



**Preparing for Spring Storms
Gutter Downspout Drainage System
Tips for Protecting Home Foundations
By
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A proper gutter downspout drainage system helps drain water away from homes and protect foundations from excess water issues. Homeowners can follow these tips to see if they need additional drainage and what are the best options.

Homeowners see it every year: spring storms, flash floods and rapid downpours that transform homeowners' yards into massive puddles. Days later feet still sink into muddy lawns. That standing water can wreck havoc on foundations, with expanding soils pushing against homes causing foundations to crack. Gutter downspout drainage systems can help by moving that standing water away from homes.

While gutters and downspouts are not necessary for all homes, they are exceptional drainage options for moving standing water away from foundations.



Gutters & Downspouts - to do or not to do?

Answer “yes” to any of the following questions, then a gutter and downspout drainage system is needed:

- Is water draining from the roof eroding the soil around the foundation? This can lead to foundation problems.
- An hour after the rain stops, is there still standing water accumulated around the house? This can lead to foundation problems.
- Does water draining from the roof curl back onto the house? This can lead to leaks into the house, house paint issues as well as mold and mildew issues.
- If there is a basement, is there water leaking in?

For new downspouts or existing ones, follow these tips to for best results.

Determine how much guttering is needed.

Get the facts: Check the Weather Bureau tables for rain fall inches per hour intensity. Calculate the roof area - length (peak to eave) multiplied by the width.



Take Some Notes: Make special note of places where valleys are created by two meeting roof areas.

Do the Math: Divide the roof area by the rain fall intensity. The result is how much the gutter has to drain.

Talk to an Expert: Gutter experts or local hardware stores can help with recommending gutters that can handle that amount of water. Increase the number of downspouts attached to the gutter to increase the gutter’s capacity.

Help it Flow: Help it Flow: Determine the number of downspouts needed. The general rule thumb is one for every 30 feet. Remember valleys will need more drainage. If there already is a gutter but it is having trouble handling runoff, consider adding another downspout.

The goal is to move the water away from the foundation.

Guide It: Make certain that the downspouts have curved sections called diverters at the end and the downspouts discharge onto splash blocks.



Beware: Do not connect gutters and downspouts to French drains. French drains are for draining away subsurface, not surface water. During a downpour, French drains can become overloaded if roof runoff is funneled down to them. This can then cause the water to be pushed back to the house.

Already have gutters and downspouts? Here are a few tips to keep them flowing.

Let it flow: Spring cleaning applies to gutters too. Check gutters and downspouts for debris. Remove leaves, branches and debris.



Cover Up: Place mesh over gutter to prevent future debris from accumulating.

Give it a Wiggle: Check that all the downspout and gutter pieces are still firmly attached to each other and anchored to the house. Fix where needed.

Check for Leaks: While flushing debris out of the gutters and downspouts, watch for any leaks between sections. Reattach or caulk any areas that water is noticeable flowing through.

Visit <http://www.foundationrepairs.com> for information on Advanced Foundation Repair's services, home owner tips and DIY white papers or watch the [Tips on Gutter Downspout Drainage Systems](#) for a review on tips and tricks.

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