

2 OVERVIEW & GUIDE

2.1 ZONING ATLAS OVERVIEW	9
Zoning Districts	9
Transit Areas	10
Pedestrian Streets	10
2.2 BUILDING TYPES OVERVIEW	11
General	11
Building Assembly	11
Understanding the Building Type Pages	12
2.3 STANDARDS & MEASUREMENTS	13
General	13
Lot Standards	13
Building Placement	13
Massing & Height	15
Uses and Features	16
Building Components	18

2.1 ZONING ATLAS OVERVIEW

1. Zoning Districts

a. Zoning districts established by §1.4.2 of this Ordinance are summarized on Table 2.1 (a) and example maps showing how districts are mapped to real property are shown in Figure 2.1 (a) and Figure 2.1 (b) only for illustrative purposes.

b. The colors indicated for each zoning district on Table 2.1 (a) can be used to cross reference the Somerville Zoning Atlas with the applicable provisions for each zoning district of this Ordinance.

TABLE 2.1 (a) Zoning Districts

Residential Districts

- Neighborhood Residential (NR)
- Urban Residential (UR)

Mid-Rise Districts

- Mid-Rise 3 Story (MR3)
- Mid-Rise 4 Story (MR4)
- Mid-Rise 5 Story (MR5)
- Mid-Rise 6 Story (MR6)

High Rise Districts

- High Rise (HR)

Commercial Districts

- Fabrication (FAB)
- Commercial Core (CC)
- Commercial Industry (CI)
- Commercial Business (CB)

Special Districts

- Civic (CIV)
- Assembly Square (ASQ)
- North Point (NP)
- Powderhouse School Redevelopment (PSR)
- Tufts University (TU)

FIGURE 2.1 (a) Example Zoning Map



FIGURE 2.1 (b) Example Zoning Map



2. OVERVIEW & GUIDE

Zoning Atlas Overview

2. Transit Areas

- a. An example map illustrating how the Transit Areas established by §1.4.3 of this Ordinance are mapped to real property is shown in Figure 2.1 (c) only for illustrative purposes.

MAP 2.1 (c) Example Transit Areas Map



3. Pedestrian Streets

- a. An example map illustrating how the Pedestrian Streets established by §1.4.4 of this Ordinance are mapped to real property is shown in Figure 2.1 (d) only for illustrative purposes.

MAP 2.1 (d) Example Pedestrian Streets Map



2.2 BUILDING TYPES OVERVIEW

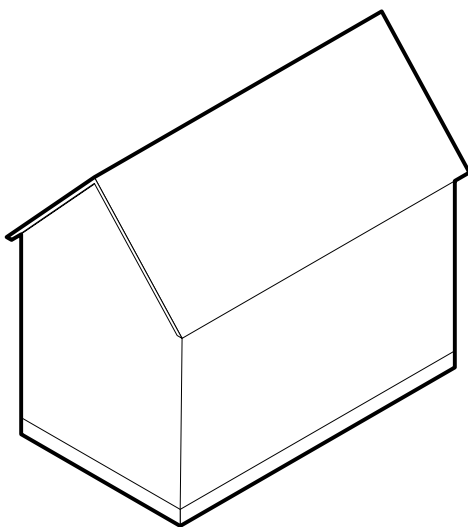
1. General

- 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.

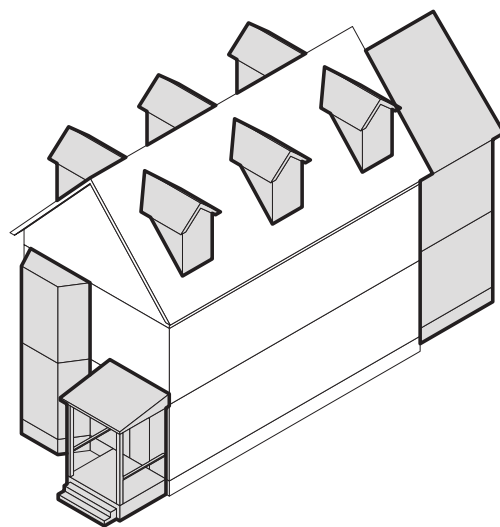
2. Building Assembly

- a. Building types are comprised of the main massing of a building and various components.
- b. The main massing is the primary and the most important portion defining a building type's form and scale. The main massing of each building type is regulated using dimensional standards that differ for each type.
- c. Building components are accessory elements attached to the main mass of a principal building that increase the buildings usefulness. Each building component has dimensional standards that differ for each type.
- d. Building components provide an important means for achieving variety and individuality in design and are permitted as indicated for each building type.

