

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	Inside Radius
2875	2	$\frac{9}{16}$	$\frac{1}{8}$	$\frac{1}{8}$
2617	2	$\frac{13}{16}$	$\frac{1}{8}$	$\frac{5}{32}$
1144	2	1	$\frac{1}{4}$	$\frac{1}{8}$
2261	$2\frac{3}{16}$	$\frac{3}{4}$	$\frac{1}{16}$	$\frac{1}{8}$
2212	$2\frac{5}{16}$	$\frac{3}{4}$	$\frac{1}{8}$	$\frac{1}{8}$
1177	$2\frac{9}{16}$	$1\frac{1}{32}$	$\frac{1}{8}$	$\frac{3}{16}$
1166	3	$\frac{7}{8}$	$\frac{1}{4}$	$\frac{1}{4}$
2888	3	$1\frac{1}{2}$	$\frac{1}{4}$	$\frac{1}{4}$
1939	$3\frac{9}{16}$	$2\frac{9}{16}$	$\frac{3}{16}$	$\frac{3}{16}$
1791	$3\frac{19}{32}$	$1\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$
1155	4	$1\frac{1}{8}$	$\frac{1}{4}$	$\frac{1}{4}$
2242	4	$1\frac{3}{8}$	$\frac{3}{16}$	$\frac{5}{32}$
2872	$4\frac{1}{2}$	$2\frac{1}{2}$	$\frac{1}{8}$	
2874	$4\frac{1}{2}$	$2\frac{1}{2}$	$\frac{1}{4}$	$\frac{1}{8}$
1940	$4\frac{9}{16}$	$2\frac{9}{16}$	$\frac{9}{32}$	$\frac{1}{4}$
1788	$4\frac{3}{4}$	$1\frac{5}{8}$	$\frac{3}{16}$	$\frac{3}{16}$
2825	$5\frac{1}{2}$	$1\frac{1}{4}$	$\frac{5}{32}$	$\frac{3}{16}$
2288	$6\frac{3}{8}$	2	$\frac{9}{32}$	$\frac{3}{32}$
1844	$8\frac{1}{2}$	$2\frac{11}{16}$	$\frac{3}{16}$	$\frac{7}{32}$
1936	$9\frac{21}{32}$	$1\frac{5}{8}$	$\frac{1}{8}$	$\frac{3}{32}$
2250	$11\frac{9}{32}$	$1\frac{5}{8}$	$\frac{3}{8}$	$\frac{3}{32}$
2120	$11\frac{1}{2}$	$1\frac{7}{16}$	$\frac{5}{32}$	$\frac{1}{8}$

Hat Shaped Channel				
Part No.	Width	Leg	Thickness	Inside Radius
1161	$4\frac{19}{32}$	$\frac{7}{8}$	$\frac{1}{8}$	$\frac{1}{4}$
2091	5	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$
1272	$9\frac{9}{16}$	$2\frac{3}{8}$	$\frac{3}{16}$	$\frac{1}{4}$

