Q  

I enjoy your “Wachuwannano” articles every month. Keep up the good work.

The question I have is, as a general contractor, when do I have a right to tell finishers they are using too much water in their joint compounds? And not only water, but everything from specialty mud conditioners to Joy and Ivory dish soap.

I personally do concrete, stucco and EIFS, and know excess water can reduce strength more than 50 percent as well as increase shrinkage. I have never had a job where six months later you can’t see some joints. Sometimes it’s a couple of rooms, and sometimes the whole job. As the home builder I always get the blame from the finishers and also the distributors because I didn’t provide “satisfactory drying conditions.” Well nobody ever complains when doing the work. I even pay for a “Level Five” finish and specialty primers. I understand temperature and humidity removal are important, but I keep thinking there must be other causes. I have had crews put topping on with paint rollers, which just seems too thin, (yes it was mud and not primer). And with the pneumatic tools, compound seems to be getting even thinner. I know the label says “a little water can be added to improve workability” but how much is too much? I sure would appreciate your thoughts. —Byron J Anger

A  

Glad to know you enjoy the column, it’s nice to know the work gets read.

I talked with a gypsum board manufacturer’s representative at AWCI’s annual convention. His first suggestion was to get a new drywall finisher. He was aware of the many concoctions used by some finishers to supposedly enhance the workability of mud. He strongly suggested reading the directions on the bucket. Some of the newer lightweight compounds will turn to soup if too much water is added, so you might want to include a clause in your contract stating that manufacturer’s instructions shall be followed.

ASTM C475, Standard for Joint Compound and Joint Tape for Finishing Gypsum Board, has no physical property requirement for viscosity. Mud manufacturers will generally produce their products in a viscosity that is preferred by a specific market. For example, a manufacturer may have one “flavor” or brand of mud, but may have five different viscosity versions for five different market preferences. That said, ASTM C474, Standard Test Methods for Joint Treatment Materials for Gypsum Board Construction, does discuss viscosity only for consistency and repeatability of testing for the physical properties required in C475. The physical requirements for joint compounds in C475 are check cracking, putrefaction (spoiling) and shrinkage. Physical requirements for the Assembly of Taping or All-Purpose Compound and Joint Tape are bond and edge cracking.

Another avenue is to use the language in ASTM C840 for Level 5 finishes; at least this may help stop the roller action with mud.

22.6.6 Level 5:

22.6.6.1 All joints and interior angles shall have tape embedded in joint compound and shall be immediately wiped with a joint knife or trowel leaving a thin coating of joint compound over all joints and interior angles. Two separate coats of joint compound shall be applied over all flat joints. One separate coat of joint compound shall be applied over interior angles. Fastener heads and accessories shall be covered with three separate coats of joint compound. A thin skim coat of joint compound shall be trowel-applied to the entire surface. *Excess compound is immediately sheared off, leaving a film of skim coating compound completely covering the paper. As an alternate to a skim coat, a material manufactured especially for this purpose shall be applied. The surface shall be smooth and free of toll marks and ridges (see 22.4.1.1).*

*emphasis added

About the Author

Donald E. Smith, CCS, is AWCI’s director of technical services. Send your technical questions to him at smith@awci.org, or fax them to (703) 534-8307.