

## Panduit® Cable tie selection chart

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

### Cable tie function

- 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

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

### Cable tie family

- Select the cable tie family that meets your overall needs

	Cable tie function		Bundle, Re-use, Identify, Mount	Bundle, Re-use, Identify, Mount	Bundle, Re-use, Mount	Bundle	Bundle	Bundle
	Material	Test method	Nylon 6.6	Weather resistant Nylon 6.6	Heat stabilized Nylon 6.6	Heat stabilized Nylon 6.6	Heat stabilized Weather resistant Nylon 6.6	TEFZEL <sup>1)</sup>
	Color	–	natural	black	black	natural	black	aqua blue
	Part number suffix (Material designation)	–	no suffix	0	30	39	300	76
Mechanical properties	Tensile strength at 23 °C (psi)	ISO 527	12 000	12 000	12 000	12 000	12 000	7 500
	Water absorption (24 hours)	ASTM D570	1,2 %	1,2 %	1,2 %	1,2 %	1,2 %	< 0,03 %
	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>	2 x 10 <sup>8</sup>
	Weathering life expectancy (years)/UV Resistance	–	1–2	7–9	4–5	1–2	7–9	> 15
	Impact resistance	–	○	○	○	○	○	●
Chemical resistance	Salts	–	●	●	●	●	●	●
	Hydrocarbons (Gas, oil, lubricants)	–	●	●	●	●	●	●
	Chlorinated hydrocarbons	–	●	●	●	●	●	●
	Acids	–	○	○	○	○	○	●
	Bases	–	●	●	●	●	●	●
	Acid Rain	–	●	●	●	●	●	●
Thermal properties	Max. continuous use temperature	UL 746B	85 °C	85 °C	115 °C	115 °C	100 °C	170 °C
	Min. application use temperature	EN 50146	–60 °C	–60 °C	–60 °C	–60 °C	–60 °C	–60 °C
	Flammability rating	UL 94	V-2	V-2	V-2	V-2	V-2	V-0
	Low smoke	ASTM E662	pass	pass	pass	pass	pass	–
	Oxygen index	BS ISO 4589	28	28	28	28	28	30
	Halogen-free	IEC 60754-2	yes	yes	yes	yes	yes	no
	Burning fume toxicity	BSS-7239	pass	pass	pass	pass	pass	–
	Heat deflection temperature at 1,8 MPa	ASTM D648 ISO 75 -1/-2	70 °C	70 °C	63 °C	70 °C	70 °C	–

● Highest   ● High   ○ Acceptable   ● Low   ○ Lowest

<sup>1)</sup> TEFZEL is a registered trademark of E.I. du Pont de Nemours and Company.

(Source: Panduit Corp.)

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	Product line			Cross sections				
Catalogue page cable tie	Pan-Ty®		■	SM, M, I, S	■	■	■	■
	Dome-Top® Barb Ty		■	M, I, S	■	■	■	
	Sta-Strap®		■	M, I, S, LH, H	■			

■ The square indicates material availability in that product line.  
Cross Sections: SM = Subminiature, M = Miniature, I = Intermediate, S = Standard, LH = Light-Heavy, H = Heavy  
(Source: Panduit Corp.)