

## Macintosh Versions of Gypsum Association Materials Available



APPLICATION AND FINISHING OF GYPSUM PANEL PRODUCTS  
GA-216-2013



Apple computer-compatible versions of prominent Gypsum Association documents are now available for sale.

In late 2012, the Gypsum Association created a joint marketing agreement with the International Code Council (ICC). Under the agreement, the ICC was given a license to create and market Apple-compatible versions of the three Association-produced technical documents that are referenced in the ICC family of codes.

As a result, electronic versions of *GA-600, Fire Resistance Design Manual*, *GA-216, Application and Finishing of Gypsum Panel Products*, and *GA-253, Application of Gypsum Sheathing*, are available for purchase from the ICC Store. The ICC Store can be accessed at: [shop.iccsafe.org](http://shop.iccsafe.org).

Once at the website, use the search mechanism to locate the desired document. Using the search phrase “fire resistance design” will display a page containing GA-600. Using the search phrase “application gypsum panel” will do the same for GA-216.

Windows-compatible versions of the noted documents are also available for download from the ICC Store or the Gypsum Association website at [www.gypsum.org](http://www.gypsum.org).

## Inside this issue:

Update on Activity for City of Los Angeles Evaluation Report Acceptance Listings	2
Follow-up on International Residential Code Activity	2
Synthetic Gypsum Use in the United States	3

VISIT THE GYPSUM ASSOCIATION WEBSITE AT [WWW.GYPSUM.ORG](http://WWW.GYPSUM.ORG)

*We're Your Gypsum Board Information Resource!*

## Gypsum Association Participating in NRCC Study

The Gypsum Association has agreed to participate in a multi-year study on apparent sound transmission being conducted by the National Research Council of Canada (NRCC). The NRCC is the Government of Canada's premier research and technology organization. It is an agency of the Canadian government and reports to Parliament through the Minister of Industry.



requirements focus on the acoustical attributes of individual systems, such as walls and ceilings. The new approach would address sound transmission as a function of the complete building system. With the change, the code would focus on the actual sound perceived by a building occupant.

The Task Group addressing the issue intends to develop a proposal for incorporation into the National Building Code (NBC) of Canada that would change the acoustical requirements in the code. Present code

The program has established a Special Interest Group (SIG) to fund and steer the development of documents and software. The SIG intends to complete its work by March 2015. During the interim period, the SIG will be producing documents for review by the NBC Code Committee.

## Update on Activity for City of Los Angeles Evaluation Report Acceptance Listings



Contractors working in the City of Los Angeles should be aware that in March 2013, the city updated and reissued Information Bulletin P/BC 2011-119, “Alternate Building Materials/Products Approval Requirements.” The bulletin outlines city requirements for using a third-party evaluation report in lieu of a City of Los Angeles Research Report (LARR) when assessing the code-compliance of specific building materials listed in the Bulletin. A copy of the bulletin may be obtained at: [http://ladbs.org/LADBSWeb/LADBS\\_Forms/InformationBulletins/IB-P-BC2011-119Apprvl2UseAltMaterials.pdf](http://ladbs.org/LADBSWeb/LADBS_Forms/InformationBulletins/IB-P-BC2011-119Apprvl2UseAltMaterials.pdf)

Because of the action by the City of Los Angeles and a subsequent announcement from the International Code Council Evaluation Service (ICC-ES), it appears that the City of Los Angeles should now accept an ICC-ES evaluation report when evaluating gypsum board and panel applications in nearly every circumstance. The possible exceptions appear to be instances where gypsum products are used in some structural applications. Such situations should be evaluated and addressed prior to beginning construction.

The Bulletin specifically indicates “gypsum sheathing” to be a material acceptable for evaluation using a third-party evaluation report. It is generally interpreted that the term “gypsum sheathing” applies to gypsum board and gypsum panel products with valid evaluation reports.

The Gypsum Association maintains an ICC-ES evaluation report for gypsum board. A copy may be accessed at: <http://www.gypsum.org/technical-information/code-services/>

## Follow-up on International Residential Code Activity



The Spring 2013 edition of Gypsumation noted that an Association-sponsored proposal on ceiling framing would be reviewed by the International Residential Code (IRC) Code Review Committee during April public hearings.

The proposal was reviewed and approved by the Code Review Committee. Assuming that no adverse Public Comments are submitted and approved, the supplemental framing language will be deleted from the 2015 edition of the IRC.

The submitted language addressed the long-standing requirement mandating the installation of supplemental framing when water-resistant gypsum board (“green board”) is installed on a ceiling in a humid environment, such as a bathroom. Noting that contemporary green board is lighter and more rigid than its historic predecessors, the Association’s proposal suggested that the supplemental framing language is outdated and no longer necessary.

Numerous other Association-sponsored proposals were also approved by the Committee. One adds language to specifically codify the term gypsum panel products in the IRC. While the code has permitted the use of glass-mat-faced and unfaced gypsum panels for many years, formal charging language for panels had never been incorporated into the code. A second proposal adds the definition for gypsum board to the code. Oddly, the IRC had never incorporated a formal definition of gypsum board, an oversight that became apparent when the panel product proposal was drafted and submitted.

Assuming no adverse Public Comment activity, the panel and gypsum board language will become a part of the 2015 IRC.

# Synthetic Gypsum Use in the United States



We are often asked to quantify the amount of gypsum board that is manufactured with synthetic gypsum in the United States. Unfortunately, it is a question that lacks a definitive answer.

At present, because of the occasional mixing of natural and synthetic sources in the board manufacturing process, it is impossible to determine the exact quantity of board that might contain some synthetic material. The common conclusion is that over one-half of the board manufactured in the U.S. contains synthetic gypsum, either in part or in whole, but that figure is an educated guess.

