



HINDALCO
EXTRUSIONS

EXPERTISE IS OUR STRENGTH

Transport - Alupuram

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HINDALCO
EXTRUSIONS

EXPERTISE IS OUR STRENGTH



VISION

To be a premium metals major, global in size and reach, excelling in everything we do, and creating value for our stakeholders.

MISSION

To relentlessly pursue the creation of superior shareholder value, by exceeding customer expectation profitably, unleashing employee potential, while being a responsible corporate citizen adhering to our values.

VALUES

Integrity: Honesty in every action

Commitment: Deliver on the promise

Passion: Energized action

Seamlessness: Boundaryless in letter and spirit

Speed: One step ahead always



Hindalco Transport Catalogue

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HINDALCO - An Overview

Hindalco Industries Limited, a USD 15 billion flagship company of the Aditya Birla Group, is a leading producer of aluminium and copper. Hindalco is present across the value chain of Aluminium & Copper. It has global footprint spanning across 13 countries in 5 continents

Copper

- World's largest single-location copper smelting capacity.
- Copper mines in Australia.

Aluminium

- Amongst top 5 aluminium majors worldwide.
- World's largest aluminium rolling company.
- Integrated operations - from mines to alumina to metal to value added products
 - ✦ Ingots & redraw rods (wire rods)
 - ✦ Flat Rolled products
 - ✦ Extrusions
 - ✦ Foils

Hindalco is a leader in Aluminium Extrusions industry in India with two manufacturing facilities. Both the plants are equipped with state of the art equipment, having well established manufacturing processes and quality systems honed over five decades.

- Manufacturing Facilities
 - ✦ Renukoot, U. P. (North India)
 - ✦ Alupuram, Kerala (South India)
- Capacity 60,000 MT per annum
- Expertise in customised alloys including hard alloys
- Catering to wide range of application segments such as Architectural, Electrical, Industrial, Transport, Defence and Consumer Durable.
- Extrusions manufactured from in-house virgin metal
- Quality Certification
 - ✦ ISO 9001-2008
 - ✦ ISO 14001-2004
 - ✦ OHSAS 18001-2007

This Catalogue covers the Transport sections from the range manufactured in the Alupuram plant of Hindalco - India's first Extrusions plant started in the year 1955.

Alupuram Plant



1250 T Lowey Hydraulic Press with 6" container, automatic controls and puller



3300 T Farrel Watson Stillman Press with 9" container, automatic controls and puller



Ultramodern Makino Vertical Machining Centre in Die Shop



CNC Wire EDM Machine in Die Shop



Solution Heat Treatment Furnace

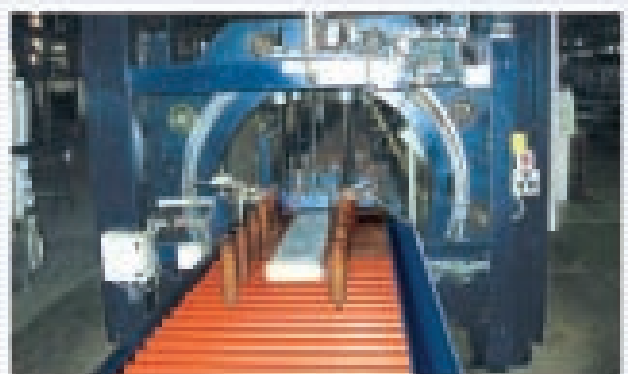


Spectrometer for Quantometric Analysis



Branding Machine

Alupuram



Automated Packing Station



TABLE - 1

Wrought alloys: Near equivalent designations

INDIA		U.S.A. (A.A.)	BRITAIN (B.S.)	CANADA	GERMANY (DIN)	RUSSIA	I.S.O.	FRENCH ND
NEW I.S.	OLD I.S.							
19501	1E	1050(E.C)	1E	C 1S	E-Al 99.5	-	-	-
19500	1B	1050	1B	1S	A-99.5	-	Al-99.5	1050A
24345	H15	2014	H15	B26S	AL-CU-SI	AK	-	-
24534	H14	2017	H14	17S/16S	-	D1	Al-Cu-4Mg Si	-
-	-	2024	-	24S	Al-Cu.Mg2	-	Al-Cu-4Mg 1	2024
31000	N3	3003	N3	3S	Al-Mn	A-Mn	Al-Mn 1	3003
52000	N4	5052	N4	M57S	Al-Mg.2	A-Mg	Al-Mg-2.5	5051
53000	N5	5086	N5	54S	-	A-Mg-3	Al-Mg-4	-
54300	N8	5083	N8	D54S	Al-Mg-4.5 Mn	-	Al-Mg-4.5 Mn	5083
65032	H20	6061	H20	65S	Al-Mg-Si Cu	-	Al-Mg-1Si Cu	-
63400	H9	6063	H9	50S	Al-Mg-Si 0.5	-	Al-Mg Si	-
64430	H30	6351	H30	B51S	Al-Mg-Si 1	AV	Al-Si-1 Mg	6081
64423	H11	6066	H11	C62S	-	-	-	-
62400	-	6005	-	C51S	-	-	-	-
63401	91E	6101	91E	D50S	E.Al.Mg.Si 0.5	-	-	-
64401	-	6201	-	-	-	-	-	-
74530	-	7039	-	D74S	Al-Zn-Mg.1	-	-	3004
-	-	7075	DTD 5124	75S	Al-Zn-Mg Cu 1.5	-	Al-Zn 6 Mg Cu	7075



TABLE - 2

Wrought alloys: Guide to selection

Alloy	Temper	Resistance to Corrosion	Workability (Cold)	Machinability	Brazeability	Weldability	Commonly available forms	Indications of use
EC/1050, 1060 (1B) (19501) (19500) (19600)	F, O	A	A	D	A	A	Flats, Rods, Tubes & other section	Electrical conductors, cable sheathing, impact-extruded products, pressing utilities of anodizing quality, pen caps, piping etc.
1100 (1C) (19000)	F, O	A	A	D	A	A	Flats, Rods, Tubes & other section	Packaging lightly stresses and decorative assemblies in architecture and transport, equipment for chemical, food and brewing industries.
2014 (H 15) (24345)	T4 T6	C C	C D	B B	D D	C C	Rods & Bars Rods & Bars	Highly stressed component of all types in aircraft, ordnance and general engineering.
2017 (H 14) (24534)	T4	C	C	B	D	C	Rods & Bars	Highly stressed parts in aircraft and other structures, screw machine products.
2024	T4	C	C	B	D	C	Rods & Bars	Load Cell, Highly stressed component of all types in aircraft, ordnance and general engineering.
4043 (N 21) (43000)	F, O	A	A	D	A	A	Rods & other sections	Welding wire, architectural applications
5005 (52000A)	O, F	A	A	D	B	A	Flats, Rods, other sections	Structures exposed to marine attractive anodized finish, architectural, electrical conductors etc.
5052 (N 4)	O, F	A	A	D	C	A	Flats, Rods, Tubes & other sections	Structures exposed to marine atmosphere, aircraft parts, wire rope ferrules, rivet stock.
5086 (N 5) (53000)	O, F	A	A	D	D	A	Flats, Rods & other sections	Ship building and other marine applications, rivets, coinage etc.
5056 (N 6) (55000)	O, F	A	A	D	D	A	Rods	Zips, Welding Rods and Rivets.
6061 (H 20) (65032)	O, F T4 T6	A A A	A C D	D C C	A A A	A A A	Rods, Flats, Tubes & other sections	Heavy duty structures, building hardware, sections for bus body, truck and rail coach, furniture, rivets etc.
6063 (H9) (63400)	O, F T4 T6 T5	A A A A	A B C C	D C C C	A A A A	A A A A	Rods, Flats, Tubes & other sections	Building hardware, architectural section with good surface finish, medium strength furniture and anodized sections.



TABLE - 2

Wrought alloys: Guide to selection

Alloy	Temper	Resistance to Corrosion	Workability (Cold)	Machinability	Brazeability	Weldability	Commonly available forms	Indications of use
6066 (64423)	O, F T4 T6	B B B	B C C	D B B	A A A	A A A	Rods and other solid sections	For welded structures, textile parts, heavy duty machine parts.
6101 (91 E) (63401)	T4 T6	A A	B B	C C	A A	A A	Rods, Flats, Tubes & other sections	High strength electrical busbar sections.
6201 (64401)	T4	A	A	C	A	A	Redraw Rod	Overhead conductors, ACAR and AAAC
6351 (H 30) (64430)	O, F T4 T6	A A A	A C D	D C C	A A A	A A A	Rods, Flats, Tubes & other sections	Structural and general engineering items such as rail & road transport vehicles, bridges, cranes, roof trusses, rivets etc.
7039 (D74S) (74530)	O, F T4 T6	A A A	A C D	D C C	A A A	A A A	Flats, Tubes, Rods & other sections	Defence structures like mobile bridges etc. Tread and chequered plates, Excellent welding property with no loss of strength in welded zone.
7075 (DTD5124)	O, F T4 T6	A A A	A A D	A A A	A A A	A A A	Rods	Highly stressed structural applications

Notes:

- Relative ratings for corrosion, workability and machinability in decreasing order of merit A, B, C and D.
- Weldability & brazeability ratings A, B, C and D are relative ratings defined as follows:
 - Generally weldable by the commercial procedure & methods.
 - Weldable with special technique.
 - Limited weldability due to crack sensitivity or loss in corrosion resistance and mechanical properties.
 - Generally not weldable.
- Availability of other forms subject to special enquiries and methods.



TABLE - 3

Wrought alloys: Chemical composition limits (percent)

Alloy (ISS) Old	New	Equivalent alloy (AA) U.S.A.	Copper		Magnesium		Silicon		Iron Max.	Manganese		*Others (Total) Max.	Remarks
			Min.	Max.	Min.	Max.	Min.	Max.		Min.	Max.		
1C	19000	1100	-	0.10	-	-	-	0.5	0.6	-	0.1	0.1	Aluminium 99.0% Min
1 B	19500	1050	-	0.05	-	-	-	0.25	0.4	-	0.05	0.1	Aluminium 99.5% Min
1 E	19501	-	-	0.04	-	-	-	0.15	0.35	-	0.03	0.1	Aluminium 99.5% Min
-	19600	1060	-	0.05	-	-	-	0.25	0.35	-	0.03	0.1	Aluminium 99.6% Min
H 15	24345	2014	3.8	5.0	0.2	0.8	0.5	1.2	0.7	0.3	1.2	0.5	-
H 14	24534	2017	3.5	4.7	0.4	1.2	0.2	0.7	0.7	0.4	1.2	0.5	-
		2024	3.8	4.9	1.2	1.8	-	0.5	0.5	0.3	0.9	0.15	Zn 0.25
N 3	91000	3003	-	0.1	-	0.1	-	0.6	0.7	1.0	1.5	0.4	-
		4032	0.8	1.3	0.8	1.3	-	13.5	0.6	-	0.2	0.15	Ni 0.8 - 1.3
N 4	52000	5052	-	0.1	1.7	2.6	-	0.6	0.5	-	0.5	0.4	Cr + Mn = 0.5
M 5	53000	5086	-	0.1	2.8	4.0	-	0.6	0.5	-	0.5	0.4	Cr + Mn = 0.5
N 8	54300	5083	-	0.1	4.0	4.9	-	0.4	0.7	0.5	1.0	0.4	Chromium up to 0.25
H 20	65032	-	0.15	0.4	0.7	1.2	0.4	0.8	0.7	0.2	0.8	0.4	**Cr = 0.15 - 0.35
-	-	6061	0.15	0.4	0.8	1.2	0.4	0.8	0.7	-	0.15	0.4	Chromium 0.04 to 0.35
H 9	63400	6063	-	0.1	0.4	0.9	0.3	0.7	0.6	-	0.3	0.4	-
-	-	6066	0.7	1.2	0.8	1.4	0.9	1.8	0.7	0.6	1.1	0.4	-
-	64423	-	0.5	1.0	0.5	1.3	0.7	1.3	0.8	-	1.0	-	-
9 1E	63401	6101	-	0.05	0.4	0.9	0.3	0.7	0.5	-	0.03	0.1	-
H 30	64430	6351	-	0.1	0.4	1.2	0.6	1.3	0.6	0.4	1.0	0.3	-
		6082	-	0.1	0.6	1.2	0.7	1.3	0.5	0.4	1.0	0.3	Chromium up to 0.25
-	74530	7039	-	0.2	1.0	1.5	-	0.4	0.7	0.2	0.7	0.4	Zinc 4.0 - 5.0 %
-	-	7075	1.2	2.0	2.1	2.9	-	0.5	0.5	-	0.3	0.2	Zinc (5.1 - 6.1) % & Chromium(0.18-0.28) %

