

# UTR Angles and Channels

## Electrical Insulating Structural Products

- Grade UTR Pultrusions
- Dimensions are in inches
- All parts are available in standard lengths of 120" except 2261 and 2890

Channel			
Part No.	Width	Leg	Thickness
2875	2	9/16	1/8
2617	2	13/16	1/8
1144	2	1	1/4
2261	2 3/16	3/4	1/16
2212	2 5/16	3/4	1/8
1177	2 9/16	1 1/32	1/8
1166	3	7/8	1/4
2888	3	1 1/2	1/4
1939	3 9/16	2 9/16	3/16
1791	3 19/32	1 1/8	1/8
1155	4	1 1/8	1/4
2242	4	1 3/8	3/16
2872	4 1/2	2 1/2	1/8
2874	4 1/2	2 1/2	1/4
1940	4 9/16	2 9/16	9/32
1788	4 3/4	1 5/8	3/16
2825	5 1/2	1 1/4	5/32
2288	6 3/8	2	9/32
1844	8 1/2	2 11/16	3/16
1936	9 2 1/32	1 5/8	1/8
2250	11 9/32	1 5/8	3/8
2120	11 1/2	1 7/16	5/32

Hat Shaped Channel			
Part No.	Width	Leg	Thickness
1161	4 19/32	7/8	1/8
2091	5	1 3/8	1/8
1272	9 9/16	2 3/8	3/16

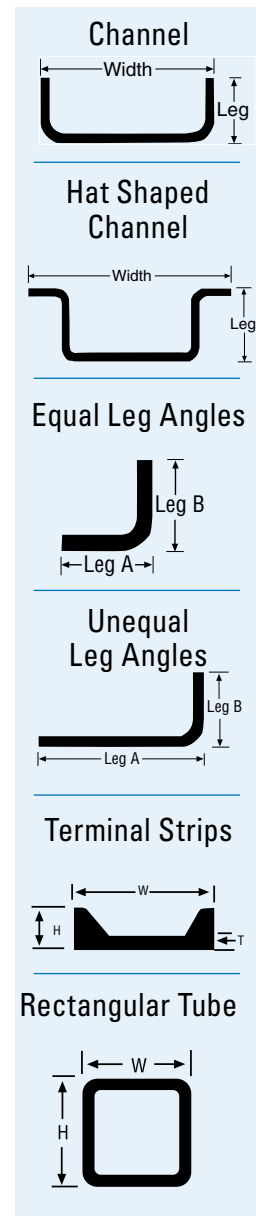
Equal Leg Angles			
Part No.	Width	Leg	Thickness
2889	1 1/4	1 1/4	1/8
2879	1 1/4	1 1/4	3/16
2880	1 1/2	1 1/2	1/8
2881	1 1/2	1 1/2	3/16
2882	1 1/2	1 1/2	1/4
2883	2	2	3/16
2884	2	2	1/4
2885	3	3	1/4
2886	3	3	3/8

Unequal Leg Angles			
Part No.	Width	Leg	Thickness
1134*	1 3/4	2	3/8
2891	2 1/4	3	1/2
2876	2 1/4	1 1/2	3/16
1133	2 1/2	1 1/4	3/16
2877	2 3/4	2	1/4
2890	6	3	1/2

\* Also sold in 7' lengths

Terminal Strips			
Part No.	Width	Leg	Thickness
2700	3/8	1 1/4	1/8
2710	7/16	1 1/2	1/4
2720	—	2	1/2

Rectangular Tube			
Part No.	Width	Leg	Thickness
F822024	1 1/2	1 1/2	1/8
F822432	2	2	1/4



## UTR Angles and Channels

	Unit	ASTM/UL Test	Typical Values <sup>1</sup>	
<b>General Information</b>				
Color, Standard	–	–	Red	
NEMA Grade	–	–	GPO-3	
UL Recognition File Number	–	–	E 23525	
<b>Mechanical Properties</b>				
Tensile Strength	Psi	D 638	15,000	
Tensile Modulus	Psi x 10 <sup>6</sup>	D 638	1.7	
Flexural Strength	Psi	D 790	25,000	
Flexural Strength at 130° C	Psi	D 790	13,000	
Flexural Modulus	Psi x 10 <sup>6</sup>	D 790	1.2	
Compressive Strength – flatwise	Psi	D 695	42,000	
Compressive Strength – edgewise	Psi	D 695	20,000	
Shear Strength	Psi	D 732	14,500	
IZOD Impact Strength (notched)	Ft.lb./in.	D 256	9.6	
Water Absorption	% by wt.	D 570	0.3	
Barcol Harness	–	D 2583	50	
Specific Gravity	–	D 792	1.8	
<b>Electrical Properties</b>				
Electric Strength – perpendicular S/T in air <sup>2</sup>	Vpm	D 149	200	
Electric Strength-parallel	kV	D 149	45	
Arc Resistance	Seconds	D 495	185	
Inclined Plane Track Resistance	Minutes	D 2303	500+	
<b>Flame &amp; Smoke Characteristics</b>				
UL Subject 94	–	UL 94	VO	
Specific Optical Density of Smoke		ASTM E662		
			Non-Flaming	Flaming
Ds @ 4.0 min. (Average)			0.3	10.7
Dm(corr) (Average)			3.1	128.4
<b>Thermal Properties</b>				
Coefficient of Thermal Expansion	in/in/°C x 10 <sup>-5</sup>	D 696	2.0	
Thermal Conductivity	BTU/hr/Ft <sup>2</sup> /in/°F	C 177	1.9	
UL Temperature Index				
Electrical	°C	UL746B	130	
Mechanical	°C	UL746B	160	
<b>Dimension Tolerances</b>				
Thickness				
Up to .125 in.	in.	–	±.015	
.125 in. – .250 in.	in.	–	±.020	
over .250 in.	in.	–	±.025	
Angularity of Legs	Degrees	–	±3	
Cut Length	in.	–	+0.5", -0"	

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1 These products are manufactured in a variety of sizes, shapes and thicknesses.  
 Data shown is a composite of all products.

2 Value for 1/8 in. thickness. Electric strength in volts per mill decreases as composite thickness increases.