

high performance translucent building systems

Project Report

Plaza Batán

Samborondón Guayaquil, Ecuador







Architecture: Wright Soto & Associates

LEED consultant: Viva Arquitectura

KALWALL®

high performance translucent building systems

KALWALL SPECIFICATION:

Panel: 2.75" | 70 mm

Grid core: shoji

Exterior FRP: crystal

Interior FRP: white

System finish: aluminum #79

U-Value: .23 | 1.31 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.

Plaza Batán, Samborondón Guayaquil, Ecuador

SHEDDING A NEW LIGHT AT THE EQUATOR

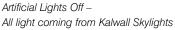
Corporación La Favorita is not only the largest retailer group in Ecuador, but it also prides itself on being a leader in environmental awareness. That's what made Kalwall® such a natural fit for the company's new complex in Samborondón, a popular suburb of Guayaquil, the largest city in this South American country that sits on the Equator.

The Plaza Batán complex of super stores, which features a Supermaxi supermarket, Bebe Mundo baby store and Kywi hardware/home store, has incorporated S-line skylights with Kalwall translucent sandwich panels to be part of this LEED® project, which was led by the design team of Wright Soto & Associates and LEED consultant Verónica Reed of Viva Arquitectura. Other key components of the project are LED artificial lighting and photovoltaic panels mounted onto parking sheds.

Ecuador has a variety of climates, from coastal (Guayaquil) to mountain (Quito) to rainforest. La Favorita has a presence throughout the country, making Kalwall panels an attractive option because of their ability to offer numerous insulation options between 0.29-0.05 U-factor (1.65-0.28 Wm²K).

The ability to harvest balanced, natural daylight without sacrificing thermal performance is the hallmark of Kalwall panels. Kalwall has been incorporated into the designs of almost 1000 LEED certified projects. Kalwall has also been specified in multiple Net Zero Energy Buildings and BREEAM® projects.







Artificial Lights On

The Kywi hardware store in the Guayaquil complex is a testament to a sustainable design that uses Kalwall panels to provide natural daylighting to dominate the space. Kalwall's daylight modeling service, which uses 3D simulation software, demonstrated the impact of daylighting design options and helped the project document its contributions to LEED objectives.

Using controlled natural light to illuminate a space minimizes the use of artificial lighting, reduces carbon emissions and positively affects the mood and well-being of the occupants. Studies have shown that the use of natural daylight increases sales and the productivity of employees at retail stores.

Kalwall panels in skylights are not only appealing because of their unique fenestration technology that provides museum-quality daylighting[™] and the ultimate in energy efficiency, but also because of their unrivaled structural integrity. They are lightweight, shatterproof, rapidly installed and easily maintained.

Following the daylighting success in the Supermaxi and Kywi stores at Plaza Batán, Corporación La Favorita has undertaken a program to retrofit many existing Supermaxi supermarkets around Ecuador with Kalwall S-Line curb mounted skylights. Retrofit projects currently underway include Supermaxi supermarkets in Quito, Quevedo and Milagro.

















