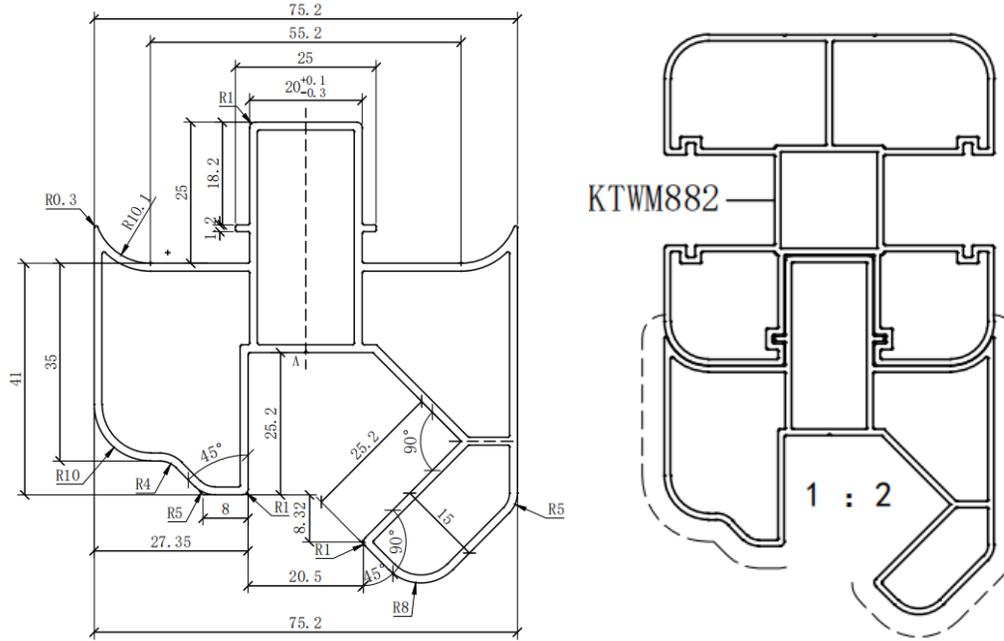


## Premium 6063-T5 Aluminum Alloy Corner column accessories:



Premium 6063-T5 Aluminum Alloy Corner column accessories - Technical Data Sheet

ASTM Cell Classification:		ASTM B221 - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes.	
Specifications:	Value	ASTM Test Method	Performance Note
<b>Thickness</b>	1.7 mm	D1784	
Specific Gravity ( $\pm 0.02$ ) 0.125" Specimen	1.45	D-792	
Izod Impact FT*lbs/in Notch	17	D-256	
Tensile Yield Strength, PSI	6200	D-638	
Tensile Modulus, PSI	365000	D-638	
Flexural Yield Strength, PSI	12000	D-790	
Flexural Modulus, PSI	410000	D-790	
DTUL @ 264 PSI, Degrees Celsius	72	D-648	
TiO <sub>2</sub> -Titanium Dioxide UV Inhibitor	10/100		
<b>Mechanical Properties</b>			
Tensile Strength: Ultimate (UTS)	180 - 205 MPa	B557 / E8	Excellent strength for structural integrity
Tensile Strength: Yield (Proof)	145 - 170 MPa	B557 / E8	High yield strength ensures reliable load-bearing capacity
Elongation at Break	8 - 12 %	B557 / E8	Good ductility, providing toughness and resistance to impact
Hardness, Brinell	60 HB	E10	Optimal balance between formability and resistance to wear
Modulus of Elasticity	68.9 GPa	E111	Standard stiffness for aluminum alloys, providing flexibility and resilience
<b>Physical &amp; Thermal Properties</b>			
Density	2.70 g/cm <sup>3</sup>		Lightweight material, offering a superior strength-to-weight ratio
Thermal Conductivity	201 - 210 W/m-K	E1461	Efficient heat dissipation, suitable for various environmental conditions
Coefficient of Thermal Expansion	23.4 $\mu\text{m}/\text{m}\cdot^{\circ}\text{C}$	E228	Low thermal expansion ensures dimensional stability across a wide temperature range
Melting Range	616 - 654 $^{\circ}\text{C}$		Maintains integrity under high-temperature exposure
<b>Durability &amp; Corrosion Protection</b>			
Coating System Durability (C4 Environment)	> 25 years	ISO 12944-5	Zinc-rich epoxy primer and polyurethane topcoat provide long-term protection in industrial and coastal atmospheres
Corrosion Resistance	Excellent	G85 / G44	Inherent resistance to atmospheric corrosion, significantly enhanced by the coating system
<b>Manufacturing &amp; Quality</b>			
Weldability	Excellent		Can be easily welded using common methods, with post-weld heat treatment available for restored strength
Machinability	Good		Suitable for precision machining and fabrication to meet complex design requirements
Anodizing & Finishing Suitability	Excellent		The smooth surface is ideal for various aesthetic finishes, including anodizing and powder coating

# CORNER POSTS: BENEFITS AND USAGE



Corner posts are essential for reinforcing the structural integrity of the fence. Their unique design ensures stability and alignment at corners, making them an indispensable part of any fencing system.

