

ALMIGWELD 5356

A Characteristic of the 5Xxx series of Alloys is their susceptibility to stress corrosion cracking when the Weld Pool chemistry is greater than 3% Mg and there is exposure to Prolonged temperatures in excess of 150° F. Special Alloys and Tempers are often required to overcome this problem. Contact Alcotec for assistance in Alloy and temper selection when elevated temperature service is a concern.

Specifications	
Classifications	ANSI/AWS A5.10 : (ER & R)
Approvals	ABS BV CE CWB DB : 61.002.04 DNV KR LR RINA : WC(*) VdTÜV

Approvals are based on factory location. Please contact ESAB for more information.

Alloy Type	Aluminum
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Tensile_Properties			
Testing Condition	Yield Strength	Tensile Strength	Elongation
Base Alloy 7039-T64			
As Welded	172 MPa (25 ksi)	303 MPa (44 ksi)	13 %
6061-T6, -T651			
Base Alloy	276 MPa (40 ksi)	310 MPa (45 ksi)	12 %
7005-T6, -T63			
Base Alloy	317 MPa (46 ksi)	372 MPa (54 ksi)	12 %
7039-T64			
Base Alloy	379 MPa (55 ksi)	448 MPa (65 ksi)	13 %
Base Alloy 5086-H32			
As Welded	117 MPa (17 ksi)	269 MPa (39 ksi)	17 %
6063-T6			
Base Alloy	214 MPa (31 ksi)	241 MPa (35 ksi)	12 %
Base Alloy 6063-T6			
As Welded	83 MPa (12 ksi)	138 MPa (20 ksi)	12 %
5086-H32			
Base Alloy	207 MPa (30 ksi)	290 MPa (42 ksi)	12 %
Base Alloy 6061-T6, -T651			
As Welded	131 MPa (19 ksi)	207 MPa (30 ksi)	11 %
Base Alloy 7005-T6, -T63			
As Welded	207 MPa (30 ksi)	317 MPa (46 ksi)	10 %

Typical Wire Composition %						
Mn	Si	Cr	Cu	Zn	Fe	Mg
0.13	0.05	0.12	0.01	0.01	0.13	4.9