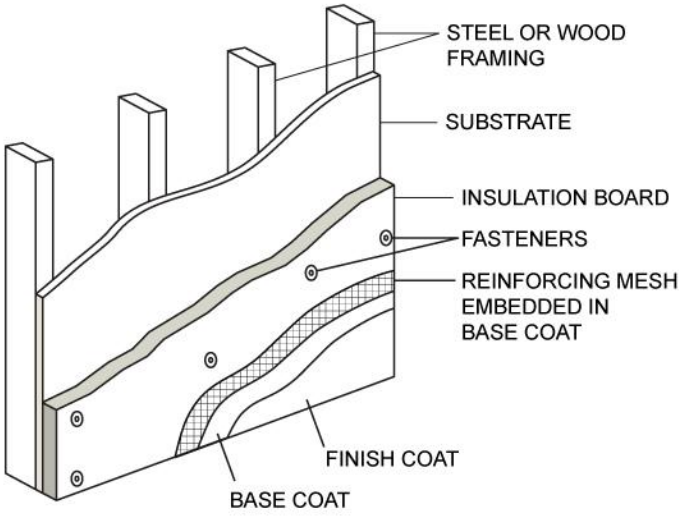
Maintain EIFS Walls

FEMA

PROTECTING YOUR PROPERTY FROM HIGH WINDS

An Exterior Insulation Finishing System (EIFS) wall typically consists of several layers of materials sandwiched together into a single panel, which is then attached to a substrate mounted on the wall studs (see figure). The exterior of an EIFS wall is water resistant, but the wall can be weakened by moisture that becomes trapped behind the wall. The sources of this moisture are usually leaks around doors and windows and where the wall joins the roof. Once an EIFS wall has been weakened, it is more likely to be torn away or penetrated by high winds and windborne debris. If wind enters a building, the likelihood of severe structural damage increases, and the contents of the building will be exposed to the elements.



CUT AWAY VIEW OF TYPICAL EIFS WALL PANEL AND SUBSTRATE MOUNTED ON STEEL OR WOOD FRAMING

You should periodically inspect your EIFS walls, particularly the flashing where the walls meet the roof and all the seals around doors, windows, and any objects that pass through the wall, such as utility lines. Make sure that the flashing and seals have been properly installed and are not damaged.

BENEFITS OF UTILIZING THIS MITIGATION STRATEGY

- Helps to prevent damage to a structure and its contents
- Helps to prevent injuries to occupants

TIPS

Keep these points in mind when maintaining your EIFS walls:

- ✓ A licensed contractor can test EIFS walls for moisture content and advise you on repairs.
- ✓ EIFS walls should be installed only by experienced contractors who have completed a manufacturer's training program. Contact the manufacturer or the EIFS Industry Members Association (EIMA) at 1-800-294-3462 or online at http://www.eima.com for more information.
- ✓ Most EIFS walls are susceptible to damage from windborne debris; however, impact-resistant walls have been developed by some EIFS manufacturers. Ask manufacturers whether their walls meet the wind load and impact standards established for your area. Your local building official can advise you about these standards.

- ✓ Ask your local building official about state and local code restrictions on the use of EIFS walls.
- ✓ EIFS walls have had mixed degrees of success in different parts of the country. Ask your local building official about the performance of EIFS walls in your area.
- ✓ EIFS manufacturers provide different types of fasteners and adhesives for buildings designed to withstand high wind loads. Ask the EIFS manufacturer and installer what the highest allowable wind speed is for your building and what can be done to help the walls withstand even higher wind speeds.

ESTIMATED COST

EIFS wall costs vary; however, the cost of a typical EIFS wall is approximately $4 to $6 per square foot.

OTHER SOURCES OF INFORMATION

EIFS Industry Members Association (EIMA), http://www.eima.com.

FEMA 489, *Hurricane Ivan in Alabama and Florida: Mitigation Assessment Team Report, Observations, Recommendations and Technical Guidance*, Chapter 5.3, "Non-Load-Bearing Walls, Wall Coverings, and Soffits," August 2005, http://www.fema.gov/library/viewRecord.do?id=1569.

FEMA 549, *Hurricane Katrina in the Gulf Coast: Mitigation Assessment Team Report, Observations, Recommendations and Technical Guidance*, July 2006, http://www.fema.gov/library/viewRecord.do?id=1857.

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