

INSTALLING SOLAR & GREEN ROOF SYSTEMS ON NEW YORK CITY BUILDINGS

What are solar and green roof systems?

Solar power is a reliable, renewable source of electricity that reduces demand on New York City's electrical grid especially during periods of peak demand. Solar panels generate electricity or can absorb thermal energy for use. Green roofs have vegetation that absorbs and filters rainwater, and reduces the heat island effect (where urban environments can be warmer than surrounding areas).

What are some of the benefits of solar and green roof systems?

- Solar panels reduce electricity costs and reduce local air pollution
- Green roofs combat the heat island effect and provide habitat
- Green roofs slow and treat stormwater runoff
- Solar panels can aid in Local Law 97 emissions compliance
- Green roof tax abatement program*
- Solar tax abatement program*

What are the requirements in the Building Code?

The Building Code requires most new buildings to have a Sustainable Roofing Zone, 100% of which should contain a solar photovoltaic electricity generating system, a green roof system, or a combination thereof. This zone shall be provided on (i) new buildings, (ii) new roofs resulting from enlargement of existing buildings, and (iii) existing buildings replacing an entire existing roof deck or roof assembly. Exceptions include areas occupied by rooftop structures, like mechanical equipment and fire access pathways.

For the full list of exceptions, see [BC Section 1512.2](#) or [Buildings Bulletin 2019-010](#).

What are the requirements for installation of solar and green roof systems?*

Solar Panels

- Approval that the structural system of the building can maintain the weight of the equipment
- Solar electric projects must file an **ED16A Form**, electrical permit application
- Must be filed through the Development HUB
- A completed PTA4 application

Green Roofs

- At least 50% of eligible roof space must be covered by the green roof
- At least 80% coverage by live plants in a vegetation layer
- A maintenance plan including inspections and plant replacement plans
- A completed PTA3 application

** Full installation requirements and tax abatement program information can be found at www.nyc.gov/site/buildings/codes/solar-panels.page and www.nyc.gov/site/buildings/codes/green-roofs.page.*

What are the next steps?

Installing a solar or green roof system requires Department of Buildings permits. Note the exception in 1 RCNY 101-14 (Table 2)(IV)(3) which states that green roofs not more than 4 inches in depth located on buildings of noncombustible construction or buildings greater than 100 feet in height does not require a permit. A New York State Registered Design Professional (RDP) – licensed Professional Engineer (PE) or Registered Architect (RA) – must file the construction documents and owners must obtain the necessary permits before work begins.