

Commercial Zoning Update Working Group



Meeting Agenda Thursday, August 18, 2022 5:00 p.m. – Village Hall Court Room 3930 N. Murray Ave., Shorewood WI

Written comments on any of the following agenda items may be submitted to bgriepentrog@shorewoodwi.gov through 3:00 pm the day prior to the meeting. Comments received prior to the deadline will be shared with the Working Group. Comments after that deadline will need to be shared verbally within the meeting during available public comment periods.

1. Call to order
2. Roll call
3. Discussion of Module 1 (535-21 Commercial & Mixed-Use Districts)
4. Introduction of Module 2 (535-22 Building Design and 535-23 Landscape & Site Design)
5. Future discussion items
6. Public comment
7. Adjournment

Dated at Shorewood, Wisconsin, this 16th day of August, 2022

Village of Shorewood
Toya Harrell
Village Clerk

Should you have any questions or comments regarding any item on this agenda, please contact Bart Griepentrog, Planning Director, Planning & Development Department, at (414) 847-2640. Upon reasonable notice, efforts will be made to accommodate the needs of all individuals.

It is possible that members of and possibly a quorum of members of other governmental bodies of the municipality may be in attendance at the above stated meeting to gather information; no action will be taken by any governmental body at the above stated meeting other than the governmental body specifically referred to above in this notice.

SHOREWOOD

COMMERCIAL ZONING UPDATE



Working Group Initial Draft: Module 1

July 20, 2022

INITIAL DRAFT REVIEW KEY

green text is pulled directly from the current code and will be removed once the appropriate metric is agreed upon. **[green text in brackets]** is current code regulation for information/comparison only.

pink text highlights items to discuss during initial draft phase and will be removed for the public review draft unless additional input is needed on the specific item. Many of these questions are in the form of footnotes that will also be removed once answered. (Footnotes that are informational will be left in as directed and will be black text in public review draft.)

blue text indicates linked cross-references that are digitally linked and will remain blue in the final code.

XXX indicates references to future sections to be developed in module 2.

An "exception" noted throughout this document is a relief process that will be discussed in module 2.

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MODULE 2

535-21A INTENT

The regulations of the commercial and mixed-use districts are intended to support development along the business corridors of the village, based upon the goals and vision established in the Village’s comprehensive plan. Further, these districts are intended to achieve the following:

535-21A(1) SENSE OF PLACE

A sense of place defined by human-scaled development consisting of a variety of high quality buildings and civic spaces with well-designed landscape and streetscapes.

535-21A(2) WALKABLE DEVELOPMENT

Walkable development that is comfortable, safe, and interesting for the pedestrian through the use of human-scaled buildings, streetscape design, and a hierarchy of streets for pedestrians and vehicles.

535-21A(3) MIXED-USE

Buildings and development that activate streets and civic spaces during the day and into the evenings through a mix of uses and multi-story buildings that define the public space of the street.

535-21A(4) SUSTAINABLE

Development that promotes environmental sustainability goals, such as reductions in vehicle miles traveled (VMT) and greenhouse gas (GHG) emissions through pedestrian- and bicycle-friendly design.

535-21B DISTRICTS

535-21B(1) DISTRICTS ESTABLISHED

The Village’s commercial and mixed-use districts are listed in [Table 535-21-1](#). When this zoning ordinance refers to “commercial” districts, it is referring to these districts.

535-21B(2) DISTRICT DESCRIPTIONS

(a) MX, Mixed-Use Storefront Districts. The MX districts are intended for the mixed-use corridors, where walkable Storefront Buildings include shopping, eating and drinking, and services.

- [1] MX1 is for locations abutting neighborhoods.
- [2] MX2 is reserved for locations where taller buildings fit within the context of the area, as designated in the comprehensive plan.

(b) CX, Commercial Storefront Mix District. The CX district is intended for specific locations where single-use commercial may be oriented both to pedestrian and automobile access is allowed as designated in the comprehensive plan.

(c) GX, General Residential-Office Districts. The GX districts are intended for locations along corridors and neighborhood edges, where residential, office, and other low intensity commercial and production uses can mix comfortably in General Buildings and Row Buildings can be used for live-work or residential uses.

- [1] GX1 is for locations abutting neighborhoods.
- [2] GX2 is for locations where taller buildings fit within the context of the area, as designated in the comprehensive plan.
- [3] GX3 is reserved for the southeast intersection at Capitol Drive and Oakland Avenue, where the tallest development is designated to occur per the comprehensive plan.

(d) RX, Residential Mix District. The RX district is intended for multi-unit residential in a mix of building types located on the edges of neighborhoods.

Table 535-21-1. Districts

SYMBOL	DISTRICT NAME
MIXED-USE & COMMERCIAL DISTRICTS	
MX1	Mixed-Use Storefront 1
MX2	Mixed-Use Storefront 2
CX	Commercial Storefront Mix
GX1	General Residential-Office Mix 1
GX2	General Residential-Office Mix 2
GX3	General Residential-Office Mix 2
RX	Residential Mix

535-21 Commercial & Mixed-Use Districts
535-21C. Applicable Regulations

535-21C APPLICABLE REGULATIONS

The following regulations apply to all sites zoned as commercial and mixed-use districts. Any other applicable regulations established by the Village may also apply.

535-21C(1) BUILDING TYPES

Building types regulated in this section 535-21 are allowed in districts per [Table 535-21-2](#). All buildings and site development must comply with one of the building types in this section, unless otherwise expressly stated in these zoning regulations.

535-21C(2) USES

See [XXX](#) for allowed uses and any use-specific regulations within each district.

535-21C(3) BUILDING & SITE DESIGN

See [XXX](#) for building and site design regulations applicable to all building types allowed in this section 535-21.

535-21C(4) MEASURING BUILDING TYPES

See [535-21](#) for definitions and methods for measuring building type requirements.

535-21C(5) EXISTING BUILDINGS AND LOTS

See Article VII for buildings constructed and lots established prior to the adoption of these regulations that do not conform to these regulations.

535-21C(6) APPROVALS

See [XXX](#) for development approval procedures.

535-21C(7) EXCEPTIONS

See [XXX](#) for minor and major exceptions processes to the building type, building design, and site design regulations. Modifications to building type regulations include:

- (a) [to be developed in module 2]

535-21D APPLICABLE TO ALL BUILDING TYPES

The regulations of this subsection apply to all building types, unless otherwise stated.

535-21D(1) PERMANENT BUILDINGS

All buildings must be of permanent construction without a chassis, hitch, or wheels, or other features that would make the structure mobile, unless otherwise expressly stated in this ordinance, and except as follows:

- (a) **Temporary Construction Buildings.** Temporary construction buildings are allowed per 535-10C.
- (b) **Other Temporary Buildings.** Temporary buildings, other than temporary construction buildings, may be allowed on sites per [XXX](#).¹

535-21D(2) ACCESSORY STRUCTURE REGULATIONS

Except as defined in the building type regulations, accessory structures are subject to the regulations of [535-26](#).

535-21D(3) NUMBER OF PRINCIPAL BUILDINGS

One principal building is allowed per lot, unless otherwise stated in the building type regulations.

535-21D(4) TREATMENT OF YARDS

All yards must consist of landscape areas, patio space, or sidewalk space, unless otherwise expressly stated. See [XXX](#) for landscape and site design regulations.

- (a) **Parking Locations.** Paved vehicular areas (parking lots, loading areas, drives) are located per the building type regulations.
- (b) **Side Yard Parking Lots.** Some districts allow side yard parking lots. Side yard parking lots must not encroach

¹ Process will be defined in second module.

Table 535-21-2. Allowed Building Types by District

Building Types	District							Reference
	MX1	MX2	CX	GX1	GX2	GX3	RX	
Storefront Building	●	●	●	–	–	–	–	535-21E
Commercial Building	–	–	●	–	–	–	–	535-21F
General Building	–	–	–	●	●	●	●	535-21G
Row Building	–	–	–	–	●	●	●	535-21H

KEY: ● = Allowed

535-21 Commercial & Mixed-Use Districts

535-21D. Applicable to All Building Types

into any street yard or minimum side setback, except as otherwise expressly stated.

(c) Driveways Crossing Yards. Paved vehicular areas are limited to specific locations per the applicable district building type regulations. Driveways may cross through yards as follows:

- [1] Where permitted as access to the lot, driveways may cross perpendicularly through the primary or non-primary street yards, except as otherwise expressly stated.
- [2] In all districts, driveways may cross perpendicularly through the side and rear yards to connect to parking on adjacent lots.

535-21D(5) REFUSE & RECYCLING LOCATIONS

Unless otherwise defined by the building type, all refuse, recycling, and other waste areas must comply with the regulations of this subsection, [535-21D\(5\)](#). Recycling includes any donation collections containers for clothing or goods.

(a) Interior Location Access Doors. Refuse, recycling, and other waste areas must be located inside the building with access doors off the rear or interior side facade.

- [1] Access doors may be located off a non-primary street facade if no other option exists.
- [2] Access doors must be opaque, screening a minimum of 80% of the opening.
- [3] Karts, dumpsters, and containers must be located immediately inside the access doors and stored inside until the process of emptying. Karts, dumpsters, and containers may not be pulled out on the street in advance of the arrival of the hauling truck.
- [4] See 455-2 for collection service regulations.

(b) Rear Yard. Refuse, recycling, and other waste areas may be located in the rear yard of the lot with approval of an exception. See [XXX](#) for required screening of refuse, recycling, and other waste areas.

535-21D(6) LOADING LOCATIONS

Unless otherwise defined by the building type, all loading areas must be located as follows.

(a) Rear Yard. All loading activities must occur in the rear or interior yard.

(b) Access Doors and Docks. All loading docks and access doors must be located on a rear facade or interior yard facade.

(c) Screening. See [XXX](#) for required buffers and [XXX](#) for required screening.

535-21D(7) PRIMARY FRONTAGES

Primary frontages generally establish the fronts of lots and buildings, and determine where to locate the principal entrance to the building. Per the building type regulations, primary frontages require the highest level of facade treatment and restrict the location of parking, driveways, and garage entrances.

(a) Designation. Lots may have multiple primary frontages. Primary frontages are generally defined by primary street, waterway frontage, and civic space frontage as follows:

- [1] Primary Streets. Defined primary streets include Oakland Avenue, Capitol Drive, and Wilson Drive.
- [2] Neighborhood Primary Streets. Within neighborhoods, primary streets are those where the majority of buildings along the street have front facades and principal building entrances facing the street.
- [3] Waterfronts. Lots with frontage along the Milwaukee River must treat facades facing the waterway as primary frontages in addition to any primary street frontage.
- [4] Civic or Open Space Frontage. Lots containing or abutting civic spaces or public open spaces must treat frontages abutting that space as primary frontages, unless otherwise approved by the Plan Commission.
- [5] Non-Primary Frontage. A non-primary frontage is a street frontage that is not considered a primary frontage.

(b) One Primary Street Frontage Required. All lots must treat at least one street frontage as primary. If no primary street abuts the lot, the street with the most existing frontage(s) must be treated as primary, unless otherwise approved by the Plan Commission.

(c) Through-Lots with Two Primary Frontages².

- [1] Where a parcel zoned MX, GX, CX, or RX extends from one primary street through the block to another primary street, each street must be treated as a primary frontage, unless otherwise approved as an exception.

² Not many of these exist; included just in case a situation arises.

535-21 Commercial & Mixed-Use Districts

535-21D. Applicable to All Building Types

- [2] Any through-lot facing any R district across a street must incorporate the following:
- [a] Within the first 50 feet of lot depth across from any R district primary frontage, all regulations of a General or Row Building type.
 - [b] Uses permitted in those building types are allowed except no retail or consumer service category uses.
- [3] An exception may be approved for a different configuration.

(d) Intersecting Primary Streets. Where two primary streets intersect on the subject lot, the street with the most existing primary frontage treatments may be treated as the sole primary frontage of the lot.

- [1] In the case of the intersection at Capitol Drive and Oakland Avenue, both frontages must be treated as primary frontage unless an exception is approved.
- [2] Where a Storefront Building is located at the intersection of either Capitol Drive or Oakland Avenue with a neighborhood street, Capitol Drive or Oakland Avenue must be treated as the primary frontage.
- [3] Where a building other than a Storefront Building is located at the intersection of either Capitol Drive or Oakland Avenue with a neighborhood street, the development may treat either as the primary frontage.
- [4] Where an existing building is located at the intersection of either Capitol Drive or Oakland Avenue with a neighborhood street and fronts the neighborhood street, the neighborhood street serves as the primary frontage.

(e) Non-Primary Frontages. Non-primary frontages allow for a lower level of facade treatment as well as permit locations for garage and parking lot driveways entrances. Non-primary frontages may always be treated at the higher level of a primary frontage.

535-21D(8) MINIMUM STREETSCAPE AREA

- (a) Purpose.** A minimum area between the street pavement and the lot line is required to ensure adequate pedestrian facilities are provided along all streets, including, at a minimum, sidewalks and street trees.
- (b) Build-to Zone Measurement.** Where the area from the back of curb to the lot line along any portion of the

frontage is less than 12 feet³, the build-to zone must be measured starting from 12 feet off the back of curb/edge of pavement into the lot. The result is the building will be located such that the pedestrian area is at least 12 feet deep. The back-of-curb measurement must be taken along the typical street segment and must not include any bump-outs at street corners. See [XXX](#) for measuring build-to zones.

- (c) Streetscape.** The extended streetscape area must be treated with streetscape per [XXX](#).
- (d) Easement.** When the sidewalk is less than 5 feet in clear width, an easement is required to ensure a full 5-foot sidewalk is publicly available.

³ The current build-to line in B1 requires 15 feet instead of 12, back of curb to 15 feet, or if the distance is greater than 15 feet, the lot line is the build-to line. 12 is a typical, comfortable pedestrian area width -- 7-foot tree/furnishings area plus 5-foot clear walk area. Most of the current pedestrian areas are 12 feet. Build-to lines are not very flexible and result in a rigid streetwall that does not create spaces along the sidewalk, one of the objectives discussed in the public meetings. Build-to zones allow more flexibility.

535-21E STOREFRONT BUILDING TYPE

535-21E(1) DESCRIPTION AND INTENT

The Storefront Building type is intended for use along corridors to accommodate shopping, services, and eating establishments in a mixed-use building. Oriented to the street with narrow or no side setbacks, this building type's streetwalls help define the public space of the street. Ground story storefront glass, entrances along the sidewalk, and windows in upper stories facing the street make these buildings interesting and inviting to pedestrians. Parking is located internally or in the rear yard.

535-21E(2) ILLUSTRATIVE IMAGES

The images shown in [Figure 535-21-A](#) are intended to illustrate the general character of the building type. The buildings and sites in each image may not fulfill all of the building type regulations.

535-21E(3) BUILDING REGULATIONS

The following tables and illustrations regulate this specific building type. See [535-21D](#) for general regulations for all building types. See [535-21I](#) for definitions and measuring table regulations.

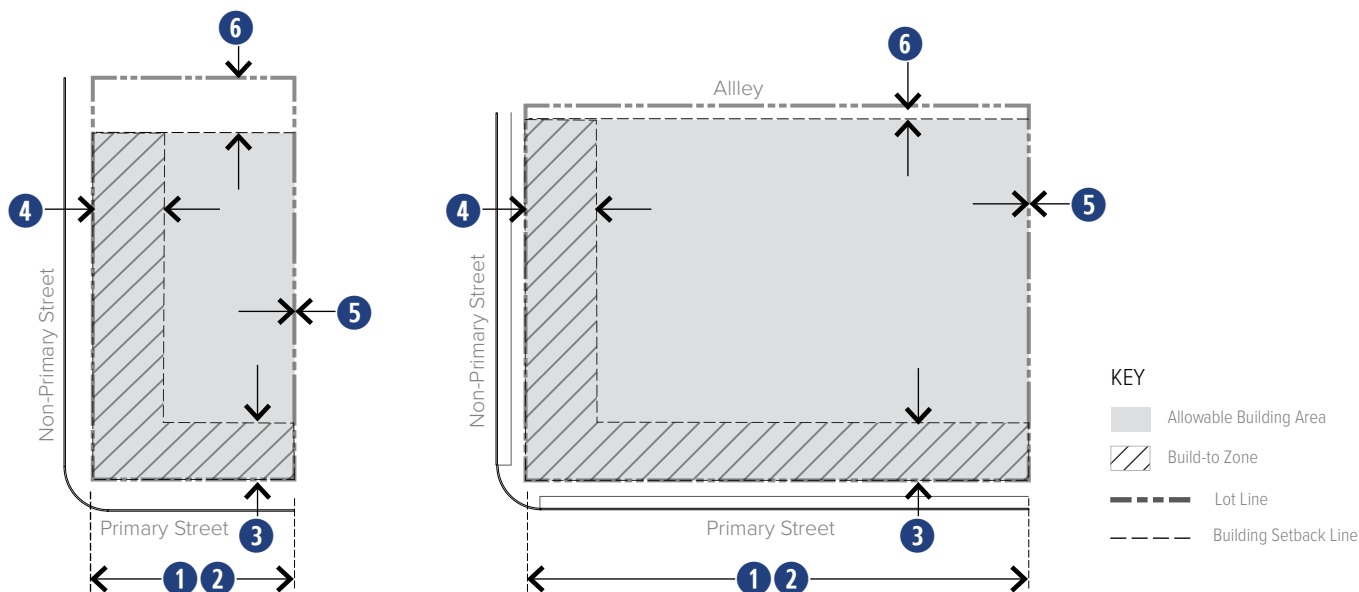
LINK	SUBSECTION
535-21 E (4)	Building Siting
535-21 E (5)	Parking & Accessory Structures
535-21 E (6)	Height
535-21 E (7)	Roofs
535-21 E (8)	Primary & Non-Primary Facades
535-21E(9)	Supplemental Regulations



