



Technical Bulletin

RoofEdge® by LiveRoof is extruded from Alloy 6063, one of the most popular alloys in the 6000 series as it provides good extrudability and a high quality surface finish, which makes it ideal for architectural and building product applications.

Alloy 6063 Chemical Analysis		Liquidus Temperature: 1211°F							Solidus Temperature: 1139°F		Density: 0.097 lb./in. ³	
Percent Weight		Elements							Others Each	Others Total	Aluminum	
	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti				
Minimum	.20	—	—	—	.45	—	—	—	—	—	—	
Maximum	.6	.35	.10	.10	.9	.10	.10	.10	.05	.15	Remainder	

Average Coefficient of Thermal Expansion (68° to 212°F) = 13.0 x 10⁻⁶ (inch per inch per °F)

The T6 temper used with RoofEdge is the strongest, hardest available for ultimate long term integrity. The product is solution heat-treated and artificially aged. When anodized, the T6 temper also provides a very lustrous anodized finish. RoofEdge is available in black and bronze anodize finishes.

The Standard and Lite RoofEdge profiles are a minimum thickness of 0.085” and the Deep and Maxx profiles are a minimum thickness of 0.115”.

Alloy 6063 Mechanical and Physical Property Limits									
Temper ¹	Specified Section or Wall Thickness ² (inches)	Tensile Strength (ksi)				Elongation ³ Percent Min. in 2 inch or 4D ⁴	Typical Brinell Hardness (500 kg load/ 10 mm ball)	Typical Ultimate Shearing Strength (ksi)	Typical Electrical Conductivity (%IACS)
		Ultimate		Yield (0.2% offset)					
		Min.	Max.	Min.	Max.				
T6	Up thru 0.124	30	--	25	--	8	73	22	53

¹ The mechanical property limits for standard tempers are listed in the "standards section" of the Aluminum Association's [Aluminum Standards and Data](#) manual and [Tempers for Aluminum and Aluminum Alloy Products](#). ² The thickness of the cross section from which the tension test specimen is taken determines the applicable mechanical properties. ³ For material of such dimensions that a standard test specimen cannot be obtained, or for shapes thinner than 0.062", the test for elongation is not required. ⁴ D = Specimen diameter.

Comparative Characteristics of Related Alloys/Tempers ¹																										
Alloy	Temper	Formability		Machinability				General Corrosion Resistance				Weldability (Arc with Inert Gas)				Brazeability				Anodizing Response				Electrical Conductivity (%IACS) @ 68°F		
		Low	High	D	C	B	A	D	C	B	A	D	C	B	A	D	C	B	A	D	C	B	A	40	50	60
6101	-T6, T63	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█

¹ Rating: A=Excellent B=Good C=Fair D=Poor For further details of explanation of ratings, see Aluminum Association's [Aluminum Standards and Data](#) manual.

Material statistics courtesy of Alcoa.

Contact: LiveRoof Global, LLC, PO Box 533, Spring Lake, MI 49456 USA
 800-875-1392 +1 616-842-1392 fax +1 616-842-3273 sales@liveroof.com
www.liveroof.com