ARCHITECTURAL RECORD

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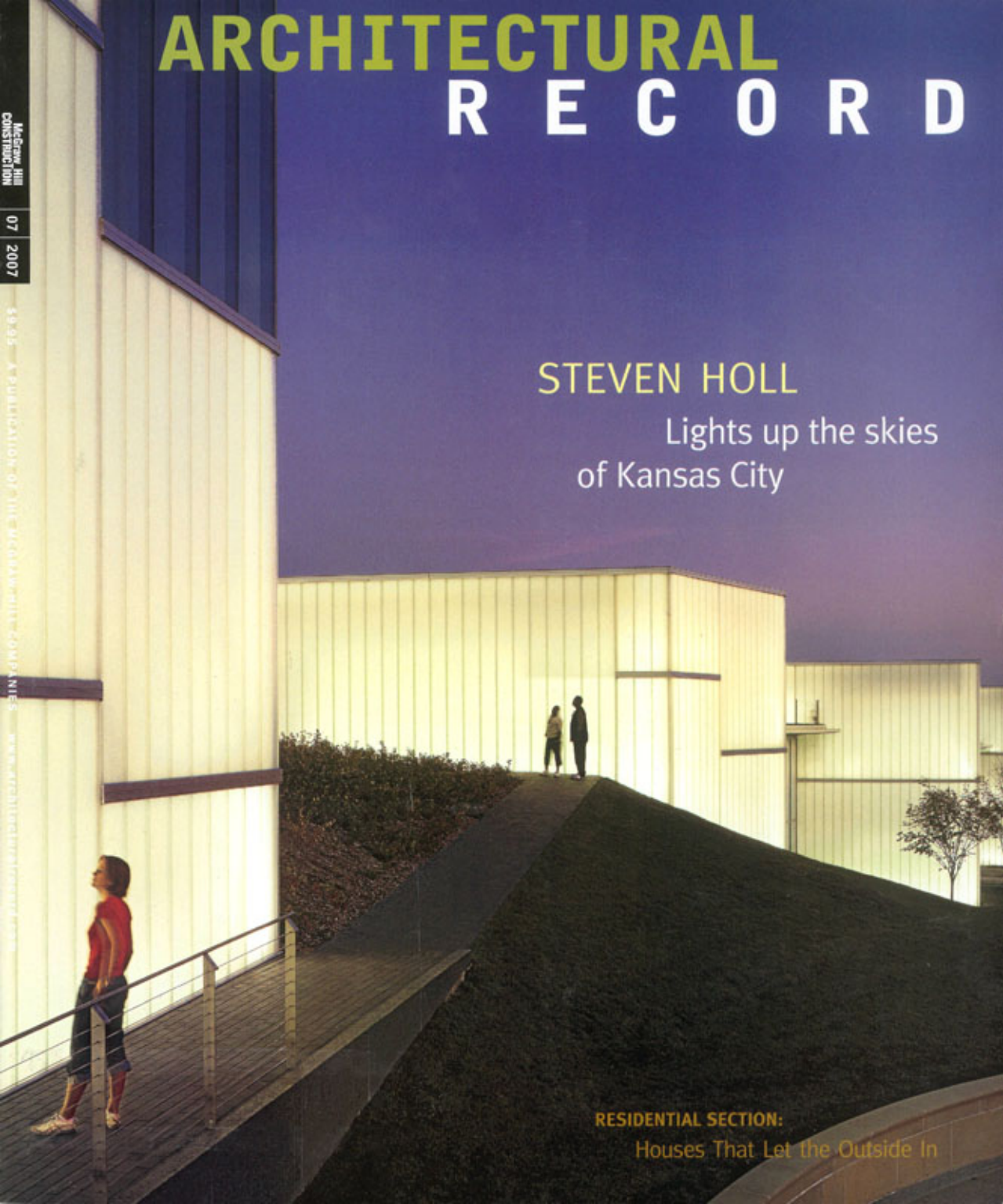
STEVEN HOLL