Figure 535-21-A. Examples of Storefront Building Type

535-21 Commercial & Mixed-Use Districts
535-21E. Storefront Building Type

Figure 535-21-B. Storefront Building Siting

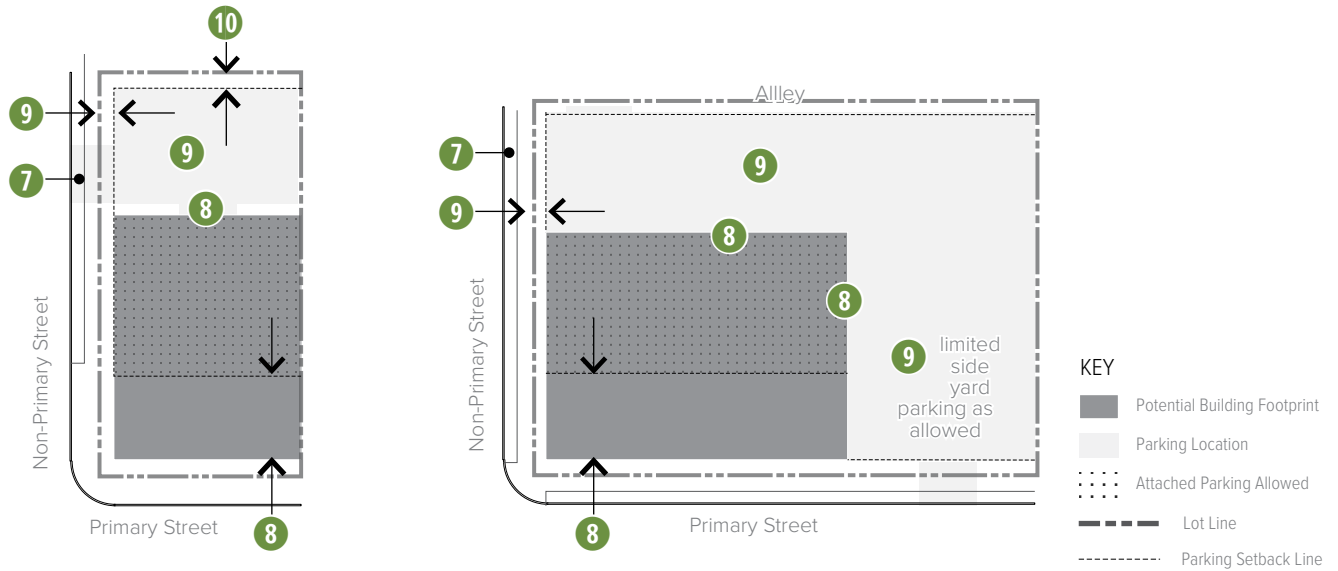


DISTRICTS

	MX	CX	Additional/References
535-21 E (4) BUILDING SITING. See Figure 535-21-B			
1 Lot Width ¹	35 ft. [40 ft., 4500 sf]	35 ft. [40 ft., 4500 sf]	
2 Primary Streetwall	80% min.	65% min.	See 535-21E(9) for building form variation. Through-lots addressed per 535-21D(7) . See 535-21(6) for measuring.
Primary Streetwall Variation	See 535-21E(9)(a) for courtyard, outdoor dining, and seating requirement on primary streetwall over 130 ft. wide. ²		
3 Primary Street Build-to Zone	0 min. 20 ft. max.	0 min. 20 ft. max.	Minimum streetscape area required per 535-21D(8) . See 535-21(6) for measuring.
4 Non-Primary Street Build-to Zone	0 min. 25 ft. max. ³	0 min. 25 ft. max.	Through-lots addressed per 535-21E(9).B .
5 Side Setback	min. 5 ft. adjacent to other district; otherwise, 0 ft. min. or, if set back, min. 5 ft.		Buffer required adjacent to R districts per 535-21E(9) .
6 Rear Setback	min. 5 ft. at alley; if no alley, min. 20 ft. [min. 10 feet adjacent to R district]		

1 Eliminating lot size requirement. Smallest lot width found is 35 feet, allowing development on this lots without a variance/exception.
 2 Requires spaces off the sidewalk only when the building is wider than 130 feet. Cornerstone building is approx. 125 feet from corner to plaza, which is approx. 50 feet wide, then the remaining building is approx. 50 feet wide.
 3 The depth of the Fiddleheads patio is approx. 25 feet.

Figure 535-21-C. Storefront Building Parking Siting



DISTRICTS

MX

CX

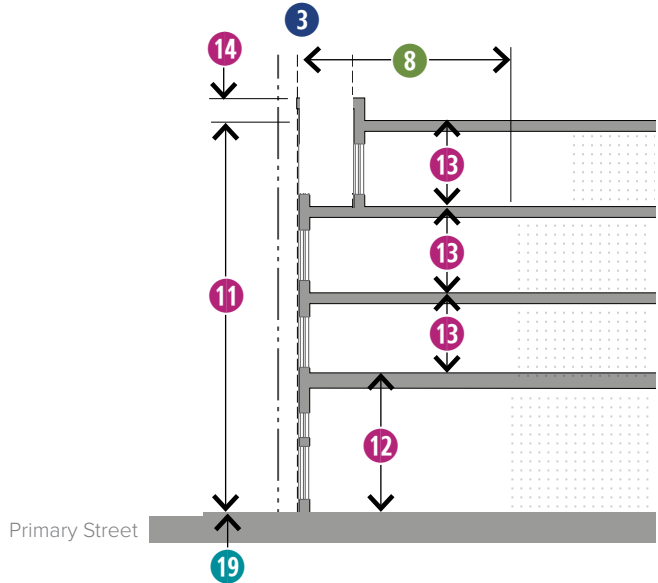
Additional/References

535-21 E (5) PARKING & ACCESSORY STRUCTURES. See [Figure 535-21-C](#).

7	Parking & Driveway Access Location	Alley; if no alley, 1 access off non-primary street; if no non-primary street, 1 access off primary street	See Article IX for parking.
	Size	Max. 22 ft. width at sidewalk	
8	Internal Parking Setback	20 ft. min. from primary facade above any basement	See XXX for garage door design regulations.
	Internal Parking Door Location	Rear, side facade; if no alley exists, door may be located on a non-primary street facade with an approved exception	
9	Surface Parking Location	Rear yard Rear yard; limited side yard	See 535-21(9) for allowed limited side yard parking layout
	Street Setback	No closer to lot line than principal building	See XXX for landscape buffers.
	Side & Rear Setback	0 ft. min. at alley; 3 ft. min.	0 ft. min. at alley; 3 ft. min.
	Accessory Structure Location	Rear yard; see accessory structure regulations	See Article V for accessory structures and uses.
10	Street Setback	No closer to lot line than principal building	
	Side & Rear Setback	5 ft. min.	5 ft. min.
KEY ACCESSORY STRUCTURES			KEY:
	Outbuildings & Garages	●	● = Allowed
	Drive-Through Facilities	–	○ = Requires a Conditional Use Permit
	Fuel Pumps	–	
	Outdoor Sales & Display	–	
	Parking Structure	●	

535-21 Commercial & Mixed-Use Districts
535-21E. Storefront Building Type

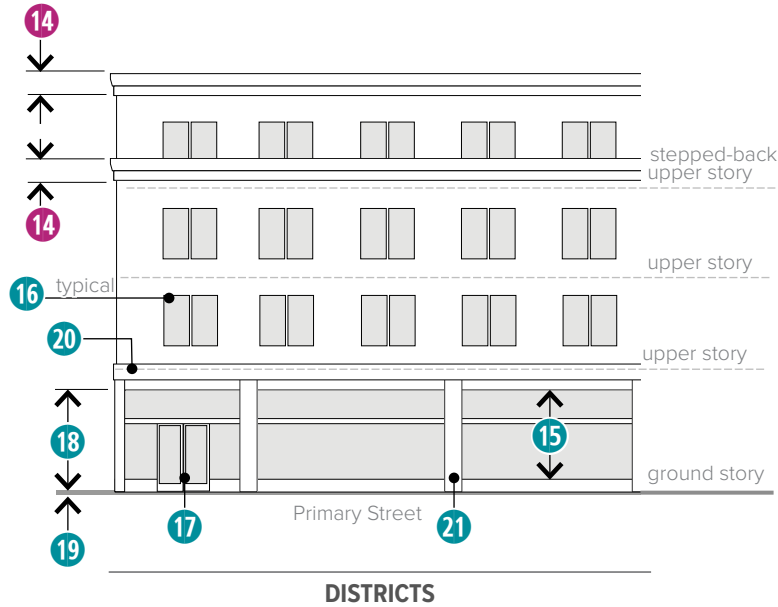
Figure 535-21-D. Storefront Building Height



DISTRICTS

		MX	CX	Additional/References
535-21 E (6) HEIGHT. See Figure 535-21-D				
11	Height	2 story min. In MX1 : 4 stories max. In MX2 : 5 stories max.	2 story min. 5 stories max.	See 535-21E(9) for minimum story facade location. Step-backs required adjacent to R districts per 535-21E(9) . Primary street step-backs required per 535-21E(9) .
12	Ground Story Height		12 ft. min. 16 ft. max.; up to 20 ft. max. with approved exception	Measured floor-to-floor. See 535-21(10) for measuring height.
13	Upper Story Height	9 ft. min. 12 ft. max.	9 ft. min. 12 ft. max.	
535-21 E (7) ROOFS. See Figure 535-21-D				
14	Roof Types	Flat, parapet, pitched		See XXX for roof types and tower regulations
	Tower	Allowed		

Figure 535-21-E. Storefront Building Facade



535-21 E (8) PRIMARY & NON-PRIMARY FACADES. See Figure 535-21-E				
		MX	CX	Additional/References
15	Transparency: Ground Story on Primary Facades	65% min.	70% min.	See 535-21(11) for measuring transparency. Blank wall segments apply.
		Measured between 2 ft. and 10 ft. from sidewalk grade		
		No bays or 15 ft. wide sections of any story on a primary facade may be without transparency		
		Ground story transparency must extend min. 30 ft. around the corner down any street-side facades		
16	Transparency: Upper Stories on Primary Facades	20% min.		Measured per story, includes any half stories, visible basement, or towers with full height stories. See 535-21(11) for measuring transparency.
		No bays or 15 ft. wide sections of any story on a primary facade may be without transparency		
	Transparency: Non-Primary Facades	20% min. ⁴		
17	Building Entrance Location	One per every 60 feet of primary facade		See 535-21(12) for measuring building entrance location.
18	Entrance Type	Storefront		See XXX for entrance types.
19	Ground Story Elevation	Within 24 in. of sidewalk elevation		
20	Horizontal Divisions with Shadow Lines	Within 3 ft. of the top of the first story		Horizontal shadow lines to run a min. 80% of length of facade. See XXX for definition of shadow lines.
21	Vertical Divisions with Shadow Lines	One per every 60 ft. of ground story street facade		

⁴ Note - this does not include the 15-foot section limit with no windows regulation.

535-21 Commercial & Mixed-Use Districts

535-21E. Storefront Building Type

535-21E(9) SUPPLEMENTAL REGULATIONS

(a) Primary Streetwall Variation. One of the following must be utilized for every 130-foot wide section of building streetwall:

- (1) Courtyard.** One courtyard, minimum 30 feet in width by 30 feet in depth, is required.
 - [a] The courtyard may count towards primary streetwall when abutting the build-to zone or line. See definition of courtyard in [XXX](#).
 - [b] Parking is not allowed in courtyards.
 - [c] Courtyard facades must be treated as primary frontage per facade regulations for the building type and any design regulations in [XXX](#).
 - [d] Courtyard may not be located on the corner of the lot except as approved by a design exception. No more than one corner of an intersection may be occupied by a courtyard.
 - [e] The courtyard must include special paving materials and patterns and landscape materials such as trees in grates or planters and/or landscape beds.
 - [f] Temporary or permanent seating is required. Temporary seating must be in place between April 30 and September 30, at a minimum.
 - [g] At least one other amenity such as a pergola, trellises, catenary or string overhead lighting, a fountain, or artwork such as a sculpture or mural must be included. Other amenities may be approved through the exception process.

(2) Seating/Dining Areas. The maximum build-to zone must be utilized for a minimum of 35% of the streetwall to allow for one or more permanent outdoor seating or dining areas.

- [a] The seating/dining areas must be included in the streetscape area per [XXX](#). Special paving materials and patterns, landscape materials such as trees in grates or planters and/or landscape beds must be included.
- [b] Temporary or permanent seating is required. Temporary seating must be in place between April 30 and September 30, at a minimum.
- [c] At least one other amenity per 130 feet of streetwall must be included. Amenities include such items as a pergola, trellises, catenary or string overhead lighting, a fountain, or artwork such as a sculpture or mural must be included. Other amenities may be approved through the exception process.

(b) Treatment Turning Corners. At all intersections of primary and non-primary streets, primary facade regulations must be met along the first 30 feet of facade, measured horizontally along the non-primary street from the corner.

(c) Minimum Story Street Facades. The street facades of the minimum stories must be located fully in the build-to zone, occupying the same facade plane. For example, with a minimum height of 2 stories, the street facade of the second story may not be set back from the first story.

(d) Transition at R Districts. Facades abutting an R district above the third story must be stepped back a minimum of 15 feet from the rear lot line. Side and rear buffer required per [7.110](#).

(e) Stepped-Back Top Story. For all buildings over 3 stories and 120 feet in width along the primary street, a minimum of 50% of the top story facade must be set back from the primary street facade a minimum of 7 feet.

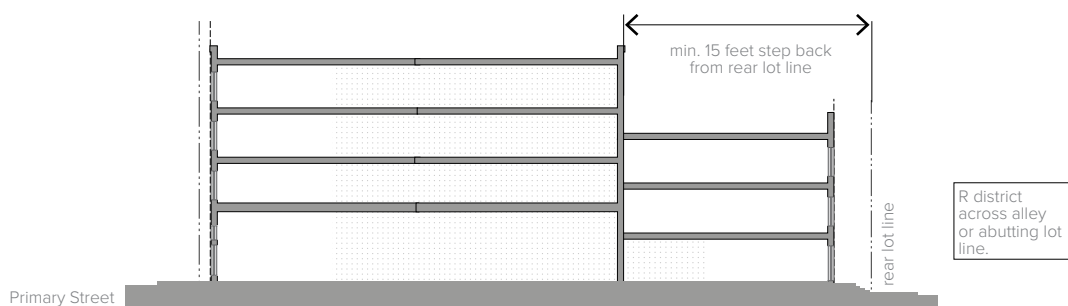


Figure 535-21-F. Step Back at R District (section)

535-21F COMMERCIAL BUILDING TYPE

535-21F(1) DESCRIPTION AND INTENT

The Commercial Building is a version of the Storefront Building that accommodates both vehicular and pedestrian access comfortably. Vehicular-focused uses, such as fueling stations and businesses with drive-through facilities are accommodated by this building type.

535-21F(2) ILLUSTRATIVE IMAGES

The images shown in [Figure 535-21-A](#) are intended to illustrate the general character of the building type. The buildings and sites in each image may not fulfill all of the building type regulations.

535-21F(3) BUILDING REGULATIONS

The following tables and illustrations regulate this specific building type. See [535-21D](#) for general regulations for all building types. See [535-21I](#) for definitions and measuring table regulations.

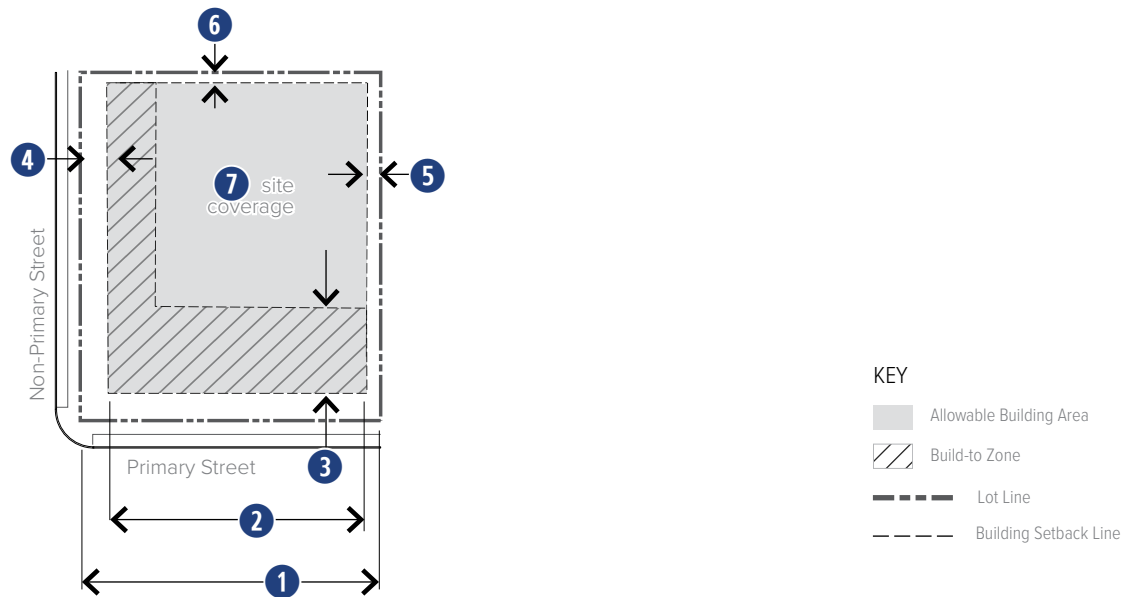
LINK	SUBSECTION
535-21 F (4)	Building Siting
535-21 F (5)	Parking & Accessory Structures
535-21 F (6)	Height
535-21 F (7)	Roofs
535-21 F (8)	Primary & Non-Primary Facades
535-21F(9)	Supplemental Regulations



