



City of Vancouver *Land Use and Development Policies and Guidelines*

Planning, Urban Design and Sustainability Department

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RM-8A and RM-8AN GUIDELINES

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Note: These guidelines are organized under standard headings. As a consequence, there are gaps in the numbering sequence where no guidelines apply.

1 Application and Intent

These guidelines are to be used in conjunction with the RM-8, RM-8A, RM-8N and RM-8AN Districts Schedule of the **Zoning and Development By-law**.

1.1 Intent

The intent of these guidelines is to:

- (a) Encourage the development of ground-oriented, medium-density multiple dwellings in the form of stacked townhouses and rowhouses. Units can be arranged in a courtyard form, or as single or back-to-back rows. A certain percentage of medium-sized units between 900 and 1,200 sf. is required to ensure a greater variety of units sizes, and thereby a greater variety of price points. The majority of units will be suitably sized for families (i.e. two- and three-bedroom units).
- (b) Ensure a high standard of livability for all new dwelling units, including lock-off units. Emphasis is placed on ground-oriented access, natural light and cross-ventilation, as well as usable private outdoor space for each unit;
- (c) Ensure a high level of activation and residential street life;
- (d) Ensure neighbourliness while recognizing that the new development's siting is not intended to be the same as development under RS zoning;
- (e) Ensure durable and sustainable design, while allowing architectural diversity rather than prescribing any particular architectural character; and
- (f) Support the retention and renovation of pre-1940s houses that retain original character elements by permitting infill one-family or infill two-family dwellings on these sites.

1.2 Application

These guidelines apply to most new conditional residential development, as well as significant renovations or additions:

- (a) Multiple Dwelling such as stacked townhouses and strata rowhouses (referred to as "rowhouses" in these guidelines);
- (b) Freehold rowhouses (also referred to as "rowhouses" in these guidelines);
- (c) Multiple Conversion Dwelling, other than those permitted outright in the RM-8, RM-8A, RM-8N and RM-8AN Districts Schedule;
- (d) Infill in conjunction with the retention of a pre-1940s house; and
- (e) Two principal buildings (one duplex and one one-family dwelling or two one-family dwellings, or, on sites of sufficient width to accommodate the required parking, two two-family dwellings) on a lot that backs or flanks onto a school or park, on a corner lot or on a lot that is more than 45.7 m (150 ft.) deep.

These guidelines do not apply to the development of one single principal building on a lot, i.e. a two-family dwelling, a two-family dwelling with secondary suite, a one-family dwellings or one-family dwelling with secondary suite (and/or laneway house). One-family dwellings and one-family dwellings with secondary suite as the only principal building on a site refer to RS-1. For laneway housing, see regulations in section 11 of the **Zoning and Development By-law**.

In situations where an applicant proposes an addition of less than 9.3 m² (100 sq. ft.) that is not visible from the street, the application will only be evaluated against Sections 2 and 4 of these guidelines.

2 General Design Considerations

2.1 Neighbourhood/Streetscape Character

The existing neighbourhoods consist of single family homes and show many characteristics of typical single-family neighbourhoods, such as a regular spacing of houses, individual front yards, etc. While new development will be different in size and massing, it should be compatible with the existing pattern with respect to:

- (a) Providing a clear visible identity of dwelling units from the street through elements that can be found in single family dwellings, such as individual front doors, porches, steps and front yards;
- (b) Providing opportunities for social interaction between the public realm on the sidewalk and the private home; and
- (c) Locating garages or vehicular access at the rear of the site.

2.2 Development Scenarios and Building Typologies

2.2.1 Development Scenarios

The RM-8A and RM-8AN zone provides an array of options for individual lots and consolidated sites, as shown in Table 1. Lock-off units are permitted, as per section 3.1.

Table 1: Typical Development Scenarios*

Typical Lot Characteristics	Permitted Uses	Maximum Allowable FSR	Notes
(A) Site area minimum 3,260 sq. ft. (303 m ²)	<ul style="list-style-type: none"> One-family dwelling One-family dwelling with secondary suite and/or laneway house (per RS-1) 	0.60-0.70 FSR + laneway house; subject to RS-1	<ul style="list-style-type: none"> RS-1 District Schedule applies RM-8A/ RM-8AN Guidelines do not apply
	<ul style="list-style-type: none"> Two-family dwelling (duplex) (with or without secondary suites) 	0.75 FSR	<ul style="list-style-type: none"> Each ½ Duplex may contain one secondary suite No guidelines, but section 4.17 in District Schedule applies
	<ul style="list-style-type: none"> Conversion of existing house (Multiple Conversion Dwelling - MCD) 	Existing FSR; up to 0.90 FSR for pre-1940 character building retention	<ul style="list-style-type: none"> MCD to two units outright MCD to max 3 units conditional
	<ul style="list-style-type: none"> Two principal buildings or infill with existing one-family dwelling or two-family dwelling on: <ul style="list-style-type: none"> sites where the rear or side property line abuts a park or school site, with or without the intervention of a lane, corner sites, or sites with a lot depth of more than 45.7 m (150 ft.) 	0.85 FSR, of which 0.25 FSR can be allocated to the infill or the principal building at the rear of the site	<ul style="list-style-type: none"> RM-8A/ RM-8AN Guidelines apply Maximum number of dwelling units is 4
	<ul style="list-style-type: none"> Infill with retention of pre-1940s building** 	0.90 FSR, of which 0.25 FSR can be allocated to the infill	<ul style="list-style-type: none"> The infill should be located at the rear of the lot, close to the lane.
(B) Site area minimum 3,260 sq. ft. (303 m ²) and minimum lot width 32 ft. (9.8 m)	<ul style="list-style-type: none"> Multiple dwelling with three units (triplex) Lock-off units permitted (maximum one) 	0.90 FSR	Maximum number of dwelling units is 3, not including lock-off unit
(C) Site area minimum 4,790 sq. ft. (445 m ²) and lot width 42 ft. (12.8 m) or more	<ul style="list-style-type: none"> Multiple dwelling in the form of stacked townhouses or rowhouses Unit size requirement applies Lock-off units permitted (maximum one for three stacked townhouse units or one for each rowhouse unit) 	1.2 FSR	<ul style="list-style-type: none"> Max Dwelling Unit Density 145/ha

* Other development scenarios may be possible.

