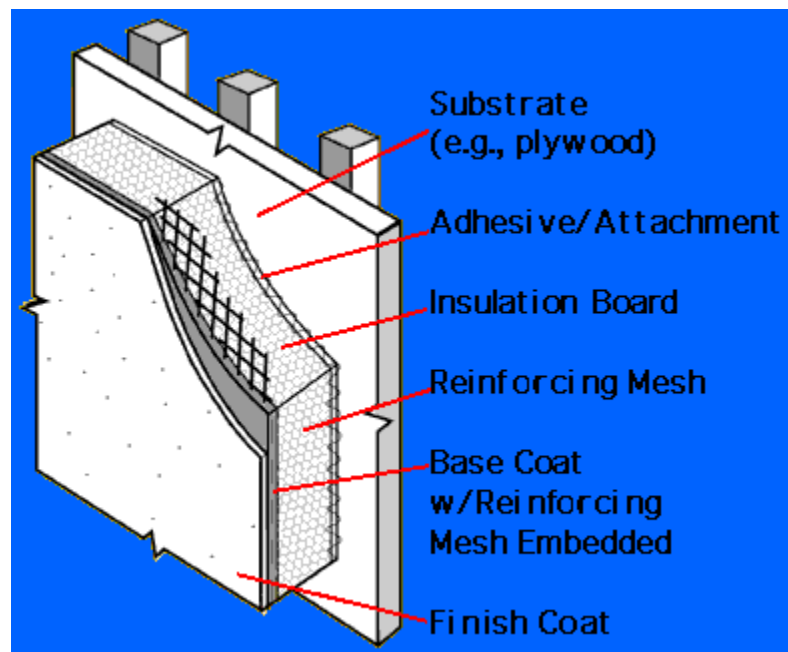


What Are EIFS?

Exterior Insulation and Finish Systems (EIFS) are multi-layered exterior wall systems that are used on both commercial buildings and homes. They provide superior energy efficiency and offer much greater design flexibility than other cladding products.

Developed in Europe in the 1950s, EIFS were introduced in the U.S. almost 30 years ago. They were first used on commercial buildings, and later, on homes. Today, EIFS account for nearly 30% of the U.S. commercial exterior wall market. EIFS typically consist of the following components:

- insulation board, made of polystyrene or polyisocyanurate foam, which is secured to the exterior wall surface with a specially formulated adhesive and/or mechanical attachment
- a durable, water-resistant base coat, which is applied on top of the insulation and reinforced with fiber glass mesh for added strength
- an attractive and durable finish coat — typically using acrylic co-polymer technology — which is both colorfast and crack-resistant.



Benefits of EIFS

The growing popularity of EIFS is due to the fact that few, if any, competitive materials offer such a wide range of desirable product benefits. Chief among these are superior energy efficiency and virtually unlimited design flexibility.

Energy Efficiency

If you've ever felt the comfort of being wrapped in a warm blanket on a cold winter night, you have some idea of what EIFS can do for a home or building.

EIFS literally wrap the exterior in an energy-efficient thermal blanket. By insulating **outside** the structure, EIFS reduce air infiltration, stabilize the interior environment and reduce energy consumption.

By contrast, traditional "between-the-studs" insulation, no matter how thick, leaves "thermal breaks" — gaps where heat and cold pass more freely between the outdoors and the space within — at studs, wall outlets, wall joints, and elsewhere.

In fact, EIFS can reduce air infiltration by as much as 55% compared to standard brick or wood construction. And since walls are one of the greatest areas of heat and air conditioning loss, improvement in the wall insulation can be very meaningful in terms of energy conservation.

What's more, EIFS add to the "R-value" of a home or building. (R-value is a measurement of the resistance to heat flow; the higher the R-value, the better the material's insulating value.) Most EIFS use insulation board with an R-value of R-4 to R-5.6 per inch as the innermost layer in the wall system. When combined with standard wall cavity insulation, this extra layer can boost wall insulation from R-11 to R-16 or more.

Another point to keep in mind on new construction: Due to the energy efficiency of EIFS, it may be possible to specify lower-capacity heating and air conditioning equipment without sacrificing anything in terms of interior comfort.

Design Flexibility

The rich appearance of EIFS bears a resemblance to stucco or stone, but the systems are far more versatile than these and other materials. Not only do EIFS come in virtually limitless colors and a wide variety of textures, but they also can be fashioned into virtually any shape or design.

With EIFS, skilled applicators can create all sorts of exterior architectural detailing that would often be cost-prohibitive using conventional construction — cornices, arches, columns, keystones, cornerstones, special moldings and decorative accents are but a few examples.

Most of this detailing is computer-generated. The designs are precision-cut out of insulation board, attached to the substrate or wall, then covered with the EIFS base coat, mesh and finish coat.

Using this ingenious process, EIFS applicators can give a striking, distinctive appearance to any building or residence.

Installation

EIFS are definitely **not** do-it-yourself wall claddings. They should be installed only by experienced applicators who have completed an EIFS manufacturer's training program.

Manufacturers who are members of EIMA provide extensive specifications for all applicators using their products.

Training programs are also available through the Association of the Wall and Ceiling Industries International (AWCI). For further information on their EIFS training programs, please call 703-534-8300 or go to their website at <http://www.awci.org/eifshome.shtml>.