

B1

## Cable Tie Selection Chart

Follow this step-by-step process to find the cable ties that best suit your application:

### Cable Tie Function

- 1) Select the main function of the cable tie you need:  
 Bundle = Standard Cable Ties  
 Re-use = Nylon Releasable Ties\*  
 Identify = Marker and Flag Ties  
 Mount = Clamp Ties, Push Mount Ties, and Stud Mount Ties

### Material Properties

- 2) Determine the appropriate material for your application:  
 Mechanical  
 Chemical  
 Thermal

### Cable Tie Family

- 3) Select the cable tie family that meets your overall needs

B3

C1

C2

C3

C4

D1

D2

D3

E1

E2

E3

E4

E5

F

G

H

	Cable Tie Function		Bundle, Re-use, Identify, Mount	Bundle, Re-use, Identify, Mount	Bundle, Re-use, Mount	Bundle, Re-use, Mount	Bundle	Bundle
	Material	Test Method	Nylon 6.6	Weather Resistant Nylon 6.6	Impact Modified Weather Resistant Nylon 6.6	Heat Stabilized Nylon 6.6	Heat Stabilized Nylon 6.6	Heat Stabilized Weather Resistant Nylon 6.6
	Color	—	Natural	Black	Black	Black	Natural	Black
	Part Number Suffix (Material Designation)	—	No Suffix	0	0	30	39	300
Mechanical Properties	Tensile @ Yield @ 73°F (psi)	ISO 527	12,000	12,000	9,700	12,000	12,000	12,000
	Water Absorption (24 Hours)	ASTM D570	1.2%	1.2%	1.2%	1.2%	1.2%	1.2%
	Radiation Resistance (Rads)	—	1 x 10 <sup>5</sup>	1 x 10 <sup>5</sup>	1 x 10 <sup>5</sup>	1 x 10 <sup>5</sup>	1 x 10 <sup>5</sup>	1 x 10 <sup>5</sup>
	Weathering Life Expectancy (Years)/UV Resistance	—	1 – 2	7 – 9	7 – 9	4 – 5	1 – 2	7 – 9
Chemical Resistance	Impact Resistance	—	○	○	⊖	○	○	○
	Salts	—	⊖	⊖	⊖	⊖	⊖	⊖
	Hydrocarbons (Gas, Oil, Lubricants)	—	●	●	●	●	●	●
	Chlorinated Hydrocarbons	—	⊖	⊖	⊖	⊖	⊖	⊖
	Acids	—	●	●	●	●	●	●
	Bases	—	⊖	⊖	⊖	⊖	⊖	⊖
Thermal Properties	Acid Rain	—	⊖	⊖	⊖	⊖	⊖	⊖
	Continuous Use Temperature Range	UL 746B	-76°F - 185°F -60°C - 85°C	-76°F - 185°F -60°C - 85°C	-76°F - 185°F -60°C - 85°C	-76°F - 239°F -60°C - 115°C	-76°F - 239°F -60°C - 115°C	-76°F - 239°F -60°C - 115°C
	Minimum Installation Temperature	UL 62275	-4°F or +32°F -20°C or 0°C (Note 1)	-4°F or +32°F -20°C or 0°C (Note 1)	-4°F or +32°F -20°C or 0°C (Note 1)	-4°F or +32°F -20°C or 0°C (Note 1)	-4°F or +32°F -20°C or 0°C (Note 1)	-4°F or +32°F -20°C or 0°C (Note 1)
	Flammability Rating	UL 94	V-2	V-2	V-2	V-2	V-2	V-2
	Low Smoke	ASTM E662	PASS	PASS	PASS	PASS	PASS	PASS
	Oxygen Index	BS ISO 4589	28	28	—	28	28	28
	Halogen-Free	IEC 60754-2	Yes	Yes	Yes	Yes	Yes	Yes
	Burning Fume Toxicity	BSS-7239	PASS	PASS	PASS	PASS	PASS	PASS
	Heat Deflection Temperature @ 1.8 Mpa	ASTM D648 ISO 75 -1/-2	158°F 70°C	158°F 70°C	145°F 63°C	158°F 70°C	158°F 70°C	158°F 70°C
	Relative Price	—	Low	Low	Low	Low	Low	Med

Cable Tie Catalog Page	Product Line	Cross Sections					
		✓	SM, M, I, S	LH, H, EH	✓	✓	✓
	Pan-Ty®	✓	SM, M, I, S	LH, H, EH	✓	✓	✓
	Super-Grip® (B1.38)	✓	M, I, S, LH	H	✓		
	Dome-Top® Barb Ty (B1.43)	✓	M, I, S	LH	✓	✓	✓
	Dura-Ty™ (B1.53)						
	Parallel-Entry (B1.56)	✓	M, I, S, HS	LH	✓	✓	
	Sta-Strap® (B1.65)	✓	M, I, S, H		✓		
	Specialty Ties (B1.73)	✓		H	✓		✓

Check mark indicates material availability in that product line.

