**the challenge:**

The auditorium on the campus of Armstrong World Industries measures 9,000 square feet in size, holds up to 650 occupants, and is used for a myriad of purposes, ranging from employee meetings to customer functions. According to Operations Manager, Karen Spina, however, the acoustic environment was not always the best. “Noise was a problem because of reflections off the walls,” she states. “Complaints from presenters were becoming more frequent, even if they were using a microphone.”

**the solution:**

To solve the problem, the company installed a large, 725-square-foot, brightly colored, geometric, acoustical wall treatment on opposite sidewalls of the space using Tectum® panels. Tectum Panel Art walls have a Noise Reduction Coefficient (NRC) up to 1.0 depending on panel thickness and mounting. The panels are offered in eight standard geometric shapes as well as custom shapes up to 48” x 48” and in White, Natural, and any customer requested color. These wall treatments measure 14-1/2’ high and 50’ long and are comprised of 196 custom right triangle-shaped panels, all in the same size. The panels are installed in a geometric pattern featuring a pinwheel design with 12 different colored panels that rotate around a center point. The panels have beveled edges on all sides and the use of black furring strips and acoustical backing in the mounting helps impart a 3-D look to the design.

According to Armstrong Product Designer, Marie DePaul, who created the wall pattern, when it came to choosing a color palette, she started with the company’s brand colors and then filled in with other complementary hues. “We wanted to create an eye-catching visual using our bold brand colors and a simple geometric pattern,” she states. Panels are one inch thick and installed on a C-20 mounting to provide an NRC of 0.80. According to Spina, after the installation of the wall panels, the difference in the acoustic environment was immediately noticeable. “Presenters are now praising the acoustics,” she states.

Spina notes reaction to the color and patterns was also overwhelmingly positive. “We were nervous originally because we don’t use this much color very often,” she states, “but the comments have ranged from ‘really pleasant’ to ‘inspiring’.”