

Water Damage Prevention

Water damage is the second most common insurance claim. Here's how to prevent it.

Among HAI Group policyholders, water damage was the second most common property claim in 2023, totaling 243 claims and \$12.78 million in damages, and surpassed only by fire. Dangerous and costly, water intrusion can compromise your building's structure and your tenants' personal property, cause mold to grow, or worse, result in personal injuries due to collapsing ceilings or other issues. A sound maintenance program that includes regular inspections, timely repairs, and meticulous documentation can go a long way toward eliminating or reducing water intrusion. It can also help you defend your organization against claims of improper maintenance should they arise. Here's what you need to know about common systems and their preventative maintenance measures.



Attic-Mounted HVAC and Plumbing Equipment

Equipment drip pans

Drip pans are one of the most common tools for protecting against leaks. Pans are typically found beneath ceiling water heaters, air conditioning units, washing machines, and other equipment where dripping may occur. Improper installation of these pans can lead to issues, though problems more commonly arise when pairing drip pans with improperly maintained equipment.

SUGGESTED PREVENTATIVE MEASURES: Check drain pans periodically to prevent leaks and reduce costly insurance claims. If a pan has water, look for leaks at the pipe fittings and tighten them if necessary. Check drain and temperature-pressure relief valves and tighten or replace them as needed.

Drip lines

In air conditioning units, which remove humidity from the air and turn it into water, drip lines move the water from the drain pan, where it collects, down the drip line and away from the unit, usually discharging it outside. If the drip line becomes clogged, water can overflow and damage the unit or the building. Clogs, which form when water combines with dust, dirt, and other debris, typically result from poor maintenance, lack of an appropriate drain slope, or an environmental issue such as flooding. Over time, the buildup thickens and can obstruct the line.



SUGGESTED PREVENTATIVE MEASURES: Schedule regular inspections of your air conditioning units to identify potential leaks and moisture issues before they become problematic. Typical signs of a clogged drain include a non-working A/C unit, standing water, a foul smell, a full drain pan, water damage, or, in the case of newer units, a notification from the equipment's technology. If you need guidance on developing a maintenance program for your HVAC equipment, ask an HVAC professional or your equipment manufacturer for help.

Sprinkler Systems

Sprinkler systems help protect building occupants from fires. Unfortunately, they have become problematic for the housing industry. An inappropriate action from one bad actor can result in a water release that damages structures and property, leading to costly remediation and claims.

Above finished ceilings

Overhead fire suppression systems pose a significant risk of water intrusion when the void space, also called a chase, is compromised. If the damage causes your residents to be displaced, it could have catastrophic financial consequences for your organization.

Exposed and open ceilings

Overhead fire suppression systems reduce your exposure and risk. However, disruptions due to water intrusion can still cost millions of dollars.

SUGGESTED PREVENTATIVE MEASURES: Inspect sprinkler system components weekly, quarterly, and annually, including detailed checks during scheduled and unscheduled access to leased spaces. Our Sprinkler System resource provides more details on this inspection schedule. Maintain updated infrastructure schematics and share them with your staff.

On the tenant side, create strict lease terms and guidance prohibiting your residents from altering their space and performing unsanctioned repairs, and ensure your team enforces them. It's also a good idea

to provide ongoing education about the disruptive and destructive outcomes that result when water-carrying components are accidentally compromised. Stress that tenants should not hang clothes or décor on pipes and sprinkler heads since doing so could affect system stability and make water intrusion more likely.

Water Supply Lines

Copper lines

Copper is the standard pipe used in plumbing projects due to its integrity, durability, and high thermal rating, among other benefits. It tends to cost significantly more than other lines, though, and it cannot withstand acidic water, so a city water supply is essential.



Cast iron lines

While no longer used in new potable water supply applications, many older plumbing projects used iron pipes, and some are still in service. The impurities found in the potable water from iron-constructed lines have raised health concerns; iron oxidizes over time, causing adverse human health impacts over the long term, along with integrity issues.

PVC

Polyvinyl chloride (PVC) pipes allow for better temperature control compared to copper pipes due to their superior insulation qualities. PVC also offers better sound reduction. In housing projects, where cost is a concern, PVC pipes offer a good balance between cost savings and the physical qualities needed for plumbing projects.

SUGGESTED PREVENTATIVE MEASURES: Regularly inspect your plumbing system to reduce potential damage and claims, even if you do not suspect issues. When addressing leaks, don't just look at obvious sources—check all accessible plumbing lines and systems near the problem area. Do not cover discolored ceilings with a stain preventer, as a cover-up won't address the real issue and may lead to a claim of personal injury. Tackle repairs and manufacturer alerts/recalls immediately, and remember that small leaks or surface stains may mean a much bigger issue is lurking. Detailed inspections paired with good documentation will help you reduce plumbing system failures and problems manifesting into personal injury and/or property claims.

Roof Coverings and Downspouts

Between the roof and ceiling

Roof coverings and systems are vital to preserving a building's structural members and interior surface coverings. We want roofs to perform as intended, even in extraordinary weather events, since damaged and/or missing roof cover materials create opportunities for building deterioration.

Improperly installed or maintained roof-mounted equipment, such as solar panels, can damage your roofing system and lead to water intrusion. Even small amounts of water can threaten your building's integrity and interior surfaces, leading to hefty repair bills and claims.

Flat roof systems

Flat or built-up roof systems are only effective if you maintain designed sloping and drainage lines. Standing or ponding stormwater can compromise the rooftop covering, leading to piercing or puncturing. Typically, water will appear as stains on the interior's finished surfaces.

Gutters and downspouts

Gutter systems and downspouts support roof-water runoff, especially after heavy rains, when large amounts of stormwater would otherwise pool on the roof's surface. If something obstructs the drainage pathway, any other opening becomes an exit for the water.

SUGGESTED PREVENTATIVE MEASURES: Inspect roof coverings and interiors after major storms, before every new season, and twice annually in addition to seasonal- and storm-related inspections. Monitor the moisture content in the space between the roof and ceiling, and inspect the underside of the roof from inside the attic, if possible. (Don't rely on what you can see outside since small punctures are not apparent in an exterior-only inspection.) Remember, what is visible on the wall surface often contains a much larger hidden problem, such as seal seams, punctures, and cracks. Document your findings in a written report and include photographs. As with any asset, review and analyze your repair log since past repairs are often good indicators of the repairs/exposures on the horizon.

Bottom line

With advancements in maintenance practices, it is unacceptable for a housing organization to claim it was unaware of deteriorating conditions related to a particular housing asset. These claims affect the entire housing industry's insurance position specific to personal injuries in a housing unit. Reducing maintenance exposure leads to declining reported incidents and a win for the housing industry.

Interested in working with HAI Group to manage your agency's risk?

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