** Pre-1940 Building Retention:

Buildings constructed before January 1, 1940, and which maintain significant elements of their original character, may be eligible for incentives such as an infill building and/or an FSR increase to 0.9.

- (a) Retention of a character building is at the applicant’s discretion;
- (b) Pre-1940 buildings which have not retained significant elements of their original character may, if character elements are fully restored as part of the development proposal, allow the proposed development to be considered for the incentives and relaxations available to developments with pre-1940 buildings.

2.2.2 Building Typologies

The RM-8, RM-8A, RM-8N and RM-8AN Districts Schedule is intended to accommodate multiple dwellings with a variety of units sizes. Units have individual entrances with direct access to private open space. This is generally accomplished with two types of multiple dwelling: the stacked townhouse and the rowhouse.

Stacked Townhouses are units that are stacked on top of each other. This can include three units located on top of each other, or two-level units stacked on top of one-level units. Other layouts may be possible.

Rowhouses are units that are arranged side-by-side, sharing a wall, occupying all levels, from the ground floor to the top floor. Each rowhouse has access to the front and rear yard or courtyard.

Unit Arrangements:

Stacked townhouse and rowhouse units can be arranged in various layouts, and both unit forms can be combined in the same development. Layouts include:

- Back-to-back arrangement of stacked townhouses or rowhouses (see Figure 1)
- Courtyard arrangements on sites of sufficient depth, with one row of units near the street, and one near the lane (see Figure 2).
- Rows perpendicular to the street can only be considered on corner sites, where an “L” shape configuration is possible, or on large assemblies where the perpendicular building is at least 66 ft (i.e. 2 standard lots) away from the neighbouring properties.
- Corner sites should provide a row of units along each street with a “break” at the corner of a minimum of 4.6 m (15 ft.).
- A combination of back-to-back and courtyard arrangements (see Figure 3).
- Other layout arrangements are possible and will be considered, provided they meet the requirements of the RM-8, RM-8A, RM-8N and RM-8AN District Schedule and Guidelines.
- On single lots, smaller townhouse developments can be accommodated, including triplexes on most standard lots with a minimum lot width of 32 ft. (see Figure 4).

Stacked townhouse Characteristics:

- (i) Stacked townhouses feature private open spaces for all units and entries that are directly accessible and visible from the front yard or courtyard.
- (ii) Access to each unit is achieved through external and internal stairs.
- (iii) Private open space is located at ground level for the lower units, accessible from the street or the courtyard, and on roof decks for the upper units.
- (iii) The minimum width of major living spaces (e.g. living room) of any dwelling unit should not be less than 4.2 m (14 ft.).
- (iv) Stacked townhouse developments may be broken up into more than one building.

Rowhouse Characteristics:

- (i) Rowhouses feature access to private open space and entries that are accessible from the street (for the front row of units) or the courtyard (for the rear row of units).
- (ii) The individual rowhouse unit should be no less than 3.6 m (12 ft.) clear, measured from internal wall finish to internal wall finish. Narrower units can be considered if improved livability is provided (e.g. end units with three exposures).
- (iii) Rowhouses may be broken up into more than one building.
- (iv) Rowhouses can be strata titled or freehold (the term “rowhouse” in these guidelines refers to both types).

Freehold Rowhouses

The main difference between a strata rowhouse and a freehold rowhouse development is the minimum width of the rowhouse. In order to provide services (e.g. water, sewer, gas)

to a freehold rowhouse and subdivide the development into fee simple lots, a minimum lot width and frontage of 5.0 m (16.4 ft.) is required.

The developer needs to decide at the initial stage of the application whether a rowhouse development will be freehold or strata. For freehold rowhouse developments, additional zoning regulations in section 11 of the Zoning and Development By-law need to be met.

Figure 1: Illustration of back-to-back arrangement of stacked townhouses or rowhouses

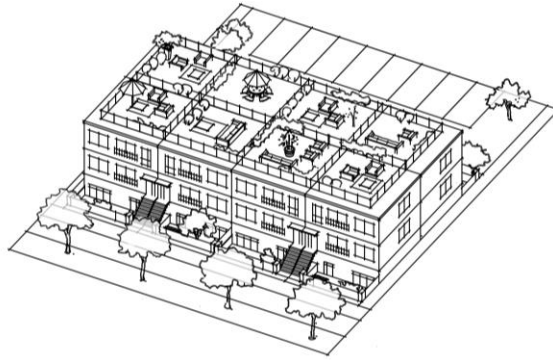


Figure 2: Illustration of courtyard arrangement of stacked townhouses or rowhouses

