

**Installation Standard  
For  
CORRUGATED METAL (STEEL AND ALUMINUM) STORM SEWERS**

**OREGON IS 29a-2007**

- 1.0 INTRODUCTION**
- 1.1** This installation standard is for use with the above mentioned sewer piping material as listed in Table 14-1, Chapter 14 of the Oregon Plumbing Specialty Code.
- 2.0 PURPOSE**
- 2.1** This standard shall provide the necessary requirements for installation, use and inspection of such piping material and fittings.
- 3.0 GENERAL REQUIREMENTS**
- 3.1** Corrugated metal storm sewer pipe may be used in sized (6) inches (152.4 mm) and larger.
- 3.1.2** Before laying corrugated metal storm sewer pipe, prepare the bottom of the trench so that the piping shall lay on a firm bed throughout its entire length as required by Section 718.0 of this code.
- 3.1.3** After inspection of the sewer pipe, carefully backfill the trench as prescribed by Section 314.0 and 315.0 of this code.
- 3.1.4** Corrugated metal storm sewer pipe shall be approved only for installations of storm water drainage systems designed by registered engineers or architects in accordance with recognized industry standards and ORS 447.010 through 447.156. Design sizes, thickness and corrugations types shall be indicated on the individual project plans and specifications.
- 4.0 CORRUGATED METAL (STEEL AND ALUMINUM) STORM SEWER PIPE**
- 4.1** Galvanized corrugated steel sheet and coil shall meet the requirements of ASTM A 444. Pipe fabrication shall meet the requirements of AASHTO M36.
- 4.1.1** Corrugated aluminum sheet and coil shall meet the requirements of ASTM B 209, Alloy Alclad 3004-H34. Pipe fabrication shall meet the requirements of AASHTO M 196.
- 4.1.2** This pipe's use is limited to collection and conveyance of storm water, surface water, street wash water, ground water, and for rain water piping commencing two (2) feet (0.6 m) from the exterior of a building,
- 4.1.3** This pipe shall be installed to the depths and grades shown on project plans, using compacted side fill material as specified on project plans. This pipe may have a continuous grated slot on its crown to intercept surface water in paved areas as detailed on project plans.
- 4.1.4** This pipe shall be joined with industry standard metal or plastic coupling bands.
- 4.1.5** This pipe shall be installed using the same type of jointing throughout except when connecting to existing piping, piping of other materials, in-line repairs and catch basins or manholes. Transition connections to other materials shall be made by listed adaptor fittings or coupling bands with any resulting annular space to be grout filled.
- 4.1.6** Fittings shall be shop fabricated with acceptable workmanship and shall meet the applicable requirements of the applicable AASHTO specifications. Fittings shall have equal durability and strength as pipe.
- 4.1.7** Coupling band corrugations or dimples shall be properly indexed with pipe corrugations, and bolts shall be firmly tightened.
- 4.1.8** Cleanouts made of corrugated metal may be installed to grade or as shown on project plans.
- 5.0 MARKING AND IDENTIFICATION**
- 5.1** Corrugated steel pipe shall be marked as follows:  
Each two (2) to five (5) feet (0.6 to 1.5 m) of sheet in coils or cut lengths shall be identified by showing name of sheet manufacturer, brand name and type of base metal, specific thickness, specified weight of coating, identification symbols relating to a specific heat number and lot number, and AASHTO designation number.
- 5.1.1** Corrugated aluminum pipe shall be marked as follows:  
Each corrugated sheet used in annular corrugated pipe shall be identified by the sheet manufacturer showing the following:  
Name of sheet manufacturer, alloy and temper, manufacturer's standard thickness, manufacturer's date of corrugation by a six

(6) digit number indicating in order the year, month and day of the month.

Each two (2) to five (5) feet (0.6 to 1.5 m) of sheet used in spiral corrugated pipe shall be identified by the fabricator by agreement with the coiled sheet manufacturer showing the following:

Name of sheet manufacturer's standard thickness, identification of the pipe fabrication if different than the sheet manufacturer, fabricator's date of forming into pipe by a six (6) digit number indicating in order the year, month and day of the month. This marking shall be applied to the sheet or coiled sheet by a permanent method such as coining into the metal. This identification shall appear on the outside of the pipe.