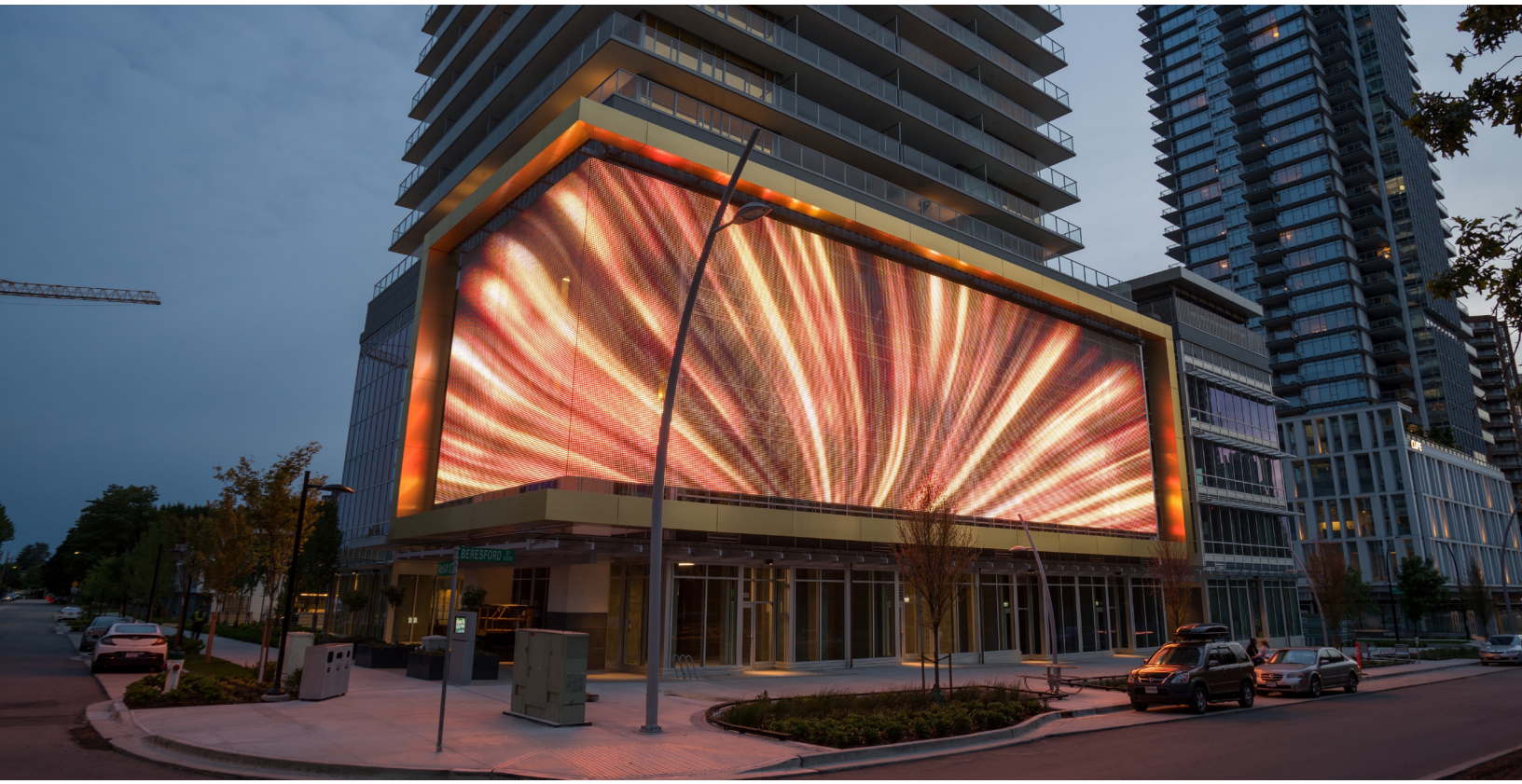
PLANAR | Installation Profile



Product
EcoDot Outdoor LED Mesh

Location
Burnaby, British Columbia, Canada

Industry
Architecture & Design

Application
Public Art

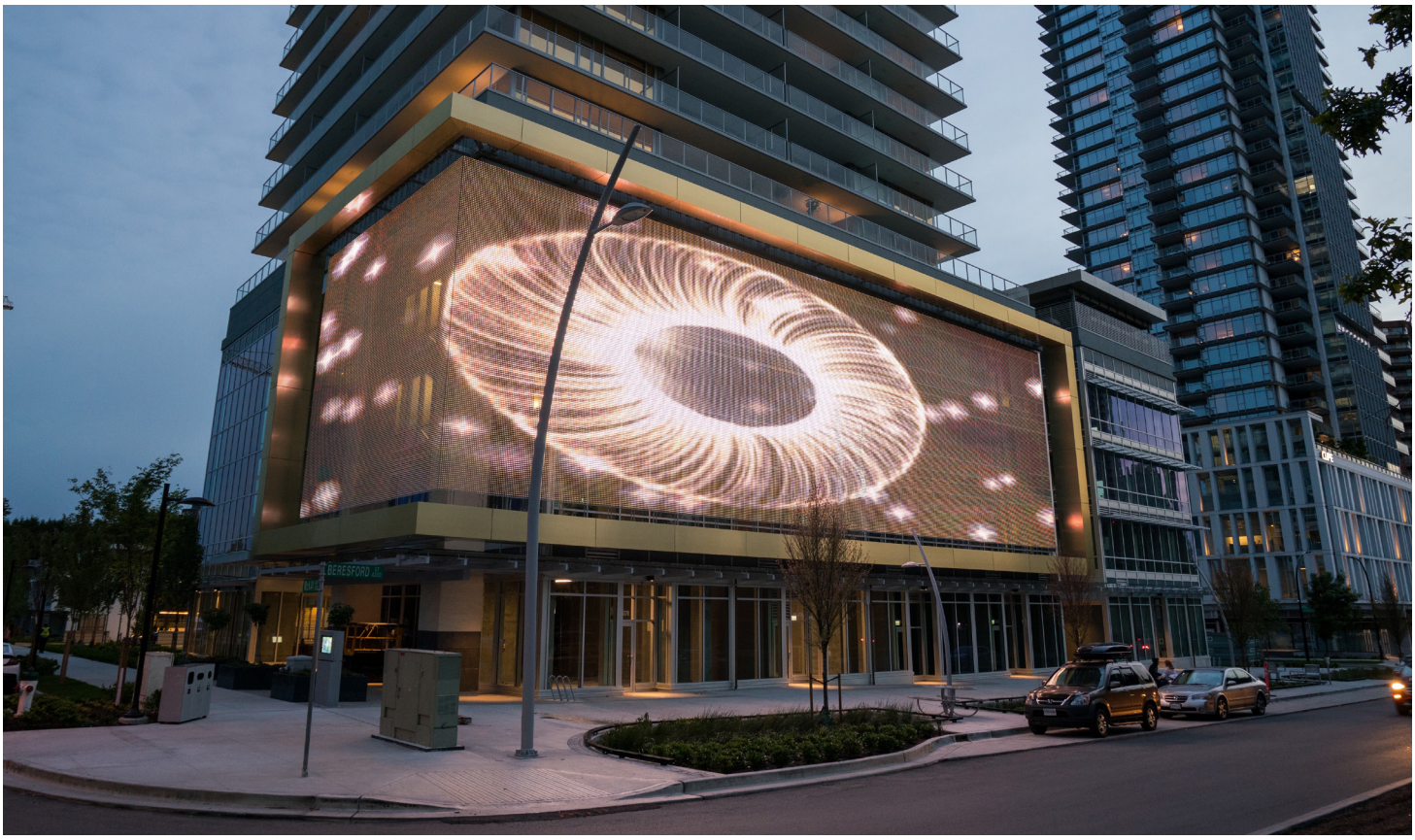
Partner
ShowTech AVL
ShowTechAVL.com

Outdoor LED Mesh Display Transforms Building into North America's Largest Digital Art Canvas

Gold House LED Public Art Display

When Rize Alliance Properties built its new Gold House mixed-use development in the Metrotown community of the City of Burnaby, British Columbia, the developer was required to contribute to the municipal government's Beresford Art Walk program with a budget of $1 million. Launched in 2014, the city art initiative was created to improve the fast-growing Metrotown area by integrating art-focused streetscapes for promoting pedestrian and transit-friendly spaces.

Rize engaged leading public art consultant Jan Ballard of Ballard Fine Art and Gold House designer Chris Dikeakos Architects to consult on the public art project. Together the consultants worked in collaboration to realize an innovative and compelling LED canvas on the buildings exterior that could be used to feature digital artwork from local artists. Ballard Fine Art contributed thoughtful research, community engagement strategy, artist selection, artist and City liaison as well as public relations.



