Chapter 133 - Sustainability and Resiliency

ARTICLE I. - GREEN BUILDINGS

DIVISION 1. - IN GENERAL

> *Footnotes:*
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> ***Editor's note—** Sec. 7, of Ord. No. 2017-4123, adopted July 26, 2017, redesignated arts. I, II, and III as divs. 1, 2, and 3.*

Sec. 133-1. - Definitions.

The following words, terms and phrases, when used in this chapter, shall have the meaning ascribed to them in this section, except where the context clearly indicates a different meaning, or as may be amended from time to time:

Construction means any project associated with the creation, development, or erection of any structure required to comply with this chapter.

Enhanced stormwater quality and quantity improvements means projects that augment water quality and quantity by: Reducing polluted runoff; advancing groundwater recharge, soil infiltration and erosion control; and restoring habitat.

Environmental monitoring means periodic or continuous surveillance or testing to determine the level of compliance required by the Environmental Protection Agency (EPA), Florida Department of Environmental Protection (DEP), or Miami-Dade County Department of Regulatory and Environmental Resources (RER) and/or pollutant levels in various media (air, soil, water) or biota, as well as to derive knowledge from this process. Examples of environmental monitoring include, but are not limited to: Water quality sampling and monitoring, groundwater testing and monitoring, and habitat monitoring.

Environmental remediation means clean-up of, or mitigation for, air, soil or water contamination for which the city is legally responsible for environmental clean-up or mitigation.

Environmental restoration means the return of an ecosystem to a close approximation of its condition prior to disturbance.

Green infrastructure means both the natural environment and engineered systems to provide clean water, conserve ecosystem values and functions, and provide a wide array of benefits to people and wildlife. Green infrastructure uses vegetation, soils, and natural processes to manage natural resources and create healthier urban environments. Examples of green infrastructure practices include, but are not limited to: Right-of-way bio-swales, green roofs, blue roofs, rain gardens, permeable pavements, infiltration planters, trees and tree boxes, rainwater harvesting systems.

Green building means generally the resource efficient design, construction, and operation of buildings by employing environmentally sensible construction practices, systems and materials.

Green building certification agency means the United States Green Building Code (USGBC) or the International Living Future Institute, as may be selected by the eligible participants.

International Living Future Institute means a non-profit organization that created an international sustainable building certification program called The Living Building Challenge. Certification types include living building certification, petals certification and net zero energy building certification.

LEED means an effective edition of the Leadership in Energy and Environmental Design (LEED) Green Building Rating System for Building Design and Construction or Homes, as applicable, of the United States Green Building Council (USGBC).

Project means any construction associated with the creation, development or erection of any building required to comply with this chapter.

Scorecard means a guide provided by the green building certification agency to assist in determining the total project score and achievable credits and level of certification at the inception of a green building, as provided under this chapter.

USGBC means the United States Green Building Council.

(Ord. No. 2016-3993, § 1, 2-10-16)

Sec. 133-2. - Intent and purpose.

The purpose of this chapter shall be to promote sustainable development within the City of Miami Beach by supporting resilient design and construction practices. The city's intent is to establish a certification compliance schedule that incentivizes all qualifying projects to attain at a minimum LEED Gold certification, or similar green building program recognized in this chapter. Sustainable building practices will promote the economic and environmental health of the city, and ensure that the city continues to become environmentally resilient to combat sea level rise and help curb climate change. This chapter is designed to achieve the following objectives:

(a) Increase energy efficiency in buildings;

(b) Encourage water and resource conservation;

(c) Reduce waste generated by construction projects;

(d) Reduce long-term building operating and maintenance costs;

(e) Improve indoor air quality and occupant health;

(f) Contribute to meeting state and local commitments to reduce greenhouse gas production and emissions; and

(g) Encourage sound urban planning principles.

(Ord. No. 2016-3993, § 1, 2-10-16)

DIVISION 2. - GREEN BUILDING REGULATIONS

Footnotes:
*--- (**2**) ---*
***Editor's note—** See editor's note to div. 1.*

Sec. 133-3. - Sustainability requirements.

