Exterior Insulation and Finish Systems (EIFS) were developed for the express purpose to conserve energy and have the aesthetic appearance of stucco. Europe experienced the energy crisis before the United States and the solution to the problem was EIFS. It was discovered that 24 inch by 48 inch foam panels adhesively applied to the exterior of structures achieved continuous insulation (CI) and provided energy savings. A fiberglass mesh is embedded into proprietary polymer enriched cement and finished with a proprietary acrylic finish. These components combine to provide a strong, yet flexible lamina to protect the foam. The base coat within the lamina is the primary water-resistive barrier of the system.

Today, national and state energy code regulations require a more prevalent use of CI that prevents or minimizes the thermal transfer often referred to as thermal short circuiting or thermal bridging. Designers and contractors are encouraged to consider EIFS to comply with energy code regulations. They provide optimal protection against thermal transference at an economical cost. These systems are fully tested by each proprietary manufacturer and are now part of the International Building Code. In addition to this generic guide, it’s recommended to visit www.eima.com and to contact EIFS manufacturers listed on the EIMA website for more information.

**BARRIER OR CONVENTIONAL SYSTEMS (CLASSIC EIFS OR STANDARD PB SYSTEM)**
- Substrate (not part of system)
- Adhesive or mechanical-attached Expanded Polystyrene Board (EPS)
- Fiberglass mesh embedded into polymer modified basecoat
- Primer (optional but required with some finishes)
- Acrylic finish coat

**EIFS WITH DRAINAGE / WATER-MANAGED EIFS:**
EIFS with drainage is conventional EIFS installed over a water-resistive barrier, with provisions for discharging of incidental water that may enter behind the insulation board. In the event of a breach of the EIFS, the drainage path for moisture exists behind the EIFS to drain water to the exterior. Flashing is required where rainwater may penetrate other components and at the interface of different components.

**DRAINAGE SYSTEM NOTES:**
- Fluid-Applied secondary weather barriers: Trowel or roller-applied product applied over 100% of the substrate prior to the installation of the EPS Foam. Sheathing joints may be required to be taped and sealed prior to installation of the weather barrier depending on the manufacturer’s requirements.
- Light commercial & residential systems: Some systems may use paper-based water-resistive barriers and insulation board is mechanically attached to substrate.
• Secondary barriers may double as air barriers. check with system manufacturer.

• Weep capacity at the base of the system:
an engineered drainage device or an exterior-grade PVC casing bead with drainage holes. In some systems fire-safing products are used for fire ratings and to prevent a chimney effect with relation to the drainage plane. Each manufacturer may have its own design and should be tested to comply with code requirements.

**PANELIZED EIFS:**
Often used on large-scale projects and utilizing offsite construction of the EIFS. EIFS panelization is the combining of a structural and non-structural system in a manner that enhances the performance characteristics of each. The system utilizes structural steel studs as a means of support for the EIFS, joined by glass mat sheathing which is screw attached to framing members prior to attachment of EIFS. Pre-fabricated EIFS panels can be quality controlled to exacting standards and manufactured in an environmentally controlled, offsite environment.

*Note: Other systems exist utilizing other rigid foam products including polymer-modified “PM” and polyiso “PI” systems. Contact your EIFS manufacturer for more details.*