FIGURE 2.1 (a) Building Assembly



Main Massing of a Building



Building Components

2. OVERVIEW & GUIDE

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

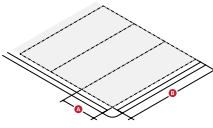
Building Standards

Color corresponds with Zoning District

Zoning District labeled at the top of every page

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

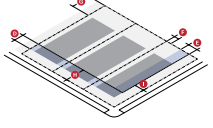
D. Cottage (cont.)
i. Lot Standards



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

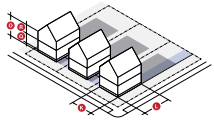
ii. Building Placement



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

28 | SOMERVILLE ZONING ORDINANCE
INTERNAL REVIEW DRAFT 12/19/16
INTERNAL REVIEW DRAFT 12/19/16
SOMERVILLE ZONING ORDINANCE | 29

2.3 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. Corner lots have two front lot lines and two side lot lines with no rear lot line.
 - 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. 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 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..
- d. Lot Development
 - i. Lot Coverage
 - a). The maximum area of a lot that is permitted to be covered by structures and impermeable surfaces. Structures are measured from the outside of the exterior walls at the ground floor, including covered porches and other building components.
 - 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 §10.3 Green Score 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

FIGURE 2.2 (a) Lot Dimensions

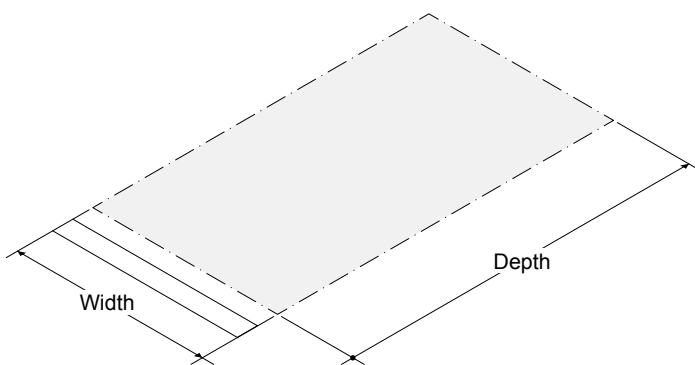
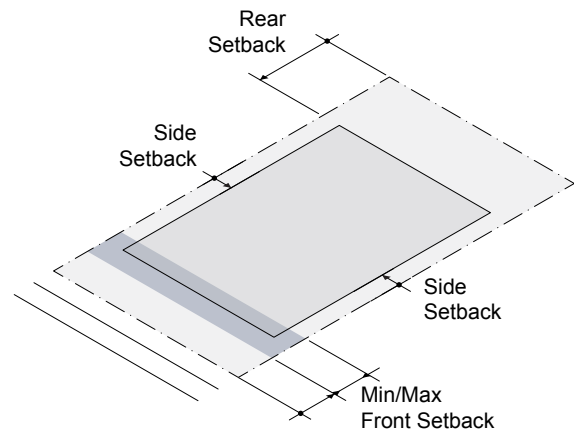


FIGURE 2.2 (b) Building Setbacks



2. OVERVIEW & GUIDE

Standards & Measurements

- 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.
- b. Parking Setbacks
- i. Unless otherwise specified, all parking, excluding underground parking, must be located at or behind any required parking setback.
- c. Setback Encroachments
- i. Building components may encroach into required setback as indicated for each type elsewhere in this Ordinance.
 - ii. Cornices, belt courses, sills, buttresses 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. Unenclosed fire escapes or emergency egress stairways may encroach into a required side or rear setback, provided that at least ten (10) feet is maintained from the vertical plane of any lot line.
 - vi. 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 24-hr average noise level of 55 dB(A) or less may fully encroach into a required setback.
- vii. Exterior walls are permitted to encroach into front, side, and rear setbacks up to eight inches (8") only for the purpose of adding insulating sheathing to the exterior wall assembly, provided that at least two (2) feet is maintained from the vertical plane of any side lot line.
 - viii. Minor structures accessory to utilities, such as hydrants, manholes, transformers, and other cabinet structures, may fully encroach into a required setback.
 - ix. Terraces, uncovered and unenclosed patios, and structures below and covered by the ground 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.
- d. Frontage Area
- i. The area of a lot between the façade of a principal building and any front lot line(s) extending fully to

