Manufacturers’ Warranties in the EIFS Business

Industry Changing as it Grapples with Today’s Market

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The exterior wall surface of a building is its most prominent feature. Since the completed structure is continuously exposed to public view, judgments are passed on the exterior appearance of a building almost daily.

For the producers of exterior insulation finish systems (EIFS), whose short 16-year history has evolved into one of the fastest growing segments of the American construction industry, how well a building’s exterior retains its visual appeal and structural integrity may determine the wall systems continued acceptance by architects and developers. A failure, for whatever cause, can be exceedingly expensive to correct and in some cases destroy the aesthetics if not the utility of a structure.

For these reasons, today, most EIFS manufacturers warrant the materials they supply when applied in accordance with factory-recommended specifications and application instructions. EIFS warranties, while written for the building owner, exist primarily to protect the manufacturer against poor workmanship and building design.

However, because manufacturers rely on the continued support of architects and contractors, they are normally quick to respond to complaints. All major EIFS producers offer a limited warranty covering replacement of defective materials for a period of three to five years. They generally accept no responsibility, however, for building design, engineering and workmanship. They “assume what’s in the can is fine” and rely on the general contractor to hire an approved applicator. While not written into the warranty, manufacturers will typically stand behind the labor, if it’s a true materials failure.

At a cost of $44.00 per square foot to repair a wall system, EIFS manufacturers rarely publicize their warranties. Therefore, building owners must request a warranty upon completion of the job.

Unique to the EIFS industry is the 5-year labor and material warranty now offered by Senergy, Inc., of Cranston, Rhode Island. This protection goes beyond materials failure by insuring the design of the wall system itself, and as a result, architects and contractors are free of normal liability for job failures. Before issuing the warranty, Senergy technicians must approve the architectural design, specification details, and applicator and will periodically inspect the job for proper EIFS installation.

Wall System Failures . . .

Good construction practices regarding EIFS should be followed as they...
should any building material. Non-performance of exterior wall assembly systems can be defined as a failure to provide a particular performance characteristic. EIFS failures fall into two categories.

The most obvious are cosmetic failures evidenced by color or texture variations, cold joints, and surface or substrate unevenness due to poor workmanship. Less than 5% of reported complaints, however, are attributed to materials failure. Engineering flaws account for the vast majority of wall system failures resulting in surface cracks, water penetration, delamination, and malicious damage. All can be prevented with proper detailing and installation.

Hairline cracks will appear when the finish coat is too thick. The open-weave fabric must be continuously lapped to avoid cracking between fiberglass panels. If not adequately cured, the expanded polystyrene insulation board will shrink and cause cracking. Finally, a building’s rigidity or flexibility can contribute to cracking.

Water is the curse of all wall systems and will more often penetrate the building rather than weep down the EIFS lamina. EIFS systems are water barriers, not drainage systems. Proper detailing around the roof line, doors and windows, and wherever the exterior finish system meets another material will keep water out, as will caulking aesthetic expansion joints.

If water does get in, the repair can be localized and easily corrected. The problem does not result in instability or other structural failure and poses no threat to people or property.

Occasionally, delamination will occur when EIFS is adhered to dirty surfaces and non-standard, untested substrates covered by poor paints and other coatings. EIFS manufacturers address substrate problems by specifying mechanical and/or special adhesive attachment techniques.
To overcome malicious damage caused by improper or inappropriate use of the wall system materials, particularly in high abuse areas, producers have introduced new heavy gauge fiberglass cloth embedded in the lamina.

Finally, wall systems will fail if not thoroughly dried and protected from the weather when being installed.

“Bad Sand”

The term “bad” or “rusty sand” results from the presence of iron in the sand used in manufacturing the wall system materials. Manufacturers purchase sand from nearly every region of the country and until recently have relied on suppliers’ quality control techniques to eliminate rust particles from processed sand.

Through the use of acidic bathing solutions, fine screens, and magnets, manufacturers have instituted their own methods for extracting rust and inspecting sand.