



Preparedness Committee
Security and Life Safety
Commercial Office Building Protective Measures

Topic:	Severe Weather Emergencies
Date:	Jan 2014; May 2018

Background A severe weather emergency is a situation where hazardous conditions such as high winds, lightning strikes, heavy hail, or flooding are occurring or have the potential to occur. While most severe weather emergencies are a result of thunderstorms, tornados, or hurricanes, dangerous weather conditions can also occur from winter-related storms. In addition to the immediate dangers from weather conditions, other potential hazards caused by weather emergencies could include flying debris or falling objects, slippery or unstable roads and sidewalks, downed or exposed power lines, or other damage to critical infrastructure.

Security departments must ensure that they have reliable methods of being informed of developing weather watches and warnings as well as being able to safely monitor the situation until the conditions have passed. Additionally, security officers remaining in potentially dangerous areas should be provided with personal protective equipment including hard hats and eye shields. Safety permitting, building Engineering departments should make sure that all exterior equipment and potentially loose objects are secured or removed, particularly rooftop items or construction materials.

Response Measures Upon notification of a severe weather situation, the following measures should be considered:

- Monitor dangerous weather conditions before, during and after the storm
- Ensure Engineering secures or removes all loose objects on or around the exterior of the building if safe to do so
- Communicate protective measure instructions throughout the building to all occupants and keep them informed and updated throughout the emergency situation, usually through public address (PA) system
- The City of Chicago and the Office of Emergency Management and Communications (OEMC) uses sirens to alert individuals outdoors to immediate threats
- Advise persons attempting to leave to remain in the building and take shelter

- Report damage, injuries, or other resulting emergency conditions to appropriate internal authorities and/or 911 as appropriate
- Alert all occupants when an “All Clear” has been determined

Best Practices / Considerations Once a severe weather situation has begun:

- If advance notification is given, or during declared Watch conditions, building management may want to notify tenants utilizing e-mails, texts, or other mass notification so that Emergency Evacuation Teams can be ready to respond as needed
- PA systems and emergency intercoms should be used to communicate safety instructions and keep occupants updated during and following severe weather conditions
- During dangerously high-wind conditions, building occupants should be directed to the inner core of the building and away from exterior windows, noting that:
 - Emergency stairwells are usually the safest location
 - Avoiding areas with glass is strongly recommended
 - Use of passenger elevators should not be allowed
- Passenger elevators may be recalled to the lobby to prevent occupants from using them
- Freight elevators may be controlled by Security and used for emergency purposes only
- Overhead dock doors may be closed and occupants advised not to leave the dock area
- Exterior cameras may be utilized to monitor outside conditions
- Generally, persons should be firmly advised and encouraged not to leave the building
- During severe weather, such as a tornado or strong thunderstorm, the primary risk to safety is from shattered glass or other airborne debris
- For occupants of mid- and high-rise office buildings, basic precautions should include:
 - Stay away from windows and other glass surfaces
 - Move quickly to the interior or core of the building
 - Know the location of emergency exits and safety equipment
 - Do **not** use elevators
 - Do **not** go to the lobby
 - Listen for instructions from the building’s PA system or via weather radio or Internet
 - Be prepared for extended power outages and have an alternate communications plan
 - Thunderstorms may be accompanied by tornadoes, strong winds, hail, and flash flooding
 - The National Weather Service defines several urgent Watches and Warnings as follows:
 - A **Tornado or Severe Thunderstorm Watch** means severe thunderstorms and tornadoes are possible in your area over the next few hours

- A **Tornado or Severe Thunderstorm Warning** means a tornado/thunderstorm has been sighted by a trained storm spotter, or intense rotation likely to produce a tornado has been detected by advanced radar
- A **Winter Storm Warning** is issued when a significant combination of hazardous winter weather is occurring or imminent
- A **High Wind Warning** is issued when the following conditions are expected: a) sustained winds of 40 mph or higher for one hour or more, or b) wind gusts of 58 mph or higher for any duration
- Be prepared and get to a place of safety immediately
- The City of Chicago has an early warning system to warn those outdoors of impending danger
 - The system is designed to warn people within affected areas in Chicago
 - When activated, the sirens emit a loud wailing noise that goes up and down in tone for three minutes
 - Individuals who hear the sirens while outdoors should seek immediate indoor shelter inside a sturdy building, away from windows and glass
- **All Clear:** Please tune into your local news agencies and listen for notification from City officials regarding the emergency.

For further information from the OEMC, go to www.AlertChicago.com For the National Weather Service, go to <https://www.weather.gov>

Conclusion / Follow Up Prior to issuing an “All Clear,” Security should be sure that all dangerous weather conditions have passed and are not in immediate danger of recurring. Additionally the building, including all common areas and tenant spaces, must be safe to occupy before returning to normal operating conditions.

At the conclusion of a severe weather emergency, the following actions should be taken:

- Conduct exterior patrols of the building to make sure glass or debris hasn’t fallen from any upper levels and that the immediate area is free from other potential hazards
- Conduct thorough building patrols to look for any damage
- Tenant Emergency Evacuation Teams should be instructed to check their spaces and report any damage or unsafe conditions to Security or Building Management
- Return building back to normal operations (security posts, elevators, etc.)
- Compile all information for a detailed Incident Report to include all damage reported
- Notify building ownership, insurance agencies, legal departments, media relations, etc.
- Conduct after-action-review with teams
- Report findings with building management, and update response plans as necessary

Note: The above measures are provided for informational purposes only and do not constitute any set standard, guideline, or code. They are offered as possible options to consider when developing response measures to issues in a commercial office building. When developing response measures, consider all variables, such as building size and design, staffing, time of day, etc. The purpose of these measures is to provide general information to those persons responsible for developing site-specific protective measures, to serve as practices to consider when drafting emergency operations plans, and do not constitute any set policy or procedure.