

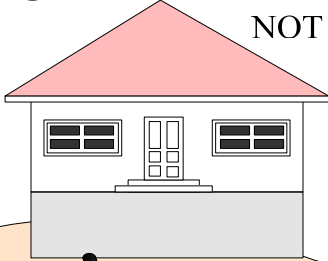
1. The floor is above first upstream manhole. Backwater Valve **NOT** required.

2. Main floor would require an elevation to determine if a Backwater valve is required. Basement floor would require a Backwater Valve.

3. All floors are located below first uphill manhole. Backwater Valve required.

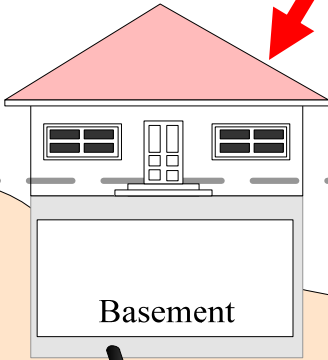
First Upstream Manhole

1.



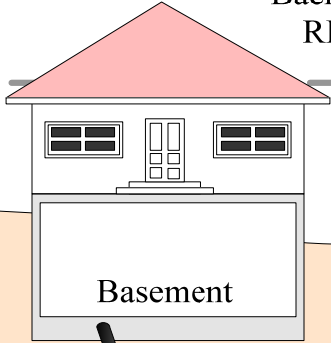
Backwater Valve NOT Required

2.



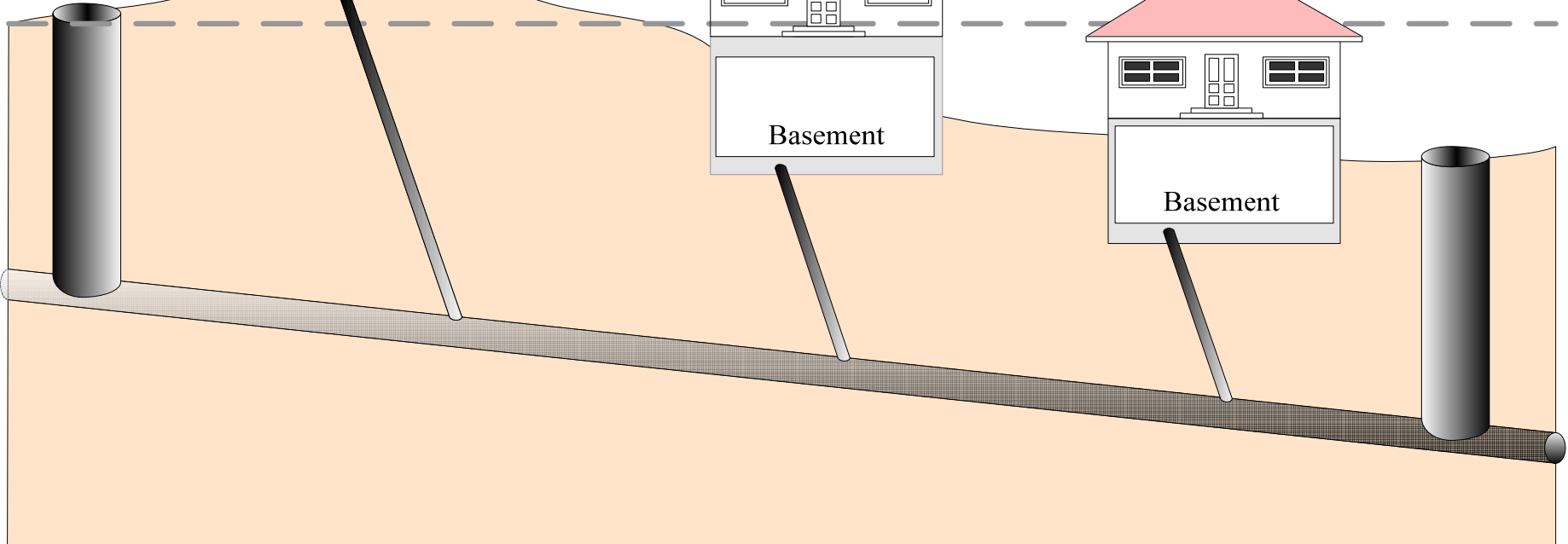
Basement

3.



