



OBJECTIVE STANDARDS

Multifamily & Mixed Use Housing

ARB Hearing

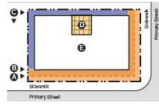
November 19, 2020

(Continued from October 15, 2020)

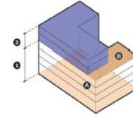
Agenda

Large Urban
Scale Strategies

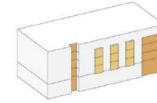
Fine Grained
Architectural Strategies



Site Design



Massing



Modulation



Facade Articulation

1. Remaining Topics (10 minutes/topic)

- Façade Design
- Residential Entries
- Open Space
- Materials

2. Revisions to Previous Topics (time permitting)

Topics and Subsections

<i>Topic</i>	<i>Section</i>
Admin	18.24.010: Purpose and Applicability
Site Design	18.24.020: Public Realm/Sidewalk Character
	18.24.030: Site Access
	18.24.040: Building Orientation and Setbacks
Building Design	18.24.050: Building Massing
	18.24.060: Façade Design
	18.24.070: Residential Entries
	18.24.080: Open Space
	18.24.090: Materials (TBD)
Performance Standards (existing code sections)	Visual Screening (18.23.050)
	Lighting (18.23.030)

Process & Timeline



18.24.060: Façade Design

(A) Intent Statement:

To create cohesive and well-crafted building facades with human-scaled details that incorporate textures, colors, and other details that are compatible with and enhance the surrounding area. Facades should include the following elements:

- Human-scaled detail, articulation, and craftsmanship
- Quality of construction, craftsmanship, and design to create long lasting buildings
- ~~• Articulation of the building base or ground floor, body or middle, and top, cornice or parapet edge~~
- Expression of a human-scaled façade rhythm and pattern that reflects the building's use
- Fenestration that enhances the architectural character of the building
- Defined building entry that is proportional to the building and number of people served

(B) Application

(C) Human Scaled Architecture

- (i) Base/Middle/Top
- (ii) Facade Articulation
- (iii) Compatible Rhythm and Pattern
- (iv) Emphasize Building Elements & Massing

(D) Ground Floor Character

(E) Parking, Loading, Utilities

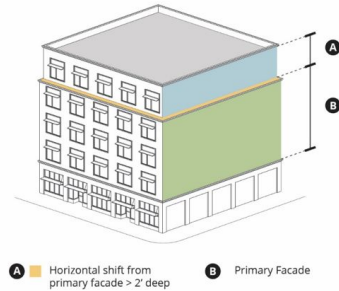
(C) Human Scaled Architecture

(i) Base/Middle/Top

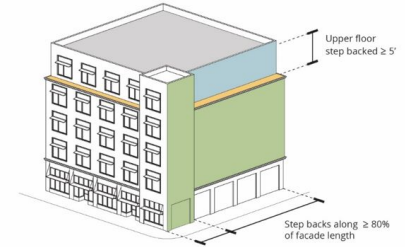
(a) Buildings three stories or taller shall be designed to differentiate a defined base or ground floor, a middle or body, and a top, cornice, or parapet cap. Buildings two stories or less shall include a defined base and top. Each of these elements shall be distinguished from one another through use of **two or more of the following four techniques**:

1. **Variation in building modulation** (select a minimum of one)
 - a. Horizontal shifts. Changes in floor plates that protrude and/or recess with a minimum dimension of two feet from the primary facade.
 - b. Upper floor step backs. A horizontal step back of upper-floor façades with a minimum five-foot step back from the primary façade for a minimum of 80% of the length of the façade.
 - c. Ground floor step back. A horizontal shift of the ground floor facade with a minimum depth of two feet for a minimum 80% of the length of the façade. Ground floor step backs shall not exceed the maximum setback requirements, where stated.
2. **Variation in facade articulation** (select a minimum of one)
 - a. Horizontal and/or vertical recesses such as a pattern of recessed grouping of windows, recessed panels, or similar strategies as approved by the Director. The recess shall be a minimum four inches in depth.
 - b. Horizontal and/or vertical projections such as shading and weather protection devices, decorative architectural details, or similar strategies as approved by the Director. Projections shall be a minimum four inches in depth.
 - c. Datum lines that continue the length of the building, such as parapets or cornices, with a minimum four inches in height or a minimum two inches in depth and include a change in material;
3. **Variation in fenestration**: size, proportions, pattern, and depth or projection.
4. **Variation in two of the following**: façade material, material size, texture and pattern, or color.

