



STANDARD
PROFILES
06/2019

Imperial Sizes





Extruded alloys- tempers & mechanical properties:

Standard alloys in production include:

EN-AW 6060 (Al MgSi0,5)	DIN 3.3206
EN-AW 6063 (Al Mg0,7Si)	DIN 3.2315
EN-AW 6005A (Al MgSi0,7)	DIN 3.3210
EN-AW 6082 (Al Si1MgMn)	DIN 3.2315
EN-AW 6061 (Al Mg1SiCu)	DIN 3.3211*

* Only available with a prior notice of 5 weeks and a minimum ordered quantity of 22 tons dispatched in one go.

Alloy chemical composition as per EN 573-3:2-13											
Alloy	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Other		Al
									Each	Total	
6060	0,30-0,60	0,10-0,30	0,10	0,10	0,35-0,60	0,05	0,15	0,10	0,05	0,15	Rest
6063	0,20-0,60	0,35	0,10	0,10	0,45-0,90	0,10	0,10	0,10	0,05	0,15	Rest
6005A	0,50-0,90	0,35	0,30	0,50	0,40-0,70	0,30	0,20	0,10	0,05	0,15	Rest
6082	0,70-1,30	0,50	0,10	0,40-1,00	0,60-1,20	0,25	0,20	0,10	0,05	0,15	Rest
6061*	0,40-0,80	0,70	0,15-0,40	0,15	0,80-1,20	0,04-0,35	0,25	0,15	0,05	0,15	Rest

Available combinations of Alloys & Tempers				
6060	6063	6005A	6082	6061
O	O	O	O	O
T4	T4	T4	T4	T4
T5	T5	-	T5	-
T6	T6	T6	T6	T6
T66	T66	-	-	-

Temper designation EN 515:2017	
O	Annealed wrought alloys
T4	Solution heat treated & naturally aged.
T5	Cooled from an elevated temperature forming operation & artificially aged (precipitation hardened)
T6	Solution heat treated & artificially aged (precipitation hardened). Press quenching required.
T66	Cooled from an elevated temperature forming operation & artificially aged (precipitation hardened) to a higher level of mechanical properties through special control of manufacturing processes. Press quenching required.

Physical properties	Alloys EN-AW				
Alloys EN-AW	6060	6063	6005A	6082	6061
Melting range °C	585-650		585-650	585-650	580-640
Density g/cm ³	2,70	2,70	2,70	2,70	2,70
Electrical Conductivity MS/m	34-38		26-32	24-32	22-30
Thermal Conductivity W/(m K)	200-220		180-220	170-220	170-200
Specific Heat J / (Kg K)	898			896	
Thermal Expansion Values					
-50 to 20 °C (10 ⁻⁶ /K)	21,8	23,4	23,4	23,4	23,0
20 to 100 °C (10 ⁻⁶ /K)	23,4				
20 to 200 °C (10 ⁻⁶ /K)	24,5				
20 to 300 °C (10 ⁻⁶ /K)	25,6				
Young's Modulus MPa	69500	69500	69500	70000	70000
Shear Modulus MPa	26100	26100	26200	26400	26300



Mechanical properties as per EN 755-2:2016 (EXTRUDED PROFILES)							
Alloy	Temper	Wall Thickness	Tensile strength	Yield strength	Elongation		Brinell Hardness
					A % min	A _{50mm} % min	
		e mm*	R _m MPa min	R _{p0,2} MPa min			HB**
EN-AW 6060	T4	e ≤ 25	120	60	16	14	50
	T5	e ≤ 5	160	120	8	6	60
		5 < e ≤ 25	140	100	8	6	60
	T6	e ≤ 5	190	150	8	6	60
		5 < e ≤ 25	170	140	8	6	60
	T66	e ≤ 5	215	160	8	6	75
		5 < e ≤ 25	195	150	8	6	75
EN-AW 6063	T4	e ≤ 25	130	65	14	12	50
	T5	e ≤ 10	175	130	8	6	65
		10 < e ≤ 25	160	110	7	5	65
	T6	e ≤ 10	215	170	8	6	75
		10 < e ≤ 25	195	160	8	6	75
	T66	e ≤ 10	245	200	8	6	80
		10 < e ≤ 25	225	180	8	6	80
EN-AW 6005A	T4 open	e ≤ 25	180	90	15	13	50
	T4 hollow	e ≤ 10	180	90	15	13	50
	T6 open	e ≤ 5	270	225	8	6	90
		5 < e ≤ 10	260	215	8	6	85
		10 < e ≤ 25	250	200	8	6	85
	T6 hollow	e ≤ 5	255	215	8	6	85
5 < e ≤ 15		250	200	8	6	85	
EN-AW 6082	T4	e ≤ 25	205	110	14	12	35
	T5 open	e ≤ 5	270	230	8	6	90
	T5 hollow	e ≤ 5	270	230	8	6	95
	T6 open	e ≤ 5	290	250	8	6	95
		5 < e ≤ 25	310	260	10	8	95
	T6 hollow	e ≤ 5	290	250	8	6	95
5 < e ≤ 15		310	260	10	8	95	
EN-AW 6061	T4	e ≤ 25	180	110	15	13	65
	T6	e ≤ 5	260	240	9	7	95
		5 < e ≤ 25	260	240	10	8	95

