



شركة

اشوار
المحدودة LTD.

ALUMINIUM EXTRUSION PROFILES GENERAL CATALOGUE

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Email : jazan@ashwar.com
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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	N/mm ²	150	185	190	280	290	310
0.2% Proof stress	N/mm ²	110	160	115	240	270	285
Hardness (Brinell)	BHN	55	75	60	90	70	95
Ult. Shear Strength	N/mm ²	155		205		211	
Elongation on 50mm	%	8		8		10	
Density	g/cm ³	3		3		3	
Melting Range	Deg.C	600-650		580-650		580-650	
Coefficient on Linear Expansion	X10 ⁻⁶ /Deg.C	23		24		24	
Modules of Elasticity	N/mm ²	67000		69000		69000	
Fatigue Strength (50x10 ⁶)	N/mm ²	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, structural engineering, Pylons Platforms Pipelines Masts for Sailing boats etc.



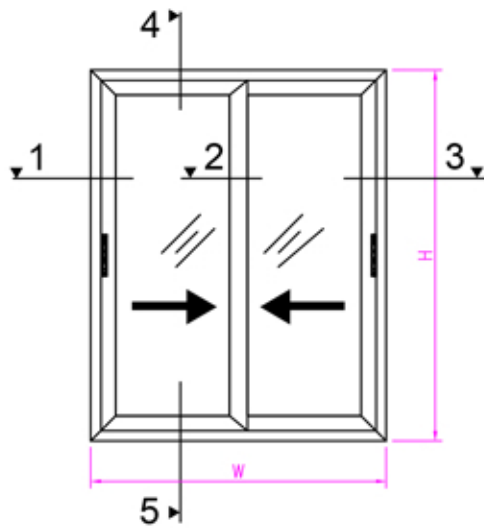
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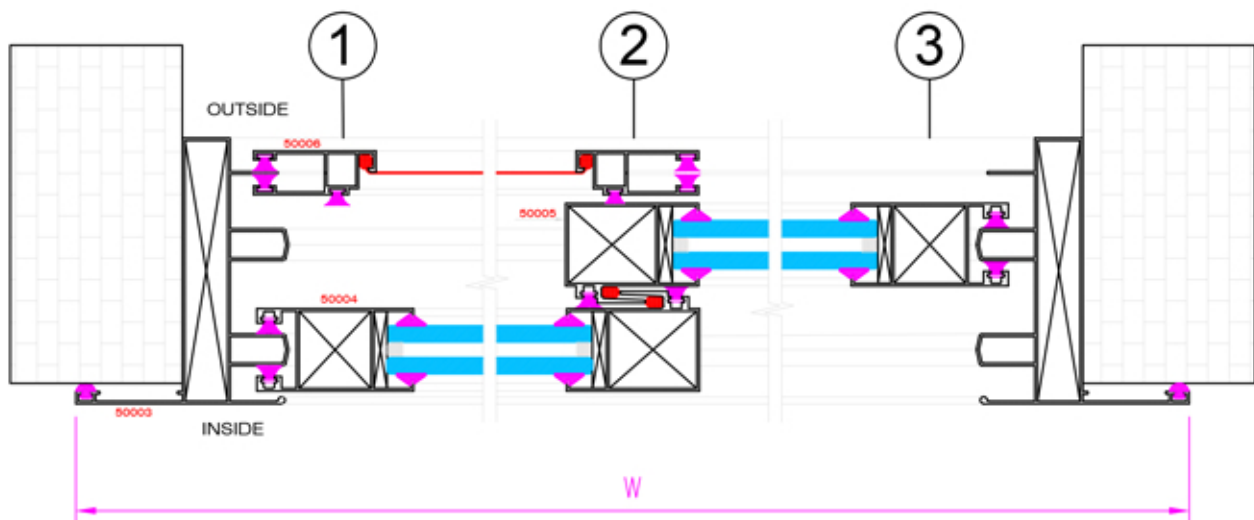
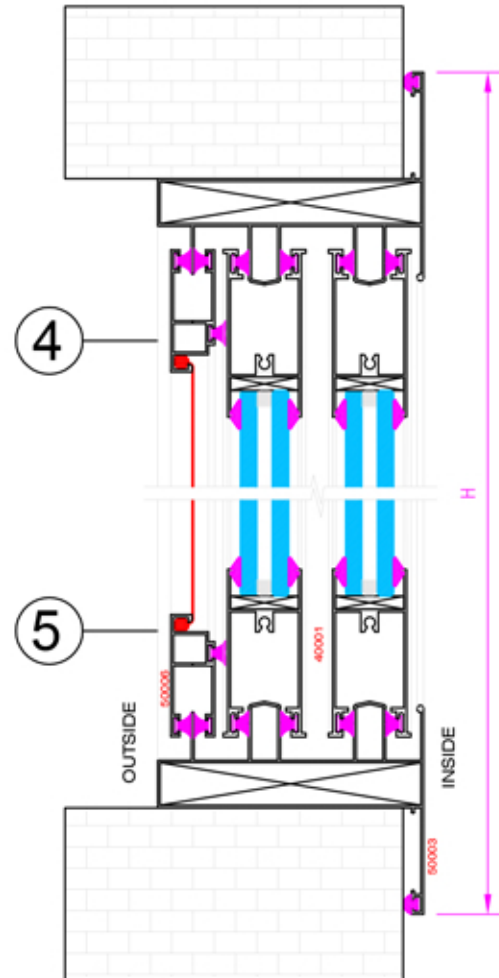
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**SARAYA SLIDING SERIES
1.0MM & 1.2MM WALL THICKNESS**

Saraya 100mm Sliding System Light Weight Assembly Drawing

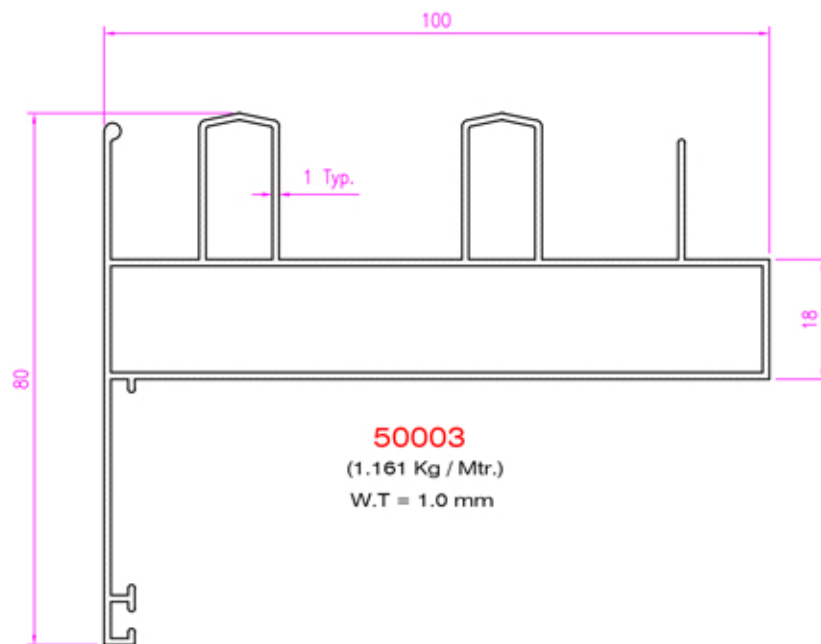
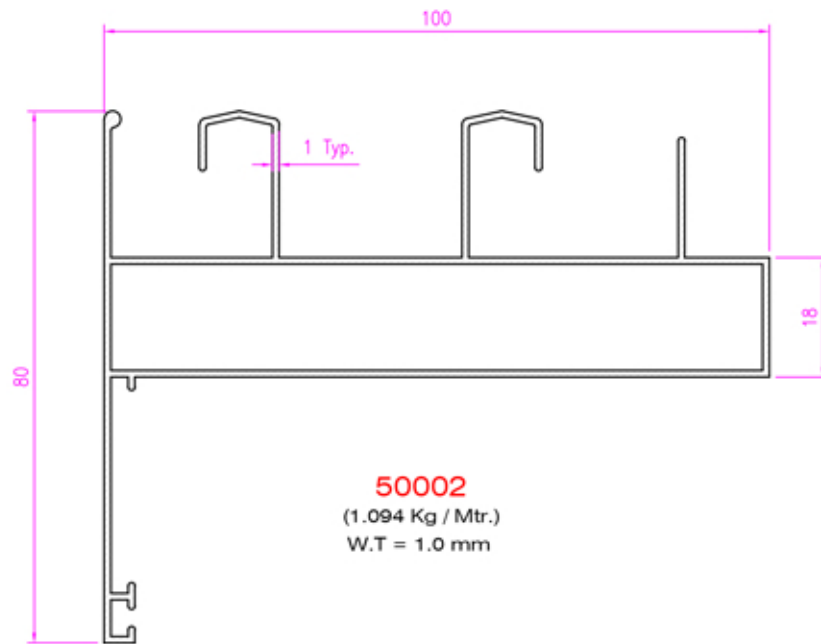


ELEVATION
 FROM INSIDE
 18mm DOUBLE GLAZING



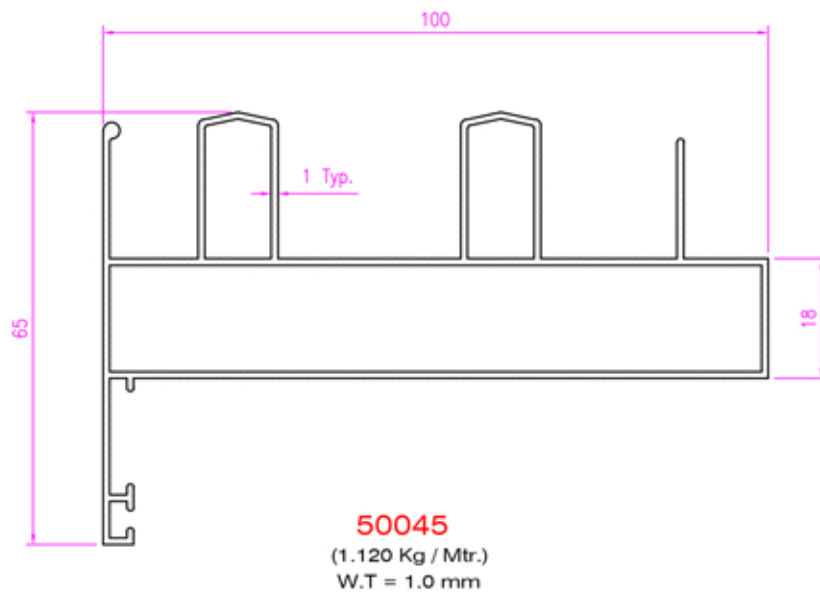
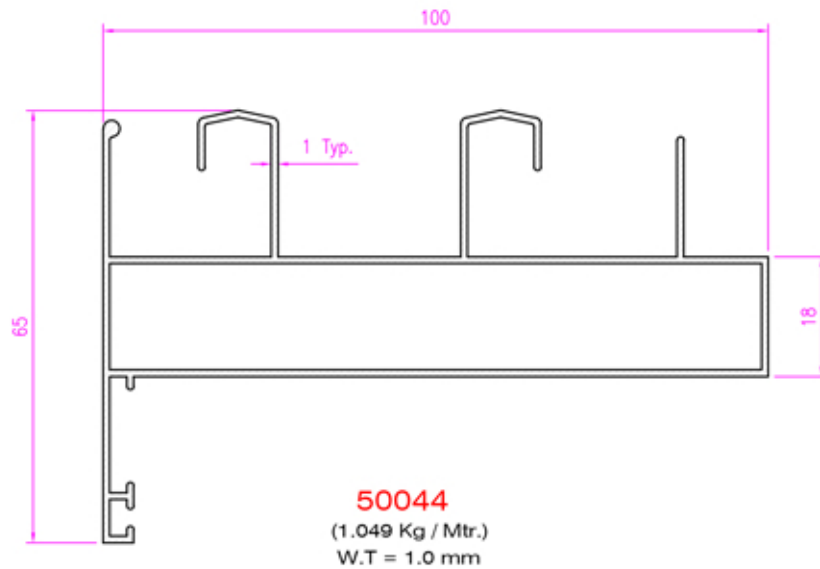


Saraya 100mm Sliding System Light Weight



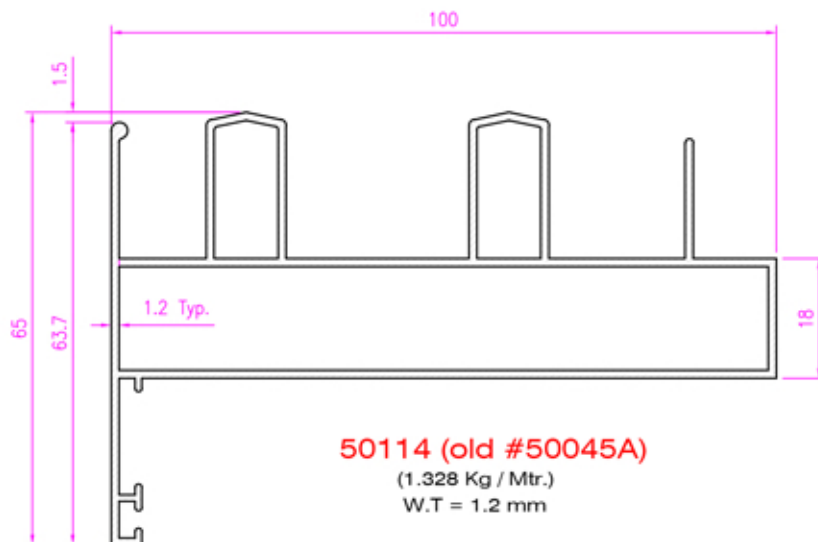
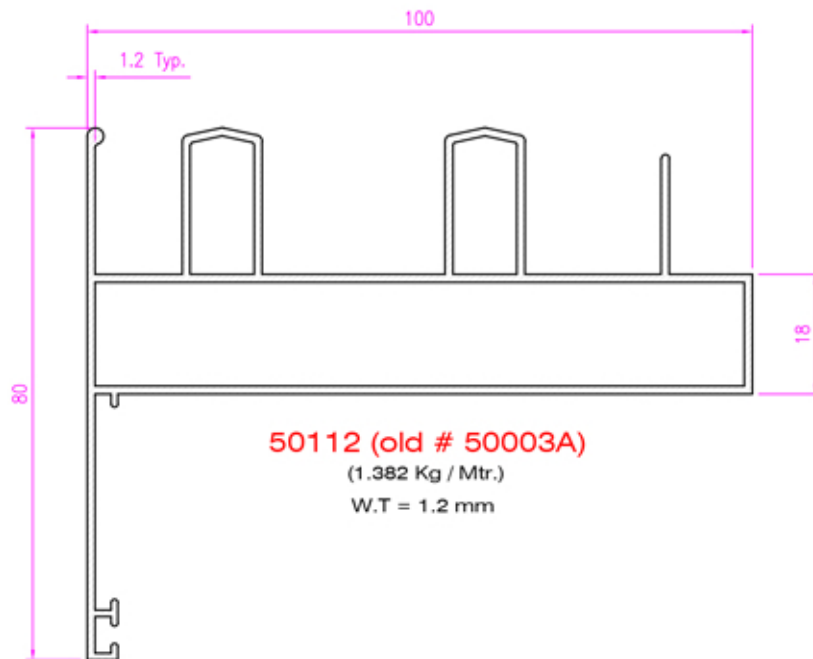


Saraya 100mm Sliding System Light Weight

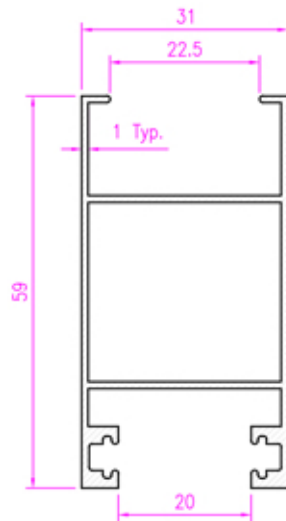




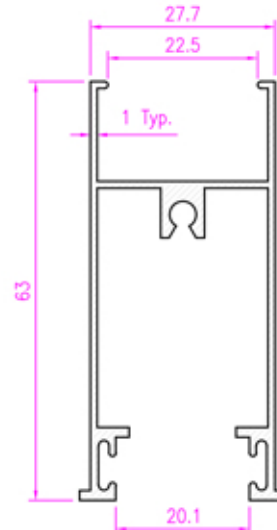
Saraya 100mm Sliding System Light Weight



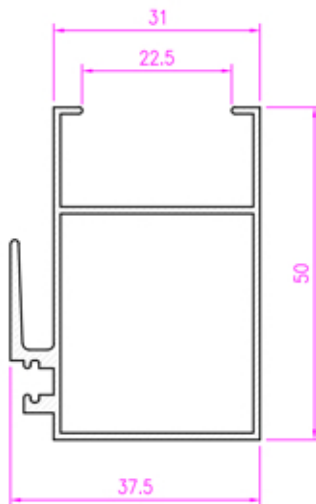
Saraya 100mm Sliding System Light Weight



