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## Article 5. Residential Development & Design

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### 5.01 Intent

The Residential Development & Design standards have the following intent.

- A. Enhance the appearance and livability of neighborhoods through thoughtful neighborhood design, including streetscapes, parks and trails, and other focal points that shape neighborhood character.
- B. Strengthen the unique character and identity of distinct neighborhoods including suburban and urban contexts.
- C. Provide housing variety throughout the city and a compatible mix of building types within neighborhoods.
- D. Restore and revitalize neighborhoods with appropriate-scale infill and rehabilitation projects.
- E. Ensure “complete neighborhoods” with proximity and access to neighborhood-supporting uses and housing integrated into mixed-use districts and corridors.
- F. Promote lasting and sustained investment in neighborhoods with quality design.

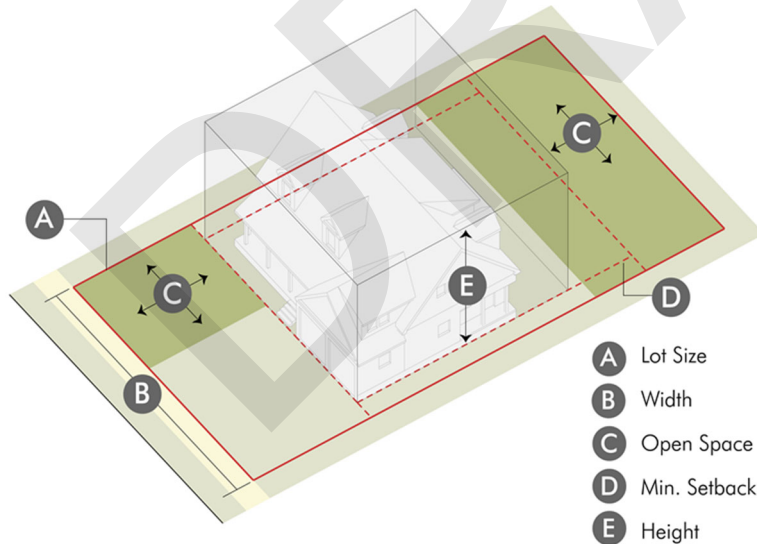
### 5.02 Applicability

- A. The standards in this article shall apply to all development in the R-SF, R-MX1, R-MX2, R-MX3, and R-MHC districts, except where sections state applicability only to specific building types, specific districts, or specific circumstances.
- B. The standards shall apply to any redevelopment or rehabilitation of existing residential projects permitted in nonresidential districts. In these cases, the standards of the applicable building type shall apply.
- C. The standards of the R-M2 district shall apply to any new residential projects permitted in a nonresidential district
- D. Modifications or additions to buildings or sites shall meet these standards to the extent of the modification or addition, except that the PD Director may waive any design standard in Section 5.04 applied to modifications or additions that:
  - 1. Is incompatible with the consistent and quality design of an existing building;

2. Conflicts with a desired and prevailing character on the block or immediate vicinity of the project; or
  3. To otherwise facilitate infill development or adaptive reuse of an existing building.
- E. The standards shall not apply to routine maintenance of existing buildings, provided the maintenance to any building may not occur in a manner that creates additional, substantial noncompliance with these standards.
- F. The standards do not apply to previously established PDs, except that any amendments to the standards of existing PDs shall be brought into conformance with the standards of this code.
- G. The standards do not apply to previously established UCDs, except that amendments to the standards of existing UCDs and new similar planned developments shall use these standards as a base line but may modify or add additional standards through the planned zoning process in Section 2.06.
- H. The Neighborhood Design standards in Section 5.04 are basic city-wide design standards to implement the Center City Neighborhoods, Mixed Residential, and Traditional Neighborhoods place types in the comprehensive plan. These standards do not preclude the application of additional supplemental design guidelines for a particular area or building type, except that no guideline may be used to modify or amend the application of a requirement in this code, except as specified in the planned zoning process in Section 2.06. Specific guidelines shall be listed in Appendix A.

### 5.03 Development & Dimension Standards

- A. **Building Types & Lot Standards.** The development standards for residential districts shall be based on the different building types permitted in each district, specified in Table 5-1, Residential Building & Lot Standards.



**Figure 5-1 Building Types**

Building types in Table 5-1 are distinguished based on lot sizes, unit configuration, building footprints, building massing, building placement, and frontage designs. This diagram illustrates these key standards in Table 5-1 applied to a typical lot.

**Table 5-1: Residential Building & Lot Standards**

Building Type	# of Principal Dwelling Units	Minimum Lot Standards			Building Standards				Zone Districts				
		Area	Width	Open Space	Height <sup>[3]</sup>	Setbacks			R-SF	R-MX1	R-MX2	R-MX3	R-MHC
						Front <sup>[2]</sup>	Side	Rear					
Detached House – Standard Lot	1	6K	50' +	40%	32' 2.5 stories	25'	5'	30'	P	P			
Detached House – Urban Lot	1	4K	35' - 50' <sup>[1]</sup>	30%	32' 2.5 stories	25'	3'	30'		P	P		P
Detached House – Small Format	1	2K	25' – 35' <sup>[1]</sup>	20%	25' 2 stories	25'	3'	20'	C	C	P	P	P
Duplex / Multi-unit House	2 - 4	6K 3K / unit min	50' + <sup>[1]</sup>	40%	32' 2.5 stories	25'	5'	20'		P	P	P	
Townhouse – Large Lot	3 - 6	2.4K / unit min. 20K total max.	20' / unit min. 150' total max	30%	40' 3 stories	15' - 25'	5'	20'		P	P	P	
Townhouse – Small Lot	3 - 8	1.5K / unit min. 16K total max.	14' / unit min 125' total max	20%	40' 3 stories	15' – 25'	5'	20'			P	P	
Apartment – Small Lot	3 - 12	1.5K / unit min. 20K total max.	50' – 150'	20%	52' 4 stories	15' - 25'	5'	20'			P	P	
Apartment – Medium Lot	13 - 40	1.5K / unit min. ¼ block max.	100' – 200'	20%	65' 5 stories	15' – 25'	5'	20'			P	P	
Apartment – Large Lot	13 +	1.1K / unit min. ½ block max.	100' – 300'	20%	n/a'	15' – 25'	5'	20'					P
Apartment - Complex	17.7 du/ac	8.5K min/ 2.45 K / unit min.	100' +	30%	40' 3 stories	25'	5'	20'					P
Civic / Institutional Buildings (permitted nonresidential uses)	n/a	20K	200'	40%	40' 3 stories	25'	25'	30'	P	P	P	P	P

[1] Smaller or narrower lots may require between 5' and 10' additional width on corner lots to allow proper building placement and orientation according to Section 5.03.C.2  
 [2] Front setbacks may be modified on a block-by-block basis, subject to the frontage design standards in Section 5.04.B, Frontage Design.  
 [3] Any portion of a multi-unit building taller than 32' shall be setback at least 15' when property adjoins an R-SF district, and any apartment building taller than 32' shall comply with the 45-degree bulk plane when property adjoins an R-SF district.

