



Standard Practice for Installing Corrugated Aluminum Structural Plate Pipe for Culverts and Sewers¹

This standard is issued under the fixed designation B 789/B 789M; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

1. Scope *

1.1 This practice describes procedures, soils, and soil placement for the proper installation of corrugated aluminum structural plate culverts and sewers in either trench or embankment installations. A typical trench installation is shown in Fig. 1, and a typical embankment (projection) installation is shown in Fig. 2. Structural plate structures as described herein are those structures factory fabricated in plate form and bolted together on site to provide the required shape, size, and length of structure. This practice applies to structures designed in accordance with Practice B 790/B 790M.

1.2 This practice is applicable to either inch-pound units as B 789 or to SI units as B 789M. Inch-pound units are not necessarily equivalent to SI units. SI units are shown in the text in brackets, and they are the applicable values for metric installation.

1.3 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 ASTM Standards:

B 746/B 746M Specification for Corrugated Aluminum Alloy Structural Plate for Field-Bolted Pipe, Pipe-Arches, and Arches²

B 790/B 790M Practice for Structural Design of Corrugated Aluminum Pipe, Pipe-Arches, and Arches for Culverts, Storm Sewers, and Other Buried Conduits²

D 698 Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft [600kN-m/m])³

D 1556 Test Method for Density and Unit Weight of Soil in Place by the Sand-Cone Method³

D 1557 Test Method for Laboratory Compaction Character-

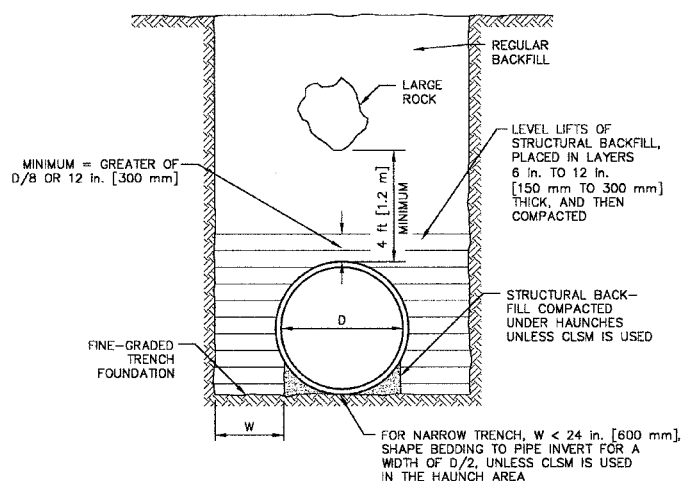


FIG. 1 Typical Trench Installation

istics of Soil Using Modified Effort (56,000 ft-lbf/ft³ [2,700 kN-m/m³])³

D 2167 Test Method for Density and Unit Weight of Soil in Place by the Rubber-Balloon Method³

D 2487 Classification of Soils for Engineering Purposes (Unified Soil Classification System)³

D 2922 Test Methods for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth)³

D 2937 Test Method for Density of Soil in Place by the Drive-Cylinder Method³

3. Terminology

3.1 Definitions of Terms Specific to This Standard:

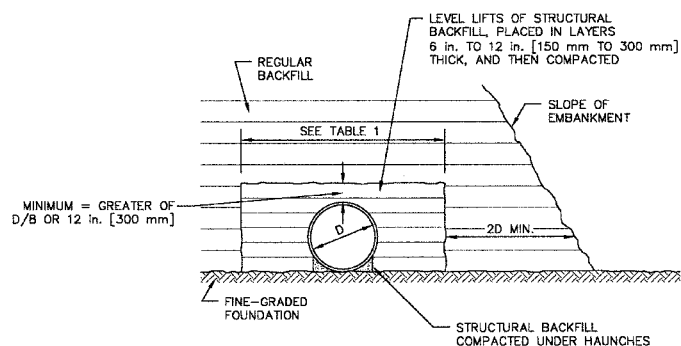


FIG. 2 Typical Embankment (Projection) Installation

¹ This practice is under the jurisdiction of ASTM Committee B-7 on Light Metals and Alloys and is the direct responsibility of Subcommittee B07.08 on Aluminum Culvert.

Current edition approved May 10, 1999. Published August 1999. Originally published as B 789 – 88. Last previous edition B 789/B 789M–97.

² Annual Book of ASTM Standards, Vol 02.02.

³ Annual Book of ASTM Standards, Vol 04.08.