



ALUMINIUMS Alloys FORTAL

ALUMINIUM PLATE TYPE 7XXX THICKNESS 25 TO 305

Removal of stresses by traction for thicknesses falling between 25 and 200.

Mechanical characteristics

Thickness mm	Typical values			Hardness HBS
	R _m MPa	R _{p0.2} Mpa	A %	
From 6 to 12	590	525	11	180
From 12 to 25	590	525	10	180
From 25 to 40	580	520	9	175
From 40 to 50	570	500	9	170
From 50 to 60	560	485	9	160
From 60 to 80	525	445	8	155
From 80 to 100	535	480	8	155
From 100 to 120	530	475	8	155
From 120 to 140	520	465	7	150
From 140 to 160	515	455	6	150
From 160 to 180	510	450	5	150

Physical properties

Specific weight Kg/dm ³	Linear expansion coefficient (0-100°C) 10/°C	Thermal conductivity (0-100°C) W/m.°C	Specific heat J/kg.°C	Modulus of elasticity Mpa	Compression modulus Mpa	Poisson Ratio	Melting range °C
2,82	23,7	153	857	72.000	72.000	0,33	475-630

Technological suitabilities

Welding		Anodized		Mechanization	
Filling (TIG)	Good DC/Helium rod 5180, 5356, 4047, 4145	For protection	B	Chip fragmentation	B
		Decorative	avoid	Surface gloss	MB
		Hard	MB		

Applications

Prototype moulds and medium-sized and large moulds for plastics' injection.
Moulds for blowing and thermoforming.
Machine elements etc.

Mechanical properties

