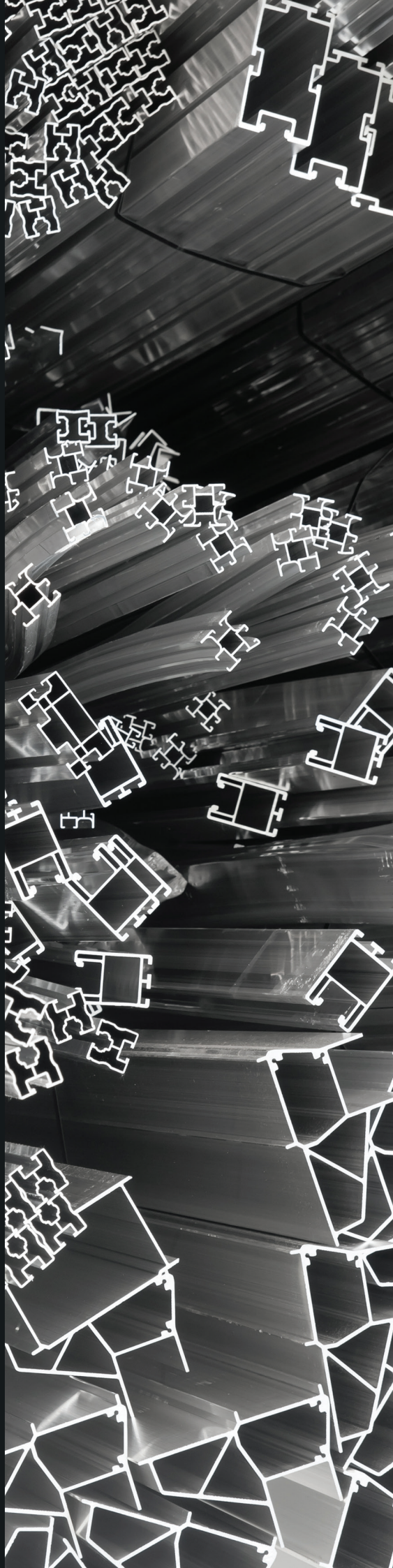


Firstmetal®



GENERAL CATALOGUE

ALUMINIUM EXTRUSION PROFILES  
GENERAL CATALOGUE  
2019/2020 ...



## Mechanical Properties & Chemical Composition of Alloy AA6063, AA6061 & AA6082 in temper T5 & T6

### International Standard Compliance

Extrusion Dimension Tolerance: BS EN 755 Series, DIN 1748, DIN 17615, ASTM B221

### Chemical Composition

	Alloy AA 6063	Alloy AA 6061	Alloy AA 6082
% Mg	0.45-0.90	0.80-1.20	0.62-0.70
% Si	0.20-0.60	0.40-0.80	0.95-1.05
% Cr	0.10	0.04-0.35	0.02
% Zn	0.10	0.25	0.02
% Fe	0.35	0.70	0.16-0.22
% Cu	0.10	0.15-0.40	0.03
% Mn	0.10	0.15	0.50-0.57
% Ti	0.10	0.15	0.02
Other impurities	0.05	0.05	0.02
Aluminium	REMAINDER	REMAINDER	REMAINDER

### Mechanical Properties

	Alloy 6063		Alloy 6061		Alloy 6082	
	T5	T6	T5	T6	T5	T6
Ult. Tensile Strength	150	185	190	280	290	310
0.2% Proof stress	110	160	115	240	270	285
Hardness (Brinel)	55	75	60	90	70	95
Ult. Shear Strength	155		205		211	
Elongation on 50mm	8		8		10	
Density	3		3		3	
Melting Range	600-650		580-650		580-650	
Coefficient on Linear Expansion	23		24		24	
Modules of Elasticity	67000		69000		69000	
Fatigue Strength (50x10 <sup>6</sup> )	75		95		101	

### TEMPER

T4 : Solution heat treatment & naturally aged to a substantially stable condition

T5 : Cooled from an elevated temperature Shaping process and then artificially aged hardened.

T6 : Solution heat treatment and age hardened.

### FIRE RATING :

Aluminium Alloys non “combustible” and rated AA (the highest possible under the classification system - BS 476: Part 6.

### EXTRUSION PRESS SIZES

1. 20 MN Press Billet diameter 203 mm (8 )inches

### MAXIMUM SIZE OF PROFILE

Solid : 240 mm CCD (Circumscribing Circle diameter)

Hollow : 200 mm CCD (Circumscribing Circle diameter)

### ALLOY CHARACTERISTIC

AA 6063 : The most popular extrusion alloy , takes a good surface finish, is corrosion resistant and can be heat treated or strength.

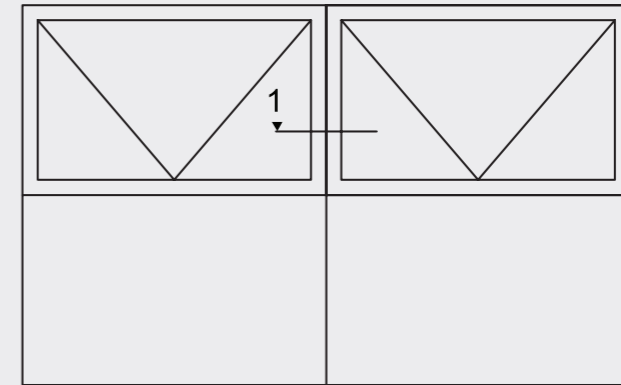
AA 6061: Most versatile alloy of heat treatable group is an improved magnesium silicide alloy with the ability to develop strength somewhat higher used in transportation & structural applications than 6063 alloy - good corrosion resistant –used in transportation and structural applications.

