

Restoring your Property: How to be prepared for Rapid Response to Flood Damage

After a flood, the restoration process can be long and complex, particularly for large commercial properties. Failure to apply sound drying and remediation practices can potentially result in health problems for building occupants and can even impact the value of the building.... sometimes quite significantly if that important tenant refuses to move back in due to worries about mold.

Most emergency water extraction companies that are called to respond to a flood, *do not* properly dry out wall cavities; shafts; ceiling plenums and other hidden areas. These areas are exactly the areas where mold prefers to grow and cause damage to buildings and health problems to occupants. To protect yourself and your building ... you may wish to hire an Environmental Consultant to oversee the dry out and subsequently to provide assurance that the building continues to be mold free.

Certified Mold Free, Corp. is pleased to provide commercial real estate owners and their tenants with **Restoring your Property: How to be prepared for Rapid Response to Flood Damage**. This guide outlines initial steps and best practices to follow when initiating dry out.

The information included is not intended to be a comprehensive remediation plan. Rather its goal is to provide you with the right questions to ask and so make sure that building dry out is properly performed without long term degradation to your building.

48 hour rule.

According to the EPA, mold will start to grow within 48 hours. It is critical that water be removed and the water damaged areas dried out (including hidden areas) as quickly as possible before mold has a chance to grow.

Your insurance company mostly likely cannot react to the problem immediately by sending out an adjuster, especially if the flooding was because of a natural disaster that affected many nearby locations. It is in your best interest and the best interest of the insurance company (as it reduces the cost of claims) to have the dry out done as soon as possible ... again before mold has a chance to grow.

It is important for you to prepare *in advance* and put together a plan for a rapid response team to quickly respond to the problem *before* the event occurs.

Be prepared! You should develop relationships with environmental professionals who are capable of diagnosing and testing mold-related concerns, and prescribing remediation. By developing these relationships now, even if you currently have no issues, you will be able to call on them quickly when the need arises.

Rapid Response Team. Management should, in advance, organize contractors / vendors in order to establish a first response system able to handle any water leak/intrusion-related situation. The objective is to develop a group of contractors / vendors that can quickly respond to any situation from small leak to major

flood. These team members should be educated by your building's Environmental or IAQ consultant on what is needed to correct the source of a broad range of water leaks and dry out along with removal of any damaged materials. Examples of the types of contractors/ vendors who should be informed, trained and ready to respond are:

- Water restoration/extraction companies (familiar in extraction, dehumidification, etc.)
- Plumbing contractors
- Drywall contractors
- Mirror contractors
- Roofing companies
- Handymen or Punch-Out contractors
- Window installation contractors
- Flooring contractors
- Foundation contractor
- Insulation contractor
- Infrared Thermographer
- Industrial Hygienist

With properly timed responses of personnel and equipment, one should be able to correct and dry out most initial leaks detected within the recommended 48-hour window.

Most of your vendors will understand the critical nature of water intrusion and the potential for mold to develop quickly, therefore many have already partnered with water extraction and remediation companies to meet your Rapid Response Team requirements.

The Rapid Response Team will be required to do several things to start:

- First, conduct the initial evaluation and start the documentation process.
- Second, secure the contaminated area.
- Third, determine the correct cause of the problem and which type of contractor or service provider/vendor needs to be called and then establish the proper steps to resolving the issue.

Call in the team.

Immediately following the flood, call in the team members that can effectively work to return the property to its normal, operational state as quickly as possible. The clean-up process in large, commercial properties can be complex and involve many players. In addition, the mere size of the building dictates that help be brought in to manage the problem.

- **Assign a point person.** Assign a project lead that can manage the project from a high level. This person's role is to coordinate all parties, help select/ and or oversee vendors, understand the legal and PR implications of the process,

and communicate well with others.

- **Follow standard protocols.** In the Appendix are two useful forms to help organize and properly document the investigation stage as well as the remediation stage. Documentation is critical from both the liability as well as the insurance claim perspectives.
- **Call in the drying firm.** There is actually a science surrounding the drying process that includes mapping the water damage, measuring and monitoring the drying rate and confirming the final moisture levels of the dry material. This indicates that there is more to drying out a building than meets the eye. It is also helpful to select a firm that is familiar with the documentation process necessary to support insurance claims. But remember most water extraction companies do not properly dry out wall cavities and other hidden spaces where mold can grow. Please refer to our application note on "Drying Out Wall Cavities" for further information on this important issue.
- **Expert firm to oversee process.** There are firms with extensive experience in managing remediation processes. These firms can direct you through the process, assist with vendor selection, lend expertise and comprehensive oversight services to ensure that every decision is made in the best interest of the property owner and is being done with the long term health of occupants and the safety of the building structure in mind.