Figure 535-21-A. Examples of Commercial Center Building Type

535-21 Commercial & Mixed-Use Districts
535-21F. Commercial Building Type

Figure 535-21-B. Commercial Building Siting



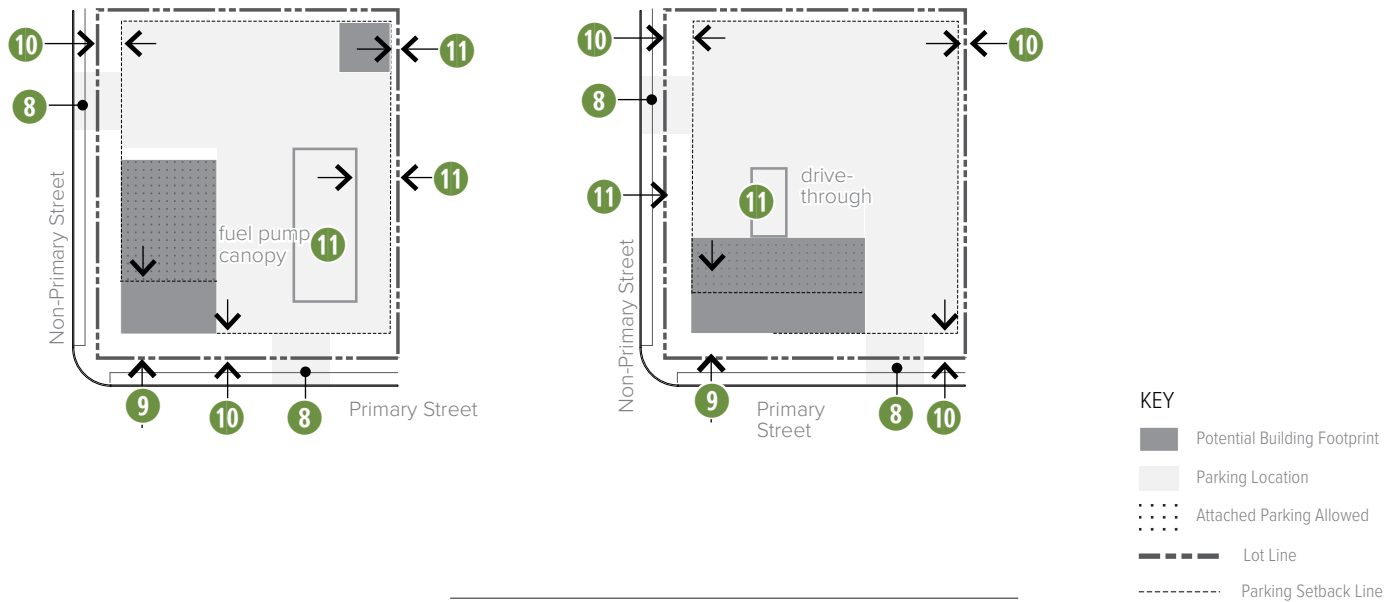
DISTRICTS

CX

Additional/References

535-21 F (4) BUILDING SITING. See Figure 535-21-B			
		CX	Additional/References
1	Lot Width	40 ft. min.	
2	Primary Streetwall	50% min.	
3	Primary Street Build-to Zone	10 ft. min. 35 ft. max.	Min. streetscape area required per 535-21D(8) . Outdoor dining and seating area required per 535-21F(9) .
4	Non-Primary Street Build-to Zone	10 ft. min. 20 ft. max.	
5	Side Setback	5 ft. min.	Buffer required adjacent to R districts per 535-21F(9) .
6	Rear Setback	min. 5 ft. at alley; if no alley, min. 20 ft.	
7	Site Coverage	75% max.	See 535-21(7) for measuring site coverage.

Figure 535-21-C. Commercial Building Parking Siting



DISTRICTS

CX

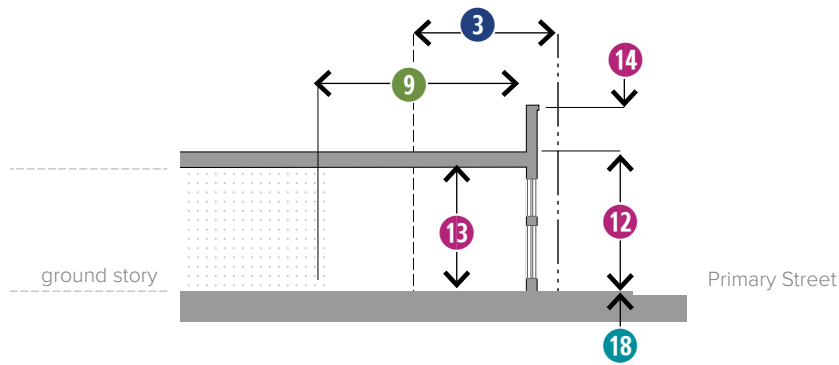
Additional/References

535-21 F (5) PARKING & ACCESSORY STRUCTURES. See Figure 535-21-C .			Additional/References
8	Parking & Driveway Access Location	1 access per 120 feet of street frontage ¹	See Article IX for parking.
	Size	Max. 22 ft. width at sidewalk	
9	Internal Parking Setback	20 ft. min. behind primary facade in rear of building above any basement	See XXX for garage door design regulations.
	Internal Parking Door Location	Rear, side, non-primary facade	
10	Surface Parking Location	Rear yard, side yard	Minimum primary streetwall must be met for side yard parking. See XXX for definition of yards.
	Street Setback	No closer to lot line than principal building	
	Side & Rear Setback	5 ft. min.	
11	Accessory Structure Location	Rear yard only, except fuel pumps allowed in rear & side yard	See Article V for accessory structures and uses.
	Street Setback	No closer to lot line than principal building	
	Side & Rear Setback	5 ft. min.; 15 ft. min. adjacent to R district	
KEY ACCESSORY STRUCTURES			KEY: ● = Allowed ○ = Requires a Conditional Permit
	Outbuildings & Garages	●	
	Drive-Through Facilities	●	
	Fuel Pumps	●	
	Outdoor Sales & Display	●	
	Parking Structure	—	

¹ Neither Culvers nor Corner Bakery would meet this requirement, but if they shared a driveway there could be 3 drives.

535-21 Commercial & Mixed-Use Districts
535-21F. Commercial Building Type

Figure 535-21-D. Commercial Building Height



DISTRICTS

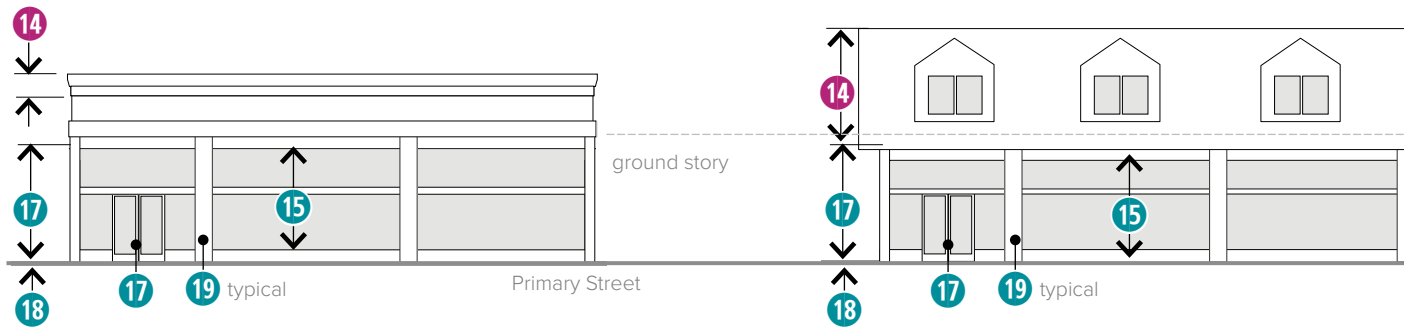
CX

Additional/References

535-21 F (6) HEIGHT. See Figure 535-21-D			
12	Height	1 story min. 1 story max. ²	See 535-21(10) for measuring height.
13	Ground Story Height	10 ft. min. with pitched roof, 14 ft. min. with flat or parapet roof 18 ft. max.	
535-21 F (7) ROOFS. See Figure 535-21-D			
14	Roof Types	Flat, parapet, pitched	See XXX for roof types and tower regulations. See 535-21F(9) for pitched roof on single-story building.
	Tower	Allowed	

² Recommend allowing only a single story building here. If multiple stories are intended, the storefront building would be used.

Figure 535-21-E. Commercial Building Facade



DISTRICTS

CX

Additional/References

535-21 F (8) PRIMARY & NON-PRIMARY FACADES. See Figure 535-21-E			
15	Ground Story Transparency on Primary Facades	55% min.	Ground story transparency measured between 2 ft. and 10 ft. from sidewalk grade. See 535-21(11) for measuring transparency. Blank wall segments apply.
		No bays or 15 ft. wide sections of any story on a primary facade may be without transparency	
		Ground story transparency must extend a min. 30 ft. around the corner, down any street-side facades	
	Transparency: Non-Primary Facades	15% min.	Measured per story, includes any towers with full-floor height. See 535-21(11) for measuring transparency.
16	Building Entrance Location	One per every 60 feet of primary facade	See 535-21(12) for measuring building entrance location.
17	Entrance Type	Storefront	See XXX for entrance types.
18	Ground Story Elevation	Within 24 in. of sidewalk elevation ³	
	Horizontal Divisions with Shadow Lines	–	See XXX for definition of shadow lines.
19	Vertical Divisions with Shadow Lines	One per every 60 ft. of ground story street facade	

³ Note that corner bakery would have required a variance because it is a unique lot. An exception could be included to allow for more than 2 feet in ground story elevation, but would not likely contemplate the amount of grade on the Corner Bakery site.

535-21 Commercial & Mixed-Use Districts
535-21F. Commercial Building Type

535-21F(9) SUPPLEMENTAL REGULATIONS

(a) Outdoor Dining and Seating Area. One or more permanent outdoor seating or dining areas, each a minimum of 600 sf, must be located either within the build-to zone, abutting the build-to zone, or a combination of the two.

[1] If located in the build-to zone, either fully or partially, the seating/dining areas must be included in the streetscape area design per XXX. Special paving materials and patterns, landscape materials such as trees in grates or planters and/or landscape beds must be included.

[2] Temporary or permanent seating is required. Temporary seating must be in place between April 30 and September 30, at a minimum.

(b) Treatment Turning Corners. At all intersections of primary and non-primary streets, primary facade regulations must be met along the first 30 feet of facade, measured horizontally, on the non-primary street from the corner.

535-21G GENERAL BUILDING TYPE

535-21G(1) DESCRIPTION AND INTENT

The General Building is a basic urban building, typically housing multiple residential units, office, laboratory spaces, classrooms, and similar spaces, usually with a central main entrance off a lobby and with windows delineating each story. Parking is located in the rear yard with attached garages entered from the rear of the building. Buildings vary in height depending on the district with any half story located within a pitched roof or in a visible basement.

535-21G(2) ILLUSTRATIVE IMAGES

The images shown in [Figure 535-21-A](#) are intended to illustrate the general character of the building type. The buildings and sites in each image may not fulfill all of the building type regulations.

535-21G(3) BUILDING REGULATIONS

The following tables and illustrations regulate this specific building type. See [535-21D](#) for general regulations for all building types. See [535-21I](#) for definitions and measuring table regulations.

LINK	SUBSECTION
535-21 G (4)	Building Siting
535-21 G (5)	Parking & Accessory Structures
535-21 G (6)	Height
535-21 G (7)	Roofs
535-21 G (8)	Primary & Non-Primary Facades
535-21G(9)	Supplemental Regulations

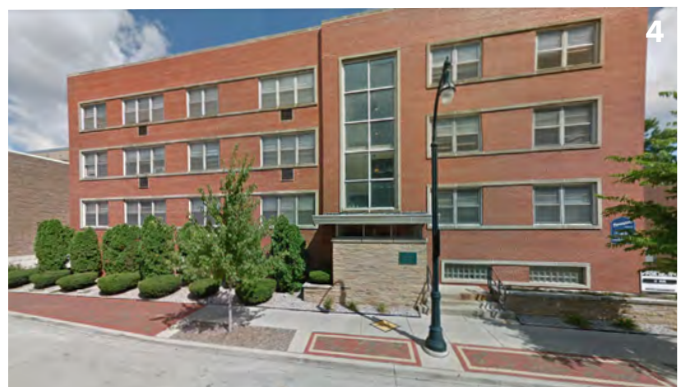
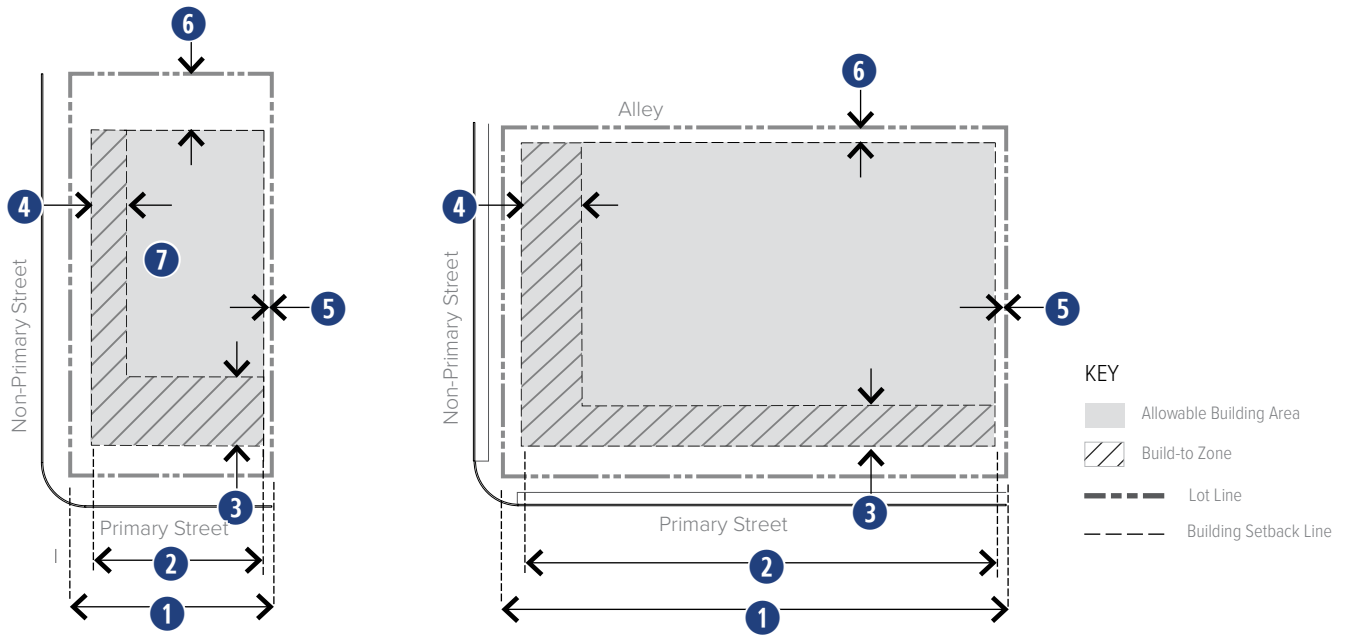


Figure 535-21-A. Examples of General Building Type

535-21 Commercial & Mixed-Use Districts
535-21G. General Building Type

Figure 535-21-B. General Building Siting



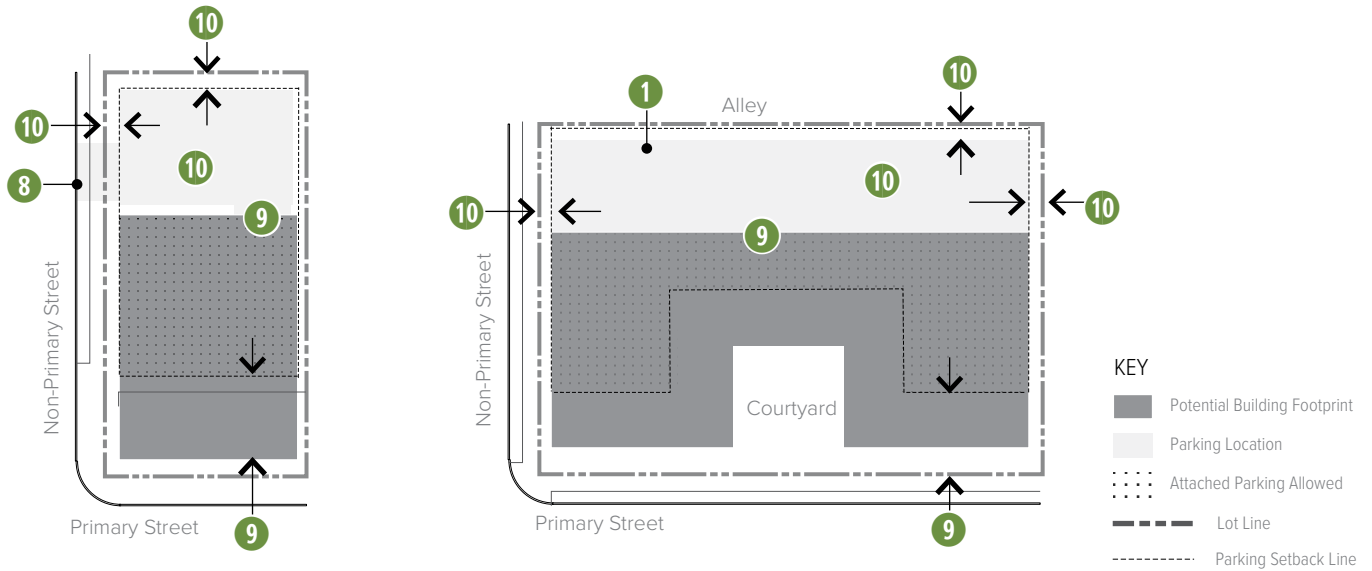
DISTRICTS

GX, RX

Additional/References

535-21 G (4) BUILDING SITING. See Figure 535-21-B		
Multiple Principal Buildings	allowed	Each building must meet the building type regulations with primary street frontage.
1 Lot Width	35 ft. [40 ft. min.]	
2 Primary Streetwall	75% min.	See 535-21G(9) for courtyard allowance and double frontage lots.
Primary Streetwall Variation	See 535-21G(9)(a) for courtyard, outdoor seating requirement on primary streetwall over 130 ft. wide.	
3 Primary Street Build-to Zone	10 ft. min. 25 ft. max.	Contextual setbacks apply on neighborhood streets. See 535-21I(6). See 535-21D(8) minimum streetscape area.
4 Non-Primary Street Build-to Zone	5 ft. min. 25 ft. max.	
5 Side Setback	Min. 10 ft. adjacent to R district; otherwise, min. 5 ft..	
Between Buildings on a Lot	Min. 10 ft	
6 Rear Setback	Min. 5 ft. at alley; if no alley, min. 20 ft.	See 535-21G(9) for treatment adjacent to R districts.
7 Site Coverage	85% max.	See 535-21I(7) for measuring site coverage.