* Titanium and/or other grain refining elements

** Either Mn or Cr shall be present



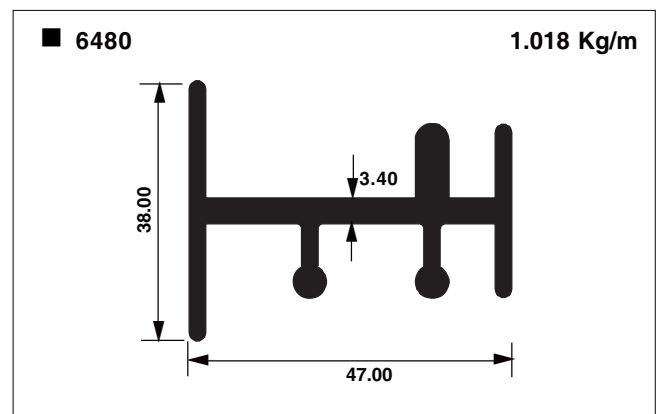
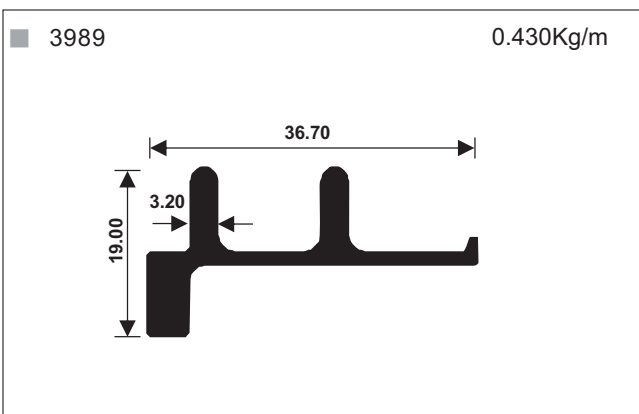
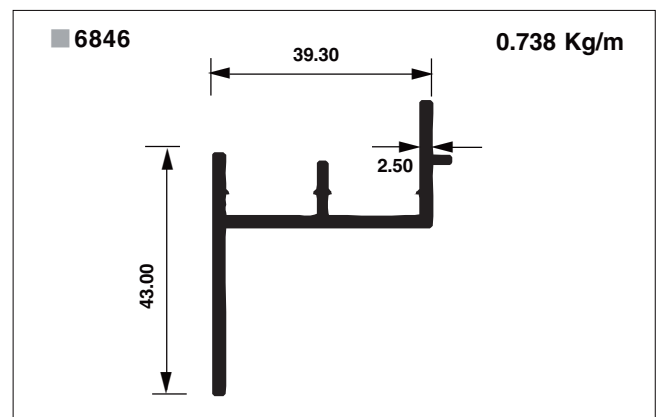
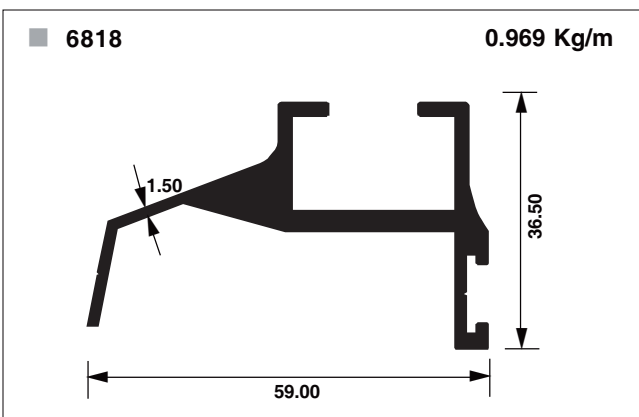
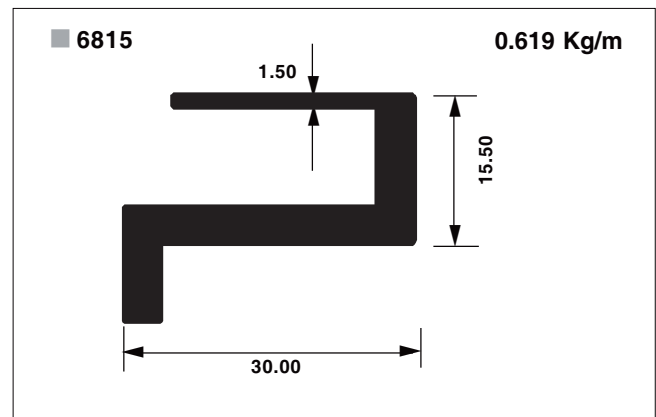
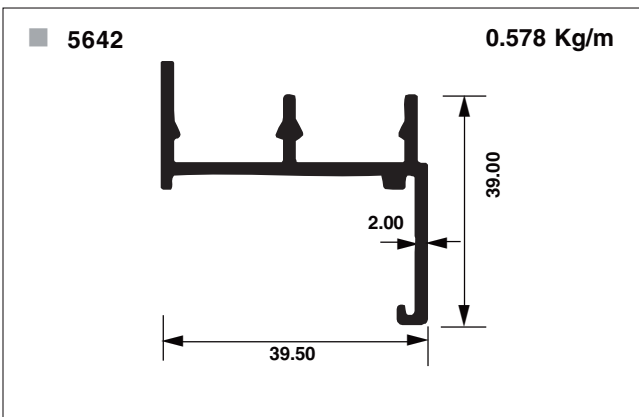
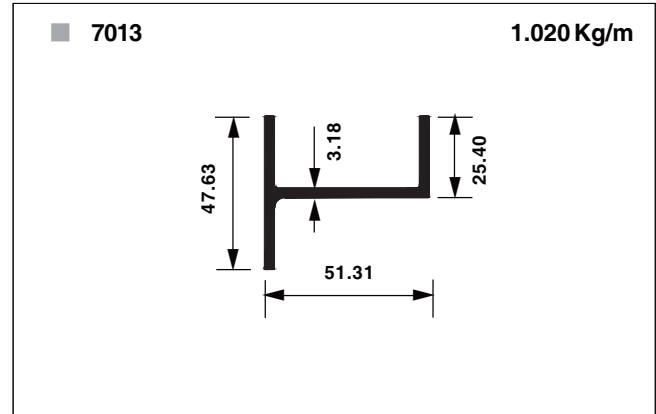
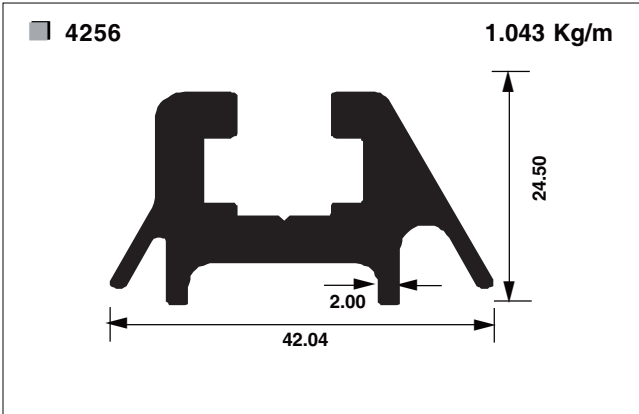
TABLE - 4

Wrought alloys: Mechanical properties

Heat Treatable Alloys					
Alloy A A Old (ISS) New (ISS)	Temper	Ultimate Tensile Strength Kg/mm ²		0.2% Proof Stress Kg/mm ²	Elongation On 50mm GL
		Min.	Max.		
2014 [H15] [24345]	T4[W]	39	-	24.0	10
	T6 [WP]	49	-	43.0	6
2017 [H14] [24534]	T4[W]	39	-	24.0	10
2024 [H9]	T4	40.5	-	26.5	12
6063 [H9] [63400]	T4[W]	14	-	8.0	14
	T6 [WP]	19	-	15.5	7
6061 [H20] 65032]	M	11.2	-	5.1	12
	T4[W]	19	-	11.5	14
	T6 [WP]	28.5	-	24.0	7
6351[H30] [64430]	M	11.2	-	8.2	12
	T4[W]	19	-	12.0	14
	T6 [WP]	31.5	-	27.5	7
6066	M	11.0	-	-	12
	T4[W]	28	-	17.5	14
	T6 [WP]	35	-	31.5	7
6101[91E] [63401]	T4[W]	14	-	8.0	12
	T6 [WP]	20.5	-	17.0	10
6201 [64401]	T4[W]	16	-	7.0	14
	T8 [WDP]	32	-	-	3
7039 [74530]	T4[W]	28	-	23.5	9
	T6 [WP]	31.5	-	26.5	7
7075	T6 [WP]	54	-	46.5	6

Properties indicated herein are typical properties and are given for information only. However properties of all the profiles in specific alloy shall be as per I. S. Specification.

Bus Windows

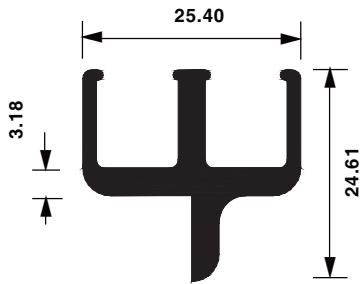




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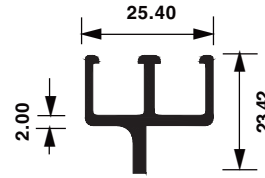
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0.498 Kg/m



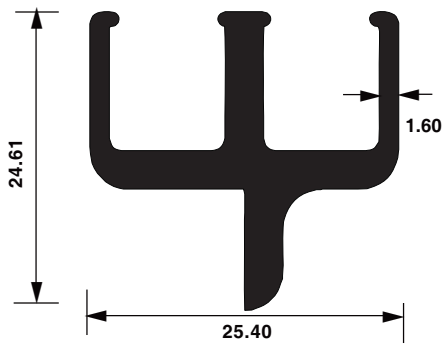
■ 4019

0.382 Kg/m



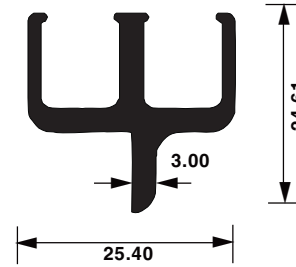
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0.497 Kg/m



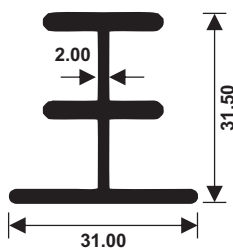
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0.479 Kg/m



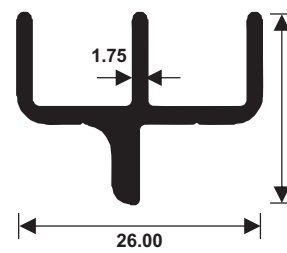
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0.652Kg/m



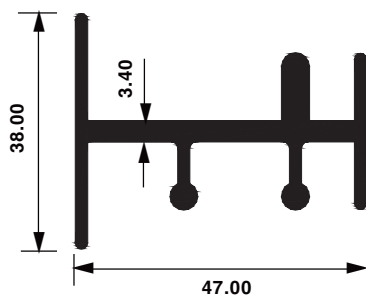
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0.341Kg/m



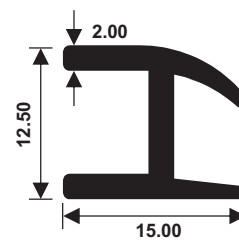
■ 6480

1.018 Kg/m



■ 4392

0.189Kg/m

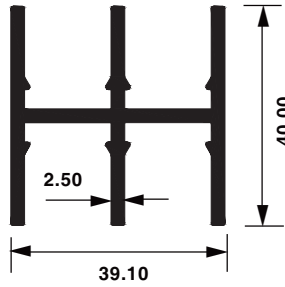


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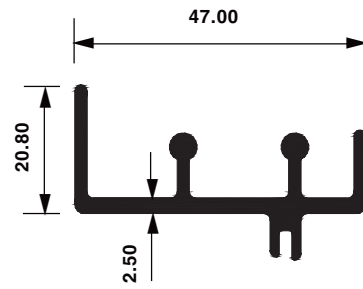
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1.053 Kg/m



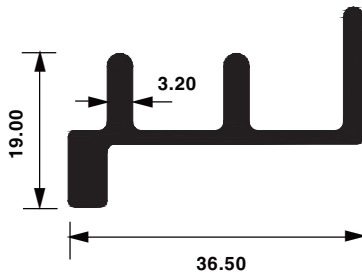
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0.699 Kg/m



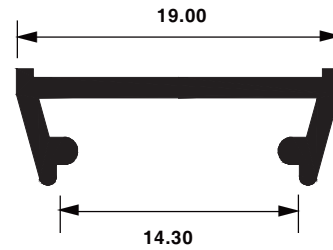
4029

0.530 Kg/m



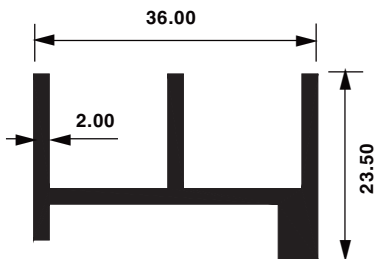
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0.108 Kg/m



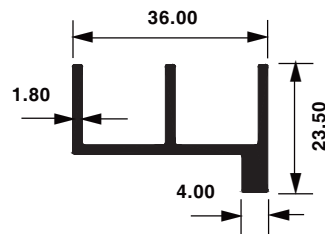
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0.548 Kg/m



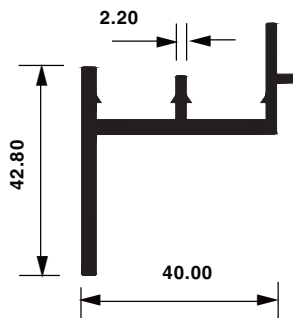
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0.477 Kg/m



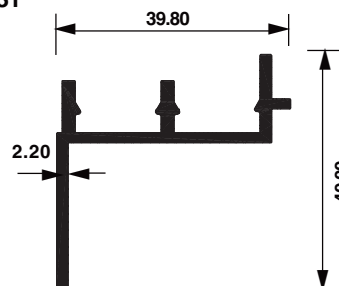
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0.844 Kg/m



5631

0.640 Kg/m

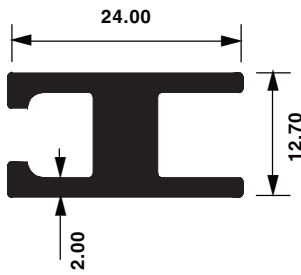




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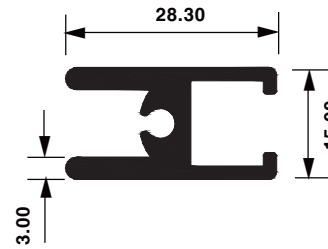
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0.434 Kg/m



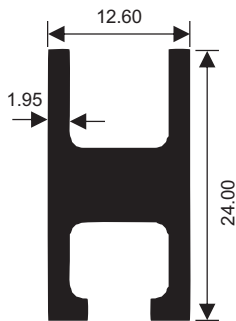
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0.512 Kg/m



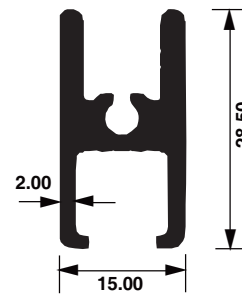
■ 4036

0.427Kg/m



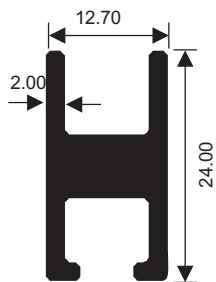
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0.529 Kg/m



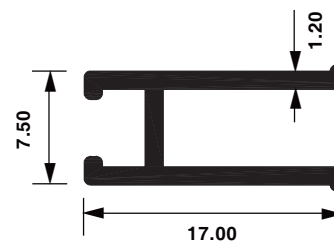
■ 3747

0.431Kg/m



6619

0.132 Kg/m

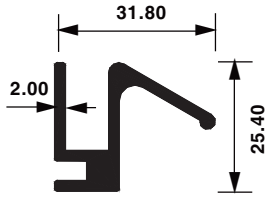


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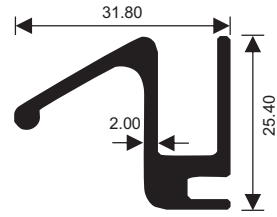
■ 3988

0.533 Kg/m



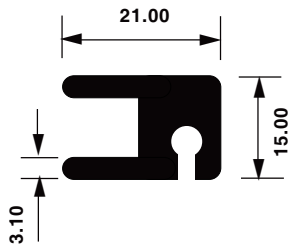
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0.552Kg/m



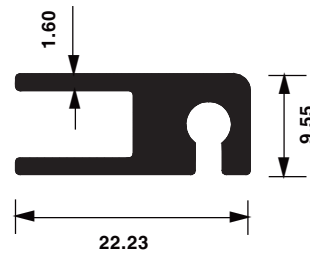
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0.552 Kg/m



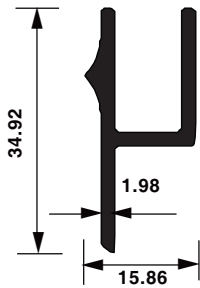
■ 2691

0.322 Kg/m



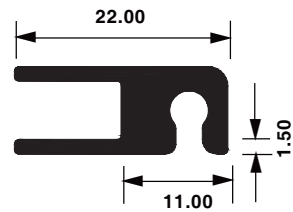
■ 3678

0.356 Kg/m



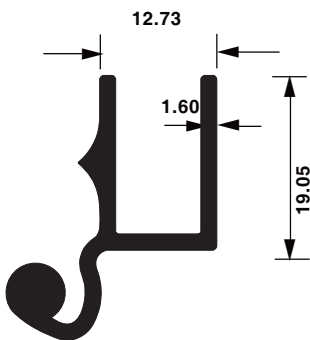
■ 3868

0.298 Kg/m



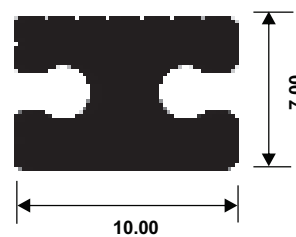
■ 3618

0.376 Kg/m



4425

0.149 Kg/m

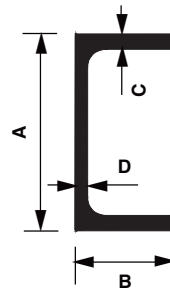
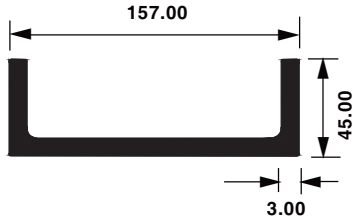




