Using the Correct Fastening System for Your EIF System

Polymer-based or Polymer-modified—It Makes a Difference

By Ron Chelli

As the EIFS industry continues to grow and flourish, various types of rigid insulation boards are being incorporated within EIF systems. Bearing this in mind, and understanding that there are many situations where mechanical fastening is necessary, it is incumbent on all those involved in EIFS to understand and differentiate between the
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Types of mechanical fastening systems and plates (washers) available. We must, as an industry, be steadfast and diligent in utilizing the proper method of attachment to ensure that the wall system will perform to its full potential.

**Fastening a Polymer-based EIF System**

For instance, when mechanically fastening a polymer-based EIF system, the installer must incorporate a plate similar to the one shown in Diagram A (page 47), which features a 1 3/4-inch diameter polypropylene plate.
with angle keys for interlocking of base coat and a recessed chamber with "finger" closures to allow for a thermal break, plate movement (independent of substrate) and to prevent the base coat from clogging the chamber. It must be specifically designed and engineered for polymer-based EIFS that is

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installed over expanded poly-styrene insulation board to counter the effects of positive wind-loading.

**FASTENING A POLYMER-MODIFIED EIF SYSTEM**

Diagram B (page 48) depicts the proper plate for use
on polymer-modified EIFS, modified stucco systems, fiber-glass-faced polyisocyanurate EIFS, metal lath and stucco netting. These plates must be installed over an extruded insulation board and/or a reinforcing mesh to facilitate the 1 3/4-inch polypropylene plate “flattening” out, which is necessary for maximum negative wind-load resistance, without damaging the integrity of the insulation board.

As with polymer-based plate, these washers also feature angle keys to interlock the base coat. Unlike the polymer-based plate, however, they are
engineered to allow the fastener head to lay flush to the surface (not recessed). Because they are to be utilized only over extruded insulation and/or a reinforcing mesh, “in-out” movement is minimal and fastener head “popping” is eliminated. In short, these plates should be used only under these conditions and should not be applied on polymer-based EIFS.

**Final Thoughts**

With these facts in mind, it is important that each and every one of us in the EIFS industry promote the proper installation of EIFS if our industry is to continue to flourish. Shortcuts, with mechanical fasteners and/or washers, or any other facet of the application process, cannot be tolerated.

We must address these issues immediately so as not to cast a blemish on the fine reputation the EIFS industry has worked for years to establish. It is of utmost importance to be consistent in striving to make each and every project one of which we can all be proud. cd

**About the Author**

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