

# Energized, Sustainable Design

Location  
Holland, Michigan, USA

Wall Products  
Optimo

Finishes  
Custom Gray Kynar



# Overview

LG Chemical sought to build the company's first advanced battery plant in the United States. Roncelli, Inc. was selected as the project's design-builder primarily because of its understanding of critical manufacturing process and LG Chem's business objectives. Roncelli's project schedule included five milestones to reach and turn over critically sequenced areas for tests of the manufacturing processes. Roncelli also assisted the equipment startup and commissioning processes for all systems.



## Wall Product Optimo





# 'Meeting' Design Needs

## Business Challenge:

LG Chem wanted the Holland factory to mirror the philosophy driving the Chevy Volt: sustainable, long-term efficiency, eye-catching style, and performance, all at a satisfactory cost. This 208,000+ square foot facility needed to be fully commissioned and functional within 15 months.

## Kingspan Solution:

Associates of the project's architectural firm, Rossetti, viewed the Kingspan Optimo wall panel when they visited Kingspan's facility in Caledon, Ontario. They left feeling certain that the Optimo panel was the best product to be specified. It has tested R-values as high as 29, superior airtightness, and low thermal bridging. In comparison to conventional cavity-based insulation systems, Optimo ratings and features can bring a potential energy savings up to 30 percent.



# Custom Creation

## Benefit to Architect:

The LG Chem project used a very innovative application method for the highly insulating metal wall system. The designs required a custom 40" module horizontal Optimo Smooth wall panel with a narrow 1/4" reveal. Light gray and slightly darker gray Kingspan Optimo panels, each one two inches thick, surround the structure. These perfectly uniform insulated metal panels clad most of the exterior and also do double duty as an interior wall in the warehouse area of the building.

In addition to the customized wall panel design, louvers and glazing were integrated into the wall panels to maintain that same 1/4" reveal pattern throughout the design.



# Beautiful Performance

## Benefit to Contractor:

Because Kingspan insulated metal panels are a single-component system, installation time was reduced by as much as 50 percent over standard multipart site-assembled built-up cladding.

"With nearly 208,000 square feet of Kingspan's Optimo wall panels, in two different colors, and a fast track installation schedule, the LG Chem project was a challenging production. However from the onset, Kingspan's engineering and sales teams were excellent in providing Universal Wall Systems with the information needed during the design phase, so we in turn could then provide the owner with the desired detailing."

-- Dan Hooper , President of Universal Wall Systems Inc.,

## Benefit to Owner:

Optimo provides a certain "Wow!" factor as it gives the LG Chem plant quite a visually pleasing exterior. This outer surface reflects the precision work performed in the scientific clean rooms where the advanced batteries are produced.





## Contact

For more information on  
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project, please email

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