

2. GLOSSARY & OVERVIEW

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2.1 GLOSSARY

Contents:

- 2.1.1 General

2.1.1 General

a. The following words, phrases, and terms in this Ordinance are defined in this Section.

(Ord. [2024-13](#), 11/26/2024; Ord. [2024-14](#), 11/26/2024; Ord. [2024-15](#), 12/12/2024) Ord. 2024-15 effective February 1, 2025.

Abut or Abutting

To physically touch or share a contiguous boundary or border, such as a common lot line, or to be separated only by an alley or shared driveway.

Access

The way or means to enter and leave.

Accessible Means of Egress

As defined by 521 CMR, as amended.

Accessory Building

A building or structure designed, used, or occupied in relation to the principal use(s) of a given lot.

Accessory Use

A use(s) of a lot, structure or portion thereof that is incidental and related to a principal building or use of land and located on the same lot as the principal building or use of land.

Affordable Dwelling Unit

A dwelling unit sold, leased, or rented at a price affordable to a specific household income specified by this Ordinance or other Federal, State, or local affordable housing program. Affordable dwelling unit is abbreviated as ADU. (See Article 12)

Affordable Dwelling Unit, Existing

An ADU subject to a covenant or deed restriction limiting its sale, lease, or rental. Existing affordable dwelling unit is abbreviated as Existing-ADU. (See Article 12)

Albedo

The amount of solar radiation reflected by a surface.

[...]

2.4 STANDARDS & MEASUREMENTS

Contents:

- 2.4.1 General
- 2.4.2 Lot Standards
- 2.4.3 Building Placement
- 2.4.4 Massing & Height
- 2.4.5 Uses and Features
- 2.4.6 Building Components

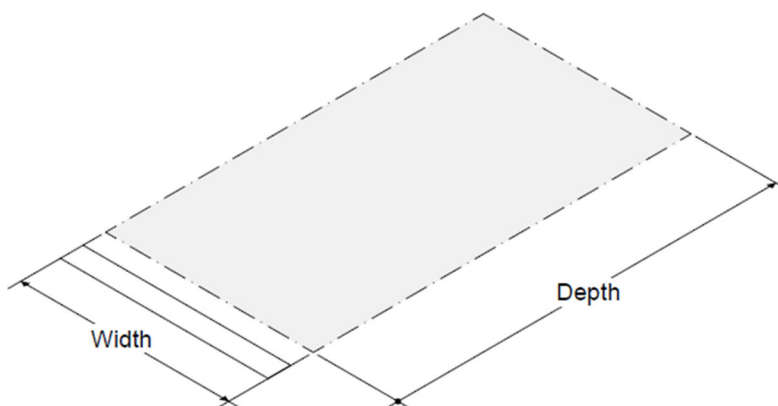
2.4.1 General

- a. This section provides an explanation of dimensional standards found in this Ordinance, defines how to measure each requirement, and provides other standards and reference information as necessary.
- b. The Building Official may waive the following provisions for constructing or modifying an accessible means of egress for an existing building provided that no other compliant design solution is possible:
 - i. §2.4.2.c.i. Lot Coverage
 - ii. §2.4.3 Building Placement
 - iii. §2.4.4 Massing & Height
 - iv. §2.4.6 Building Components
- c. The Building Official may waive the following provisions for constructing or modifying an Entry Canopy, Stoop, Portico, Lobby Entrance, Projecting Porch, or Engaged Porch for an existing building used as Residential Housing with no more than three (3) dwelling units to comply with the minimum number and dimensions for a means of egress per 780 CMR, as amended, provided that no other compliant design solution is possible:
 - i. §2.4.2.c.i Lot Coverage
 - ii. §3.1.13 Building Components in Neighborhood Residence
 - iii. §3.2.12 Building Components in Urban Residence
- a-d. The Building Official shall maintain documentation of any waived standard granted for any means of egress in the public record.

