the challenge:

The Suburban Beer Garden was designed to be a lively, social atmosphere where people can relax and have fun. “I wanted it to be vibrant,” says Chef Owner Eric Yost of his newly-opened restaurant and beer hall. “I wanted it to have energy.” However, with the exposed structure and concrete floors, the space could also be very loud, making it difficult to carry on a conversation. The hard surfaces may not have been the best materials for controlling sound,” he says, “but that’s the look we were going for.”

During opening week, Yost realized acoustics were going to be a problem. “One customer said it was so loud it was like eating on a tarmac waiting for a plane to take off,” he explains.

the solution:

Yost turned to Armstrong Ceiling & Wall Solutions to solve the problem. After taking the necessary acoustical measurements, it was determined that the reverberation time was way too high for the space. “Recommended levels for this type of space are below one second,” says Sean Browne, Principal Scientist, Armstrong World Industries. “Readings here were closer to 1.5 seconds. Some reverberation will keep the place lively, but too much and it just feels loud.”

Based on the readings, the You Inspire™ Solutions Center at Armstrong came up with an acoustical design that would absorb sound and be aesthetically pleasing as well. Traditional methods were bolstered with some innovative ways to disguise the sound-absorbing materials.

A SOUNDSOAK® acoustical wall system installed on the front wall of the restaurant was customized with the Suburban Beer Garden logo. The hexagon-shaped SOUNDSCAPES® Shapes acoustical clouds serve as a visual focal point while absorbing noise over the loudest part of the bar. Custom-fit-and-painted TECTUM® panels were installed in the rafters to blend right in yet provide acoustic control throughout the space.

The acoustical solution reduced reverberation time by 30 percent to a more comfortable 0.9 seconds — an improvement that customers noticed immediately. “I can hear someone sitting next to me without them yelling,” says one customer. “It’s still a fun, busy atmosphere, but you can still have intimate conversations.”

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CASE STUDY

Project | Suburban Beer Garden
Location | Exton, PA
Designer | You Inspire™ Solutions Center
Contractor | ERCO Ceilings and Interiors
Product | SOUNDSOAK® Walls, SOUNDSCAPES® Shapes, TECTUM® Ceiling Panels