# PANDUIT®



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

			EN ST	9			Pan		
	Product Family	PLT	SG	BT	DT	CBR	HV	SST	ERT
	Locking	✓	✓	✓	✓	✓	✓	✓	
	Releasable	✓							✓
les	Marker	✓		✓				✓	
Styles	Clamp	✓		✓				✓	
	Push Mount	✓		✓					
	Specialty	✓		✓				✓	
60	Miniature	✓	✓	✓		✓		✓	✓
Sections	Intermediate	✓	✓	✓		✓		✓	
E	Standard	✓	✓	✓		✓		✓	
Se	Heavy-Standard					✓			
SS	Light-Heavy	✓	✓	✓		✓	✓	✓	
Cross	Heavy	✓	✓		✓				
	Extra-Heavy	✓	·		✓				

# **Cable Tie Industry Approvals**

Agency	Spec/Approval	Requirement	Products
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	pyd's Register of Shipping 89/60111 (E3)		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 Plants and Reprocessing Plants	All cable tie products
US Military Aerospace Standard	QPL-AS23190-3	SAE spec AS23190	Select PLT, BT, SST, and CBR Series

# **Material Selection Criteria**

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	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	Flame Retardant Nylon 6.6
	Color	_	Natural (other colors available)	Black	Black	Black	Natural	Black	Black
	Part Number Suffix (Material Designation)	_	No Suffix	0	0	30	39	300	60
	Tensile @ Yield @ 73°F (psi)	ISO 527	12,000	12,000	9,700	12,000	12,000	12,000	11,000
Mechanical	Water Absorption (24 Hours)	ASTM D570	1.2%	1.2%	1.2%	1.2%	1.2%	1.2%	1.1%
char	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>	1 x 10 <sup>5</sup>
So	Weathering Life Expectancy (Years)/UV Resistance	_	1 – 2	7 – 9	7 – 9	4 – 5	1 – 2	7 – 9	1 – 2
	Impact Resistance	_	0	0	•	0	0	0	•
	Salts	_	•	•	•	•	•	•	•
Chemical	Hydrocarbons (Oil, Lubricants)	_	•	•	•	•	•	•	•
E S	Chlorinated Hydrocarbons	_	•	•	•	•	•	•	•
She	Acids	_	•		•			•	
"	Bases	_	•	•	•	•	•	•	•
	Acid Rain	_	•	<b>-</b>	•	<b>-</b>	•	<b>-</b>	<b>-</b>
	Max. Continuous Use Temperature	UL 746B	185°F 85°C	185°F 85°C	185°F 85°C	239°F 115°C	239°F 115°C	212°F 100°C (Note 1)	212°F 100°C
ies	Min. Application Use Temperature	EN 50146	-76°F -60°C	-76°F -60°C	-76°F -60°C	-76°F -60°C	-76°F -60°C	-76°F -60°C	-40°F -40°C
perl	Flammability Rating	UL 94	V-2	V-2	HB	V-2	V-2	V-2	V-0
I Properties	Low Smoke	ASTM E662	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Thermal	Oxygen Index	BS ISO 4589	28	28	_	28	28	28	34
Ĕ	Halogen-Free	IEC 60754-2	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Burning Fume Toxicity	BSS-7239	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	154°F 68°C
	Relative Price	_	Low	Low	Low	Low	Low	Med	Med
_									
	Product Family			Cross S					
	Pan-Ty® Cable Ties PLT		✓	SM, M, I, S	LH, H, EH	✓	✓	✓	✓
£	Super-Grip® Cable Ties SG		✓	M, I, S, LH	Н	1			
Availability	Dome-Top® Barb Ty Cable Ties BT		✓	M, I, S	LH	✓	✓	✓	
	Dura-Ty™ Cable Ties DT								
Material	Contour-Ty® Cable Ties CBR		✓	M, I, S, HS	LH	✓	✓		
Ma	Hyper-V™ Cable Ties HV				LH				
	Sta-Strap® Cable Ties SST		✓	M, I, S, LH		✓			
	Elastomeric Cable Ties ERT								

	Recommendation Legend								
Highest	High	Acceptable	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, EM = Extra-Heavy

									DT	ERT
Flame Retardant Nylon 6.6	Weather Resistant Nylon 12	Polypropylene	Weather Resistant Polypropylene	TEFZEL*	HALAR*	PEEK	Metal Detectable Nylon	Metal Detectable Polypropylene		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 <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	12 – 15	1	7 – 9	>15	>15	_	_	1	>20	7 – 9 (Note 1)
•	0	•	•			•	0	•	•	•
•	•	•	•	•	•	•	•	•	0	•
•	•	0	0	•	•	•	•	0	•	0
•	•	0	0	•	•	•	•	0	•	•
•	•	•	•			0		•		•
•	•	•	•			•	•	•	•	•
011005	0	22205	00005	00005	05705	50005	40505	22205	40505	10005
212°F 100°C	194°F 90°C	239°F 115°C	239°F 115°C	338°F 170°C	257°F 125°C	500°F 260°C (Note 2)	185°F 85°C	239°F 115°C	185°F 85°C	122°F 50°C
-40°F -40°C	-76°F -60°C	-76°F -60°C	-76°F -60°C	-76°F -60°C	-76°F -60°C	-76°F -60°C	-76°F -60°C	-76°F -60°C	-76°F -60°C	-40°F -40°C
V-0	HB	НВ	НВ	V-0	V-0	V-0	HB	HB	HB	V-0
PASS	_	_	_	1	_	PASS	_	_	PASS	_
34	_	_	_	30	52	35	_	_	_	26
Yes	Yes	Yes	Yes	No	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
/	<b>√</b>	1	<b>√</b>	<b>√</b>	1	<b>√</b>	1	1		
✓										
									<b>√</b>	
<b>✓</b>										
										1
I		I				1	I	1		

Note 1: Estimated
Note 2: Based upon UL RTI for electrical properties

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

<sup>▲</sup>HALAR is a registered trademark of Ausimont USA, Inc.

# **Bundling Systems for Network Cabling**

Panduit has a comprehensive offering of cable ties that deliver reliability by protecting against over-tensioning of high performance fiber and copper cables. These ties are adjustable, releasable, and reusable to effectively support frequent moves, adds, and changes (MACs). A wide range of designs, sizes, and colors provides flexibility and an aesthetically pleasing appearance.



Tak-Ty® Loop Ties
Slot allows for pre-wrapping
of bundles



Tak-Ty® Strip Ties
Rolls perforated in convenient
6", 8", or 12" strips for use with
pre-determined bundle sizes



Tak-Ty® Rolls
Continuous rolls of 15' and 75'
can be cut to any length



Tak-Ty® Stacked Strips
- Eliminates cutting and staging
- 7" strips (100 pieces)



Tak-Ty® Cable Ties – Plenum Rated
UL approved for use in
air handling spaces



Ultra-Cinch ™ Ties
Cinch ring accommodates
tighter bundles



Elastomeric Cable Ties
- UL 94V-0 flammability rating
- Safe and releasable



**Tak-Tape** <sup>™</sup> **Rolls** General purpose fastener



Hook and Loop Wrap
Marker Ties
- Write-on identification area
- Custom imprinting available

# **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



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