NYC GREEN CODES
LEGISLATION AT A GLANCE

GCTF Proposal
Reduce Summer Heat with Cool Roofs

Implemented
Local Law 21 of 2011

Summary
Light-colored roofs reflect light and heat back into the atmosphere, thereby cooling buildings and cities. The building code mandates white roof coatings, but the standards are not aligned with LEED, which is used by many developers.

This law amends existing Building Code requirements for reflective roof coatings to align more closely with LEED and clarifies exceptions to the standard.

New Requirements or Changes

Effective: July 1, 2012. These changes do not apply retroactively; they are triggered when any roof construction activity exceeds the area limits detailed below.

Amendments to Section 28-101.4.3 of the New York City Administrative Code:

- Although exempt from some aspects of current code, buildings built under the 1968 code still must comply with the cool roof standards in section 1504.8 of the Building Code when their roofs are recovered or replaced, unless the area recovered or replaced is less than 50% of the roof area and less than 500 square feet.

Amendments to Sections 1504.8 and 1510.1 of the New York City Building Code:

- Revises existing cool roof standards to align with LEED standards for low-sloped roofs and setbacks – slope of 17% or less. Roofs with greater slope do not have to comply.
- Roof coverings must have either: (1) a minimum initial solar reflectance of 0.7 and minimum thermal emittance of 0.75; or (2) a minimum initial solar reflectance index (SRI) of 78.
- Amends or adds various exceptions:
  - Removes exception that only 75% of the roof area must comply with cool roof requirements
  - Clarifies that existing exception for green roofs also applies to roofs used for agricultural plantings
  - Adds the following exceptions:
    - Ballasted roofs provided the ballast has a minimum initial solar reflectance of 0.2
    - Any portion of the roof that is under various equipment and structures: mechanical equipment, flush-mounted solar panels, duckboarding, decking, platform, roof tanks, or cooling towers
    - Any portion of the roof composed of glass, metal, clay, or concrete tile, or plastic/rubber intended to simulate concrete tile, wood or slate
    - Any portion of a roof used by a school or daycare as a playground for
• If the remaining portion of the roof not already covered by an exception is in the aggregate less than 100 square feet
  o When recovering or replacing existing roofs, the cool roof standards do not apply if area recovered or replaced is less than 50% of the roof area and less than 500 square feet

**Enforcement**

These new and revised provisions are a standard part of the Building Code. They will be enforced by the Department of Buildings in the same manner as any other element of the Construction Codes.

**Implementation**

There are no known issues for implementation of this Local Law. Roof coatings that comply with these standards are readily available at no additional cost from roofing and building suppliers, including Home Depot and Lowe’s. Coatings with an SRI as high as 120 are available, and SRIs in excess of 100 are common.