



System No. 25B FHIT.25B Electrical Circuit Integrity Systems

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- Authorities Having Jurisdiction should be consulted in all cases as to the particular requirements covering the installation and use of UL Certified products, equipment, system, devices, and materials.
- Authorities Having Jurisdiction should be consulted before construction.
- Fire resistance assemblies and products are developed by the design submitter and have been investigated by UL for compliance with applicable requirements. The published information cannot always address every construction nuance encountered in the field.
- When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the product manufacturer noted for the design. Users of fire resistance assemblies are advised to consult the general Guide Information for each product category and each group of assemblies. The Guide Information includes specifics concerning alternate materials and alternate methods of construction.
- Only products which bear UL's Mark are considered Certified.

FHIT - Electrical Circuit Integrity Systems

[See General Information for Electrical Circuit Integrity Systems](#)

System No. 25B

December 18, 2014

Fire Rating — 1 or 2 Hr. (See Item 2)

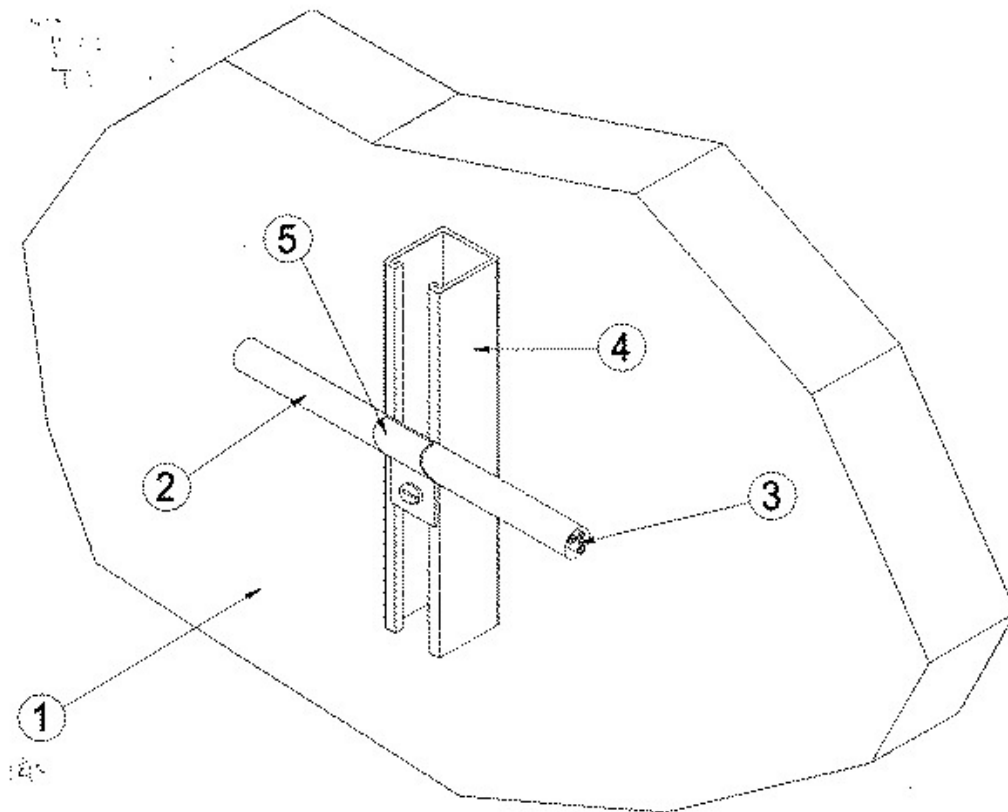


Fig. 1
Two-piece Single-bolt Pipe Clamp

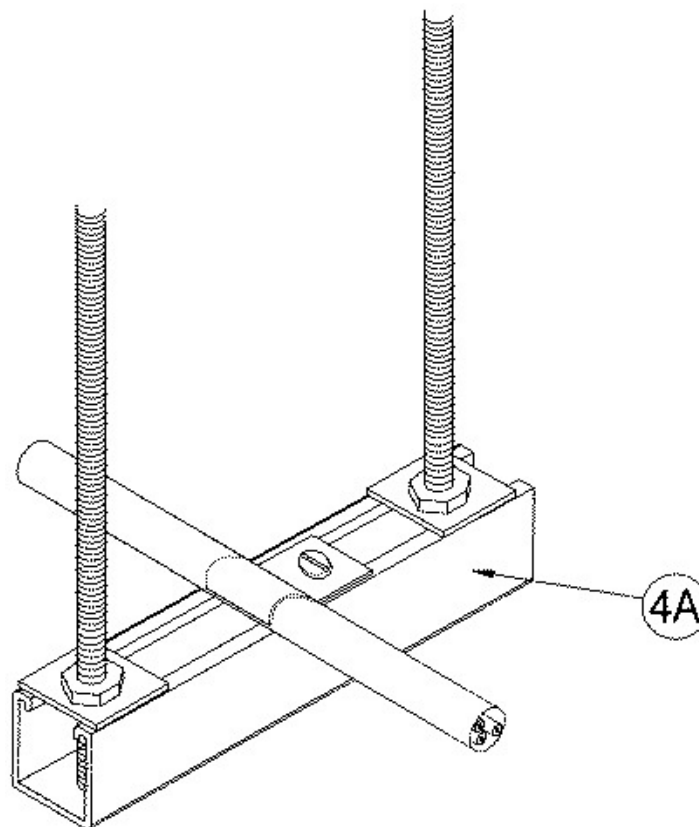


Fig. 2
Steel Strut Trapeze