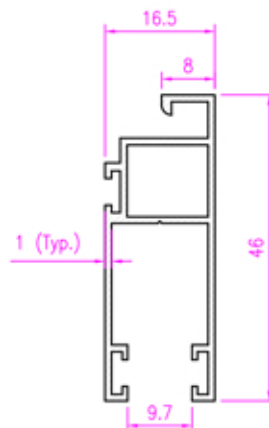
50004
 (0.606 Kg / Mtr.)
 W.T = 1.0 mm



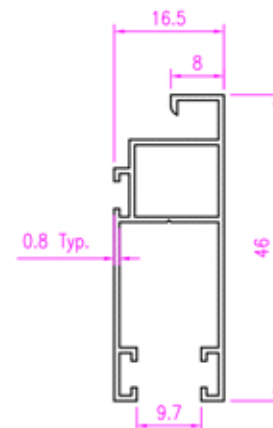
40001
 (0.615 Kg / Mtr.)
 W.T = 1.0 mm



50005
 (0.579 Kg / Mtr.)
 W.T = 1.0 mm



50006
 (0.382 Kg / Mtr.)
 W.T = 1.0 mm



50046
 (0.307 Kg / Mtr.)
 W.T = 0.8 mm



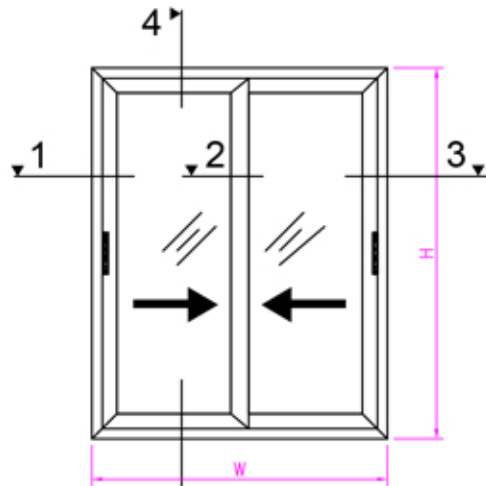
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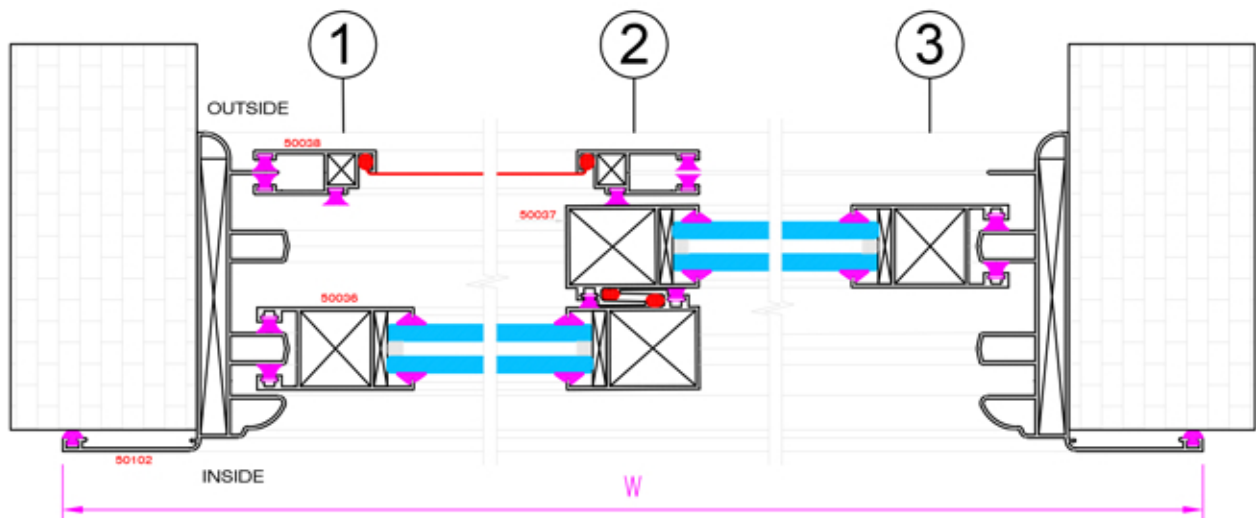
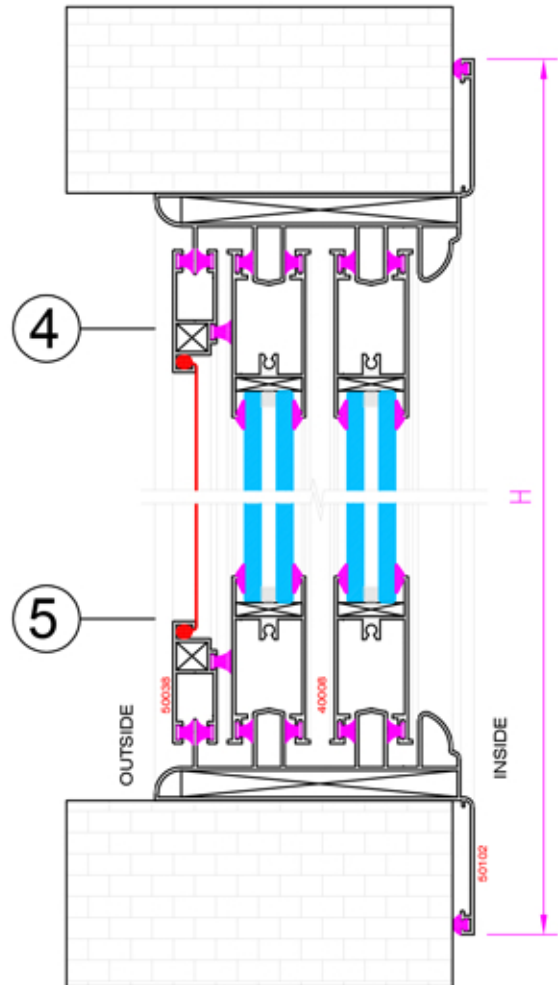
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**SARAYA SLIDING SERIES
1.3MM WALL THICKNESS**

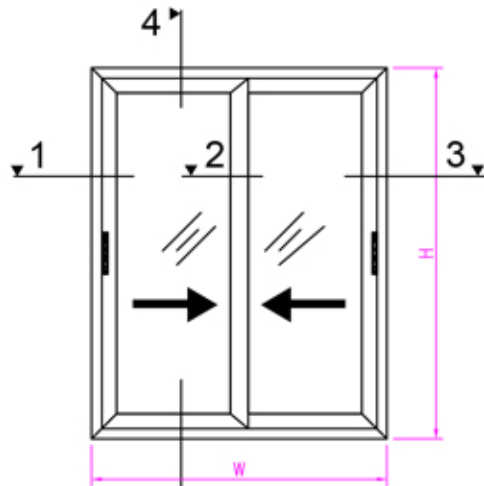
Saraya 120mm Sliding System



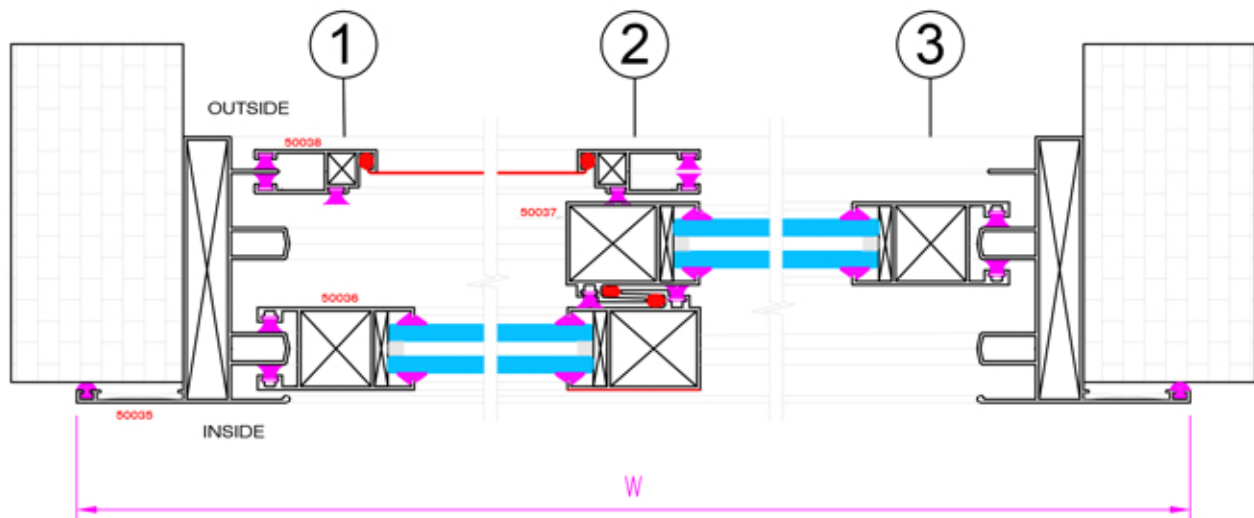
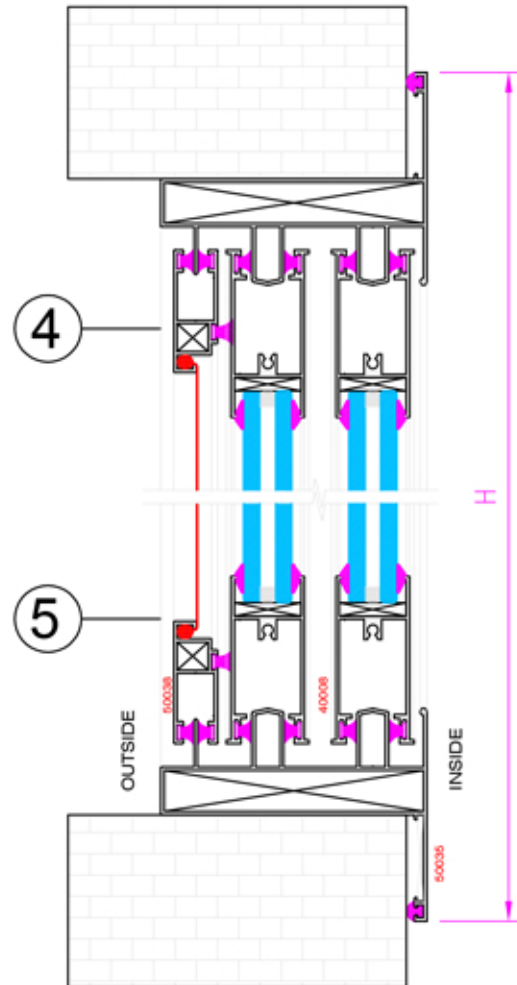
ELEVATION
 FROM INSIDE
 18mm DOUBLE GLAZING



Saraya 100mm Sliding System Medium Weight

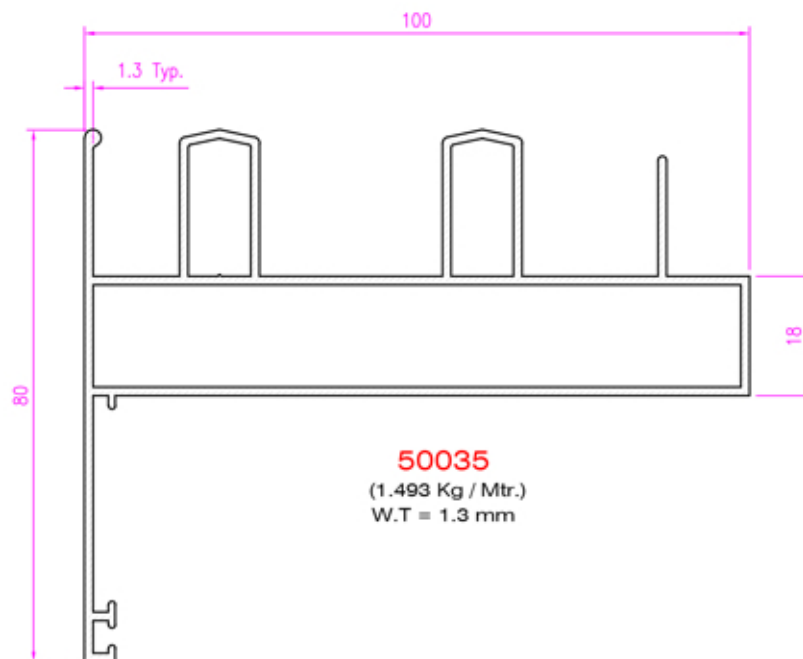
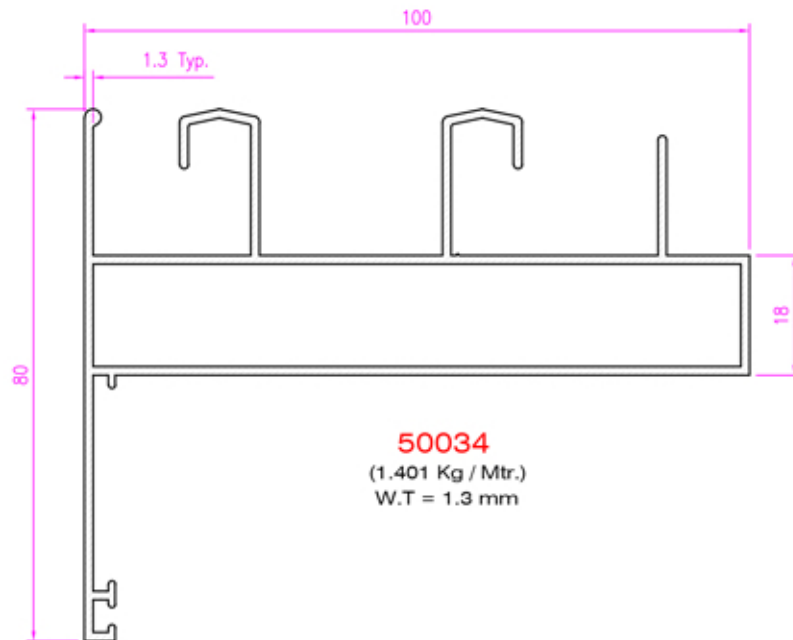


ELEVATION
 FROM INSIDE
 18mm DOUBLE GLAZING



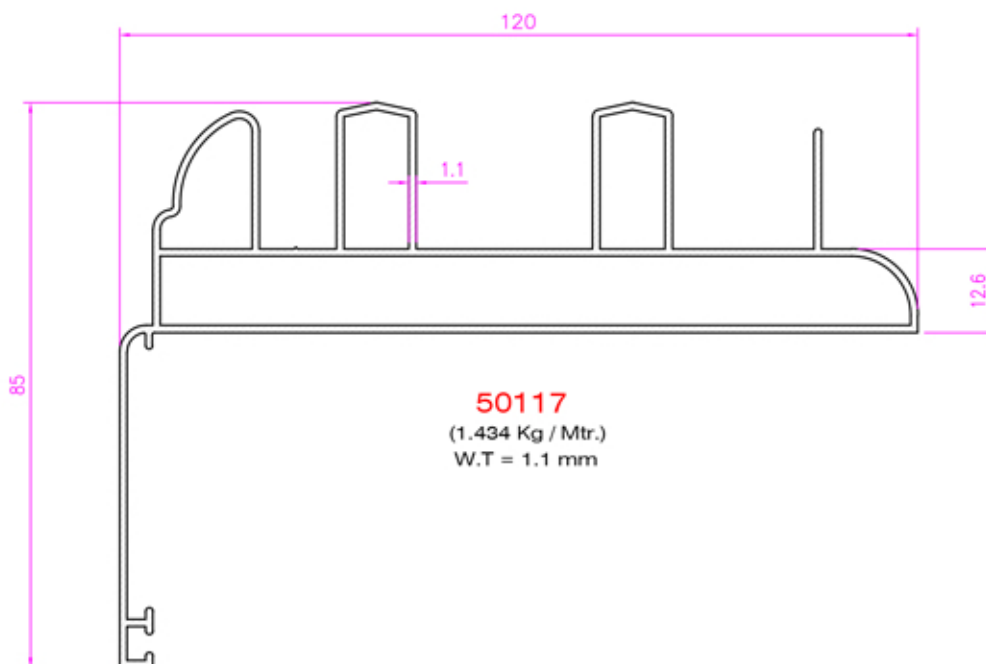
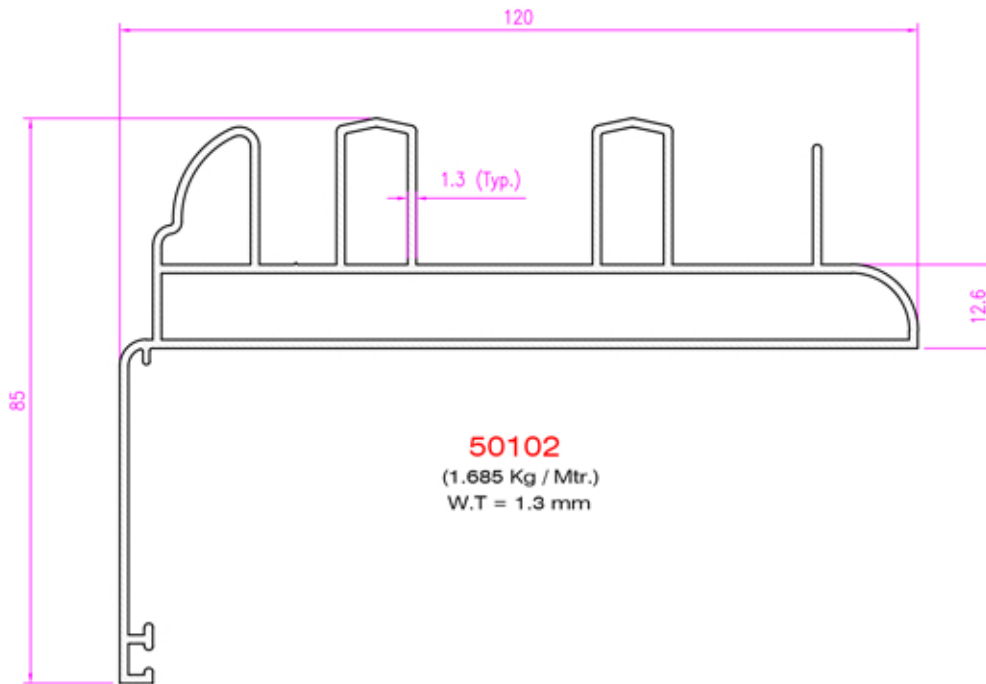


Saraya 100mm Sliding System Medium Weight

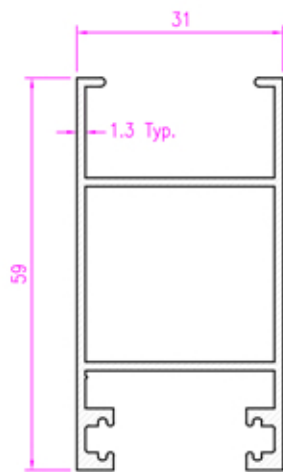




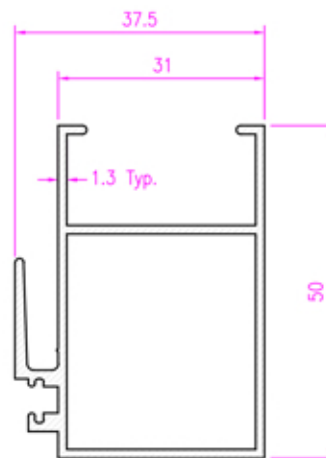
Saraya 120mm Sliding System Medium & Light Weight



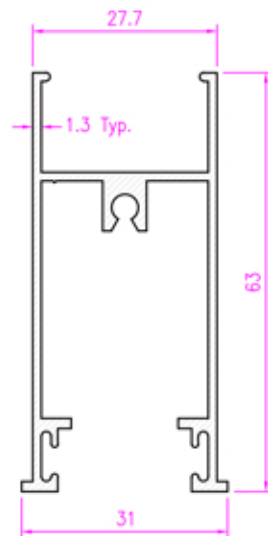
Saraya 100 & 120mm Sliding System Medium Weight



