

Cable Ties Product 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 Pan-Ty® Cable Ties
 Most comprehensive product offering
- SG Super-Grip® 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 Contour-Ty® Cable Ties

 Low profile head, parallel-entry, outside teeth
- HV Hyper-V ™ Cable Ties
 Teeth on both sides; 2-wedge locking design
- SST Sta-Strap® Cable Ties
 Two-piece design, low thread force, lightweight
- **ERT Elastomeric Cable Ties**Flexible, elastic material, UL 94V-0, releasable

	Product Family	PLT	SG	ВТ	DT	CBR	HV	SST	ERT	PLWS	PLDC
	Locking	✓	✓	✓	✓	√	✓	✓		√	✓
	Releasable	✓							✓		
es	Marker	✓		✓				✓			
Styles	Clamp	✓		√				✓			
	Push Mount	✓		✓							
	Specialty	✓		✓				✓			
	Miniature	✓	✓	✓		✓		✓			
	Intermediate	✓	✓	✓		✓		✓			
Suc	Standard	✓	✓	✓		✓		✓			
ectic	Heavy-Standard					✓					
Cross Sections	Light-Heavy	✓	✓	✓		✓	✓				
Cro	Heavy	✓	✓		✓			✓			
	Extra-Heavy	✓			✓						
	Extra-Heavy (thin)									✓	√

Cable Tie Industry Approvals

Agency	Spec/Approval	Requirement	Products				
UL (Underwriters Laboratory)	UL 62275 (File E56854)	Types 1, 11, 2, 2S, 21, 21S (Note 1)	Select PLT, BT, SG, SST, and CBR Series				
CSA (Canadian Standards Association)	CSA-C22.2 No. 62275 (File 31212)	Types 1, 11, 2, 2S, 21, 21S (Note 1)	Select PLT, BT, SG, SST, and CBR Series				
ABS (American Bureau of Shipping)	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				
Bureau Veritas	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				
Det Norske Veritas	E-6405	Det Norske Veritas' Rules for Classification of Ships and Mobile Offshore Units	PLT, PLC, PLM, PRT, PLWP, PRWP and PRST Series				
Lloyd's Register of Shipping	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				
Russian Maritime Register of Shipping	11130200	Russian Maritime Type Approval Certificate	PLT, PLC, PLM, PLF, SG, BT, BF, BM, BC, DT and CBR Series				
NRC (Nuclear Regulatory Commission)	NRC 10CFR50	Quality Assurance Criteria for Nuclear	All cable tie products				
US Military Aerospace Standard	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	Flame Retardant Nylon 6.6	Flame Retardant Nylon 6.6	Weather Resistant Nylon 12	Weather Resistant Nylon 612	Polypropylene	Weather Resistant Polypropylene	TEFZEL ⁿ	HALAR ^s	PEEK	Metal Detectable Nylon	Metal Detectable Polypropylene	DT Weather Resistant Acetal	ERT Flame Retardant TPU
Color	_	Natural (other colors available)	Black	Black	Black	Natural	Black	Black	Black	Natural Ivory	Black	Black	Green	Black	Aqua Blue	Maroon	Translucent Brown	Lt. Blue	Dark Blue	Black	Black
Part Number Suffix (Material Designation)	_	No Suffix	0	0	30	39	300	350	60	69	120	6120	109	100	76	702Y	71	86	186	N/A	20
Tensile @ Yield @ 73°F (psi)	ISO 527	12,000	12,000	9,700	12,000	12,000	12,000	8,700	11,000	11,000	6,700	9,300	4,100	4,100	7,500	7,000	15,200	_	_	6,500	4,300
Water Absorption (24 Hours)	ASTM D570	1.2%	1.2%	1.2%	1.2%	1.2%	1.2%	1.2%	1.1%	1.1%	0.3%	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 ⁵	1 x 10 ⁵	1 x 10 ⁵	1 x 10 ⁵	1 x 10 ⁵	1 x 10 ⁵	1 x 10 ⁵	1 x 10 ⁵	1 x 10 ⁵	3.5 x 10 ⁶	_	1 x 10 ⁶	1 x 10 ⁶	2 x 10 ⁸	2 x 10 ⁸	1 x 10°	_	1 x 10 ⁶	6 x 10 ⁵	_
Weathering Life Expectancy (Years)/UV Resistance**	_	1 – 2	7 – 9	7 – 9	4 – 5	1-2	7 – 9	7-9	1 – 2	1 – 2	20	20	1	7-9	>15	>15	_	_	1	>20	7 – 9
Impact Resistance	_	0	0	•	0	0	0	•	•	•	0	0	•	•	•	•	•	0	•	•	•
Salts	_	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	0	•
Hydrocarbons (Oil, Lubricants)	_	•	•	•	•	•	•	•		•	•	•	0	0	•	•	•	•	0		0
Chlorinated Hydrocarbons	_	•	•	•	•	•	•	•	•	•	•	•	0	0	•	•	•	•	0	•	•
Acids	_	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	0	•	•	•	•
Bases	_	•	•	•	•	•	•	•	lacktriangle	•	•	•	•	•	•		•	•	•	•	•
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 – 239°F -60°C – 115°C			-76°F – 239°F -60°C – 115°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 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 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 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	НВ	V-0	V-0	НВ	НВ	НВ	НВ	V-0	V-0	V-2	НВ	НВ	НВ	V-0
Low Smoke	ASTM E662	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	_	_	_	_	_		PASS	_	_	PASS	_
Oxygen Index Halogen-Free	BS ISO 4589 IEC 61249-2-21	28 Yes	28 Yes	Yes	28 Yes	28 Yes	28 Yes	22 Yes	34 Yes	34 Yes	— Yes	Yes	Yes	Yes	30 Yes	52 No	35 Yes	Yes	Yes	Yes	26 Yes
Burning Fume Toxicity	BSS-7239	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS					— ies	INU	— ies				
Heat Deflection Temperature	ASTM D648	158°F	158°F	145°F	158°F	158°F	158°F	145°F	145°F	154°F	122°F	158°F	122°F	122°F		149°F	313°F			147°F	
@ 1.8 Mpa	ISO 75 -1/-2	70°C	70°C	63°C	70°C	70°C	70°C	63°C	63°C	68°C	50°C	70°C	50°C	50°C	_	65°C	156°C	_	_	64°C	_
Relative Price	_	Low	Low	Low	Low	Low	Med	Med	Med	Med	Med	Med	Med	Med	High	High	High	Low	Med	Med	High
Product Family			Cross S	ections																	
Pan-Ty® Cable Ties PLT		✓	SM, M, I, S	LH, H, EH	✓	✓	✓		✓	✓	✓	(except for SM and EH)	✓	✓	✓	✓	✓	✓	✓		
Super-Grip® Cable Ties SG		√	M, I, S, LH	Н	√																
Dome-Top® Barb Ty Cable Ties BT		✓	M, I, S	LH	✓	✓	✓			✓											
Dura-Ty™ Cable Ties DT																				✓	
Contour-Ty® Cable Ties CBR		✓	M, I, S, HS, LH		✓	✓				✓											
Hyper-V™ Cable Ties HV				LH																	
Sta-Strap® Cable Ties SST		✓	M, I, S, H		✓																
Elastomeric Cable Ties ERT																					✓
Double Clamp Cable Ties PLDC								✓													
Wide Strap Cable Ties PLWS								√													