1. **Wall or Floor Assembly*** — Minimum 2 hour fire rated concrete or masonry wall or concrete floor. Opening in wall or floor through which raceway passes is to be sized to closely follow the contour of the raceway. Through opening in wall or floor to be firestopped using a compatible firestop system. See **Through-Penetration Firestop Systems** (Guide XHEZ) category for presently Certified firestop systems.

2. **Raceway*** — Horizontal or Vertical installation. Vertical installations are limited to 1 Hr. rating.

ALLIED TUBE & CONDUIT CORP — Type EMT E-Z Pull Brand

WESTERN TUBE & CONDUIT CORP — Type EMT

Horizontal Installation - 1 or 2 Hr.		
Number of Cables	AWG/kcmil Size	Raceway Trade Size
1	8, 6	1/2 in.
1, 2	8	3/4 in.
1	6, 4, 3, 2	3/4 in.
1, 2, 3, 4	8	1 in.
1, 2	6, 4	1 in.
1	3, 2, 1	1 in.
1, 2, 3, 4	8, 6	1-1/4 in.
1, 2, 3	4, 3	1-1/4 in.
1, 2	2	1-1/4 in.
1	1, 1/0, 2/0, 3/0, 4/0	1-1/4 in.
1, 2, 3, 4	8, 6, 4, 3, 2	1-1/2 in.
1, 2	1, 1/0	1-1/2 in.
1	2/0, 3/0, 4/0, 250, 300	1-1/2 in.
1, 2, 3, 4	8, 6, 4, 3, 2, 1	2 in.
1, 2, 3	1/0, 2/0	2 in.

1, 2	3/0, 4/0	2 in.
1	250, 300, 350, 400, 500	2 in.
1, 2, 3, 4	8, 6, 4, 3, 2, 1, 1/0, 2/0, 3/0, 4/0	2-1/2 in.
1, 2, 3	250	2-1/2 in.
1, 2	300, 350, 400, 500	2-1/2 in.
1	600, 750	2-1/2 in.
1, 2, 3, 4	8, 6, 4, 3, 2, 1, 1/0, 2/0, 3/0, 4/0, 250, 300	3 in.
1, 2, 3	350, 400, 500	3 in.
1, 2	600, 750	3 in.
1, 2, 3, 4	8, 6, 4, 3, 2, 1, 1/0, 2/0, 3/0, 4/0, 250, 300, 350, 400, 500	3-1/2 in.
1, 2, 3	600	3-1/2 in.
1, 2	750	3-1/2 in.
1, 2, 3, 4	8, 6, 4, 3, 2, 1, 1/0, 2/0, 3/0, 4/0, 250, 300, 350, 400, 500, 600	4 in.
1, 2, 3	750	4 in.

