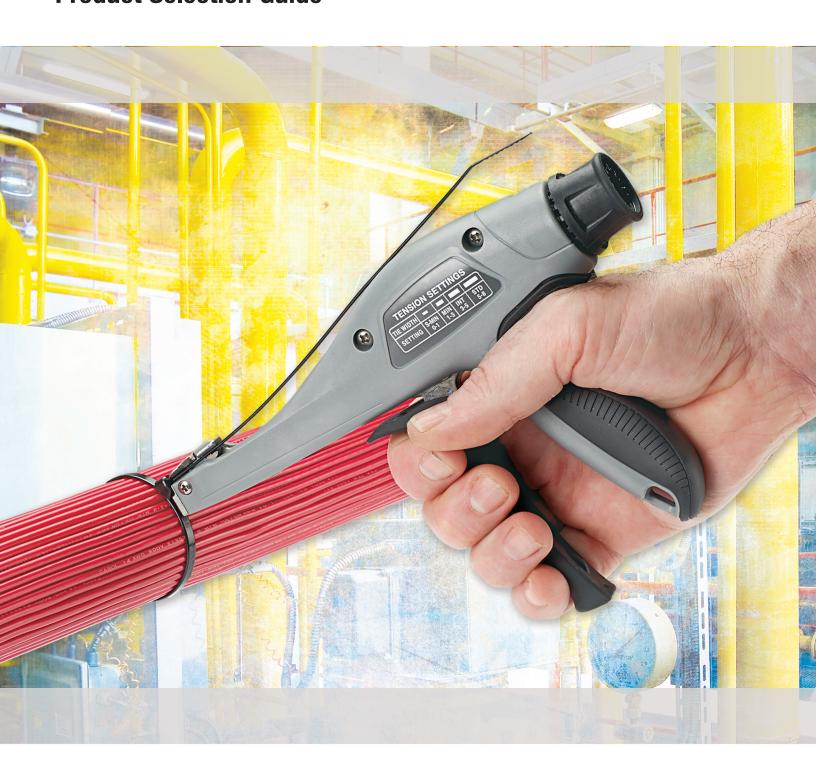


Cable Ties Product Selection Guide



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	CBR	Contour-Ty® Cable Ties
	Most comprehensive product offering		Low profile head, parallel-entry, outside teeth
SG	Super-Grip® Cable Ties	HV	Hyper-V™ Cable Ties
	Withstand rough installations		Teeth on both sides; 2-wedge locking design
BT	Dome-Top® Barb Ty Cable Ties	SST	Sta-Strap® Cable Ties
	Metal locking barb; infinite adjustability		Two-piece design, low thread force, lightweight
PLWS	Pan-Ty® Wide Strap Cable Ties	ERT	Elastomeric Cable Ties
	Ideal for Heavy Duty applications		Flexible, elastic material, UL 94V-0, releasable
DT	Dura-Ty® Cable Ties	PLDC	Pan-Ty® Double Clamp Cable Ties
	Acetal material; 20+ years outdoor service life		Ideal for Heavy Duty application

	Product Family	PLT	SG	BT	DT	CBR	HV	SST	ERT	PLWS	PLDC
	Locking	✓	✓	✓	√	✓	✓	✓		✓	✓
	Releasable	✓							✓		
<u> es</u>	Marker	✓		✓				✓			
Styles	Clamp	✓		✓				✓			
	Push Mount	✓		✓							
	Specialty	✓		✓				✓			
	Miniature	✓	✓	✓		✓		✓			
ટ	Intermediate	✓	✓	✓		✓		✓			
Sections	Standard	✓	✓	✓		✓		✓			
ec	Heavy-Standard					✓					
Cross Se	Light-Heavy	✓	✓	✓		✓	✓				
	Heavy	✓	✓		✓		·	✓			
5	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
	Color Part Number Suffix	_	Natural (other colors available) No Suffix	Black 0	Black 0	Black 30	Natural 39	Black 300	Black 350	Black 60
	(Material Designation)			_						
	Tensile @ Yield @ 73°F (psi)	ISO 527	12,000	12,000	9,700	12,000	12,000	12,000	8,700	11,000
Mechanical	Water Absorption (24 Hours)	ASTM D570	1.2%	1.2%	1.2%	1.2%	1.2%	1.2%	1.2%	1.1%
char	Radiation Resistance (Rads)	_	1 x 10 ⁵	1 x 10⁵	1 x 10 ⁵	1 x 10⁵	1 x 10⁵	1 x 10⁵	1 x 10 ⁵	1 x 10 ⁵
Me	Weathering Life Expectancy (Years)/UV Resistance	_	1 – 2	7 – 9	7 – 9	4 – 5	1 – 2	7 – 9	7 – 9	1 – 2
	Impact Resistance	_	0	0	•	0	0	0	•	•
	Salts Hydrocarbons	_	•	•	•	•	•	•	•	•
cal	(Oil, Lubricants)		•	•	•	•	•	•	•	•
Chemi	Chlorinated Hydrocarbons	_	•	•	•	•	•	•	•	•
ည်မှိ	Acids	_	•		•	•	•	•	•	•
	Bases 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	-76°F – 239°F	-76°F – 239°F -60°C – 115°C	-76°F – 212°F -60°C – 100°C
Properties	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)
odo	Flammability Rating	UL 94	V-2	V-2	V-2	V-2	V-2	V-2	НВ	V-0
al Pr	Low Smoke	ASTM E662	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Thermal	Oxygen Index	BS ISO 4589	28	28	-	28	28	28	22	34
투	Halogen-Free	IEC 61249-2-21	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Burning Fume Toxicity	BSS-7239	PASS	PASS	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	145°F 63°C	145°F 63°C
	Relative Price	_	Low	Low	Low	Low	Low	Med	Med	Med
	Product Family				Sections					
	Pan-Ty® Cable Ties PLT		✓	SM, M, I, S	LH, H, EH	✓	✓	✓		✓
	Super-Grip® Cable Ties SG		✓	M, I, S, LH	Н	✓				
<u>i</u>	Dome-Top® Barb Ty Cable Ties BT		✓	M, I, S	LH	✓	✓	✓		
Availability	Dura-Ty [™] Cable Ties DT									
	Contour-Ty® Cable Ties CBR		✓	M, I, S, HS, LH		✓	✓			
Material	Hyper-V [™] Cable Ties HV				LH					
Mat	Sta-Strap® Cable Ties SST		✓	M, I, S, H		✓				
	Elastomeric Cable Ties ERT									
	Double Clamp Cable Ties PLDC								✓	