- B. Accessory Buildings – Residential.** Accessory buildings shall be permitted in association with and on the same lot as a principal building, subject to the standards in Table 5-2, Residential Accessory Structures, and to the following additional limitations.

Table 5-2: Residential Accessory Structures				
Type	Quantity	Size	Height	Setbacks
<i>Minor Structure (small shed, playhouse, and similar structures)</i>	<ul style="list-style-type: none"> <li>▪ 1 / each 3k s.f. of lot</li> <li>▪ Maximum of 4</li> </ul>	<ul style="list-style-type: none"> <li>▪ 200 s.f. max</li> </ul>	<ul style="list-style-type: none"> <li>▪ 12' max</li> <li>▪ 16' if roof pitch is 4:12 or greater.</li> </ul>	<ul style="list-style-type: none"> <li>▪ 3' side and rear; except accessory structures that share a common wall or abut for their entire length on a lot line.</li> <li>▪ Behind the front of the principal structure</li> </ul>
<i>Secondary Building (detached accessory building, guest house, and similar structures)</i>	<ul style="list-style-type: none"> <li>▪ 1 / principal building</li> </ul>	<ul style="list-style-type: none"> <li>▪ No more than 2/3 of principal building footprint</li> </ul>	<ul style="list-style-type: none"> <li>▪ 22' max, but no higher than principal structure.</li> </ul>	<ul style="list-style-type: none"> <li>▪ 3' from side and rear;</li> <li>▪ Behind the front of building line of the principal structure</li> </ul>
Any building over 16' high or more than 200 square feet shall meet the design standards in Section 5.03.B.5.				

1. All accessory buildings shall be at least 10 feet from the principal building, unless otherwise specified by applicable building codes based on fire ratings of adjacent walls.
2. Accessory buildings shall be clearly incidental and subordinate to the principal building or use in terms of scale, location, and orientation.
3. Minor accessory structures of 120 square feet or less, and not built on a slab or similar foundation do not have a required interior side or rear setback but shall be movable and are otherwise placed “at risk” by the owner with regard to any easements, fence, or screening requirements.
4. On corner lots, minor accessory structures shall be located behind the front building line of the adjacent principal building, unless they are more than 50 feet from the adjacent principal building.
5. Secondary buildings over 200 square feet or over 16 feet high shall meet the following massing and design standards to ensure compatibility with the principal structure:
  - a. The wall height shall not exceed 10 feet above the finished floor, except that gables, dormers, or other subordinate walls may support a pitched roof.
  - b. The roof peak or other top of structure shall not exceed 22 feet above finished floor for pitched roofs with a 6:12 pitch or greater, and no more than 16 feet for shed roofs or pitched roofs below a 6:12 pitch.
  - c. The design shall be compatible with the principal building considering materials, architectural details and style, window and door details, and roof forms.
  - d. Secondary buildings with vehicle access directly from an alley or shared easement shall be positioned to prevent parking that encroaches in the alley or easement. They may be built with the access between 0 and 3 feet from the alley or shared easement, or with the access at least 20 feet from the alley or shared easement.
6. Any building or structure exceeding the limits in Table 15-2 shall be treated as a second principal building and meet all lot and building design standards for a principal building.

- C. Dimension Exceptions.** The following are exceptions to setback and building dimensions standards established in Table 5-1: Residential Building & Lot Standards.

1. *Lot and Building Configurations.*
  - a. Townhouses and side-by-side duplexes may have individual units platted on separate lots, provided the building meets the standards in Table 5-1 and each

- unit meets any per-unit or proportional standards for each lot. The lots shall be platted with a party wall meeting standards of the building code.
- b. Side lot easements between abutting lots may be granted in association with a plat to have the effect of “zero lot line” configurations. Easements for exclusive use of the side yard may be granted to the abutting owner to meet the lot open space requirements and design standards in Section 5.03 for the grantee, while maintaining the required setbacks from the platted lot line for each building in Table 5-1 for the grantor. Easements shall be private agreements and must account for all access and maintenance responsibility for the lots, open space, and buildings.
- c. The front setbacks for each building may be modified according to the frontage types and Frontage Design Standards in Section 5.04.B.
- d. Lots may be configured in a Courtyard Pattern as provided in Section 5.05.B.
- e. Lots may be configured in a Cluster Pattern as provided in Section 5.05.C.



**Figure 5-2 Side Lot Easements**

Side lot easements may be used to provide more contiguous areas to meet the lot open space requirements and have the effect of a zero lot line configuration. (5.03.C.1.b).

- 2. **Corner Lot Configurations.** When applying building, lot, and frontage standards to corner lots, the lots may be arranged in one of three patterns based on the context of the block and abutting lots:
  - a. **Standard Corner.** The building orients to the same street as all other buildings on the same block face. An additional 5 feet shall be added to the required side setback on the street side lot line. Side and rear setbacks apply to the remaining sides.
  - b. **Reverse Corner.** The building orients to the shorter side of the block (end grain) and not the longer block face that other lots internal to the block orient to. An additional 15 feet shall be added to the required side setback on the street side lot line, or a setback of 50% of established front setback of the abutting lot, whichever is less. Side and rear setbacks apply to the remaining sides.
  - c. **Corner Orientation.** The building orients to both streets, with the front setback and frontage design applying on both street sides. The two remaining lot lines are treated as side setbacks and there is no rear setback.

[insert illustration of 3 options]

- 3. **Setback Encroachments.** The following encroachments into the required setback are permitted, except in no case shall this authorize structures that violate the provisions of any easement.

