

SECTION 26 01 20 – UNDERGROUND ENCLOSURES

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Requirements for polymer concrete underground enclosures for use with exterior underground power circuits (i.e., site lighting and receptacle circuits) and other listed applications.

1.2 DEFINITIONS

- A. Enclosures: Refer to box, cover and, if provided, extensions and base.
- B. Box: Upper main section of enclosures containing a recess to receive the cover.
- C. Cover: Top surface section of enclosure for closing top opening of box section.
- D. Knockout: Portion of extension or base with reduced thickness or notched outline-accommodating removal for entrance of cable or conduit.

1.3 GENERAL DESCRIPTION

- A. The polymer concrete underground enclosures are for use in lawn areas. The enclosures shall be suitable for direct buried applications in soil, concrete embedment, or asphalt embedment. The enclosure shall have an ANSI/SCTE 77 2007 Tier 22 Rating unless noted otherwise.
- B. Where applicable, provide enclosures and lids carrying an AASHTO H-20 rating.

1.4 ENVIRONMENTAL TESTS

- A. The enclosures shall comply with all of the environmental tests as per current ANSI/SCTE 77.

1.5 STRUCTURAL REQUIREMENTS

- A. The enclosures shall be current ANSI/SCTE 77 Tier rating as indicated.
- B. The enclosures shall comply with all structural load tests as per current ANSI/SCTE 77.

1.6 SUBMITTALS

- A. Product Data, including cutsheets and installation requirements.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Quazite
- B. Oldcastle equivalents.
- C. Synertech equivalents.

2.2 BOX DIMENSIONS

A. Installed in non-paved areas:

1. Lighting and 120V power circuits:

- a. The box shall be Quazite Tier 22, stackable, open bottom PG series 11" x 18" x 18" deep box. Box model number PG1118BA18 with Tier 22, 2 bolt cover model number PG1118HH00. Provide "Electric" LOGO Engraved in cover face (the use of metal tags shall not be acceptable). The cover shall be skid resistant. Box may be provided with mouseholes at contractor discretion.

- 1) Boxes shall be installed in non-paved areas where possible.

2. All other underground enclosures:

- a. The box shall be Quazite Tier 22, stackable, open bottom PG series, size as indicated on the drawings. Cover shall be Tier 22 w/ 2 bolt, single piece where size allows. Provide "Electric" or "Communications" LOGO Engraved in cover face (the use of metal tags shall not be acceptable). The cover shall be skid resistant. Provide multiple boxes as required to meet depth requirements on the drawings. Where size is not indicated on drawings, provide 24" x 36" x 36" deep.

- 1) Boxes shall be installed in non-paved areas where possible.

B. Installed in paved areas:

1. Lighting and 120V power circuits:

- a. The box shall be Quazite AASHTO H-20, open bottom PG series 13" x 24" x 18" deep box. Box model number PG1324BA18 with H-20, collar model number PA1324SF and 2 bolt steel cover model number PA1324SC. Provide "Lighting" LOGO in cover face. The cover shall be skid resistant.

2. All other underground enclosures:

- a. The box shall be Quazite AASHTO H-20, open bottom PG series 17" x 30" x 36" deep box. Box model number PG1730BA36 with H-20, collar model number PA1730SF and 2 bolt steel cover model number PA1730SC. Provide "Electric" or "Communications" LOGO in cover face. The cover shall be skid resistant.

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2.3 ENCLOSURE COLOR

- A. The enclosure shall be concrete/cement grey in color unless otherwise specified.

PART 3 - INSTALLATION

3.1 PREPARATION

- A. Excavate, install base material, and compact base material in accordance with manufacturer's instructions.

3.2 INSTALLATION

- A. Install within non-paved areas:
 - 1. Box shall be approximate $\frac{1}{2}$ " above surrounding ground. Slope ground up to top edge of box to allow proper drainage away from box.
- B. Installed within paved areas:
 - 1. Box cover shall be flush with surrounding ground. Slope ground up to top edge of box to allow proper drainage away from box.
 - 2. Boxes installed in pavement shall be provided with 6" x 6" reinforced concrete form around box. Form and place concrete per manufacturer recommendations.
- C. Excavation and Backfill.
 - 1. Provide excavation and backfilling. Include minimum 6" gravel Base under the hand hole assembly with the gravel 3" to 4" wider than the sides of the hand hole. (Internal Bracing may be warranted for any manufacturer's underground enclosure if 95% compaction is required or if heavy vehicles are going to be present during construction and/or throughout the life of the enclosure. See manufacturer recommended practices and instruction including applicable sizes that would require internal bracing).
- D. Conduits shall enter pullbox at ends.
- E. Conduits shall turn up in box and be sealed to prevent migration of water. Ensure that the conduit turns up minimum 12" from bottom of box.

END OF SECTION 26 01 20