

2 OVERVIEW & GUIDE

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2ND DISCUSSION DRAFT

2.1 BUILDING TYPES OVERVIEW

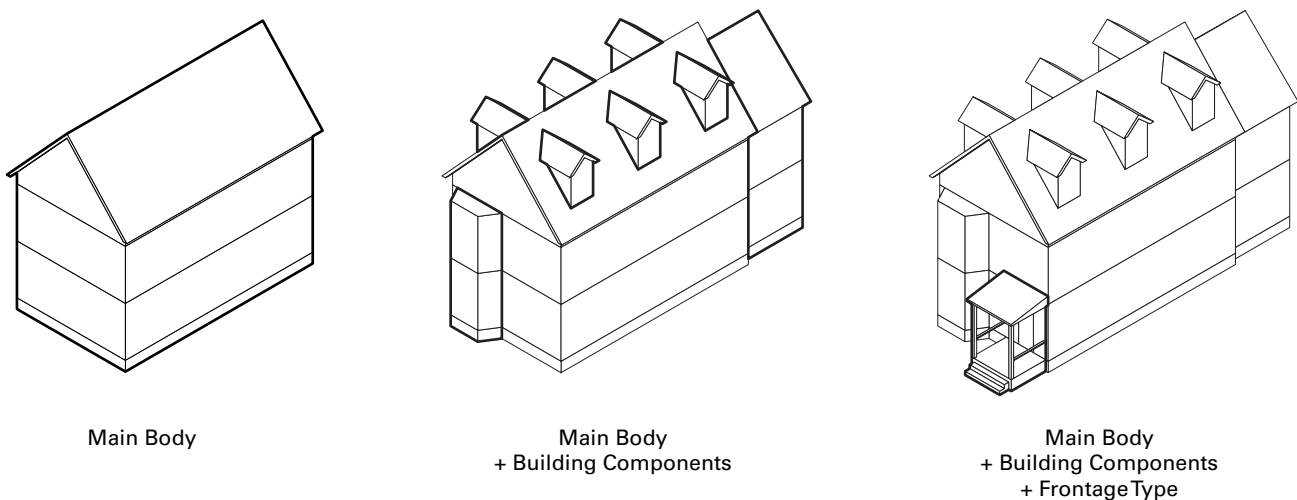
1. General

- a. This Ordinance uses 'building types' as a tool to regulate development within each zoning district.
- b. Building types are defined by the combined disposition, configuration, and function of a principal structure and are used in this Ordinance to establish the standards for new construction, renovation of existing structures, and redevelopment.
- c. In contrast to applying generic dimensional standards to all principal structures, the use of Building Types as a regulatory tool allows dimensional standards to differ from one class or kind of structure to another within the same district and is authorized by M.G.L. Chapter 40A, Section 4.
- d. The selection of building types permitted within a zoning district combine with the mix of permitted uses to define the intended character of each zoning district.

2. The Building Type Kit-of-Parts

- a. Building types are primarily an assembly of three features including the main body of the building, various building components, and at least one building frontage type.
- b. The Main Body is the primary massing and the most important portion defining a building type's form and scale. The main body of each building type is regulated using dimensional standards that differ for each type.
- c. Building Components are accessory features that attach to the main body and increase the habitable square footage or enhance the usefulness of a building. Each Building Component has dimensional standards that differ for each type of component.
- d. Building Frontages attach to the facade of a building and provide a gradual transition and strong interface between the private realm (yards and building interiors) and the public realm (sidewalks, thoroughfares, and civic spaces). Each Building Frontage has dimensional standards that differ for each type of frontage.
- e. Building Components and Building Frontages provide an important means for achieving variety and individuality in design and are permitted as indicated for each building type.

FIGURE 2.3 Building Type Kit-of-Parts



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Building Types Overview

3. Understanding the Building Type Pages

- a. The standards for building types identified in this Ordinance are presented across four pages that are the same for each building type:
 - i. **Description & Precedents.** The first page for each Building Type provides a general description and shows several images of typical buildings indicative of the variety possible within the definition of each type. The images are intended only for illustrative purposes and do not fully exemplify all of the requirements or possibilities for each type.
 - ii. **Diagrams & Dimensional Tables.** Page two and three provide the key spread of dimensional standards.
 - iii. **Additional Standards.** The fourth and final page for each Building Type identifies various provisions applicable to the specific building type, standards linked to the dimensional table, and includes any additional illustrative diagrams that are necessary.
- b. Section 2.2 provides an explanation of each line item in the building type dimensional tables, defines how to measure each requirement, and provides other standards and reference information as necessary.

