

Form-Based Code Circuit Training!

PAW Boot Camp

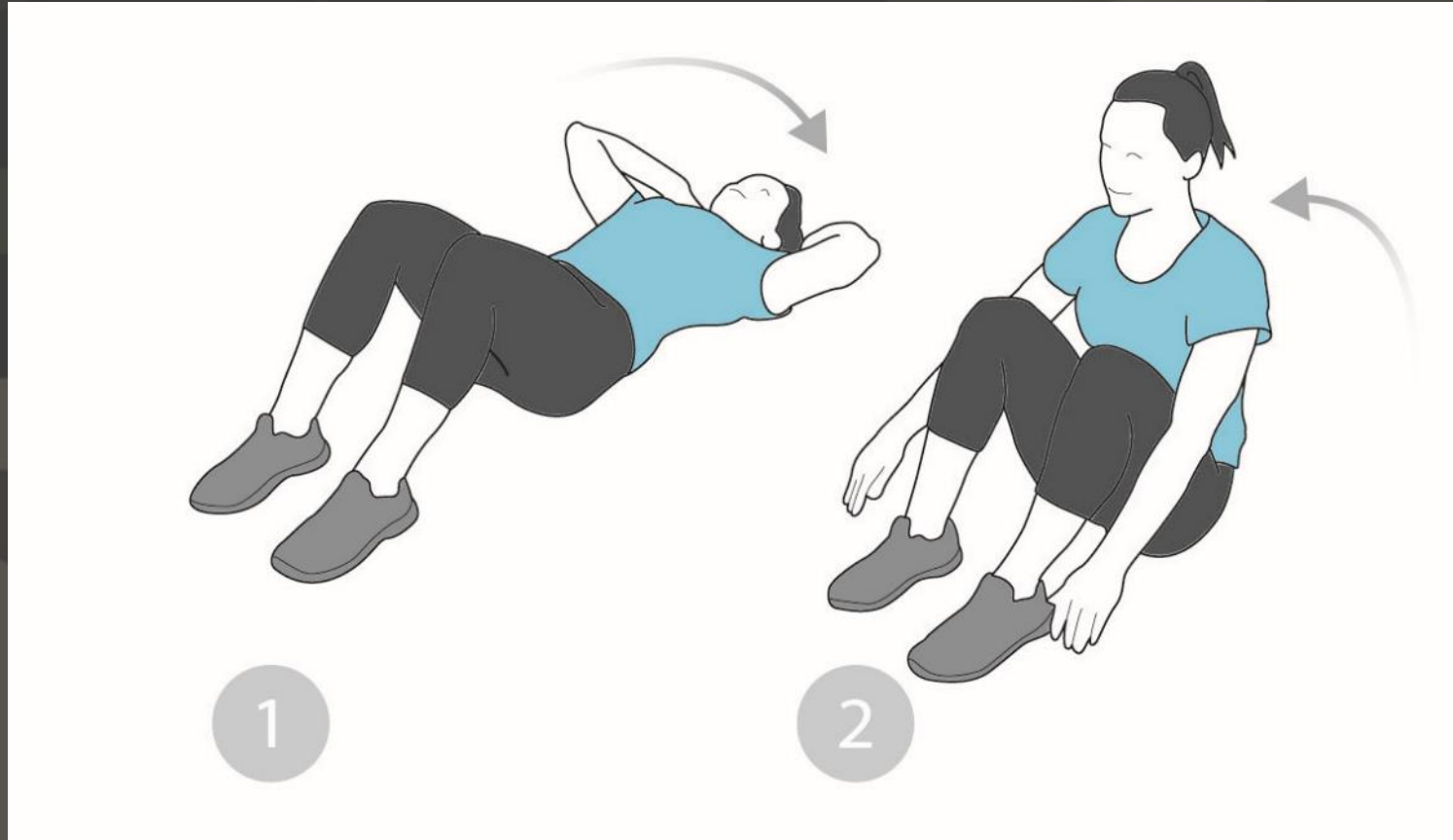
Mercer Island, November 15, 2019

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Training Exercises

1. Form-based codes calisthenics
2. Code initiation sprints
3. Land use reverse lunges
4. Housing diversity aerobics (including a VPS drill)
5. Community design jumping jacks
6. Block frontage bench dips
7. **Site design sit-ups**
8. **Building design stair climb**
9. Parking push-ups
10. Lessons learned stretches



