When Fentress Architects was commissioned to design a new concourse for the Norman Y. Mineta International Airport in San Jose, Calif., Curtis Fentress, the firm’s principal in charge of design, sought to deliver “an iconic form to honor the region’s innovation soul.”

The result of his firm’s work is Terminal B, a sleek, linear thoroughfare with a telescoping design that not only conveys the forward-thinking ethos of the Silicon Valley, but incorporates abundant environmentally advanced technologies as well.

One key element in the Terminal B design is a series of curved metal panels, supplied by Overly Manufacturing, that billow like fabric over the main building, then attenuate as they arc from the rooftop to the sidewalk below. The panels, which are coated with Regal White Duranar® powder coatings to match the exterior hue of the terminal, are perforated to express buoyancy and lightness during the day and to transmit a translucent, glowing appearance at night.

In addition to being a signature design element for Terminal B, the metal panels also represent the first major application of Duranar powder coatings by PPG on architectural metal. Neil Chrisman, president of Spectrum Metal Finishing, said his firm, which coated more than 30,000 square feet of metal panels for the project, said Duranar powder coatings were selected for several reasons.

“The scope and application of this project made it a great opportunity to use powder coatings,” he explained. “Both sides of the panels had to have painted surfaces, and we needed a specific film thickness in the (perforated) holes because the terminal building backlights the panels when the lights are on after dark.”

Duranar powder coatings were also selected in part for their minimal impact on the environment. Because they are formulated without solvents, they emit virtually no volatile organic compounds (VOCs).
Like Duranar liquid coatings, which have long been favored by architects for their proven durability, Duranar powder coatings are made with a Kynar resin system. For more than 40 years, PPG has combined these resins with proprietary PPG resins and pigments to make Duranar coatings the industry’s most trusted and proven product line.

Because Duranar powder coatings are based on the same PVDF technology as their liquid counterparts, they offer the best of both worlds. That is, the environmental benefits of an ultra-low-VOC powder coating with the durability, small-batching capability, color and gloss retention, and the chalk, corrosion and stain resistance of a liquid coating.

Chrisman said PPG powder coatings offered at least one additional benefit: easy installation. “Our installers said that this was a smooth installation for several reasons,” he explained. “Less touch-up was needed in the factory and also less on the job site. There was much less marring because of the hardness of Duranar powder [coatings].”

The new Terminal B at Mineta San Jose International Airport is one component of a $695 million design-build project that encompassed aesthetic enhancements to Terminal A, roadway and parking improvements and numerous system upgrades such as a state-of-the-art baggage-handling system.

Covering more than 160,000 square feet, Terminal B is designed to accommodate up to 8.5 million passengers per year. Other environmental highlights include curtain walls and skylights with low-e glass, low-flow plumbing fixtures and extensive use of recycled materials and certified wood. There also are energy-efficient air diffusers, secure bike storage and showers for employees and an educational kiosk explaining sustainable design. Water efficiency also is designed to be 30 percent better than code, thanks in part to drought-tolerant landscaping that cuts water consumption in half.

To learn more about Duranar powder coatings, visit www.ppgideascapes.com or call 1-888-PPG-IDEA (774-4332).