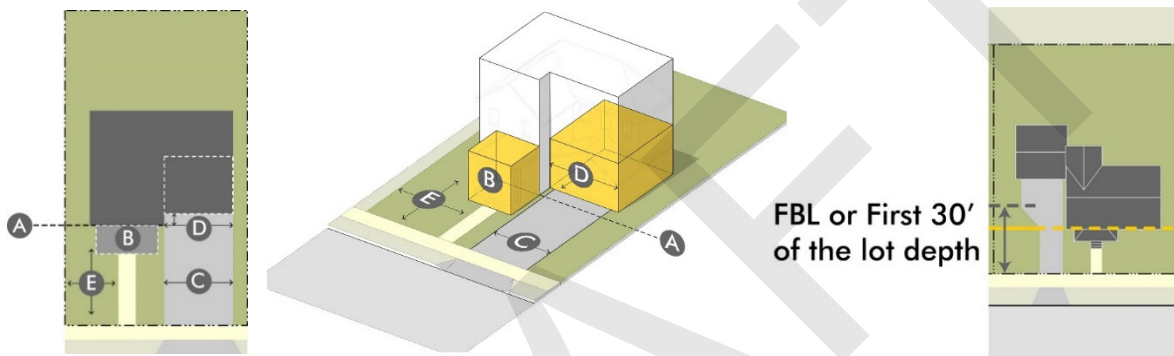
- a. Primary entrance features may encroach beyond the required front building line, as specified in Section 5.04.B.3.
  - b. Structural projections such as bay windows, balconies, canopies, chimneys, eaves, cornices, awnings, open fire escapes, egress wells, or other non-foundational overhangs or projections may extend up to 4 feet from the foundation and encroach into the setback, provided they:
    - (1) Are no closer than 2 feet from any lot line and
    - (2) Are limited to no more than 20% of the total area of a building elevation.
  - c. Unenclosed and un-roofed decks or patios at or below the first-floor elevation may extend into the rear or side setback up to 15 feet but no closer than 5 feet from any street side lot line and 3 feet to any other lot line.
  - d. Ground-mounted mechanical equipment, meters, and utility boxes accessory to the building may be located in the side or rear setback provided they
    - (1) Are no taller than 4 feet high
    - (2) Extend no more than 6 feet from the principal building, and no closer than 3 feet to the lot line.
    - (3) Are screened from public right-of-way by a solid structure and landscape. These limitations do not apply to any utility structures otherwise authorized to be located according to easements or in the right-of-way, which shall follow the location and design standards of those specific authorizations.
  - e. Any other accessory structure within the setback, not specified in Section 5.02.B., shall have a setback of at least one-half its height from the property line.
3. *Height Exceptions.* The following are exceptions to the height limits in Table 5-1:
- a. Building elements integral to the design and construction of the building, such as parapet walls, false mansards, or other design elements essential to a quality appearance of the building may extend up to 6 feet above the roof deck of a flat roof.
  - b. Architectural features such as chimneys, ornamental towers and spires, and similar accessory elements may extend up to 50% above the actual building height, provided they are integral to the specific architectural style of the building and are less than 15% of the building footprint.
  - c. Functional and mechanical equipment such as elevator bulkheads, cooling towers, smokestacks, roof vents, or other equipment may be built up to their necessary height in accordance with building codes provided they are screened according to the standards of this code.

## 5.04 Neighborhood Design

- A. **Design Objectives.** The Neighborhood Design standards have the following design objectives:
1. Enhance the image of neighborhoods by coordinating streetscape investment with private lot and building investment.
  2. Design frontages to the context of the neighborhood, block, and street.
  3. Relating buildings and sites to the streetscape in a consistent manner and creating compatible massing along the block face.
  4. Provide outdoor social spaces that activate the streetscape and limit the cumulative impact of frontages designed for car access.
  5. Use front entry features to reinforce neighborhood character, promote unique designs, create subtle variation in building patterns, and provide human-scale connections to the streetscape.
  6. Promote appropriate massing of buildings in relation to the lot and in relation to buildings and open spaces on adjacent lots.

7. Use human-scale features and details to provide visual interest and compatible designs.
8. Encourage unique architectural expressions and promote the use of key details and design characteristics inherent in the chosen style for a building.
9. Ensure access to a variety of different types of open spaces including natural areas, park and recreation amenities, and formal gathering spaces.

**B. Frontage Design.** Neighborhood lot and building frontages shall be designed according to the types in Table 5-3, and be applied based on the context of the neighborhood and block. Frontage types may modify the required front setbacks in Table 5-1 to create a consistent frontage design and streetscape relationships with other lots and building along a block. Subsections following the table provide specific design strategies and techniques to meet the standards.

