

Severe Convective Storm Checklist



SEVERE CONVECTIVE STORM SEASON peaks in March through June in the US and Southern Europe with Northern Europe typically a couple months later (May through September). However, significant losses are possible throughout the year any time atmospheric instability exists, and recently the storm activity has been starting earlier in the year, when temperatures begin rising.

Severe convective storm (SCS) refers to many hazards including: *thunderstorms, hail, heavy rainfall leading to stormwater, straight-line winds, and tornadoes*. Given the constant possibility of these perils, it is vital to always prepare your building before peak season and prior to imminent, forecasted storms. Weakened roof covers, obstructed roof drains, and below-grade building spaces are key vulnerabilities.

Pre-season Planning (3 Months prior to peak season)

- Review and update your Emergency Action Plan for the various hazards of SCS
- Inspect your roofs and make necessary repairs as soon as possible
 - Repair roof areas with bubbling, blistering, cracking, etc. and ensure roof ballast is level and has sufficient coverage
 - Also include flashing, gutters, and parapets; drains and catch basins; roof-mounted equipment securement and guarding; and lightning protection systems
- Document the condition of the roof following improvements for comparison later
- Where missing, strap or anchor rooftop equipment to the roof structure (not the roof covering)
- Inspect for the following:
 - Nearby trees that may need to be trimmed or removed
 - Inspect the integrity of building envelope seals around windows and doors from the exterior
 - Inspect for loose building components
- Inspect and test wind and stormwater flood protection equipment which may include: storm shutters, garage door braces, sandbags, flood barriers, waterproof covers, wind anchors/straps, generators, generator transfer switch, and dewatering/sump pumps
 - Note – there are many intuitive, temporary flood barriers as an alternative to sandbags
 - If backflow from drainage is a known issue please take precautions to also protect your facilities from water ingress from the drains
- Review and stock appropriate supplies
- Check with your Lockton team if you need assistance
- Discuss agreements with equipment and restoration vendors. Check on temporary or replacement equipment availability.
- Take pictures of facility and equipment and check to ensure list of assets is current
- Consider permanent protection of roof covers, outdoor and rooftop equipment, yard storage, and vehicles from hail impact
- Consider the installation of a lightning protection system (if not installed)
- Update business continuity planning for brief site interruptions such as a power outage and for catastrophic events such as a direct impact from a tornado

Forecasted Severe Weather Conditions (48-24 hours in advance)

- Continuously monitor the forecast of storm severity and type and consider what precautions are necessary
 - Is a tornado warning likely?
 - Will the storm include intense, sustained rainfall?
 - Is severe hail forecasted?
- Follow your Emergency Action Plan
- Repeat the roof inspection and make temporary repairs
 - Remove loose material such as screws, debris, etc. from the roof
 - Ensure all HVAC air filter panels and rooftop equipment are fully fastened
- Inspect, clear, and repair roof gutters, drains, flashing. Ensure the drains direct flow away from foundation
- Remove debris from around the facility including landscaping that could become airborne
- Test all backup equipment (generators, boilers, batteries, communications)
- Verify operation and stage dewatering equipment (pumps, wet vacs, buckets, squeegees, etc.)
- Provide employees equipment needed for remote work
- Backup servers and computers, and protect or relocate vital records
- Relocate equipment and stock to higher elevations above possible stormwater levels
- Ensure supplies for emergency response team and "ride thru" team (should your EAP designate such a team for this event)
 - Water, food, medical supplies, flashlights, walkie-talkies
- Fill fuel tanks for generators, fire pumps and vehicles
- Familiarize the emergency team with the location of utility lines and valves (water and gas)
 - May be necessary to shut off gas line to minimize fire hazard

Day of the storm and throughout storm

- Review the weather forecast and expected arrival time of the storm
- Take temporary measures such as:
 - Move vehicles and yard storage to sheltered locations
 - Move electronics and other sensitive contents away from windows
 - Cover sensitive, indoor equipment with a water-proof barrier
- For extreme severity storms –
 - Install shutters or plywood over windows and install door bracing
 - Deploy flood protection measures
 - Shutdown all equipment and consider disconnecting electrical feeds
- Monitor the skies for weather development
- "Ride Thru" team should take refuge and stay inside the building
 - Be aware of roof, piping, window, and structural damage
 - Rounds may be made to determine extent of damage if safe
- Monitor equipment that must operate
- If power fails, turn off electrical switches and close gas valves
- Avoid floodwaters and downed power lines

After the storm

- Secure the site
 - Lock doors, fences, and post guards
- Survey for damage
 - Be aware of live electrical wires, downed power lines, broken glass, sharp metal, leaking fuel gases and flammable liquids, damaged building supports, paved areas undermined by flood water that could collapse.
 - Assess the buildings externally before entering
 - Inspect the walls, windows, roof, doors, yard, and detached buildings
 - Check foundations and outdoor piping for damage
 - Check electrical panels and breakers. Do not operate if damaged. Call an electrician.
 - Take photos and/or video of the damage
- Document the size of hail if still present following the storm
- Inspect the fire protection systems and have repaired if necessary
 - Post fire watch in areas where protection is impaired
 - Inform fire department and insurance carriers of any impairments
- Ban smoking
- Ensure proper hot work protocols for repair work
- Check electrical equipment before connecting or restarting
- Update management on condition of building and equipment
- Establish repair priorities focusing on building envelope and fire protection
- Implement pre-established restoration plan. Contact designated continuity, repair, and cleaning vendors
- Clean roof drains and remove roof debris
- Begin salvage process
 - Cover broken windows and torn roof coverings
 - Separate damaged goods
 - Remove water
- Document damages and repairs. Coordinate claims activity with Lockton's Claims Team
 - Keep receipts and invoices for recovery
- Often a separate accounting code for recovery costs works best