Consultant’s Corner

Sealed with a Miss
What Your Caulker Doesn’t Know Can Hurt You
by Mark Baker

It has come to my attention that much of the time spent by specifiers, designers, detailers, material technical representatives and consultants producing, reviewing and approving specifications, details and shop drawings is going to waste. The guys with the caulk guns do not read contract documents and installation instructions.

I know plenty of good sealant installers, but I’ve also run into almost as many bad sealant installers. For some reason, I am often surprised by the work of experienced installers, but seldom am I surprised by the work of the inexperienced ones.

Lack of Information
Last week, I attended a meeting at a recently completed building where we were asked to check the window installation against the contract documents as part of a quality-assurance program by the general contractor. After the meeting we walked the project with the window and sealant subcontractors. We selected a location at random for a sealant field adhesion test and found that the perimeter sealant joint was 3/8-7/16 inches wide and was 1¼-11/2 inches deep without backer rod.

The sealant installer, who was a mature and experienced installer, did not have an explanation and had not heard of 2:1 ratios or maximum sealant depths, although the information was indicated in the material manufacturer’s data sheet, which he had given to us in the meeting only minutes before.

Perimeter sealant as specified, designed and approved
Far too many of these guys don’t know how to clean and/or prime properly. They don’t store and mix material properly. They don’t check expiration dates. They don’t know the limitations of the material, including compatibility issues, minimum and maximum joint dimensions or proper joint depth/width ratios. Some don’t use backer rod or cannot tool. The guys I am talking about may be on your job. And if you don’t tell them what they are doing wrong, they won’t find out. I assure you that you will hear about it, but your sealant guy will probably be long gone.

I suggest that we put down our pencils and get out into the field and look at what our sealant installers are doing. My experience is that once these guys find out that what they are doing is wrong, they don’t do it any more. One thing almost all sealant installers have in common is pride in their work. Most of the time, it isn’t any harder for them to perform the work properly—they just haven’t been taught.

Get Together
Sealant kick-off meetings are a must. The general contractor, glazing subcontractor, sealant installer, sealant manufacturer, architect and consultant should get together before any sealant is installed to review the details and the as-built joints to confirm appropriate material selection and joint dimensions, including depth and width limits (minimums and maximums), cleaning and priming requirements and procedures, ambient temperature limitations, storage and mixing procedures and to establish quality-control procedures including a schedule for field-adhesion tests.

We like to get written confirmation from the material manufacturer that we are using the appropriate material in accordance with its installation instructions. We also advise the sealant installer not to apply the sealant if the joint being sealed is outside of the limits set by the manufacturer. Once he installs the sealant, the joint and any related problems are his. Rather, advise the general contractor to correct the opening so the sealant can be installed in accordance with the manufacturer’s instructions, or have the sealant manufacturer review and approve the joint with any required modifications.

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