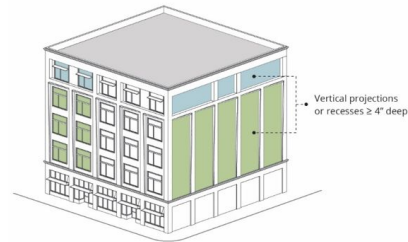
1(a)



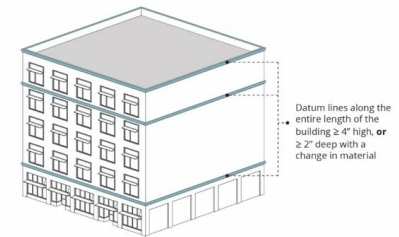
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2(a)



2(c)



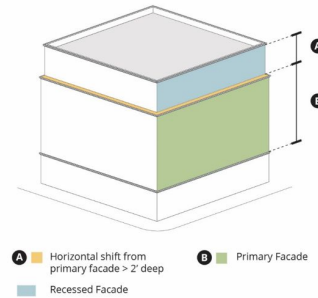
(C) Human Scaled Architecture

(i) Base/Middle/Top

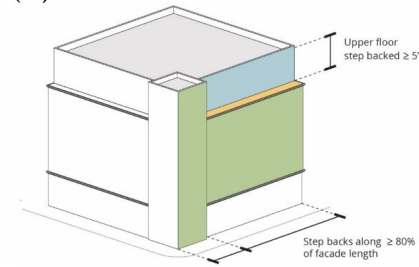
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2. **Variation in facade articulation** (select a minimum of one)
 - a. Horizontal and/or vertical recesses or projections such as a pattern of recessed grouping of windows, recessed panels, bay windows or similar strategies as approved by the Director. The recess shall be a minimum four inches in depth.
 - b. Horizontal and/or vertical projections such as shading and weather protection devices, decorative architectural details, or similar strategies as approved by the Director. Projections shall be a minimum four inches in depth.
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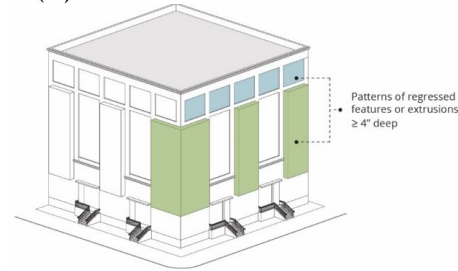
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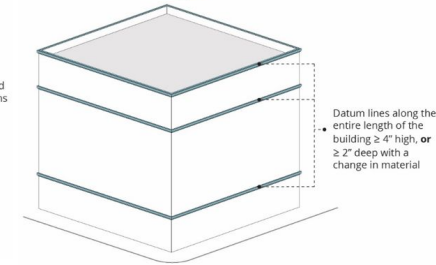
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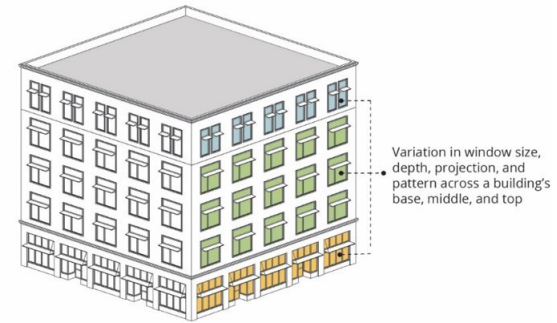
(C) Human Scaled Architecture

