

Project Profile



Project

Columbus MR Service Center
Columbus, Georgia

Owner

Columbus Consolidated Government

Roofing Consultant

Dry Tech Consulting LLC
Atlanta, Georgia

Roofing Contractor

M. Jordan Roofing, Inc.
Manchester, Georgia

Roofing System

Décor Roof System using 60 mil
Sarnafil® G410 feltback membrane
in patina green

Project Size

17,895 square feet

Completed

July 2010

Décor Roof Solves Leak Problems at Columbus MR Service Center

Some mornings it felt like the sky was falling at the Columbus Mental Retardation (MR) Service Center. For years the roof at the Center leaked when it rained, saturating ceiling tiles to the point where they would collapse. Since the Center provides job training and skill development for intellectually disabled adults and is heavily occupied, this was obviously not acceptable.

“We spent years repairing and even coating the metal roof, but we just couldn’t get the leaks to stop,” said Bruce Gilbreath, facilities maintenance manager for the City of Columbus. As a result, he would often be greeted in the morning by damaged ceiling tiles and wet floors.

“This metal roof was about 20 years old and suffered from an inadequate design,” said Craig Jepson, president of Dry Tech Consulting, Inc. of Atlanta, Georgia. “Dry Tech has been a roofing consultant for the City of Columbus for many years now, and most of their problematic roofs are metal ones. If there is a leak in a metal roof and it is not at a penetration, it usually ends up being a design-related problem at critical intersections such as ridges, valleys, walls or

perimeter flashing.” Most older metal roofs are not designed to accommodate expansion and contraction which further complicates poor flashing design.

When efforts to repair the metal roof failed, it was obvious that the roof needed to be replaced. However, “the cost to tear off the roof and replace it was out of the question,” Jepson remarked. “Installing shingles would drastically change the appearance of the facility, so that was not an option either.”

Dry Tech Finds Dry Solution

Jepson had heard about Sika Sarnafil’s Décor system, and thought maybe that would be the perfect solution to the Center’s problems. The Décor Roof System combines the Sarnafil G410 thermoplastic single-ply roofing membrane with Décor profiles and/or battens to give the appearance of a standing seam metal roof. This system utilizes Sika Sarnafil’s time-tested vinyl membrane, and is the only roofing system of this type that includes warranty coverage for the hot-air welded ribs that give the roof the appearance of metal.

“The Décor system is a monolithic system. It can also be applied right over the old metal roof, which would save the cost of tearing

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off the metal roof,” Jepson explained. “I also like the fact that its ribs are heat-welded, as I refuse to use ‘peel and stick’ battens.”

Jepson suggested using a Décor membrane in patina green, because the light-colored roof would reflect the sun’s rays better than the original brown roof, thereby reduce cooling costs.

A Fitting Installation

Once the decision was made to go with the Décor system, Dry Tech went to work preparing the specifications and details for the installation of the system over the roof deck and existing metal roof. The metal curtain walls around the east and west wings’ main ridge were removed, because Jepson determined that to be one of the main causes of the roof leaks. The old wall uprights were cut flush to the roof panels.

The next step was achieving a level substrate for the Décor membrane by using insulation board to fill in the metal roof between the battens. “We were fortunate that the metal battens on the old roof were 1- ½” high so the insulation board would be even, otherwise we would’ve had to remove the battens,” said Brad Jordan, president of M. Jordan Roofing, Inc. of Manchester, GA.

A gypsum roof board then went on top. “The wood nailer along the perimeter of the roof made it easier to start the cover board and gravity made it easier to keep the



gypsum roof boards tight during installation,” Jepson said. “The contractor did not rush the installation as the roof board had to be exact in measurement and fit. No gaps were allowed because any anomalies in the field of the roof would be visible and alter the intended look of a standing seam metal roof,” he added.

The Décor membrane was then adhered to the gypsum roof board and the Décor profiles hot-air welded to the membrane. “We used a rope to tie the welder to the top of the roof and keep it steady as we climbed the ‘hill’,” Jordan explained.

Sika Sarnafil representatives were on-site to help with technical questions. “This was our first Décor installation, although we have used Sika Sarnafil for years and believe they have the best thermoplastic product on the market,” Jordan said. “The Sika Sarnafil representative helped with the welder and also made sure the proper installation procedures were being followed,” Jordan said. “Having them and Dry Tech onsite gave us a lot of confidence.”

“Dry Tech did a fine job, as they usually do,” Gilbreath said. “That’s one reason they have

been the City of Columbus’ roofing consultant for so many years.”

It was this professionalism and attention to detail that earned Dry Tech Third Place in Sika Sarnafil’s 2010 Roofing Consultant Project of the Year.

An Attractive, Dry Roof

“Driving up to the Center, you would never know this is not a standing seam metal roof,” Jepson remarked. “There are very clean lines throughout, along with brand new skylights, gutters and downspouts, making this building look brand new.” Jepson added that the City of Columbus is so happy with the Décor system that Jepson has specified it for a skating rink and a swimming pool the city is building.

Perhaps even more important, the roof is completely leak-free. “The roof is doing very well, and we haven’t had any leaks,” Gilbreath said. “In fact, now that we are confident the roof is going to stay dry, we can finally replace those damaged ceiling tiles.”



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