

Program Summary:

This project, a performing arts center at a k-12 school, provides an enriching new environment for its students.

Program Statement:

The project was conceived to accommodate the school's long neglected music program, which currently practices in the school's original gymnasium, and to ensure a home to nurture the growth of current students as well as to attract future students and faculty.

The project combines artistic vision, expert craftsmanship, and superior functionality. This ground-breaking interior design, which considers user experience above all else, has raised the bar for practice and performance venues in the area. The new facility provides the school with two rehearsal halls, practice rooms and music support spaces.

Inspired by acoustics and sonic geometries, our architects embarked on a journey to create a space that encourages creativity, artistic expression, and a connection between performers and audiences. Their ability to blend materiality and acoustic performance resulted in best-in-class quality for both choral and instrumental rehearsal spaces.

The seemingly straightforward design concept was thoughtful at every level – from space planning, lighting, circulation and beyond. In a city rich with musical and cultural heritage, the building pays homage to the vibrant artistic community it serves.

IA375.01

Building Area: (sf)
8,500

Cost per Square Foot:
647.05

Construction Cost
\$5,500,000

Date of Completion:
June 2022



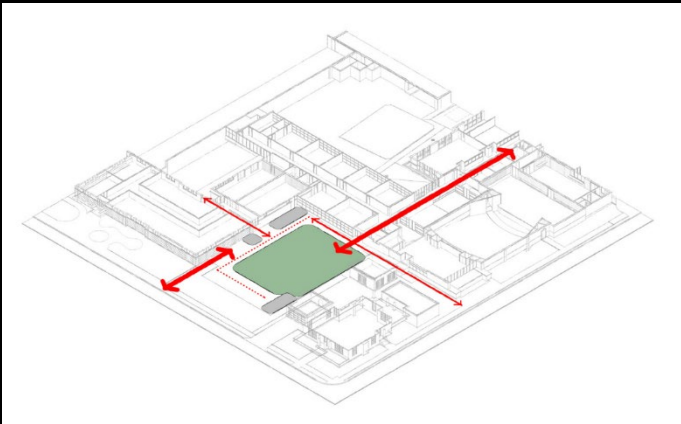
IA375.02

A contemporary façade enhances user experience.

The new facility is nestled between one of the campus' original structures, the Jefferson Building, and the Robinson House—the home for the institution's Head of School.

Immense consideration was made to the exterior design so that it fits harmoniously with its surroundings. The façade pulls from the 3-part organization of the Jefferson Building in a subtle contemporary expression, to complement and not compete with the historic structure.

The glazed façade stitches together the varying levels of both buildings, fills the building with an abundance of natural light and creates a sense of connectivity between the campus and surrounding neighborhood.

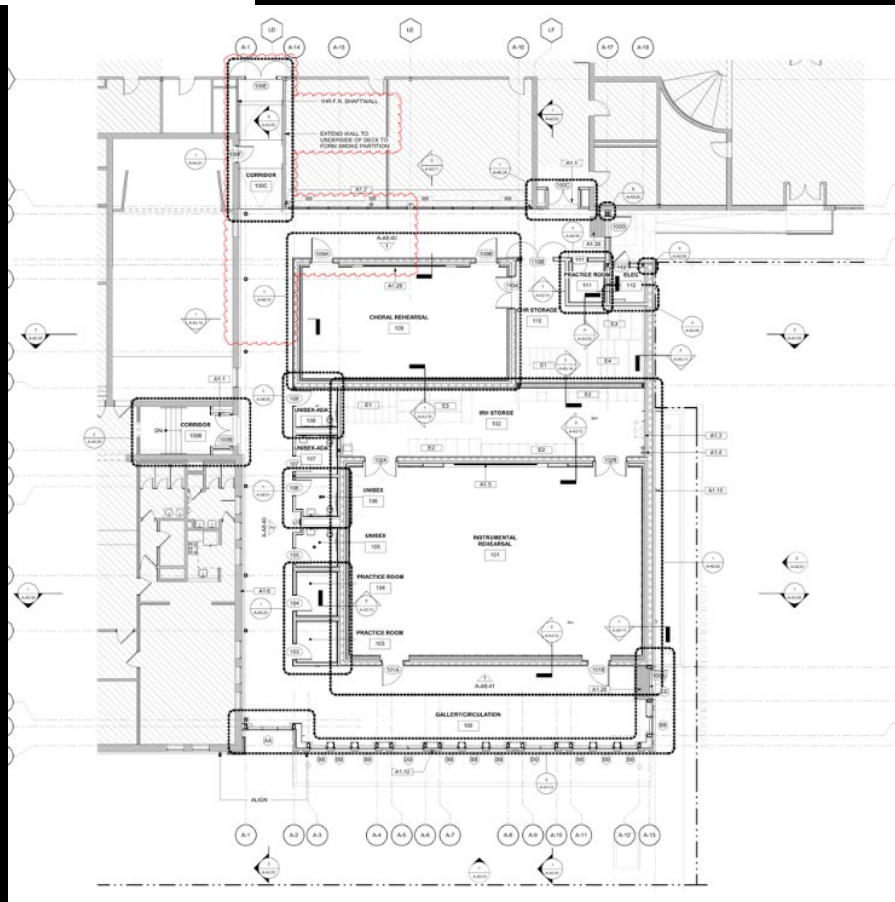


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Efficient and impactful design.