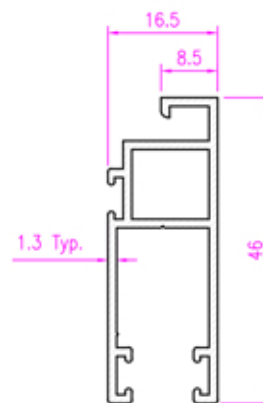
50036
 (0.738 Kg / Mtr.)
 W.T = 1.3 mm



50037
 (0.703 Kg / Mtr.)
 W.T = 1.3 mm



40008
 (0.722 Kg / Mtr.)
 W.T = 1.3 mm



50038
 (0.474 Kg / Mtr.)
 W.T = 1.3 mm



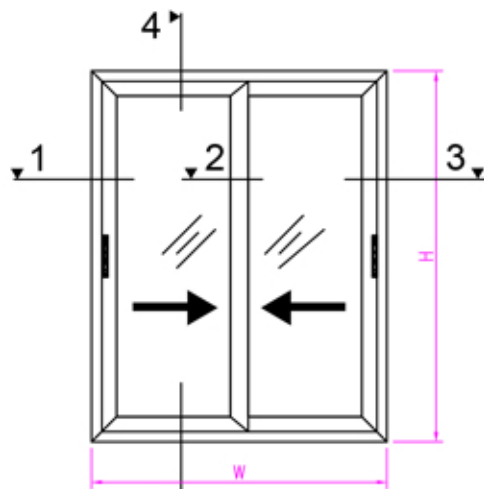
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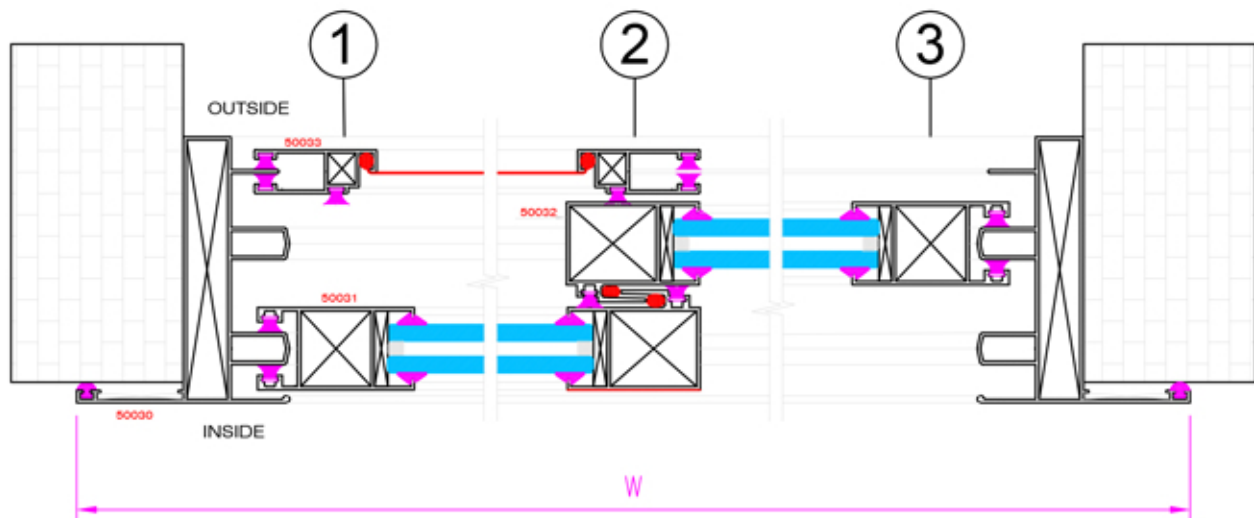
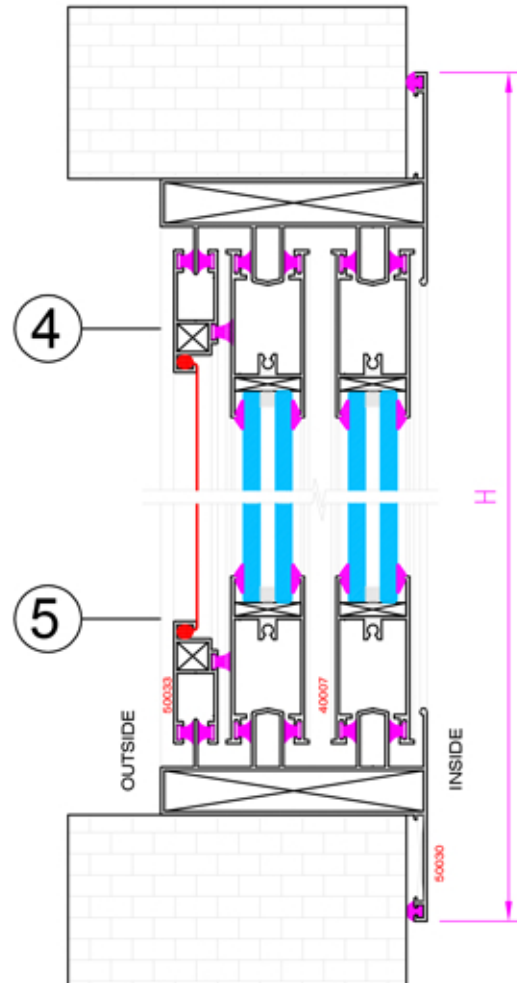
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**SARAYA SLIDING SERIES
1.5MM WALL THICKNESS**

Saraya 100mm Sliding System Medium Weight

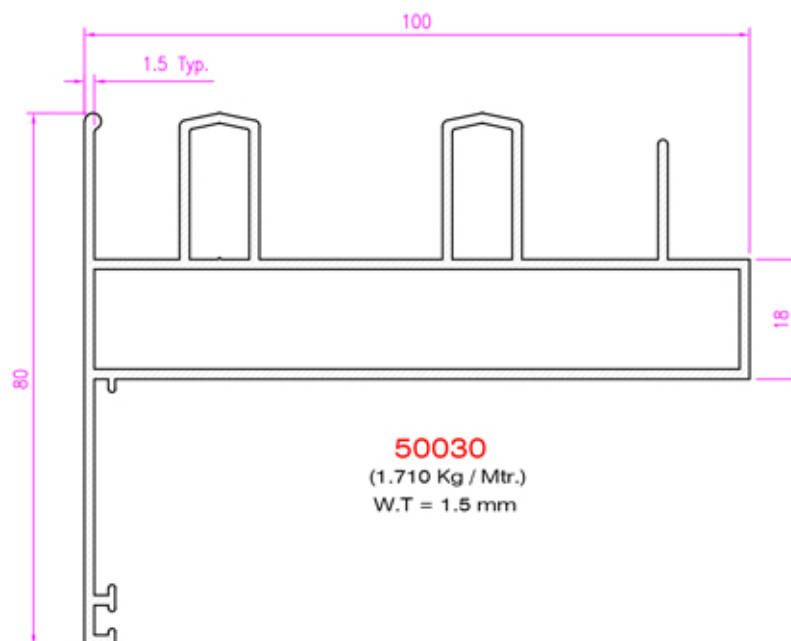
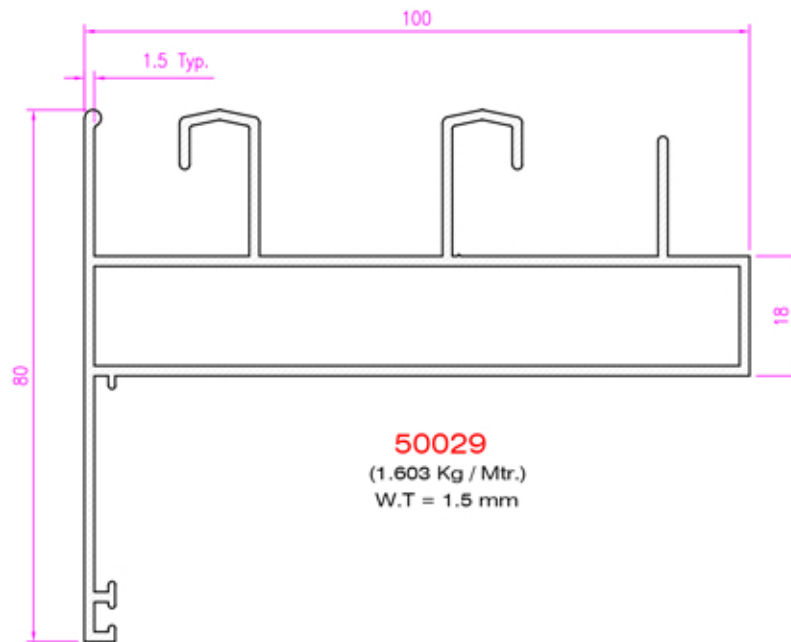


ELEVATION
 FROM INSIDE
 18mm DOUBLE GLAZING

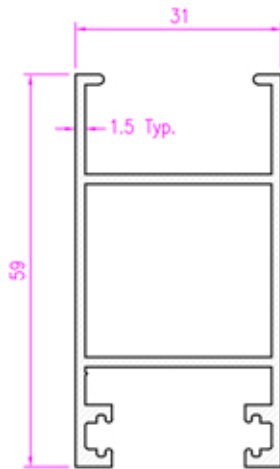




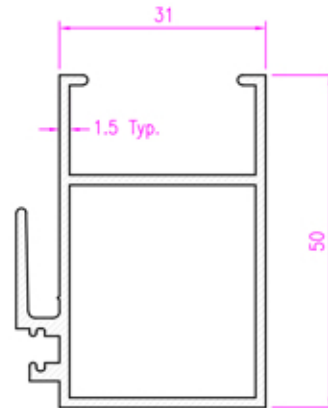
Saraya 100mm Sliding System Medium Weight



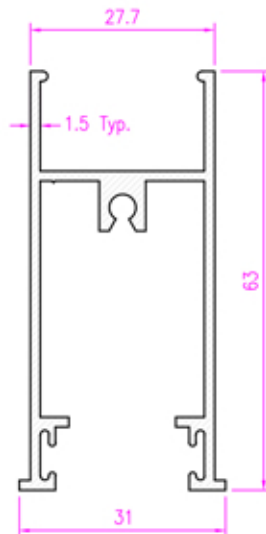
Saraya 100mm Sliding System Medium Weight



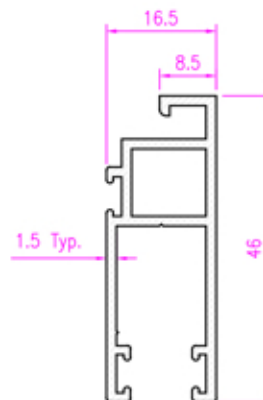
50031
 (0.825 Kg / Mtr.)
 W.T = 1.5 mm



50032
 (0.794 Kg / Mtr.)
 W.T = 1.5 mm

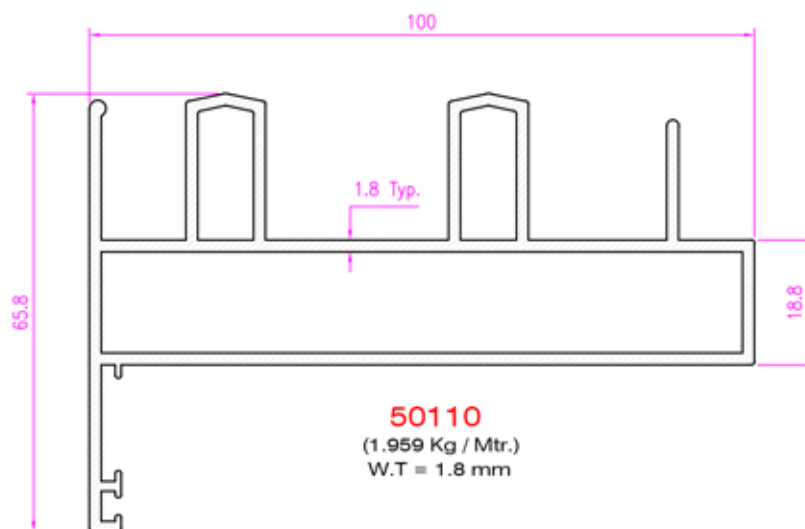


40007
 (0.805 Kg / Mtr.)
 W.T = 1.5 mm



50033
 (0.531 Kg / Mtr.)
 W.T = 1.5 mm

Saraya 100mm Sliding System Heavy Weight





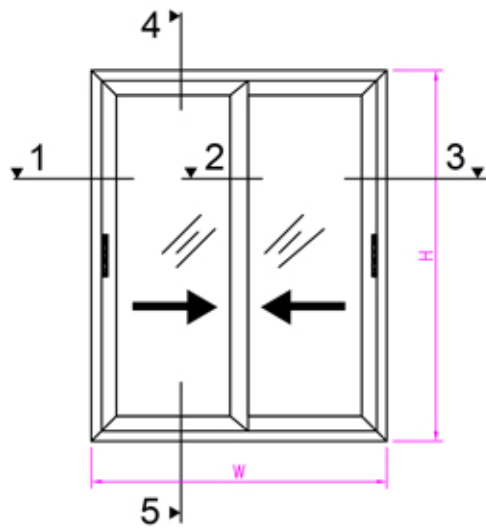
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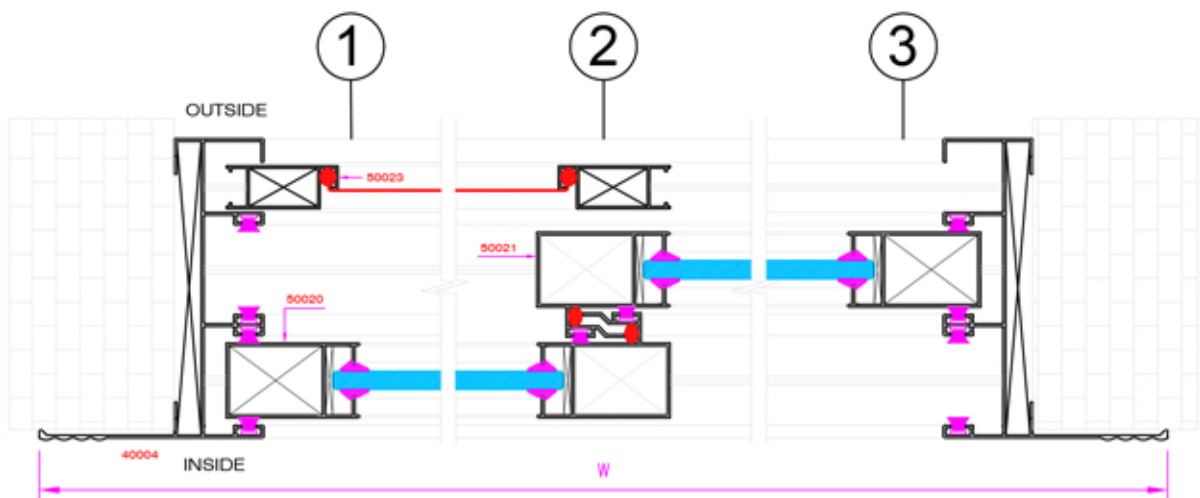
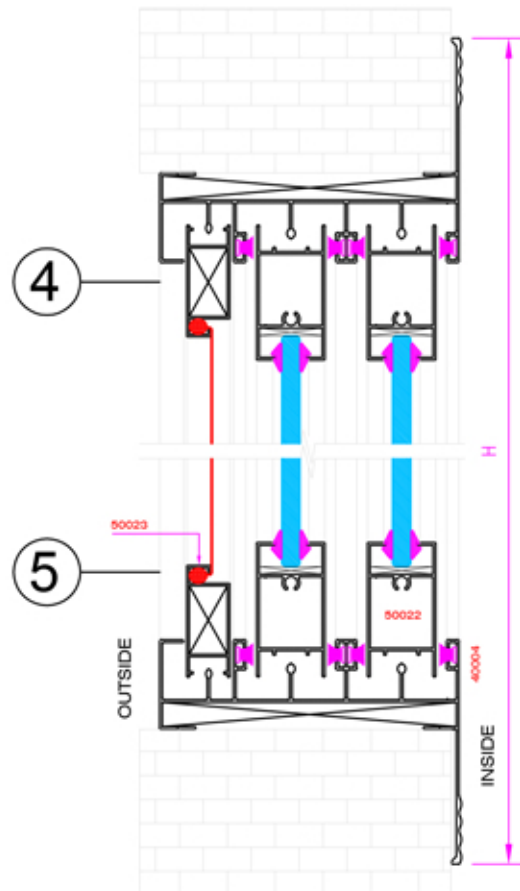
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**COMMERCIAL DECORATIVE 100MM
CLOSEDSLIDING SERIES(TIJARI)**

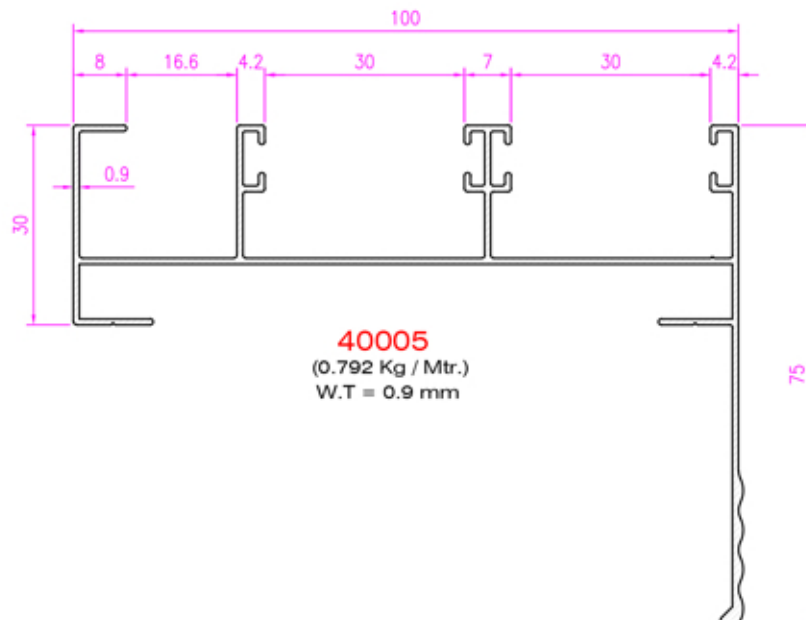
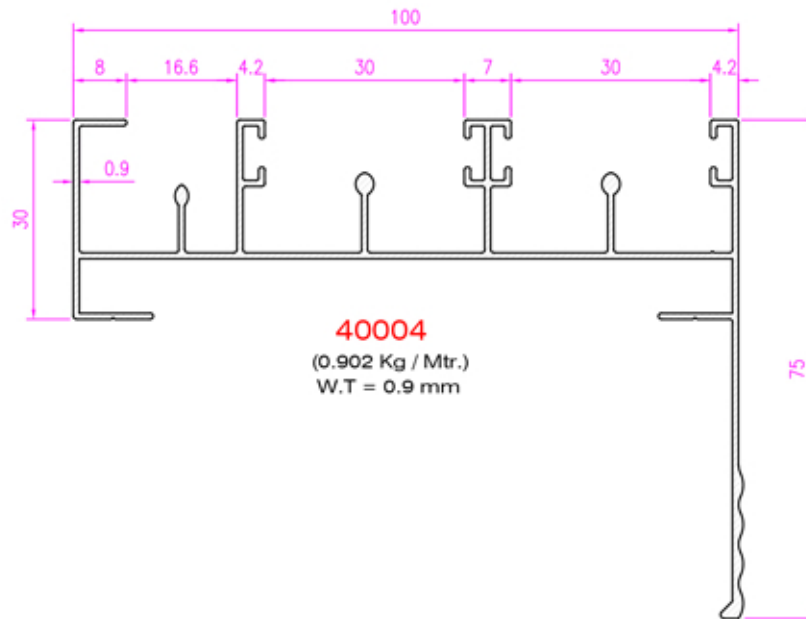
Commercial Decorative 100mm Sliding System Assembly Drawing