Badges indicate standards that are illustrated in the building type diagrams

Lot Standards

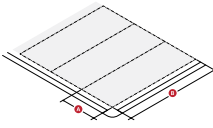
Building Standards

Color corresponds with Zoning District

Zoning District labeled at the top of every page

4.0 RESIDENTIAL DISTRICTS
Neighborhood Residence (NR)
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Neighborhood Residence (NR)

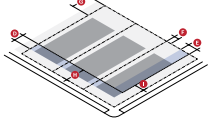
D. Cottage (cont.)
i. Lot Standards



Lot Dimensions	
Width (min)	-
No Driveway Access	32 ft
Side or Rear Driveway Access	32 ft
Front Driveway Access	35 ft
Depth (min)	70 ft

Lot Coverage	
Building Coverage (max)	65%
Green Area Ratio (min)	0.18

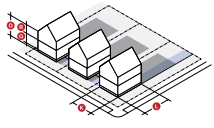
ii. Building Placement



Building Setbacks	
Primary Front Setback (min/max)	10 ft / 20 ft
Secondary Front Setback (min/max)	10 ft / 20 ft
Side Setback (min)	5 ft
Rear Setback (min)	20 ft


Parking Setbacks	
Primary Front Setback (min)	20 ft
Secondary Front Setback (min)	10 ft

D. Cottage (cont.)
iii. Massing & Height



Main Body	
Facade Build Out (min)	60%
Width (min/max)	22 ft / 26 ft
Depth (min/max)	24 ft / 32 ft
Building Height (max)	2 stories
Story Height (min/max)	9 ft / 12 ft
Ground Floor Elevation (min)	2 ft
Roof Type	Flat, Gable, Mansard

iv. Uses & Features



Facade Composition	
Ground Story Fenestration (min/max)	20% / 50%
Upper Story Fenestration (min/max)	20% / 50%

Use & Occupancy	
Dwelling Units (max)	-
Outdoor Amenity Space (min)	1/ DU

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2.2 STANDARDS & MEASUREMENTS

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.

2. Lot Standards

- a. General
 - i. One (1) Principle Building Type may be built on each lot.
- b. 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. For CORNER LOTS, the primary FRONT LOT LINE is designated as follows:
 - a). Any front lot line 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 are designated as secondary FRONT LOT LINES.
- c. Lot Dimensions
 - i. 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.
 - ii. Lot Depth

- a). Lot depth is measured as the horizontal distance between the front and rear lot lines measured in the mean direction of the side lot lines.
- d. Lot Development
 - i. Lot Coverage
 - a). The maximum area of a lot that is permitted to be covered by structures and impermeable surfaces.
 - ii. Green Factor
 - a). Green factor is landscape requirement measured as a ratio of the weighted value of various landscape elements to total lot area. See §10.3 Green Factor for more information.

3. Building Placement

- a. Building Setbacks
 - i. Setbacks are measured parallel to lot lines.
 - ii. All buildings and structures must be located at or behind any required minimum front, side, or rear setback except as indicated in §2.2.3.c. Setback Encroachments.
 - iii. The facade of a principal building must be built at or in front of any maximum front setback for each story of a building. The façade of upper stories may not project forward of the façade of the first story except through the use of permitted building components and building frontages.
 - iv. Buildings and structures are not permitted to encroach upon any easement or the right-of-way of any public thoroughfare.
 - v. Lots that cannot meet tower setback requirements on all sides are not appropriate for tall buildings.