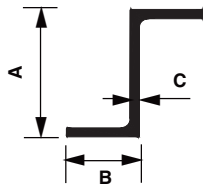
Bus Structural

2361

1.136 Kg/m



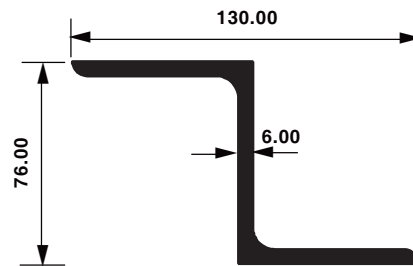
Sec	A	B	C	D	Kg/m
2612	31.75	25.40	3.18	4.76	0.762
2613	44.45	25.40	3.18	4.76	0.926
2202	50.80	25.40	4.76	4.76	1.183
2302	101.60	50.80	7.94	6.35	3.745



Sec	A	B	C	Kg/m
3405	44.45	19.05	1.60	0.346
3402	44.45	25.40	3.18	0.775

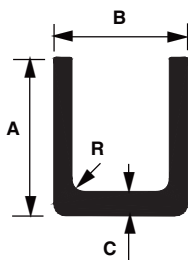
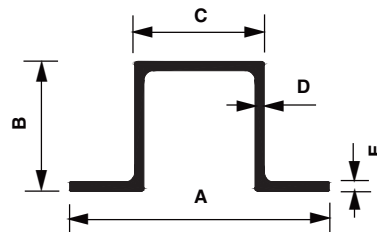
■ 3438

3.273Kg/m

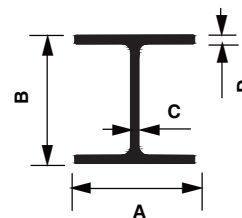


■ 2651

1.344 Kg/m



Sec	A	B	C	R	Kg/m
2369	11.11	13.40	2.35	-	0.204
2389	38.10	35.06	3.18	3.00	0.900
2298	50.80	50.80	6.35	1.50	2.389
2366	50.80	76.20	6.35	1.50	2.825
2377	50.80	101.60	6.35	1.50	3.261
2378	76.20	203.20	9.52	1.50	9.908



Sec	A	B	C	D	Kg/m
2800	44.45	41.27	3.18	3.18	1.41
2847	64.00	53.00	4.00	2.50	1.403
2859	127.00	100.00	10.00	10.00	8.502

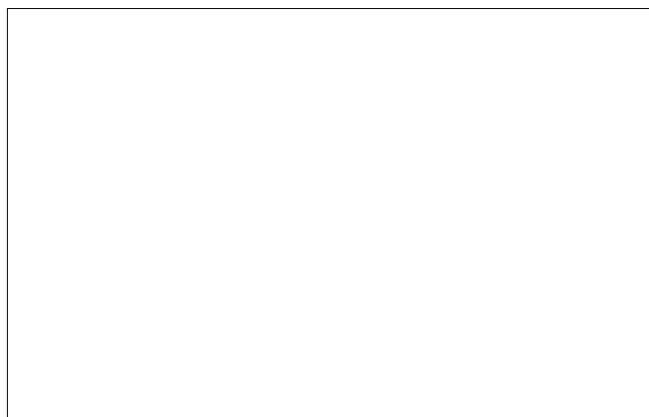
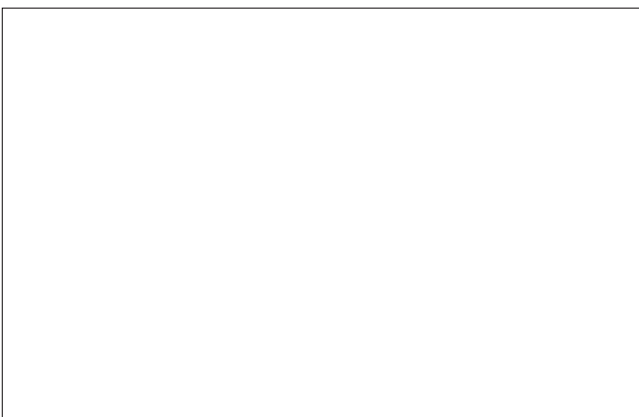
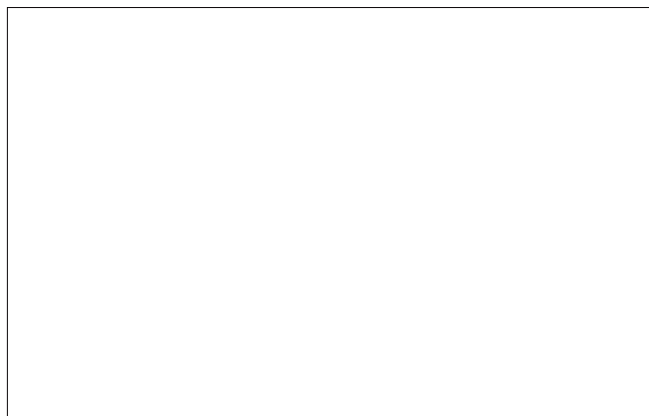
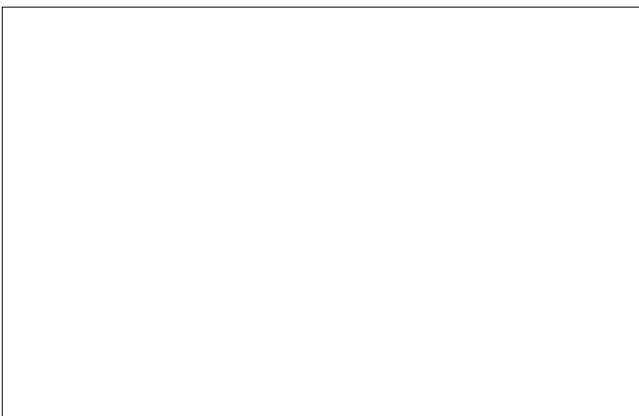
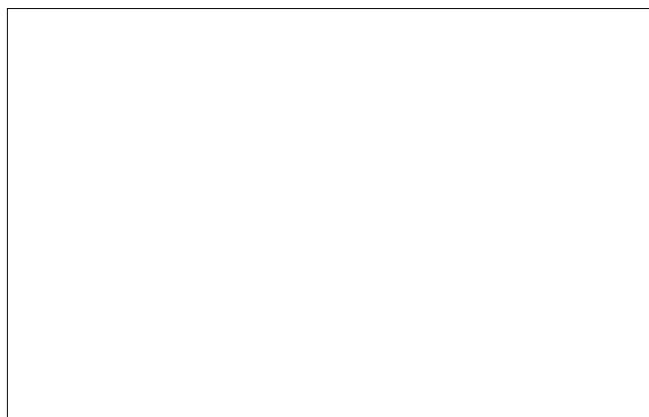
Bus Structural



Sec	A	B	C	Kg/m
1753	31.75	31.75	3.18	0.533
1755	38.10	38.10	3.19	0.627
1756	38.10	38.10	4.76	0.935
1903	63.50	50.80	4.76	1.433
1904	76.20	50.80	6.35	2.096
1762	88.90	88.90	6.35	2.980

9638 **3.961 Kg/m**

■ **2735** **0.238Kg/m**





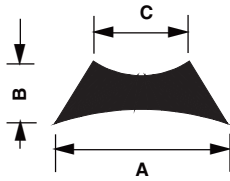
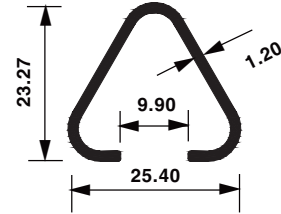
Mouldings



Sec	A	B	R	Kg/m
5519	20.00	3.00	1.50	0.159
5506	20.00	5.00	2.50	0.263
6323	25.00	4.00	2.00	0.265
5505	25.40	3.18	1.90	0.214
5509	40.00	2.50	2.50	0.263

■ 7374

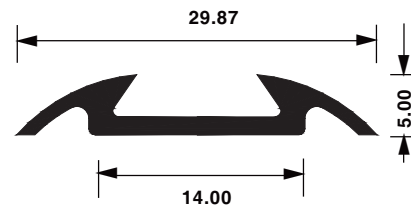
0.207 Kg/m



Sec	A	B	C	Kg/m
5769	25.00	4.78	14.00	0.171
5606	25.40	5.92	14.29	0.230

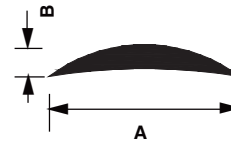
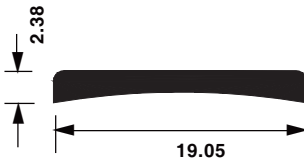
■ 2684

0.159 Kg/m



■ 5602

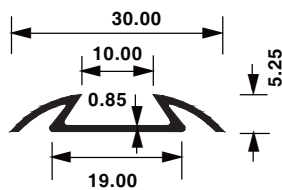
0.095 Kg/m



Sec	A	B	Kg/m
5405	25.40	3.18	0.111
5454	26.16	4.78	0.179
5782	30.00	10.43	0.551

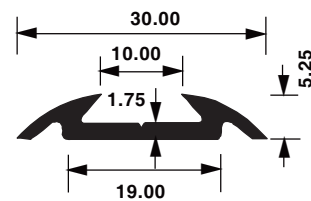
■ 2776

0.114 Kg/m

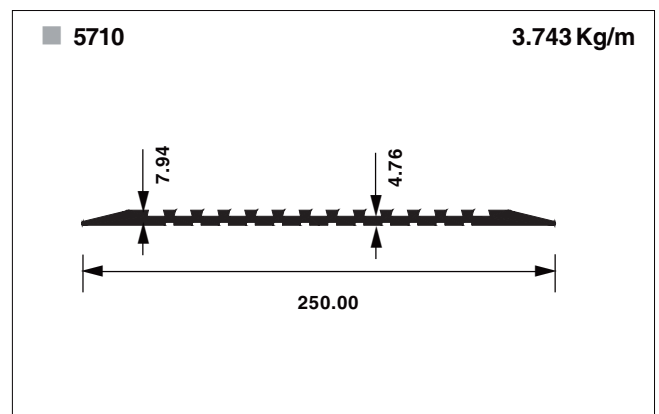
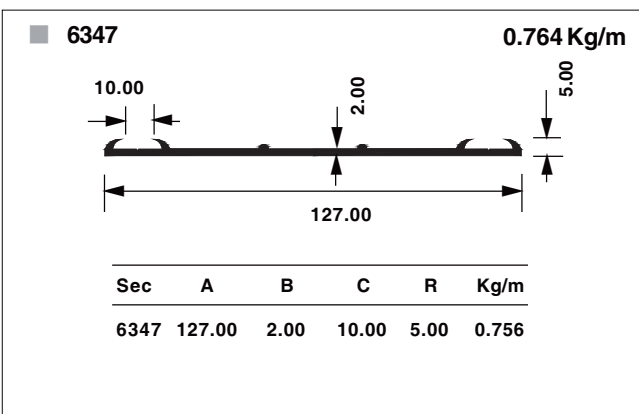
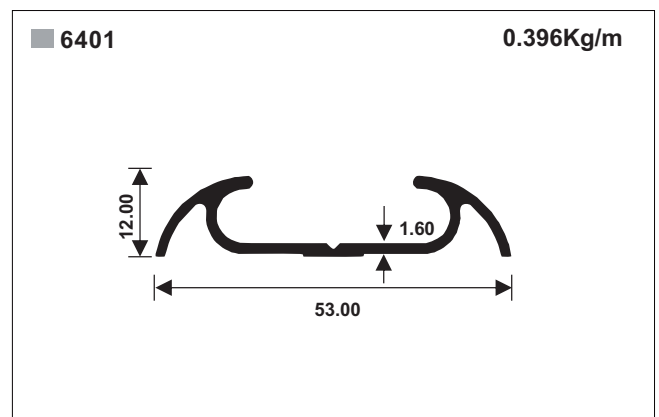
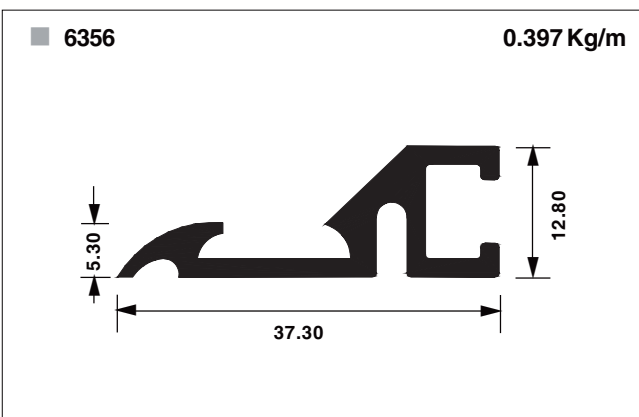
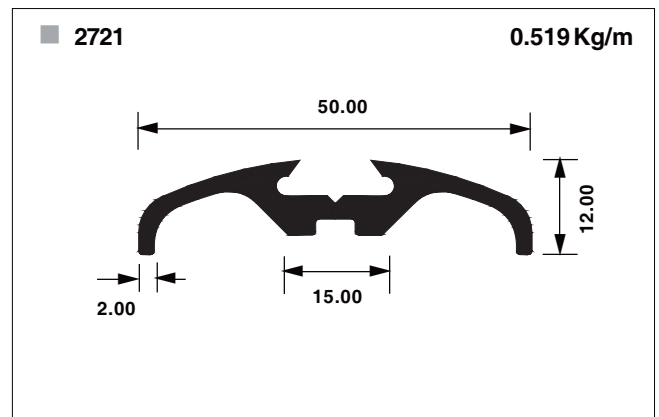
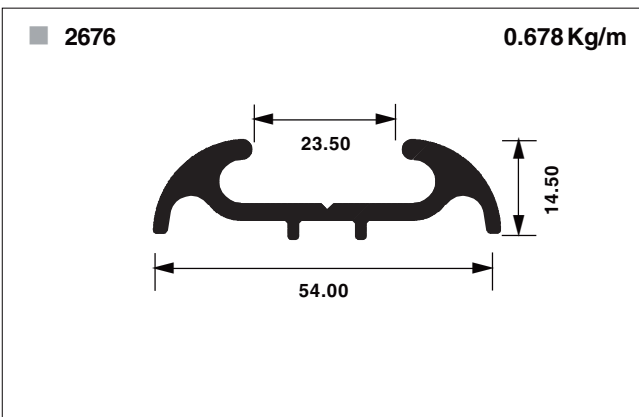
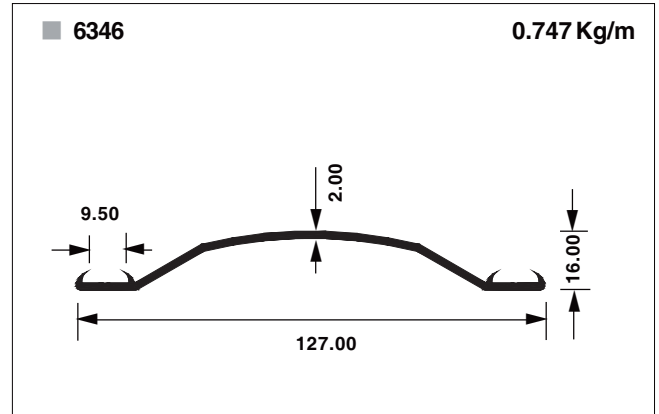
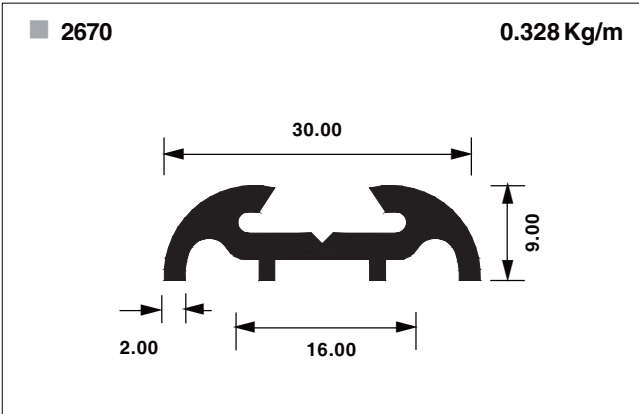