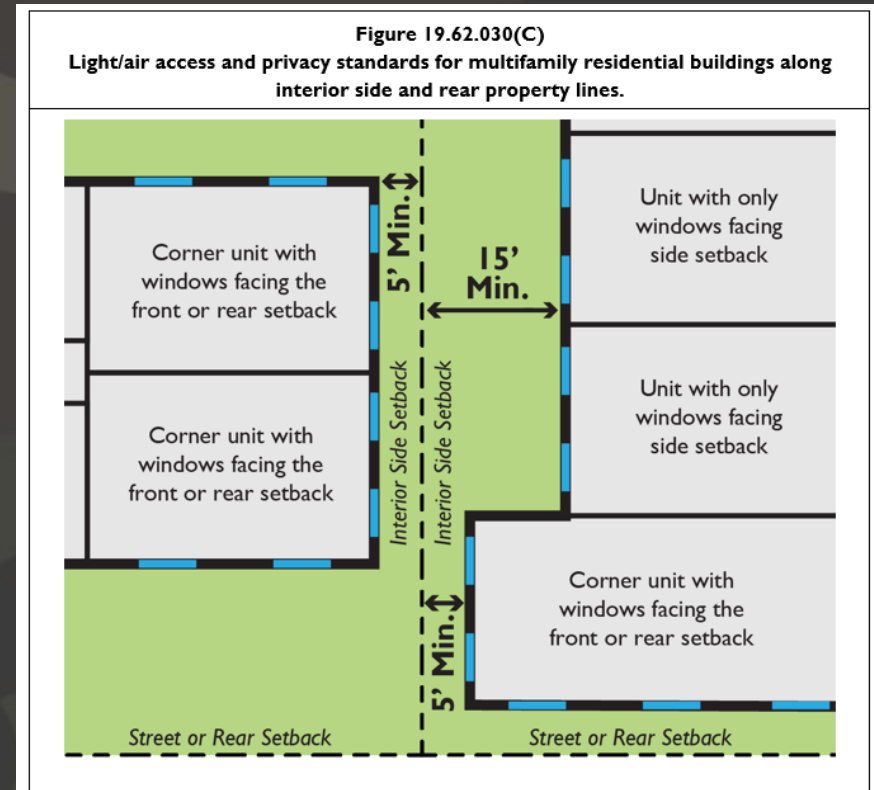
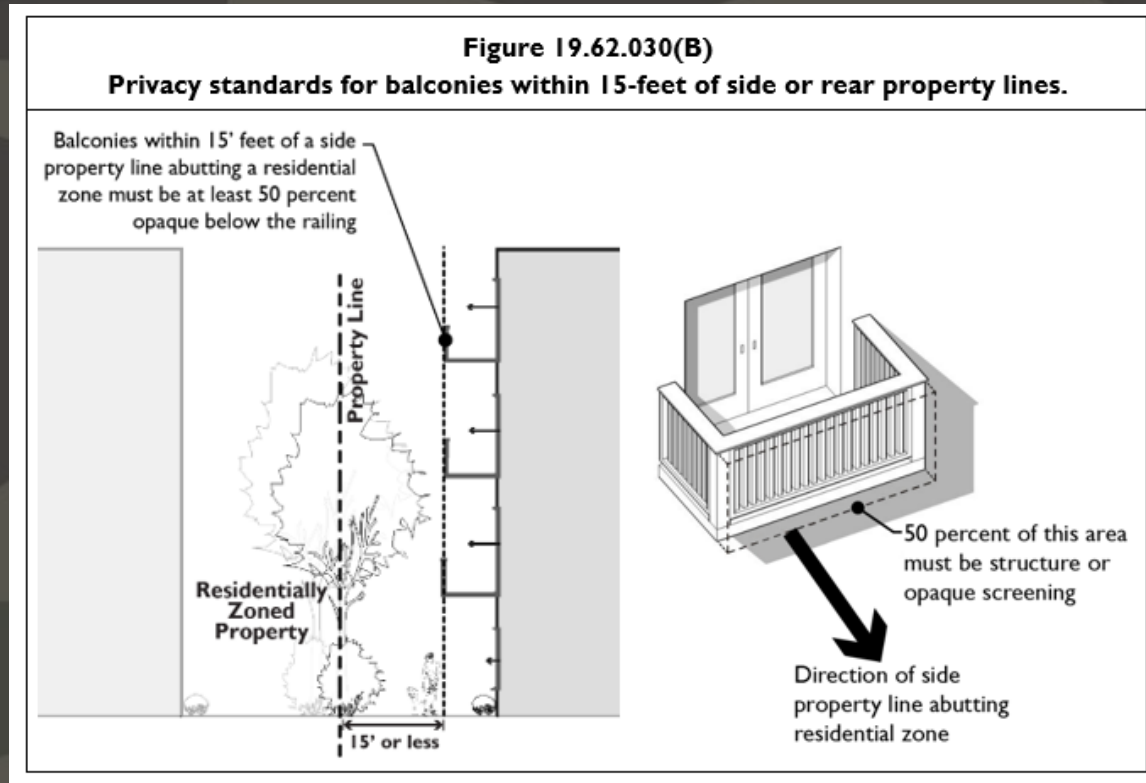
Site Design Sit-Ups

Site Planning

1. Relationships to adjacent properties
2. Residential open space
3. Commercial open space
4. Landscaping

Relationship to adjacent properties

Most important in areas with zero or minimal side yard setbacks



Residential Open Space

Figure 19.62.040(B)(2)
Shared open space examples.



The upper left example include a combination of open lawn area for informal recreation plus pathways and decorative landscape areas to enhance the setting for residents. The upper right courtyard includes pathways, seating areas, landscaped beds, and decorative lighting to provide a visual and physical amenity for residents.



The left image above includes a covered gathering space with outdoor grills adjacent to a landscaped commons with a central pathway. The right image includes a pond/wetland type area with boardwalk and seating areas.

Residential Open Space – Min. Area

- A critical element to livability – and also marketability
- MAKERS’ approach: Minimum square footage based on number and size of units

	Tukwila			Comparable Jurisdictions				
	<u>Tukwila South Proposed</u>	<u>Current Code: MDR/HDR</u>	<u>Current Code: TUC</u>	<u>Newcastle Commons Newcastle</u>	<u>Greenbridge King County</u>	<u>Discovery Heights Issaquah Highlands¹</u>	<u>City of Anacortes</u>	<u>City of Shoreline</u>
Recreation Space								
Studio	100 SF per unit	400 SF per unit	200 SF per unit	50 SF per unit	90 SF per unit	48 SF per unit	100 SF per unit	100 SF per unit
1-BR	100 SF per unit	400 SF per unit	200 SF per unit	65 SF per unit	90 SF per unit	48 SF per unit	100 SF per unit	100 SF per unit
2-BR	150 SF per unit	400 SF per unit	200 SF per unit	80 SF per unit	170 SF per unit	48 SF per unit	150 SF per unit	130 SF per unit
3-BR+	200 SF per unit	400 SF per unit	200 SF per unit	80 SF per unit	170 SF per unit	48 SF per unit	150 SF per unit	170 SF per unit

1. Issaquah Zoning code allows for recreation space to be provided as Individual Private Community Space such as patios, balconies or decks or Common Private Community Space which is easily accessible to all residents of the complex

Residential Open Space - Proportion

- Allow multiple types of space to meet the development's cumulative requirements – up to a point. Diversity is desirable.
- Provide design standards for each option to ensure usability.

