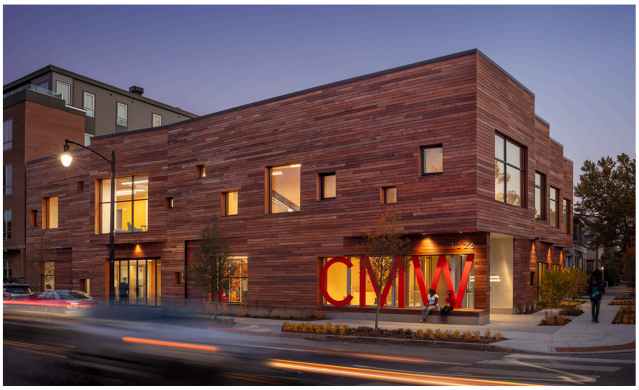
EDUCATION | MASS TIMBER

PROJECT PROFILE

A Sound Choice: Mass Timber Strikes the Right Note for Community MusicWorks Center



When a visionary music nonprofit for youth in Providence, Rhode Island, set out to build a single dedicated facility, the architects at 3SIX0 responded with a crystalline structure at the intersection of two city grids—and built almost entirely from cross-laminated timber (CLT) and glulam[1]. More than just an innovative structural solution, the wood became an acoustic asset, lending auditory warmth and rhythm to a space designed to perform—inside and out. The result is an inspiring community center and performance hall that resonates, literally and metaphorically, with the organization's mission of music as a means for social change.

At a Crossroads: Community Music Program Pivots from Mobility to Momentum

As Community MusicWorks (CMW), a Providence nonprofit offering free music education to the city's youth, began planning its first permanent home, it faced a

[1] Both hyperlinks USDA# 4713

fundamental question: Would settling in one place betray its founding promise to meet the community where it was?

“They were initially hesitant, and wanted to reflect on how best to do it,” recalls Chris Bardt, principal at 3SIX0 Architecture. “Because they're working in neighborhoods that are underserved, if we make a home base, how do we draw the community in and avoid the trap of gentrification?”

For years, CMW had operated nomadically—in church basements and storefronts—hauling instruments across the city. “The hardest thing was to challenge a narrative,” says Kyna Lesk, principal at 3SIX0. “This romantic idea of the itinerant musician was very persistent. So this was a radical shift: turning it 180 degrees to say: Now the community comes to the center. That took a lot of soul searching.”

But permanence offered new possibilities. Rootedness could mean refuge—a safe, stable hub for young musicians—and it could also mean an invitation. The wood-clad, mass timber design doesn’t just settle into the neighborhood, it radiates from it. With a form derived from overlapping geometries of the angled city grid, the building carries both centripetal and centrifugal force: drawing students, families, and audiences inward, while projecting energy and programming back into the community.

In addition to a 100-seat performance space, the program includes a café, gallery, music locker area, luthier workshop, experimental electronic music studio, administrative offices, and library on the first floor and a student lounge, classrooms, private practice spaces, and access to a performance hall balcony on the second floor. While the central soundproof performance hall anchors the building’s core, the other spaces are porous and outward-looking in all directions. Wedge-shaped rooms, syncopated windows, and angled volumes allow for oblique views between spaces—a child glimpsing through a skylight or a musician visible in rehearsal from a stairwell—turning the act of music performance and instruction into something transparent and shared.

“One of the early sketches the architects did—I still have it—was just a line drawing of the parallel lines to Westminster Street meeting the parallel lines to Dexter Street,” recalls CMW founder Sebastian Ruth. “They basically made a tic-tac-toe board and showed that this triangle gets formed throughout the building. And they said, ‘Let’s not fight it—let’s embrace it.’”

Sound Thinking: Mass Timber Meets Musical Mission

Though concrete and steel were initially assumed to be the most affordable construction systems, 3SIX0 and CMW soon shifted to a less obvious option: CLT. “Wood was in the air, but it was certainly not a foregone conclusion when we started,” Leski says. “This was always a budget-constrained project, always. So when the budget numbers were first developed, it was assumed it would be more affordable to build with conventional concrete and steel.”

With support from the Healthy Materials Lab, a design research lab at Parsons School of Design, and encouragement from the local contractor, Pezzuco Construction Inc., CLT became a more than viable alternative. Not only did it offer speed of erection and lower carbon impact, but it also aligned with the atmosphere CMW hoped to create and could serve as a finished surface throughout. “We see wood as a warm and friendly material,” Bardt says. “Providence is made from wood. The community is somewhat resistant to overly modern architecture, but they have a place in their heart for wood.”

Beyond cultural resonance, the material also offered acoustic benefits. “Wood has this beautiful resonance—it’s not dead like brick and not sharp like glass,” Bardt continues. “It creates a warmth that feels right for a place built around sound and music. That resonance has to be shaped and controlled.”

The acoustical considerations also extend beyond the central hall. “The performance space is very alive—it vibrates with the energy of sound, thanks to the CLT and wood cladding,” Leski says. But every other room needed some level of acoustic isolation to avoid sound transference into the performance spaces, and vice versa. To achieve that, the team implemented double-wall construction, poured a light concrete topping on the CLT floors, and introduced rubber separators between assemblies.

“Working with Arup, we treated the performance hall like an instrument,” Leski says. “Each surface was tuned to reflect, diffuse, or absorb sound.” The result is architecture that sounds as good as it looks.

