

All PMI products in aluminum alloy type EN AW 6082 are compliance with the spec in below table, which is referred to EN755-2:2016 standard for mechanical properties and EN573-3:2013 for chemical composition. We commit to customer that all products supplied to customer by us have passed our quality assurance inspection and met the standard and customer's requirement.

**Physical characteristics**

Density:	2.71	g/cm <sup>3</sup>	Thermal conductivity at 20 °C:	in state O:	1.70	W/cm° K
Lower melting point:	645	°C		in state T6:	1.58	W/cm° K
Specific heat between 0 and 100°C:	928	J/Kg° K	Linear thermal expansion coefficient:	-20~100°C	24.9*10 <sup>-6</sup>	1/° K
				-20~200°C	24.5*10 <sup>-6</sup>	1/° K
				-20~300°C	24.8*10 <sup>-6</sup>	1/° K
Linear modulus of elasticity E:	65800	N/mm <sup>2</sup>	Electrical resistivity at 20°C:	in state O:	2.67	uΩ • cm
				in state T6:	2.94	uΩ • cm

**Chemical composition according to European Standard EN 573.3**

Alloy	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Others		Al
									Each	Total	
EN AW-6082	0.70 -1.30	0.50 max	0.10 max	0.40 -1.0	0.6 -1.2	0.25 max	0.20 max	0.10 max	0.05 max	0.15 max	rest

**Minimum mechanical properties, according to European Standard EN 755.2**

Types of profile	Temper state	D / S / t(wall thickness)		Tensile strength Rm(MPa)		Limit elasticity load Rp0.2(MPa)		Elongation	
				min	max	min	max	A %min	A <sub>50mm</sub> %min
Full bars	O, H111	D≤200	S≤200	-	160	-	110	14	12
	T4 <sup>c</sup>	D≤200	S≤200	205	-	110	-	14	12
	T6 <sup>c</sup>	D≤20	S≤20	295	-	250	-	8	6
		20<D≤150	20<S≤150	310	-	260	-	8	-
		150<D≤200	150<S≤200	280	-	240	-	6	-
		200<D≤250	200<S≤250	270	-	200	-	6	-
Extruded pipe	O, H111	t ≤25		-	160	-	110	14	12
	T4 <sup>c</sup>	t ≤25		205	-	110	-	14	12
	T6 <sup>c</sup>	t ≤5		290	-	250	-	8	6
		5< t ≤25		310	-	260	-	10	8
Sections	O, H111	all		-	160	-	110	14	12
	T4 <sup>c</sup>	t ≤25		205	-	110	-	14	12
	Open profile T5	t ≤5		270	-	230	-	8	6
		t ≤5		290	-	250	-	8	6
	Open profile T6c	5< t ≤25		310	-	260	-	10	8
		t ≤10		270	-	230	-	8	6
Hollow profile T6c	t ≤5		290	-	250	-	8	6	
	5< t ≤25		310	-	260	-	10	8	

a D = Diameter for round bar.

b S = Width across flats for square and hexagonal bar, thickness for rectangular bar.

c Properties may be obtained by press quenching.

d Bending quality.

e If a profile cross section is comprised of different thickness which fall in more than one set of specified mechanical property values, the lowest