Why Are Infiltration And Inflow Big Problems?

Infiltration and inflow (I/I) are terms referring to groundwater and/or rainwater that enters the sanitary sewer system through cracked pipes, leaky manholes, roof and gutter downspouts, sump pumps, foundation drains, and improperly connected storm drains. Most infiltration comes from groundwater, and most inflow comes from rainwater and/or snowmelt. Extensive studies have shown that as much 40% of I/I enters the collection system from building sewers.

Additional I/I flow in the sanitary sewer collection system results in the need for larger sewers and treatment plants. Higher sewer user fees must be collected to treat the increased volume of wastewater from I/I.

What Can I Do To Prevent And Reduce Infiltration And Inflow?

- Make sure the cap to any cleanout is secure and has not been damaged.
- Disconnect outdoor patio, deck, yard, or garage drains that may be connected to the building sewer.*
- Reroute sump pump discharges from basement or foundation drains entering building sewer connections* to outdoor lawn areas or storm drains.
- Redirect rain gutters and downspouts connected to the building sewers* to rain gardens, lawns, or storm drains.

*NOTE: These types of connections are illegal in many communities.

Who Is Responsible For Maintaining and Repairing The Building Sewer?

Property owners are usually responsible for maintaining and repairing building sewers. However, there may be special circumstances when a municipality will pay for the repair and maintenance of all or a portion of the building sewer.

If your building sewer needs maintenance or repair, always call your wastewater utility to verify local requirements. Your wastewater utility may also want to perform an inspection, prior to a repair, to identify if there is a problem in the main sanitary sewer pipe. The installation and maintenance of the building sewer is regulated by the Department of Commerce, Safety and Buildings Division.

This brochure can be downloaded from:
http://www.dnr.state.wi.us/org/water/wm/ww/cmar/brochures.htm

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Wisconsin Department of Natural Resources
Bureau of Watershed Management
P.O. Box 7921
Madison, WI 53707-7921

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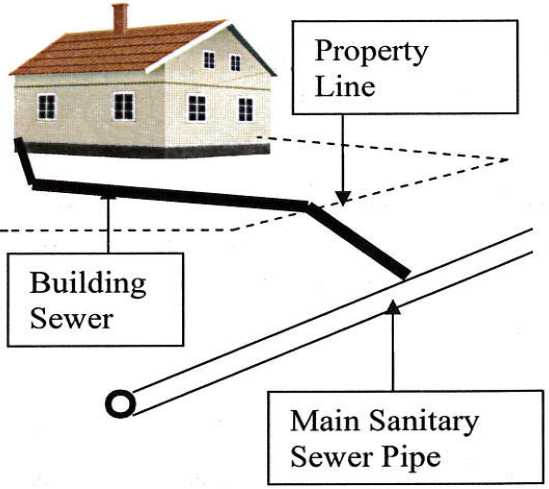
BUILDING SEWER MAINTENANCE AND REPAIR



Wisconsin Department of Natural Resources
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What Is A Building Sewer?

A building sewer is the pipe that connects a building's plumbing system to the main sanitary sewer. Building sewers are also called "service laterals", "house laterals", or "sewer laterals."

The main sanitary sewer is usually located in the street and collects wastewater, called sewage, from building sewers and conveys it to the wastewater treatment plant.

Why Do Building Sewers Need Maintenance?

Blockages in your building sewer can cause backups of sewage from your building's toilets, showers, and floor drains. These types of blockages are sometimes referred to as basement backups. A backup of sewage can lead to disease, destruction of valuables, damage to your property, and electrical malfunctions.

Rubbish and other objects often combine with hair, grease, and other debris to cause clogging of the sewer system. Even something as small as a cotton tip swab with other attached debris can clog sewer building sewers.

Cracked building sewers allow groundwater to enter the sewer system, which can also cause a basement backup.

What Are Sewer Cleanouts?

Building sewers often have cleanouts which provide a point of access for cleaning or repair. One cleanout is located immediately inside the building or just outside the building wall. There may be additional cleanouts between the building wall to the main sewer. The cleanout is usually a small pipe about 4 inches in diameter within a frost sleeve. There should be a cap on the cleanout.

What Problems Should I Look For?

- Wastewater backups inside the building.
- Slow draining sinks and toilets.
- Wet or soggy ground in your yard.
- Water leaking from cleanouts, outside drains, or main sewer manhole covers.
- Unusual odors or sewage smells in or around your home or business.

If you suspect you have a blockage or problem in your building sewer, call a professionally licensed plumber for an inspection. Even if you aren't experiencing drain or sewer problems, periodic inspections and cleaning by a professionally licensed plumber are a good idea.

Building sewers are usually neglected by homeowners until problems arise. Simple maintenance and timely repairs can avoid sewage backups and damage to your property and personal belongings.

How Can I Prevent Problems?

Follow these DOs and DON'Ts to prevent problems with your building sewer:

DOs:

- Place paper towels, feminine products, disposable diapers, dental floss, hypodermic needles, plastics, and other personal hygiene products in a wastebasket. Dispose as garbage.
- Use sink and shower drain strainers.
- Collect grease and fats in a heat-resistant container, cool, and dispose of it in your garbage with solid waste.
- Choose the most appropriate method of disposal for food scraps: composting; in the garbage for solid waste disposal; or down the sink by grinding with a garbage disposal unit.

DON'Ts:

- Don't use the toilet as a wastebasket for garbage, medications, or chemicals!
- Don't plant trees or large shrubs near sewer lines where roots can penetrate and create a dense mat of "root balls."
- Don't pour grease, fats, or oils from cooking down the drain. Grease in drains collects and hardens into a plug.
- Don't connect French drains, roof gutters, sump pumps and other flood control systems to your sanitary sewer. These types of connections are illegal.