Figure 535-21-C. General Building Parking Siting



DISTRICTS

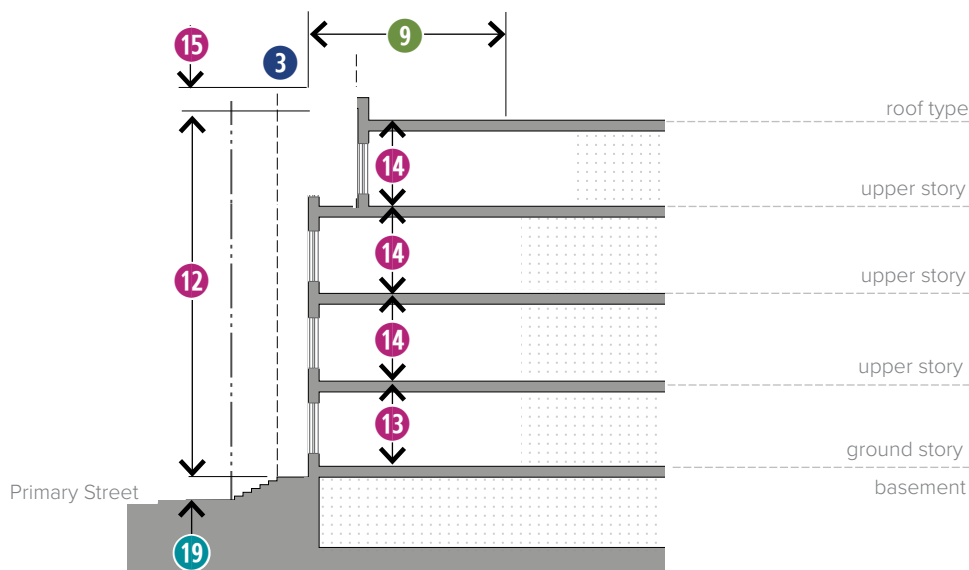
GX, RX

Additional/References

535-21 G (5) PARKING & ACCESSORY STRUCTURES. See Figure 535-21-C .			
8	Parking & Driveway Access Location	Alley; if no alley, 1 access off non-primary street; if no non-primary street, 1 access off primary street	See Article IX for parking.
	Size	Max. 22 ft. width at sidewalk	
9	Internal Parking Setback	20 ft. min. from primary facade above any basement	See XXX for garage door design regulations.
	Internal Parking Door Location	Rear, interior side facades; if no alley, non-primary facade may be approved with an exception	
10	Surface Parking Location	Rear yard	
	Street Setback	No closer to lot line than principal building	
	Side & Rear Setback	5 ft. min.	
11	Accessory Structure Location	Rear yard	See Article V for accessory structures regulations.
	Street Setback	No closer to lot line than principal building	
	Side & Rear Setback	5 ft. min.	
KEY ACCESSORY STRUCTURES			KEY:
	Outbuildings & Garages	●	● = Allowed
	Drive-Through Facilities	–	○ = Requires a Conditional Permit
	Fuel Pumps	–	
	Outdoor Sales & Display	–	
	Parking Structure	●	

535-21 Commercial & Mixed-Use Districts
535-21G. General Building Type

Figure 535-21-F. General Building Height and Roofs



DISTRICTS

GX, RX

Additional/References

535-21 G (6) HEIGHT. See Figure 535-21-F			
12	Height	2 stories min. GX1 and RX: 4.5 stories max. GX2: 5.5 stories max. GX3: 8.5 stories max.	See 535-21G(9) for minimum story facade location. Step-backs required adjacent to R districts per 535-21G(9). See 535-21I(10) for measuring height. Primary street step-backs required per 535-21G(9)
13	Ground Story Height ¹	10 ft. min. 14 ft. max.	Measured floor-to-floor.
14	All Other Stories Height	9 ft. min. 12 ft. max.	
535-21 G (7) ROOFS. See Figure 535-21-F			
15	Roof Types	Flat, parapet, pitched	See XXX for roof types and tower regulations.
	Tower	Allowed	

¹ Flexibility built in per workshop: Typically the ground story height would be the same as upper stories in the General Building, but to allow these buildings to be used in the future for other uses, the ground story height may be set separately in this structure. However, consider that this building type allows the ground story to be elevated above sidewalk grade for privacy of residential units on the ground story. If used for commercial uses in the future, that elevation will not be ideal.

Figure 535-21-G. General Building Facades



DISTRICTS

GX, RX

Additional/References

535-21 G (8) PRIMARY & NON-PRIMARY FACADES. Figure 535-21-G			
16	Transparency: Primary Facades Non-Primary Facades	20% min. 18% min.	Measured per story, includes any half stories, visible basements, or towers with full floor height. See 535-21(11) for measuring transparency. Blank wall segments apply.
		No bays or 15 ft. wide sections of any story may be without transparency	
17	Building Entrance Location	One per every 120 ft. of primary facade	See 535-21(12) for measuring building entrance location.
18	Entrance Type	Stoop	See XXX for entrance types. See XXX for definition of visible basement.
19	Ground Story Elevation	Between 18 in. and 30 in. above grade or between 30 in. and 4 ft. with a visible basement	
20	Horizontal Divisions with Shadow Lines	One within 3 ft. of the top of any basement, first, or second story	Horizontal shadow lines to run a min. 80% of length of facade. See XXX for definition of shadow lines.
21	Vertical Divisions with Shadow Lines	One per every 120 ft. of street facade	

535-21 Commercial & Mixed-Use Districts

535-21G. General Building Type

535-21G(9) SUPPLEMENTAL REGULATIONS

(a) Primary Streetwall Variation. One of the following must be utilized for every 130-foot wide section of building streetwall:

- (1) Courtyard.** One courtyard, minimum 30 feet in width by 30 feet in depth, is required.
- [a] The courtyard may count towards primary streetwall when abutting the build-to zone or line. See definition of courtyard in [XXX](#).
 - [b] Parking is not allowed in courtyards.
 - [c] Courtyard facades must be treated as primary frontage per facade regulations for the building type and any design regulations in [XXX](#).
 - [d] Courtyard may not be located on the corner of the lot except as approved by a design exception. No more than one corner of an intersection may be occupied by a courtyard.
 - [e] The courtyard must include special paving materials and patterns and landscape materials such as trees in grates or planters and/or landscape beds.
 - [f] Temporary or permanent seating is required. Temporary seating must be in place between April 30 and September 30, at a minimum.
 - [g] At least one other amenity such as a pergola, trellises, catenary or string overhead lighting, a fountain, or artwork such as a sculpture or mural must be included. Other amenities may be approved through the exception process.

(2) Seating Areas. The maximum build-to zone must be utilized for a minimum of 35% of the streetwall to allow for one or more permanent outdoor seating areas.

- [a] The seating areas must be included in the streetscape area per [XXX](#). Special paving materials and patterns, landscape materials such as trees in grates or planters and/or landscape beds must be included.

[b] Temporary or permanent seating is required. Temporary seating must be in place between April 30 and September 30, at a minimum.

[c] At least one other amenity per 130 feet of streetwall must be included. Amenities include such items as a pergola, trellises, catenary or string overhead lighting, a fountain, or artwork such as a sculpture or mural must be included. Other amenities may be approved through the exception process.

(b) Minimum Story Street Facades. The street facades of the minimum stories must be located fully in the build-to zone, occupying the same facade plane. For example, with a minimum height of 2 stories, the street facade of the second story may not be set back from the first story.

(c) Transition at R Districts. Facades abutting an R district above the third story must be stepped back a minimum of 15 feet from the rear lot line. Side and rear buffer required per [XXX](#).

(d) Stepped-Back Top Story. For all buildings over 3 stories and 120 feet in width along the primary street, a minimum of 50% of the top story facade must be set back from the primary street facade a minimum of 7 feet.

535-21H ROW BUILDING TYPE

535-21H(1) DESCRIPTION AND INTENT

The Row Building is comprised of multiple vertical units with shared side walls. Each unit is typically oriented to the street with an entrance off the public sidewalk and can be solely residential or a live-work unit, as allowed by the district. Parking is located in the rear yard with either detached garages or attached garages entered from the rear of the building.

535-21H(2) ILLUSTRATIVE IMAGES

The images shown in [Figure 535-21-A](#) are intended to illustrate the general character of the building type. The buildings and sites in each image may not fulfill all of the building type regulations.

535-21H(3) BUILDING REGULATIONS

The following tables and illustrations regulate this specific building type. For the purposes of the Row Building, a building consists of a series of units. See [535-21D](#) for general regulations for all building types. See [535-21I](#) for definitions and measuring table regulations.

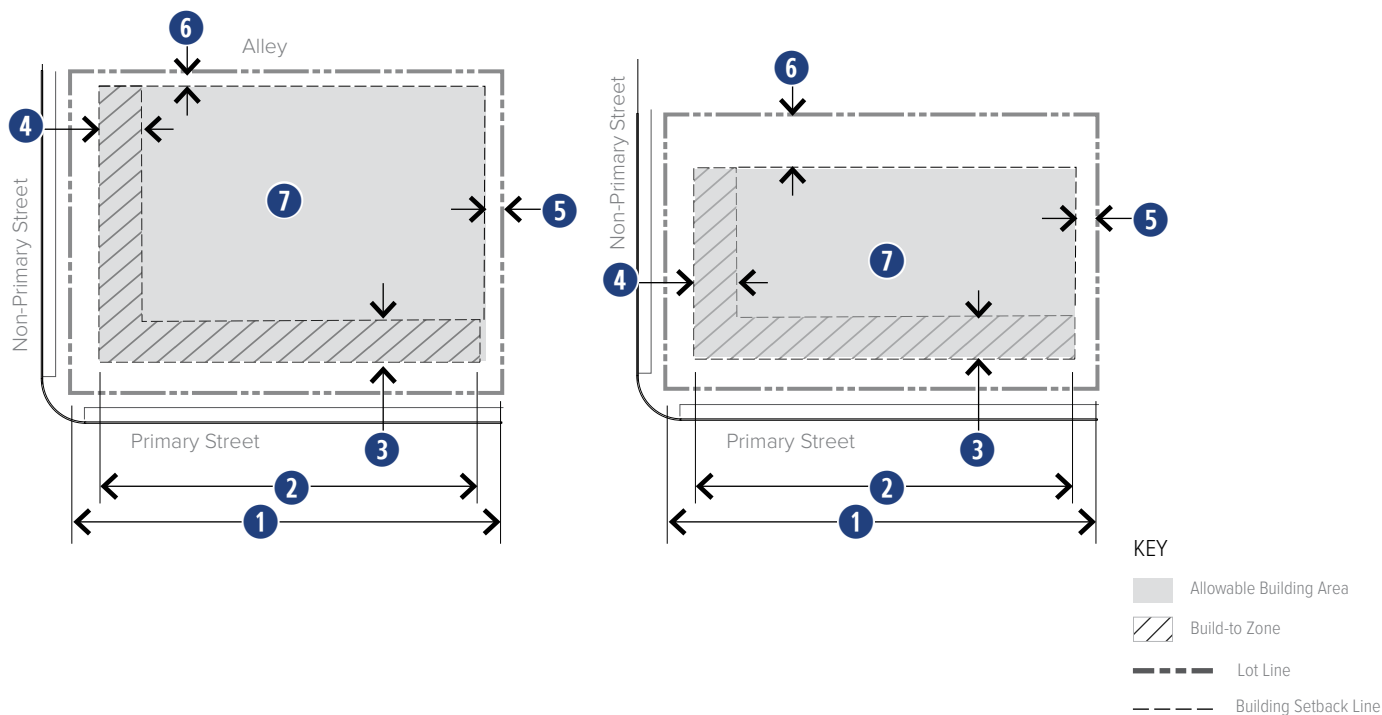
LINK	SUBSECTION
535-21 H (4)	Building Siting
535-21 H (5)	Parking & Accessory Structures
535-21 H (6)	Height
535-21 H (7)	Roofs
535-21 H (8)	Primary & Non-Primary Facades
535-21H(9)	Supplemental Regulations



Figure 535-21-A. Examples of Row Building Type

535-21 Commercial & Mixed-Use Districts
535-21H. Row Building Type

Figure 535-21-B. Row Building Siting



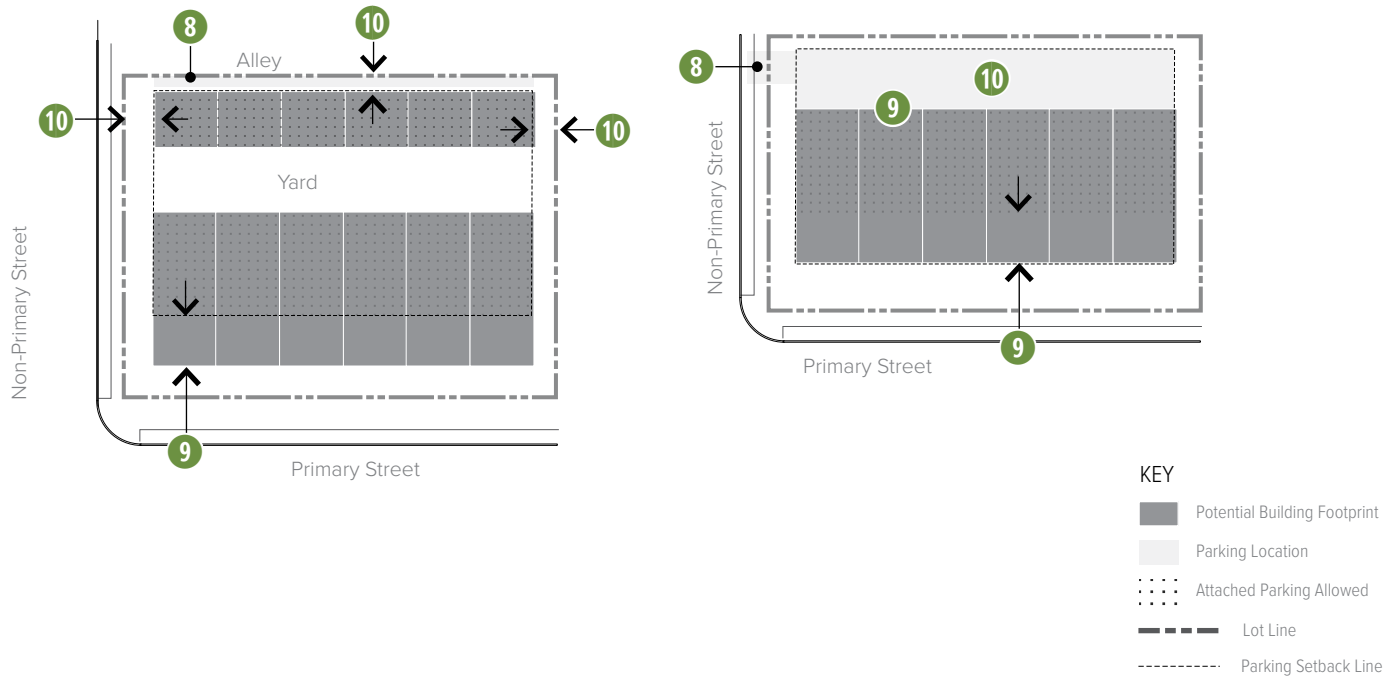
DISTRICTS

GX, RX

Additional/References

535-21 H (4) BUILDING SITING. See Figure 535-21-B		
Configuration	Multiple side-by-side units sharing common side walls	
Multiple Principal Buildings	allowed	See 535-21H(9) for multiple buildings on a lot.
1 Lot Width	100 ft. min.	
2 Primary Streetwall	70% min.	See 535-21H(9) for courtyards. Measured in build-to zone along any street frontage.
Facade Width per Street Frontage	3 units min. 5 units max.	
3 Primary Street Build-to Zone	15 ft. min. 35 ft. max.	See 535-21D(8) minimum streetscape area.
4 Non-Primary Street Setback	10 ft. min.	
5 Side Setback Space between Adjacent Buildings	7.5 ft. min. 15 ft. min.	
6 Rear Setback	5 ft. min. at alley; if no alley, 20 ft. min.	
7 Site Coverage	75% max.	See 535-21I(7) for measuring site coverage.

