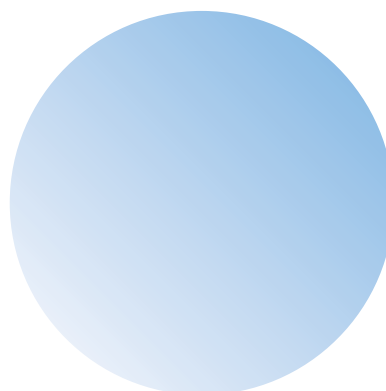


A cure for water damage in offices and habitational facilities

Risk Services: Understanding risk across your business







Focused on helping our customers

At Zurich, we are focused on helping customers reduce and mitigate losses and get back to business quickly. Beyond the direct physical damage, water damage claims can harm your insurance program such as premium and deductibles and adversely affect your reputation. This is particularly true in an industry setting with offices and habitational settings, where a loss can impact not only revenue, but more importantly people's jobs and affect their quality of life.

The concept is simple. It is like looking under the hood of your car. When you look at hoses, pipes, tanks and other conduits in advance of their failure, they can be repaired or replaced before failure at an inconvenient time.

The most effective water damage prevention program involves using engineering controls such as excess flow shutoffs and liquid sensors; administrative controls such as education of staff on reporting small leaks; emergency procedures and having equipment on hand to mitigate the effects of a spill.

That's why we developed this program for our Real Estate customers.

- Zurich's **'A cure for water damage in real estate'** is designed to put some of the control over potentially paralyzing losses in the hands of
 - risk managers
 - safety managers
 - other key real estate professionals
- This program kit includes important claims and loss control information, as well as tips and checklists to help prepare for a common and potentially devastating type of loss in your industry.

Work with your Zurich risk services professional to determine the most effective way to use the tools included here for your facilities. Following the program's steps and recommendations will help reduce the chances of water damage. You will also have a comprehensive plan prepared specifically for your facility that you can put into action to help reduce potential losses and help keep your facility running safely and efficiently.

The problem

The leading cause of property losses in offices, apartments and other real estate facilities is from liquid damage. A review of Zurich claims data shows there is nearly a 50 percent chance that the next property claim will be water-related and if it is, it will cost, on average, three times as much as a claim that does not involve water damage. The high dollar amounts result from payment for cleaning and drying out the building. Tenant or occupiable spaces may need to remain vacant until dried out and rehabilitated.

Reducing these losses and taking quick and effective action when water infiltration occurs can help you reduce the number and size of losses. Reducing the likelihood of such incidents also helps minimize the disruption to operations. Water damage originates from a number of sources including:

- Domestic water lines and systems
- Drains and drain lines
- Sewage systems
- Cooling and heating piping and radiators
- Sprinkler piping
- Surface water
- Leaky roof

Piping and other systems in older facilities are more prone to failure. Greater maintenance and testing is needed to assure the integrity of the pipe, fittings and equipment. Some areas of the country have public or private water supplies containing certain minerals that increase the corrosion rate of water. Proper water treatment, system maintenance and testing of the integrity of systems must be practiced in such areas.

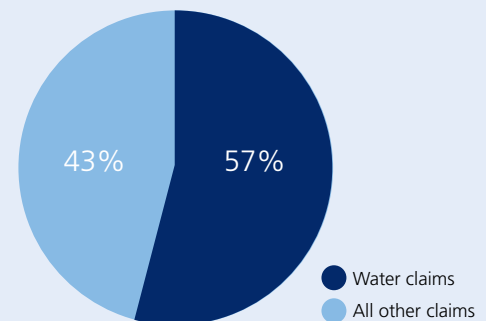
Pipe breaks often occur during earthquakes. Facilities should be evaluated for earthquake bracing and retrofitted as needed. Real Estate facilities in earthquake-prone areas should be prepared for leaks and breaks. When an earthquake and the resulting leaks occur, immediate and proper action is vital to helping reduce further damage and assuring a faster return to normal services.

In multi-tenanted buildings, care should be taken to control the installation of domestic hot water tanks. Inspection and maintenance of these units should be tracked even though it is the responsibility of the tenant in many cases. Ideally, the tanks remain in the care and control of the building owner. The installation site for these tanks relative to the tenants adjacent to the installation site is important as well.

Curbing around the tank to direct accidental flow, drains in close proximity and shutoffs nearby should be considered. When leakage does occur, immediate and proper action is vital to preventing further damage and assuring a faster return to normal services.