With careful attention to detail Ballard Fine Art facilitated the initial artist selection and artwork concept commission through fabrication and installation with audio, video, lighting and rigging specialists ShowTech AVL to help design and manage the technological challenges in a display of this magnitude.

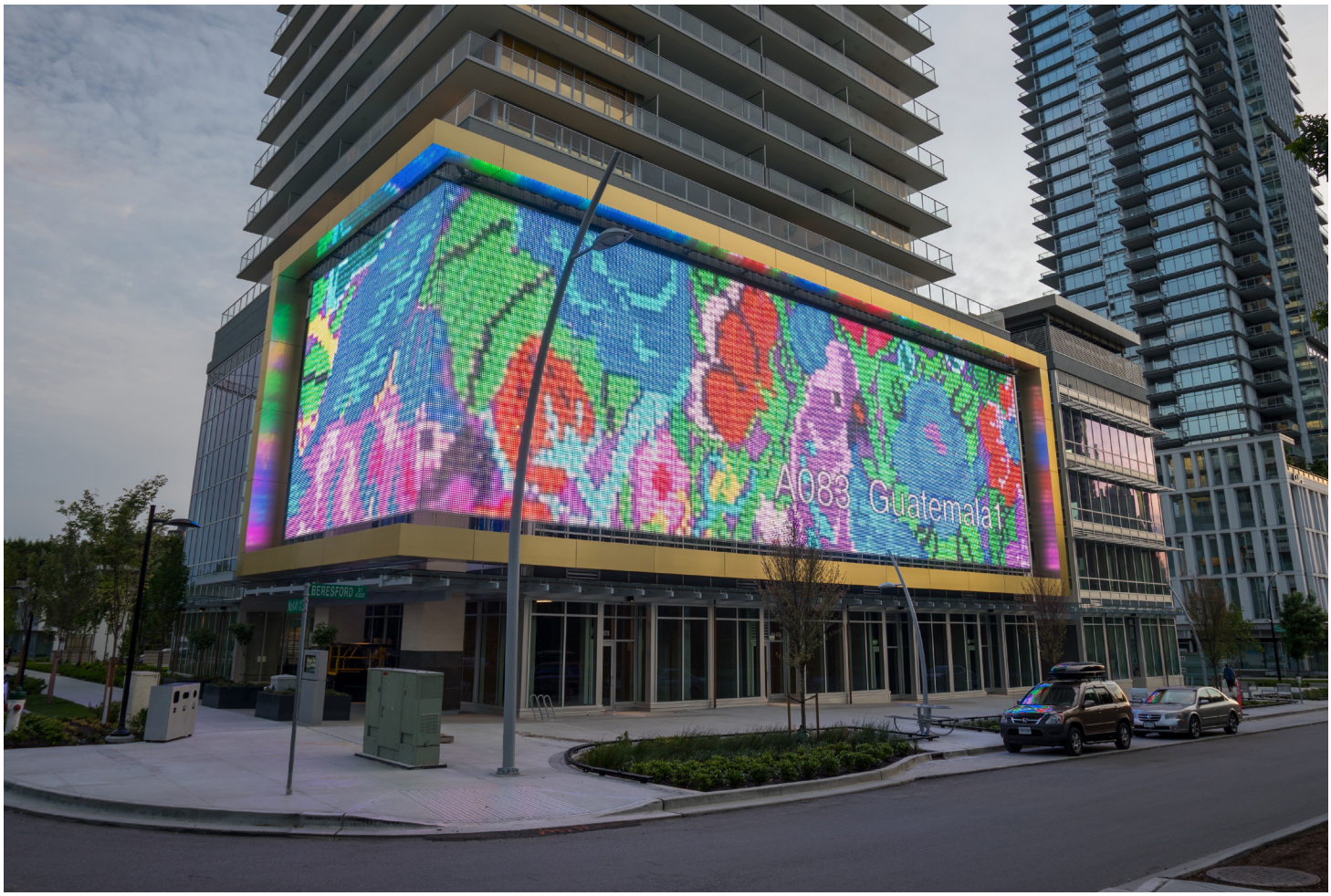
“With the Rize Gold House public art project we collaborated with the incredible artist Marian Penner Bancroft to provide a high quality, creative, and original inaugural artwork that simultaneously supports the project’s vision, fosters social connection, and generates a meaningful contribution to the cultural landscape of the community in an enduring way, ” said Ballard.

