We make it easy to specify fire-rated assemblies

Fire safety is a critical issue to consider when developing your designs. At National Gypsum, we make it easy to ensure that every part of your project assemblies will meet the fire-safety rating required.

Working closely with one of the best laboratories in the industry, our products go through a battery of tests in accordance with ASTM Standard E 119, Fire Tests of Building and Construction Materials. The fire-resistance ratings are given only after undergoing full-scale tests under controlled conditions recognized by building code authorities and fire-insurance rating bureaus. When you specify according to the assembly we’ve detailed, that particular fire-resistance rating will be met. In short, our fire-rated assemblies have a proven record: Easy to specify and easy to list on your drawings.

We have two unified UL designs: V438 for Steel Stud Walls and W419 for Shaft Walls. They offer from one- to four-hour fire-resistance ratings, or the designated amount of time an assembly, not just the gypsum board, is projected to perform under specific conditions.

These ratings offer a snapshot of a single assembly/system. For example, to achieve a “one-hour fire rating” of a gypsum board assembly/system, all requirements of an ASTM E 119 test method were successfully met in a testing laboratory furnace, including withstanding fire endurance, for at least 59 minutes and 30 seconds for that specific assembly/system and with those specific components of the assembly/system.

Specific is the operative word here, so remember to update the UL fire listings on your drawings whenever you specify National Gypsum products.

According to Mark Chapman, National Gypsum senior manager of construction services, “It’s streamlined; you spec one design and you’ll have all the information you need in one place.”

And as Kelly Guinsler, National Gypsum product manager, Gypsum Systems, adds, “It is our goal to get the right products installed correctly in the right systems. These designs make it easy for the architect to specify and easy for the contractor to install our products.”

For details, click on Details/Drawings or contact your construction design manager today.

Furnace temperatures reach 1000°F in 5 minutes, 1700°F in 1 hour and up to 2000°F in 4 hours.

In most cases, fire-rated wall assemblies require application of a fire hose stream of 30-45 psi for up to 5 minutes.

Fire tests of load-bearing walls and floors must be tested with up to 100 percent of their full design load applied.

Fire ratings are assigned to assemblies consisting of materials designed to effectively protect the structural elements from fire in accordance with certain test parameters.

Flame spread tests (or tunnel tests) require an induced draft of 240 feet/minute (12 mph) inside the chamber.

For more information about fire-rated assemblies, click on National Gypsum’s Purple Book.