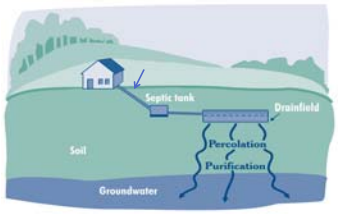
# * Sewage Disposal System Piping

## Technical Standards Section III
## Pg. 16 - 21

Connecticut Department of Public Health
*Keeping Connecticut Healthy*

# *Building or House Sewer

*The pipe located between the building served connected to the septic tank or grease interceptor tank




# *Building Sewer

- Sometimes referred as sewer line or soil line
- Rigid pipe that resists crushing

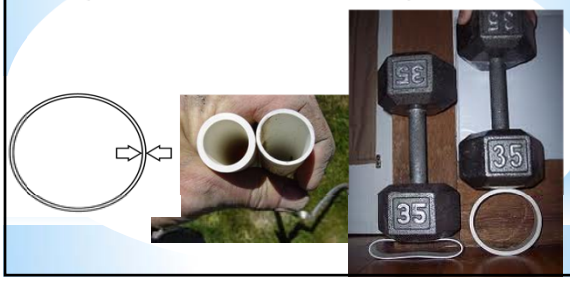



**Table 2**
**Approved Building Sewer Pipe from Building Served to Septic Tank or Grease Interceptor Tank (pg. 18)**

| USE | PIPE DESCRIPTION | ACCEPTABLE JOINT | REMARKS |
|---|---|---|---|
| Building sewer from foundation wall to septic tank or grease interceptor tank.<br><br>Building sewer within the sanitary radius of a water supply well, but no closer than the following minimum distances based on withdrawal rates:<br><10 gpm: 25 feet<br>10 – 50 gpm: 75 feet<br>>50 gpm: 100 feet<br><br>Building sewers no less than 25 feet from a water suction pipe.<br><br>Building sewers and pressurized water lines shall be installed in accordance with Section III D.<br><br>Building sewers shall be kept a minimum of 10 feet from closed loop geothermal bore holes and trenches.<br><br>There are no minimum distances between building sewers and other items listed in Table 1. However items placed near building sewers shall not damage or compromise the integrity of the pipe. | Cast iron hubless ASTM A 888 | Cast iron split sleeve bolted joint with rubber gasket, MG Coupling or equal<br>OR<br>3"-wide, heavy -duty, stainless steel banded coupling with rubber gasket; Clamp-All, ANACO SD 4000 Coupling, or equal | Roll-on "donut type" gaskets not acceptable if connection is within 25 feet of foundation wall. Pipe shall be properly bedded, laid in straight line on uniform grade |
| | Cast iron bell and spigot ASTM A 74 | Rubber compression gaskets | Stainless steel 3" wide shear band coupling required for connection of dissimilar piping materials |
| | PVC Schedule 40 or 80, ASTM D 1785 or ASTM D 2665 | Rubber compression gasket couplings, Harco Mfg., ASTM D 3139 or equal*<br>OR<br>Solvent weld couplings/ fittings using proper two step PVC solvent solution procedure | *Use of 3"-wide approved stainless steel banded couplings on PVC, ASTM D 1785 or 2665 is acceptable<br>UL (gray) Piping - Schedule 40 or 80- 36"min. radius sweep piping (90°) may be utilized without a cleanout.<br>ABS Schedule 40 is not acceptable |
| | Ductile iron ANSI A 21.51 | Rubber compression gaskets | Connection to cast iron building sewer shall be made with compression gaskets. |
| | PVC AWWA C900 (PC 100 psi min.) | Rubber compression gaskets | "O"-ring gasket is not acceptable |
| | PVC ASTM F 1760, Schedule 40 | Rubber compression gaskets | Only 4" pipe approved<br>Minimum 1' cover in vehicular loaded traffic areas |

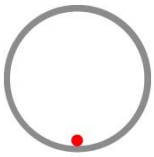
Solvent weld melts the pipe together creating a permanent connection. Look for the purple primer.

Pipe designation


## *Section III: Piping

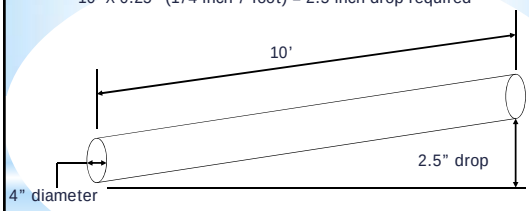
*Building Sewers

- *Minimum size 4” pipe
- *Minimum pitch 4” pipe: ¼” per foot
- *Minimum pitch 6”- 8” pipe: 1/8” per foot
- *High strength pipe
- *Table 2




