

REMEDIATION AFTER FLOODING

October 13, 2005

FREQUENTLY ASKED QUESTIONS

Q1 Should ceramic tile adhered to concrete slabs be removed after flooding to avoid potential mold problems?

Non-porous materials such as glass, masonry, ceramic tile, porcelain will not support mold growth or sustain significant damage from water. Restoration procedures for ceramic floor tile depend on the products used, and quality of original installation. Flooding will cause water to be absorbed into porous material, such as grout and adhesive, and even into some concrete and tile. Standing water should be removed as soon as possible to begin the drying process. Also, remove interior wallboard 12 inches above the maximum flood water height; remove any water-soaked insulation to provide drying of the floor perimeter and wall cavities.

Inspect for evidence of deterioration of grout and adhesive. If there is extensive deterioration of the adhesive, as evidenced by loose tiles, then it is likely that tile will need to be removed. If not, continue to thoroughly clean and dry out the home and flooring. Clean and disinfect surface of tile with 1/2-cup of household chlorine bleach in a gallon of water, or a generic Zephiran Chloride. Continuously use air conditioning plus a dehumidifier (heat in winter) to reduce humidity and dry out the flooring to prevent growth of mold. If home is not air-conditioned, open windows and use fans to circulate air. In humid climates, dehumidifiers may be necessary.

References:

- Tile Council of North America (TCNA) www.tileusa.com (864-646-8453), Professional Ceramic Tile & Stone Consulting, TCA TEAM, LLC, info@tcateam.com
- *Protect Your Home From Water Damage* (2002 Brochure), Institute for Business & Home Safety (IBHS), www.ibhs.org, (866-657-4247)

- *Cleaning Flood-damaged Homes* (Pub 2267, 09-05 Rev), Louisiana State University Agricultural Center, www.lsuagcenter.com
- *Water Damage Recovery Guide* (IBHS Website), www.ibhs.org/publications/print.asp?id=508
- Association of Specialists in Cleaning & Restoration <http://www.ascr.org/news/hurricane090605.cfm>
- Institute for Inspection, Cleaning, & Restoration: www.iicrc.org
- National Institute for Restoration: www.nir-inc.com/nir/home/index.shtml
- *Storm Recovery - Guide for Homeowners* (Pub 2668A-F 9/14/05 Rev), Louisiana State University Agricultural Center, www.lsuagcenter.com
- *Repairing Your Flooded Home* (ARC 4476, FEMA L-198, Aug 1992), American Red Cross: http://www.redcross.org/services/disaster/0,1082,0_570_,00.html, and FEMA www.fema.gov
- *Disaster Recovery Guidelines* (RC Insights, Doc 259, 2005), St Paul Travelers Companies, www.stpaultravelers.com/riskcontrol

Q2 Do electrical switches, connections, receptacles, and wiring need to be replaced after flooding?

In the majority of cases, wiring will not need to be removed and replaced. However, before making that determination, a thorough inspection by a qualified electrician may be required.

First, stand on a dry spot and use a dry wood stick to disconnect main electrical switch and all circuits at the panel box. If there is no main switch, turn off all circuit breakers or remove all fuses.

Unplug all appliances that have been flooded. As soon as possible, remove all standing water from the structure, and dry out interior as much as possible. Also, remove interior wallboard 12 inches above the maximum flood water height, remove any water-soaked insulation, and dry out wall cavities to preclude any water in the walls from continuing to soak into wiring and receptacles.

Then, have a qualified electrician do the following:

- Remove cover plates from all electrical outlets, receptacles, wall switches, and breaker or fuse boxes to inspect wiring and terminal connections.
- If the main box got wet, clean and check it.

- Check switches and outlets and their boxes for mud and dirt, which can cause a short or overheating.
- If there is a lot of mud, dirt, or salt water corrosion in switches or outlets, replace them. Look for broken electrical fixtures or exposed wiring.
- Replace all dimmers and electronic implements such as ground-fault circuit interrupters (GFCI), and arc-fault circuit interrupters (AFCI). Immersed smoke detectors and thermostats should also be replaced.
- Check condition of wire that goes to each switch and outlet. Replace any fabric-covered wire. Any aluminum wiring that has been flooded by salt water should be replaced.
- Have a qualified service technician inspect water heaters, furnaces, heat pumps, air handlers, water softeners, and all appliances and HVAC equipment. In many cases all such items should be replaced.
- Flush out boxes with clean water or air pressure; dry out and spray with cleaner/lubricant.
- Check continuity and grounding of all circuits, and check for electrical shorts. Check to ensure that all terminal connections are tight.
- Turn on each circuit, replace each fuse, one at a time, and test each circuit. Make sure all ground-fault circuit interrupters (GFCI) and arc fault circuit interrupters (AFCI) are functioning.
- Test the operation of all smoke detectors and of the heating ventilation and air conditioning (HVAC) systems.

References:

- *Cleaning Flood-damaged Homes* (Pub 2267, 09-05 Rev), Louisiana State University Agricultural Center, www.lsuagcenter.com
- *Water Damage Recovery Guide* (IBHS Website), www.ibhs.org/publications/print.asp?id=508
- *Storm Recovery - Guide for Homeowners* (Pub 2668A-F 9/14/05 Rev), Louisiana State University Agricultural Center, www.lsuagcenter.com
- *Repairing Your Flooded Home* (ARC 4476, FEMA L-198, Aug 1992), American Red Cross: http://www.redcross.org/services/disaster/0,1082,0_570_,00.html, and FEMA www.fema.gov

For more information visit www.toolbase.org