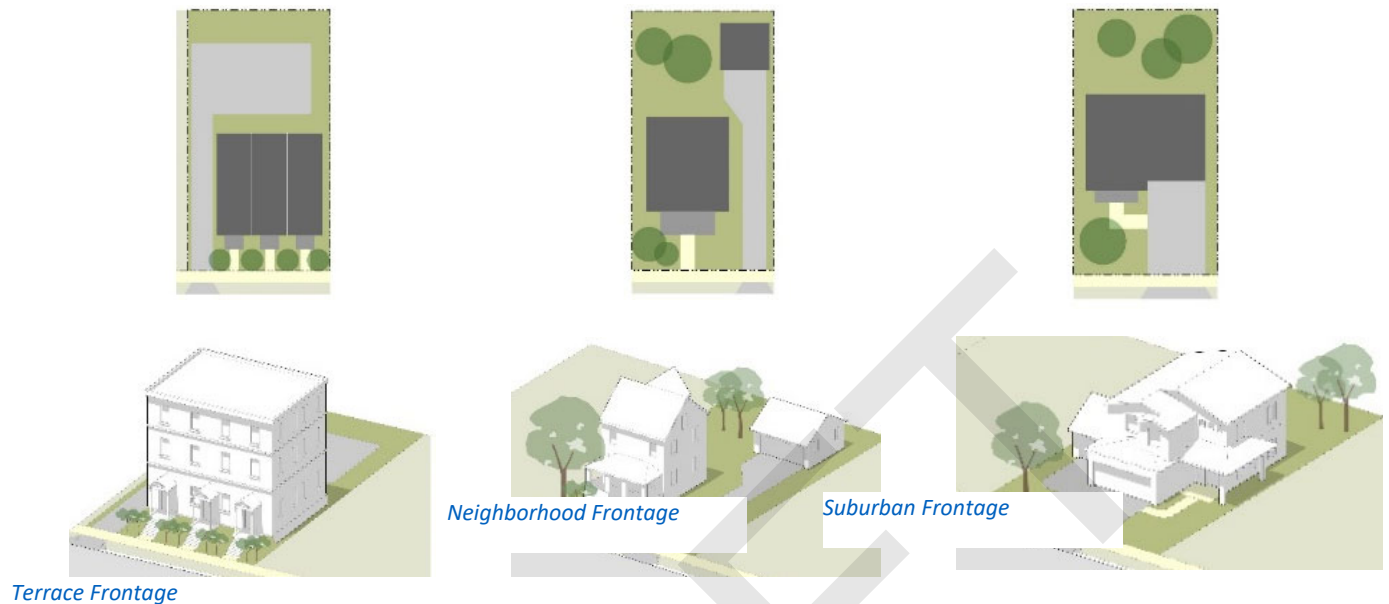


**Figure 5-3 Frontage Design Standards**

This diagram illustrates the key elements of frontage design in Table 5-3: (A) front building line; (B) front entry features; (C) driveway widths (applies to the first 30' of frontage depth or up to the front building line); (D) garage limitations; and (E) frontage landscape areas. These elements determine the relationship between the building, the lot, and the streetscape, and affect the character of the area when applied across multiple lots on a block.

<b>Table 5-3: Residential Frontage Types &amp; Design Standards</b>			
<b>Frontage Element</b>	<b>Terrace Frontage</b>	<b>Neighborhood Frontage</b>	<b>Suburban Frontage</b>
<i>Front Building Line</i>	10' – 25'	25' – 50'	25' +
<i>Front Entry Feature</i>	Required, See Section 5.04.B.2	Required, See Section 5.04.B.2	Optional
<i>Driveway Width (max)</i>	15% of lot width, up to 20'	20% of lot width, up to 24'	40% of lot width, up to 27'
<i>Garage Limitations</i>	<ul style="list-style-type: none"> <li>▪ 20% of facade;</li> <li>▪ 35% if 12'+ behind FBL</li> </ul>	<ul style="list-style-type: none"> <li>▪ 30% of facade;</li> <li>▪ 45% if 12'+ behind FBL</li> </ul>	<ul style="list-style-type: none"> <li>▪ 50% of facade;</li> <li>▪ No limit if 50' + setback</li> </ul>
<i>Frontage Landscape</i>	75% minimum	60% minimum I	45% minimum
<i>Application</i>	R-SF	□	■
	R-M1	□	■
	R-M2	■	□
	R-M3	■	□
	R-MHC	■	□

- Permitted default standard.
- Alternative standard to be applied based on context through Minor Modification. Blank is only applicable through a Major Modification



1. **Front Building Line.** Front building lines create a consistent pattern along a block framing streetscapes. Front building lines shall be established within the front building line ranges and applicable frontage types in Table 5-3 with the following exceptions:
  - a. Front building lines may be modified to reflect specific patterns on a block.
  - b. Frontage types and design should be similar for all buildings along a block but may gradually transition to different building placements between lots.
  - c. The front building line of adjacent buildings shall not differ by more than 5 feet unless more than 20 feet exists between the buildings.
  - d. Front entry features designed according to Section 5.04.B.2 may extend beyond the front building line.
  - e. Frontages and the required landscape in Table 5-3 shall meet the landscape design standards in Section 8.03, Required Landscape for the specified percentage between the front building line and the front lot line.
  
2. **Front Entry Features.** Front entry features create consistent human-scale massing elements that relate buildings to the block frontage, provide outdoor social spaces that activate streetscapes, and establish subtle variations in design and style among similar buildings along a block. The following front entry feature design strategies and techniques shall be used where entry features are required by Table 5-4, and are otherwise recommended to achieve the intent of this article and design objectives of this section.

Table 5-4: Residential Front Entry Features			
Type	Width (Min.)	Depth (Min.)	Area (Min.)
Porch	10', but at least 25% of front elevation	6'	80 s.f.
Stoop	8'	5'	60 s.f.
Entry Court	12', but no more than 50% of front elevation	10'	200 s.f.

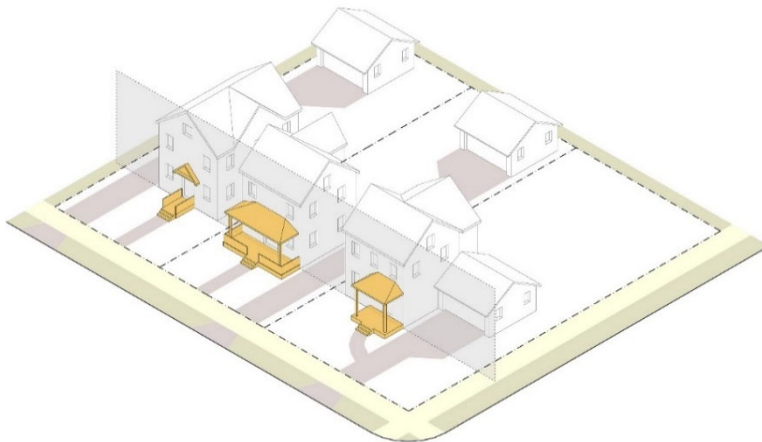


- a. Front entry features shall be oriented to the lot front and have a sidewalk or path at least 4 feet wide directly connecting the entry feature to the public sidewalk. For suburban frontage types or frontages without a public sidewalk, this can connect via a driveway.
- b. Entry features shall be integrated into the overall building design including compatible materials, roof pitch and forms, and architectural style and details.
- c. Entry features shall be single story, and any roof structure and ornamentation shall be between 8 feet and 14 feet above the floor level of the entry feature. If not roofed, a canopy, pediment, transom windows, enlarged trim or molding shall be used to emphasize the entry.
- d. Entry features shall be unenclosed by may include a decorative wall or railing between 2.5 feet and 4 feet high along the perimeter
- e. Entry features of adjacent buildings shall differ in one or more of the following ways to provide streetscape variation, particularly for the same building type or models:
  - (1) Different entry feature types (i.e. porch, stoop, or courtyard)
  - (2) Different location (i.e. centered, shifted – left/right, side, or wrapped)
  - (3) Different extent (i.e. full or half)
  - (4) Different roof type (i.e. shed, hip, flat, gabled, arched, trellis, or no roof)
  - (5) Any other significantly different architectural detail or massing elements.
- f. Any building with more than 150 feet of front facade, or any street side façade longer than 250 feet, and which is permitted within 30 feet of the street shall have 1 entry feature for every 100 linear feet of building fronting the street.
- g. Entry features meeting the requirements of this section may encroach up to 10 feet into the front setback, but never closer than 5 feet to the lot line

