Hard-Coated Foam Brings the World of Ancient Egypt’s Pharaohs to Life

Modern foam display technology is used to design an ancient architectural backdrop for the Treasures of the Pharaohs, the second in a series of traveling exhibits recently on display at the Florida International Museum in St. Petersburg. With massive columns, wall panels and accents fabricated using Futura Coatings’ polyurethane hard coats over foam, this new exhibition is a prime example of the possibilities offered in the “Promised Land of Foam,” says John Henningsen, marketing director for Futura Coatings, St. Louis, Mo.

“In some cases, it is the first time these particular antiquities have been out of Egypt,” commented Roger Barganier, president of Creative Arts Unlimited, Inc., a St. Petersburg, Fla.-based specialty prop architectural fabricator. They were brought into the project under great security for this touring exhibition. For the project’s planners and architects, these questions were posed: How does one bring to life the splendor of an age more than 5,000 years old? and How do you transport the exhibit from city to city in an easy, affordable manner? For Harvard Jolly Glees Toppe, an architectural firm headquartered in St. Petersburg, Fla., the answer was a lightweight foam fabrication protected with Futura Coatings’ spray-applied STYROTHANE® hard coating to make the displays durable.

Creative Arts Unlimited worked closely with the architectural
firm and Egyptian curators to produce the exhibit’s architectural columns, archways and ceilings. The Creative Arts design staff used computer-driven foam cutting machines to carve the main body of the pieces. From there, thousands of years of artistic skill took over. Creative Arts tried to capture the grandiose architectural power that was the hallmark of ancient Egypt.

Using these foam carving methods, Creative Arts Unlimited could produce any size architectural piece they desired. According to John Toppe of Harvard Jolly Clees Toppe: “We’re excited about the idea of working with foam because of its low cost, light weight and ease of manipulation.”

Creating lightweight foam pieces fit the criteria exactly since the display would have to be eventually transported from city to city. This immediately ruled out materials like fiberglass, wood or EIFS and plaster due to weight, shipping costs and structural engineering required by the building code. Foam also can be manipulated and coated to look and feel just like stone.

John Toppe commented: “They (Creative Arts) were able to achieve superior surface characteristics thanks to the coating system.” The coating didn’t add excess weight to the exhibit pieces. What’s more, since Creative Arts used the fire-rated version of Futura’s product, the foam complied 100 percent with the stringent codes of the fire department. Best of all, the hard-coating system over the foam means the pieces would resist the biggest abuse faced by any exhibit or museum piece: The curious hands of the public as they wonder what the exhibits are made of.

Even though the architectural displays themselves are lightweight, they’re coated to keep them durable enough to stand the daily touch of thousands of visitors. Plus, the coating handles the occasional collisions with strollers, wheelchairs or metal purse buckles.