Clarity on EIFS Practices

Back in July 2002 the Ontario Association of Architects published a rain penetration control guide that contained a wall design exclusion to protect the association’s Indemnity Plan from claims relating to exterior wall systems. The exclusion was most notably aimed at face seal systems applied over moisture-sensitive substrates such as gypsum.

In the EIFS industry the 54-page guide hit the streets with a stir of controversy, not so much because it eliminated face seal wall systems, but because it didn’t address other EIFS options. Fears in the EIFS industry were that guide could be misconstrued as an indictment against other EIF systems.

Those fears should be allayed now with the OAA’s recent publication of an addendum to the guide titled the EIFS Interpretation Bulletin. Its intent is to “assist architects and their practices to understand the underlying principles of rain penetration in walls,” the OAA states. Published in September, the bulletin goes into detail on good practice techniques, although the association recommends that practitioners read the 54-page guide to fully understand appropriate EIFS applications covered by their insurer.

John Smith, president of the EIFS Council of Canada, says he’s pleased with the bulletin because it demystifies EIFS for architects: “The big concern was liability and whether the OAA’s indemnity plan would cover them if they used EIFS. The bulletin makes it much easier for the architectural community to specify EIFS.”

Most EIFS manufacturers will concur that the bulletin serves the industry well. Moisture drainage barrier systems have played a big part of the manufacturing sector’s production line for some years now, so the elimination of face seal systems over gypsum won’t have a major impact on manufacturers, Smith points out.

In the original 54-page guide, the wall design exclusion had been misinterpreted by some specifiers to mean that all wall systems must be drained ones. That is not the case. In fact, the guide contains a series of typical details demonstrating the principles of good wall design practices, some of which are not drained systems. An example is when precast concrete is the substrate.

According to the guide, EIFS can also be applied over glass mat faced exterior gypsum using a dual barrier/drained joint system. As long as the application has good detailing and it is carefully inspected, this system may even be used in highrises. A secondary barrier may be a proprietary trowel-applied product or another type of waterproof membrane.

The bulletin stipulates that all joints and penetrations, such as windows, must be drained. It contains a number of detailed drawings to assist EIFS designers with how to do this. It notes that a drained joint is not always created by two lines of sealant. The inner seal is often achieved by a water resistant barrier such as flashing or a gasket, as it is in window-to-wall joints and prefabricated panel systems. The outer seal may also be composed of gaskets, labyrinth joints or a similar type of seal, although this is rare for EIFS.

For complete details see the document at the OAA’s website, www.oaa.on.ca. At the top of the home page, click on “Services and Resources,” then scroll down and click on “OAA Practices Bulletins.” From there click on “E Series - Technical.”

The guide was written by John Straube, who is affiliated with the Civil Engineering Department and the School of Architecture at the University of Waterloo, in Kitchener-Waterloo, Ont. Straube teaches at the university on the subject of building materials and detailing and he also instructs classes through the OAA’s continuing education division.

About the Author
Don Procter is a free-lance writer in Ontario, Canada.