EF 13

CLARIFY STANDARDS FOR ATTACHING ROOFTOP SOLAR PANELS

New York City Building Code
Proposal developed by the Energy & Ventilation Committee

Summary

Issue:
The Building Code does not specify acceptable criteria for the attachment of solar panels to rooftops, inhibiting the installation of solar energy systems.

Recommendation:
Require the Department of Buildings to develop detailed criteria for roof attachment of solar panels.

Proposed Legislation, Rule or Study
Amendments to the New York City Building Code
1. Amend Section 1502.1 as follows:

1502.1 General. The following terms shall, for the purposes of this chapter and as used elsewhere in this code, have the meanings shown herein.

ADDED COVERING. Covering added over a roof covering.

2. Add a new Section 1509.1.1 as follows:

1509.10 Anchorage. Installation of equipment on a roof or roof setback shall be in accordance with Chapter 16. Any system, equipment, added covering or other building-related load on roofs or roof setbacks shall be anchored to the building in a manner consistent with Section 1604.8.3. Ballast shall be prohibited on roofs one hundred (100) feet or higher above grade. For roofs less than one hundred (100) feet above grade, ballast shall be fully contained.

Supporting Information

Issue- Expanded
Ambiguity as to acceptable practice in the installation of solar collectors can inhibit their adaptation. This proposal clarifies the requirements so that designers will know the standards they must meet, removing one barrier to the implementation of solar energy.

Environmental & Health Benefits
Since solar collectors decrease the use of fossil fuels, the increased rate of implementation due to removing this barrier will result in decreased emissions of both global warming emissions and Clean Air Act pollutants.

This proposal was determined to have a low environmental impact per building and to impact a low number of buildings. It was thus given an environmental score of 1.

This proposal was determined to have an indirect health impact.

Cost & Savings
This proposal is to clarify code requirements, and will therefore have no direct impact on construction costs.

Precedents
There are no know precedents for this proposal.

LEED
This proposal will make it more feasible for projects to utilize solar energy installations, which will facilitate achieving the following LEED credits (among other credits in pilot programs):

- LEED NC-EA cr.2, On-Site Renewable Energy
- LEED CI-SS cr.1 Option K, On-Site Renewable Energy
- LEED EB-EA cr.2, On-Site and Off-Site Renewable Energy
- LEED for Schools EA cr.2, On-Site Renewable Energy
- LEED for Homes EA cr. 1, Optimize Energy Performance
- LEED ND-GCT cr.13, On-Site Renewable Energy Sources

Implementation Market Availability
The technologies are well known, although market penetration in NYC is not high and experience somewhat limited.