

Water Damage Prevention– Condominium and Apartment Buildings

Overview

Over the last decade, water damage to condominium and apartment buildings has increased dramatically. The main sources of water damage are:

1. **More severe weather events** caused by changing weather conditions. This increases the chance of a building exterior being breached, which can cause heavy damage to the interior.
2. **Human error** – such as a sink tap left running, or a door or window left open in the winter – continues to be the cause of most water damage.
3. **Aging and faulty plumbing** coupled with uninsulated piping follow closely behind.
4. **Water leaks**, as undetected silent leaks can be equally damaging as a catastrophic leak.

The source of water damage can be from either within a building, or from the exterior.

The most common areas are:

- Interior Building Water Intrusion Sources
- Exterior Building Water Intrusion Sources

Interior Building Water Intrusion Sources

- **Plumbing**
Pipes and drains, plumbing fixtures – (faucets, toilets, sinks, etc.), equipment- (water heaters, dishwashers, etc.), sump pumps and other miscellaneous equipment.

- **Mechanical Systems**
Heaters, air handlers, evaporators, condensate drains, chillers, pumps, tanks, boilers, piping, refrigerant lines, reservoirs.
- **Fire Sprinklers**
Piping, sprinkler heads, control boxes, stand pipes.
- **“Wet” areas**
Showers/baths, steam rooms, laundry, lavatory/ water closet, indoor swimming pools, areas of higher maintained relative humidity.
- **Exterior Building Water Intrusion Sources**
Rain/ground water, irrigation systems, hard and softscape drainage, septic systems, pools and spas, exterior plumbing (city water supply), adjacent properties – the path of exterior water sources, roofs and roof drains, decks and deck drains, windows and doors, cladding (wood siding/trim), stucco, brick, one coat systems and panelized systems, concrete foundations, basement walls (waterproofing), penetrations and junctions of above sources.

Water Damage Prevention Checklist

To help protect your building from water damage caused by interior sources, it's important to help minimize the risk by considering the following:

- Are main water valves properly labeled?
- Do your unit occupants know where and how to isolate (turn off) the water supply in their units?
- Have you told unit occupants to turn off water to their unit when absent for an extended period of time and to drain their faucets to clear the pipes?
- Are individual unit hot water tanks placed in a drain pan with provisions for the safety valve line to drain without causing damage?

- Do you replace individual unit hot water tanks every 10 years?
- Are large central hot water tanks provided with a working floor drain with sufficient dyking or flow to the drain?
- Are the heating boilers – central hot water/ steam – located in a boiler room with proper drainage?
- Are radiators and piping protected from freezing?
- Are your unit occupants advised to maintain a minimum temperature of 55F (13C) to keep pipes from freezing?
- Are appliances installed by professionals and connected to the water supply with braided hoses?
- Are all appliances, water heaters, hoses and other equipment kept up-to-date and in good working order?
- Are there at least two sump pumps in each sump (a main and a back-up) and are the pumps tested regularly?
- Do you have any water leak detection systems in place to help identify potential trouble spots?
- Do you tell unit occupants to report any signs of evident water damage?

In addition, as a building owner or manager, you should enact a planning guide detailing the correct procedures to be taken to minimize loss when a water damage incident occurs.

Summary

Water damage can result from natural occurrences, technological hazards or mechanical failures. However the vast majority of water-related problems are the result of accident or neglect.

As a condominium corporation or apartment building owner, you should have a comprehensive risk management process that includes a scheduled maintenance program for your building, its grounds, and the building mechanical services.