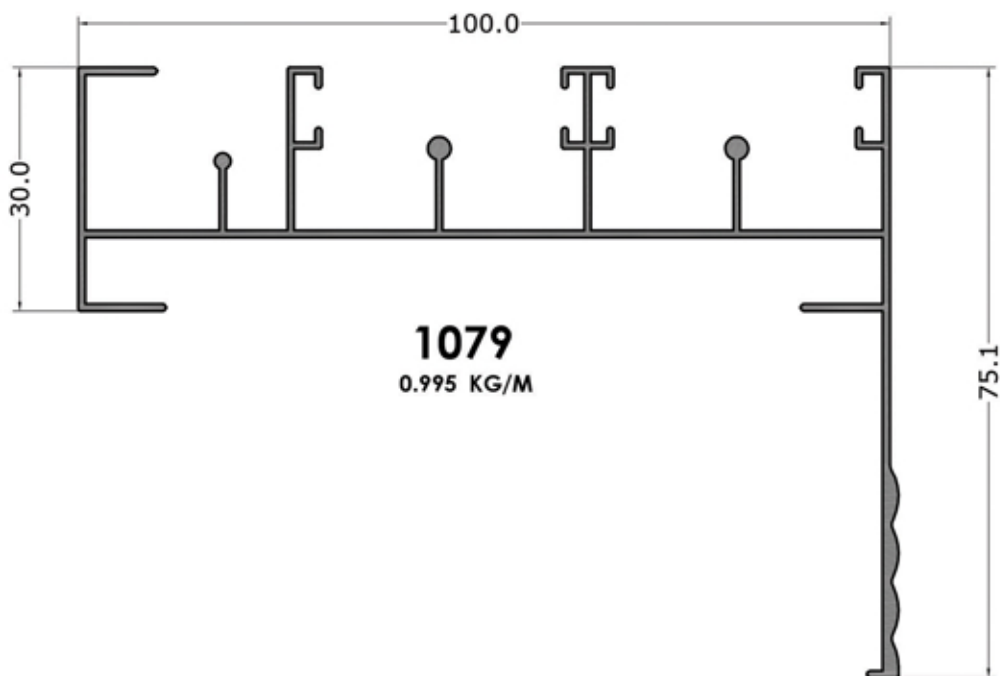
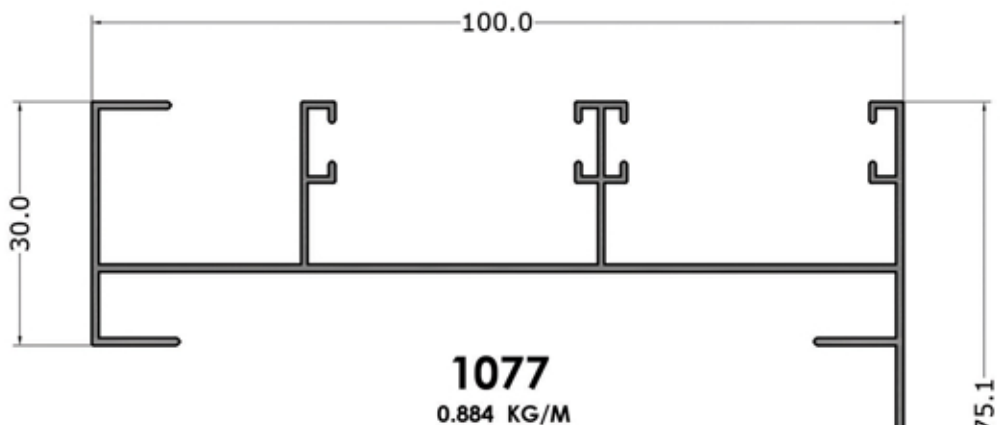
GLAZING TYPE	GLASS TYPE	RUBBER TYPE	
		INSIDE	OUTSIDE
 P.CODE - 3312 2.0 MM THICKNESS	24 MM 6 MM+12 MM SPACER+6MM	--	--
	20 MM 6 MM+8 MM SPACER+6MM	--	--
	18 MM 6 MM+6 MM SPACER+6MM	--	--
 P.CODE - 1006 1.0 MM THICKNESS	18 MM 6 MM+6 MM SPACER+6MM	--	--
	20 MM 6 MM+8 MM SPACER+6MM	--	--
 P.CODE - 3006 1.0 MM THICKNESS	18 MM 6 MM+6 MM SPACER+6MM	--	--
	20 MM 6 MM+8 MM SPACER+6MM	--	--
 P.CODE - 3005 1.0 MM THICKNESS	18 MM 6 MM+6 MM SPACER+6MM	--	--
	20 MM 6 MM+8 MM SPACER+6MM	--	--

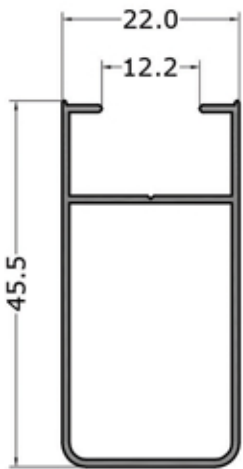
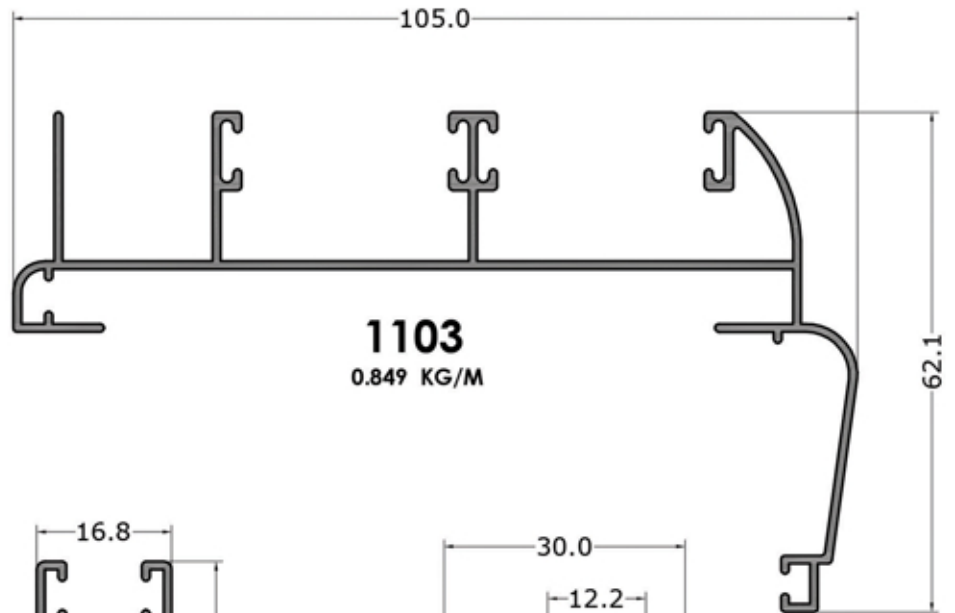
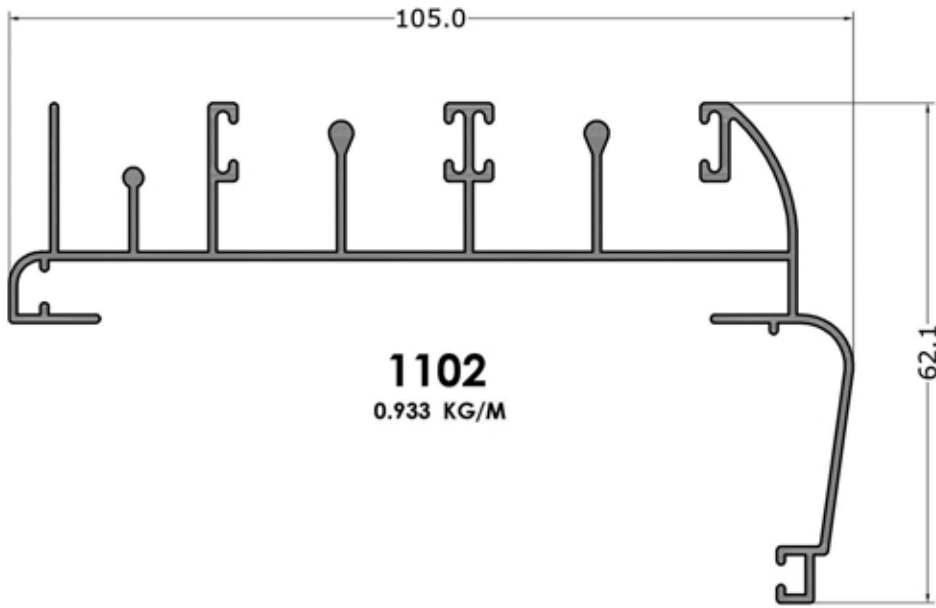




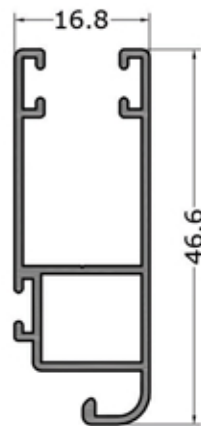




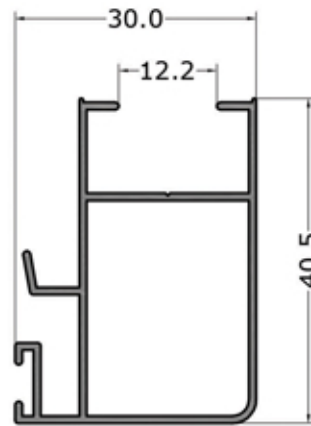




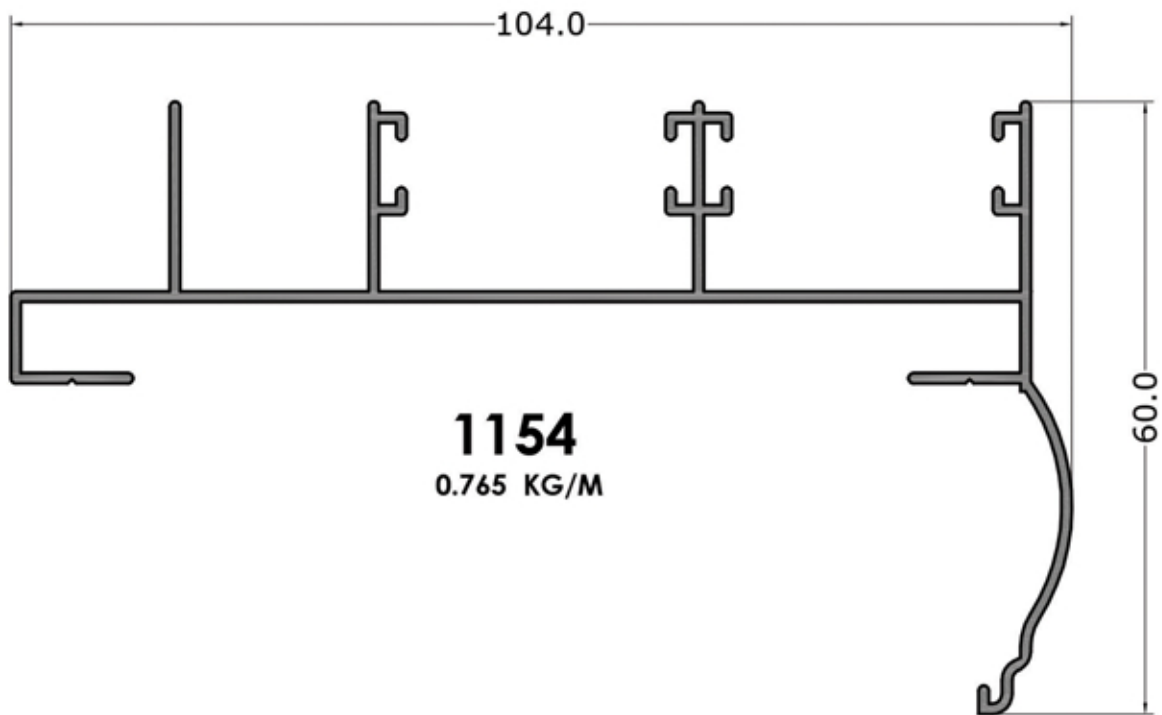
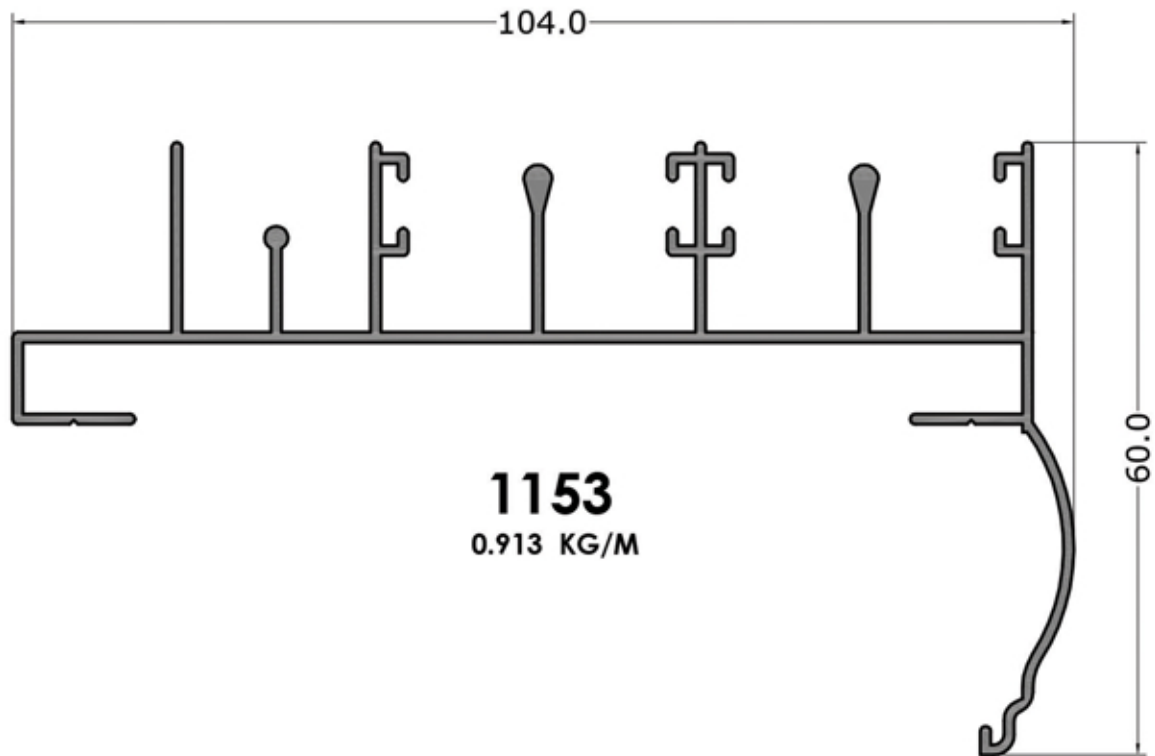
**3285**  
 0.331 KG/M

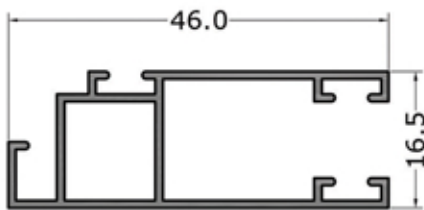
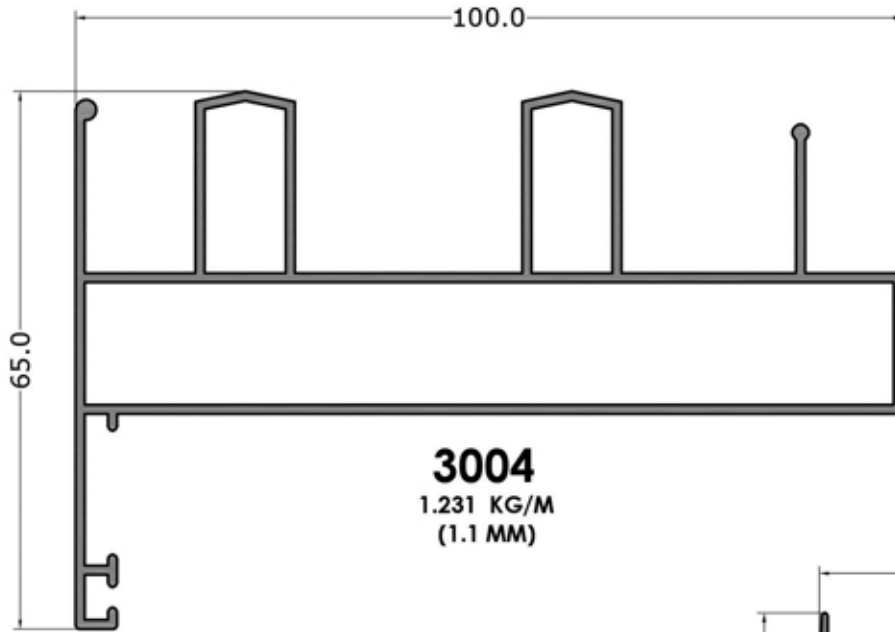


**3097**  
 0.319 KG/M

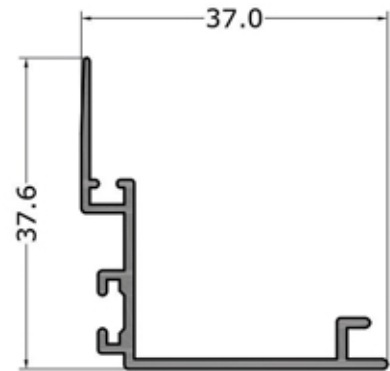


**3286**  
 0.390 KG/M

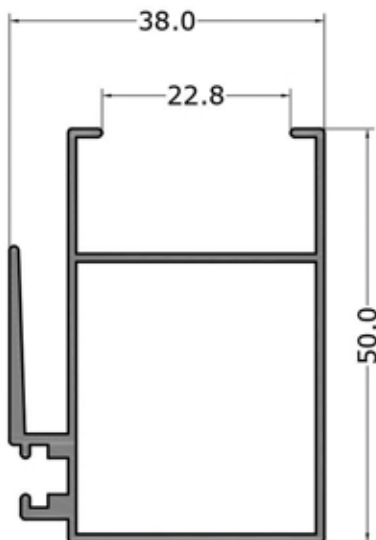




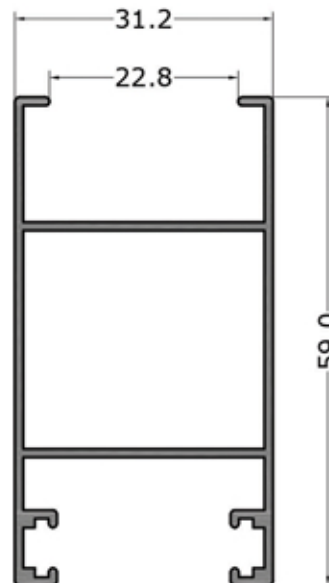
**3007**  
 0.349 KG/M  
 (0.9 MM)



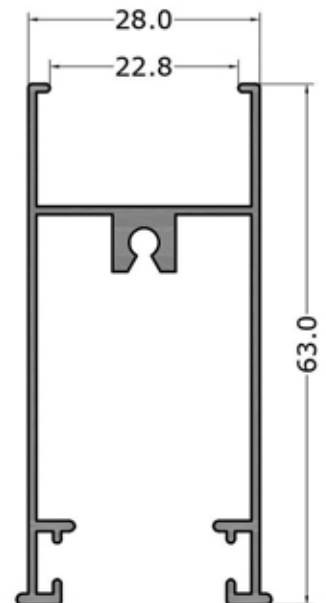
**1195**  
 0.294 KG/M  
 (1.2 MM)