Basement

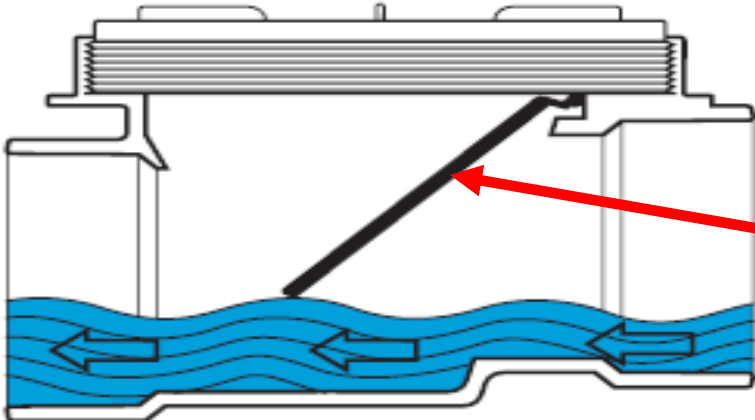
Backwater Valve REQUIRED



# How Does A Backwater Valve Work?

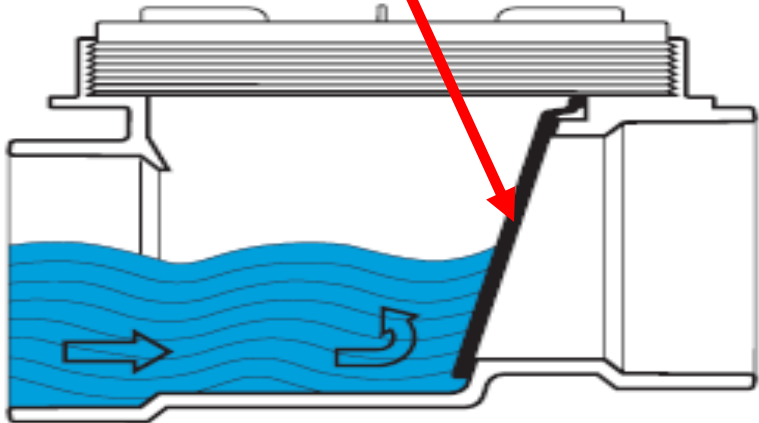
A Backwater Valve has an internal mechanical disc (flapper) that will close a sewer pipe opening when reverse surcharges from a public/private sewer system attempt to enter into a building drainage system, preventing the flooding of a building with raw sewage.

# How a Backwater Valve Works ...



**Flapper**

Backwater Valve is open - allowing waste waters to flow to sewers.



Backwater Valve is closed - protecting basement from sewer backups.

# Examples

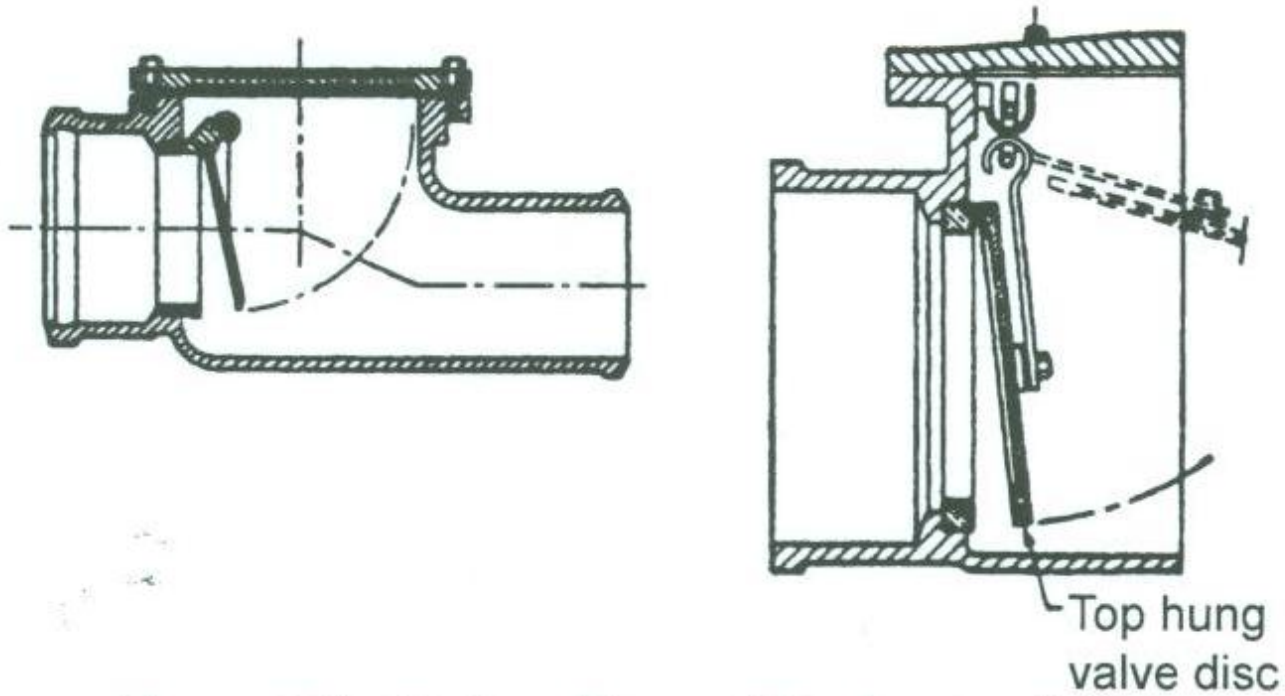


Figure 1-7 Various Types of Backwater Valve



**Removable  
cover for  
maintenance of  
interior  
mechanism**

# Summary

- If your property appears to require a backwater valve, but you do not know if one has been installed, we strongly encourage you to call a licensed plumber, who can evaluate your situation and, if necessary, install a backwater valve.
- Backwater valves must be checked to ensure that they are operating properly at all times. Root cleaning machines, debris in the drain line or other problems can easily damage or interfere with the proper operation of backwater valves.
- A plumbing permit is required for the installation of a backwater valve. For more information, please contact the Department of Code Enforcement at (610) 446-1000.