Real Estate claims by number

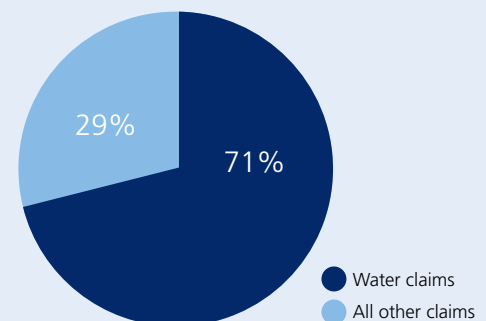
Water damage claim frequency



Data provided by Zurich

Real Estate claims by loss dollars

Water damage claim dollars



Data provided by Zurich

Loss examples

- A major leak from a failure in a hot water tank relief valve damaged nine floors of an office building as the leak ran through an entire weekend. The tank had been installed without the owner's knowledge and risk transfer provisions between the owner and the tenant were not sufficient. A pipe corroded near a coupling. Prior evidence of staining indicated that a small leak was present for some time. A loss of \$600,000 occurred.
- A frozen pipe burst and water leaked down four floors. The pipe was located just inside an exterior wall. A tenant space had the heat shut off when it was vacated and the space was not inspected. An inspection may have noted the fact that a window was open in the space, which coupled with the shut off of the heat, led to the line freezing. The loss was over \$100,000.
- Water leaking from a water line abandoned during renovation, but still energized, leaked for an unknown extended period of time. The water pressure eventually broke through the plaster and damaged four floors of a building including several tenanted units. It is estimated that the water column rose as high as four levels before breaking out. The loss was over \$500,000.
- To provide water for a piece of equipment, a section of rubber hose was used. This hose eventually failed and flooded several levels of an office building. The damage was over \$500,000.
- A commode overflowed in a tenant bathroom of an apartment building causing water damage to multiple units below. The damage was in excess of \$65,000 despite a quick response from the staff.

Reducing damage from water, sewage and other types of liquids

Complete the following checklists as indicated, which will help you identify some of the risk for liquid damage, check for preparedness and help in the response to leaks that can occur.



Risk reduction checklists

Mitigation and reduction of liquid damage in office and habitational buildings

A key measure in reducing losses from water damage is to perform a self-assessment. This will help you to determine what needs to be done. Included with this program is a self-assessment for mitigation and reduction of liquid damage. The checklist is in Word® format so it can be customized for your facility as you see fit.

[Download checklist here](#)

Critical equipment areas

Critical equipment areas, such as tenant equipment, main telephone room, or EDP centre, etc. can exacerbate even a small water leak. Click here for a checklist to help you assess these key areas to determine your level of exposure.

[Download checklist here](#)

Roof evaluation

Water entry into buildings from outside can also cause serious damage. As with interior exposures, much of this potential risk can be identified in advance. A checklist has been developed to help you evaluate your roof.

[Download checklist here](#)

Handling losses

When a loss does occur, dealing with it properly can help mitigate the damage. Zurich developed a checklist to assist you in dealing with losses both from a facility manager and a risk manager perspective.

[Download checklist here](#)

Vendor phone list for emergencies

Having a list of vendors who can assist in the event of a water damage loss can help you mitigate the loss. This program includes a list with key vendors to help you in the event of a water damage claim. One of the key numbers on the list is Zurich Claims who can provide assistance as well.

[Download checklist here](#)



New construction or renovation

- When valuable equipment is added or moved or a tenant moves in or changes equipment layout, the Checklist for Critical Equipment Areas should be used to reduce the chance of potential problems.
- Valuable equipment should be located on floors at or above grade. This includes telephone equipment rooms and computer centres.
- Designers should route all liquid carrying systems away from ceilings over critical and valuable equipment.
- Valves should be located where readily accessible. Consider adding valves if needed to help improve response time in isolating a leak.
- Valves should be marked to identify purpose and the zones or areas each controls.
- The floors above areas containing critical and valuable equipment should be waterproofed. Openings around floor penetrations made for conduit and ducts and other utilities should be well sealed.
- Pipe should be pressure tested per code, witnessed by owner's representative, with all leaks properly repaired and the pipe retested. Pipe should not be sealed off in walls until tested and signed off.
- Rooms containing fuel tanks, hot water tanks or any other liquid containing equipment and vessels should be provided with secondary containment and drains.
- Consider installing water sensors on the floor for areas containing valuable equipment, or under raised floors of computer rooms.
- Identify new construction/landscaping on adjacent properties, especially those being conducted at slightly higher elevations. Storm water runoff can be a major problem when natural water diverting means, such as grass, is temporarily removed during a project. Debris from construction projects and landscaping can also clog storm drains in the area during exceptionally heavy rain events.

- Have a procedure in place for plans to be reviewed by leasing or other departments responsible for tenants.
- If the project is a "green" project, appropriate engineering studies will be presented showing prevention and control of water entry.