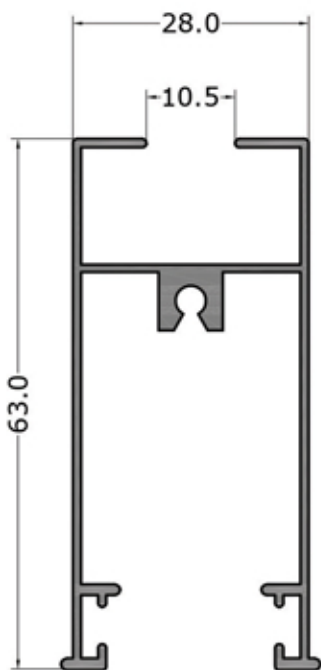
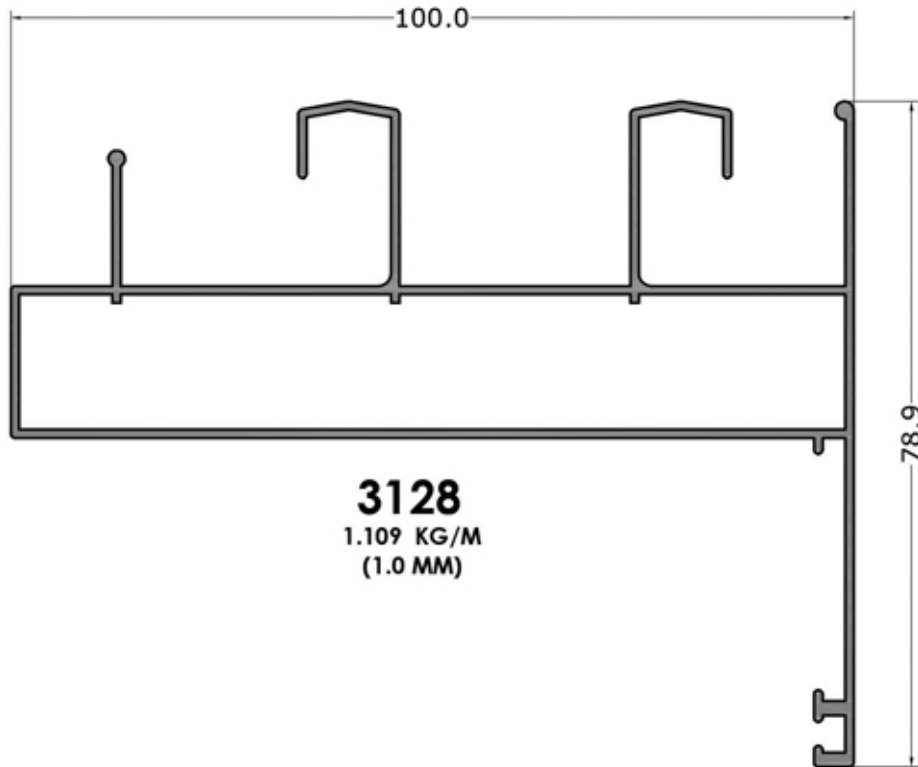
**3005**  
 0.609 KG/M  
 (1.0 MM)



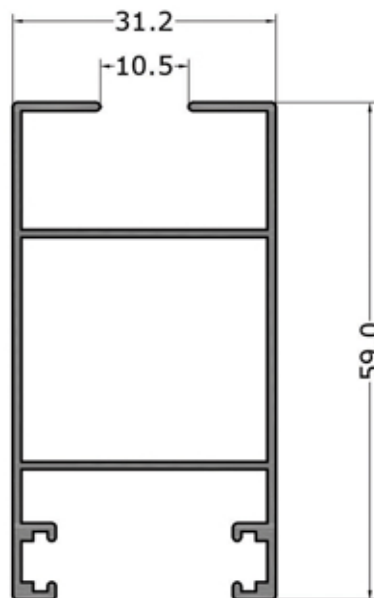
**3006**  
 0.563 KG/M  
 (1.0 MM)



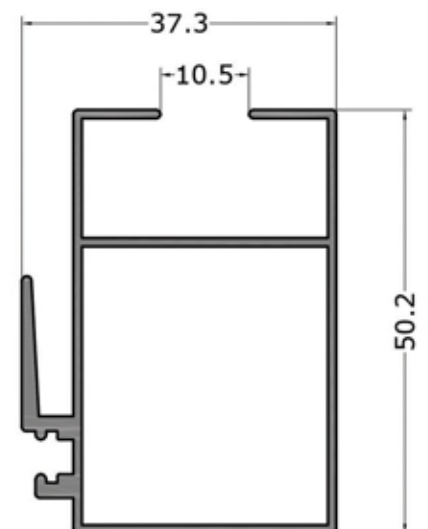
**1006**  
 0.596 KG/M  
 (1.0 MM)



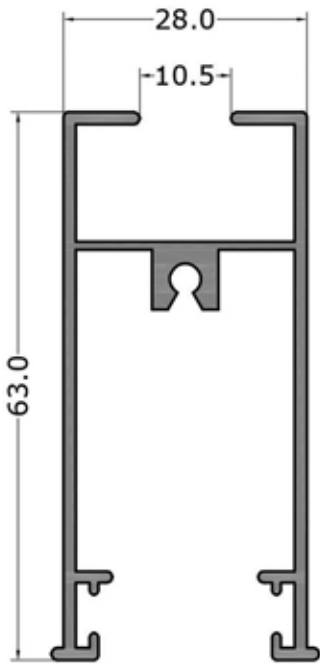
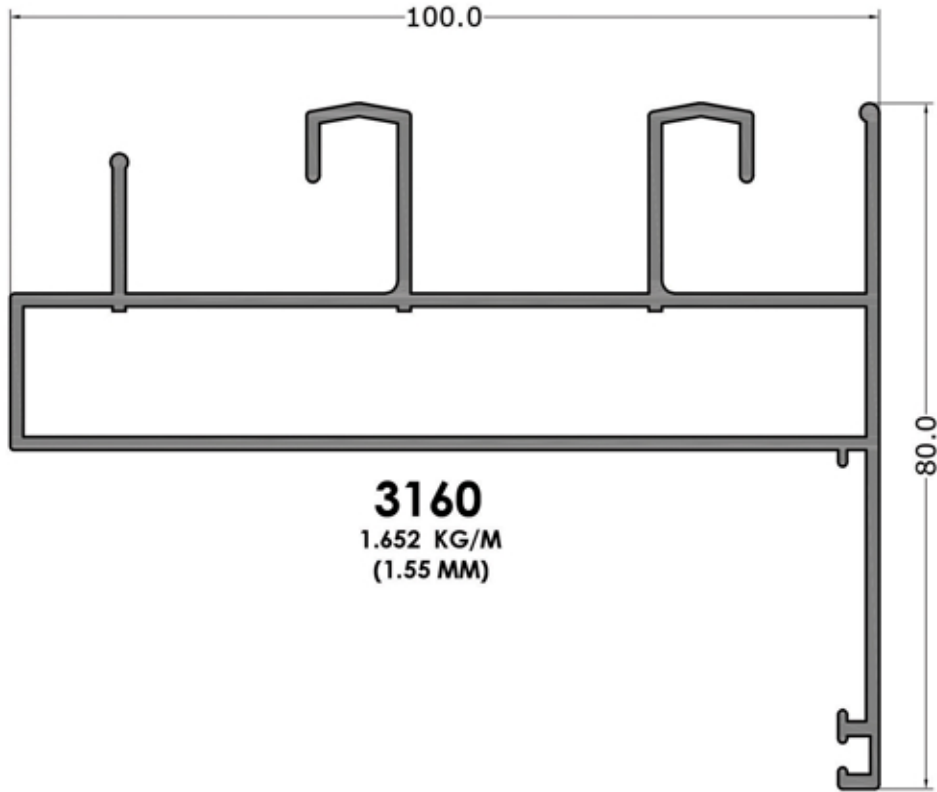
**1105**  
 0.636 KG/M



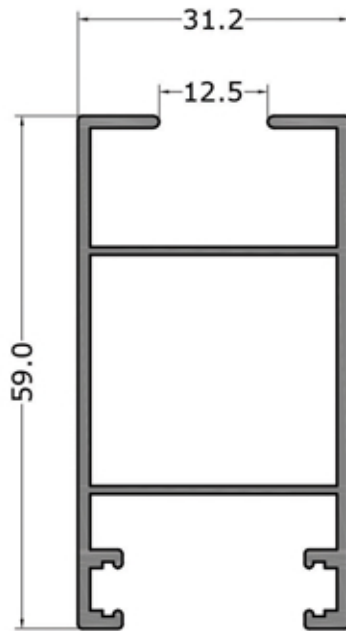
**3433**  
 0.580 KG/M



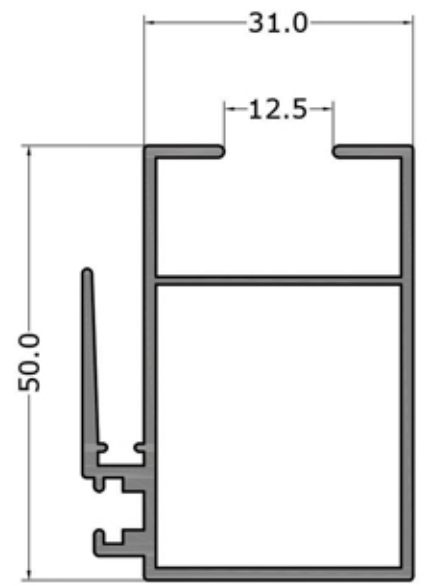
**3428**  
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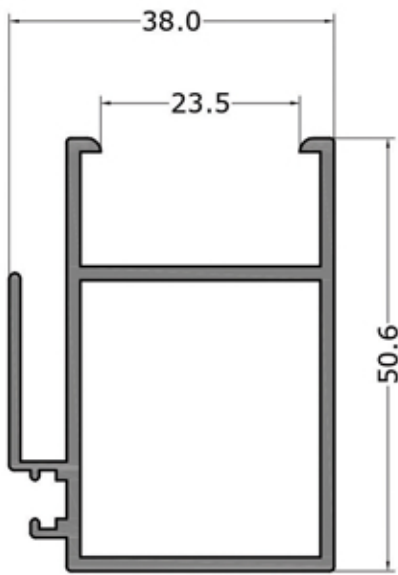
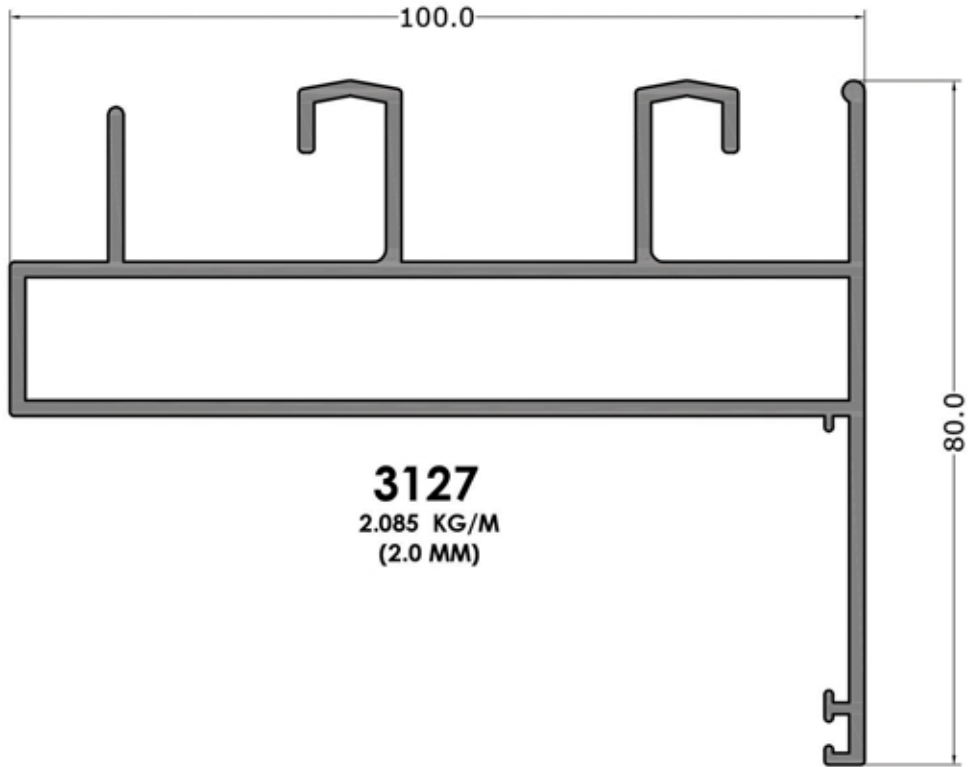
**1106**  
 0.764 KG/M  
 (1.4 MM)



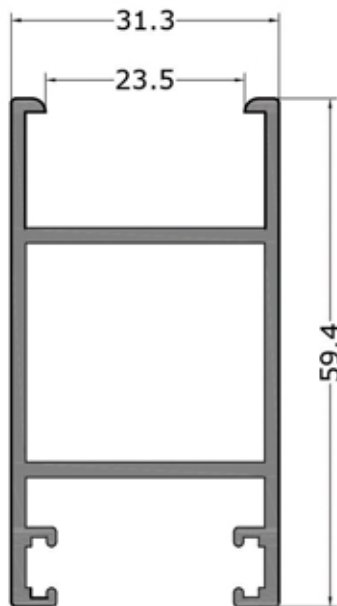
**3132**  
 0.714 KG/M  
 (1.4 MM)



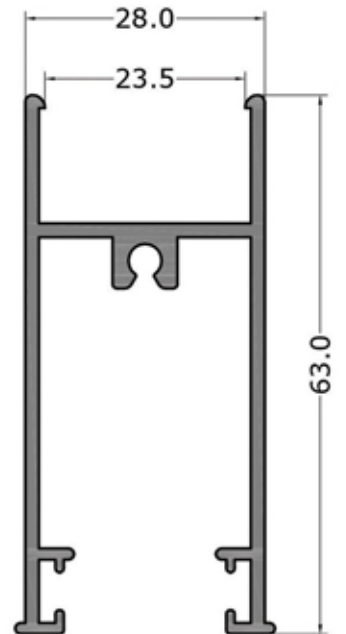
**3133**  
 0.783 KG/M  
 (1.4 MM)



**3243**  
 0.816 KG/M  
 (1.6 MM)

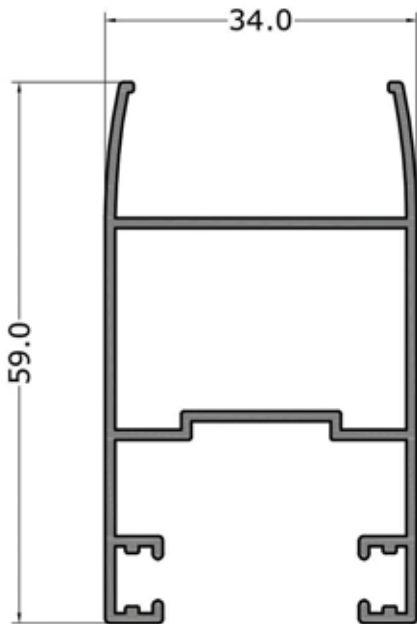
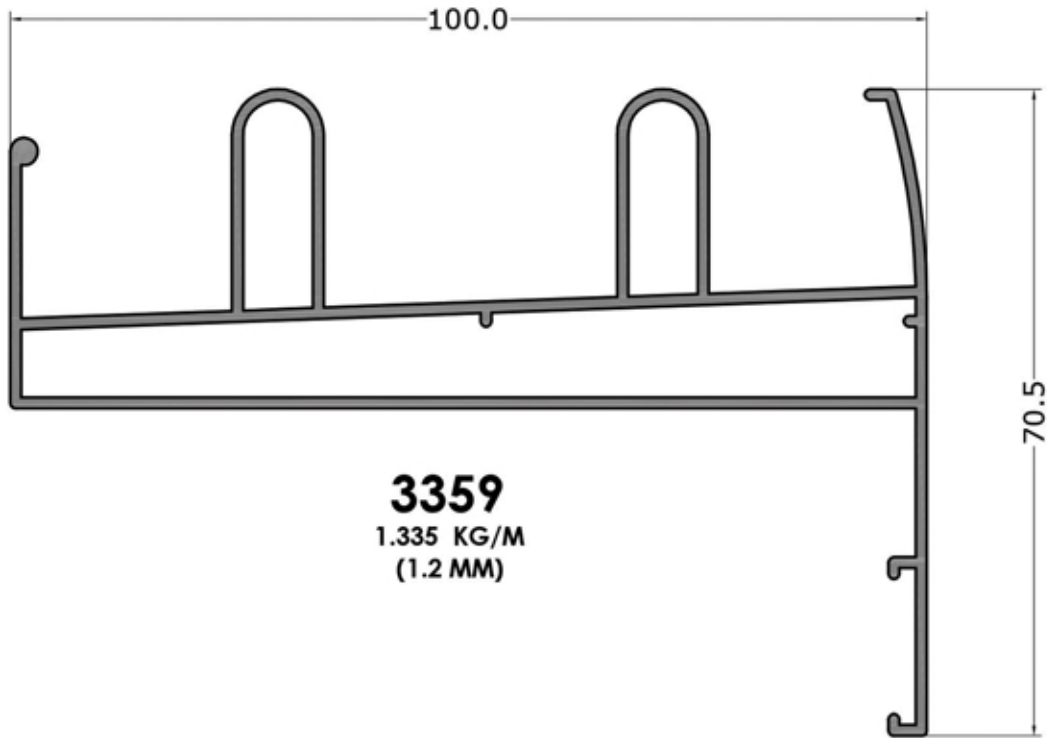


**3244**  
 0.830 KG/M  
 (1.6 MM)

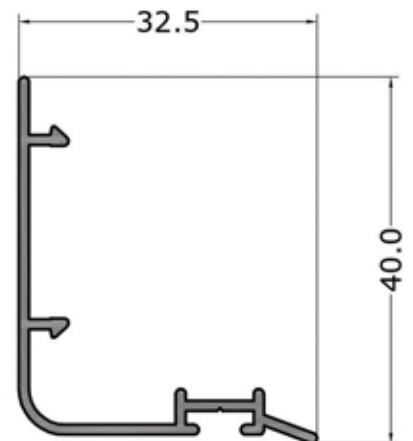


**1156**  
 0.803 KG/M  
 (1.6 MM)

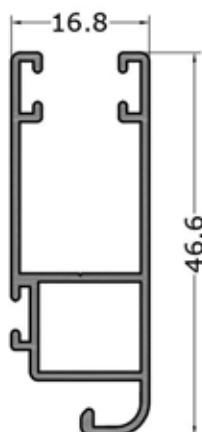
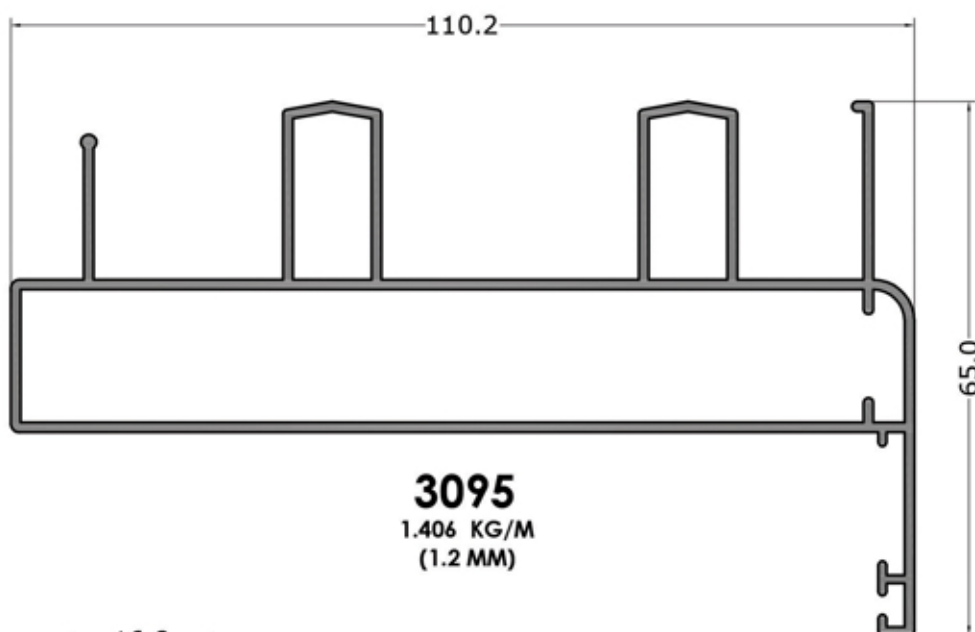




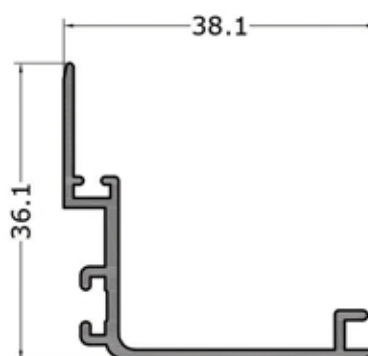
**3360**  
0.642 KG/M  
(1.1 MM)



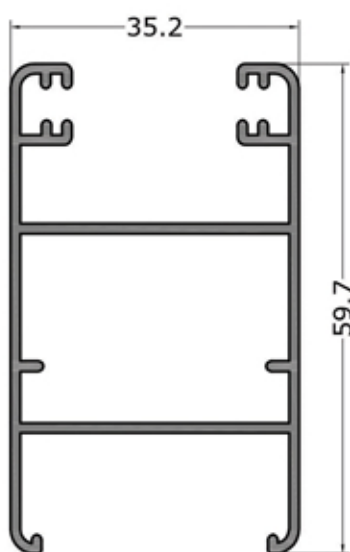
**1196**  
0.263 KG/M  
(1.1 MM)