FIGURE 2.2 (c) Parking Setbacks

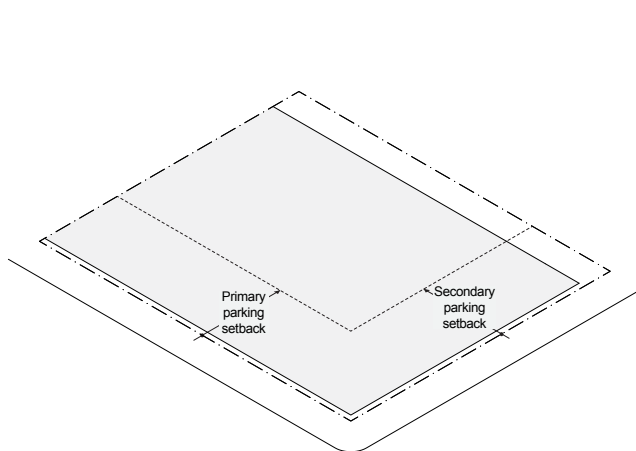
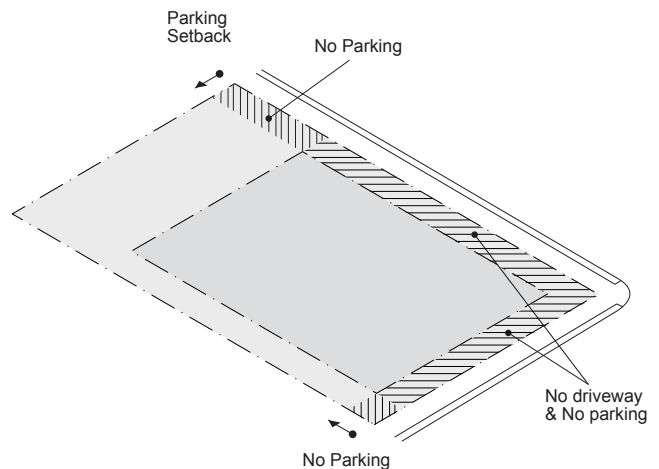


FIGURE 2.2 (d) Frontage Area



- each side lot line(s) is the frontage area of a lot.
- ii. Parking is not permitted in the frontage area and driveways are not permitted in the frontage area between a building and the front lot line.

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.
- 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.
 - a). The review boards may waive this requirement for any lot in the Neighborhood Residence district where any side lot line intersects with the front lot line at an acute angle.
- 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 2.2 (d).
 - 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.
 - d). Forecourts are considered part of the building for the purpose of measuring facade build out.
 - ii. Building Width
 - a). Width is measured parallel to the facade of a building, from the exterior of each side 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 each story of a building, measured at the exterior walls, but excluding building components.
 - 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 not counted as one (1) story unless the finished floor of the ground story is five (5) feet or more above

FIGURE 2.2 (d) Facade Build-Out

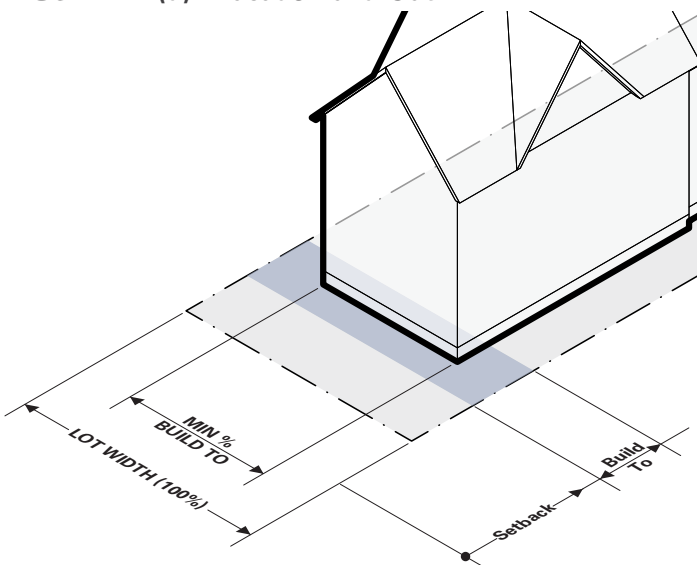
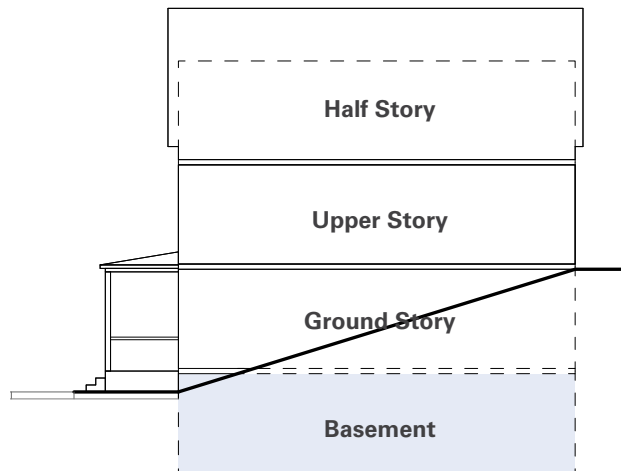