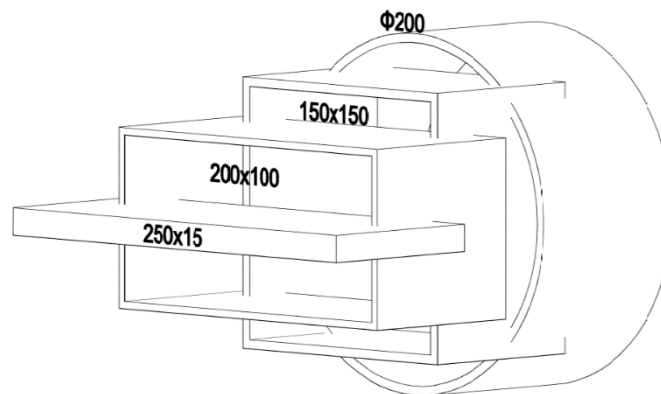
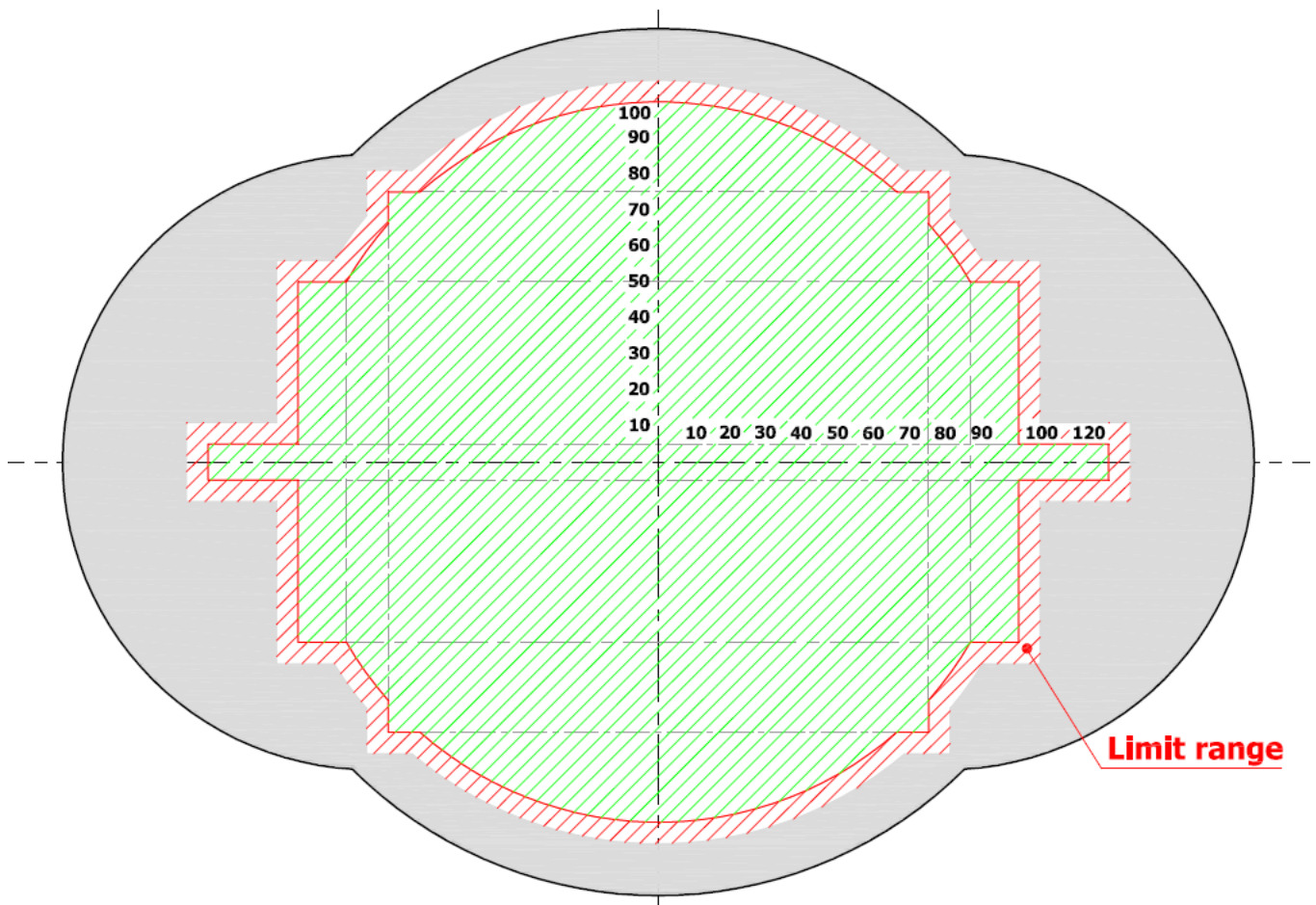
* For a profile having different wall thicknesses, the lowest specified values of properties shall be considered as valid for the whole profile cross section. ** The values for the HB hardness are indicative only.