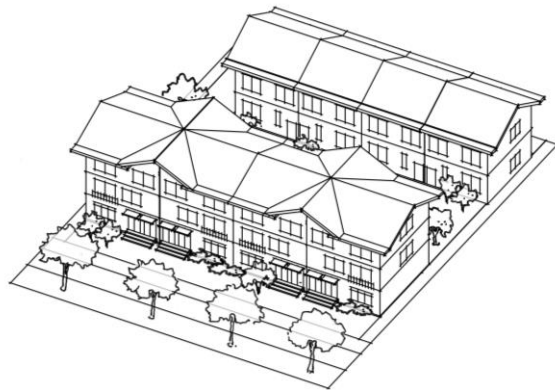


Figure 3: Illustration of combination of back-to-back and courtyard arrangements

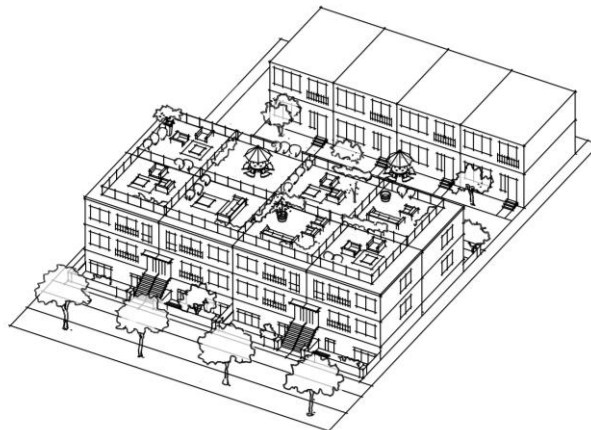
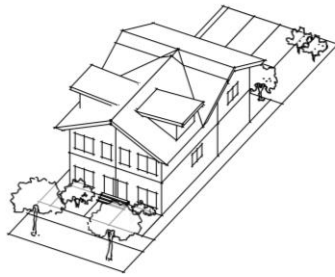


Figure 4: Illustration of triplex on single lot



2.3 Orientation

- (a) Unit entrances should be clearly identified architecturally and oriented to the street or courtyard/rear yard.
- (b) For the rear building of a courtyard configuration, a secondary entrance oriented to the lane is encouraged to activate the lane interface, noting the primary entrance will be from the courtyard.
- (c) On corner sites, building fronts and entrances should be located facing both streets and both street-facing elevations should be fully designed and detailed.
- (d) Stacked townhouses on interior sites may have the main entrance to the dwelling unit from a side yard. However, a larger side yard setback with a minimum of 2.4 m (8 ft.) should be provided for the portion of travel between the front property line and the front entrance.

2.4 Access and Circulation

- (a) Pedestrian access to unit entrances should be from the street or via a clearly marked path on site to the courtyard/rear yard.
- (b) The path should provide a sense of entrance to the courtyard and the rear of the site, and also meet Vancouver Building By-Law requirements for fire-fighter access to dwelling unit entrances, as follows:
 - (i) A continuous path of 2.0 m (6.56 ft.) may be provided for fire-fighter access in a side yard with a minimum 2.4 m (8 ft.) width. The other side yard may be 1.2 m (4 ft.), or
 - (ii) A continuous path of 2.0 m (6.56 ft.) may be provided for fire-fighter access at a “break” in the front building with a minimum building separation of 3.1 m (10 ft.).
- (c) Side yards not providing fire-fighter access may be designed with paths to allow access to garbage and recycling areas and parking located at the rear of the site. These convenience paths are not required to be continuous surface, and may be pavers or gravel to increase site permeability.
- (d) Vehicular access should be from the lane, where one exists. Sites for multiple dwelling should be assembled in such a way that vehicular access from a lane is possible.

2.6 Light and Ventilation

Access to natural light and ventilation affects the livability of dwelling units.

2.6.1 Access to Natural Light

- (a) Daylight for interior and exterior spaces for all housing types should be maximized.
- (b) Multiple dwellings have to meet the Horizontal Angle of Daylight requirements of the RM-8, RM-8A, RM-8N and RM-8AN Districts Schedule.
- (c) Shadowing on adjacent sites should be minimized.

- (d) Shadowing of courtyards and other open spaces should be minimized.
- (e) For all housing types, all habitable rooms (not including bathrooms and kitchens) should have at least one window on an exterior wall.

2.6.2 Natural Ventilation

- (a) The majority of dwelling units should aim to have at least two major exposures that face opposite directions or are at right angles to each other.
- (b) The provision of natural ventilation should work in conjunction with Horizontal Angle of Daylight regulations to ensure that each habitable room is equipped with an openable window.
- (c) Where a dwelling unit is located directly beneath the roof of a building, the stack effect of internalized air may be exploited by placing openable skylights in the roof.
- (d) Employing window types that facilitate air exchange are encouraged. Double-hung windows offer the choice of ventilating a high zone, a low zone or a combination thereof, of interior space. Casement windows, when oriented with prevailing winds, can facilitate air flow from outside into interior spaces (scoop effect).

2.6.3 Light and Ventilation for Courtyard Rowhouses:

The central courtyard plays an important role in providing light and ventilation to both rows of units and should be adequately sized to ensure performance.

- (a) The courtyard should have a minimum of 7.3 m (24 ft.) clear width on the first and second levels. In general, the partial 3rd storey at lane should be centralized to provide solar access to the courtyard and reduce the apparent height on the lane. Alternately, configuration can be revised on case by case basis.
- (b) For courtyards with external stairs to upper stacked townhouse units, a minimum of 9.1 m (30 ft.) clear width on the first and second levels should be provided to accommodate external stairs.
- (c) There are no set restrictions on what rooms can face the courtyard, but privacy should be considered.
- (d) Projections permitted into the courtyard should be the same as the allowable projections into yards in section 10.32 of the Zoning and Development Bylaw, except that:
 - (i) On the first level, entry porches and bay windows may project into the minimum courtyard width;
 - (ii) the minimum distance between projecting bay windows should be 7.3 m (24 ft.) on the second level; and
 - (iii) on the third level, portions of roofs sloping away from the courtyard, balcony rails, pergolas and similar architectural features should also be permitted to project into the courtyard width.
- (e) Some units in courtyard rowhouse buildings may be in close proximity to commercial lanes. Windows to ground level bedrooms in these units should not be located within 3 m (10 ft.) of a commercial lane.