Recreation space type	Maximum allowable percentage of required useable recreation space
Shared outdoor open space	100%
Ground level individual open space	100% (for adjacent units only)
Balconies	50%
Common indoor recreation areas	20%

Residential Open Space - Examples

Indoor rec rooms



Shared outdoor space



Roof decks



Individual outdoor space



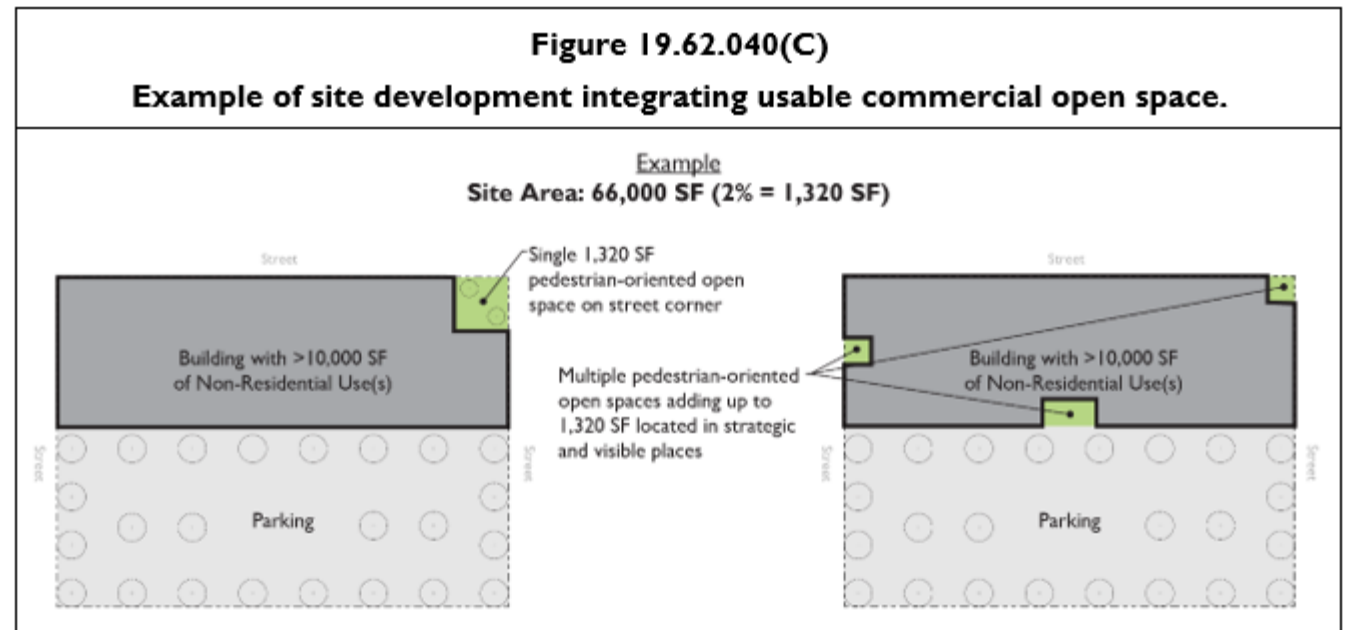
Balconies



Commercial Open Space

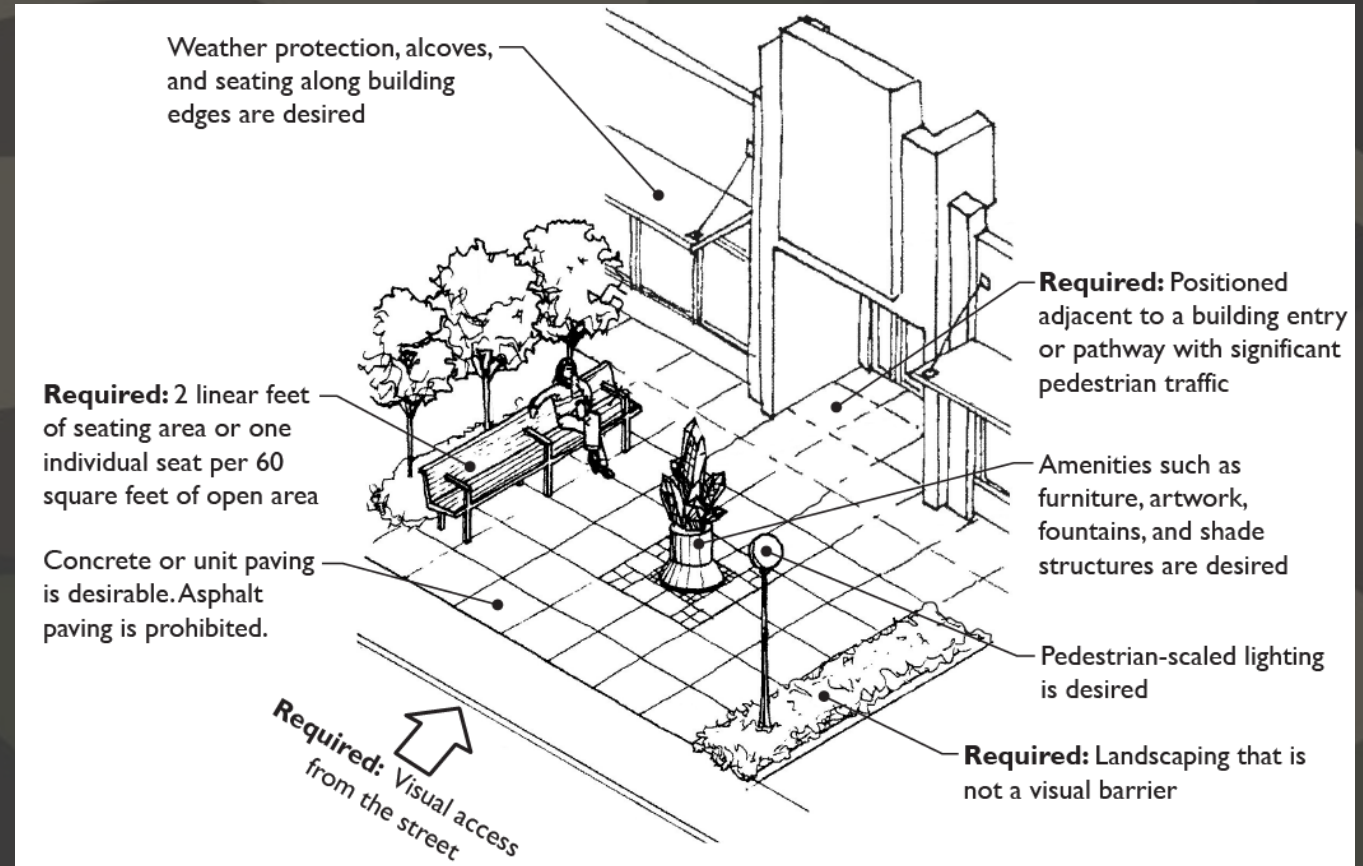
C. Usable commercial open space. New developments with non-residential uses with more than 10,000-square-feet of gross floor area in the C, CBD, and MMU zones must provide open space equal to at least two-percent of the development site. The open space may be in the form of pedestrian-oriented open space per subsection (D) below, garden, play area and/or other open space feature that serves both as a visual amenity and a place for human activity. Portions of sidewalks that are wider than 12-feet and which meet the standards of pedestrian-oriented open space may be counted toward this requirement.