AA 6082: Similarly this alloy has good tensile strength having good extrudability; widely chosen for Auto mobile profiles structures with complex sections,

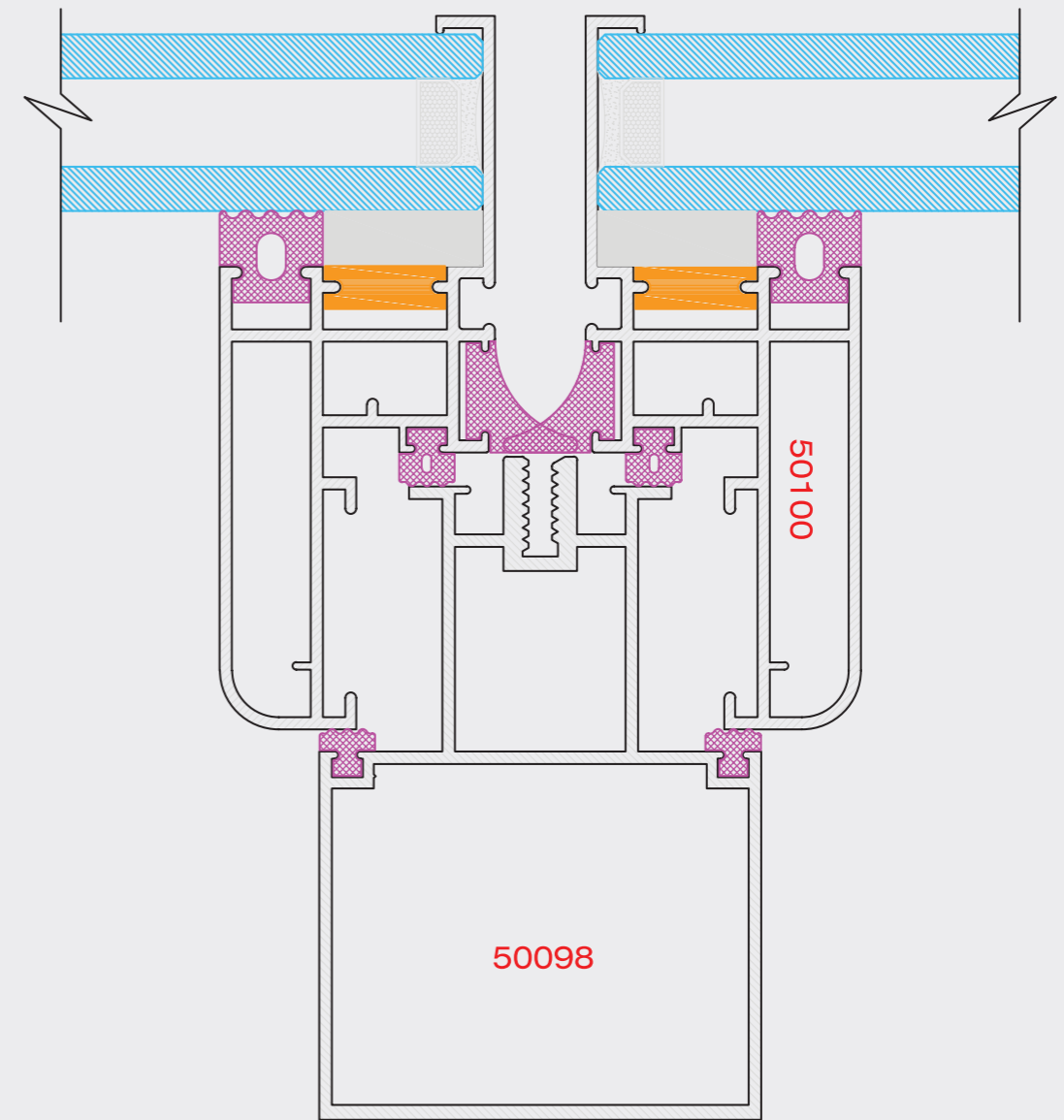
# CURTAIN WALL



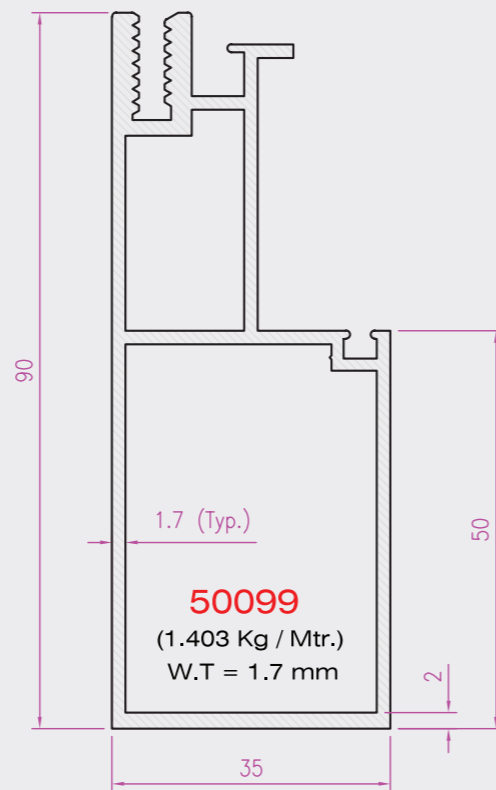
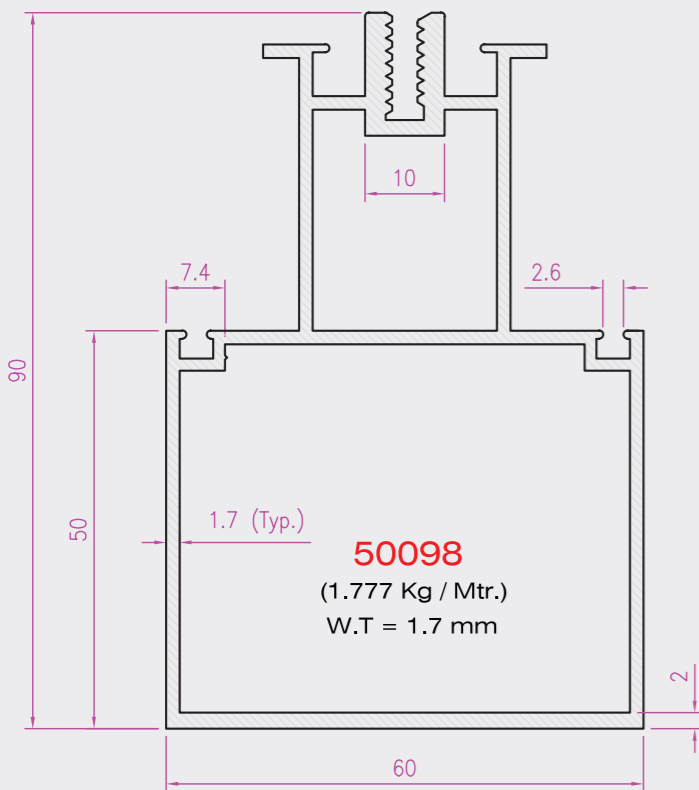
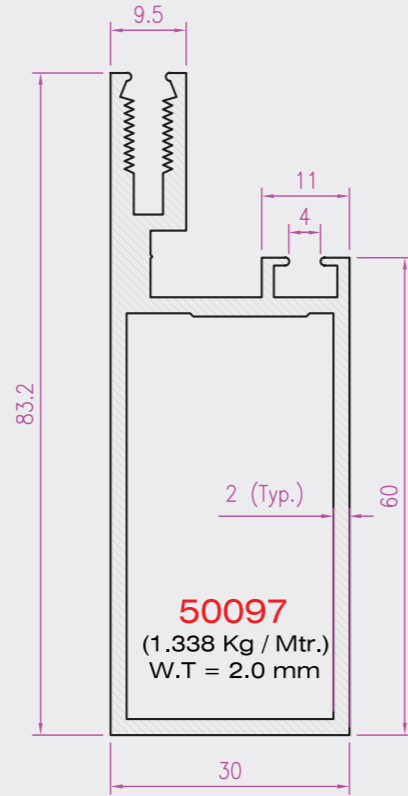
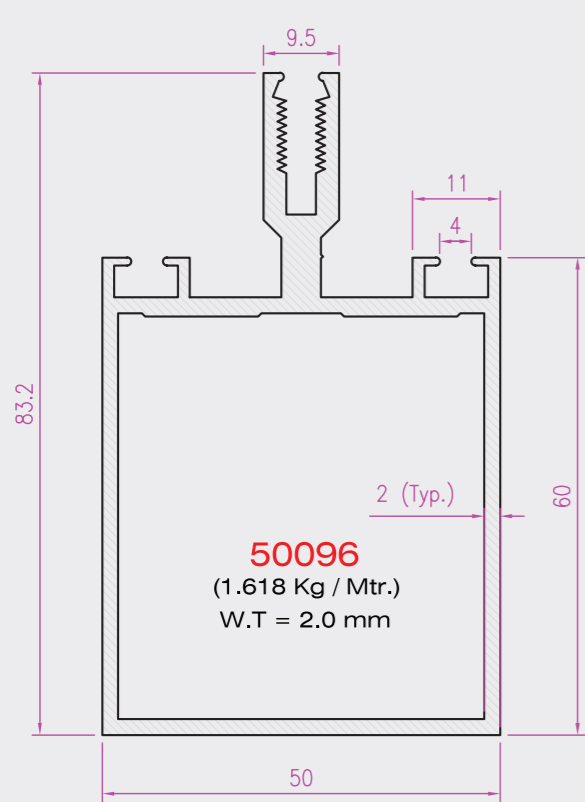
## Curtain Wall Assembly Drawing



