

Engineered Stone Standards? ◀ ▶ My Opinion

Have a technical question? Check MIA's Dimension Stone Design Manual VII first. If you can't find the answer there, contact MIA's Technical Director, Chuck Muehlbauer, at technical@marble-institute.com. This FREE service is for MIA members only! (Non-member charge: \$85/hour) As a courtesy to other members, please limit phone conversations to ten minutes per call. All opinions and advice provided by Chuck Muehlbauer or anyone else from MIA are provided as general information only. MIA assumes no responsibility and shall not be liable for any damages resulting from your use of this information. Any information provided by the MIA is the exclusive property of MIA and shall not be disseminated, republished, or reproduced in any manner without the prior written consent of MIA.

Q: I'm designing a building with a granite base and granite pavement. Aesthetically, I prefer to have the joint in the horizontal plane, in which case I would have the cladding extending below the pavement surface. In looking at existing buildings in my area, it appears that most are done this way. A colleague of mine says it should go the other way, with the pavement extending below the base, is there a correct way?

A: You are likely correct in saying that many, perhaps most existing buildings have the base course extending below the line of the finished pavement. This is a much easier detail to coordinate, since the slopes and elevations of the pavement are difficult to precisely predict, and extending the vertical stone below this line allows for some forgiveness in coordinating the two.

If it can be accommodated, the better detail, from a performance perspective, is to start the base course above the pavement surface. The concern is moisture control, and while most granites have low absorption, they still have some, and extending them below the pavement usually results in having them wick up subsurface moisture.

I've seen countless stone base conditions that were stained due to wicking, and it becomes quite unsightly. The Indiana Limestone Institute also recommends against it, and offers drainage details in their handbook in those cases where it absolutely cannot be avoided.

Q: Who pays for stone testing? We're looking at a stone spec with a

lot of testing in it, and we're asking our supplier to cover the cost, they're saying it's our responsibility as the installer.

A: In general, the testing requirements will be specified in the stone section, and it is most frequently the installing contractor that bids this section complete to the general contractor, so ultimately it is your responsibility. It's just one of the components of what you're bidding, and whether the purchase of the testing services is done by one of your vendors or by you, the cost will still be there.

Getting your supplier to do it isn't going to make it free. Depending on the country in which the stone supplier is located, they may or may not have access to local laboratories that test to ASTM standards. If they do, it often saves time and money to test locally and avoid shipping the test specimens internationally, but only if qualified laboratory services are available locally.

If you are purchasing multiple stone products from multiple vendors, it is probably simpler to arrange and purchase the testing services yourself. In some cases, where the general contractor has elected to purchase the stone product directly, and you are bidding installation labor only, the testing would typically go with the stone purchase section, although clarification of this should be made in advance.

There are also cases where the general contractor or owner has engaged a testing agency to do all of the testing for the entire project. In this case, the actual testing services

would be pulled from your scope, but you would still have to provide the test specimens.

Q: Is there a table or guide that tells us how long a shower seat can span for 2 or 3 cm stone?

A: No, there is no such table, and it would be impossible to create one due to the variability in stone strengths. For all practical purposes, you can forget about any appreciable span being safe for a shower seat in 20 mm thickness. Some of the stronger stones would be capable of safely supporting the occupant over a modest span in 30 mm thickness. The strength and variability of the individual stone would have to be considered on a job by job basis.

Q: Are the details and standards in the MIA's *Dimension Stone Design Manual* applicable to engineered stone?

A: No, we do not consider ourselves to be authoritative in the manmade products, nor have we had any involvement from the manufacturers of those products in the production of the manual. While it is likely that some of the details and standards would be applicable, we can't guarantee that they are.

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