Figure 535-21-C. Row Building Parking Siting



DISTRICTS

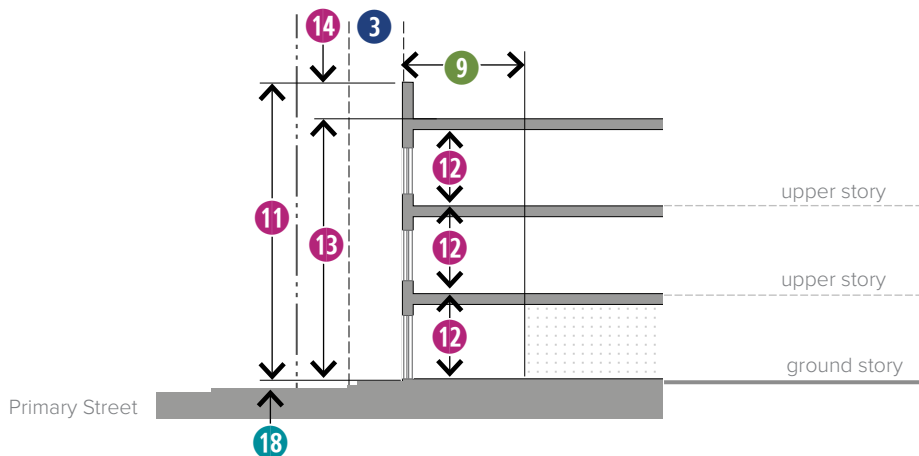
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Additional/References

535-21 H (5) PARKING & ACCESSORY STRUCTURES. See Figure 535-21-C .			
8	Parking & Driveway Access Location	Alley; if no alley, 1 access off non-primary street; if no non-primary street, 1 access off primary street	See Article IX for parking.
	Size	Max. 14 ft. width at sidewalk	
9	Internal Garage Setback	Min. 12 ft. behind primary facade above any basement	See supplemental regulations in 535-21H(9) for garage door screening. See XXX for garage door design regulations.
	Internal Garage Door Location	Rear; not visible from a primary street and screened from non-primary streets	
10	Parking Lot & Accessory Structure Location	Rear yard	See Article V for accessory structures.
	Street-Side Setback	No closer to lot line than principal building	
	Side & Rear Setback	5 ft. min.	
KEY ACCESSORY STRUCTURES			
	Outbuildings & Garages	●	KEY: ● = Allowed ○ = Requires a Conditional Permit
	Drive-Through Facilities	—	
	Fuel Pumps	—	
	Outdoor Sales & Display	—	
	Parking Structure	○	

535-21 Commercial & Mixed-Use Districts
535-21H. Row Building Type

Figure 535-21-D. Row Building Height



DISTRICTS

GX, RX

Additional/References

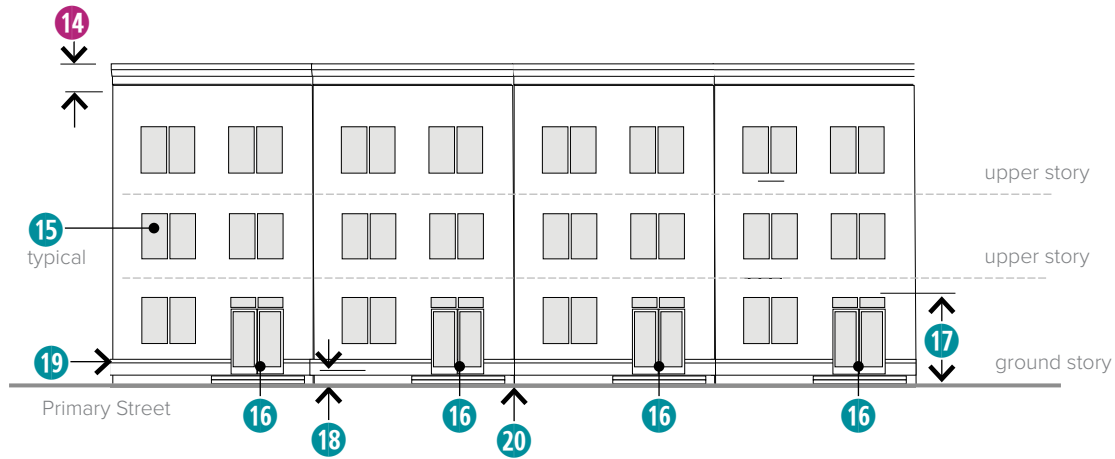
535-21 H (6) HEIGHT. See Figure 535-21-D

11	Height	2 stories min. 3 stories max.	See supplemental regulations on half stories in 535-21H(9) . See 535-21I(10) for measuring height.
12	Floor-to-Floor Height	9 ft. min. 11 ft. max.	Measured floor-to-floor.
13	Height to Eaves (Pitched Roof)	20 ft. max.	Height to eaves is measured from the first floor to the bottom of the eave. See 535-21I(10) for measuring height to eaves.

535-21 H (7) ROOFS. See Figure 535-21-D

14	Roof Types	Pitched, flat, parapet	See XXX for roof types and tower regulations.
	Tower	Not allowed	

Figure 535-21-E. Row Building Facades and Roofs



DISTRICTS

GX, RX

Additional/References

535-21 H (8) PRIMARY & NON-PRIMARY FACADES. See [Figure 535-21-E](#)

			Additional/References
15	Transparency: Primary Facades Non-Primary Facades	20% min. 15% min.	Measured per story, including any half stories, visible basement, or towers with full-floor height. See 535-21(11) for measuring transparency. Blank wall segments apply.
		On the primary facade, no bays or 10 ft. wide sections of any story may be without transparency	
16	Building Entrances Location	One per unit on primary facade except 1 per every 3 units may be located off a courtyard	See 535-21H(9) for courtyards.
17	Entrance Type	Porch or Stoop	See XXX for entrance types
18	Ground Story Elevation above Grade	Between 18 in. and 30 in. above grade or between 30 in. and 4 ft. with a visible basement	
19	Horizontal Divisions with Shadow Lines	One within 3 ft. of the top of any basement, first, or second story	See XXX for definition of shadow lines.
20	Vertical Divisions with Shadow Lines	One for every 60 ft. of facade on the ground story	

535-21 Commercial & Mixed-Use Districts

535-21H. Row Building Type

535-21H(9) SUPPLEMENTAL REGULATIONS

(a) **Multiple Buildings on a Lot.** Multiple buildings may be located on a lot with the following regulations:

- [1] The minimum space between buildings is met.
- [2] Each building must fulfill all of the requirements of the building type unless otherwise expressly stated.
- [3] Each building must be located in the build-to zone, contributing to the primary streetwall requirements, except one of every 2 units may front a courtyard. See [Figure 535-21-F](#).
 - [a] The courtyard counts as primary streetwall as long as 3 sides are enclosed at the minimum primary streetwall percentage.
 - [b] Parking is not allowed in the courtyard.
 - [c] Primary facade requirements apply to courtyard facades.
 - [d] If a unit is located on the corner of the courtyard and the street, the entrance must be located on the street.
 - [e] All entrances must connect to the primary street sidewalk via a minimum 4-foot wide sidewalk.

(b) **Garage Door Visibility.** Garage doors must be screened from any street by building or by a masonry wing wall off the building. The wing wall must be faced in an allowed major material used on the adjacent building facade.

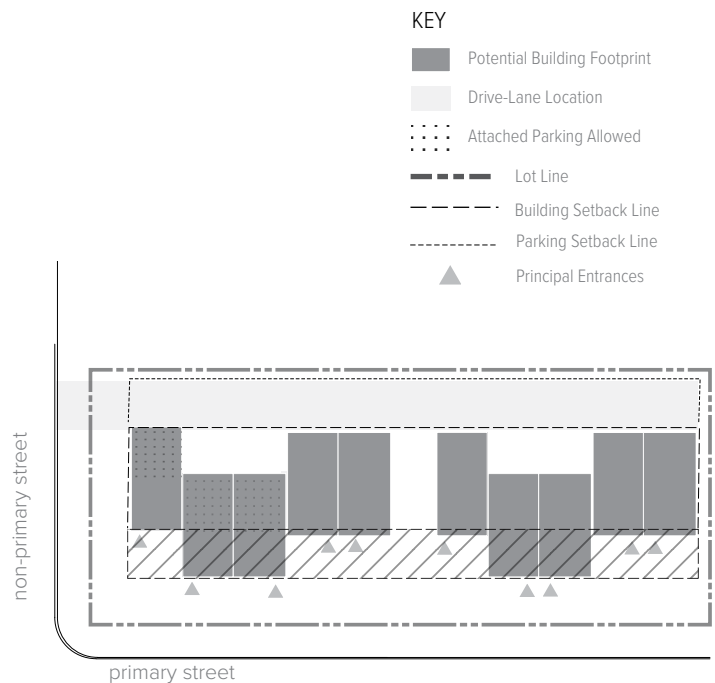


Figure 535-21-F. Multiple Row Buildings on a Lot

535-21I MEASURING BUILDING TYPE REGULATIONS

535-21I(1) FRACTIONS AND ROUNDING GENERALLY

When calculations required under this zoning code result in fractions, any fractional result of less than one-half of the unit of the regulation is rounded down to the whole number and any fractional result of one-half or more of the regulation unit is rounded up to the whole number. For example, if the maximum regulation is 2 feet, a measurement of 1.5 feet (or 1-foot, 6 inches) is rounded up to 2 feet and a measurement of 1.25 feet (or 1-foot, 3 inches) is rounded down to 1 foot. If the maximum regulation is in inches, fractions are rounded to the nearest inch.

535-21I(2) GENERALLY PARALLEL & PERPENDICULAR

"Generally parallel," when stated related to lot lines or building facades, means less than 45 degrees off the lot line or facade. "Generally perpendicular," when stated related to lot lines or building facades, means more than 45 degrees off the lot line or facade in any direction.

535-21I(3) LOT AREA

Lot area is measured as the total ground-level surface area contained within the lot lines of a lot.

535-21I(4) LOT WIDTH

Lot width is the horizontal distance measured along the minimum front setback line between the side lot lines of a lot. If no minimum front setback is required, lot width is measured along the front lot line.

535-21I(5) PRIMARY STREETWALL

(a) Definition. The minimum amount of building facade required along and generally parallel to a primary street frontage and built within the build-to zone. A streetwall

(b) Measurement: Minimum Percentage of Streetwall. The minimum percentage of primary streetwall must be equal to or greater than the width of the principal structures, as measured within the primary build-to zone, divided by the length of the lot line parallel to the primary street, minus the minimum side setbacks. See [Figure 535-21-A](#).

(c) Measurement: Maximum Streetwall. The maximum streetwall is the measurement along all primary facades that are generally parallel and facing the lot line, measured from the edge of the facade horizontally to the opposite edge of the facade.

(d) Height. The streetwall or building facade being measured must meet the minimum height required for the building type. See [535-21I\(10\)\(a\)](#).

(e) Courtyard and Other Allowances. Courtyards and other allowances may be listed in the supplemental regulations for the building type as exceptions. The length of the courtyard opening or expanded build-to zone may be counted towards primary streetwall.

535-21I(6) SETBACKS AND BUILD-TO ZONES

The following applies to required setbacks and build-to zones per the building type regulations in this section 535-21.

(a) Measurement: Buildings. Required setbacks and build-to zones are measured from the applicable lot line, right-of-way line, or specific location referred to in the applicable regulation, to the exterior building walls generally parallel to the subject line.

[1] Street (primary and non-primary) setbacks are measured from the actual right-of-way line of the street to the nearest exterior building wall. (Alleys

$$\frac{\text{Width of Building within Build-to Zone}}{\text{Length Primary Frontage Lot Line Minus Minimum Side Setbacks}} = \text{Primary Streetwall \%}$$

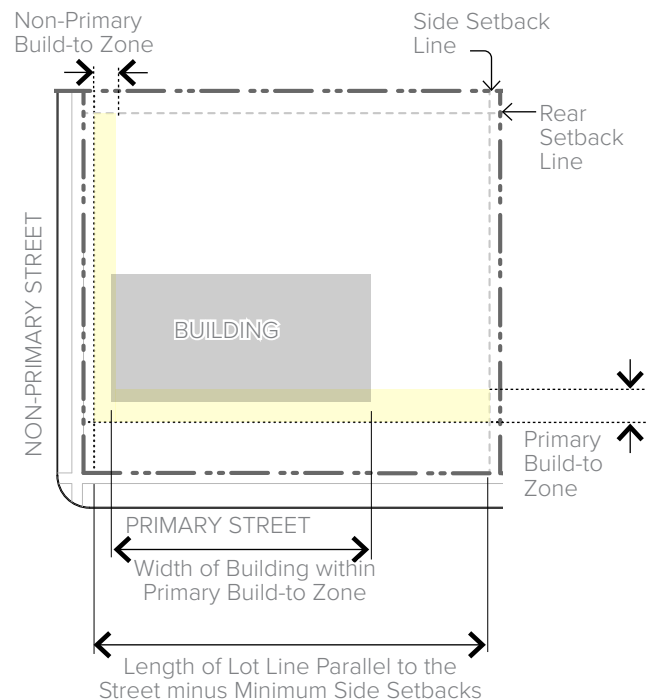


Figure 535-21-A. Measuring Primary Streetwall

535-21I. Measuring Building Type Regulations

are not considered streets and typically abut side or rear lot lines.)

- [2] Side or interior-side setbacks are measured from the nearest side lot line that does not abut a street to the nearest.
- [3] Rear setbacks are measured from the rear lot line.
- [4] On corner lots, the required primary or non-primary setback must be provided for each street frontage, depending on whether the abutting street is a primary or non-primary street. The lot line opposite of the primary street is the rear lot line, requiring a rear setback. The lot line generally perpendicular to the primary street is the side lot line, requiring a side setback.
- [5] On through-lots, the required primary or non-primary setback must be provided for each street frontage, depending on whether the abutting street is a primary or non-primary street. (See [XXX](#) for definitions.) Generally applicable regulations apply per [535-21D\(7\)](#) and supplemental building regulations for the building type may have additional requirements.

(b) Minimum Required Streetscape Area. See [535-21D\(8\)](#) for regulations requiring a minimum streetscape area. Where the minimum area does not exist, the build-to zone is measured from the edge of the expanded streetscape area into the lot.

(c) Exceptions to Build-to Zones. Upper-story recessed balcony facades are not required to be located within the build-to zone or at a build-to line.

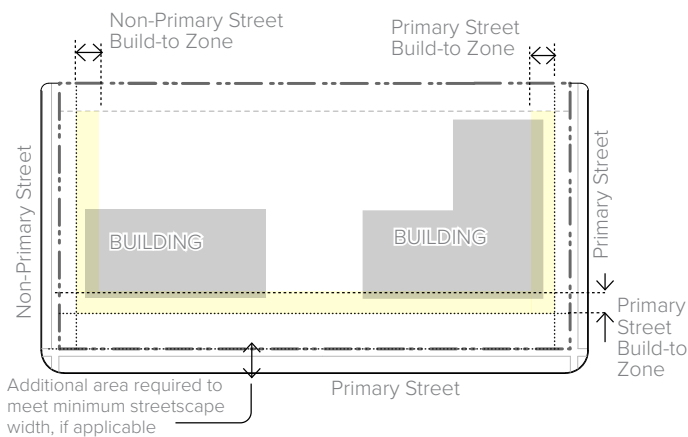


Figure 535-21-B. Build-to Zones

(d) Allowed Encroachments. Allowed encroachments into setbacks or beyond build-to zones are as follows, unless otherwise established in the building type regulations:

- (1) Minor Building Projections in All Yards for All Building Types.** Roof overhangs, eaves, chimneys, bays, and other architectural features, such as cornices, may encroach up to 18 inches into any yard no closer than 1 foot from the lot line.
- (2) Steps and Ramps in Front Yards.** Steps and ramps in front yards may encroach fully into any yard up to within 1 foot of any lot line.

(e) Setbacks on Irregular Lots. Setbacks are measured from lot lines towards the center of the lot as follows:

- [1] When lot lines are curvilinear, setbacks must be measured parallel to the curvilinear lot line.
- [2] When there are multiple rear lot lines, the rear setback must be measured from each of rear lot lines.

(f) Waterway Frontage. A river or trail frontage build-to zone or setback is measured from the required trail easement or right-of-way into the lot perpendicular to the easement or lot line. See [XXX](#) for waterway frontage trail easement.

(g) Measurement: Elements Other than Buildings. Minimum setbacks that apply to elements other than buildings (e.g. parking areas, fences, storage areas) are measured from the lot line, right-of-way line, or specific location referred to in the applicable regulations, to the nearest point of the feature.

535-21I(7) SITE COVERAGE

Site coverage is measured as the percentage of a lot covered by impervious surfaces. See [Figure 535-21-E](#).

- (a) Impervious Surfaces.** Any land or portion of a site covered by constructed features that prevent the direct percolation of surface water into the underlying earth. Examples include buildings, paved parking and roadways, masonry walls and terraces, swimming pools, sidewalks, hard surface playing courts, and paved driveways.
- (b) Semi-Pervious Materials.** Semi-pervious materials, such as semi-pervious pavers, semi-pervious asphalt, and semi-pervious concrete, counts towards the site coverage at a lower rate. The area of the semi-pervious materials is added into the overall site coverage at 75% of the actual area. For example, if the area of semi-pervious materials measures 1,600 sq. ft., 1,200 sq. ft.

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(75% of 1,600) contributes to the lot's maximum site coverage.

- (c) **Green Roofs.** Green, or vegetated, roofs count towards the site coverage, calculated at 75% of the area of the green roof. For example, if the surface of the green roof measures 13,000 sq. ft., then 9,750 sq. ft. (75% of 1,600) contributes to the lot's maximum site coverage.

535-21I(8) INTERNAL PARKING AND DOOR LOCATION

- (a) **Internal Parking Setback Measurement.** Internal parking setbacks are defined in the building type regulations.
- (b) **Dimensional Setback.** When the building type regulation includes a dimensional setback for internal parking, the setback is measured from the primary facade of the building, located generally parallel and facing the primary lot line. The setback is intended to promote the use of the area directly behind the primary facade of any building for people and not the parking of vehicles.
- (c) **Setback Use.** The use of the space of the building within the setback must be occupied space. See definition.
- (d) **Internal Parking Door Location.** Any garage door must be located on one of the designated facades of the building.

535-21I(9) LIMITED SIDE YARD PARKING

Where allowed, limited side yard parking is located in the interior side yard and must be configured as one double- or single-loaded aisle of parking with the centerline of the aisle located perpendicular to the street.

535-21I(10) BUILDING HEIGHT

See [Figure 535-21-C](#).

- (a) **Minimum Height.** Each building type requires a minimum number of stories. The building must meet the minimum required height along all primary street facades and for a depth of at least 30 feet into the building. All building facades located within the build-to zone must meet the required minimum building height.
- (b) **Maximum Height.** Maximum heights are specified in number of stories. This requirement applies to the entire building. The maximum number of stories may not be exceeded due to sloped sites. Heights must step with the grade in order to not exceed the maximum allowable height. See [Figure 535-21-F](#).