The Gold House development includes two towers—a 41-story north tower and a 26-story south tower—that house 490 residential units as well as more than 19,000 square feet of retail and office space between the ground and fourth levels. The project team determined that the most optimal placement for an LED installation would span the second, third and fourth floors of the north tower building, facing both north and east.

LED façades at this scale can be built using larger pitch LED mesh, which can be mounted to the exterior surface of a building (or other structures) and designed to create digital imagery that seamlessly integrates with architecture.

Since an LED building wrap would cover several windows of commercial space, one of the most important elements in selecting a product became the degree of transparency that was available, according to Christopher Moreno, ShowTech AVL system architect and project manager. “We knew people were going to be working on those floors and would have amazing views of the mountains out their windows looking north. So, it was important to maintain those views as much as possible—that became the driving force behind the search for an LED product.”

Moreno searched extensively for something that met this parameter before discovering the EcoDot Outdoor LED Mesh from Planar, a high transparency LED mesh designed for large building exterior surfaces. Compared to traditional outdoor LED displays, EcoDot offers the benefit in that it doesn’t block light from entering buildings, preserving the availability of natural light.



“We became convinced that not only would the product fit the transparency requirements, but it would be bright enough to be visible during the day and would last well into the future,” Moreno said.

To determine the most optimal resolution, ShowTech arranged a demonstration at the Rize Gold House showroom. Using a product sample sent by Planar, Moreno created a prototype of LED mesh suspended on stainless steel cable in a frame, which was hung on a glass window.

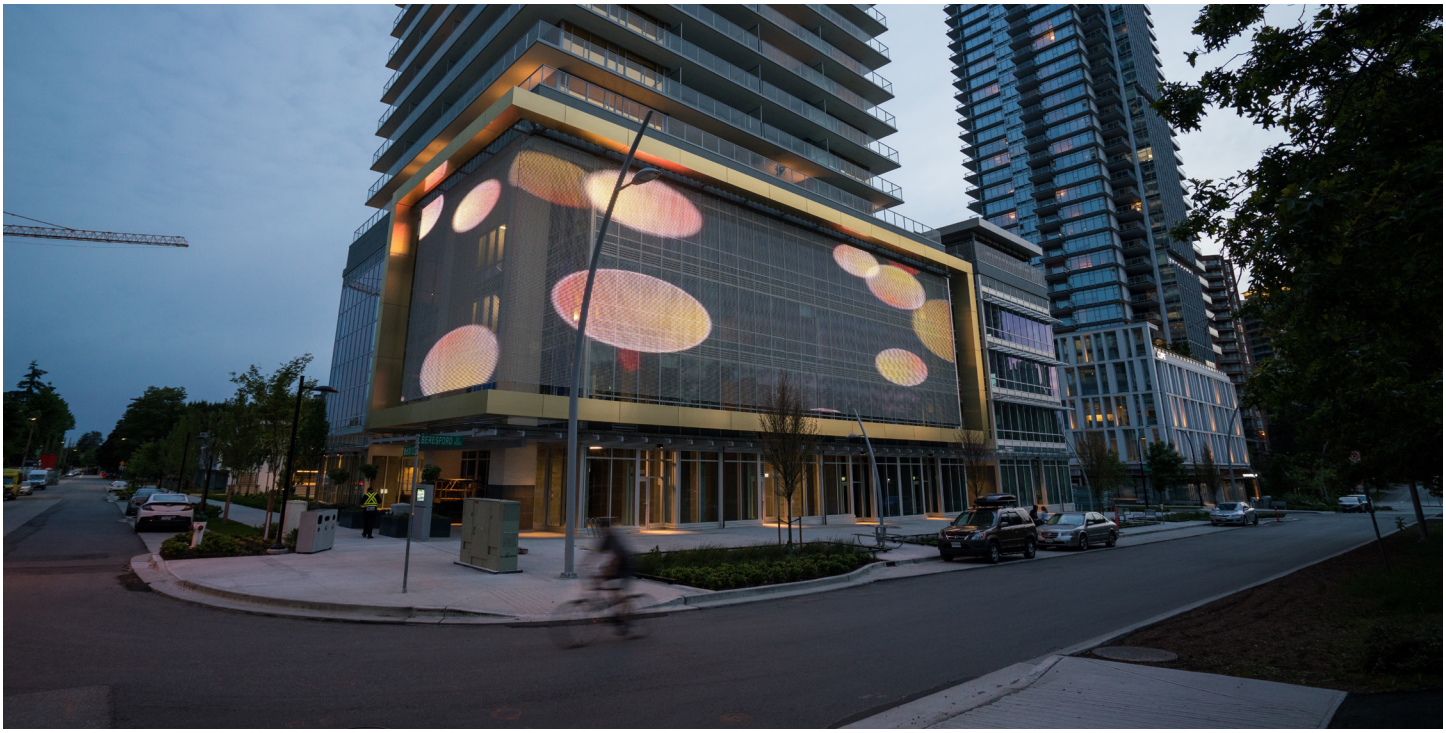
“We showed them what a 35, 45, 55, 75 and 100mm pixel pitch installation would look like,” Moreno said. “Ultimately, we decided that 55mm offered the best balance between the clarity of the display and the amount of transparency from inside the building looking out.”

