

MaterialSolutions

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Date: 06-01-2021

Below are the properties of the aluminum alloy used by Material Solutions systems:

ALLOY 6082 – T6 TO EN 755 Part 1-9

Mechanical Properties, Hollow profile (t≤5)

YIELD STRENGTH: 250 Mpa
TENSILE STRENGTH: 290 Mpa

Physical Properties

Density	2,70 kg/dm ³
Modulus of Elasticity	70 GPa
Thermal conductivity	172 W/m.K
Coefficient of thermal expansion:	23.1 x 10 ⁻⁶ /°C
Electrical resistivity at 20 ^o C:	44% IACS
Melting range	575-650 °C

Composition

	Min.	Max.
Si	0.70	1.30
Fe		0.50
Cu		0.10
Mn	0.40	1.00
Mg	0.60	1.20
Cr		0.25
Zn		0.20
Ti		0.10
Other Elements:	0.05 each	0.15 total