- (c) **Towers.** When expressly allowed in the building type tables, towers may exceed the overall maximum height of the subject building type (see [XXX](#)).
- (d) **Height to Eaves.** Eave height is measured from the floor elevation of the first floor to the eave.
- (e) **Roof Type.** Roof types per [XXX](#) allowed by building type regulations add additional height to the building.
- (f) **Half Stories.** Half stories are stories either located fully within the roof type or in a visible basement.
 - (1) **Roof.** Where occupied building space is allowed within the roof type (see [XXX](#)), any space within the roof and within the floor to floor height counts as a half story towards the overall allowable height.
 - (2) **Visible Basement.** See [Figure 535-21-D](#) for diagram and explanation of a visible basement and [XXX](#) for definitions of basements and visible basements.
 - (3) **Two Half Stories.** If a building has both a half story within the roof and a half story that is a visible basement, the combined height of the two half stories is considered one full story in terms of measuring overall height.
- (g) **Basements.** See [Figure 535-21-D](#) for illustration of basements and [XXX](#) for definitions of basements and visible basements.
 - [1] A basement that is not a visible basement does not count towards the minimum or maximum height of a building.
 - [2] Any building may have a basement, unless expressly prohibited in this ordinance.
 - [3] A basement may contain any use allowed within the building, including those allowed only in upper stories.
- (h) **Story Height.** Each story is measured with a range of permitted floor-to-floor heights. See [Figure 535-21-C](#).
 - (1) **Measurement.** All story heights are measured in feet between the floor of a story to the floor of the story above it. Minimum and maximum floor-to-floor heights are required along a minimum of 80% of each facade's horizontal length for each story.
 - (2) **Ground Story.** When noted as a separate story height, the ground-story height must extend from the primary street facade into the building a minimum of 30 feet. The remainder of the ground-

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■ ■ = Site Coverage
 ■ ■ = Permeable Paving calculated at 75% of area

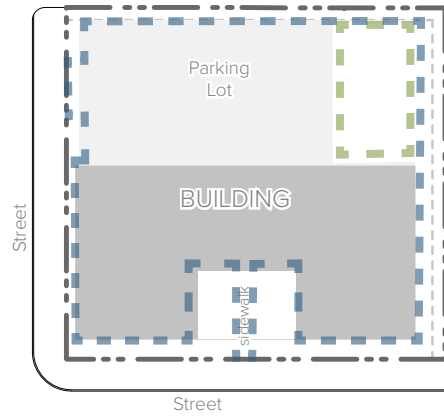


Figure 535-21-E. Site Coverage

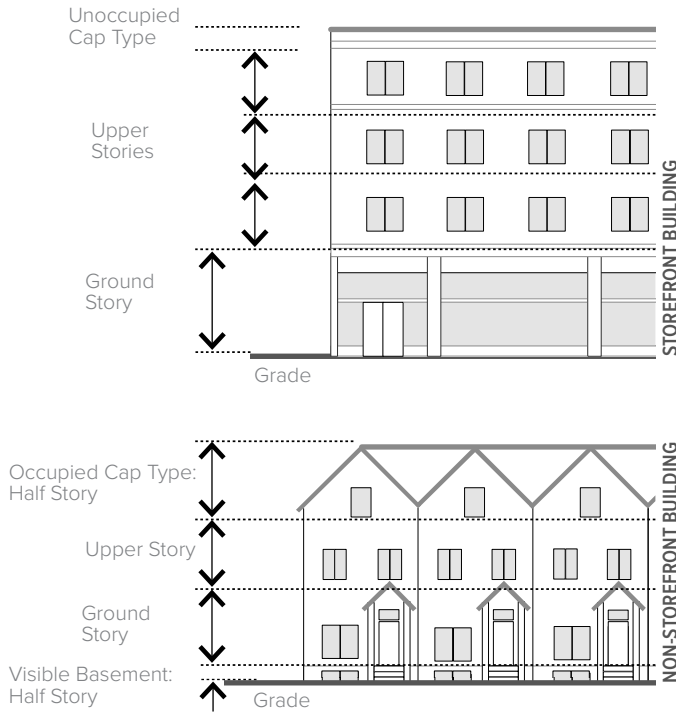


Figure 535-21-C. Measuring Building Height

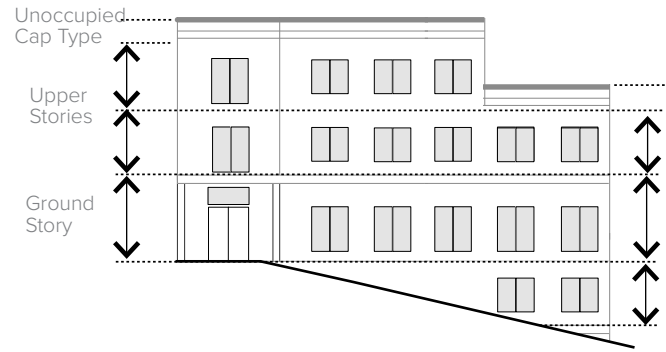


Figure 535-21-F. Measuring Height along a Sloped Street

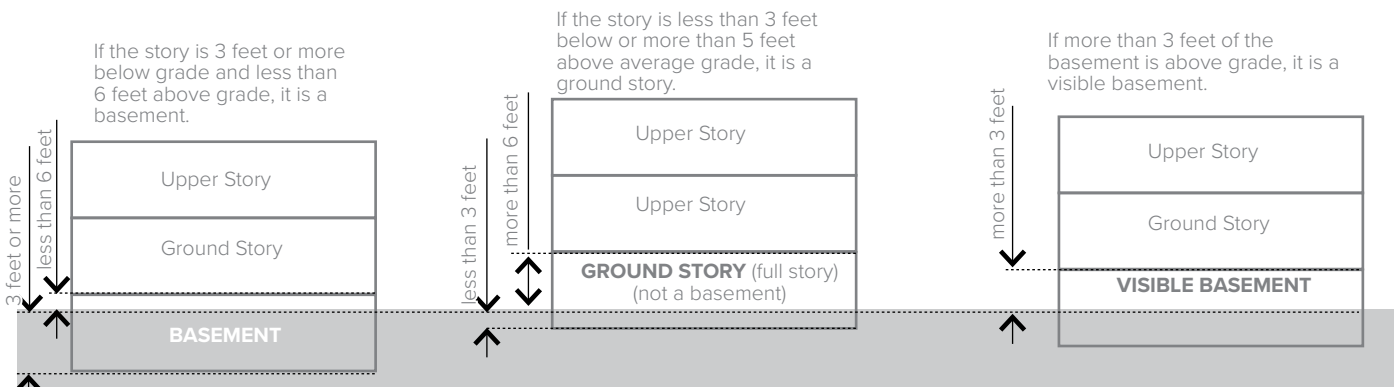


Figure 535-21-D. Basements & Visible Basements

535-21 Commercial & Mixed-Use Districts
535-21I. Measuring Building Type Regulations

story may meet either the primary frontage ground-story heights or the height range permitted for all stories.

(3) Single-Story Buildings and Top-Story

Measurement. For single-story buildings and the uppermost story of a multi-story building, the floor-to-floor height is measured from the floor of the story to the ceiling, unless a specific height is provided for a single-story building.

(4) Mezzanines. Mezzanines may be included within the allowed floor-to-floor height of any story per the building types provided the following:

- [a] Mezzanines extending above the story's allowable floor-to-floor height must count as a full story in addition the story below.
- [b] Mezzanines occupying more than 30% of the floor area below must count as a full story in addition the story below.
- [c] Where the mezzanine story is located adjacent to a street facade, the street facade transparency requirements of the subject building type must be applied to both the mezzanine floor and the story the mezzanine overlooks.

(5) Taller Spaces. Spaces exceeding the allowable floor-to-floor heights of the building type are permitted for a maximum of 20% the length of street facades.

535-21I(11) TRANSPARENCY

Governed by the building type regulations, the transparency of a facade is measured for each story separately using 2 regulations: (1) an overall minimum transparency percentage per story, and (2) where applicable per building type, maximum blank wall segments (per [535-21I\(11\)\(c\)](#), below).

(a) Definition of Transparency. For the purposes of this zoning ordinance, transparency is the measurement of the percentage of a facade that contains highly transparent, low-reflectance glass.

(1) Storefront. When transparency is required separately for primary street ground-story facades, glass must be a minimum of 60% transmittance factor and a reflectance factor of not greater than 0.25.

(2) All Other Windows. Transparency for all window, door glass, and other storefront glass must be

a minimum of 50% transmittance factor and a reflectance factor of not greater than 0.25.

(3) False Windows. The use of false or faux windows, where the window is visible from the exterior with no opening from the interior, to meet the transparency requirement is not allowed.

(b) Measurement. Minimum facade transparency is measured from floor-to-floor of each story separately, except for required minimum ground-story transparency as defined below. See the building type regulations for required transparency by building type.

- [1] Transparency requirements must be met with windows or glass in doors that comply with applicable transmittance and reflectance factors.
- [2] The measurement may include the frame, mullions, and muntins, but may not include trim or casing.

(c) Blank Wall Segments. Where applicable per the building type regulations, blank wall segments on all facades must meet the following:

- [1] No rectangular areas greater than 30% of a story's facade, as measured floor to floor, may be blank wall, without transparency. See [Figure 14-H](#).
- [2] No horizontal segments of a story's facade greater than 15 feet in width may be blank wall, without transparency. See [Figure 14-I](#).

(d) Minimum Ground-Story Transparency. When a separate minimum ground-story transparency is required per the building types requirements, the ground-story transparency is measured between 2 feet and 10 feet from the average grade at the base of the facade.

(e) Mezzanines. Mezzanines treated as a separate story per [535-21I\(10\)](#) must include upper-story transparency required per building type.

(f) Tall Stories. Stories that are 18 feet or taller in height must include additional transparency consistent with the following standards. See [Figure 14-J](#).

(1) Separate Ground Story Transparency Required. When a separate minimum ground story transparency is required per building type, the facade design must fulfill that requirement in addition to the minimum transparency for the remainder of the ground-story.

(2) No Separate Ground Story Transparency Required. Where no separate ground story

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535-21I. Measuring Building Type Regulations

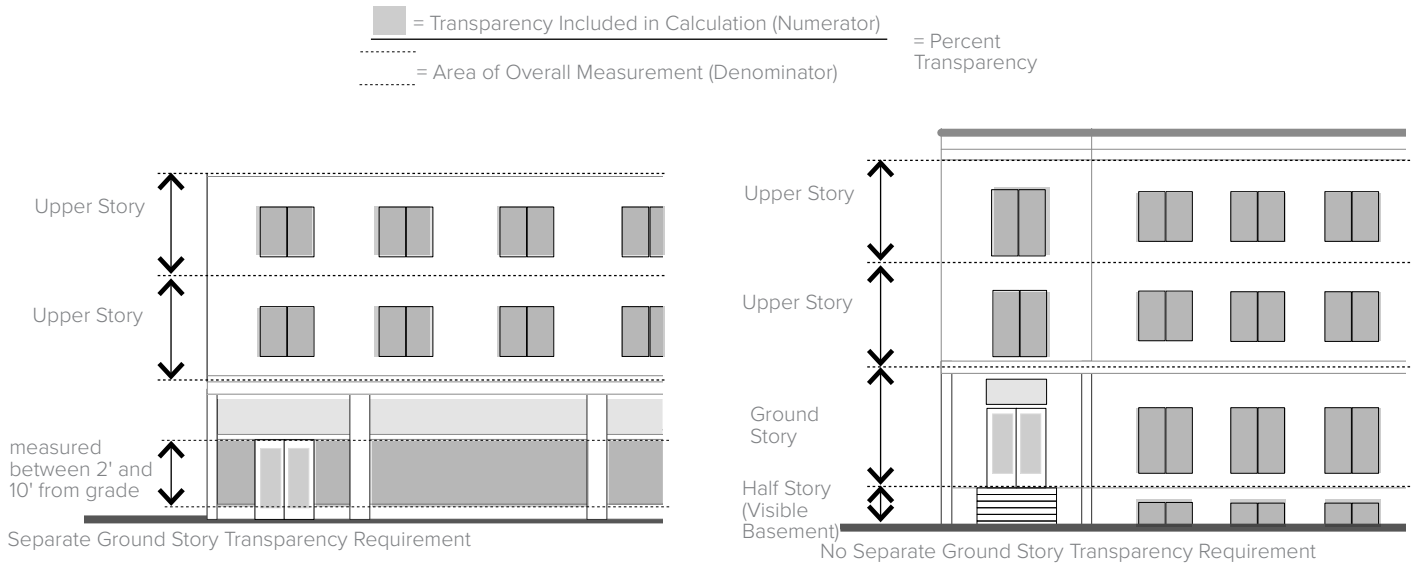


Figure 535-21-G. Measuring Transparency Floor-to-Floor

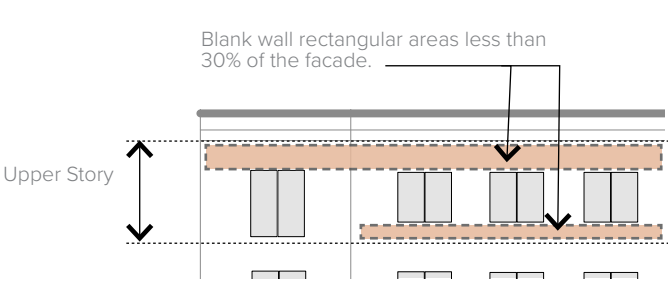


Figure 535-21-H. Blank Wall Segments (1)

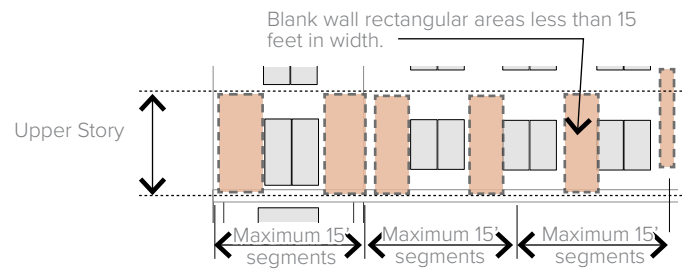


Figure 535-21-I. Blank Wall Segments (2)

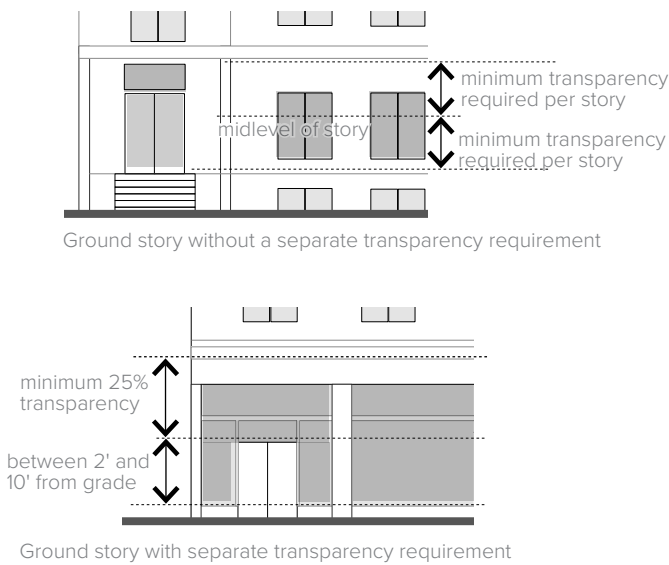


Figure 535-21-J. Measuring Transparency on Taller Stories

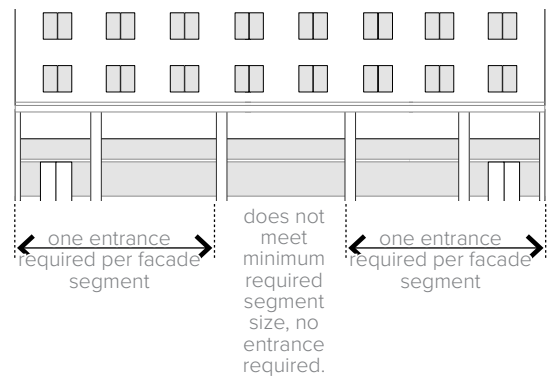


Figure 535-21-K. Entrances

transparency is required per building type, a tall story is treated as 2 separate stories, divided in half horizontally, with the minimum transparency applied to each half.

- (g) Half Stories.** All half story facades located within the roof structure and within visible basements must meet the minimum required transparency.

535-21I(12) BUILDING ENTRANCES

Entrances must be provided consistent with the entrance location and number requirements established for the subject building type and consistent with [Figure 535-21-K](#).

535-22. BUILDING DESIGN

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535-22C	Entrance Types	22-6
535-22D	Facade Materials	22-8
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535-22G	Mechanical Equipment	22-19

INTERIM DRAFT EXPLANATION

INITIAL DRAFT REVIEW KEY

green text is pulled directly from the current code and will be removed once the appropriate metric is agreed upon. **[green text in brackets]** is current code regulation for information/comparison only.

pink text highlights items to discuss during initial draft phase and will be removed for the public review draft unless additional input is needed on the specific item. Many of these questions are in the form of footnotes that will also be removed once answered. (Footnotes that are informational will be left in as directed and will be black text in public review draft.)

blue text indicates linked cross-references that are digitally linked and will remain blue in the final code.

XXX indicates references to future sections to be developed in module 2.

An "exception" noted throughout this document is a relief process that will be discussed in module 2.

535-22 Building Design
535-22B General Regulations

535-22A GENERAL REGULATIONS

535-22A(1) APPLICABILITY

The regulations of this section apply to all buildings in all commercial and mixed-use zones, unless otherwise stated.

535-22A(2) INTENT

The regulations of this section, [535-22](#), along with the building type regulations in [535-21](#), are intended to improve the physical quality of buildings, improve the long-term value and durability of buildings, enhance the pedestrian experience, and protect the historic form and scale of the village.

(a) Durable, High Quality. Ensure the use of well-tested, high-quality, durable, weather-resistant, exterior-grade materials on the majority of finished building surfaces, while permitting a wider range of materials for details. High quality materials can improve how well buildings weather, reduce material failure rate, require lower maintenance, have a longer life cycle and sense of permanence, and maintain longer term value.

(b) Clearly Articulated, Human-Scaled Facades. Promote clearly articulated, well-organized facades that are easy to understand, have a clear hierarchy, and yield building proportions and details comfortable to and in line with the scale of people.

