



# WATER RESTORATION

## Category 2 (Grey Water)

### INTRODUCTION

Category 2, or gray water floods, originate from sources that contain a significant level of contamination and have the potential to cause illness to humans. These sources may be from overflows from dishwashers, washing machines, toilets or seepage from aquariums or waterbeds. It is important to remove the water as quickly as possible. Gray water that remains untreated several days may escalate to a category 3 (black water) flood. Black water floods are discussed in another Technical Guide.

### PROCEDURE

- **STEP 1**  
Complete a work authorization form. Have the insured sign and date it.
- **STEP 2**  
Identify health and safety hazards of the job. When a structure has been flooded with Category 2 water, a threat to human health exists. Look for electrical problems or gas leaks. Post warning signs where needed to notify anyone who may enter the structure of potential hazards. Provide all technicians with proper PPE (personal protective equipment) that will be needed to perform the job safely. Determine if evacuation of sensitive persons is needed. Infants, elderly and those with immune deficiencies are at a higher risk.
- **STEP 3**  
Significant evaluation of all structure materials and contents is a must. Determine if items can be restored or replaced. Porosity, cost of restoration vs. replacement, effect on occupants, and state and local regulations all need to be considered.
- **STEP 4**  
Locate and eliminate the source of the water or contain the intrusion to the extent possible. Determine the category of the loss. If it is Category 3, follow the procedure. If it is Category 2, follow procedures outlined to mitigate

the loss under those conditions. (Discussed in another Technical Guide)

- **STEP 5**  
Furniture and contents in the affected area should be moved to an unaffected area to prevent further contamination.
- **STEP 6**  
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. Pad that was saturated with category 2 water should be removed and discarded. Remove water from hard surfaces, duct work, etc. using pumps, squeegees or other appropriate tools
- **STEP 7**  
If there has been a delay in responding to the water intrusion or there is an inability to promptly remove moisture, the application of a biocide to wet surfaces may help prevent some microbial growth. Getting the structure clean and dry is preferred over introducing a chemical agent. Pay particular attention to the carpet, backing, sub floor, baseboards tackless strip and wall bottom plates. Follow label directions.
- **STEP 8**  
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 9**  
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 10**  
Install professional drying equipment including air movers and dehumidifiers to begin evaporating the water that could not be extracted. Use the structures air condition system and ceiling fans if there is no hazard (electrical shock or biological contamination). Be familiar with the principles of drying, Psychrometry and the S500 industry standards to determine the best drying procedures.

- **STEP 11**  
Monitor the drying process closely using appropriate tools such as a **Thermohygrometer** and various **Moisture Meters**.
- **STEP 12**  
Inform client of any unsalvageable items. After getting approval, dispose of these safely and properly. This will include carpet pad and stuffed materials such as upholstered furniture, pillows, mattresses and stuffed animals that were saturated by contaminated water. Include other highly absorbent materials such as ceiling tiles, drywall, books and papers.
- **STEP 13**  
Inspect structural materials including paneling, plaster and wood to determine if they can be restored or if they need to be replaced. Some demolition maybe necessary to expose pockets of contamination.
- **STEP 14**  
Reinstalled carpet along with new cushion if required.
- **STEP 15**  
Perform post flood cleaning of the carpet in all the affected areas and surrounding areas that may have been soiled by foot traffic while performing the restoration work. Instructions for carpet cleaning are found in other Bridgepoint technical Guides. Follow the carpet cleaning procedures outlined in other **Bridgepoint Technical Guides** covering residential or commercial carpet cleaning.

### Chemicals Needed



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



**Zone Perfect**  
**Type:** *Ultra-Concentrated prespray*  
**Highlights:** *Blend of surfactants and grease cutters suitable for most carpets.*

**End Zone**

**Type:** Rinse agent / Neutralizer

**Highlights:** Provides cleaning power along with thorough rinsing.

**Maxim Protector**

**Type:** Premium Fluorochemical protector

**Highlights:** Maximum protection plus acid-dye resisters

**Alternative Chemicals****Microban**

**Type:** Anti-Microbial-Disinfectant, Bactericide

**Highlights:** Kills germs, bacteria, fungi, mold and mildew. Can be used on most surfaces.

**Water Claw Extraction Tools**

**Type:** Extraction Tools

**Highlights:** Extract water from carpet, backing and pad.

**Carpet Wand**

**Type:** Wand

**Highlights:** For surface extraction of water from carpet fibers.

**Moisture Probe**

**Description:** Moisture Detector

**Purpose:** Locate migration of water in carpet backing and pad.

**SurveyMaster, Hygrometer and Moisture Meters**

**Description:** Moisture Detector Tools

**Purpose:** Aids in psychrometry to monitor moisture content, relative humidity and dew point.

**TCBS 3-Gallon Pump Sprayer**

**Description:** Pump Sprayer

**Purpose:** Applies chemicals quickly, evenly and efficiently.

**EZ Moves**

**Description:** Furniture Slides

**Purpose:** One person can move heavy furniture without damaging furniture or carpet.

**Gekko Hard-Surface Tool With Squeegee Attachment**

**Type:** Hard surface cleaning tool

**Highlights:** Extracts flood water from hard surfaces. Cleans hard surfaces, tile and grout.

**Personal Protective Equipment**

**Goggles, Gloves, Respirators and Warning Signs will be needed for each technician.**

**Carpet Repair and Reinstallation Tools and Power Stretcher**

**Type:** Carpet Reinstallation Tools

**Highlights:** Used for reinstallation of carpet.

**Equipment Needed****Truckmount**

**Description:** Hot water extraction machine

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

**Hydro-X Xtreme Xtractor and Vacuum Pac**

**Description:** Carpet and Pad Water Extraction Tool

**Purpose:** Removes the greatest amount of water from carpet and pad for fastest drying.

**Phoenix Axial Air Mover**

**Description:** Air Mover for Structural Drying

**Purpose:** Focuses high velocity air movement along wall and floor for rapid drying.

**Phoenix 200 LGR Dehumidifier**

**Description:** Dehumidifier

**Purpose:** Removes moisture from the air to speed up drying and prevent secondary damage.

**HELPFUL HINTS & CAUTIONS** — It is imperative that anyone

who performs water restoration attends an IICRC Water Damage Class. You will learn the proper fundamentals of water restoration, and be trained to identify the different categories of water sources. This is extremely important to protect yourself, your technicians and your business as well as your customers from the hazards of improper drying techniques. You take on a certain liability when you accept a water loss job, and it is important that you perform all aspects of the restoration properly.

**CAUTIONS-**

In addition to the basic classes, additional classes are available that cover advanced structural drying (ASD), mold remediation and related topics. This training will better equip you to meet your customer's needs as well as provide additional services for the home and property owner.

**Other Resources**

**IICRC S500 Water Damage Restoration Standards**  
**IICRC Water Damage Restoration Technician Class**  
**Bridgepoint Website [www.bridgepoint.com](http://www.bridgepoint.com)**  
**Your local Bridgepoint or Interlink Supply distributor**