Going Green on your commercial project with Cool Roofs

GOING GREEN
with Joe Bontrager
LEED Accredited Professional

Who knew that the color and composition of your roof could reduce your utility costs by thousands of dollars a year and help protect the environment?

Along with contributing to the cost of utilities, traditional roofing materials create heat island effect and emit greenhouse gases. Heat island effect occurs when the sun's heat is absorbed by building and paving materials, which then causes an increase in temperature over an entire geographic zone.

The U.S. Green Building Council estimates buildings are responsible for 30 percent of greenhouse gas emissions and 70 percent of all electrical consumption in the U.S. A choice as simple as the color and type of your roof can help lower your utilities and contribute to saving the environment.

Cool Roofs are a great energy- and environment-saving idea for your next construction or remodeling project.

Cool Roofs are constructed from specialized roofing materials designed to reflect the heat of the sun away from the building, thus reducing the cooling load and associated air conditioning costs. The increased cost to install a Cool Roof instead of a standard metal roof is nominal and the payback begins immediately. Even in non-air conditioned areas of a building, a Cool Roof can lower floor temperatures by 8 to 12 degrees.

Research by the Cool Roof Rating Council and Cool Metal Roofing Coalition in collaboration with Oak Ridge National Laboratory examined energy consumption at two schools in Georgia in 2002 and 2003. The schools were the same size – 90,000 square feet. They had the same HVAC units, the same orientation to the sun, and each had a standing seam metal roof.

J&S Constructions applied Cool Roof technology to their new corporate headquarters in Cookeville. This and other applied green technologies have greatly impacted their utility savings.

However, the first school had a Cool Metal Roof, while the second had a standard non-cool roof. The color of both roofs was evergreen. Thermostats in both schools were controlled from a central monitoring station and kept at identical settings.

According to the research, which was reported in Building Operation Management magazine's September 2008 edition, energy savings at the school with the Cool Roof for the first year totaled more than $8,000.

Can you imagine the amount of money and electricity that could be saved if every roof was replaced with a Cool Roof system?

There are many industry choices for Cool Roof systems if you are interested in "going green" on your next building project. Cool Metal Roofing and Ceramic Re-Roofing Systems are two great options whether you are building from the ground up, or remodeling.

Cool Metal Roofing Systems are great for replacement and new construction projects. These roofs use specialized coatings that have infrared-reflecting pigments that deflect solar rays. Regionally available construction materials, low upfront cost and projected energy savings make Cool Metal Roofs a great candidate for your next roof replacement.

Ceramic Re-Roofing Systems are a great system to save your existing roof. With this system, roofs are treated with surface conditioners, seams sealed and waterproofed, and a seamless membrane applied in multiple layers that eliminate leaks. These ceramic roofs prevent 95 percent of solar radiation from reaching the building and lower energy cost significantly. The ceramic roof's low initial cost helps you realize a return-on-investment in just a few short years.

As you plan your next roofing or re-roofing project, consider a Cool Roof System or Ceramic Re-Roofing to help you save money, increase your ROI and help reduce heat island effect from your building. Both systems are available through J&S Construction. Call us at 931-528-7475 or toll free at 1-800-933-1121. ■

Joe Bontrager is a LEED Certified Project Manager for J&S Construction Company Inc. in Cookeville, TN. J&S is a locally owned, full-service construction company with more than 52 years' experience building projects, relationships and trust. It has completed more than 90,000 square feet of LEED certified buildings and over 5,000 unique projects with more than a 75 percent repeat customer rate. J&S employs 100 of the finest craftsmen and trade professionals, including a number of nationally recognized and award winning architects and engineers.