“The project demonstrates how LED technology can be deployed to create community value.”

— Brian Konechny,
President, ShowTech AVL

The installation began once the building’s concrete structure and steel beams were finished and was performed in tandem with the project’s exterior finish work. ShowTech worked with the building’s structural engineers to attach 400 stainless steel tension devices to ensure that the LED mesh were sufficiently taunt.

“It was necessary for the final product to look like it was designed to fit with the development,” Moreno said.



A stunning platform for digital artists

The Gold House LED display featuring EcoDot Outdoor LED Mesh incorporates 792 strings with 181 nodes per string for a total of 143,352 nodes. The EcoDot product family includes Eco-1, Eco-2 and Eco-4 (correlating to the number of LEDs in each node). The more LEDs per node, the brighter it is. The Gold House installation incorporates four LEDs per node (thus, the product is called “Eco-4 P55”), creating a massive display of 573,408 pixels.

“The display has the potential to reach thousands of locals, incorporating contemporary art into their day-to-day routines.”

— Julia Schenck,
Director, Design and Communications, Rize Alliance Properties the Department of Geography and Environmental Studies

Wrapping the northeast corner of the building, the 144-foot-long, 33-foot-high installation is the largest non-commercial urban art LED display in North America, according to Brian Konechny, ShowTech AVL president. “The project demonstrates how LED technology can be deployed to create community value,” Konechny said. “Nobody wants their community overwhelmed with digital ads for smart phone plans or car insurance. Instead, sentiment is shifting towards using LED technology for more artistic purposes.”

The Burnaby Art Gallery is responsible for curating digital art to be displayed on Gold House LED canvas. “Once or twice a year, the gallery will manage an adjudication process for selecting a new piece of digital art,” Moreno said. “That artist will then update their piece to fit the display.”

According to Julia Schenck, Rize director of design and communications, the Gold House art display gives artists the opportunity to amplify their body of work. “The display has the potential to reach thousands of locals, incorporating contemporary art into their day-to-day routines,” Schenck said. “Art and culture play a significant role in creating vibrant communities and we hope building a public art screen inspires those who connect with it.”

Aside from showcasing established professional artists, the Gold House art screen will also show works by students from Burnaby's school district, giving budding young artists exposure and a platform for their work. "We see the potential for activated public spaces and how they become a center for community interaction," Schenck said. "Our investment in meaningful public art installations is one of the ways we can elevate everyday living within our developments."

About the EcoDot Outdoor LED Mesh

The EcoDot Outdoor LED Mesh Series enables artistic and creative LED installations on a large scale that can be designed into a variety of shapes and patterns. Featuring a high degree of transparency, EcoDot is well suited for LED building wraps covering windows as the amount of natural light coming into the building—and views from inside looking out—is preserved (55mm pixel pitch is the most popular for LED building wraps). Flexible and lightweight, the EcoDot Outdoor LED Mesh features a magnetic, fast lock design for quicker installations. And, with the proper mounting hardware, it can withstand hurricane-force winds. The product is waterproof, dustproof and incorporates a high IP rating suitable for permanent outdoor usage. Available in any custom color, the EcoDot Outdoor LED Mesh blends with buildings and other structures.