■ 2726

0.173 Kg/m

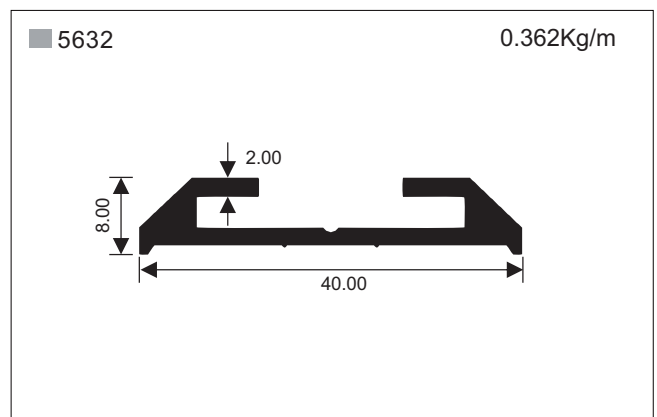
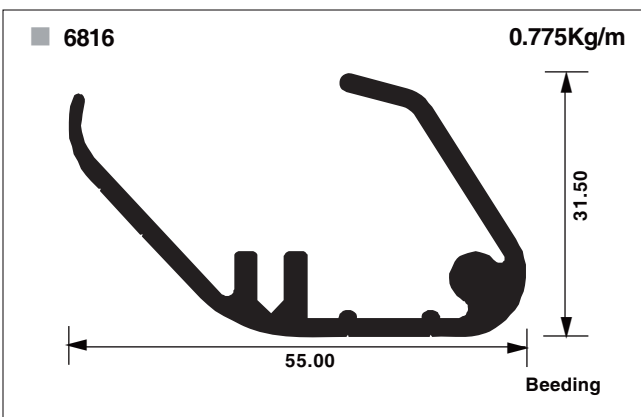
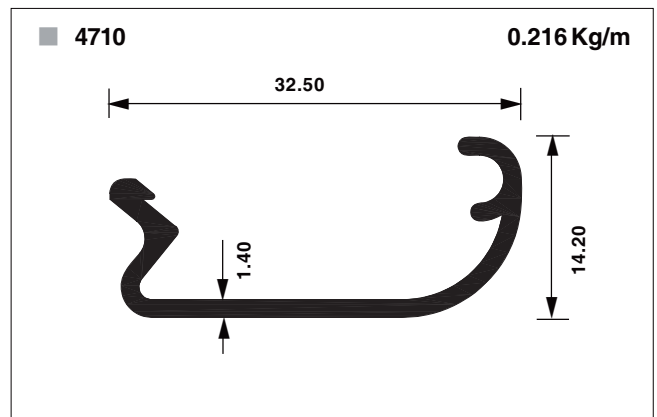
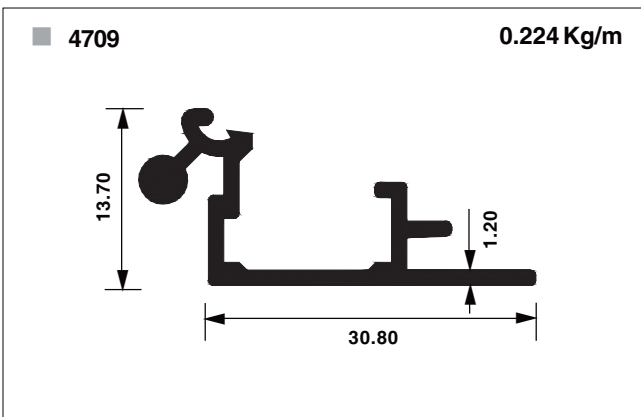
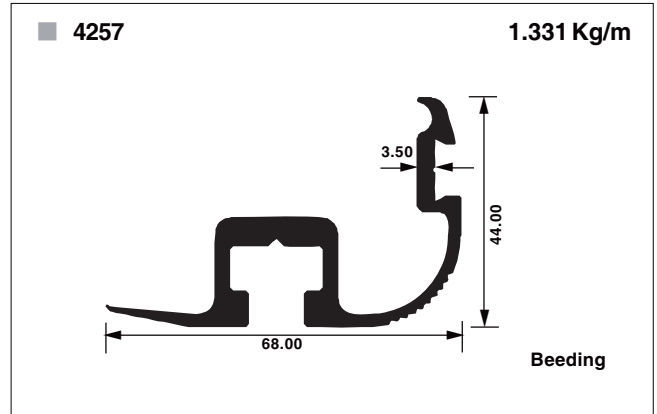
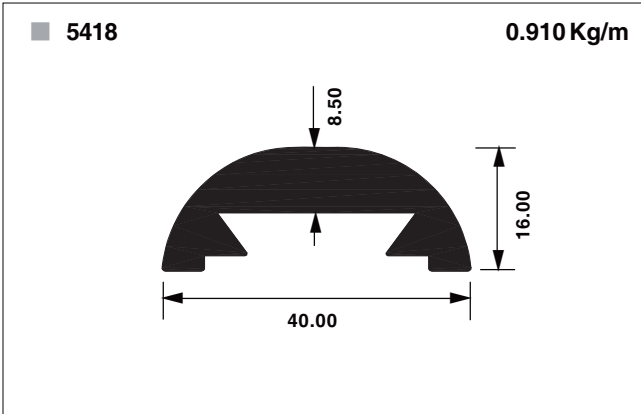


Mouldings

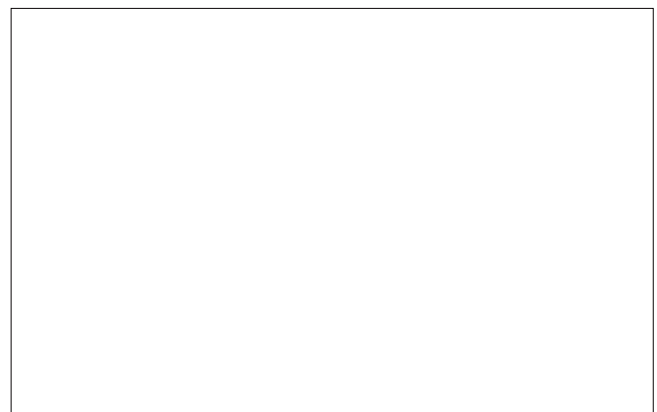




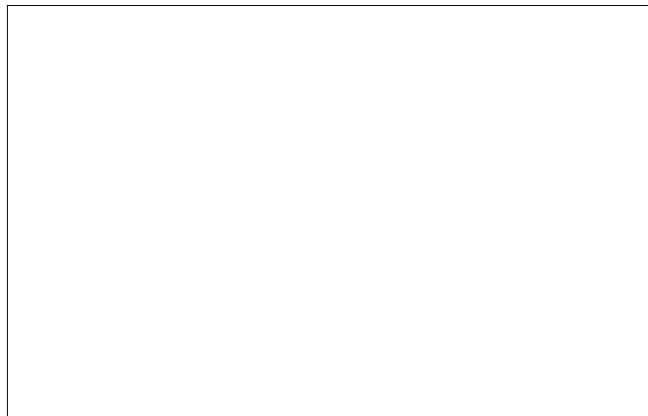
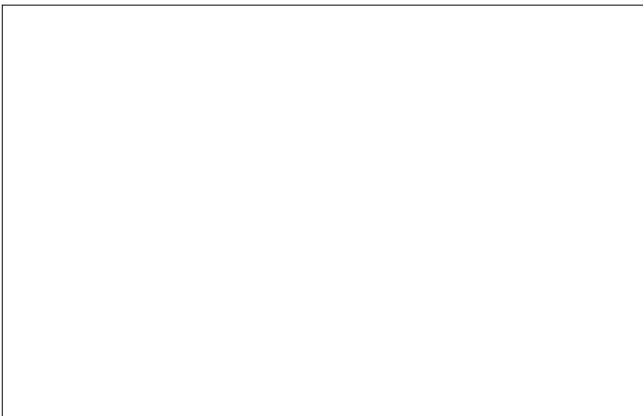
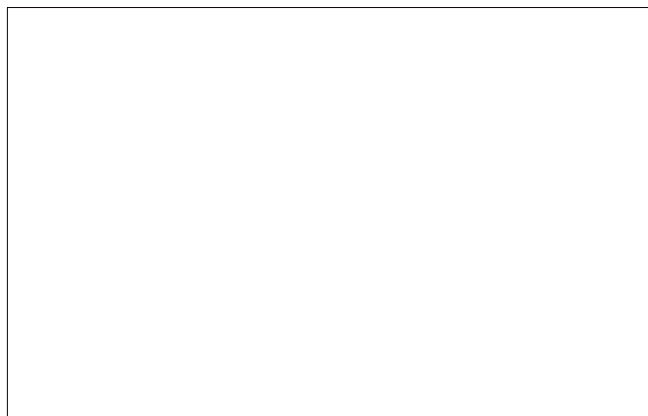
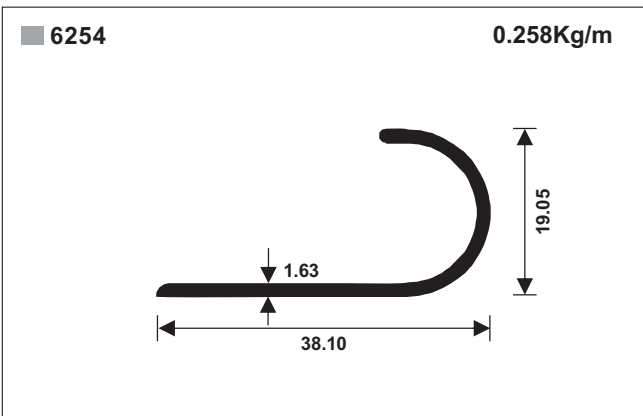
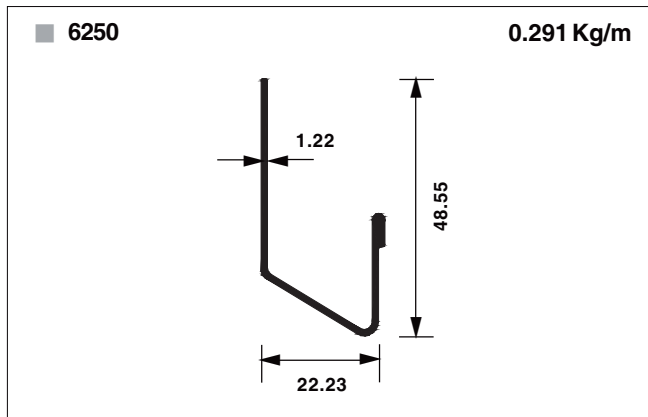
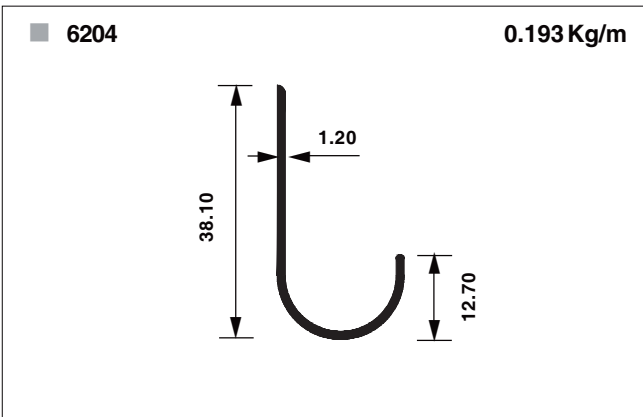
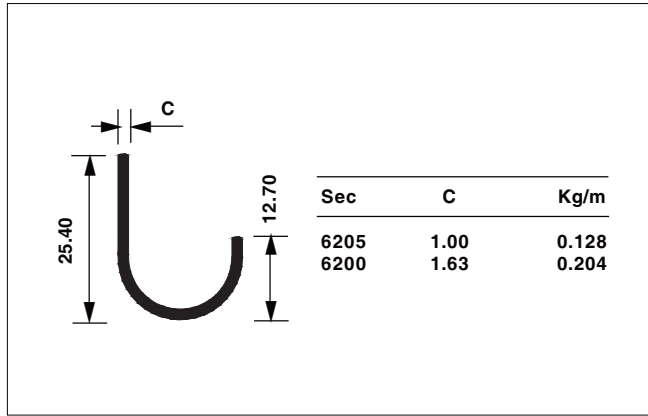
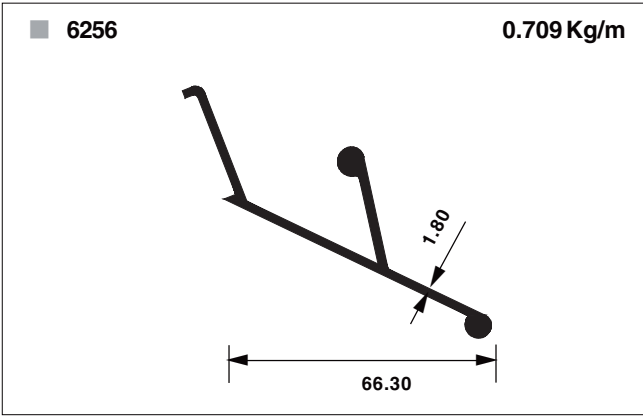
Mouldings