DEPARTURE: Open space area may be reduced to one-percent of the development site if the director finds the project includes exceptional design features and elements that meet the purpose of the standards. This includes open spaces that feature a combination of design (site materials, amenities, and configuration) and location/context that clearly exceed typical plaza designs found in the region.

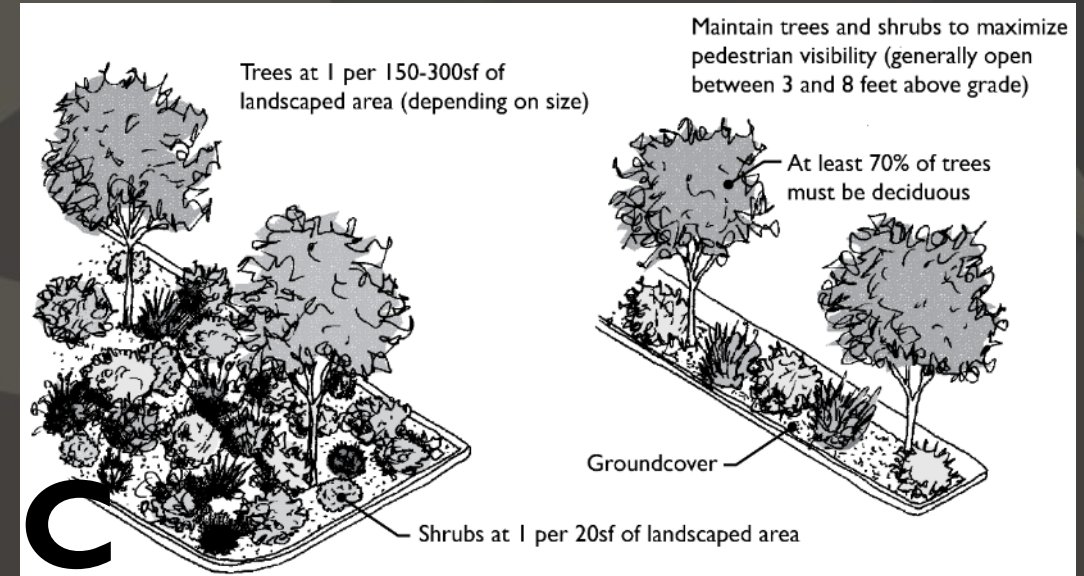
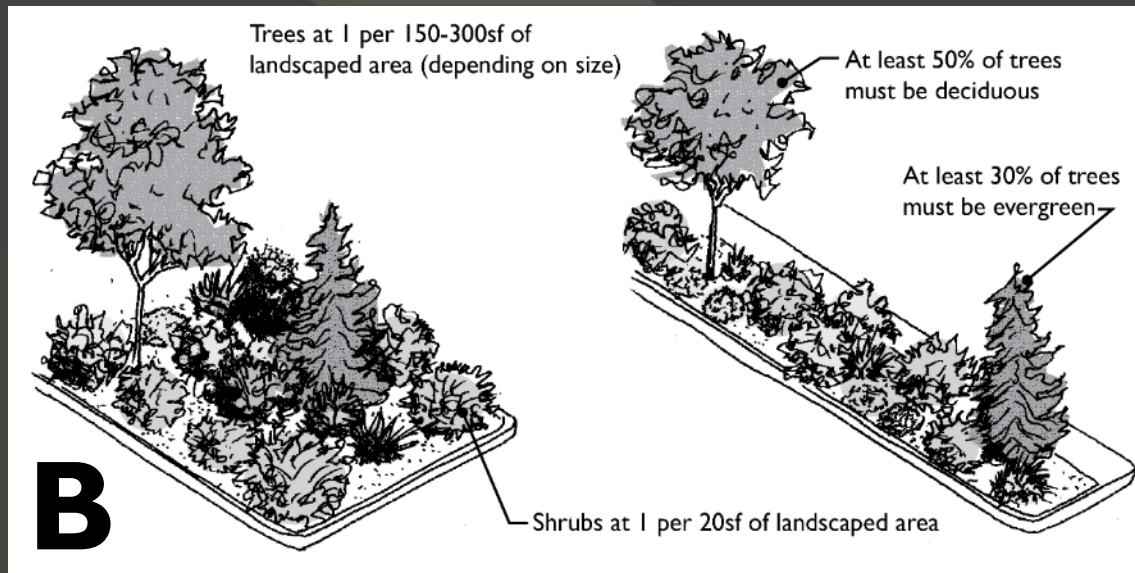
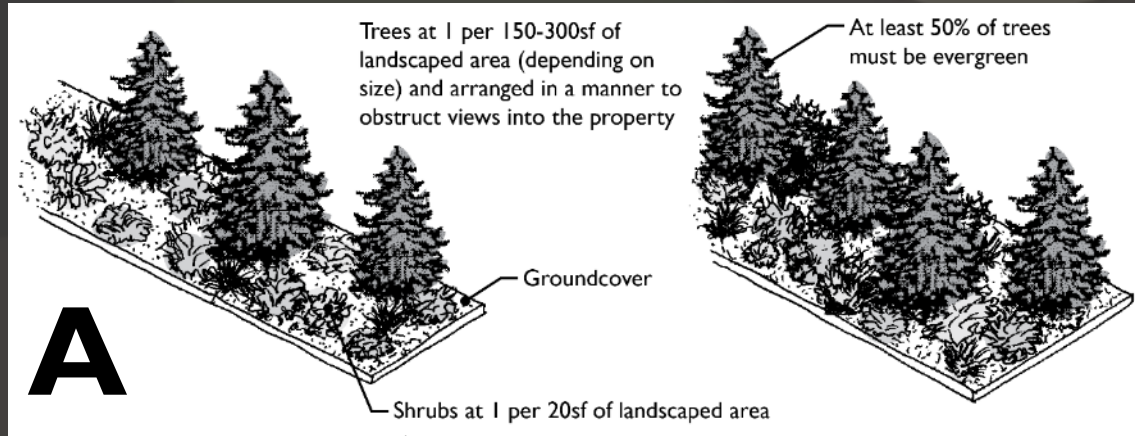


