



GYPSUMATION

Supplement to *Construction Dimensions*

SEPTEMBER 2009

GA Releases the 19th Edition of its Flagship Publication

The Gypsum Association is pleased to announce the release of the 19th edition of GA-600, *Fire Resistance Design Manual (FRDM)*. Since 1959, the Association has regularly published its collection of the latest in fire-resistance rated gypsum building system designs. And over the last 50 years, the manual has become the standard industry reference document for architects and design professionals, builders and drywall contractors, and the building code enforcement community.



The FRDM now contains laboratory tested designs for both fire-resistance- and sound-attenuation-rated gypsum board building systems. The rated systems include walls and partitions; floor-ceiling systems; roof-ceiling systems; column protection systems; and beam, girder, and truss protection systems. Fire resistance ratings range from one to four hours; sound attenuating systems range from 30 to 69 in sound transmission class (STC). The FRDM also contains sections that describe the requirements necessary for correctly assembling fire-resistant and noise-attenuating building systems.

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VISIT THE GYPSUM ASSOCIATION WEBSITE AT WWW.GYPSUM.ORG

We're Your Gypsum Board Information Resource!

Gypsum Association Proposes Code Changes

With the intent of clarifying current model code language, the Gypsum Association has submitted a series of code change proposals that, if approved, will remove references to nine unavailable gypsum board standards that appear in the International Building Code (IBC) and the International Residential Code (IRC).

All nine of the standards were eliminated from circulation by the ASTM C-11 Committee on Gypsum and Related Building Materials and Systems in late 2004 when a composite standard containing specifications for all the gypsum products addressed by the individual standards was universally adopted for use by the gypsum board industry. The composite standard, ASTM C1396/C 1396M was first released in 1998. At that time, the gypsum industry agreed to a dual-labeling program that lasted until 2004 at which time all manufacturers began to label material using only the composite standard reference designation.



"It's clearly time to get the old, unusable references out of the IBC and IRC," says Michael Gardner, Executive Director of the Association, "because their inclusion occasionally causes confusion for some end users. The revised language won't appear in print until the 2012 editions of the IBC and IRC; however, we can and will do some education about the proposed changes prior to that date, assuming approval of the proposals."

The reference to the ASTM C 1396 standard was incorporated into both the IBC and IRC in the early part of the decade. Elimination of the individual standards will not impact the ability of a code user to use gypsum board products.

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The Proper Use of Green Board



Roughly five years ago, the model building codes began to limit the use of water-resistant gypsum board (“green board”) in shower and tub areas. Language that originally appeared in the 2004 Supplement to the International Codes and only applied to the *International Residential Code* limited the use of tile backer products that were permitted for use in “wet areas” and excluded green board from the list of approved materials. That language has evolved into more limiting and descriptive passages that now also appear in the *International Building Code*.

Five years of the above described evolving modifications have also given rise to two commonly held misconceptions about the revised model code language. The first and most egregious misconception is that the language absolutely prohibits the use of green board in bathrooms. Such is not the case, for the language only mandates the use of a material other than green board in shower and tub areas locations typically referred to as “wet areas”

in bathrooms. Tiled locations other than those at shower and tub surrounds may still use gypsum board as the backing board or tile backer.

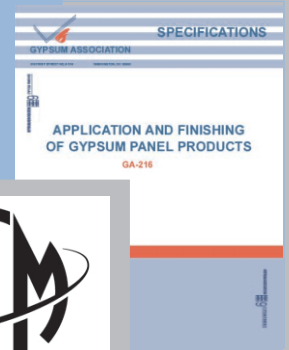
The second misconception is that the incorporation of the new language into the codes somehow modified the long-standing model code mandate that narrows the spacing of framing members when green board is applied to a ceiling. To the contrary, that language was not modified in either the IRC or the IBC, and it remains unchanged to this day. Both codes still contain language that reduces the allowable distance between framing members when green board is applied to a ceiling.

Subtle differences do exist between the language in the IBC and the IRC; however, the overall intent is identical: use a material other than green board at tub and shower surrounds. The IBC mandates the use of the backing materials at “ceiling panels in shower areas” language that does not appear in the IRC and the IBC contains a slightly different product list when compared to the IRC. It also incorporates technical language to describe the materials that is somewhat more precise than that used in the IRC.