Sec	A	B	C	D	Kg/m
1463	31.77	3.00	1.20	2.39	0.188
1450	31.77	3.96	1.60	2.39	0.246



Water Channels

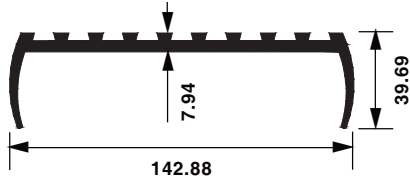




Step Edging

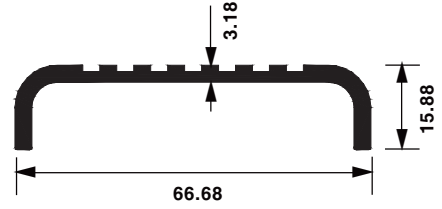
■ 5708

2.815 Kg/m



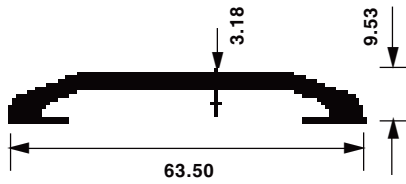
■ 1457

0.672 Kg/m



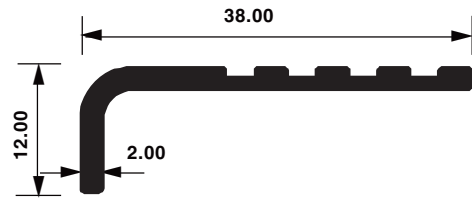
■ 4600

0.682 Kg/m



■ 5702

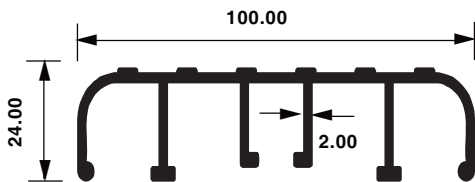
0.217Kg/m



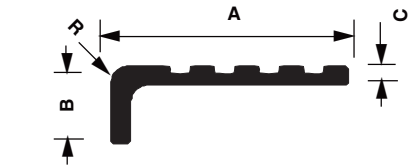
Step Edge

■ 5767

1.358 Kg/m



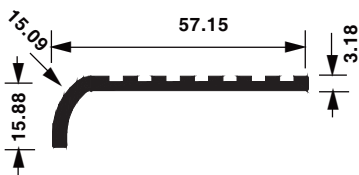
Step Edge



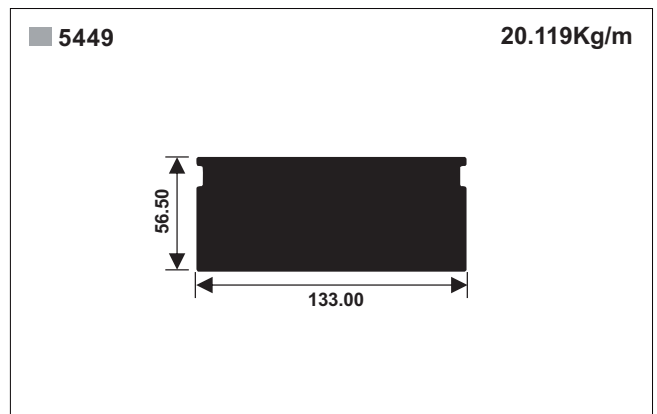
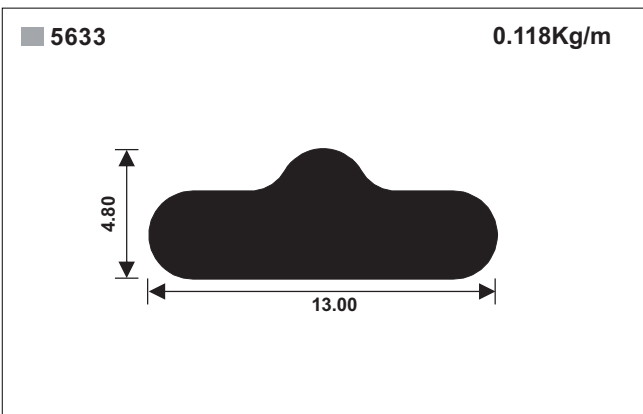
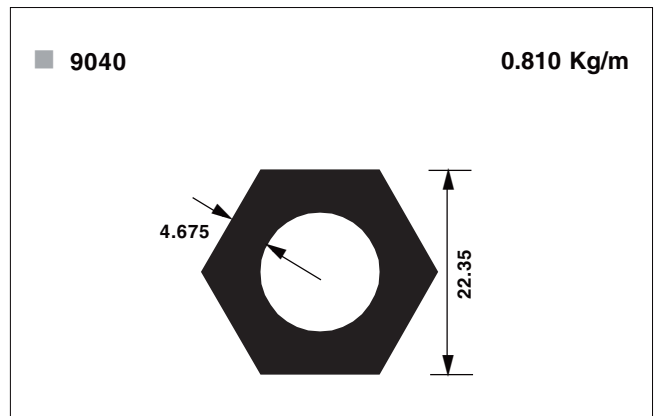
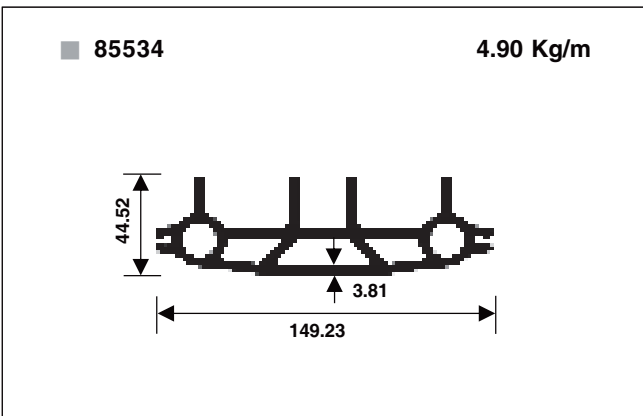
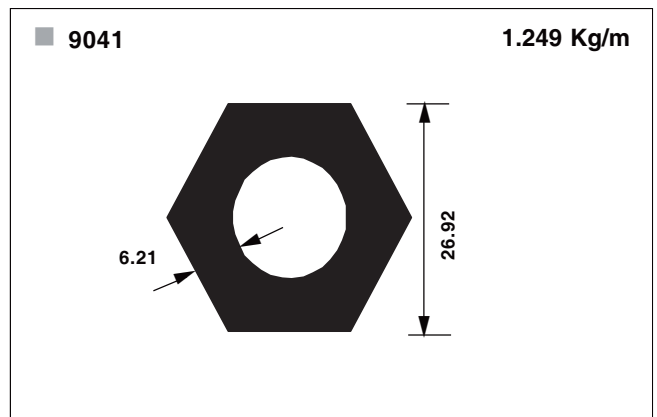
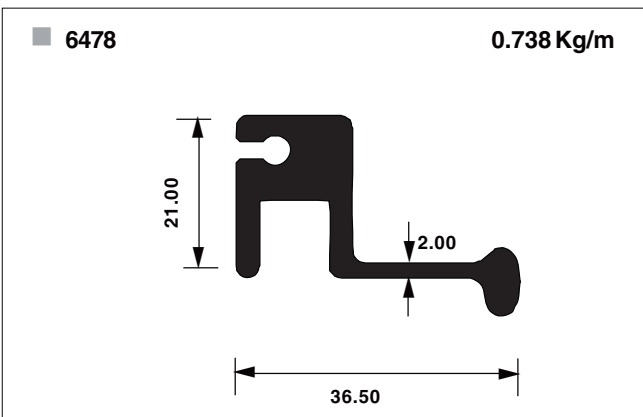
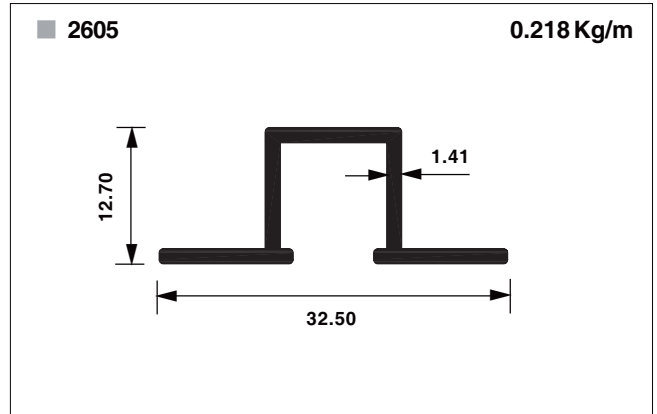
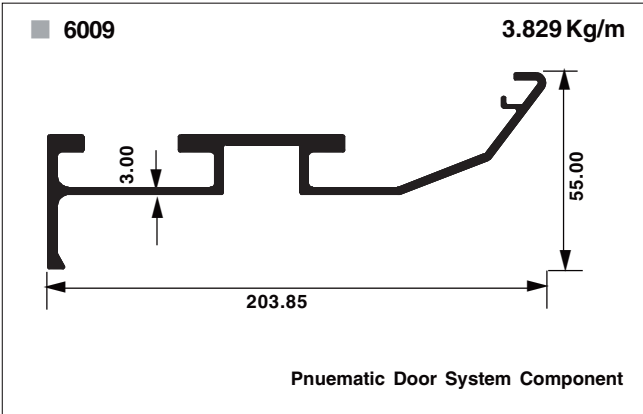
Sec	A	B	C	R	Kg/m
5707	36.00	12.00	2.50	2.00	0.247
5700	38.10	12.70	3.18	2.39	0.368

■ 5701

0.495 Kg/m

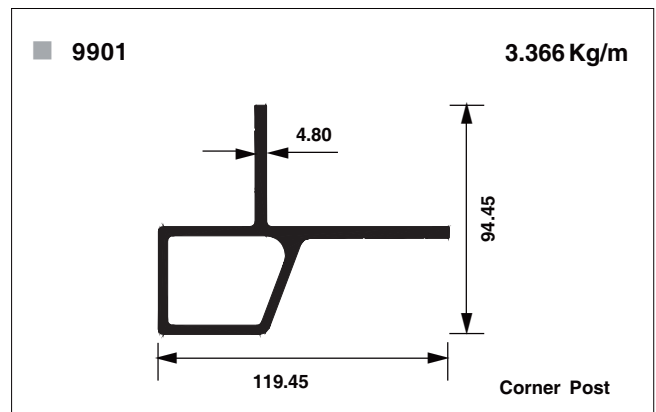
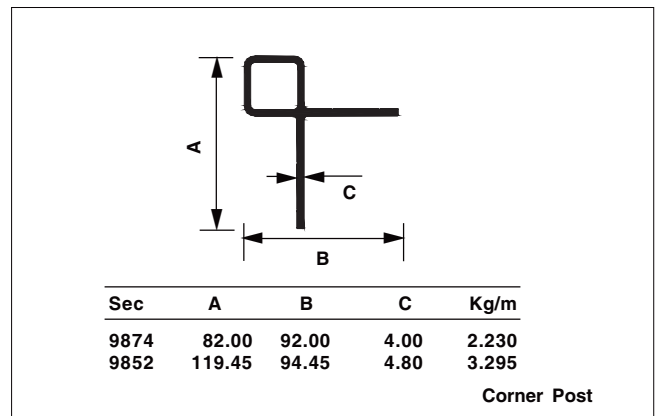
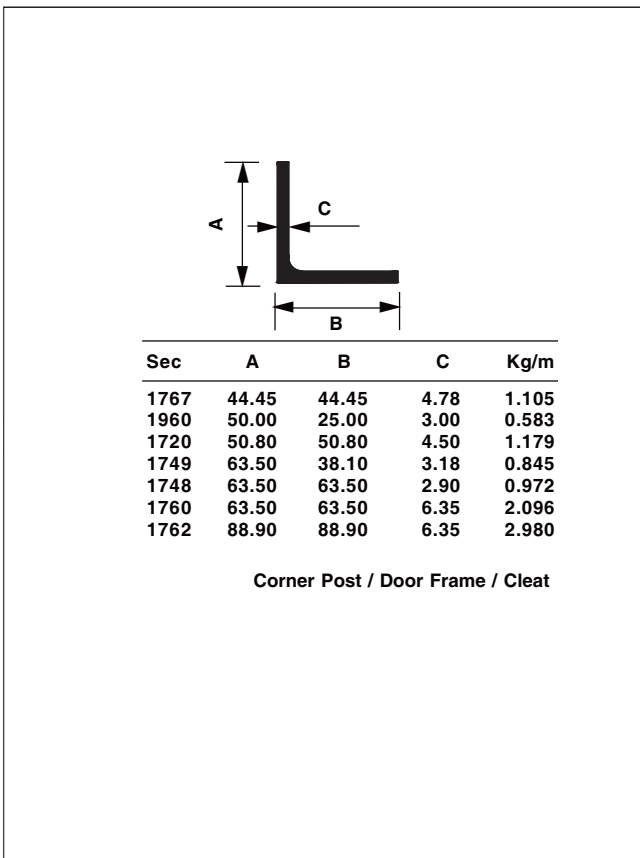
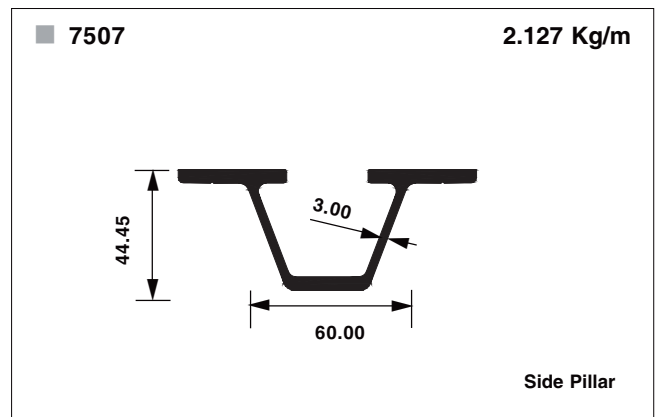
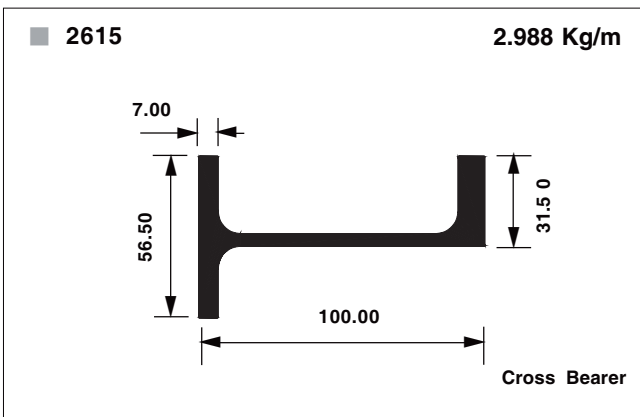
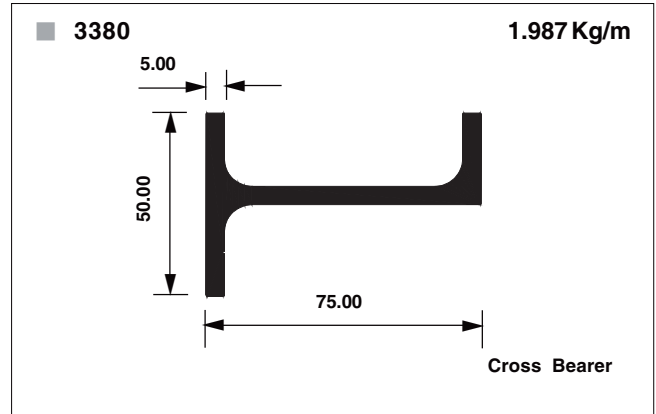
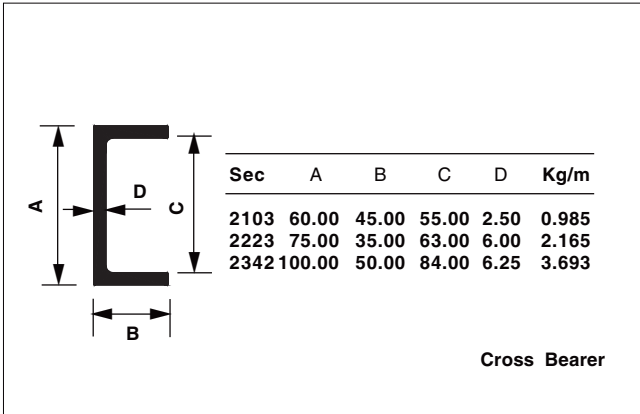