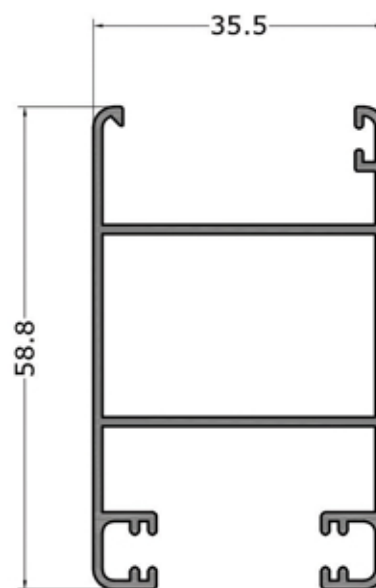
**3097**  
0.319 KG/M



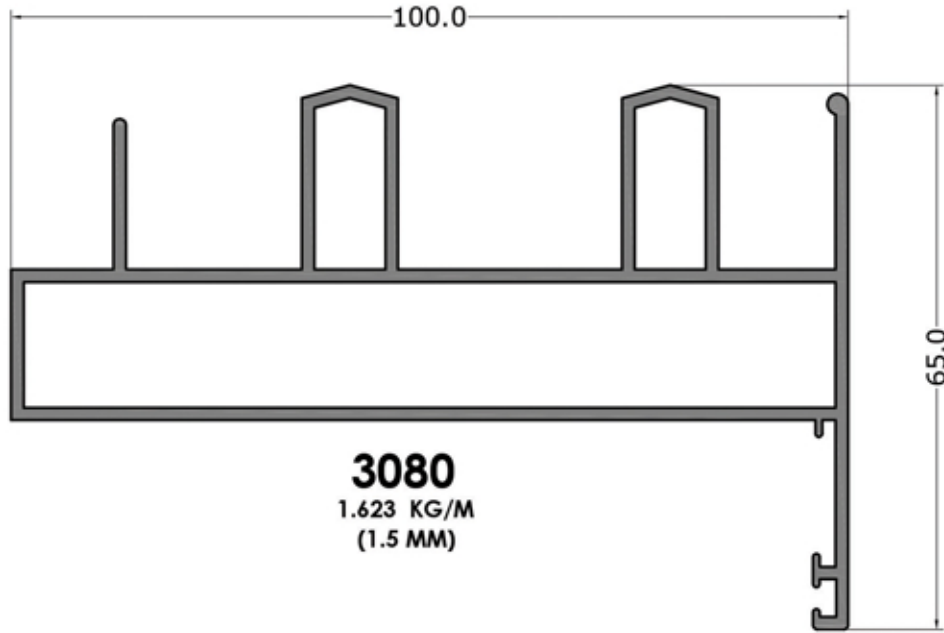
**1080**  
0.310 KG/M



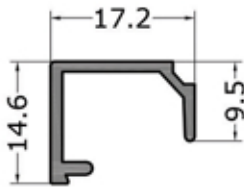
**3096**  
0.737 KG/M



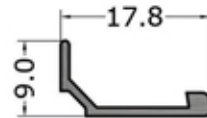
**3340**  
0.683 KG/M



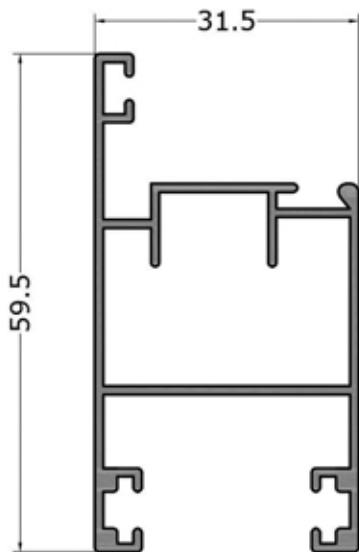
**3080**  
 1.623 KG/M  
 (1.5 MM)



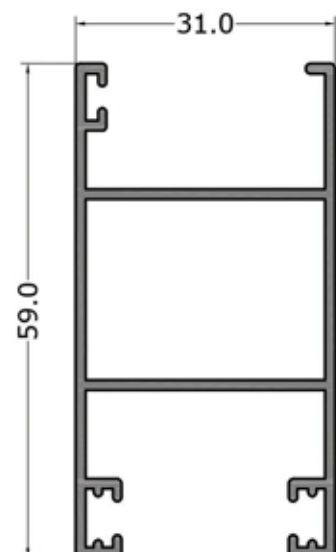
**1083**  
 0.143 KG/M  
 (1.4 MM)



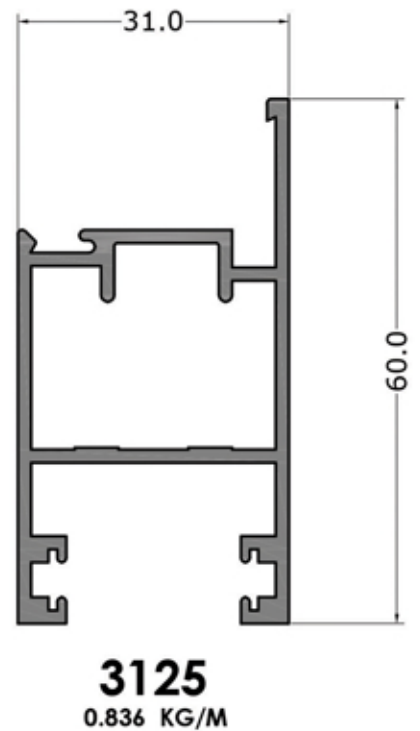
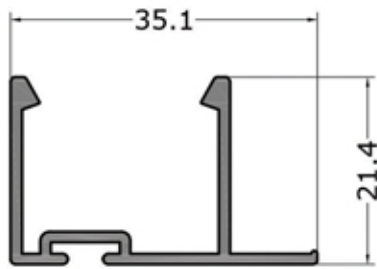
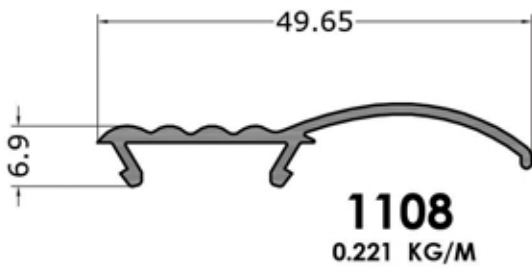
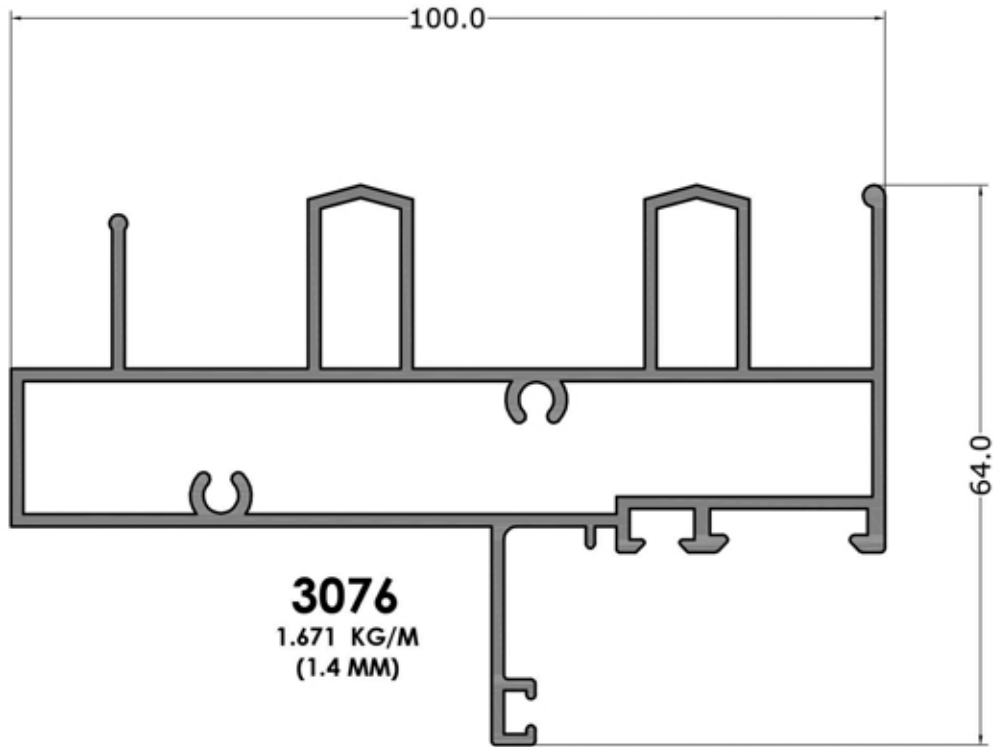
**1088**  
 0.078 KG/M  
 (1.0 MM)

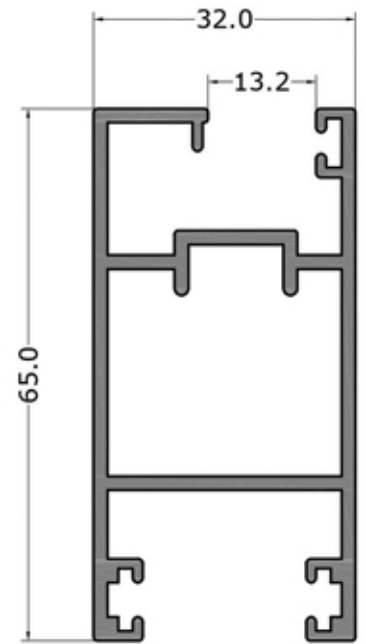
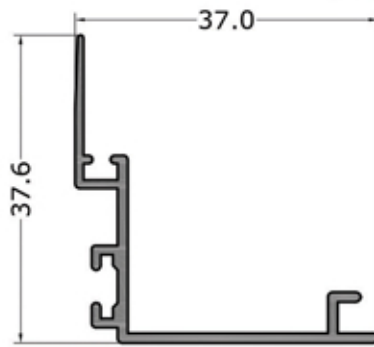
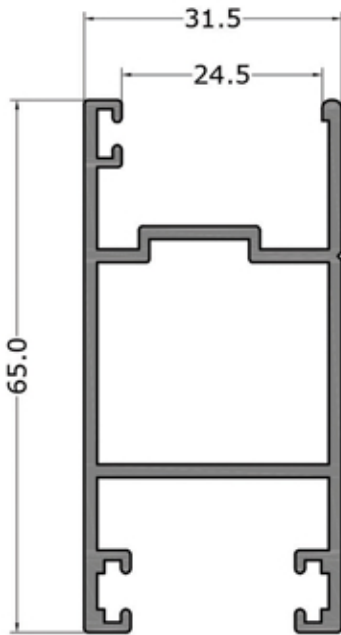
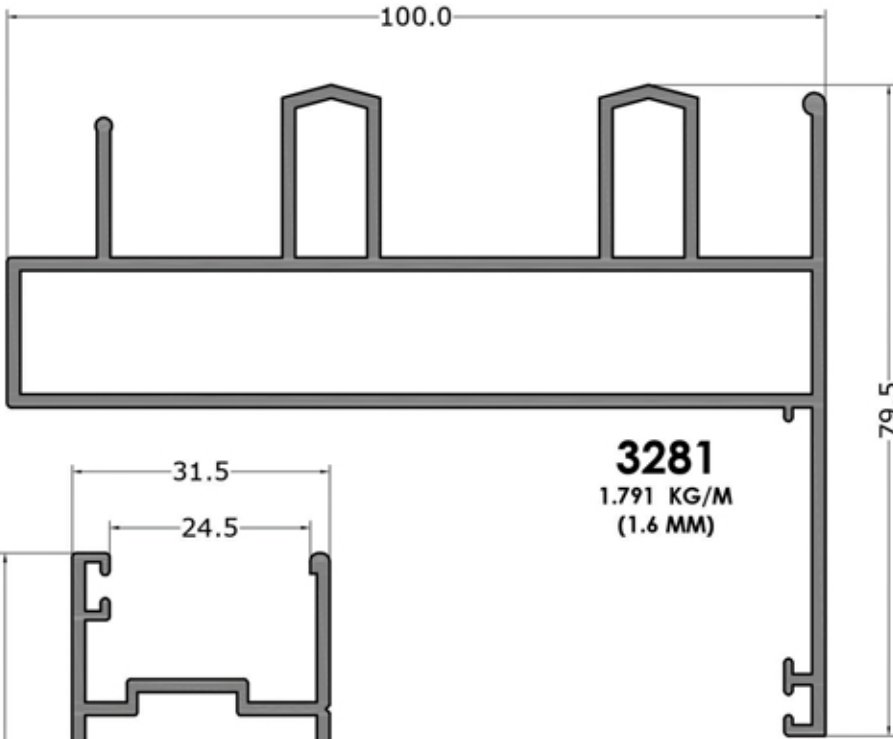
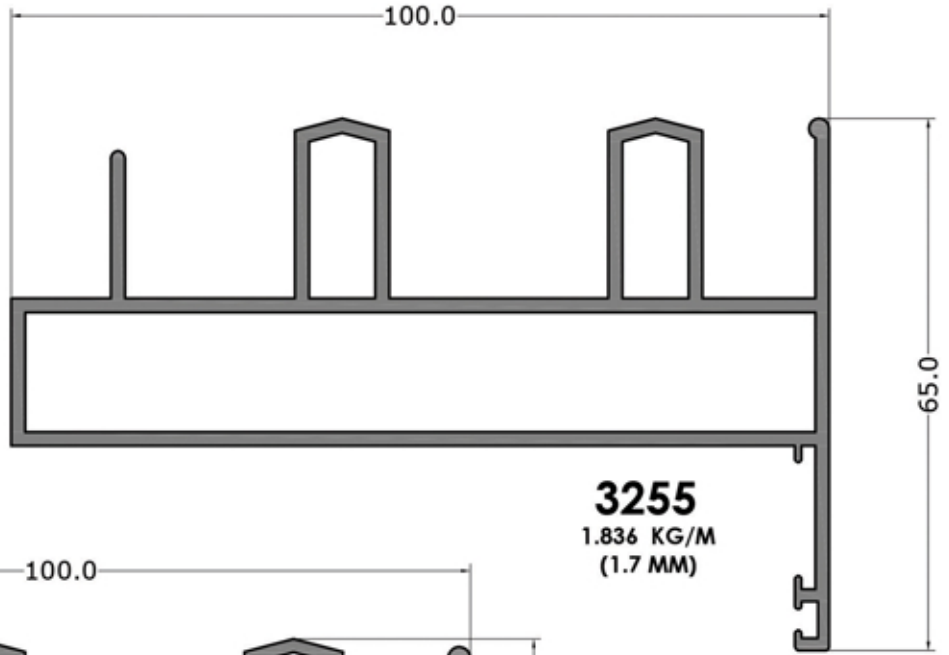


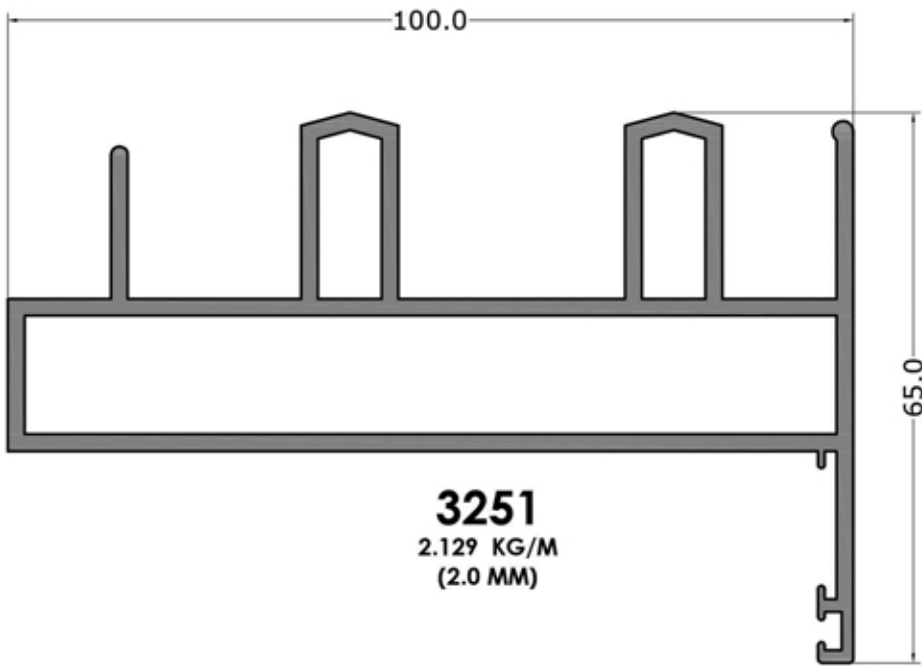
**3102**  
 0.621 KG/M



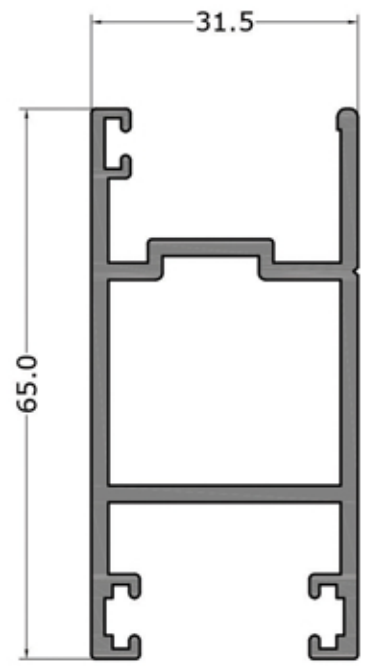
**3341**  
 0.676 KG/M



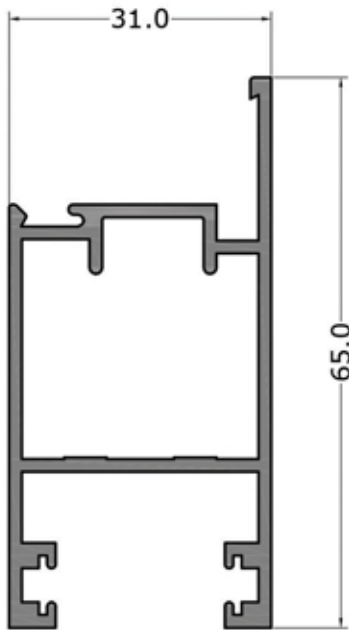




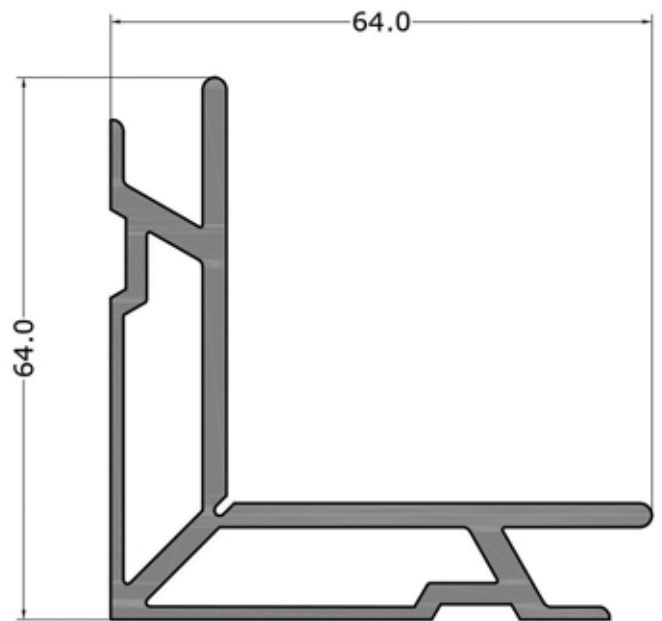
**3251**  
2.129 KG/M  
(2.0 MM)



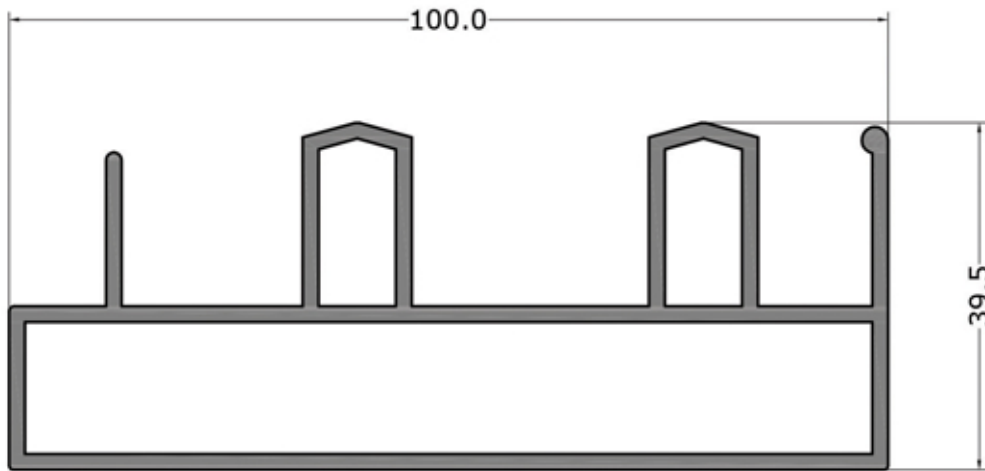
**3256**  
1.107 KG/M  
(2.0 MM)



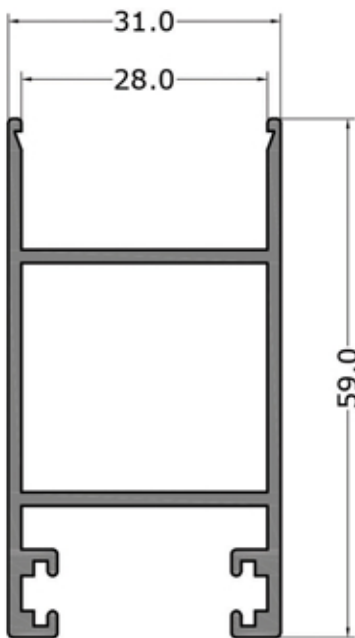
**3081**  
0.877 KG/M  
(1.5 MM)