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



	Recommendation Legend										
Highest	High	Accept- able	Low	Lowest							
•	•	0	•	•							

Check mark indicates material availability in that product family for all cross sections.

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

[&]quot;TEFZEL is a registered trademark of E.I. du Pont de Nemours and Company.

^sHALAR is a registered trademark of Ausimont USA, Inc.

^{**}Weather Life Expectancy is an estimated life expectancy and not a guarantee of life expectancy.

Cable Tie Installation Tools

Panduit offers the most preferred hand-operated tools in the industry. These versatile tools can be used for production, maintenance or construction applications. Panduit cable tie installation tools promote worker safety, help reduce downtime, improve productivity and provide the lowest total installed cost. As with all Panduit products, quality in design and production along with customer service excellence, are assured.

Cable Tie Tools



GTS-E

- Used with SM, M, I, and S cable ties
- Ergonomic design lowers the risk of repetitive motion injuries. Lowest activation and impact force to installer's hand



GS2B-E

- Used with SM, M, I, and S cable ties
- Metal tool with a durable powder coat finish
- Ergonomic design lowers the risk of repetitive motion injuries. Lowest activation and impact force to installer's hand



GTH-E

- · Used with S, HS, LH, and H cable ties
- Ergonomic design lowers the risk of repetitive motion injuries. Lowest activation and impact force to installer's hand



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. Lowest activation and impact force to installer's hand



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. Lowest activation and impact force to installer's hand

Pneumatic Hand Tools



PTS

- Used with SM, M, I, and S cable ties
- Ergonomic design with impact resistant resin housing and black knob; 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 and red knob; replacement parts can be part of a scheduled maintenance program



Pneumatic Tool Accessories

 Visit www.panduit.com for our complete line of pneumatic tool accessories

Complete Your Bundling System

Tools



Manual Cable Tie Installation Tools

- Designed to speed installation for lower installed cost
- Flush tie cut-off limits exposure to sharp edges
- A full line of lightweight, ergonomic hand tools available
- Panduit leads the industry in 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 off 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



Stainless Steel Cable Ties

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

