

# Benefits of All-acrylic Wall Coatings

PAINT AND COATING APPLICATORS familiar with masonry materials generally agree that cracks in stucco are as inevitable as death and taxes.

And many are just as convinced that conventional masonry paints – while aesthetically appealing and priced to sell – won't put a dent in solving the cracking problem.

As a result, paint and coating specifiers and applicators throughout the Sun Belt and elsewhere are switching to thicker wall coatings with elastic qualities that can "stretch" to span cracks that may develop and expand in masonry, and to provide an effective protective barrier against moisture from wind-driven rain.

The trend is reflected in industry figures that show elastomeric wall coating sales exceeding \$100 million a year, and growing at an annual rate of more than 12 percent.

Architectural and construction coatings manufacturers are reporting steady gains in both the residential and commercial segments of their business. This reflects what they say is a growing awareness in the field of the features, benefits and life-cycle cost advantages of elastomeric coatings.

Many of these manufacturers produce coatings with all-acrylic binders, in deference to the more-sophisticated, quality-conscious customer base they serve.

The manufacturers say that all-acrylic binders provide better color retention and are more resistant to alkalinity, a chemical condition in new stucco and other cement-based materials that attacks the paint film. All-acrylic elastomeric coatings, according to some manufacturers, are also far more effective than conventional exterior paints in curbing or reducing efflorescence, a salt-like substance that migrates through the masonry substrate, leaving a milky deposit on the coated surface.

The growing acceptance of elastomeric coatings marks a comeback of sorts for a product category that was unfairly tarnished earlier in the decade. On a number of projects, the coatings were poorly specified, says Scott



**Using trained applicators is one way to ensure proper performance and long life.**

Mueller, product manager at Thoro Systems, Jacksonville, Fla. "By the time they discovered that more than one coat was needed, it was often too late," he says. Elastomeric coatings make up between 30 percent and 35 percent of Thoro's total coating sales. "Pinholes soon developed in these coatings, and the architects blamed it on the product. These architects have since learned that there is nothing inherently wrong with the product, that you simply need a thickness of at least 20 mils dry to achieve the desired results."

With dry film thicknesses four to five times those of latex exterior paints, elastomeric coatings are now generally applied in two coats to enhance their ability to bridge cracks, to form a sturdy barrier against moisture, and to reduce the likelihood of alkalinity and efflorescence. Most manufacturers also recommend use of an alkali-resistant primer, though many applicators prefer to let the coating basecoat serve as the primer on newly patched masonry.

With their added thickness and elasticity, these coatings readily stretch across cracks in masonry surfaces, which develop as the masonry expands and contracts due to daily temperature swings. And they maintain their flexibility even in very low temperatures. When temperatures return to normal and the cracks diminish in size, the coatings contract and return to their original shape without warping or wrinkling.

Nowhere have elastomeric coatings found a more receptive audience than

in Florida's retirement communities. Richard's Paint Co., Rockledge, Fla., projects a healthy future for the coatings in Florida's condominium market, where accelerated construction schedules and an inherent settling problem have served to increase demand for high-quality coatings that can respond effectively to cracks in stucco.

### Quality and return on investment are important issues ...

"The ground rules have changed somewhat for general contractors in Florida," says Eric Richard, Richard's vice president and director of marketing. "Owners of commercial buildings now have up to 15 years to sue builders and general contractors for poor performance. So we want to use the best possible coatings on all our jobs."

Florida condo builders are particularly concerned about the prospects of moisture seeping into the cracks and rusting out the steel rebar, Richard says. Once that happens, it's not un-

usual for large chunks of concrete to crumble and fall away. Elastomeric coatings can form an effective moisture barrier to protect these reinforcements from rust and corrosion.

Nature isn't the only culprit when it comes to cracks in stucco. Thoro Systems, which has supplied elastomeric coatings for nearly 9,000 single-family homes, primarily in Arizona and New Mexico, suggests that an insufficient number of expansion joints in many of today's newer buildings creates undue pressure on the walls and eventually leads to cracking of the stucco exterior.

"If you discount settling and the normal temperature swings, inadequate building design is probably the chief contributor to cracking in the stucco homes we see," says Mueller.

Most coatings manufacturers recommend that freshly applied masonry be allowed to cure for a minimum of 28 days to avoid the possibility of alkaline damage during the first year. But to be absolutely sure, Richard's Paint Co. recommends that an alkali-resistant primer be applied to the new masonry following the curing period.

Despite such advice, some builders choose to forego the curing period, hoping that the elastomeric coating will hold up at least through the warranty period. It's important that specifications include specific instructions for this process.

Most manufacturers back their elastomeric coatings against failures for at least three to five years, though some insist that an all-acrylic elastomeric



All-acrylic elastomeric wall coatings are growing in popularity in both commercial and residential markets.



**Elastomeric coatings are now generally applied in two coats to maximize their effectiveness.**

coating should perform well for upwards of 10 years. And when a product fails during the warranty period, they claim it's almost always a case of an applicator not following accepted surface-preparation or application procedures. Consequently, manufacturers agree on the importance of using contractors experienced in applying these types of coatings.

While any masonry surface is a potential candidate for an elastomeric coating, the rule of thumb is that any crack wider than  $\frac{1}{32}$  of an inch should first be cleaned and repaired using either an all-acrylic or a combination of caulk and a masonry patch. Mike O'Neil, product manager for architectural coatings at Sto Corp., Atlanta, says his company continuously stresses the importance of proper preparation and application techniques in its applicator training programs. "Even if there are no cracks to be filled," he says, "applicators are taught how to power brush and wash to remove dirt, unbound sand chalk, or loose surface particles."

Proper training of applicators is the key to the future growth of the elastomeric market, says Bill Barker, marketing manager for wall coating systems at the Neogard Division of Jones-Blair Co., Dallas. "Most failures can be traced back to improper surface preparation and application techniques," he says.

Aside from the education issue, the

biggest hurdle facing manufacturers of all-acrylic wall coatings is selling the return-on-investment aspects of a product that often sells at a premium. Some manufacturers note that all-acrylic coatings have a much higher life expectancy than coatings with less-durable

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binders. And because labor accounts for nearly 85 percent of the cost of a typical paint job, the savings from using a top-quality elastomeric coating can be significant, especially on large, residential projects. By choosing all-acrylic coatings, owners of stucco homes won't have to re-coat as often, which will save them time and money in the long run, according to Thoro's Mueller.

Quality and return on investment are also important issues for customers of Neogard, which sells thousands of gallons of its all-acrylic elastomeric line

each year. "Sure, there are builders and contractors who shop only on price, but we're definitely seeing the pendulum swing the other way," says Barker.

Elastomeric coatings, like exterior paints, reflect a growing trend toward lighter accent colors that tend to deflect heat. Particularly popular in the Sun Belt states and other stucco markets are muted, accent neutral pastels such as peach, beige, coral and iris. Thoro, for example, offers 48 standard colors as well as a custom-tint program featuring 3,000 additional shades. Bucking the trend toward lighter shades is the residential market in the Southwest, which, according to Sto's O'Neil, "won't accept pastels. Typically, they're looking for somewhat darker earth tones, like tans and beiges," he says.

Regardless of color preference, coatings manufacturers say homeowners and other end users are becoming increasingly more cost and quality conscious when selecting a coating for masonry surfaces. In elastomeric coatings, they see an affordable category of products that can add extra years of trouble-free performance while providing excellent resistance against color fading, dirt and mildew.

And they're discovering that, unlike death and taxes there's something they can do about cracking in stucco and other masonry surfaces. ■

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