Bus Body Miscellaneous

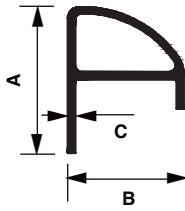




Truck Body Structural



Truck Body Structurals

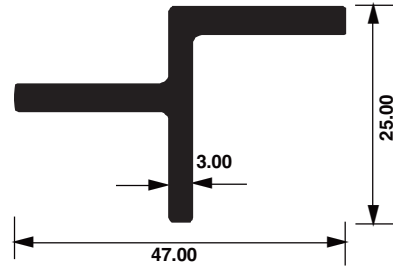


Sec	A	B	C	Kg/m
9875	50.00	34.00	3.00	1.083
9961	53.50	45.00	2.50	1.160

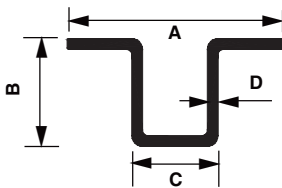
Cant Rail

■ 3467

0.562 Kg/m

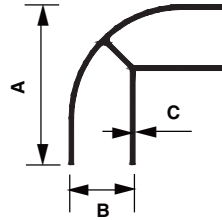


Door Frame



Sec	A	B	C	D	Kg/m
2657	63.50	31.75	25.40	3.18	0.989
2626	68.00	31.50	30.00	3.00	1.022
2654	88.89	44.45	44.45	3.18	1.495
2780	109.00	36.00	65.00	3.00	1.418
2653	120.00	60.00	63.00	2.50	1.595

Roof Sticks /
Roof Purlins /
Side Pillars

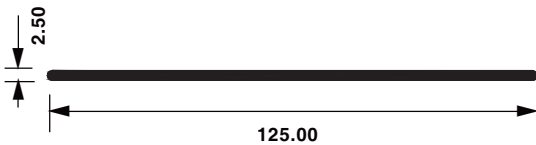


Sec	A	B	C	Kg/m
7461	88.00	38.00	2.00	1.479
7309	107.95	44.45	3.18	2.893
7463	115.27	52.06	3.18	3.100

Cant Rail

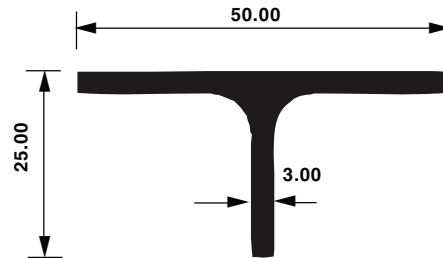
■ 5565

0.840 Kg/m



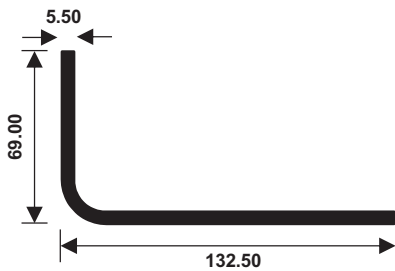
■ 3115

0.616 Kg/m



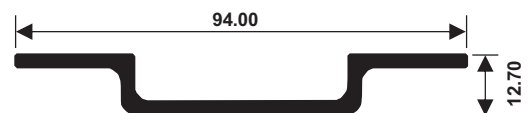
■ 1510

2.806Kg/m



■ 3383

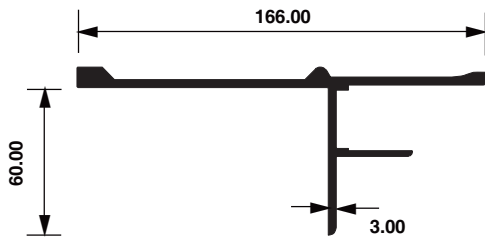
0.928Kg/m



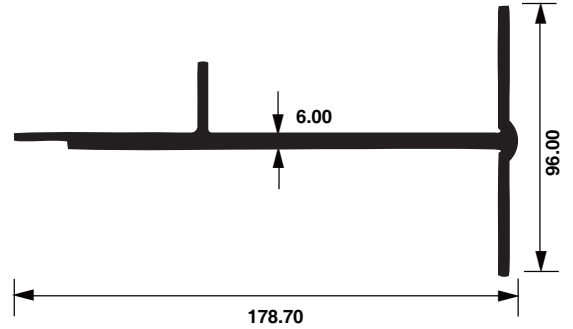


Truck Body Side Raves

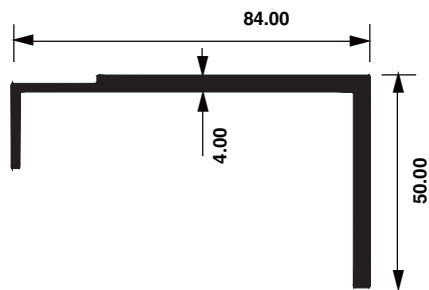
■ 5524 2.337 Kg/m



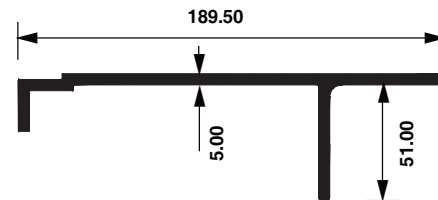
■ 3544 4.011 Kg/m



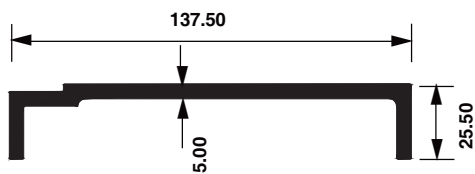
■ 3376 1.393 Kg/m



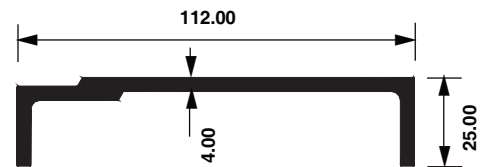
■ 3377 3.530 Kg/m



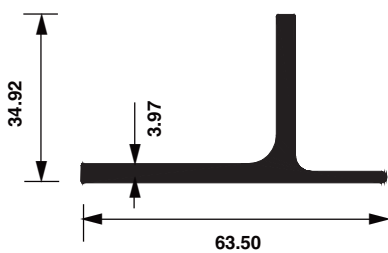
■ 3367 2.417 Kg/m



■ 3379 1.721 Kg/m



■ 3150 0.955 Kg/m

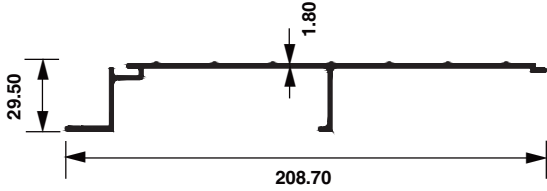


Truck Body Floor Planks



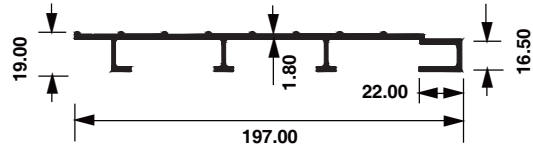
7504

1.415 Kg/m



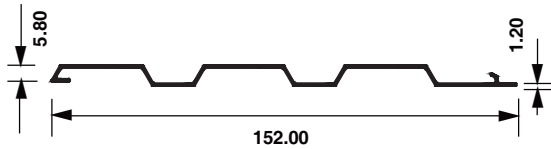
7381

1.602 Kg/m



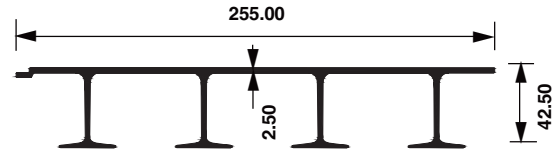
7580

0.534 Kg/m



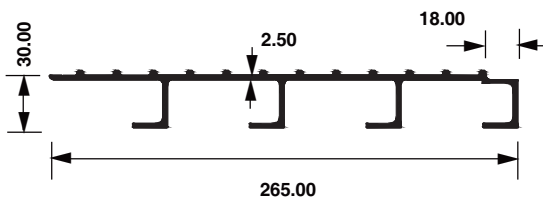
6692

3.660 Kg/m



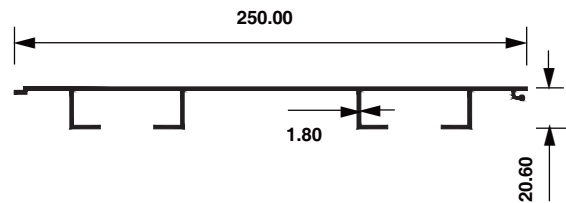
7387

3.557 Kg/m



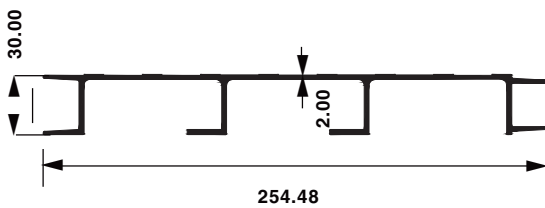
6539

1.887 Kg/m



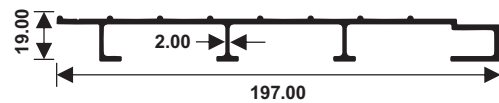
7479

2.697 Kg/m



7092

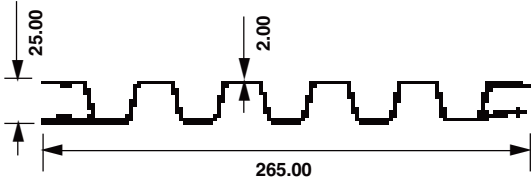
2.091 Kg/m



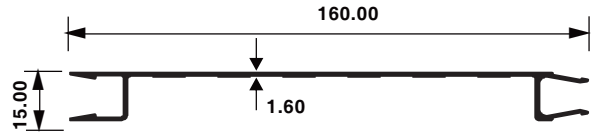


Truck Body Side Planks

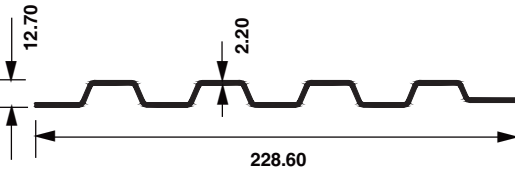
■ 7401 2.871 Kg/m



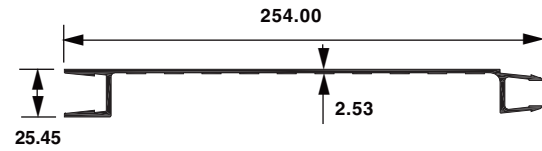
■ 7417 0.862 Kg/m



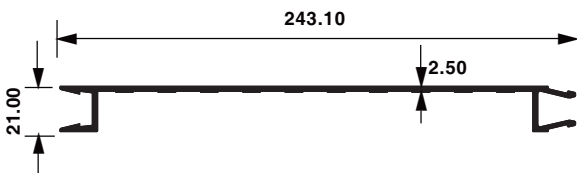
■ 7439 1.652 Kg/m



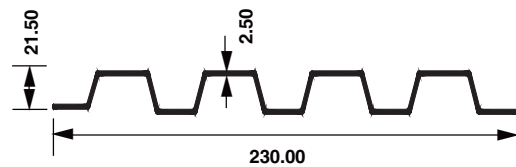
■ 7481 2.089 Kg/m



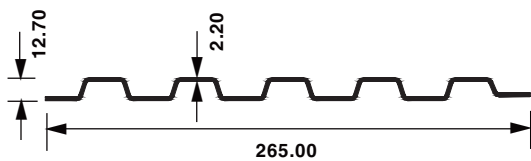
■ 7990 1.815 Kg/m



■ 7071 2.121 Kg/m



■ 7460 1.960 Kg/m

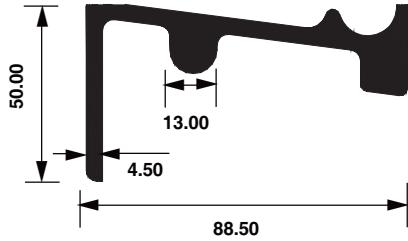


Rail Coach Windows



■ 3968

2.633 Kg/m



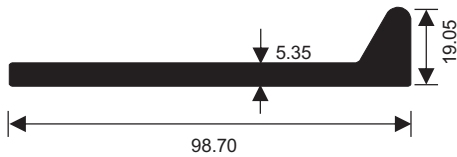
■ 3692

0.655 Kg/m



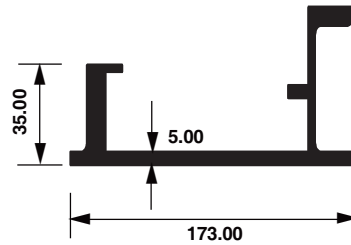
■ 6531

1.741Kg/m



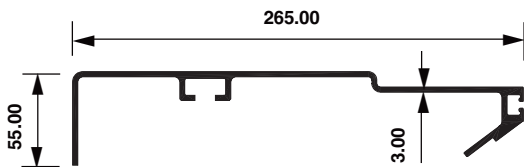
■ 3350

4.650 Kg/m



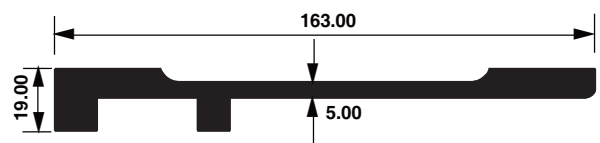
■ 6712

3.735 Kg/m



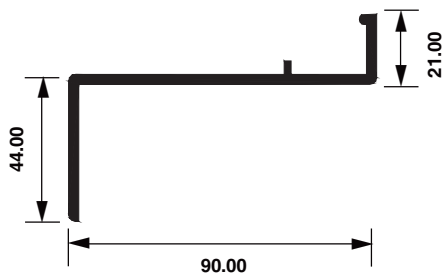
■ 3351

3.540Kg/m



■ 4160

1.235 Kg/m



■ 6551

0.355Kg/m

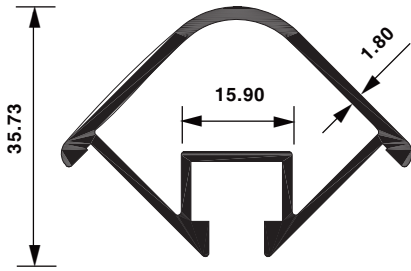




Rail Coach

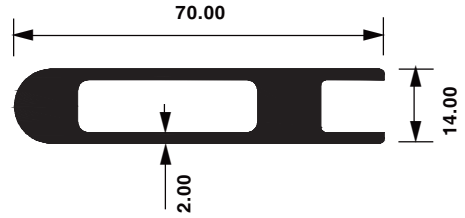
■ 8590

0.694 Kg/m



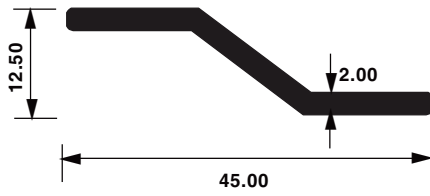
■ 9532

1.356 Kg/m



■ 6606

0.262 Kg/m



■ 6605

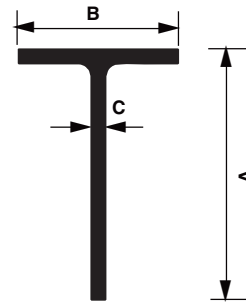
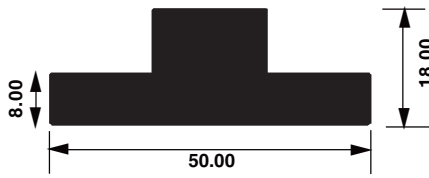
0.501Kg/m