Responsibility of the insured.

Upon discovering water damage, the primary objective is to work to keep a bad situation from getting worse.

The idea is to salvage property that can be saved. A key responsibility of the insured is to limit further damage. Preventing water damage from fostering mold growth can significantly limit additional damage.

Below are some guidelines for ensuring that every effort is applied toward salvaging assets and maximizing impact.

- **Assess the cause of the damage.** Determine which areas have been damaged by rising water and which have been damaged by rain. Areas damaged by rising water cannot typically be salvaged. Rising water is classified as "black water" (in the same category with sewage) and any porous materials that have been in contact with rising water generally will need to be thrown out unless they can be disinfected assuring there will be no mold growth. In areas wet with rainwater, materials may be dried out, if possible, and cleaned.
- **Target minimally affected areas first.** By starting with the areas that are least damaged by water, workers have the best chance of salvaging items by drying them before mold begins to grow.
- **Remove ruined materials.** Below the line indicating rising water damage, workers can begin discarding water damaged porous items that cannot be salvaged. Be sure to document the condition of the materials to support your insurance claim. By quickly discarding water damaged porous items you reduce

the amount of water that must be removed from the building and therefore you help to speed the drying process. In particular, *remove water damaged carpet, padding and insulation materials as soon as possible to facilitate building dry out.*

- **Designate a temporary trash area.** Designate an area outside the building to serve as a temporary disposal area where contaminated materials can be placed while they await delivery to a landfill.

Communication and Organization

Communication and organization are critical in the midst of clean-up activities. We recommend that the standard forms in Appendix A and B be followed as an aid in organization and documentation.

- **Document the damage.** In order to ensure that your insurance company gets all the information it needs to settle your claim, it is important to document the damage. Collect and store information in the form of pictures, videos, samples, logs, notes, and infrared moisture maps before beginning any major clean up efforts, or at least as those efforts proceed.
- **Contact legal counsel.** Due to the complex nature of the issues and players surrounding a water intrusion event in a commercial building, litigation can be an issue now or in the future. Contact legal counsel early.
- **Consider the long term effects.** Improper remediation can result in extensive mold contamination. This can pose potentially serious health threats to occupants and damage the structural integrity of the building. Drying with excessive heat can "bake" materials, causing them to release high levels of VOCs, polluting the indoor environment. In short, decisions made and actions taken during the remediation process can impact indoor environmental quality and ultimately occupant health and comfort down the road. For this reason, it is critical to conduct activities in a way that will have minimal impact on the indoor environment. It is helpful to select an experienced firm to help oversee this process.

If you require assistance at any point in the process, contact us!

Certified Mold Free is an indoor air quality consulting firm that provides solutions to create healthy indoor environments and avoid potentially dangerous indoor pollution. We are a leader in providing due diligence for resolution of sick building syndrome, occupant complaints, and mold contamination and corrective strategies.

Appendix

Useful Forms

Water Intrusion Event Control Log

Homeowner Information

Homeowner Name: _____

Address: _____

Phone Number/ E-mail: _____

Homeowner Notification

Date: _____ Time: _____

Phase I – Loss Assessment and Evaluation

⇨ Site inspection (visual)

Date: _____ Time: _____

A visual inspection is the most important initial step in identifying a water intrusion and/or mold contamination problem.

Inspection equipment:

- Digital Camera
- Moisture meter
- Infrared Thermographic Camera
- Laser Particle Counter

⇒ **Observable conditions – data collection:**

Discoloration or mold on baseboards, wallboards

Additional surfaces: _____

- Water penetrations(s) – (root cause) source/cause

Specify: _____

- Musty/moldy odor

Specify location(s): _____

- Cracks in shower tile, lack of caulking, loose toilet, leaks under sink

Specify: _____

- Plumbing issues

Specify: _____

- HVAC filters: Clean: _____ Dirty: _____

- Thermostat setting at time of inspection: _____

- Thermostat type: Manual: _____ Programmable: _____

- Overall system performance evaluation

Specify: _____

- Carpet and padding

Other flooring - specify: _____

- Contaminated area(s)

