EF 14

ALLOW LARGE SOLAR ROOFTOP INSTALLATIONS

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

Summary

Issue:
Current regulations limit the area of roof that solar panels can cover without counting as another floor. This can increase the effective cost of solar panels, or prevent their installation.

Recommendation:
Exempt solar panels from limits on rooftop coverage.

Proposed Legislation, Rule or Study

Amendments to the New York City Building Code:

1. Amend Section 504.3 as follows:

   **504.3 Rooftop structures.** Rooftop structures including but not limited to roof tanks and their supports, ventilating, air conditioning and similar building service equipment, bulkheads, penthouses, chimneys, and parapet walls 4 feet (1219 mm) or less in height shall not be included in the height of the building or considered an additional story unless the aggregate area of all such structures exceeds 33 and one-third percent of the area of the roof of the building upon which they are erected. Rooftop structures shall be constructed in accordance with Section 1509.

   **Exception:** Solar thermal and solar electric (photovoltaic) collectors and/or panels and their supporting equipment, but not including any accessory plumbing or electrical equipment, shall not be included as rooftop structures subject to the 33 and one-third percent limitation on roof coverage.

Supporting Information

Issue- Expanded
This proposal will eliminate a barrier to the deployment of solar collectors and make possible an increase in the rate at which they are implemented. As written the restriction is reasonable for the structures listed, which do not take up much area. Solar collectors, however, cover as much of the roof as is practical, but do not constitute rentable space or project up as far as another story would. Because of their obvious benefits, and the absence of any detriments, solar collector usage should be encouraged, not limited or inhibited.

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 for a code allowance, which will have no direct impact on construction costs.

Precedents
There are no known precedents for this proposal.

**LEED**

This proposal will make it more feasible for projects to utilize solar, thermal and photovoltaic panels, 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 and Market Availability**

There are no known implementation issues for this proposal.