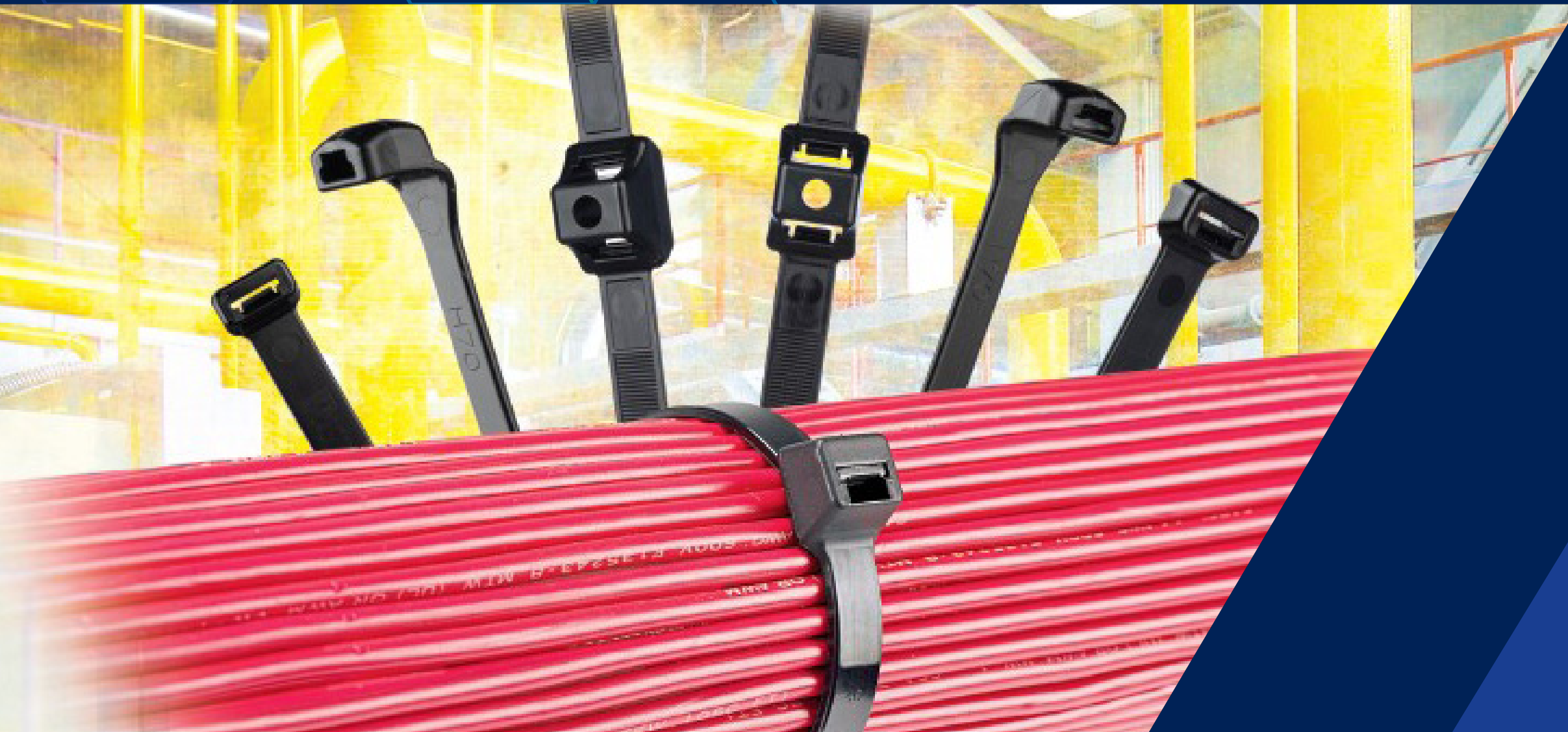


# Premium Cable Ties



**PANDUIT**<sup>®</sup>

Selection Guide

# Comprehensive Cable Tie Solutions

Panduit offers a broad selection of industry approved styles, sizes, and materials to meet a full range of electrical, industrial, and networking applications.