Commercial Open Space

- Can be strategically limited to certain zones or large sites
- Provide a sense of respite and community gathering space
- Provide standards for usability



Landscaping



Landscaping Types

- Just three types can cover a range of screening requirements
- Type A – dense screen for unwanted views
- Type B – filtered screen for visual separation
- Type C - see-through screen for parking lots and building elevations

Buffer Matrix

- Refer to the types here – and throughout code for other functions

	Existing Abutting Uses and Districts					
Developing Use	Street	R-1 & R-2 zones	R-3 & R-4 zones or Multi-family use	C, CBD, MMU & CM zones	HM, MS, CM2, I & LM zones	Park & trails
Multifamily	See block frontage standards	Fence, plus BC-5'	Fence, ABC-5', or path	Fence, BC-5', or path	Fence plus ABC-10'	Fence or ABCD-10'
Low intensity non-residential use	See block frontage standards	Fence, plus ABC-5'	Fence or AB-5'	Site site planning standards in chapter 19.62		See trail frontage standards
Moderate intensity non-residential use	See block frontage standards	Fence, plus ABC-10'	Fence plus ABC-5'			See trail frontage standards
High intensity non-residential use	See block frontage standards	Fence, plus ABC-15'	Fence plus ABC-10'			See trail frontage standards
Outdoor storage	See block frontage standards, plus A-10'	Fence, plus ABC-10'	Fence plus ABC-10'	Fence or A-5' or B-10'		Fence plus ABC-5' or A-10'
Heavy industry	See block frontage standards	Fence, plus ABC-20'	Fence plus ABC-20'	Fence plus ABC-5' or A-10'	Fence plus ABC-5' or A-10'	Fence plus ABC-10' or AB-20'

Other Site Planning Elements

- Internal pedestrian access and design
- Vehicular circulation and parking
- Service areas and mechanical equipment

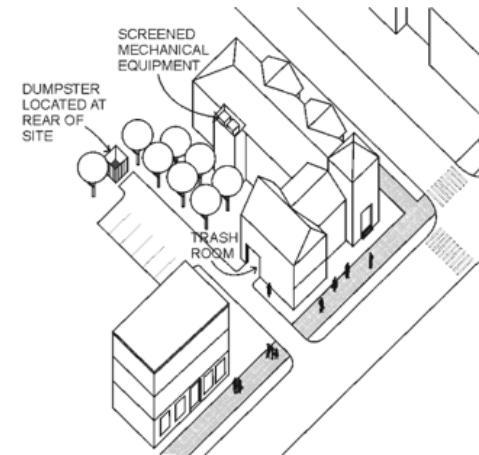
Figure 19.62.050(D)(5)

Example of a successful pedestrian sidewalk between parking lot and storefront.



Figure 19.62.070(B)

Service element location



Locate service elements to reduce impacts on the residential and pedestrian environment, and provide appropriate enclosure.





Building Design Stair Climb

Building Design

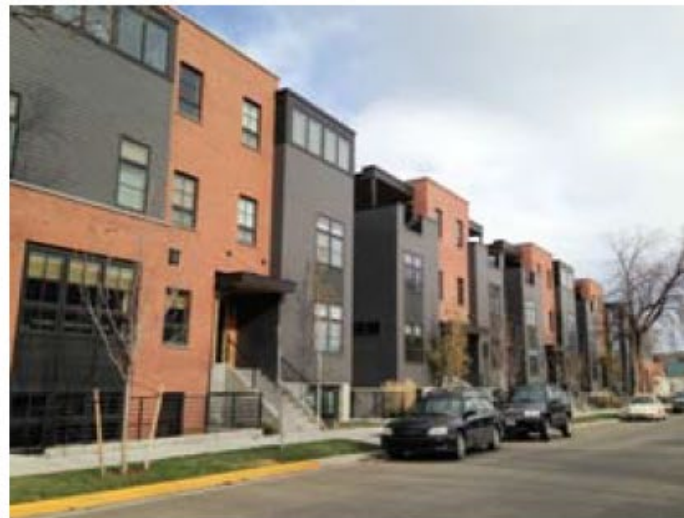
1. Façade articulation & massing
2. Building details
3. Exterior materials
4. Blank walls

Façade Articulation – Residential

Figure 20.131.040.C
Residential façade articulation examples.



Below examples use a combination of vertical building modulation, window patterns, material changes, and roofline modulation.