FIGURE 2.4.2 Lot Dimensions

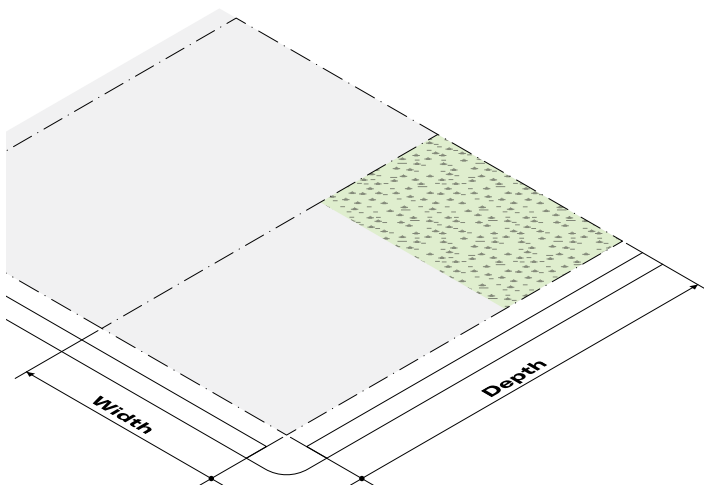
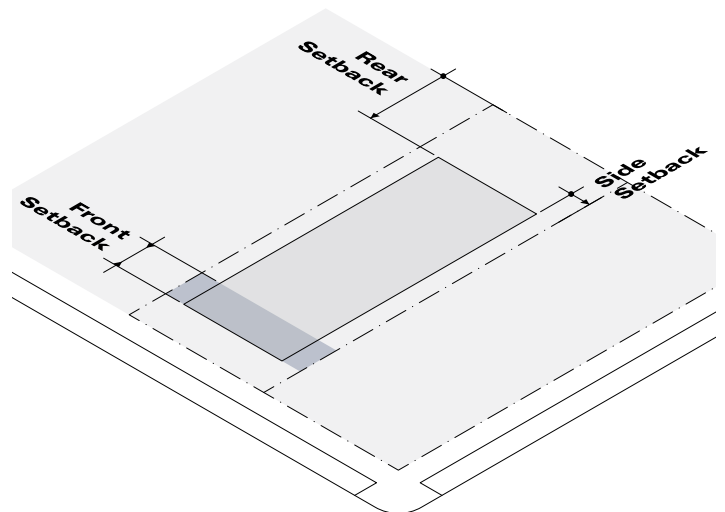


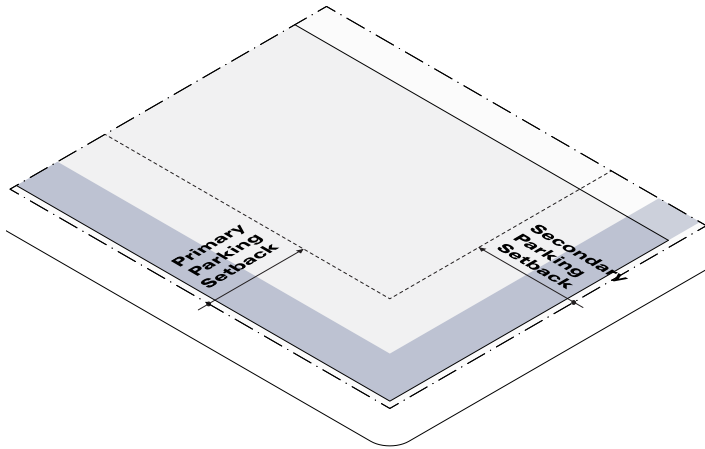
FIGURE 2.4.2 Setbacks



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FIGURE 2.4.3 Parking Setbacks



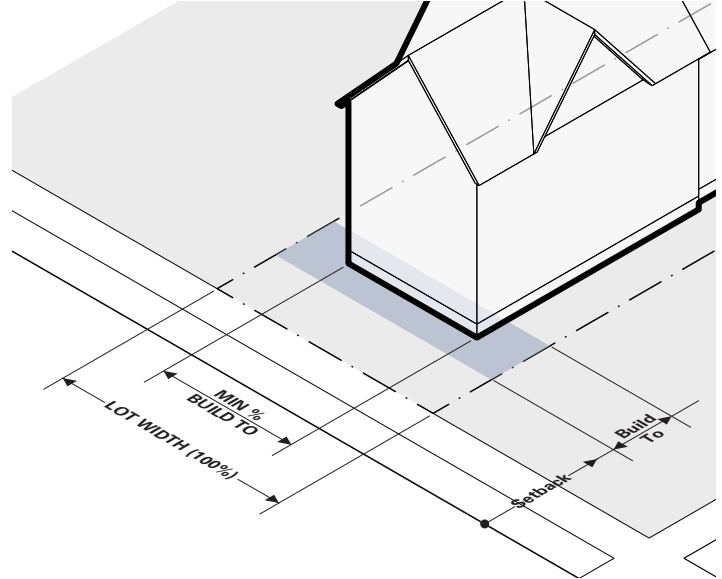
b. Parking Setbacks

- i. Unless otherwise specified, all off-street parking, including surface and structured parking, but excluding underground parking, must be located at or behind any required parking setback.