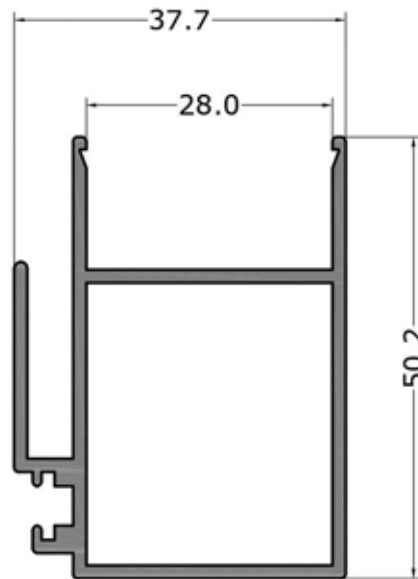
**3257**  
1.601 KG/M  
(2.8 MM)



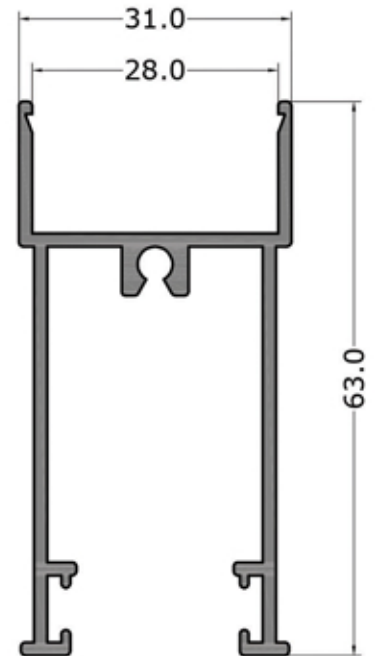
**3328**  
 1.773 KG/M  
 (1.8 MM)



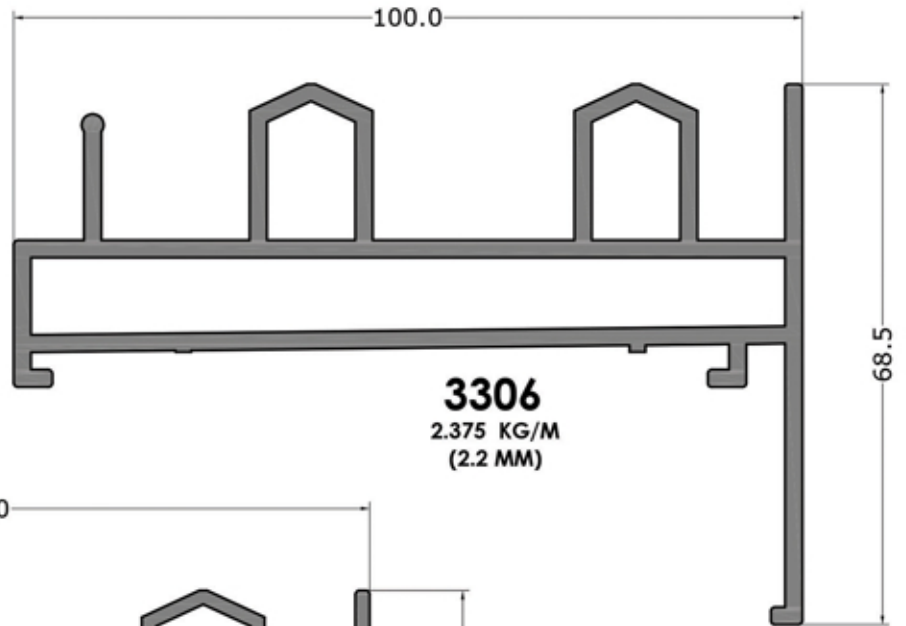
**3329**  
 0.800 KG/M  
 (1.5 MM)



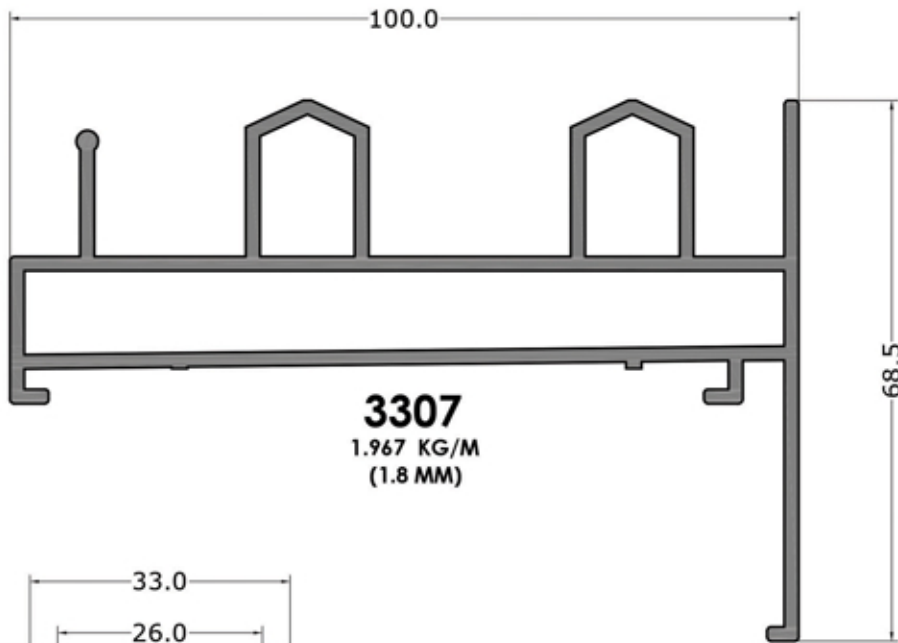
**3330**  
 0.789 KG/M  
 (1.5 MM)



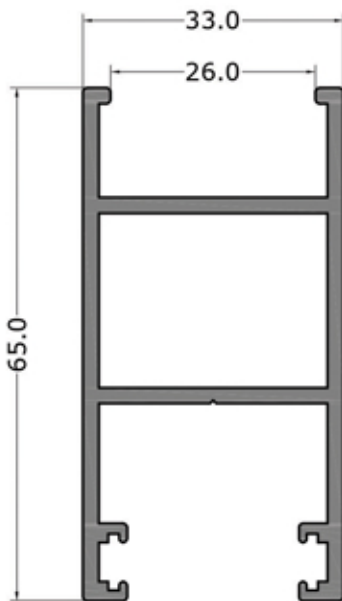
**1183**  
 0.756 KG/M  
 (1.5 MM)



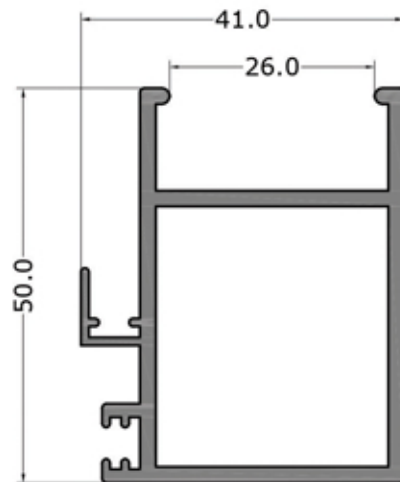
**3306**  
 2.375 KG/M  
 (2.2 MM)



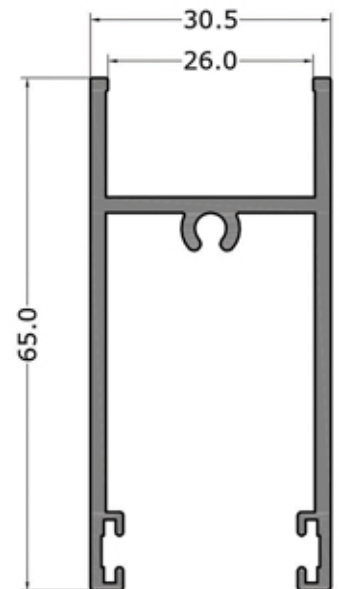
**3307**  
 1.967 KG/M  
 (1.8 MM)



**3312**  
 1.104 KG/M  
 (2.0 MM)

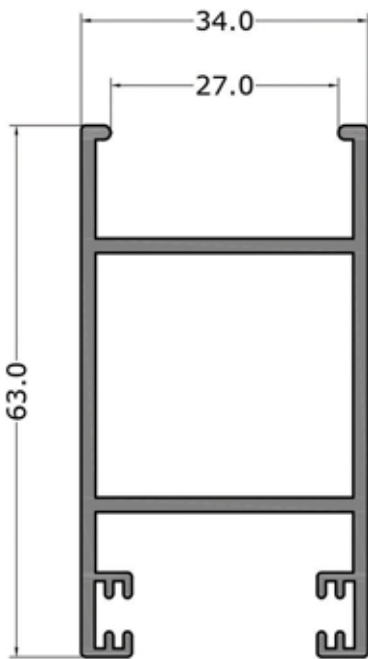
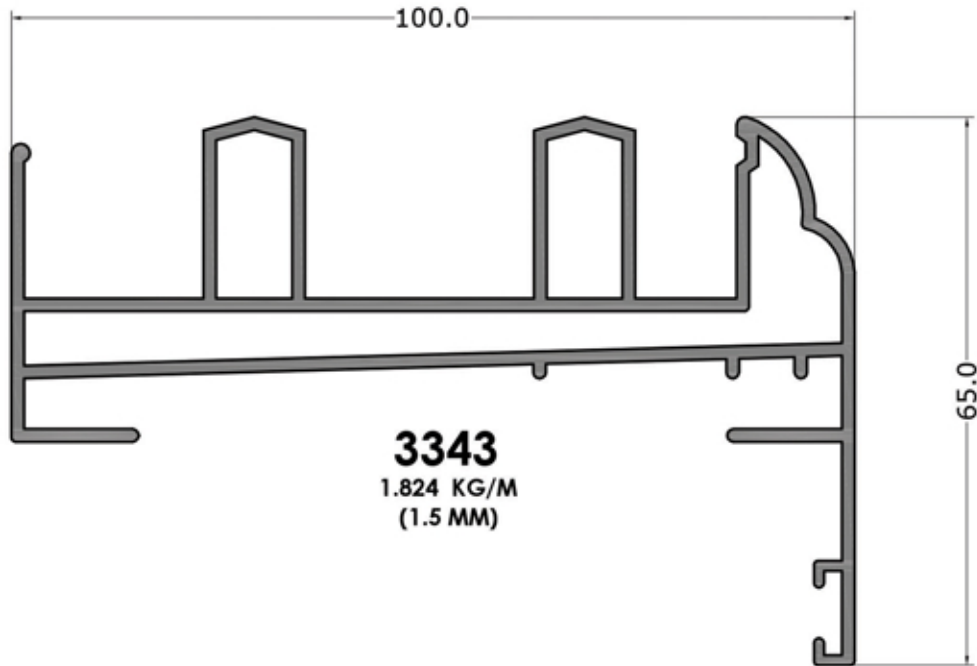


**3313**  
 0.981 KG/M  
 (2.0 MM)

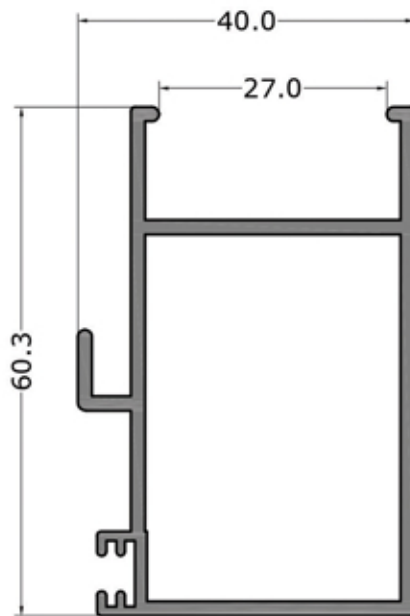


**1177**  
 0.917 KG/M  
 (2.0 MM)

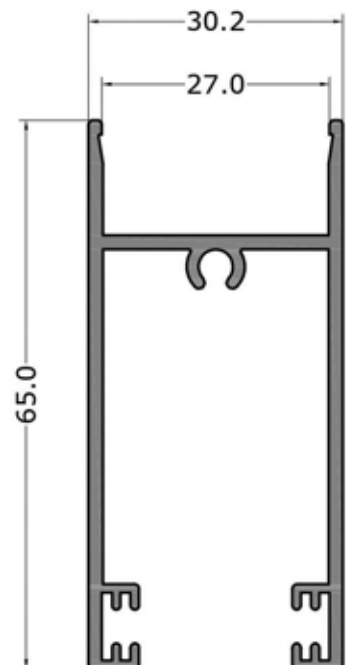




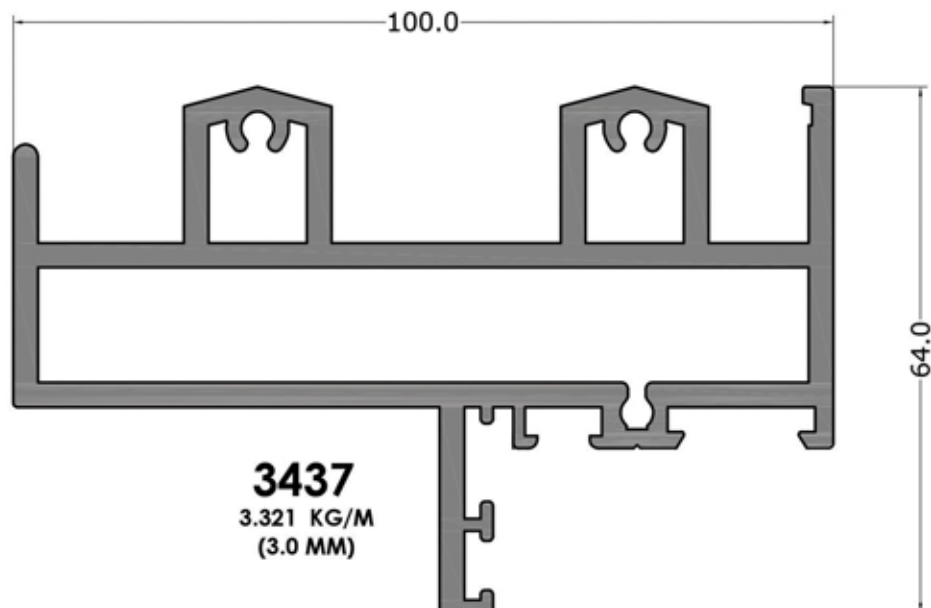
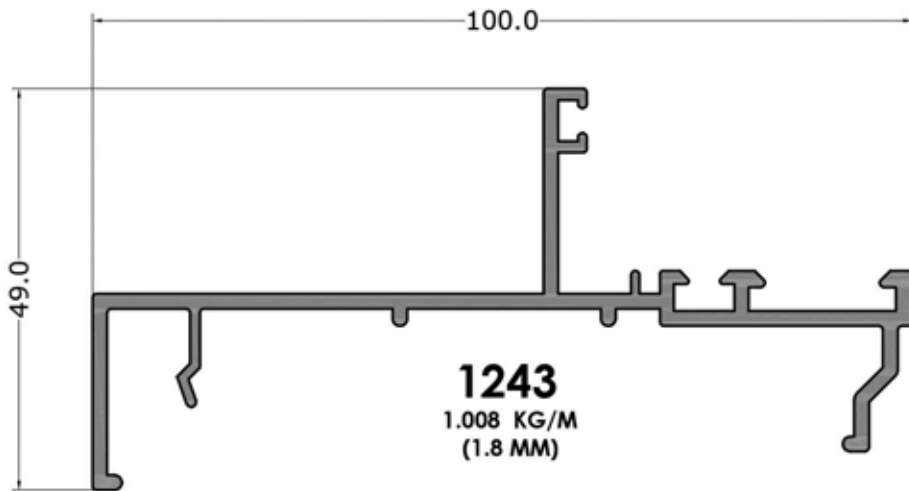
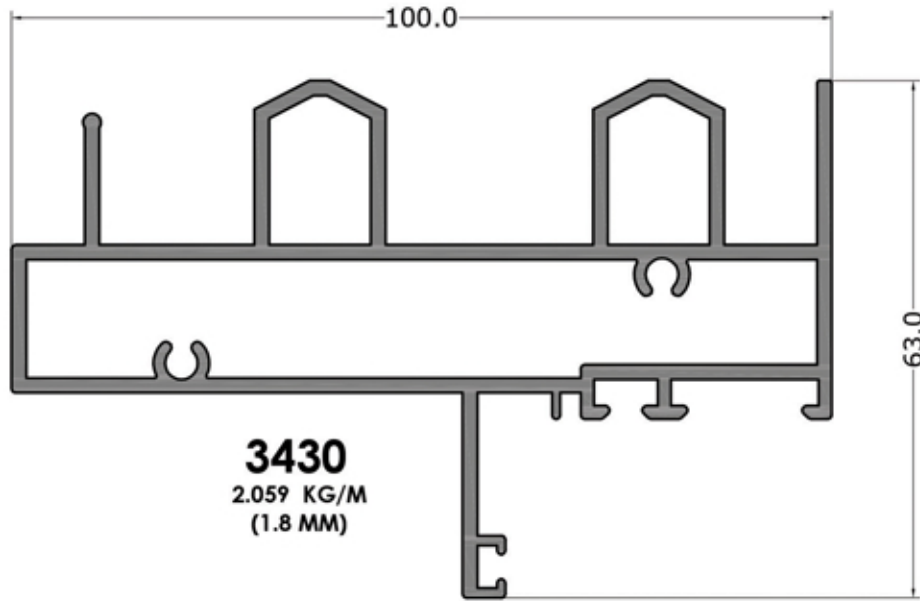
**3322**  
 0.955 KG/M  
 (1.7 MM)

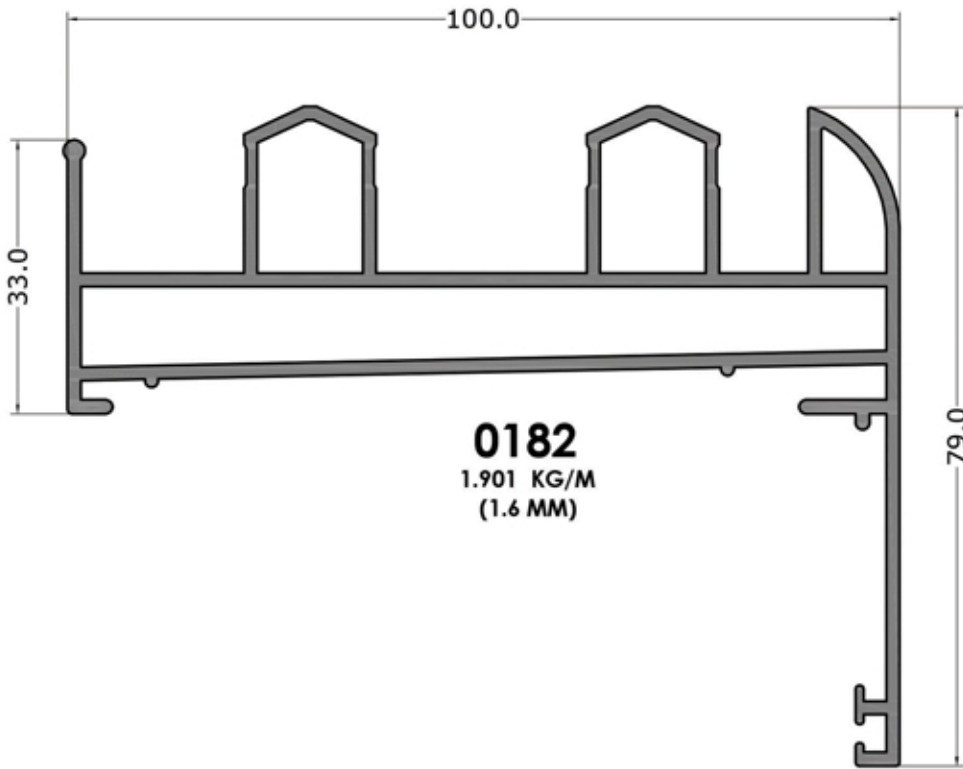


**3321**  
 0.945 KG/M  
 (1.7 MM)

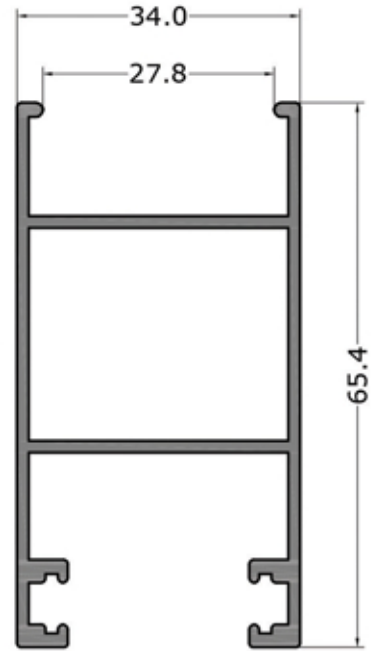


**1179**  
 0.833 KG/M  
 (1.7 MM)

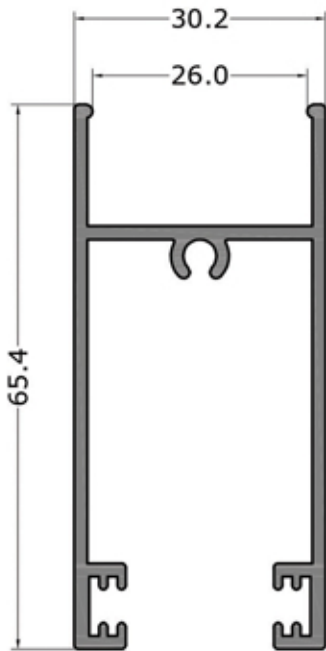




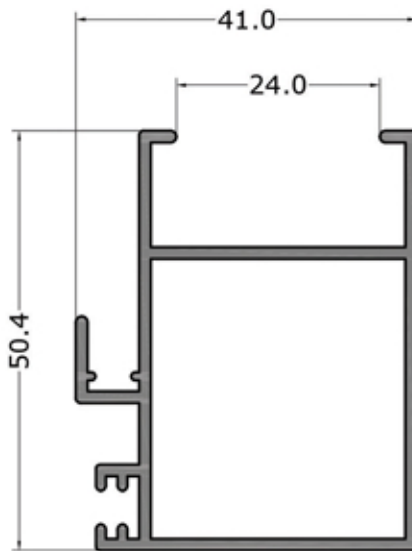
**0182**  
 1.901 KG/M  
 (1.6 MM)



