

GA-600-2018 *Fire Resistance and Sound Control Design Manual*

Available in November, the twenty-second edition of the GA's flagship publication is the best yet!

The Gypsum Association (GA) has completed the twenty-second edition of its flagship publication GA-600-2018 *Fire Resistance and Sound Control Design Manual*. Revised on a three-year basis in alignment with the code revision cycles, GA-600 has been referenced by the model building codes as a source of fire-resistant designs for 50 years. Now nearly 400 pages, the 2018 edition contains more than 140 new proprietary systems that supplement existing assemblies for walls and partitions, floor-ceiling systems, area separation walls and many other construction assemblies utilizing gypsum panel products

Always considered among the best organized and easiest to use of the fire design reference manuals, the 2018 edition features an improved layout that clearly distinguishes between fire and sound systems and makes easier the identification of components and layers in system descriptions. Maintaining and improving upon the *Fire Resistance and Sound Control Design Manual* is crucial because the manual is referenced by the *International Building Code*, and *The National Fire Codes*. Many state and local jurisdictions in the US and Canada also rely on GA-600 as a source document for fire-resistance and sound-control rated designs.

Both the building codes and the A/E/C community are placing increased emphasis on acoustics. In response, GA-600-2018 contains a new introductory section on sound that outlines general principles of acoustics. With this edition, both terminology and explanatory notes specific to acoustical design are



included. To meet the acoustical information needs of designers and specifiers, most generic systems more than thirty years old, or generic systems with a Sound Transmission Class (STC) of less than 40 will no longer provide information on sound design because these systems will not meet code criteria. Where such information is retained in older systems—such as plaster systems—it is included for historical reference. Up-to-date acoustical data for many generic systems will be available in the GA-600-2018 Premium Package. This data will allow designers to make better informed decisions when selecting generic systems for specific sound control requirements, such as speech privacy.

continued on page 2

continued from page 1

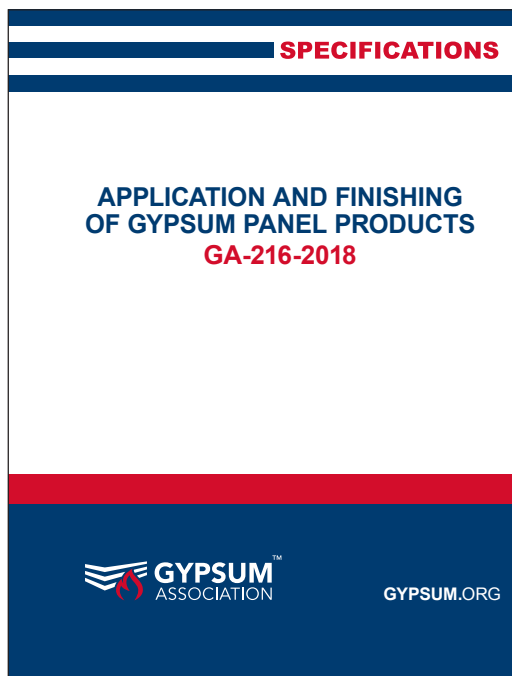
Speaking of the digital counterpart to the *Fire Resistance and Sound Control Design Manual*, the success of the electronic edition introduced in conjunction with GA-600-2015 has led to additional offerings. Based on their needs, Gypsum Association Bookstore customers can select either a basic E-Book and print book combination or the GA-600 Premium Package that provides users with the ability to search system descriptions by key word, by STC, or by fire-resistance rating. Once the desired system is identified, users can download a PDF of the entire system or just the corresponding graphic for inclusion in project specifications. The GA-600 2018 Premium Package also include a print book. Both offerings are delivered on-demand.

Given the expansion of the *Fire-Resistance and Sound Control Design Manual*, and additional sound

testing, new tables are included to assist users. Approximately two dozen systems have new GA file numbers. New file numbers were created to maintain the book's organizational structure, which allows users to quickly identify systems that meet specific fire and sound requirements. Where a file number has been changed, a new table allows readers to quickly find an assembly's new file number. In addition to tables listing new and deleted systems, another table notes systems that were previously proprietary, but are now considered generic.

Users can expect the book to continue to evolve. As codes and construction practices change, the Gypsum Association and its member companies are dedicated to providing increasing levels of solutions and information for the A/E/C community.

Updated Code Referenced Specification Provides New Criteria for Installing Gypsum Panels over Concrete



GA-216-2018 now available.

As a code referenced document, GA-216 *Application and Finishing of Gypsum Panel Products* is revised every three years. Beginning in 2018, *Application and Finishing of Gypsum Panel Products* will be revised and released to better coincide with the 2021 code revision cycle and to better align with the Association's other code-referenced documents, namely GA-600 *Fire Resistance and Sound Control Design Manual* and GA-253 *Application of Gypsum Sheathing*. GA-216 is referenced in the *International Building Code* (and other "I-Codes") as well as *NFPA 5000* as a standard for the application and installation of gypsum panel products.