(i) Base/Middle/Top

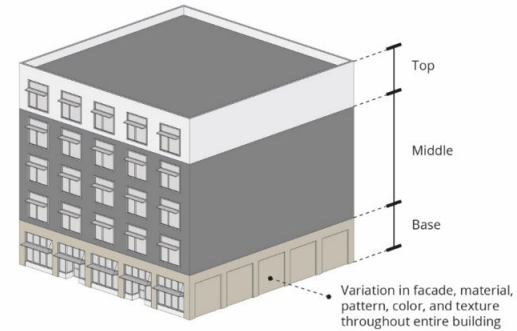
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 - a. Horizontal shifts. Changes in floor plates that protrude and/or recess with a minimum dimension of two feet from the primary facade.
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 - a. Horizontal and/or vertical recesses or projections such as a pattern of recessed grouping of windows, recessed panels, bay windows or similar strategies as approved by the Director. The recess shall be a minimum four inches in depth.
 - b. Horizontal and/or vertical projections such as shading and weather protection devices, decorative architectural details, or similar strategies as approved by the Director. Projections shall be a minimum four inches in depth.
 - c. Datum lines that continue the length of the building, such as parapets or cornices, with a minimum four inches in height or a minimum two inches in depth and include a change in **material**;
3. **Variation in fenestration**: size, proportions, pattern, and depth or projection.
4. **Variation in two of the following**: façade material, material size, texture and pattern, or color.

3. Variation in Fenestration



4. Variation in Material/Color



(ii) Façade Articulation

- (a) Building facades shall use a variety of strategies including building modulation, fenestration, and façade articulation to create visual interest and express a variety of scales through a variety of strategies. All facades shall include a minimum of one of the following façade articulation strategies to create visual interest:
1. Vertical and horizontal recesses such as a pattern of recessed grouping of windows, recessed panels, or similar strategies as approved by the Director. The recess shall be a minimum four inches in depth.
 2. Vertical and horizontal projections such as shading and weather protection devices, decorative architectural details, or similar strategies as approved by the Director. Projections shall be a minimum four inches in depth.
 3. Datum lines that continue the length of the building, such as cornices, with a minimum four inches in depth, or a minimum two inches in depth and include a change in material;
 4. Balconies, habitable projections, or Juliet balconies (every 20 to 40 feet) with a minimum four inches in depth;
 5. Screening devices such as lattices, louvers, shading devices, perforated metal screens, or similar strategies as approved by the Director; or
 6. Use of fine-grained building materials, such as brick or wood shingles, not to exceed eight inches in either height or width.



(iii) Compatible Rhythm and Pattern

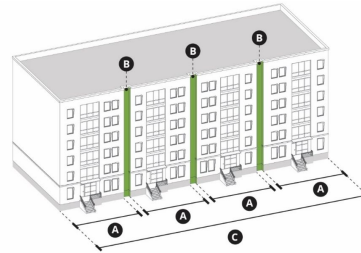
(a) Residential or residential mixed-use buildings shall express a vertical rhythm and pattern that reflects the size and scale of a housing unit and/or individual rooms and spaces. This may be achieved with building modulation to create vertically oriented facades (height greater than the width of the façade), façade articulation and fenestration repetitive vertically oriented patterns. The following standards apply:

1. For facades less than 100 feet in length, the façade shall have vertically oriented patterns of vertical recesses or projects, façade articulation, and/or fenestration.
2. For continuous facades greater than 100 feet in length, the façade shall include a vertical recess or projection with a minimum four feet wide and two feet deep vertical shift modulation to establish a rhythm between 20 to 50 feet in width for housing units or 12 to 16 feet in width for individual rooms and spaces.

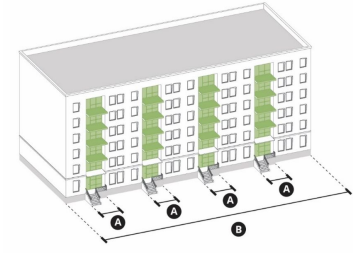
(b) Mixed-use and non-residential buildings shall express a vertical rhythm and pattern by using one of the following options:

1. Facades shall use vertical patterns of building modulation, façade articulation, and fenestration;
2. Facades that use horizontal articulation and fenestration patterns shall use a vertical massing strategy with a minimum four feet wide and two feet deep vertical shift in modulation at least once every 50 feet of façade length.

(c) Storefront uses shall express a vertical rhythm not to exceed 30 to 50 feet in width.



