

Technical
Training
Series



Stucco and Cementitious Building Finishes – Part 2 of 2

Two commonly seen exterior building finishes, often referred to by the blanket term “Stucco” are **Portland Cement Stucco** and **EIFS (Exterior Insulation and Finishing System)**. While both may be similar in appearance, the systems are differentiated by component, assembly, installation and durability characteristics.

EIFS (Exterior Insulation and Finishing System)

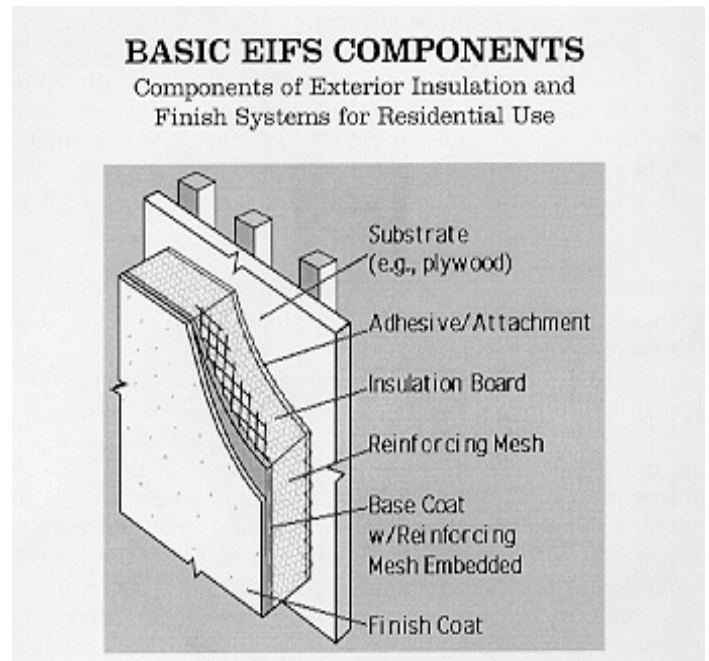
Often referred to as “Synthetic Stucco,” *EIFS is not stucco*. Many different EIFS systems exist, each with unique properties and components. EIFS can be installed with (Drainage EIFS) or without (Barrier EIFS) a moisture management system. Barrier EIFS installed over wood or fibrous substrate, if improperly designed, can lead to trapped moisture conditions, causing long-term damage. Typical assembly consists of an insulation board, reinforcement layer and finish coat.

Insulation Board – Commonly, expanded polystyrene of varying thickness, applied to a substrate with an acrylic or cementitious adhesive, or mechanically fastened to substrate.

Reinforcement – Typically fiberglass mesh applied to the insulation board and set in a cementitious base.

Finish Coat – Synthetic or acrylic coating applied in a variety of textures, similar to Portland Cement Stucco.

EIFS and Trapped Moisture – Because the substrate of an EIFS assembly is a synthetic material (rigid foam), EIFS clad structures are prone to trapped moisture conditions. Water penetrating the inner and outer primary moisture barriers becomes trapped, and is unable to evaporate. When not properly installed, and/ or not equipped with an effective moisture management system, trapped moisture within an EIFS assembly can lead to rot and deterioration.



Sectional View Of A Typical EIFS Application

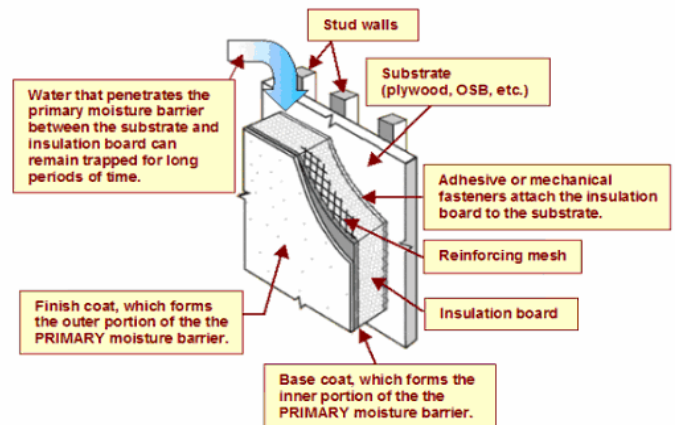


Figure 1