(a) Mandatory compliance with the requirements of this chapter shall be required for all applicants with building permit applications that meet the following criteria (hereinafter "eligible participants"):

(1) All new construction that proposes over 7,000 square feet of construction of a structure; or

(2) Ground floor additions (whether attached or detached) to existing structures that encompass over 10,000 square feet of additional floor area.

(b) Notwithstanding the foregoing, non-elderly and elderly low and moderate income and workforce housing developments shall be exempt from the requirements of this article. However, such developments are encouraged to incorporate green building elements that further the intent and purpose of section 133-2.

(Ord. No. 2016-3993, § 1, 2-10-16; Ord. No. 2022-4513, § 3, 9-28-22)

Sec. 133-4. - Standards.

This chapter shall be administered using standards developed for and standards developed by the United States Green Building Council (USGBC) or the International Living Future Institute. All eligible participants who are certified as having satisfied all of the requirements of the green building certification agency, including, but not limited to, any monetary or certification requirements, are eligible for a partial or full refund of the sustainability fee identified in section 133-7, herein based upon the level of compliance with the regulations in this chapter.

(Ord. No. 2016-3993, § 1, 2-10-16)

DIVISION 3. - SUSTAINABILITY FEE PROGRAM

Footnotes:
*--- (**3**) ---*
***Editor's note—** See editor's note to div. 1.*

Sec. 133-5. - Generally.

A sustainability fee will be assessed for all eligible participants. The calculation of the fee, provisions for refunding all or portions of the fee, its purpose, and eligible uses are detailed within this division.

(Ord. No. 2016-3993, § 1, 2-10-16; Ord. No. 2017-4123, § 7, 7-26-17)

Sec. 133-6. - Sustainability fee calculation.

(a) In order to obtain a temporary certificate of occupancy (TCO), certificate of occupancy (CO), or certificate of completion (CC), whichever comes first, the eligible participant must first post a sustainability fee payment bond or issue full payment of the sustainability fee to the city. The sustainability fee shall be valued at five percent of the total construction valuation of the building permit. However, the eligible participant may be entitled to a refund or partial refund, of the bond, or payment of the sustainability fee, based upon achieving the program certification levels in the compliance schedule below:

Certification Compliance Schedule

Level of Certification Achieved	Sustainability Fee Reimbursement to Participant for Meeting Certain Green Building Certification Levels
Failure to obtain Certification	0% refund of bond or payment of Sustainability fee
LEED Certified	50% refund of bond or payment of Sustainability fee
LEED Silver Certified	66% refund of bond or payment of Sustainability fee
LEED Gold Certified or International Living Future Institute Petals or Net Zero Energy Certified	100% refund of bond or payment of Sustainability fee
LEED Platinum Certified or International Living Future Institute Living Building Challenge Certified	100% refund of bond or payment of Sustainability fee

If the proof of green building certification is provided prior to the obtaining a TCO, CO, or CC, the "sustainability fee" shall be in the full amount identified above, minus the refund for the level of green building certification achieved identified in the certification compliance

schedule.

(b) The sustainability fee shall be valuated upon the eligible participant's submittal at time of application for temporary certificate of occupancy (TCO), certificate of occupancy (CO), or certificate of completion (CC), whichever comes first, upon review by the planning department during zoning review of the certificate. The sustainability fee bond or full payment shall be provided by participant prior to obtaining a temporary certificate of occupancy (TCO), certificate of occupancy (CO) or certificate of completion, whichever comes first.

(c) Refund of the sustainability fee or bond to the eligible participant may occur as provided for in subsection (a), above, provided the eligible participant complies with the certification compliance schedule within the timeframe identified in in section 133-7(b).

(d) The entirety of the sustainability fee shall be forfeited to the city based upon participant's failure achieve the applicable green building certification levels identified [in section] 133-6(a) within the timeframe identified in section 133-7(b).

(Ord. No. 2016-3993, § 1, 2-10-16)

Sec. 133-7. - Review procedures.

(a) Prior to obtaining a temporary certificate of occupancy, certificate of occupancy (CO) or certificate of completion (CC), whichever comes first, the qualifying projects shall post a bond with the city, or in the alternative, provide a payment to the city, in the amount of the "sustainability fee" identified in section 133-6(a).

