

# Multistorey Building Water Damage Exposures Property Risk Control

---

## The Risk



Loss history consistently shows that water damage claims make up the largest percentage of losses in multistorey buildings, whether they are offices, apartments or condominium high-rises—often not only by frequency, but also by total aggregate annual loss severity. Water damage losses can be attributed to many sources throughout a multistorey building. Domestic water supplies and plumbing account for most of the losses, followed by sprinkler leakage in buildings that have automatic fire protection systems.

The mechanisms by which water losses in multistorey buildings can happen are simple: a coupling or joint fails, or maybe a contractor leaves a drain valve open or does not tighten the bolts on a fitting. Leaking or ruptured water chiller lines for building air conditioning systems, sinks or toilet failures are all common sources of leaks. Inadequately installed piping and connections on domestic or fire sprinkler systems can also cause large water damage problems, especially in newer buildings. Water flows from the failed piping downhill through stairwells, elevator shafts, pipe or electrical penetrations in the floor, or gaps between the floor and exterior walls, affecting many floors below. Carpeting, gypsum board walls, furniture, ceiling tiles, files and more can all be damaged.

Having to replace water damaged walls and carpeting can cause a major disruption to building operations. Most single-storey buildings do not have the same exposure to water damage as high-rises as a result of the number of levels that water can spread to. In some isolated cases, water damage has been reported to have occurred on over 20 floors when a major pipe has broken.

Loss history clearly demonstrates that the largest water damage claims usually involve the inability to shut off the flow of water in short order once the water leak or flooding is discovered. There are just a few simple actions that building owners can take to prevent or reduce water leakage events that can lead to major building damage and disruption—not to mention poor loss history.

---

## The Solutions



**Have a water damage emergency response plan for the building.** Be sure that multiple employees from different departments operating on different shifts know about the building's response plan. Identify and provide a map of all water shut-off valve locations.

**Exercise (close and reopen) the valves on at least an annual basis, or perhaps twice a year as valve maintenance conditions warrant.** Knowing the location of a valve and what it controls is essential, but being unable to close it in an emergency situation because the valve is stuck open will still delay the shut-off.

**Ensure that building staff will have the authority to close the valve in question.** There have been situations in which security guards, upon having discovered the leak (or being notified) and determining which valve to close, could not close the valve due to being told they did not have the authority to do so. In some cases this has resulted in water being allowed to flow for more than an hour until authorized personnel arrived on the scene.

**Make sure that building staff knows where *all* of the water control valves are.** That includes the largest and smallest valves for sinks, toilets, hot water tanks, storage tanks, divisional valves, incoming water supply valves on the street or property, and sprinkler control valves for every floor, including main valves for incoming water supplies. Compile a list of these valves and clearly describe where they are located and what they control.

**Maintain proper heating in all areas of the building to prevent pipes from freezing and bursting.** Leakage tends to occur when a frozen pipe has thawed and water begins to flow again. If a heating or power failure lasted long enough for pipes to freeze, pipe damage will be noticeable when heating is restored, so be sure to inspect the pipes at that time.

**Properly train employees to protect the building from water damage.** In general, it is fine to shut down a leaking system, but employees must confirm that they can shut off a sprinkler system during a non-fire situation.

**Have equipment readily available as well as a pre-negotiated pricing contract with a 24-hour claims emergency responder.**

Equipment should include drying fans, mops, pails, wet/dry vacuums and more. Plug the leaking pipe—the entire system will continue to drain even when the valve is closed at the building's incoming main water line.

**Pre-qualify contractors and sub-contractors, and inspect their work.** Be sure that all contractors working on projects are insured, licensed and well qualified for their work assignments. Inspect and verify work upon its completion to ensure that shortcuts have not been taken and that specified materials and approved installation methods have been used.

**Mitigate damage when leaks occur:**

- Turn off power immediately. Do not energize wet equipment.
- Track down and shut off the cause of leakage, and cover up equipment if leaking continues from above.
- Begin removing the liquid. Remove as many wet items (anything that holds moisture) as possible.
- Begin cleanup and drying procedures immediately.
- Apply proper preservatives to equipment (note: material should not promote corrosion, conduct electricity or create a fire hazard).

## Summary

Every building will be different and will therefore require a unique valve list. It will take some initial legwork to put it together, including instructions on what to do in a water leak situation. However, this type of risk control program is still very inexpensive to put together and can dramatically reduce the size of water losses. For a common source of property losses, risk control doesn't get any simpler than this.

# Risk Control Your Destiny

GJG 2019

© 2019 Royal & Sun Alliance Insurance Company of Canada. All rights reserved. RSA, RSA & Design and related words and logos are trademarks and the property of RSA Insurance Group plc, licensed for use by Royal & Sun Alliance Insurance Company of Canada. RSA is a trade name of Royal & Sun Alliance Insurance Company of Canada. The information in this brochure is intended for promotional purposes only. It contains some information about coverages and services offered by RSA, but does not list all the conditions and exclusions which apply to described coverages and services. The actual wording of the policy and the local law govern all situations.