What we can create is a reasonably accurate figure for the percentage of total gypsum used to manufacture gypsum board that is synthetic gypsum. Based on statistics aggregated by the Gypsum Association, approximately 45 percent of the gypsum material presently used to manufacture gypsum board in the U.S. is synthetic material. Virtually all of the synthetic gypsum used to manufacture board in the U.S. is FGD gypsum and is derived from flue-gas desulfurization. This process removes polluting gasses from the stacks of fossil-fueled power plants and purifies them into a hard substance. The purified, solid material can then be manufactured into gypsum board. The gypsum in natural and FGD gypsum is chemically identical.

FGD gypsum has been used to manufacture gypsum board for over 30 years. The production of this extremely pure type of gypsum reduces environmental pollution. In 2012, the U.S. gypsum industry diverted nearly 8.8 million short tons of FGD gypsum to board manufacturing that otherwise would have been sent to local landfills. 🍷

## Technical Hotline



**Q:** Can fire-resistance ratings and flame-spread ratings be used interchangeably?

**A:** No. A fire-resistance rating is usually defined as the time, in hours or fractions thereof, that construction materials or composite systems will resist fire penetration when tested in accordance with ASTM E119 (sometimes called the “furnace test”). Fire-resistance ratings determined by this test method measure the relative effectiveness of various building components and assemblies to act as fire barriers.

A flame spread rating, on the other hand, is the assessment of the relative rate at which fire will propagate over the surface of a material. ASTM E 84 (the Steiner Tunnel Test) is used to establish flame spread ratings and measure smoke generation. In this test, inorganic reinforced cement board is assigned an index of 0 and red oak an index of 100. From these benchmarks relative values are established with a higher number indicating a greater rate of flame propagation.

Think of being in a burning corridor with a fire-resistance rating of one hour, which has been decorated with a fabric wall covering material that has a very high flame-spread rating. If you can get out of the corridor, you’ll be protected by the fire resistance of the wall material; however, if the wall fabric is extremely flammable, all your efforts to escape may well be futile as the flames may be exacerbated by the wall covering.

Both fire-resistance and flame-spread ratings are important fire protection concepts, but they do have distinctly different applications. What about gypsum? Gypsum products typically offer both high fire resistance and low flame spread ratings – the best of both distinct worlds! 🍷

*When you have technical questions just contact the Gypsum Association!*

**Phone: 301-277-8686**  
**8:30 a.m.-5:00 p.m. ET**  
**Fax: 301-277-8747**  
**Website:**  
**[www.gypsum.org](http://www.gypsum.org)**

# ESSENTIALS

## FROM THE GYPSUM ASSOCIATION

### **FIRE RESISTANCE DESIGN MANUAL GA-600-2012 20th Edition**

The 20th edition of the Gypsum Association's flagship publication depicts over 600 systems that may be used for fire-rated walls and partitions, floor/ceiling systems, roof/ceiling systems, and to protect columns, beams, and girders. This edition contains new designs for protecting steel column systems that allow the use of horizontal joints with fire-resistance ratings ranging between 1 to 4 hours; contains a new section addressing Strain Relief Systems with designs for 1- to 4-hour rated systems that protect control joints in walls, 1-hour systems for control joints in ceilings, and 1- and 2-hour rated perimeter relief systems. A new discussion in the preliminary notes addresses the protection of wood columns and beams. Several new proprietary systems that offer protection for wood and steel pitched roof trusses, several 30 minute wall systems, and a 45 minute floor/ceiling system. In total, over 150 new designs have been added. The FRDM is currently referenced by the International Building Code, and The National Fire Codes, as well as many state and local jurisdictions in the US and Canada as a source document for fire-resistance and sound-control rated designs that incorporate gypsum board in a variety of building systems. The 20th edition of the FRDM consists of 230 pages.

### **FIRE RESISTANCE DESIGN MANUAL GA-600-2009 19th Edition**

Includes fire-resistance ratings for over 420 gypsum protected wall, ceiling, roof, column, beam girder, and truss systems. Over 80 proprietary building system designs are offered. 178 pages.

### **APPLICATION AND FINISHING OF GYPSUM PANEL PRODUCTS GA-216-2013**

Describes the most up-to-date industry and building code recommendations for the proper installation and finishing of gypsum panel products, including related accessories, over a variety of substrates and framing. An invaluable resource for drywall contractors. 17 pages.

### **DESIGN DATA - GYPSUM BOARD GA-530**

Our most complete collection of current Gypsum Association publications containing the most recent edition of the Fire Resistance Design Manual (GA-600) as well as GA-214, GA-216, GA-220, GA-221, GA-222, GA-223, GA-224, GA-225, GA-226, GA-229, GA-232, GA-234, GA-235, GA-236, GA-253, GA-254, GA-276, GA-291, GA-406, GA-510, GA-515, GA-610, GA-618 and ICC-ES ESR-1338.

### **RECOMMENDED LEVELS OF GYPSUM BOARD FINISH (GA-214) RESOURCES**

Levels of Finish resources provide information on the 5 levels of gypsum board finish and will enable you both to anticipate the final appearance of decorated wall and ceiling systems and to achieve a specified finish. Resources cover factors to be considered, terminology, where each level should be used, and the minimum requirements for each level. Featured resources include GA-214-VS, an 11 minute Levels of Finish video containing Spanish narration, and GA-214-CCD, an instructional CD-ROM (English).

To place your order, fax or mail this order form to:

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#### FREE MATERIALS AND RESOURCES

Please send me the CD-ROM,  
***Recommended Levels of Gypsum  
Board Finish (GA-214-CCD)***.

#### GYPSUM ASSOCIATION MEMBERSHIP 2013

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