Jeff Davis County High School recently received an energy efficiency rebate check for over $84,000 from Georgia Power Company for energy efficient measures implemented, including the installation of a fluid-applied cool-roof system. The selection of a fluid-applied roof also saved the school approximately 50% over the cost of roof replacement utilizing older construction technology.

The 124,000 square foot granulated cap sheet roof was suffering from numerous roof leaks. The Jeff Davis County School Board called in third party energy consultants ABM Building Solutions to survey the roofs and determine what roof system would provide the best cost savings and be the most energy efficient. During the roof survey ABM was joined by Southern Insulated Roof Solutions of Hazlehurst, GA and the regional representative for ASTEC Re-Ply Roofing Systems.

Together they determined, through core sampling, that the roof was not suffering from extensive water saturation. This made the roof a great candidate for a fluid-applied roof system.

Although Fluid-applied roof systems have been very successful for more than 30 years, they are still not as well-known as conventional roof systems such as asphalt or rubber membranes. One of the biggest advantages of fluid-applied is that they are fully adhered directly to the existing roof surface. This means the costs associated with extensive roof tear-off, and the huge environmental impact of adding to over-flowing landfills, are eliminated. Additionally, fluid-applied systems add minimal weight, so they can be installed on roofs that have reached most building code limits of two older conventional roof systems.

ABM wanted to use a local roofing contractor and fortunately, Joel Chaney of Southern Insulated Roof Solutions was based right in Jeff Davis County. An authorized contractor for ASTEC Re-Ply Roof Systems for over fifteen years, he also had a history of quality workmanship with the county school system. ABM did their research and determined that ASTEC Re-Ply offered superior quality materials, had close to thirty years' experience, hundreds of millions of square feet installed, local installers, and was less expensive than the alternatives.
Since the fully reinforced system was being installed by a factory-trained authorized contractor, a 15-year material and labor warranty backed directly by the ISO 9001-2008 registered manufacturer was issued.

Only minor remedial repairs were necessary to prepare the existing roof for the Astec Re-Ply System. Once the repairs were made and the surface cleaned, multiple layers of ASTEC Base Sealer were installed and reinforced with a polyester mesh for additional tensile strength. After the waterproofing process was complete, multiple courses of ASTEC’s premium protective finish were installed. The end result is a seamless membrane without the high cost of tear-off and installation that comes with other types of seamed roofing systems. Seam failure is the number one reason most roofs fail.

Due to the highly reflective and highly emissive nature, cool-roofing materials can lower surface temperatures by up to 65° f, often resulting in air conditioning energy savings up to 40%. This also has the domino effect of lowering maintenance costs and extending the life cycle of expensive A/C equipment since the units do not have to work as hard to maintain comfortable temperatures.

The fully reinforced system was perfect for this low-sloped roof project. The advanced polymer technology incorporated in the multiple layers of ASTEC allows the roof to withstand the toughest ponding water conditions.

Looking into the future, the Astec fluid-applied membrane systems offer the unique option of having the warranty renewed at the end of the term for a fraction of the cost of the original installation. Upon inspection the roof can be cleaned and, usually, just the last few layers of material need to be re-applied. The Astec renewable warranty creates a sustainable roof system that, with proper maintenance, can last the lifetime of the building.

Quality workmanship, premium products, and lower installation costs resulted in the addition of two more school roofing projects for Jeff Davis County.

It is important to note that not all roofs qualify for a fluid-applied system. A thorough roofing evaluation is necessary to determine the best roofing system to solve problems. Extremely neglected roofs probably won’t make the cut; but for roofs such as those owned by Jeff Davis County, a fluid-applied system was the smart choice; providing huge savings, long-term performance, energy efficiency and a nice payday in the form of big rebate check.

For more information about fluid-applied systems contact ASTEC at 800-223-8494, or visit www.icc-astec.com.