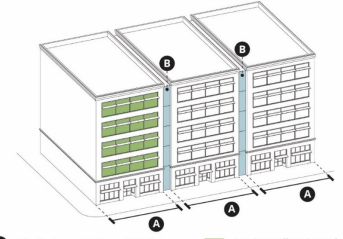
- A 20' - 50' horizontal increment
- B 4' wide, 2' deep vertical recesses
- C Facade length $\geq 100'$
- Vertically oriented patterns



- A 12' - 16' wide vertical recesses/projections
- B Building length $\geq 100'$
- Vertically oriented patterns



- Vertical patterns along building facade



- A Vertical modulation $\geq 50'$ of building length
- B 4' wide, 2' deep vertical recesses
- Horizontally oriented patterns along building facade



(iv) Emphasize Building Elements and Massing

(a) Building Entries Within Façade Design

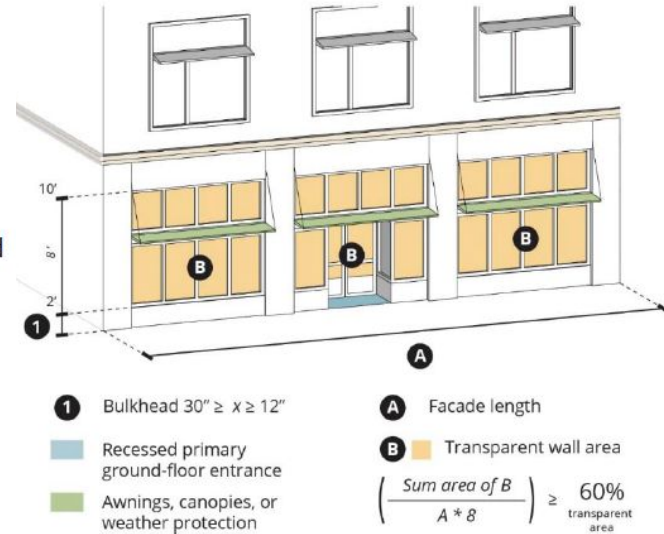
1. Primary building entries shall be scaled proportionally to the number of people served (amount of floor-area or number of units accessed). Building entries inclusive of doorway and facade plane shall meet the following minimum dimensions:
 - a. Individual residential entries: five feet in width
 - b. Shared residential entry, such as mixed-use buildings: 10 feet in width
 - c. Commercial building entry: 20 feet in width
 - d. Storefront entry: six feet in width
2. Primary building entries (not inclusive of individual residential entries) shall include a façade modulation that includes at least one of the following:
 - a. A recess or projection from the primary façade plane with a minimum depth of two feet.



(D) Ground Floor Character

(i) Storefront/Retail Ground Floors

- (a) Ground floor height shall be a minimum 14 feet floor-to-floor or shall maintain a 2nd floor datum line of an abutting building.
- (b) Transparency shall include a minimum 60 percent transparent glazing between 2 and 10 feet in height from sidewalk, providing unobstructed views into the commercial space.
- (c) Bulkheads and solid base walls: If provided, shall measure between 12 and 30 inches from finished grade
- (d) Primary entries shall include weather protection that is a minimum 6 feet wide and 4 feet deep by recessing the entry, providing an awning or using a combination of these methods.
- (e) Awnings, canopies and weather protection:
 1. When transom windows are above display windows, awnings, canopies and similar weather protection elements shall be installed between transom and display windows. These elements should allow for light to enter the storefront through the transom windows and allow the weather protection feature to shade the display window.
 2. Awnings may be fixed or retractable.
 3. Awnings, canopies and other weather protection elements shall not extend across the entire facade. Instead, individual segments shall be installed over each storefront entry or set of storefront windows and shall not extend across wall sections, across multiple windows or over columns.



(D) Ground Floor Character

(ii) Other Non-residential Ground Floors

- (a) Ground floor height shall be a minimum 14 feet floor-to-floor or shall match the 2nd floor datum line of an abutting building.
- (b) Transparency shall include a minimum 50 percent transparent glazing between 4 and 10 feet in height from sidewalk or terrace grade.
- (c) Primary entries shall include weather protection that is a minimum 10 feet wide and 8 feet deep by recessing the entry, providing an awning or using a combination of these methods.