(b) Within one year from the receipt of a certificate of occupancy (CO) or certificate of completion (CC), the owner shall submit proof of green building certification for the development from the green building certification agency.

(1) The bond or payment provided, or percentage thereof, shall be refunded to program participants that have achieved a level of green building certification identified in the certification compliance schedule in section 133-6.

(2) The planning director may approve, upon the request of the eligible participant, a one-time one year extension, provided proof that the green building certification agency's review remains pending to determine final certification.

(c) Building permit applications for a green building project submitted or resubmitted for review shall be given priority review over projects that are not green building projects by the city's departments reviewing such applications.

(d) All building inspections requested for green building projects shall be given priority over projects that are not green building

projects.

(Ord. No. 2016-3993, § 1, 2-10-16)

Sec. 133-8. - Deposit of funds; account.

(a) The city has established a sustainability and resiliency fund. The revenue generated through the sustainability fee program shall be deposited in the sustainability and resiliency fund.

(1) Interest earned under the account shall be used solely for the purposes specified for funds of such account.

(2) Sustainability fees deposited and credited to the sustainability and resiliency fund account, and credited to the eligible participant, pursuant to section 133-7, shall be identified, within the city's sustainability and resiliency fund.

(3) Appropriation of deposited funds in the sustainability and resiliency fund shall not be permitted until the applicable refund period, established in section 133-7(b), for those funds has lapsed.

(4) Should the eligible participant provide a bond, rather than pay the sustainability fee, then, the city shall safeguard the bond, to ensure compliance with this chapter. The city shall return the bond, or make a claim for a portion of the bond, depending on the eligible participant's compliance with section 133-7(b) and 133-6(a).

(b) Earned fees in the sustainability and resiliency fund shall be utilized to provide public improvements that increase the sustainability and resiliency of the city. Expenditures from these funds shall require prior city commission approval. Prior to any expenditure, the city manager shall provide a recommendation to the city commission.

(c) Such improvements that increase the resiliency of the city may include:

(1) Environmental restoration projects;

(2) Environmental remediation projects;

(3) Environmental monitoring;

(4) Green infrastructure;

(5) Enhanced stormwater quality and quantity improvements; and/or

(6) Sustainability planning efforts.

(Ord. No. 2016-3993, § 1, 2-10-16)

Secs. 133-9—133-49. - Reserved.

ARTICLE II. - SEA LEVEL RISE AND RESILIENCY REVIEW CRITERIA

Sec. 133-50. - Criteria.

The city's land use boards shall consider the following when making decisions within their jurisdiction, as applicable:

(a) Criteria for development orders:

(1) A recycling or salvage plan for partial or total demolition shall be provided.

(2) Windows that are proposed to be replaced shall be hurricane proof impact windows.

(3) Where feasible and appropriate, passive cooling systems, such as operable windows, shall be provided.

(4) Resilient landscaping (salt tolerant, highly water-absorbent, native, or Florida-friendly plants) shall be provided, in accordance with chapter 126 of the city Code.

(5) The project applicant shall consider the adopted sea level rise projections in the Southeast Florida Regional Climate Action Plan, as may be revised from time-to-time by the Southeast Florida Regional Climate Change Compact. The applicant shall also specifically study the land elevation of the subject property and the elevation of surrounding properties.

(6) The ground floor, driveways, and garage ramping for new construction shall be adaptable to the raising of public rights-of-way and adjacent land, and shall provide sufficient height and space to ensure that the entry ways and exits can be modified to accommodate a higher street height of up to three additional feet in height.

(7) As applicable to all new construction, all critical mechanical and electrical systems shall be located above base flood elevation. All redevelopment projects shall, whenever practicable and economically reasonable, include the relocation of all critical mechanical and electrical systems to a location above base flood elevation.

(8) Existing buildings shall, wherever reasonably feasible and economically appropriate, be elevated up to base flood elevation, plus City of Miami Beach Freeboard.

(9) When habitable space is located below the base flood elevation plus City of Miami Beach Freeboard, wet or dry flood proofing systems will be provided in accordance with chapter 54 of the city Code.

