## **COMMERCIAL SERIES**

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# **PROPER MAINTENANCE AND TIMELY REPAIRS:** How to Protect Your Business from Stor

We've all heard the expression, "take care of your body and your body will take care of you." As you should apply this wisdom to your commercial building and the premises around it. While is physical damage that can be caused by large storms, Mother Nature also is slowly and consiste down your building's defenses against future weather conditions. The specific weather conditio building is exposed to, coupled with your maintenance plan, play a large part in the strength a your building and your resulting bottom line.

Here are a few examples of severe weather conditions that can damage properties:

- Expansion and contraction due to seasonal temperature swings and daily temperature fluctuations can create leaks in sealants, gaskets, and some building materials.
- UV exposure from sun, as well as snow, rain, drought, hail and smog, can degrade roofs
- Salt sprays in coastal locations can corrode various metals; acid rain in northern locatio at some metals.
- Repeated windstorm exposure can cause fatigue on metal and wood components making them more prone to failure in the next big storm.

### **STAYING A STEP AHEAD OF DAMAGE**

The following guidance from the Insurance Institute for Business & Home Safety (IBHS) is aimed at helping you plan a site inspection and identify when to take corrective action.

It's important periodically to survey your building from top to bottom, and quickly inspect for damage following a severe storm. A thorough inspection should include roofs; roof and ground water drainage systems; walls, windows, and doors; building penetration seals such as vents, piping and conduit; and the perimeter grounds. Spring and early summer are great times to get outside to identify and fix problems, because the weather is mild and you can spot damage caused from previous storms prior to the next extreme season.

#### <u>ROOFS</u>

The roof is your building's first line of defense from natural hazards; it's also the most vulnerable component. Roofs are repeatedly exposed to weather and other elements that contribute to decay and deterioration. A regular program of inspection, maintenance, and roof repair is essential to prolong the useful life of your roof. For more information on how to recognize and address signs of a roof problem, please see "Protection from the Top: The Importance of Commercial Roof Cover Maintenance and Repair."



#### **ROOF DRAINAGE SYSTEMS**

Proper roof drainage is a key to maximizing the life of the roof cover and avoiding weather related problems. Different roof systems have different drainage apparatuses. For example, steep slope and low slope roofs often have perimeter edge drainage including gutters, while flat roofs with a parapet typically have internal drains and perimeter scuppers for secondary drainage. If these drainage systems are blocked, snow, ice and water can remain trapped on the roof and add loads that put your roof at greater risk.<sup>1</sup> To avoid this problem, keep all drains, scuppers, gutters and downspout inlets free of debris that may restrict proper flow. It is also important to keep the roof clear of debris, leaves and vegetation, all of which may retain water. Trim trees near the building and branches that hang over the roof.

#### **BUILDING JOINTS & CONNECTIONS**

As a general guideline, pay particular attention to any area where two different building components meet. Intersections of the roof to walls, rooftop air conditioner mounts and curbs, window and door frames, and pipes through walls all require some type of transition material that is typically more prone to wear out over time. Rubber gaskets, seals and caulks should be inspected for brittleness, cracks, chips and gaps, and replaced as needed.

#### **WALLS**

Inspect for and seal all minor wall cracks. Masonry walls may have settling cracks, which often look like steps along the grout line and are visible from the outside, even through stucco. Check wooden walls for rotting siding. If needed, remove rotting boards and apply a new coat of paint. Inspect Exterior Insulating Finishing Systems (EIFS) for cracks, chips, holes and other problems, and repair them as needed. Depending upon the type and extent of repair, a professional may be needed to complete the work.



Inspect your walls for cracks caused by water damage, as shown above.

#### WINDOWS AND DOORS

Windows and doors may provide an unintended pathway for water and wind to enter your building, if they are broken or breached during a storm. As part of your maintenance review, ensure that all doors and windows have proper seals. Water stains below a window sill on the inside of the building are a sign of leaks. Inspect the rubber gasket or glazing putty surrounding your windows for cracks and reseal when necessary, even if stains aren't obvious. Examine magnetic contacts that may be part of your building's security systems to monitor when the window is opened or closed, and make sure they are well sealed. For additional information on how to protect commercial windows from high winds, including what to look for if you are buying new windows, please see "Windows, Wind and Windborne Debris: How to Protect Your Business from Hurricanes."

Inspect the wooden threshold, where the door meets to floor. If there are signs of decay, replace the threshold and place new seals around the door.

#### **BUILDING PENETRATIONS**

Check and seal all roof and wall penetrations, including all water lines and electrical conduit. A single tube of caulk can likely seal all gaps between utility service lines that enter the walls.

#### **SURROUNDINGS**

Check downspout outlets to ensure that they are not blocked by debris or by the ground itself. It is best to have the surrounding terrain slope away from your building to prevent storm water runoff from accumulating around perimeter walls. Keep all exterior storm water drains free of debris. Drainage canals and culverts that are designed to shed water from the property should be checked and maintained for proper water flow.



Debris can clog exterior drains like the one shown shown above, and possibly result in water damage.

While most businesses focus attention on operations inside their building, it's important to get outside periodically to survey for damage and identify maintenance needs. Take advantage of long, sunny days to ensure the roof, walls, windows, and doors can provide the protections your business will need when storms inevitably come your way.

<sup>1</sup> For a more information on snow loads and ice dams, please see "Commercial Winter Weather Guidance."

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