



ARCHITECT'S BOARD



UNIQUE DESIGNS

Unusual challenges require a vendor capable of providing efficient original solutions.

Left:
Transit stair enclosure at
[Brickel City Center](#) in
Miami, Florida.

Below Left:
Lighted Gibson Guitar
restroom sign at
[Wind Creek Casino](#) in
Montgomery, Alabama.

Below Right:
Ring "Canopies"
Cowetta EMC in
Palmetto, Georgia



FAÇADE TREATMENTS – Design Meets Engineering

The vision to push the boundaries of what is possible is the defining characteristic that makes architects and designers unique in the construction trades. Realizing such a vision requires a combination of artistic creativity, engineering and materials science, a firm understanding of building codes, as well as a comprehensive knowledge of existing products and their potential for innovative application. For this reason many creative professionals find it useful to collaborate with engineers and custom manufacturers. By building an experienced team early, the creative professional can protect their design by heading off budget and attachment issues.

The interface of art and engineering is important in any modern construction, but especially in a building's envelope and façade treatments. Structurally it may be concrete and steel, but outside, where art meets structure, challenges can arise. The artistic vision is all about shape, form and color, and the interplay of façade, visitor and environment. Between the concrete and the vision must lie a sound mechanical design. Any building includes many trades whose work is critical, but in many ways unremarkable. Sheetrock is rarely cutting-edge, and buildings are not remembered for their MEP. It is the overall shape and style, façades, canopies, spires, trim and lightscaping that define a building. This realm is where something truly original can be created, and this is where a team member from the manufacturing trades can make a substantial contribution.



Beneath the façade and other design elements there may be any of a number of substructure materials, and a qualified design-assist professional will need to grasp the structural factors inherent to each of these various conditions. Whether new prestressed or post-tensioned concrete, existing brick or stone, mullion systems, structural steel or even various roofing systems, the fabricator must be familiar with the challenges they each present. And finally, between the façade and substructure, they must understand fastener and anchor systems, truss and framing methods and all the techniques that can bridge the narrow space between mechanical structure and artistic envelope. In addition, they must understand how to do so in the most efficient way possible. Sometimes it will be the building structure that dictates the preferred method, in others it could be the façade material, electrical or illumination issues, site or service accessibility, wind loading or even scheduling concerns.

Most importantly, this partner must be able to use these skills to project how a given artistic design can be maximized within the available budget. It is far too common to see creative scope eliminated because it is the last thing considered from a budgetary standpoint, or because it can be especially challenging from an attachment perspective. This need not be the case.

By assisting with budget, attachment and subsurface engineering early, the right manufacturer can help keep the architect's concept on track toward realization in the field. Not only does this free the creatives to pursue other work, but it also allows the contractor to devise solutions that fit with their working methods. As a result, everyone sees a better return on their time, and a reduced possibility of a miscommunication, or an overlooked detail.

Ultimately, front end coordination and planning will get more scope off of the drawing board and into your portfolio.