2.4.2 Lot Standards

- a. Lot Lines
 - i. Any lot line abutting a Pedestrian Street is a primary front lot line.
 - ii. The front lot line of any interior lot or key lot is a primary front lot line.
 - iii. Corner lots and through lots have two front lot lines.
 - a). Any front lot line of a corner lot abutting a pedestrian street is a primary front lot line.
 - b). For all other corner lots, the primary front lot line is designated by the property owner, with all remaining front lot lines designated as secondary front lot lines.
 - c). Both front lot lines of a through lot are primary front lot lines.
- b. Lot Dimensions
 - i. General

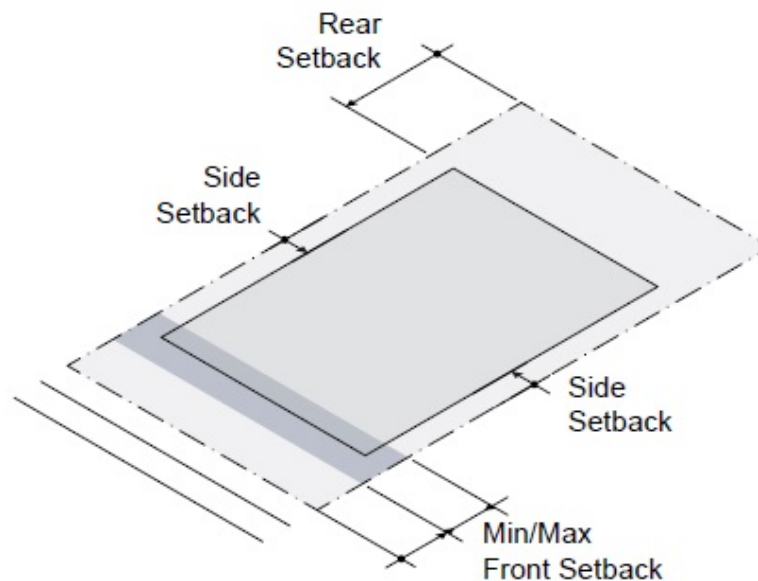
- a). Lots must have dimensions appropriate for one or more of the building type(s) or civic spaces permitted for the district where the lot is located.
- ii. Lot Width
 - a). Lot width is measured as the length of the front lot line of a lot, except as follows:
 - i). For a flag lot, only the 'pole' or 'post' portion of the lot is used to measure lot width.
- iii. Lot Depth
 - a). Lot depth is measured as the horizontal distance between the midpoint of the primary front lot line and the midpoint of the rear lot line or to the most distant point on any other lot line where there is no rear lot line.

Figure 2.4.2 Lot Dimensions

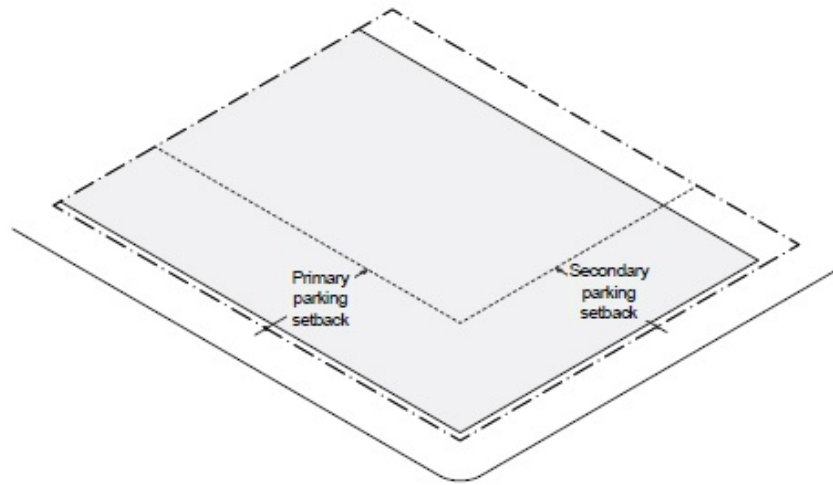
- c. Lot Development
 - i. Lot Coverage
 - a). The maximum area of a lot that is permitted to be covered by the combination of principal buildings, accessory buildings, accessory structures and impermeable surfaces.
 - b). The lot coverage of a structure is measured from the outside of the exterior walls at the ground story, including covered porches and other building components.
 - c). The lot coverage (and permeable area) of porous asphalt, pervious concrete, paving stones, or grass pavers is calculated using the runoff coefficient provided by the manufacturer.
 - ii. Green Score
 - a). Green Score is landscape requirement measured as a ratio of the weighted value of various landscape elements to total lot area. See §10.4 GREEN SCORE for more information.
 - iii. Open Space
 - a). The minimum area of a lot that must be provided as open space.
 - b). When the open space requirement results in eight thousand (8,000) square feet or less, an in lieu payment in accordance with Section 12.3 Buyouts & Payments may be made for up to one hundred (100) percent of the required open space, in whole or in part.
 - c). When the open space requirement results in eight thousand (8,000) square feet or more, the open space must be provided on the lot.

