

**Installation Standard  
For  
CORRUGATED POLYETHYLENE PIPE (CPE) PIPE AND FITTINGS**

**Oregon IS 1A-2007**

**1.0 SCOPE**

**1.1** Installation and material of corrugated polyethylene pipe and fittings shall comply with this standard.

**Note:** The following sections of the Oregon State Plumbing Specialty Code apply to corrugated polyethylene pipe and fittings:

**Table 14-1 Material Standards**

301.1	Minimum Standards
310.0	Workmanship
313.0	Protection of Piping Materials and Structures
315.0	Trenching, Excavation and Backfill
701.1.5	Drainage Systems Materials
701.2	Drainage System Fittings
316.2.3	Plastic Pipe to Other Materials
316.4	Prohibited Joints and Connections
1103.0	Building Storm Sewer Materials
Chapter 11	Storm Drainage

**2.0 INTRODUCTION**

**2.1** This installation Standard is for corrugated polyethylene pipe and fittings. Pipe fitting materials are as listed in Table 14-1, Chapter 14 of the Oregon State Plumbing Specialty Code. Its use is limited to exterior building storm drains, subsurface, foundation, footing, underslab and absorption drains.

**3.0 GENERAL REQUIREMENTS**

**3.1 ABS OR PVC-DWV PIPE**

**3.1.1 MINIMUM STANDARDS**

**3.1.2** Corrugated Polyethylene pipe and fittings may be used in sizes 3 inch (75 mm) to 60 inches (1500 mm).

**3.1.3** When in connection with combined or storm sewers, installations shall comply with the requirements of Section 1103.4 of the Oregon State Plumbing Specialty Code.

**3.1.4** Trenches for corrugated polyethylene storm sewer pipe shall be prepared so that the piping shall lay on a firm bed throughout its entire length.

**3.1.5** Bedding under corrugated pipe shall be four (4) inches (101.6 mm) minimum. Bedding material around and over the pipe zone

envelope shall be six (6) inches (152.4 mm) minimum. Materials shall be prepared as provided in subsection 3.1.6.

**3.1.6** All materials shall be compacted in a manner which will provide the necessary base required to support and protect the pipe from damage. The minimum horizontal underground pipe cover is twelve (12) inches (304.8 mm).

**3.1.7** All single-wall corrugated non-perforated polyethylene pipe shall be installed on a uniform one-fourth (1/4) inch (6.35 mm) per one (1) foot (304.8 mm) minimum grade. Where necessary, a one-eighth (1/8) inch (3.175 mm) per foot (304.8 mm) grade is acceptable when approved by the Authority Having Jurisdiction.

**3.1.8** Corrugated polyethylene storm sewer pipe shall be approved only for installation of storm-water drainage systems designed by a registered engineer or architect in accordance with recognized industry standards and ORS 447.010 through 447.156. Design sizes, thickness and corrugation types shall be indicated on the individual project plans and specifications.

**3.1.9** All connections shall be made with approved fittings and adapters, as provided by the manufacturer. Connections to sumps, catch basins and collecting devices shall be made of approved materials.

**4.0 MARKINGS**

**4.1** Corrugated polyethylene pipe shall be marked with the designation "ASTM F 405" and the designation of "Heavy Duty," or "ASTM F 667," or ASTM F 2306, or "AASHTO M252," or "AASHTO M294" and the manufacturer's identification symbol, regularly spaced at intervals not to exceed ten (10) feet (3 m).

**4.1.1** Each roll or bundle of corrugated polyethylene pipe shall bear the day, month and year of manufacture. The marking may be embossed on the product or displayed on a tag or label.

**4.1.2** Fittings for corrugated polyethylene tubing shall be marked with the designation number "ASTM F 405," "ASTM F 667," "ASTM F 2306," "AASHTO M252" or "AASHTO M294" and the manufacturer's identification symbol.