Bendability classes to standardised tempers (EN 15088:2005)						
Alloy	T4	T5	T6	T6510	T64	T66
EN-AW 6060	-	B3	B3	B3	B2	B3
EN-AW 6063	-	B3	B3	B3	-	B3
EN-AW 6005A	-	-	-	B3	B3	-
EN-AW 6082	B2	B3	B3	-	-	-
EN-AW 6061	B2	-	B3	B3	-	-

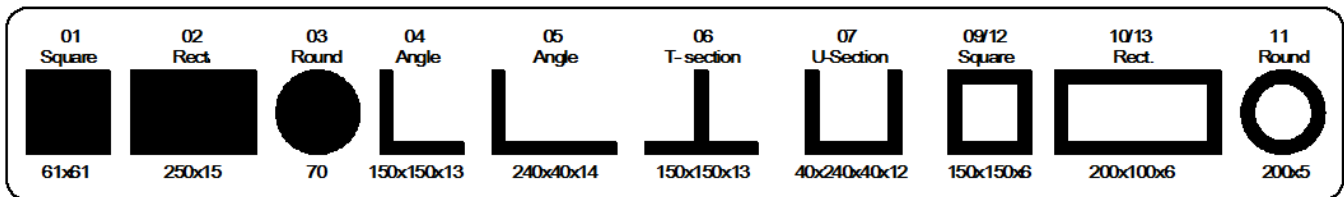
EXPERTS IN ALUMINIUM™

B2	Material is in mid strained hardened/naturally aged/partially aged hardened. Bendability for simple symmetrical sections with medium radii is possible. Thin walled or complicated sections may require special devices or bending machines.
B3	Material is in hard/fully age hardened. For simple symmetrical sections bendability is possible only with relatively large radii. Thin walled or complicated sections may require special devices or bending machines.

Profile size production range



Maximum extrusion dimensions per standard profile (shape) category.