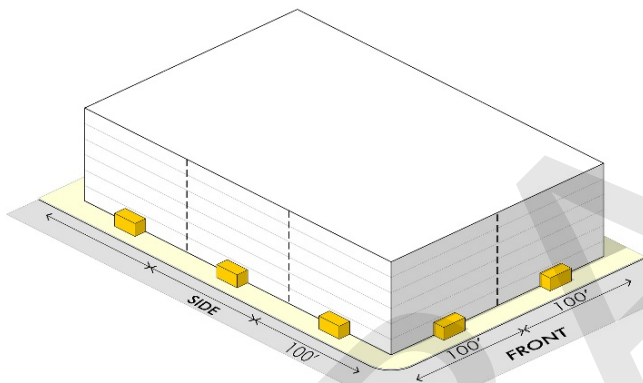


**Figure 5-4 Front Entry Features - Types**

The porch, stoop, and entry court are three distinct types of entry features that create active, social spaces and human-scale details on the residential frontages. Spaces with a minimum width (A) and depth (B) specified in Table 5-4 provide usable social spaces, activate the streetscape and frontage, and contribute to the massing and modulation required by the building design standards.

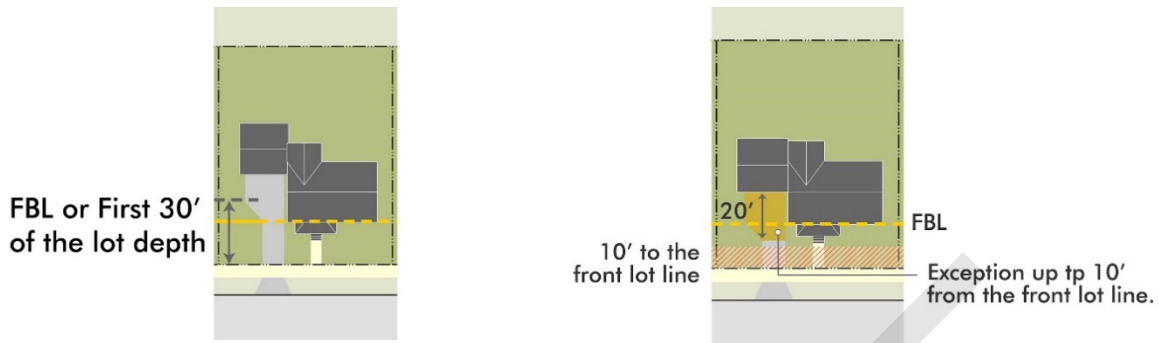


**Figure 5-5 Primary Entry Feature - Encroachments**  
Front entry features meeting the standards of this section create social spaces that help activate streetscapes, and create a variety of human-scale details along blocks. These features may encroach into the front setback to improve the frontages along blocks. (Table 5-4)



**Figure 5-6 Primary Entry Feature - Large Buildings**  
Front entry features should be more frequently located on larger buildings with wall planes in close proximity to the street. This breaks up the building massing and activates the streetscape. (Table 5-4)

3. **Driveway and Garage Limits.** Driveway and garage standards in Table 5-3 limit the impact on the neighborhood streetscape from frontages that prioritize car access and parking, particularly the cumulative affects from narrower lots or buildings placed closer to the street. The following driveway and garage design strategies and techniques shall be used to meet the standards.
  - a. The driveway width limits apply to the first 20 feet of lot depth, or up to the front building line, whichever is less.
  - b. Garage limits shall apply to the garage door openings, except where the garage is a distinct building mass in which case the limit shall be applied to the entire mass.
  - c. In cases where the standards prohibit or impede front-loaded driveways and garages on a particular lot, alternative patterns may be used, including:
    - (1) Single-lane drives to wider recessed garages;
    - (2) Single-lane drives to expanded rear parking, access and garage entries;
    - (3) Shared drives to recessed or detached rear garages and/or parking pads;
    - (4) Common lanes or alleys accessing parking or garages internal to the block; or
    - (5) Parking or garages accessed from a side street, particularly on corner lots or through common lanes.



**Figure 5-7 Application of Driveway Limits**

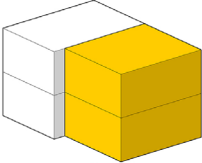
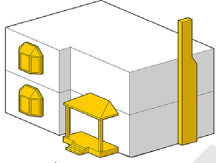
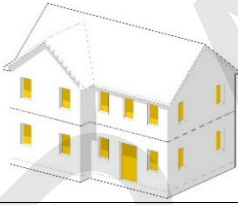
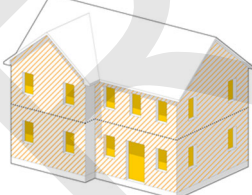
Driveway limits shall apply to the first 30' or up to the Front Building line, whichever is less; except any front-loaded garage meeting these standards may have a driveway expanded to the width of the entry 20 feet in front of the entry, provided the expanded area is no closer than 10' from the front lot line. (5.04.A.34.a).



**Figure 5-8 Driveway & Garage Options**

Frontage type standards are based on lot widths to recognize both the proportionate and cumulative effect that frontage design elements have on the streetscape, and narrower or compact lots may be more limited. In these situations, options that reduce the car-orientation yet accommodate the convenience of access of vehicles should be used. Options include narrower entries, side entries, shared drives, common lanes, or internal block alleys. (5.04.A.3.c.)

- C. **Building Design.** Buildings shall be designed according to the standards in Table 5-5, and be applied based on specific building type. Subsections following the table provide specific design strategies and techniques to meet the standards.