“When it comes to music and acoustics, wood is a very good material because it resonates and vibrates with a more random distribution of frequency. That’s what makes music so beautiful,” explains Alban Bassuet, Associate Principal and Acoustical Engineering Consultant at Arup’s acoustics lab.

“In the performance hall, we ran an optimization algorithm that tested thousands of combinations of angled wood panels—concave, convex, and flat—to find the best

arrangement for acoustics. And we raised the ceiling of the room as much as we could to reduce sound intensity. ”

Nonetheless, wood comes with some challenges—specifically controlling for vibration and sound isolation. “We had to very carefully design all of the floors and ceilings to make sure adjacent activities would not disrupt other rooms. To achieve this in the practice rooms we built rooms within the CLT structure—a partial box-in-box system as a relatively cost-effective isolation design strategy,” says Bassuet.

Porous, Outward-Looking CLT Structure as an Expression of Community Building

While all-mass-timber structures often take straightforward, orthogonal forms, the material can also tackle relatively complex geometries like CMW’s design. That challenge, as Leski explains, revealed new possibilities for the material’s versatility—particularly in civic projects of this scale.

Initially envisioned as a pure CLT structure, the design evolved into a hybrid system—CLT slabs supported by glulam beams and columns. “Combining CLT and glulam with panelized light-frame wood construction kept things more affordable and also gave us greater flexibility,” Leski says. “And the quirks of the building’s geometry gave us surprises that also offered moments of delight—like columns that became part of the character rather than a compromise, unexpected chances to create transparency between spaces, and opportunities to draw in light.”

What might have been a limitation became a defining feature. “CLT is inherently planar, and that helped shape how we thought about the building—as a kind of porous structure with a geometric rhythm to it. The movement through the building is musical: align, shift, pause, repeat,” Bardt says. “If you were to take a crystal and break it, the facets on the outside reflect the internal geometry. That’s how we conceived of the building.”

Even the performance hall’s interior finishes echo the project’s ethos. The walls are lined with exposed two-by-fours—simple, stick-frame construction, intentionally rough and rhythmic. “It almost evokes the idea of something under construction, not yet complete,” Leski explains. “This reflects that Community MusicWorks is a building of a community. It's an action. It's always evolving."

The abundant use of wood, exposed and textural, is both an aesthetic and philosophical gesture. “The rawness as a design language continues through, even in the most finished space,” Bardt adds. “What you see—exposed wood, unfinished edges, structural rhythm—reflects a philosophy.”

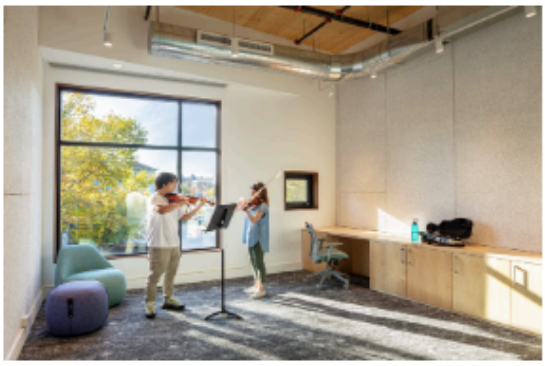
Outside, the building's geometry continues the theme of angular motion and musical pacing with horizontal, responsibly sourced Ipe cladding. "There is a sense of movement and rhythm as you approach the building," Bardt says, "very much like music."

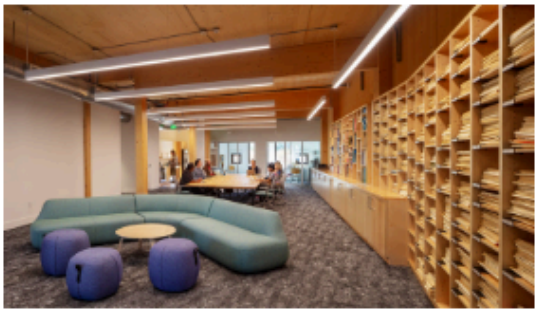
From the soloist balcony to the flexible galleries and garden performance spaces, the building is designed to evolve alongside its community. "This isn't a finished object," Leski emphasizes. "It's a work in progress—just like the organization it's built to serve."

Project Details

Project Name: Community MusicWorks Center
Location: Providence, Rhode Island
Size: 24,000 square feet
Architect: 3SIX0 Architects
Contractor: Pezzuco Construction Inc
Structural Engineer: WSP USA Buildings Inc.
Acoustic Consultant: ARUP
Supplier: Element5 | HASSLACHER Group
Timber Products: CLT, Glulam, Light-frame panels
Photography:








Social for USDA Review

New Post:
This mass timber music center in Providence hits all the right notes! Community MusicWorks' new CLT structure by @3SIX0 Architecture proves wood construction can create perfect acoustics while building community. See how their design transforms this community hub where structure and sound harmonize beautifully.

ICYMI #1:
Providence's new Community MusicWorks Center by @3SIX0 Architecture demonstrates how CLT's acoustic properties enhance musical performance spaces. The mass timber structure supports the nonprofit's mission while offering a warmth and resonance conventional materials can't match.

ICYMI #2:
@3SIX0 Architecture's design for Community MusicWorks Center leverages mass

timber's acoustic advantages in a crystalline CLT structure. The Providence facility transforms a nomadic music education program into a permanent community hub without losing its grassroots energy.

Feature Friday #1:
Striking the right timber!

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Have a wood project you want us to share? Send us a DM!