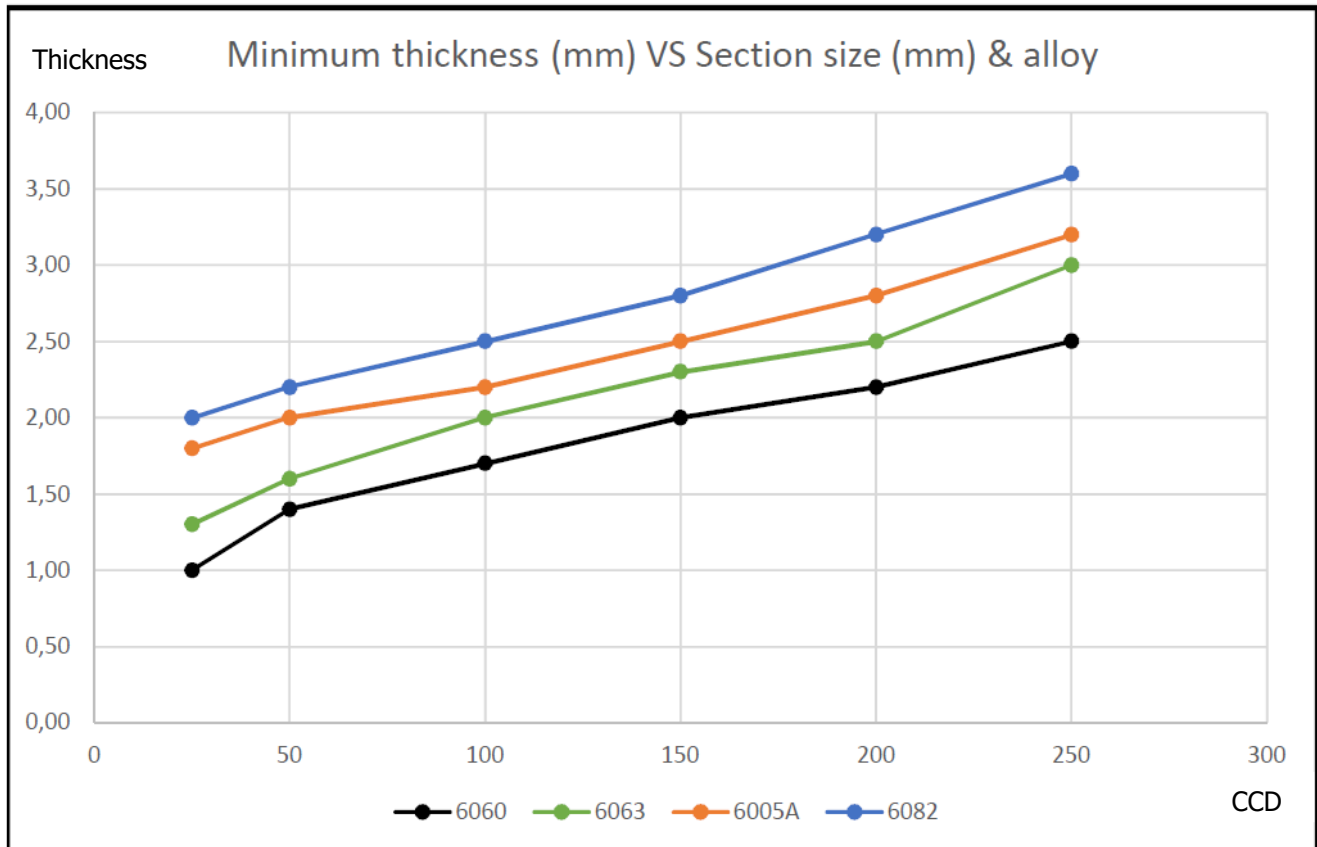


Profile weight production range

Minimum	Maximum
0,100 Kg/m	10,00 Kg/m

Thickness vs Alloy

Depending on the size of the section (Circumscribed Circle Diameter, horizontal axis) and the alloy to extrude, the minimum thickness should follow the trend indicated by the chart below (vertical axis):





Product forms & Applications

Alloys	Forms	Characteristic properties	Applications
EN-AW 6060	Extruded bars Extruded tubes Extruded profiles	V.good corrosion resistance, weldability, Medium strength, Complex sections, Anodising quality.	Architectural sections, windows, doors, curtain walls, lightings, railing, ladders, furniture, fences, truck flooring, heat sinks, irrigation, cooling pipes, electronic modules.
EN-AW 6063		V.good corrosion resistance, weldability, Medium strength, Complex sections, Anodising quality.	Architectural sections, windows, doors, curtain walls, lightings, railing, ladders, furniture, fences, truck flooring, heat sinks, irrigation, cooling pipes, electronic modules, electric motor housings, office equipment, special machine elements.
EN-AW 6005A		V.good corrosion resistance, V.good weldability, ,Medium-high strength, Complex sections, Anodising quality.	Bus and railway profile structures, structural engineering, pylons, platforms, pipeline,...
EN-AW 6082		V.good corrosion resistance, V.good weldability, Medium-high strength, good machinability, formability in T4,Medium-high strength, Simple sections	Heavy duty structures in rail coaches, truck frames, ship building, offshore, bridges, boiler making, mast and beams for ship building, scaffolding, motorboats.
EN-AW 6061		V.good corrosion resistance, V.good weldability, Medium-high strength, good machinability, formability in T4,Medium-high strength, Simple sections	Heavy duty structures in rail coaches, truck frames, ship building, offshore, bridges, boiler making, mast and beams for ship building, scaffolding, motorboats

Quality control

Cosmos follow the inspection rules and control the shape quality characteristics and mechanical properties of the extruded sections under the following European norms:

EN Standard	Description
Aluminium & aluminium alloys- Extruded rod/bar, tubes and profiles	
EN 755-1	Technical conditions for inspection & delivery
EN 755-2	Mechanical properties
EN 515	Temper designation
EN 573-3	Chemical composition and form of products
EN 755-3	Round bars, tolerances on dimension & form
EN 755-4	Square bars, tolerances on dimension & form
EN 755-5	Rectangular bars, tolerances on dimension & form
EN 755-6	Hexagonal bars, tolerances on dimension & form
EN 755-8	Porthole square, rect, hex, Oct, & round tubes, tolerances on dimension & form
EN 755-9	Profiles, tolerances on dimension & form
EN- 12020-1	Technical conditions for inspection & delivery (for precision profiles only)
EN- 12020-2	Tolerances on dimension & form (for precision profiles only)
Metallic products- materials	
EN ISO 6892-1	Tensile testing- part 1: Method of test at room temperature
EN- 10204	Inspection certificates 2.3, 3.1, 3.2
On special request	
ASTM B 221M-07 (Metric)	Standard specification for Aluminium and Aluminium alloy Extruded Bars, Rods, Wire, Profiles and Tubes
ASTM B 429M-06	Standard specification for Aluminium alloy Extruded Structural Pipe or Tube.
BS EN ISO 8493:2004	Tube- Drift- expanding test



Certifications

Cosmos aluminium is holding the following certificates:

Cosmos Certificates
ISO 9001
ISO 14001
ISO 50001
OSHAS 18001
Certificate of Conformity of Factory Production Control- No 0038/CPR/PIR1007756/A- Lloyds
LR Approved- No MD00/4306/0004/6a- Lloyds
REACH
RoHS

Rectangular bars (Flat bars)

Rechteckstangen (Flachstangen)



Notes:

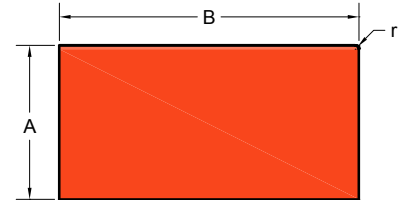
* The weight of each profile is calculated by measuring it's cross-sectional area and multiplying it by the material density. The aluminium density is considered to be 2,70

