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Tips for writing successful installation specifications

By taking advantage of the specification guidelines available in the marketplace, stone users can be confident that the finished stone installation will last for the long term

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Those of us who have been in the industry for at least a few years know how challenging it can be to specify stone installations correctly and then to ensure that the specification is held through the installation process. There are several things that need to happen to ensure that a stone installation is successful. First, the correct stone must be chosen for the application, and this is an area where the durability of the stone should obviously be taken into account. However, all too many times, I have seen a very soft and somewhat porous stone being used on a commercial flooring application that sees heavy foot and sometimes even cart traffic. In addition, the installation materials that are used must also be up to task of the application that the installation will be subjected to.

How can a specifier ensure that the installation will have the best chance for success? A good way to make sure that a stone and installation system will be successful is to be involved in a collaborative process that relies on the expertise of a seasoned architectural specialist. These specialists can represent the stone supplier or manufacturer/supplier of the installation products — or both. Together, they possess all the knowledge that can ensure a permanent installation.

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Some installation materials manufacturers have designed specification programs that make it simple to generate complete, comprehensive custom specifications that are equipped with installation details. Some of these allow users to generate a complete electronic specification in just minutes.

Creating a healthy environment

In addition, there are a few other things that specifiers and designers want to be aware of with stone installation specifications. One of the most important things that specifiers can do is to help create a comfortable and healthy installation. There has been a lot of negative publicity concerning indoor air quality issues. These issues have cast a bad light upon the construction industry. Specifiers and architects are becoming increasingly concerned about using environmentally friendly installation products for tile and stone. There are two distinct issues that should be addressed. One is the

issue of low volatile organic compound-emitting (VOC) products that do not emit harmful gas, are friendly to the occupants of the structure and to the environment. Most tile and stone installation materials manufacturers have a range of products that fall into this category. When specifying these materials, it is important to not only reference the appropriate ANSI category for the materials, but to also reference a specific Indoor Air Quality Act or state mandate that lists the maximum VOC limitations, along with a specific named installation product that serves as the design standard (where applicable). This will allow the bidders to bid the appropriate type of product that meets the low VOC requirements as well as the appropriate ANSI standard. If a product is specified simply on the basis of the ANSI standard — for example: "use thin bed mortar that complies with ANSI A118.4" — the return on the bid may provide a whole host of products that may not be suitable for the application. It would be better to specify the products in the following manner: "use low VOC-emitting thin-bed mortar that complies with ANSI A118.4," while also citing the specific state act regarding compliance and the standard-bearing brand, where applicable. In order to ensure fair competition, you may also state, "Approved equals will be accepted."

Many tile and stone adhesive manufacturers have installation materials that contain anti-microbial agents that reduce the potential for mold growth. This is especially important for wet area installations.

Mold and mildew issues

The other issue that needs to be addressed is the use of tile and stone installations that do not promote the growth of stain-causing mold and mildew. This has a direct impact on the overall air quality of a structure. Many tile and stone adhesive manufacturers have installation materials that contain anti-microbial agents that reduce the potential for mold growth. This is especially important for wet area installations. The use of non-organic adhesives goes a long way in avoiding mold and air quality issues. In addition, specifying waterproofing membranes in wet areas will protect spaces below and adjacent to the areas scheduled to receive tile and stone. Most portland cement-based products are inherently immune to mold growth. However, the mold can grow on organic deposits left on portland

cement-based materials (especially on grouts — e.g. soap and shampoo residue, etc.) To avoid problems, specify installation products — including adhesives, membranes and grouts — that are equipped with antimicrobial agents by specific product name or category as a design standard and by the appropriate ANSI category. Approved equals that meet the design standard can also be accepted as substitutes.

Rely on the experts

The last thing that we would like to mention is that there are so many new installation products and techniques that are becoming available, there is almost no way to get a good grasp on all of this information without help. As a suggestion, we would again recommend that you rely on the expertise of the architectural specialists of the installation materials manufacturer to provide this new information to design and specification firms. Most of these manufacturers have a full library of presentations that can be given at your firm. Usually, these programs are registered with the AIA/CES and qualify for continuing education points. ❑

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