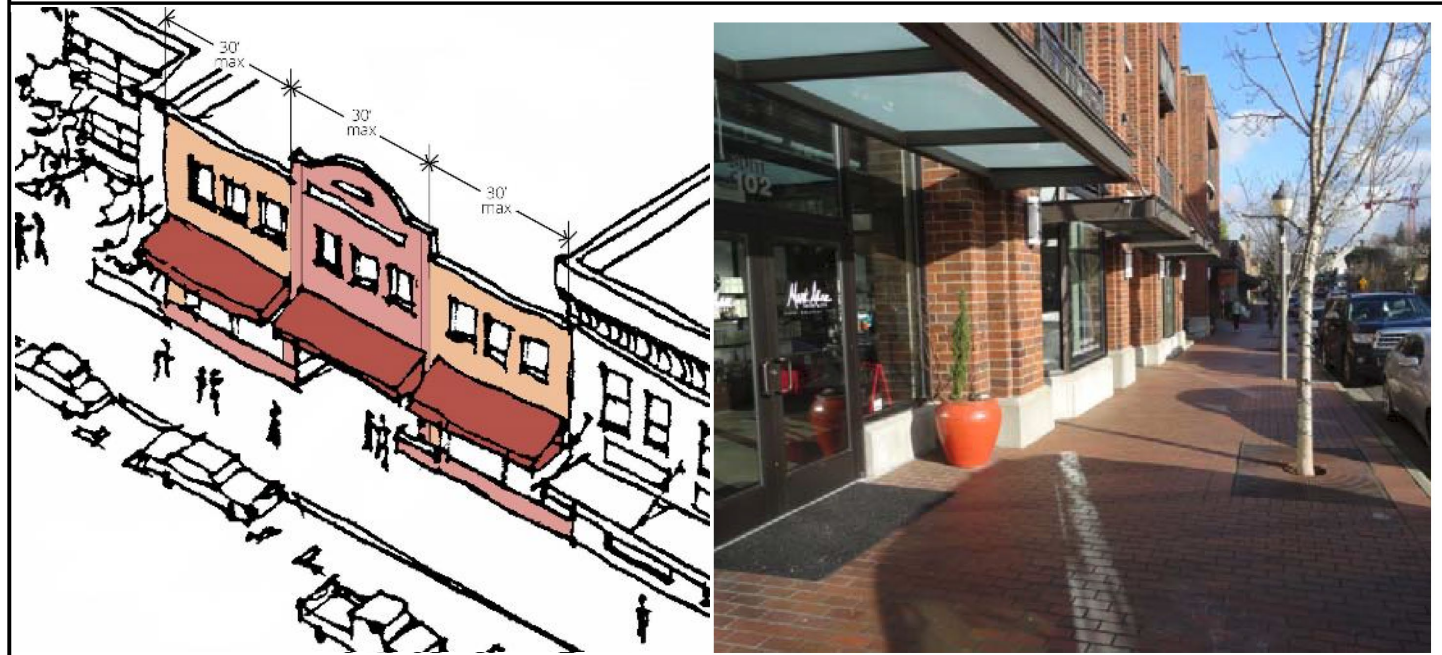




Façade Articulation – Commercial

- Most important for storefronts and mixed-use developments
- Typically a 30' interval, based on historic storefront size and column spacing

Figure 19.63.040(B)
Façade articulation examples.

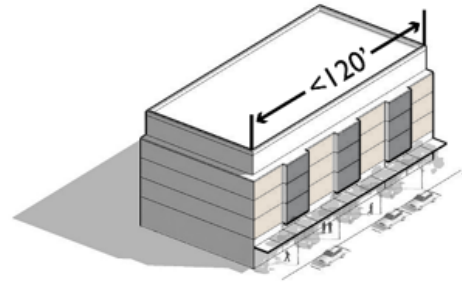


Maximum Façade Width

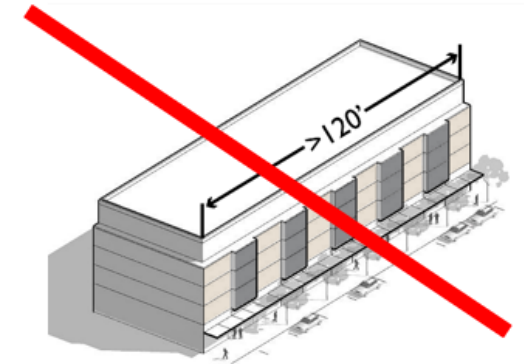
- Critical for retaining a sense of human scale
- Typically suggest a maximum width of 100-120'
- Major feature required to break up façade – not necessarily a courtyard as shown here

Figure 3.1.C

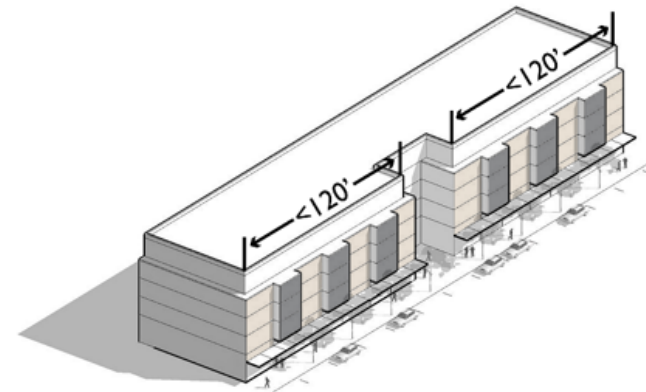
Illustrating maximum façade width guidelines and good and bad examples.



Less than 120' wide: Meets guideline.



More than 120' wide: Does not meet guideline.



Bad



Really Bad



New examples being used for South Tukwila

Figure 3.1.C

Illustrating maximum façade width guidelines and good and bad examples.

Building incorporates a courtyard along the façade (technique #1 noted above) to effectively break it up into smaller components: Meets guideline.