- PLT** **Premium Locking Cable Ties**  
Most comprehensive product offering
- SG** **Vibration-resistant Cable Ties**  
Withstand rough installations
- BT** **Dome-Top® Barb Ty Cable Ties**  
Metal locking barb; infinite adjustability
- DT** **Dura-Ty® Cable Ties**  
Acetal material; 20+ years outdoor service life
- CBR** **Contoured Cable Ties**  
Low profile head, parallel-entry, outside teeth

- HV** **In-Line Cable Ties**  
Teeth on both sides; 2-wedge locking design
- SST** **Through-panel Cable Mounting Cable Ties**  
Two-piece design, low thread force, lightweight
- ERT** **Elastomeric Cable Ties**  
Flexible, elastic material, UL 94V-0, releasable
- PLWS** **Wide Strap Cable Ties**  
Wide, thin flexible body, high heat
- PLDC** **Double Clamp Cable Ties**  
Secures and separates parallel hoses, tubing and wire bundles



	Product Family	PLT	SG	BT	DT	CBR	HV	SST	ERT	PLWS	PLDC
<b>Styles</b>	Locking	✓	✓	✓	✓	✓	✓	✓		✓	✓
	Releasable	✓							✓		
	Marker	✓		✓				✓			
	Clamp	✓		✓				✓			✓
	Push Mount	✓		✓							
	Specialty	✓		✓					✓		
<b>Cross Sections</b>	Miniature (M)	✓	✓	✓		✓		✓			
	Intermediate (I)	✓	✓	✓		✓		✓			
	Standard (S)	✓	✓	✓		✓		✓			
	Heavy-Standard (HS)					✓					
	Light-Heavy (LH)	✓	✓			✓	✓				
	Heavy (H)	✓					✓	✓			
	Extra-Heavy (EH)	✓				✓					
Extra-Heavy (thin) (EH)									✓	✓	

# Cable Tie Industry Approvals

Agency	Spec/Approval	Requirement	Products
<b>UL (Underwriters Laboratory)</b>	UL 62275 (File E56854); UL 2809	Types 1, 11, 2, 2S, 21, 21S (Note 1)	Select PLT, BT, SG, SST, and CBR Series
<b>CSA (Canadian Standards Association)</b>	CSA-C22.2 No. 62275 (File 31212)	Types 1, 11, 2, 2S, 21, 21S (Note 1)	Select PLT, BT, SG, SST, and CBR Series
<b>ABS (American Bureau of Shipping)</b>	05-HS463235-PDA	2005 Steel Vessel Rules 1-1-4/7.7, 4-8-4/21.9.32001 MODU Rules 4-3-3/5.9.1	PLT and BT Series
<b>Bureau Veritas</b>	Cert 05968/C0, BV File ACE 14/601/01 Product Code: 2535H	Bureau Veritas Rules for the Classification of Steel Ships	PLT, PRT, BT and CBR Series
<b>Det Norske Veritas</b>	E-6405	Det Norske Veritas' Rules for Classification of Ships and Mobile Offshore Units	PLT, PLC, PLM, PRT, PLWP, PRWP and PRST Series
<b>Lloyd's Register of Shipping</b>	89/60111 (E3)	Lloyd's Register Type Approval	PLT, PLC, PLP, PLWP, PLM, PRT, SST, SSC, SSM, BT, BC, BM, BF, B2M, B3M, BM, BW, BP, ILT and CBR Series
<b>US Military Aerospace Standard</b>	QPL-AS23190	SAE spec AS23190	Select PLT, BT, SST, and CBR Series

