

PART 1 - GENERAL

1.1 RELATED SECTIONS

- .1 Section 21 00 00/26 00 00 – Specific Conditions – Mechanical/Electrical.
- .2 Section 26 05 00 – Common Work Results – Electrical.

1.2 REFERENCES

- .1 Unless otherwise indicated, all the works must be done in accordance with the latest edition of the Quebec Construction Code (QCC).

1.3 SUBMITTALS

- .1 Shop drawings:
 - .1 Submit shop drawings in accordance with Section 21 00 00/26 00 00 – Specific Conditions – Mechanical/Electrical.
- .2 Product data:
 - .1 Submit required product data in accordance with Section 21 00 00/26 00 00 – Specific Conditions – Mechanical/Electrical.
- .3 Samples:
 - .1 N/A.

1.4 WASTE MANAGEMENT AND DISPOSAL

- .1 Separate waste for recycling in accordance with Section 21 00 00/26 00 00 – Specific Conditions – Mechanical/Electrical.
- .2 Remove all packaging material from site and divert to appropriate recycling facilities.
- .3 Separate for recycling packaging material and place in designated containers in accordance with Waste Management Plan.
- .4 Divert unused metal materials to metal recycling facility as approved by Engineer.
- .5 Fold up metal banding, flatten and place in designated area for recycling.

PART 2 - PRODUCTS

2.1 SUPPORT CHANNELS

- .1 U shape, size 41 x 41 mm, 2.6 mm thick, surface mounted, suspended or set in poured concrete walls and ceilings.
- .2 Equipment supports must be made of galvanized steel.
- .3 Supply all equipment supports required for complete installation as per plans, where provided. Supports for junction boxes, outlets, ducts, etc. are examples of supports not indicated on the drawings that must be supplied and installed. For all panels that must be wall-mounted, hot galvanized steel structural shapes must be installed vertically between the wall and the panel. For prefabricated supports, installation must be in accordance with manufacturer's requirements.
- .4 Metal fasteners must be used. Plastic fasteners are not acceptable.

PART 3 - EXECUTION

3.1 INSTALLATION

- .1 Secure equipment to masonry, tile and plaster surfaces with lead anchors.
- .2 Secure equipment to poured concrete with expandable inserts.
- .3 Secure equipment to hollow masonry walls or suspended ceilings with toggle bolts.
- .4 Secure surface mounted equipment with twist clip fasteners to inverted T bar ceilings. Ensure that T bars are adequately supported to carry weight of equipment specified before installation.
- .5 Support equipment, conduit or cables using clips, spring loaded bolts, cable clamps designed as accessories to basic U channel members.
- .6 Fasten exposed conduit or cables to building construction or support system using straps:
 - .1 One-hole steel straps to secure surface conduits and cables 53 mm and smaller.
 - .2 Two-hole steel straps for conduits and cables larger than 53 mm.
- .7 Beam clamps to secure conduit to exposed steel work.
- .8 Suspended support systems:
 - .1 Support individual cable or conduit runs with 6 mm diameter threaded rods and spring clips.

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- .2 Support 2 or more cables or conduits on U channels supported by 6 mm diameter threaded rod hangers where direct fastening to building construction is impractical.
- .9 For surface mounting of two or more conduits use channels at 1.5 m on centre spacing.
- .10 Provide metal brackets, frames, hangers, clamps and related types of support structures where indicated or as required to support conduit and cable runs.
- .11 Ensure adequate support for raceways and cables dropped vertically to equipment where there is no wall support.
- .12 Do not use wire lashing or perforated strap to support or secure raceways or cables.
- .13 Do not use supports or equipment installed for other trades for conduit or cable support.
- .14 Install fastenings and supports as required for each type of equipment cables and conduits, and in accordance with manufacturer's installation recommendations.
- .15 Install lattice support structures for vertical conductors located in vertical raceways independent of connections to terminals and at intervals not in excess of those indicated in QCC Table 21, Chapter V – Electricity. The supports must maintain continuity of the raceways without damaging conductors or their sheaths. Anchor the supports inside the boxes.
- .16 Install lattice support structures for vertical cables independent of connections and at intervals not in excess of those indicated in QCC Table 21, Chapter V – Electricity. The supports must hold the weight of the cables without damaging the wire sheath. Anchor the supports.

END OF SECTION