

# Project Profile



## USG Helps NASCAR Achieve a Photo Finish

### Application/Building Type:

Museum and office tower

### Project Name:

NASCAR Hall of Fame

### Location:

Charlotte, NC

### Architect:

Pei Cobb Freed & Partners

### Featured Products:

DX®/DXL™ ceiling suspension system  
LIBRETTO™ gridless metal ceiling system  
PANZ™ metal ceiling panels  
RADAR™ ceiling panels  
SHEETROCK® brand all purpose joint compound  
SHEETROCK® brand gypsum panels  
SHEETROCK® brand paper-faced metal corner bead  
SHEETROCK® brand TUFF-HIDE™ primer-surfacer

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### USG's Drive, Creativity and Precision Help Fuel NASCAR Hall of Fame Design and Performance Objectives

The opening of the City of Charlotte's NASCAR Hall of Fame (HOF) in Uptown Charlotte was more than a celebration for motorsports fans. Fueled by intense competition and powered by performance, precision and teamwork, USG Corporation also shared in the victory.

Licensed by NASCAR and operated by the Charlotte Regional Visitors Authority, the 150,000-square-foot Hall of Fame was designed in concept by world-renowned architecture firm Pei Cobb Freed & Partners. The building's defining element is an oval-shaped ribbon that wraps around the facility's exterior similar to the shape of a speedway. Design elements that project speed, motion and excitement continue indoors and include many that pay homage to the famed checkered flag.

The five-acre Hall of Fame complex also includes NASCAR Plaza, a privately developed 19-story office tower by Lauth Property Group, LLC, which, like the new entertainment venue, features racetrack flourishes. USG, a long-term marketing partner with NASCAR and the sport's related series and teams, helped make the motorsports aesthetic possible in both properties with a combination of creativity and high-performing products.

### Design Uses Standard Ceilings Products to Create Unique Look

In the HOF's Great Hall, a dramatic exhibit space with a 40-foot high ceiling, budget limitations and value-engineering almost eliminated the architect's original vision for a custom metal ceiling that was also intended as a gesture to the victory flag.

"To meet their budget, they were going to step away from their original design and settle on a 12 inch x 12 inch concealed cast product, a smooth ceiling with no identifying characteristic. But, when working in a big space like the Great Hall, that type of dimensional ceiling panel is not the right choice. The ceiling needs large enough modules to be proportionate to the size of the space," said Greg Ahren, USG Ceiling Solutions Group Manager. "That's where we said we could help achieve the desired aesthetic at the dollars available to spend."

Ahren leads USG's Ceiling Solutions Group, a team of project managers, product application architects, product designers and construction installation experts who help design and develop custom specialty ceilings, address technical issues and direct manufacturing resources to keep projects on target and budget. Ahren's group partnered with USG's Architectural Services team which works closely with architectural firms on design issues and provides high-performing, cost-effective recommendations that help architects achieve their intended designs. One of the pre-determined factors USG had to consider for the Great Hall ceiling was lighting design and fixture placement.

"We established a grid module based on the spacing of the light fixtures in two directions, using an 18-inch wide metal panel to run in both directions from the centerline of the light fixtures. Filling in the open squares that resulted from that layout provided

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an opportunity to place panels in alternating directions for a checkerboard effect,” explained USG’s John Bankston, Applications Architect. “Even though we designed the ceiling exclusively for this particular space, it’s standard USG ceilings products that create the ceiling’s interest and texture.”

The ceiling features non-perforated, white PANZ™ metal specialty ceiling panels with 6 foot by 6 foot openings. USG planks linear metal ceiling panels, 9 inches wide and 6 feet long, fill the PANZ openings in opposing horizontal and vertical patterns to create a subtle checkered flag image.

“While we have never done a ceiling quite like this before, once we got going, we knew it would turn out well. It was pretty simple to install,” said William Brigman, Project Manager for Acoustics Inc., the interiors specialty contractor. “USG’s detailed instructions were helpful. They have a great support system. We have a long relationship with USG that goes back many years and we know if we need something, USG can get it done. We all had a vested interest in this and that’s what made it such a good project all the way around.”