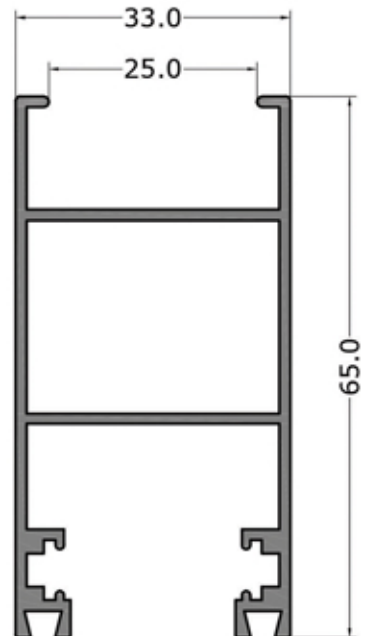
**0183**  
 0.858 KG/M  
 (1.4 MM)



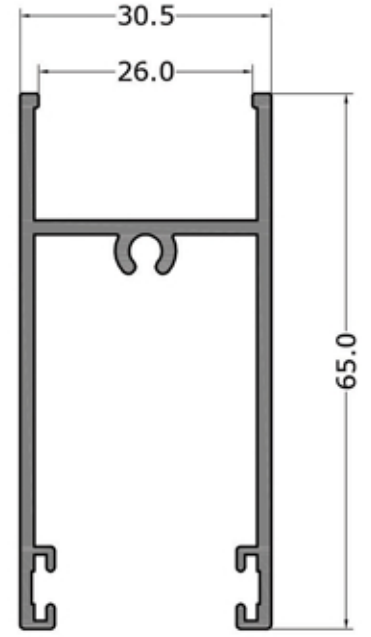
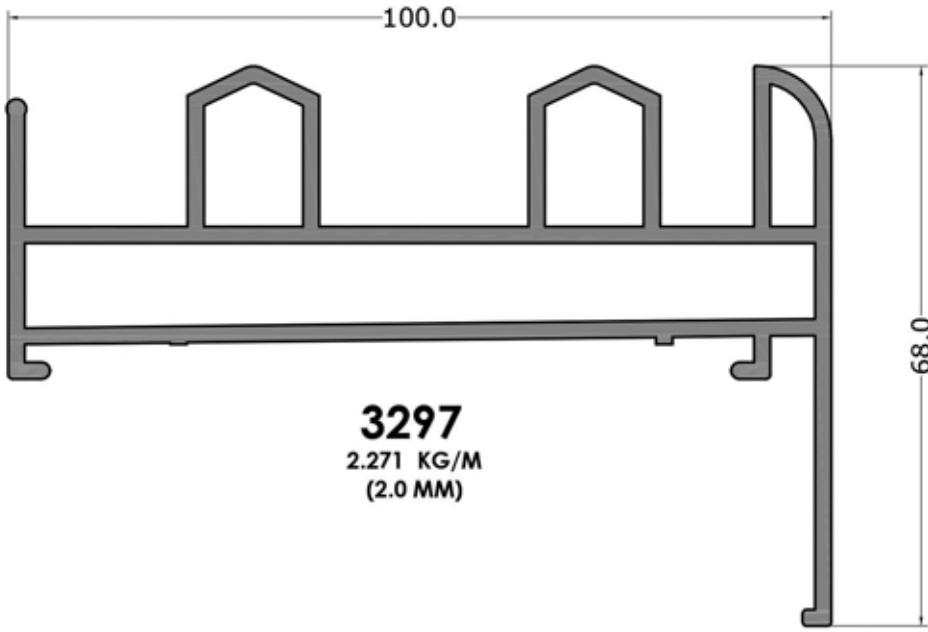
**0185**  
 0.852 KG/M  
 (1.6 MM)



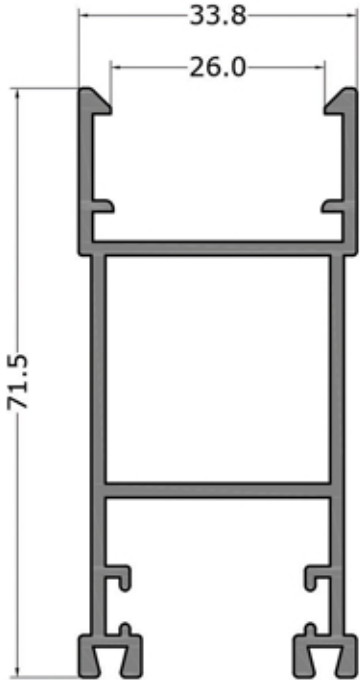
**0184**  
 0.760 KG/M  
 (1.4 MM)



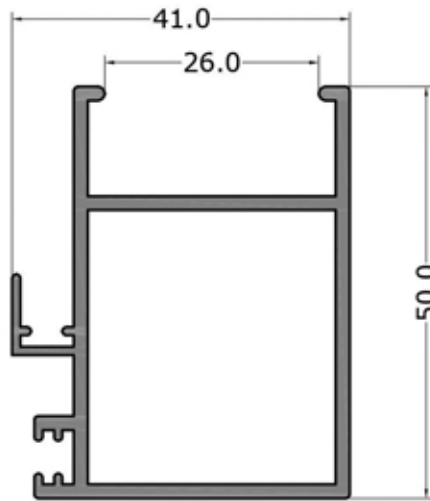
**0186**  
 0.822 KG/M  
 (1.3 MM)



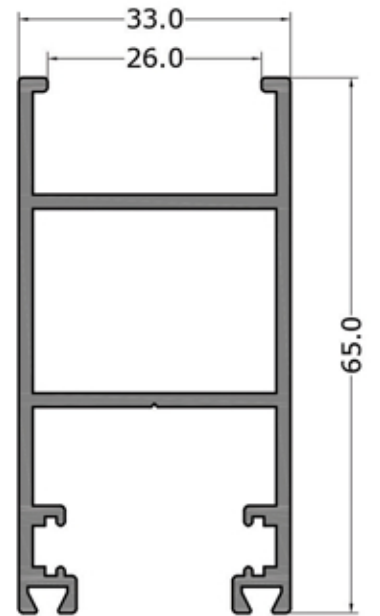
**1175**  
 0.812 KG/M  
 (1.7 MM)



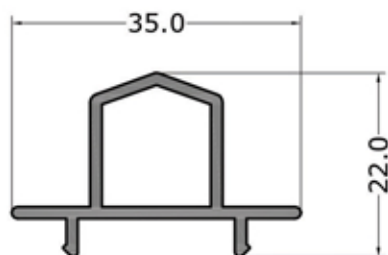
**3298**  
 1.097 KG/M  
 (1.7 MM)



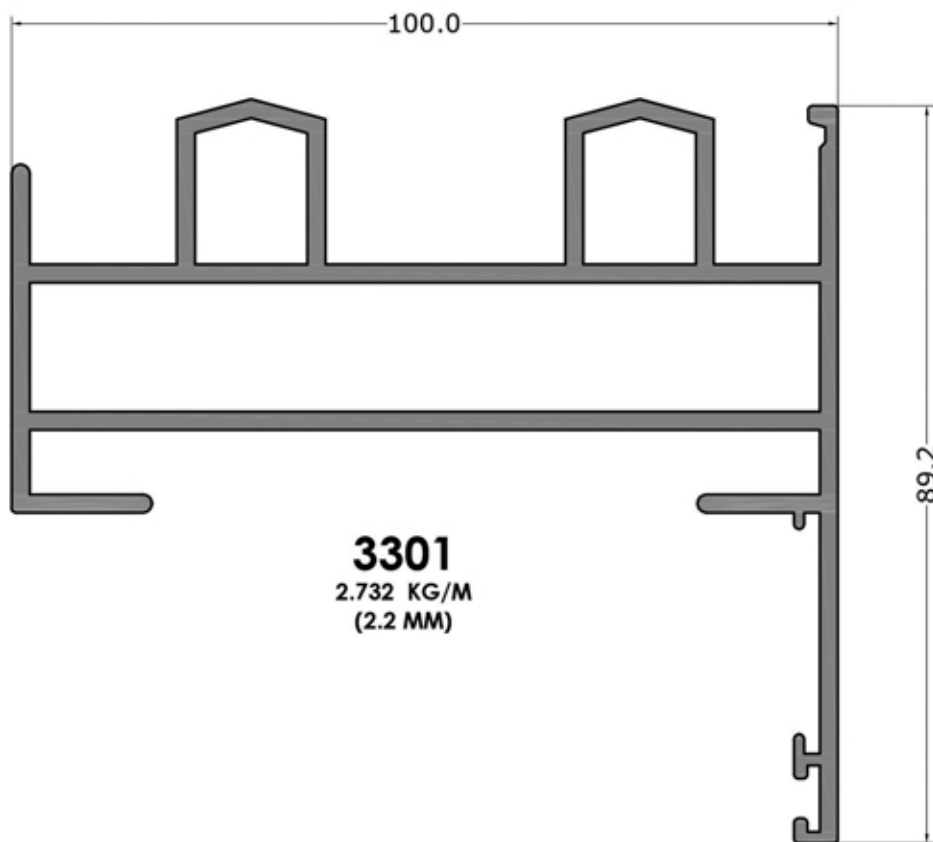
**3299**  
 0.859 KG/M  
 (1.7 MM)



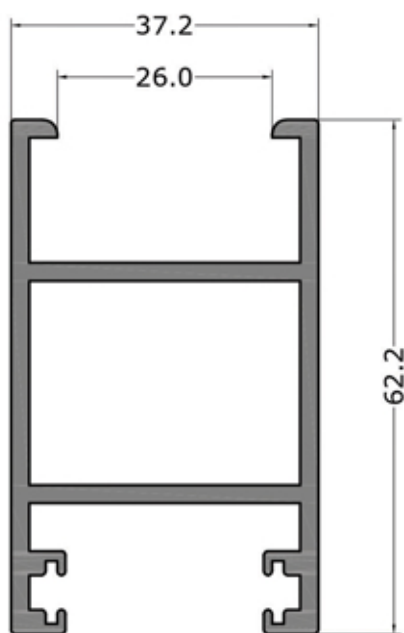
**3300**  
 1.000 KG/M  
 (1.7 MM)



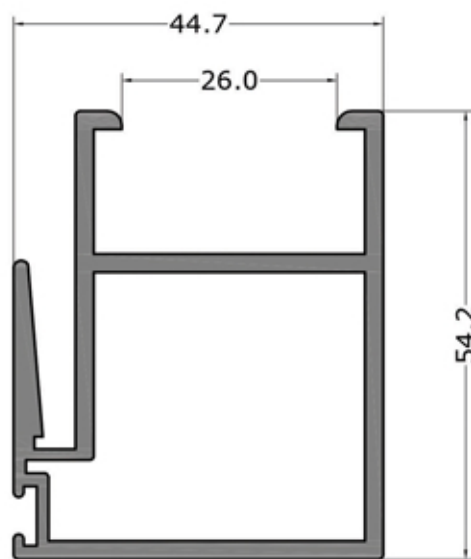
**3309**  
 0.321 KG/M  
 (1.4 MM)



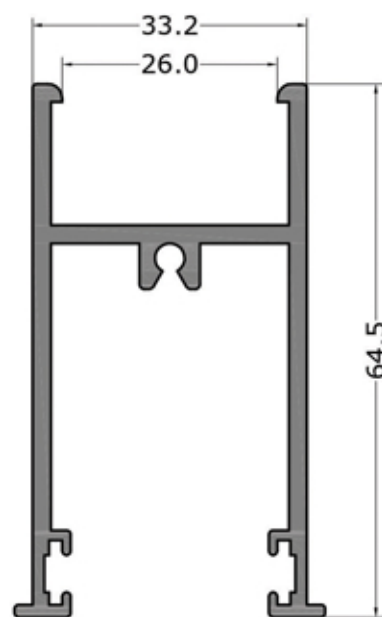
**3301**  
 2.732 KG/M  
 (2.2 MM)



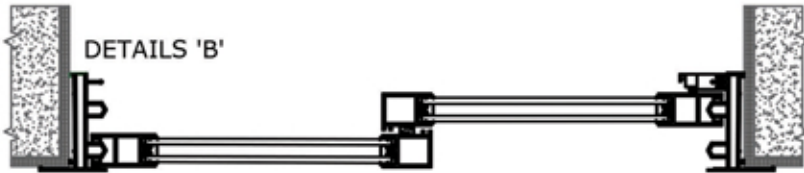
**3303**  
 1.274 KG/M  
 (2.2 MM)



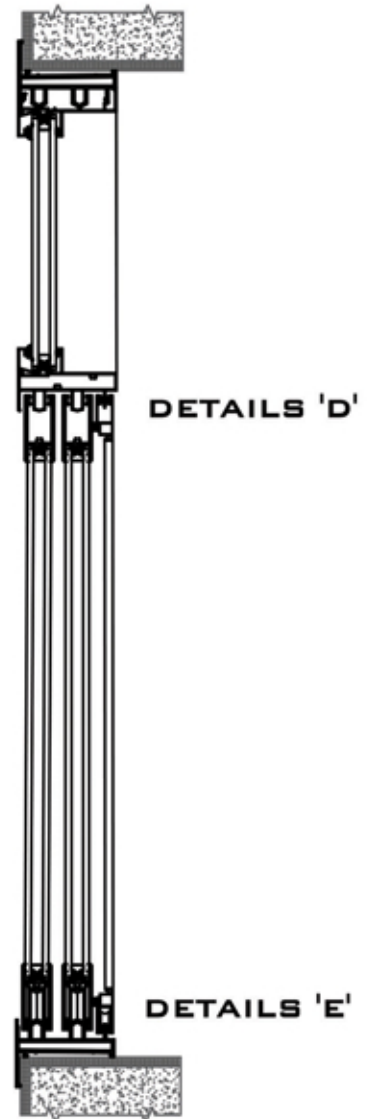
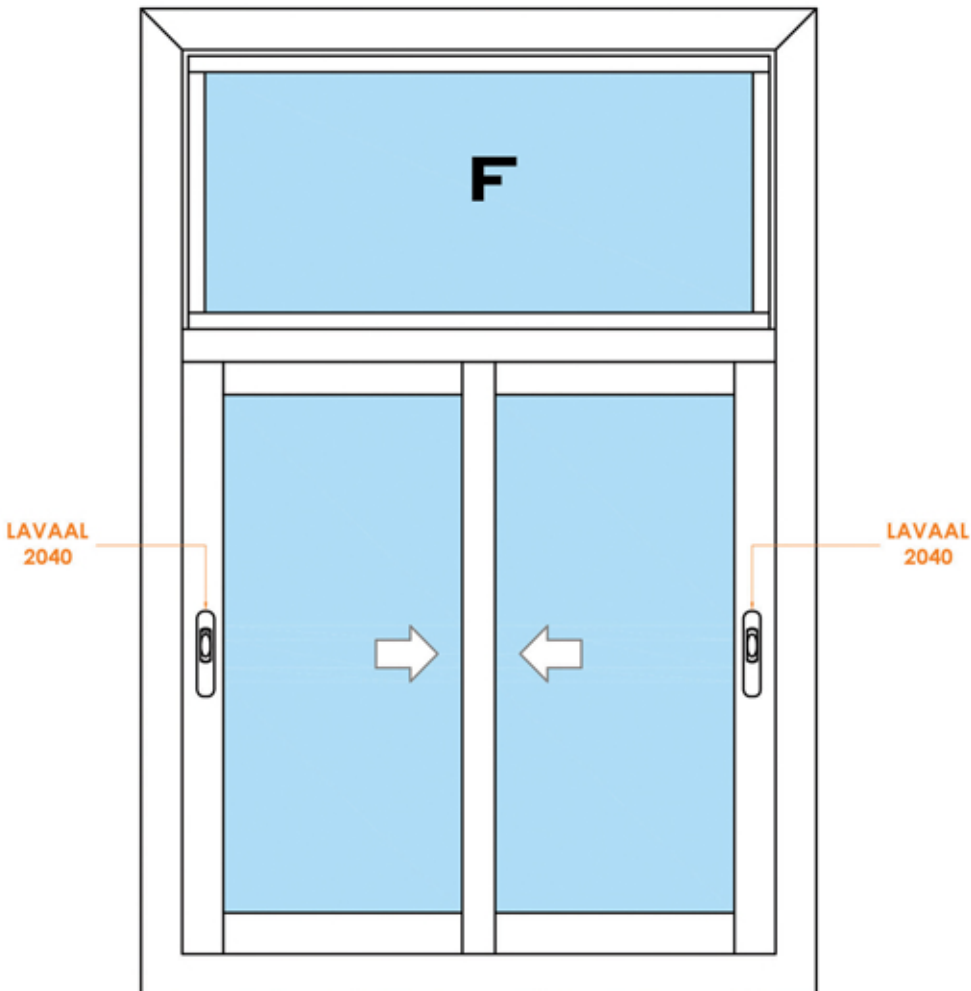
**3302**  
 1.293 KG/M  
 (2.2 MM)

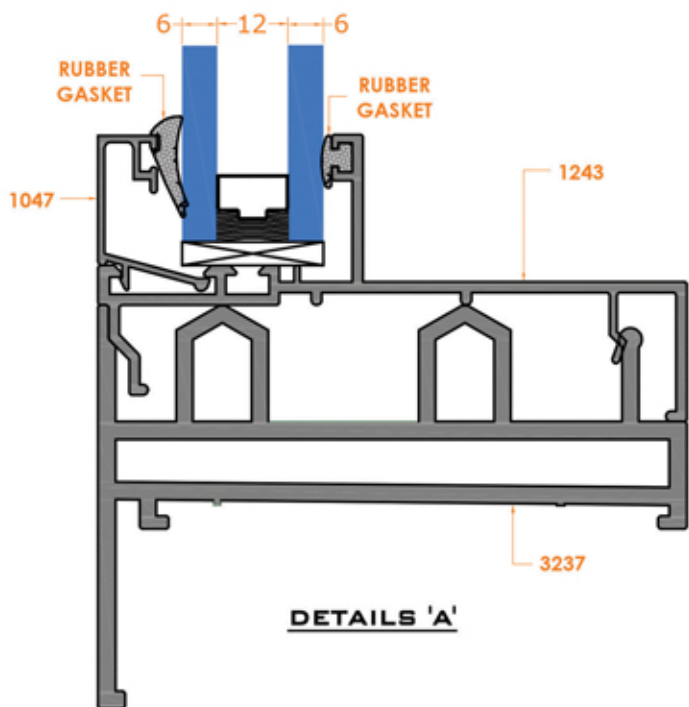


**1174**  
 1.058 KG/M  
 (2.2 MM)






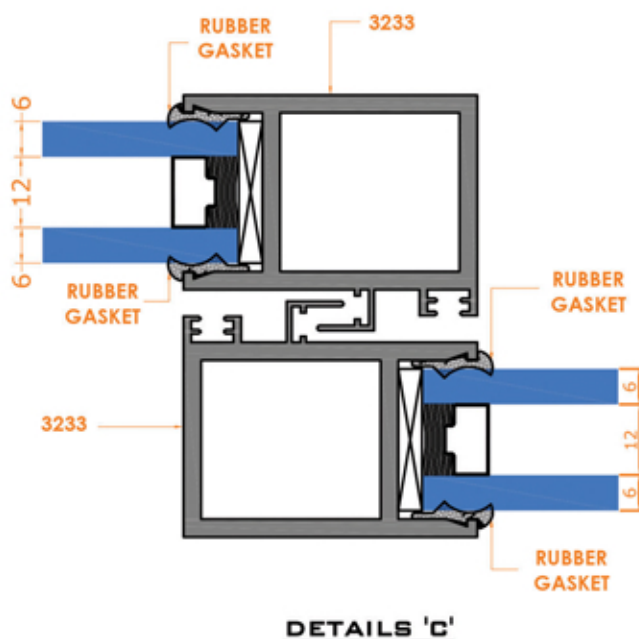
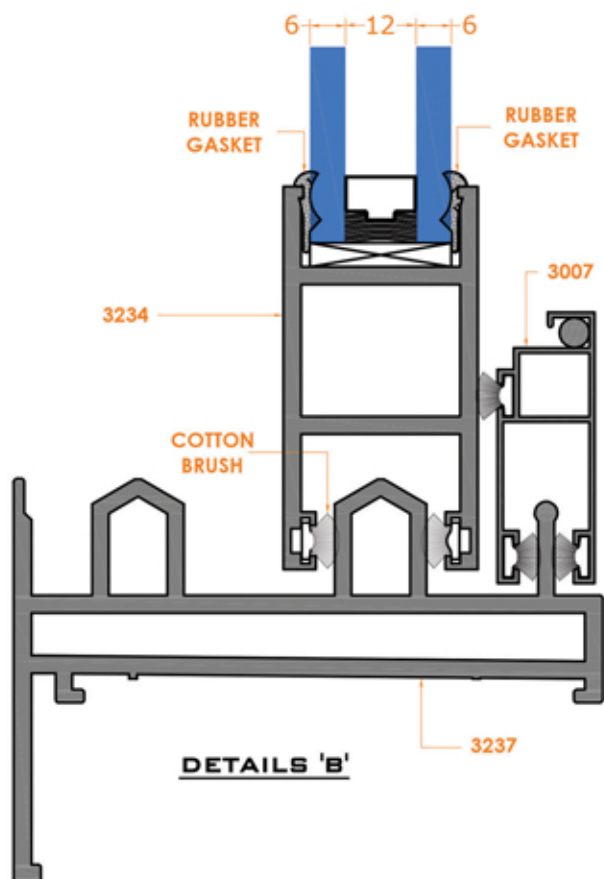
DETAILS 'C'





