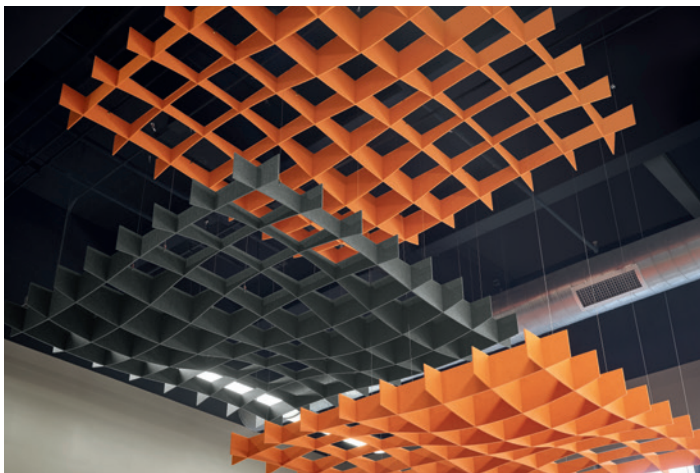


CASE STUDY



Project | *The Stone Independent School*
Location | *Lancaster, PA*
Product | *FeltWorks® Acoustical Panels, FeltWorks® Blades, FeltWorks® Open Cell Clouds*



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the challenge:

The Stone Independent School is a project-based school serving students from 7th to 12th grade. As a result of expanding enrollment, it recently moved to a larger space in a building built in 1865. The historical space provides an open, collaborative environment that gives the students the freedom and flexibility to work together on projects.

According to Mike Simpson, Head of School, one of the problems with moving into such a large, open building was the acoustics. "There were large amounts of reflective surfaces that would carry noise from one end of the school to the other," he says. "However, adding walls was not an answer because we wanted to keep the open plan so that students could collaborate. We didn't want to change the space, only make it more functional by making it quieter."

the solution:

To remedy the noise problem, the school partnered with Armstrong Ceiling Solutions and installed acoustical ceiling treatments in three of the facility's principal spaces. The largest was the "Maker Space," a hands-on area in which multiple student building projects may be in progress at any given time.

To reduce noise levels, 1,500 square feet of FeltWorks® Acoustical Panels were installed in the ceiling. Especially well-suited for exposed structure spaces, the 4' x 8' panels were installed directly to the deck. Black panels were chosen so that they virtually disappeared into the black deck.

The panels have a Noise Reduction Coefficient (NRC) of 0.80, meaning they absorb 80% of the sound that strikes them. Initial on-site acoustical testing indicated reverberation time was 1.6 seconds. Following installation of the panels, it fell to 1.0 seconds, an acoustically significant reduction of 38%. Simpson notes both students and staff were quick to notice the improvement. "The difference in sound was just extraordinary," he states.

The "Art Space," a 64-foot-long walkway where students congregate and features students' artwork, also received an acoustical treatment. Selected for use here was FeltWorks® Blades, an acoustical solution that features an upscale soft, linear visual along with excellent sound absorption.

Because sound is absorbed on their front, back, and sides, Blades can provide greater sound absorption efficiency than a continuous ceiling. Acoustical tests showed a 27% reduction in reverberation time following the ceiling treatment. Instead of a rectangular blade visual, the panels feature a 'Peaks and Valleys' blade design to accentuate the fun, creative space.

The third area to receive acoustical treatment was the "Coffee Space," which features a student-run coffee shop. Three 8' x 8' FeltWorks® Open Cell Clouds were installed in layers to provide spot acoustics over the coffee bar. The result was a 15% reduction in reverberation time using only 192 square feet of material.