



*Award Winner*

# SPOTLIGHT:

**Groupe Piché's Ford Hall Inside Rogers Place Wins CISCA's Founder's Award**



BY META LEVIN

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**Other CISCA members  
involved in the project:**  
Decoustics

**Architect/Designer:**  
HOK, Kansas City  
Orchestral Arts, Inc.

utting it together was like a puzzle,” says Arturo Feria, Groupe Piche project manager of the Ford Hall inside Rogers Place job, for which Groupe Piché earned CISCA’s prestigious Founders Award. It was, he says, at once a complex, challenging and a fast-paced project.

Groupe Piché was teamed with CISCA member Decoustics to successfully design and build the 33,000 square feet of geometrically designed, multiplanar ceiling.

“Ford Hall is a very large, high ceiling atrium, about the same area as an American football playing field, excluding the end zones,” says Dale Faucet of OAi. “It is, therefore, cathedral in its proportions, acoustically highly reverberant, but the conception is multi-use.”

When not serving as an entrance area and lobby for the ice hockey arena that is home to the NHL’s Edmonton Oilers and the WHL’s Edmonton Oil Kings, as well as serving as a concert venue, Ford Hall hosts events





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such as public gatherings, presenters, singers and instrumental musicians. This means that the acoustics need to be such that announcements over a public-address system are intelligible and music and other communication must be clear, more than 0.95 NRC, says Ally James, a Decoustics marketing specialist familiar with the project.

The Decoustics' Claro® mimics the appearance of drywall or plaster. In this case, a white stipple texture imitates plaster. At its core, it has acoustic absorbent material. "This met the architect's objectives of attaining high light reflectance and excellent sound absorption," says James.

OAI, with help from HOK's Tom Usher, created a computer model. Decoustics worked with HOK and OAI during the design phases, helping especially with a mock-up, says James. "Venues like this rarely receive the attention they deserve," says Faucet. Using both the Decoustics product, as well as another, proprietary product on the walls, "the sound reverberation was lowered to an acceptable time and level," he says.

"We had to balance the budget with the vision, and bring the reverberation time

down," says Usher, who admits that they looked at other products, but found that the Decoustics ones best fit their needs. "This is a public space. We did not want to see it compromised. It now has a nice, crisp look."

The floating two-level ceiling is made of 1,200 custom panels, constructed of Decoustics® Claro® Ceilencio® ceiling, all of which were custom engineered and manufactured. Fully 60 percent of the panels were uniquely shaped. The Ceilencio ceiling suspension system is designed to be tailored for use with custom panels.

"This added to the degree of difficulty of the project, putting more weight on the accuracy of the calculations," says James. Decoustics' engineering work took about eight months and an estimated 90 percent of that was taken up with detailing the custom components. "The product tolerance had to be within 1/16 of an inch to achieve the precision desired and required by the other trades that took the panel dimensions and radiuses provided to build their sections of the ceiling."

Panels had to be 100 percent downward accessible, which is a feature of the Ceilencio

system, says James. This was a requirement of the job, to allow for maintenance on the infrastructure above the ceiling.

In addition, the ceiling needed openings to accommodate more than 300 light fixtures of varying diameters. All were factory cut. Each panel was designed and positioned to a master plan, allowing for a way to hide the grid of the framing system, so that it wasn't visible through the light holes.

"This was a curved ceiling with different elevations," says Fera.

Usher notes that it was important to create the curvilinear shape design, which was complex: "Our concern was making sure it took the curves." Those compound curves were a challenge for everyone. "We had lengthy calls with Decoustics," Usher adds. "In a few cases, we had to tweak our design a little bit to work within the parameters."

To make it curved, Decoustics engineered the panels using 3D design software, flattened them out for manufacturing purposes and curved them afterwards, joining them with pre-curved metal edges to provide strength and integrity.



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Groupe Piché had to navigate coordinating with more than 10 different trades, as well as an environment that required close oversight to ensure that not only was the work quality up to expectations, but that everyone was operating within the correct safety regulations and guidelines. “We had our own safety officer to make sure every worker was meeting the requirements,” says Faria.

The ceiling rose up to 70 feet above the floor in some places, spanning not only the main floor, but mezzanines, as well. This meant that installers were operating from scaffolding over the main floor, but using so-called “giraffes” or elevated lifts with arms to reach more difficult areas, says Faria.

Storage and equipment were other issues. Ford Hall inside Rogers Place is built on an overpass of a multi-lane main avenue in Edmonton, Alberta, Canada. This was challenging for all concerned. Groupe Piché had to ensure that its equipment was in the right place on the right side of the roadway, while designers from HOK and acousticians from OAi were constantly aware of the effects of all that traffic on the building.

A computer analysis showed the possibility of a 4-inch deflection, says Usher. He was concerned that the ceiling system

would handle it, which the Decoustics product showed that it could.

Groupe Piché had a good working relationship with Decoustics, says Faria. This was especially true when navigating the issue of limited on-site storage space. Not only was room a concern, but Groupe Piché took extra precautions to guarantee that there was no damage to the panels and grids, thus, just-in-time delivery was crucial. “Decoustics played a big part in the coordination and having the materials there when we needed them,” says Faria.

Time management, manpower with the necessary expertise, experience and skills, and getting materials at the right time and the right place were the biggest challenges, Faria says. They also took great pains to confirm that they had the right customized pieces for the areas in which they were working. It took six months to get it all installed.

It was, admits Faria, more complicated than anything they had done before. “We have installed this type of ceiling, but at a much lower scale and less complexity.” In the end, though, the project “allowed us to grow as a company” and was a success. ■

