

Chemical composition

According to EN 573-3:2009(F)

Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ga	V	remarqs	Others		Aluminium min
												each	total	
0.40	0.40	0.10	0.50	2.6-3.6	0.30	0.20	0.15	0.10-0.6 Mn+Cr ^C)	0.05	0.15	

Typical physical properties :

According to "mill products general properties" Pechiney

1MPa = 1N/mm2

Density g/cm3	2.67	Poisson ratio	0.33
Melting range °C	590-645	Thermal conductivity (0 to 100°C)- W/m °C (O/H34 Temper)	132
Coefficient of linear expansion (0 to 100°C)-°C-1 x 10(6)	23.8	Resistivity at 20°C - μΩ cm (O/H34 Temper)	5.3
Modulus of elasticity MPa (average)	70 000	Specific heat (0 to 100°C) J/kg °C	945

Technological properties :

According to "mill products general properties" Pechiney

(A)-very good (B)-good (C)-acceptable (D)-poor or not recommended

Welding

Electron beam	A
Inert gaz (TIG or MIG)	A
Resistance welding :	A
Slodering	C

Deep drawing

Annealed	B
1/2 hard H116/H32	C
4/4 hard	C
Spinning 'O' Temper	C

Normal behaviour

Atmospheric corrosion	A
Marine environments	A
Machinability H116/H32	
Break-up of chip	C

Anodizing

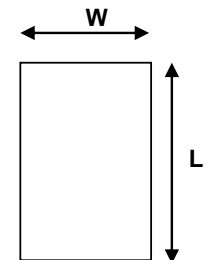
Protective	A
Bright	B
Hard	A

Tolerances :

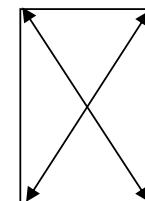
According to EN 485-3:2003(F)

Thickness		Specific Width "Hot Rolled products" - W in mm				
from >	to =	W<=1250	W >1250 <=1600	w >1600 <=2000	W >2000 <=2500	W >2500 <=3500
>= 2,5	4	± 0,28	± 0,28	± 0,32	± 0,35	± 0,40
4	5	± 0,30	± 0,30	± 0,35	± 0,40	± 0,45
5	6	± 0,32	± 0,32	± 0,40	± 0,45	± 0,50
6	8	± 0,35	± 0,40	± 0,40	± 0,50	± 0,55
8	10	± 0,45	± 0,50	± 0,50	± 0,55	± 0,60
10	15	± 0,50	± 0,60	± 0,65	± 0,65	± 0,80
15	20	± 0,60	± 0,70	± 0,75	± 0,80	± 0,90
20	30	± 0,65	± 0,75	± 0,85	± 0,90	± 1,0
30	40	± 0,75	± 0,85	± 1,0	± 1,1	± 1,2
40	50	± 0,90	± 1,0	± 1,1	± 1,2	± 1,5
50	60	± 1,1	± 1,2	± 1,4	± 1,5	± 1,7
60	80	± 1,4	± 1,5	± 1,7	± 1,9	± 2,0
80	100	± 1,7	± 1,8	± 1,9	± 2,1	± 2,2
100	150	± 2,1	± 2,2	± 2,5	± 2,6	/
150	220	± 2,5	± 2,6	± 2,9	± 3,0	/
220	350	± 2,8	± 2,9	± 3,2	± 3,3	/
350	400	± 3,5	± 3,7	± 3,9	± 4,2	/

Width and Length		Tolerances on specific Width(W) or Length(L) mm				
thickness from>	thickness to=	WL <=1000	WL >1000 <=2000	WL >2000 <=3000	L >3000 <=3500	L >3500 <=6000
...	6	0 +5'	0 +7'	0 +8'	0 +10'	0 +10'
6	12	0 +6'	0 +7'	0 +8'	0 +10'	0 +10'
12	50	0 +6'	0 +8'	0 +9'	0 +10'	0 +10'
50	200	0 +8'	0 +8'	0 +9'	0 +10'	0 +10'
200	400	0 +11'	0 +11'	0 +12'	0 +12'	0 +12'



Squareness mm		WIDTH (W)			
LENGTH (L)		L <=1000	L >1000 <=1500	L >1500 <=2000	L >2000 <= 3500
from >	to =				
...	2000	6	7	8	...
2000	3000	7	7	9	10
3000	3500	7	8	10	10
3500	5000	8	10	10	12
5000	...	12	12	15	15



5754**EN AW-AI Mg3****ALMET MARINE****Mecanical properties at room temperature :**

