



*Gypsum Association Provides Recommendations for Assessing,
Repairing Gypsum Boards and Panels*

Hyattsville, MD - June 11, 2015 - As the technical, promotion, and information center of the gypsum industry in North America, the Gypsum Association (GA) regularly reviews and updates technical publications to ensure they continue to reflect best practices in the field. Revisions of [Repair of Fire-Rated Gypsum Panel Product Systems](#) (GA-225-15) and [Assessing Water Damage to Gypsum Board](#) (GA-231-15) are particularly important to maintaining the health, safety and welfare of building occupants.

Gypsum board is the premier building material for wall, ceiling, and partition systems in residential, institutional, and commercial structures. Designed to provide a monolithic surface when joints and fastener heads are covered with a joint treatment system, gypsum board's aesthetic value is equaled in importance by its natural fire resistance properties. Gypsum, chemically known as "calcium sulfate dihydrate," contains chemically combined water in an amount approximately 21 percent by weight.

Gypsum boards protect wood and steel structural members from fire because exposure to heat prompts the release of chemically combined water as steam. Steam acts as a thermal barrier until this slow release process, called calcination, is complete. Behind the plane of calcination, temperatures remain 212°F, significantly lower than the temperature at which steel begins losing structural integrity or wood ignites. Even after calcination is complete, the calcined gypsum that remains in place continues to offer protection from direct exposure to flames.

When fire-rated gypsum panel product systems are damaged during the life cycle of buildings, proper procedures for repair must be followed to restore the original fire resistive condition and maintain the required fire rating. *Repair of Fire-Rated Gypsum Panel Product Systems* (GA-225-15) lays out the proper procedures for assessing the severity of damage and achieving an appropriate fire resistive restoration.

Similarly, *Assessing Water Damage to Gypsum Board* (GA-231-15), provides recommendations for determining the need for replacement of gypsum boards when exposed to rain, condensation, water leakage, and standing water. Key to assessment is identifying and eliminating the source of the water. Gypsum board exposed to sewage or flood water, must be replaced; while gypsum board exposed to uncontaminated water that can be dried thoroughly before the possibility of mold growth sets in (typically 24 to 48 hours depending on environmental conditions) may not demand

replacement.

Any fire-resistance or sound rated system exposed to water should be repaired in a manner that is consistent with its original design, including board type, fasteners and their spacing, and staggered joints.

In addition to recommendations for drying conditions, GA-231-15 addresses--for the first time--the use of hand-held moisture meters for identifying and assessing water exposure. Although often used by contractors and consultants, careful calibration according to ASTM C1789, *Standard Test Method for Calibrations of Hand-Held Moisture Meters on Gypsum Panels* is essential. However, while moisture meters can help identify areas that are wet versus areas that are dry, or which areas are wetter than others, this type of rank ordering is not necessarily a reliable means of assessing the need for replacement.

GA-225-15, and GA-231-15 are available at www.gypsum.org and are included in [Design Data - Gypsum Board \(GA-530\)](#).

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About the GA

The Gypsum Association is in its 85th year of service as the technical, promotion, and information center of the gypsum industry. The Association, representing companies located throughout the United States and Canada, is based in Hyattsville, MD.

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