

## **1 General**

### **1.1 RELATED SECTIONS**

- .1 Section 26 05 00 - Common Work Results - Electrical.

### **1.2 REFERENCES**

- .1 Canadian Standards Association (CSA)
  - .1 CSA C22.2 No. 18.4-04 (R2009), Hardware for the support of Conduit, Tubing, and Cable (Bi-National Standard with UL 2239).

## **2 Products**

### **2.1 SUPPORT CHANNELS**

- .1 U shape, size 41 x 41 mm, 2.5 mm thick, surface mounted suspended or set in poured concrete walls and ceilings as required.

### **2.2 SPECIFIC PURPOSE SUPPORTS**

- .1 Specific purpose heat treated, spring steel fasteners to support boxes, conduit and cable from main structure, channels, and metal studs.

## **3 Execution**

### **3.1 INSTALLATION**

- .1 Secure surface mounted equipment with bar type box hangers. Ensure that box hangers are adequately supported to carry weight of equipment specified before installation.
- .2 Support equipment, conduit or cables using clips, spring loaded bolts, cable clamps designed as accessories to basic channel members.
- .3 Fasten exposed conduit or cables to building construction or support system using straps.
  - .1 One-hole steel straps to secure surface conduits and cables 50 mm and smaller.
  - .2 Two-hole steel straps for conduits and cables larger than 50 mm.
  - .3 Beam clamps to secure conduit to exposed steel work.
  - .4 Strap AC90 at box location and at every 900 mm.
- .4 Suspended support systems.
  - .1 Support individual cable or conduit runs with 6 mm dia threaded rods and spring clips.
  - .2 Support two (2) or more cables or conduits on channels supported by 6 mm dia threaded rod hangers where direct fastening to building construction is impractical.
- .5 For surface mounting of two or more conduits use channels at 1.5 m on centre spacing.
- .6 Provide metal brackets, frames, hangers, clamps and related types of support structures where indicated or as required to support conduit and cable runs.
- .7 Ensure adequate support for raceways and cables dropped vertically to equipment where there is no wall support.
- .8 Install fastenings and supports as required for each type of equipment cables and conduits, and in accordance with manufacturer's installation recommendations.
- .9 Electrical boxes concealed in hollow gypsum board walls to be supported by specific purpose brackets or clips designed for stud wall construction.

### **3.2 RESTRICTIONS**

- .1 Do not use wire lashing, wood blocking, nylon or plastic strap ('Ty-Wraps') to support or secure raceways or cables.
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- .2 Do not use supports or equipment installed for other trades for conduit or cable support except with permission of other trade and approval of Departmental Representative.
- .3 Do not install cable, raceway, or boxes directly to underside of roof deck, maintain a minimum separation of 1.5" as required by Code.

**END OF SECTION**

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