EASY MAINTENANCE ENSURES

EIFS Longevity

by Randall L. Donovan

A bad patch job can look so unsightly that it is as obvious as the original damage to the exterior insulation and finish system.

Low maintenance is one of the great advantages of EIFS. However, low maintenance does not mean no maintenance.

Many well-maintained EIFS buildings now in their second or third decade have proven the durability of this type of system. With occasional washing, periodic inspection and timely repair of any faulty sealant, loose flashing or any other leak-causing damage, these buildings have maintained their aesthetic qualities. EIFS contractors who want to showcase the longlasting quality of their work can point to them with pride.

In fact, everyone concerned benefits when the EIFS contractor, together with the design/build team, makes it a point to educate owners about the minimal maintenance and repair procedures that can keep their buildings in prime condition for many years.

INSPECTION IS THE KEY

First and foremost, periodic inspections are a must. Homeowners and owners of small commercial buildings must make it a habit to thoroughly inspect their buildings as part of their spring and/or fall cleanups and after major storms. Owners of medium- and high-rise buildings need to budget for close-up inspections. They may want to arrange regular inspections by in-house maintenance crews and/or outside contractors. This might include asking window washers to keep an eye out for anything amiss.

In all cases, building owners must be advised of exactly what they are looking for. The EIFS contractor can provide an inspection checklist and a list of cleaning do’s and don’ts. Contact your EIFS manufacturer to see if a checklist of maintenance recommendations is available.

Owners should be especially alert to any signs of water damage inside the building (including mold or mildeew as well as water stains, condensation or actual leaks) and trace it to the source. If water is leaking into a building, some of it also may be infiltrating the area behind the EIFS cladding. If ignored, it eventually will cause problems to the EIFS or other building materials. If the source cannot be easily pinpointed, the contractors who installed the various building materials should be contacted to help determine the cause and to provide recommendations for corrective measures. Your EIFS manufacturer may be helpful in...
providing a water vapor transmission analysis if condensation is suspected.

In addition to condensation, probable points of water entry that can specifically damage an EIFS include deficiencies in joint sealant, damaged or loose flashing, gutter or scupper problems and improperly installed or sealed pipes, signs or wires. These areas should be inspected carefully.

Those conducting inspections should check flashing at window sills and window heads, doors and parapet caps. The flashing should not be too flexible, extend at least 2 inches over the face of the EIFS, and not be punctured or torn.

In addition, inspectors should make sure the EIFS is properly sealed where it is penetrated by scuppers. They should ascertain that gutters and scuppers are properly sealed to the downspouts. All other penetrations of the EIFS—for air conditioners, utilities and signs, for example—should be checked to see that they remain properly sealed. If a sign has been replaced by a newer one, attachment penetrations for the old one should have been sealed.

Inspectors also should note any other surface damage to the EIFS cladding, such as that caused by a hurricane-driven object or vandalism. Patching a small penetration now can avoid a bigger problem later.

**REPAIRS**

While building owners may conduct their own inspections, they should be informed that a qualified
Applying base coat and reinforcing mesh.

Properly performed repair of an EIFS blends with the rest of the wall so that it is noticed only on close inspection.

Inserting a new piece of insulation board that has been cut and sanded to tightly fit the cutout area.

EIFS applicator should make any required repairs. Do-it-yourself patches most often look nearly as unsightly as the original hole or crack. EIFS contractors should let building owners know that this is not the way to solve the problem.

EIFS applicators may want to provide owners with an extra bucket of finish to take care of any near-future patching requirements. If the building is several years old a sample of finish taken from the building should be sent to the original EIFS manufacturer so that new finish for the patch can be matched to the weathered finish already on the building. The original EIFS manufacturer's materials should be used to avoid voiding any warranties.

Follow your EIFS manufacturer's recommendations for patching. Generally, this would include tapping off an area about 4 inches away from all sides of the damaged area. Within that area, cut out the lamina and insulation board about 1 inch away from all sides of the damage. With a disk grinder or sander, remove the finish coat that extends the additional 3 inches from the cutout to the edge of the taped area. The substrate must be checked and any deficiencies corrected.

A new piece of insulation board should be cut and sanded to tightly fit the cut-out area. Apply base coat over the back, but not the edges, of the insulation board and adhere it to the substrate. Rasp the insulation board, if necessary. Cover it with base coat and embed reinforcing mesh that overlaps the original reinforced base coat a minimum of 2½ inches. When the base coat has dried a minimum of 24 hours, apply the finish over the patched area and texture it to match the surrounding finish. Remove the tape before the finish coat completely dries and use a small brush or nail to blend the edges of the new finish into the surrounding texture.

**Cleaning**

While cleaning may be handled by the owner's maintenance crew or a professional building cleaning company, make sure the owner knows that the EIFS manufacturer's recommendations must be followed. The owner also should be informed that high-pressure powerwashing or water blasting should not be used, nor should solvents or petroleum-based products.

A non-sudsing soap, soft bristle brush (never a wire brush) and a garden hose or low-pressure powerwash are all it takes to remove the dirt that commonly collects on urban-area buildings. Specific types of commercial cleaners can be recommended by the EIFS manufacturer for removing graffiti, tar, red mud, mildew or efflorescence.

**Showcase Results**

The very nature of EIF systems means relatively little work for building owners, but owners do need to ensure that this minimal maintenance is done. Inspections, low-pressure powerwashing and, if necessary, calling an EIFS professional for an occasional repair are all it takes to keep an EIFS building in top shape. Such a building can serve as showcase project that will help generate future EIFS business for many years.

**About the Author**

Randall L. Donovan is manager of field services for Senergy Inc., Winter Park, Fla., a manufacturer of exterior insulation and finish systems. He joined Senergy in 1983 as a technical service representative. Donovan is active on the ASTM E6.55 subcommittee on EIFS.