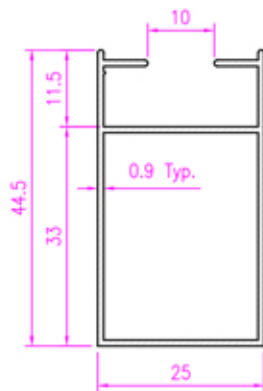
ELEVATION
 FROM INSIDE
 6mm SINGLE GLAZING



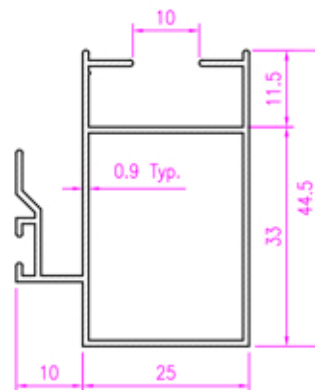
Commercial Decorative 100mm Sliding System



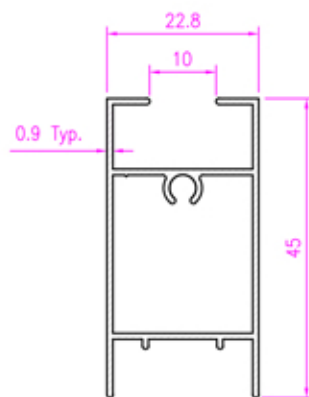
Commercial Decorative 100mm Sliding System



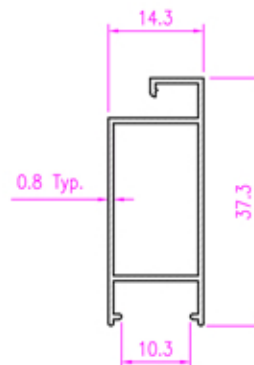
50020
 (0.360 Kg / Mtr.)
 W.T = 0.9 mm



50021
 (0.450 Kg / Mtr.)
 W.T = 0.9 mm



50022
 (0.378 Kg / Mtr.)
 W.T = 0.9 mm



50023
 (0.227 Kg / Mtr.)
 W.T = 0.8 mm



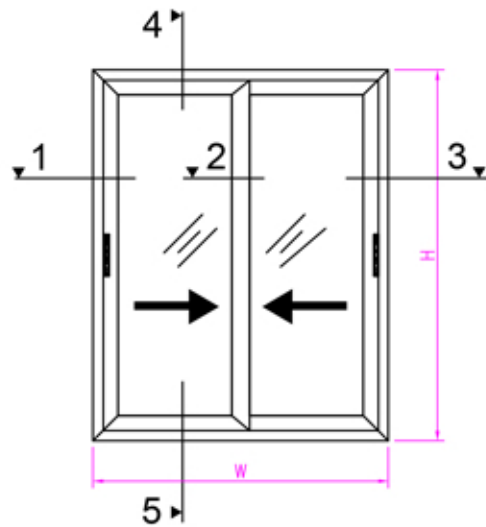
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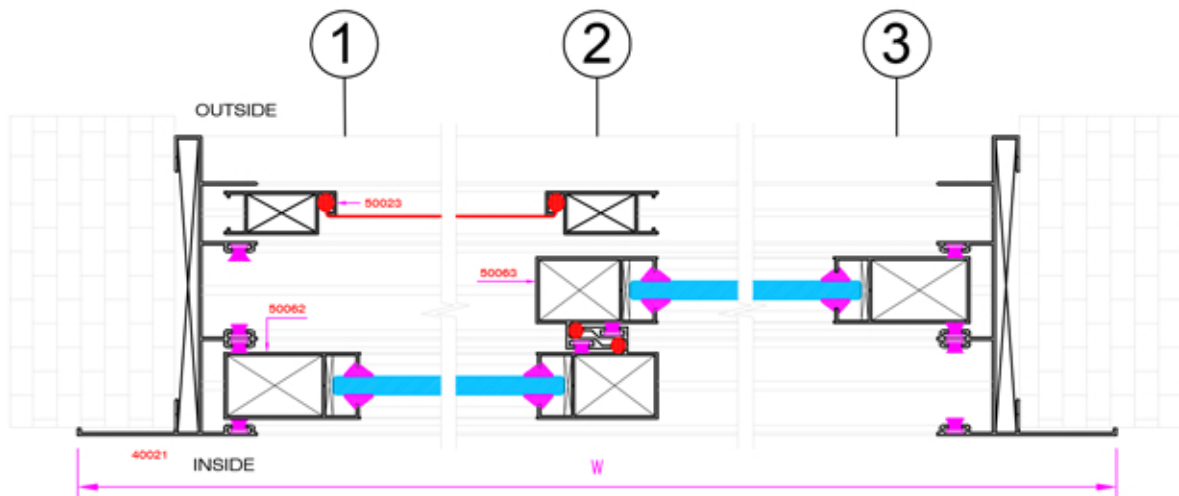
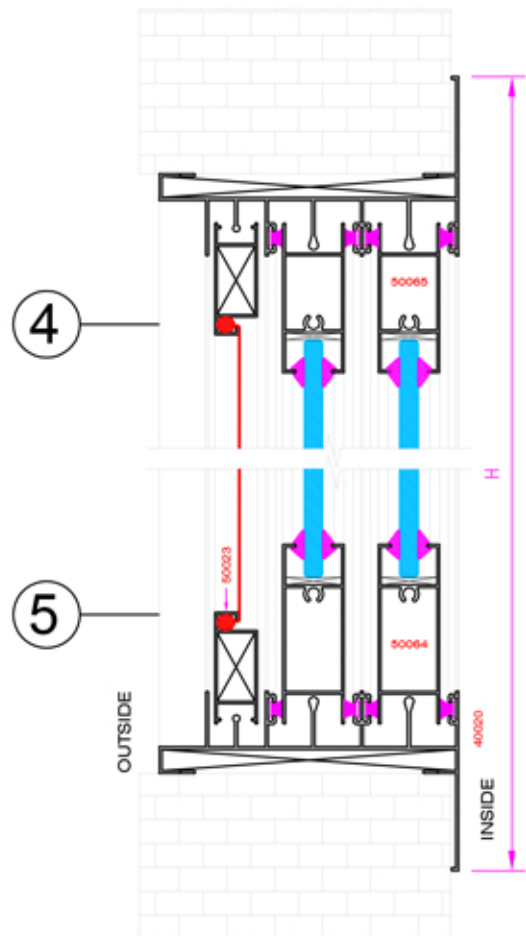
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**COMMERCIAL NON DECORATIVE 100MM
OPEN SLIDING SERIES(TIJARI)**

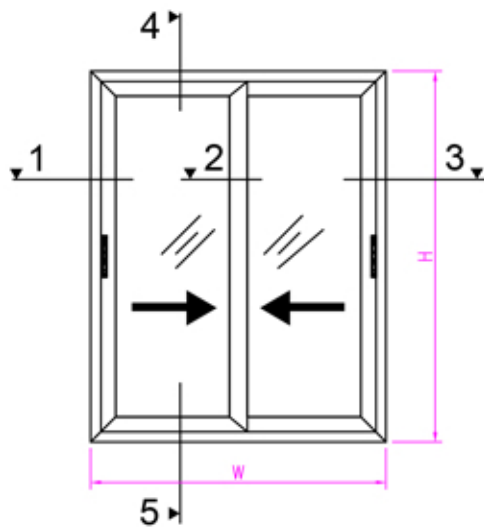
Commercial Non Decorative 100mm Sliding System Assembly Drawing



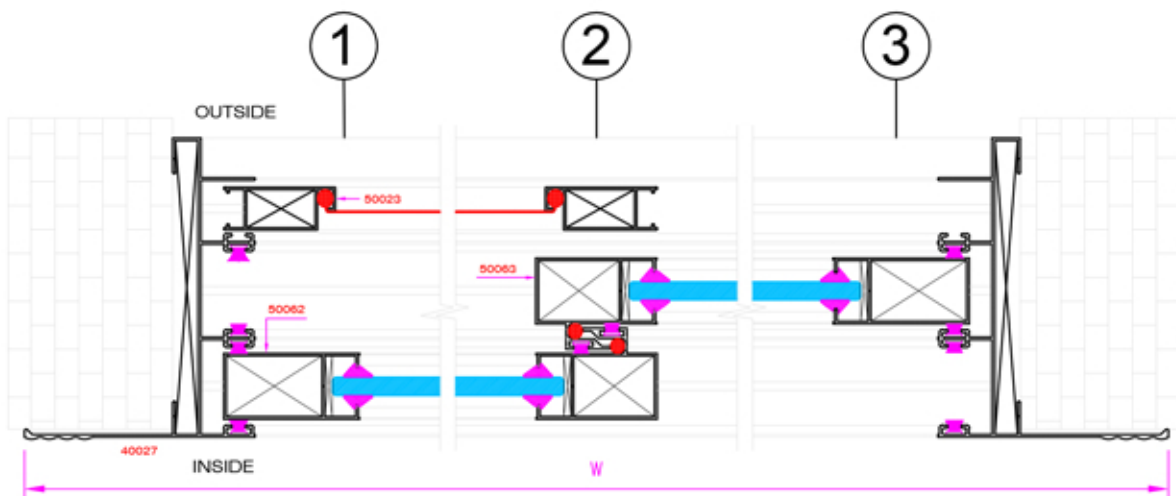
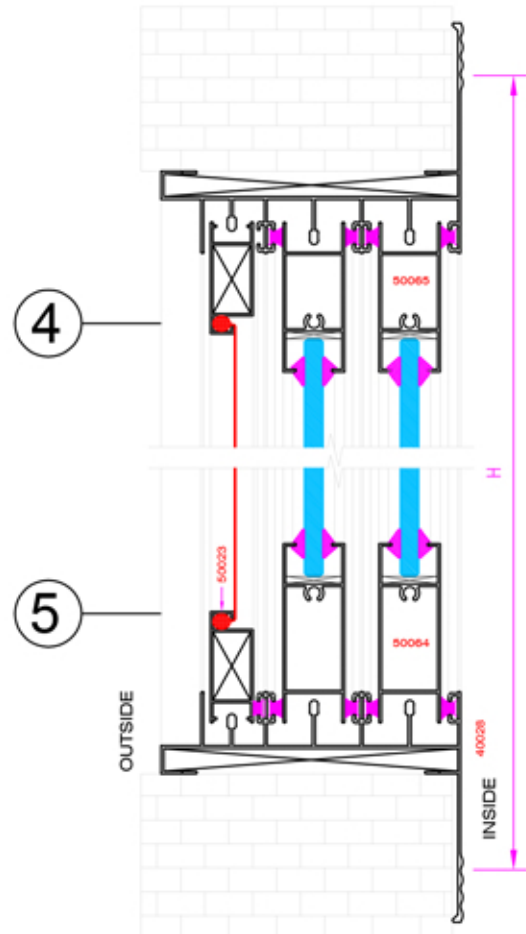
ELEVATION
 FROM INSIDE
 6mm SINGLE GLAZING



Commercial Decorative 100mm Sliding System Assembly Drawing

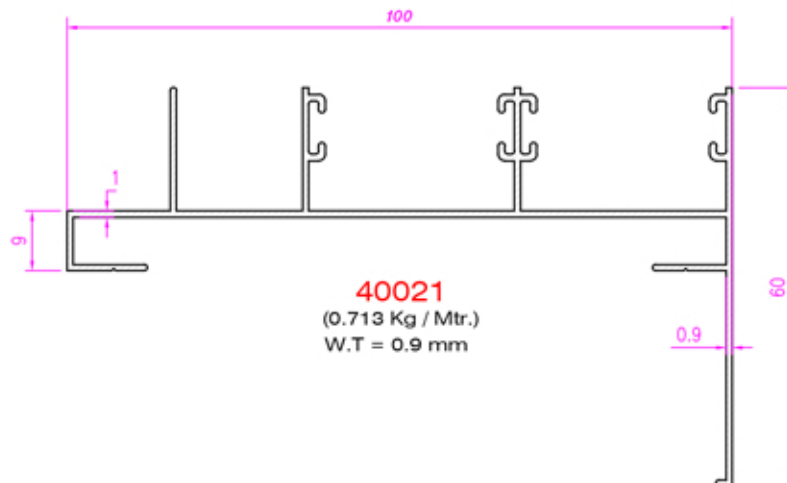
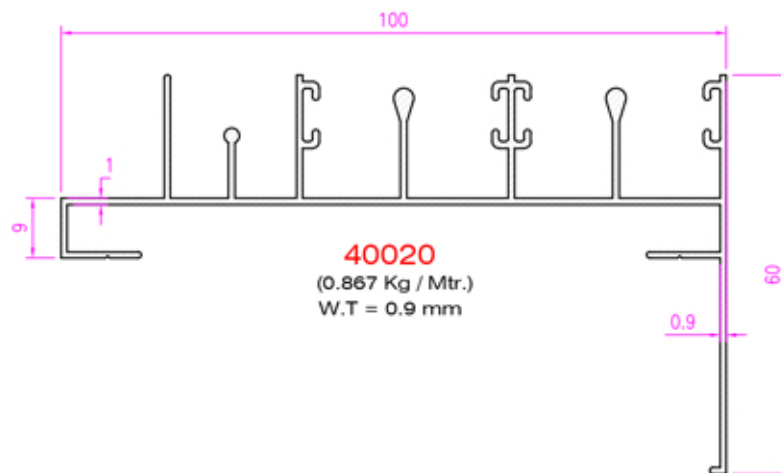


ELEVATION
 FROM INSIDE
 6mm SINGLE GLAZING



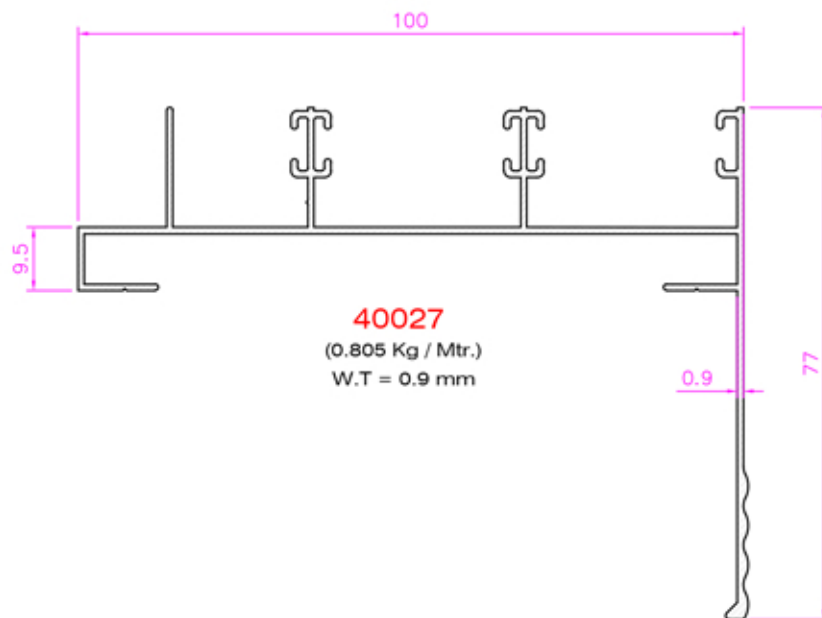
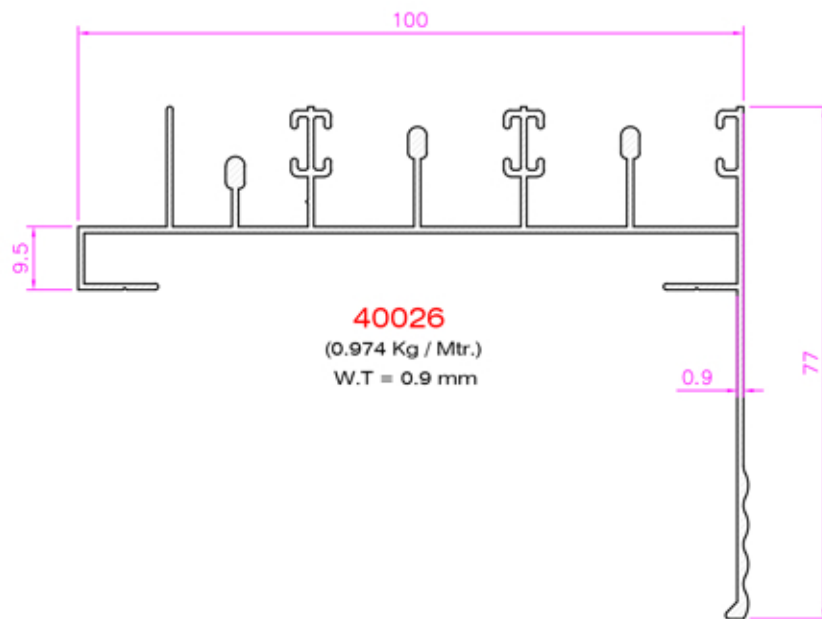


