



Click in the top of this page for online articles about building interiors & drywall, insulation, ventilation: diagnosis, installation, and repair at InspectAPedia.com

GYPSUM ASSOCIATION

810 FIRST STREET NE, #510 WASHINGTON, DC 20002

ASSESSING WATER DAMAGE TO GYPSUM BOARD (GA-231-06)

In general, gypsum board should not be exposed to elevated levels of moisture for extended periods. Examples of elevated levels of moisture include, but are not limited to, exposure to rain, condensation, water leakage, and standing water. Some board exposed to these conditions may not need to be replaced, depending upon the source of the moisture and the condition of the gypsum board being considered for replacement. However, **IF THERE IS EVER A DOUBT ABOUT WHETHER TO KEEP OR REPLACE GYPSUM BOARD THAT HAS BEEN EXPOSED TO MOISTURE -- REPLACE IT .**

ASSESSING THE NEED FOR REPLACEMENT OF GYPSUM BOARD

When gypsum board is exposed to elevated levels of moisture, an assessment of the potential damage to the gypsum board must be made as to whether board exposed to these conditions must be replaced. Gypsum board may experience limited intermittent exposure to moisture from a variety of sources, such as improper storage, construction or design defects, water leaks, and janitorial activities. Gypsum board exposed to water should be replaced unless all of the following conditions are met.

- The source of the water or moisture is identified and eliminated.
- The water or moisture to which the gypsum board was exposed was uncontaminated¹.
- The gypsum board can be dried thoroughly before mold growth begins (typically 24 to 48 hours depending on environmental conditions).
- The gypsum board is structurally sound and there is no evidence of rusting fasteners or physical damage that would diminish the physical properties of the gypsum board or system.

CAUTION: When replacing gypsum board in a fire resistance or sound rated system, care must be taken to ensure that all repairs are consistent with the specific fire or sound rated design initially constructed (gypsum board type, fasteners and their spacing, and staggered joints).

RECOMMENDATIONS FOR DRYING CONDITIONS

These are general recommendations; for more detailed information, a water damage restoration specialist may be contacted.

- Adequate ventilation, air circulation, and drying are essential to minimize the potential for mold or other fungal growth.
- The source of water or moisture must be eliminated.
- Damaged gypsum board and other wet materials that are to be replaced must be removed from the building to facilitate drying.
- The interior of the building must be thoroughly dried immediately.
- The indoor humidity can be lowered by using fans and portable dehumidification equipment and by opening up the

¹ Gypsum board that has been exposed to sewage or flood waters must be replaced.

- building when the outside air is drier than the air inside the structure.
- Closets, cabinets, and doors between rooms should be opened to enhance circulation of air.
 - Fans should be used to increase air movement. (Central HVAC systems should not be used for this purpose if the air ducts were covered with water during the incident that created the wet conditions.)
 - For information on safe practices to be followed when working in water damaged structures, publications of the Federal Emergency Management Agency (FEMA)² should be referenced.

Note: Once the gypsum board has been thoroughly dried, it should receive a final inspection for defects before redecorating.

ADDITIONAL SOURCES OF INFORMATION

The following Web sites and standards provide information and recommendations for treating mold growth; other Web sites also provide similar suggestions.

California Indoor Air Quality Program at <http://www.cal-iaq.org/iaqsheet.htm>

Federal Emergency Management Agency at <http://www.fema.gov/pdf/hazards/fststpbr.pdf>

New York City Department of Health at <http://www.ci.nyc.ny.us/html/doh/html/epi/moldrpt1.html>

U. S. Environmental Protection Agency at <http://www.epa.gov/iedweb00/pubs/moldresources.html>

Standard and Reference Guide for Professional Mold Remediation, IICRC S520 (Available from Institute of Inspection, Cleaning and Restoration Certification, 2715 East Mill Plain Road, Vancouver, WA 98661.)

Standard and Reference Guide for Professional Water Damage RestorationI, IICRC S500 (Available from Institute of Inspection, Cleaning and Restoration Certification, 2715 East Mill Plain Road, Vancouver, WA 98661.)

² FEMA, *Repairing Your Flooded Home*. Available from the Gypsum Association