

MECHANICAL PROPERTIES

EXTRAL
ALUMINIUM

EXTRUDED PROFILES

State	Wall thickness	R_m [MPa]		$R_{p0,2}$ [MPa]		A	A_{50mm}	HBW
	t [mm]	min	max	min	max	% min	% min	
EN AW-6060e [Al MgSi] - EXTRUDED PROFILES								
T4 ^c	≤25	120	-	60	-	16	14	50
T5	≤5	160	-	120	-	8	6	60
	5< t ≤ 25	140	-	100	-	8	6	60
T64 ^{cd}	≤15	180	-	120	-	12	10	60
T6 ^c	≤3	190	-	150	-	8	6	70
	3< t ≤ 25	170	-	140	-	8	6	70
T66 ^c	≤3	215	-	160	-	8	6	70
	3< t ≤ 25	195	-	150	-	8	6	75
EN AW-6063e [Al Mg0,7Si] - EXTRUDED PROFILES								
T4 ^c	≤25	130	-	65	-	14	12	50
T5	≤5	175	-	130	-	8	6	65
	5< t ≤ 25	160	-	110	-	7	5	65
T64 ^{cd}	≤15	180	-	120	-	12	10	65
T6 ^c	≤10	215	-	170	-	8	6	75
	10< t ≤ 25	195	-	160	-	8	6	75
T66 ^c	≤10	245	-	200	-	8	6	80
	10< t ≤ 25	225	-	180	-	8	6	80
EN AW-6005Ae [Al SiMg(A)] - EXTRUDED PROFILES								
Flat profiles T4 ^c	≤25	180	-	90	-	15	13	50
Flat profiles T6 ^c	≤5	270	-	225	-	8	6	90
	5< t ≤ 10	260	-	215	-	8	6	85
	10< t ≤ 25	250	-	200	-	8	6	85
Hollow profiles T4 ^c	≤10	180	-	90	-	15	13	50
Hollow profiles T6 ^c	≤5	255	-	215	-	8	6	85
	5< t ≤ 15	250	-	200	-	8	6	85

EXTRUDED PROFILES

State	Wall thickness	R_m [MPa]		$R_{p0,2}$ [MPa]		A	A_{50mm}	HBW
	t [mm]	min	max	min	max	% min	% min	
EN AW-6082Ae [Al SiMg(A)] - EXTRUDED PROFILES								
T4 ^c	≤25	205	-	110	-	14	12	70
Flat profiles T5	≤5	270	-	230	-	8	6	90
Flat profiles T6 ^c	≤5	290	-	250	-	8	6	95
Hollow profiles T5	5< t ≤ 15	310	-	260	-	10	8	95
	≤5	270	-	230	-	8	6	90
Hollow profiles T6 ^c	≤5	290	-	250	-	8	6	95
	5< t ≤ 15	310	-	260	-	10	8	95

c Mechanical properties may be gained by cooling on the press exit
d Material for bending
e If profile cross section is comprised of different thicknesses which fall in more than one of specified mechanical property values, the lowest specified value shall be considered as valid for the whole profile cross section

Temper symbols (according to EN 515)

F	extruded and air cooled (without mechanical properties specified)
H112	softly strengthen by shaping in higher temperature (specified mechanical properties limits)
T4	heat treated and naturally aged
T5	cooled from extrusion temperature and artificially aged
T64	heat treated and artificially aged
T6	heat treated and artificially aged
T66	heat treated and artificially aged level of mechanical properties higher than in temper T6

Mechanical properties

Rm	Tensile strength
Rp_{0,2}	Yield strength
A%	Elongation measured on a gauge length of 5,65 √S0 (S0 - cross section of the sample) and expressed in %
A50	Elongation measured on a gauge length of 50mm and expressed in %