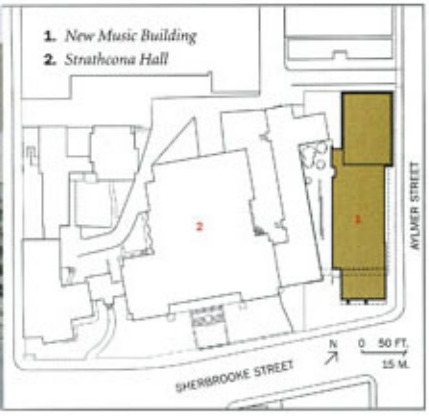
Lights up the skies of Kansas City



RESIDENTIAL SECTION:
Houses That Let the Outside In

A syncopated rhythm of matte and mirror-polished black aluminum panel strips, interspersed with flush window planes, animates the west facade (this page). The glossy surfaces reflect the older music building next door (opposite), linked to the new one by a green-glass second-story bridge. Cor-Ten steel clads the base of the west facade (this page).

Tapping into the rhythms of the city, **Saucier + Perrotte** compose the **NEW MUSIC BUILDING** for McGill University, in Montreal



By Sarah Amelar

Unexpected edge conditions and juxtapositions characterize not only the location of McGill University's New Music Building (NMB—until it gets a donor name), but also the complexities of the department itself. The site, a sliver of land at the southeastern corner of the 80-acre campus, lies at an intersection along Sherbrooke Street, a busy commercial strip in downtown Montreal, where the visual clamor of fast-food joints, upscale restaurants, and high-rise chain hotels competes with the rush of automotive traffic and the underground rumble of nearby subway lines. Hardly the obvious spot for a recital hall and acutely sensitive recording studios. But the parcel also happens to border the university's main music building, the ornate limestone Strathcona Hall (with its earliest section, circa 1899, designed by Bruce Price in "British Château" style). And it was essential that the new structure connect with the old programmatically and spatially.

Adding to an already complicated mix of site adjacencies, the new, $30 million building, by architects Saucier + Perrotte with Menkès Shooner Dagenais Architectes, had to engage a department drawn from a remarkable range of disciplines. While McGill's music school, with both undergraduate and graduate programs, takes pride in its traditional conservatory and such humanities-based studies as musicology, its staff and faculty run the gamut from respirologists to physicists, neuroscientists, psychologists, and computer, sound, and electrical engineers—often approaching music from places deep in the realms of science and technology.

So where to begin? Working from the outside in and inside out, Saucier + Perrotte principal Gilles Saucier took cues simultaneously from the campus configuration, the urban context, the local topography, and an evolving set of interior spatial needs.

Saucier recognized that while Sherbrooke Street speaks of a bustling downtown, the quieter, perpendicular Aylmer Street, defining the parcel's eastern edge, reveals key aspects of the landscape. Like a topographic section cut, Aylmer ascends a hill from the St. Lawrence River and Montreal's Old City, to the south, continuing along a plateau as it extends through the McGill campus, gradually rising to the small but iconic mountain called Mont Real. The site occupies the relatively flat transition zone between urban density in its immediate foreground, and a high, verdant slope in the near background. Equally significant to Saucier, Aylmer jogs (or shifts) to the east once it crosses Sherbrooke to the university, "as if," the architect suggests, "the McGill campus had acted like a geological plate shifting the city grid."

Taking inspiration from these real and metaphoric geological con-

Project: *New Music Building at the Schulich School of Music, McGill University, Montreal*
Architect: *Saucier + Perrotte—Gilles Saucier, design principal*
Executive architect: *Menkès Shooner Dagenais Architectes—Anik Shooner, project architect*
Engineers: *Saia Deslauriers Kadanoff, Leconte Brisebois Blais (structural); Pellemon/BPR (m/e)*
Acoustics: *Artec*

PHOTOGRAPHY: © MARC CRAMER

The Cor-Ten-steel cladding at the base of the west facade not only adds to a lively play of textures and materials, but also makes reference to the earthiness of the courtyard beside it (left). The main entry elevation, along Sherbrooke (opposite), is mostly transparent, engaging the lobby and library with the street. Rather than imitate the older music building stylistically, Saucier sought a balance in compatible contrasts.

ditions, the architect imagined the building as exposed strata that had "eroded" from the once-larger mountain to create the plateau. As built, the 126,750-square-foot rectangular structure, rising eight stories above grade, has a strong horizontality along Aylmer Street, abstractly expressing the fictitious layers of "geological history." Here, Saucier introduces a deep concrete band, 20 feet up from the ground, intended to evoke a former ground plane, extending south from the mountain. Black and gray zinc cladding, with long, dynamically staggered strip windows, compose the elevation above the concrete band, with glass, brick, limestone, and concrete below it.