** Alloy and Length is subject to customer's request.

*** Corner Radii 0,0118 inch or 0,3 mm.

* Additional charge

A = Width
B = Height
r = Corner radius



Profile Code	A (inch)	B (inch)	r ^(***) (inch/mm)	Area Flaechе (inch ²)	Area Flaechе (mm ²)	Weight Gewicht (Kg/m)
020859	1/8"	5/8"		0,0781	50	0,136
020801	1/8"	3/4"		0,0936	60	0,163
020870	3/16"	3/4"		0,1406	91	0,246
020832	3/8"	3/4"		0,2807	181	0,489
020847	1/2"	3/4"		0,3749	242	0,653
020823	1/8"	1"		0,1251	81	0,218
020866	3/16"	1"		0,1894	122	0,330
020807	1/4"	1"		0,2497	161	0,435
020860	1/2"	1"		0,5000	323	0,871
020861	3/4"	1"		0,7497	484	1,306
020835	1/8"	1.1/4"		0,1561	101	0,272
020862	1/4"	1.1/4"		0,3129	202	0,545
020848	3/4"	1.1/4"		0,9375	605	1,633
020845	1"	1.1/4"		1,2498	806	2,177
020844	1/8"	1.1/2"		0,1871	121	0,326
020808	1/4"	1.1/2"		0,3749	242	0,653
020809	3/8"	1.1/2"		0,5626	363	0,980
020836	1/2"	1.1/2"		0,7497	484	1,306
020863	3/4"	1.1/2"		1,1252	726	1,960
020824	1"	1.1/2"		1,5001	968	2,613
020840	1.1/4"	1.1/2"		1,8755	1.210	3,267
020846	1/4"	1.3/4"		0,4374	282	0,762
020841	1.1/4"	1.3/4"		2,1872	1.411	3,810
020826	3/16"	2"		0,3749	242	0,653
020825	1/8"	2"		0,2503	161	0,436
020802	1/4"	2"		0,4999	323	0,871
020810	3/8"	2"		0,7497	484	1,306
020818	1/2"	2"		1,0000	645	1,742
020856	5/8"	2"		1,2498	806	2,177
020864	3/4"	2"		1,5001	968	2,613
020811	1"	2"		1,9995	1.290	3,483
020842	1.1/4"	2"		2,5001	1.613	4,355
020812	1.1/2"	2"		3,0001	1.936	5,226

Profile Code	A (inch)	B (inch)	r^(***) (inch/mm)	Area Flaeche (inch²)	Area Flaeche (mm²)	Weight Gewicht (Kg/m)
020852	3/4"	2.1/4"		1,6872	1.089	2,939
020865	1.1/4"	2.1/4"		2,8124	1.814	4,899
020837	1/4"	2.1/2"		0,6246	403	1,088
020834	3/8"	2.1/2"		0,9375	605	1,633
020831	1/2"	2.1/2"		1,2498	806	2,177
020819	1"	2.1/2"		2,5001	1.613	4,355
020822	1.1/2"	2.1/2"		3,7499	2.419	6,532
020843	2"	2.1/2"		5,0002	3.226	8,710
020827	1/4"	3"		0,7497	484	1,306
020803	3/8"	3"		1,1252	726	1,960
020828	1/2"	3"		1,4989	967	2,611
020857	5/8"	3"		1,8749	1.210	3,266
020820	1"	3"		2,9995	1.935	5,225
020853	1.1/4"	3"		3,7499	2.419	6,532
020849	1.1/2"	3"		4,4996	2.903	7,838
020838	2"	3"		6,0513	3.904	10,541
020850	1"	3.1/2"		3,5001	2.258	6,097
020854	1.1/2"	3.1/2"		5,2499	3.387	9,145
020806	1/4"	4"		1,0000	645	1,742
020813	3/8"	4"		1,5001	968	2,613
020804	1/2"	4"		1,9999	1.290	3,484
020839	5/8"	4"		2,5001	1.613	4,355
020829	3/4"	4"		2,9995	1.935	5,225
020821	1"	4"		3,9996	2.580	6,967
020833	1.1/4"	4"		5,0002	3.226	8,710
020814	1/4"	5"		1,2498	806	2,177
020858	1/2"	5"		2,5001	1.613	4,355
020851	1"	5"		5,0002	3.226	8,710
020805	1/4"	6"		1,4999	968	2,613
020815	3/8"	6"		2,2498	1.451	3,919
020816	1/2"	6"		3,0001	1.936	5,226
020817	1"	6"		6,0002	3.871	10,452

Round bars (Rods)

standard

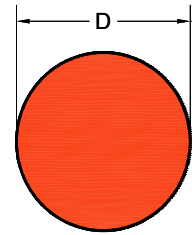
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Notes:

* The weight of each profile is calculated by measuring it's cross-sectional area and multiplying it by the material density. The aluminium density is considered to be 2,70