(10) As applicable to all new construction, stormwater retention systems shall be provided.

(11) Cool pavement materials or porous pavement materials shall be utilized.

(12) The design of each project shall minimize the potential for heat island effects on-site.

(b) Criteria for ordinances, resolutions, or recommendations:

(1) Whether the proposal affects an area that is vulnerable to the impacts of sea level rise, pursuant to adopted projections.

(2) Whether the proposal will increase the resiliency of the city with respect to sea level rise.

(3) Whether the proposal is compatible with the city's sea level rise mitigation and resiliency efforts.

(Ord. No. 2017-4123, § 8, 7-26-17; Ord. No. 2019-4252, § 4, 3-13-19)

Secs. 133-51—133-59. - Reserved.

ARTICLE III. - GROUND FLOOR STANDARDS FOR NONRESIDENTIAL BUILDINGS

Sec. 133-60. - Existing building standards.

Existing buildings with nonresidential uses on the ground floor that are repaired or rehabilitated, pursuant to section 118-395(a), by more than 50 percent of the building, as determined by the building official, shall be subject to the following standards:

(a) Where feasible, the ground floor shall be located at a minimum elevation of one foot above the highest sidewalk elevation adjacent to the frontage. Ramping and stairs from the sidewalk elevation to the ground floor elevation shall occur inside the property and shall not encroach into the public sidewalk.

(b) Except where there are doors, facades shall have a knee wall with a minimum height of two feet, six inches above the sidewalk elevation. Such knee walls shall include any required flood barrier protection. The planning director or designee may waive this knee wall requirement if the applicant can substantiate that the proposed glass storefront system satisfies all applicable Florida Building Code requirements for flood barrier protection, or if the finished floor meets the minimum freeboard requirements of the city Code.

(c) Where feasible, ground floors, wall systems, partitions, doors and finishes shall utilize waterflood damage resistant materials in accordance with all applicable requirements of the Florida Building Code, FEMA regulations, and American Society of Civil Engineer (ASCE) - Flood Resistant Design and Construction Standards, for a minimum of the first two feet, six inches above the

floor elevation.

(d) Flood panels for doorways shall be permanently stored adjacent to all doorways, except when in use.

(e) Where implementation of the regulations in this section is unfeasible or incompatible with the environment and adjacent structures, they may be waived to the minimum extent necessary by the historic preservation board (HPB) or design review board (DRB), in accordance with the certificate of appropriateness review criteria or design review criteria, as applicable; however, an applicant may be required to implement alternative approaches for adequate mitigation of flooding.

(Ord. No. 2020-4371, § 3, 11-18-20)

Sec. 133-61. - Short frontage standards.

The following regulations shall apply to new construction with nonresidential uses on the ground floor on frontages with a width of 150 feet or less:

(a) *Sidewalk standards.* Where feasible, sidewalks shall be constructed as follows:

(1) *Circulation zone.* The sidewalk shall contain a "circulation zone" with a minimum dimension of ten feet in width, pursuant to the following standards:

a. The circulation zone shall be fully illuminated, consistent with the city's street and sidewalk lighting requirements and subject to the review and approval of the public works director.

b. The design of the circulation zone shall be consistent with the city's public sidewalk requirements.

c. The circulation zone may be constructed in areas of the public right-of-way and required yards that are in front of a building facade.

d. The circulation zone shall remain free from obstructions created by landscaping, signage, utilities, and lighting fixtures.

e. Pedestrians shall have 24-hour access to the circulation zone.

f. The circulation zone shall include a minimum five-foot wide "clear pedestrian path," free from obstructions, including, but not limited to, stairs, ramping, handrails, outdoor cafés, sidewalk cafés, and door swings. The clear pedestrian path shall be delineated by in-ground markers that are flush with the path, including differing pavement tones, differing pavement type, or by another method approved by the planning director.

g. An easement providing for perpetual public access shall be provided to the city for portions of the circulation zone that are constructed within the setback area on private property.