535-22A(3) EXCEPTIONS

Modifications to specific building design regulations noted in this section, [535-22](#), may be approved by the DRB through the exceptions process, provided the design meets the intent of the building design regulations.

535-22B ROOF TYPES

535-22B(1) REGULATIONS APPLICABLE TO ALL ROOF TYPES

(a) The major components of any roof shall meet the requirements of one or a combination of the roof types allowed on building type per the building type regulations in [535-21](#).

(b) Roofs for bay or bow windows and dormers are not required to meet a roof type.

(c) Terraces, green roofs, rooftop gardens, and other outdoor facilities are and are allowed on any roof and are not considered a roof type, except as follows:

- [1] Any permanently covered, open-air area applies to the overall height as regulated by the building type regulations ([535-21](#)), or may be treated as an interior building tower per [535-22B\(6\)](#).

[2] Any fully enclosed structure on a roof must meet the tower regulations per [535-22B\(6\)](#).

[3] Where any canopy or cover is visible from any public way or open space, the cover must comply with a roof type per this section, [535-22B](#).

[4] Terraces and other outdoor facilities for people may not occur within 15 feet of an adjacent lot line of an R district.

[5] Commercial activities may not occur on any rooftop that abuts an R district.

(d) Roofs, including all eaves or overhangs, must be fully located within the property lines of the lot except as encroachments into yards allowed per [535-21\(6\)](#). See [535-21](#) for setback regulations.

535-22B(2) OTHER ROOF TYPES

Other roof designs not defined in this section may be approved by the DRB through a design exception process with the following requirements:

(a) Occupied Building Space. The roof type must not create additional occupiable floor space beyond that permitted by the building type. See [535-21J](#) for definition of occupied building space.

(b) Other Design. The shape of the roof **should** be different from those defined in this section, [535-22B](#), such as a dome, spire, or vault and not an allowed pitched roof, parapet roof, or flat roof, except as otherwise expressly stated in this section, [535-22](#).

(c) Warrant. The building **should** warrant a separate status from the majority of buildings in the district, with a correspondence between the form of the roof and the building use or location. For example, a dome for planetarium or a unique, singular roof for a more distinctive museum or cultural facility.

535-22B(3) PARAPET ROOF TYPE

A parapet is a low wall projecting above a building's roof along the perimeter of the building on all street facades and other primary facades. See [Figure 2-A](#) Example of a Parapet Roof.

(a) Parapet Height. Height is measured from the top of the upper story to the top of the parapet.

[1] Minimum height is 1.5 feet with a maximum height of 6 feet.

[2] Roof slope beyond the parapet must not be visible above the parapet.

- [3] A shadow line must be located within 2 feet of the top of the uppermost story. See [535-21J](#) for definition of shadow line.
- [4] A shadow line must be located at the top of the parapet. See [535-21J](#) for definition of shadow line.
- [5] Parapets may be faced with a sloped, shingled roof detail, provided the detail does not exceed the allowable height of the parapet and the shingles are **clay tiles!** An alternative material may be approved through the design exception process.

(b) Occupied Building Space. Occupied building space must not be incorporated behind this roof type. See [535-21J](#) for definition of occupied building space.

(c) Rooftop Appurtenances. With the exception of solar panels and wind energy systems, any rooftop appurtenances must be located towards the rear or interior of the parapet roof. Rooftop appurtenances should be located such that the parapet blocks their

1 Note that most of these details on parapet roofs in the village are clay tiles. It is common for these to be replaced by asphalt shingles. One consideration is they tend to be more visible on single-story buildings; perhaps require clay tiles only on 1-story buildings.



Figure 2-A. Example of a Parapet Roof Type

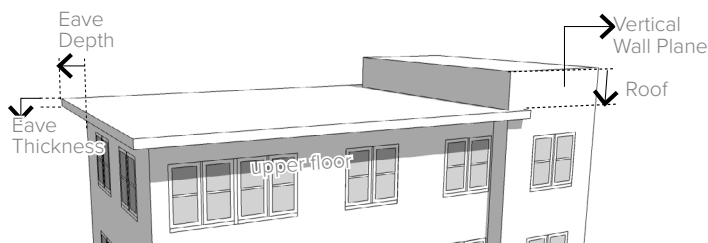


Figure 2-B. Example of a Flat Roof Type

view from the sidewalk across the street or may be located within a tower per [535-22B\(6\)](#). See [535-22G\(4\)](#) for additional regulations of mechanical equipment.

535-22B(4) FLAT ROOF TYPE

This roof type is a visibly flat roof with overhanging eaves. See [Figure 2-B](#) Example of a Flat Roof.

(a) Maximum Slope. The maximum slope is 2:12; however, the roof must not appear to be visibly sloped from the street or other primary frontage.

(b) Eaves. Eaves are required on all street and other primary frontages.

(1) Eave Depth. Eaves must have a depth of at least 14 inches. Eave depth is measured from the building facade to the outside edge of the eave.

(2) Eave Thickness. Eaves must be a minimum of 6 inches thick. Eave thickness is measured at the outside edge of the eave, from the bottom of the eave to the top of the eave.

(c) Interrupting Vertical Walls. Vertical walls may interrupt the flat roof and extend above the top of the eave with no discernible roof type.

[1] No more than one-third or 20 feet, whichever is less, of any primary facade may consist of an interrupting vertical wall.

[2] Vertical walls shall extend no more than 8 feet above the top of the eave.

(d) Occupied Building Space. Occupied building space shall not be incorporated within this roof type, including the flat roof and vertical wall. See [535-21J](#) for definition of occupied building space.

(e) Rooftop Appurtenances. With the exception of solar panels and small wind energy systems, rooftop appurtenances may not be located on the flat portion of this roof type. Any rooftop appurtenances may be located behind the interrupting vertical wall with no visibility from the sidewalk across the street per [535-22G\(4\)](#) or may be located within a tower per [535-22B\(6\)](#).

535-22B(5) PITCHED ROOF TYPE

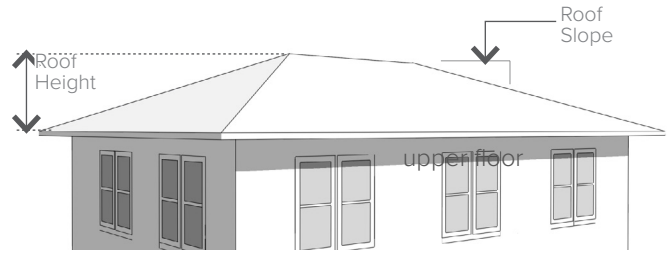
This roof type is a sloped or pitched roof, where the slope appears on all street and other primary facades. Slope is measured with the vertical rise divided by the horizontal span or run. See [Figure 2-C](#) Examples of Pitched Roof type.

535-22 Building Design
535-22B Roof Types

(a) **Pitch Measure.** The roof may not be sloped less than a 4:12 (rise:run) or more than 14:12. Slopes less than 4:12 are permitted to occur on second story or higher roofs.

(b) **Configurations.**

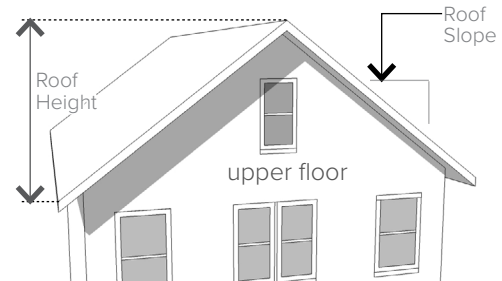
- [1] Hipped, gabled, and combination of hips and gables with or without dormers are allowed. When the ridge line runs parallel to any primary frontage, (a) or (b), below, must occur:
 - [a] A gabled end or perpendicular ridge line must occur at least every 100 feet of roof; or
 - [b] One dormer must be provided for every 15 feet of ridge line on any street or primary frontage with at least one dormer per frontage.
 - [c] Occupied building space within the roof is allowed and counts as a half or full story. See [535-21\(10\)](#) for definition of half story and any half-story limitations per the building type regulations. See [535-21J](#) for definition of occupied building space.
- [2] Gambrel and mansard roofs² are allowed per the following:
 - [a] Gambrel roofs with the ridge line perpendicular to the street are allowed.
 - [b] Gambrel roofs with the ridge parallel to the street and mansard roofs are allowed where one dormer is provided for every 20 feet of ridge line on any street or primary frontage with at least one dormer per frontage.
 - [c] The steepest portion of the roof must be no greater than the tallest permitted height of one upper story.
 - [d] Occupied building space is required beneath the roof and counts as a half or full story, based upon the percentage of footprint allowed for a half story within the building type regulations. See [535-21\(10\)](#) for definition of half story. See [535-21J](#) for definition of occupied building space.
- [3] Butterfly (or inverted gable or V-shaped roof) and shed roofs are allowed only with a design exception approved by DRB. The following applies:



Low Pitched Roof Type (Hip Roof)



Parallel Pitched Roof Type



Pitched Roof Type (Gable Roof)

Figure 2-C. Examples of Pitched Roof Type

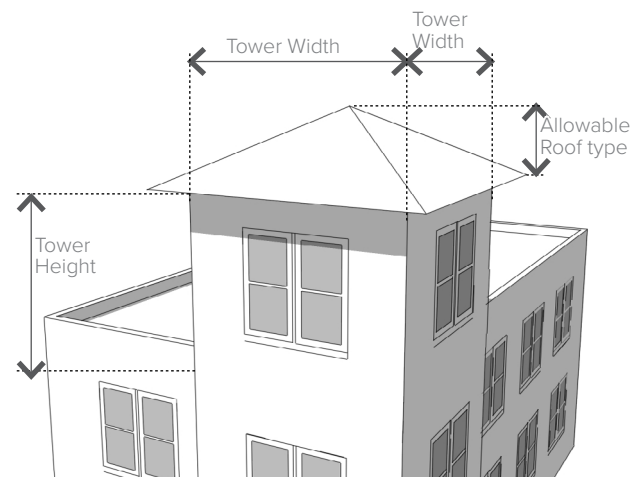


Figure 2-D. Example of Tower

² Not sure these should be allowed - inconsistent with current building form. Mansard roof portion on face of parapet is handled in the parapet roof type.

- [a] Negative impacts on neighboring properties, such as shading or glare, are mitigated.
- [b] The butterfly or shed roof must not exceed 8 feet in total height, inclusive of overhang.
- [c] The roof must not be significantly higher than the surrounding context, unless the visibility of the roof is screened from the street and neighbors by the building.
- [d] Occupied building space within the roof is allowed and counts as a half or full story. See [14.20.10535-21I\(10\)](#) for definition of half story and any half-story limitations per the building type regulations. See [535-21J](#) for definition of occupied building space.

(c) Maximum Roof Height. Roofs without occupied building space and/or dormers must have a maximum height on primary and non-primary frontage facades equal to no more than 1.5 times the upper-story floor-to-floor height utilized on the building.

(d) Half Stories in Roof. See [535-21I\(10\)](#) for definition of half story.

(e) Rooftop Appurtenances. With the exception of solar panels, antennae, and wind energy systems, any rooftop appurtenances must be recessed within the pitched roof with no visibility on any street elevation drawing. See [535-22G\(4\)](#) for additional regulations of rooftop mechanical equipment.

535-22B(6) TOWERS

A tower is a vertical element used with other roof types. See [Figure 2-D](#) Example of Tower.

(a) Degree of Enclosure. A street-facade tower must be fully enclosed. Any interior building tower may be partially or fully enclosed. A fully open structure, such as a rooftop gazebo is not a tower.

(b) Quantity. Unless otherwise defined in the building type regulations, the following is allowed:

- [1] Street Facade Towers. A maximum of 2 towers located within 15 feet of any street facade is permitted on any building. Street facade towers enhance the facade design.
- [2] Interior Building Towers. Two additional towers are permitted provided the towers are located a minimum of 30 feet from any street facade. Interior towers are typically functional, providing housing for utilities or access to the roof.

(c) Tower Height.

- [1] Maximum height, measured from the top of the uppermost floor of the building to the top of the tower shaft, not including the tower roof, is the equivalent of the height of one upper floor of the building to which the tower is applied.
- [2] A tower allows up to one additional story of height within the tower footprint to any building type where permitted and is not included in the overall maximum height of the building.

(d) Tower Footprint.

- [1] A tower footprint may be polygonal (simple, e.g. hexagonal or octagonal), rectilinear, or cylindrical in plan.
- [2] The maximum width in any direction of the footprint of any tower is 1/3 the width of any street or primary facade or 20 feet, whichever is less.

(e) Tower Spacing.

- [1] Street facade towers, within 15 feet of any street facade, must be spaced a minimum of 120 feet from other street facade towers.
- [2] Interior building towers must be located a minimum of 60 feet from any other tower.

(f) Transparency. For facades of towers taller than 5 feet and located within 30 feet of a street facade, the minimum primary street, upper-story transparency requirement must be met.

(g) Horizontal Shadow lines. If the tower extends the building up to a 5th or higher story, a shadow line is required between the 4th and 5th stories on any tower street facade. Shadow lines required by the roof type used on the tower also apply.

(h) Occupied Building Space. Towers may be occupied by the same uses allowed in upper stories of the building type to which it is applied. See [535-21J](#) for definition of occupied building space.

(i) Rooftop Appurtenances. No rooftop appurtenances are permitted on tower roofs. Roof appurtenances may be housed within a tower.

(j) Tower Roof. The tower may be roofed by any roof type defined in this subsection [535-22B](#) or approved as an other roof type per [535-22B\(2\)](#).

535-22 Building Design
535-22C Entrance Types

535-22C ENTRANCE TYPES

535-22C(1) REGULATIONS APPLICABLE TO ALL ENTRANCE TYPES

Entrance types are allowed per building type, see [535-21](#). The following applies to entrance types on any street or courtyard facades.

- (a) **Retaining Walls.** See [535-23B\(1\)](#) for retaining walls located in any street yard.
- (b) **Railings.** Railings for all porches or ramps must be constructed of steel or cast stone on all building types.
- (c) **Design Exception.** Other configurations for any entrance type may be approved by the DRB through the design exceptions process, provided the intent of the entrance type is maintained.

535-22C(2) STOREFRONT ENTRANCE TYPE

(a) **Intent.** Storefront entrance types are intended to provide at grade access between the store and adjacent sidewalk creating a high level of permeability. See [Figure 2-E](#).

(b) **Recessed Entrance.** Where the sidewalk outside the storefront is less than 7 feet in width, measured perpendicular to the facade, entrances must be recessed as follows:

- [1] The door must be recessed between 3 and 8 feet deep, measured from the facade.
- [2] The maximum width of the recess is 10 feet.

(c) **Transparency.** A minimum amount of ground-story storefront glass is required per the building type regulations.

- [1] The storefront entrance must meet the minimum transparency requirements.
- [2] The glass shall turn the corner of any recessed entry as shown in [Figure 2-E](#).
- [3] Transom windows.
 - [a] Transom windows above doors and windows are required where the top of the door is lower than the top of the window.
 - [b] Existing transom windows must be retained.
- [4] See [535-22E\(2\)](#) for general window regulations.

(d) **Bulkhead.** Where a bulkhead is incorporated, the maximum height is 24 inches. A bulkhead is the lower

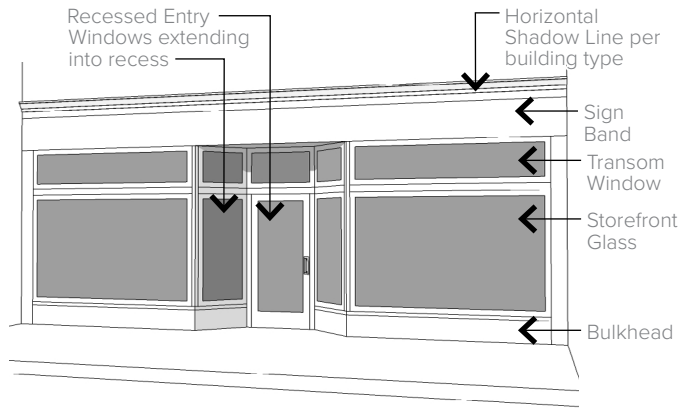


Figure 2-E. Example of a Storefront Entrance

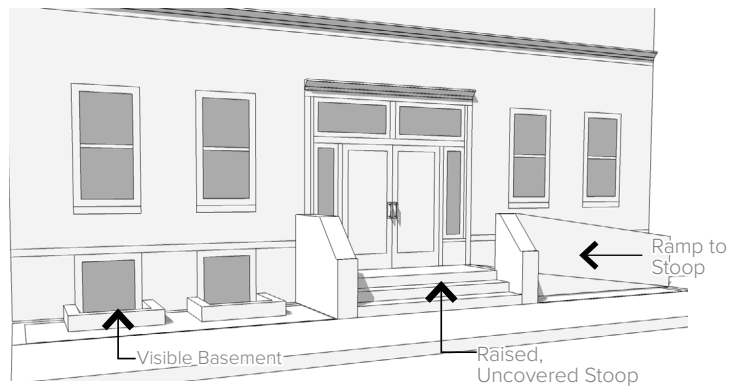


Figure 2-F. Example of Stoop Entrance

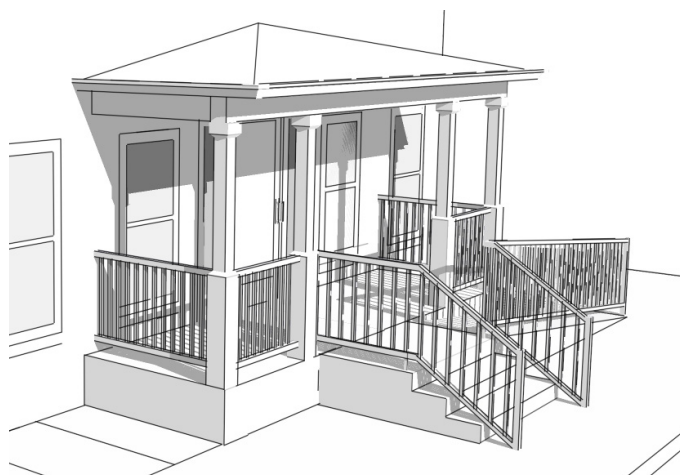


Figure 2-G. Example of Porch Entrance

set of panels or low wall upon which the storefront windows rest. See [Figure 2-E](#). The bulkhead may be constructed of wood, metal, concrete, spandrel glass, or masonry. Concrete masonry units may not be exposed. See [535-22D](#) for allowed facade materials.