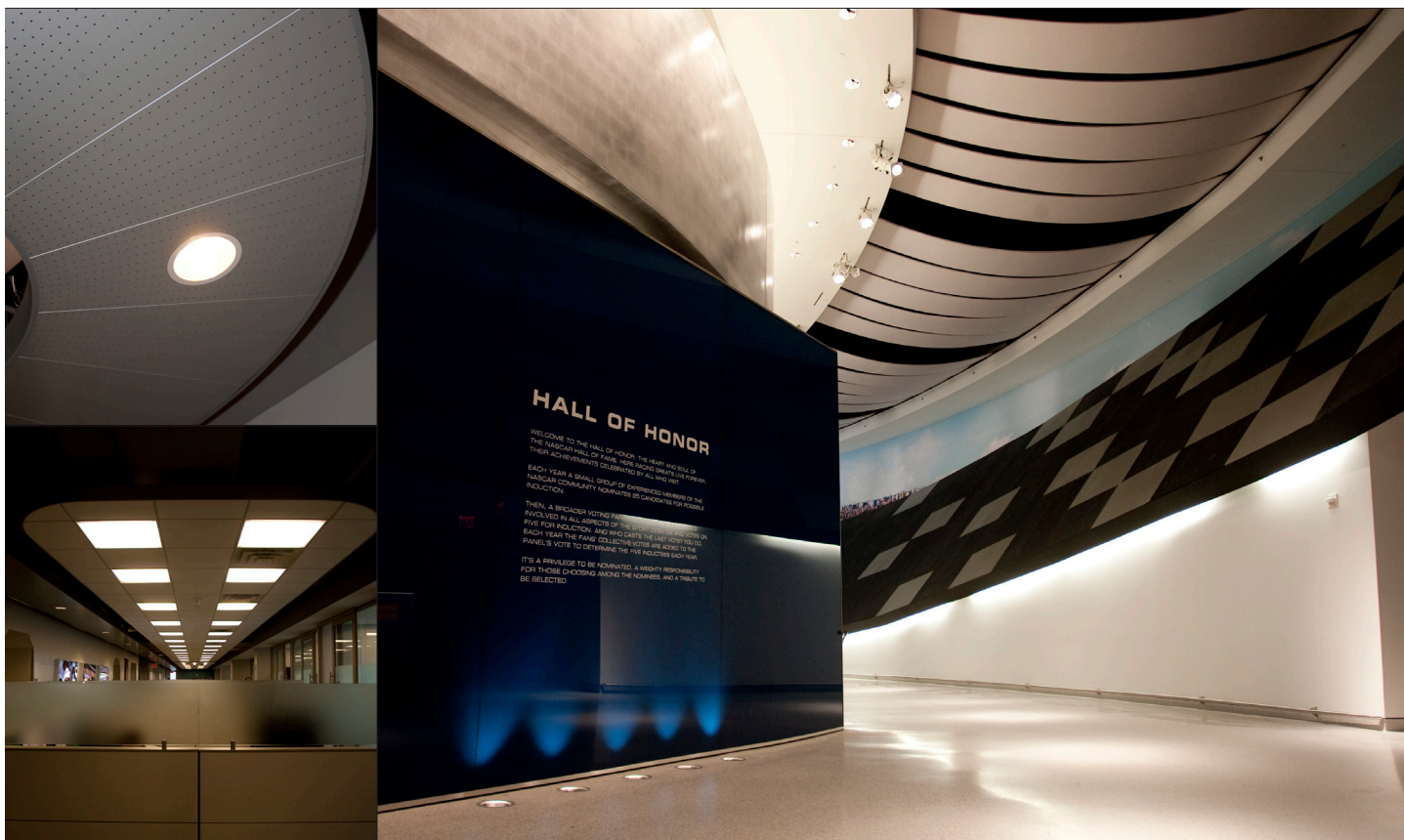
In total, the Great Hall features nearly 10,000 square feet of metal ceiling. USG SHEETROCK® brand gypsum panels, SHEETROCK® brand all purpose joint compound and SHEETROCK® brand paper-faced metal corner bead, which carry a 30 year limited lifetime warranty against corner cracks, were also used in the Great Hall. To achieve a level-five finish and to give the walls the same sleek, ultra-high-end look as the ceilings, contractors used USG SHEETROCK® brand TUFF-HIDE™ primer-surfacer, a spray-applied finish that does not require additional priming before decorating.

#### **Specialty Ceiling Achieves Design at Less Cost**

Over at NASCAR Plaza, the homage to motorsports continues. The corridor ceilings in the building’s top two NASCAR executive floors wind their way around in a continuous semicircle with radius, or rounded, corners. But, similar to the Great Hall, the competitive ceiling material originally specified would have compromised the architectural vision, the ceiling application and project budget.

“The original product was little individual pieces, not a continuous ceiling. It didn’t look like what was drawn and would not have resulted in the radius corners. It was just a totally different application,” recalled Steve Hudson, chief estimator for Warco Construction, Inc., the office tower’s interiors contractor.

Hudson, a long-time installer of USG ceilings products, suggested the developer consider USG LIBRETTO™ gridless metal specialty ceiling system. Libretto features fabricated aluminum panels that interconnect to form a continuous, uninterrupted plane that follows the contours of a space’s unique design.



“This was our first experience with the product, but we knew it would work. We showed it to the developer and they loved it. They really liked the look of it,” said Hudson. “And we actually saved them money, which was even better. We got a nice custom ceiling that came in under budget.”

Each Libretto system is custom-designed, engineered and manufactured as a kit for efficient installation. At 1,200 square feet, this was one of the largest Libretto installations to date. Not only did the length add complexity to the process, but so did the requirement that the ceiling installation start and finish at the same meeting point.

“One panel hooks into the next and progressively builds a ceiling from one end to another, so quarter miles of the material went around the building and it met itself as it should have,” explained USG’s John Bankston. “The accuracy with which we manufacture these panels is unprecedented.”

Hudson added, “It was all about the preparation beforehand. USG was very detail-oriented and insisted on getting good field dimensions. That made all the difference. And USG delivered the materials to us within three or four weeks, half the normal delivery time for this type of product. They knew how important this project was to us and the others involved.”

“It’s beautiful. There is no other way to say it. It’s a wonderful space,” Hudson continued. “USG designed and built the ceiling to fit perfectly. All we had to do was take it out of the box and hang it. It literally went together like a jigsaw puzzle. We didn’t have to measure or cut. It was simple. There were no problems in the field and that’s a rarity.”

The rest of the NASCAR Plaza’s ceilings feature RADAR™ ceiling panels and DOWN® DX®/DXL™ ceiling suspension system. The office tower’s walls are lined with SHEETROCK gypsum panels and SHEETROCK all purpose joint compound.

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