

Rain-Ready Home Guide



Taking care of rainwater and drainage around your home helps prevent basement flooding. Most homes in Mississauga already have drainage features like weeping tiles, sump pumps, and swales that move water away from your foundation.

To keep them working properly, it's important to check and maintain these systems. This helps to stop water from getting into your basement, protects your home from damage (especially during winter), and prevents mold.

Good drainage can also make your home look better. Features like rain gardens or permeable driveways can boost curb appeal and add value.



Remember: It's the homeowner's job to manage water on their own property. The City handles stormwater on the streets, but you are responsible for what happens on your lot. Follow the tips below to safely move rainwater away from your home and into the City's storm system.

Report problems on City property:

If you notice water ponded over a storm drain on the road, for more than 24 hours after it has rained, an overflowing ditch, call 3-1-1 or use the City's online portal at Pay, apply and report.

Note: The City of Mississauga handles stormwater, but the Region of Peel takes care of the wastewater (sewage) system. For questions about wastewater or sanitary backwater valves, visit the Region of Peel's website. Installing a backwater valve needs a City plumbing permit and inspection.

Spot the Signs of Drainage Problems

Don't wait until you have a flooded basement to check if your yard and roof are draining properly. The best time to learn about your yard's drainage is during or right after a good rain. Take a walk around the exterior of your house and look for warning signs like:

What to look for:

- Ponding water that lingers for more than a day next to your foundation or in private storm drains in your driveway.
- Green moss growing at ground level on your concrete foundation
- Sunken areas of ground or patios that are sloped towards the house next to your basement foundation
- Water overtopping your eaves troughs or filling of your basement window wells
- Blocked or covered drainage swales in your backyard or between your house and your neighbours
- Roof downspouts and elbows draining immediately next to your foundation

These are red flags for poor exterior drainage – you may need to regrade parts of your yard, improve your drainage systems, or get a professional assessment.

TIP: The next time it rains, watch where the *water flows* on your property. Noticing where runoff collects will show you where improvements are needed.







What to do:

Improve outdoor drainage

 To divert rainwater and melted snow away from your foundation.
See detailed information in the following categories below.

Service your sump pump

• If your basement has one, check that your basement sump pump is free of blockages and that the pump, back-up pump and back-up power supply (battery) are operating correctly. Check the battery status. Clean and service sump pits and pumps regularly and test them by pouring clean water in the pit. If the pump does not cycle on and empty

the pit, service or replace the pump promptly so that it runs when you need it to. Sump pumps must not discharge directly into City ditches, swales, or roads. Water from sump pumps must discharge onto your own property.

Clean and service backwater valves

 Regularly check the operation of the valve so that it will close when water flows towards your basement

Seal cracks

 Seal cracks around basement windows, walls, and doors, and repair or replace broken portions of these openings into your basement.

Improve Lot Grading: Slope Matters

One of the simplest but most important fixes for drainage is **proper grading**. The ground around your house should slope **downward and away** from the foundation - ideally dropping about 2-3% in the first 2 metres (6 feet) from the house. This gentle slope sends rainwater and melting snow away from your basement walls and towards swales, storm drains, or the street.

Fill low spots

• Soil next to your foundation may settle over the years since house construction. If you have sunken areas next to your foundation where water pools, fill them with clean clay soil so that water doesn't collect there. Ensure the ground is highest at the house and tapers lower toward your property boundaries.

Important: Don't pile soil up over the bottom of your house walls (brick or siding) - this can trap moisture and damage those materials.

Mind your neighbours

 When regrading the ground next to your foundation, make sure you're not diverting water onto neighbouring properties. Most lots were originally contoured to keep rainwater within your property lines and flowing along the property grading and through swales to a proper outlet (street or storm drain). The City of Mississauga's Property Standards Bylaw require that you prevent drainage impacts to neighbouring land (including City roads or property) when you change drainage on your property. To understand how your property/ subdivision grading was built, call 311 to request more information or records.

Get professional help for major drainage work

• If you're planning big changes – like regrading your yard, installing a new drainage system or major repairs to one, it's best to hire a licensed qualified professional. Getting the right advice and any needed City approvals, permits and inspections can save you a lot of trouble later on. City inspectors can make sure that the work is done properly and safely – before you pay your contractor. Beware of any contractor who wants to skip permits. That could lead to costly problems for your or your neighbours down the line.

Maintain Eavestroughs and Downspouts

Your roof is like a big umbrella – but all that water needs somewhere to go! **Eavestroughs or gutters** collect rain from the roof and send it into **downspouts**, which carry the water down to ground level. Keeping these in good shape is vital for drainage:

Clean your eavestroughs regularly:

 Leaves, sticks and debris can accumulate in gutters and block the flow of water. Clean out eavestroughs and downspouts at least every spring and autumn so that rain can flow freely. While you're up there, check for any leaks or sagging sections and repair them.

Disconnect roof downspouts and divert the water away from any building foundations and adjacent properties.

• To see how a simple downspout disconnection is done, have a look at this video from the City of Toronto. Water from your roof can be a valuable resource for filling rain barrels or flowing into home raingardens once the downspout is disconnected.









Extend your downspouts:

 Downspout extensions and splash pads should lead water at least 3 ft away from your foundation. Further away is better. Aim them onto your lawn or garden, not toward your neighbour's yard. Splashpads or large stones located where the downspout discharges water will reduce erosion of lawns or gardens. This keeps water well away from your basement walls. Also avoid letting downspouts discharge across sidewalks or driveways, where water can freeze into ice and become a slip hazard. In winter, ensure your downspout outlet isn't buried in snow or ice (you may need to clear it or use a heat cable to keep it open).



