

Datasheet: EN AW-7020 Sheet, strip & plate - Aluminium Alumeco ApS 08-04-2025					Internal alloy name: 7020 Chemical Symbol: EN AW-Al Zn4,5Mg1 International alloy name: EN AW-7020 UNS: A97005 DIN-Werkstoff no.: 3.4335 Alloy type: Heat treatable alloy					
Main usage: Welded structural components – Containers, truck components, pylons, bridges Military application			Important norms and literature: General Standards: EN 573-3:2013: Aluminium and aluminium alloys – Chemical composition and form of wrought products – Part 3: Chemical composition and form of products. Geometric Tolerance: EN 485-3:2005: Aluminium and aluminium alloys – Sheet, strip and plate – Part 3: Tolerances on dimensions and form for hot-rolled products Product standards: EN 485-2:2008: Aluminium and aluminium alloys – Sheet, strip and plate – Part 2: Mechanical properties. EN 485-4:2000: Aluminium and aluminium alloys – Sheet, strip and plate – Part 4: Tolerances on shape and dimensions for cold-rolled products							
Main properties: High strength weldable alloy High fatigue strength High strength in welded structures										
Chemical composition in %: EN 573-3:2013										
Al	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Others	
									Max.	
									Each	Total
Remainder	Max. 0,35	Max. 0,40	Max. 0,2	0,05 – 0,50	1,0 – 1,4	0,10 – 0,35	4,0 – 5,0	-	0,05	0,15
Mechanical properties: EN 485-2:2008										
Temper	Specified thickness <i>t</i> mm	Tensile Stress <i>R_m</i> MPa	Proof Stress <i>R_{p0,2}</i> MPa	Elongation Min. %		Bend radius* 90°		Hardness HBW		
				<i>A_{50mm}</i>	<i>A</i>	<i>t</i> mm	bend			
O	0,4 ≤ <i>t</i> < 12,5	Max. 220	Max. 140	12 - 15	-	-	-	45		
T4	0,4 ≤ <i>t</i> < 12,5	Min. 320	Min. 210	11 - 14	-	0,4 - 12,5	2,0 - 5,0 * <i>t</i>	92		
T451	0,4 ≤ <i>t</i> < 12,5	Min. 320	Min. 210	11 - 14	-	0,4 - 12,5	2,0 - 5,0 * <i>t</i>	92		
T6	0,4 ≤ <i>t</i> < 250	Min. 330 - 350	Min. 260 - 280	7 - 10	5 - 9	0,4 - 12,5	3,5 - 8,0 * <i>t</i>	98 - 104		
T651	0,4 ≤ <i>t</i> < 250	Min. 330 - 350	Min. 260 - 280	7 - 10	5 - 9	0,4 - 12,5	3,5 - 8,0 * <i>t</i>	98 - 104		
T62	0,4 ≤ <i>t</i> < 250	Min. 330 - 350	Min. 260 - 280	7 - 10	5 - 9	0,4 - 12,5	3,5 - 8,0 * <i>t</i>	98 - 104		
* Information values only;										
Physical properties:										
Density g/cm³	Solidification range °C	Electrical conductivity %IACS	Thermal conductivity W/m K	Thermal expansion (µm m ⁻¹ K ⁻¹)	Annealing temperature °C	E - modulus				
						(N / mm²)				
2,78	605 – 645	35	140	23,3	400 – 420	70000				
Properties and information's (3 high/good; 2 Middle; 1 Poor/bad)										
Resistance: Corrosion index, general: 2 Marine Atm. Corr index: 1 Hot workability: Extrusion: 2 Forging: 2 Cold formability: Cold formability general: 2 Deep drawing: 2-3 Bending: 3			Weldability TIG welding: 2 MIG welding: 3 Solderability Brazability index: 1 Solderability index: 1 Machinability Machinability index: 2			Anodizing: Decorative anodizing surface treatment: 2 Protective anodizing index: 3 Hard anodizing: 2 Color anodizing: 2				