

Zoning & Planning Committee November 25, 2019



ITEMS:

- GARAGE ORDINANCE REPEAL
(#327-19)
- CLIMATE ACTION ZONING PROPOSED ORDINANCES
(#363-19 & #364-19)

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Garage Ordinance Repeal



Background

- Zoning section 3.4.4 “Garages” adopted June 2016
 - Residents and design professionals raised concerns
- Council deferred implementation repeatedly
- Currently scheduled to go in effect after 12/31/2019, unless Council takes other action before then

Recommendation


- Repeal ordinance
- Address garage regulation through citywide Zoning Redesign

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Discussion
#327-19

Ordinance amendment to repeal Zoning Ordinance 3.4.4 Garages

**Climate Action Zoning
Proposed Ordinances**



Climate Action Zoning Proposed Ordinances

#363-19

#364-19

<p>Reducing Barriers to Environmental Improvements</p> <ul style="list-style-type: none"> • Setback Encroachments • Height • FAR 	<p>Sustainable Building/Site Design Requirements</p> <ul style="list-style-type: none"> • Standard tied to 1 of 3 Green Building Programs • Submissions at special permit, building permit, and certificate of occupancy phases 	<p>EV Charging Station Requirements</p> <ul style="list-style-type: none"> • 10% of parking access to EV charging stations • 10% of parking EV ready
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Reducing Barriers to Environmental Building Improvements

Updates:

- ZAP Committee requested Staff to further evaluate the exemption of solar panels from measuring height on a pitched roof

Section 1.5.4.A.d	Previous	Current
Solar panel which do not extend above the roof ridgeline more than -	Four feet	One foot

- Greater height extensions allowed by special permit

**Discussion
#363-19**

**Amendment(s) to Chapter 30 relative to
building efficiencies**

Sustainable Building/Site Design Requirements



Setting the Standard

- 20,000 sf & SP
- Choice of Green Building Programs
- Standard Tied to Green Building Program Rating Systems
- EV Charging Stations
- Other Specific Requirements

Sustainability Review

- Special Permit Application Submission
- Green Building Program Professional

Ensuring Compliance

- Submissions at Building Permit and Certificate of Occupancy
- Green Building Program Professional
- Green Commissioning Agent

Sustainable Building/Site Design Requirements



Updates :

- Certifiable vs. Certification (sec. 5.12.4.A)
 - LEED – Certifiable
 - Passive House – Certified
 - Enterprise Green Communities – Certifiable
- Reserved Sections (sec. 5.12.4.D-E)
 - Embodied carbon
 - Electrification
- Review Procedures (sec. 5.12.6.C)
 - Certain documentation required when applying for Temp C/O
 - Final documentation required by final C/O
- Commissioning (sec. 5.12.6.D)
 - Removed because it is duplicative - all Green Building Rating Programs have built in commissioning requirements

Discussion #364-19

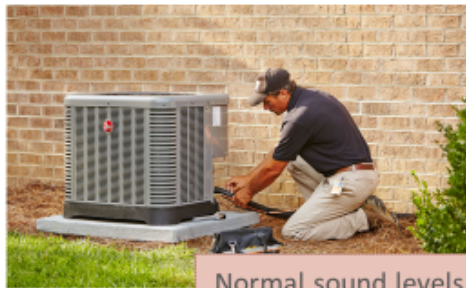
Amendment(s) to Chapter 30 relative to sustainable design

Appendix

- Green improvement examples
- Sustainable design details
- Green building examples

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Heat Pump Compressors



Proposed Rule

- Allowed in setback

Definition

- A device that serves as a heating and cooling system for a building by transferring heat energy into a building to heat it and out of the building to cool it

Normal sound levels emitted from most heat pumps range between 40 and 50 decibels. That's less than a working dishwasher or a light rainfall

Green improvement examples

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Exterior Insulation



Proposed Rule

- Exemptions only apply for existing buildings
- Allowed in setback up to 8 inches
- Not counted towards FAR

Definition

- Insulation that is installed exterior to the exterior structural wall of the building

Green improvement examples

Doorway Vestibule



Proposed Rule

- Allowed in setback to project up to 4 feet with a width no greater than 6 feet
- Not counted towards FAR up to a maximum of 24 feet

Green improvement examples

Window Shades



Proposed Rule

- Allowed to project into setback up to 2 feet

Definition

- Non-habitable architectural features attached to a building above windows to reduce the amount of sunlight entering the window

Green improvement examples

Roof Overhang



Proposed Rule

- Allowed to project into setback up to 3 feet

Green improvement examples

Solar Panels



Proposed Rule

- Allowed up to 4 feet above the roofline

Green improvement examples

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Setting the Standard



- **Applicability** - 20,000 sf and a special permit
- **Standard** – Choice from three Green Building Programs
 - LEED – Must meet silver, gold if 50,000+ sf
 - Passive House – base standard
 - Enterprise Green Communities – base standard

Sustainable design details

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Sustainability Review



- **Checklist** – Submitted list identifying the green building program, rating system, target rating, and the “points” of other indications of how achieved.
- **Narratives** – Descriptions of the design elements of the project and specifically, the energy components of that.
- **Credentials & Affidavit** – From the green building professional certifying that the project as designed meets the requirements of this ordinance and the appropriate rating system.