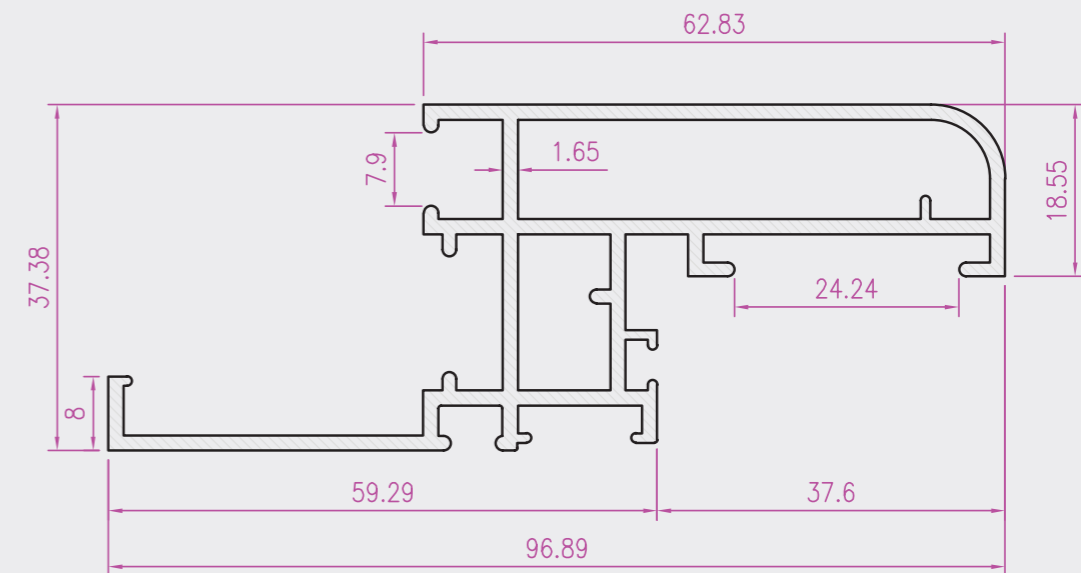
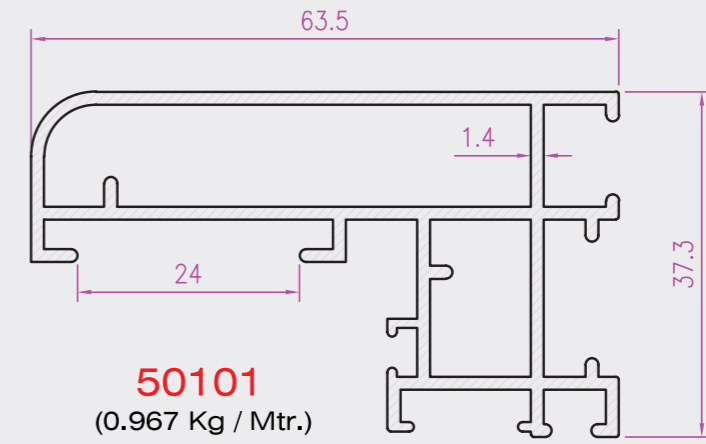
ELEVATION  
CURTAIN WALL  
OPENING OUTWARD