TOOLS YOU'LL NEED:

- hacksaw
- tape measure
- screwdrivers
- pliers (needle-nose or crimpers)
- drill (to create holes for screws)

If your downspouts go into the ground:

- Many older homes have downspouts connected to underground pipes (sometimes even the sanitary sewer system). During heavy storms this can overload sewers and lead to sewage backing up into basements. It's strongly recommended to disconnect any downspouts and redirect that water to a safe surface outlet. You can often do a basic disconnection vourself or hire a professional for more complex situations. Make sure the discharge point is well away from the house and not causing problems for neighbours.
- If you disconnect a downspout from an old underground standpipe, cap or seal the pipe opening to prevent debris blocking your basement weepers and so it doesn't become a hole in your yard or a path for pests. Caps are available at hardware stores.

Maintain downspouts year-round:

 Periodically ensure extensions are still attached and not clogged with leaves or ice. A quick walk-around after big storms can catch a loose or blocked downspout before it causes a problem.



If you're a resident of Mississauga and are planning to install water-resistant materials or other flood prevention measures in your home, you may be eligible for a rebate.



Keep Water Away from Window Wells and Basement Doors

Windows and doors in the foundation of a home are openings to the interior of the house. The seals and drainage around these openings are critical to prevent water from seeping into your basement.

- Basement window wells are connected into your foundation drainage system.
 Most window wells have a vertical drainpipe at the base of the well (often
 buried under the gravel) that connects to the foundation weeping tiles.
 This drain helps to carry water away from the window.
- Basement doors that are located below ground level will have a drain to remove water that collects at the bottom of the stairs. Be sure that this drain is kept clear to keep water flowing away from your basement.

To reduce the chances of water seeping through basement windows:

Keep window wells clean:

 Remove leaves, dirt, and debris that collect in the well. If the drain at the bottom of the well is clogged with debris, water can fill the well and press against the window (and eventually leak through).



Add a plastic cover that opens from inside to keep rain out:

• Consider installing a clear window well cover that keeps rain and debris out of the well. Covers made of strong plastic or polycarbonate still let light in, but also lets you out, if needed. Ensure that the window well assembly is securely attached to your house wall with no gaps and extends 3-4 inches (76 to 100mm) above the ground. A raised, well-sealed window well edge will stop surface water from pouring into the well during heavy rain.

Check for cracks and openings around basement windows and doors to seal against water.

Swales, Ditches and Private Storm Drains -Keep them flowing

Take a walk around your property. Do you see any shallow, grassy channels or metal grates in the ground? These might be swales, ditches or private storm drains - all important parts of your rain drainage system.

- **Swales** are shallow channels (often between houses or beside driveways) that guide rainwater safely across your property.
- **Ditches** are usually next to roads in older neighbourhoods and help drain both the road and nearby yards.
- **Private storm drains** (metal grates in the yard or driveway) collect water from low spots. These are your responsibility, not the City's.



To keep everything working during rainstorms and prevent flooding on your property:

Don't block swales or ditches.

 Never fill them with soil, mulch, or yard waste. Don't block them with fences or sheds. Keep them grassy and open so water can flow freely.

Planning landscaping changes?

• If you want to move or change a swale, you must redirect water safely. One option is installing a French drain (a gravel-filled trench with a perforated pipe) along the same path. Always consult a drainage expert first for proper installation.

Clear your private storm drains:

- Check them after heavy storms or in the fall. Leaves and debris can clog the grate and cause local flooding.
- Often private storm drains service your and neighbouring lots so important they are free to drain.

If you have followed all of these steps and water is still draining very slowly from a private storm drain on your property, then your connecting storm drainage pipe might be clogged with dirt or roots. You may need to have it flushed out and best to call a licensed plumber/drain service for help.







IMPORTANT: Storm drains on private property are not maintained by the City, so if you don't keep yours clear, nobody else will.

Winter Drainage Tips

Ontario winters can cause drainage problems with blockages from snow, ice and freezing. Be **winter-wise** by using these simple tips to help protect your home.

Keep eavestroughs and downspouts flowing:

• If safe to do so, clear snow and ice from your roof edge and eavestroughs to prevent ice dams. Make sure downspouts continue to direct water away from your home, not onto driveways or sidewalks where it can freeze and become a slip hazard. After snowstorms, check that downspouts aren't blocked or frozen.

Bonus tip: Some roofs may benefit from adding heating cables, before winter, to keep this free of ice.

Smart snow piling:

 Don't pile snow against your house. Keep snow mounds at least 1 metre (3 feet) away from your foundation. Further away if space allows. Push snow toward low or well-drained areas like swales or the street never block drainage paths.

Clear drains and wells during thaws:

 Mid-winter melts or rain can send water rushing. Clear snow and ice from private storm drains and basement window wells so meltwater can drain safely.











Use Salt and De-icers carefully:

 Shovel first, then use only a small amount of salt or de-icer. Too much of it can harm the environment.
Sweep up leftovers to protect your plants, pets and waterways. Try sand or eco-friendly options when possible.

Report Blocked Street Drains:

 Call 311 to report blocked catch basins on roads that you cannot safely clear yourself, or if you see roadway flooding.

Seasonal Tip: Before winter, disconnect and empty rain barrels and check that downspouts have extensions to direct roof water at least 1 metre (3 feet) away from your foundation. During winter, whenever, keep an eye out for blocked or frozen drains so you can act before a thaw or rain to prevent flooding.

If you have questions or require further information on making your home rain-ready, please call (311).