2.8 Noise

The intent of this section is to guarantee an acceptable level of acoustic separation between dwelling units within a development.

- (a) All shared walls between separate dwelling units should strive to achieve an STC rating of 65. This will most likely require a wall thickness of 25 cm (10 in.).
- (b) Unit layouts and their relationship to adjacent units should be considered. Noise-sensitive rooms, such as bedrooms, should be located adjacent to noise-sensitive rooms in the neighbouring unit.
- (c) Locating building elements such as stairs and closets to act as noise buffers against shared walls is also an effective design solution to minimize noise impact from neighbouring units.

- (d) For structural floors between separate stacked townhouse dwelling units, a high acoustical rating is recommended. Furthermore, other measures designed to dampen the transfer of vibrations should also be provided.
- (e) Details reflecting the method of noise mitigation proposed for the exterior walls should be included with the drawing set as required in section 4.15 of the District Schedule.

2.9 Privacy

While some overlook of private open space and direct lines of sight into windows may be unavoidable, the intent of these guidelines is to minimize these impacts.

- (a) The location and orientation of windows, decks and balconies in new development should be carefully considered to reduce looking into close-by windows of existing adjacent development.
- (b) Visual privacy for units, balconies and private open space should be enhanced as much as possible through unit planning, landscape screening, and other elements, such as solid railings.
- (c) In stacked townhouse developments, external stairs leading to upper level units should be located close to the entry doors so that people do not need to pass the front doors and windows of other units in order to access their own units. Where shared access occurs, livability and privacy should be considered.
- (d) Developments along the lane are encouraged to raise the ground floor at least 0.9 m (3') above the lane to enhance residents' privacy provided the proposed development meets the City's accessibility requirements.

2.12 Internal Storage in Stacked Townhouses

The internal design of stacked townhouses should consider the storage needs of families. In-suite storage areas should be provided within individual dwelling units or within storage areas located in underground parking structures. Refer to the administration bulletin **Bulk Storage and In-Suite Storage – Multiple Family Residential Developments**.

3 Uses

3.1 Lock-off Units

- (a) The District Schedule permits a “Principal Dwelling with a Lock-off Unit” in multiple dwellings. A lock-off unit is a portion of the main dwelling unit that can be locked off to be used separately or rented out. The intent of allowing lock-off units in stacked townhouses and rowhouses is to increase the rental stock in the neighbourhood and to provide the option of having a mortgage helper for the owner of the unit (similar to the option of having a secondary suite in one- and two-family dwellings).
- (b) A lock-off unit is an optional and flexible use, and therefore the lock-off unit must be equipped with an internal access to the main unit.
- (c) A lock-off unit cannot be strata-titled (secured by covenant).
- (d) While lock-off units do not require additional vehicle parking, they do need separate bicycle parking (see Section 4.9).
- (e) In order to ensure safety and acceptable standards of liveability, lock-off units must comply with the **Principal Dwelling Unit with a Lock-off Unit Guidelines**.
- (f) The maximum number of lock-off units in stacked townhouse developments is one lock-off for every three units.
- (g) The maximum number of lock-off units in rowhouse developments is one lock-off unit for every rowhouse unit.
- (h) The bedroom in a lock-off unit does **not** count toward the required percentage of 3-bedroom units under the Conditions of Use in Section 3.3.1 of the District Schedule (i.e. a 2-bedroom unit with a lock-off unit is a 2-bedroom unit, not a 3-bedroom unit).

3.2 Conditions of Use for Three-bedroom Units

In order to ensure an adequate supply of housing suitable for families, as an alternative to single-family houses, multiple dwellings with four or more units are required to include a minimum of 25% of three-bedroom units.

4 Guidelines Pertaining to Regulations of the Zoning and Development or Parking By-laws

4.2 Frontage

The minimum frontage in the District Schedule for a multiple dwelling with four or more units (not including lock-off units) is 12.8 m (42 ft.). This is the minimum frontage for a townhouse development. It allows for small townhouse developments on individual sites, and for larger developments on assembled sites.

4.3 Height

Adjacent to the street at the front of the site, and, in the case of corner sites, on the flanking street side:

- (a) For stacked townhouses and rowhouses, the Director of Planning may permit an increase in building height to 11.5 m (37.5 ft.) and 3 storeys. This will allow for adequate layouts and livability of both upper and lower units.

Adjacent to the lane at the rear of the site:

- (b) For courtyard rowhouses or courtyard stacked townhouses, the Director of Planning may permit an increase in building height if the rear yard setback at the lane is 10 ft or more, or if there are specific site conditions (e.g. tree retention).
 - (i) For a minimum 7:12 pitched roof, the Director of Planning may permit an increase in building height to 10.1 m (33 ft.) and a partial third storey; and,
 - (ii) For a flat or less than 7:12 pitched roof, the Director of Planning may permit an increase in building height to 9.4 m (31 ft.) and a partial third storey.
- (c) Infill or principal buildings, other than courtyard rowhouses, located in the rear should be one and a partial second storey with or without a basement. In considering the partial second storey, the guidelines in Section 5 should be followed. The Director of Planning may relax the 7.7 m (25 ft.) height limit on corner sites and on sloping sites to 9.5 m (31 ft.) where the infill or principal building is more than 4.9 m (16 ft.) from the adjacent property. However, a maximum height of 7.7 m (25 ft.) shall be maintained within 4.9 m (16 ft.) of adjacent properties.