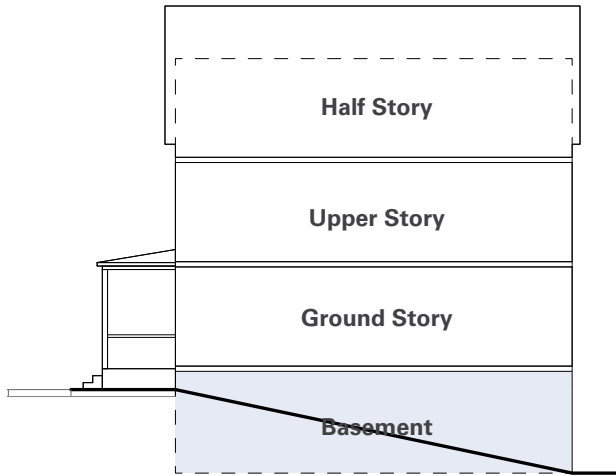
FIGURE 2.2 (g) Upward Slope



2. OVERVIEW & GUIDE

Standards & Measurements

FIGURE 2.2 (f) Downward Slope



the average ground level of the lot. See Figure 2.2 (g) and Figure 2.2 (h).

- v). 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.
- 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. Upper Story Step-Back
 - a). When required, any building that exceeds four (4) stories in height must step back at the 5th story as indicated for each building type.
 - i). Buildings on any lot less than sixty-five (65) feet deep are exempt from the upper story step-back requirement.
- 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**.

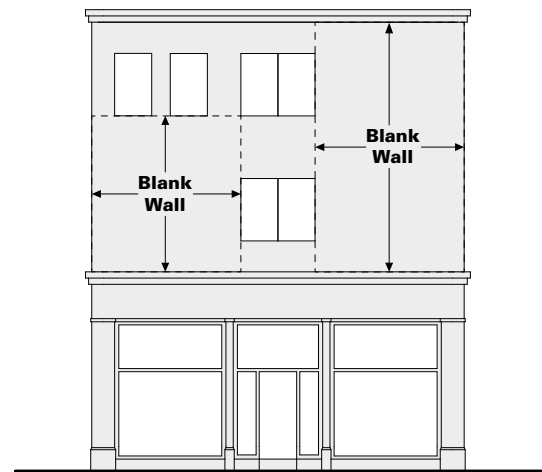
When there is no floor above, story height is measured from the surface of the finished floor to the top of the structural beam or joists above or the top of the wall plate, whichever is more.

- b). Minimum story height requirements are not measured for half-stories.
- viii. 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.
- ix. 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.
- x. 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.
- xi. Roof Features
 - a). Roof decks are permitted only on flat roofs and must be setback at least five (5) feet from any facade.
 - 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 minimum width and depth of 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.

