



# MIND your business



Institute for Catastrophic  
Loss Reduction

Building resilient communities

ICLR Commercial Bulletin

ISSUE 12 • MAY 2023



## Protect your business from floods

Follow these recommendations to reduce the likelihood of flood damage to your business



## 1 Know your flood zone

Look up your property on a local flood map by searching online or by contacting your local Conservation Authority (Southern Ontario), watershed or basin council, or local government. Note: Flooding caused by heavy rainfall can occur outside of regulatory flood areas on flood maps.

## 2 Learn your Base Flood Elevation (BFE)

Learn the base flood elevation (BFE) of your property and determine whether the elevation of your building's lowest floor is above or below the BFE. Your insurance broker, insurer or local government may help you find this information.

If below the BFE, you may consider elevating your structure to reduce the chances it will flood. Consult with certified, licensed and insured experts, such as engineers, to help you decide the best course of action.

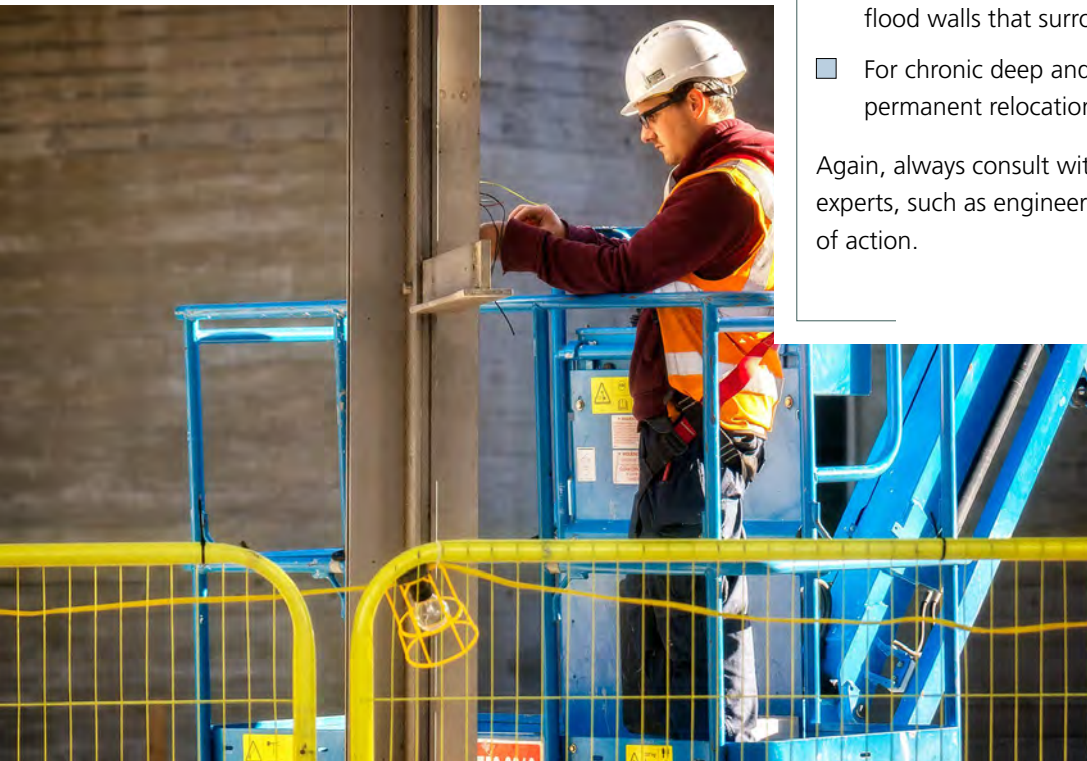
## 3

## Employ dry floodproofing techniques

If your building is in or near a flood-prone area, consider utilizing dry floodproofing techniques to make your building watertight and prevent flood waters from entering:

- Keep a supply of flood protection materials/products on hand to help divert water away from the building such as water-absorbent barriers or sandbags, or plastic sheeting/tarps for relatively shallow flooding;
- Consider installing watertight shields over all doors and windows at least one metre (three feet) above the BFE. The type of barrier used will depend on the size and type of opening;
- For temporary protection of large sections of a building such as large commercial doors or entranceways that may be exposed to deeper flood waters, water-filled barriers can be interconnected and stacked to divert water away from openings;
- Consider installing moveable flood gates, permanent swing flood doors or submarine doors (the latter two options provide permanent flood protection for deeper water) if feasible;
- For repetitive deep and prolonged flooding, permanent flood walls that surround the property may be considered;
- For chronic deep and prolonged flooding, consider permanent relocation of the business.

