

Aluminium Properties

Alloy	Min. Proof stress $R_{p0.2}$ (N/mm ²)	Min. Tensile strength R_m (N/mm ²)	Min. Elongation A5%	Brinell hardness HBS	Spec. weight g/cm ³	Thermal conductivity W/cm ² K	Coefficient of thermal expansion cm x K (20-100°C)	Weldability	Annealing cm/10 ² x °C	Fusing-point/ Interval C°	Elastic modulus KN/mm ²	Electrical conductivity at 20° ohm-mm ²
5754 H111	80	190	12	52	2.66	1.3-1.7	23.7	excellent	330-360	610-640	70	18-23
5083 H111	125	275	12	75	2.66	1.1-1.2	23.8	excellent	330-400	580-640	71	17
6082 T651	240	295	8	89	2.70	1.5-1.9	23.4	good	350-400	585-650	70	24-32
2017A T4	245	390	12	110	2.80	1.3-1.7	22.8	bad	350-400	512-650	72	21-28
2024 T3	290	440	13	110	2.77	1.3-1.7	22.8	bad	350-400	505-640	73	18-26
2014 T651	400	460	6	133	2.80	1.6	23.0	bad	350-400	510-640	72	23-29
7020 T651	270	340	8	101	2.77	1.2-1.6	23.0	good	350-400	580-650	70	18-24
7022 T651	350	430	5	127	2.78	1.3-1.5	23.6	bad	--	515-640	71	17-19
7075 T651	440	525	4	155	2.80	1.3-1.6	23.3	bad	--	500-640	72	17-20
7050 Hokotal	532	757	7.8	180	2.83	1.54	23.5	bad	--	560-600	70.3	23

The Indicated numbers are guidelines only.

Chemical Composition: EN AW-5754

Si	Fe	Cu	Mn	Mg	Cr	Zn	Others	Al
0.4	0.4	0.1	0.5	2.6-3.6	0.3	0.2	0.4	Rest

Others: Ti = 0.15