2.4.3 Building Placement

- a. **Building Setbacks**
 - i. All principal and accessory buildings must be located at or behind any required minimum curb, front, side, or rear setback except as indicated in §2.4.3.d. Setback Encroachments.
 - ii. Minimum and maximum front setbacks are measured as follows:
 - a). Parallel to any front lot line that intersects a side lot line within five (5) degrees of a right angle.
 - b). Parallel to the tangent of a concave front lot line or to the secant of a convex front lot line.
 - c). Perpendicular to the lot depth from the center point of the front lot line.
 - iii. Side and rear setbacks are measured parallel to lot lines.
 - iv. The facade of a principal building must be built at or in front of any maximum front setback for each story of a building.
 - v. Buildings and structures are not permitted to encroach upon any easement or the right-of-way of any public thoroughfare.
 - vi. Lots that cannot meet tower setback requirements on all sides are not appropriate for tall buildings.
- b. **Building Separation**
 - i. Any principal or accessory building must be separated from any other principal or accessory building on the same lot or on an abutting lot by the building separation distance specified for each building type.
 - ii. Building separation is measured parallel from the face of the exterior walls of a principal or accessory building, excluding a party wall.
 - iii. Building components and the structural walls of window wells are prohibited within the required separation area.

Figure 2.4.3 (a) Building Setbacks

- c. **Parking Setbacks**
 - i. Unless otherwise specified, all parking, excluding underground structured parking, must be located at or behind any required parking setback.

