RC 2: PROVIDE RECYCLING AREAS IN APARTMENT BUILDINGS

New York City Building Code
Proposal developed by the Materials & VOCs Committee

Summary

Issue:
In many buildings, the lack of a dedicated recycling space impedes recycling

Recommendation:
Require new multi-family residential buildings to provide adequate space to store and sort recyclable materials

Proposed Legislation, Rule or Study

Amendments to the New York City Building Code:

1. Amend Section 1213 as follows:

1213.1 General. Multiple dwellings shall comply with Section 81 of the New York State Multiple Dwelling Law and Section 27-2021 of the New York City Housing Maintenance Code. Where a room [is] or rooms are provided for the storage of refuse and/or recyclables in a building, such room or rooms shall be completely enclosed by construction that has a fire resistance rating of not less than 2 hours, with self-closing opening protectives having a fire protection rating of not less than 1 ½ hours. The location of such refuse storage room or rooms shall be identified on the construction documents.

1213.2 Compactor. A refuse compacting system shall be provided in multiple dwellings in a Group I-1 or R-2 occupancy that are four or more stories in height and contain 12 or more dwelling units, and in buildings of any size occupied as a Group R-1 multiple dwelling. Such system shall be located within a refuse storage room constructed in accordance with Section 1213.1 or in a refuse chute termination room constructed in accordance with Section 707.13.4. The floor within such room shall be constructed of concrete and shall be sloped to a floor drain connected to the building sewer. A hose connection shall be provided within such room.

1213.3 Refuse chute. A multiple dwelling that is five or more stories in height and that contains more than 12 dwelling units shall be provided with a refuse chute, refuse chute access rooms, and refuse chute termination room constructed in accordance with Section 707.13.

1213.4 Central Refuse Storage Room. Any building classified in occupancy groups R-1 or R-2 that contains12 or more dwelling units shall contain at least one central refuse storage room. The central refuse storage room or rooms shall contain sufficient space for the storage of both refuse and recyclables, separated in accordance with the requirements of the Department of Sanitation, and shall comply with the minimum area requirements of Table 1213.4.

<table>
<thead>
<tr>
<th>Number of dwelling units</th>
<th>Minimum size of refuse storage room</th>
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</thead>
<tbody>
<tr>
<td>12-23</td>
<td>65 square feet</td>
</tr>
<tr>
<td>24-49</td>
<td>100 square feet</td>
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<tr>
<td>50-99</td>
<td>150 square feet</td>
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<tr>
<td>100 or more</td>
<td>150 square feet plus 1 square foot per dwelling unit over 99 units up to a maximum of 250 square feet.</td>
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</tbody>
</table>
1213.5 Secondary Storage Rooms for Refuse and Recyclables. Any building classified in occupancy groups R-1 or R-2 that contains 12 or more dwelling units shall contain a secondary storage room for refuse and recyclable material on any floor with main entries to 6 or more dwelling units. Secondary storage rooms shall be a minimum of 10 square feet and shall contain separate receptacles for refuse, for recyclable paper products, and for recyclable metal, glass, and plastic.

Exceptions:
1. Floors with separate trash chutes for refuse, for recyclable paper, and for recyclable metal, glass, and plastic. Chutes for recyclable material shall be constructed in accordance with Section 707.13.
2. Where a refuse access room is provided on a floor that is constructed in accordance with Section 707.13.3 and such refuse access room is at least 8 square feet in area.

Supporting Information

Issue – Expanded
Recycling is good for the environment because it takes less energy and resources to make new products out of recycled materials than from new materials. It also has the potential to save the city money as the cost of exporting waste to out-of-state landfills continues to rise.

About 33% of New York’s total waste stream (and 16% of residential waste) is recycled, putting the city just above the average national recycling rate of 32%. Other large cities have managed to vastly exceed this average. Los Angeles recycled over 60% of its total waste and Chicago over 55%; almost 70% of San Francisco’s waste is recycled.

One barrier to increasing recycling rates in multi-family residential buildings is that many lack a dedicated room to store and sort recycling and waste. Without this dedicated space, it is challenging for residents or superintendents to keep recycling separated. For this reason, many other cities and Battery Park City Authority require that residential buildings provide a waste/recycling room.

Environmental & Health Benefits
By increasing the allotted space for recycling bins and thus increasing awareness and accessibility for recycling measures, this proposal will in effect increase the recycling rates for multi-family residential facilities. By increasing the recycling rates, less solid waste goes to landfills.

Cost & Savings
This proposal is not expected to have any significant impact on capital costs.

Precedents
Many municipalities including San Francisco, Santa Monica, and Portland require that residential buildings provide space for recyclables. Within New York City, Battery Park City also has a space requirement for recyclables.

LEED
This recommendation is in accordance with LEED NC provided that criteria for separation of materials, size & accessibility of designated recycling storage areas, and location of collection areas are met. This issue is addressed as a prerequisite under almost all of the rating systems. Therefore, code revisions under this proposal could significantly impact a project’s ability to attain LEED certification.

LEED requires that adequate space is provided for the storage of paper, corrugated cardboard, glass, plastics, and metals. Projects adhering to the code revisions outlined in this proposal will only comply with LEED if all of these materials are accommodated and if they are collected separately.

LEED 2009 also specifies a minimum size for refuse storage rooms in commercial buildings. Buildings 50,000-20,000 square feet are required to provide a room that is 225-275 square feet. The maximum room size required is 500 square feet for buildings of 200,000 square feet or greater.

Implementation and Market Availability
There are no known implementation issues for this proposal.

Notes
1. The committee initially considered requiring trash compactors in commercial buildings in order to consolidate waste and recyclable materials, thus reducing air pollution from transportation from the building. Ultimately, the committee did not include this provision because these benefits were not sufficiently understood or quantifiable.
2. The Zoning Resolution will also need to be revised to add “recycling” to all references to refuse, and to credit chutes for recycling in the same manner as chutes for refuse.

ENDNOTES:


2 ASHRAE 198.1 § 9.3.4.3 (requires central collection for recycling with separate storage for paper, corrugated cardboard, glass, plastics and metals); BATTERY PARK CITY RESIDENTIAL ENVIRONMENTAL GUIDELINES (require secondary storage room on each floor; either separate bins or separate chutes for refuse and recyclables, and centralized holding areas holding a volume of 2.9CF/dwelling unit); SANTA MONICA, CA., PLANNING AND ZONING REGULATIONS, art. 9.04 (require minimum areas for recycled materials storage); ALAMEDA COUNTY, CA. (aims to divert 75% waste from landfills; ties area requirements to frequency of pick-up); CITY OF MOUNTAIN VIEW, CALIFORNIA (requires one 3-yard bin and 3 recycling carts for every 15 units); PORTLAND, OR., CITY CODE ch. 17 (requires recycling systems sized to meet the goal of achieving 75% recycling by 2015); REDMOND, WA. STANDARDS FOR GARBAGE AND RECYCLING ENCLOSURES 20D.120.40 (requires 65 square foot minimum area and stipulates 1.5 square foot/dwelling); WASHINGTON DC. DPW (has adopted a single-stream recycling. Recyclables are taken to the materials recycling facility (MRF) where they are separated and prepared for market); and (numerous other municipalities require residential recycling without stipulating space requirements for recyclable collection).