

STEELING ART FOR STUDENTS



450 North Grand Avenue, Los Angeles, CA



CASE STUDY

BUILDING LOCATION

450 North Grand Avenue, Los Angeles, CA

SIZE

238,000 square feet

OWNER

Los Angeles Unified School District

COMPLETED

2008

DESIGN ARCHITECT

HMC Architects, Los Angeles, CA

EXECUTIVE ARCHITECT

HMC Architects, Los Angeles, CA

METAL SIDING

Stainless/aluminum/neoprene composite; perforated stainless panels; shingled, interlocking stainless panels

GREEN SCALE

The project scored 41 points on the Collaborative for High-Performance Schools (CHPS) test, an LEED-analogous points scale for California educational buildings.

When art, stainless steel, and architectural statements collide, the results can be either beautiful or challenging. In the case of Central Los Angeles Area High School #9, it can be both.

The high school's state-of-the-art campus—part of L.A.'s continuing Grand Avenue arts corridor renovation—plays on the school's educational emphasis on performing arts and highlights it with three 304-grade stainless steel-clad sculptural buildings.

1. The library is a conical building with shingled, interlocking panels that create a smooth, curved surface.
2. The tower is the highest profile building on campus and sits atop the school's

theater, featuring perforated panels with various hole sizes.

3. The lobby is a multi-angled, sloping building clad with composite panels of stainless steel and aluminum sandwiching a neoprene core that helps keep the material flat and reduce oil canning (metal popping up in the middle of a panel).

The aesthetic goals of the project, coupled with the utilitarian demands of a high school, presented the project's architects and fabricators with a unique set of challenges.

First on the list was designing a campus for an arts-focused school that would coincide with

the scheme of the arts corridor. Second was determining how to integrate that design in an urban setting overlooking an expressway. Third was actually building the thing—melding the design within the setting without blowing the budget sky-high.

"The geometries were really challenging," said Glenn Meyer, project manager for CMF, Inc., in Orange, CA, who oversaw the fabrication of the project's 73,000 sq ft of sheet metal panels. "To make the configuration of the [lobby] panels right, we almost had to remeasure and have a unique set of panels for every row. So there was nothing standard."

"The panels all had a margin on them, and depending on the

BUILD LEGACIES
■■■ METAL

size of the panel and the diameter of the holes, we were stuck with margins that varied a little bit,” he recalled. “From a distance, you don’t have a major problem with that, but trying to fit them up, trying to have a consistent margin with a consistent hole pattern when you have different-sized panels, it’s difficult.”

Meyer should know—CMF constructed a significant portion of the visually stunning and stainless-intensive Walt Disney Concert Hall just down the road. Tying in aesthetically to that structure, as well as the performance art that could be found at the nearby Dorothy Chandler Pavilion, was exactly what the school district and the designers had in mind.

“It has a cultural connection as well as a programmatic connection with the downtown arts corridor,” said Gary Gidcumb, principal at HMC Architects and executive architect for the project. “It’s a symbolic thing—that this is a priority in the community. And it allows students themselves to see

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the importance placed on their education.”

Those symbols are more than rhetorical—they’re standing right there in solid steel. The lobby is the formal public entrance to the school, and the library building is a symbol for education, according to the design architect.

“The fact that this is an arts school inspired the concept of using architecture as urban signs,” said Kerstin Kohl, spokesperson for the project’s design architect, COOP HIMMELB(L)AU. “The tower on top of the theater is a sign for art in the city. Together with the church tower of the Los Angeles Cathedral on the other side of the

freeway, the two towers create a new landmark for downtown Los Angeles. This is an urban, as well as architectural, concept.”

From the practical side, using stainless steel for the panels addressed a range of utilitarian and aesthetic demands that other materials could not have.

“The metal enabled us to clad buildings of different geometries, including curved geometries, in one material, while also giving them a special appearance,” Kohl said. “The metal allows different functional applications of the skin, while keeping it in one language—such as integrating glass, perforations, layered systems of

glass, and perforated metal, etc. We could not have done this with another material within cost.”

According to Gidcumb, it also gives the buildings durability; they are vandalism-resistant structures that are fairly easy to maintain.

“What we had was an unusual shape, a difficult-to-clad shape,” Gidcumb said. “The use of metal allowed it to conform to the design shape and also provided an interesting texture for the surface. The actual material allowed connection to joinings and served to highlight forms that other types of material would not.” ■

