

7 Electrical Grounding Capacity

The National Electrical Code, Article 392-7 allows cable tray to be used as an equipment grounding conductor. All T&B standard cable trays are classified by Underwriter's Laboratories per US NEC Table 392-7 based on their cross sectional area.

The corresponding cross-sectional area for each siderail design (2-siderails) is listed on the label. This cable tray label is attached to each straight section that is UL classified. Fittings are not subject to CSA or UL.

**NEC TABLE 392.60 (A)
Metal Area Requirements for Cable Trays
Used as Equipment Grounding Conductors**

Maximum Fuse Ampere Rating, Circuit Breaker Ampere Trip Setting, or Circuit Breaker Protective Relay Ampere Trip Setting for Ground Fault Protection of any Cable Circuit in the Cable Tray System	Minimum Cross-Sectional Area of Metal* In Square Inches	
	Steel Cable Trays	Aluminum Cable Trays
60	0.20	0.20
100	0.40	0.20
200	0.70	0.20
400	1.00	0.40
600	1.50 **	0.40
1000	-	0.60
1200	-	1.00
1600	-	1.50
2000	-	2.00 **

For SI units: one square inch = 645 square millimeters.

* Total cross-sectional area of both side rails for ladder or trough-type cable trays: or the minimum cross-sectional area of metal in channel-type cable trays or cable trays of one-piece construction.

** Steel cable trays shall not be used as equipment grounding conductors for circuits with ground-fault protection above 600 amperes. Aluminum cable trays shall not be used as equipment grounding conductors for circuits with ground-fault protection above 2000 amperes.

For larger ampere ratings an additional grounding conductor must be used.

See pages 198 to 201 for grounding and bonding products.

For more information on grounding and bonding cable tray refer to section 4.7 of the NEMA VE 2-2006 Cable Tray installation guidelines.