Table 5-5: Residential Building Design Standards			
Design Detail	Building Type	Detached House (all), and Duplex / Multi-Unit House	Row House, Apartment (all)
Maximum wall plane without a massing variation of 4'+ on at least 25% of elevation.		800 s.f. or 45 linear feet	1,200 s.f. or 70 linear feet
Maximum wall plane without modulation on at least 20% of the wall plane.		500 s.f. or 30 linear feet	800 square feet or 45 linear feet
Minimum window and door openings per elevation		First Story – 30% Upper Story – 15%	First Story – 30% Upper Story – 15%
Materials		Primary Material – 55% - 75% Secondary Material -20% - 30% (limit 2) Accent Material - 5% - 15% Limit – 4 materials total	

1. **Wall Plane Limits.** Massing uses changes in the building footprint, height, or shifts in wall or roof planes to break down larger volumes into smaller parts and refine the scale and form of the building. Building elevations that exceed the wall plane limits in Table 5-5, either in square footage or in linear feet, shall be broken into components differentiated by one or more of the following design techniques.
  - a. Break the building into distinct masses (primary mass, secondary mass, and wings), where portions of the building are offset from the main mass by at least 8 feet or are otherwise noticeably smaller and subordinate to the main mass.
  - b. Step back portions of the building footprint or upper stories by at least 4 feet in association with meaningful outside space, such as a balcony, deck, patio, or entry court.
  - c. Use cantilevers on upper stories that provide at least a 2 feet overhang of other portions of the wall plane.
  - d. Provide single-story entry feature that project at least 6 feet from the wall plane.
  - e. Articulate rooflines by using gables and dormers, dropping eaves, and using prominent overhangs, or stepping roof lines or parapets to create offsets and projections of at least 2 feet.

- f. Where larger buildings are next to smaller buildings, or are along a block with smaller buildings, step the height of the building or offset secondary masses to create compatible massing nearest to adjacent structures.
2. **Blank Wall Limits.** Façade composition uses materials, ornamental details, and subtle variations in the wall plane to break up blank wall and add visual interest to buildings. Uninterrupted elevations that exceed the blank wall limits in Table 5-5, either in square footage or in linear feet, shall use one or more of the following design techniques to modulate the elevation and avoid expanses of blank walls.
  - a. Create projections in the wall planes with bay windows, balconies, awnings, or canopies that project at least 2 feet from the wall plane.
  - b. Create voids in the wall plane with step-backs of upper stories or balconies that recess at least 4 feet from the wall plane.
  - c. Differentiate stories, roofs, or other masses with prominent trim materials and/or incorporate material changes on different modules of the building. Significant trim or ornamentation used to break up blank walls or wall planes shall project between 2 inches and 2 feet from the wall and be at least 8 inches wide.
  - d. Use color changes and accent materials to emphasize distinct components of the facade. Material and color changes should wrap corners and occur at the inside corner of a massing element or occur in association with a significant trim or ornamentation to give a finished and unified appearance to the façade component.
  - e. Break up remaining large expanses of blank walls with facade composition that considers the location and grouping of windows, doors, or architectural details.
3. **Transparency.** Windows and doors provide connections to active outdoor spaces and add visual rhythm and detail to the façade with the location, pattern, and proportions of openings. Building elevations shall meet the required transparency in Table 5-5 for any street-facing façade. This can be achieved through one or more of the following design techniques.
  - a. Create relationships to outdoor spaces near buildings with the location, pattern, and proportions of windows and doors.
  - b. Incorporate distinct and visually significant windows and doors (size, orientation, and ornamentation) to emphasize key locations on the facade or to relate to important social spaces.
  - c. Locate windows doors to create a coordinated facade composition considering the entire facade as a whole, and considering where facades are broken into different components with the grouping of windows and doors.
  - d. Locate and design windows strategically in relation to privacy concerns in adjacent spaces and buildings but maintain consistent exterior patterns and façade composition. High-bank windows, transom windows, opaque windows, and window treatments that are adaptable and user-controlled are better may be used to deliver privacy as opposed to omitting windows.
  - e. Use windows and doors with projecting trim and ornamentation to create depth, texture, and shadows on the facade; to emphasize openings; or to group openings into a single feature. Openings that have projecting trim and casements (at least 1 inch off the facade and 4 inches wide) or that group widows with significant ornamental details may count these additional features for up to 25% of the transparency requirement.
  - f. The window requirement may be waived on sides of buildings that are closer than 3 feet to the property line, if necessary to meet applicable building code requirements.

4. **Materials.** Building materials add texture and patterns, create visual interest, and signify quality construction and detailing. Building elevations shall apply the material standards in Table 5-3, through one or more of the following design techniques.
  - a. Use natural materials for primary materials, such as painted or natural finish wood siding (horizontal lap, tongue-and-groove, board and batten or vertical), brick, stone, stucco, ceramic or terra cotta tile. Synthetic alternates to these natural materials may be used if manufacturer specifications and/or precedents for application demonstrate that it will perform equally or better than the principal materials in terms of maintenance, design, and aesthetic goals.
  - b. Coordinate changes in color and materials in association with changes in massing and modulation of the building.
  - c. Use changes in color or materials to differentiate the ground floor from upper floors and the main body of the building from the top or roof-structure, particularly on buildings 3 stories or more.
  - d. In multi-building projects, use subtle variations in building materials and colors on different buildings, within a consistent palette of materials and colors.
  
- D. **Open Space Design.** A system of different types of open spaces shapes the character of neighborhoods, create unique identities for different neighborhoods, and provide focal points for building and development. The block and lot open space requirement compliments this system and ensures that each building has access to useable outdoor space and creates a common amenity for multi-unit buildings.
  1. **Required Site Open Space.**
    - a. Each lot and building type shall provide the open space specified in Table 5-1.
    - b. Lot open spaces may be designed to also meet a landscape or buffer requirement. To the extent that Article 8, Landscape and Site Design requires additional open areas for landscape and buffers that meet the standards of this section, it shall not preclude also meeting the standards on Article 8 with additional open and landscaped areas.
    - c. Lots platted through a final plat with common open space meeting the design standards in Section 3.02 may credit the common open space towards the lot open space requirement, provided it meets the following criteria:
      - (1) The space is public or remains accessible to the public; or
      - (2) If private or common space, the lot applying the credit has access to the space through ownership or other agreement, and the space is otherwise dedicated and reserved from future development.
      - (3) The space shall be on the same lot, on the same block, or on an adjacent block within 1,000 feet of the lot and connected by a trail or public sidewalk
  
  2. **Open Space Design.** Different open space types maximize the value of unbuilt portions of the site for ecological, aesthetic, and functional purposes. Open space shall be designed according to one of the types in Table 5-6.

