

## **PART 1 - General**

### **1.1 RELATED SECTIONS**

- .1 Section 26 05 01 Common Work Results - Electrical.

### **1.2 REFERENCES**

- .1 CSA C22.1-2015, Canadian Electrical Code, Part 1.

### **1.3 WASTE MANAGEMENT AND DISPOSAL**

- .1 See Section 01 74 21 Construction Demolition Waste Management.
- .2 Collect and separate plastic, paper packaging and corrugated cardboard in accordance with Waste Management Plan.
- .3 Fold up metal banding, flatten and place in designated area for recycling.

## **PART 2 - Products**

### **2.1 OUTLET AND CONDUIT BOXES GENERAL**

- .1 Size boxes in accordance with CSA C22.1.
- .2 103 mm square or larger outlet boxes as required for special devices.
- .3 Gang boxes where wiring devices are grouped.
- .4 Blank cover plates for boxes without wiring devices.
- .5 347 V outlet boxes for 347 V switching devices.
- .6 Combination boxes with barriers where outlets for more than one system are grouped.

### **2.2 GALVANIZED STEEL OUTLET BOXES**

- .1 Electro-galvanized steel single and multi gang flush device boxes for flush installation, minimum size 91mm x 53mm x 41mm or as indicated. 103mm square outlet boxes when more than one conduit enters one side with extension and plaster rings as required.
- .2 Electro-galvanized steel utility boxes for outlets connected to surface-mounted EMT conduit, minimum size 103mm x 54mm x 53mm.
- .3 103mm square or octagonal outlet boxes for lighting fixture outlets.

- .4 103mm square outlet boxes with extension and plaster rings for flush mounting devices in finished walls.
- .5 Surface outlet boxes installed below 2438 mm shall be hot dipped galvanized cast "FS", or "FD" series boxes with metal coverplates.

### **2.3 CONDUIT BOXES**

- .1 Cast FS boxes with factory-threaded hubs and mounting feet for surface wiring of switches and receptacles.
- .2 PVC FS boxes with factory-threaded hubs and mounting feet for surface wiring of switches and receptacles.

### **2.4 FITTINGS - GENERAL**

- .1 Bushing and connectors with nylon insulated throats.
- .2 Knock-out fillers to prevent entry of debris.
- .3 Conduit outlet bodies for conduit up to 31.75 mm and pull boxes for larger conduits.
- .4 Double locknuts and insulated bushings on sheet metal boxes.

## **PART 3 - Execution**

### **3.1 INSTALLATION**

- .1 Support boxes independently of connecting conduits.
- .2 Fill boxes with paper, sponges or foam or similar approved material to prevent entry of debris during construction. Remove upon completion of work.
- .3 For flush installations mount outlets flush with finished wall using plaster rings to permit wall finish to come within 6 mm of opening.
- .4 Provide correct size of openings in boxes for conduit and cable connections. Reducing washers are not allowed.
- .5 At each local switch, convenience outlet, receptacle, ceiling or wall fixture, continuous row of fixtures, or system unit (i.e. fire alarm, etc.) provide and install a standard pressed steel outlet box unless specifically noted otherwise. All outlet boxes shall be galvanized inside and out and set flush with finished surfaces. They shall be rigidly and securely set. Boxes shall not be mounted back to back, but separated by a minimum of 300mm, to prevent noise transmission.

- .6 In centering outlets, the Contractor is cautioned to allow for radiation, pipes, ducts, etc., and for the variation in arrangement and thickness of finishes, etc.. His failure to comply with this will not relieve him from the cost of necessary alterations.
- .7 The Contractor shall allow for the relocation of an outlet up to 3000mm from where shown, provided he has been notified so prior to rough-in of the same.
- .8 All suspended boxes are to be supported with minimum size 12mm threaded rod(s).
- .9 All flexible conduit fixture feeds shall originate from the side of the outlet box and not from the box cover.
- .10 Flush installed boxes being used as a junction or pull box that requires a blank metal coverplate, is to have an appropriate sized, one or two gang "plaster ring" installed on same. This permits the use of a standard, one or two gang (blank) finish metal coverplate to be used, and avoids the necessity of acquiring an oversized, custom made coverplate.
- .11 When installing flush boxes in metal drywall partitions, always screw a short piece of metal stud (same width as partition) to non-supported side of box.
- .12 Concealed boxes installed above drywall ceilings or behind walls, are to have their locations identified on room sides of access opening frames with properly colour coded identification discs.
- .13 Condulet fittings (LB, LL, LR, etc.) and their respective covers/plates are to be painted, and where concealed, have their locations identified with appropriate colour coded, 21mm, self-adhering discs, applied to T-bar splines and/or access opening frames, in similar manner as for concealed junction and/or pull boxes, etc..
- .14 Tile type extension rings are not to be used on boxes that have not been "flush" installed. They are not intended, not acceptable for "surface" type application.

### **3.2 IDENTIFICATION**

- .1 All outlet boxes shall be colour coded as per the colour coding legend for conduits and cables. Refer to Specification Section 26 05 01. Outlet boxes are to be coloured only on the inside.

**END OF SECTION**