

# Loss Prevention Safety Tip



Loss Prevention  
Program

By Red River Mutual

## PREVENTING BASEMENT FLOODING

Basement flooding can cause significant damage to personal property and can have serious repercussions for the livability of your home. Basement flood impacts include:

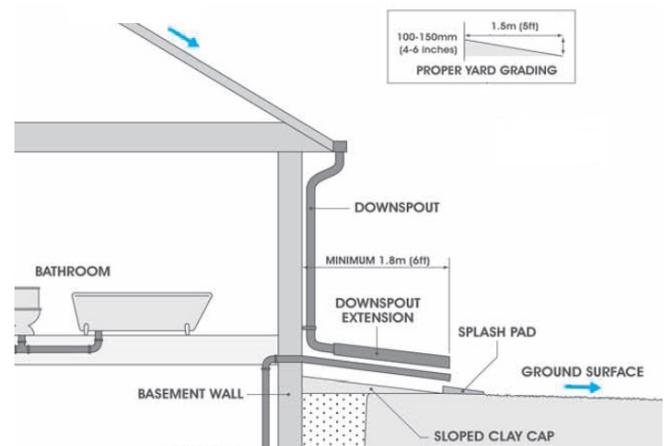
- Damage to basement flooring and wall materials.
- Loss of furniture, entertainment systems and other property stored in the basement.
- Damage to irreplaceable sentimental items.
- Damage to furnaces, water heaters and the home's electrical system.
- Structural damage to the home, including possible damage to the foundation.



Aside from reducing damages to your house and personal property, by reducing basement flooding you can protect yourself and your family from possible health impacts from a flood event, including respiratory problems from dampness and mold growth.

## SIMPLE WAYS TO PROTECT YOUR BASEMENT FROM WATER DAMAGE

- Seal cracks in foundation walls and basement floor.
- Reduce home water use during heavy rain falls to decrease the amount of water handled by the municipal sewer system.
- Regularly clean and maintain eaves troughs and downspouts. When clogged, water can pour over the side of eaves troughs and run down the side of your foundation.
- Install downspout extensions at least 6 feet in length. Splash pads should be used to help prevent soil erosion.
- Check your lot to see if the yard slopes away from your home, including areas under stairs and decks.

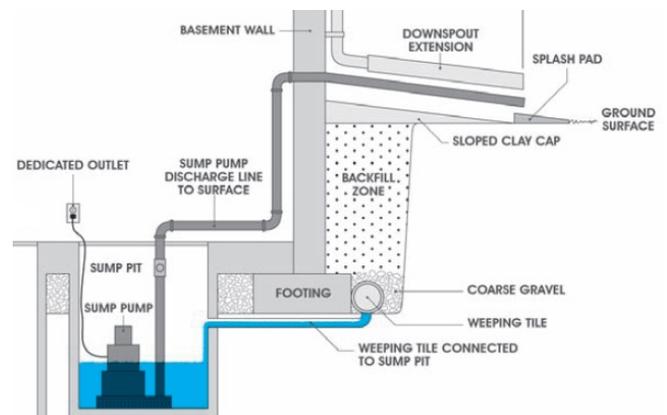


## EFFECTIVE MEASURES TO PREVENT BASEMENT FLOODING & SEWER BACK-UP

### Weeping Tile & Sump Pump

A foundation drain is an underground perforated pipe, or weeping tile, that runs along the bottom of a home's foundation. The weeping tile helps keep the basement free of excess moisture, and is also very useful for helping to reduce infiltration flooding. The water that is conveyed by the weeping tile is relatively clean, and does not normally require treatment at sanitary sewage treatment facilities.

Water from the weeping tile should be directed to a sump pit, and then pumped outside the home with a sump pump. The location of the sump pit depends on how weeping tiles are connected to the pit under the basement floor.



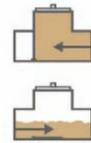
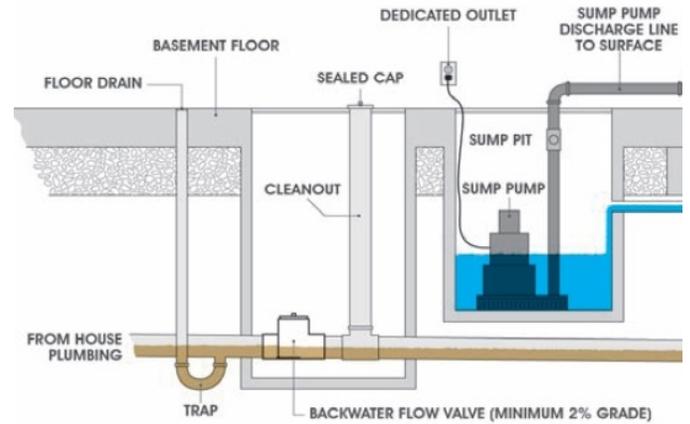
Source: Institute for Catastrophic Loss Reduction

## Install a Backwater Valve

Mainline backwater valves are placed directly into the sewer lateral at the foot of your basement wall and serve to reduce the risk of sewer backup in your home.