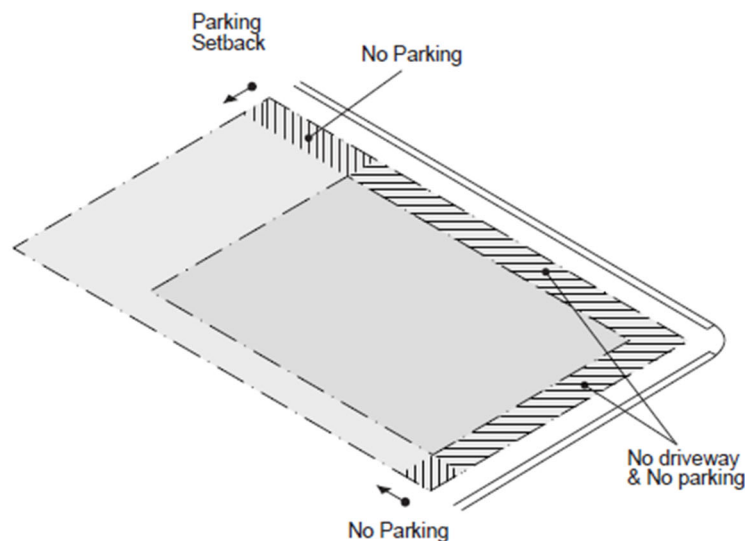
Figure 2.4.3 (b) Parking Setbacks

d. **Setback Encroachments**

- i. Building components may encroach into required setbacks as indicated for each type elsewhere in this Ordinance.
- ii. Cornices, belt courses, sills, pilasters and other architectural features may encroach up to two (2) feet into a required setback, provided that at least two (2) feet is maintained from the vertical plane of any side lot line.
- iii. Chimneys and flues may encroach up to four (4) feet into a required setback, provided that at least two (2) feet is maintained from the vertical plane of any lot line.
- iv. Building eaves and roof overhangs may encroach into a required setback, provided that at least two (2) feet is maintained from the vertical plane of any lot line.
- v. Mechanical equipment associated with residential uses, such as an HVAC unit, is not permitted in the frontage area of a lot, but may encroach into a required side or rear setback, provided that at least two (2) feet or the distance provided in the manufacturer's specifications, whichever is greater, is maintained from the vertical plane of any lot line.
 - a). Air heat pumps and other energy-saving mechanical equipment with a day-night twenty-four (24) hour average noise level of fifty-five (55) dB(A) or less may fully encroach into a required setback.
- vi. Exterior walls are permitted to encroach into front, side, and rear setbacks up to eight (8) inches only for the purpose of adding insulating sheathing to the exterior wall assembly, provided that at least two feet (2) feet is maintained from the vertical plane of any side lot line.
- vii. Minor structures accessory to utilities, such as hydrants, manholes, water meters, or gas meters, may fully encroach into a required front, side, or rear setback.
- viii. Transformers and other cabinet structures may fully encroach into a required side or rear setback.
- ix. Terraces, uncovered and unenclosed patios, and underground structures may fully encroach into a required setback.
- x. Trellises or other structures attached to a building for the sole purpose of growing vines or other vegetation may encroach into a required setback provided that at least two (2) feet is maintained from the vertical plane of any side lot line.
- xi. Accessory structures, fences and walls, signs, and landscape buffers may encroach as indicated in Article 10: Development Standards.

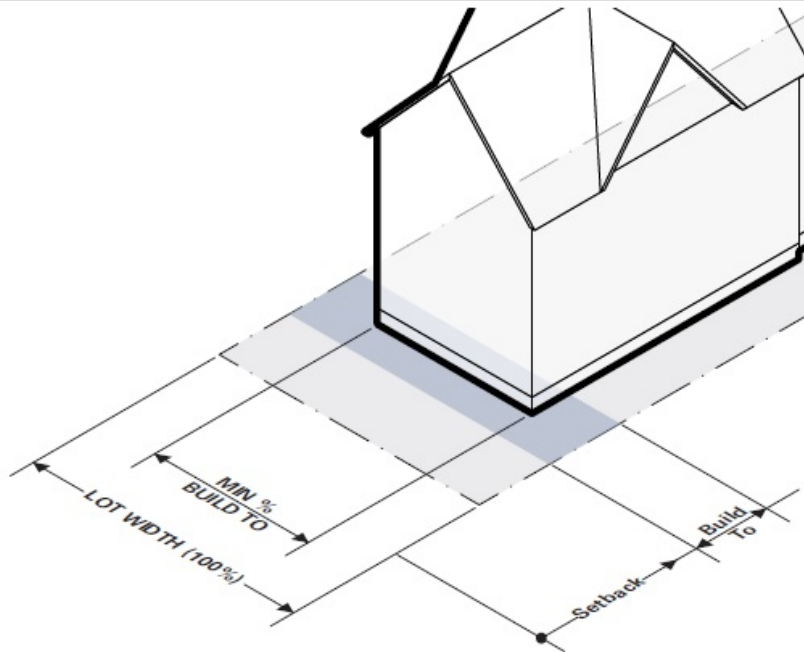
- e. Frontage Area
 - i. Motor vehicle parking, excluding parking in the drive aisle of a driveway, and parking spaces are not permitted in the frontage area and driveways are not permitted in the frontage area between a building and the front lot line.
 - ii. Corner lots and through lots have two frontage areas.
 - a). Any frontage area of a corner lot abutting a Pedestrian Street is a primary frontage area.
 - b). For all other corner lots, the primary frontage area corresponds with the primary front lot line designated by the property owner, with all remaining frontage area designated as secondary frontage area.
 - c). Both frontage areas of a through lot are primary frontage area.

