Atlanta
Cool Roof Ordinance

Extreme heat poses an increasing threat to the city of Atlanta. By midcentury, Atlanta could face up to 46 days per year with a heat index above 100°F, an extreme heat threshold that can cause severe illness and death.

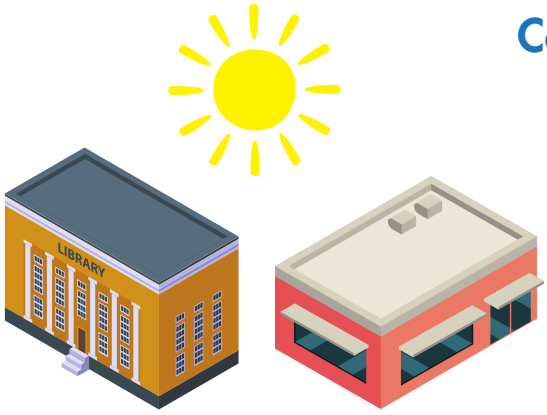
Why Cool Roofs?

Cool roofs are used across the U.S. to **reflect more sunlight and absorb less heat** than conventional roofs. This significantly lowers temperatures inside homes and buildings and reduces urban heat, **making cities healthier and more livable** – especially for people more vulnerable to extreme heat, such as children, outdoor workers, the elderly, and communities of color. **Cool roofs are cost competitive with traditional dark roofs.**

Dark Roof on a 99°F Day

177°F Roof Temperature

Of the incoming solar energy
52% Heats the Air
38% Heats the Atmosphere
5% is Reflected
4.5% Heats the Building



Cool Roof on a 99°F Day

111°F Roof Temperature

Of the incoming solar energy
8% Heats the Air
10% Heats the Atmosphere
80% is Reflected
1.5% Heats the Building

Source: CRRC Cool Fixes for Hot Cities.

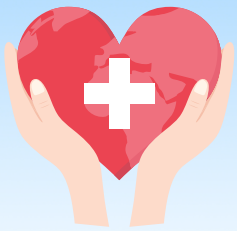
New City Ordinance

Atlanta City Council Member Liliana Bakhtiari has introduced an ordinance that would set better performance standards for roofing. Full implementation of the Atlanta Cool Roof Ordinance has been modeled to result in the following benefits over the next 35 years:

$310 Million	Cumulative Direct Energy Savings	**2.4 °F**	Peak Summer Citywide Temperature Reduction	**1000 Metric Tons**	Cumulative Air Pollution Reduction
$760 Million	Net Financial Benefits	**6.3 °F**	Peak Reductions in Hottest Neighborhoods	**3.65 M Metric Tons**	Cumulative CO2e Emissions Reductions

Projections are the results of Smart Surfaces Coalition modeling via Atlanta's custom Benefit Cost Analysis Tool.

Benefits of Cool Roofs in Atlanta:

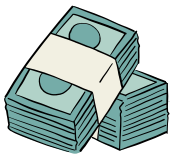


Protecting Public Health

Extreme heat puts residents and visitors to Atlanta in increased danger of heat-related illness and injury, leading to increased emergency room visits, hospitalizations, and premature death. Lower air temperatures and improved air quality reduce heat-related and smog-related health issues, including heat stroke, heat exhaustion, and asthma.

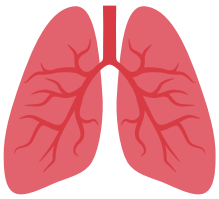
Saving Energy & Money

Cool roofs keep buildings and cities cooler, saving energy and money. A cool roof can decrease annual HVAC energy costs in a single-story building by up to 28%. These energy savings will become even larger in the coming decades, as extreme heat events become more frequent.



Accounting for additional financial benefits like surface life extension and reduced heat mortality, **the Cool Roof Ordinance is projected to yield:**

- **$760 Million** in Net Financial Benefits
- **$310 Million** in Direct Energy Savings



Reducing Air Pollution

Cool roofs lower outdoor temperatures and reduce air pollution, lessening pollution- and heat-related illnesses like asthma, allergies and more. Reflective roofs also reduce cooling energy demand in air-conditioned buildings, cutting emissions of greenhouse gases and other air pollutants from power plants that burn fossil fuels.

Promoting Equity

The ordinance would increase equity in Atlanta. Underinvested and formerly red-lined communities are usually hotter than wealthier neighborhoods. Cool surfaces are a very cost-effective measure to reduce temperatures and energy bills, especially in at-risk communities.

Protecting Outdoor Workers

Heat exposure poses risks to the health and productivity of outdoor workers. A new study published by the National Academy of Sciences documents that increasing the solar reflectivity of outdoor surfaces by installing cool roofs and reflective pavements would cut heat and improve worker safety, well-being and productivity.