The central portion of the left building (Image A) employs substantial horizontal and vertical modulation (from adjacent building elevation segments), a different mix of façade materials, distinctive rooflines and different window fenestration techniques to effectively break up the building massing. Image B building employs distinct facades to lend the appearance that it's several different buildings.



Image C and D buildings feature a combination of modest vertical modulation, roofline modulation, and window fenestration techniques, but lack the more effective techniques to visually break up its expansive and repetitious façade length.

Building Details: Doors, Windows, Etc.

Figure 19.63.040(B)(1)

Examples of decorative or specially designed windows and entries.



Examples of decorative or specially designed windows and entries. A = openable storefront window. B = transom windows. C = openable window with decorative details. D = decorative window shades. E = Decorative door. F = recessed entry.

Figure 19.63.040(C)

Acceptable and unacceptable window design examples.



Recessed and/or trimmed windows.



This window lacks any other detail that adds visual interest.

Building Details

Toolbox approach

B. Façade details - non-residential and mixed-use buildings. All commercial and mixed-use buildings must be enhanced with appropriate details. All new buildings and additions and buildings associated with Level II and III Improvements (see section 20.128.020) must employ at least one detail element from each of the three categories below for each façade facing a street or public space for each façade articulation interval (see section 20.131.040). For example, a building with 120 feet of street frontage with a façade articulated at 40-foot intervals will need to meet the standards for each of the three façade segments below.

- I. Window and/or entry treatment, such as:
 - a. Display windows divided into a grid of multiple panes.
 - b. Transom windows.
 - c. Roll-up windows/doors.
 - d. Other distinctive window treatment that meets the purpose of the standards.
 - e. Recessed entry.
 - f. Decorative door.
 - g. Other decorative or specially designed entry treatment that meets the intent of the standards.

Decorative Windows & Entries

Figure 20.131.050.B.1

Examples of decorative or specially designed windows and entries.



Examples of decorative or specially designed windows and entries. A = operable storefront window. B = transom windows. C = operable window with decorative details. D = decorative window shades. E = Decorative door. F = recessed entry.

Building Elements & Façade Details

Figure 20.131.050.B.2

Examples of attached elements that enhance the visual intrigue of the building.



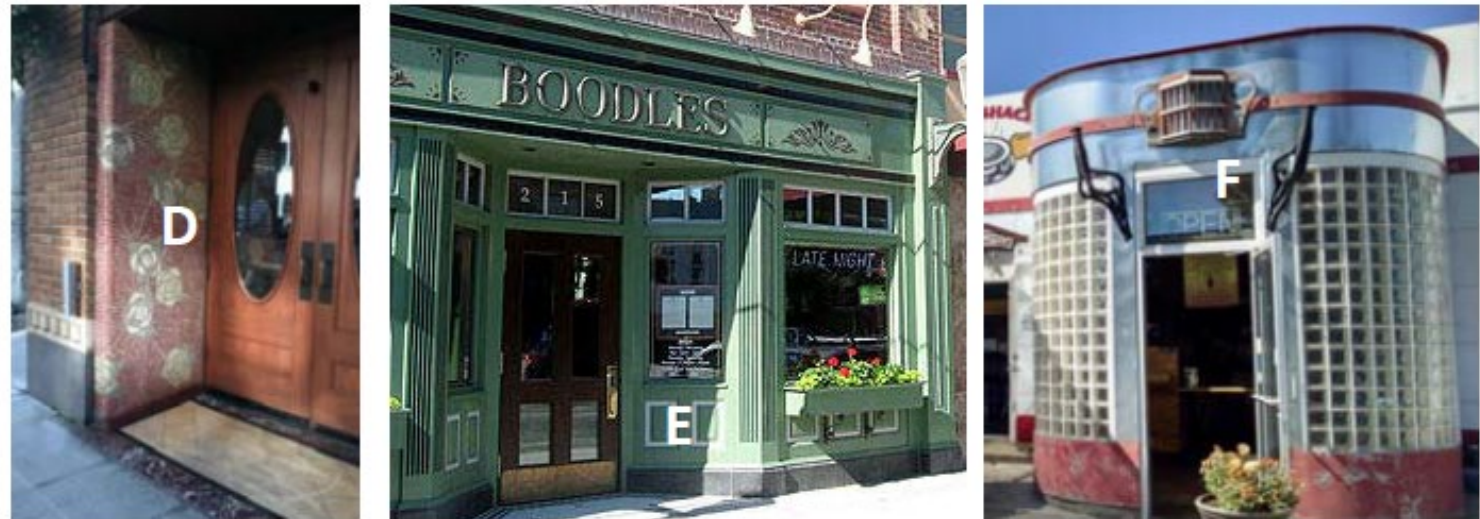
Examples of elements attached to facades that enhance the visual intrigue of the building. A = retractable awning. B = custom hanging bike rack and repair station integrated as a storefront design element. C = decorative façade/sign lighting D and E = custom decorative canopy. F decorative tower.

Building Materials & Other Facade Elements

Figure 20.131.050.B.3
Examples of decorative surface materials.



Examples of decorative surface materials. A = decorative brick/design. B = decorative tile-work and column pattern. C = decorative medallion.



D = decorative mosaic tile work. E = decorative bulkhead. F = Decorative materials and design.

Window Design

Figure 20.131.050.C

Acceptable and unacceptable window design examples.



Recessed and/or trimmed windows.



The window in the left image lacks any other detail that adds visual interest.



Building Material Standards

- The most commonly used exterior materials typically warrant some conditions for their use
 - Concrete block
 - EIFS
 - Metal siding
 - Hardi-panels/planks
- Can regulate in different ways – focus on the ground floor and public-facing elevations

Figure 19.63.050(C)(1)

Acceptable concrete block use/design.



CMU is the primary cladding for the corner element above, but secondary to brick on the main façades. The corner element uses a combination of decorative split faced CMU closer to the sidewalk and smooth-faced CMU that is colored to look more like traditional white terra cotta tiles.



