

Quieting a Computer Server Room

Nowadays, every company has to have a computer server room. These rooms are host to lots of computers and servers that all require fans to keep their systems cooled. All of these fans running at one time create excessive ambient noise.

Taco Metals Inc., in Miami had this very same problem. They have a small room approximately 10' x 12' with 4 racks full of IBM equipment. They have a total of 10 servers plus a number of computers in this small space. Like most typical computer / office environments the room had hard reflective surfaces for the walls (drywall) and floor (commercial grade carpeting). They also have a typical drop tile ceiling in place that incorporated the use of "standard" grade ceiling tiles. To make matters worse they have one full time employee working in this space surrounded by all of the excessive ambient noise levels.

Knowing that there must be a solution to this common problem, Nick Martin, MIS Manager for Taco Metals, Inc., found Acoustical Solutions' website and called their toll-free number for advice. The solution was a straightforward and simple fix. First, the recommendation was made to use Sonex Classic Colortec acoustical foam sheets, which is a Class A fire rated foam, on the wall behind the racks and in between the racks. This was to pick up the first reflection of the sound coming off the fans and in a sense keep the sound from bouncing or reverberating off that back wall. The

second product suggested was to use Sonex Contour Ceiling Tiles, which are another class A fire rated foam product. The problem with "standard" office type ceiling tiles is that they offer low sound absorption values, this particular acoustical ceiling tile has a NRC between .70 – 1.00 depending on the model. What that co-efficient relates to is a percentage of the sound waves (70% - 100%) that come in contact with those tiles will be absorbed and not reflected back into the room. That percentage is 2 –3 times higher than those of "standard" acoustical ceiling tiles.

The day the Sonex Contour Ceiling tiles and acoustical foam panels arrived Nick Martin had them installed into his server room and sent Acoustical Solutions the following statement. "We received the ceiling tiles today and they are already in place and WOW what a difference in the computer room. The ceiling tiles are doing the job, thanks for all your help. I will HIGHLY recommend you and your company in the future". Thanks, Nick Martin, MIS Manager, Taco Metals Inc.