The proper installation of a mainline backwater valve can be complicated. In an existing home, installation will require breaking up the concrete basement floor and cutting a section out of the sanitary sewer lateral. You will need the assistance of a licensed plumber to install a mainline backwater valve.

Normally open backwater valves stay open until a sewer surcharge occurs. An open valve allows sewer gasses to vent properly, and are the only type of backwater valve allowed to be installed in sanitary sewer laterals under many provincial building codes. When a sewer surcharge occurs, the sewage pushes the valve closed. When the valve is closed, sewage cannot get in, or out, of a building.



### Closed position

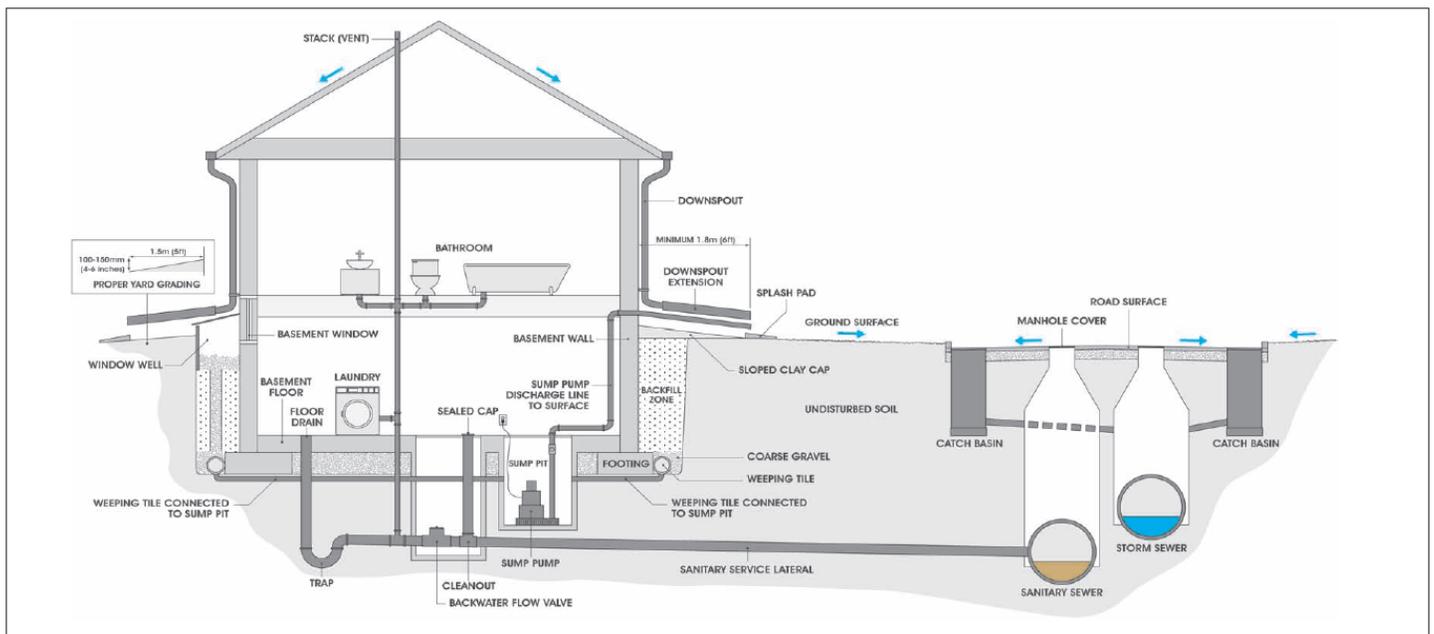
Prevents surcharge from backing up into building.



### Open position

Allows normal operation of the sewer lateral.

## HOME WITH FLOOD PROTECTION MEASURES & EQUIPMENT IN PLACE



Source: Institute for Catastrophic Loss Reduction

### To reduce overland flooding, infiltration flooding and sewer backup:

- Properly graded yard directs water away from the home.
- Extensions on the eaves trough downspouts and sump-pump discharge pipe keep water away from the home.
- Eaves troughs and downspouts are clear of debris

### To reduce infiltration flooding:

- Cracks in the foundation walls and basement floor have been sealed.
- Weeping tiles have been repaired and are in good working order.

### To reduce sewer backup:

- Weeping tiles are drained into a sump-pit, and water is pumped to the lot's surface using a sump-pump.
- A mainline backwater valve has been installed in the sanitary sewer lateral.

## See more loss prevention tips at [www.preventingloss.com](http://www.preventingloss.com)

While the safety recommendations in this report are based on apparent and obvious conditions that were found at the time of inspection, the report does not purport to identify all hazards or guarantee compliance with any standards, codes, ordinances or regulations. It is not legal or expert advice, and should not be used in place of consultation with appropriate professionals. Any person relying on this information does so entirely at their own risk. Red River Mutual denies all responsibility for any liability, loss, injury or risk which is incurred as a direct or indirect result of the use of any of the recommendations in this report.