Vertical Installation - 1 Hr.		
Number of Cables	AWG/kcmil Size	Raceway Trade Size
1	8	3/4 in.
1	8	1 in.
1, 2, 3	8	1-1/4 in.
1	6, 4, 3, 2	1-1/4 in.
1, 2, 3, 4	8	1-1/2 in.
1, 2	6	1-1/2 in.
1	4, 3, 2	1-1/2 in.
1, 2, 3, 4	8	2 in.
1, 2, 3	6	2 in.
1, 2	4, 3, 2	2 in.
1	1, 4/0	2 in.
1, 2, 3, 4	8, 6, 4, 3, 2	2-1/2 in.
1, 2	1, 1/0, 2/0, 4/0	2-1/2 in.
1	3/0, 250, 300, 350, 400, 500	2-1/2 in.
1, 2, 3, 4	8, 6, 4, 3, 2, 1	3 in.
1, 2, 3	1/0, 2/0, 4/0	3 in.
1, 2	3/0, 250, 300	3 in.
1	350, 400, 500, 600, 750	3 in.
1, 2, 3, 4	8, 6, 4, 3, 2, 1, 1/0, 2/0, 4/0	3-1/2 in.
1, 2, 3	3/0, 250	3-1/2 in.
1, 2	300, 350, 400, 500	3-1/2 in.
1	600, 750	3-1/2 in.
1, 2, 3, 4	8, 6, 4, 3, 2, 1, 1/0, 2/0, 3/0, 4/0, 250	4 in.
1, 2, 3	300, 350	4 in.
1, 2	400, 500, 600, 750	4 in.

2A. **Raceway Coupling*** – (Not shown).

RACO – Steel (all components) EMT Compression Couplings. Trade size to correspond with the raceway size.

3. **Fire Resistive Cables*** – The hourly fire rating applies to cable passing completely through a fire zone and terminating

a minimum of 12 inches beyond the fire rated wall or floor bounding the fire zone.

DRAKA CABLETEQ USA INC — Type RHW-2 Lifeline Brand of the following part numbers: G300 followed by 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 77, 78; or QLIFLINE followed by 300 or 400 followed by KCMIL. To be installed as described herein and in accordance with the manufacturer's installation instructions dated November 13, 2014, File R19359.

4. **Supports** — (Figure 1) - Min 12 gauge, by 1-1/2 in. wide or 1-5/8 in wide, painted or unpainted, slotted steel channels with hemmed flange edges. Channel bottom with or without holes. Lengths of slotted steel channels 5 ft and less shall be secured to the wall or floor with a min of two 1/4 in. diameter (or larger) by 2-1/4 in. min long concrete screws, or 1/4 in. diameter (or larger) by 1-3/4 in. long min steel masonry anchors. One screw or anchor to be located at each end of the slotted steel channel. Lengths of slotted steel channel in excess of 5 ft require a min of three screws or anchors, one at each end of the channel and one centrally located within the length of the channel. The supports shall be spaced a maximum of 5 ft. OC. When installing cable(s) in vertical runs, the maximum distance of cable within EMT shall be 37 ft. between terminating points.

4A. **Trapeze-type Supports** — (Figure 2) - The raceways shall be installed on/from trapeze-type supports. The trapeze-type supports shall be secured from the surface of the floor. The supports shall be spaced a maximum of 5 ft. OC.

5. **Clamps** — Two-piece single-bolt pipe clamps manufactured of 16 gauge steel, measuring 1-1/4 in. wide and trade size to correspond with the outside diameter of the raceway.

*Bearing the UL Certification Mark

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