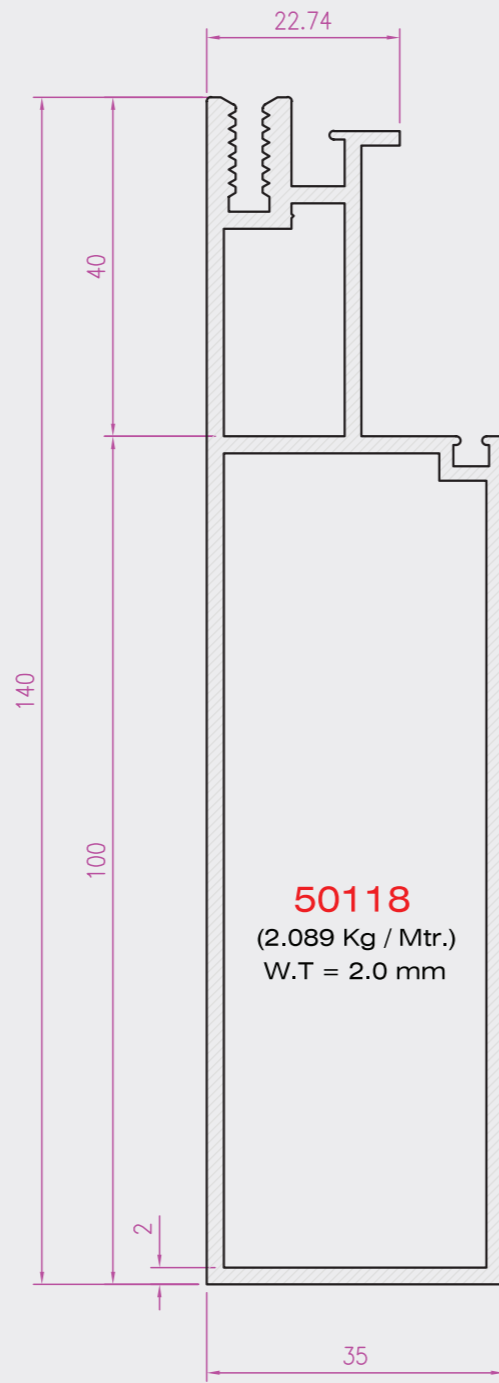
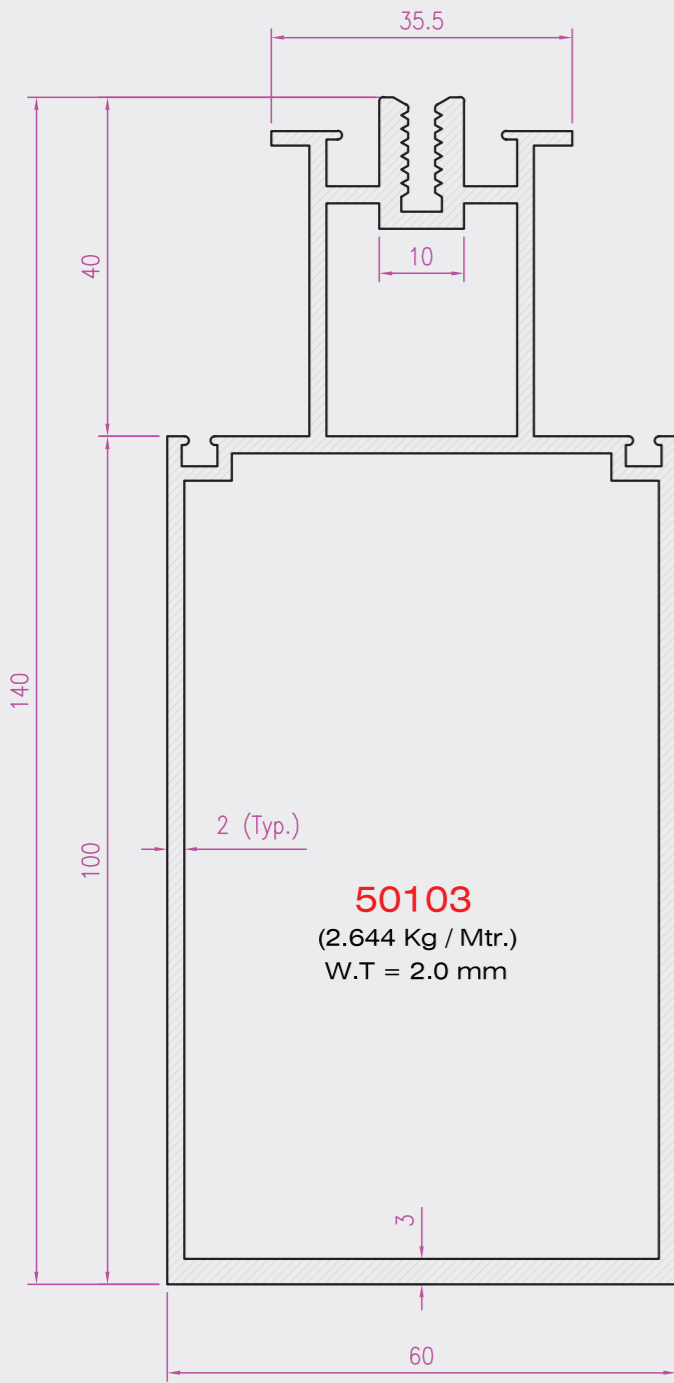
Curtain Wall