Figure 2.4.2 (c) Frontage Area



2.4.4 Massing & Height

- a. Main Massing
 - i. Facade Build Out
 - a). Building facade(s) must be built parallel to the front lot line for the minimum facade build out specified for each building type and is measured as a percentage of the lot width.
 - b). For lots with frontage on three (3) sides, the facade build out along a secondary frontage is only applicable to the minimum number of stories required for each building type.
 - c). Forecourts are considered part of the building for the purpose of measuring facade build out.

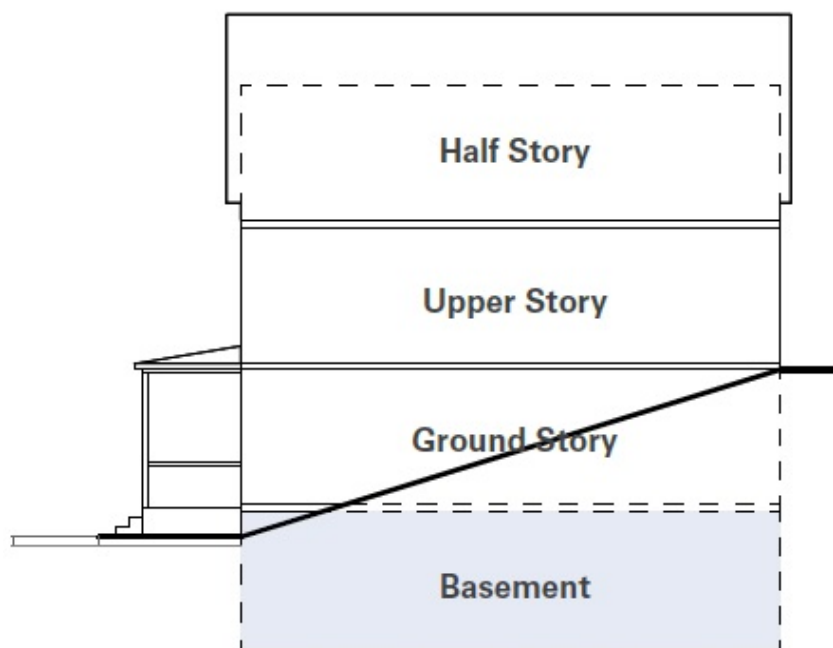
Figure 2.4.4 (a) Facade Build-Out

- ii. Building Width
 - a). Width is measured parallel to the facade of a building, from the exterior of each side wall or the midpoint of a party wall.
- iii. Building Depth
 - a). Depth is measured perpendicularly from the facade as the maximum length of any exterior side wall of a building.
- iv. Floor Plate
 - a). Floor plate is measured as the total gross floor area of a single story of a building, excluding building components.
- v. Building Interconnection
 - a). Abutting buildings may not be interconnected across lots lines to create any structure that conflicts with the building width or floor plate standards of this Ordinance.
 - i). Underground structured parking is exempt.
 - ii). Pedestrian bridges over a public thoroughfare are exempt.
 - b). Interconnection of buildings over a public thoroughfare by a pedestrian bridge requires compliance with all City Ordinances.
- vi. Ground Story Elevation
 - a). Ground story elevation is measured as the vertical distance from the average finished ground level at the facade(s) to the top of the finished floor of the ground story.
- vii. Story Height
 - a). Story height is measured vertically from the surface of the finished floor to the surface of the finished floor above at all points. When there is no floor above, story height is measured from the surface of the finished floor to the top of the structural beam or joists above or the top of the wall plate, whichever is more.

vii. Number of Stories

b). The total number of stories of a building is calculated as follows:

- iii). The ground story is counted as one (1) story, except that a single ground story of twenty-five (25) feet or more is counted as two (2) stories.
- iv). Each upper story is counted as one (1) additional story, except that any upper story with a mezzanine or loft is counted as two (2) stories.
- v). Interstitial space between stories is counted as an additional story if the space has a walking surface, permanent lighting, a ceiling height of seven feet six inches (7'6") or more, or is accessed via a stairwell or elevator door.
- vi). Basements are not counted as one (1) story unless the finished floor of the ground story is five (5) feet or more above the average ground level of the lot. See Figure 2.4.4 (b) and Figure 2.4.4 (c).
- vii). Each story of above ground structured parking is counted as one (1) story regardless of its relationship to habitable stories, except that up to two (2) stories of above ground structured parking may be counted as one (1) story when those stories are fully screened by a single ground story with an equal or greater story height.

