



## Water damage - reduce your risk

You can help prevent future leaks and water intrusion by regularly inspecting the following elements in and around your home to make sure they remain in good condition.

### ***Plumbing and Appliances:***

- Inspect plumbing supply lines and drain systems annually:
  - Look for condensation around the pipes or an obvious leak and corrosion.
  - Watch for stains on walls or ceilings or a musty smell.
  - Pay attention to your water bill. A significant increase could indicate a leak.
  - Call a plumber at the first signs of rust-colored water, backed-up toilets or sinks and cracked or warped flooring.
  - Insulate pipes in attics, basements and exposed exterior pipes to avoid freezing.
  - During periods of freezing weather, open cabinet doors to expose pipes to warm air.
  - Disconnect garden hoses when freeze warnings are issued.
- Ensure proper refrigerator/icemaker operation:
  - Proper installation of the icemaker supply line hose is important to avoiding water damage.
  - Tightly connect the hose to the valve. Avoid over-tightening.
  - Inspect the hose every six months. Ensure the valve connection is secure and check for kinks.  
If kinks are present, replace the hose.
  - Leave a 3- to 4-inch space between the back of the refrigerator and the wall to prevent the hose from crimping.
  - Locate the water shut-off valve.
    - Inspect the valve every six months to make sure the water supply will shut off.
    - Replace the valve if needed.
- Prevent washing machine leaks:
  - Turn supply valves off when not in use.
  - Consider installing a lever-type valve that is easy to operate between uses.
  - Do not operate the washing machine while the home is unoccupied.
  - Leave a 3- to 4-inch gap between the back of the washing machine and the wall to avoid kinking the hose near the valve connection.
  - Inspect the water supply line hoses every six months.



- Ensure that the connection to the valve is secure, but avoid over-tightening.
- Hand-tighten first. Then tighten an additional 2/3 of a turn using water pump pliers.
- Check the hoses for cracks, kinks or blisters, which are most commonly found near the hose connection.
- Washing machine manufacturers recommend replacing washing machine hoses every five years.
- Consider installing reinforced braided stainless steel hoses.
- Protect water heaters:
  - Schedule a professional plumbing inspection of the anode rod at least once every two years.
  - Annual inspections are recommended once the warranty has expired.
  - The rod will eventually corrode and leave the tank vulnerable to damage, so replace when needed.
  - Flush the tank every six months to remove sediment.
  - Sediment will build up faster in areas with hard water.
- Avoid toilet leaks:
  - Inspect the flushing mechanism inside the toilet every six months.
  - The fill valve should shut off when the float reaches the proper water level.
  - Replace the flapper or fill valve assembly if you notice intermittent or constant tank refilling when the toilet is not in use.
  - Inspect the supply line every six months.
  - Ensure the connection to the valve is secure.
  - Operate the valve to make sure the water supply will shut off. Replace if needed.
  - Keep sinks operating:
    - Inspect plumbing beneath sinks every six months.
    - Ensure connections are secure and there is no evidence of corrosion on the pipes.
    - Look for kinks in copper or plastic pipes. These could lead to pinhole leaks over time.
    - Locate the water shut-off valve.
    - Inspect the valve every six months to make sure the water supply will shut off.
    - Replace the valve if needed.
- Shower stall safety:
  - Inspect tile and grout every six months, paying attention to loose or cracked tiles and cracked or crumbling grout lines. Repair as needed.
  - Test the shower pan annually:
    - Block the floor drain.
    - Fill the shower stall with approximately one inch of water



- Use a pencil to mark the water line.
- Leave the water standing in the shower pan for eight hours.
- If the water level decreases, contact a plumbing professional.
- Ensure proper sump pump operation:
  - Follow the manufacturer's recommendations for sump pump maintenance. These vary from running the sump pump every two to three months to a yearly cleaning before the rainy season.
  - To inspect the sump pump:
    - Open the lid and remove debris that may be blocking the water inlet screen.
    - Pour approximately five gallons of water into the pump and watch the float valve rise.
    - As the float valve rises, the pump should turn on and the water should discharge through the outlet pipe.
    - Go outside and inspect the outlet pipe. Water should be flowing from the pipe and away from the home.
    - If the sump pump fails to operate during this inspection, contact a plumbing professional.
  - Install a battery backup system.
    - Choose a system with a battery replacement warning.
    - Replace batteries every two to three years.