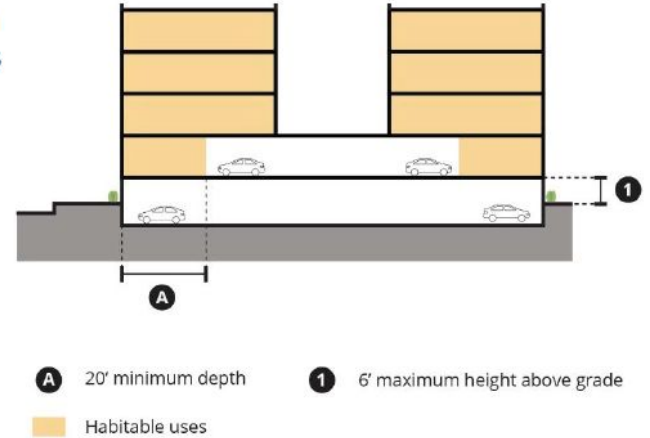
(iii) Residential Ground Floors

- (a) Finished Floor Height: Units on ground floors shall have a finished floor height at a minimum two feet above average back of sidewalk height for the associated façade.
- (b) Primary entries shall include weather protection that is a minimum 4 feet wide and 4 feet deep by recessing the entry, providing an awning or using a combination of these methods.



(E) Parking/Loading/Utilities

- (i) Entry Size: No more than 25% of the site frontage facing a street should be devoted to garage openings, carports, surface parking, loading entries, or utilities access (on sites with less than 100 feet of frontage, no more than 25 feet)
- (ii) Above grade structured parking levels facing a public right-of-way or publicly accessible open space/path shall be lined with commercial or habitable uses with a minimum depth of 20 feet.
- (iii) Partially sub-grade parking not exceeding six feet in height above abutting grade at back of sidewalk shall be screened with features meeting the standards of section 18.24.110 *Visual, Screening, and Landscaping*.



18.24.070: Residential Entries

(A) Intent

Private entries into ground floor residential units shall be designed to provide:

- human-scaled detailing
- enhanced pedestrian experience
- transition between public and private space
- spaces for residents to gather and spend time outdoors
- resident privacy

(B) Ground floor unit entries



(B) Ground floor unit entries

(i) Where ground floor residential unit entries are required, one or more of the following entry types shall be provided:

(a) Stoop:

1. Stoops shall provide entry access for a maximum of two units.; and
2. Stoop entry landings shall be a minimum 4 feet in depth; and
3. The maximum stoop height from the back of sidewalk grade shall be 5 feet.

(b) Porch:

1. Porches shall provide entry access for a maximum of one unit; and
2. Porches shall be large enough so a 6-foot by 6-foot square can fit inside of a porch for each unit; and
3. The maximum porch floor height from the back of sidewalk grade shall be 5 feet.

(c) Terrace:

1. A Terrace may serve multiple unit entries; and
2. The maximum Terrace height shall be 30 inches above the grade of the back of the adjacent sidewalk or accessway; and
3. Walls, fences and hedges on Terraces shall be a maximum of 42 inches tall and have a minimum transparency of 40 percent.

(d) Frontage Court:

1. A Frontage Court may serve multiple unit entries; and
2. The minimum Frontage Court width along a primary frontage shall be 25 feet; and
3. The maximum Frontage Court width along a primary frontage shall be 50 percent of the facade length or 80 feet, whichever is less; and
4. The minimum Frontage Court depth shall be 25 feet; and
5. The maximum Frontage Court depth shall be 50 feet or a ratio not to exceed 2:1 depth to width.