Again, always consult with certified, licensed and insured experts, such as engineers, to help you decide the best course of action.





4

## Ensure you have flood insurance

Ensure that your commercial property policy includes coverage for sewer backup and overland flood. Discuss insurance options with your insurance provider, whether broker, agent or directly with the carrier.

5

## Landscape with native plants

Landscape with native plants and vegetation, which can help prevent soil erosion and allow flood waters to drain more efficiently.

6

## Raise electrical components

Consider hiring a licensed and insured electrician to raise electrical components (switches, sockets, circuit breakers, and wiring) at least 30 centimetres (12 inches) above the BFE for your area. This will help prevent damage to the electrical system and reduce the chance of fire from short circuits in flooded systems.

7

## Raise or floodproof HVAC

Consider raising or floodproofing heating, ventilation, and cooling (HVAC) equipment to prevent damage. Have a licensed and insured contractor move HVAC systems to an upper floor or build a floodproof wall around the equipment.

8

## Use flood-resistant materials

Use flood-resistant materials where possible, including floor coverings, wall coverings, and wall insulation. Most flood-resistant materials can withstand direct contact with water for at least 72 hours without being significantly damaged.



9

## Provide backup power

Backup electrical power can be critical for reducing recovery time. Plan in advance for backup power needs for vital equipment needed to resume operations. Consider power for mechanical equipment such as your air conditioning systems too, since they can reduce humidity and moisture levels, which will help dry materials and inhibit mold growth. Ensure backup power and related equipment is elevated and/or protected from flood waters.

10

## Find out how to disconnect utilities

Determine the location of disconnect valves and cut-off points (gas, water, electricity).

11

## Seal cracks

Use high-quality urethane-based caulk to seal cracks and utility pipe penetrations.

12

## Apply waterproof coating

Apply a waterproof coating or membrane to exterior and/or basement walls, particularly to where leaks have occurred.

## 13 Check downspouts

Ensure downspouts funnel water away from the building to prevent rainwater from accumulating near the building's perimeter.

## 14 Check slope

Make sure the slope of the land directs water away from the building.

## 15 Use a sump pump

Consider purchasing a sump pump and have the ability to connect it to a generator or battery backup. Consider installing a sump pump backup, which automatically begins pumping during power outages, when the main pump fails or when water flow exceeds the capacity of the main pump. Regularly test the backup power system, and make sure batteries are always fresh.

## 16 Install sewer backflow protection

Consider having a licensed and insured plumber install an interior or exterior sewer backflow valve to prevent sewage from sanitary sewer lines from backing up through drain pipes into the building.



17

## Anchor fuel tanks

Anchor fuel tanks, which can otherwise damage your building or be swept downstream, damaging other properties. When they break away, the contents may leak, creating fire, explosion and pollution risks that can adversely affect health and the environment.

## Inspect wells

Have a licensed and insured contractor inspect your well and suggest improvements to protect it from floodwater contamination.

18

## Move valuables

Do not store valuable equipment, documents, or inventory in any crawlspace or basement/lower level where flooding is possible.

19



Adapted from 'Protect your business from flood' by the Insurance Institute for Business & Home Safety (IBHS) with sincere thanks.

### Institute for Catastrophic Loss Reduction

#### Mission

To reduce the loss of life and property caused by severe weather and earthquakes through the identification and support of sustained actions that improve society's capacity to adapt to, anticipate, mitigate, withstand and recover from natural disasters.

30-34 Duncan Street  
Toronto, Ontario  
M5V 2C3  
T 416-364-8677  
[www.iclr.org](http://www.iclr.org)  
[www.PIEVC.ca](http://www.PIEVC.ca)

Western University  
Amit Chakma Building, Suite 4405  
1151 Richmond Street  
London, Ontario, Canada  
N6A 5B9  
T 519-661-3234  
F 519-661-4273  
[www.iclr.org](http://www.iclr.org)