4.4 Front Yard

- (a) For townhouse developments, front yards may be reduced to 3.7 m (12 ft.) to allow for sufficient courtyard width and help in the provision of useable outdoor space for all units. Adjacent existing buildings may have deeper front yards. To assist with this transition the sidewalls of new buildings should be well composed and treated with materials and fenestration to avoid the appearance of a blank 'end wall' condition.

4.5 Side Yard

The minimum side yard is 1.2 m (4 ft.). A 2.4 m (8 ft.) side yard may be required at **one side** of the front building to provide space for a 2.0 m (6.56 ft.) fire-fighter access path from the street to the units at the courtyard and the rear of the site. See Section 2.4.

4.6 Rear Yard

A minimum rear yard of 1.8 m (6 ft.) is required for courtyard townhouse developments to provide space for secondary entrance porches and patios as well as space for planting at the lane.

Secondary entrances from the lane are encouraged to provide a residential scale and character. However the lane entry is not considered to be the primary unit entrance for fire-fighter access as required by the Vancouver Building By-Law. The primary unit entrance must be accessed from the street via a 2 m (6.56 ft.) clear continuous path and, as such, will be located facing the courtyard and the front of the site.

A minimum rear yard of 3.0 m (10 ft.) is required for courtyard developments to achieve a partial third storey for the building at the lane (see Section 4.3).

4.7 Floor Space Ratio (FSR)

Floor space ratios for different building types are specified in the RM-8, RM-8A, RN-8N and RM-8AN District Schedule and further explained in Table 1 of these guidelines. Depending on site features such as existing trees, topography, and site dimensions (particularly site depth), as well as the other requirements, such as parking requirements, it may not be possible to achieve the maximum permitted FSR on all sites.

For townhouse developments to achieve the maximum FSR of 1.2, a certain unit size requirement has to be met. The intent of this unit size requirement is to achieve a mix of unit sizes, which in turn can offer a greater variety of price points. The requirement of a minimum of 45% of the units to be between 900 and 1,200 sq. ft. in size will be easily achievable on most sites. Floor area should be measured from the inside of all outer walls (i.e. “paint-to-paint”), and should exclude a maximum of 3.7 m² (40 sq. ft.) of residential storage space. The provision of some wider ground floor units is anticipated for developments to be able to meet the requirement. However, the Director of Planning can accept slightly lower percentage of units in the 900 to 1,200 sq. ft. range where site-specific circumstances (such as tree retention or slope) prevent the development from achieving the required 45%.

Parking and bicycle storage exclusions

The intent of Section 4.7.8 (e) of the RM-8, RM-8A, RN-8N and RM-8AN Districts Schedule is to exclude accessory buildings used for bicycle parking only. Garages used for vehicular parking are counted in floor area.

Floor space under pitched roof

The intent of Section 4.7.8 (c) of the RM-8, RM-8A, RN-8N and RM-8AN District Schedule is to allow sloped ceilings where they occur directly underneath the structure of a steeply-pitched roof (9:12 pitch or greater). Where such a condition occurs, ceiling heights in excess of 3.7 m (12 ft.) may result for small portions of this space. This means that the space on the top floor below a roof with a steep pitch that is in excess of 3.7 m (12 ft.) will not be counted twice towards overall floor space calculation. The intent of this section is not to permit excessively high ceilings for the lower storeys as this would contribute to the overall external bulk of the building. High ceilings in excess of 3.7 m (12 ft.) height that are proposed for storeys that are

below the top storey, therefore, will be counted twice towards the overall floor space calculation.

4.8 Site Coverage and Impermeability

For stacked townhouses and rowhouses, the Director of Planning can increase the area of impermeable materials to 75% of the site. However, for stacked townhouse and rowhouse developments with underground parking, a further relaxation may be granted, if:

- (a) The outer limits of the underground parking areas does not protrude into the required setbacks on the site, other than the access ramp.
- (b) The proposed development meets stormwater and groundwater requirements for the area. See Section 10 for more detail.

4.9 Off-Street Parking and Bicycle Storage

4.9.1 Parking

For townhouse developments, the following applies:

- (a) Parking can be provided underground or above ground at the lane.
- (b) Underground parkades should not project into the front, side or rear yards and should align with the exterior walls of the buildings above.
- (c) Where elevated courtyards are proposed, exposed portions of underground parking should be clad with high-quality, durable materials and screened with plantings at-grade.
- (d) For planting over structures, provide substantial growing medium volumes within irrigated planters (to meet BCSLA latest standard).
- (e) Open exit stairs from the underground parkade are discouraged due to CPTED (Crime Prevention Through Environmental Design) concerns.
- (f) Covered parkade exit stairs are encouraged and may be located within the building massing or within the courtyard provided they do not compromise the functionality of the courtyard or livability of adjacent units. Covered parkade exit stairs are not permitted in the side yards.
- (g) Where parking is located above ground at the lane, it can be accommodated in open parking spaces or garages, however, enclosed parking is counted as part of the allowable floor space. There is no exclusion for above ground parking within the residential buildings at the lane or accessory buildings for the purpose of FSR calculations.
- (h) Open parking spaces should be paved with pavers that are permeable to reduce stormwater sewer loads. However, since most permeable pavers lose their permeability over time, parking areas with permeable pavers are counted as impermeable surface.

