what is the intent of the term “nominal” regarding plaster thickness in ASTM C-926? —via e-mail

To ensure proper plaster thickness, ASTM C-926 refers the user to “Table 1—Nominal Plaster Thickness for Three and Two Coat Work.” At first glance I read the “nominal” thicknesses to be minimum thicknesses (it’s hard for me to imagine getting more exacting than an 1/8 inch with a trowel or plaster pump). However, section 5.2.3 reads “ . . . where total plaster thickness will exceed the total thickness specified in Table 1 for types of solid bases [5/8 inches], furred or self-furring metal plaster base shall be installed in accordance with Specification C-1063.” This suggests that the “nominal” thickness is in fact the maximum thickness, because if you’re plastering over block and you exceed the “nominal” 5/8-inch thickness, you are required to install lath. But, section 7.3.1.1 reads: “Where masonry or concrete surfaces vary in plane, plaster thickness required to produce level surfaces shall not be required to be uniform.” But section 5.2 states: “Surfaces of solid bases to receive plaster, such as masonry, stone, cast-in-place or precast concrete shall be straight and true within 1/4 in. in 10 ft.”

So I found myself in a conundrum: How do you have a “nominal” thickness of 5/8 inches that requires you to use lath if you exceed that thickness, when the tolerance for the substrate is 1/4-inch? It seems with a nominal thickness of 5/8-inch and an allowance of 1/4-inch in the substrate, the range of thickness (with no tolerance) is 3/8 inches to 7/8 inches. How thin is too thin? How thick is too thick?

Fortunately, I know when I’m in over my head, so I asked the experts in hopes of getting to the bottom of this intent question. Here are their responses:

Gary Maylon, author of The Metal Lath Handbook, writes: “I believe that ‘nominal was used because it would be impossible to hold to any specified tolerance for each coat due to the fact that each is so thin to begin with. The ‘1/4 in 10 feet’ refers to the overall plane of the wall, if I am not mistaken, and that can only be controlled if the substrate to which we lath and plaster is straight and plumb. This is another gray area because we both know that you can’t use stucco to straighten an out-of-plumb wall. This will create variations in stucco thickness that will nearly always lead to stucco cracks in the thinnest areas.”

Walt Pruter, co-author of The Plaster and Drywall Systems Manual, writes: “As with so many issues involving plaster, a certain amount of latitude must be extended in enforcing requirements of ASTM C-926. Here in the West we tend to use Tables 25 A-D and 25 A-F in the California Building Code, which are a bit more specific. Table 25-D, Thickness of Plaster, does not use ‘approximate’ or ‘nominal and only states minimum thickness, except on concrete walls and ceilings where the thickness shown is maximum. For example: Vertical concrete walls can be skim coated with as little as 1/16-inch finish plaster or as much as 7/8-inch of plaster (presumably) on liquid bonding agent or dash bond coat. No maximum thickness is shown if metallic lath is employed. On ceilings where the 1/2-inch maximum is exceeded, metal lath or wire lath is required. Table 25A-F does use the adjective Approximate,’ but refers back to Table 25 A-D.”

Plastering consultant Ed Jakacki writes: “Nominal has always been a term used to express reality in the case of an application produced as an art form, such as plastering. The meaning was intended to relate to an application done or produced by a person rather than that which might be expected to be produced by machine, thus the term nominal means to be produced within expected or-better yet-reality: tolerance limits. If one had to put a number to this situation, I’m sure we would express it as plus or minus as little as 5 percent. Again, we are talking about something that is humanly possible.”

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