Architects and specifiers consult and reference GA-216 in construction documents to guide

continued on page 3

continued from page 2

installation of gypsum panels over appropriately spaced and installed wood or steel framing, and to determine when, and if, control joints should be used. Specialty contractors rely on GA-216 to ensure proper handling and storage of gypsum panels on the jobsite and appropriate installation and finishing methods. *Application and Finishing of Gypsum Panel Products* dictates the layout of gypsum panels, including proper placement of joints around window and door openings, and selection of fastener types and fastener spacing. GA-216 also serves as a guidance document for building inspectors.

The 2018 specification provides appropriate installation methods for the various types of gypsum panels—from the more common ½-inch and type X wallboards to specialized performance gypsum panels such as glass mat water-resistant gypsum panels and abuse-resistant and impact-resistant gypsum panels. New to the 2018 specification, is clarification of language on steel studs and abuse-resistant and impact-resistance panel products and updated criteria for panel installation over concrete. Direct adhesion to concrete is no longer acceptable; panels must be installed on framing. Also, GA-223 has been added to the appendix as a reference to ASTM standards and GA publications that provide additional information and specifications.

All GA publications, including approximately thirty free technical documents, are available in the Association's bookstore. Technical documents, publications, and answers to common questions can be found at gypsum.org.

Reach the GA's Technical Services Specialist:

Call 301-277-8681

Email info@gypsum.org

**Monday-Friday 8:30 a.m.
until 5:00 p.m ET**

Tech Question

The question, below, is the latest addition to the FAQs on gypsum.org.

Q) Increasingly, I see specifications for gypsum shaftliner in area separation walls, particularly in multi-unit residential and hotel construction. I'm not familiar with these assemblies and their advantages. What can you tell me?

A) Gypsum shaftliner area separation walls (ASWs) are a great alternative to other fire-resistant constructions. ASWs are built using steel framing and two, one-inch thick shaftliner panels (typically two-feet wide and eight-feet long). On each side, three-quarter inches from the shaftwall assembly proper, is a typical 2x4 wood stud wall. These flanking walls also act as the finished walls for the units on each side. Per the building code, flanking walls are allowed to have electrical conduit and outlet/switch boxes at a prescribed rate (approximately five standard switch/outlet boxes per 100 square feet of wall.)

The advantages presented by gypsum shaftliner ASWs are numerous. First, carpentry and drywall contractors already on site can construct these walls as they are framing and mounting drywall in the structure. Second, gypsum shaftliner ASWs are also relatively easy to build. Once the steel framing is in place, you insert the panels, place on the top track, and build the next level. Third, speed of construction is yet another advantage; the walls can be built quickly, due in part to the ease of the construction. A well-coordinated crew can easily complete the ASW between two condominium units in well under two days, and often, in a single day. Finally, construction of these assemblies does not require bringing additional heavy equipment or trades to the construction site.

All in all, gypsum area separation walls are a great alternative for fire-resistant assemblies in multi-unit residential, hotel/motel, and many other projects.

Hurricane Season is Here, Five GA Technical Resources Offer Guidance

With record flooding brought on by Hurricane Florence, the Gypsum Association draws attention to relevant technical documents on repair and replacement of gypsum wallboard after water damage. Located on gypsum.org, the Hurricanes and Flooding Technical Resources page also includes answers to frequently asked questions associated with gypsum board (AKA drywall or wallboard).

These technical resources layout proper methods of handling and storage as well as repair and replacement of gypsum board. As always, consumers, building professionals, code officials, inspectors, and building product distributors can access these technical resources online and free of charge.

Technical documents essential to appropriate repair of flood damaged properties are:

- *GA-231 Assessing Water Damage to Gypsum Board*
- *GA-235 Gypsum Board Typical Mechanical and Physical Properties*
- *GA-238 Guidelines for Prevention of Mold Growth on Gypsum Board*

- *GA-801 Handling and Storage of Gypsum Panel Products*
- *GA-1000 Identification of Gypsum Board*

The Gypsum Association also provides technical assistance by phone or email. Technical representatives cannot offer site specific prescriptions. Only a knowledgeable building professional who can evaluate an impacted site in person can offer a set of specific remediation actions. However, Gypsum Association representatives are able to point consumers, building professionals, and inspectors to legitimate technical standards and best practices that address their concerns.

Newly Revised Gypsum Association Publications

- *GA-216 Specification For The Application And Finishing Of Gypsum Panel Products*
- *GA-229 Shear Values For Screw Application Of Gypsum Board On Walls*
- *GA-255 Guidance On The Use Of Panel Rips **NEW!***
- *GA-605 Proprietary Gypsum Panel Products for Use in UL Classified Systems*
- *GA-600 Fire Resistance and Sound Control Design Manual*
- *GA-620 Gypsum Area Separation Firewalls*

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Gypsum Association

962 Wayne Ave, Suite 620

Silver Spring, MD 20910

301-277-8686 • www.gypsum.org

