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# Roofing Contractor

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## Low-slope Roofing Details

Commercial Roof Accessories  
Fall Protection



You Know You Need a New Roof



When...

*by Josephine A. DeLorenzo*



**I**owa State University's Scheman Center is constantly in use, making any roofing problem or project a challenge. Built in the late 60s, the center is made up of several meeting rooms, an auditorium, an art gallery and an atrium/reception area. The original coal-tar pitch roof prematurely failed. It was hastily replaced using copper cap metal, chunks of which had a tendency to blow off when it was windy – not the best scenario for innocent passers-by.

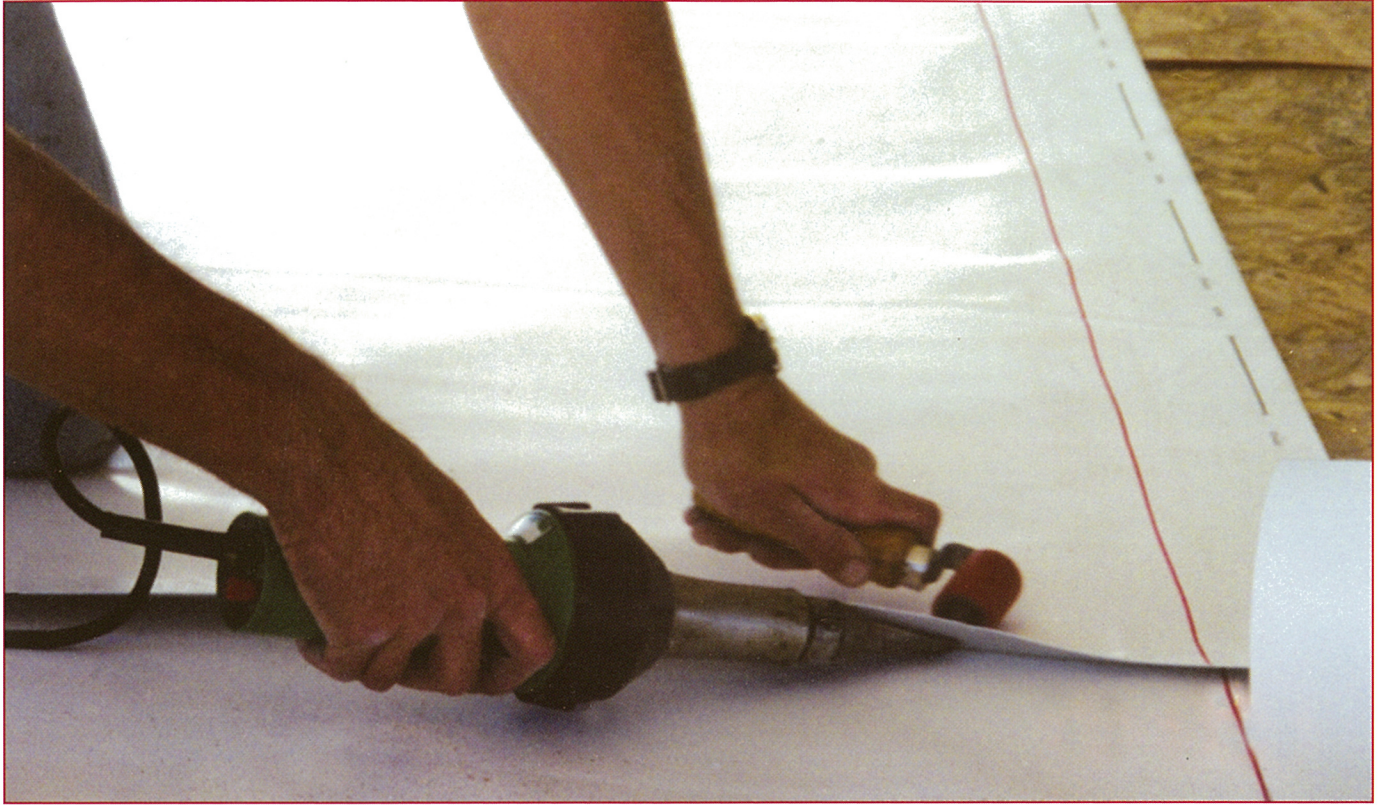
Requiring constant repairs, this roof was replaced about 17 years ago with mechanically fastened thermoplastic hypalon. By the fall of 2000, there were active leaks and a lot of fasteners had pulled loose or were in the process of doing so. On windy days, you could actually see the roof flutter.

It was about time for a reroof. Central States Roofing, Ames, Iowa, had the experience to do the job. "Over the course of the last seven years, with the new generation of thermoplastics, we've done in excess of 6,000 squares," says

Mark Hanson, Central States' president. The company does all types of commercial roofing – 95 percent single-ply and 5 percent BUR. About 65 percent of its projects are reroofs; the rest are new construction.

The 675-square job was spec'd with white thermoplastic CPA from 2001 Co., Waterbury, Conn. The 2001 system is a vented roofing system. In a standard system, high winds can create an inequality in pressure, resulting in a billowing effect. A vented roofing system uses one-way valves to let air pressure out, but not in. The membrane is air-sealed to the deck with the valves placed on the perimeter. "This system lends itself to labor efficiencies," explains Hanson. "With a huge, wide-open roof area, cost is always a factor. In today's market, labor is a huge percentage of that cost. Using this system helps keep the costs down."

"We know the criteria for the vented roof system and we fax drawings to 2001. They tell us specifically where to put



the vents. The system is warranted," says Hanson. "We've done eight of these in the last three years for a total of around 2,000 squares. We're very happy with it. You can tell the roofs are not fully adhered, but we saw one perform during 50-mph winds. It was very tight, very impressive."

Central Roofing's contract for the Scheman Center was for \$168,500. The job took an eight-person crew 15 days to complete. One of the bigger challenges was noise reduction, because the building was in constant use with meetings and conferences. Previous rounds of repairs had resulted in unacceptable

noise levels due to putting fasteners in concrete. The vented roofing system requires very few fasteners; those that were needed could be installed before 8:00 a.m. The other big challenge was the fact that the job was done during the time of year when there was either dew or frost on the roof every morning. The crew had to spend time with blowers or dryers before starting work.

On the plus side, material handling was minimal. There were only two driveways to the center, and one had to be blocked off when the crane was in use. But this occurred for only a few minutes

a day, so the disruptions were minor. The weather cooperated as well, allowing the job to be done quickly, thus making the owner happy. Because there are no classes in the center, only meetings and conferences, business depends on being open. "We met all of our customer's expectations," says Hanson. "The job was a success." **R**

*Josephine A. DeLorenzo is editor of Roofing Contractor. Special thanks to Chuck Beyer, Beyer Roofing Sales (641.357.8194), for assistance with this article.*

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