Cross Sections: SM = Subminiature, M = Miniature, I = Intermediate, S = Standard, HS = Heavy-Standard, LH = Light-Heavy, H = Heavy, EH = Extra-Heavy.

\*For information on re-usable Hook and Loop Cable Ties, see page B1.81.

Recommendation Legend	Highest	High	Acceptable	Low	Lowest
	●	◐	○	◑	●

Bundle	Bundle, Identify	Bundle	Bundle	Bundle, Re-use	Bundle	Bundle	Bundle	Bundle	Bundle	Bundle
Flame Retardant Nylon 6.6	Flame Retardant Nylon 6.6	Weather Resistant Nylon 12	Polypropylene	Weather Resistant Polypropylene	TEFZEL ■	HALAR ▲	PEEK	Metal Detectable Nylon 6.6	Metal Detectable Polypropylene	Weather Resistant Acetal
Black	Natural Ivory	Black	Green	Black	Aqua Blue	Maroon	Brown	Blue	Blue	Black
60	69	120	109	100	76	702Y	71	86	186	N/A
11,000	11,000	6,700	4,100	4,100	7,500	7,000	15,200	—	—	6,500
1.1%	1.1%	0.3%	0.1%	0.1%	<0.03%	<0.05%	0.5%	1.2%	0.1%	<0.45%
1 x 10 <sup>5</sup>	1 x 10 <sup>5</sup>	3.5 x 10 <sup>6</sup>	1 x 10 <sup>6</sup>	1 x 10 <sup>6</sup>	2 x 10 <sup>8</sup>	2 x 10 <sup>8</sup>	1 x 10 <sup>9</sup>	—	1 x 10 <sup>6</sup>	6 x 10 <sup>5</sup>
1 – 2	1 – 2	12 – 15	1	7 – 9	>15	>15	—	—	1	>20
◑	◑	○	◐	◐	●	●	●	○	◐	◐
●	●	●	○	○	●	●	●	●	○	●
●	●	○	●	●	●	●	○	●	●	●
◑	◑	◐	●	●	●	●	◐	—	●	◑
-76°F - 212°F -60°C - 100°C	-76°F - 212°F -60°C - 100°C	-76°F - 194°F -60°C - 90°C	-76°F - 239°F -60°C - 115°C	-76°F - 239°F -60°C - 115°C	-76°F - 338°F -60°C - 170°C	-76°F - 257°F -60°C - 125°C	-76°F - 500°F -60°C - 260°C	-76°F - 185°F -60°C - 85°C	-76°F - 239°F -60°C - 115°C	-76°F - 185°F -60°C - 85°C
-4°F or +32°F -20°C or 0°C (Note 1)	-4°F or +32°F -20°C or 0°C (Note 1)	-4°F or +32°F -20°C or 0°C (Note 1)	-4°F or +32°F -20°C or 0°C (Note 1)	-4°F or +32°F -20°C or 0°C (Note 1)	-4°F or +32°F -20°C or 0°C (Note 1)	-4°F or +32°F -20°C or 0°C (Note 1)	-4°F or +32°F -20°C or 0°C (Note 2)	-4°F or +32°F -20°C or 0°C (Note 1)	-4°F or +32°F -20°C or 0°C (Note 1)	-4°F or +32°F -20°C or 0°C (Note 1)
V-0	V-0	HB	HB	HB	V-0	V-0	V-0	HB	HB	HB
PASS	PASS	—	—	—	—	—	PASS	—	—	PASS
34	34	—	—	—	30	52	35	—	—	—
Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes
PASS	PASS	—	—	—	—	—	—	—	—	—
154°F 68°C	154°F 68°C	122°F 50°C	122°F 50°C	122°F 50°C	—	149°F 65°C	313°F 156°C	145°F 63°C	122°F 50°C	239°F 115°C
Med	Med	Med	Med	Med	High	High	High	Low	Med	Med

✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	✓									
	✓									✓

Note 1: Check UL file for the specific part number rating

Note 2: Based upon UL RTI for electrical properties

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