Figure 2.4.4 (b) Upward Slope

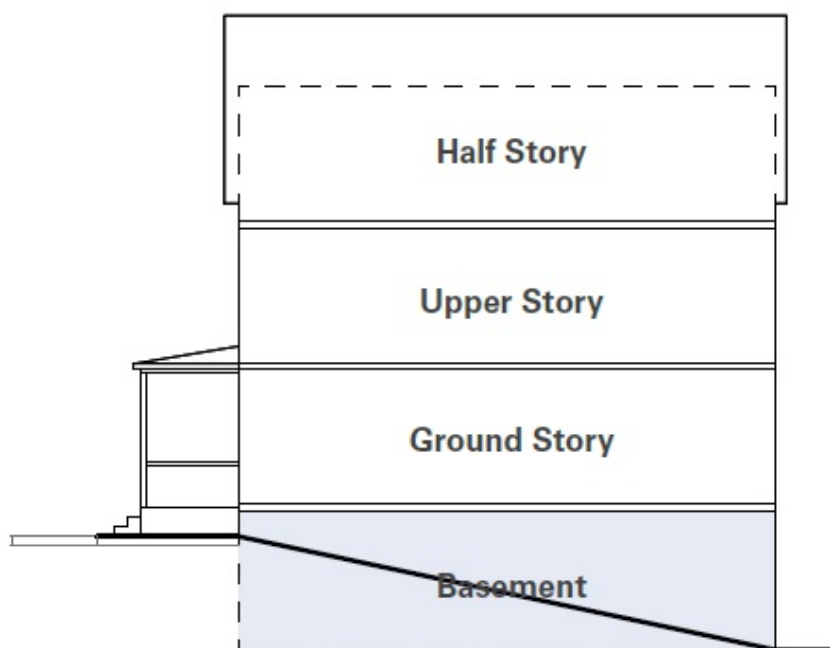
b). Habitable space located directly under a pitched roof is counted as a half story. The following standards apply to half stories:

- viii). The roof rafters must intersect the wall plate or top of wall frame of the exterior walls at a height up to two (2) feet above the finished floor of the half-story of a principal building type or four (4) feet above the finished floor of the half-story of an accessory building type.
- ix). Ceiling height of a half story must not exceed twelve (12) feet in height at any point.

c). Non-habitable attic space located under a pitched roof is not counted as a half story.

viii. Upper Stories

- a). Each upper story of a building may only be recessed from the exterior wall plane of the story below, excluding the ground story, except through the use of building components.
- ix. Step-back
 - a). A required distance that certain upper stories of a building must be recessed from the plane of the facade of the stories below.
 - i). Required step backs must be provided for all stories as indicated for each building type.
 - ii). Buildings on any lot less than sixty-five (65) feet deep are exempt from the upper story step-back requirement.
- x. Building Height, Feet
 - a). Building height in feet is measured as the vertical distance from the average finished ground level at the facade(s) to the top of the structural beam or joists of the upper most story.

Figure 2.4.4 (c) Downward Slope

- x. Roofs
 - f). Defined roof types are permitted as indicated for each building type. If this line item is not identified on the building type table, the roof is not regulated.
- xi. Roof Features
 - a). Roof decks are permitted only on flat roofs and must be setback at least five (5) feet from any facade, excluding building components.
 - b). Mechanical & stairwell penthouses; roof mounted cellular, radio, and Internet transmission equipment; vents or exhausts; solar panels or skylights; flagpoles; belfries, chimneys, cupolas, monuments, parapets, spires, steeples, and other non-habitable architectural features are permitted on roofs.
- xii. Forecourts
 - a). Forecourts must have a width and depth of at least twelve (12) feet and a maximum height to width ratio of two to one (2:1).
 - b). A forecourt must be enclosed by walls on three sides.