(a)



(b)



(c)



(d)



18.24.080: Open Space

(A) Intent

To ensure that residents and visitors have access to usable open space and common facilities that provide recreational opportunities, promote a healthy environment, and enhance the experience of living in Palo Alto. Common and private open spaces should include the following characteristics:

- Be integrated into the site access and building circulation strategy
- Be generous in dimension to provide usable space
- Provide landscape elements that will support the health of the plants and enhance the character of place
- Promote public health
- Be located to provide easy access to private and common building areas
- Promote sustainable practices and opportunities for green infrastructure
- Promote community safety through eyes on the street

(B) Private Open Space

(C) Common Open Space

(B) Private Open Space

Private Open Spaces shall meet the following standards:

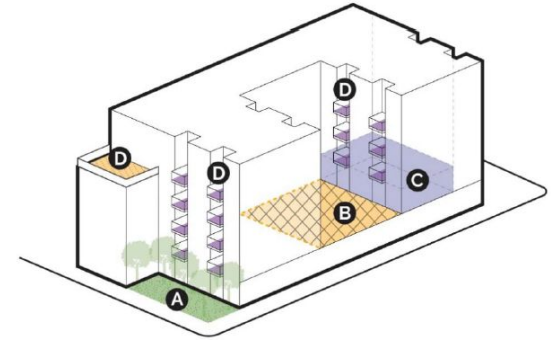
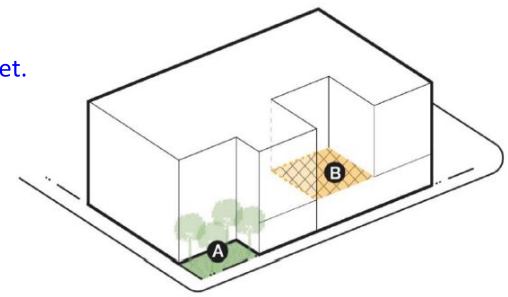
- (a) Minimum dimension of six feet by six feet.
- (b) Minimum clear height dimension of 8'-6" feet
- (c) Be accessed directly from a residential unit
- (d) Balconies shall not be located within the daylight plane
- (e) Notwithstanding subsection (a), ground floor patios shall meet the following minimum requirements:
 1. RM-20 and RM-30 districts, Minimum dimension of eight feet by eight feet and 100 square feet of area for at least 75% of the area
 2. RM-40 districts, Minimum dimension of six feet by six feet and 80 square feet of area for at least 75% of the area
 3. Street facing private open space on the ground floor shall meet the finished floor height for ground floor residential standards in section 18.24.040(iii)(a)



(C) Common Open Space

Common Open Space shall meet the following standards:

1. ~~Minimum dimension of 12 feet.~~ Minimum size of 200 square feet and minimum dimension of 10 feet.
2. Minimum of 60% of area open to the sky free of permanent weather protection or encroachments
3. Notwithstanding subsection (1), courtyards enclosed on four sides shall have a minimum dimension of 40 feet and have a minimum courtyard width to building height ratio of 1:1.25
4. Include places to sit
5. A minimum 20% of landscaping
6. Soil Depth: Planting in above grade courtyards shall have a minimum soil depth of 12 inches for ground cover, 20 inches for shrubs, and 36 inches for trees.
7. Rooftop Open Space:
 - a. In order to qualify as usable open space, a rooftop garden shall meet the requirements set forth in Section 18.40.230.
 - b. Rooftop open spaces may fulfill usable open space requirements in the following districts:
 - (i) CD-C sites that do not abut a single- or two-family residential use or zoning district, rooftop gardens may qualify as usable open space and may count as up to 75% of the required usable open space for the residential component of a project.
 - (ii) For CN and CS sites on El Camino Real and CC(2) sites that do not abut a single- or two-family residential use or zoning district, rooftop gardens may qualify as usable open space and may count as up to 60% of the required usable open space for the residential component of a project.



- A. Publicly Accessible Open Space
- B. Common Open Space
- C. Common community room opening into Common Open Space
- D. Private open space (e.g. balconies, roof courtyard, etc.)



18.24.090: Materials (EXAMPLE)

70.04.2.8 Materials

Intent

To promote the use of high quality, durable, and attractive materials that exhibit a sense of permanence and contribute to the aesthetic quality of the development and to the urban design fabric of the community.

