

Project Report

Middle West Spirits

Columbus, Ohio, USA



Architecture: Jonathan Barnes Architecture and Design

Photography: Brad Feinknopf

KALWALL®

high performance translucent building systems

KALWALL SPECIFICATION:

Panel: 2.75" | 70 mm

Grid core: plank

Exterior FRP: crystal

Interior FRP: white

System finish: aluminum #79

U-Value: .23 | 1.25 Wm²K

Solar Heat Gain Coefficient: 0.28

Visible Light Transmission: 20%

WHAT IS KALWALL?

A translucent, structural sandwich panel that provides:

Glare-free, balanced daylighting

Superior thermal performance

Energy + electricity saving

Low maintenance life cycle requirements

Safety + security through visual privacy

Durability + graffiti / vandal-resistance

Hurricane, explosion venting + blast rated options



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For unparalleled thermal performance in translucent daylighting, consider specifying Kalwall with **CABOT's Lumira®** aerogel insulation. Available in 2.75" (70 mm) panel formats up to: 4' x 12' (1200 mm x 3600 mm) and 5' x 10' (1500 mm x 3000 mm) maximum.

Middle West Spirits, Columbus, Ohio, USA

FINDING THE RIGHT BALANCE

The ability to balance design, cost and function can sometimes be a complicated, lengthy and expensive process.

And then there are cases such as the Middle West Spirits expansion project in Columbus, Ohio, when one element can make everything come together. In this instance, that element turned out to be Kalwall® translucent sandwich panels.

Jonathan Barnes Architecture and Design of Columbus selected Kalwall as the signature feature in the expansion of a historic 1920's era warehouse that is home to this artisan small batch distillery.

JBAD describes the 55-foot (17 m) tiered structure clad in Kalwall as a "parabuilding" — an addition or alteration to an existing building that transforms the essential character of the original structure.

In addition to a tasting room, bottle shop and office, the expansion needed to accommodate new distillery equipment to increase production, including two new towering stills, one 50-foot (15 m) high and the other 35-foot (11 m) high, as well as several large mashing tanks.

Working within a restricted footprint, a center portion of the 10,000-square-foot (1,000 m²) warehouse's original steel bow truss and wood roof was removed. Kalwall panels were used to clad the entire new structure, creating what the architect describes as a monolithic translucent white tower with both a striking and subtle daytime presence and a glowing, beacon-like quality at night. The adjacent tasting room was positioned to have a striking view of the distillery.

In addition to being a distinctive feature, Kalwall translucent sandwich panels provide the owners with a bright space that allows them to easily monitor the equipment within the distillery. Kalwall's daylight modelling service allowed the architects to design the building so that different elevations transmit different amounts of light to provide completely balanced, museum-quality daylighting™.

And while Kalwall panels provided a solution that fulfilled the required design and function aspects, they were also particularly appealing for the cost savings.

John Kelly, the Ohio sales representative for Kalwall, said both JBAD and Sullivan Builders of Worthington, Ohio, were looking for a single-source cladding solution that was within budget and could meet their timetables.

"The decision to clad the building with Kalwall was made after the excavation work had started," Kelly says. "I'm not sure what the original cladding material was to be, but after our shop drawings were issued, we began getting questions from Sullivan about the steel supports required. They learned that they could eliminate quite a bit of the steel behind our panels due to our span capability and the lightweight nature of Kalwall. This was an unexpected cost-savings to the team."

Awards:

AIA Columbus' 2017 Architecture:
Honor Award



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