



Sustainable polyurethane coating provides the look of marble on a concrete budget.

The project team of Ave Maria University personnel, architect Cannon Design of Grand Island, New York, and construction manager Suffolk/Kraft of Naples wanted the 70,000 square feet of concrete floors in the newly-constructed Ave Maria near Naples, FL, to have a dramatic look and be extremely durable, yet affordable. Several companies bid on the job, but Solomon Colors, Inc. of Springfield, IL and Covestro were instrumental in providing an alternative, more sustainable solution to traditional flooring surfaces.

They recommended an affordable combination of acid stain and polyurethane sealant that would have the appearance of marble and be extremely durable and easy to maintain. According to Solomon Colors' former president, Art Pinto, achieving the desired results from decorative concrete can be extremely intricate. "It's important to use top-quality products, and know exactly how the different materials are going to interact." For the floors at Ave Maria University, Solomon Colors recommended a system comprised of their own ChemTone Acid Stain and a DecoShine sealer, a polyaspartic polyurea developed using

polyurethane technology from Covestro. A rich "aged leather" color was chosen for use throughout.

"ChemTone Acid Stain provides you with a beautiful, marble-like finish. It's the only acid stain without hydrochloric acid, so it's safer to use and has no nasty fumes," commented Pinto. "And the polyurethane sealer absolutely locks in the finish and creates the high-gloss polished look. It's extremely durable – it won't scratch and it's easy to maintain. That was important for everyone on the Ave Maria team."

Three specialty contractors were hired to execute the project. Miami-based flooring contractor, Concrete Floor Solutions, began by diamond-grinding the surface of the new concrete to a 100 grit surface finish. This provided an excellent surface for the acid stain, and allowed proper adhesion of the polyaspartic coating. Once the concrete was prepped, experienced crews from Crown Concrete and Cutting Edge Concrete applied the acid stain then sprayed the polyaspartic sealant on all 70,000 square feet of concrete floor. Because the coating was easy to use and fast drying, a second coat was applied just a few hours later. Pinto noted, "The Ave Maria job had a very tight timeframe and the quick-drying polyaspartic sealer helped to keep us on schedule. Yet it was even more important that the end result would give the University years and years of beautiful wearability. The combination of our ChemTone Acid Stain and the polyaspartic sealer was the ideal combination."

Top Coat:

DecoShine polyaspartic polyurea coating/sealer

Location:

Naples, Florida

Owner:

Ave Maria University

Coating Supplier:

Decosup, Inc.
Miami, Florida
305-468-9998
www.decoup.com

General Contractor:

Suffolk/Kraft
Naples, Florida
239-643-6000
www.kraftconstruction.com

Architect:

Cannon Design
Grand Island, New York
716-773-6800
www.archiplanet.org



The Job wouldn't have gone quite so smoothly without the seamless collaboration of all parties. Cannon Design, Suffolk/Kraft, and all of the trades worked diligently through the guidance of Covestro and Solomon Colors to ensure that the new finishes were installed properly and completed before school opened in the fall of 2007.

As the University grows, so will the foot traffic across the acid stain concrete floors. Thanks to a unique polyaspartic sealant, their marble-like finish will shine for years to come.

DecoShine Polyaspartic Polyurea Coating/Sealer

Description:

A state-of-the-art polyaspartic polyurea coating/sealer for concrete, this self-priming system can be applied to a variety of substrates. It provides a long-term finish that resists chemicals and is more scratch resistant than most coatings in the market today. It may be applied at low or high temperatures. It is very easy to apply (roller or sprayer), offers a deep, high-gloss wet look, and provides a very durable finish.

System Composition:

Self-priming finish coat made of a polyaspartic polyurea, applied at 5 to 10 mils with roller or sprayer.

Coverage is approximately 225 sq ft/ gallon when applied at 5 mils.

General Properties:

- Self-priming
- Excellent adhesion to concrete
- Excellent scratch and traffic resistance

System:

- 68% solids polyaspartic polyurea
- VOC gms per liter: zero
- Tensile strength: 6627
- Elongation: 3%
- Shore D hardness: 75
- 60 degree gloss: 93
- Impact resistance (direct): 100
- Taber abrasion: 57.7 mg
- Mix ratio: 100A/100B by volume
- Pot life: 25 minutes
- Dry to touch: 60 to 90 minutes
- Full cure: 2 to 4 hours



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