Because none of the tropes here are explicit or literal, some critics have interpreted this elevation as more musical than geological, with the reflections in the slivers of window playing lyrically against the precision—like a regular tempo bar—of the rectilinear, metal-clad bands.

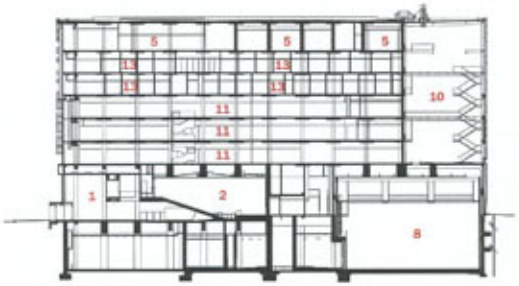
The west facade has a very different beat, with a syncopated rhythm of matte and mirror-polished black-aluminum squares and rectangles, interspersed with flush windowpanes. The staccato of glinting surfaces animates this long elevation with flickering reflections of Strathcona Hall. Rather than jam together the contrasting new and old buildings, Saucier left breathing space between them for a long, narrow courtyard. At the base of this elevation, earthy Cor-Ten-steel cladding plays against the aluminum above it. Adding to the material palette, a second-floor bridge, enclosed in green glass, links the two buildings.

The NMB's entry facade, along Sherbrooke, to the south, is skinned mostly in transparent glass, opening it visually to the street, while revealing a double-height lobby that rises to a three-story, digitally wired music library (triple glazed), beneath two floors of offices, and finally, a top level of research labs, along with meeting and administrative rooms.

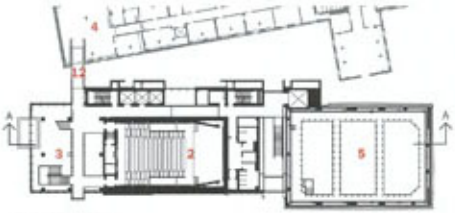
Projected toward Sherbrooke, beyond the discreetly setback Strathcona Hall, the NMB embraces and subtly expands the older building's already popular forecourt, centered on generous tiers of front steps. Built to its lot lines, the new structure holds the site like a cornerstone marking the entire campus's southeastern boundary, while benefiting from a slight bow in Sherbrooke to gain physical prominence in the city.

But beyond establishing the building's urban presence, many of the exterior moves come from interior functions. The school's energetic and visionary dean, Don McLean, who worked closely with the architects and acousticians to fine-tune and realize the design, put forward an ambitious program, in which a key element was the Centre for Interdisciplinary Research in Music Media and Technology (CIRMMT, pronounced "Kermit"). This center required state-of-the-art performing and recording spaces, as well as laboratories for investigating, for example, the perception and cognition of music and motion; digital sound modeling (synthesis and analysis) and acoustics; and virtual, 3D, multimodal immersive systems.

The centerpiece of CIRMMT is a five-story multimedia room (MMR)—a column-free, 60-by-80-by-60-foot-tall black box that can accommodate a symphony orchestra or choir, providing a cutting-edge sound stage for film scoring. The facility also includes a rehearsal hall for opera and voice. As recording studios with high-tech digital controls, both chambers demanded isolation from vibrations and sounds emanating from outside and inside the building (including its mechanical systems).



