

Proposed Revision To: <input checked="" type="checkbox"/> Standard Specifications For Public Works Construction <input type="checkbox"/> Standard Plans For Public Works Construction	Change No. 349 UM (ASSIGNED BY GREENBOOK COMMITTEE)
Public Works Standards, Inc. c/o Associated General Contractors of California Los Angeles District Office 1906 West Garvey Avenue, Suite No. 100 West Covina, California 91760	Date Proposal Received 10/23/24 (ASSIGNED BY GREENBOOK COMMITTEE)
Subsection or Standard Plan to be revised: _____ On page(s): _____	
<p>Warning: Public Contract Code §3400 prohibits any local agency specification that limits bidding, directly or indirectly, to any one specific concern or product. If this revision describes a proprietary or patented product, it must identify other products which equally perform the functions of the proprietary or patented product.</p>	
<p>Revision: I am proposing changes to the following sections of the Greenbook:</p> <ul style="list-style-type: none"> • Table 207-17.1 – Update D3034 reference to show current sizes/diameters covered by the standard (4-60”). Add reference to minimum Pipe Stiffness (PS) as pipe 18” and larger is classified via PS instead of SDR/DR. Remove reference to F679 for 18” – 30” pipe. • 207-17.2.1 – Update to show identification marks/print line may use PS designation instead of SDR for PVC sewer pipe. Add note explaining that ASTM F679 has been repealed and incorporated into D3034; pipe manufactured prior to or soon after the change may still show F679 in the print line. • 207-17.2.2 – Change cell class ‘13364’ to ‘12364,’ 13364 was dropped from the ASTM D3034 standard prior to 2000 and replaced with 12364. • 207-17.4.1 – Remove reference to F679 • TABLE 207-17.5 - Change cell class ‘13364’ to ‘12364’ 	
<p>Reason For Revision:</p> <p>In July of 2024, ASTM merged the F679 standard into D3034 and removed F679. As a result, F679 is obsolete and PVC gravity sewer 18” and larger will reference D3034 going forward. Additionally, some of the revisions make corrections to information regarding print lines, cell classification, and wall thickness classifications.</p>	
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<p>Instructions: Use a separate form for each revision. Attach plain paper if more space is needed. For minor changes, copy present wording striking out words to be deleted and <u>underlining</u> new text. For major changes, rewrite or add paragraph or sections. All proposed revisions must include the reason(s) for the revision.</p>	
<p>Subcommittee Action: On <u>4/15/2025</u> (Date)</p> <p><input checked="" type="checkbox"/> Recommended For _____ Supplement/Edition</p> <p><input type="checkbox"/> Rejected <input type="checkbox"/> As Modified</p>	<p>Editorial Standards Subcommittee Review: On <u>9/11/2025</u> (Date)</p> <p><input checked="" type="checkbox"/> Reviewed For Surf/Und/Spec/Plans Subcommittee</p> <p><input checked="" type="checkbox"/> NO Modifications <input type="checkbox"/> As Modified</p>
<p>Greenbook Committee Action:</p> <p>On <u>10/16/25</u> <input checked="" type="checkbox"/> Approved For <u>2025 Supplement 2nd Printing</u> Supplement/Edition <input type="checkbox"/> As Modified</p> <p><input type="checkbox"/> Rejected</p>	

Underground Materials and Methods Subcommittee approved 4/15/2025

extend at least 1 inch (25 mm) beyond the damage. When damage exceeds these limits, the damaged section shall be cleanly removed.

207-17 PVC GRAVITY PIPE.

207-17.1 General. This subsection applies to the requirements for unplasticized PVC plastic pipe for sanitary sewers, storm drains, and house connection sewers. Pipe, fittings, couplings, and joints for solid wall pipe shall conform to the requirements shown in Table 207-17.1. Pipe, fittings, couplings, and joints for large diameter (21-inch to 54-inch) (525 mm to 1350 mm) closed profile wall pipe shall conform to ASTM F1803.

TABLE 207-17.1

Nominal Size inches (mm)	ASTM	Wall Thickness Min. / <u>Pipe Stiffness (PS) Min.</u>
4-15 (100-375) <u>4-60 (100-1500)</u>	D3034	SDR 35 / <u>PS 46</u>
18-30 (450-750)	F679	"T-1" only

Joints for sanitary sewers, except house connection sewers, shall be gasketed joints.

207-17.2 Manufacturing Requirements.