Applicable Design Principles

1. Design Places for People
3. Promote High-quality Design
4. Consider Development Context
7. Incorporate Sustainability and Resiliency

Design Guideline

G1. Refer to Table 70.04.2.8 Materials:

- a. The predominant building material(s) shall be high quality, durable, and attractive.
- b. The predominant building material(s) may be complemented with other secondary materials that may not be appropriate on large areas of the facade.
- c. Accent materials that would generally not be acceptable on large areas of the facade may be used in limited areas of the facade to highlight architectural features.

G2. Standard S2 shall be met.

Design Standard

S1. Refer to Table 70.04.2.8 Materials:

- a. Buildings shall utilize primary materials for no less than 65 percent of each building facade.
- b. Secondary materials are prohibited as primary cladding on building facades and shall not be allowed on more than 35 percent of each building facade.
- c. Accent materials are permitted on no greater than 5 percent of each facade as trims or accents (e.g. flashing, projecting features, ornamentation, etc.).
- c. Buildings 30 feet and shorter, measured from grade plane to eave or top of parapet, whichever is higher, with elevations 50 feet or narrower may utilize any secondary material as a primary material.

S2. Materials identified as prohibited in Table 70.04.2.8 shall not be used.

Table 70.04.2.8 Materials

P = Primary material
S = Secondary Material
A = Accent Material
N = Prohibited Material or Fencing Type

Material	Commercial, Industrial, Institutional, or Mixed-Use	Multifamily and Single Family Attached
Brick (full dimensional)	P	P
Stone/masonry	P	P
Stucco	S ¹	P
Glass (transparent, spandrel)	P	P
Finished wood, wood veneers, and wood siding	P	P
Factory or naturally finished flat, profiled, fluted, or ribbed metal panels	P	P
Fiber reinforced cement siding and panels	S ¹	P
Concrete blocks with integral color (ground, polished, or glazed finishes)	S ¹	S ¹
Concrete (poured in place or precast)	P	P
Concrete blocks with integral color (split face finish)	S ¹	S ¹
Ceramic tile	S ¹	S ¹
Standing seam metal	S ¹	S ¹
Other material as approved by the Planning Commission	P/S	P/S
Glass block	A	A
Corrugated metal	A	A
Vegetated wall panels or trellises	A	A
Vinyl siding	N	N
T-111 Plywood	N	N
Exterior Insulation Finishing System (EIFS)	N	N
Plastic or vinyl fencing	N	N
Chain link fencing ²	N	N

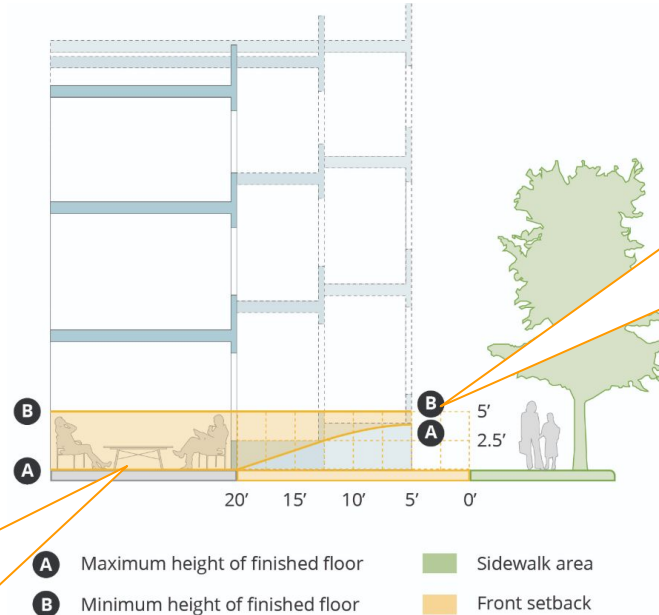
¹ Smaller scale buildings may use this as a primary material. See 70.04.2.8.S1.d

² Existing chain link fencing may be replaced on sites 10,000 square feet and smaller

18.24.040: Building Orientation + Setbacks

(iii) Ground Floor Residential Units

(a) The finished floor of ground floor residential units shall be within the minimum and maximum heights according to setback distance from back of sidewalk identified in Figure XXX.

