

Table 45 — Alloy EN AW-7075 [Al Zn5,5MgCu]

Temper	Specified thickness		R_m		$R_{p0,2}$		Elongation min.		Bend radius ^a		Hardness HBW ^a
	mm		MPa		MPa		%		180°	90°	
	over	up to	min.	max.	min.	max.	$A_{50\text{ mm}}$	A			
O	≥ 0,4	0,8		275		145	10		1,0 <i>t</i>	0,5 <i>t</i>	55
	0,8	1,5		275		145	10		2,0 <i>t</i>	1,0 <i>t</i>	55
	1,5	3,0		275		145	10		3,0 <i>t</i>	1,0 <i>t</i>	55
	3,0	6,0		275		145	10			2,5 <i>t</i>	55
	6,0	12,5		275		145	10			4,0 <i>t</i>	55
	12,5	75,0		275				9			55
T6	≥ 0,4	0,8	525		460		6			4,5 <i>t</i> ^b	157
T651	0,8	1,5	540		460		6			5,5 <i>t</i> ^b	160
T62	1,5	3,0	540		470		7			6,5 <i>t</i> ^b	161
	3,0	6,0	545		475		8			8,0 <i>t</i> ^b	163
	6,0	12,5	540		460		8			12 <i>t</i> ^b	160
	12,5	25,0	540		470			6			161
	25,0	50,0	530		460			5			158
	50,0	60,0	525		440			4			155
	60,0	80,0	495		420			4			147
	80,0	90,0	490		390			4			144
	90,0	100,0	460		360			3			135
	100,0	120,0	410		300			2			119
	120,0	150,0	360		260			2			104
	150,0	200,0	360		240			2			
	200,0	300,0	360		220			1			
T652	150,0	200,0	360		260			2			
	200,0	300,0	360		220			2			
T76	≥ 1,5	3,0	500		425		7				149
T7651	3,0	6,0	500		425		8				149
c	6,0	12,5	490		415		7				146
T73	≥ 1,5	3,0	460		385		7				137
T7351	3,0	6,0	460		385		8				137
d	6,0	12,5	475		390		7				140
	12,5	25,0	475		390			6			140
	25,0	50,0	475		390			5			140
	50,0	60,0	455		360			5			133
	60,0	80,0	440		340			5			129
	80,0	100,0	430		340			5			126

Whenever a new application of this alloy is contemplated, and if this application involves special properties such as corrosion resistance, toughness, fatigue strength, it is strongly recommended that the user consult the producer in order to make a precise and appropriate selection of the material.

^a For information only.

^b Appreciably smaller cold bend radii can be achieved immediately after quenching.

"continued"

Table 48 : Alloy EN AW-7075 [Al Zn 5,5MgCu]

Extruded rod/bar								
Temper	Dimensions mm		R _m MPa		R _{p0,2} MPa		A %	A _{50 mm} %
	D ¹⁾	S ²⁾	min.	max.	min.	max.	min.	min.
O, H111	≤ 200	≤ 200	-	275	-	165	10	8
** T6, T6510, T6511	≤ 25	≤ 25	540	-	480	-	7	5
	25 < D ≤ 100	25 < S ≤ 100	580	-	500	-	7	-
	100 < D ≤ 150	100 < S ≤ 150	530	-	470	-	6	-
	150 < D ≤ 200	150 < S ≤ 200	470	-	400	-	5	-
T73, T73510, T73511 ⁹⁾	≤ 25	≤ 25	485	-	420	-	7	5
	25 < D ≤ 75	25 < S ≤ 75	475	-	405	-	7	-
	75 < D ≤ 100	75 < S ≤ 100	470	-	390	-	6	-
	100 < D ≤ 150	100 < S ≤ 150	440	-	380	-	6	-
Extruded tube								
Temper	Dimensions mm		R _m MPa		R _{p0,2} MPa		A %	A _{50 mm} %
	e ³⁾		min.	max.	min.	max.	min.	min.
O, H111	≤ 10		-	275	-	165	10	-
T6, T6510, T6511	≤ 5		540	-	485	-	8	6
	5 < e ≤ 10		580	-	505	-	7	5
	10 < e ≤ 50		580	-	495	-	6	4
T73, T73510, T73511 ⁹⁾	≤ 5		470	-	400	-	7	5
	5 < e ≤ 25		485	-	420	-	8	6
	25 < e ≤ 50		475	-	405	-	8	-
Extruded profile ¹⁰⁾								
Temper	Dimensions mm		R _m MPa		R _{p0,2} MPa		A %	A _{50 mm} %
	e ³⁾		min.	max.	min.	max.	min.	min.
** T6, T6510, T6511	≤ 25		530	-	480	-	6	4
	25 < e ≤ 60		540	-	470	-	6	-
T73, 73510, T73511 ⁹⁾	≤ 25		485	-	420	-	7	5

1) D = Diameter for round bar.
 2) S = Width across flats for square and hexagonal bar, thickness for rectangular bar.
 3) e = Wall thickness.
 9) Refer to annex A and annex B, for material in this temper.
 10) If a profile cross-section is comprised of different thicknesses which fall in more than one set of specified mechanical property values, the lowest specified value shall be considered as valid for the whole profile cross-section.