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EIFS Terms & Definitions

Accessory:

Any component installed in conjunction with an EIF System manufactured by that other than the systems manufacturer other than specific system components such as Portland cement and fiberglass reinforcing mesh. (i.e. starter tract, control joints, mechanical fasteners).

Aesthetic Joint/Reveal:

An aesthetic joint/reveal is a shaped groove cut into the insulation board prior to the installation of base coat and mesh. It serves as a design feature as well as providing a natural stopping point during the installation of the finish material. At no time can any portion of an aesthetic joint/ reveal be a flat horizontal surface.

Adhesive:

Cementitious and Non-cementitious adhesives. Cementitious, either premixed dry base or polymer-based adhesive that is to be mixed with cement. Typically used for the attachment of EPS to gypsum, cement board or unpainted masonry substrates. Non-cementitious adhesive is a one-part incombustible adhesive typically used for the attachment of EPS to wood substrates.

Backer Rod:

A closed cell foam rod installed in a joint that is to receive sealant. Its purpose is to control joint depth and configuration as well as prevent three-sided adhesion.

Base Coat Adhesive:

Cementitious and Non-cementitious base coats applied to the face of the insulation board and which the reinforcing mesh is imbedded.

Brown Coat:

The second coat of Portland cement plaster installed in a conventional hard coat stucco system. This coat if for leveling the wall surface in preparation for the installation of the finish material.

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Casing Bead:

Used as a stucco stop and exposed to eliminate the need for wood trim around window and door openings; also recommended at junction or intersection of plaster another wall or ceiling finishes, and as a screed.

Cladding System:

All components of the exterior of a building including but not limited to cladding material, windows, roof, flashings and sealants.

Class PB EIFS:

A polymer-based system applied over expanded polystyrene (EPS) board attached to the substrate with adhesive and/ or mechanical fasteners. Base coat thickness will vary depending on weight of fiberglass reinforcing mesh and number of mesh layers covering the entire surface. Primer may be installed over cured base coat, but is optional or by system specification. Textured or non-textured finish coat is applied to primed or non-primed base coat.

Class PI EIFS:

A polymer-based system applied over polyisocyanurate (PI) board attached over open (steel stud) framing or a solid substrate. Base coat thickness will vary depending on weight of fiberglass reinforcing mesh and number of mesh layers covering the entire surface. Primer may be installed over cured base coat, but is optional or by system specification. Textured or non-textured finish coat is applied to primed or non-primed base coat.

Class PM EIFS:

A polymer modified, mechanically fastened EIFS. Insulation board and fiberglass reinforcing mesh are both mechanically attached to the framing and/ or substrate. Typically, PM systems call for vinyl or zinc coated trim accessories. Base coat material ranges in thickness from ¼ to 3/8 inches. The base coat can be coated with a primer, depending on specifications. Finish material is applied over the primed or unprimed base coat.

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Cold Joint:

Cold Joints occur when a wet edge is not maintained. This can typically be avoided with proper scaffold, sufficient manpower and aesthetic reveal/ joints.

Corner Bead – Expanded:

A general-purpose corner bead is economical and most generally used. Has wide expanded flanges that are easily flexed. Preferred for irregular corners. Provides increased reinforcement close to nose of bead.

Cornerite:

This product is a strip of painted or galvanized Diamond Mesh Lath used as reinforcement. Cornerite, bent lengthwise in the center to form a 100-degree angle, should be used in all internal stucco angles where metal lath is not lapped or carried around; over substrate, anchored to the substrate, and over internal angles of masonry construction.

Control Joint:

Designed to relieve stresses of both expansion and contraction in large stuccoed areas. Made from roll-formed zinc alloy, it is resistant to corrosion in both interior and exterior with gypsum or Portland cement plaster. An open slot, ¼" wide and ½" deep, is protected by a plastic tape that is removed after plastering is completed. The short flanges are perforated for keying and attachment by wire-tying to metal lath or by stapling to gypsum lath. Thus, the plaster is key-locked to the control joint, which not only provides plastering grounds but can also be used to create decorative panel designs.

Curing:

This is one of the most critical aspects of good stuccowork. Cement is plaster requires water for hydration and to develop its full strength. If inadequate water is present, cement hydration is incomplete, producing weaker stucco. Curing during the early days of each coat is essential since shrinkage stresses tend to be high while the plaster has not yet gained full strength. Curing does not reduce overall shrinkage but it does delay it so that the plaster can gain strength and is thus better able to resist shrinkage stresses when the plaster dries later.

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Direct-Applied Exterior Finish System (DEFS):

An exterior finish system without insulation board. Base coat, regular or fiber reinforced, fiberglass-reinforcing mesh, if required by system manufacturer and finish coat applied directly to an un-insulated substrate.

Drainage Mat:

One type is a three-dimensional core consisting of fused, entangled filaments and a second is a non-woven fibrous, plastic mesh. Both are used as a spacer to create a drainage plane.

Drainage Plane/Cavity:

The space between the EPS insulation board and the weather/ moisture barrier through which incidental moisture can intercepted, conveyed and drained to the face of the cladding system. Two types are drainage mat and fluted EPS.

Efflorescence:

A crystalline deposit, usually white, that may develop on the face of a cementitious base coat, possibly from exposure to rain or damp conditions. Efflorescence deposited on the face oat is a bond breaker, and will prevent adhesion of the finish or coating.

