

TAHOE CITY PUBLIC UTILITY DISTRICT

Sewer Trench & Air Test Quick Reference. Specifications, test values and procedures for 2003.

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- **Sewer Trench: Gravity pipe installation.**
 - Pipe materials approved for use
 - PVC SDR-35 “O” ring, “Ring Tight” gasket or equivalent sewer pipe
 - PVC C900 class 150 or 200 water pressure pipe
 - Ductile Iron Pipe (DIP) class 50 “Tyton” joint or equivalent sewer pipe
 - Pipe couplings
 - PVC SDR-35 “O” ring, “Ring Tight” gasket or equivalent
 - Or “Caulder”, “Fernco” or equivalent flexible sewer pipe couplings
 - Inches of cover / pipe material
 - 36” or more, traffic or non traffic: SDR 35
 - 35” or less traffic or non traffic: C900, DIP or other approved pipe
 - Bedding, bedded to spring line of pipe
 - Dry trench: 4” of imported backfill sand (Type 1 backfill)
 - Wet trench: 4” of imported ” crushed rock (Type 2 backfill)
 - Initial Backfill
 - Same material as used for bedding
 - Backfill to extend 6” above top of pipe
 - Intermediate Backfill
 - Material shall contain no rocks greater than 3”
 - Backfill to extend from 6” above top of pipe to the surface
 - Final Backfill
 - Backfill as required by County or State under right of ways or roadways
 - Slope
 - Minimum ” per foot fall for 4” pipe
 - Check with bubble level, **bubble or better**
 - Minimum ^{1/16}” per foot fall for 6” pipe
 - Must have District approved plans and Engineer certified grade (by survey)
 - Clean-out spacing
 - Foundation c/o located within 5’ of building foundation
 - Property line c/o located within 5’ of the property line on homeowners side
 - Length between c/o’s, measure actual line length
 - 80’ or less, no midlines required
 - 81’ or more, midline c/o(s) required
 - Midline c/o’s to be placed as close as possible to center of the line
 - Bend in line
 - Bend of 45 °, use two 22 ° fittings coupled no closer than 18”, no c/o needed
 - Bend of 45 ° needs c/o located upstream of bend, within 5’
 - Bend of more than 45 ° to 90 ° needs special c/o arrangement and prior authorization
 - Bends of more than 90 ° are not allowed
 - Clean-out riser pipe
 - Riser pipe to be SDR-35
 - Riser pipe to be brought up at 90 ° from the sewer line
 - Clean-out Caps
 - T-cone cap, District preferred
 - or same as pipe material (SDR-35 gasket caps)
 - Clean-out Boxes (not to be set at Trench Inspection)
 - N9 “Christy” box or equivalent
 - N9 “Christy” steel lid marked “Sewer” or equivalent
 - Set to grade non traffic areas, ” below grade in traffic areas
 - Common Trench, sewer line and water line in same trench
 - Water must be 1 foot above and 1 foot over from sewer line in the trench
 - Water minimum burial is 30”, minimum Sewer burial is now 42” regardless of pipe material
 - 12” of initial backfill material is now needed between the sewer line and the water line
 - Any crossing of the sewer by the water line in the trench must be done at a 90 ° angle from 1’ above and over on one side of the trench to 1’ above and over on the other side of the trench

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- **Sewer Air Test. Gravity pipe backfilled to grade, boxes set or riser pipes protected:**
- For Contractor
 - Test Equipment
 - Test gauge
 - To read in 1/10 pound increments (10 or 15 lb gauge recommended)
 - Gauge to be mounted on a hard line that allows it to be read outside of the trench
 - Test plug and isolation plugs as needed
 - Air compressor or air tank
 - Test Set-up
 - Test plug set at foundation c/o
 - Isolation plug set at property line c/o and midline c/o's if needed
 - Caps on midline c/o's are acceptable if they will hold
 - Inflate plugs to isolate line
 - Air up sewer line to 3.5 psi
- For Inspection
 - Test Pressure
 - 3.5 psi for 5 minutes for remodel or new construction.
 - 0.5 psi loss in 5 minutes is allowable
 - 0.6 psi loss in 5 minutes is a failure
 - Contractor to release air on test (do not pull a plug, could shock damage couplings in the line)
 - Wait for inspector to request air release
 - Release air through fill stem
 - Volume of air released
 - Should take several minutes
 - Gauge pressure drops with air release
 - Check caps
 - T-cone preferred or same as pipe material
 - Caps must be on to protect pipe
 - Check boxes, (if boxes are not set, protection needed for risers)
 - Set to grade, _" below grade in traffic areas
 - Christy N9 or equivalent top box
 - Christy N9 or equivalent steel lid marked "SEWER"
 - Risers must be protected if boxes are not set
- For Inspector
 - Drawing and measurements if safe
 - Make every attempt to complete drawing and measurements if work site is safe. Safety.
 - If site is unsafe, do at Final Inspection. Safety
 - Complete paper work
 - Air Test inspection form, give signed inspection notice to contractor
 - If test fails, issue Correction Notice, explain deficiencies to contractor
- This document is meant as a quick reference guide and does not include all the sections and sub-sections of the Tahoe City P.U.D. ordinance 112 (sewer) and ordinance 185 (water). Tahoe City P.U.D. ordinances are subject to change annually. Please make sure you have the latest version of our ordinance.
- Copies of Tahoe City P.U.D. ordinances 112 (sewer) and 185 (water) are available at our office
 - Tahoe City P.U.D. offices are located at 221 Fairway Drive in Tahoe City
 - Office hours are Monday through Friday, 8:00 am to 4:30 pm, except for legal holidays
- Questions or comments
 - Contact Tahoe City P.U.D. Public Works Department at 530-583-3796
- Call U.S.A. two working days before you dig, it's the law and it's free
 - Toll free, 1-800-227-2600