The new facility provides the school with two rehearsal halls, practice rooms and music support spaces.

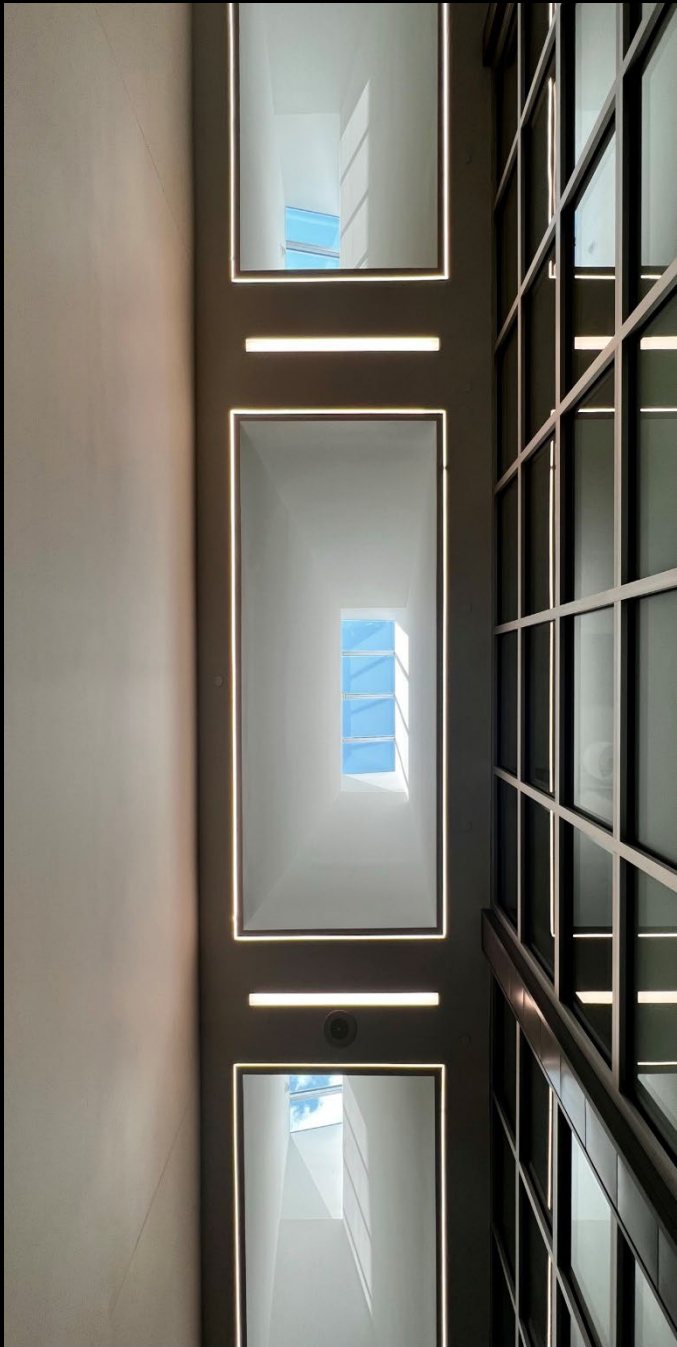
Due to the constricted site, these program elements were organized into a compact configuration setback from the adjacent buildings to help better isolate the performance space and to compliment many of the schools existing circulation patterns.





IA375.04

The resulting multi-story surround provides an abundance of natural light, serves as a break-out space utilized by students and gallery space for students' artwork to be displayed throughout.



IA375.05

In addition to the façade, three large skylights provide natural light.

The interior design further illustrates Newman's mantra of "education on display" by providing continuous glazing into the adjacent facility's classrooms so that Newman's educational mission can be experienced throughout and to satiate student curiosity, sparking interest and potential collaboration.