Total square footage: _____

- Structural issues

Specify: _____

-
- Condition of crawlspace

Specify: _____

- Electrical issues

Specify: _____

- Relocation of homeowner/family/pets required

Specify: _____

Children: _____ Age: _____

Type of pets: _____

⇒ **Categorization of water**

- Clean water (water supply line)
- Gray water (dishwasher, washing machine, toilet with urine)
- Black water (sea water, flooding, river water, toilet backflows from beyond trap and sewage)

⇒ **Causes**

- Building design
- System malfunction
- Construction defect
- Disaster
- Occupants/lack of maintenance

Phase II – Initial Steps Taken

Date: _____

- Notify responsible Business Partner
- Notify Regional Heightened Awareness Director
- Confined contaminated area(s)
- Identified water source

Shut down water supply

First response team consist of:

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Phase III – Testing

Date: _____

In most cases, if visual mold growth is present, sampling and testing for mold is unnecessary. Decisions about appropriate remediation strategies can be made on the basis of the visual inspection

- ⇨ Less than 10 square feet of contamination
 - No testing required
- ⇨ 10 to 30 square feet of contamination
 - Air sampling only if required Date: _____
- ⇨ 30 square feet or more of contamination
 - As required by commercial remediation company
 - Air sampling Date: _____
 - Bulk or surface sampling Date: _____

Phase IV – Drying Date: _____

- Bulk removal – remove all wet drywall as necessary to inspect all hidden areas
- Contaminated material properly removed (sealed plastic bags)
- Carpets and padding (dry carpets; **however**, if wet longer than 72 hours, discard!)
- Evaporation methods used (wet vac, material removal, fans, vacuum with HEPA filter)
Specify: _____
- Dehumidification methods used
Specify: _____

Phase V – Monitoring Date: _____

Meter reading (laser particle count @ 5 & 10 micron, moisture meter, IR Camera, RH/Temp, Air Samples Taken). Check if photos taken.

Specify type and area(s): _____

	Room	Particle Count	RH/Tem	IR Camera	Air Samples Taken
Photos <input type="checkbox"/>	_____	_____	_____	_____	_____
Photos <input type="checkbox"/>	_____	_____	_____	_____	_____
Photos <input type="checkbox"/>	_____	_____	_____	_____	_____
Photos <input type="checkbox"/>	_____	_____	_____	_____	_____
Photos <input type="checkbox"/>	_____	_____	_____	_____	_____

Additional Monitoring:

Date: _____

	Room	Particle Count	RH/Tem	IR Camera	Air Samples Taken
Photos <input type="checkbox"/>	_____	_____	_____	_____	_____
Photos <input type="checkbox"/>	_____	_____	_____	_____	_____
Photos <input type="checkbox"/>	_____	_____	_____	_____	_____
Photos <input type="checkbox"/>	_____	_____	_____	_____	_____
Photos <input type="checkbox"/>	_____	_____	_____	_____	_____

Follow-up monitoring at rebuild stage:

Date: _____

	Room	Particle Count	RH/Tem	IR Camera	Air Samples Taken
Photos <input type="checkbox"/>	_____	_____	_____	_____	_____
Photos <input type="checkbox"/>	_____	_____	_____	_____	_____
Photos <input type="checkbox"/>	_____	_____	_____	_____	_____
Photos <input type="checkbox"/>	_____	_____	_____	_____	_____
Photos <input type="checkbox"/>	_____	_____	_____	_____	_____

Phase VI – Final Inspection

Date: _____

Visual

Specify: _____

Third party

Specify: _____

Remediation contractor

Specify: _____

Homeowner

Builder Representative:

Date:

Attorney-Client Privileged Document

Confidential

Telephone Interview Log

Homeowner Information:

Name: _____

Address: _____

Phone Number: _____

Alternate Phone Number: _____

E-mail Address: _____

Initial Notification: Date: _____ Time: _____

Interview Questions

1. Type of water intrusion (plumbing, windows, roofing, etc.):

2. When did you first notice the problem?

3. Can you see where the water is coming from?

If yes, where: _____

4. Rooms affected: _____

5. Type of damage (discoloration, musty/moldy odors, flooring, cabinets, etc.):

6. Category of water (circle one): Clear Gray Black

7. Approximate size of damage (10 square feet or less, 10 - 30 square feet, >30 square feet):

8. Family size:

Children: _____ Ages: _____ Pets: _____

9. Any special circumstances (health conditions, etc.):

10. Additional notes: _____

Name of Interviewer: To whom was this information delivered?

Y IAQ Representative

Name: _____ Date/Time: _____

Y Builder V.P.

Name: _____ Date/Time: _____

Y Other Builder Division Representative

Name: _____ Date/Time: _____