# Material Selection Criteria

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	Impact Modified Heat Stabilized Weather Resistant Nylon 6.6	Impact Modified, Heat Stabilized, Weather Resistant PIR*** Nylon 6.6	Flame Retardant Nylon 6.6	Weather Resistant Nylon 6.12	Polypropylene	Weather Resistant Polypropylene	TEFZELn	HALARs	PEEK	Antimicrobial Metal Detectable Nylon	Metal Detectable Polypropylene	DT Weather Resistant Acetal	ERT Flame Retardant TPU								
Color	-	Natural	Black	Black	Black	Natural	Black	Black	Black	Black	Natural Ivory	Black	Green	Black	Aqua Blue	Maroon	Translucent Brown	Blue	Dark Blue	Black	Black							
Part Number Suffix (Material Designation)	-	No Suffix	0	0	30	39	300	350	360	60	69	6120	109	100	76	702Y	71	96A	186	N/A	20							
Mechanical Properties	Tensile @ Yield @ 73°F (psi)	ISO 527 4°F (-20°C)	12,000	9,700	12,000	12,000	8,700	8,412	11,000	9,300	4,100	7,500	7,000	15,200	-	-	6,500	4,300										
	Water Absorption (24 Hours)	ASTM D570	1.2%							1.1%		0.4%	0.1%	0.1%	<0.03%	<0.05%	0.5%	1.2%	0.1%	<0.45%	0.25%							
	Radiation Resistance (Rads)	-	1 x 10 <sup>5</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>	-									
	Weathering Life Expectancy (Years)/UV Resistance**	-	1-2	7-9	4-5	1-2	7-9	10	1-2	20	1	7-9	>15	-	-	1	>20	7-9										
Impact Resistance	-	○	○	●	○	○	○	●	●	○	○	○	○	○	○	○	○	○	○	○								
Chemical Resistance	Salts	-	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	○	○								
	Hydrocarbons (Oil, Lubricants)	-	●	●	●	●	●	●	●	●	●	○	○	●	●	●	●	●	○	○								
	Chlorinated Hydrocarbons	-	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○								
	Acids	-	●	●	●	●	●	●	●	●	●	●	●	●	●	○	○	○	○	○								
	Bases	-	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○								
	Acid Rain	-	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○								
Thermal Properties	Continuous Use Temperature Range	UL 746B	-76°F - 185°F (-60°C - 85°C)		-76°F - 239°F (-60°C - 115°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 - 338°F (-60°C - 170°C)		-76°F - 257°F (-60°C - 125°C)		-76°F - 464°F (-60°C - 240°C)		-40°F - 185°F (-40°C - 85°C)		-40°F - 239°F (-40°C - 115°C)		76°F - 185°F (-60°C - 85°C)		-40°F - 122°F (-40°C - 50°C)	
	Minimum Installation Temperature	UL 62275	-4°F (-20°C) or 32°F (0°C) Note 1							-4°F (-20°C)		-4°F (-20°C) or 32°F (0°C) Note 1		32°F (0°C)		-4°F (-20°C) or 32°F (0°C) Note 1												
	Flammability Rating	UL 94	V-2				HB				V-0		HB		V-0		V-2		HB		V-0							
	Low Smoke	ASTM E662	PASS							-		-		-		-		PASS		-		PASS		-				
	Oxygen Index	BS ISO 4589	28		-		28		22		-		34		-		-		30		52		35		-		26	
	Halogen-Free	IEC 61249-2-21	Yes							-		-		-		-		No		-		Yes		-		-		
	Burning Fume Toxicity	BSS-7239	PASS							-		-		-		-		-		-		-		-		-		
Heat Deflection Temperature @ 1.8 Mpa	ASTM D648 ISO 75 -1/-2	158°F (70°C)	145°F (63°C)	158°F (70°C)	145°F (63°C)	151°F (66°C)	149°F (65°C)	158°F (70°C)	122°F (50°C)	149°F (65°C)	313°F (156°C)	-	149°F (65°C)	147°F (64°C)	-	-	147°F (64°C)	-	-	147°F (64°C)	-							
RELATIVE PRICE	-	Low				Low-Med				High				Low		Med		High										
Material Availability	Product Family/Cross Section Widths																											
	Premium Locking Cable Ties	PLT	-	All Widths	SM, M, I, S	LH, H, EH	All Widths	-	All Widths	All Widths (except for SM and EH)	All Widths	-	-	-	-	-	-	-	-	-								
	Vibration-Resistant Cable Ties	SG	-	All Widths	M, I, S, LH	H	All Widths	-	-	-	-	-	-	-	-	-	-	-	-	-								
	Dome-Top® Barb Ty Cable Ties	BT	-	All Widths	M, I, S	LH	All Widths	-	-	-	M, I, S, LH	S & LH	-	-	-	-	-	-	-	-								
	Dura-Ty™ Cable Ties	DT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EH								
	Contoured Cable Ties	CBR	-	All Widths	M, I, S, HS, LH	-	All Widths	-	-	-	S	-	-	-	-	-	-	-	-	-								
	Hyper-V™ In-Line Cable Ties	HV	-	-	-	LH	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
	Through-Panel Cable Mounting Cable Ties	SST	-	All Widths	M, I, S, H	-	All Widths	-	-	-	-	-	-	-	-	-	-	-	-	-								
	Elastomeric Cable Ties	ERT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
	Double Clamp Cable Ties	PLDC	-	-	-	-	-	-	-	EH	-	-	-	-	-	-	-	-	-	-								
Wide Strap Cable Ties	PLWS	-	-	-	-	-	-	-	EH	-	-	-	-	-	-	-	-	-	-									



