

One-Coat Stucco

One-coat stucco is another option for designers and contractors to consider for energy efficient claddings. One-coat stucco has been a popular and successful cladding for residential construction throughout the Southwestern United States for over 40 years. This system was developed during the 1970's energy crisis. New requirements for more R-Value in the exterior wall cavity meant builders needed to go from traditional 2 x 4 to 2 x 6 framing in order to make room for thicker insulation. The plaster industry responded to the need and created the "one-coat stucco system" which allowed builders to continue using 2 x 4 wood studs and meet the higher R-Values set by the energy code. The one-coat stucco system was initially designed to be placed over 1" inch of tongue and groove rigid foam. The rigid foam added the required R value.

One-coat stucco is a proprietary system incorporating a blended cement typically applied over a rigid EPS foam sheathing board. The systems are generally considered by plaster bureaus more appropriate for residential and low rise commercial projects. One-coat stucco has had good success when applied per manufacturer's recommendations and with an approved finish coat. For more information about one-coat stucco, please visit www.nocsa.org.

SPECIFYING SUCCESSFUL ONE-COAT STUCCO

The one-coat system is actually a two-coat process: the base coat and the final or "finish" coat. Acrylic or elastomeric finishes can be used to add performance and crack reduction. The system is generally less in cost per square foot than EIFS and can be less than conventional three-coat stucco. The following are recommended by "WCC" when specifying "One-coat Stucco":

- One-coat stucco is not recommended for smooth or fine sand finish textures.
- One-coat stucco should be limited to Type V construction.
- The nominal thickness of the one-coat base coat should be 1/2 inch rather than the code minimum 3/8 inch.
- For quality control purposes, Specify wire made in North America
- One-coat stucco may be applied over gypsum sheathing, rigid foams or wood based sheathings.
- Follow all manufacturers recommendations
- A Water-Resistant Barrier(s) (WRB) compliant with the manufacturers' recommendation should be placed behind the rigid foam sheathing.
- Attach lath/wire approximately no more than seven (7) inches on center along framing supports.

The degree and type of flashing will depend largely on the type of building, region of the country and exposure to water. It is advised to contact a local reputable source for best practices in that region of the country with regard to one-coat stucco. This would include plaster bureaus, suppliers, manufacturers and established contractors with a proven track record.

For added crack protection, the designer may specify a mesh imbedded into a polymer-based cement skim coat. This will add cost to a base system, but significantly improve crack resistance. Insure the finish coat is compatible with the mesh and skim coat if an acrylic lamina (crack suppression system) is specified. WCC recommends all plaster "wet goods" are supplied by the same manufacturer to ensure product compatibility.