(2) *Landscape area.* A "landscape area" between the circulation zone and the adjacent automobile parking or vehicle travel lanes shall be provided as follows:

a. The landscape area shall be predominantly landscaped, except where there are access paths, public transit stops, valet parking stands, lighting fixtures, pedestrian crossings, or driveways.

b. The landscape area shall have a minimum width of five feet.

c. Street trees shall be planted within the landscape area.

d. Where the landscape area is adjacent to on-street parking, access paths shall be provided between parking spaces so that each parking space has access to the circulation zone generally from either the front end or rear end of the vehicle. Access paths shall be no wider than 36 inches.

e. Street and pedestrian lighting fixtures shall be located within the landscape area.

f. The circulation zone may encroach into the landscape area in order to meet adjacent sidewalks and street crossings.

(b) *Setbacks.* The building's ground floor façade, parking areas, and loading areas shall be set back a minimum of 15 feet from the back of curb to provide sufficient area to accommodate the required circulation zone and landscape area in cases where the public right-of-way is not sufficiently wide. If the underlying zoning regulations require a larger setback, the larger setback shall be required.

(c) *Ground floor elevation.* The ground floor shall be located no lower than the future crown of road elevation.

(d) *Ramping and stairs.* Ramping and stairs from the sidewalk elevation to 14 inches below the ground floor elevation may occur on the exterior of the building and encroach into the circulation zone only if within five feet of the façade of the building. Ramping and stairs shall not encroach into the clear pedestrian path. Ramping above 14 inches below the ground floor elevation shall occur within the property and shall not encroach into the public sidewalk or setback areas.

(e) *Knee wall.* Except where there are doors, facades shall have a knee wall with a minimum height of two feet, six inches above the sidewalk elevation. Such knee walls shall include any required flood barrier protection. The planning director or designee may waive this knee wall requirement if the applicant can substantiate that the proposed glass storefront system satisfies all applicable Florida Building Code requirements for flood barrier protection or if the finished floor meets the minimum

freeboard requirements of the city Code.

(f) *Flood damage-resistant materials.* Ground floors shall utilize water resistant materials for a minimum of two feet six inches above the floor elevation.

(g) *Flood panels.* Flood panels for doorways shall be permanently stored next to doorways, except when in use.

(h) *Multiple frontages.* For developments that contain more than one frontage, and where one such frontage is greater than 150 feet, the requirements of section 133-62 shall apply.

(i) *Waivers.* Where implementation of the regulations in this section is unfeasible or incompatible with the environment and adjacent structures, they may be waived to the minimum extent necessary by the historic preservation board (HPB) or design review board (DRB), in accordance with the certificate of appropriates review criteria or design review criteria, as applicable; however, an applicant may be required to consider alternative approaches for adequate mitigation of flooding.

(Ord. No. 2020-4371, § 3, 11-18-20)

Sec. 133-62. - Long frontage standards.

The following regulations shall apply to new construction with nonresidential uses on the ground floor on frontages with a width greater than 150 feet:

(a) *Sidewalk standards.* The sidewalk shall be raised to the future crown of road elevation, except for transition areas and where there are street crossings, intersections, or driveways, as follows:

(1) *Circulation zone.* The sidewalk shall contain a "circulation zone" with a minimum dimension of ten feet wide, pursuant to the following standards:

a. The "circulation zone" shall be fully illuminated, consistent with the city's street and sidewalk lighting requirements and subject to the review and approval of the public works director.

b. The design of the circulation zone shall be consistent with the city's public sidewalk requirements.

c. The circulation zone may be constructed in areas of the public right-of-way and required yards that are in front of a building facade.

d. The circulation zone shall remain free from obstructions created by landscaping, signage, utilities, stairs, ramping,

handrails, and lighting fixtures.

e. Pedestrians shall have 24-hour access to the circulation zone.

f. The circulation zone shall include a minimum five-foot wide "clear pedestrian path," free from obstructions, including, but not limited to, outdoor cafés, sidewalk cafés, handrails, and door swings. The clear pedestrian path shall be delineated by in-ground markers that are flush with the path, including differing pavement tones, differing pavement type, or by another method approved by the planning director.

g. An easement providing for perpetual public access shall be provided to the city for portions of the circulation zone that are constructed within the setback area on private property.

