I watched a group of plasterers dump dry detergent into a stucco mix the other day. why would they do that and what do you think of it? G.S.—Washington

It’s pretty obvious; these guys were trying to make a clean room. (Sorry, but I couldn’t resist.) Rather, they may be creating a mess.

Wachuwannano has seen liquid detergent dumped into joint compound in an attempt to theoretically make it “slicker” and easier to apply, but the addition of dry detergent to stucco is a hereto before personally unseen phenomena. While the idea sounds rather innocuous—What could a little detergent do to a plaster mix?—some checking reveals that it is not a good practice to follow and is not condoned by any industry organization. (By the way, Wachuwannano does not sanction the joint treatment/detergent cocktail mixing process either.)

Machine application of plaster is a common practice in the western and southeastern United States, and some plastering crews apparently believe that the addition of a dry detergent to the scratch or brown coat plaster mix will make the plaster material slicker and easier to shoot with a plaster gun. That concept probably makes some sense, because if you take a small batch of detergent, mix it with water and rub it on the palm of your hand, it feels greasy and slick. Also, if you transpose that thought to the barrel of a plaster gun, it would seem logical that the plaster would fly out of the gun nozzle easier and more uniformly than if the detergent had not been added.

However, to fully appreciate what happens when you mix the detergent with the plaster, carefully open the lid on an operating washing machine during the wash cycle. Notice how the bubbles and foam are produced in an unsymmetrical pattern? The same thing happens when detergent is dumped into a plaster mix. The foam makes the plaster uneven, and the bubbles form an erratic pattern. Taken together, the two will combine to make the plaster irregular, adversely impact its final strength and possibly make it more susceptible to cracking and soft spots, especially if the detergent isn’t thoroughly mixed within the plaster.

Mixing the dry detergent with water also releases detergent solvents that can react adversely with the chemicals used to make some building papers more resistant to moisture. This can lead to deterioration of the paper and negate the positive impact of having a moisture barrier. Adding detergent to a plaster mix also may make painting the stucco more difficult since the chemicals in the detergent can work their way to the surface of the plaster and unfavorably impact the ability of the paint to adhere to the stucco surface.

Although their addition to stucco produces bubbles, detergents should not be confused with air-entraining admixtures. Air-entraining admixtures fluff up plaster to make it more workable and uniform, but all they usually add to a plaster mix is air, most of which is worked off during the machining or hand-troweling process. Dry detergents also produce bubbles and add air to the stucco mix, but, unlike the air-entrained bubbles, the detergent stays in the mix after it is applied to the substrate.

About the Author
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