Mitigating damage when leakage occurs

Quick list

- Turn off power immediately, if safe to do so. Do not energize wet equipment!
- Track down and shut off the cause of leakage.
- Cover up equipment if leaking occurs from above.
- Begin removing the liquid.
- Remove, as much as possible, all wet items (anything that holds moisture).
- Begin clean-up and drying procedures immediately.
- Apply proper preservatives to equipment (note: material should not promote corrosion, conduct electricity or create a fire hazard).
- Call the Zurich Claims Reporting Department at 866-345-3454.
- Call professional cleaners and restorers immediately.

Fire/water cleanup

Name _____

Phone _____

Equipment restoration

Name _____

Phone _____

Building

Note: The following actions can help your staff begin the clean up process. Professional cleaners have the equipment necessary to quickly remove large volumes of water and properly clean and treat buildings and furnishings. Professional equipment restorers bring in the experience and resources to effectively clean and repair electronic equipment and get it recertified if necessary.

- Remove wet items such as carpeting, padding and ceiling tile, anything that holds moisture to an exterior location, or cut off dock area.
- Use all available and rentable water vacuum equipment to eliminate water on floors as soon as possible. Also use squeegees and mops.
- Set up any available dehumidifiers (if outside temperature is greater than 60° F).
- Open any doors and windows to help reduce humidity (if weather is appropriate).
- Use fans to help circulate the air and assist drying.
- Open drawers and closet doors to enhance drying.
- Blot hard surface furniture dry. Place non-staining blocks or aluminum foil under furniture legs.
- Lift draperies off carpet and suspend.
- Move photos, paintings, and art objects to a safe, dry location.
- Remove damp books from shelves and spread them in a stable and dry environment.
- Leave the heat on if damage occurs during a cool season. Utilize air conditioning if it occurs during a warm season.

Equipment

- Turn off power immediately, if safe to do so. Do not energize wet equipment!
- Do not re-energize equipment until authorized by qualified restoration personnel or manufacturer's technical representative.
- Open cabinet doors/side panels/covers/chassis drawers; drain all water.
- Remove equipment to a cool, dry area after wiping down and removing as much moisture and contaminants as possible.
- Set up fans to move ambient air through equipment.
- Blow water out with clean compressed air (or preferably liquid nitrogen) and/or hair dryers or a PowerCat.
- Wipe down and dry metal surfaces as soon as possible.
- Follow up with professional restoration services.

Zurich Claims Reporting
Department at 866-345-3454



Spill response cart and pipe repair supplies

A spill kit or cart and emergency pipe repair supplies should be available for quick accessibility and use anywhere in the building. The following list contains some of the suggestions for a spill response kit. The maintenance and/or engineering departments should be involved in selecting the contents and locations of the kits. Plastic sheets to cover electronic equipment should be readily available in the applicable areas for use by operators.

Note: The materials may be needed in several areas if the premises is large or involves multiple buildings. Quick accessibility is the goal.

- Plastic sheets or nylon tarps to throw over and protect equipment, furnishings and documents (should be immediately available in every valuable equipment area).
- Contractor strength plastic or trash bags to dispose of wet material.
- Wet vacuums or other water removal equipment (commercial grade with effective GFIs, squeegees, mops, buckets).
- Portable pump(s) and hose.
- Rain gear, Tyvek or other type disposable suits.
- Water displacing solvents for applying to electrical.
- Towels for wiping up.
- Absorbent socks, to contain and absorb spills (make sure compatible for what you are absorbing).
- Pipe clamps to place around and stop a leak (pipe repair kit).
- Diagrams of piping systems with valve locations highlighted.
- Dehumidifiers (or ready rental source).
- Boots.
- Portable dikes for diverting surface water away from below grade doorways and possible points of water entry. This would be necessary during unusually heavy rains, and especially if the facility has a history of water accumulating near certain doorways, loading docks, parking ramps, etc.

Phone numbers

Emergency phone numbers should be readily available to management and the personnel responding to or overseeing the incident. Examples of phone numbers that should be available include the professional clean-up company, professional equipment restoration company(s), Zurich Claims Reporting Department (866-345-3454), servicing companies for the critical and valuable equipment (especially the technical representatives) and sources for renting additional wet vacuums and dehumidifiers.

Preferred provider list

Zurich's Claims department offers a list of preferred providers. It includes professional cleaning and restoration companies and consultants. They were selected because of their experience and training. The list is available by contacting the Zurich Claims Reporting Department.



For other risk
management needs, please visit
www.zurichcanada.com/riskservices
or call
800-387-5454.





Zurich

400 University Avenue
Toronto, Ontario M5G 1S7 Canada
416-586-3000 www.zurichcanada.com

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