Drywall manufacturers recommend wetting gypsum wallboard in order to bend it for radius walls and other curves. With all the worries about mold, particularly with gypsum board, this seems to be counterintuitive and, at the least, risky. I know that it’s supposed to be fully dried before finishing, but this still seems unorthodox. Do you know if this is still the recommended method from manufacturers? —F.E.

Lately it seems that every aspect of construction, even years after the fact, has a built-in mold time bomb attached, just waiting for some eager lawyer to light the fuse. To tell the truth, I have heard that because gypsum wallboard’s paper surface is both composed of cellulose fibers and has lots of pores to offer mold spores a nice nesting place, it can indeed support mold growth under the right circumstances. It has also become part of the anti-mold mantra that one must eliminate all possible avenues or sources of moisture to ensure that the inescapable fog of mold spores that surrounds us does not get properly watered to the point that it can spread. Obviously adding water to such a surface at first glance seems as smart as smoking near an oxygen generator; on the other hand, I had not heard that the practice had changed either.

The Gypsum Association publication GA-226-96, Application of Gypsum Board to Form Curved Surfaces, offers both a dry and a wet method of applying the board to curved surfaces. This document explains that a dry board can be bent just so far, but if wetted front and back using either a roller or sprayer, then left flat for at least an hour, the board can be bent to an even shorter radius.

A quick call to the Gypsum Association confirmed that this document is still current. I was also reminded that the contractor should provide proper drying conditions, which include the use of dehumidifiers and fans, to ensure that the board dries sufficiently for the job to proceed in a timely and mold-free fashion.

Occasionally we receive a particularly interesting question on AWCI’s NetForum, at www.awci.org/neforum/awci/a, where the posted question is answered by several industry experts and warrants sharing here in Wachuwannano. Here is such an exchange:

What are the considerations of applying stucco over a 26 gauge thick sheet metal skin on a steel building! That seems too light. Are there other considerations? Should this even be attempted? —J.M.

From Robert E. Wilson of Rinker Materials: Twenty-six gauge is pretty much standard for metal buildings. It should have ribs every 12 inches. I would recommend that you use 3.4 self-furring paper-backed lath with self-tapping wafer head screws and attach on every rib (at 12-inch centers). I have used this method many times with favorable results. Don’t forget to use control joints every 144 square feet.

And from Kevin Day of Morrison Hershfield: Twenty-six gauge metal is only one consideration; design deflection is another. Anything with a wind design for less than L/360 could still cause problems—even with adequate control joints. My main concern stems from the fact that pre-engineered steel buildings often have design wind load deflection much greater than L/360 (such as L/60 or L/120: that’s 1 inch deflection over 60, and 1 in 120 respectively—too much movement for stucco).

About the Author
Lee G. Jones is AWCI’s director of technical services. Send your questions to him in care of AWCI’s Construction Dimensions, or send your e-mail question to jones@awci.org.