For three-unit multiple dwellings (triplex), parking should be located within the rear 6.1m (20 ft.) of the site. Parking may be provided as surface spaces located at grade or in a garage. The garage is limited in size to a two-car garage of 42 m² (400 sq. ft.).

4.9.2 Bicycle Storage

- (a) The District Schedule specifies that the portion of required bicycle parking located in an accessory building may be excluded from floor area calculations.
- (b) Creative bike parking solutions should be sought, such as under stairs and patios, in crawl spaces and in freestanding boxes. They should not compromise the functionality of courtyards or private outdoor amenity space.

4.14 Dedication of Land for the Purpose of Road Widening

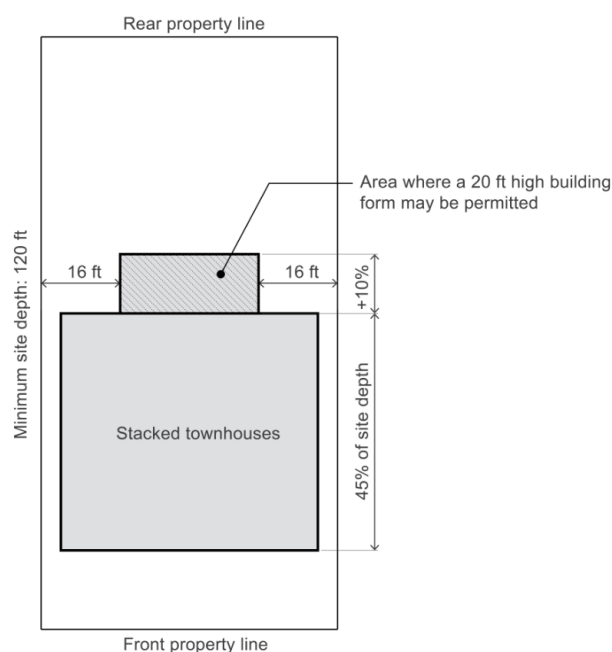
Dedications are required from conditional development to facilitate increased street right-of-way width to provide Complete Streets or other public realm improvements on Oak Street and King Edward Avenue.

4.16 Building Depth and Building Width

4.16.1 Building Depth

- (a) For all housing types permitted, the maximum building depth is 40% of the depth of the site, as specified in the RM-8, RM-8A, RN-8N and RM-8AN Districts Schedule.
- (b) For stacked townhouses or back-to-back townhouses, the building depth can be increased to 45% of the site depth, provided all units meet livability guidelines for light and ventilation.
- (c) For stacked townhouses or back-to-back townhouses on sites that have a minimum depth of 36.6 m (120 ft.), the building depth can be increased to 55% for any portion of the building located at least 4.9 m (16 ft.) from any side property line (See Figure 5). This would allow the middle section of a building to extend further into the back yard, thereby giving more options for window placement and achieve better livability for the units in the centre of the development. The portion of the building that extends beyond 45% building depth cannot be more than 6 m (20 ft.) high. While the increase in building depth improves the internal layout, it will be achieved at the expense of ground level rear yard space. Therefore, an adequate amount of outdoor space should be provided in the form of a generous porch or balcony.

Figure 5: Increased building depth for middle section of a stacked townhouse building



4.16.2 Building Width

The housing types permitted in the RM-8, RM-8A, RN-8N and RM-8AN Districts are larger than the existing single-family dwellings in the neighbourhood. To ensure that new forms of development are compatible in massing with the existing streetscapes, building width should be limited. Limiting the building width allows more windows on the sides and allows for better cross-ventilation and access to natural light.

- (a) Building width over 27 m (90 ft.) should be avoided.
- (b) On sites with frontages of 40 m (132 ft.) or more, particular care should be taken to avoid monotony in building massing and design. Buildings may be broken up in sections to fit with the variety of the existing streetscape. Other forms of architectural articulation can also be used to reduce the massing of long rowhouse developments.

4.17 External Design

4.17.1 Separation between infill and other dwellings

- (a) The minimum separation between an infill located in the rear yard and any other dwelling uses on the site is 4.9 m (16 ft.). This distance can be reduced to assist in the retention of a pre-1940 building, provided all building code and fire separation regulations can be met.

4.17.2 Separation between adjacent multiple dwelling buildings

- (a) Where a development includes two or more townhouse buildings, the minimum distance between the exterior side walls of the adjacent buildings should be 3.1 m (10 ft.). This does not apply to the courtyard between the front and rear buildings which must meet the separation requirements in section 2.6.3.

4.19 Number of Buildings on Site

- (a) On a lot that backs or flanks onto a school or park, on a corner lot or on a lot that is more than 45.7 m (150 ft.) deep, a second principal building may be permitted. Development scenarios include:
 - i. one duplex and one one-family dwelling;
 - ii. two one-family dwellings; and
 - iii. on sites of sufficient width to accommodate the required parking, two duplexes.
- (b) On sites over 445 m² (4,790 sq. ft.), a second principal building in combination with a multiple dwelling can be considered.

5 Architectural Components

Developments are not required to emulate any particular architectural style. Regardless of style, a high level of design excellence is expected to participate in the enrichment of the streetscape. All walls or portions thereof that are visible from the street should include a cohesive and well-scaled composition of cladding materials, trim, fenestration and relief elements such as bays, recesses, porches, balconies which provide shadow play, wall texture, rain protection and human scale.