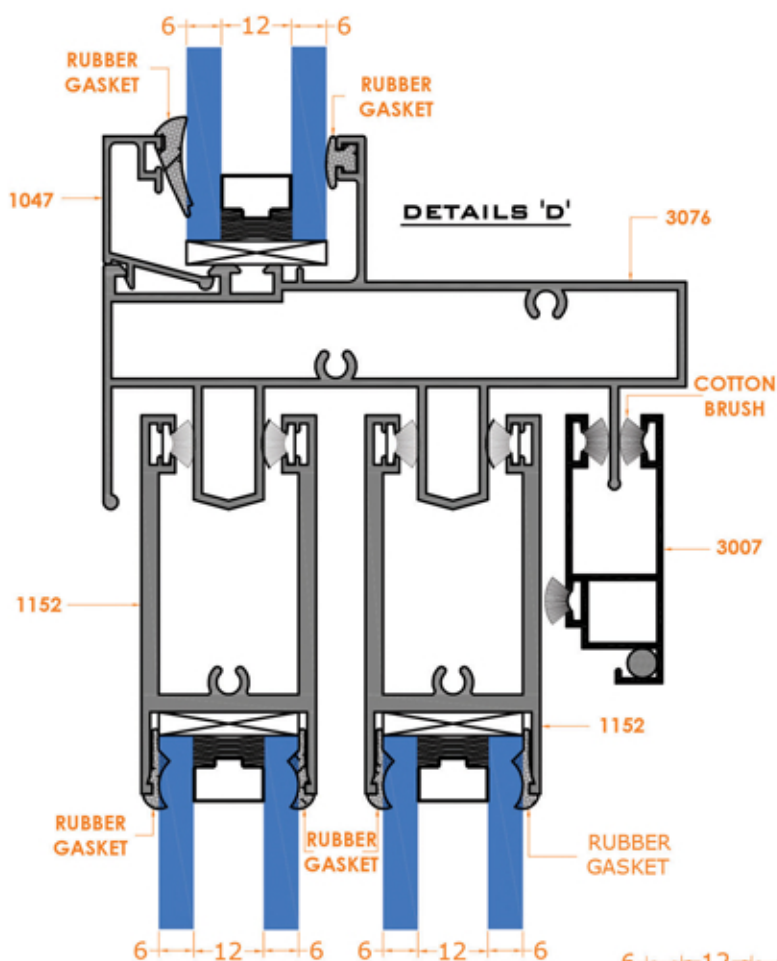
### GLASS TYPE USING




GLAZING TYPE	GLASS TYPE	RUBBER TYPE	
		INSIDE	OUTSIDE
 F.CODE - 1152 3.0 MM THICKNESS	24 MM 6 MM+12 MM SPACER+6MM	--	--
	20 MM 6 MM+8 MM SPACER+6MM	--	--
	18 MM 6 MM+6 MM SPACER+6MM	--	--
 F.CODE - 3234 3.0 MM THICKNESS	24 MM 6 MM+12 MM SPACER+6MM	--	--
	20 MM 6 MM+8 MM SPACER+6MM	--	--
	18 MM 6 MM+6 MM SPACER+6MM	--	--
 F.CODE - 3233 3.0 MM THICKNESS	18 MM 6 MM+6 MM SPACER+6MM	--	--
	20 MM 6 MM+8 MM SPACER+6MM	--	--

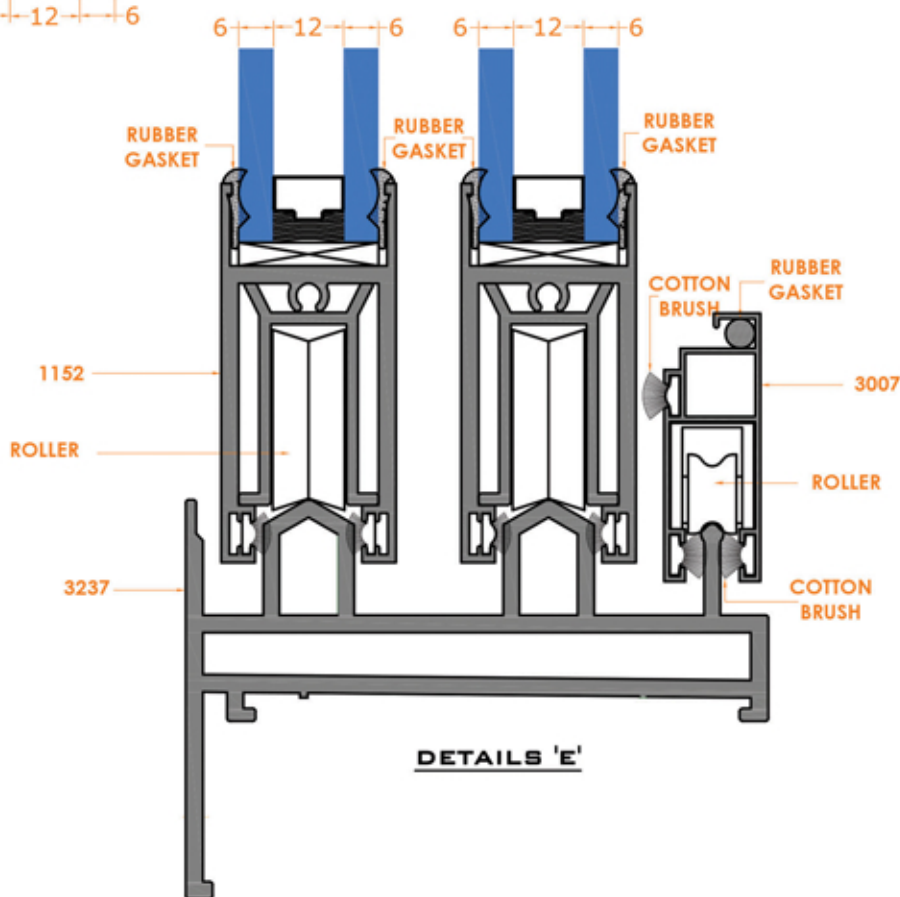




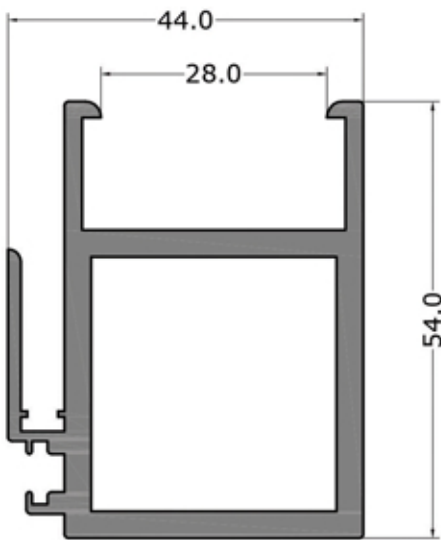
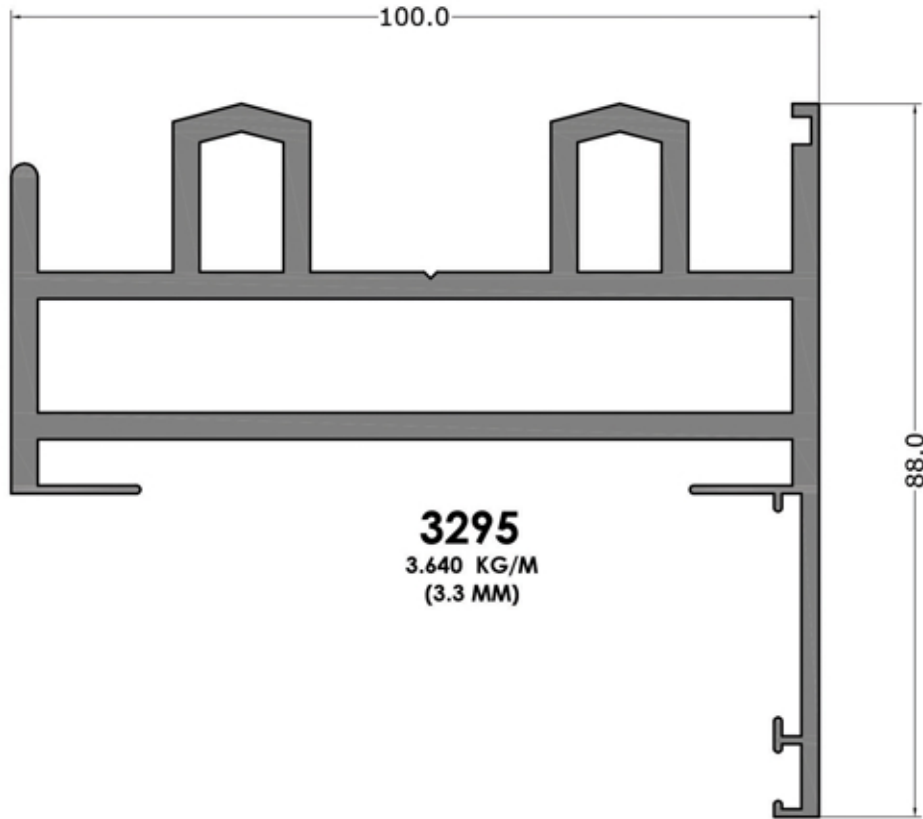
### GLASS TYPE USING



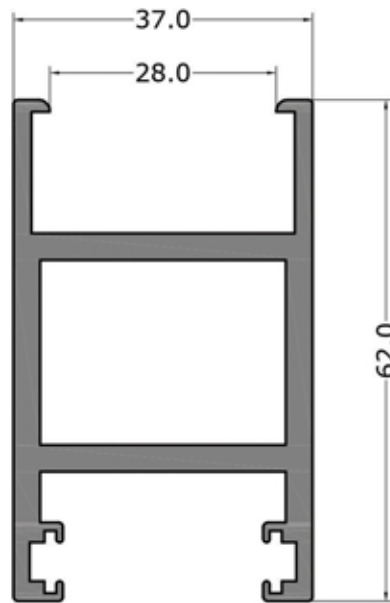
GLAZING TYPE	GLASS TYPE	RUBBER TYPE	
		INSIDE	OUTSIDE
 P.CODE - 1152 3.0 MM THICKNESS	24 MM 6 MM+12 MM SPACER+6MM	--	--
	20 MM 6 MM+8 MM SPACER+6MM	--	--
	18 MM 6 MM+6 MM SPACER+6MM	--	--
 P.CODE - 3234 3.0 MM THICKNESS	24 MM 6 MM+12 MM SPACER+6MM	--	--
	20 MM 6 MM+8 MM SPACER+6MM	--	--
	18 MM 6 MM+6 MM SPACER+6MM	--	--
 P.CODE - 3233 3.0 MM THICKNESS	18 MM 6 MM+6 MM SPACER+6MM	--	--
	20 MM 6 MM+8 MM SPACER+6MM	--	--



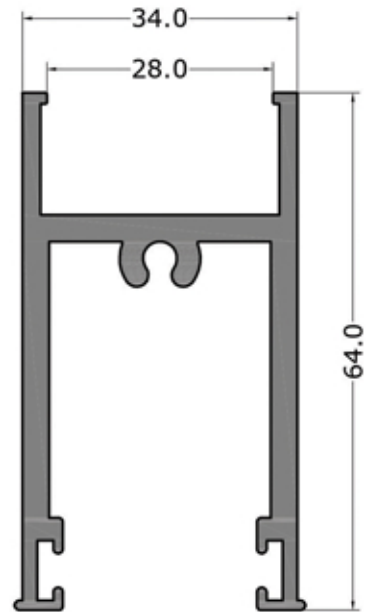




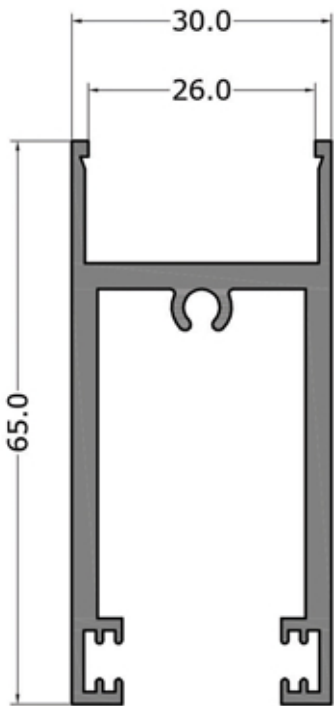
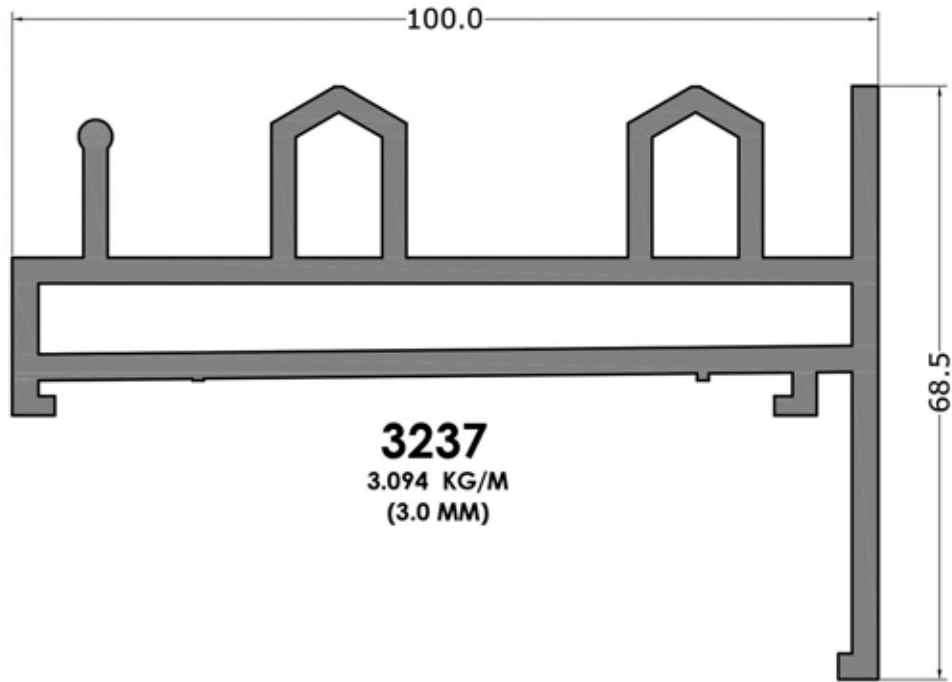
**3293**  
 1.589 KG/M  
 (3.3 MM)



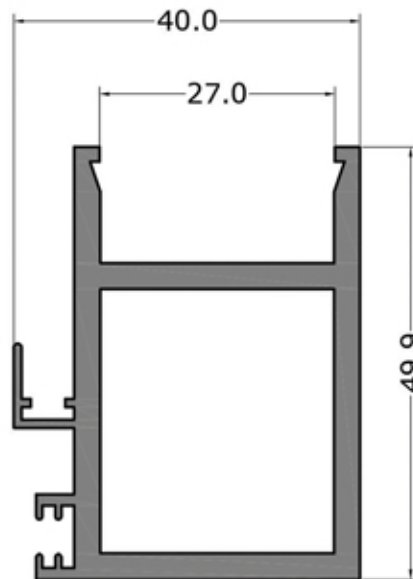
**3294**  
 1.579 KG/M  
 (3.3 MM)



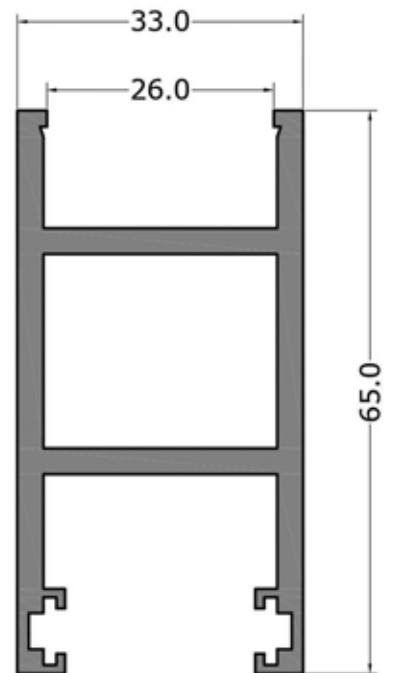
**1173**  
 1.390 KG/M  
 (3.3 MM)