Commercial Non Decorative 100mm Sliding System



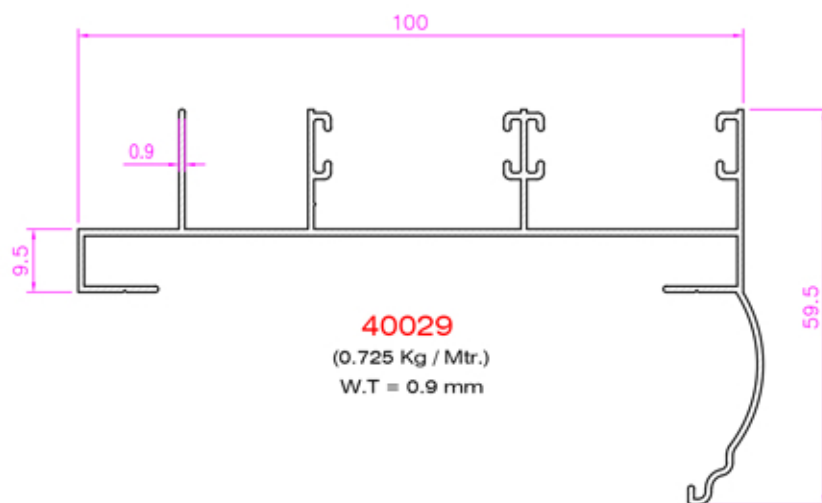
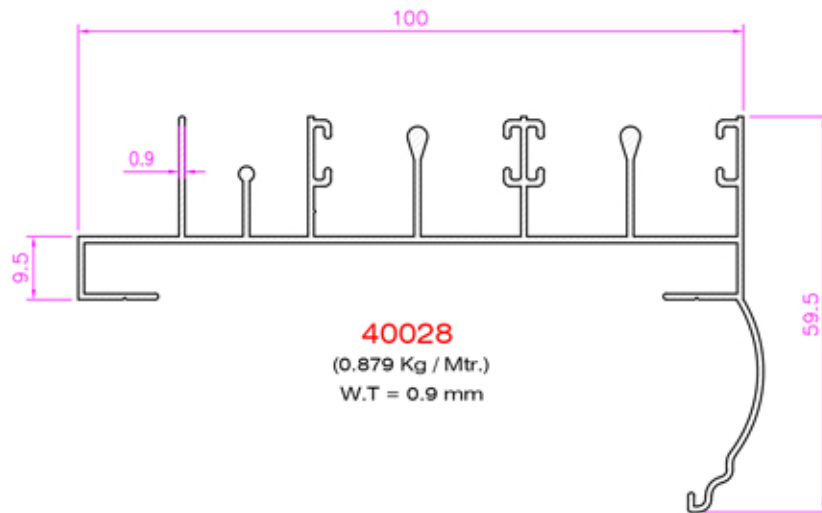


Commercial Decorative 100mm Sliding System

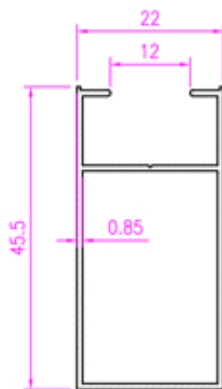




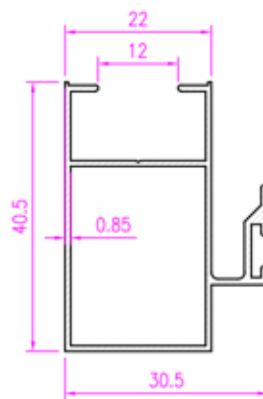
Commercial Decorative 100mm Sliding System



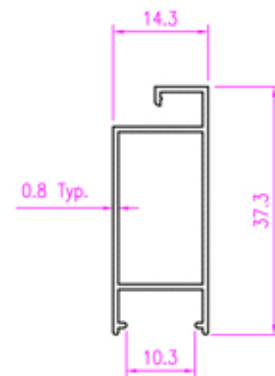
Commercial Non Decorative 100mm Sliding System



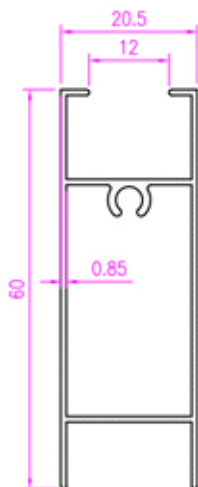
50062
 (0.321 Kg / Mtr.)
 W.T = 0.85 mm



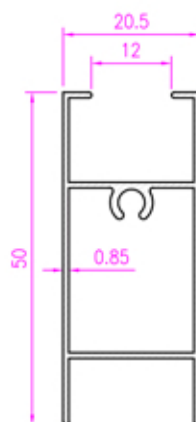
50063
 (0.379 Kg / Mtr.)
 W.T = 0.85 mm



50023
 (0.227 Kg / Mtr.)
 W.T = 0.8 mm



50064
 (0.413 Kg / Mtr.)
 W.T = 0.85 mm



50065
 (0.367 Kg / Mtr.)
 W.T = 0.85 mm



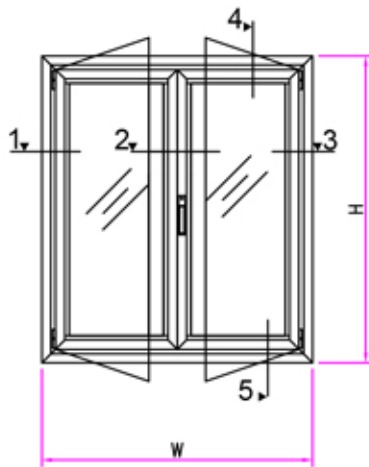
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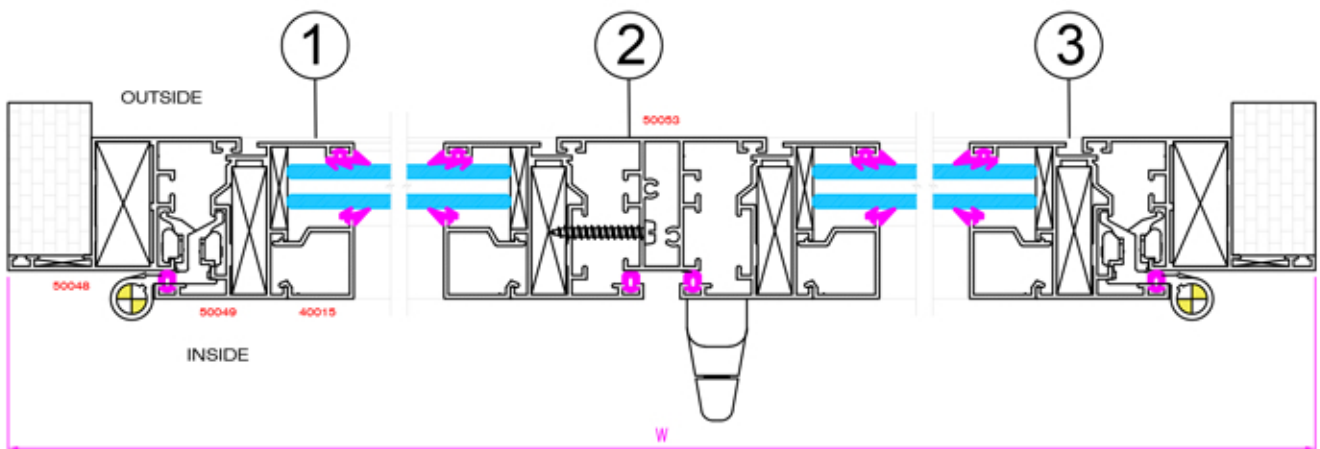
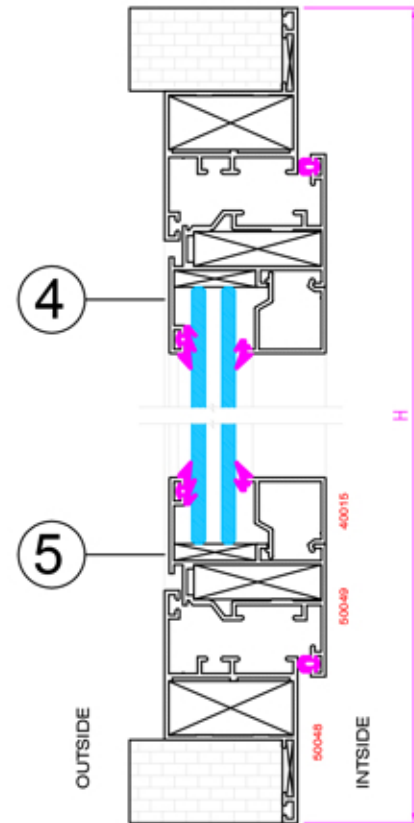
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SARAYA CASEMENT SERIES

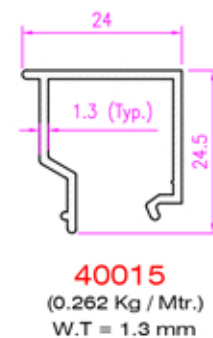
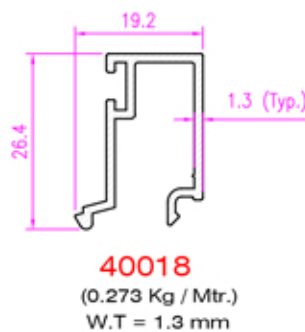
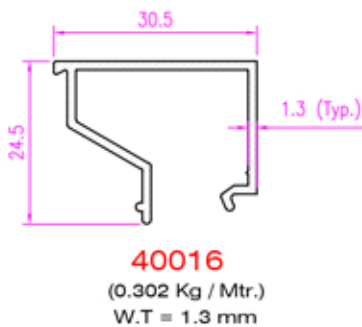
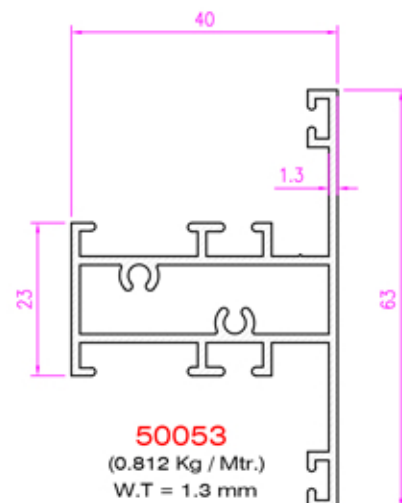
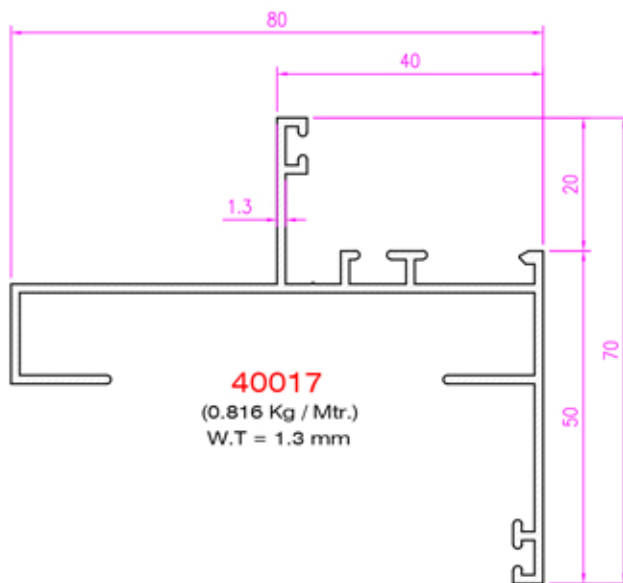
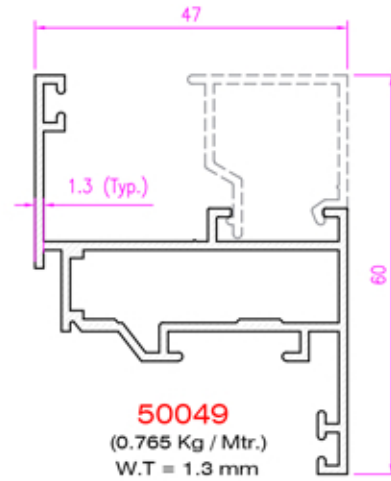
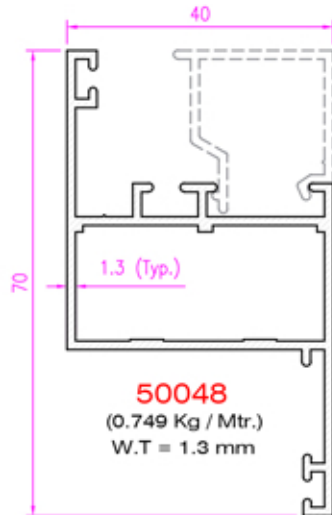
Hinged System Assembly Drawing



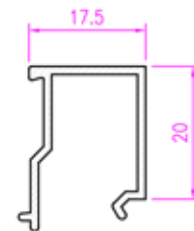
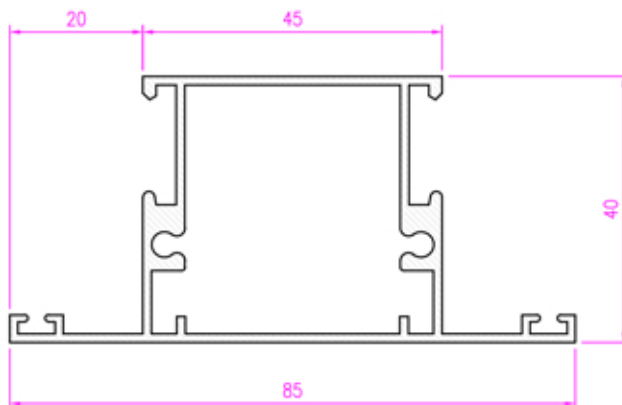
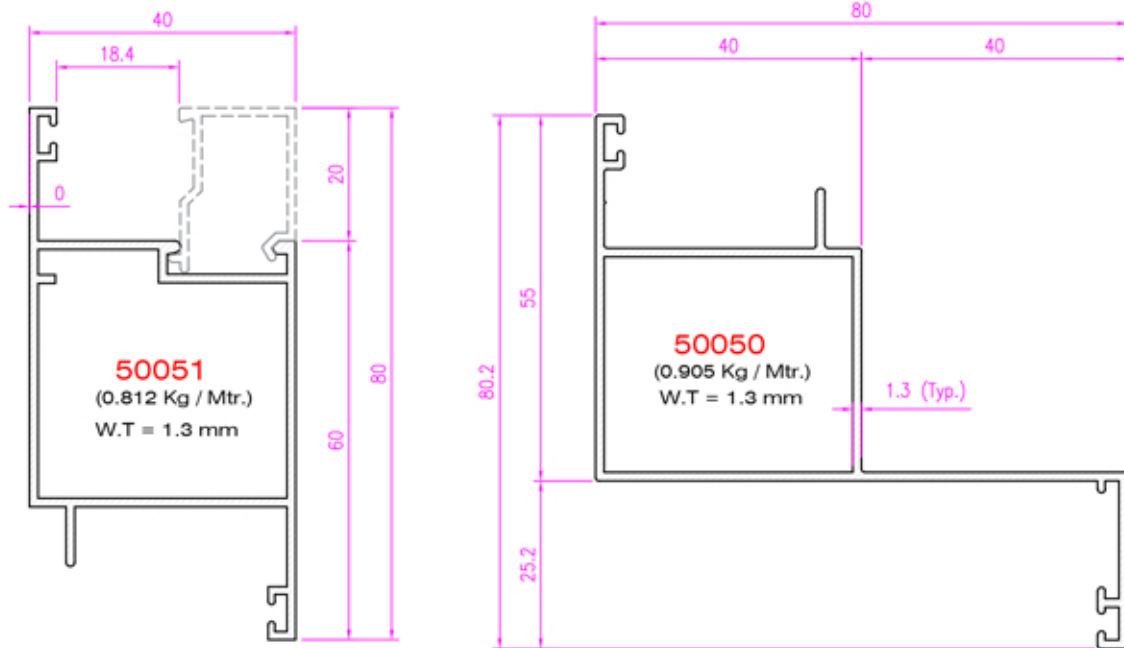
ELEVATION
 (OPENING INSIDE)
 18mm DOUBLE GLAZING



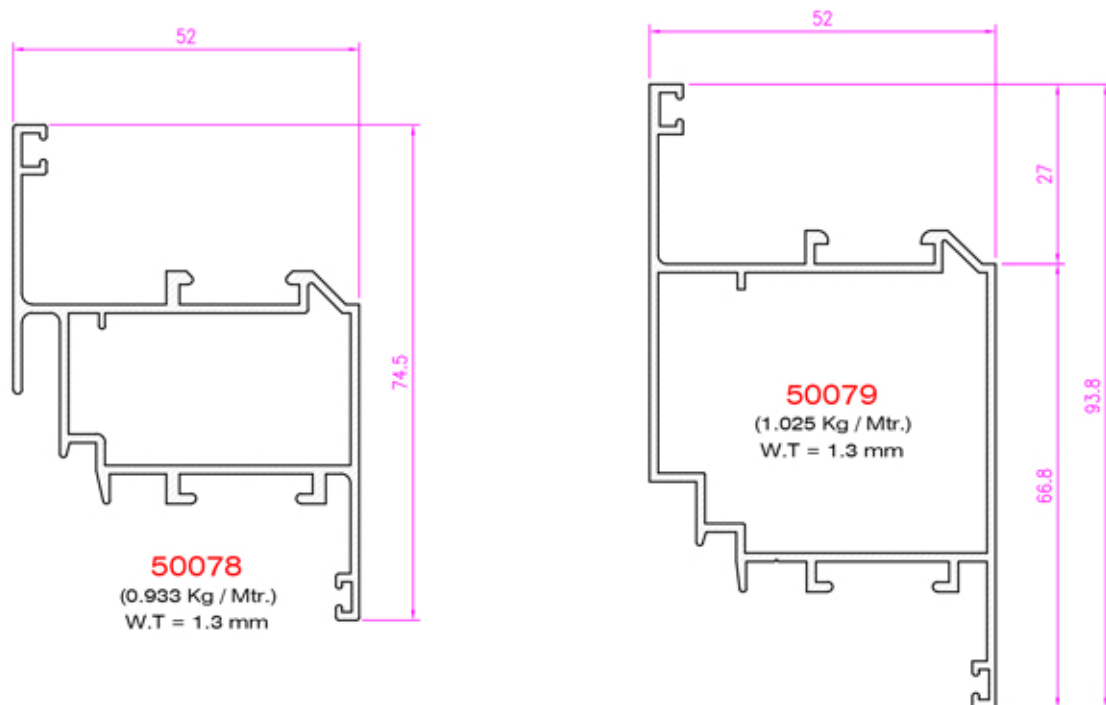
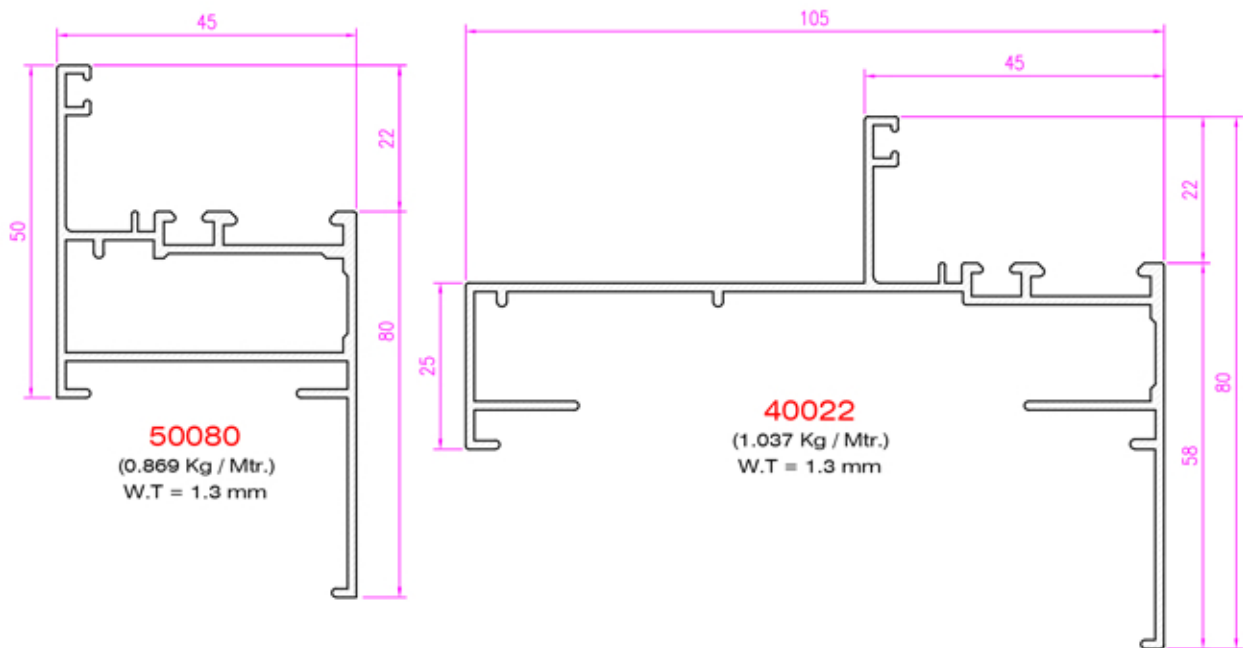
Saraya Hinged Window 1.3mm Wall Thickness



