Gypsum Association Updates Website

To better meet user technical information needs, the Gypsum Association has updated and enhanced its primary website, www.gypsum.org.

The new site collects information previously housed on three separate sites: The primary site, an environmental and sustainability site (www.gypsumsustainability.org), and an ancillary site (www.gypsumbuilds.org). Both the sustainability site and the ancillary site have been sunset. A fourth site under the management of the Association, www.responsiblemoldsolutions.org, remains operational.

“Over the years the Association created independent websites to address significant issues,” said Deputy Executive Director Steve Meima. “Unfortunately, that approach eventually became unwieldy from a content management perspective. It led to instances of comparable information conflicting between sites and made updating content a time consuming exercise. In addition, we want users to focus on a single site; so we opted to place all our information in one location.”

In a new twist, the site will feature a significant historic and archival library containing information unavailable to the public since the 1940s and 1950s. “We found a trove of fascinating material,” said Meima. “Incorporating these resources into the new site creates a fun and educational experience for users. So we’ve made old promotional films, brochures, and interesting documents available online. And we expect to regularly change the content to keep it fresh and compelling.”

Gypsum.org also offers a new look and operational feel. While the release date is indeterminate as Gypsumation goes to press, the updated site should go live in late February or early March.

Environmental Product Declaration for Gypsum Board Nears Completion

In October, the Gypsum Association announced the publication of the first-ever set of North American Product Category Rules (PCR) for gypsum board. Created under contract for the Association by FPInnovations of Vancouver, British Columbia, the PCR was completed in conformance with the International Organization for Standards (ISO) 14040 series of Life Cycle Assessment standards (LCA).

Immediately following release of the PCR, the Association contracted again with FPInnovations to produce a generic Environmental Product Declaration (EPD) for 5/8-inch thick type “X” gypsum board. As this edition of Gypsumation approaches publication, the EPD is nearly complete, with an anticipated mid-to late-spring 2014 release date.

According to Jennifer O’Connor, research leader, sustainability, FPInnovations, “An EPD is a standardized and LCA-

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Gypsum Association Releases GA-227-13, Recommendations for the Prevention of Ceiling Cracking

The Gypsum Association has released GA-227-13, Recommendations for the Prevention of Ceiling Cracking. The publication outlines methodologies for mitigating cracking in large span gypsum board ceilings due to fluctuations in temperature and humidity.

The document explains that when two materials with significantly different coefficients of expansion, such as gypsum board and wood, are rigidly attached to each other stresses will build up in the materials as their moisture content and/or temperature changes. To address the issue, the document details how resilient channels can be used to reduce the occurrence of cracking.

“The methods for the use of resilient channels outlined in GA-227-13 have been shown to be very effective in preventing ceiling cracks due to swings in temperature and moisture content of wood framing—particularly in long spans,” said Robert Wessel, Ph.D., FASTM, senior director of technical services for the Gypsum Association. “The swings usually occur during a change in season from summer to winter or in dry areas such as desert environments.” Electronic copies of GA-227-13 are available for download on the Gypsum Association website at: www.gypsum.org. See the related article in this issue for information on the recent translation of the document into Canadian French.

Code Evaluation Report Re-Approved


The primary feature of ESR-1338 is its reference to the Gypsum Association Fire Resistance Design Manual, GA-600. The report verifies that generic sound and fire-resistance systems contained in GA-600 comply for use with the relevant criteria in the International Residential Code and the International Building Code.

ESR-1338 also contains information addressing the use of gypsum board in a seismic- or wind-resistant system and when applied as a thermal barrier. In addition, the report contains descriptions of sound- and fire-resistive systems that are not addressed in either the model codes or GA-600.

The Evaluation Report is being reviewed by the Gypsum Association Building Code and Technical Committee for possible modification during the coming year.

A copy of the updated report may be accessed on the Gypsum Association website at: www.gypsum.org/technical-information/code-services/.

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based tool to communicate the environmental performance of a product or system. EPDs provide transparent, credible environmental footprint data, allowing buyers to fairly compare one product to another.” Once completed, the EPD will provide users with the ability to compare the environmental attributes of gypsum board with both gypsum-based and non-gypsum-based materials.