(2) *Parallel transition areas.* "Parallel transition areas" between the raised circulation zone and lower level sidewalks, street crossings, intersections, and driveways shall be accommodated within the frontage adjacent to the new development as follows:

a. The parallel transition areas shall not contain steps, switchback ramps, or handrails.

b. The parallel transition areas shall be of the minimum length necessary so as to not require the use of steps, switchback ramps, and handrails between the higher future crown of road elevation and the lower level sidewalk, pedestrian crossing, or driveway elevation.

(3) *Landscape transition areas.* "Landscape transition areas" between the raised circulation zone and the adjacent automobile parking or vehicle travel lanes shall be provided as follows:

a. The landscape transition area shall be predominantly landscaped, except where there are access steps, lighting fixtures, pedestrian crossings, or driveways.

b. The landscape transition area shall have a minimum width of five feet.

c. Street trees shall be planted within the landscape transition area in raised planters or stabilized planting areas that at a minimum match the elevation of the circulation zone.

d. Where the landscape transition area is adjacent to on-street parking, access steps shall be provided between parking spaces so that each parking space has access to the circulation zone generally from either the front end or rear end of the vehicle. Steps shall be no wider than 36 inches, not included handrails.

e. Handrails shall only be permitted for access steps to on-street parking.

f. Street and pedestrian lighting fixtures shall be located within the landscape transition area.

g. The circulation zone may encroach into the landscape transition area in order to meet adjacent sidewalks and street crossings. The encroachment shall be the minimum necessary to comply with the requirements for and shall comply with the requirements of parallel transition areas.

Notwithstanding the standards in subsections a. to g. above, public transit stops and valet parking stands, may be located within the landscape transition area. In the event of a conflict, the provisions in this section shall be superseded by any requirement in the city Code, Miami-Dade County Code, or state law that is applicable to public transit stops or valet parking stands.

(b) *Setbacks.* The building's ground floor facade, parking areas, and loading areas shall be set back a minimum of 15 feet from the back of curb to provide sufficient area to accommodate the required circulation zone and landscape transition areas in cases where the public right-of-way is not sufficiently wide. If the underlying zoning regulations require a larger setback, the larger setback shall be required.

(c) *Driveways.* Driveways to access off-street parking, drop-off, and loading areas shall comply with the following:

(1) Where a development has more than one frontage, driveways should be located facing the street with the lowest traffic volumes.

(2) The number of driveways should be minimized to the greatest extent possible.

(3) Where the circulation zone passes through a driveway, the surface shall be fully horizontal in a direction perpendicular to the facade of a building, so as to provide a safe and comfortable pedestrian environment.

(4) Mountable curbs shall be utilized, where feasible.

(d) *Ground floor elevation.* The ground floor shall be located a minimum elevation of 14 inches above the future crown of road elevation. Ramping and stairs from the sidewalk circulation zone to the ground floor elevation shall occur within the property and not encroach into the circulation zone or setback areas, unless adequate space exists on the exterior.

(e) *Knee wall.* Except where there are doors, facades shall have a knee wall with a minimum height of two feet, six inches above the future crown of road elevation. Such knee walls shall include any required flood barrier protection. The planning director or

designee may waive this knee wall requirement if the applicant can substantiate that the proposed glass storefront system satisfies all applicable Florida Building Code requirements for flood barrier protection.

(f) *Flood damage-resistant materials.* Ground floors, walls system, partitions and doors shall utilize water flood damage resistant materials in accordance with all applicable Florida Building Code, FEMA regulations and American Society of Civil Engineer (ASCE) - Flood Resistant Design and Construction Standard, for a minimum of the first two feet, six inches above the ground floor elevation.

(g) *Flood panels.* Flood panels for doorways shall be permanently stored adjacent to all doorways, except when in use.

(h) *Waivers.* Where implementation of the regulations in this section is unfeasible or incompatible with the environment and adjacent structures, they may be waived to the minimum extent necessary by the historic preservation board (HPB) or design review board (DRB), in accordance with the certificate of appropriateness review criteria or design review criteria, as applicable; however, an applicant may be required to implement alternative approaches for adequate mitigation of flooding.

(Ord. No. 2020-4371, § 3, 11-18-20)