When you’re trying to maintain a comfortable temperature in a 45,000-square-foot workshop, it’s imperative to find a system that works well without costing a fortune to run.

A steel manufacturer in New York state recently built a new workshop, approximately 85 feet by 480 feet, adjacent to an already existing building. Because radiant heating in the older building was working well to keep things at a comfortable temperature, it made sense to use radiant again.

“It’s quite tall inside the building, so they wanted to keep the heat down near the floor,” said Victor Mangano, owner of T.M. Contracting. “They don’t keep the place at a high temperature, because there are large doors and people are in and out all the time. Having used radiant before is why they chose to use it again. It works.”

When Mangano went to his local supply house to look at choices for the new building, Viega Climate Mat came up as a good option. After deciding on the Climate Mat, Viega’s radiant design team came into the picture, creating the plans for the mats. The team and Mangano were presented with some unique challenges on the project.

Although the building is a large, skinny rectangle shape, there is a portion of the building – a strip of space that runs the longer length of the building, almost down the middle – where radiant products could not be installed.

“There is a three- to four-foot-wide concrete obstruction, for a crane and rail system, down the middle of the building,” explained Josef Marcum, Viega Radiant Design Engineer. “So we had to reconfigure the plan so that there was no radiant directly underneath it.”

With the variances needed for the design, Marcum made a total of seven revisions on the project before the plan was settled. Revisions included different manifold locations and working around the obstruction area.

Mangano said installation took about two weeks, including hooking up all 19 manifolds, tying everything down and pressurizing the system before concrete was poured. He said an average of four or five workers were on the job, depending on the section, and guessed it would have taken seven or eight workers to do the job in that amount of time had they used traditional radiant tubing instead of Climate Mat.

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