Revision 9
Jan 12, 2018

# 1. Scope

This Specification covers the requirements for furnishing and delivering pad-mounted 600 volt termination enclosures.

# 2. Reference Standards

Except as otherwise specified herein, these enclosures shall meet the applicable requirements of the following industry standards. When the following standards are superseded by an approved revision, the revision shall apply.

**ANSI C57.12.28-1999** American National Standard for Pad-Mounted Equipment — Enclosure Integrity
**ANSI C119.4-2004** American National Standard for Electric Connectors — Connectors for Use Between Aluminum-to-Aluminum or Aluminum-to-Copper Bare Overhead Conductors

# 3. Material ID Numbers and Dimensions

| Material ID | Width | Depth | Height | Connections/Ø |
|---|---|---|---|---|
| 1000209 | 36" | 30" | 44" | 20 (#2 AWG -750 kcmil) |
| 1000210 | 54" | 48" | 44" | 30 (#2 AWG -750 kcmil) |

Minor variations in enclosure dimensions may be allowed with prior District Approval.

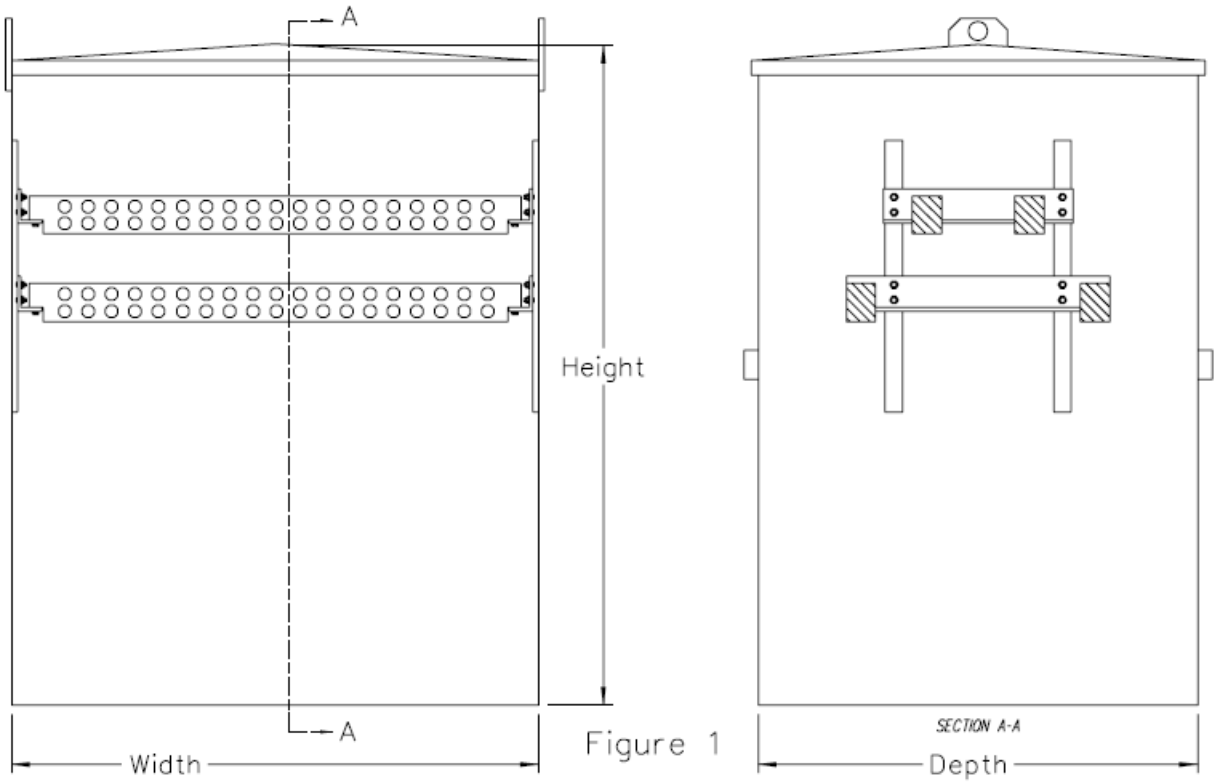


Figure 1

# 4. Construction

Pad-mounted 600 volt termination enclosures shall consist of the termination cabinet, access doors and integral set screw bus bars. The enclosure shall meet the construction and security requirements of ANSI C57.12.28.

## 4.1 Cabinet

The cabinet shall be manufactured from galvanized steel, stainless steel or 5052-H32 aluminum. Cabinet thickness shall be 12 gage minimum for steel and 0.125 inch minimum for aluminum. The cabinet and supporting frame shall be sufficiently strong to prevent noticeable deflection or distortion to the cabinet during installation and use. The cabinet roof shall be crowned so as to shed water. The cabinet shall include lifting provisions.

A ½-13 UNC threaded grounding pad shall be welded to the cabinet interior.

The cabinet base shall consist of a nominal 2 inch flange along the interior perimeter of the cabinet. The flange shall be manufactured with a minimum of four 9/16 x 1 inch slotted mounting holes.

## 4.2 Doors

Each termination enclosure shall be equipped with side-hinged doors designed to swing open horizontally. The doors shall be located on opposite sides of the cabinet and parallel to the bus bars. Doors shall be of sufficient size to allow full access to the bus bars and cabinet interior and be equipped for latching in the open position. The corners of the hinges shall be rounded and the hinge plates shall not extend past the corners of the cabinet.

## 4.3 Finish

The enclosure finish shall meet or exceed the requirements of ANSI C57.12.28, latest revision. The topcoat color of paint shall be dark green Munsell No. 7GY 3.29/1.5. Combined primer and topcoat thickness shall be no less than 3.0 mils. Primer and paint shall be lead free.

## 4.4 Identification

A durable corrosion-resistant metal nameplate shall be mounted in an easily visible location in the cabinet interior. As a minimum, the nameplate shall include the manufacturer’s name and date of manufacture. The nameplate shall be secured to the door with aluminum rivets.

## 4.5 Set Screw Bus Bars

Each enclosure shall be equipped with four set screw bus bars (one per phase and one for the neutral). These bars shall be manufactured from 6061-T6 aluminum or a District approved equivalent and shall be fully tested per ANSI C119.4 for Class A connectors. Bus bars shall have a minimum 4,000 amp load rating.

Set screw bus bars shall utilize two 5/16 inch allen head set screws per cable position and shall accommodate cable sizes from #2 AWG through 750 kcmil. Holes shall actually be drilled to fit 800 kcmil cables. Set screw bus bars shall be compatible with aluminum or copper conductors.

Set screw bus bars shall be installed in the cabinet on nonconductive mounting brackets. All mounting hardware shall be stainless steel. Bus bar locations shall be staggered as shown in Figure 1. The bus bars, mounting brackets and hardware must be of sufficient strength to support full secondary cable weight without the need for supplemental cable supports.

Each bus bar shall be equipped with a District approved flexible molded polymer cover rated 600V, 105°C. The cabinet shall arrive with the covers pre-installed over the bus bars.

## 5. Packaging

Pad-mounted secondary termination enclosures shall be shipped in an enclosed van and secured to individual non-returnable wooden pallets suitable for handling with a forklift.