



AM 2 - 400

from Pechiney Rhenalu specification IS 5626

THICKNESS25 to 350 mm

CHEMICAL COMPOSITION7xxx ALLOY

MECHANICAL PROPERTIES

THICKNESS mm	MINI. VALUES					TYPICAL VALUES					
	UTS		0,2PS		E	UTS		0,2PS		E	Hardness
	MPa	ksi	MPa	ksi	%	MPa	ksi	MPa	ksi	%	HB*
25 ≤ e ≤ 38,1	440	63	390	56	9	465	67	415	60	12	140
38,1 < e ≤ 76,2	415	60	370	53	8	440	63	395	57	11	130
76,2 < e ≤ 127	415	60	370	53	7	440	63	395	57	10	130
127 < e ≤ 152,4	400	58	350	50	7	430	62	380	55	10	130
152,4 < e ≤ 203,2	395	57	340	49	6	425	61	370	53	9	125
203,2 < e ≤ 254	390	56	330	47	5	420	60	360	52	9	125
254 < e ≤ 305	-	-	-	-	-	400	58	340	49	5	120

UTS, 0,2PS, E : Value at 1/4 thickness

HB* : ball 2.5 mm, 62.5 kg Indicative values

HEAT TREATMENT

Plates are delivered after complete thermal treatment and internal stress relieving.
No further thermal treatment is recommended.

INTERNAL STRESS RELIEVED

- Stretching for thickness from 25 to 254 mm.
- Compression for thickness from 200 to 305 mm.

PHYSICAL PROPERTIES

Specific gravity	2,79 kg/dm ³	Modulus of elasticity	72000 MPa
Coef. of thermal expansion (0-100°C)	23,5.10 ⁻⁶ /°C	Modul. of compression	73000 MPa
Thermal conductivity (0-100 °C)	122 W/m.°C	Poisson's coefficient	0.33
Specific heat (0-100 °C)	960 J/kg.°C	Melting range	610 - 650 °C

USAGE PROPERTIES

Welding	Refilling (TIG)	Excellent
	Fitting	Good
Anodizing	Protective	O.K
	Hard	Excellent
Milling	Swarf breaking	Very good
	Surface brightness	Good

DIMENSIONS

Minimum and maximum lengths available depend on their cross section.

Our sales office will be pleased to advise on these limits.

The herewith table is to be used only as a guide.

Thickness mm	Min. width		Maximal Width		Standard Width	
	compressed	Stretched	compressed	Stretched	compressed	Stretched
	plate mm	plate mm	plate mm	plate mm	plate mm	plate mm
25	-	3050	-	1500	-	-
50	-	3050	-	1500	-	-
75	-	3050	-	1500	-	-
100	-	2400	-	1500	-	-
150	-	1700	-	1500	-	-
200	-	1300	1500	1250	1500	-
250	800	1050	1450	1000	1450	-
300	800	-	1450	-	1450	-

Pechiney Rhenalu

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