Sustainable design details

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Ensuring Compliance



- **Building Permit** – Submit everything again with the building permit application – especially the certification of the Green Building Professional.
- **Certificate of Occupancy** – Submit everything again before receiving the Certificate of Occupancy.
- **Green Commissioning Process** – Submit required materials based on the used Green Building Rating Program

Sustainable design details

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Additional Notes



- **Exceptions Provision** – By special permit if environmental outcomes can be achieved by some other approach or project design and full exception possible for projects where literal compliance is impractical due to the nature or use

Sustainable design details

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Passive House



Boston

Green building examples

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Passive House



Nonantum

Green building examples

5.12. Sustainable Development Design

5.12.1. Intent and Purpose

The intent of this section is to reduce the use of energy, water, and other natural resources in Newton's building stock and minimize adverse environmental impacts from buildings and development in both construction and long-term operation by:

- A. Increasing the use of renewable energy sources for electricity, transportation, heat/cooling, and hot water
- B. Increasing the use of efficient electricity technology for transportation and buildings
- C. Increasing the number of buildings built to Passive House, net zero, or similar standards.
- D. Minimizing the environmental impacts of construction materials and methods, including waste reduction.

5.12.2. Definitions

- A. **Green Commissioning.** The process of verifying and documenting that a building and all of its systems and assemblies are installed, tested, operated, and maintained to meet specified levels of environmentally sustainable performance in accordance with the provisions of Section 5.12 of this Zoning Ordinance.
- B. **Green Commissioning Agent.** An entity or person with documented experience on at least 2 building projects with a scope of work similar to the proposed project extending from early design phase through at least 10 months of occupancy.
- C. **Green Building Professional.** A professional who holds a credential from a Green Building Rating Program indicating advanced knowledge and experience in environmentally sustainable development in general as well as specific Green Building Rating Systems or otherwise possesses comparable experience in environmentally sustainable development. In instances where a Green Building Rating Program that does not offer such a credential is being applied to meet the provisions of Section 5.12, the designated Green Building Professional must have demonstrated experience as a project architect or engineer, or as a consultant providing third-party review, on at least 3 projects that have been certified using the applicable Green Building Rating Program.
- D. **Green Building Project.** Any development project that meets the provisions of Section 5.12.3.
- E. **Green Building Rating Program.** A collection of activities and services directed by an organization to promote environmentally sustainable development and to recognize projects that achieve defined environmentally sustainable development objectives, including the establishment and oversight of one or more Green Building Rating Systems.
- F. **Green Building Rating System.** A specific set of design standards for environmentally sustainable performance established under the auspices of a Green Building Rating Program against which a project or building design may be evaluated.

5.12.3. Application of the Sustainable Development Requirements

- A. These sustainable development requirements apply to any proposed development in any zoning district that includes the construction or substantial reconstruction of one or more buildings totaling 20,000 sf or more of gross floor area that also requires issuance of a special permit under any provision of this Zoning Ordinance.
- B. **No Segmentation.** The zoning provisions of this Section apply to projects at one site or two or more adjoining sites in common ownership or under common control within a period of five years from the first date of application for any special permit for construction on the lot or lots, or for the 12 months immediately preceding the date of application for any special permit. An applicant for development may not segment or divide or subdivide or establish surrogate or subsidiary entities to avoid the requirements of Section 5.12. Where the City Council determines that this provision has been violated, a special permit will be denied. However, nothing in Section 5.12 prohibits the phased development of a property.

5.12.4. Sustainable Development Requirements

- A. A green building project must be designed to meet the standards of one of the authorized green building rating systems identified in Section 5.12.5 according to the requirements listed below.
 - 1. **LEED Green Building Rating Program.** A green building project being designed according to the LEED Green Building Rating Program must be designed to achieve a minimum 'Silver' level standard. Projects of greater than 50,000 sf of gross floor area must be designed to meet a minimum 'Gold' level standard. Certification by the LEED Green Building Rating Program is not required.
 - 2. **Passive House Green Building Rating Program.** A green building project being designed according to the Passive House Green Building Rating program must be designed to achieve certification. Certification by the Passive House Green Building Rating Program is required.
 - 3. **Enterprise Green Communities Green Building Rating System.** A green building project being designed according to the Enterprise Green Communities Green Building Rating program must be designed to achieve the minimum criteria for certification. Certification by the Enterprise Green Communities Green Building Rating Program is not required.
- B. **Electric Vehicle Charging Stations.** A green building project must provide that a minimum of 10% of parking spaces have access to electric vehicle charging stations up to a maximum of 40 spaces. An additional 10% of parking spaces must be electric vehicle charging station ready, meaning that electrical systems and conduit are prepared to expand the number of charging stations as demand increases. This Section 5.12.4.B only applies to new or rebuilt parking facilities; those projects using existing parking lots are exempt.
- C. **Solar Panels.** [reserved]
- D. **Embodied Carbon** [reserved]
- E. **Electrification of heating/cooling and residential cooking, domestic water heating, and laundry** [reserved]