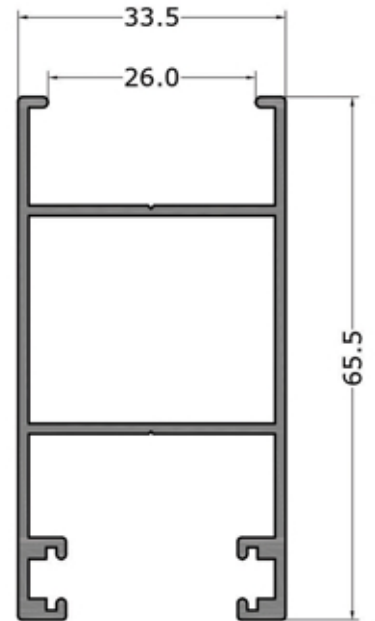
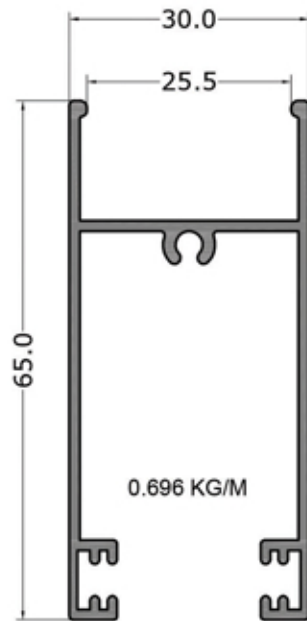
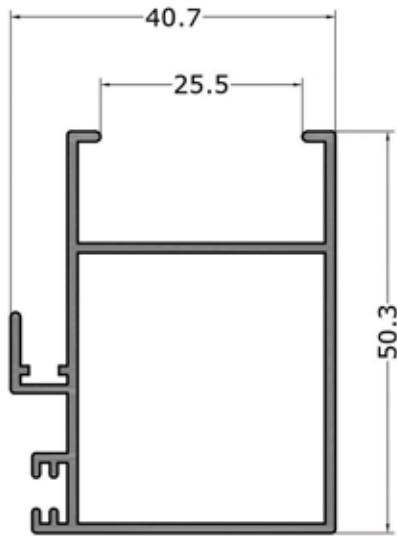
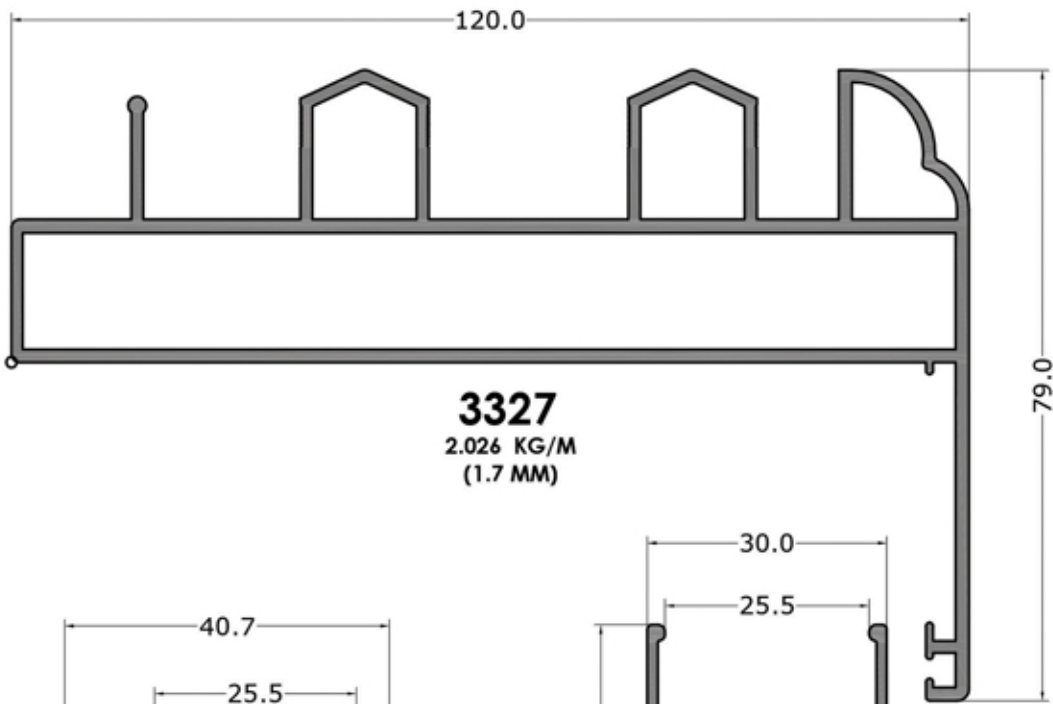
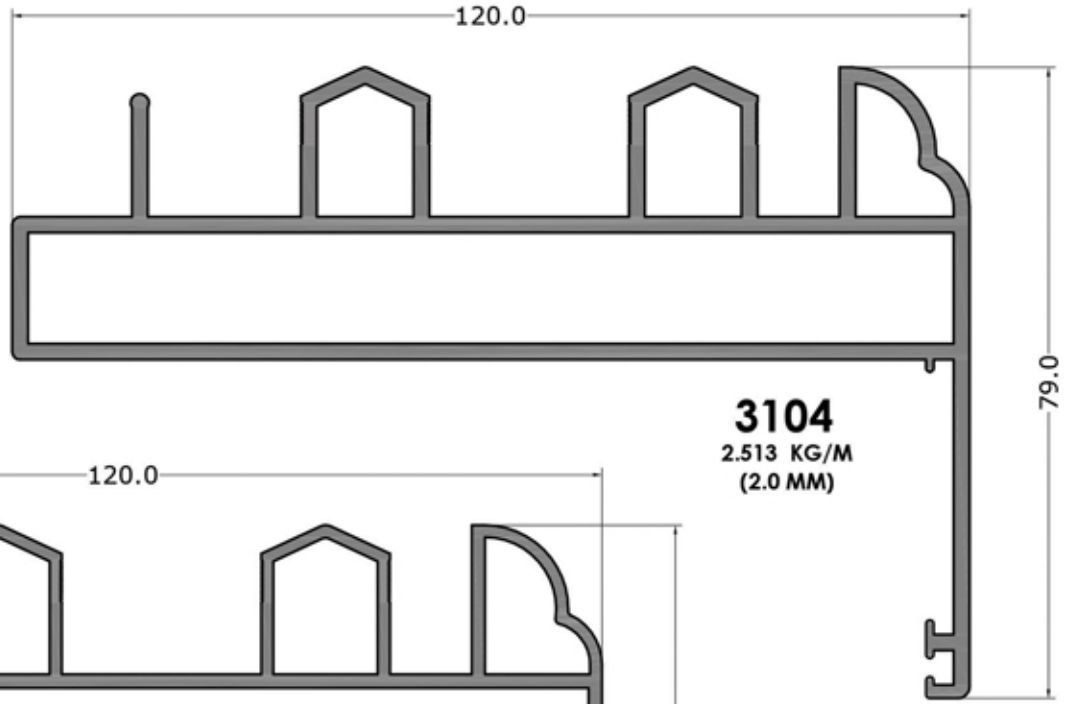
**1152**  
 1.179 KG/M  
 (3.0 MM)

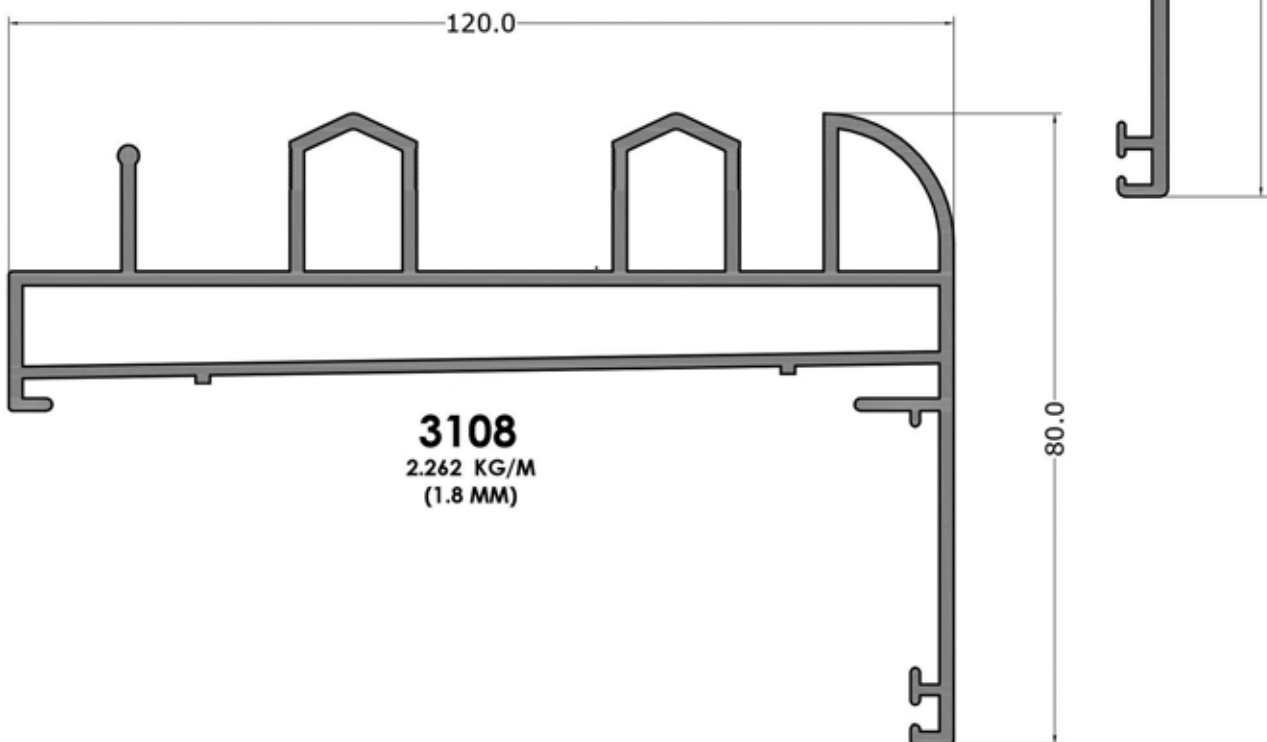
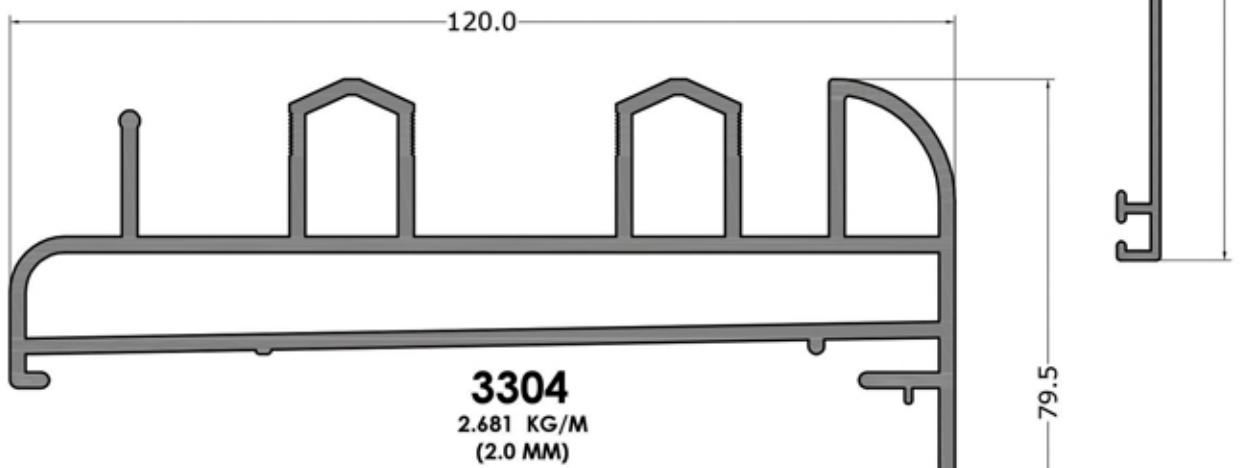
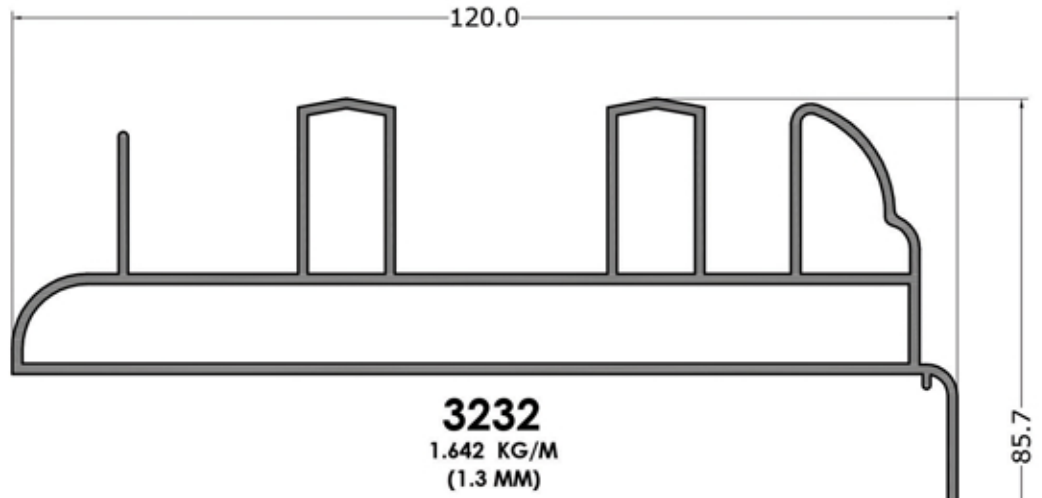


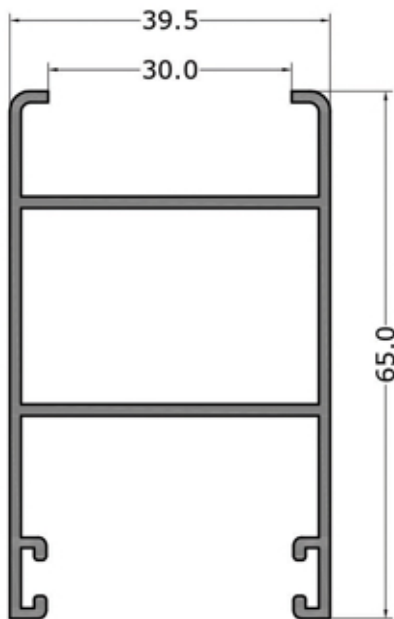
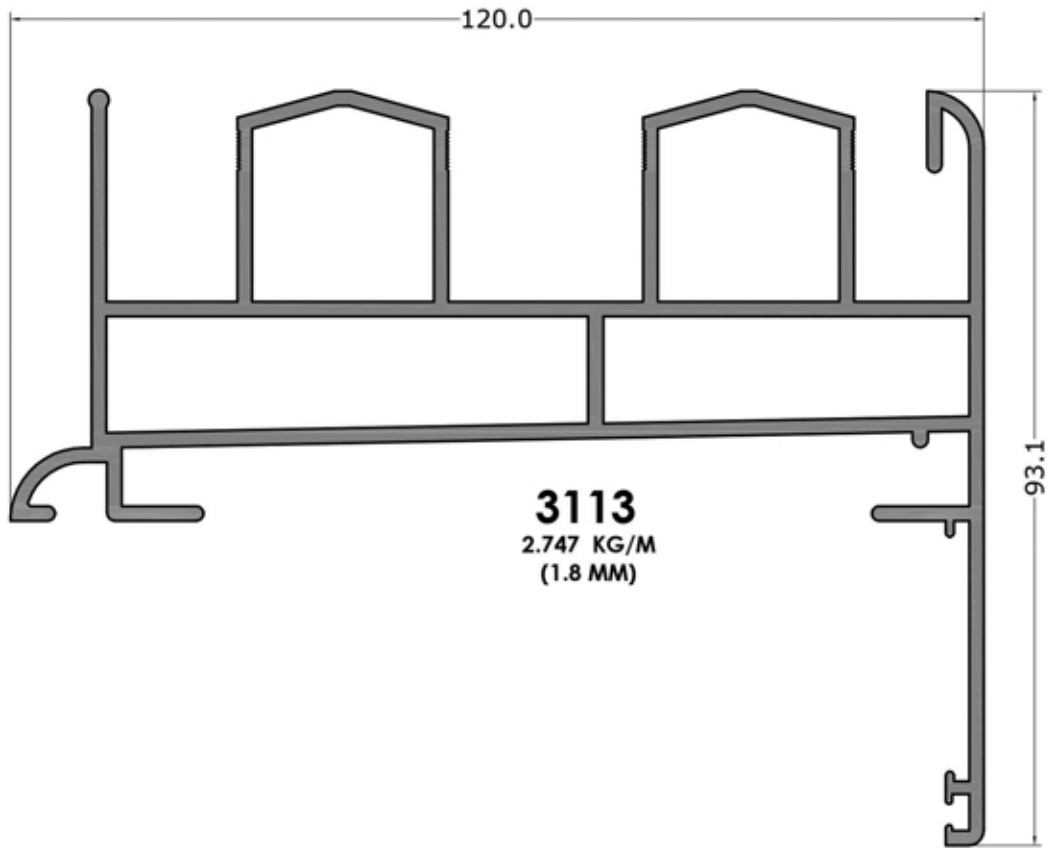
**3233**  
 1.319 KG/M  
 (3.0 MM)



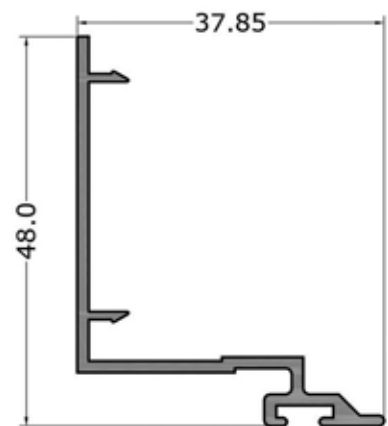
**3234**  
 1.495 KG/M  
 (3.0 MM)



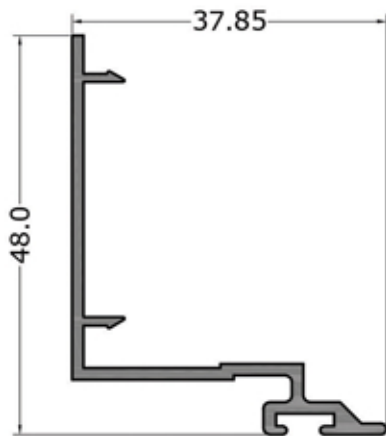
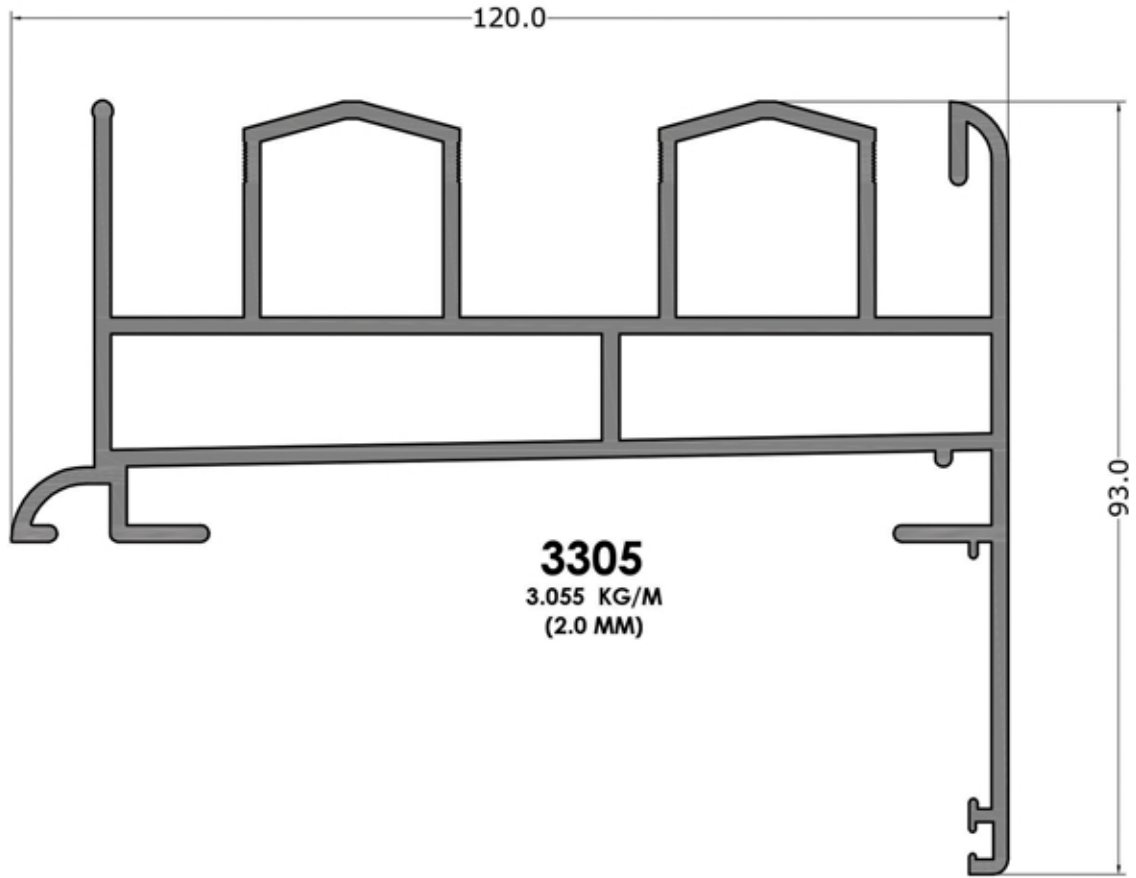




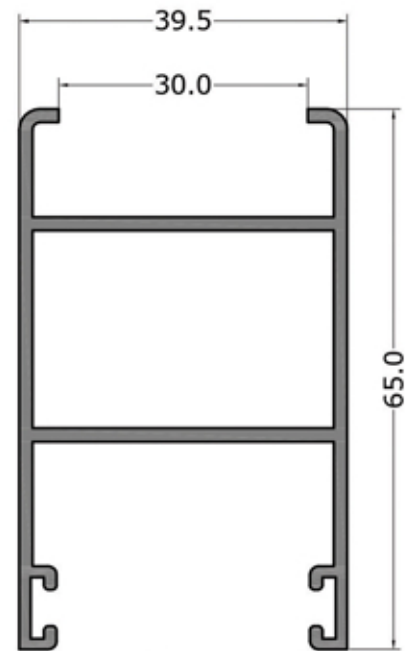
**3114**  
0.849 KG/M  
(1.4 MM)



