



CASE HISTORY

Serving Up an Appealing Selection of Images

Vikuiti™ rear projection screen builds business and appetites for Axel's Bonfire restaurant

The corner of Grand and Victoria streets in St. Paul, MN has always been an active intersection for commerce and shopping. The crossroads originally served a neighborhood of sprawling Victorian mansions with car dealerships, garages and a corner drug store. It's now become a mecca for shoppers and diners lured by cosmopolitan bustle. Triple lattes and local brews, designer kids' clothes, cooking utensils and furniture are all within a few steps of each other. Eclectic restaurants offer Thai, Greek and Italian cuisine. The newest eatery, Axel's Bonfire Wood-Fire Cooking, is a bistro-like restaurant carefully designed to balance live music with sports video, an environment that captures the hum of the neighborhood while encouraging patrons to linger.

The proprietor of Axel's Bonfire, Phil Danford, knows his neighborhood. He previously managed Ciatti's, an Italian restaurant at the same location, for 20 years. When he and his partners redesigned the setting into Axel's Bonfire, they drew on what they knew patrons liked. Besides a good menu, customers like the unexpected, and that's why the restaurant's front windows feature two 60-inch diagonal Vikuiti™ rear projection screens from 3M.

"Besides the usual appeal of video, the screens themselves are unique," said Danford. "At only one-quarter inch thick, the suspended screens seem to deliver eye-catching video out of thin air," he said. "Customers are intrigued, and the screens become conversation pieces." From Danford's experience, visuals can be one more reason for people to come to the restaurant. Patrons can gather to watch anything from local and national sports matches to major international sporting events. Rear projectors mounted behind the screens are connected to satellite TV. In addition to the video rear projection in the windows, customers can also view events on plasma and high-definition screens located elsewhere in the restaurant.

An eclectic mix that works

"We chose the Vikuiti screens for the front window because they're thin, not bulky and intrusive like a TV would be," said Danford. Vikuiti



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rear projection screens are one-quarter inch thick, making a 60-inch diagonal screen weigh about 15 pounds. "The screens enhance the décor by adding a high tech look," said Danford.

The visuals are one part of the mix designed to welcome guests who have a variety of dining preferences. A raised stage and two pianos separate the dining room from the bar area, and live music is as popular at lunchtime or dinner as it is after 10 p.m. The eclectic décor successfully mixes high tech with something that might be called old-world baronial: heavy wooden tables and chairs, a two-sided fireplace, wall art that could be from a private collection, and a double-sided bar running the length of the front dining area. It's all enhanced by the main architectural feature left over from the building's original days as a Studebaker dealership: 30-foot ceilings and floor-to ceiling windows overlooking the bustle of Grand Avenue.

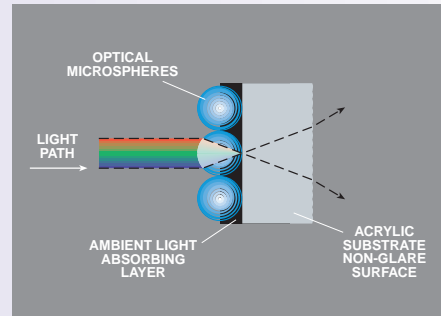
Image "pops" with glass bead technology

It's no accident that Danford placed the Vikuiti rear projection screens in the floor-to-ceiling front window. "The Vikuiti screens are easily visible throughout the day, and at night they really pop," he said. "They attract the attention of pedestrians walking by."

The exceptional visibility, both in daylight and after dark, is what distinguishes the Vikuiti screen, according to Joel Fusco of Alpha Video, a Minneapolis supplier of audio-visual systems. "You can see vivid and clear images in light conditions not usually considered acceptable for rear projection, plus you can see the images from almost any angle," he said. "With the Vikuiti screens, customers have the flexibility to place them in areas not normally ideal for video viewing. The image appears to come from out of nowhere because the projector is concealed and out of vision from the viewers."

The Vikuiti rear projection screen consists of three layers: a layer of optical microspheres, a light-absorbing layer, and an acrylic layer with a non-glare surface. The layer facing the projector is coated with millions of optical microspheres, which focus the light so it exits at just one small point (see diagram). This layer refracts light from the projector. A black layer in the middle absorbs ambient light, which contributes to the high-contrast image and reduces screen glare. The projected light passes efficiently through this black absorbing layer and diffuses throughout a durable, acrylic, non-glare surface, which faces the viewer. This three-layer combination enhances brightness and contrast, and preserves rich colors and high resolution, even when the screen is viewed from the side.

After 20 years on the corner of Grand and Victoria, Danford knows that tastes in dining ambiance change along with menu preferences. What doesn't change is the desire for a welcoming, comfortable venue. Axel's Bonfire Wood-Fire Cooking is a captivating restaurant that could be anywhere in the world.



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