** Alloy and Length is subject to customer's request.

D = Diameter



* Additional charge

Profile Code	D (inch)			Area Flaeche (inch ²)	Area Flaeche (mm ²)	Weight Gewicht (Kg/m)
030807	5/8"			0,307	198	0,535
030805	1/2"			0,196	127	0,342
030806	3/4"			0,442	285	0,770
030808	7/8"			0,602	388	1,048
030801	1"			0,786	507	1,369
030804	1.1/4"			1,227	792	2,138
030809	1.3/8"			1,485	958	2,587
030810	1.1/2"			1,767	1140	3,078
030802	1.3/4"			2,405	1552	4,190
030811	1.7/8"			2,764	1783	4,814
030803	2"			3,142	2027	5,473
030816	2.1/8"			3,545	2287	6,197
030815	2.1/4"			3,976	2565	6,926
030812	2.3/8"			4,431	2859	7,718
030813	2.1/2"			4,909	3167	8,551
030814	2.3/4"			5,939	3832	10,346

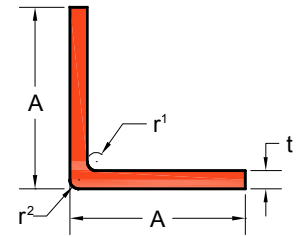
Symmetrical L-Profiles (Angles)

Gleichschenklige L-Profil (Winkelprofile)

Notes:

- * The weight of each profile is calculated by measuring it's cross-sectional area and multiplying it by the material density. The aluminium density is considered to be 2,70
- ** Alloy and Length is subject to customer's request.
- *** Corner Radii 0,0118 inch or 0,3 mm.

- A** = Width
- A** = Height
- t** = thickness
- r¹, r²** = Corner radius



* Additional charge

Profile Code	A (inch)	A (inch)	t (inch)	Area Flaeche (inch ²)	Area Flaeche (mm ²)	Weight Gewicht (Kg/m)
040822	3/4"	3/4"	1/8"	0,1716	111	0,299
040816	1"	1"	1/16"	0,1211	78	0,211
040801	1"	1"	1/8"	0,2342	151	0,408
040811	1"	1"	3/16"	0,3393	219	0,591
040819	1"	1"	1/4"	0,4369	282	0,761
040818	1.1/4"	1.1/4"	1/16"	0,1521	98	0,265
040807	1.1/4"	1.1/4"	1/8"	0,2974	192	0,518
040820	1.1/4"	1.1/4"	1/4"	0,5626	363	0,980
040802	1.1/2"	1.1/2"	1/8"	0,3594	232	0,626
040817	1.1/2"	1.1/2"	3/16"	0,5270	340	0,918
040803	1.1/2"	1.1/2"	1/4"	0,6889	444	1,200
040824	1.3/4"	1.3/4"	3/16"	0,6200	400	1,084
040823	2"	2"	1/16"	0,2474	160	0,431
040804	2"	2"	1/8"	0,4839	312	0,843
040813	2"	2"	3/16"	0,7141	461	1,244
040805	2"	2"	1/4"	0,9375	605	1,633
040821	2"	2"	3/8"	1,3594	877	2,368
040815	2.1/2"	2.1/2"	3/16"	0,9019	582	1,571
040809	2.1/2"	2.1/2"	1/4"	1,1878	766	2,069
040808	3"	3"	1/8"	0,7331	473	1,277
040806	3"	3"	1/4"	1,4375	927	2,504
040810	3"	3"	3/8"	2,1086	1360	3,673
040814	4"	4"	1/4"	1,9375	1250	3,375
040812	4"	4"	3/8"	2,8589	1844	4,980

Asymmetrical L-Profiles (Angles)

Ungleichschenklige L-Profil (Winkelprofil)

Notes:

* The weight of each profile is calculated by measuring it's cross-sectional area and multiplying it by the material density. The aluminium density is considered to be 2,70

** Alloy and Length is subject to customer's request.

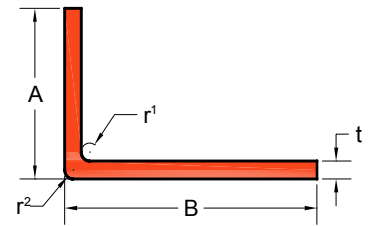
*** Corner Radii 0,0118 inch or 0,3 mm.