Table 5-6: Open Space Design	
Permitted Open Space	Design
Frontages	<ul style="list-style-type: none"> <li>Designed according to 16-5-4.B,</li> <li>Excludes any permitted for driveways or parking area</li> </ul>
Yards	<ul style="list-style-type: none"> <li>Minimum 15' in all directions</li> <li>Minimum 400 s.f. of area</li> </ul>
Open & Uncovered Decks or Patios	<ul style="list-style-type: none"> <li>Minimum 12' in all directions</li> <li>Minimum 200 s.f.</li> <li>Must be at or below first floor elevation</li> <li>Limited to 25% of required open space</li> </ul>
Private Balconies or Patios (Apartment / Mixed-use Buildings only)	<ul style="list-style-type: none"> <li>Minimum 6' in all directions; 15' if common area shared by multiple dwelling units</li> <li>Minimum 80 square feet (individual); 300 s.f. if shared by multiple dwelling units.</li> <li>Limited to 25% of required open space</li> </ul>
Common Courtyard	<ul style="list-style-type: none"> <li>Designed according to Section 5.05.D.</li> </ul>
Public or Common Open Space	<ul style="list-style-type: none"> <li>Designed according to Section 3.02</li> </ul>

- E. **Modifications.** Modifications to the standards in Section 5.04, Neighborhood Design may be authorized according to the site plan modification process and criteria in Section 2.03, and any of the following applicable additional criteria.
- The context presents a clear pattern of existing buildings and lots on the same block and opposite block face with a different arrangement in terms of the front building line, driveway access patterns, and extent and placement of garages.
  - An alternative design allows the building, garage, and access to be sited in a way that preserves topography or other natural features on the site.
  - The requirement is not consistent with the architectural style selected for the building based on reputable resources documenting the style.
  - The requirement would make the building less compatible with designs or characteristics of other buildings or sites adjacent to the project or that are prevalent throughout the area, and the design or characteristics are desirable to retain and reinforce.
  - Deviations from material standards and any simulated products demonstrate a proven performance in terms of maintenance and quality appearance.
  - The specific standard is not practical due to the context and location of the lot or other similar physical conditions beyond the specific building and site not created by the landowner.
  - In all cases the deviation is the minimum necessary to address the circumstance, the alternative equally or better meets the design objectives of this Section, and there are no negative impacts on other design standards applicable to the building or site.

### 5.05 Alternative Patterns

- A. **Intent.** Alternative housing patterns in this section permit different arrangements for housing to provide greater amenities for residences organized around common open spaces; allow flexibility for smaller lots and smaller format housing; maintain community design standards that allow projects to be better integrated into the context; and improve housing attainability through flexibility and efficiency in the patterns.

**B. Courtyard Pattern.**

1. *Design Objective.* A courtyard pattern can integrate multi-building projects into the neighborhood pattern by integrating formal open space into part of the street frontage. It is an effective infill strategy or appropriate on deeper lots and blocks. Residential buildings and lots may be designed to front on a courtyard based on additional design and development standards in this section.
2. *Applicability.* The courtyard pattern is appropriate where:
  - a. Courtyards are designed and visible as an extension of the public streetscape and open space system for the neighborhood;
  - b. Blocks and surrounding lots are deep, allowing a different configuration of buildable lots; or
  - c. Other developed areas where existing lot patterns in the vicinity warrant use of this pattern to facilitate infill development and compatible building types.It is specifically applicable through the site plan review in association with residential zoning where the proposed building types are permitted, or in association with rezoning applications where different building types are proposed.
3. *Eligible Building Types.* The following building types, if permitted in the applicable zoning district according to Table 5-1, are eligible for the courtyard pattern, subject to the limitations stated:
  - a. Small Apartments, up to 5 buildings or 36 units, whichever is less.
  - b. Row Houses, up to 4 buildings or 24 units, whichever is less.
  - c. Duplex, Multi-unit Houses, and Detached Houses, up to 12 buildings or 18 units, whichever is less.
4. *Design Standards and Exceptions.*
  1. Lots may front on a common courtyard, rather than along a street.
  2. The courtyard shall be at least 25 feet wide in all directions, and at least 1,000 square feet, and shall have frontage on a public street or be accessible from the streetscape by a pedestrian passage.
  3. Building frontage standards shall apply on the courtyard and on the public street frontage. The streetscape and frontage landscape standards in Section 8.03 for all lots shall be concentrated in the courtyard and the frontage landscape standards shall be met for the public street perimeter of the project.
  4. The minimum lot size per building may be reduced by up to 20%, provided the courtyard is owned in common by all lots or otherwise established as a shared-space amenity.
  5. The front setback may be reduced to 5 feet from the courtyard boundary.
  6. Any buildings fronting the street, or the sides of any buildings adjacent to the street shall still meet requirements for public frontages and orientation standards in Section 5.04.
  7. Vehicle access and parking shall be coordinated for all lots and buildings, be designed in a way that minimizes the impact on the public street and the courtyard. Access for the project shall meet all frontage standards along the public street.





**Figure 5-9 Courtyard Pattern**

The courtyard pattern allows for a different configuration of buildings in specific contexts. The pattern arranges buildings on smaller lots with a common frontage on the courtyard. The courtyard and the front buildings provide to the streetscape, while other buildings may relate direction to the courtyard. Vehicle access is shared and limited to more remote or discrete portions of the project.

**C. Cluster Pattern.**

1. **Design Objective.** The cluster pattern allows residential lots and buildings to be arranged around an open space system that preserves greater amounts of intact open and natural spaces designed as focal point and community amenity, and provides benefits from a greater variety and concentration of housing on developed areas.
2. **Applicability.** The conservation pattern is appropriate in more remote areas where preservation of larger or natural open space is beneficial, and specifically is eligible in combination with R-SF zoning district. It requires a planned development application as outlined in Section 2.06, and a minimum project size of at least 5 acres unless it is an extension of an existing cluster development.
3. **Density Bonus.** The base density and open space required shall be based on a typical and practical layout according to the R-SF zoning district. The following density bonus may be granted based on the amount of additional intact open space to be preserved in the plan. The “bonus” units shall not require additional open space, other than the space specified in Table 5-7.

Table 5-7: Cluster Pattern Density Bonus					
Preserved Area [1]	Bonus Units Above Base Density	Project Size	Example Using R-SF Base Zoning		
			Base Density Yield	Additional Units	Developed area
20% - 30%	0 (but concentration on smaller lots permitted)	5 ac.	36 units	0	36 units on 7 – 8 acres
31% to 40%	50%	5 ac.	36 units	18 units	54 units on 6 – 7 ac.
41% to 50%	100%	5 ac.	36 units	36 units	72 units on 5 to 5.5 ac.
51% to 60%	150%	5 ac.	36 units	54 units	90 units on 4 – 5 ac.
> 60%	TBD by Planning Commission based on plan	5 ac.	TBD	TBD	TBD on less than 4 ac.

