

# NYC°CoolRoofs

NYC °Cool Roofs is an exciting collaboration between NYC Service, NYC Department of Buildings and Community Environmental Center to promote and facilitate the application of cool, reflective surfaces to New York City's rooftops. Cool roofs decrease the city's carbon footprint, lower energy consumption and fight the Urban Heat Island Effect. Join us in this initiative as we coat 1,000,000 square feet of rooftop to make NYC healthier, cleaner, more cost effective and cooler!

## Benefits of °Cool Roofs

Most roofs in New York City are dark and retain the sun's rays as heat. During the summer, heat absorption increases roof temperatures, air conditioning costs, energy demand, and even local temperatures in a phenomenon called the "urban heat island effect". Cool Roofs can reverse these impacts! Cool Roofs materials consist of special coatings that are "painted" onto an existing roof. The coating is highly reflective, typically white, and release heat quickly. By reflecting the sun's rays, Cool Roofs can:

- **Reduce roof temperatures**

During a typical summer day, flat, black asphalt rooftops can reach temperatures up to 190° F - 90° hotter than the surrounding air temperature!

- **Reduce internal building temperatures**

Coated rooftops can reduce internal building temperatures by up to 30%, making the building cooler and more comfortable during the hot summer months.

- **Reduce the Urban Heat Island Effect.**

New York City can be 6°F - 8°F hotter than surrounding areas due to greater amounts of dark surfaces, such as roofs and roads, and less shading from vegetation. Reflective roofs help reduce this effect.

- **Reduce CO2 emissions.**

Every 1,000 square feet of roof that is coated can reduce the city's carbon footprint by 1 ton of CO2 and help fight climate change.

- **Improve air quality.**

Coated roof tops can reduce greenhouse gas emissions and smog, in-turn improving air quality.

- **Extend the life of roofs and cooling equipment**

Cool Roofs last longer since the roofs expand and contract less due to lower roof temperatures. By decreasing the roof temperature and cooling loads, the life of the cooling equipment can be extended.

## Program Details

In the spring of 2010, NYC °Cool Roofs will collaborate with non-profits, city agencies and individual building owners to coat one million square feet of rooftops in NYC! Targeting under-served areas, the programs focus is to coat rooftops belonging to non-profits in Hunts Point (The Bronx), East New York (Brooklyn) and Long Island City (Queens), neighborhoods that exhibit roof temperatures higher than the citywide mean. NYC Service and CEC have developed a program that provides instructions and hands-on training to green jobs trainees and community volunteers who will work with site supervisors to coat the building roofs. Participating buildings will receive free labor to apply the coating and training for any employees or community partners who would like to help.



**NYC Service**

Department  
of Buildings

Mayor's Office  
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