



Designation: F 1735 – 02

## Standard Specification for Poly (Vinyl Chloride)(PVC) Profile Strip for PVC Liners for Rehabilitation of Existing Man-Entry Sewers and Conduits<sup>1</sup>

This standard is issued under the fixed designation F 1735; 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 ( $\epsilon$ ) indicates an editorial change since the last revision or reapproval.

### 1. Scope

1.1 This specification covers requirements and test methods for materials, dimensions, workmanship, extrusion quality, and a form of marking for extruded poly (vinyl chloride)(PVC) profile strips used for field fabrication of PVC liners for existing man-entry (36 to 144 in. (900 to 3650 mm) in vertical dimension) sewer and conduit rehabilitation.

1.2 Profile strip produced to this specification is for use in field fabrication of PVC liners in non-pressure pipe and conduit rehabilitation where the liner is installed into the existing sewer or conduit and the annular space between the liner and the existing sewer or conduit is grouted with cementitious grout.

NOTE 1—The practice for the installation of PVC liner covered by this specification is Practice F 1698.

1.3 This specification includes extruded profile strips made only from materials specified in 6.1.

1.4 The values stated in inch-pound units are to be regarded as the standard. The values given in parentheses are for information only.

1.5 *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:

- D 618 Practice for Conditioning Plastics for Testing<sup>2</sup>
- D 790 Test Method for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials<sup>2</sup>
- D 883 Terminology Relating to Plastics<sup>2</sup>
- D 1600 Abbreviations of Terms Relating to Plastics<sup>2</sup>
- D 1784 Specification for Rigid Poly (Vinyl Chloride)(PVC) Compounds and Chlorinated Poly (Vinyl Chloride)(CPVC) Compounds<sup>2</sup>

<sup>1</sup> This specification is under the jurisdiction of ASTM Committee F17 on Plastic Piping Systems and is the direct responsibility of Subcommittee F17.67 on Trenchless Plastic Pipeline Technology.

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<sup>2</sup> *Annual Book of ASTM Standards*, Vol 08.01.

D 2122 Test Method of Determining Dimensions of Thermoplastic Pipe and Fittings<sup>3</sup>

D 2152 Test Method for Degree of Fusion of Extruded Poly (Vinyl Chloride)(PVC) Pipe and Molded Fittings by Acetone Immersion<sup>3</sup>

D 2240 Test Method for Rubber Property—Durometer Hardness<sup>4</sup>

F 412 Definitions Of Terms Relating To Plastic Piping Systems<sup>3</sup>

F 1698 Practice for Installation of Poly (Vinyl Chloride)(PVC) Profile Strip Liner and Cementitious Grout for Rehabilitation of Existing Man-Entry Sewers and Conduits<sup>3</sup>

#### 2.2 Federal Standard:

Federal Standard No. 123 Marking For Shipment (Civil Agencies)<sup>5</sup>

#### 2.3 Military Standard:

MIL-STD-129 Marking for Shipment and Storage<sup>5</sup>

### 3. Terminology

3.1 *General*—Definitions are in accordance with Terminology D 883 and Terminology F 412. Abbreviations are in accordance with Terminology D 1600, unless otherwise indicated.

3.2 *Definitions of Terms Specific to this Standard*—See Fig. 1 to clarify terminology.

3.2.1 *coextruded flexible PVC seal, n*—a flexible (soft) bead of PVC coextruded in the joiner strip to provide compression sealing of the mechanical joint made when the joiner strip locks adjacent edges of former strip.

3.2.2 *extruded PVC joiner strip, n*—a companion product to the profile former strip of such configuration as to provide the locking mechanism at the edges of the former strips.

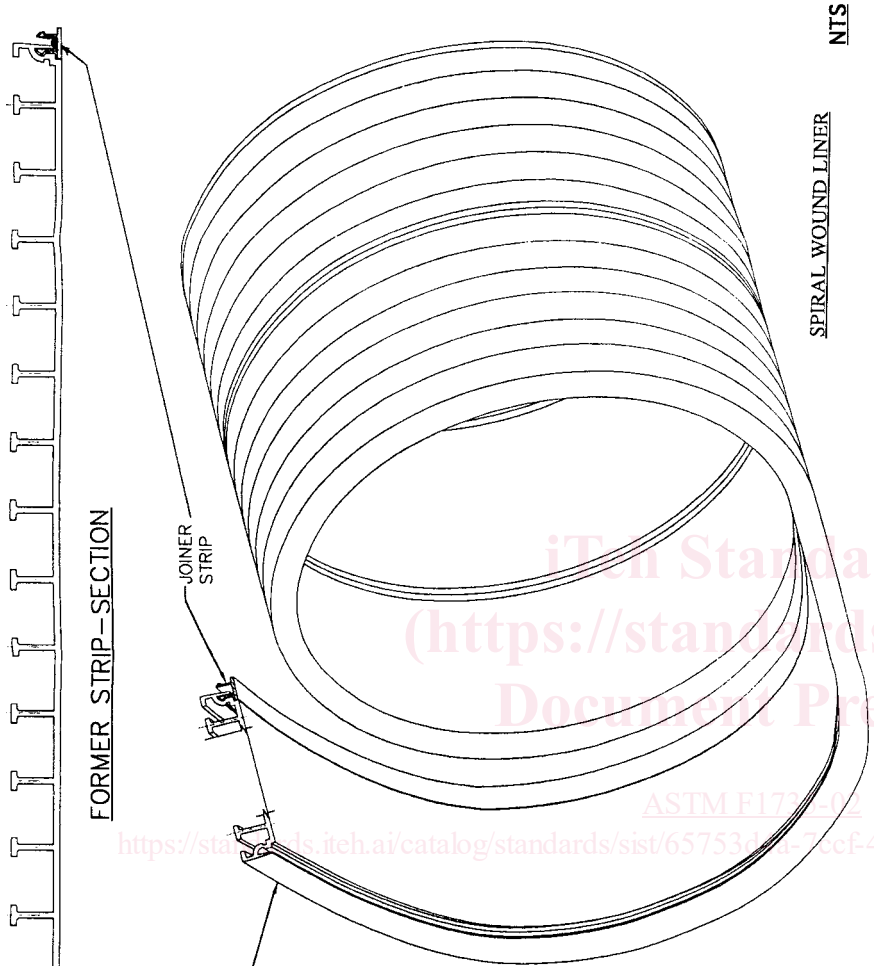
3.2.3 *extruded PVC profile former strip, n*—a product, available in various sizes, consisting of a smooth inner surface and a ribbed outer surface (profile) with edge configurations to allow mechanical locking of adjacent strips.

3.2.4 *production run, n*—a continuous extrusion of a given profile type.

<sup>3</sup> *Annual Book of ASTM Standards*, Vol 08.04.

<sup>4</sup> *Annual Book of ASTM Standards*, Vol 09.01.

<sup>5</sup> Available from Standardization Documents Order Desk, Bldg. 4 Section D, 700 Robbins Ave., Philadelphia, PA 19111-5098, Attn: NPODS.



Typical Values

Cross Sectional Area = .125 in<sup>2</sup>/in  
 Width = 12 in  
 Moment of Inertia = .0039 in<sup>4</sup>/in  
 Neutral Axis = .18 in  
 (from smooth side)

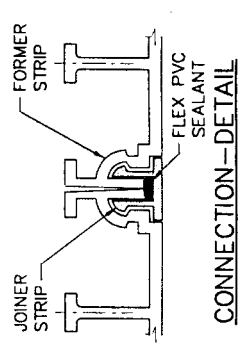


FIG. 1 An Example of A Profile PVC Strip