A = Height

B = Width

t = thickness

r¹, r² = Corner radius



* Additional charge

Profile Code	A (inch)	B (inch)	t (inch)	Area Flaeche (inch ²)	Area Flaeche (mm ²)	Weight Gewicht (Kg/m)
050806	1"	1/2"	1/16"	0,0901	58	0,157
050820	1"	5/8"	1/8"	0,1883	121	0,328
050808	1.1/2"	1"	1/8"	0,2968	191	0,517
050801	2"	1"	1/8"	0,3594	232	0,626
050809	2"	1"	1/4"	0,6872	443	1,197
050813	2"	1.1/2"	1/8"	0,4191	270	0,730
050810	2"	1.1/2"	1/4"	0,8123	524	1,415
050807	3"	1"	1/8"	0,4839	312	0,843
050811	3"	1.1/2"	1/8"	0,5471	353	0,953
050812	3"	2"	1/8"	0,6091	393	1,061
050805	3"	2"	3/16"	0,9019	582	1,571
050802	3"	2"	1/4"	1,1872	766	2,068
050819	4"	1"	1/8"	0,6114	394	1,065
050803	4"	2"	1/4"	1,4369	927	2,503
050804	4"	3"	1/4"	1,6878	1089	2,940
050816	5"	2"	3/8"	2,4840	1603	4,343
050817	5"	3"	1/4"	1,9372	1250	3,387
050818	6"	3"	1/4"	2,1872	1411	3,824
050815	6"	3"	3/8"	3,2464	2094	5,655
050814	7"	3"	3/8"	3,6224	2337	6,310

U-Profiles (U-Channels)

U-Profile

Notes:

* The weight of each profile is calculated by measuring its cross-sectional area and multiplying it by the material density. The aluminium density is

** Alloy and Length is subject to customer's request.

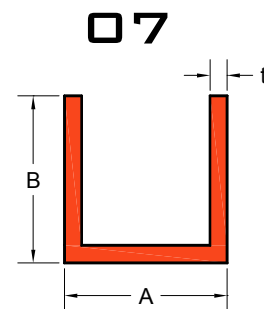
*** Corner Radii 0,0118 inch or 0,3 mm (otherwise stated).

* Additional charge

A = Base

B = Legs

t = thickness



Profile Code	B (inch)	A (inch)	B (inch)	t (inch) leg/base	Area Flaeche (inch ²)	Area Flaeche (mm ²)	Weight Gewicht (Kg/m)
070801	1"	3/4"	1"	1/16-1/16"	0,1630	105	0,284
070802	2"	4"	2"	1/4-5/16"	2,0942	1351	3,648
070803	2"	6"	2"	3/8-1/4"	2,8123	1814	4,917
070804*	2.3/4"	5"	2.3/4"	5/16-3/16"	2,5658	1655	4,486

* Inside bottom corner radii R 1/4")

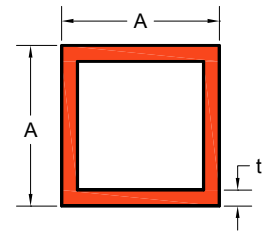
Square tubes

Vierkantrohre

Notes:

- * The weight of each profile is calculated by measuring it's cross-sectional area and multiplying it by the material density. The aluminium density is considered to be 2,70
- ** Alloy and Length is subject to customer's request.
- *** Corner Radii 0,0118 inch or 0,3 mm (otherwise stated).

A = Width
A = Height
t = Thickness



* Additional charge

Profile Code	A (inch)	t (inch)	t (SWG)	Area Flaeche (inch ²)	Area Flaeche (mm ²)	Weight Gewicht (Kg/m)
090811	1/2"		16	0,1114	72	0,194
090809	3/4"		16	0,1751	113	0,305
090808	1"		16	0,2394	154	0,417
090802	1"		10	0,4466	288	0,778
090814	1.1/4"		16	0,3038	196	0,529
090803	1.1/4"		10	0,5746	371	1,001
090813	1.1/2"		16	0,3674	237	0,640
090810	1.1/2"		10	0,7021	453	1,223
090801	2"		10	0,7021	453	1,223
090806	2"	1/4"		1,7498	1129	3,048
090812	2.1/2"		10	1,2142	783	2,115
090804	3"		10	1,4696	948	2,560
090805	4"		10	1,9829	1279	3,454
090807	4"	1/4"		3,7504	2420	6,533

S.W.G. Chart

This chart provides a cross reference between S.W.G. (Standard Wire Gauge), imperial sizes and metric equivalents, in terms of tube wall thickness.

S.W.G.	inches	mm	S.W.G.	inches	mm	S.W.G.	inches	mm
0	0.324"	8.23	9	0.144"	3.658	18	0.048"	1.219
1	0.300"	7.62	10	0.128"	3.251	19	0.040"	1.016
2	0.276"	7.01	11	0.116"	2.946	20	0.036"	0.914
3	0.252"	6.401	12	0.104"	2.642	21	0.032"	0.813
4	0.232"	5.893	13	0.092"	2.337	22	0.028"	0.711
5	0.212"	5.385	14	0.080"	2.032	23	0.024"	0.610
6	0.192"	4.877	15	0.072"	1.829	24	0.022"	0.559
7	0.176"	4.47	16	0.064"	1.626	25	0.020"	0.508
8	0.160"	4.064	17	0.056"	1.422			

Rectangular tubes

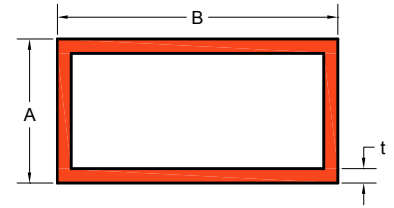
Rechteckrohre



Notes:

- * The weight of each profile is calculated by measuring it's cross-sectional area and multiplying it by the material density. The aluminium density is considered to be 2,70
- ** Alloy and Length is subject to customer's request.
- *** Corner Radii 0,0118 inch or 0,3 mm (otherwise stated).