Saraya Hinged Door 1.3mm Wall Thickness



Saraya Hinged Door 1.3mm Wall Thickness





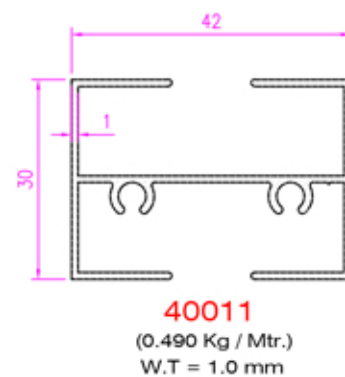
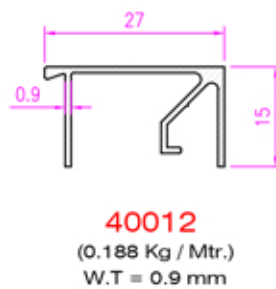
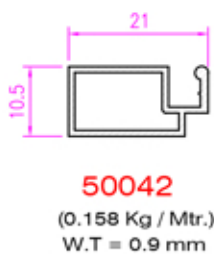
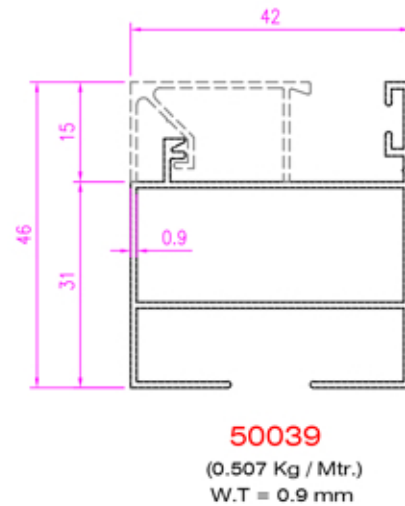
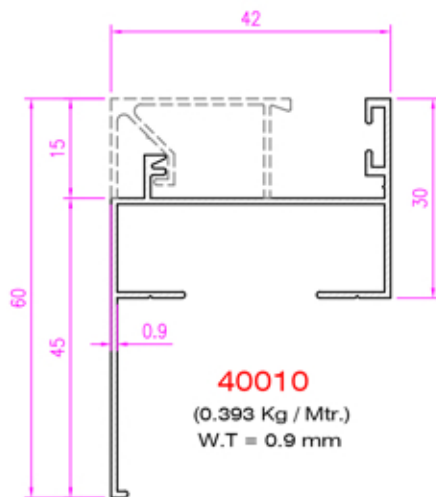
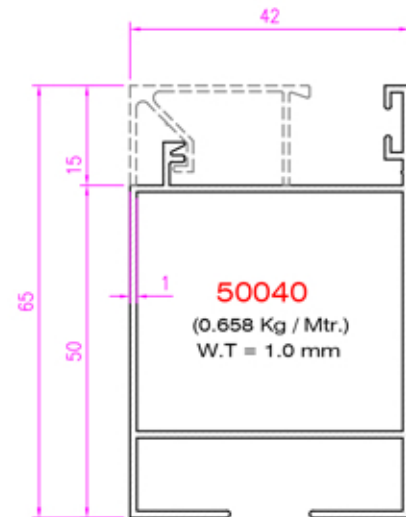
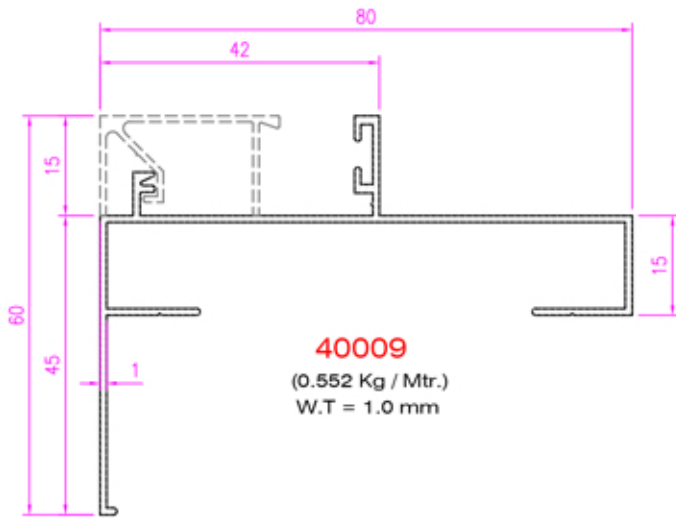
شركة

اشوار

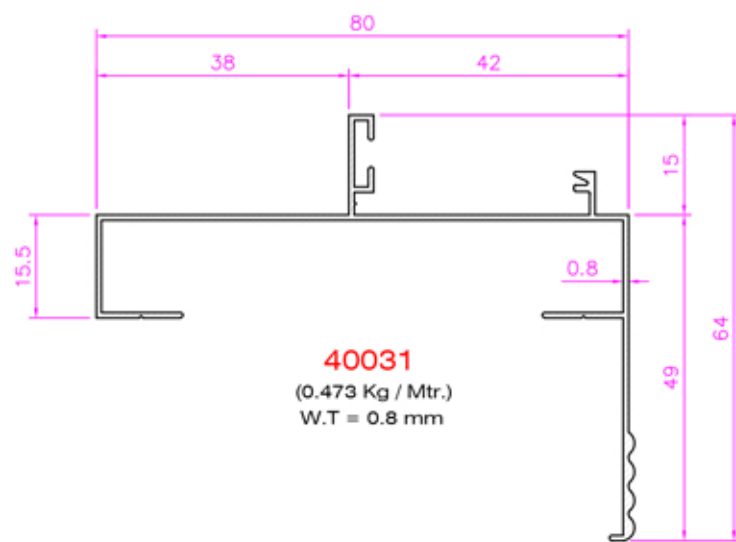
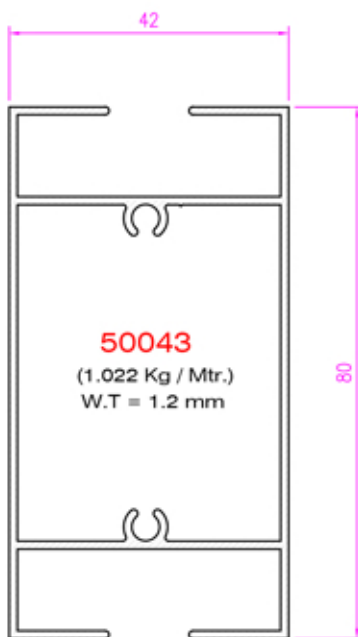
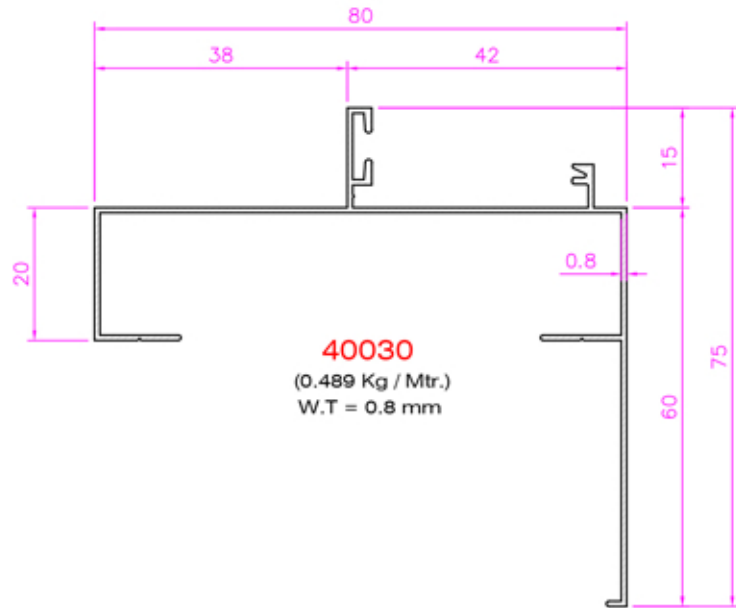
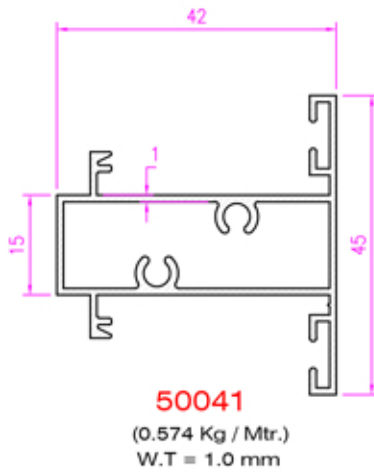
LTD. المحدودة

**COMMERCIAL
CASEMENT 42MM SERIES(TIJARI)
0.9MM & 1.0MM THICKNESS**

Commercial Hinged Windows & Doors



Commercial Hinged Windows & Doors





شركة

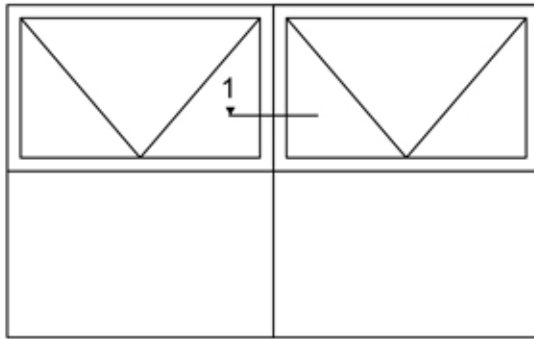
اشوار

LTD. المحدودة

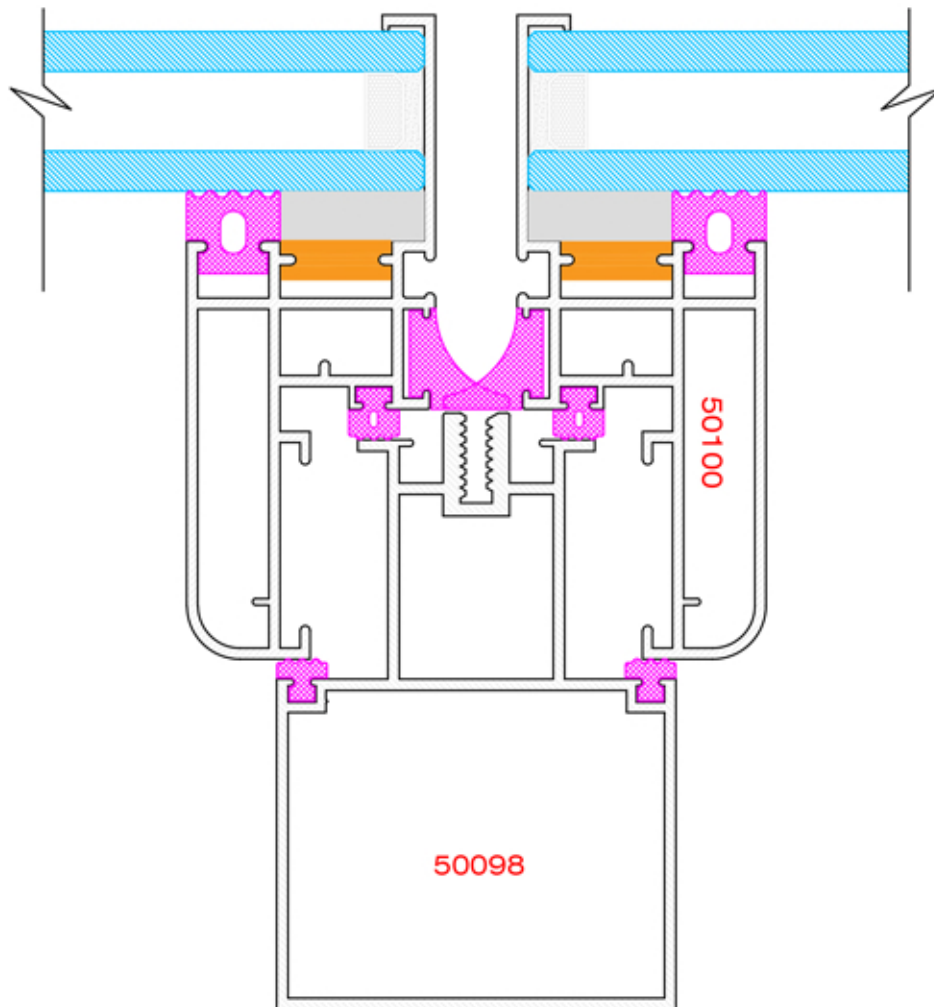
CURTAIN WALL



Curtain Wall Assembly Drawing

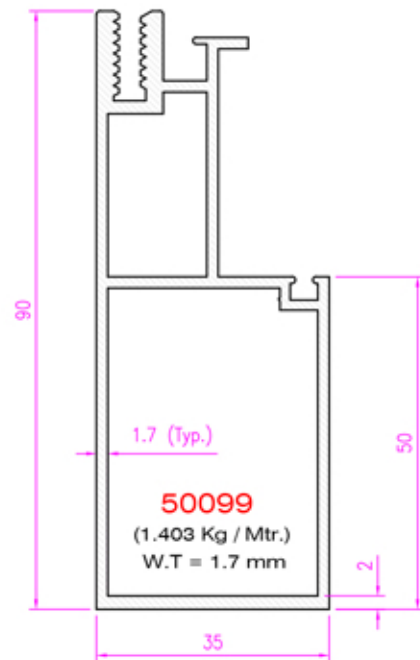
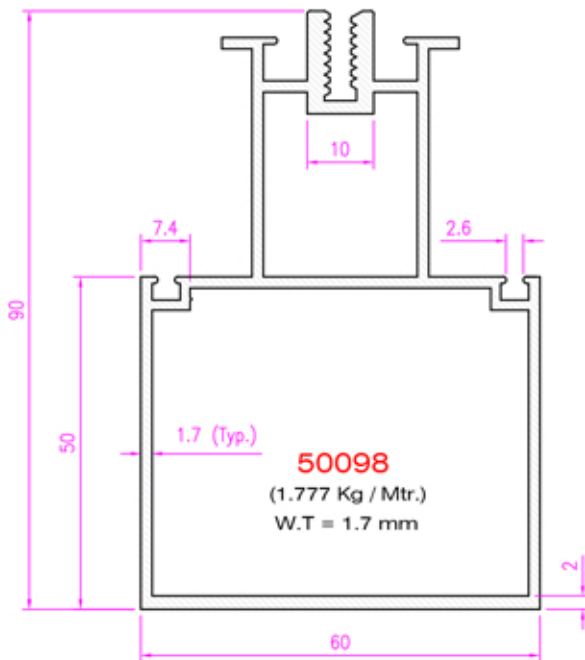
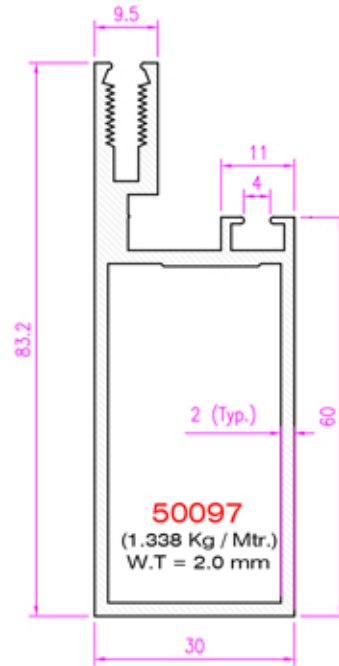
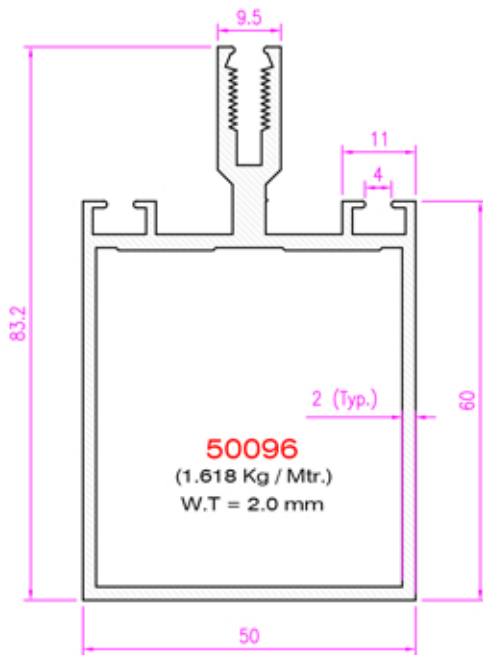