5. Uses and Features

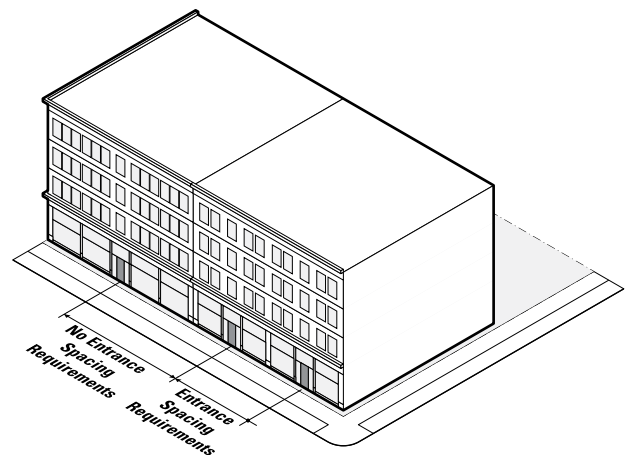
- a. Facade Composition

FIGURE 2.2 (i) Fenestration



- 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). 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 a minimum sixty percent (60%) Visible Light Transmittance (VLT) and no more than fifteen percent (15%) Visible Light Reflectance (VLR).
 - ii). For upper story fenestration, glazing must have a minimum of forty percent (40%) VLT and no more than fifteen percent (15%) VLR.
- ii. Blank Wall Area
 - a). Blank wall area is any portion of a façade 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 façade by at least four (4) inches.
 - b). Blank wall area limitations apply both vertically and horizontally for all stories of a building for any façade.
- b. Use & Occupancy
 - i. Pedestrian Access
 - a). Each building must have at least one (1) principal entrance, except that buildings with ground floor commercial spaces must have a principal entrance for each space in addition to the principal entrance for the building.
 - b). Principal entrances must be located on the façade of a building, provide both ingress and egress, and be operable at all times.

FIGURE 2.2 (j) Entrance Spacing

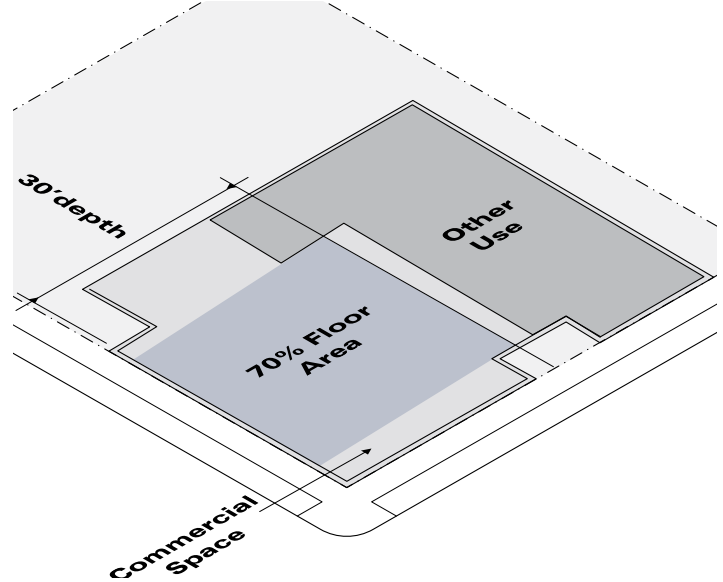


2. OVERVIEW & GUIDE

Standards & Measurements

- c). Principal entrance spacing is measured as the distance between center line of doors along a facade.
- d). Principal entrance spacing requirements must be met for each building individually, but are not applicable to adjacent buildings.
- 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. Habitable Space Depth
 - a). Ground story dwelling units must have a habitable room at least twenty (20) feet in depth, measured as the distance from the facade towards the interior of the building.
- iii. 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.
 - i). Commercial space 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.
 - ii). Required commercial space may be provided to one or more tenants.
- iv. Dwelling Units per Lot
 - a). The total combined number of dwelling units, including accessory apartments, that are permitted within a principal building type and accessory building type on the same lot.
- v. Dwelling Units
 - a). The minimum or maximum number of dwelling units permitted for a building type.
 - i). The maximum number of dwelling units permitted for specific uses is sometimes restricted for certain building types.
 - ii). Accessory apartments are not permitted for any lot where the principal building has a nonconforming number of dwelling units.
- vi. Gross Floor Area per Dwelling Unit (GFA/DU)
 - a). The maximum number of dwelling units permitted for a building type is equal to the total GROSS FLOOR AREA of the building, excluding parking, divided by the GFA/DU indicated for each building type.
 - i). The GFA/DU permitted for each building type is different for buildings on different sized LOTS, SUSTAINABLE BUILDINGS, and 100% AFFORDABLE BUILDINGS.

FIGURE 2.2 (k) Commercial Space Depth



- vii. Outdoor Amenity Space
 - a). When required 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 a habitable room within 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, provided that the space includes the total seating area required for each dwelling unit that the shared space is meant to serve.

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. Clearance
 - iv. Seating Area, Clear
- b. Bays
- c. Entry Canopys
- d. Stoops
- e. Porticos
- f. Porchs
- g. Engaged Porchs
- 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

2. OVERVIEW & GUIDE

Standards & Measurements