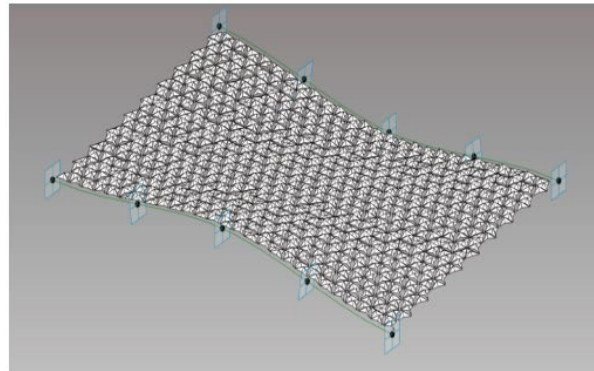
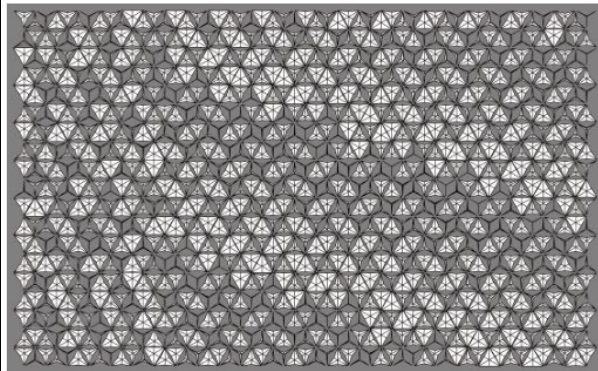
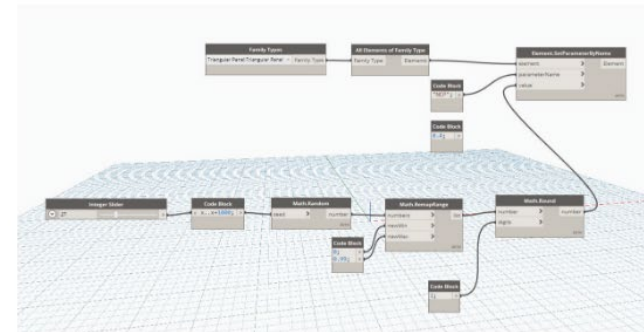
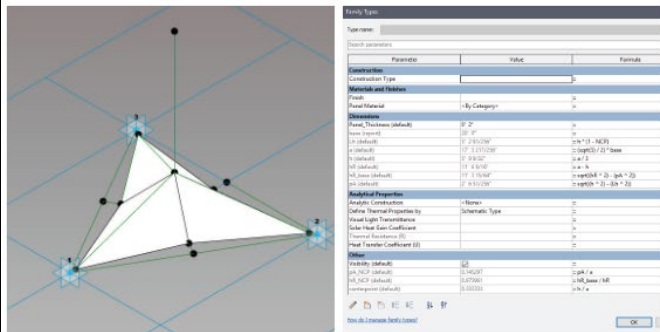
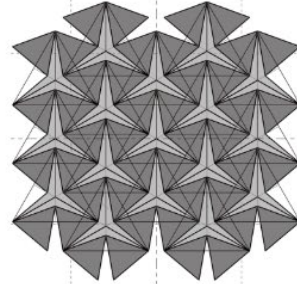
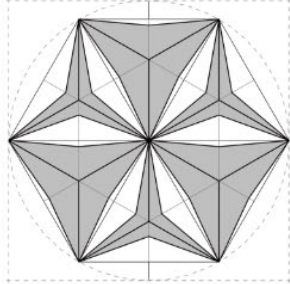
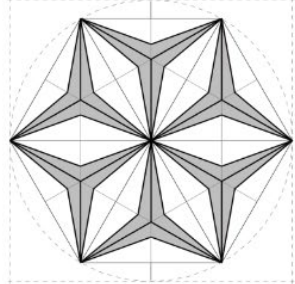
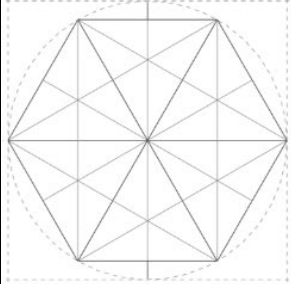
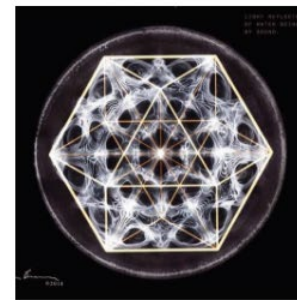
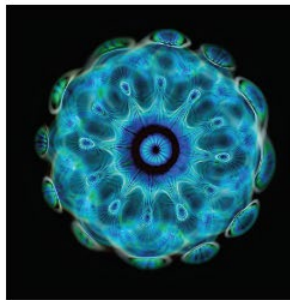
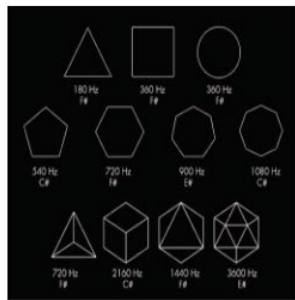
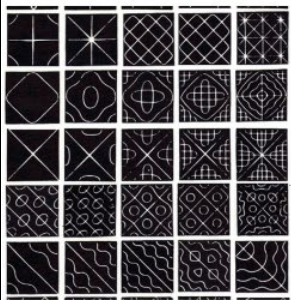
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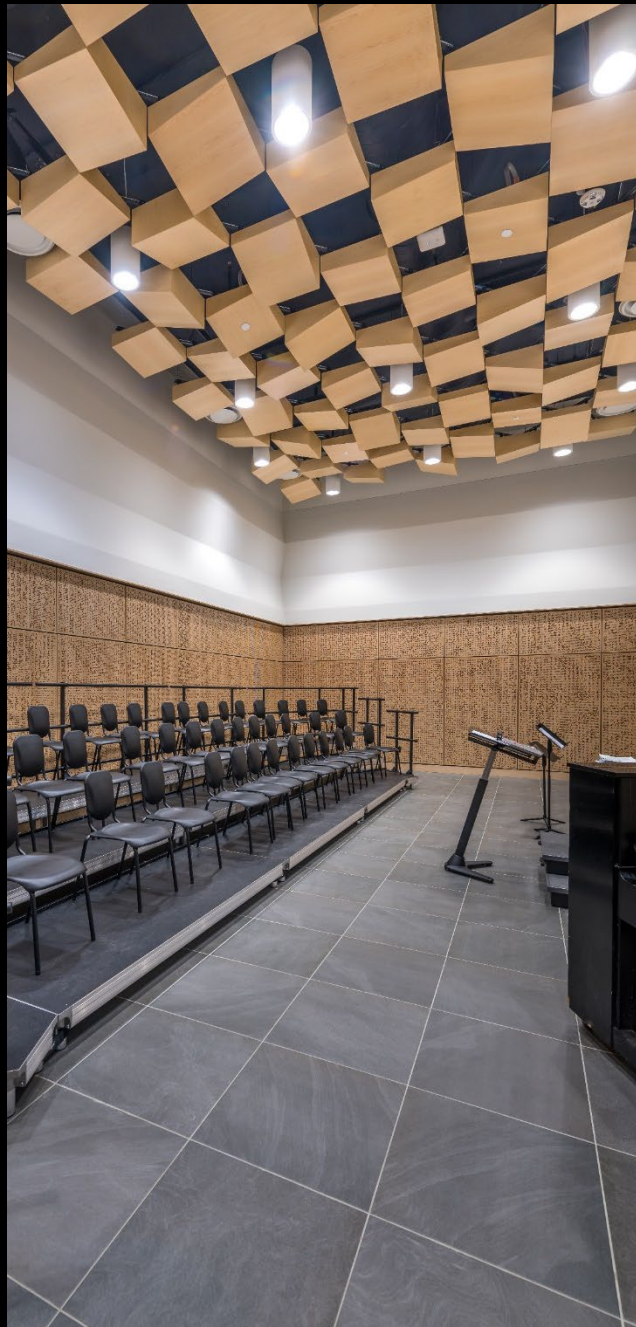
Design inspired by sonic geometry.