c. Setback Encroachments

- i. Building frontages and components may extend beyond a required front setback as indicated for each type.
- ii. Cornices, belt courses, sills, buttresses and other architectural features may encroach up to two (2) feet.
- iii. Chimneys and flues may encroach up to four (4) feet, 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 up to three (3) feet, provided that at least two (2) feet is maintained from the vertical plane of any lot line.
- v. Unenclosed fire escapes or emergency egress stairways may encroach up to four (4) feet into a required side or rear setback, provided that at least two (2) feet is maintained from the vertical plane of any lot line.
- vi. Mechanical equipment associated with residential uses, such as HVAC units and security lighting, may encroach into a required side or rear setback, provided that at least two (2) feet is maintained from the vertical plane of any lot line.
- vii. Terraces, uncovered and unenclosed patios, and/or structures below and covered by the ground may fully encroach into a required setback.
- viii. Minor structures accessory to utilities, such as hydrants, manholes, transformers, and other

FIGURE XXX Facade Build-Out



cabinet structures, may fully encroach into a required setback.

- ix. Trellises or other structures attached to the facade of a building for the sole purpose of growing vines or other vegetation are not measured in the calculation of setbacks.
- x. Accessory structures, fences and walls, signs, and landscape buffers may encroach as indicated in Article 10: Development Standards.

4. Massing & Height

a. General

- i. The upper stories of a building may not project, in any direction, beyond the exterior wall plane of the stories below, except through the use of permitted building components and building frontages.

b. Facade Orientation

- i. The facade of a principal building must be built parallel to a front lot line or to the tangent of a curved front lot line.

c. Main Body

i. Facade Build Out

- a). Façade build out is a ratio of building width to lot width, measured at the maximum front setback line. See figure XXX.
- b). The façade of a building must be built to the façade build out ratio as specified for each building type.
- c). For lots with frontage on three (3) sides, façade build out along a secondary frontage is only applicable to the minimum number of stories required for each building type.

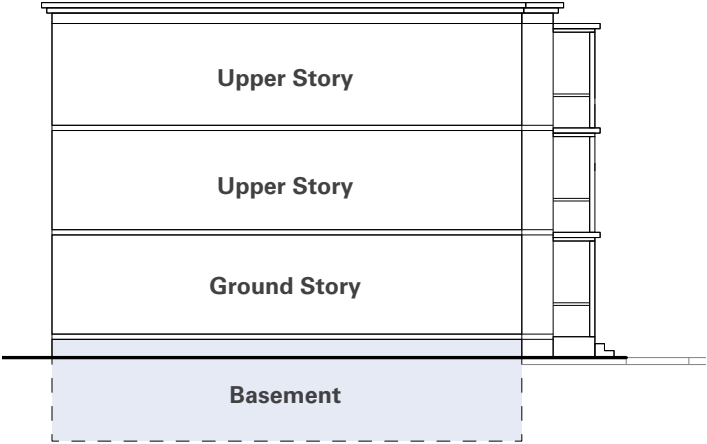
ii. Building Width

- a). Width is measured parallel to the facade of a

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FIGURE 2.3 Building Height in Stories



- building.
- 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 each story of a building, excluding building components and frontages.
- v. Building Height, Stories
 - a). The total number of stories of a building is calculated as follows:
 - i). 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.