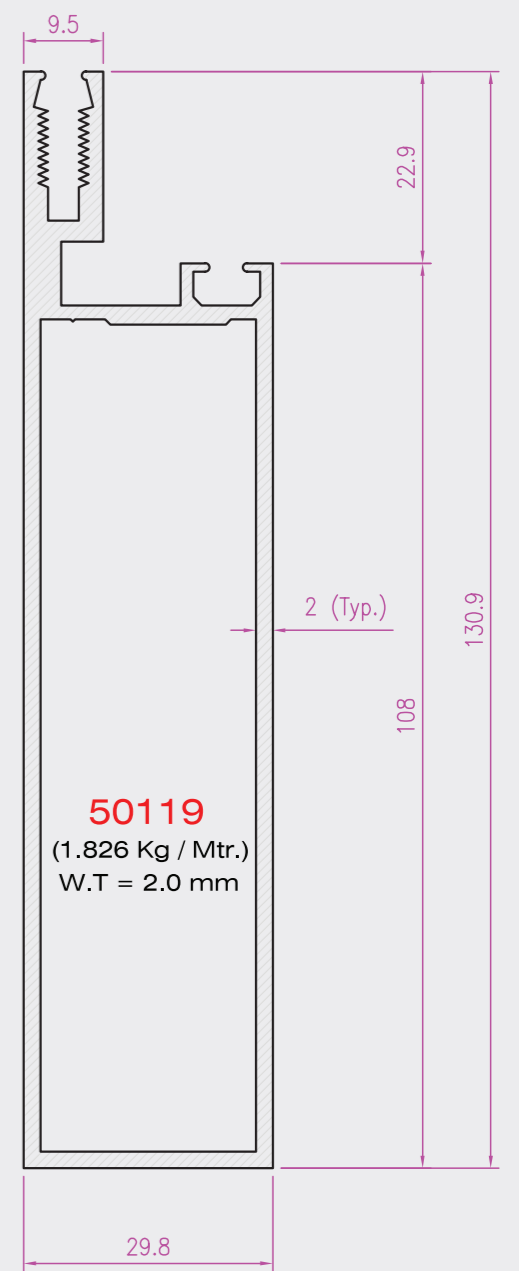
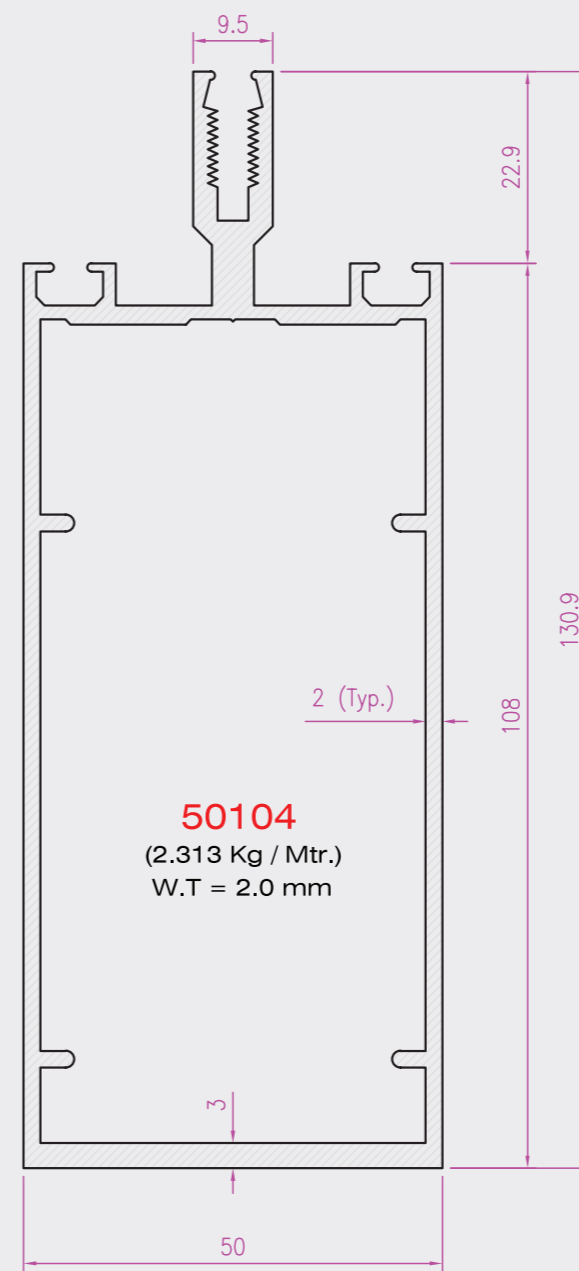
Curtain Wall