- c). Building components may encroach into a forecourt.
- d). Driveways, parking spaces, passenger drop-offs, garage entrances, loading and service areas, exhaust vents, mechanical equipment, and refuse or recycling storage are not permitted in forecourts.

(Ord. 2024-14, 11/26/2024)

2.4.5 Uses and Features

a. Facade Composition

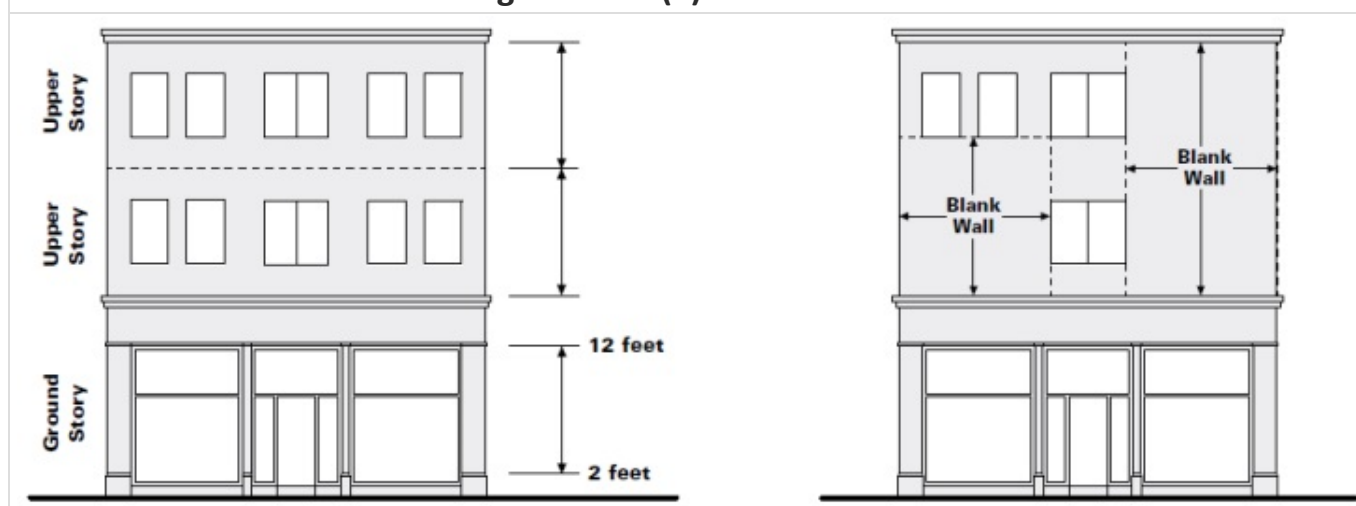
i. Fenestration

- a). Fenestration must be provided as indicated for each building type and is calculated as a percentage of the area of a facade.
 - i). For buildings with ground story commercial spaces, ground story fenestration is measured between two (2) feet and twelve (12) feet above the finished floor of the ground story.
 - ii). For all other buildings and all other stories, fenestration is measured independently for each story, from the top of a finished floor to the top of the finished floor above.
- b). Fenestration enclosed with glazing may be included in the calculation if it meets the following criteria:
 - i). For ground story fenestration, glazing must have at least sixty percent (60%) visible light transmittance (VLT) and may have up to fifteen percent (15%) visible light reflectance (VLR).
 - ii). For upper story fenestration, glazing must have at least forty percent (40%) VLT and may have up to fifteen percent (15%) VLR.

ii. Blank Wall Area

- a). Blank wall area is any portion of a facade that does not include fenestration (doors and windows) and surface relief through the use of columns, cornices, moldings, piers, pilasters, sills, sign bands, other equivalent architectural features that either recess or project from the average plane of the facade by at least four (4) inches.

Figure 2.4.5 (a) Fenestration



- b). Blank wall area limitations apply both vertically and horizontally for all stories of a building for any facade.

