



Designation: C896 – 13

## Standard Terminology Relating to Clay Products<sup>1</sup>

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### 1. Referenced Documents

#### 1.1 *ASTM Standards*:<sup>2</sup>

C301 Test Methods for Vitrified Clay Pipe

C700 Specification for Vitrified Clay Pipe, Extra Strength, Standard Strength, and Perforated

### 2. Terminology

**approving authority**—the individual official, board, department, or agency established and authorized by a state, county, city, or other political subdivision, created by law to administer and enforce specified requirements.

**backfill**—all the material used to fill the trench from bedding to finished surface.

**backfill, final**—material used to fill the trench from initial backfill to finished surface.

**backfill, initial**—material used to fill the trench from top of bedding to a designated height over the pipe.

**backfill, unconsolidated**—non-compacted material in place in the trench.

**barrel**—the cylindrical portion of a vitrified clay pipe exclusive of branches, spurs, joints, and handling rings or lugs.

**bearing strength**—the non-destructive limit of pipe load, as determined by 3-edge bearing test method, used to determine field supporting strength.

**bedding**—the materials, their placement, consolidation, and configuration, as designed to support, and to develop field supporting strength of vitrified clay pipe.

**bell**—the flared-end portion of a vitrified clay pipe or fitting, designed to function in the joining of other such pipe.

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<sup>2</sup> 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.

**beveled pipe**—a pipe with an end angled to mate with a complimentary pipe end or adjust to another surface.

**blister**—a convex, raised area on the pipe surface indicating an internal separation.

**body**—See **pipe body**.

**chip**—a small piece of broken-off material, or the location where a small piece of the unit material has been broken off.

**clay**—an earthy or stony mineral aggregate consisting essentially of hydrous silicates of alumina, plastic when sufficiently pulverized and wetted, rigid when dry, and vitreous when fired to a sufficiently high temperature.

**closure**—See **compression joint**.

**compaction**—mechanical or hydraulic consolidation of backfill to achieve stability.

**compression coupling**—See **compression joint**.

**compression disk**—a disk of compressible material placed between the ends of adjacent pipe for the purpose of distributing the jacking force.

**compression joint**—a joint designed so that a sealing action is obtained by compressing elastomeric components.

**conduit**—a pipe for conveying fluid.

**consolidation**—the gradual reduction in volume of backfill matter to achieve stability.

**constant weight**—the condition of a substance in which all volatile components have been vaporized, and repeated exposure to a specified temperature, for any period of time, causes no change in weight.

**controlled low strength material (CLSM)**—flowable low compressive strength cementitious material used in the pipe zone as a bedding material. Also referred to as controlled density fill, flowable fill, slurry, or lean concrete.

**crack**—an irregular separation with well-defined sharp edges visible on the surface of a pipe.

**deadload**—the load imposed on pipe, that is determined by depth and width of the trench at top of pipe, as well as unit weight and character of backfill material.

**drains**—a piping system used to collect and carry off surface and ground water.

**encasement**—special materials, their placement and configuration which are designed to fully surround the pipe, and develop a field supporting strength which exceeds that developed by other commonly used installation and bedding techniques.

**exfiltration**—the quality of water leaving the test section during a specified time period.

**face**—to cover with a new surface.

**filter block**—a cellular vitrified clay block unit, of proprietary configuration, designed to underbed the media in trickling filters.

**fire clay**—a sedimentary clay of low-flux content.

**fitting**—products such as wyes, tees, elbows, adapters, etc. used in the installation of vitrified clay pipelines.

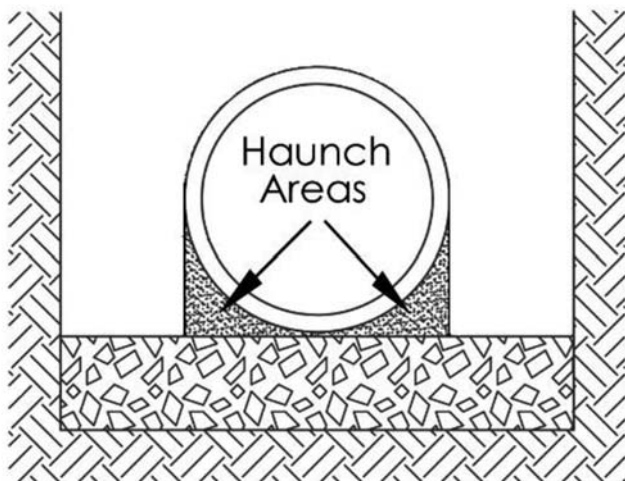
**flooding**—a means of compacting trench backfill by the introduction of water by gravity.

**flue lining**—a manufactured tubular non-load bearing fired clay unit, normally used for conveying hot gases in chimneys.

**fracture**—that portion of a vitrified clay pipe from which a fragment has been broken. It is distinguished by well-defined fracture faces and sharp edges where the fracture faces meet the surface of the pipe.

**glaze**—a hard glassy fused coating.

**haunch**—the areas bordered by the barrel outside diameter, the vertical tangents from the pipe springline and the horizontal tangents from the bottom of the pipe. See detail:



**hot face**—the interior surface of a chimney that is exposed to the elevated temperatures of the flue gasses.

**inch-pound units**—the units of length, area, volume, weight, and temperature in common use in the United States at the present time. These include, but are not limited to: (1)

length—feet, inches, and fractional inches, (2) area—square feet and square inches, (3) volume—cubic feet, cubic inches, gallons, and ounces, (4) weight—pounds and ounces, and (5) temperature—degrees Fahrenheit.

**industrial waste**—the water-conveyed residues resulting from manufacturing or processing operations.

**infiltration**—the quality of ground water entering the test section during a specified time period.

**initial backfill**—location for placement of selected material, native or import, extending from the top of the bedding material to an elevation 1 ft above top of pipe.

**jacking**—a method of installing pipe by the trenchless method using equipment and pipe designed for this purpose.

**jacking force**—the force applied to the pipe along the longitudinal axis of the pipeline by the pipe jacking equipment.

**jetting**—a means of compacting trench backfill by the introduction of water under pressure through a nozzle.

**joint**—an individual length of pipe, or the means of closure to form a pipeline.

**lamination**—a stratification of the material in the plane of the wall of a unit.

**leachate**—liquid drainage normally associated with contaminated soils and solid waste landfills.

**live load**—the portion of the load transmitted to pipe from wheel or tread impacts.

**lot**—specific group of clay products having characteristics of sufficient similarity that individual specimens selected from that group may be considered representative of the whole group.

**microtunneling**—trenchless installation of pipe by jacking the pipe behind a remotely controlled, steerable, laser guided, microtunnel boring machine that provides continuous support to the excavated face under various geotechnical conditions including the presence of groundwater.

**mitered fittings**—fittings manufactured by using beveled pipe segments.

*mitered pipe*—See **beveled pipe**.

**nominal diameter**—references the internal diameter in name only to the nearest unit dimension.

**pimple**—a small solid bump or protrusion on the pipe surface.

*pipe*—See **vitrified clay pipe**.

**pipe body**—the clay material or mixture of clay materials from which vitrified clay pipe is made.

**pipe bursting**—process by which existing pipelines are broken by mechanical fracturing from either inside or outside with the remains being pushed into the surrounding soil while simultaneously inserting a new pipeline of equal or larger diameter.