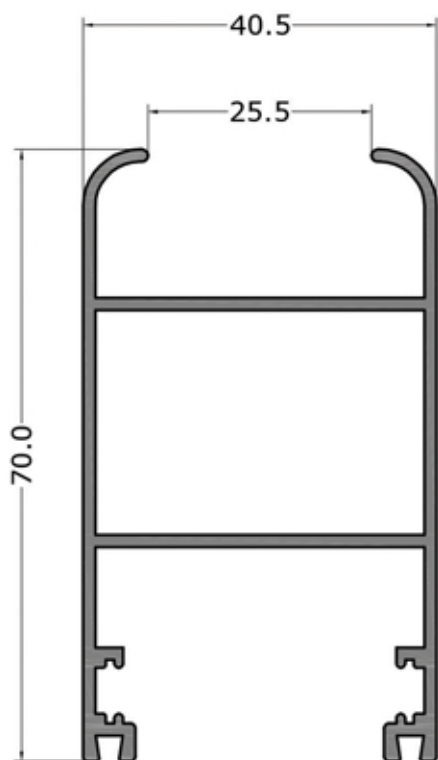
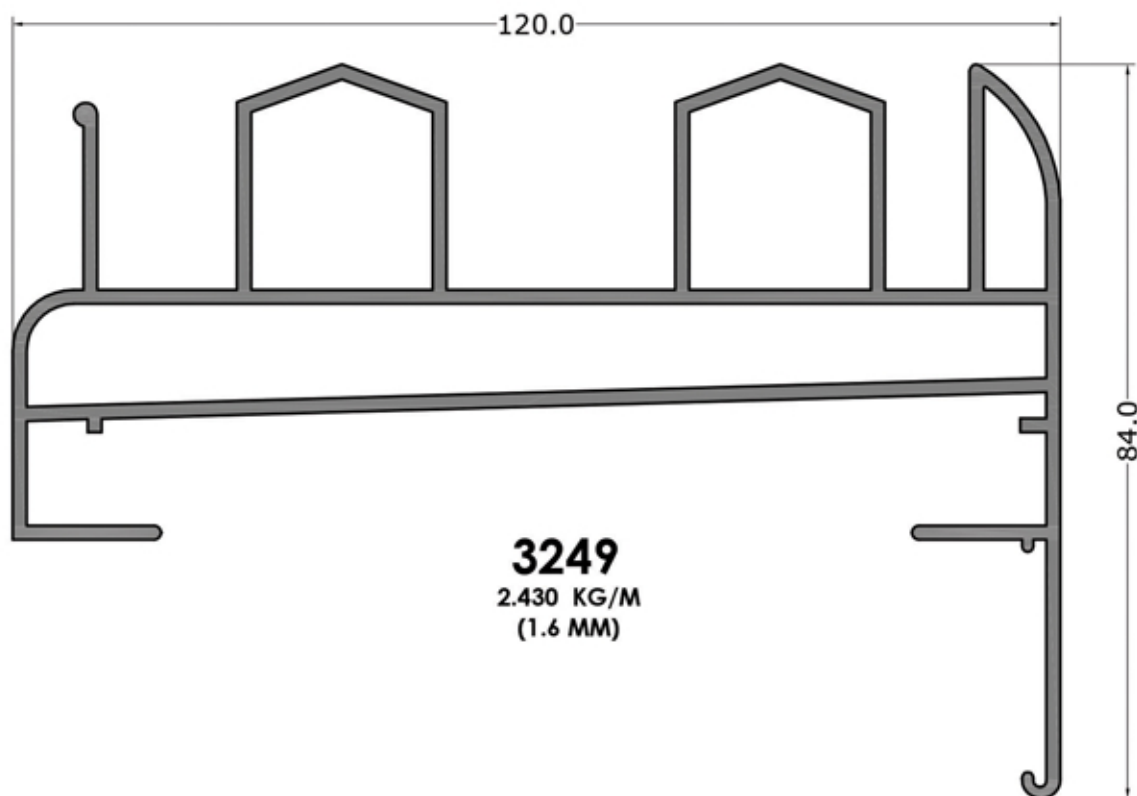
**1089**  
0.379 KG/M



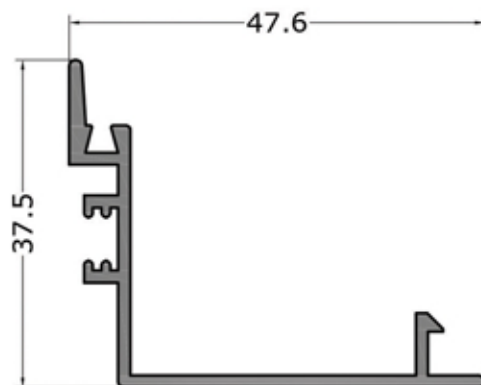
**1089**  
0.379 KG/M



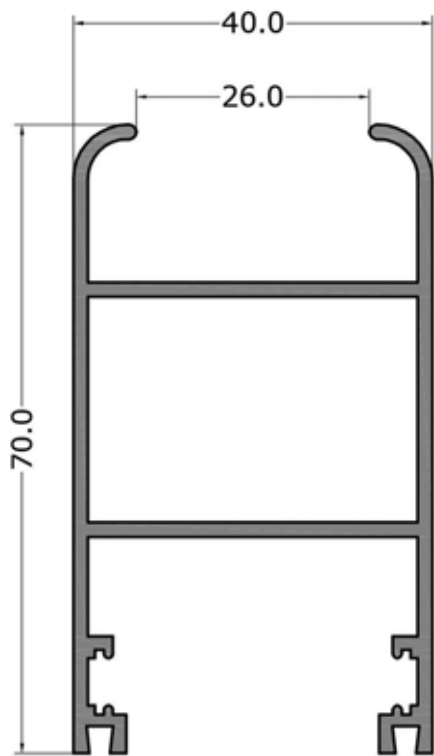
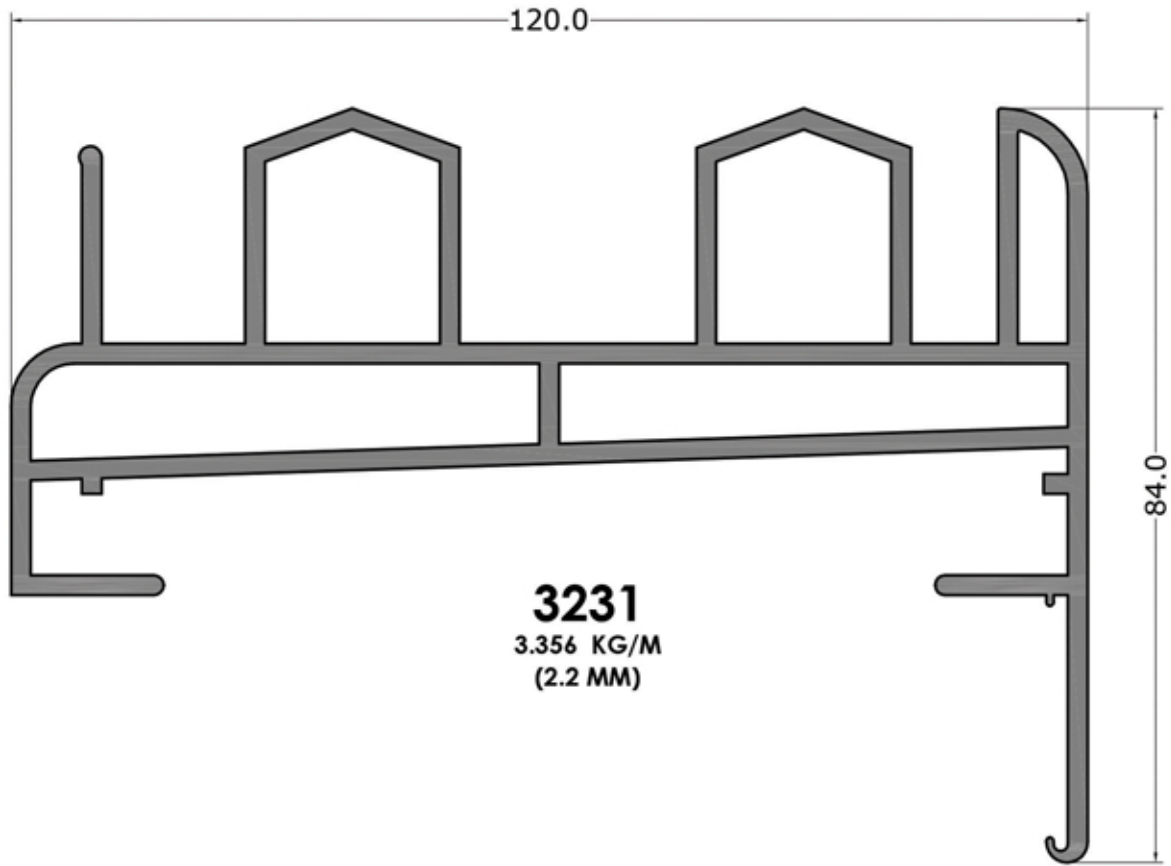
**3216**  
0.949 KG/M  
(1.6 MM)



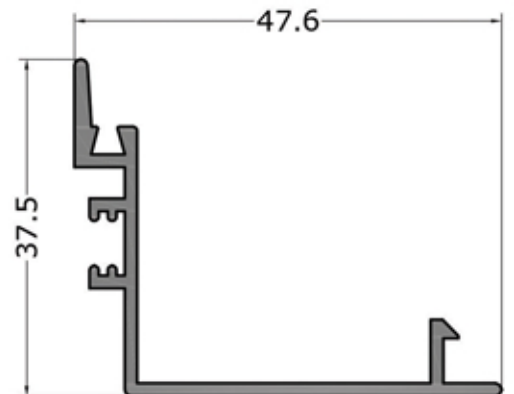
**3250**  
 0.950 KG/M  
 (1.4 MM)



**1160**  
 0.414 KG/M  
 (1.4 MM)



**3230**  
1.045 KG/M  
(1.6 MM)



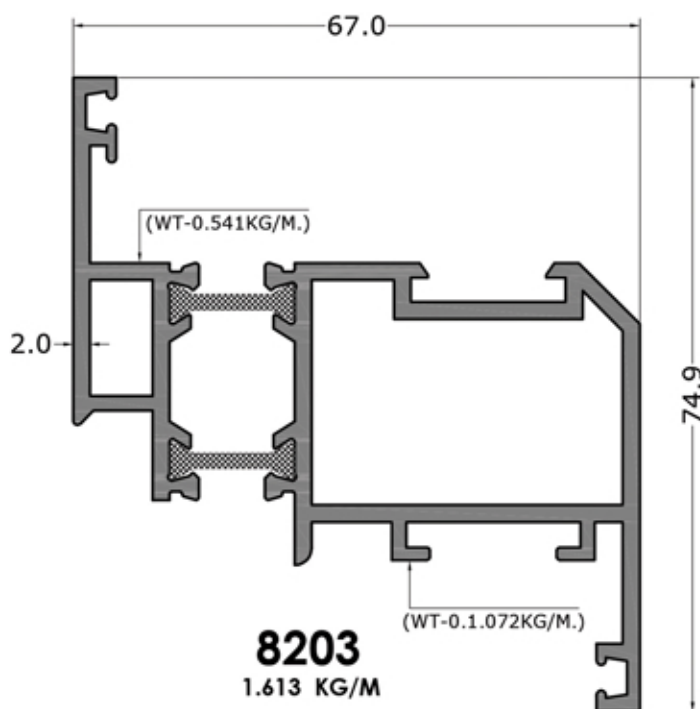
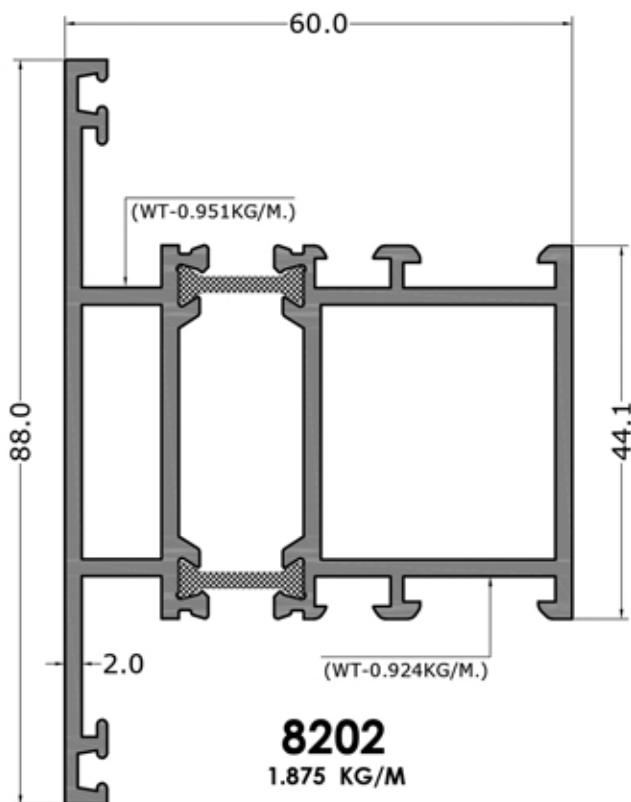
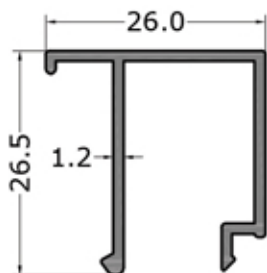
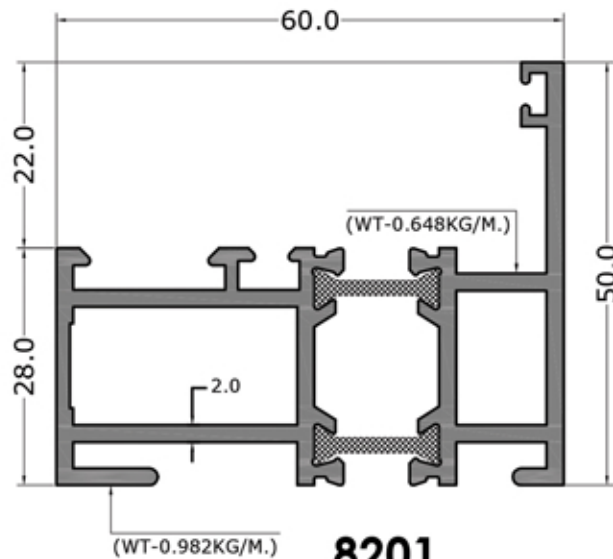
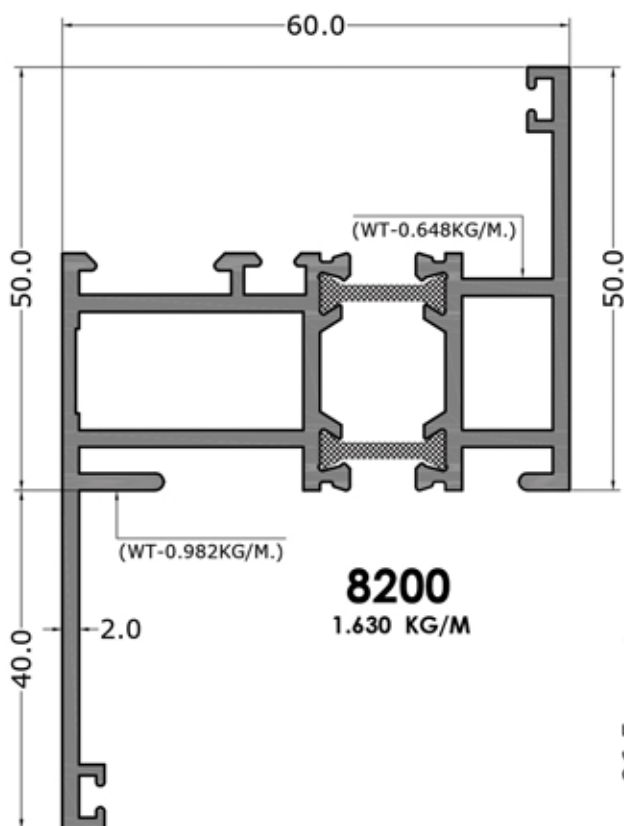
**1160**  
0414 KG/M  
(1.4 MM)

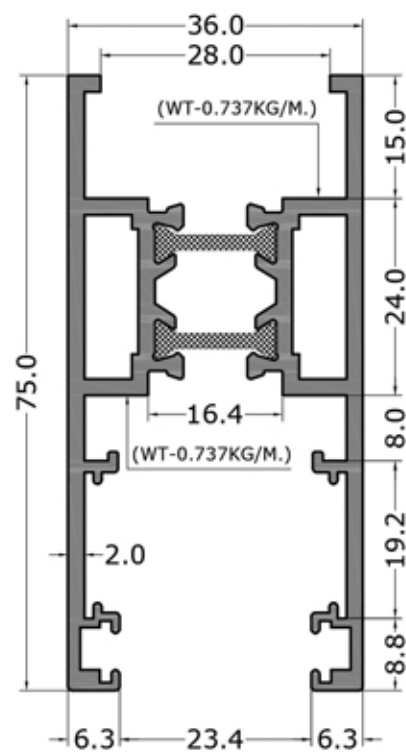
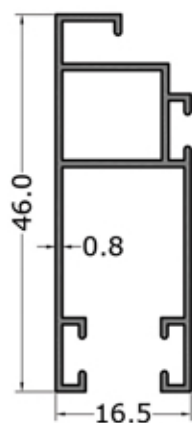
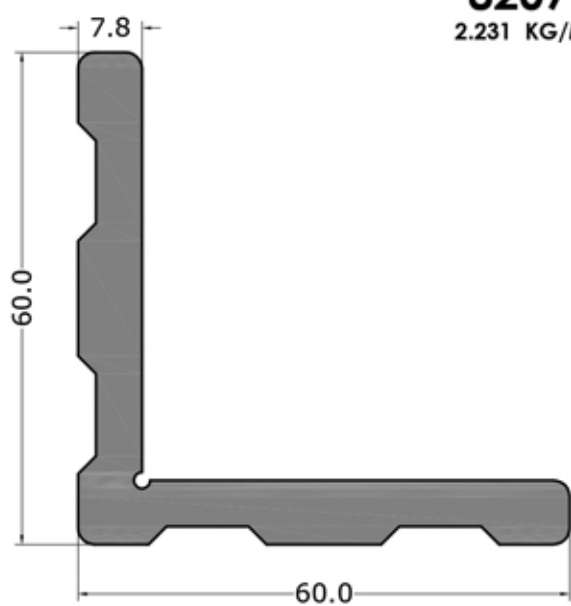
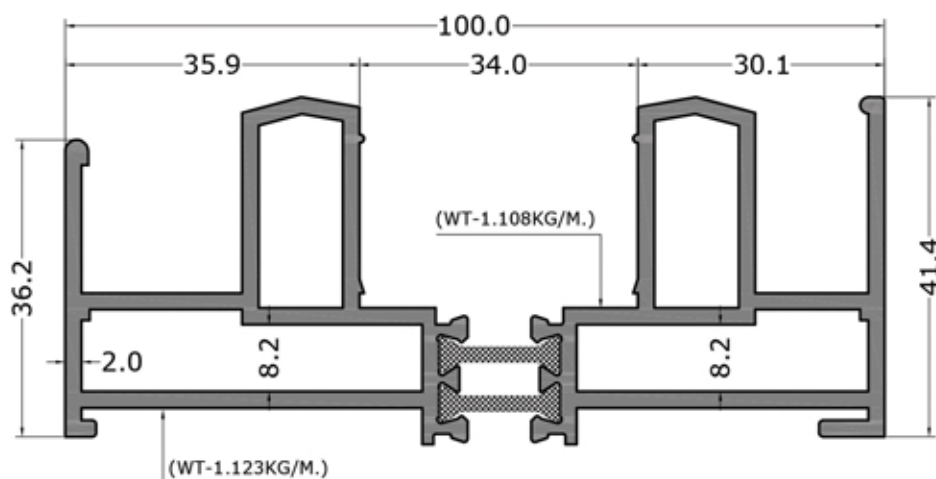
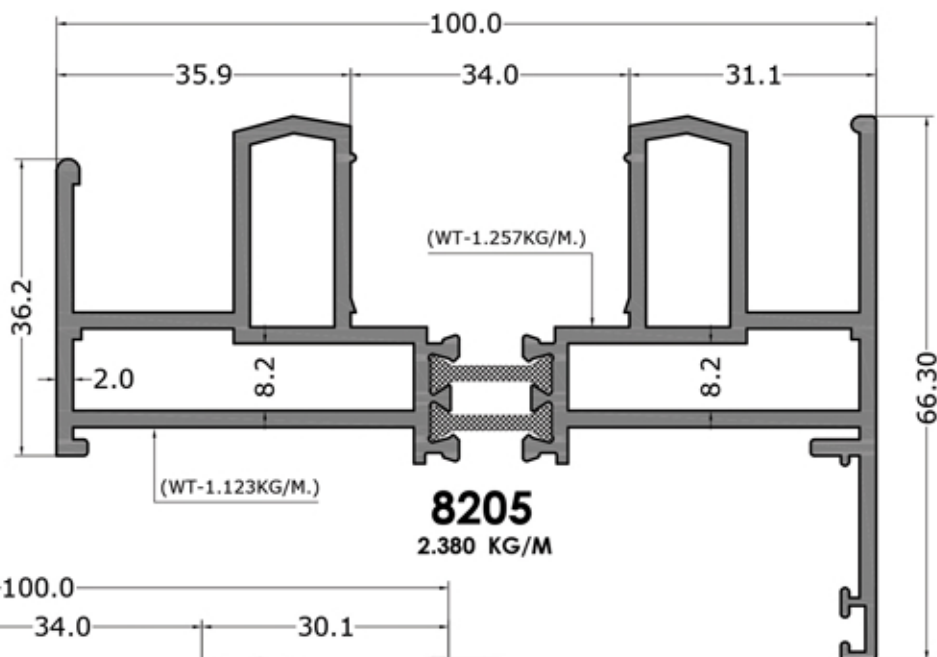




**THERMAL BREAK SYSTEMS**

**THERMAL BRAK SYSTEM**







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