2. Use & Occupancy

- i. Pedestrian Access
 - a). Buildings must have at least one (1) principal entrance. Principal entrances must be located on the facade, provide both ingress and egress, and be operable at all times.
 - b). Multi-story buildings with ground story commercial spaces must have at least one (1) principal entrance for each commercial space in addition to any principal entrance(s) necessary for accessing the upper stories.
 - c). Principal entrance spacing is measured as the distance between center line of doors along a facade.
 - d). All residential buildings developed after the adoption date of this Ordinance must provide at least one (1) zero step entrance at the front, side, or rear of the building. Per Article VI of the Code of Ordinances, City of Somerville, Massachusetts, reasonable accommodation may be requested to comply with this standard.
 - e). Light wells may be provided within the frontage area to provide light and access into lower stories or to accommodate a change in grade across the front of a building.
 - f). The frontage area of a lot may be terraced to accommodate pedestrian access where a change in grade exists across the front of a building.
- ii. Ground Story Commercial Space
 - a). Any building fronting a Pedestrian Street must provide one (1) or more ground story commercial spaces fronting the primary facade for one hundred percent (100%) of the total width of the building, excluding lobbies for upper story uses and other required means of egress.
- iii. Commercial Space Factor
 - a). When specified for a building type, the required minimum number of ground story commercial spaces is calculated by dividing the building width at the primary facade by the commercial space factor indicated.
- iv. Commercial Space Depth
 - a). The depth of a commercial space is measured perpendicularly from the facade toward the interior of a building.
 - b). The leasable floor area of any ground story commercial space must have the commercial space depth specified for each building type.
- v. Dwelling Units Per Lot
 - a). The total combined number of dwelling units, that are permitted within a principal building type and accessory building type on the same lot.
- vi. Dwelling Units
 - a). The minimum or maximum number of dwelling units permitted for a building type.
 - b). Existing structures may not be modified to conflict with number of dwelling units permitted for each building type.
 - c). Ground story dwelling units must have habitable space at least twenty (20) feet in depth, measured perpendicularly from the facade towards the interior of the building.
- vii. Density Factor
 - a). When specified for a building type, the maximum number of dwelling units permitted is calculated by dividing the total gross floor area of the building by the density factor indicated for each building type.

- i). The density factor permitted for each building type is different for buildings on different sized lots, net zero ready buildings.
 - ii). The gross floor area of any underground structured parking and the net floor area of any above ground structured parking is excluded when calculating density factor.
 - iii). Any fractional number resulting from this calculation is rounded up to the next whole number.
 - viii. Outdoor Amenity Space
 - a). When specified for a building type, outdoor amenity space must be provided as a balcony, deck, patio, porch, roof deck, roof terrace, or yard that is directly accessible by a doorway from the dwelling unit the outdoor amenity space is meant to serve.
 - b). Each outdoor amenity space must provide an unobstructed area of at least twenty-four (24) square feet that may be used for seating.
 - c). Buildings with seven (7) or more dwelling units may provide shared outdoor amenity space as a patio, roof deck, roof terrace, or yard, provided that the space includes the total seating area required for each dwelling unit that the shared space is meant to serve.
- 3. Roof-Mounted Mechanicals
 - i. The height of any roof-mounted mechanical equipment, screening, or penthouse is measured vertically from the surface of the finished roof to the top of the equipment, screening or penthouse roof above.

2.4.6 Building Components

- a. Dimensions
 - i. Projection
 - ii. Setback Encroachment
 - a). The distance a component may encroach into a required setback, provided that at least two (2) feet is maintained from the vertical plane of any side lot line.
 - iii. Seating Area, Clear
- b. Bays
- c. Entry Canopys
- d. Stoops
- e. Porticos
- f. Projecting Porches
- g. Engaged Porches
- h. All Dormers
 - i. If the face wall of a dormer is oriented toward the front lot line, the setback requirements are similarly oriented.
- i. Window Dormers
- j. Shed Dormers
- k. Cross gables
- l. Projecting gables
- m. Side Wings
- n. Rear Additions