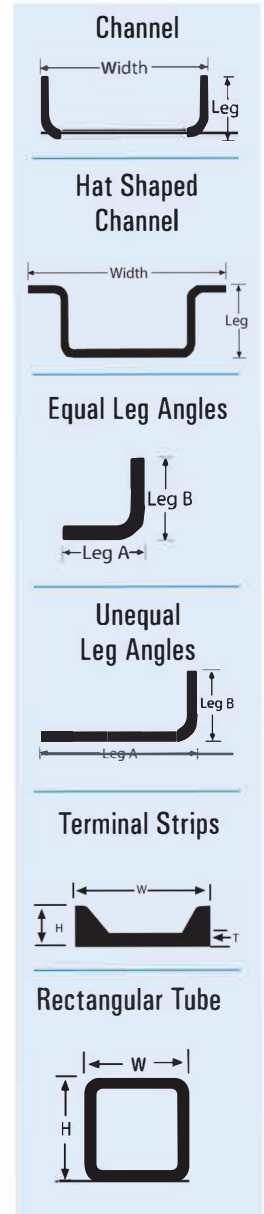
Equal Leg Angles				
Part No.	Leg A	Leg B	Thickness	Inside Radius
2293	$\frac{7}{8}$	$\frac{7}{8}$	$\frac{1}{8}$	$\frac{1}{32}$
2294	1	1	$\frac{1}{4}$	$\frac{1}{32}$
2878	1	1	$\frac{1}{8}$	$\frac{1}{8}$
2889	$1\frac{1}{4}$	$1\frac{1}{4}$	$\frac{1}{8}$	$\frac{1}{8}$
2879	$1\frac{1}{4}$	$1\frac{1}{4}$	$\frac{3}{16}$	$\frac{1}{4}$
2880	$1\frac{1}{2}$	$1\frac{1}{2}$	$\frac{1}{8}$	$\frac{1}{8}$
2881	$1\frac{1}{2}$	$1\frac{1}{2}$	$\frac{3}{16}$	$\frac{1}{4}$
2882	$1\frac{1}{2}$	$1\frac{1}{2}$	$\frac{1}{4}$	$\frac{3}{8}$
2883	2	2	$\frac{3}{16}$	$\frac{1}{4}$
2884	2	2	$\frac{1}{4}$	$\frac{3}{8}$
2885	3	3	$\frac{1}{4}$	$\frac{3}{8}$
2886	3	3	$\frac{3}{8}$	$\frac{3}{8}$

Unequal Leg Angles				
Part No.	Leg A	Leg B	Thickness	Inside Radius
1134*	$1\frac{3}{4}$	2	$\frac{3}{8}$	$\frac{3}{8}$
2891	$2\frac{1}{4}$	3	$\frac{1}{2}$	$\frac{1}{2}$
2876	$2\frac{1}{4}$	$1\frac{1}{2}$	$\frac{3}{16}$	$\frac{1}{8}$
1133	$2\frac{1}{2}$	$1\frac{1}{4}$	$\frac{3}{16}$	$\frac{1}{4}$
2877	$2\frac{3}{4}$	2	$\frac{1}{4}$	$\frac{1}{8}$
2890	6	3	$\frac{1}{2}$	$\frac{1}{2}$
2971	$2\frac{1}{4}$	$1\frac{7}{8}$	$\frac{1}{8}$	
2973	$4\frac{3}{8}$	$1\frac{7}{8}$	$\frac{1}{8}$	

* Also sold in 7' lengths

Terminal Strips			
Part No.	Leg	Thickness	Width
2700	$\frac{3}{8}$	$\frac{1}{8}$	$1\frac{1}{4}$
2710	$\frac{7}{16}$	$\frac{1}{4}$	$1\frac{1}{2}$
2720	-	$\frac{1}{2}$	2

Square Tube			
Part No.	Width	Height	Thickness
FR22024	$1\frac{1}{2}$	$1\frac{1}{2}$	$\frac{1}{8}$
FR22432	2	2	$\frac{1}{4}$



UTR Angles and Channels

	Unit	ASTM/UL Test	Typical Values ¹	
General Information				
Color, Standard	-	-	Red	
NEMA Grade	-	-	GPO-3	
UL Recognition File Number	-	-	E 23525	
Mechanical Properties				
Tensile Strength	Psi	D 638	15,000	
Tensile Modulus	Psi x 10 ⁶	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 ⁶	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	
Electrical Properties				
Electric Strength – perpendicular S/T in air ²	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+	
Flame & Smoke Characteristics				
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
Thermal Properties				
Coefficient of Thermal Expansion	in/in/°C x 10 ⁵	D 696	2.0	
Thermal Conductivity	BTU/hr/Ft ² /in/°F	C 177	1.9	
UL Temperature Index				
Electrical	°C	UL746B	130	
Mechanical	°C	UL746B	160	
Dimension Tolerances				
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.	-	+2", -0"	

The data within this document is for reference only. Values above are typical for this grade of material. It is the responsibility of the end user of this information to validate the data in this document. K&E Plastics, Inc. assumes no liability for the use of this data. Users are urged to contact K&E Plastics, Inc. to determine if the Specification has been revised.

¹ These products are manufactured in a variety of sizes, shapes and thicknesses.

Data shown is a composite of all products.