EIFS:

Exterior Insulation and Finish System. A non-load bearing exterior wall cladding system consisting of a thermal insulation board, adhesively and/ or mechanically attached to the substrate, base coat with reinforced fiberglass mesh and a textured finish coat.

EIFS-MD:

EIFS with a drainage plane. A non-load bearing exterior wall cladding system consisting of a thermal insulation board, adhesively and/ or mechanically attached to the substrate, base coat with reinforced fiberglass mesh and a textured finish coat with a drainage plane allowing incidental moisture to drain to the face of the cladding system.

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Embed:
a method implemented to encapsulate the fiberglass reinforcing mesh in the base coat.

EPS:(See **Insulation board**).

Expansion Joint:
A complete structural separation of building elements that allows for independent movement of abutting elements without damage to the assembly. Typically, this is a separation through the EIFS as well as the substrate and framing or masonry.

Factory Mixed:
A material that is delivered from the manufacturer ready to use from the container. (i.e. finish coatings and non-cementitious base coat).

Field Mixing:
The mixing of a manufacturer supplied material with additional materials not manufactured by the system manufacturer. (i.e. EIFS base coat and Portland cement).

Fasteners:
Plastic washers used in conjunction with non-corrosive screws to attach both Class PB and PM insulation to substrate and/ or framing. There is a great difference in the plastic washer used in the two different systems. Fasteners are considered an EIF System accessory.

Flashing:
A non-corrosive material of metal or plastic at a systems termination or interface with an opposing cladding component used to drain moisture to the face of the wall assembly.

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Finish:

A textured and colored material, trowel or spray applied over the reinforced base coat with graded aggregate of either silica or marble.

Insulation Board:

Aged, molded, expanded or extruded polystyrene (EPS) foam. One-pound expanded polystyrene is used with a Class PB or MD EIF System. Extruded polystyrene is used with a Class PM EIF System. Also, there is Polyisocyanurate insulation that is typically used with a Quick R system.

Lamina:

Base coat, fiberglass-reinforcing fabric/ mesh and finish coat as a composite unit. Sometimes a primer coat is also incorporated, depending on the application and manufacturers system requirements.

Metal Lath:

Metal lath embedded within the stucco provides reinforcement. It is readily shaped to ornamental contours to a degree not possible with other stucco bases. Metal lath is a mesh material formed from sheet steel that has been slit and expanded to form a multitude of small openings. It is made in Diamond Mesh and Rib lath types and in two different weights for most types. Manufactured from steel protected by a coating of black asphaltum paint. Diamond Mesh and 3/8” Rib lath are also available in galvanized steel.

One Coat Stucco (OCS):

A factory blended, fiber-reinforced, Portland cement stucco base coat formulated for assured strength and durability.

Penetration:

Any location in an EIF System where an object passes through all components of the system such as a window, door, light box, etc.)

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Primer:

A paint-like coating (tinted or untinted) installed over the base coat to enhance adhesion, equalize suction and improve workability of the finish material.

Reinforcing Mesh:

Standard reinforcing mesh is a nominal 4.5 oz./sq. yd., symmetrical, interfaced open-weave glass fiber fabric made with minimum 20 percent by weight alkaline resistant coating for compatibility with base coats.

Reinforcing Mesh – High Impact Mesh:

Minimum 15 oz./ sq. yd., high impact, double strand, interwoven, open-weave glass fiber fabric with alkaline resistant coating for compatibility with base coats. High impact mesh is also available in 20 oz./ sq. yd. from most EIFS manufacturers.

Sealant:

Installed with or without a backer rod for the purpose to allow thermal expansion and contraction of dissimilar cladding components to prevent moisture intrusion at system penetration and terminations.

Sealant System:

The use of primer, backer rod or bond breaker in conjunction with the installation of sealant.

Scratch Coat:

The first coat of Portland cement stucco installed over metal wire or lath. This first coat should be a minimum of ¼" thick, measured from the backing to adequately cover the metal wire or lath and still leave enough stucco to permit deep scratching (horizontally) to give a good mechanical key for the next coat which is the brown coat.

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Stucco – Conventional Hard Coat:

A solid cement plaster cladding of Portland cement and sand often containing lime, plasticizers or other admixtures, applied over rigid or non-rigid backing fixed to wood or steel stud framing and reinforced with metal wire mesh or lath.

Substrate:

The wall surface to which the EIFS is attached. Acceptable substrates include exterior grade plywood, oriented strand board, exterior grade gypsum sheathing, glass faced gypsum board, cement board, clean unpainted masonry, concrete free of paint sealers and oils or contaminants, structurally sound unpainted clean Portland cement stucco.

Surface Mounted Objects:

Anything attached to the face of the EIFS that penetrates the lamina. (i.e. light fixtures, downspouts) Each EIFS manufacturer has specific details for the attachment of surface mounted objects.

Strip lath:

(see **Cornerite**)

Weather/Moisture Barrier:

A sheet good or wet applied coating installed at the face of the substrate as a moisture barrier or drainage plane.

Wrapping:

The process of totally encapsulating all EPS to seal and strengthen the system by bringing reinforcing mesh around the system terminations, embedded in base coat. Wrapping is also referred to as back wrap or edge wrap.