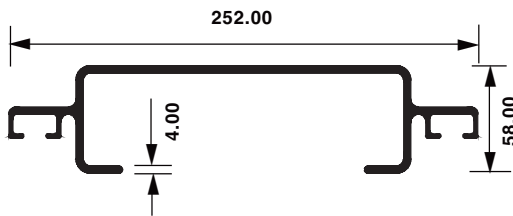
■ 3018

1.565 Kg/m



■ 6708

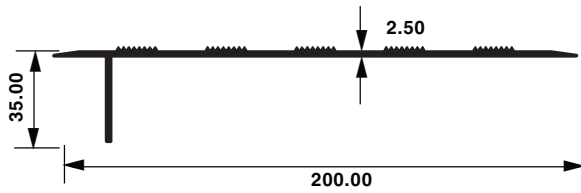
4.722 Kg/m



Sec	A	B	C	Kg/m
3023	40.00	20.00	4.00	0.623
3024	50.80	25.40	5.00	0.989
3025	76.20	38.10	4.76	1.436
3026	125.00	50.00	8.00	3.681
3265	125.00	80.00	8.00	4.296
3229	150.00	80.00	5.00	3.673
3266	150.00	80.00	8.00	4.826

■ 6307

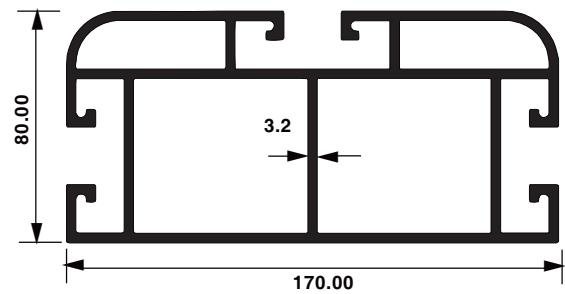
1.708Kg/m



Rail Coach Door

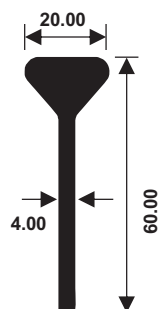
■ 85033

7.182 Kg/m



■ 3592

1.043Kg/m

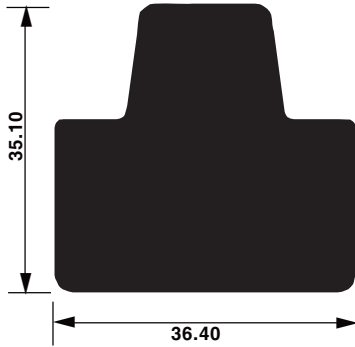




Auto AC Components

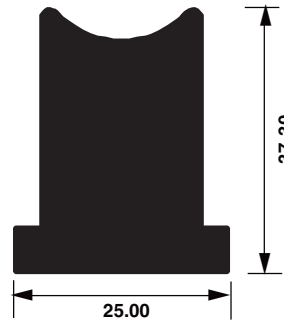
■ 6013

2.721 Kg/m



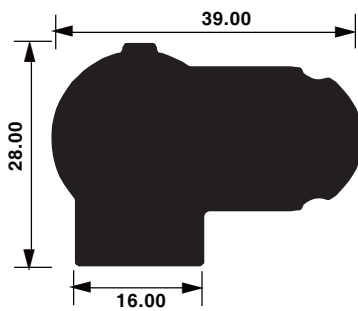
■ 5430

1.563 Kg/m



■ 5435

2.084Kg/m



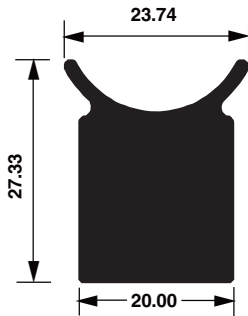
■ 5500

3.750Kg/m



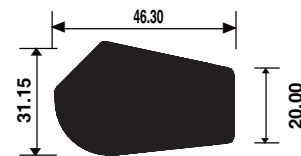
■ 3361

1.231 Kg/m



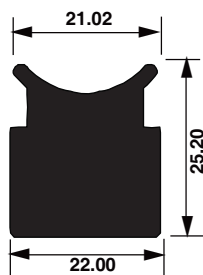
■ 6036

2.269 Kg/m



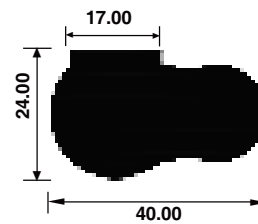
■ 3417

1.257 Kg/m



6037

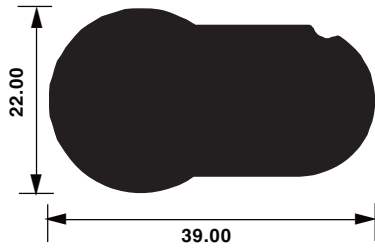
1.997 Kg/m





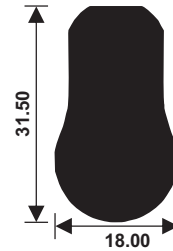
5434

1.820 Kg/m



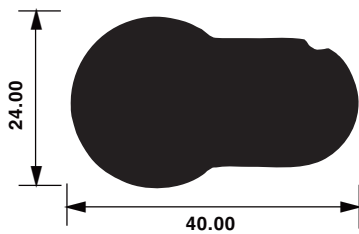
■ 6457

1.209Kg/m



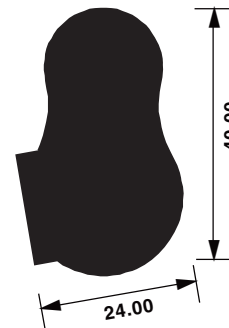
■ 5433

1.959 Kg/m



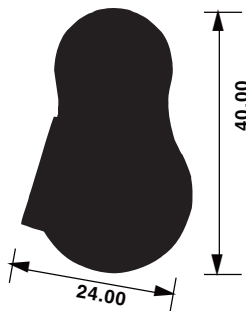
■ 6014

1.999 Kg/m



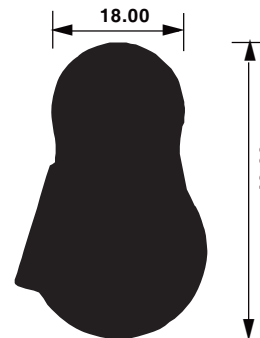
■ 6015

1.984 Kg/m



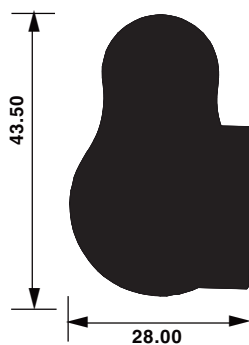
■ 6016

1.983 Kg/m



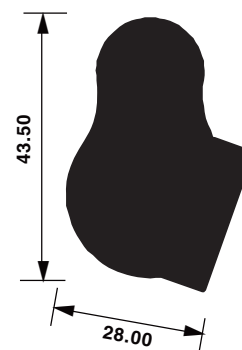
■ 6017

2.515 Kg/m



■ 6018

2.524Kg/m

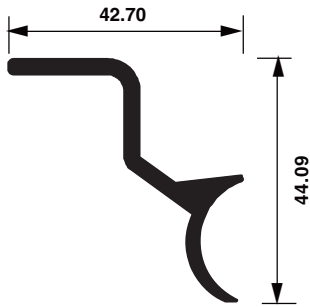




Auto AC Components

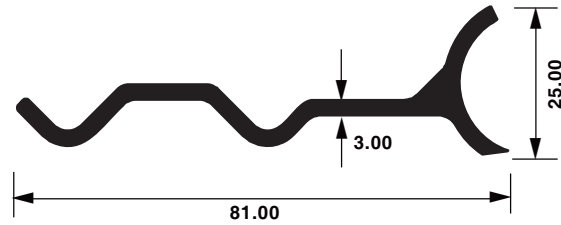
■ 3445

0.635 Kg/m



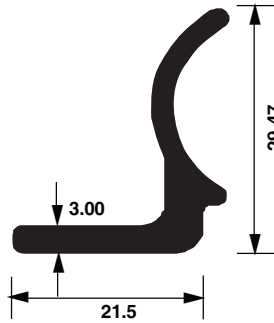
■ 4261

0.921 Kg/m



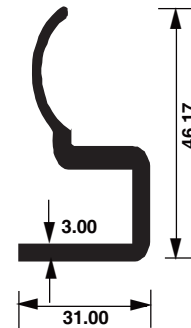
■ 3418

0.386 Kg/m



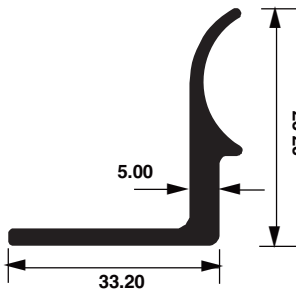
■ 3420

0.794 Kg/m



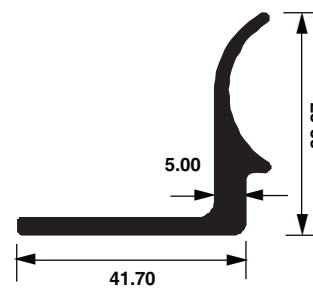
■ 3421

0.650 Kg/m



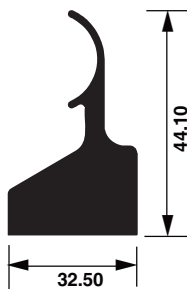
■ 3425

0.582 Kg/m



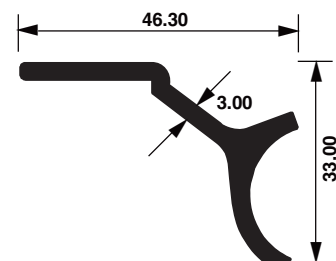
■ 3430

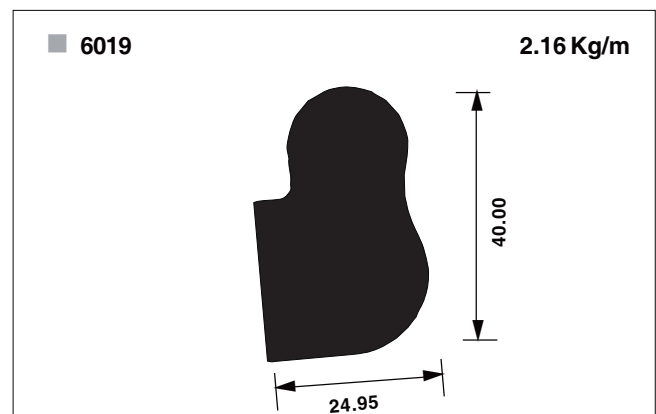
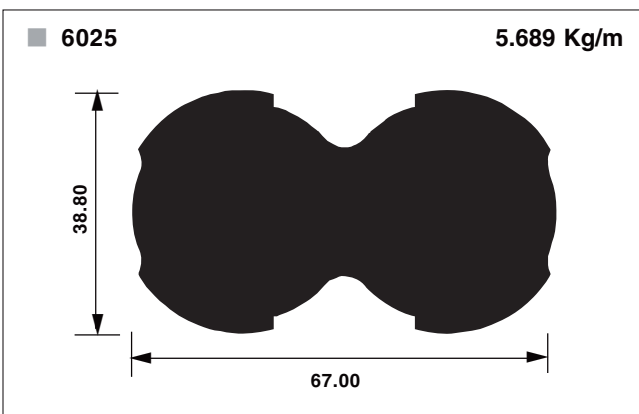
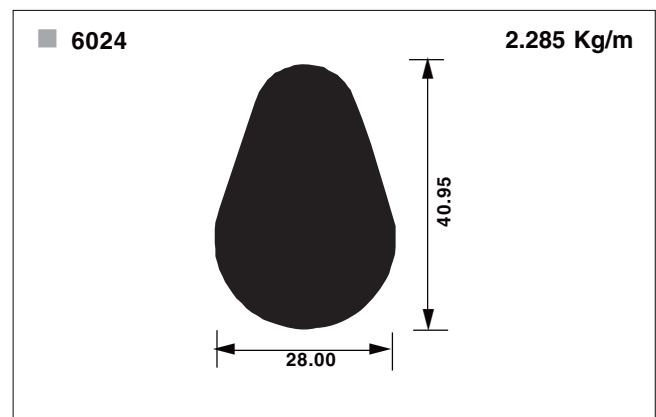
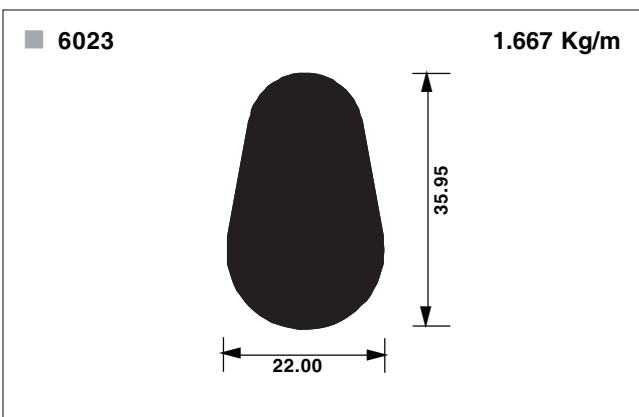
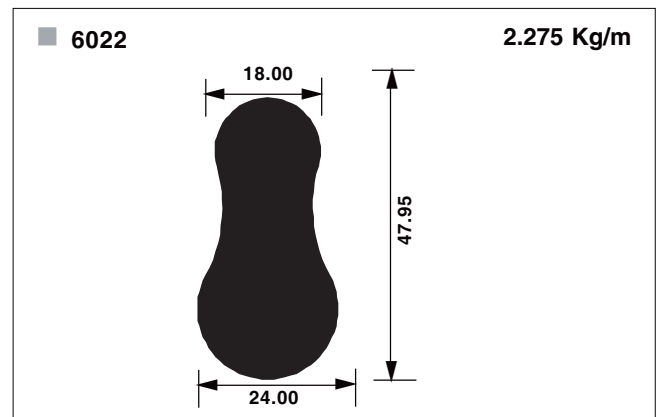
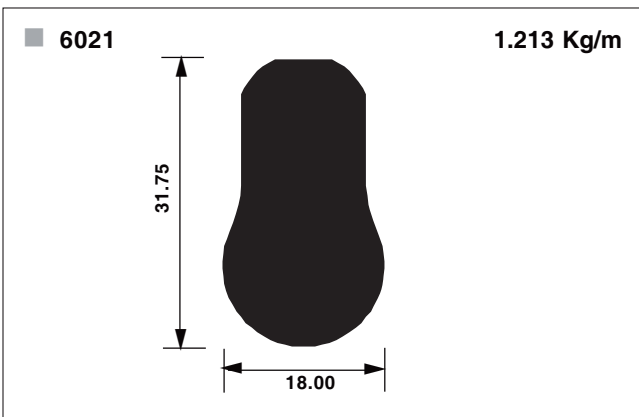
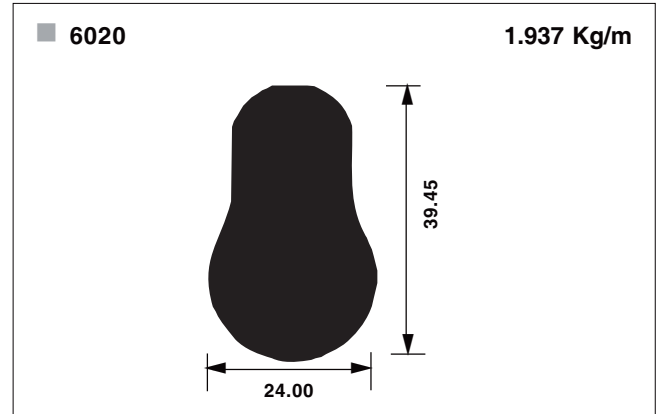
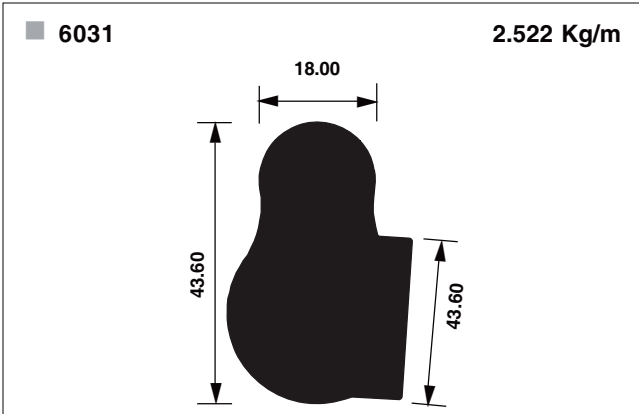
2.063 Kg/m