[1] Total percentage of the project area preserved as open space meeting the Natural Open Space, Trail, or preservation of productive agriculture lands criteria in Section 3.02

4. **Lot Sizes & Building Types.** The resulting density based on the plan after the density bonus is applied may be allocated in the developed portion of the project with the following building types. No combination of these building types may be used to allow more units than authorized by the density bonus. All other standards applicable to each building type in Table 5-1 shall apply within the developed portion of the plan.
  - a. Detached house (all types)
  - b. Duplex / multi-unit house
  - c. Row house (all types)
  
5. **Open Space.** Open space shall meet the design criteria of Section 3.02 for Natural Open Space, Trail, or include prime farmland or other existing and productive agriculture lands designed to be a focal point and community amenity. All lots shall have access to the public or common open space preserved as part of the plan within 1,000 feet, measured along pedestrian or trail routes.



Conventional Pattern



Cluster Pattern

**Figure 5-10 Conservation Pattern**

The conservation pattern allows both a greater number of units and a greater concentration of those units in exchange for greater quantities and more coordination of larger open spaces.

D. **Small Format Housing Community.**

1. *Design Objective.* The small format housing community pattern allows large projects of smaller home sites to be organized around common amenities and provides flexibility in community design. These patterns typically provide the efficiency from manufactured or other small format houses, and can provide high-quality, attainable housing provided the home sites and community design standards are planned in a way that integrates with the surrounding context.
2. *Applicability.* The small format housing community pattern applies to:
  - a. Projects in the R-MHC district.
  - b. Projects implementing any detached house – small format building type where permitted in any other district by Table 5-1.
 Application of the small format housing pattern requires a planned development application as outlined in Section 2.06
3. *Community Plan.* All small format home communities shall be supported by a community plan meeting the standards in Table 5-8, unless otherwise modified through the planned zoning procedures and criteria in Section 2.06.

Table 5-8: Small Format Housing Community Plan	
<i>Project Size</i>	<ul style="list-style-type: none"> <li>▪ 3 acres minimum;</li> <li>▪ 150' minimum frontage on an arterial or collector</li> </ul>
<i>Project Intensity</i>	<ul style="list-style-type: none"> <li>▪ 15 units per acre, maximum</li> </ul>
<i>Useable Open Space</i>	<ul style="list-style-type: none"> <li>▪ 20% of project areas</li> </ul>
<i>Lot &amp; Building Standards</i>	<ul style="list-style-type: none"> <li>▪ Detached house – small format standards in Table 5-1 apply</li> <li>▪ All home sites shall front on a public street, common internal street, or common open space with street or alley access to the rear.</li> </ul>
<i>Parking</i>	<ul style="list-style-type: none"> <li>▪ 1 per home site</li> <li>▪ 0.5 guest parking spaces per home site.</li> </ul>
<i>Perimeter Setbacks</i>	<ul style="list-style-type: none"> <li>▪ 25 feet minimum from any public street boundary or property perimeter</li> </ul>
<i>Exception</i>	<p>If the common usable open space is increased to 25% the following exceptions may be granted:</p> <ul style="list-style-type: none"> <li>▪ <i>Project Size:</i> 1 acre minimum, 100' frontage on arterial</li> <li>▪ <i>Project Intensity:</i> 20 units per acre maximum</li> <li>▪ <i>Home Sites:</i> 1.2K s.f.; 20' width minimums</li> </ul>

4. *Common Area Design.* All common areas not dedicated as home sites according to the development standards, shall be designed as part of the circulation and common areas for the plan. This space shall be allocated to:
  - a. Internal vehicle circulation shall be laid out to provide connectivity and continuity through the community and organize the project into blocks and lots so that all home sites and lots are served by streets. There shall be at least:
    - (1) One external connection for projects under 25 dwelling units;
    - (2) Two external connections for projects between 25 and 100 dwelling units; or
    - (3) One connection for every 50 dwelling units for projects over 100 dwelling units.
    - (4) The maximum block size shall be 2.5 acres, except blocks containing common open space may be 4 acres.
  - b. Internal roadways shall generally mimic the public streetscape standards in Section 3.01:

- (1) 20 feet where no parking is permitted;
    - (2) 24 feet wide where parking is permitted on one side;
    - (3) 28 feet wide where parking is permitted on both sides; and
    - (4) 12 – 18 feet for alleys or lanes.
  - c. Pedestrian connections shall be integrated into all streets or provided through an off-street trail or path system at intervals and distances equal to or more extensive than the street connections. Streets, trails or paths should feature landscape areas that align with the public streetscape and open space standards in Article 3. Walkways shall be:
    - (1) 5 feet wide generally; and
    - (2) 6 to 8 feet wide when directly accessing any common areas or amenities.
  - d. Useable open space shall meet one design type specified in Section 3.02 and be designed and located in a manner that ensures adequate accessibility for all units in the community.
  - e. At least one of these spaces shall include a clubhouse, which is centrally located, for recreation, meetings, laundry facilities, or other common amenities. A storm shelter shall be provided with the clubhouse.
  - f. A common storage and utility area shall be provided within the plan including at least 100 cubic feet per unit. This area shall be screened from the project and from surrounding property according to the buffer standards in Article 8.
5. *Building and Home Site Design.*
  - a. All dwellings shall have a front entry feature, such as a porch, stoop, or outside patio relating the home site to the lot frontage or other common open space upon which the dwelling is located.
  - b. Parking spaces on a home site shall be located to the side or rear of the dwelling. Home sites may include a carport, provided it remains open and unenclosed on at least 75% of the perimeter, is no taller than the dwelling unit, is no larger than 360 square feet, but in no case larger than the dwelling unit.
  - c. Guest parking for each home site shall be within 300' of the unit and may be "on-street" parking where designed according to the street standards in Section 3.01.
  - d. Home sites that have streets or access drives on multiple sides shall locate the driveway and parking on the least prominent street, access drive, or alley.
  - e. Any mobile home dwellings or similarly movable building types shall:
    - (1) Be secured to the ground by tie downs and ground anchors, and otherwise protected against wind forces in accordance with the applicable building code.
    - (2) Be skirted within 14 days after placement in the community by enclosing any open area under the unit with a material that is consistent with the exterior finish of the building and compatible with the design of the community.