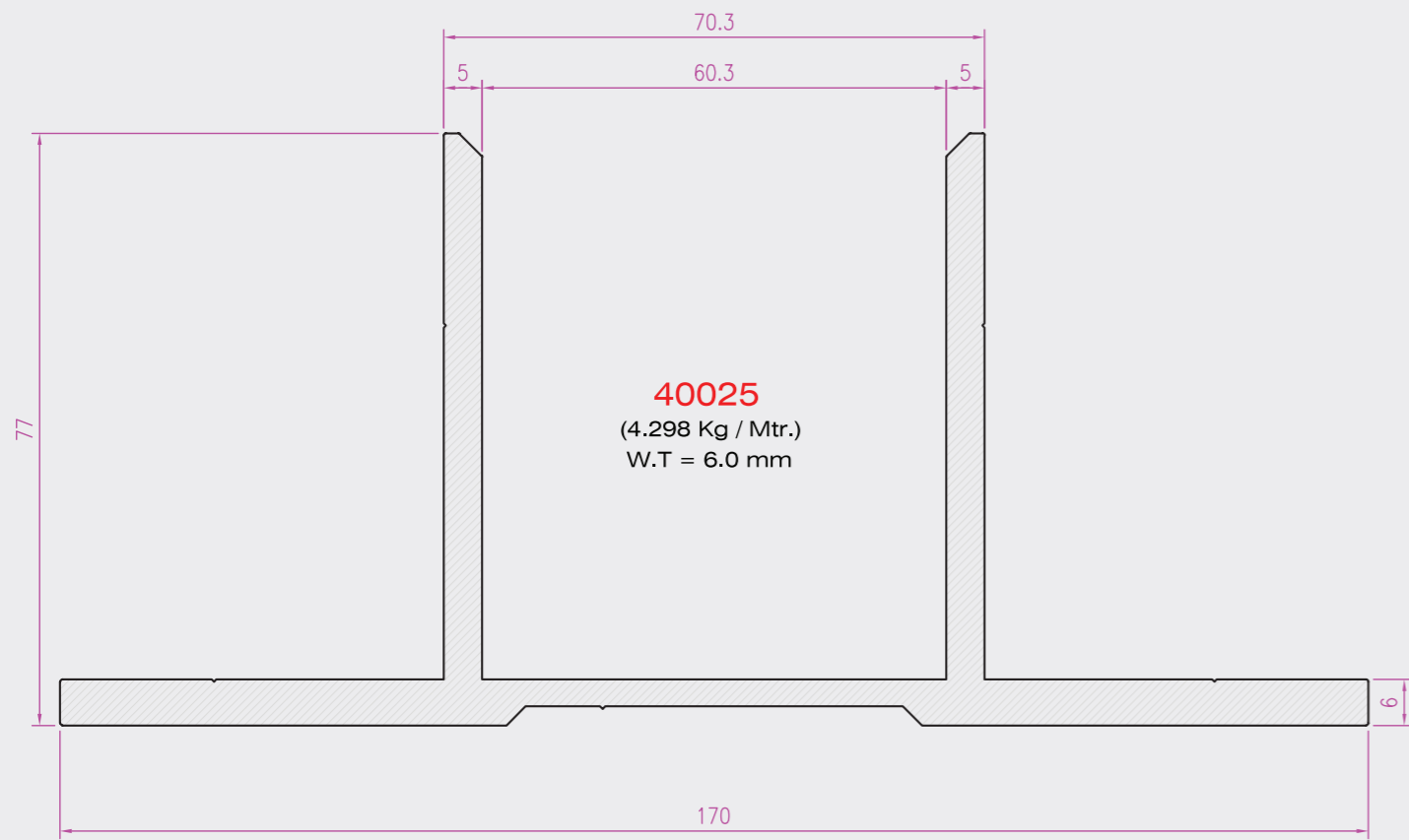
Curtain Wall



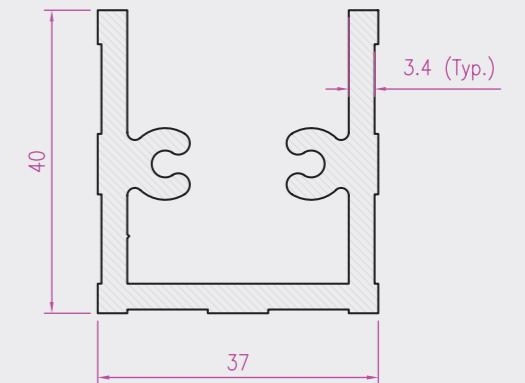
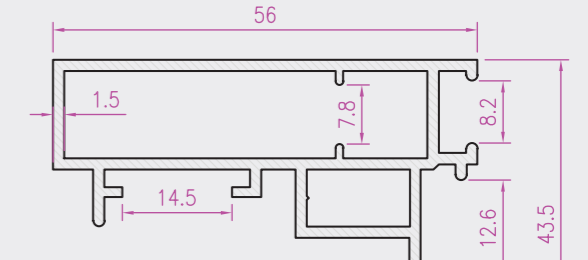
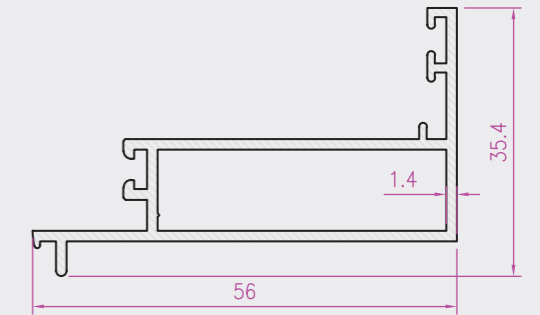
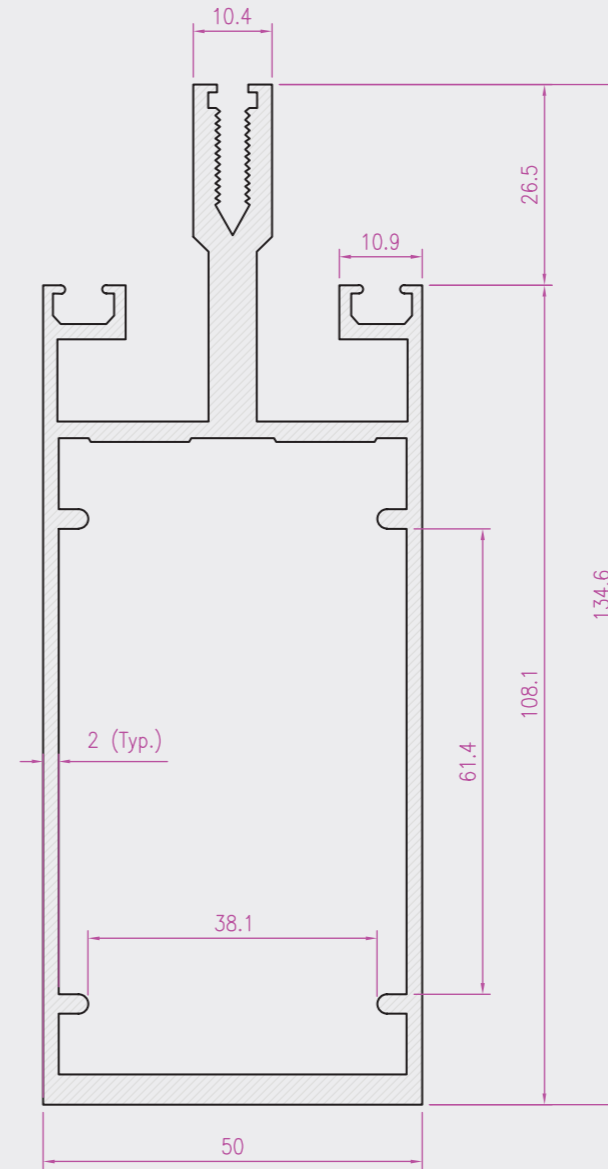
Curtain Wall