ELEVATION
CURTAIN WALL
OPENING OUTWARD



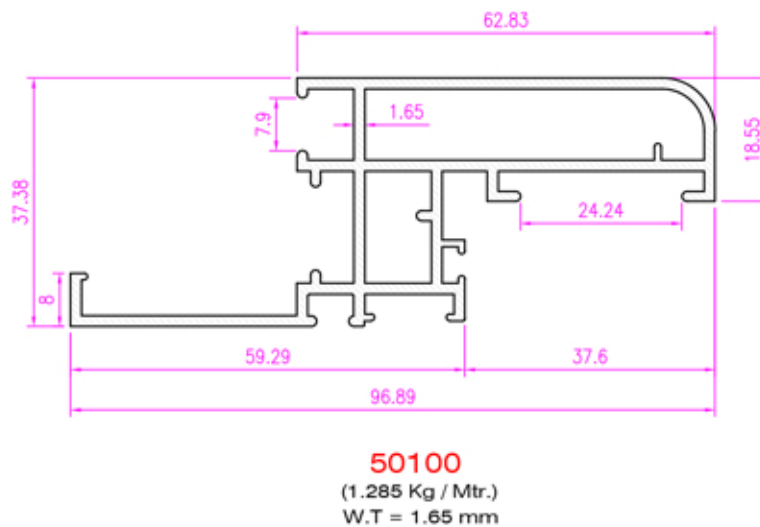
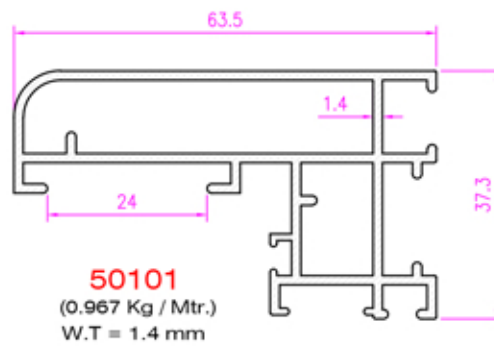
1

Curtain Wall

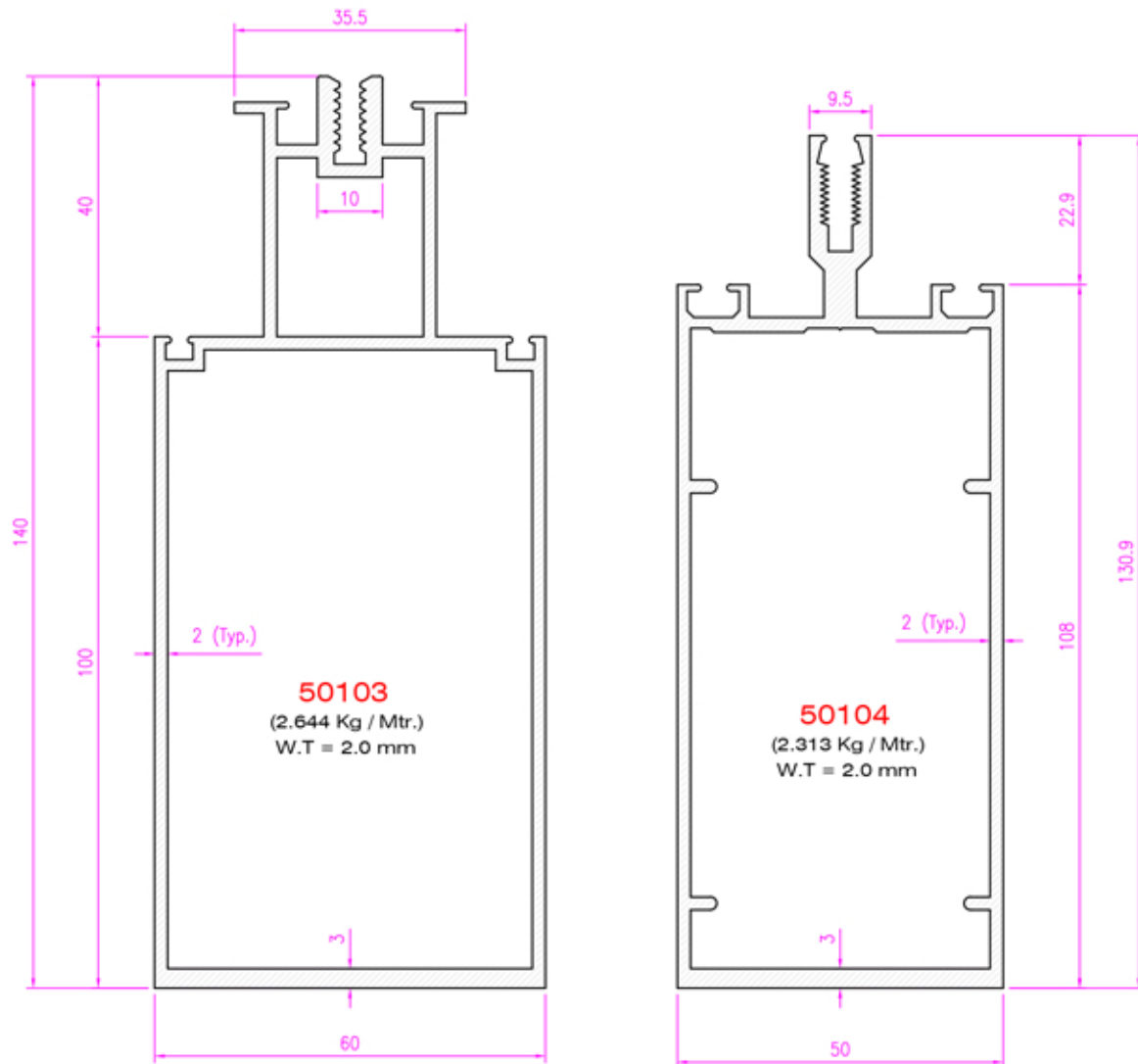




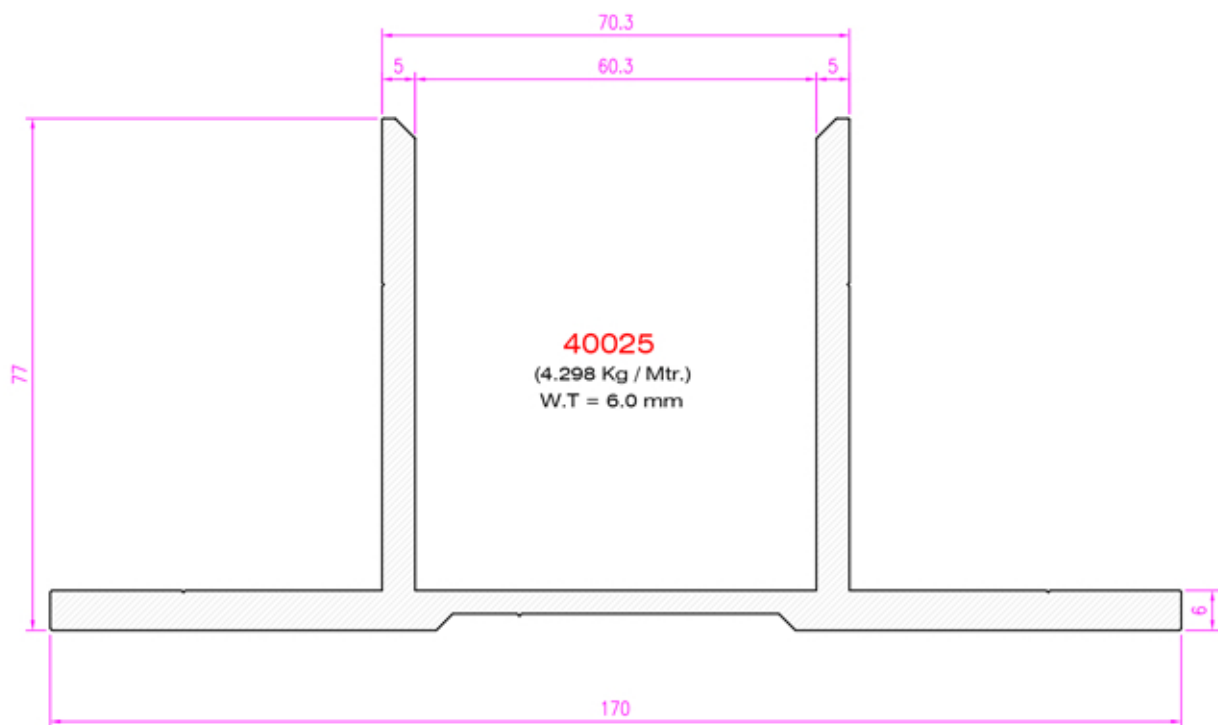
Curtain Wall



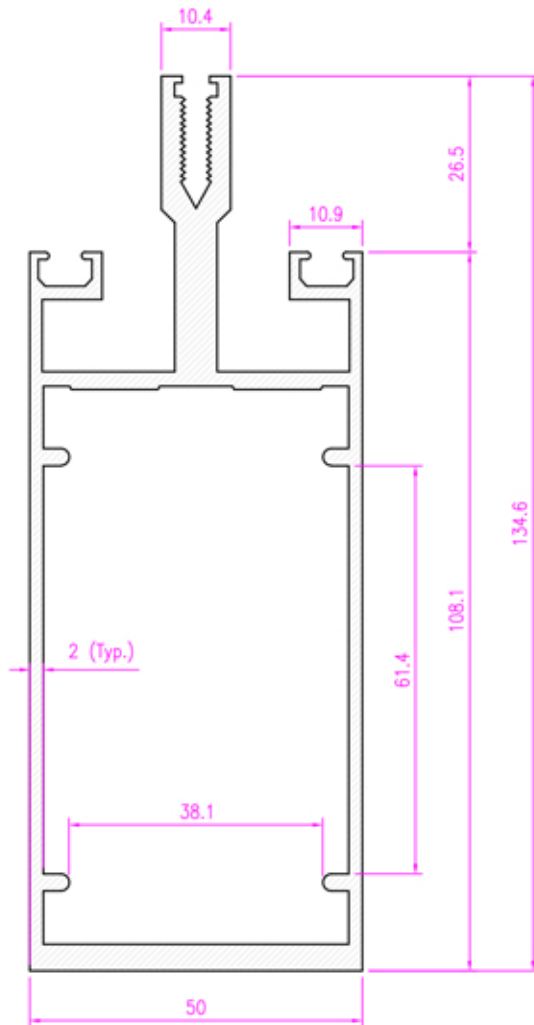
Curtain Wall



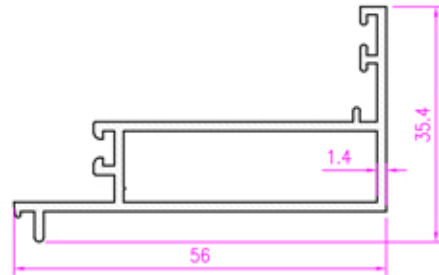
Curtain Wall



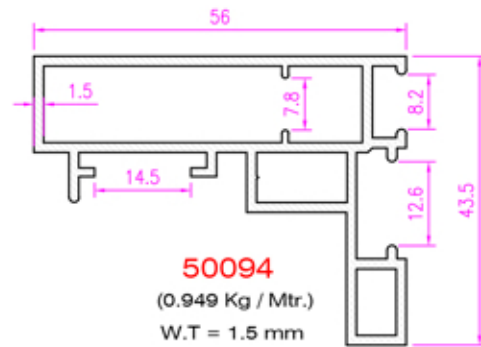
Curtain Wall



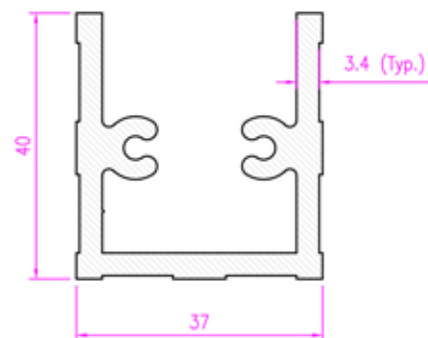
50092
 (3.018 Kg / Mtr.)
 W.T = 2.0 mm



50095
 (0.595 Kg / Mtr.)
 W.T = 1.4 mm



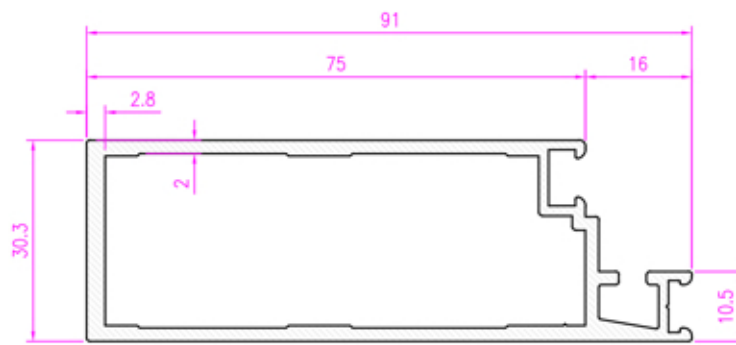
50094
 (0.949 Kg / Mtr.)
 W.T = 1.5 mm



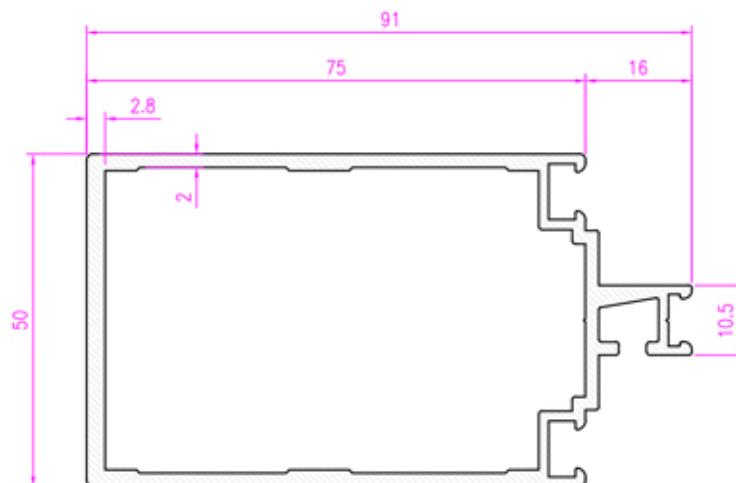
40024
 (1.344 Kg / Mtr.)
 W.T = 3.4 mm



Curtain Wall



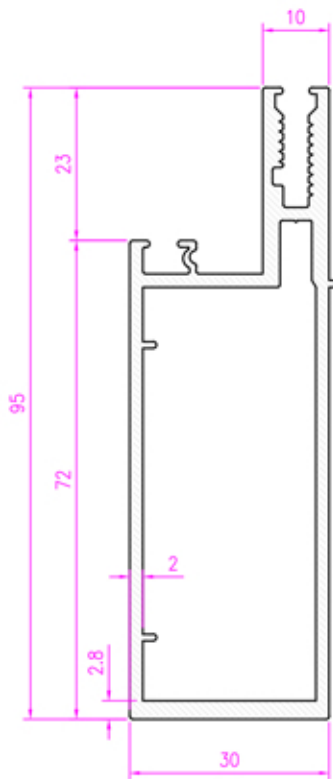
50084
(1.388 Kg / Mtr.)
W.T = 2.0 mm



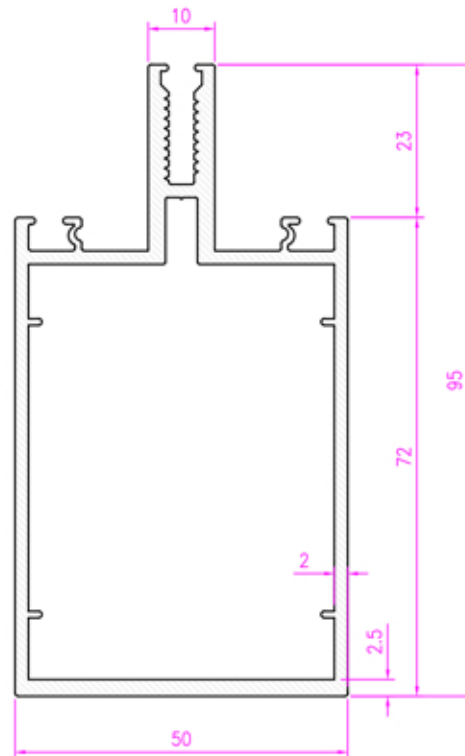
50087
(1.657 Kg / Mtr.)
W.T = 2.0 mm



Curtain Wall

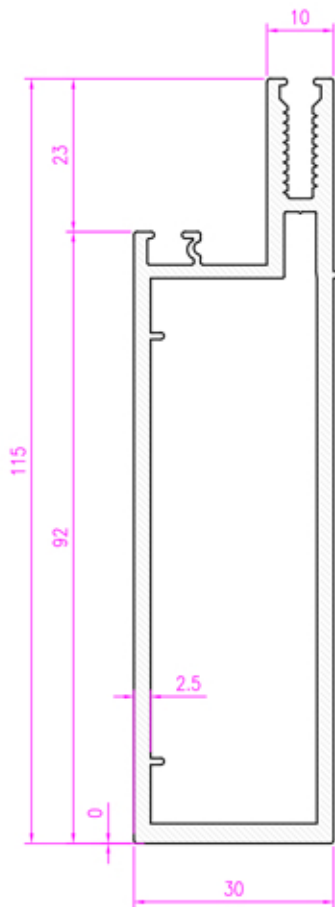


50120
(1.526 Kg / Mtr.)
W.T = 2.0 mm

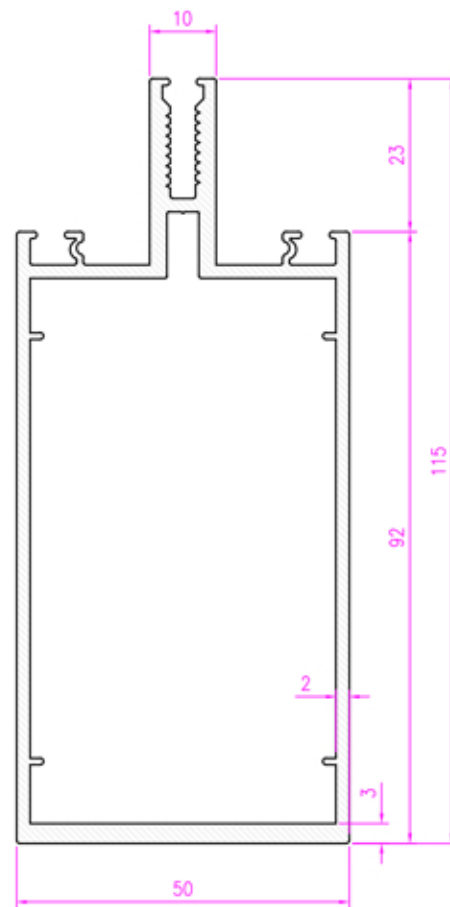


50121
(1.814 Kg / Mtr.)
W.T = 2.0 mm

Curtain Wall



50122
(1.987 Kg / Mtr.)
W.T = 2.5 mm



50123
(2.093 Kg / Mtr.)
W.T = 2.0 mm

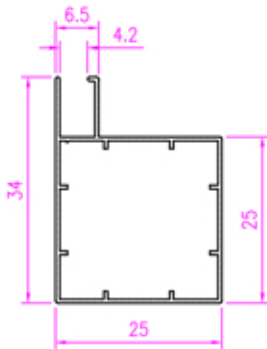


شركة
اشوار
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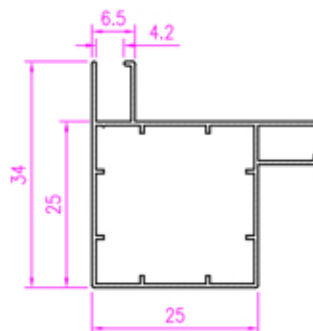