- ii). Each upper story is counted as one (1) additional story, except that any story, excluding the ground story, with a mezzanine or loft is counted as two (2) stories.
- iii). 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.
- iv). Basements are counted as one (1) story only when the finished floor of the ground story is five (5) feet or more above the average ground level of the lot. Walkout basements are exempt.
- v). For any lot with frontage on (2) two or more thoroughfares with a difference in elevation of at least ten (10) feet, the ground story at the lower elevation is not included in the calculation of total number of stories.
- vi). 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

FIGURE 2.3 Downward Slope

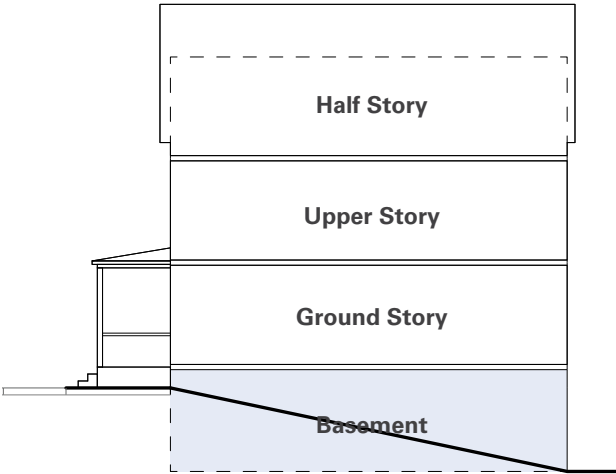
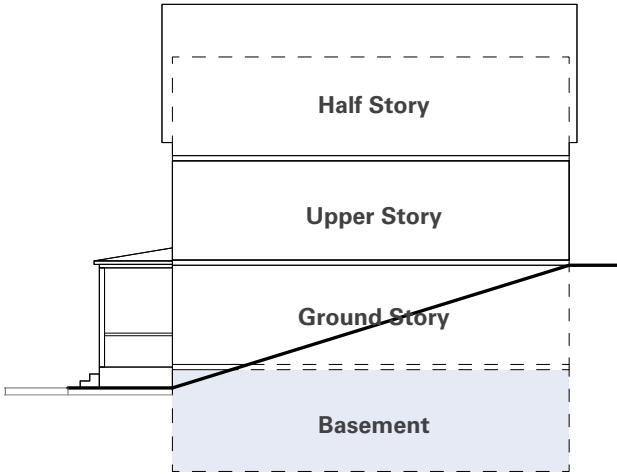


FIGURE 2.3 Upward Slope



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FIGURE 2.3 Half-Stories



height.

- b). When building height allows for a half-story, the half story is counted as the habitable space located directly under a pitched roof. The following standards apply:
 - i). The roof rafters must intersect the wall plate or top of wall frame of the exterior walls at a height no more than two (2) feet above the finished floor of the half-story.
 - ii). 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.
- vi. Story Height
 - a). Story height is measured vertically from the surface of the finished floor to the surface of the finished floor above. 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.
 - b). Minimum story height requirements are not measured for half-stories.
- vii. Ground Story Elevation
 - a). Ground story elevation is measured from the average grade of the sidewalk of the abutting thoroughfare or from the crown of the roadway of the adjacent thoroughfare when no sidewalk exists, to the top of the finished floor of the ground story of a building.
- viii. Building Height, Feet
 - a). Building height in feet is measured as the vertical distance from the finished ground level

at the façade of the building to the top of the structural beam or joists of the upper most story.

- ix. Roofs
 - a). 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.
- x. Roof Features
 - a). Roof decks conforming to §3.G.7. Roof Deck; 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.

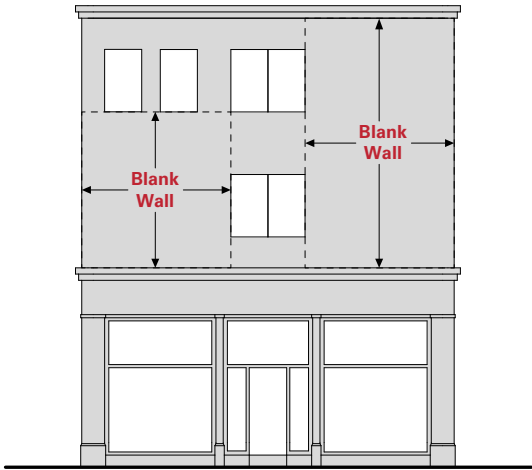
5. Uses and Features

- 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 façade.
 - i). Ground story fenestration is measured between two (2) feet and twelve (12) feet above the Abutting sidewalk.
 - ii). Upper story 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 a minimum 60% Visible Light Transmittance (VLT) and no more than 15% Visible Light Reflectance (VLR).
 - ii). For upper story fenestration, glazing must have must have a minimum of 40% VLT and no more than 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.
 - b). Blank wall area limitations apply both vertically and horizontally for all stories of a building for any facade.
- b. Pedestrian Access