■ 3444

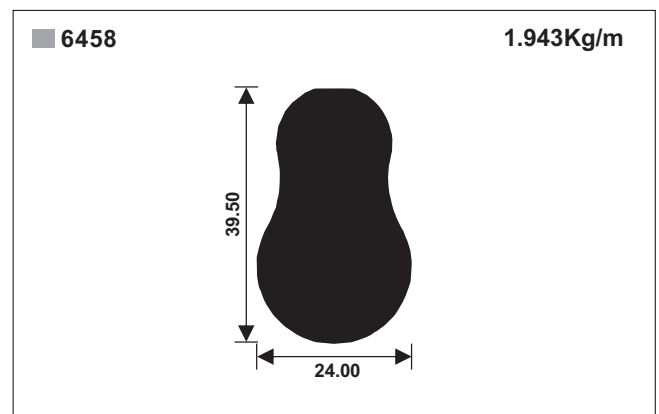
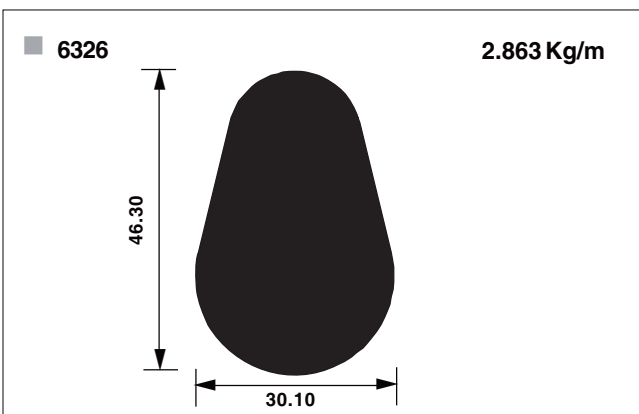
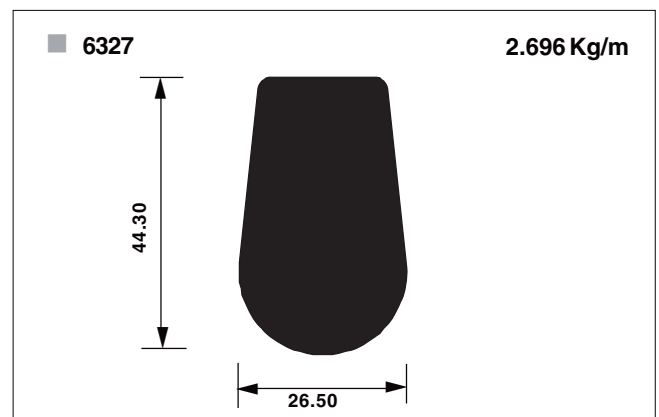
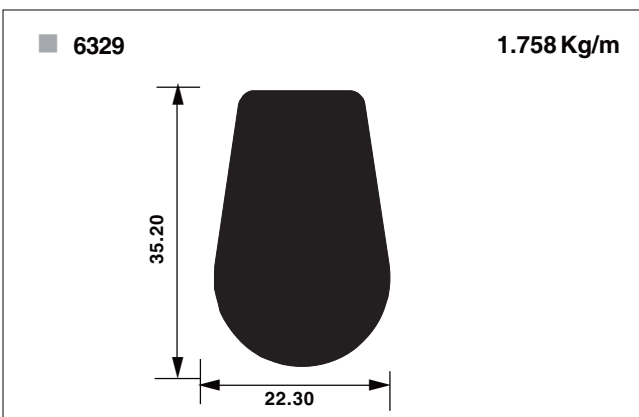
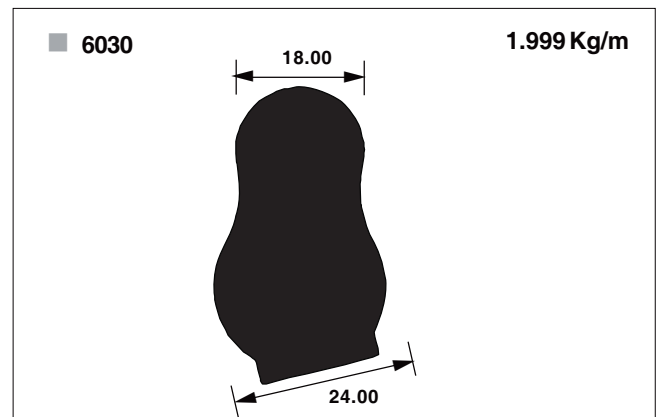
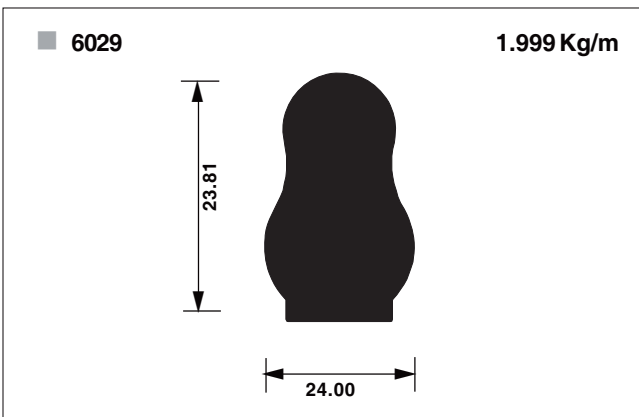
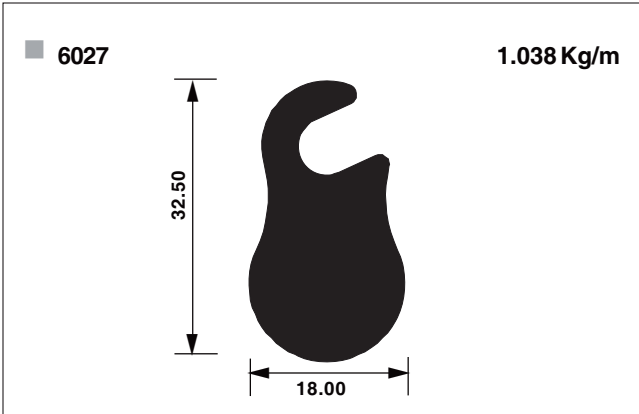
0.630 Kg/m







Auto AC Components

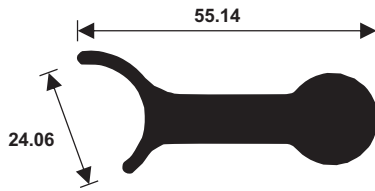


Auto AC Components



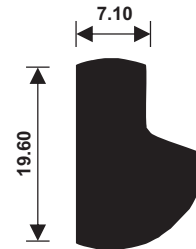
■ 3609

1.412Kg/m



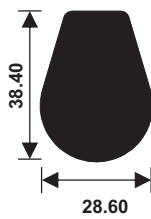
■ 6363

0.498Kg/m



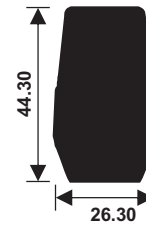
■ 6033

2.336Kg/m



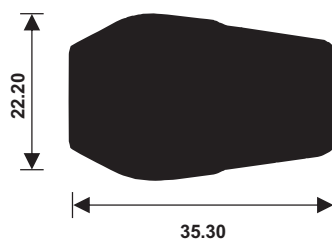
■ 6035

2.784Kg/m



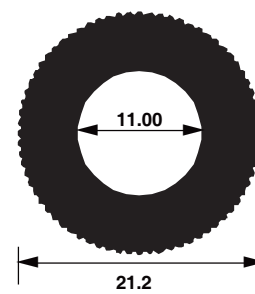
■ 6034

1.786Kg/m



■ 85100

0.676 Kg/m



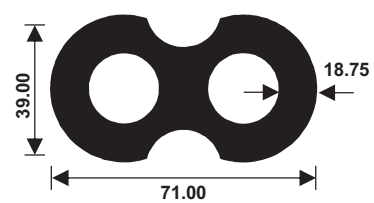
■ 6330

2.70 Kg/m



■ 85351

4.425Kg/m

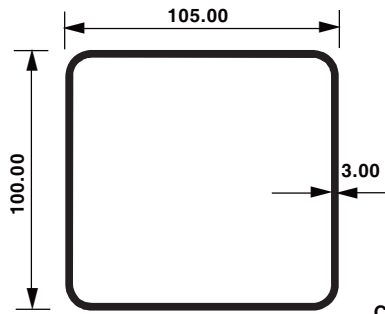




Miscellaneous

■ 8367

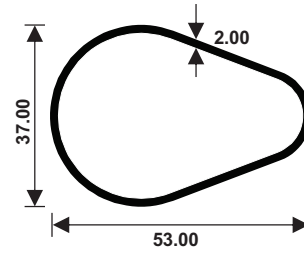
3.337 Kg/m



Crash Guard

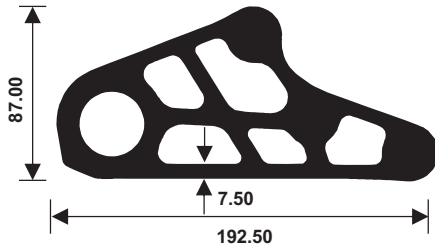
■ 9968

0.729Kg/m



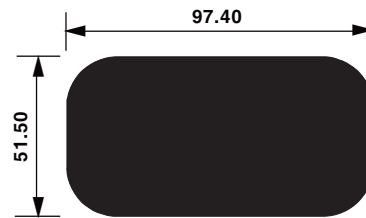
■ 85432

18.066Kg/m



■ 5267

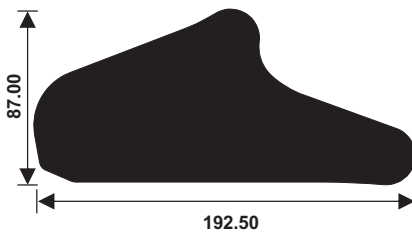
12.950 Kg/m



Brake System Component

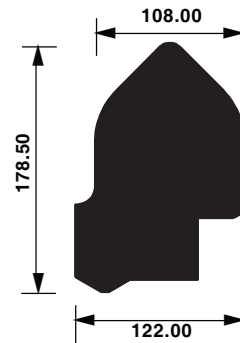
■ 7011

28.978Kg/m



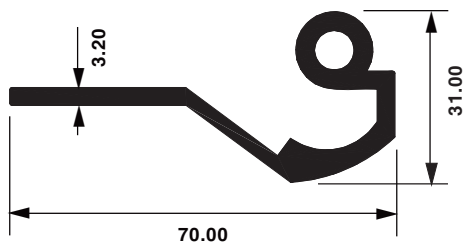
■ 6392

41.160 Kg/m



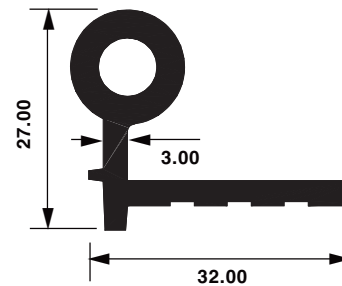
■ 9390

1.123 Kg/m



■ 9389

0.624 Kg/m

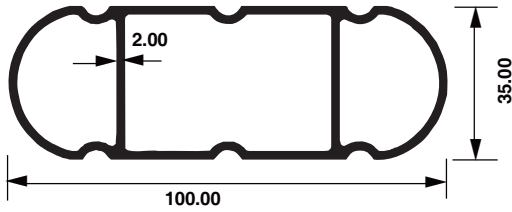


Miscellaneous



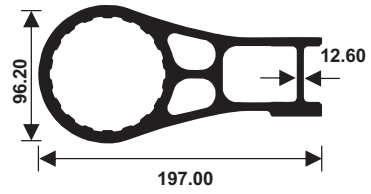
■ 9402

1.668 Kg/m



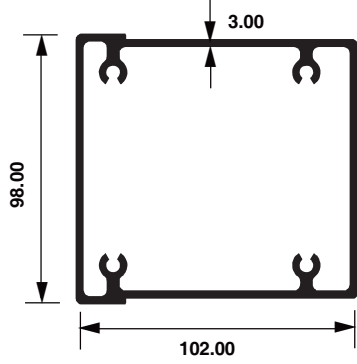
■ 85431

12.8519Kg/m



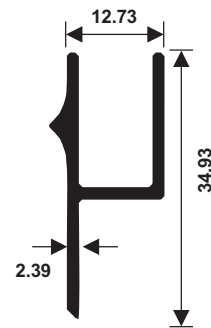
■ 9608

4.062 Kg/m



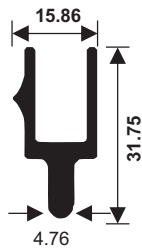
■ 3620

0.290Kg/m



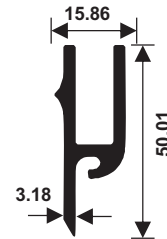
■ 3683

0.461Kg/m



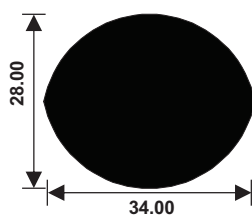
■ 3686

0.840Kg/m



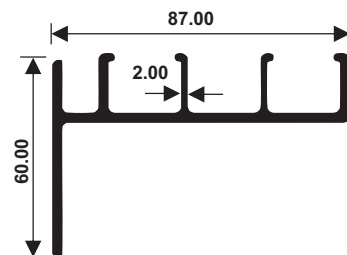
■ 5417

1.927Kg/m



■ 3694

1.729Kg/m





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			128	5500	34	193	6392	40			



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