Curtain Wall



Curtain Wall

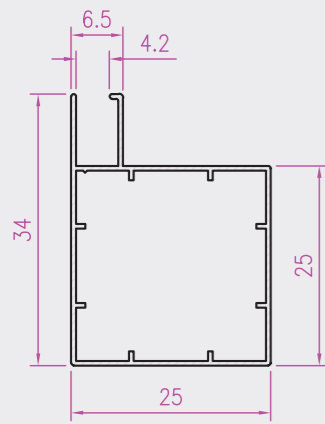




# KITCHEN PROFILES

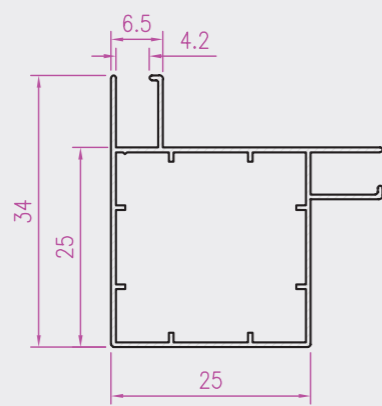


## KITCHEN CABINETS



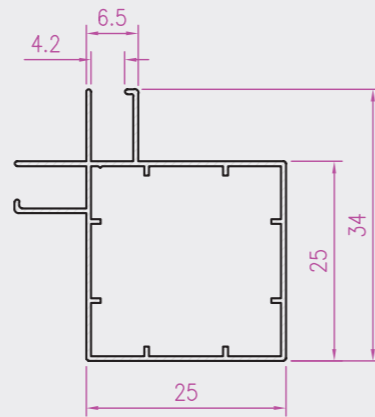
**50015**

(0.204 Kg / Mtr.)  
W.T = 0.6 mm



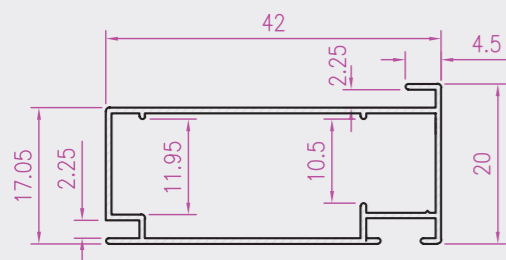
**50016**

(0.235 Kg / Mtr.)  
W.T = 0.6 mm



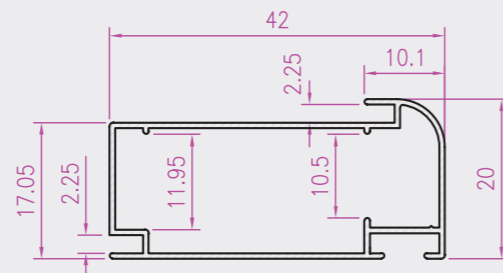
**50017**

(0.235 Kg / Mtr.)  
W.T = 0.6 mm



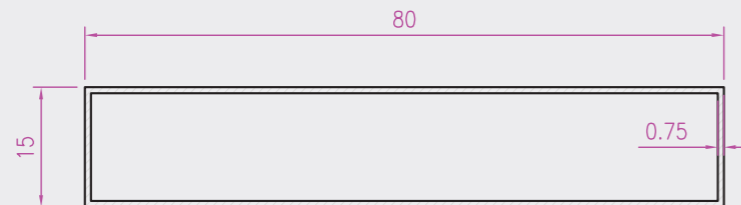
**50018**

(0.255 Kg / Mtr.)  
W.T = 0.7 mm



**50019**

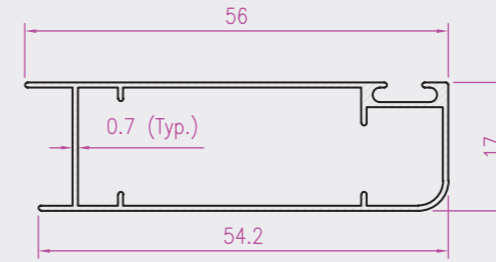
(0.257 Kg / Mtr.)  
W.T = 0.7 mm



**30303**

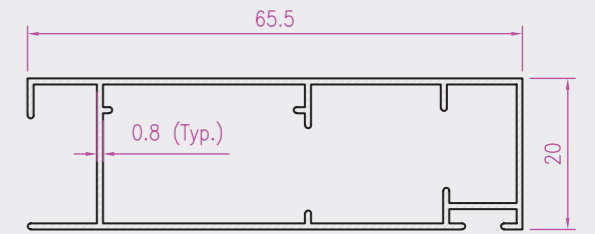
(0.379 Kg / Mtr.)  
W.T = 0.75 mm

## KITCHEN CABINETS



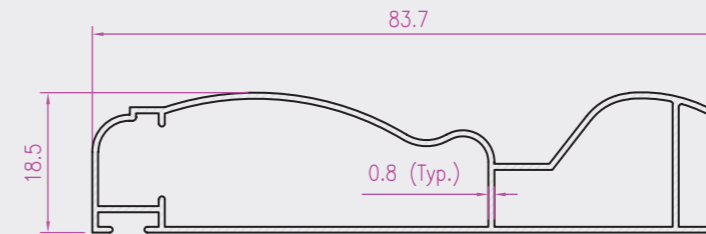
**50054**

(0.304 Kg / Mtr.)  
W.T = 0.7 mm



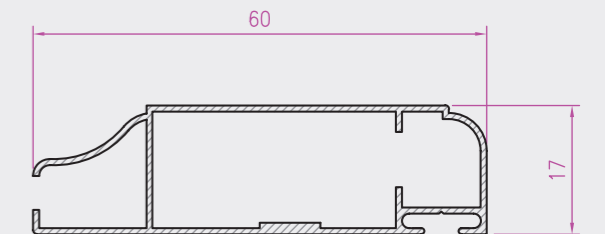
**50059**

(0.420 Kg / Mtr.)  
W.T = 0.8 mm



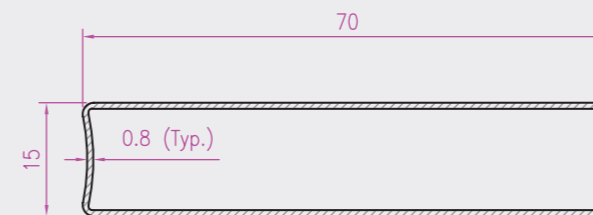
**50060**

(0.480 Kg / Mtr.)  
W.T = 0.8 mm



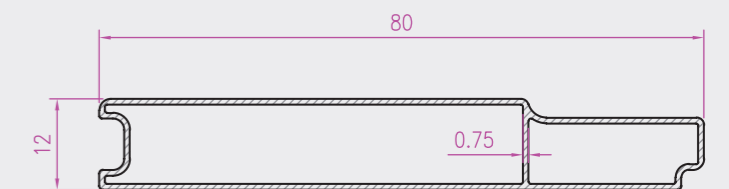
**50058**

(0.379 Kg / Mtr.)  
W.T = 0.8 mm



**30319**

(0.353 Kg / Mtr.)  
W.T = 0.8 mm

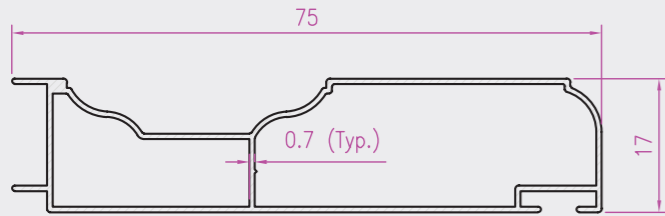


**50061**

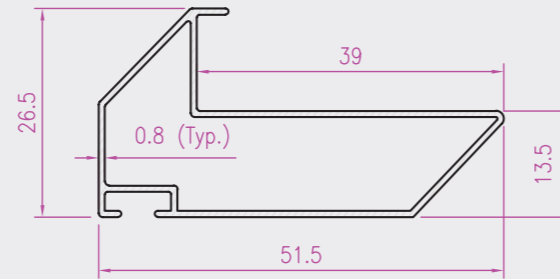
(0.389 Kg / Mtr.)  
W.T = 0.75 mm



