



# WATER RESTORATION

## Water Extraction

### INTRODUCTION

Water extraction is one of the most important steps in a water damage restoration project. You must remove the water both quickly and as thoroughly in order to mitigate the loss. Proper extraction can remove as much as 97% of the water present in carpet and cushion. But, without proper extraction procedures the drying process will be slowed. In this Technical Guide we will discuss the principles of water extraction and some of the most efficient tools needed to perform the work.

### PROCEDURE

- **STEP 1**  
Complete a work authorization form. Have the insured sign and date it.
- **STEP 2**  
Identify possible health and safety concerns. Electrical shock and slip & fall hazards are common on water damage restoration job sites. Post warnings where needed to alert anyone who may enter the area of these potential hazards. Provide all technicians with proper PPE (Personal Protective Equipment) as required to perform the job safely.
- **STEP 3**  
Locate and eliminate the source of the incoming water. This would include finding any leaks, shutting off water to broken pipes, pumping or diverting any standing water away from structure, etc.
- **STEP 4**  
Smaller items should be moved to an unaffected area, if practical. Large or heavy items should be lifted or blocked to prevent further damage from moisture. Standard drying and restoration principles will be needed to restore these contents.
- **STEP 5**  
Extract water from the carpet and pad using the **Hydro-X Xtreme Xtractor** or the **Water Claw**. These tools are able to remove up to 97% of the water from carpet and padding

without disengaging the carpet. Testing has proved these tools superior regardless of the category and class of the flood or the style of carpet and pad. The Water Claw comes in a variety of sizes to match your extraction equipment. Your Bridgepoint or Interlink Supply distributor will be glad to demonstrate either of these pieces of equipment. Remove water from hard surfaces using squeegees or other appropriate tools.

- **STEP 6**  
In some situations, you may choose to apply an EPA registered disinfectant to the wet surfaces. Normally getting the structure clean and dry is preferred over introducing a chemical agent. However on category 2 or 3 floods a biocide often offers some benefits. Apply sufficient product to contact all affected areas. Always follow label directions. Do not apply biocides in an occupied area.
- **STEP 7**  
Thoroughly inspect anywhere water may have traveled. This includes under walls, into a crawl space or basement, stairwells, under cabinets or built-in appliances even HVAC systems and ductwork. Make sure to include drying these areas.
- **STEP 8**  
Some operators choose to disengage the carpet and remove the pad. Many restorers dry the structure along with the carpet using tes (Thermal Energy System) or top down drying using air movers and dehumidifiers. Refer to Technical Guides on those subjects.
- **STEP 9**  
Continue procedures needed to return the structure to its pre-loss condition. (These steps are not covered in this technical guide.) Handle the job in accordance with S500 standard.

### Chemicals Needed



**Quat Amo**  
**Type:** Quaternary Disinfectant  
**Highlights:** An EPA registered disinfectant that kills a wide range of micro-organisms including bacteria and mold.

### Alternative Chemicals



**Microban**  
**Type:** Anti-Microbial-Disinfectant, Bactericide  
**Highlights:** Kills germs, bacteria, fungi, mold and mildew. Can be used on almost any surface.

### Accessories Needed



**Water Claw Extraction Tools**  
**Type:** Extraction Tools  
**Highlights:** Extract water and chemical from carpet, backing and pad.



**Carpet Wand**  
**Type:** Wand  
**Highlights:** Provides surface extraction of water from carpet fibers.



**TCBS 3-Gallon Pump Sprayer**  
**Description:** Pump Sprayer  
**Purpose:** Applies chemicals quickly, evenly and efficiently.



**Gekko Hard-Surface Tool**  
**Type:** Hard surface cleaning tool  
**Highlights:** Extracts flood water from hard surfaces. Cleans hard surfaces, tile and grout.



**Moisture Probe**  
**Description:** Moisture Detector  
**Purpose:** Locate migration of water in carpet backing and pad.



**EZ Moves**  
**Description:** Furniture Slides  
**Purpose:** One person can move heavy furniture without damaging furniture or carpet.

## Equipment Needed



### Truckmount

**Description:** Truck-mounted Extraction Machine

**Purpose:** Provides heat, pressure and vacuum for the cleaner.



### Hydro-X Xtreme Xtractor & Vacuum Pac

**Description:** Extraction Tool

**Purpose:** Removes excess water from carpet, backing and pad, while still in place.



### Olympus Portable

**Description:** Portable Extractor

**Purpose:** Portable unit that extracts water and chemical from carpet and upholstery.

**HELPFUL HINTS** – With both conventional and top-down drying systems, it is important to reduce indoor humidity to 30% - 40% as quickly as possible. In most cases, a central air conditioning system works well to provide added dehumidification in the early stages of a job. Keep in mind that most refrigerant dehumidifiers work best between 68° and 90°. Don't cool the air below 68°. In cold weather it may be beneficial to provide additional heat. Direct heaters that burn fossil fuels will add water to the structure. Indirect heat should be used.



**NOTE** – It is imperative that anyone attempting structural drying be well trained in its procedures, and have complete understanding of the science of psychrometry and the tools it takes to perform it. If you lack this training, it may be advisable to turn the job over to a company that is better suited to handle it.



## Quick Guide



## PROCEDURE

- 1 Complete authorization form.
- 2 Identify health and safety issues.
- 3 Eliminate source of incoming water.
- 4 Remove small items and block larger items.
- 5 Extract water using the Hydro-X Xtreme Xtractor or the Water Claw.
- 6 Apply a biocide if appropriate
7. Thoroughly inspect all areas that may be affected
8. Proceed in accordance with S500 Water Damage Restoration standards to complete the job.

## PRODUCTS NEEDED

- Quat Amo
- Microban
- Hydro-X Xtreme Xtractor
- Water Claw
- Carpet Wand
- Moisture Detector
- EZ Moves
- TCBS Pump Sprayer
- Gekko Hard Surface Tool w/Squeegee
- Olympus Portable
- Xtreme Xtractor Vac Pak

## Other Resources

IICRC S500 Water Damage Restoration Standards  
IICRC Water Damage Restoration Technician Class  
Chuck Dewall's Structural Drying School  
Bridgepoint Website [www.bridgepoint.com](http://www.bridgepoint.com)  
Your local Bridgepoint or Interlink Supply distributor.