The above façade illustrates an acceptable alternative example, as CMU is used as the primary cladding material. Note the use of split-façade CMU's above each of the awnings and coupled with the use of smooth-façade CMU's on the vertical columns (which employ black accent tiles for added interest).

Building Materials: Concrete Block (CMU)

C. Special conditions and limitations for the use of certain cladding materials.

- I. Concrete block (a.k.a. CMU) may be used as a cladding material if it is incorporated with other permitted materials and/or incorporates a combination of textures and/or colors to add visual interest. For example, combining split or rock-façade units with smooth blocks can create distinctive patterns. The figures below illustrate acceptable concrete block use/designs.

Figure 20.131.060.C.1
Acceptable concrete block use/design.



CMU is the primary cladding for the corner element above, but secondary to brick on the main facades. The corner element uses a combination of decorative split faced CMU closer to the sidewalk and smooth-faced CMU that is colored to look more like traditional white terra cotta tiles.



The above façade illustrates an acceptable alternative example, as CMU is used as the primary cladding material. Note the use of split-façade CMU's above each of the awnings and coupled with the use of smooth-façade CMU's on the vertical columns (which employ black accent tiles for added interest).



Building Materials: Metal Siding

2. Metal siding may be used as a secondary cladding material if it is incorporated with other permitted materials and complies with the following standards:
 - a. It must feature visible corner molding and trim and does not extend to the ground level of non-residential and mixed-use buildings and no lower than two feet above grade for residential buildings. Masonry, concrete, or other durable material must be incorporated between the metal siding and the ground plane.
 - b. Metal siding must be factory finished, with a matte, non-reflective surface.
- ➡ Departures will be considered provided the material's integration and overall façade composition meets the intent of the standards.

Figure 20.131.060.C.2
Acceptable metal siding examples.



The use of metal siding in each example above is secondary to masonry. The left and right images are more contemporary in character, whereas the middle image is more rustic and industrial, with more refined windows.









Building Materials: EIFS

3. Standards for the use of Exterior Insulation and Finish System (EIFS). Such material/finishes may be used as a decorative accent cladding material if it is incorporated with other permitted materials and it complies with the following:
- EIFS is limited to no more than 20 percent of the total façade area and may not be the primary cladding material.
 - EIFS must feature a smooth or sand finish only.
 - EIFS must be trimmed in wood, masonry, or other material and must be sheltered from weather by roof overhangs or other methods.
 - EIFS must not be used on the ground floor when facing a street, internal access road or pathway. Concrete, masonry, or other durable material must be used for ground level wall surfaces to provide a durable surface where damage is most likely.

Figure 20.131.060.C.3
Acceptable and unacceptable EIFS examples.



Note the use of brick and decorative concrete block on the ground level and EIFS on the second floor of the left image. The window treatments visible on the second floor add depth and interest to the façade. The right image employs EIFS between the window and sidewalk - this design is prohibited.

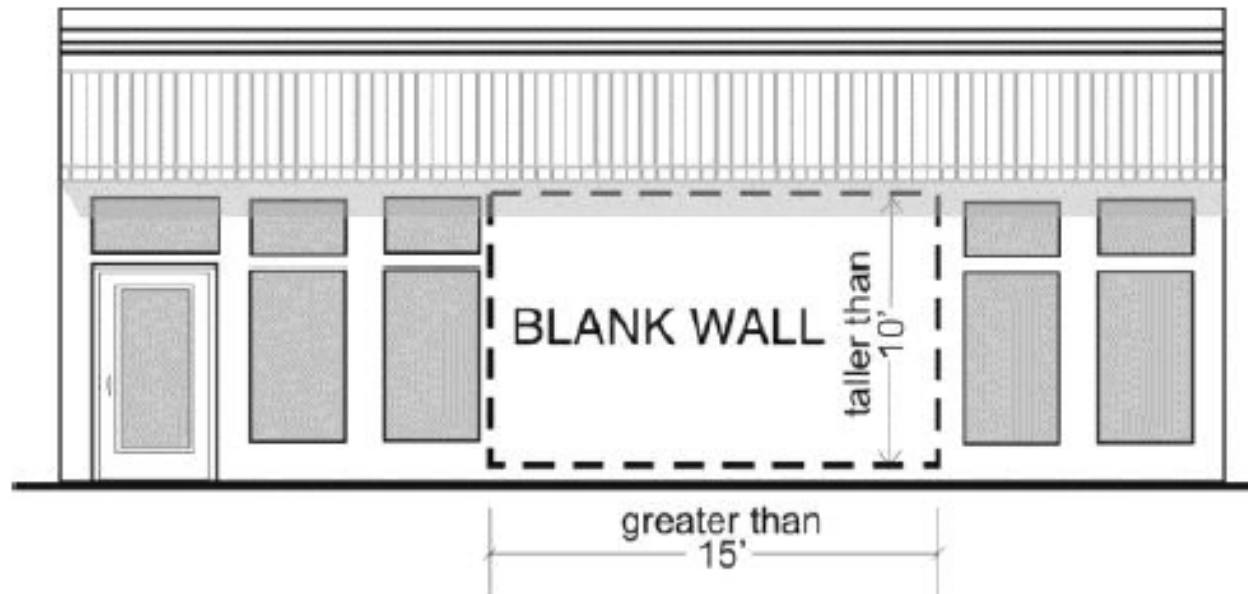
Building Materials: EIFS





Blank Walls

Figure 20.131.070.B
Blank wall definition.



Blank Walls

- Treatment is key for enhancing the pedestrian realm
- Reduce graffiti targets

Figure 3.5.B

Blank wall treatment examples.



Image A uses an artistic mural and Image B uses a landscape planting bed. Image C includes a landscape planting bed with shrubs too low to meet the screening requirement. Image D includes simple detailing (color changes) and a landscape planting bed which are ineffective in screening or treating the blank wall.

Corporate Architecture

Some communities prohibit it in case of change of use



Corporate Architecture

Corporate architects will conform to your local standards if they are in place!



