

PROJECT PROFILE



Project:
C.M.R.S.
Columbus, Georgia

Owner:
Columbus Consolidated
Government

Roofing Consultant:
Dry Tech Engineering
Atlanta, Georgia

Roofing Contractor:
M Jordan Roofing
Manchester, Georgia

Roofing System:
Adhered Décor Roof
using 60 Mil Feltback
PVC membrane

Project Size:
17,895 square feet

Completed:
July 2010

Dry Tech ends years of roof leaks once and for all!

For over the past decade, the Center for Mentally Retarded Services (CMRS) has fought off roof leaks every time there was a heavy rain. The Center provides job training and skill development for developmentally challenged adults in the Columbus area and is heavily occupied.

The original metal roof started showing signs of leaks not long after the building was constructed in 1978. After repeated attempts to stop the leaks, a metal waterproof coating was applied to the roof in an effort to waterproof the suspect areas. Although some of the leaks subsided, new leaks started to show up again and became progressively worse. "After a heavy rain, I would open up the facility in the morning to find collapsed ceiling tiles and wet floors in several rooms" said Michael Jackson, Supervisor of Facility Maintenance and Case Manager (SST2) at the facility.

The Director of Facilities Maintenance for the City, Mr. Jerry Chandler estimated that thousands of dollars were spent on replacing wet or damaged ceiling tiles. However, due to budget restraints year after year, the cost to replace the roof made it virtually impossible...until now.

The Challenge

With over 200 buildings in the City's portfolio, this facility became top priority as the leaks were not only disruptive, but costly. Mr. Chandler brought the case to the City's Roof Consultant, Dry Tech Engineering. "The City's frustration with the leak history at this facility was understandable. There were no more short-term solutions available except roof replacement due to the current roof condition", said Craig Jepson, President of Dry Tech Engineering. "However, the cost to tear off the roof and replace it with another metal roof was out of the question and installing shingles would have dramatically altered the appearance of the facility." Faced with this challenge, Jepson contacted his local Sika Sarnafil Representative, Tom Wiese who was currently working with him on a new construction project using the Décor system. "The technical support from Sika-Sarnafil is absolutely top notch. They were on the roof and provided me with accurate budget figures right away" said Jepson. Together, Dry Tech and Sika-Sarnafil's technical department were able to work on the logistics of retrofitting the existing metal roof which eliminated the need to tear off the roof.

Dry Tech called for the removal of the metal curtain walls around the east and west wing's main ridge that Jepson determined to be the primary cause of roof leaks.

Extreme Roof Makeover

Dry Tech Engineering prepared specifications and details for installation of the new Décor system over the techtum roof deck and existing metal roof to meet FM I-60 wind uplift requirements. The old wall uprights were cut flush to the roof panels. It was critical to achieve a level substrate to adhere to. This meant no margin for error in design and installation. "We were fortunate that the metal battens on the old roof were 1-1/2" high so the isoboard would be even, otherwise we would have had to remove the battens", said Brad Jordan of M Jordan Roofing. The densdeck cover board was fully adhered and had to be level throughout, with tight board joints. "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 boards tight during installation", said Jepson. "The contractor did not rush the installation as the densdeck had to be exact in measurement and fit. No gaps were allowed as any anomalies in the field of the roof would be visible and alter the intended look of a standing seam metal roof."



Jordan roofing felt comfortable tackling this unique installation with the onsite presence of both Dry Tech Engineering and Sika-Sarnafil's technical inspector. "We communicated with each other throughout every stage of this project and felt confident knowing that we were meeting everyone's expectations every day", said Jordan."

"Dry as a Bone"

Driving up to this facility, you would never know that it is not a standing seam metal roof. Very clean lines throughout along with brand new skylights, gutters

and downpouts make this building look brand new. More important, the facility is now 100% leak free.

"We had to trust our Roof Consultant with the whole concept of this project. It was hard to imagine how a PVC membrane and profile would look just like a metal roof", said Mr. Chandler. "We were very pleased with the end result. Not only does it look like a metal roof, it has solved our leak problems at this facility for good".

The completed roof system has a 20 year 'No Dollar Limit' warranty and is a good example of a successful metal retrofit roof application. After years of fighting leaks, it has been nothing but smiles for the staff and participants at the center. But, that should come as no surprise as this group brings smiles to people's faces every day.



Story by: Craig Jepson, Dry Tech Engineering. Craig can be reached at 678.793.7280 or by email at: cjepson@drytechconsulting.com



Dry Tech Engineering llc

● ROOFING/WATERPROOFING CONSULTANTS ● STRUCTURAL ENGINEERING