

°COOL IT YOURSELF

Saving energy and reducing costs are a key part of the PlaNYC initiative, launched in 2007 by Mayor Michael Bloomberg. Dark-colored roofs absorb heat and increase cooling costs while “cool roofs” reflect heat and keep buildings cooler and more comfortable. Cool roof coatings also:

- increase the efficiency of roof-mounted air conditioning equipment
- protect roofs against thermal expansion and UV radiation, making them more durable and longer-lasting, and
- decrease the risk of brownouts and blackouts during the warmer months by reducing peak energy use.



STEP 1: Identify your roof's eligibility

The cool roof coating can be applied to a flat roof covered with smooth asphalt, EDPM Rubber or smooth aluminum.

STEP 2: Check your roof's warranty

Before you coat, check current roof warranty to make sure that coating the roof will not void the warranty.

STEP 3: Follow the forecast

You will need three days (72 hours) of rain-free weather to properly coat your roof. The temperature should be over 50° F for the coating to dry properly.

STEP 4: Plan for safety

Safety is of utmost importance. Familiarize yourself with the building's roof. Be aware of any tripping hazards and always stay alert.

STEP 5: Inspect and repair your roof

Your roof must be free of any blisters, cracks or peeling paint before you can begin to coat it. It is also a good idea to check for loose screws, poor drainage and any other issues that may need to be addressed before beginning the coating process.

STEP 6: Measure your roof

The amount of coating needed is determined by the square footage of your roof. Use this number to calculate the amount of coating you need based on the manufacturer's directions.

STEP 7: Clean your roof

Before you can begin coating your roof, you should clean and wash the surface using brooms and pressure washers. When washing the roof, pay attention to drainage and make sure there is no puddling.

STEP 8: Grid your roof

Grid your rooftop into square sections to ensure the coating is applied evenly. Most coating products suggest gridding your roof into 100 square foot sections. Read the manufacturer's directions to determine how much area one container of coating material will cover.

STEP 9: Coat your roof

Start coating the furthest away from the roof entrance and work backward. Be sure not to paint yourself into a corner. The first coat must dry overnight before applying a second.

STEP 10: Clean your roof annually

To sustain your roofs coating, clean it once a year. This is also a good time to look for leaks, puddling or other issues that could damage your roof if left unaddressed.

FREQUENTLY ASKED QUESTIONS

Q: What is cool roof coating?

A: Cool roof coating is a highly reflective white membrane that is rolled or sprayed onto flat roofs. The coating reflects 70% to 90% of the sun's energy when newly installed. When you are deciding which coating product to purchase for your roof, look for coatings marked Energy Star, the industry standard for quality certification.

Q: What types of roofs can be coated?

A: Suitable roof types include granule, smooth asphalt, EDPM Rubber and smooth aluminum. Roofs that are not suitable include gravel roofs, spray foam, TPO, PVC, clay tile, wood shingles, and slate and asphalt shingles.

Q: What risks do I face as a building owner?

The application of coating will not hurt your roof. In fact, the coatings can extend the life of your roof as well as the heat, ventilation and air conditioning (HVAC) systems on the roof.

Q: Will coating my roof significantly increase my heating bills in the winter months?

A: No. In winter, the roof does not provide a significant amount of heat for the building. While cool roof owners may pay slightly more to heat

their buildings during cold weather, the amount is usually minimal compared to the cooling energy savings during the summer.

Q: Do I need a permit?

A: No. Make sure that the roof coating product you select is rated for white-roof use and won't void your roof's warranty.

Q: Are there any new Building Code requirements that affect cool roofs?

A: The 2008 Building Code requires that 75% of the roof area must be coated white or rated as highly reflective by Energy Star. The following roof types are exempt from these requirements:

- Pitched roofs (25 % slope)
- Small setbacks
- Green (planted) roofs
- Landscaped recreation areas (walking surface paving must have a reflective, or "albedo," rating of at least 30)
- Existing buildings permitted before July 1, 2009.

If you would like more information, email us at Coolroofs@buildings.nyc.gov.