“Given the option of performing our first EPD on regular core versus type “X” core material, we chose the latter,” said Steve Meima, deputy executive director, Gypsum Association. “This largely reflects a decision to first focus on non-residential construction materials. While environmental attributes are certainly relevant to residential construction, we believe that a greater demand for sustainability information presently exists in the non-residential market. Our initial effort reflects careful consideration of which construction sectors have the more pressing green building needs. Type “X” gypsum board is more often used in non-residential construction, so we decided to begin with that product line and move forward from there.”

Once complete, the EPD will be released to Association members and the general public. The Association’s External Issues Committee is discussing the potential for creating additional EPD documents.
Translated Technical Documents Released

The Gypsum Association has translated four publications into French and one into Spanish.

GA-216-13, Application and Finishing of Gypsum Panel Products was translated into both French and Spanish. This represents the second time this important document has been translated into both languages. GA-216-13 is one of four Association publications available in Spanish.

Three documents were translated into French for the first time:
- GA 220–06, Gypsum Board Winter-Related Installation Recommendations
- GA 227–13, Recommendations for the Prevention of Ceiling Cracking
- GA 236–13, Joint Treatment Under Extreme Weather Conditions

The French language versions are created by the Gypsum Association for use by its Canada-based members. The Canadian government mandates that reference documents be available in both English and French.

The Association intends to expand its libraries of translated documents during the next year. Currently, French and Spanish publications are available for download on the Gypsum Association website at:
- www.gypsum.org/store/canadian-french-publication-library/.
- www.gypsum.org/store/spanish-publication-library/.

Technical Hotline ☏

Q: I’ve heard that gypsum can be used as a food additive or preservative. Seems difficult to believe, but can it be used that way?

A: It is absolutely true that a variety of food products contain gypsum. Gypsum has a unique status among minerals in that it can be used both as part of a building material and as a food additive. It also can be used as a soil amendment material and to make dental casts. It is so safe that, in 1980, the Food and Drug Administration (FDA) in 21CFR184,1230, declared calcium sulfate—i.e. gypsum—to be “generally recognized as safe” for use as a food additive. According to the FDA, naturally occurring anhydrate gypsum can be used as a “dough strenghtener, a flour treating agent, a nutrient supplement, a pH control agent, and a stabilizer and thickener.” This permits it to be used in “baked goods, confections and frostings, frozen dairy desserts, gelatins, puddings, pasta, and other food categories.”

Gypsum is regularly used, as allowed by the FDA language, as a preservative or processing agent in canned and processed vegetables, baked goods, and grain products. Gypsum is often added to tofu as a coagulant. Ben Franklin first saw it used in France in the 18th Century as a soil amendment to help neutralize the pH of soil. Anecdotally, we are told that raw gypsum tablets are sold in some countries as a source of calcium.

If you really need to prove to yourself that gypsum is safe, have a glass of wine or beer at the end of a long day. Many beers contain a pinch of gypsum, added to help adjust the hardness of the brewing water. In wine, specifically red wine, it is used to control acidity and add color.
ESSENTIALS FROM THE GYPSUM ASSOCIATION

FIRE RESISTANCE DESIGN MANUAL (FRDM)  
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 are included. More than 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

RECOMMENDED LEVELS OF GYPSUM BOARD
FINISH (GA-214) RESOURCES
Levels of Finish Resources provide information on the five levels of gypsum board finish and will enable you to both anticipate the final appearance of decorated wall and ceiling systems and 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:
Gypsum Association
6525 Belcrest Road, Suite 480
Hyattsville, MD 20782
301-277-8686
301-277-8747 (Fax)

Please send me:

- Copies of FIRE RESISTANCE DESIGN MANUAL GA-600-2012 X $30.00 each = _________
- Copies of FIRE RESISTANCE DESIGN MANUAL GA-600-2009 X $35.00 each = _________
- Copies of APPLICATION AND FINISHING OF GYPSUM PANEL PRODUCTS GA-216-2013 X $18.00 each = _________
- Copies of DESIGN DATA - GYPSUM BOARD GA-530 X $65.00 each = _________
- Copies of RECOMMENDED LEVELS OF GYPSUM BOARD FINISH GA-214-VS (Spanish) X $10.00 each = _________

Prices include shipping charges. Sales tax will be added to orders sent to Maryland addresses.

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To save time, order publications online at: www.gypsum.org

FREE MATERIALS AND RESOURCES

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

GYPSUM ASSOCIATION MEMBERSHIP 2014

AMERICAN GYPSUM COMPANY LLC
CERTAINTEED GYPSUM, INC.
CERTAINTEED GYPSUM CANADA, INC.
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