



# Division 262500

## Busway

### DESIGN GUIDE

## 1 General

### 1.1 Introduction

- A. This section applies to the following:
  - 1. Indoor busway and fittings.
- B. Feeder Busway: Where installation of feeder conduits is restricted by available ceiling space, the use of indoor busway shall be considered in lieu of feeder wiring in conduit. Selection of feeder busway make and model shall be closely coordinated with the ELSM.
- C. Branch Busway: Where programmatic needs require dense quantities of large ampacity branch electrical connections, the use of indoor busway shall be considered. Selection of branch busway make and model shall be closely coordinated with the ELSM.

## 2 Materials

### 2.1 General

- A. Manufacturers: Eaton Electrical, General Electric, Square D, Starline or approved equal.
- B. The busway housing shall be totally enclosed and non-ventilated.
- C. Bus bars shall be copper.



- D. A copper ground bus shall be included. Bus housing used as ground conductor is not acceptable.
- E. Indoor feeder busway shall be approved for hanger spacing of up to 10 feet for horizontally mounted runs and 16 feet for vertically mounted runs.
- F. The equipment shall be constructed to meet the project seismic requirements.

## 2.2 Short Circuit Ratings

- A. Each section of busway shall be labeled with a UL short circuit 3-cycle withstand rating. The withstand rating shall be as indicated on the drawings, but not less than 50,000 amperes RMS symmetrical at rated voltage.

# 3 Execution

## 3.1 Preparation

- A. Layout Drawings: Contractor to prepare dimensioned layout drawings of busway routing. As a minimum, layout drawings shall include the following information:
  1. Location and orientation of all required fittings, including offsets required to avoid conflicts with work of other trades.
  2. Location and thickness of wall and floor penetrations.
  3. Location of building seismic joints.
  4. Location of electrical equipment to which the ends of the busway will be connected, indicating the front side of the equipment and curb height, if any.
  5. Type and spacing of supports.



## **3.2 Installation**

- A. Do not install busway until building environment can be maintained within the service conditions required by the manufacturer.
- B. Provide busway length with expansion fitting at each location where busway run crosses building seismic joints.

## **3.3 Adjustment and Testing**

- A. Tighten connectors and terminals, including screws and bolts, in accordance with equipment manufacturer's published torque tightening values for equipment connectors. Check tightness of connections using calibrated torque wrench per manufacturer's instructions. Record date and value of torque for inclusion in O&M manuals.

# **4 Appendix**

## **4.1 Reserved for future.**

