Int. No. 1032-A

By Council Members Espinal, The Speaker (Council Member Johnson), Levin, Constantinides, Richards, Levine, Ampry-Samuel, Cohen, Rivera, Rosenthal, Rodriguez, Lander, Kallos, Chin, Brannan, Gibson, Menchaca, King and Ayala

A Local Law to amend the administrative code of the city of New York and the New York city building code, in relation to requiring that the roofs of certain buildings be covered in green roofs or solar photovoltaic electricity generating systems

Be it enacted by the Council as follows:

Section 1. Exception 12 of section 28-101.4.3 of title 28 of the administrative code of the

city of New York is amended by adding a new exception 12.4 to read as follows:

12.4 Sustainable roofs. Work involving the replacing of an entire existing roof deck or

roof assembly shall comply with section 1511.2 of the New York city building code.

§ 2. Section BC 1502.1 of the New York city building code is amended by adding a new

definition of "sustainable roofing zone" in alphabetical order to read as follows:

SUSTAINABLE ROOFING ZONE. Areas of a roof assembly where a solar photovoltaic electricity generating system, a green roof system, or a combination thereof, is installed.

§ 3. Section BC 1504.9 of the New York city building code, as amended by local law

number 141 for the year 2013, is amended to read as follows:

1504.9 Reflectance. Roof coverings on roofs or setbacks with slope equal to or less than two units vertical in 12 units horizontal (17 percent) shall have:

- 1. A minimum initial solar reflectance of 0.7 in accordance with ASTM C 1549 or ASTM E 1918, and a minimum thermal emittance of 0.75 as determined in accordance with ASTM C 1371 or ASTM E 408; or
- 2. A minimum SRI of [78] <u>82</u> as determined in accordance with ASTM E 1980.

Roof coverings on roofs or setbacks with slope greater than two units vertical in 12 units horizontal (17 percent) shall have:

1. <u>A minimum initial solar reflectance of 0.25 in accordance with ASTM C 1549 or</u> <u>ASTM E 1918, and a minimum thermal emittance of 0.75 as determined in accordance</u> with ASTM C 1371 or ASTM E 408; or

2. <u>A minimum SRI of 39 as determined in accordance with ASTM E 1980.</u>

Exceptions:

in

- 1. Terraces on setbacks comprising less than 25 percent of the area of the largest floor plate in the building.
- 2. Any portion of a roof covered by a green roof system, including such a system with agricultural plantings, in compliance with Section 1507.16.
- 3. Any portion of a roof used as outdoor recreation space by the occupants of the building that is landscaped, covered by wood decking or covered with a walking surface or other protective surface, provided that such walking surface or protective surface has a minimum initial solar reflectance of 0.3 as determined in accordance with ASTM C 1549 or ASTM E 1918.
- 4. Ballasted roofs, provided that the ballast has a minimum initial solar reflectance of 0.2 as determined in accordance with ASTM C 1549 or ASTM E 1918.
- 5. Any portion of a roof that is under mechanical equipment, [flush mounted solar panels lying directly on the roof surface,] duckboarding, decking, platform, roof tank, cooling tower or any other rooftop structure or equipment exempted by rule by the commissioner.
- 6. Any roof or portion of a roof composed of glass, metal, clay or concrete tile or plastic/rubber intended to simulate clay or concrete tile, wood, or slate.
- 7. Any roof, if the amount of rooftop space not subject to exceptions 1 through 7 is the aggregate less than 100 square feet (9.3 m^2).
 - § 4. Section BC 1511 of the New York city building code, as amended by local law

number 141 for the year 2013, is amended to read as follows:

SECTION BC 1511

SOLAR PHOTOVOLTAIC PANELS/MODULES <u>AND REQUIRED SUSTAINABLE</u> <u>ROOFING ZONES</u>

1511.1 Solar photovoltaic panels/modules. Solar photovoltaic panels/modules installed upon a roof or as an integral part of a roof assembly shall comply with the requirements of this code and the *New York City Fire Code*.

1511.1.1 Structural fire resistance. The structural frame and roof construction supporting the load imposed upon the roof by the photovoltaic panels/modules shall comply with the requirements of Table 601.

1511.2 Sustainable roofing zone. A sustainable roofing zone shall be required on 100 percent of the roof. For such sustainable roofing zone:

- A contiguous area of a sustainable roofing zone measuring less than 200 square feet (18.5 m²) shall be equipped with at least a solar photovoltaic electricity generating system if such system would accommodate at least 4kW of solar photovoltaic electricity generating capacity, as determined by the department; and
- 2. A sustainable roofing zone with a slope less than or equal to two units vertical in 12 units horizontal (17 percent) that would accommodate less than 4kW of solar photovoltaic electricity generating capacity, as determined by the department, shall be equipped with at least a green roof system.

Exceptions:

- 1. Areas required to be set aside for setbacks or access pursuant to the New York City Fire Code, the New York City Construction Codes, or the Zoning Resolution of the City of New York.
- 2. <u>Areas occupied by rooftop structures, mechanical equipment, towers, parapets, guardrails, solar thermal systems, and appurtenances.</u>
- 2. Areas occupied by obstructions related to stormwater management practices including, but not limited to, cisterns, or reuse systems that are installed to comply with site connection or stormwater construction permits issued by the department of environmental protection.
- 3. Terraces on setbacks comprising less than 25 percent of the area of the largest floor plate in the building.
- 4. <u>Recreational spaces that are principal to the use of the building on which the rooftop is located.</u>
- 5. <u>A roof assembly with a slope greater than two units vertical in 12 units</u> <u>horizontal (17 percent) that would accommodate less than 4kW of solar photovoltaic</u> <u>electricity generating capacity.</u>
- <u>6. Areas where site conditions are determined by the department to be unfavorable to either a solar photovoltaic electricity generating system or a green roof system.</u>

§ 5. This local law takes effect 180 days after it becomes law, except that the commissioner of buildings shall take such measures as are necessary for the implementation of this local law, including the promulgation of rules, before such date.

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