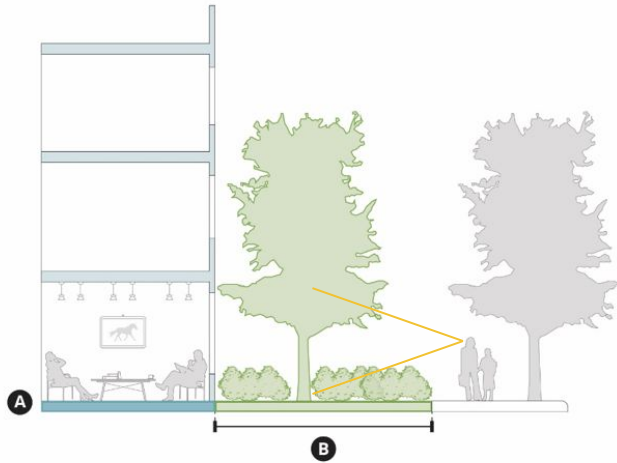


Ground floor residential units closer to the sidewalk require greater height separation to ensure privacy

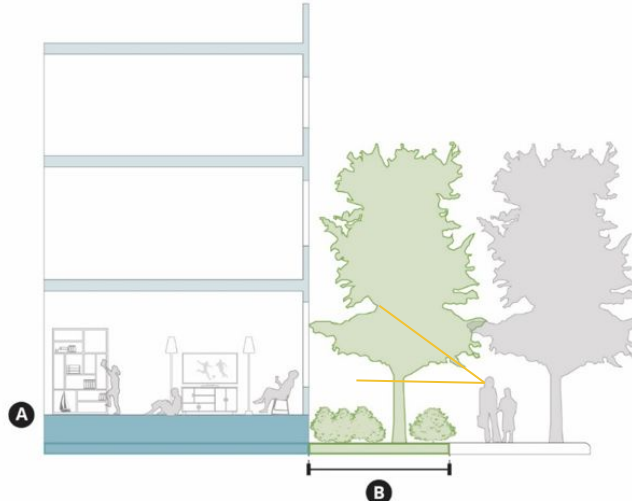
Ground floor residential units further from the sidewalk can be closer to grade since distance and landscaping provides privacy.



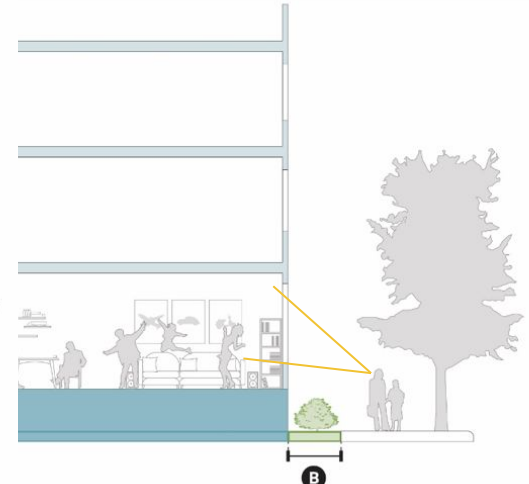
Setback + FF Height for Ground Floor Units



- A** Ground floor at sidewalk height/grade
- B** Building setback $\leq 20'$ from back of sidewalk



- A** Ground floor $\geq 2.5'$ above sidewalk height/grade
- B** Building setback $\geq 12.5'$ from back of sidewalk



- A** Ground floor $\geq 4'$ above sidewalk height/grade
- B** Building setback $\geq 5'$ from back of sidewalk

18.24.040: Building Orientation + Setbacks

(iii) Ground Floor Residential Units

(b) Ground floor units with a finished floor less than two feet above grade shall have a minimum of one tree per 25 linear feet of façade located in the building set back.

(c) Ground floor residential **entries** shall be setback a minimum of 10 feet from the back of sidewalk.

(d) Where no minimum building setback is required, all residential units shall be set back a minimum 5 feet from back of walk.

(e) A minimum of 80% of the ground floor residential units that face a public right-of-way or publicly accessible path, or open space shall have a unit entry with direct access to the sidewalk, path, or open space. (Senior units or other deed-restricted units for special populations are exempt)

