

Builders Risk Loss Control & Prevention Series

WATER

A Publication of ACE USA Risk Control Services

Introduction

According to industry loss experience, one of the most frequent types of loss is damage due to water. The source of water is most often rain and piping in the building, but can also include flooding, and water damage as a result of extinguishing fires.

Drains & Piping

- A means to ensure the integrity of piping and closure of valves on piping should be in effect. This includes assuring that caps are in place and water valves are maintained in a closed position. This is best accomplished through scheduled inspection rounds.
- Basement drains should not be covered or obstructed by accumulated materials. This may result in excessive rise in water elevation as water finds its way to an operational drain. All basement floor drains should be maintained operational and free flowing. This is especially important when electrical equipment or other water susceptible materials and supplies are nearby. It may be helpful for drains to be periodically flushed to verify they are free running.
- Roof drains can be obstructed by roofing materials or building debris. This increases the potential for water to infiltrate the structure. Roof drains should be periodically monitored to confirm that they are free running.
- All drains should be connected to the underground collection system as soon as practical. Until this is completed, 1. Care should be taken with storage of materials/equipment below grade, and 2. All roof leaders should be opened below grade to permit free flow and prevent back-up of water into the piping of the structure.
- Storing materials in basement areas, even on pallets can result in water damage. In some instances, the wood pallets deteriorate due to the damp conditions and the weight of the contents. If materials must be stored in basement areas, the condition of such storage should be monitored regularly.
- Where permanent fixed fire hose stations are planned, they should be activated as soon as possible throughout the facility, ensuring controls are present to prevent unauthorized use. Sometimes, contractors use standpipes as a source of construction water. In such instances, shut down procedures at the end of the day should include ensuring that valves are closed.

PLEASE READ CAREFULLY The information contained herein is not intended as a substitute for advice from a safety expert or legal counsel you may retain for your own purposes. It is not intended to supplant any legal duty you may have to provide a safe premises, workplace, product or operation.

Rain

- Forecasts for severe weather should be monitored daily, and plans made to provide protection to susceptible materials prior to the start of rain.
- *Monitor and ensure that roofing contractors adequately secure their work at the end of each shift, and prior to severe weather. This includes sealing the leading edges of roof installations at the end of the work day.
- The parapet wall should be temporarily protected until the cap and flashing has been installed. Water entering incomplete or missing flashing and caps can make its way down through the building, damaging walls and ceilings, and collecting on floors.
- Scheduling of work should be sequenced to avoid incomplete window, door, skylight, or other building openings. Also, finish operations (e.g. sheetrock, trim) are enhanced by natural ventilation. There should be sufficient shut down procedures to ensure that windows opened during the day are closed at the end of each day.
- The proximity and extent of ground water elevation should be determined early in the construction process. The location of material storage should include considerations including elevation, natural collection points for water, and the relative location of bodies of water.
- Sump pump systems should be considered for sites where water accumulation due to elevation or proximity to bodies of water are a concern. Other options to controlling the problem of run-off water include the provision of swells or diking.
- Connections to permanent sewer and storm water systems should be completed prior to the start of building construction.

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