
Wachuwannano

By Lee G. Jones

Q When hanging gypsum board, what happens if you hang the walls first and then the ceiling?

A GA 216 and ASTM C840 recommend installing the ceiling first, though they don't explain why. A couple of reasons come to mind. First, as Bob Wessel at the Gypsum Association explains, the joists that the ceiling is attached to will inevitably move, which in turn is likely to result in cracking at the joints. Also, getting a good clean joint where the butt end of the ceiling board meets the wall is likely to be more of a challenge for the finisher than if the edge of the horizontally installed wall panel is butted up tightly against the face of the ceiling.

Q We're doing a repair of a building constructed in the early 1900s that has a "Caen Stone" finish. We have the original documents with the plasterer's "mixture, but something doesn't look right. It looks as if the plasterer was trying to pull a fast one on the architect to protect a trade secret. The recipe calls for both Keenes Cement, which is white, and gray material, perhaps portland cement, but that seems like an odd combination. What is the correct mixture?

A Caen Stone is a faux stone look achieved with plaster that was popular from the late 1800s to the early 1900s. The plaster mixture is either used as the finish coat or in all three coats of plaster and can be applied over either lath or masonry. In high visibility and high traffic areas, the mixture is used for all three coats so that chipping and gouging of the finish do not reveal the different colors as would be found if only the top coat were tinted.

According to Dick Engbrecht of USG, an article containing the mixture for Caen Stone can be found in a November 1912, magazine called "The Architect and the Engineer." This recipe instructs the plaster to mix five parts plastering Keenes Cement,

five parts Manti Utah Stone, three parts "yellow" stone, and one or two parts mixture of white and gray (portland cement?).

But there are several recipes out there calling for a variety of aggregates and differing amounts of lime to be mixed with the Keenes cement, depending upon the desired hardness of the finish.

Q It is conventional wisdom in our area that a one-hour fire-rated wall does not require fire tape over the gypsum board joints if they are backed by metal. However, the Underwriters Laboratories Fire Resistance Directory indicates all assemblies are tested with one coat of joint tape. Is the tape necessary?

A **The 2001 UL Fire Resistance Directory** says, "Unless otherwise specified in the specific design, all gypsum board systems except those predecorated or metal covered surfaces have joints taped and joints and fastener heads covered with one coat of joint compound (fire taped). Base layers in multilayer systems are not required to have joints or fastener heads taped with joint compound."

I asked UL if their omission could be interpreted to mean that they were not used and was told that "unless otherwise specified" means one must assume the compound and tape are present unless the language specifically spells out their omission. I suspect the confusion about the metal backing grew out of the instruction exempting metal covered surfaces. However, having metal framing behind the wallboard is not the same as having a metal covering on the front of the surface. The passage about taping only the top layer of multilayered systems suggests to me that the idea is to keep hot and or toxic gases from passing through the outside surface of the wall. 🏠

About the Author

Lee G. Jones is AWCI's director of technical services.