5.12.5. Authorized Green Building Rating Programs

- A. Any of the following green building rating programs may be used to meet the requirements of this Section 5.12.
1. The Leadership in Energy and Environmental Design (“LEED”) Green Building Rating Program developed and overseen by the United States Green Building Council;
 2. The Passive House Green Building Rating Program developed and overseen by either Passive House Institute US, Inc. or the Passive House Institute; or
 3. The Enterprise Green Communities Green Building Rating Program developed and overseen by Enterprise Community Partners, Inc.
- B. **Applicability of Rating Systems.**
1. If a green building rating program offers different green building rating systems, a green building project must use the system that is most directly applicable to the project or building type, as determined by the Planning Director.
 2. The green building rating system must address the design and construction of buildings, not building operations or neighborhood development.
 3. A green building project must use the most current version of the applicable green building rating system at the time of the special permit application.
 4. The green building rating system, including the applicable version, must be specified at the time of special permit application.

5.12.6. Sustainable Development Review Procedures

- A. **Special Permit Submittal Requirements.** The following must be submitted with the special permit application:
1. **Rating System Checklist.** A document enumerating the criteria set forth in the applicable green building rating system and indicating which technical and design requirements will be met in the green building project design and the resulting rating level of the green building project.
 2. **Rating System Narrative.** A written description of the technical and design elements of the green building project that will be utilized to achieve compliance with the applicable green building rating system.
 3. **Energy Narrative.** A written description of the energy efficiency, renewable energy, and other technical and design elements of the green building project that serve to minimize energy use, make use of renewable energy sources, and otherwise demonstrate how close the project is to achieving net zero energy use status. This narrative should include descriptions of building envelope performance, anticipated energy loads, site planning, mechanical systems and on-site and off-site renewable energy systems. The narrative must also describe how the building could be made to achieve net zero status in the future.
 4. **Credentials.** A document demonstrating the credentials of the green building project’s designated green building professional, which must include a credential from the green building rating program indicating advanced knowledge in the specific green building rating system being applied to the green building project.
 5. **Affidavit.** An affidavit signed by the green building professional stating that he/she has reviewed all relevant documents and that to the best of their knowledge, the documents provided indicate that the green building project is being designed to achieve the requirements of this Section 5.12.

- B. **Building Permit Submittal Requirements.** When applying for a building permit for a Green Building Project, the documentation listed in Section 5.12.6.A above, updated from any previous version to reflect the current Green Building Project design, and the additional documentation listed below must be submitted to the Department of Planning and Development.
1. Credentials of the Green Building Project's Green Commissioning Agent.
 2. For a Green Building Project using the Passive House Green Building Rating Program, the following set of documents is required:
 - a. Credentials of the Passive House rater/verifier who will perform testing and verification and letter of intent stating he/she has been hired to complete the on-site verification process;
 - b. Credentials of the Certified Passive House Consultant who has provided design, planning, or consulting services;
- C. **Certificate of Occupancy Submittal Requirements.** When applying for a temporary certificate of occupancy for a Green Building Project, the documentation listed in Sections 5.12.6.A and 5.12.6.B above, updated from any previous version to reflect the current Green Building Project design, must be submitted to the Department of Planning and Development. The additional documentation listed below must be submitted prior to issuance of a final certificate of occupancy.
1. An affidavit signed by the Green Commissioning Agent, certifying that the pre-construction commissioning process requirements of the applicable Green Building Rating Program have been met and that the post-construction commissioning process requirements of this Section were included in the scope of work and will be met, including a schedule of when each commissioning requirement was or will be met.
 2. For Green Building Projects using the Passive House Green Building Rating Program, the final testing and verification report completed by the Passive House rater/verifier.
 3. Credentials of the Green Building Project's accredited Green Building Professional and an affidavit signed by that professional stating that he/she has reviewed all relevant documents and that to the best of his/her knowledge, the documents provided indicate that the Green Building Project was built to achieve the requirements of Section 5.12.

5.12.7. Exceptions

A special permit may be granted to allow for exceptions to this Section 5.12 if an applicant can demonstrate that the same or better environmental outcomes can be achieved through a different approach or project design. An exception may also be granted where literal compliance is impracticable due to the nature of the use or that such exceptions would be in the public interest.