

Case Study:

Getting More from Your Metal Composite Panel

BAMCO INC.
ARCHITECTURAL WALL SYSTEMS



By now, savvy designers are familiar with the variety of shapes and finishes available in ACM and MCM. They know these products can be curved, bent and sized to provide all types of aesthetics. But did you know that with just a little bit of ingenuity, they can provide depth and shapes normally associated with much more expensive materials? As designers attempt to create more complex visuals, creative fabricators are developing solutions—here's how one team brought their 20th century architectural design style to life.

The Design Challenge

The architect wanted to recreate a look reminiscent of Art Nouveau Architectural styles of the early 20th century. These designs were familiar throughout New York City in the 1920's and 30's and remain landmarks today. Recreating these shapes however, seemed economically unfeasible—a challenge which begged the question: are these shapes truly a thing of the past?

It would require techniques that few, if any, local ornamental fabricators continued to practice. And, even if they were to find someone, what would the lead time and cost be? And, if this could be manufactured from more rapidly available materials, say ACM, how would it be accomplished? How would they layer a panel to recreate pattern and depth? How would the fabricator deal with the added weight and recalculated deflection? How would it be secured without becoming unstable or burdensome to handle? And finally, would the backup support system handle all of the above?

The Design Solution

The design team for this project, in conjunction with the developer, reached out to BAMCO, Inc. for expertise. Our team had previously drawn similar designs of a less complex nature, and used those designs as a jumping-off point. We added to them by designing a complex series of dies and shapes that could be formed, finished and mounted on the flat ACM panel face to mimic the design's intent.

Further, a series of stiffeners and gussets could be built into the panel rear to support these shapes without any exposed fasteners or unmanageable weight. A mockup was then created and reviewed by all parties to ensure design integrity and benchmark quality.

The Design Result

The end result was a stunning design that incorporated all of the architects' intent while maintaining the budget, existing support and manageability of installation.

The project, known as 1040 Dean Street in Brooklyn, New York, was completed on time and within budget for the metal panel scope. The owner was rewarded with an award-winning façade; the architect was rewarded by bringing their design to life; and BAMCO was rewarded for providing expertise, initiative and innovation. Working together, great teams can make great ideas become even greater projects.