### **Home's Interior:**

- Windows and Doors:
  - Check for leaks around your windows and doors, especially near the corners.
  - Check for peeling paint, it can be a sign of water getting into the wood.
  - Inspect for discolorations in paint or caulking, swelling of the window or doorframe or surrounding materials.
- Termite-Damaged Material:
  - Check for termite damage in wood materials such as walls, beams, or floors.
  - Any wood exposed to the exterior can potentially lead to moisture intrusion or termite infestation.
- Basements:
  - Make sure that basement windows and doors have built-up barriers or flood shields.
- Humidity:
  - The relative humidity in your home should be between 30% and 50%.
  - Condensation on windows, wet stains on walls and ceilings, and musty smells are signs that you may have too much humidity in your home.



- Check areas where air does not easily circulate, such as behind curtains, under beds, and in closets for dampness and mildew.
- Be sure to use bathroom exhaust fans following warm showers or baths.
- When going on trips, turn the temperature up on the air conditioning, not off. The air conditioning system helps remove moisture from your home.
- If you are concerned about the humidity level in your home, consult with a mechanical contractor or air conditioning repair company to determine if your HVAC system is properly sized and in good working order.
- Air Conditioners:
  - Check drain pans to insure they drain freely, are adequately sloped toward the outlets and that no standing water is present.
  - Make sure drain lines are clean and clear of obstructions.
  - Drain pan overflows usually occur the first time the unit is turned on in the spring.
  - Clean prior to first use with compressed air or by pouring a water-bleach solution down the drain line until it flows freely.
- Drywall:
  - Since drywall is an extremely porous material and is difficult to dry out completely, damaged areas should be replaced if any signs of moisture are present.
  - One way to protect drywall from moisture intrusion in the event of a flood is to install it slightly above the floor and cover the gap with molding.

### **Home's Exterior:**

- Flashing: Flashing, which is typically a thin metal strip found around doors, windows, thresholds, chimneys, and roofs, is designed to prevent water intrusion in spaces where two different building surfaces meet.
- Vents: All vents, including clothes dryer, gable vents, attic vents, and exhaust vents, should have hoods, exhaust to the exterior, be in good working order, and have boots.
- Exterior Wood Sheathing and Siding:
  - Replace any wood siding and sheathing that appears to have water damage.
  - Inspect any wood sided walls to ensure there is at least 8" between any wood and the earth.
- Exterior Walls:
  - Exterior walls should be kept well painted and sealed.
  - Don't place compost or leaf piles against the outside walls.



- Landscape features should not include soil or other bedding material mounded up against walls.
- Landscaping:
  - Keep trees trimmed so that branches are at least 7 feet away from any exterior house surface. This will help prolong the life of your siding and roof and prevent insects from entering your home from the tree.
  - Vines should be kept off all exterior walls, because they can help open cracks in the siding, which allows moisture or insects to enter the house.
- Irrigation: Inspect and adjust the spray pattern of the irrigation heads to minimize the water sprayed directly onto the house to avoid excessive water near the foundation.

To prolong roof life, have a professional roof inspection annually. Request a detailed inspection report that includes the condition of the flashing, roof covering, parapets and drainage system.

- Repairs are needed if there are cracked or missing shingles or loose or missing granules; if flashing has deteriorated, particularly around chimneys and vents; or if pooling water is present.
- Leaks are particularly common around chimneys, plumbing vents and attic vents.
  - To trace the source of a ceiling leak, measure its location from the nearest outside wall and then locate this point in the attic using a measuring tape. Keep in mind that the water may run along the attic floor, rafters, or truss for quite a distance before coming through the ceiling.

### ***Act Quickly if Water Intrusion Occurs***

- If water is flowing into the home from burst piping or damaged appliances, shut off the water supply, typically found outside the house or at the meter. Immediately remove standing water and all moist materials, and consult with a licensed building professional who can determine the extent of the repairs necessary.
- Water damage left unattended can result in structural failure or, potentially, mold growth.
- Should your home become damaged by a catastrophic event such as fire, flood or storm, take appropriate actions to prevent further water damage once it is safe to do so. This may include:
  - Boarding up damaged windows
  - Covering a damaged roof with plastic sheeting
  - Removing wet, damaged rugs, carpet, or personal belongings
  - Fast action on your part will help minimize the time and expense for repairs, resulting in a faster recovery.