I’m an architect, and I just came across one of your old columns from a couple years ago where you talked about applying veneer plaster directly to concrete masonry units. I’m involved in a project where we are considering applying a skim coat of veneer plaster to monolithic concrete. Will this produce a satisfactory finish, and what should I be aware of before I design the veneer plaster finish into the project?—J.G., South Carolina

Yes, veneer plaster can be applied directly to monolithic concrete. It will produce a satisfactory finish if applied properly, but you need to be aware of some issues before you begin to apply the plaster.

If the concrete surface you intend to plaster is new and freshly poured, you need to let it cure for at least 30 days before you begin to apply the plaster. Up until the 30 days are complete, the concrete is still “hot” and still forming and hasn’t developed properly to accept plaster or any other surface finish.

Once the concrete is properly cured, you need to make sure it is not coated with form release agent residue or a waterproofing compound that could prohibit the plaster from establishing a firm grip on the concrete. Release agents are commonly applied to the surface of the forms that are used when the concrete is poured, and if enough of the release agent remains behind on the concrete after the forms are stripped, the plaster will never stick properly.

Whatever the age of the concrete, you need to make sure that it is clean and free of gouges and protrusions—remember, one-eighth of an inch of plaster is not going to make an extremely rough surface smooth—and in good condition. The concrete should not be deteriorating or falling apart and must be dry. Depressions greater than one-quarter of an inch in depth should be filled with portland cement mortar. Shallower depressions can be filled with a spot coat of veneer basecoat material.

You should apply a bonding agent to the surface of the concrete before you apply the plaster. Concrete tends to be very inconsistent in its porosity and texture, and the plaster probably will not bond evenly unless the surface is coated with a product that is designed to improve the adhesive process. Bonding agents vary in their mixing and application requirements, so manufacturer’s directions must always be carefully followed when they are used.

And forget the notion of using a single coat of veneer plaster. The AWCI Veneer Plaster Manual recommends that a two-coat system always be used when the material is being applied directly to monolithic concrete or concrete masonry units. In addition, the AWCI guide recommends that the base coat of plaster be scored or roughened once it has become firm. This is to provide proper suction for the finish coat.

Once installed, the plaster surface should be identical in appearance to veneer plaster that has been applied to gypsum veneer base. It will provide a smooth, monolithic surface and can be painted or decorated using conventional veneer plaster painting techniques.

About the Author
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