

:: SustainableRoofing

demand. By reducing air temperatures and the associated demand for air conditioning at critical peak periods during the day, the installation of reflective roofs and surfaces may reduce overall peak electricity demand in urban areas by as much as five to 10 percent.

- **Lower air pollution.** The combination of lower overall temperature and reduced peak demand offered by reflective roofs and surfaces may lead to reduced air pollution

by lowering the amount of power plant emissions and by reducing the temperature-related formation of smog.

- **Reduced risks from blackouts.** By lowering peak electricity demand, reflective roofs may reduce the risk of power blackouts. And in the event a blackout does occur, reflective roofs continue to divert solar heat away from buildings and help occupants stay cool without the use of air conditioning.

- **Improved quality of life.** Reductions in overall air temperature and urban air pollution combine to provide a healthier and a safer environment for a city's inhabitants, leading to improvements in work productivity and leisure activity.

For the roofing contractor, perhaps the most noteworthy feature of cool roof coatings is that so many of the benefits accrue directly to the building owners who invest in them. Important benefits of cool roofs for building owners include:

- **Lower electric bills.** Because many electric utilities, especially in urban areas, add peak demand charges to their electric bills, the dollar savings available from installing a reflective roof may be many times more than the actual reduction in peak usage. For example, a recent study of peak electric charges suggests that the costs associated with peak electricity demand charges may account for over 50 percent of some electric bills during the summer.
- **Reduced equipment sizing.** Because air conditioning equipment must be sized to accommodate peak cooling loads, reflective roofs may help lower the overall size of the compressors and air handlers needed to cool a building.
- **Improved service life.** Because reflective roofs may lower roof surface temperatures by as much as 50 to 60 degrees Fahrenheit, rooftop air conditioning units operate at reduced temperature differentials, which may extend the service life of equipment. In addition, the normal process of ultraviolet degradation of the underlying roof membrane is effectively stopped in its tracks.

If you'd like to learn more about the many features of cool roof coatings you can market to your customers, the Roof Coating Manufacturers Association maintains a top-notch web site dedicated to the benefits of cool roof coatings. Simply go to www.roofcoatings.org, select "Reflective Roof Coatings Institute" from the menu, and you'll be directed to a comprehensive list of cool roof coating information. That includes specific benefits for every key roofing stakeholder, an FAQ of common cool roof coating questions, and even a state-by-state database of incentives and rebates available for installing cool roof coatings. **RC**

Jim Hoff is president of TEGNOS Research, Inc. and lead instructor for Commercial Roofing Boot Camp sponsored by Roofing Contractor and Building Enclosure. Learn more by visiting www.tegnos.org.



CHEM LINK
POLYMER INNOVATION

SEALANTS & ADHESIVES THAT DELIVER HIGH PERFORMANCE WITHOUT THE RISKS

CHEM LINK offers a family of high performance polyether sealants and adhesives for practically every application throughout the building envelope whether for schools, hospitals, offices or homes. CHEM LINK sealants are solvent-free and contain virtually no VOCs, eliminating risks to contractors and building occupants, contributing toward healthy indoor air quality and easing worries for building owners. Not only are CHEM LINK'S sealants non-toxic, but they deliver the highest levels of performance in strength, adhesion and flexibility.

For more information contact us at 1.800.826.1681 or visit www.chemlink.com.