According to EN 485-2:2008(F)

in MPA 1mpa = 1 N/m/m2

* Values offered merely as a guide

Products	temper	Thickness mm		TENSILE PROPERTIES					Bending radius		Hardness HBW *
		from >	to =	Rm-UTS min (Mpa)	Rm-UTS max (Mpa)	Rp0,2MPa-0,2%ps	A% 50mm	A%	180°	90°	
Sheet 5754	O / H111	0.2	0.5	190	240	80	12		0.5 t	0 t	52
		0.5	1.5	190	240	80	14		0.5 t	0.5 t	52
		1.5	3.0	190	240	80	16		1.0 t	1.0 t	52
		3.0	6.0	190	240	80	18		1.0 t	1.0 t	52
		6.0	12.5	190	240	80	18			2.0 t	52
		12.5	100.0	190	240	80		17			52
Sheet 5754	H112	>= 6.0	12.5	190		100	12				62
		12.5	25.0	190		90		10			58
		25.0	40.0	190		80		12			52
		40.0	80.0	190		80		14			52
Sheet 5754	H12	0.2	0.5	220	270	170	4				66
		0.5	1.5	220	270	170	5				66
		1.5	3.0	220	270	170	6				66
		3.0	6.0	220	270	170	7				66
		6.0	12.5	220	270	170	9				66
		12.5	40.0	220	270	170		9			66
Sheet 5754	H14	0.2	0.5	240	280	190	3				72
		0.5	1.5	240	280	190	3				72
		1.5	3.0	240	280	190	4				72
		3.0	6.0	240	280	190	4				72
		6.0	12.5	240	280	190	5				72
		12.5	25.0	240	280	190		5			72
Sheet 5754	H16	0.2	0.5	265	305	220	2				80
		0.5	1.5	265	305	220	3				80
		1.5	3.0	265	305	220	3				80
		3.0	6.0	265	305	220	3				80
Sheet 5754	H22	0.2	0.5	220	270	130	7		1.5 t	0.5 t	63
		0.5	1.5	220	270	130	8		1.5 t	1.0 t	63
		1.5	3.0	220	270	130	10		2.0 t	1.5 t	63
		3.0	6.0	220	270	130	11			1.5 t	63
		6.0	12.5	220	270	130	10			2.5 t	63
		12.5	40.0	220	270	130		9			63
Sheet 5754	H24	0.2	0.5	240	280	160	6		2.5 t	1.0 t	70
		0.5	1.5	240	280	160	6		2.5 t	1.5 t	70
		1.5	3.0	240	280	160	7		2.5 t	2.0 t	70
		3.0	6.0	240	280	160	8			2.5 t	70
		6.0	12.5	240	280	160	10			3.0 t	70
		12.5	25.0	240	280	160		8			70
Sheet 5754	H26	0.2	0.5	265	305	190	4			1.5 t	78
		0.5	1.5	265	305	190	4			2.0 t	78
		1.5	3.0	265	305	190	5			3.0 t	78
		3.0	6.0	265	305	190	6			3.5 t	78

5754**EN AW-Al Mg3****ALMET MARINE****Mecanical properties at room temperature :**

According to EN 485-2:2008(F)

in MPA 1mpa = 1 N/m/m2

* Values offered merely as a guide

Products	temper	Thickness mm		TENSILE PROPERTIES					Bending radius		Hardness HBW *
		from >	to =	Rm-UTS min (Mpa)	Rm-UTS max (Mpa)	Rp0,2MPa-0,2%ps	A% 50mm	A%	180°	90°	
Sheet 5754	H32	0.2	0.5	220	270	130	7		1.5 t	0.5 t	63
		0.5	1.5	220	270	130	8		1.5 t	1.0 t	63
		1.5	3.0	220	270	130	10		2.0 t	1.5 t	63
		3.0	6.0	220	270	130	11			1.5 t	63
		6.0	12.5	220	270	130	10			2.5 t	63
		12.5	40.0	220	270	130		9			63
Sheet 5754	H34	0.2	0.5	240	280	160	6		2.5 t	1.0 t	70
		0.5	1.5	240	280	160	6		2.5 t	1.5 t	70
		1.5	3.0	240	280	160	7		2.5 t	2.0 t	70
		3.0	6.0	240	280	160	8			2.5 t	70
		6.0	12.5	240	280	160	10			3.0 t	70
		12.5	25.0	240	280	160		8			70
Sheet 5754	H36	0.2	0.5	265	305	190	4			1.5 t	78
		0.5	1.5	265	305	190	4			2.0 t	78
		1.5	3.0	265	305	190	5			3.0 t	78
		3.0	6.0	265	305	190	6			3.5 t	78