

METRO-NORTH COMMUTER RAILROAD

POWER DEPARTMENT

SPECIFICATION NO. PD-804, REVISION 2, 6/15/11

THIRD RAIL SUPPORT BRACKETS

PART 1 – SCOPE

- 1.1 This Specification covers the manufacture, inspection, quality control and shipment of third rail support brackets.
- 1.2 This Specification applies to each of the twenty (20) types of brackets designated on Standard Plans SP-201 through SP-210.

PART 2 – MATERIAL AND WORKMANSHIP

- 2.1 The brackets shall be gray iron castings in accordance with ASTM Standard Specification for Gray Iron Castings, Designation A48, Class 30A.
- 2.2 The castings shall be smooth, true to pattern, free from cold shuts, blow holes or any other defects that diminish their strength, durability or appearance.
- 2.3 All castings shall be in accordance with the dimensions and tolerances indicated on the Standard Plans.
- 2.4 The draft in cored holes shall not exceed 3 degrees; draft on other surfaces, e.g. ribs, shall be the minimum consistent with good foundry practice.
- 2.5 Each bracket shall be permanently cast with the manufacture's identification and batch code.

PART 3 – FACTORY QUALITY CONTROL

- 3.1 In order to enhance factory quality control, the manufacturer shall design and fabricate two types of inspection fixtures for each type of bracket at the time of first purchase of each type. Each fixture shall permit determining departures on any casting from the indicated relative locations of:
 - a) the face of the bracket and the top and lip of the supporting lug with respect to the base and the mounting holes, and
 - b) the face of the bracket with respect to the axis of the top hole,

as well as the orthogonality of the face of the bracket and the lip of the supporting lug to the axis of the base.

In addition to fixtures required for factory quality control, the manufacturer shall provide two fixtures of each type to the Railroad in advance of first shipment of that type.

PART 4 – INSPECTIONS AND TESTS

- 4.1 In advance of quantity manufacture, the manufacturer shall provide two (2) brackets for pattern verification and inspection by the Railroad. Quantity production shall begin only after authorization is granted based on approval of the samples provided.
- 4.2 At all stages of manufacture, the Railroad's representative shall have full access to the work in progress in the manufacturer's plant or elsewhere, and the manufacturer shall furnish him with every facility and all necessary assistance for assuring himself that the requirements of these specifications are met. No bracket will be accepted which does not, in the judgment of the Railroad's inspector, conform to this Specification.

The Contractor shall give the Railroad five (5) days notice of the time when brackets will be ready for final inspection and shall not ship any brackets until accepted by the Railroad's inspector, unless otherwise instructed by the Railroad.

- 4.3 The acceptance of brackets at the manufacturer's plant by the Railroad's inspector does not relieve the Contractor from responsibility for defects which develop in shipment and during erection and any material which is so found to be defective will be condemned and the Contractor shall make replacements promptly upon written notice, free of charge.

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