



Vanceva® World of Color Awards™ Honorable Mention, NA

Project information

Project: PZ Vapor Trail Experience

Location: Cape Canaveral, Florida, U.S.A.

Architect: GTRI | www.gtri.gatech.edu in collaboration with Formations Studio | www.formations-studio.com

Glass laminator: Glass Flooring Systems Inc. | www.glassflooringsystems.com

Project year: 2018

Featured products: Vanceva interlayers 0002 0006 0248 000H 0258

(Visit vanceva.com/color and type in color code to view optical, solar, thermal, and color properties.)

Photo credit: © GTRI communications



Vanceva® glass tiles enlighten visitors at the Kennedy Space Center Visitor Complex

PZ Vapor Trail lights up with information when activated.

The PZ Vapor Trail project at the Kennedy Space Center Visitor Complex in Cape Canaveral, Florida, will be a 40,000-square-foot lighted outdoor footpath consisting of piezoelectric—or PZ-enabled—concrete pavers topped with approximately 600 load-bearing Vanceva glass tiles.

For this unique project, the architects and researchers at Georgia Tech Research Institute (GTRI), in collaboration with Formations Studio, designed the interactive self-powered flooring system to light up in various colors with user interaction. Underneath the Vanceva glass tile top, each tile has custom electronics, including circuit boards, six mini solar panels, a battery, LEDs, a Bluetooth transmitter, a Wi-Fi transmitter, microcontrollers, and the piezoelectric element. In this case, the PZ element is a thin ceramic disk of lead zirconate titanate.

A small electrical charge is generated when a piezoelectric material is compressed, flexed, or vibrated. For the PZ Vapor Trail, the electrical charge is activated by foot traffic. As visitors

walk on the self-powered path, their footsteps produce a wireless signal that connects with smartphones and screens to inform the visitors about space missions and piezoelectric technology.

Each glass tile is a pixel in the pathway's mosaic imagery of Earth, Mars, and the Moon. The tiles operate on three power sources: piezoelectricity, solar panels, and a small rechargeable lithium battery for energy storage and use at night.

The PZ Vapor Trail project is a glowing example of how renewable energy applications, along with Vanceva glass laminates, can be used to make wayfinding an enlightening experience.

About Vanceva®

Producing a broad spectrum of colors and moods that are unachievable using stock selections of glass, Vanceva® color interlayers by Eastman give architects and designers more creative freedom with glass than ever before. Vanceva color interlayers can be combined to produce more than 17,000 transparent, translucent, or solid color options to help create the desired tone and intensity. When Vanceva color interlayers are combined with tinted or reflective glass, the design possibilities are nearly limitless. No other interlayer brand delivers the complete spectrum of colors for laminated glass like Vanceva colors.

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