

Data Sheet		Internal alloy name: 6060											
<b>EN AW 6060 - Profiles</b> Including anodizing  <b>Alumecco A/S</b>		International alloy name: EN AW 6060 Chemical Symbol: EN AW – AlMgSi											
		DIN-Werkstoff no.: 3.3206 Alloy type: Heat treatable alloy											
<b>Main usage</b>  <ul style="list-style-type: none"> <li>• Constructions</li> <li>• Anodizing in general</li> <li>• Automotive</li> <li>• Forgings</li> <li>• Marine and offshore</li> </ul>	<b>Main properties</b>  <ul style="list-style-type: none"> <li>• Very good atmospheric corrosion resistance</li> <li>• Very good workability</li> <li>• Decoration anodized</li> </ul>	<b>Important norms and literature</b>  Extrusion: EN 755-1: Technical conditions for inspection and delivery EN 755-2: Mechanical properties EN 755-9: Tolerances on dimensions and forms for different extrusions  Chemical composition: EN 573-3: Chemical composition											
		Usages: EN 13195: Specifications for wrought products for marine applications EN 602: Usage in the food industry  Anodizing: ISO 7599 (DIN 17611): Anodizing of aluminium and its alloys											
<b>Chemical composition (%) EN 573-3</b>													
Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Remarks	Other elements Each together				
0.30-0.60	0.10-0.30	0.10	0.10	0.35-0.60	0.05	0.15	0.10	N/A	0.05	0.15			
<b>Typical mechanical properties EN 755 - 2</b>													
Product group Dimension (mm)		Temper		Rm MPa	Rp0.2 MPa		A %	Hardness* HB					
Profiles Wall thickness ≤ 5		T6		Min. 190	Min. 150		8	70					
Profiles Wall thickness 5 < t ≤ 25		T6		Min. 170	Min. 140		8	70					
<small>* Information values only</small>													
<b>Anodizing Classes and layer thicknesses ISO 7599</b>													
Class		Minimum average thickness (µm)				Minimum local thickness (µm)							
AA5		5,0				4							
AA10		10,0				8							
AA15		15,0				12							
AA20		20,0				16							
AA25		25,0				20							
<b>Physical properties of metal</b>													
Density	Solidification range	Electrical conductivity	Thermal conductivity	Thermal expansion	Annealing temperature		E - modulus						
G cm <sup>-3</sup>	°C	%IACS	W m <sup>-1</sup> K <sup>-1</sup>	µm m <sup>-1</sup> K <sup>-1</sup>	°C		N mm <sup>-2</sup>						
2.70	645-658	54	209	23.4	350-400		69,500						
<b>Typical Alumecco products with this alloy</b>  <ul style="list-style-type: none"> <li>• Various profiles</li> <li>• Anodizing pretreatment – E6 – Chemical etched</li> </ul>													
<b>Properties and information (3 high/good; 2 medium; 1 poor/bad)</b>													
<u>Resistance</u> Corrosion index, general: 3 Marine atm. corr. index: 3  <u>Hot workability</u> N/A – Anodizing destroyed.  <u>Cold formability</u> N/A – Anodizing destroyed.		<u>Weldability</u> TIG welding: 2 MIG welding: 2 Anodizing needs to be removed before welding  <u>Solderability</u> 2 Anodizing needs to be removed before soldering			<u>Machinability</u> Machinability index: 1  <u>Tips regarding machining</u> Bear in mind that the anodizing gives the alloy a very hard surface layer.			<u>Anodizing (Already anodized)</u> Decorative anodizing surface treatment: 3 Protective anodizing index: 3 Hard anodizing: 3 Color anodizing: 3  <u>General information</u> The anodized layer and the profiles does not have the same thermal expansion.					