5.1 Roof and Massing

5.1.1 Roofs

The orientation, form and massing of the roof is limited by the desire to locate livable space within and the requirement to limit the amount of the building mass as seen from the street. The following guidelines are intended to assist with a neighbourly transition between new development and existing one-family dwellings:

- (a) The maximum allowable roof height as specified in the District Schedule may only be attained as a localized point within the development, rather than as a continuous height around the perimeter of the building.
- (b) For pitched roofs, the main roof should spring from the upper floor level. It is expected that some of the allowable floor space will be between 1.2 m (4 ft.) and 2.4 m (8 ft.) in height in most developments. In general, the eave height of a sloped roof or the second-storey cornice line on flat roof buildings should not be higher than 7.9 m (26 ft.).
- (c) Secondary roof forms and dormers should be clearly subordinate to the main form in size and number. They may vary in the pitch of the main roof.
- (d) Roof top terraces should be set back from the edge to minimize the view into adjacent yards.
- (e) Roof top stairwell 'penthouses' should be located to minimize the visual prominence of these elements.

5.1.2 Massing of Rowhouses and Courtyard Rowhouses on the Street

- (a) Rowhouses and courtyard rowhouses should visually emphasize individual units. While many successful rowhouse developments rely on simple repetition of identical or near

identical side-by-side units, the boundaries of each unit should be obvious and clearly expressed on the street façade.

- (b) The apparent scale should furthermore be reduced by other aspects, such as floor to floor heights, horizontal elements, changes in material, and the proportion and placement of openings.

5.1.3 Massing of Infill and Courtyard Rowhouses on the Lane

- (a) Courtyard rowhouses at the rear of the site should be designed to reduce apparent massing adjacent to the lane and neighbouring properties.
- (b) The upper floor facing the lane should be stepped back or contained in a roof form. See section 5.1.1. (a).

5.3 Entrances, Stairs and Porches

The intent of these guidelines is to maximize active street life by enlivening the streetscape with residents' use of front entries and porches and front facing yards.

5.3.1 Entrances

- (a) For stacked townhouses, each stacked unit should have one unit entrance facing the street and the other unit in the 'stack' may have their entrance facing the courtyard/rear yard. The location of unit entrances should generally align with adjacent units in the 'row'.
- (b) For back-to-back townhouses, units in the back row can have their entrance facing the courtyard/rear yard.
- (c) For courtyard configurations, units in the rear building should have main entrances facing to the internal courtyard and secondary entrances facing the lane.
- (d) Pedestrian pathways to units facing the courtyard should be clearly visible for wayfinding purposes (such as through lighting, addressing and arbours/trellises).

5.3.2 Porches

- (a) For stacked townhouses, each stacked unit should be designed with a major private outdoor space on the principal street-facing facade in the form of a front porch, a front patio, a balcony or a roof deck.
- (b) Entrance porches can range from a small stoop area to a large, more usable porch.

5.3.3 Stairs

- (a) Exterior porch landings and stairs ("stoops") may access the first storey above grade and play a role as places for informal social interaction. It is recommended that landings are generally no more than 1.5 m (5 ft.) above grade or a courtyard.
- (b) Stairs to upper levels above the main floor either within a unit or to provide access to an upper level stacked unit can be accommodated within the internal space of the house or partially externally.
- (c) Steps are allowed in required side yards where they are designed to facilitate grade changes from the front to the rear of the site.

5.4 Windows and Skylights

Window placement and design play important roles in the overall visual composition of a building. Windows are also significant for the liveability of a unit because they let in natural light and air.

- (a) When a window or skylight is the only source for natural light for a room, it should also be possible to open it to guarantee natural ventilation throughout the dwelling.

5.5 Balconies and Decks

- (a) Balconies and decks should be designed as integral parts of the building massing and façade composition.
- (b) In order to minimize overlook of neighbouring properties, projection of balconies located above the first floor are discouraged.
- (c) Privacy screens on roof decks should be set back from the roof edge and not exceed 1.8 m (6 ft.) in height so that their visibility from the street and adjacent properties is minimized.

5.6 Exterior Walls and Finishing

The finishing materials of new development should be durable. High-quality materials that last longer are more sustainable and create less waste. Materials that perform well over a long period of time also increase the affordability of the dwelling.

In addition to durability, the following guidelines should be considered when choosing exterior materials:

- (a) Materials should be used in a way that is true to their nature. For example, stone facing should be used as a foundation element, and as the base of columns, but should not be used as a facing on upper levels with no clear means of support below.
- (b) In general, the same materials should be used in consistent proportions on all facades and not just on the street face. Materials should carry around corners and terminate at logical points to avoid appearing as a thin veneer or ‘false front’.
- (c) All sides of a building that extend in front of an adjacent building are visible from the public realm and warrant appropriate design. For corner buildings, the side façade should be articulated and have sufficient windows and detailing, comparable to the front façade.
- (d) Large blank walls should be avoided whenever possible. Window openings, detailing, materials, colour, wall articulation and landscaping should be used to enliven them and reduce their scale.
- (e) Exposed foundations should be limited to 30 cm (12 in.).
- (f) Garage doors should be single width.

5.7 Relationship to Finished Grade and Public Realm

The establishment of floor elevations should be considered carefully to respond to existing site topography. Conspicuous retaining walls should be avoided. Wherever possible, protrusions of the underground parking garage should not be evident above the natural grade, particularly in front and side yards.

6 Lane Frontage

For courtyard rowhouse developments, the lane will become a focus of development, and in effect, an exposure that is as important as the streetscape. The “lanescape” should be a visually interesting experience for passersby and a pleasant outlook for residences near the lane, while at the same time accommodating necessary services:

- (a) Entry porches, insets, projections and overhangs should be used to lend interest to the lane façade, and to emphasize the presence of living space;
- (b) Trellises should be provided to screen parkade entries and create places for planting.
- (c) Garbage and recycling storage is provided in the underground parkade, or within a screened enclosure.

