



Standard Practice for Installation of an Outside Sewer Service Cleanout through a Minimally Invasive Small Bore Vacuum Excavation¹

This standard is issued under the fixed designation F3097; 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 covers installation methods, test methods and required materials for the installation of an outside sewer service clean out, by means of a small vacuum excavated borehole. The utilization of this practice greatly reduces disruption to the general public and requires minimal restoration.

1.2 *Units*—The values stated in inch-pound units are to be regarded as standard. No other units of measurement are included in this standard.

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:²

C920 Specification for Elastomeric Joint Sealants

D1600 Terminology for Abbreviated Terms Relating to Plastics

D2855 Practice for Making Solvent-Cemented Joints with Poly(Vinyl Chloride) (PVC) Pipe and Fittings

D3034 Specification for Type PSM Poly(Vinyl Chloride) (PVC) Sewer Pipe and Fittings

F412 Terminology Relating to Plastic Piping Systems

3. Terminology

3.1 Unless otherwise indicated, definitions are in accordance with Terminology **F412**, and abbreviations are in accordance with Terminology **D1600**.

3.2 Definitions of Terms Specific to This Standard:

3.2.1 *adhesive/sealant*—an elastomeric bonding agent designed to provide a water activated, leak resistant flexible bond between a PVC pipe saddle and a lateral sewer service pipe.

3.2.2 *borehole*—a small diameter vacuum excavated hole.

3.2.3 *cleanout*—a fitting located on a lateral sewer service pipe having a vertical riser pipe extending therefrom to the surface providing access to the lateral sewer service pipe.

3.2.4 *cleanout riser pipe*—a section of pipe that is connected to the boss of a saddle and extends from the saddle to the surface.

3.2.5 *coring*—the process of remotely cutting a hole through the crown of a sewer service pipe such that the coupon is retrieved to establish communication from a cleanout riser pipe and a lateral sewer service pipe.

3.2.6 *coupon*—a disc shaped piece of the lateral sewer service pipe produced by coring.

3.2.7 *lateral sewer service pipe*—a sewer pipe that connects a building to a municipal, main sewer pipe in a lateral direction and collects sanitary waste or storm water.

3.2.8 *saddle*—a PVC saddle that encompasses more than 50% of a lateral sewer service pipe where the side walls of the saddle extend beyond the spring line of the host pipe. The saddle includes setoff tabs that allow for uniform distribution of the adhesive/sealant.

3.2.9 *setoff tabs*—Protruding tabs located on the underside of the saddle one located on each side of the saddle boss for the purpose of insuring a specific annulus between the host pipe and the saddle and a specific layer thickness of adhesive/sealant.

3.2.10 *sonde*—a device outfitted in a closed circuit video inspection camera that emits a signal in subterranean pipelines that is traceable by use of a locating receiver at surface.

4. Summary of Practice

4.1 The process of installing a cleanout through a minimally invasive excavation begins with locating the 4 in. or 6 in. sewer service lateral. This is accomplished by use of a CCTV outfitted with a locatable sonde and vacuum excavating a small borehole, providing access to the exterior surface of a lateral

¹ This practice 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.

Current edition approved May 15, 2015. Published June 2015. DOI: 10.1520/F3097-15

² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.