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FIGURE 2.3 Fenestration



- i. Principal entrances must be located on the facade of a building, provide both ingress and egress, and be operable at all times.
- c. Use & Occupancy
 - i. Dwelling Units
 - a). The minimum or maximum number of dwelling units permitted for a building type, as specified.
 - ii. Density Factor
 - a). The maximum number of dwelling units permitted is equal to the total residential gross floor area of a building or portion of a building divided by the density factor indicated for a

- iii. Outdoor Amenity Space
 - a). Where required, outdoor amenity space must be provided for each dwelling unit as a balcony, deck, patio, porch, roof deck, roof terrace, or yard.
 - b). Each outdoor amenity space must provide at least twenty-four (24) square feet of unobstructed seating area.
 - c). Within the Mid-Rise and High-Rise Districts, building types may provide shared outdoor amenity space, provided that the space includes the total seating area required for

FIGURE 2.4.1 Entrance Spacing

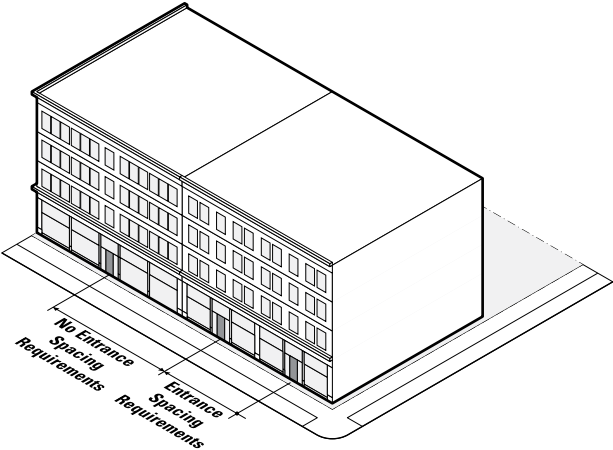
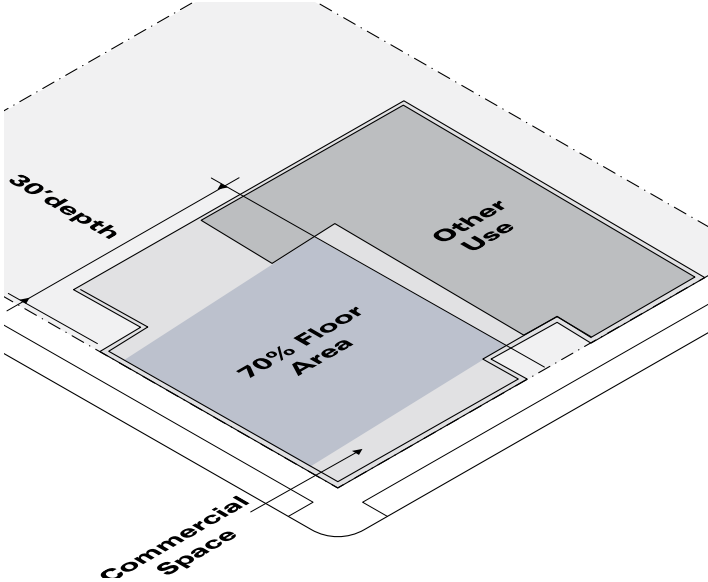


FIGURE 2.4.2 Commercial Space Depth



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- each dwelling unit that the shared space is meant to serve.
- d). For all other building types, each outdoor amenity space must be directly accessible by a doorway from a habitable room within the dwelling unit it is meant to serve.
- iv. Habitable Space Depth
 - a). Ground story dwelling units must have a habitable room at least twenty feet in depth, measured as the distance from the facade towards the interior of the building.
- v. Entrance Spacing
 - a). Principal entrance spacing is measured as the distance between center line of doors along a facade.
 - b). Principal entrance spacing requirements must be met for each building individually, but are not applicable to adjacent buildings.
- vi. Commercial Space Depth
 - a). Ground story spaces intended for a commercial tenant must have a leasable area with the depth indicated for each Building Type.
 - b). This depth must be provided for at least seventy percent (70%) of the floor area of the space, measured as the distance from the facade towards the interior of a building.
 - c). This floor area may be provided to one or more tenants.