Recommendation Legend								
Highest	Highest High Acceptable Low Lowest							
	•	0	•	•				

PLWS

Wide Strap Cable Ties

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



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Flame Retardant Nylon 6.6	Weather Resistant	Polypropylana	Weather Resistant Polypropylene	TEFZEL ^a	HALAR ^s	PEEK	Metal Detectable Nylon	Metal Detectable Polypropylene		ERT Flame Retardant TPU
Natural Ivory	Black	Green	Black	Aqua Blue	Maroon	Translucent Brown	Lt. Blue	Dark Blue	Black	Black
69	120	109	100	76	702Y	71	86	186	N/A	20
11,000	6,700	4,100	4,100	7,500	7,000	15,200	-	-	6,500	4,300
1.1%	0.3%	0.1%	0.1%	<0.03%	<0.05%	0.5%	1.2%	0.1%	<0.45%	0.25%
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 ⁹	-	1 x 10 ⁶	6 x 10⁵	_
1 – 2	12 – 15	1	7 – 9	>15	>15	_	_	1	>20	7 – 9
•	0	•	•	•	•	•	0	•	•	•
<u> </u>	•	•	•	•	•	•	•	•	0	•
•	•	0	0	•	•	•	•	0	•	0
•	•	0	0	•	•	•	•	0	•	•
•	•	•	•	•	•	0	•	•	•	•
•	•	•	•	•	•	•	•	•	•	•
•	•	•	•	•		•	•	•	•	•
-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 – 500°F -60°C – 260°C (Note 2)	-76°F – 185°F -60°C – 85°C	-76°F – 239°F -60°C – 115°C	76°F – 185°F -60°C – 85°C	-40°F – 122°F -40°C – 50°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 1)	
V-0	HB	НВ	НВ	V-0	V-0	V-0	HB	НВ	HB	V-0
PASS	-	-	_	_	_	PASS	-	-	PASS	_
34	-	-	_	30	52	35	_	-	_	26
Yes	Yes	Yes	Yes	Yes*	No	Yes	Yes	Yes	Yes	Yes
PASS	_	_	_	_	_	_	_	_	_	_
154°F 68°C	122°F 50°C	122°F 50°C	122°F 50°C	_	149°F 65°C	313°F 156°C	_	_	147°F 64°C	_
Med	Med	Med	Med	High	High	High	Low	Med	Med	High
√	√	✓	√	√	✓	√	√	✓		
✓										
									✓	
✓										
										✓

Note 1: Check UL file for specific part number rating
Note 2: Based upon UL RTI for electrical properties; mechanical without impact carries a 240° C (464° F) RTI rating

[&]quot;TEFZEL is a registered trademark of The Chemours Company.

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

^{*}Tefzel material contains Flourine, but in accordance to IEC 61249-2-21, which calls out Chlorine and Bromine, but not Flourine, meets the definition of Halogen-Free.

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





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

Services



Custom Imprinting Service

- Products available for custom imprinting include cable ties, marker plates, marker and flag ties, hook and loop wrap ties
- Results in a professional, high quality appearance for identification and labeling as well as promotional purposes
- Options include company logos, website addresses, sequential numbering, phone numbers, graphics and text

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

