

Acrylic Coatings: The Perfect Stucco Finish

By Larry Miller and Joe Miller

Whether a stucco surface is new or old, there are many different finish coatings in today's marketplace that are supposedly right for the job. However, none works better than 100% acrylic coatings. From elastomeric to high-build flexible textured coatings, acrylic coatings are the best solution for solving color coating or stucco cracking problems.

Acrylic coatings are extremely durable and flexible materials formulated with high quality aggregates and fillers. Properly formulated, they possess excellent adhesion and won't peel, chalk or flake from a properly prepared surface. The high-build coatings have excellent hiding power which can help eliminate surface defects and irregularities. Acrylic coatings are extremely resistant to U.V. attack and possess excellent weatherability, with the better products withstanding wind-driven rain of up to 120 mph.

Even after 10 years of exposure to the elements, high quality acrylic coatings will maintain their flexibility characteristics and will not become brittle even after exposure to either cold or hot climatic conditions. They can withstand the damaging effects of continual freeze-thaw cycles and are alkaline resistant.

Water based acrylic coatings easily meet the EPA requirements limiting the volatile organic compound (VOC) content regulations. They have an

extended shelf life and are also easy to clean up with just soap and water once the job is completed.

Acrylic coatings have excellent color stability too. They can be easily tinted to match practically any color in the spectrum. In addition, some manufacturers offer a choice of textures (smooth, fine, coarse or trowel tex-

100% acrylic coatings, including elastomeric and high-build flexible textured coatings, provide the best solution for solving color coating or stucco cracking problems.

ture) to enhance the aesthetic beauty of the project and solve surface defect problems encountered in some stucco applications.

Selecting a Quality Acrylic Coating

As with most products in the con-

struction industry, not all acrylic coatings are equal. In today's market there are high quality acrylic coatings and materials that are of lesser quality. No matter what the situation, the old adage "you get what you pay for" rings true. The quality of the material is just as important to the success of the application as the workmanship. No matter how good the contractor is, the result will usually be substandard if the material applied is of poor quality.

When looking for a good quality product, a few things should be investigated. First, look at the weatherability characteristics of the material. Has it passed an accelerated weathering test? Can it withstand severe temperature changes and freeze-thaw cycles? A material that has passed a minimum weatherometer test of 5,000 hours is usually going to stand the test of time.

Second, check the solids content of the material. The higher the solids content (over 65% is generally a good level for elastomeric), the better the material will perform. Be certain to select an acrylic coating that does not contain plasticizers as these can leach out over time and lead to embrittlement of the film or chalking.

Finally, will the manufacturer back up his product with quality service and assistance? Too often a product is selected for a particular application, and when help is needed the

manufacturer is nowhere to be found. A manufacturer who stands behind a product and offers you technical assistance does so because he knows there's more to the job than just the material in the bucket.

Most acrylic coating are easily applied by spray and/or roller. The lone exception is high-build coatings which are predominantly applied by hawk and trowel, although spray application is acceptable.

Repairing Deteriorated Stucco

When you talk about repairing old stucco, the latest buzzword in the industry always gets mentioned: elastomerics. It seems as if every manufacturer has an elastomeric in his product line and promotes it as the end of all problems. The fact is that elastomerics do offer a solution for stucco repair, but they do not eliminate all problems.

Primarily, elastomeric coatings should be used to correct deteriorated or cracked stucco, not prevent it. A properly prepared, clean, sound substrate is essential in order for the project to be successful. Hairline cracks (cracks measuring up to 1/32") can be filled with a smooth texture of the product by brushing into the crack and feathering the material out. Cracks that are bigger than hairline cracks must be filled with a knife grade elastomeric and spread out properly across the surface in order to prevent a "mapping" image from occurring.

Once the cracks have been properly filled, a two-coat application of the elastomeric coating can be applied to the clean, solid stucco substrate. In no time you will have that hairline-cracked stucco looking like new and resistant to wind driven rain.

One thing you should be careful of with an elastomeric is to make sure that it truly is one. Imitations are everywhere in the market. Like its name, an elastomeric should act similar to a rubber band: not only will it elongate, but it must also have recovery properties, especially in extremely cold or hot conditions. Too often, manufacturers who claim that they offer an elastomeric will have a product that does in fact stretch, but lacks

recovery characteristics especially in hot summer temperatures.

New to the marketplace is the trowelable elastomeric. These high-build coatings offer an unlimited amount of design freedom and texture for the plastering trade. They are used in place of the paintable acrylic coatings where additional hiding power is needed or when a change of texture is desired. The trowelable elastomerics possess all of the performance characteristics of a traditional elastomeric with the added advantage that they will fill, hide and bridge cracks of up to 1/8". These trowelable elastomerics are usually reinforced with mesh at the larger cracks and then coated with the material.

Coating New Stucco

For new stucco substrates the acrylics industry is filled with a wide variety of products ideal for the job, depending on the desired result and the condition of the stucco.

For example, in many areas of the

country stucco is finished in a standard gray or uncolored grade and finished with a two-coat film-forming 100% acrylic emulsion. With this method, minor application errors or defects can be corrected while obtaining a uniform color finish without changing the texture.

Be careful. Imitation elastomerics are everywhere in the market.

For integrally colored stucco surfaces that have color irregularities, an application of a low viscosity, pene-

trating, tinted acrylic sealer may be applied to help achieve uniformity. This sealer can be tinted to match the color of the stucco and then spray applied in the light mist coat to help eliminate shadows in the finished surface. With this method, color uniformity can be achieved without giving a painted look to the stucco.

When greater hiding abilities are needed for new stucco without changing the texture, some manufacturers offer higher build, higher viscosity film-forming 100% acrylic coatings. Usually available in various aggregate sizes, this type of acrylic coating has excellent hiding power, freeze-thaw resistance and weatherability.

To obtain a high build texture and color uniformity in one step, a trowel-applied acrylic finish coating is available. Plasterers are familiar with this type of coating as, in many instances, it is the same material as the finish coatings in exterior insulation and finish systems (EIFS) applications.

Dubbed "synthetic stucco," these flexible coatings are ideal to work with, possess more hiding power than the film-forming coatings, and provide a virtually unlimited amount of design freedom.

Application Suggestions

No matter which acrylic coating is selected for the job, there are a few general guidelines which should be followed in order to have a successful project. These helpful hints include:

a). Prior to starting any

work, a job sample should be completed and approved by the architect and/or owner for color and texture.

b). Follow all mixing and application instructions from the manufacturer.

c). All work must be done

in a continuous fashion and in one operation to the entire wall area.

d). A wet edge must be maintained at all times to prevent lap marks or cold joints from occurring.

e). Application of the material should be from and to natural stopping points on the building (i.e., control or expansion joints, feature lines, exterior or interior comers, etc.).

Whether it's new stucco or the repair of cracked stucco, there's a quality acrylic coating that is right for the job. Not only do acrylic coatings provide an attractive finish, but they are, more importantly, functional and long lasting, to get the job done right the first time.

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Deteriorated and cracked stucco surface.



A 100% acrylic coating is ideal for obtaining a uniform, durable finish for the stucco surface.



Hairline cracks in the surface are filled by brushing a smooth elastomeric into the crack and feathering the material.



To obtain high build texture and color uniformity in one step, apply a trowel applied acrylic finish coating, commonly referred to as "synthetic stucco."



For cracks larger than 1/32", a knife grade elastomeric is used for the repair.



Whether it's new stucco or the repair of cracked stucco, a high quality acrylic coating will provide a durable and attractive finish.