

SEWER LATERAL INSTALLATION REQUIREMENTS

1. Approved materials and pipe fittings. Refer to charts.
2. Inspections and testing. 10-foot head of water, no leakage for 15 minutes.
3. Minimum depth of 36".
4. Provide sleeve or relieving arch at foundation 2 pipe sizes larger than the sewer. Annual space to be sealed with approved materials.
5. Piping shall be laid on a bed of screenings minimum 6" depth.
6. Upon approval of sewer, the pipe shall be covered with 6"-12" of screenings, compacted. Additional fill lifts of soil shall be placed at 6" lifts, mechanically compacted.
7. A house trap is required minimum 10 feet from building.
8. When laid in same trench as water service, the trench shall be shelved when the water service is a minimum of 12" above the top of the sewer and pipe conforms to section
9. Provide cleanouts at foundation and at maximum 100' intervals.
10. Refer to P.S.W. Co. and Utilities Inc. of PA for additional requirements.

BACKFILL / TEST INSPECTIONS – 3 working days notice

Township Inspection

1. Inspections will take place between 9:00 a.m. and 3:30 p.m.
2. The trench walls must be appropriately sloped or shored.
3. The township will inspect the pipe installation and witness the leak test.
4. The township will inspect the placement and compaction of the screenings.
5. There will be a \$50 inspection fee.
6. Tests shall be in place 15 minutes prior to inspection. Inspection time limited to 15 minutes.

Independent Third Party Inspection

1. Following the township inspection, a township-approved, independent third party shall inspect the remaining backfill placement and compaction.
2. The independent third party inspection reports shall be submitted to the township.

BUILDING SEWER PIPE

MATERIAL	STANDARD
Acrylonitrile butadiene styrene (ABS) plastic pipe	ASTM D 2661; ASTM D 2751; ASTM F 628
Asbestos-cement pipe	ASTM C 428
Cast-iron pipe	ASTM A 74; ASTM A 888; CISPI 301
Concrete pipe	ASTM C 14; ASTM C 76; CSA A257.1; CSA CAN/CSA A257.2
Copper or copper-alloy tubing (Type K or L)	ASTM B 75; ASTM B 88; ASTM B 251
Polyvinyl chloride (PVC) plastic pipe (Type DWV, SDR26, SDR35, SDR41, PS50, or PS100)	ASTM D 2665; ASTM D 2949; ASTM D 3034; ASTM F 891; SCA B182.2; CSA CAN/SCA-B182.4
Vitrified clay pipe	ASTM C 4; ASTM C 700

SLOPE OF HORIZONTAL DRAINAGE PIPE

SIZE (inches)	MINIMUM SLOPE (inch per foot)
2 ½ or less	1/4
3 to 6	1/8
8 or larger	1/16

For SI: 1 inch = 25.4 mm, 1 inch per foot
= 0.0833 mm/m

WATER SERVICE REQUIREMENTS

1. Approved materials and pipe fittings. Refer to charts below.
2. Minimum size permitted ¾”.
3. Minimum depth below grade is 42” below grade.
4. A pressure reducing valve is required if the pressure inside the building exceeds 80 p.s.i.
5. The water service shall be in a separate trench at least 5 feet from the building sewer unless the water service is installed on a shelf 12” higher than the building sewer.
6. The water service shall be protected by a sleeve where the service penetrates a building foundation or is in or under a footing. The sleeve shall be 2 pipe diameters larger than the water service. The annular space around the sleeve shall be filled with oakum and sealed with an approved sealant.
7. Where trenches are excavated forming the bedding for the pipe the bottom of the trench shall be firm and level and free of rocks. Where rock is encountered a suitable bedding material is required for bedding and minimum 6” cover of the pipe. All backfilling shall be tamped in 6” lifts, free of rocks, rubble and frozen materials.
8. The water service shall be sized for the peak demand of the building.
9. Trenches that are over excavated shall be backfilled to proper depth with sand or gravel compacted in 6” lifts.
10. A backflow preventor is required if there is another water source connected to the water distribution piping within the building.
11. For permit application complete applicable portions of plumbing permit and submit two copies of job description and specifications. If contractor is applying for permit submit Workers Compensation Insurance certificate of notarized addendum if claiming an exemption.
12. Backfill inspection required prior to backfilling pipe. Test shall be in place 30 minutes prior to inspection. Inspection time is limited to 30 minutes, thereafter-approved 3rd party inspection required.
13. Final inspection required upon completion.

<u>PIPE FITTINGS</u>		<u>WATER SERVICE PIPE</u>	
MATERIAL	STANDARD	MATERIAL	STANDARD
Acrylonitrile butadiene styrene (ABS) plastic	ASTM D 2468	Acrylonitrile butadiene styrene (ABS) plastic pipe	ASTM D 1527; ASTM D 2282
Cast iron	ASME B16.4; ASME B16.12	Asbestos-cement pipe	ASTM C 296
Chlorinated polyvinyl chloride (CPVC) plastic	ASTM F437; ASTM F 438; ASTM F 439	Brass pipe	ASTM B 43
Copper or copper alloy	ASME B16.15; ASME B16.18; ASME B 16.22; ASME B16.23; ASME B16.26; ASME B16.29; ASME B16.32	Copper or copper-alloy pipe	ASTM B 42; ASTM B 302
Gray iron and ductile iron	AWWA C110; AWWA C153	Copper or copper-alloy tubing (Type K, WK, L, WL, M or WM)	ASTM B 75; ASTM B 88; ASTM B 251; ASTM B 447
Malleable iron	ASME B16.3	Chlorinated polyvinyl chloride (CPVC) plastic pipe	ASTM D 2846; ASTM F 441; ASTM F 442; CAS B 137.6
Polyethylene (PE) plastic	ASTM D 2609	Ductile iron water pipe	AWWA C151; AWWA C115
Polyvinyl chloride (PVC) plastic	ASTM D2464; ASTM D2466; ASTM D 2467; CSA CAN/CSA-B137.2	Galvanized steel pipe	ASTM A 53
Steel	ASME B 16.9; ASME B16.11; ASME B16.28	Polybutylene (PB) plastic pipe and tubing	ASTM D 2662; ASTM D 2666; ASTM D 3309; CSA B137.8
		Polyethylene (PE) plastic pipe	ASTM D 2239; CSA CAN/CSA-B137.1
		Polyethylene (PE) plastic tubing	ASTM D 2737; CSA B137.1
		Cross-linked polyethylene (PEX) plastic tubing	ASTM F 876; ASTM F 877; CSA CAN/CSA-B137.5
		Cross-linked polyethylene/aluminum/cross-linked polyethylene (PEX-AL-PEX) pipe	ASTM F 1281; CSA CAN/CSA B137.10
		Polyethylene/aluminum/polyethylene (PE-AL-PE) pipe	ASTM F 1282; CSA CAN/CSA-B137.9
		Polyvinyl chloride (PVC) plastic pipe	ASTM D 1785; ASTM D 2241; ASTM D 2672; CSA CAN/CSA-B1373