207-17.2.1 Identification Marks. All pipe, fittings, and couplings shall be clearly marked at intervals not to exceed 5 feet as follows:

- Nominal pipe diameter.
- PVC cell classification.
- Company, plant, shift, ASTM, SDR or PS, and date designation.
- Service designation or legend.

For fittings and couplings, the SDR designation is not required.

207-17.2.2 Cell Classification. Pipe shall be made of PVC plastic having a cell classification of 12454 or ~~13364~~ 12364, as defined in ASTM D1784. The fittings shall be made of PVC plastic having a cell classification of 12454, or ~~13364~~ 12364. PVC compounds of other cell classifications shall be in conformance with 207-17.5. Additives and fillers, including but not limited to stabilizers, antioxidants, lubricants, colorants, etc., shall not exceed 10 parts by weight per 100 of PVC resin in the compound.

207-17.3 Joining Systems.

207-17.3.1 General. All pipe shall have a home mark on the spigot end to indicate proper penetration when the joint is made.

The socket and spigot configurations for the fittings and couplings shall be compatible to those used for the pipe.

207-17.3.2 Elastomeric Gasket Joints. Pipe with gasketed joints shall be manufactured with a socket configuration which will prevent improper installation of the gasket and will ensure that the gasket remains in place during the joint operation. The gasket shall be manufactured from a synthetic elastomer and shall conform to the requirements of 208-1.2 and 208-4.

207-17.3.3 Solvent Cement Joints. Pipe with solvent cement joints shall be joined with PVC cement conforming to ASTM D2564.

207-17.3.4 Injection Sealed Joints. Pipe with injection sealed joints shall be sealed with a PVC adhesive compound. The compound shall conform to the requirements of ASTM D2564 and shall have a minimum viscosity of 50,000 centipoises (50 Pa·S). The internal diameter of the socket shall be

uniform with a locking taper at the base and an outer seal ring attached to the end. The socket shall have an injection port to inject the adhesive and an exhaust port on the opposite side to allow air to escape from the annular space.

207-17.4 Test Requirements.

207-17.4.1 General. Pipe, fittings, and couplings shall meet the requirements of the section titled “Requirements” of ASTM D3034, ~~or F679 (“T 1” wall only)~~. During production of the pipe, the manufacturer shall perform the specified tests for each pipe marking. A Certificate of Compliance by the manufacturer indicating compliance with specification requirements shall be delivered with the pipe. The Certificate of Compliance shall include the test result data. The PVC compound shall also meet the chemical resistance requirements of 207-17.5.

207-17.4.2 Acceptance. The basis for acceptance will be the inspection of pipe, fittings, and couplings; the tests specified in 207-17.4.1; and compliance with the Specifications. When the pipe is delivered to the Work site, the Engineer may require additional testing to determine conformance with the requirements of pipe flattening, impact resistance, pipe stiffness, and extrusion quality. Installation time shall conform to 207-15.7.

207-17.4.3 Selection of Test Pipe. When testing is required by the Engineer, one test pipe shall be selected at random by the Engineer from each 1,200 feet (370 m) or fraction thereof of one test pipe per lot. A lot shall be defined as pipe having the same identification marking. The length of specimen for each selected pipe shall be a minimum of 8 feet (2.4 m).

207-17.5 Chemical Resistance and Physical Testing. PVC shall be tested in accordance with 211-2 and conform to Table 207-17.5.

TABLE 207-17.5

Property	ASTM Test Method	Values (Initial and After 112-Day Exposure)		
		Cell Classification		
		12454	13343	13364 12364
Tensile stress at yield, psi (MPa), min.	D638	7000 (48.3)	6000 (41.4)	6000 (41.4)
Impact Strength ft-lbs/inch (J/m) of notch, min.	D256 Method A Size 1/2 x 1/8 x 2-1/2" (12.7 x 3.17 x 63.5 mm)	0.65 (35)	1.5 (80)	1.5 (80) 0.65 (35)
Weight Change Unconditioned Conditioned	D543	± 1.5% max ± 1.0% max	± 1.5% max ± 1.0% max	± 1.5% max ± 1.0% max

207-18 ANNULAR HIGH-DENSITY POLYETHYLENE PIPE WITH SMOOTH INTERIOR, CORRUGATED EXTERIOR, WITH BELL AND SPIGOT JOINTS (TYPE S).

207-18.1 General. These specifications apply to high density polyethylene, annular corrugated pipe and applicable fittings and coupling systems intended for use in the construction of gravity flow storm drains, culverts, and subsurface drains. The size, type, and material properties of the pipe to be furnished shall be as shown on the Plans or as specified in the Special Provisions.