KITCHEN PROFILES

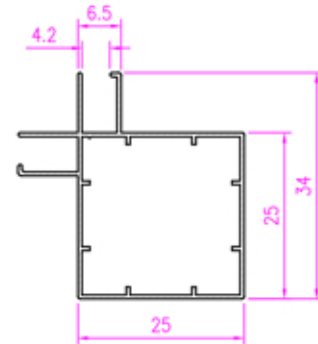
KITCHEN CABINETS



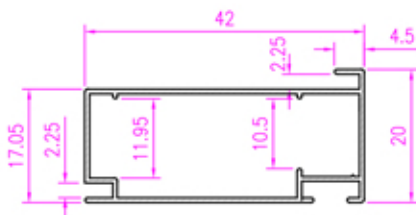
50015
 (0.204 Kg / Mtr.)
 W.T = 0.6 mm



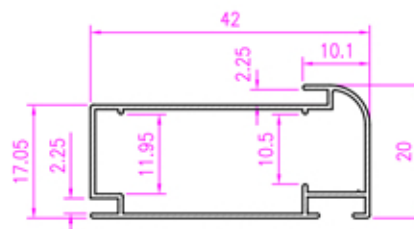
50016
 (0.235 Kg / Mtr.)
 W.T = 0.6 mm



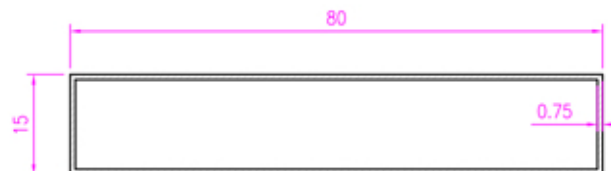
50017
 (0.235 Kg / Mtr.)
 W.T = 0.6 mm



50018
 (0.255 Kg / Mtr.)
 W.T = 0.7 mm

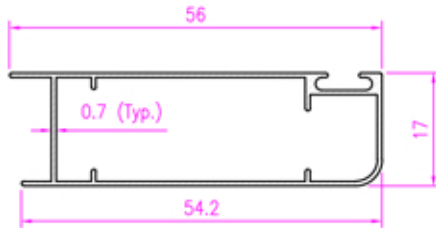


50019
 (0.257 Kg / Mtr.)
 W.T = 0.7 mm

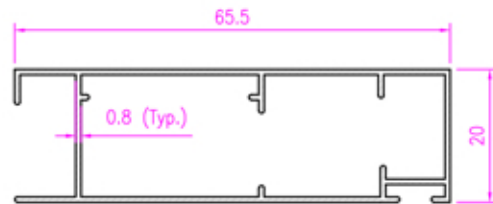


30303
 (0.379 Kg / Mtr.)
 W.T = 0.75 mm

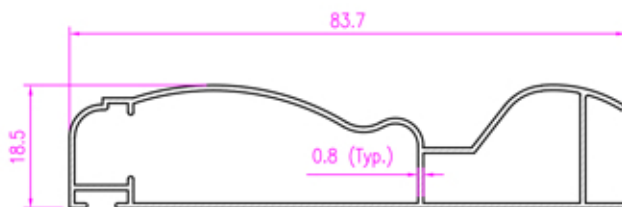
KITCHEN CABINETS



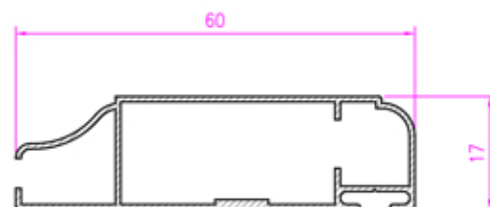
50054
 (0.304 Kg / Mtr.)
 W.T = 0.7 mm



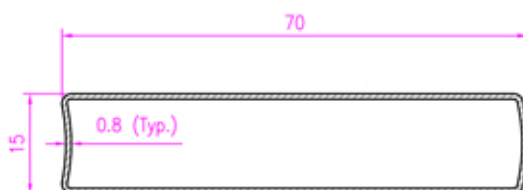
50059
 (0.420 Kg / Mtr.)
 W.T = 0.8 mm



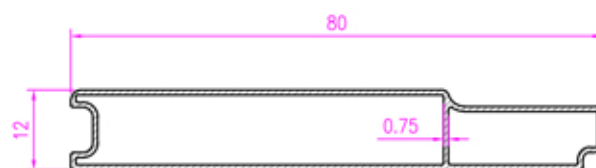
50060
 (0.480 Kg / Mtr.)
 W.T = 0.8 mm



50058
 (0.379 Kg / Mtr.)
 W.T = 0.8 mm

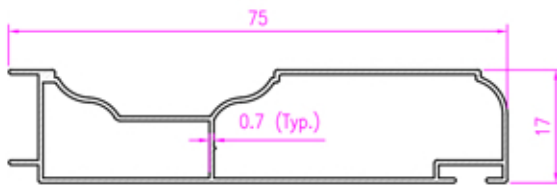


30319
 (0.353 Kg / Mtr.)
 W.T = 0.8 mm

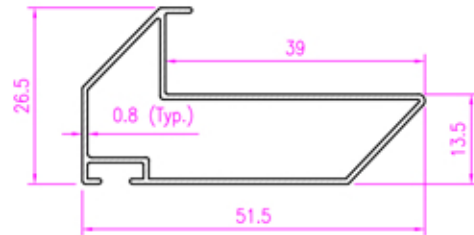


50061
 (0.389 Kg / Mtr.)
 W.T = 0.75 mm

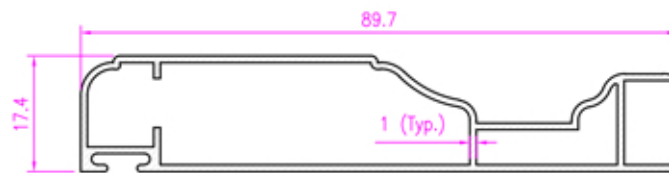
KITCHEN CABINETS



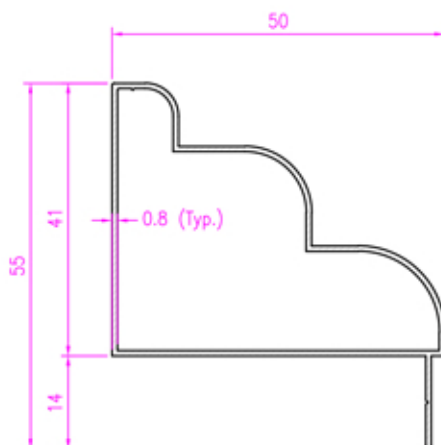
50093
 (0.384 Kg / Mtr.)
 W.T = 0.7 mm



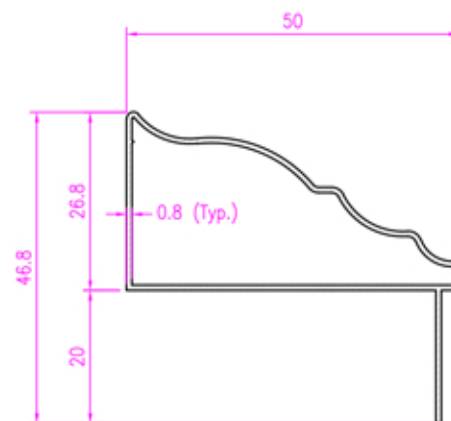
50055
 (0.324 Kg / Mtr.)
 W.T = 0.8 mm



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

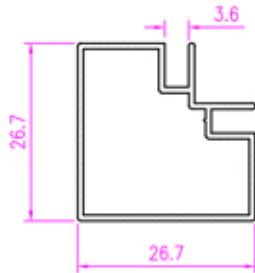


50057
 (0.391 Kg / Mtr.)
 W.T = 0.8 mm

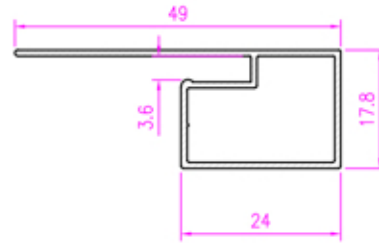


50081
 (0.336 Kg / Mtr.)
 W.T = 0.8 mm

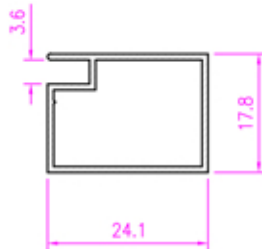
KITCHEN CABINETS



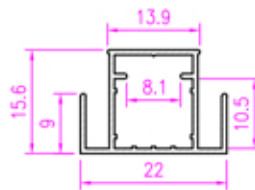
50108
 (0.274 Kg / Mtr.)
 W.T = 0.9 mm



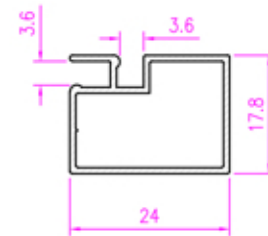
50106
 (0.281 Kg / Mtr.)
 W.T = 0.9 mm



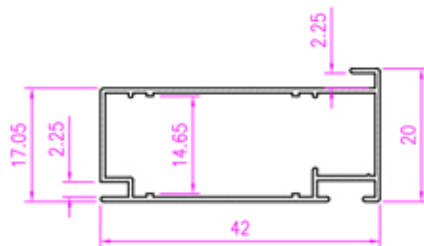
50107
 (0.210 Kg / Mtr.)
 W.T = 0.9 mm



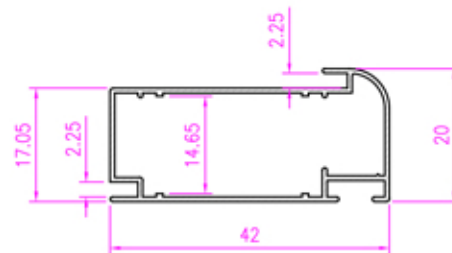
50109
 (0.173 Kg / Mtr.)
 W.T = 0.75 mm



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



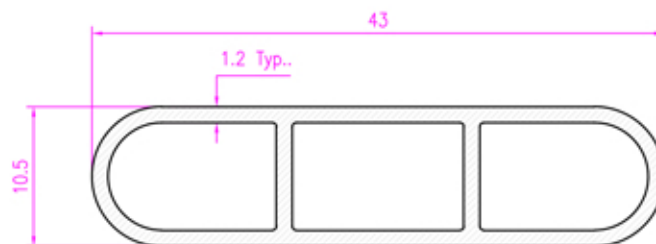
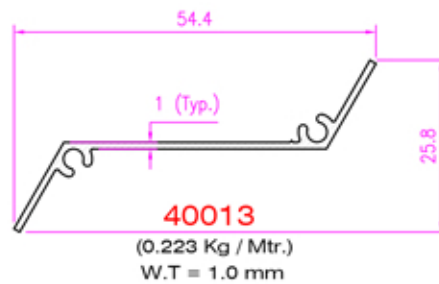
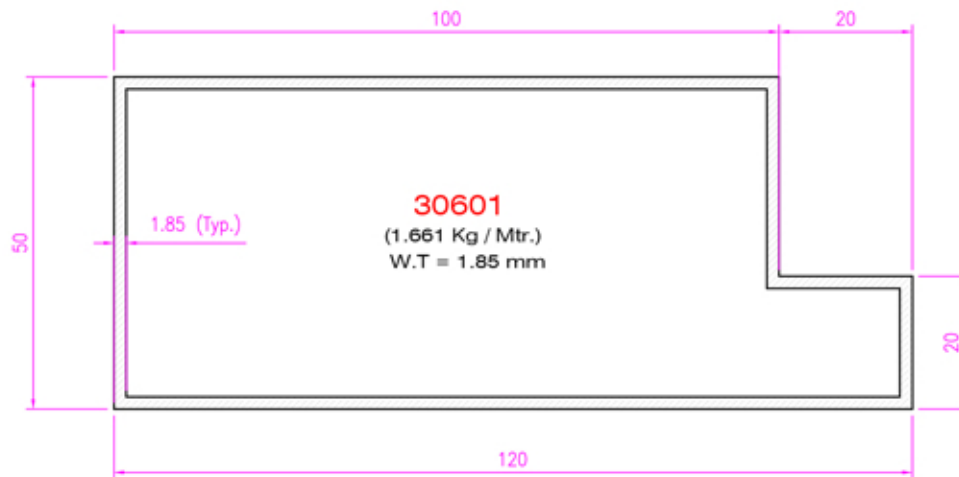
شركة

اشوار

LTD. المحدودة

MISCELLANIES PROFILES

MISCELLANIES PROFILES





شركة

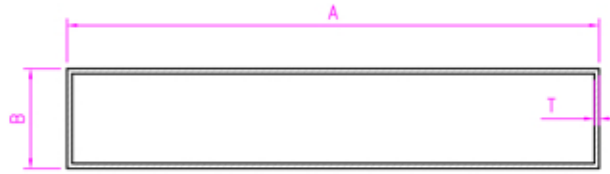
اشوار

LTD. المحدودة



STANDARD RECTANGULAR TUBES

STANDARD RECTANGULAR TUBE



SL.NO	PROFILE NO.	A (mm)	B (mm)	T (mm)	Kg/mtr.
1	30305	220.0	50.0	1.9	2.873
2	30306	200.0	50.0	1.9	2.657
3	30301	100.0	40.0	2.0	1.469
4	30320	80.0	40.0	0.9	0.574
5	30303	80.0	15.0	0.75	0.379
6	30304	78.0	38.0	0.90	0.555

NOTE : NEW SECTIONS ARE ADDED DAY BY DAY.
 PLEASE CHECK & CONFIRM AVAILABILITY FOR SECTIONS OTHER THAN GIVEN ABOVE



شركة

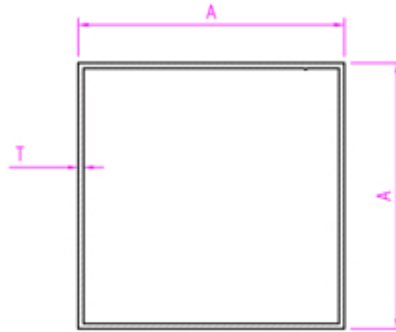
اشوار

LTD. المحدودة



STANDARD SQUARE TUBES

STANDARD SQUARE TUBES



SL.NO	PROFILE NO.	A (mm)	T (mm)	Kg/mtr.
1	30003	50.0	1.8	0.937
2	30004	40.0	1.8	0.743
3	30001	40.0	0.8	0.339
4	30002	20.0	1.3	0.263

NOTE : NEW SECTIONS ARE ADDED DAY BY DAY.
 PLEASE CHECK & CONFIRM AVAILABILITY FOR SECTIONS OTHER THAN GIVEN ABOVE



شركة

اشوار

LTD. المحدودة



STANDARD FLAT BAR

STANDARD FLAT



SL.NO	PROFILE NO.	A (mm)	B (mm)	Kg/mtr.
1	10301	150.0	6.0	2.430
2	10309	40.0	4.0	0.432
3	10302	25.0	3.0	0.203
4	10311	20.0	4.0	0.216
5	10303	20.0	3.0	0.162
6	10310	20.0	2.0	0.108

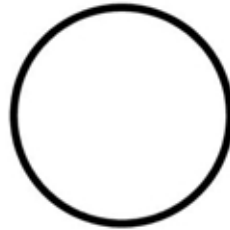
NOTE : NEW SECTIONS ARE ADDED DAY BY DAY.
 PLEASE CHECK & CONFIRM AVAILABILITY FOR SECTIONS OTHER THAN GIVEN ABOVE



شركة

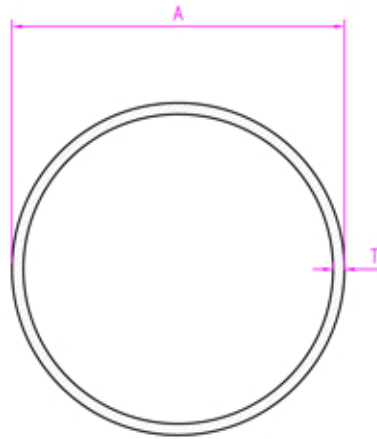
اشوار

LTD. المحدودة



STANDARD ROUND TUBES

ROUND TUBES



SL.NO	PROFILE NO.	ϕA (mm)	T (mm)	Kg/mtr.
1	20003	88	2.5	1.813
2	20002	60.0	2.5	1.219
2	20001	50.0	1.7	0.696

NOTE : NEW SECTIONS ARE ADDED DAY BY DAY.
 PLEASE CHECK & CONFIRM AVAILABILITY FOR SECTIONS OTHER THAN GIVEN ABOVE



شركة

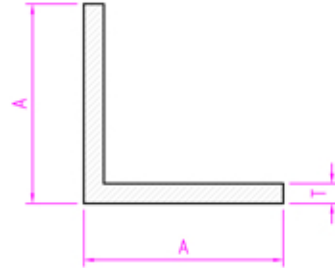
اشوار

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STANDARD EQUAL ANGLES

STANDARD EQUAL ANGLES



SL.NO	PROFILE NO.	A (mm)	T (mm)	Kg/mtr.
1	10701	40.0	4.0	0.821
2	10702	40.0	3.0	0.624
3	10703	30.0	3.0	0.462
4	10704	30.0	2.5	0.388

NOTE : NEW SECTIONS ARE ADDED DAY BY DAY.
 PLEASE CHECK & CONFIRM AVAILABILITY FOR SECTIONS OTHER THAN GIVEN ABOVE



شركة

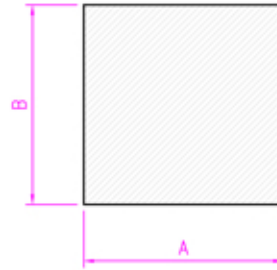
اشوار

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STANDARD SQUARE BAR

STANDARD EQUAL ANGLES



SL.NO	PROFILE NO.	A (mm)	B (mm)	Kg/mtr.
4	10000	8.0	8.0	0.173

NOTE : NEW SECTIONS ARE ADDED DAY BY DAY.
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