## *Building Sewer Pipe Pitch

10’ X 0.25” (1/4 inch / foot) = 2.5 inch drop required



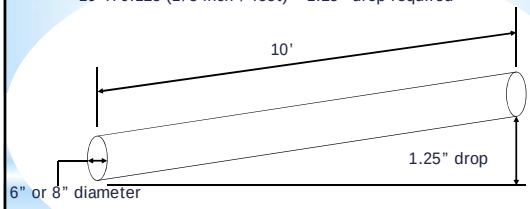

10 / 4 = 2.5 or 10 x .25 = 2.5

2.5 / 12 (inches to feet) = .208

8

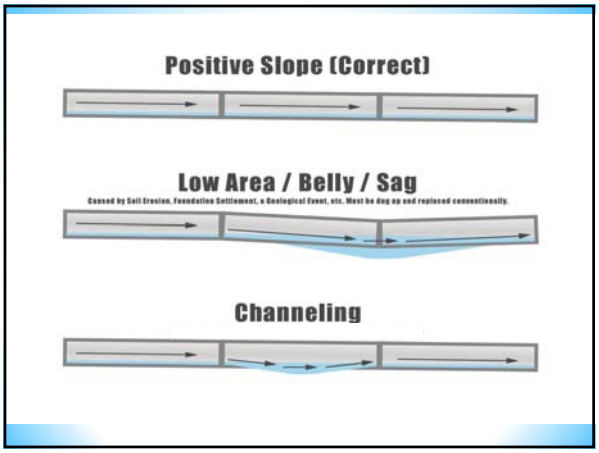
## *Building Sewer Pipe Pitch

10’ X 0.125 (1/8 inch / foot) = 1.25” drop required

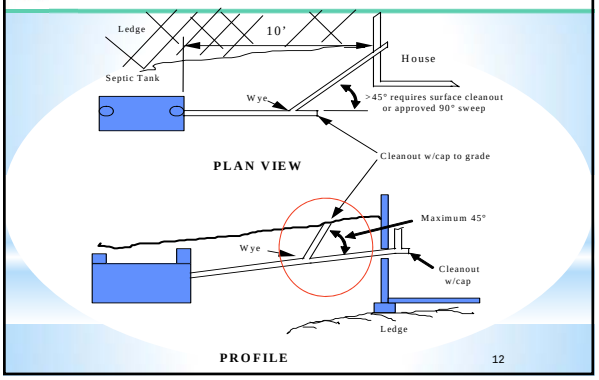



1.25/ 12 (inches to feet) = 0.104’ drop required

9

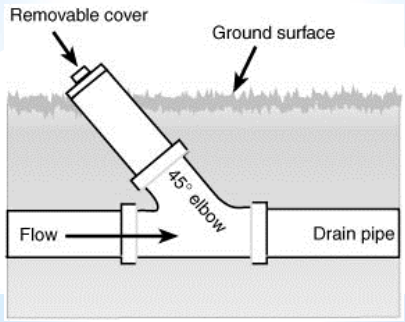



## *Piping: Clean-out to Grade

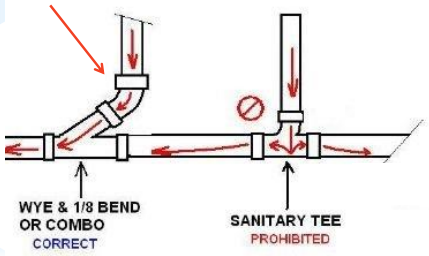



12

## *Clean-out




## *Clean-out to grade




## *Clean-out to Grade

Not acceptable


## *Pipe Connections

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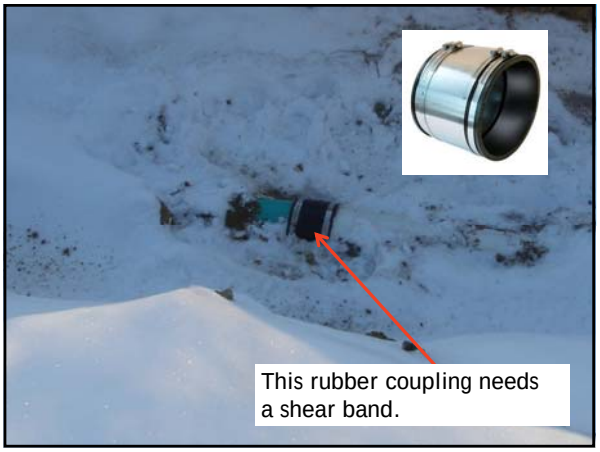
18

## Stainless Steel Banded Coupling


19


## Foundation Penetrations

- **Building Sewer foundation penetrations shall comply with the plumbing code.**

22

## Section III: Piping

- **Approved Sewage Piping**
  - Table 2 Building Sewer Piping
  - Table 2-A Sewage Effluent Distribution Pipe
    - After the septic tank
    - Perforated piping shall only be used in the leaching area

23

## Section III: Piping

- **Approved Sewage Piping**
  - Table 2-B Sewage Force Main Piping
    - Piping from pump chamber to a leaching system
  - Table 3 Approved Tight Pipe for Groundwater or Surface Water Piping within 25 Feet of a Sewage System

24