SECTION A-A



MEZZANINE LEVEL

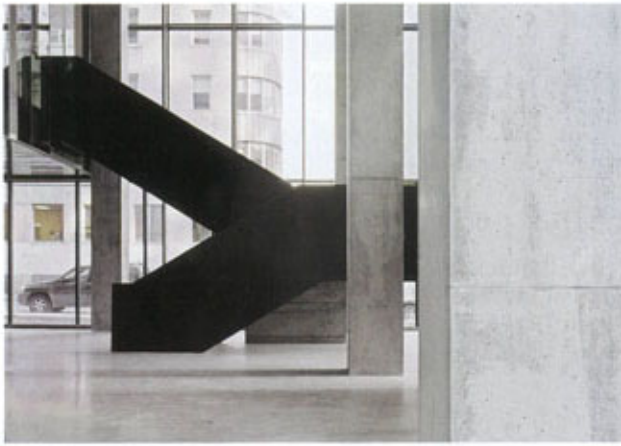
STREET LEVEL

LOWEST LEVEL (BELOW GRADE)

0 30 FT.
9 M.

1. *Lobby*
2. *Recital hall*
3. *Void*
4. *Strathcona Hall*
5. *Lab, meeting, or administrative space*
6. *Opera rehearsal hall*
7. *Control booths*
8. *Multimedia room*
9. *Recording studio*
10. *Mechanical*
11. *Music Library*
12. *Bridge (to Strathcona Hall)*
13. *Office*

The library's layers create a facade behind a facade (left). A stair of folded, black steel (opposite and below) snakes through the lobby and then reemerges in the library above it. The 200-seat recital hall has ribbed, oak acoustic panels (bottom).



The lobby fully engages Sherbrooke Street, a major thoroughfare, just outside its door. This interior has simply a floor of polished concrete, raw-concrete columns, and a rough granite door surround.

To accomplish this acoustic feat in the thick of the city, the architects, working closely with acoustician Larry King, then of ARTEC, built the MMR as a concrete box within another (separated by neoprene pads for sound and vibration isolation) and buried the lowest two stories below grade, where both chambers, as well as small recording studios, are entered. The top of the nested volumes, rising two floors above the ground level at the north end of the site, along Aylmer, sets the datum line for that concrete "geological layer," wrapping all the way around the front of the building.

Rather than mount the mechanical systems on the roof in the conventional manner and run long ducts, increasing the potential for interior sound pollution, the architects perched a six-story-high box of mechanical stacks and catwalks above the MMR, carefully isolating the upper volume on concealed legs that descend to the ground. As a result, the mechanical feeds into each floor are short, direct—and quiet. Saucier also sequestered other potentially "noisy" elements, including fire stairs and elevators, behind the west elevation, separately articulating this functional vertical layer.

Expressions of the building's interior on its skin also extend to the 200-seat recital hall, entered off the lobby and its mezzanine. On the Aylmer facade, the edge of a folded plane of concrete reveals the rake of the auditorium floor, while bricks, laid vertically end-to-end above it, evoke the ribbed, oak acoustic panels inside the hall.

What is ultimately most remarkable about the building is how it renders a multitude of complicated factors perceptually simple. While the exterior, especially to the east, offers a high-energy dynamism and eclectic material palette, the overall geometric purity keeps the composition from ever feeling excessive. With reductivism in the details, disposition, and sheer number of different spaces, the interior conveys clarity and serenity. Because the design evolved through a protracted series of iterations, the architects had time to work out key spatial proportions (optimizing acoustics) and solve complex problems with pure, uncluttered, and at times seemingly straightforward results. "What you don't see are the spaces *between* rooms," says Saucier. "Much deeper than in ordinary buildings, they hold miles of cable. We even provided portals so that, say, CBC radio-broadcast trucks can hook up directly to our performance or recording spaces."

Free of distractions, the lobby, with floors of polished concrete, has a quiet elegance, animated by a sculptural stair of black steel that snakes up through it (a recurrent motif in Saucier + Perrotte's work), by the green-glass bridge that crosses the mezzanine, heading toward Strathcona Hall, and by the movement of people through the space or along the highly visible streetscape beyond it. "This was like doing an art school," says Saucier. "You want to inspire people, but if you put in too much design, you rob the students of their chance to express themselves." ■

For sources, see page 124.

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