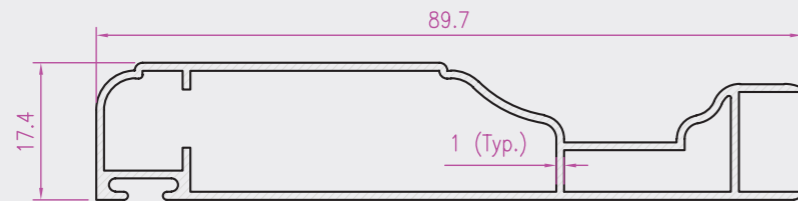
## KITCHEN CABINETS



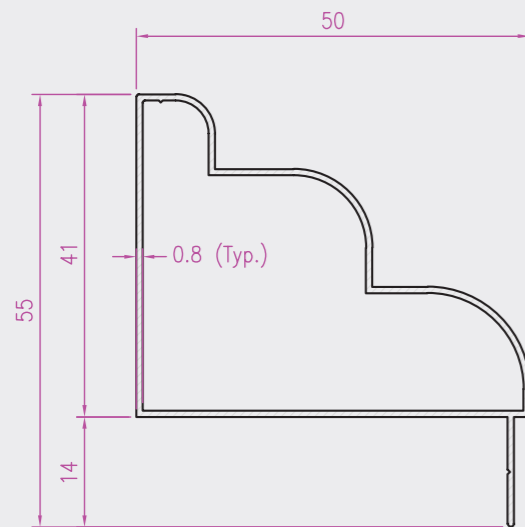
**50093**  
(0.384 Kg / Mtr.)  
W.T = 0.7 mm



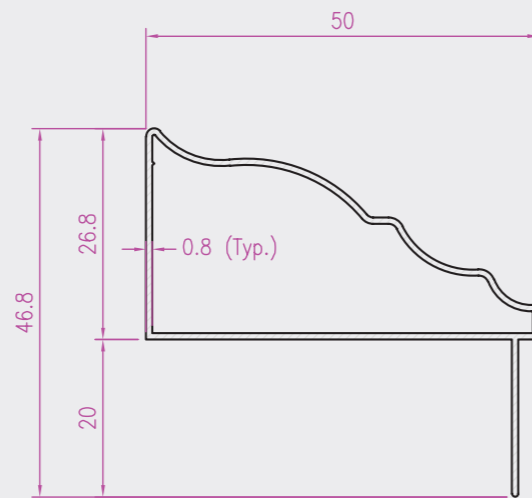
**50055**  
(0.324 Kg / Mtr.)  
W.T = 0.8 mm



**50056**  
(0.633 Kg / Mtr.)  
W.T = 1.0 mm

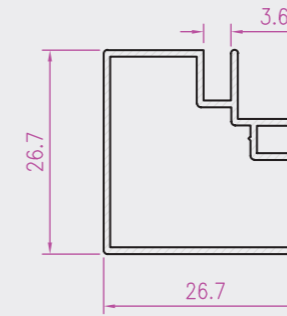


**50057**  
(0.391 Kg / Mtr.)  
W.T = 0.8 mm

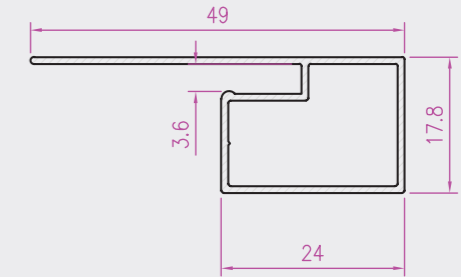


**50081**  
(0.336 Kg / Mtr.)  
W.T = 0.8 mm

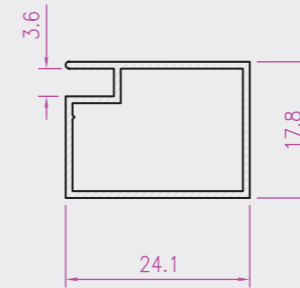
## KITCHEN CABINETS



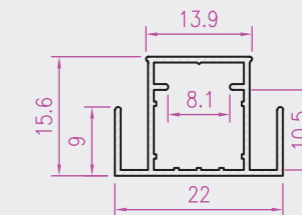
**50108**  
(0.274 Kg / Mtr.)  
W.T = 0.9 mm



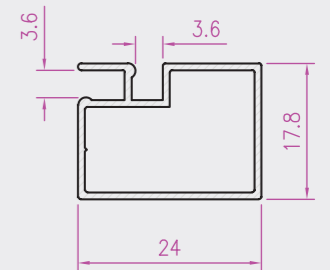
**50106**  
(0.281 Kg / Mtr.)  
W.T = 0.9 mm



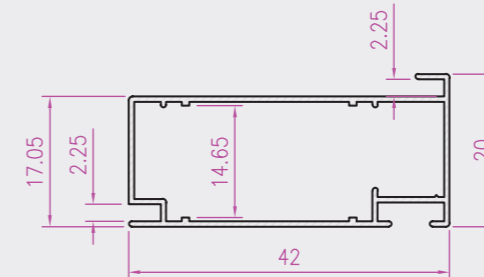
**50107**  
(0.210 Kg / Mtr.)  
W.T = 0.9 mm



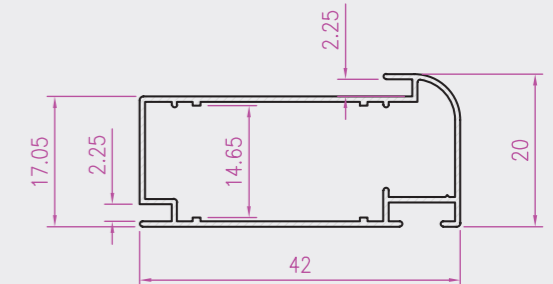
**50109**  
(0.173 Kg / Mtr.)  
W.T = 0.75 mm



**50105**  
(0.223 Kg / Mtr.)  
W.T = 0.9 mm



**50115**  
(0.261 Kg / Mtr.)  
W.T = 0.7 mm  
Same as 50018 only inside dim.  
is less for tight fitting



**50116**  
(0.262 Kg / Mtr.)  
W.T = 0.7 mm  
Same as 50019 only inside dim.  
is less for tight fitting

**Firstmetal<sup>®</sup>**

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