Cleanability and Aesthetics of Architectural Fabrics

On any building the general appearance of the structure is a major concern, not only when the structure is new but also as the structure ages.

Many of the structures designed using Shelter-Rite architectural fabrics are high profile buildings that have unique patterns and shapes. These structures need to maintain their appearance for a long time, and architects and engineers are typically very concerned with color changes or excessive dirt pickup that might affect the visual appeal of the structure.

Color change of a coated fabric is usually related to the exterior coating compound, but the top coating system can also have an effect on the color. As a result, Seaman formulates the proprietary compound to use colorfast pigments. To provide confidence in the formulations, the coatings can be tested in an accelerated test machine to determine any significant levels of color change.

A more difficult aesthetic problem is related to dirt pickup on the architectural material. Because synthetic resin coated polyester fabrics are formulated to be soft and flexible, they can be susceptible to dirt sticking to the surface. Seaman has addressed this issue by applying a top finish system on the exterior of the coating. The principle behind the top finish system is to create a thin hard film on the surface and to allow the dirt to be washed off by normal rainfall.

Seaman offers several popular top finish systems. The first system uses an acrylic solution top finish applied to the material. Secondly, weldable PVDF is offered which is primarily an acrylic / fluoropolymer blend, dissolved in solvents. A very thin layer of this solution is applied to the surface of the material, with the resulting thickness of 0.2 to 0.4 mils. One of the problems with these systems is they will erode over time, allowing the structure to get dirty after several years. This top finish system is used on many industrial and recreational buildings.

Seaman Corporation 1000 VENTURE BLVD. WOOSTER, OHIO 44691 USA, www.architecturalfabrics.com
Phone 330.262.1111, Fax 330.263.6950 U.S. *Toll-Free:* Phone 800.927.8578, Fax 800.649.2737