

FRP Cable Tray specifications

External revision 1

*Dimension
Conversion Table:

2"	= 50.8mm
3"	= 76.2mm
4"	= 101.6mm
5"	= 127mm
7"	= 177.8mm
6"	= 152.4mm
8"	= 203.2mm
9"	= 228.6mm
9.25"	= 235mm
12"	= 304.8mm
18"	= 355.6mm
18.5"	= 470mm
24"	= 457.2mm
30"	= 762mm
36"	= 914.4mm
42"	= 1,066.8mm

Section 1 - Acceptable manufacturers

- 1.01** Cable tray system will be made of straight sections, fittings and accessories as defined in the latest CSA/NEMA standards publication.
- 1.02** All manufacturing practices will be in accordance with CSA/NEMA.
- 1.03** Cable trays will be by ABB, or approved CSA/NEMA member.

Section 2 - Cable tray design

- 2.01** Straight section structural elements; side rails, rungs and splice plates shall be pultruded from glass fiber reinforced polyester or vinylester resin.
- 2.02** Pultruded shapes will be constructed with a surface veil to ensure a resin-rich and ultravioletresistant surface.
- 2.03** Pultruded shapes shall meet the ASTM E-84 Class 1 flame rating and self-extinguishing requirements of ASTM D-635.

Section 3 - Construction

- 3.01** Straight section lengths will be 120" (10 ft. (3.05m)) or 240" (20 ft. (6.10m)) standard.
- 3.02** Side rails will be inward "C" configuration and be predrilled to accept splice plates.
- 3.03** Overall heights shall be 8, 6, 4 or 3" (*mm) respectively.
- 3.04** Loading depths for cable tray systems shall be 7, 5, 3 or 2" (*mm) as per CSA/NEMA tolerances.

- 3.05** Loading classifications and test specimens shall be per CSA/NEMA.

- 3.06** Rung spacing shall be 6, 9.25, 12 or 18.5" (*mm)

Section 4 - Dimensions

- 4.01** All fittings shall be of mitered design type with a minimum 3" (76.2mm) tangent following the radius.
- 4.02** All fittings shall have a nominal 9.25" rung spacing.
- 4.03** Width (usable inside tray width) shall be 6, 9, 12, 18, 24, 30 or 36" (*mm).
- 4.04** Outside width shall not exceed inside width by more than a total of 2" (50.8mm).
- 4.05** Straight and expansion splice plates will be of stainless steel or fiberglass design with an eight-bolt pattern in 5" (127mm) fill systems and four-bolt pattern for 3, 4, 6 and 8" tray depths.
- 4.06** Dimension tolerances will be per CSA/NEMA.
- 4.07** Cable tray must have integral connection between side rails and rungs consisting of nonmetallic mechanical fasteners and adhesive bonding.