7 Open Space

The provision of open space should be part of an overall site development and landscape plan and should take into consideration general site circulation patterns, including parking, existing landscape features, sun access, privacy and usability.

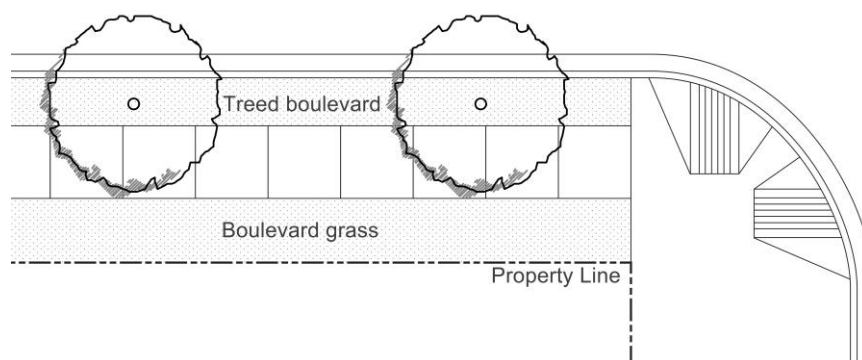
- (a) In rowhouse developments, open space should be organized in a way that every rowhouse unit has its own front and rear yard.

- (b) For courtyard rowhouse developments, semi-private space or garden/entry courtyards in the centre of the site, should be designed:
 - (i) as a focus of development and an organizing element, not as ‘leftover’ space.
 - (ii) as a primary outlook and entrance for units in the middle and rear sections of a site.
 - (iii) to provide sufficient distance, screening, landscape, and outlook considerations for the mutual comfort of dwellings overlooking the space.
- (c) For stacked townhouses:
 - (i) a ground-level yard is preferable, particularly for larger units;
 - (ii) alternatively, a spacious balcony or deck with a minimum depth of 1.8 m (6 ft.) should be provided;
 - (iii) units that could accommodate families with children (2 bedrooms or larger) should provide open space that is suitable for children’s play.
- (d) For each lock-off unit, a minimum area of 1.8 m² (19 sq. ft.) should be provided immediately adjacent to and accessible from the unit.
- (e) Roof decks add considerably to the amenity of any unit. Care should be taken to avoid direct sightlines to neighbouring windows, balconies and yards. Roof decks should be well-integrated into the overall form, such as cut into sloped roofs in a way that does not upset roof geometry.

8 Landscaping

- (a) Existing trees should be kept and new trees introduced wherever possible.
- (b) Patio areas in the front yard should be screened with planting.
- (c) Visually undesirable building features, such as exposed foundation or utilities, should be screened with landscaping. Sidewalk and boulevard arrangement should be consistent with the City’s **Streetscape Design Guidelines** or, in the case of sites in Cambie Corridor, with the **Cambie Corridor Public Realm Plan**. Typically, a treed boulevard should be provided between the sidewalk and the street (see Figure 6).

Figure 6: Typical sidewalk and boulevard arrangement



- (d) The front and back boulevard should be landscaped as green space. At a minimum, they should be retained as grassed areas, but more intense planting is encouraged. The space between the sidewalk and the front property line should receive similar treatment.
- (e) In general, the Zoning & Development By-law fencing height limit of 1.2 m (4 ft.) in front yards, and 1.8 m (6 ft.) in rear and side yards should be respected. However, exceptions may be made for entry arbours, and trellises or screening elements immediately adjacent to patio or deck areas. Over height elements in the front yard should assist with the definition of outdoor space but should not prevent all views or glimpses of the outdoor space from the street. Any over height element should be largely transparent and limited in extent.
- (f) Where walls or fences are provided, they should be combined with soft landscape to provide visual depth, screening and layering.
- (g) Landscaping in semi-private common spaces in courtyard rowhouse developments should be designed to provide screening and filtering of views. Planting larger caliper trees is particularly necessary in these locations.

- (h) Where courtyard rowhouses are located at the lane, every opportunity to enhance the lanescape with landscaping should be taken. This includes:
 - (i) Entry gates and arbors over pedestrian entrances.
 - (ii) Arbors over driveway entrances.
 - (iii) Planted areas or planter boxes between garage doors.
 - (iv) Trellised areas along the lane façade, between and above garage entries, to enable “vertical greening” with vines.
 - (v) Planters overhanging the lane on balconies and outside the windows of dwellings on upper levels.
 - (vi) Planting of trees near the lane where possible.

9 Garbage and Recycling

For multiple dwelling developments, garbage and recycling will be collected by private contractors. Measures should be taken to ensure that waste bins are not left in the lane. Appropriate areas for garbage and recycling bins should be provided to ensure convenient pick up – either in the underground parkade or directly off the lane. The document, **Garbage and Recycling Storage Facility Supplement**, provides detailed information on the number of containers required and dimensions and specifications of commonly used storage containers.

10 Rainwater and Groundwater Management

Underground parking structures should be absolutely minimized, and held back from site edges to allow for tree planting and rain water infiltration. The parking structure should not project into front or side yards (See Figure 7).

For sites in Cambie Corridor, specific rainwater and groundwater management requirements Apply. Please refer to the [Rainwater Management Bulletin](#) and the [Groundwater Management Bulletin](#) for more detail.

Figure 7: Parkade Structure - Plan and Typical Section