For more information on the products listed in this guide scan here.

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

**Cross Sections:** SM = Subminiature, M = Miniature, I = Intermediate, S = Standard, HS = Heavy-Standard, LH = Light-Heavy, H = Heavy, EH = Extra-Heavy  
**Note 1:** Check UL file for specific part number rating  
 \*TEFZEL is a registered trademark of The Chemours Company  
 \*HALAR is a registered trademark of Solvay Specialty, a Division of Syensqo  
 \*\*Weather Life Expectancy is an estimated life expectancy and not a guarantee of life expectancy  
 \*\*\* PIR: Post-Industrial Recycled

# Cable Tie Installation Tools

Our hand-operated tools are among the most preferred in the industry, suitable for production, maintenance, or construction applications. These versatile tools promote worker safety, help reduce downtime, and improve productivity for improved installation cost and efficiency. Quality in design and production.

## Cable Tie Tools

- GTS-E**
- Used with SM, M, I, and S cable ties
  - Ergonomic design lowers the risk of repetitive motion injuries with the lowest activation and impact force to the installer



- GS2B-E**
- Used with SM, M, I, and S cable ties
  - Metal tool with durable powder coat finish
  - Ergonomic design lowers the risk of repetitive motion injuries through improved activation and force impact to the installer



- GTH-E**
- Used with S, HS, LH, and H cable ties
  - Ergonomic design lowers the risk of repetitive motion injuries through improved activation and force impact to the installer



- GS4H-E**
- Used with S, HS, LH, and H cable ties
  - Metal tool with a durable powder coat finish
  - Ergonomic design lowers the risk of repetitive motion injuries through improved activation and force impact to the installer



- GS4EH-E**
- Used with LH, H, and EH cable ties
  - Metal tool with a durable powder coat finish
  - Ergonomic design lowers the risk of repetitive motion injuries through improved activation and force impact to the installer



## Pneumatic Hand Tools

- PTS**
- Used with SM, M, I, and S cable ties
  - Ergonomic design with impact resistant resin housing
  - Replacement parts can be part of a scheduled maintenance program



- PTH**
- Used with S, HS, LH, and H cable ties
  - Ergonomic design with impact resistant resin housing
  - Replacement parts can be part of a scheduled maintenance program



# Complete Your Bundling System

## Tools

### Manual Cable Tie Installation Tools

- Optimized installation efficiency and reliability
- Flush tie cut-off limits exposure to sharp edges
- Full line of lightweight, ergonomic hand tools models to fit all cable tie cross sections
- Designed for reliability and performance



### Automatic Cable Tie Installation Systems

- An efficient solution for high volume harnessing, assembly, fastening and packaging applications
- High-speed tools lower installed cost and reduce operator fatigue
- Wrap, tension, and cut cable ties in less than one second
- Microprocessor based controller monitors system performance for production data and reporting



## Related Products

### Cable Accessories

- Comprehensive line of mounts, clips, and clamps that organizes and routes cables, speeds and simplifies installations, and lowers overall installed cost
- Installation methods include adhesive backed, user applied adhesive, screws, rivets and push barb
- Accessories provide long-term reliability while cable clips and clamps offer a one-piece solution to save time and reduce inventory designed for reliability and performance



### Stainless Steel Cable Ties

- Durable method of bundling, fastening and permanent identification under severe environmental conditions
- Engineered for safety, productivity, and durability by providing round edges and smooth surfaces, easy threading, high loop tensile strength and tight clamping



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