Inspired by Ernst Chladni's sound visualization studies as well as sonic geometries, the design team modeled a reflector design that is unique to each rehearsal hall's acoustic needs.

Drawing from these underlying geometric patterns a parametric reflector model was created along with a dynamo script that manipulated the shape of each panel.

While the shape of the reflector panel had to be simplified due to budgetary constraints, the resulting undulating array adhered to the original intent while creating visual intrigue and optimized sound diffusion for each space.





IA375.07

Immersed in Sound.

Whether it be the reflectors optimizing diffusion, the volume of each space, wall shaping or absorption, every design decision was driven by creating an environment to immerse the end users and provide spaces conducive to creativity and expression.

Beyond the tectonics, the design team drew from the warmth of sound for underlying aesthetics, both rehearsal halls utilize wood tones on both the overhead reflector array and the surrounding wall panels to provide the space with richness. The other finishes used soft subtle tones to compliment the wood paneling.

Each space was intended to act as siblings – from the same family but individual enough to respond to their specific needs.



IA375.08

In the instrument rehearsal hall, dampening the sound of large ensembles is of paramount importance. As a result the upper walls contain fabric wrapped acoustic panels dispersed evenly throughout.

At the occupant level, wood grilles provide a refined finish, while maintaining acoustic transparency, allowing the concealed absorptive panels to reduce sound energy throughout.





IA375.09

In the choral rehearsal hall, sound diffusion takes precedence. Along with the reflector array, the upper walls were shaped and constructed out of reflective materials to diffuse the singers' voices and enhance reverberation time.

Similarly at the occupant level, perforated wooden panels surround the user. The patterned perforations create visual intrigue, while maintaining acoustic transparency, allowing the concealed absorptive panels to reduce sound energy throughout.