Follow these basic preventive maintenance steps to prevent leaks and ensure roof drainage systems will work properly to protect your business from rain throughout the year.
1 **Inspect and clean the roof drainage system**

Inspect and clean the roof drainage system at least twice a year, ideally during the spring and fall. This includes all gutters, interior drains, and scuppers.

2 **Trim trees**

Keep trees trimmed and away from the roof to prevent branches from rubbing against the roof and leaves from accumulating and clogging the drainage system.

3 **Remove debris**

- Remove loose objects and accumulated debris – including anything left by contractors – from the roof that could end up in the drainage system.
- Also check under and around all roof-mounted equipment, satellite dishes, antennas, and solar panels for debris that could disrupt the drainage system’s water flow or cause ponding.

4 **Check gutters for granules**

For steep-sloped roofs with asphalt shingles and low-sloped roofs with modified bitumen or built-up roofs, remove roof cover granules and pea gravel from gutters as they can accumulate, alter the slope of the gutter, and impede the gravitational flow of water.

5 **Inspect roof drains**

Check for and repair cracks around roof drains.

6 **Re-check drainage systems**

- After severe weather, check all drainage systems for leaks and ensure they are properly secured and operating.
- When re-roofing, ensure that all drains, scuppers, and gutters are returned to their original operating conditions.

7 **Check for water**

Check for long-term standing water in gutters and correct any blockages that may be the cause. If there are no blockages but standing water still occurs, ensure the gutter is properly sloped to the downspout.
Check slope of roof cover system

For low-sloped roofs, ensure the slope of the roof cover system and the insulation boards divert water to internal drains when present or to the edge of the roof. Long-term standing water is an indication of improper slope.

Check AC drains

Ensure all roof-mounted air conditioning drain lines funnel water to a drain.

Check downspouts

Ensure downspouts funnel water away from the building and do not allow water to accumulate near the building’s perimeter.

Up-size gutters

When replacing gutters, consider larger-sized gutters which allow for greater flow.

Check wall air conditioners

If your property uses wall air conditioners:

- Ensure size of internal drain pipe is adequate and water is flowing freely.
- Ensure there is proper caulking and weather stripping around the unit.
- Ensure unit is installed with a \(\frac{1}{4}\)-inch bubble tilt toward outside.

Internal drain

If the AC unit has an internal drain, make sure pipe size is adequate and water is running and flowing freely in order to handle a high volume of water.

Caulking of AC unit sleeve

Look for any gaps, cracks, or other damage that indicates improper caulking around the edge of the sleeve to the exterior of the building. This increases vulnerability to water entry.

Orientation

Tilting AC unit sleeves slightly (2 degrees) towards the exterior wall can significantly reduce water entry.

Weather stripping

Proper weather stripping between the AC unit and sleeve can reduce water entry.
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.

Adapted from ‘Protect Your Business From Heavy Rain’ by the Insurance Institute for Business & Home Safety (IBHS) with sincere thanks.