A = Width
B = Height
t = thickness



* Additional charge

Profile Code	A (inch)	B (inch)	t (inch/SWG)	Area Flaeche (inch ²)	Area Flaeche (mm ²)	Weight Gewicht (Kg/m)
100802	2"	1"	/10	0,7021	453	1,223
100801	2"	1.1/2"	/10	0,8301	536	1,446
100803	3"	1"	/10	0,9581	618	1,669
100808	3"	1.1/2"	/10	1,0862	701	1,892
100807	3"	2"	/10	1,2136	783	2,114
100804	4"	1"	/10	1,2142	783	2,115
100805	4"	1.3/4"	/10	1,4059	907	2,449
100806	4"	2"	/10	1,4696	948	2,560
991439	4"	2"	1/4"	2,7340	1764	4,780
100812	1.1/2"	3/4"	1/16"	0,2654	171	0,464

S.W.G. Chart

This chart provides a cross reference between S.W.G. (Standard Wire Gauge), imperial sizes and metric equivalents, in terms of tube wall thickness.

S.W.G.	inches	mm	S.W.G.	inches	mm	S.W.G.	inches	mm
0	0.324"	8.23	9	0.144"	3.658	18	0.048"	1.219
1	0.300"	7.62	10	0.128"	3.251	19	0.040"	1.016
2	0.276"	7.01	11	0.116"	2.946	20	0.036"	0.914
3	0.252"	6.401	12	0.104"	2.642	21	0.032"	0.813
4	0.232"	5.893	13	0.092"	2.337	22	0.028"	0.711
5	0.212"	5.385	14	0.080"	2.032	23	0.024"	0.610
6	0.192"	4.877	15	0.072"	1.829	24	0.022"	0.559
7	0.176"	4.47	16	0.064"	1.626	25	0.020"	0.508
8	0.160"	4.064	17	0.056"	1.422			

Round tubes

Rundrohre

Notes:

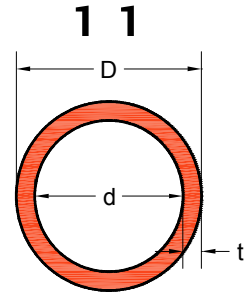
* The weight of each profile is calculated by measuring its cross-sectional area and multiplying it by the material density. The aluminium density is considered to be 2,70

** Alloy and Length is subject to customer's request.

D = Outer Diameter

d = Inner diameter

t = thickness



* Additional charge

Profile Code	D (inch)	t (inch)	t (SWG/mm)	Area Flaeche (inch ²)	Area Flaeche (mm ²)	Weight Gewicht (Kg/m)
110821	3/4"		10/3,251	0,2496	161	0,44
110802	1"		10/3,251	0,3503	226	0,61
110809	1.1/8"		10/3,251	0,4015	259	0,70
110817	1.1/4"		10/3,251	0,4511	291	0,79
110815	1.1/2"		10/3,251	0,5518	356	0,96
110810	1.1/2"	1/4"		0,9812	633	1,72
110822	1.3/8"		10/3,251	0,5007	323	0,88
110811	1 5/8"		10/3,251	0,6014	388	1,05
110820	1.3/4"		10/3,251	0,6526	421	1,14
110814	2"	*	16/1,626	0,3906	252	0,68
110806	2"		10/3,251	0,7518	485	1,31
110808	2"	3/16"		1,0680	689	1,87
110818	2"	1/4"		1,3749	887	2,40
110807	2.1/2"		10/3,251	0,9533	615	1,67
110812	2.1/2"	1/4"	1/4"	1,7670	1140	3,09
110813	3"	*	16/1,626	0,5921	382	1,04
110803	3"		10/3,251	1,1548	745	2,02
110805	3"	1/4"		2,1592	1393	3,78
110823	3.1/2"		10/3,251	1,3563	875	2,37
110824	3.1/2"	1/4"		2,5529	1647	4,46
110819	4"	*	/1,5	0,7316	472	1,28
110801	4"	*	16/1,626	0,7936	512	1,39
110804	4"	*	10/3,251	1,5562	1004	2,72
110816	6"	*	10/3,251	2,3607	1523	4,13

S.W.G. Chart

This chart provides a cross reference between S.W.G. (Standard Wire Gauge), imperial sizes and metric equivalents, in terms of tube wall thickness.

S.W.G.	inches	mm	S.W.G.	inches	mm	S.W.G.	inches	mm
0	0.324"	8.23	9	0.144"	3.658	18	0.048"	1.219
1	0.300"	7.62	10	0.128"	3.251	19	0.040"	1.016
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8	0.160"	4.064	17	0.056"	1.422			