

Project Report

Northland Transit Center

Columbus, Ohio, USA

Canopy

Architect: OHM Advisors



The center includes an 8,950-square-foot overhead canopy system that integrates a single-source, aluminum box beam superstructure designed by Structures Unlimited, Inc. and featuring Kalwall®



STRUCTURES UNLIMITED SPECS:

Canopy

Double Wing Canopy

Aluminum Box Beam Frame:
4" x 8" | 6" x 13"

Aluminum Finish: #79 aluminum

Size: 16' x 303'

KALWALL PANEL SPECS:

Panel: 2.75" | 70 mm

Grid core: merrimack

Exterior FRP: white

Interior FRP: white

Panel U-Factor: 0.53

Solar Heat Gain Coefficient: 0.21

Visible Light Transmission: 0.19

PROJECT CREDITS:

Architect: OHM Advisors

General Contractor:
Gutknecht Construction

WHY STRUCTURES UNLIMITED?

Single source turnkey solutions include:

Technical sales consultations

Estimating + budgeting services

Daylight modeling services

Design + engineering services

Drafting + modeling

Project management

Precision fabrication

Professional installation

STRIKING A BALANCE BETWEEN SERVICE AND EFFICIENCY

When the Central Ohio Transit Authority (COTA) opened Columbus, Ohio's first rapid transit bus line in 2018, local riders could travel faster and reach popular city destinations previously inaccessible by bus. Known as CMAX, the line not only sets a standard for rapid transportation, but style and comfort as well.

The centerpiece of the CMAX project is the visually striking Northland Transit Center. The center includes an 8,950-square-foot overhead canopy system that integrates a single-source, aluminum box beam superstructure designed by Structures Unlimited, Inc. and featuring Kalwall® translucent sandwich panels.

The complex and extensive project required great coordination, including contracted electricians working right behind the crew from Structures Unlimited, to run wiring inside the aluminum box beam superstructure for both the lighting and security cameras. Working with a single-source manufacturer allowed the project manager to avoid down time.

Architects determined early on in the project design to utilize Kalwall's Merrimack grid pattern in order to create a unique look. Spacing the internal I-beams formed another distinguishing characteristic by casting shadows onto each other. Structures Unlimited was also able to design the canopy so that the bay spacing is an open 16 feet, alternated with 8 feet bay spacing between columns where benches and wind screens were placed.

Structure Unlimited's canopy system offers superior structural integrity that stands up to hurricane-force winds, high snow loads, and the most demanding code requirements. While another choice for a canopy may be glass, Kalwall panels offer a more effective solution because they not only meet the design requirements and offer protection from varying weather conditions, but are lighter (requiring less supporting structure) and easier to maintain. Soil and detritus are less obvious on Kalwall than on glass, and cleaning is much simpler because access scaffolding is not required, and maintenance staff can safely walk across its surface.

Kalwall panels also eliminate shadows, hotspots, glare and the stark contrast of light and shade; all improving the experience for passengers below. The soft glow Kalwall gives off from artificial light often helps serve with wayfinding at night.

Structures Unlimited is favored by municipal projects for a multitude of reasons. Providing total responsibility from design and engineering through installation helps ensure that projects like the Northland Transit Center are completed on time and within budget.