It's interesting to note that while the net effect of the code language is to prohibit the use of green board in wet areas, neither code is written using a manner that specifically bans the material; instead, both incorporate positive voice language that mandates the use of specific products other than green board at specific locations. Using the positive voice makes enforcement of the code cleaner and helps eliminate situations where an attempt might be made to use a fully inappropriate product that has just come onto the market. 🔥

Affected Standards to Be Revised

Now that it appears that the language limiting the use of green board is here to stay, organizations such as the Gypsum Association are beginning to revise impacted documents. GA-216, *Application and Finishing of Gypsum Panel Products*, is presently under review for creation of a 2010 edition, and the appropriate sections of the text will be modified to reflect a reference to the modified code language. Doubtless a similar discussion will occur regarding ASTM C 840, *Application and Finishing of Gypsum Board*. Organizations such as the Tile Council of North America are also reviewing related language. 🔥



(GA Releases the 19th Edition of its Flagship Publication, continued from page 1)

The FRDM is currently referenced by the International Building Code, the BOCA *National Building Code*, the *Uniform Building Code*, the *Standard 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 19th edition of the FRDM is available from the Association via its website at www.gypsum.org. The new edition offers a total of 89 new proprietary building system designs: 51 wall and partition designs, 8 area separation fire wall designs, 17 floor-ceiling designs, 3 roof-ceiling designs, and 10 column designs. Other minor changes to the FRDM include new language in the introduction regarding which provisions prevail when there are differences between code language and other standards, new testing agency listings, and a list showing specific sections in ASTM C 1396 that apply to various gypsum panel products. 🔥

(Gypsum Association Proposes Code Changes, continued from page 1)

The proposals will be heard during the Code Development Hearings scheduled for October 24 through November 11, 2009, in Baltimore, Maryland. The hearings are conducted as a part of the 2009 International Code Council Annual Conference. 🔥

Technical Hotline



Q: I am a painting contractor in California. I am on a project that requires a Level 5 finish on the interior drywall. The taping contractor wants to stop after he achieves a Level 4 finish and then have us apply a prep coat material to achieve the Level 5 finish. Will that material work to achieve a Level 5 finish?

A: A Level 5 finish is obtained when a skim coat of joint compound is applied to a Level 4 finish. According to the Gypsum Association publication, GA-214, *Recommended Levels of Gypsum Board Finish*, a “material manufactured especially for this purpose and applied in accordance with manufacturer's recommendations” can be applied to the entire finished surface to achieve a Level 5 finish in lieu of joint compound. Whether a specific product can be used in lieu of joint compound to achieve a Level 5 finish is entirely at the discretion of the manufacturer of the material; however, there are numerous materials that are specifically formulated to achieve a Level 5 finish available in the contemporary market.

Q: I occasionally see a reference to type “C” board in specifications. What is type C board and does it differ from type X board?

A: Type “C” is a designation that has been unofficially adopted by manufacturers of gypsum board to designate a product that has a core that exhibits fire-resistive characteristics beyond those exhibited by type X board. Unlike a type X designation, characteristics of which are specifically defined by the ASTM C 1396 standard, type C board is proprietary to a specific manufacturer and must be used in specific fire tests. Type C board is primarily used in ceiling systems where adding additional layers of board to achieve fire ratings may be cumbersome. 🔥

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

Phone: (301) 277-8686
8:30 a.m-5:00 p.m. ET
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www.gypsum.org

ESSENTIALS

FROM THE GYPSUM ASSOCIATION

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. Now contains laboratory tested designs for both fire-resistance and sound-attenuation-rated gypsum board building systems, including walls and partitions, floor-ceiling and roof-ceiling systems. Over 80 proprietary building system designs are offered. Referenced by the International Building Code, Uniform Building Code, the BOCA National Building Code, the Uniform Building Code, the Standard Building Code and The National Fire Codes. Also referenced in major jurisdictions in the United States such as Florida, Chicago, Los Angeles, and New York City. Recognized in major jurisdictions in Canada. 178 pages.

FIRE RESISTANCE DESIGN MANUAL GA-600-2006 18th Edition

Includes fire-resistance ratings for over 370 gypsum protected wall, ceiling, roof, column, beam girder, and truss systems. Over 40 system designs have been added since the previous edition, including several new floor- and roof-ceiling systems and double-stud steel partition designs. Referenced by the International Building Code, Uniform Building Code, and the Building Construction and Safety Code, NFPA 5000. Also referenced in major jurisdictions in the United States such as Florida, Chicago, Los Angeles, and New York City. Recognized in major jurisdictions in Canada. 158 pages.

APPLICATION AND FINISHING OF GYPSUM PANEL PRODUCTS GA-216-2007

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. 18 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-290, 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).

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- Please send me the CD-ROM, *Recommended Levels of Gypsum Board Finish (GA-214-CCD)*.
- Please send me a *Catalog of Publications, Resources, and Training Materials*.

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