- (e) **Security Shutters.** External roll down shutters are not allowed. Any necessary security grills must be located inside the shop windows, and shall not be solid. Preferred security systems are glass shock or breaker sensors, or electronic alarms.

535-22C(3) STOOP ENTRANCE TYPE

A stoop is a small, open platform that may include a canopy or roof cantilevered off the building. See [Figure 2-F](#).

- (a) **Location.** Stoops on any street facades in the commercial and mixed-use districts must be located within the build-to zone **unless a planning exception³ is approved by the plan commission.**
- (b) **Stoop Size.** Stoops must be a minimum of 4 feet wide and 3 feet deep.
- (c) **Orientation to Door.** The stoop, if covered, shall be centered on the doorway, including sidelights, and shall not extend greater than 3 feet in either direction.
- (d) **Floor Height.** The floor height of any stoop shall be at or within 8 inches of the front entry height.
- (e) **Canopy.** A canopy over a stoop must be located within 3 feet of the top of the ground story.
- (f) **Elevated Stoop.** Where a stoop entrance is located above 3 feet, the lower level is considered a visible basement and the following applies:
 - [1] See [535-22C\(1\)](#) for general retaining wall regulations.
 - [2] Street facade transparency requirements of the building type apply to any visible basement facade. See [535-21J](#) for definition of visible basement. Openings without windows or doors are not allowed on primary street facades.
 - [3] Elevated Stoops must be a masonry or concrete structure, faced with an allowed major facade material if exposed. Wood decking or open metal platforms attached to the building are not allowed.
 - [4] Ramps must be designed as part of the stoop as required by any building accessibility regulations.

³ the name of this exception may change

535-22C(4) PORCH ENTRANCE TYPE

A porch is a raised, roofed platform open on all sides not abutting the building. See [Figure 2-G](#).

- (a) **Location.** Porches on any street facade in the commercial and mixed-use districts must be fully located within the build-to zone **unless a planning exception⁴ is approved by the plan commission.**
- (b) **Porch Size.**
 - [1] Minimum porch size is 5 feet deep and 8 feet wide.
 - [2] Maximum depth of porches is 10 feet.
- (c) **Floor Height.** The floor height of any porch shall be at or within 8 inches of the front entry height.
- (d) **Height.** Porch roof height shall be a maximum of ~~one-story~~ 2 stories, each story meeting the floor-to-floor story height of the building type. ~~A second-floor-deck-with-railling may be allowed, subject to approval of a design-exception.~~
- (e) **Unenclosed.** At least 50% of the exterior wall area shall be open; mesh screened areas, glazing and guardrails shall be considered enclosed.
- (f) **Elevated Porch.** Where a porch entrance is located more than 3 feet above the public sidewalk, the lower level is considered a visible basement and the following applies:
 - [1] See [535-23B\(1\)](#) for general retaining wall regulations.
 - [2] Street facade transparency requirements of the building type apply to any visible basement facade. See [535-21J](#) for definition of visible basement. Openings without windows or doors are not allowed on primary street facades.
 - [3] Ramps must be designed as part of the stoop as required by any building accessibility regulations.

⁴ the name of this exception may change

535-22D FACADE MATERIALS

535-22D(1) MAJOR FACADE MATERIALS

Allowed major facade materials are listed in [Table 535-22-1](#). [Figure 2-1](#) illustrates major and minor facade materials.

(a) Street and Other Primary Facades. Major materials are required on all street and other primary facades, unless otherwise stated, and are intended to serve as the main surface material on street-facing and other primary facades. See [535-21D\(7\)](#) for other primary facades including courtyard facades. Major materials must be used on a minimum of 65%⁵ of applicable facades, not including window and door areas.

(b) Simplicity of Facade Materials. The intent of these regulations is the use of fewer facade materials resulting in simpler, clearer building designs.

(1) Single Major Material. A single major facade material must be used for the street and other primary facades of the building.

(2) Design Exception. A design exception may be approved by the DRB for dividing the building into segments with at least one segment 120 feet or greater. Each segment may utilize a different major facade material. [Figure 2-1](#) illustrates major and minor facade materials.

⁵ This version of 2/3 (65%) major material to 1/3 (35%) minor is one version. An alternative is 3/4 & 1/4 (75% & 25%): a 4 story building might have up to one story faced in a minor material. Or higher?

- [a] Building segments must be separated by a minimum 3 feet setback.
- [b] Courtyards may count as a separate building segment.

(c) Side and Rear Facades.

- [1] For any rear and side facades that are generally perpendicular to a street or other primary facade, allowed major materials on the street or primary facade must extend along that side or rear facade a distance equal to the horizontal distance to the side facade of the adjacent building or a maximum of 30 feet, whichever is less.
- [2] All major materials may be used on side and rear facades.
- [3] See [Table 535-22-2](#) for facade materials that may be utilized on 100% of side and rear facades.

(d) Original Facade Materials. Where brick or stone is an existing building's original major facade material, the following applies:

- [1] The original brick or stone may be maintained if in good condition or repaired or the brick or stone may be replaced by new brick or stone.
- [2] A different major material may not be installed over the original brick or stone except with approval of a design exception by the DRB.



Figure 2-1. Example of Major and Minor Materials on a Facade

535-22D(2) MINOR FACADE MATERIALS

(a) Maximum Minor Materials for Street Facades. A maximum of **35%** of each **street** facade surface, not including window and door areas, may be composed of minor facade materials per [Table 535-22-3](#).

(b) Accents and Details. Additional materials are allowed for trim, accents, and details per [Table 535-22-4](#), not included in the maximum facade area.

535-22D(3) PITCHED ROOF MATERIALS

The following materials are allowed on pitched roofs: dimensional asphalt composite shingles, wood shingles and shakes, **metal tiles or standing seam**, slate, ceramic tile, and **engineered wood or slate**.

535-22D(4) APPROPRIATE GRADE OF MATERIALS

All doors, windows, and hardware must be of commercial grade quality with the exception of those on Row buildings.

535-22D(5) MATERIAL INSTALLATION

The following material installation requirements are intended to advance the quality of construction, durability, and aesthetics of new buildings, specifically related to application and detailing of facade materials.

(a) Changes in Facade Materials. Changes in facade materials, whether major materials or minor materials, should occur mainly at concave corners or changes in building planes.

(b) Materials Hierarchy. A hierarchy of materials must be maintained on the building facade, where "heavier," articulated unit materials (brick, concrete masonry units, stone) are located at the base of the facade and "lighter," constant surface materials with fewer seams (stucco, panels) are located above those on the facade.

(c) Shadow Lines on Surfaces. Shadow lines must delineate changes in materials with solid materials of a thickness that is greater than **1.5 inches**, such as cast stone, masonry, or stone. For example, cast stone elements or brick may be offset to create a shadow.

535-22D(6) OTHER MATERIALS

Materials that are not listed in this section as allowed major, minor, accent/detail, or roof materials may not be installed on any facade or roof unless approved as a design exception by the DRB.

(a) Intent. Other materials may be allowed if the applicant demonstrates the material in its proposed application meets the intent of the facade material standards.

(b) Examples. Samples and examples of successful high-quality local installation in the region and the manufacturer’s warranty and industry ratings must be provided by the applicant.

(c) Prohibited Materials. Materials listed as prohibited on [Table 535-22-5](#) may not be approved as acceptable materials.

Table 535-22-1. Allowed Major Materials on Street & Primary Facades [min. 65% of facade]

BUILDING TYPE				
MATERIAL (alphabetical)	STOREFRONT BUILDINGS	COMMERCIAL BUILDING	GENERAL BUILDINGS	ROW BUILDINGS
A Brick full dimensional, economy, unit, face brick, unglazed, no black ¹	●	●	●	●
B Concrete Masonry Units architectural, minimum 3 inch depth, “artisan stone” look, varied sizes, (Echelon Masonry or approved equal), “stone” face, “hewn stone”, rock cut	●	●	●	●
C Stone natural, units	●	●	●	●

¹ Black brick or glazed colored brick may be used as a minor material, but not the major material for the building. Gray brick is allowed.

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535-22D Facade Materials

Table 535-22-2. Allowed Side & Rear Facade Materials [min. 65% of facade]

All allowed major facade materials for street & primary facades may be used for rear and side facades, unless otherwise listed as prohibited in Table 535-22-5.

MATERIAL (alphabetical)	BUILDING TYPES			
	STOREFRONT BUILDINGS	COMMERCIAL BUILDING	GENERAL BUILDINGS	ROW BUILDINGS
E Concrete Masonry Units minimum 3 inch depth, split-faced, burnished/ground face, glazed, or honed	●	●	●	●
F Fiber Cement Board finished panels, finished lap siding or shingles	●	●	●	●
H Metal, Architectural articulated architectural panel, cladding system (steel, titanium, zinc, corten steel)	●	●	●	●
J Stucco synthetic or with elastomeric finishes	●	●	●	—
		3rd or higher stories only		

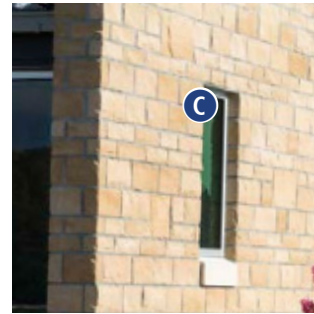
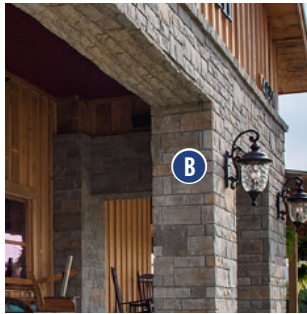
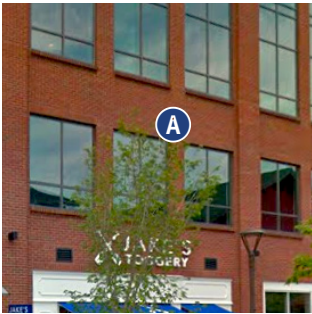
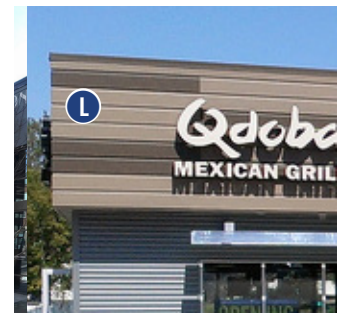


Table 535-22-3. Allowed Minor Facade Materials [up to 35% of facade]

All allowed major facade materials for street & primary facades may be used for minor facade materials, unless otherwise listed as prohibited in Table 535-22-5.

MATERIAL (alphabetical)	ALLOWED ON BUILDINGS IN THESE ZONES	ALLOWED LOCATION	MAXIMUM AMOUNT ON ALLOWED FACADES
Brick full dimensional, economy, unit, face brick, glazed, black	All	All facades	35%
D Concrete Surfaces finished, stained, painted, treated concrete & precast panels	All	All facades, below ground floor only	10%
E Concrete Masonry Units minimum 3 inch depth, split-faced, burnished/ground face, glazed, or honed	All	Street facades	20%
F Fiber Cement Board finished panels, finished lap siding or shingles	All	All facades, stories above the ground story only	35%
G Glass curtain wall	All	All facades; see 535-22F for bird friendly design	35%
H Metal, Architectural articulated architectural panel, cladding system (steel, titanium, zinc, corten steel)	All	All facades, stories above the ground story only	35%
I Metal, Corrugated, Other ribbed, corrugated, sheet panels ¹	All	All facades, no more than 100 s.f. continuous area	10%
Stucco cement-based, 2-3 layer hard coat	All	All facades, 3rd or higher stories only	35%
J Stucco synthetic or with elastomeric finishes	All	All facades, 3rd or higher stories only	35%
Terra Cotta or Ceramic tiles or panels	All	All facades	20%
K Wood painted, stained, treated, natural, or aged lap siding, shingles, board & batten	All	All facades, no more than 100 s.f. continuous area	20%
L Wood, Composite lap siding, shingles, board & batten, rainscreen system	All	All facades, no more than 100 s.f. continuous area	35%

¹ Add minimum gauge, thickness



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535-22D Facade Materials

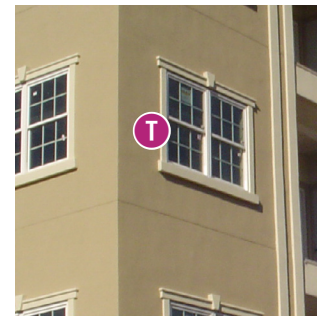
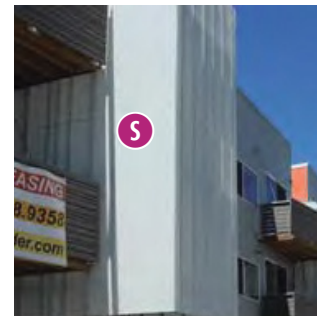
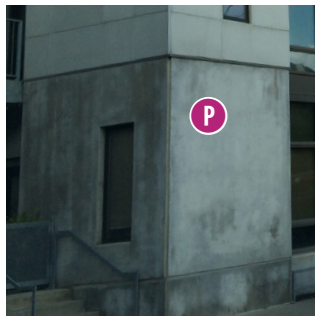
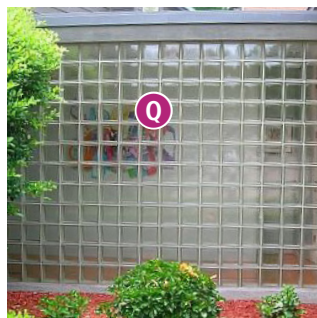
Table 535-22-4. Allowed Detail & Accent Materials

All permitted major and minor facade materials may be used for details, trim, and accents.

M	Concrete Details precast stone ornamentation, lintels, sills, banding, columns, beams
-	Fiber Cement Details trim, soffits
N	Metal Details trim, ornamentation, lintels, beams, columns
-	Wood and Wood Composite Details painted/treated trim, soffits, other approved details
O	Vinyl Details limited to soffits, window trim; minimum .04 inches thick

Table 535-22-5. Prohibited Materials

-	Brick thin veneer
P	Concrete, Unfinished untreated, unstained, unpainted
-	Fiberglass and Acrylic Panels all
Q	Glass Block clear or patterned units with or without color
R	Metal, Aluminum Composite aluminum composite materials (ACM) or panels (ACP)
S	Plastic Panels all, including high-density polyethylene and polycarbonate panels
T	Stucco Moldings or Synthetic Stucco Moldings trim, sills, cornices, banding, columns, pilasters or other 3 dimensional details
-	Vinyl & PVC Siding minimum .040 in. thick
-	Wood unfinished, untreated plywood siding or panels



535-22E FACADE ELEMENTS

535-22E(1) EXCEPTIONS

Allowed design and planning exceptions to facade elements are noted throughout this subsection and must be approved per XXX.

535-22E(2) WINDOWS

Windows on street and other primary facades of all buildings must be consistent with the following requirements:

- (a) **Amount.** Each building must meet the transparency requirements per the building type regulations. See [535-21](#).
- (b) **Bird-Friendly Design.** See XXX for bird-friendly design regulations applicable to all windows, storefront glass, and curtain-wall glass, and any other non-opaque surface.
- (c) **Recessed.** All windows, with the exception of ground-story storefront systems and glass curtain wall systems, must be recessed with the glass a minimum of 1.5 inches from the facade surface material or adjacent trim.
- (d) **Vertically Oriented.** A minimum of 70% of street facade windows must be individually vertically oriented, but may be grouped in a set. See [Figure 2-J](#).
- (e) **Operable Windows.** With the exception of ground-story storefront glass and glass curtain wall systems, operable windows are required as follows:
 - [1] A minimum of 70% of all street facade windows on all buildings must be operable.
 - [2] Examples include single-hung, double-hung, pivot, casement, and awning windows; fixed or picture windows are not operable.
 - [3] A design exception may be approved by the DRB.
- (f) **Visibility Through Glass.** Reflective glass and glass block are prohibited on street and other primary facades. Windows must meet the transmittance and reflectance factors established in the transparency definition. See [535-21\(11\)](#).
- (g) **Expressed Lintels.** For masonry construction, the expression of lintels must be included above all windows and doors by a change in brick coursing or by a separate detail or element. See [Figure 2-J](#) for illustrations of expressed lintels on masonry facades.
- (h) **Garage Doors.** Garage doors utilized for patio access, open air dining, or display and not utilized for vehicular

access, may be used for storefronts or other window requirements on any building type, provided the doors contribute to and meet the transparency requirements. Garage doors do not count as an entrance.

- (i) **Unobstructed Windows.** Ground-story, street-facade windows, other than those for residential uses, must be unobstructed. Window displays on the inside of the building may be used, blocking up to 70% of the window area, but the surfaces of windows must be clear. The remaining window area must have views into the occupied space of the building. See [445-11](#) for window signs.

535-22E(3) DOORS

Doors on street and other primary facades of all buildings must be consistent with the following requirements:

- (a) **Amount.** Each building must meet the entrance requirements per the building type regulations. See [535-21](#).
- (b) **Recessed.** All doors, with the exception of those in ground-story storefront systems and glass curtain wall systems, must be recessed with the door panel a minimum of 3 inches from the facade surface material or adjacent trim.
- (c) **Visibility Through Glass.** Doors on primary facades must include at least 35% transparent glass, meeting the transmittance and reflectance factors established in the transparency definition. See [535-21\(11\)](#). A design exception may be approved by the DRB for a lower transmittance, such as frosted glass.



Figure 2-J. Vertically Oriented Windows

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(d) **Open, Operable Doors.** All doors on a primary facade must be fully operable as follows:

- [1] False doors are not allowed.
- [2] The minimum number of required doors on a facade per the building type regulations must be open and operable during the business hours of the tenant behind the door.
- [3] A **planning** exception may be approved by the plan commission for the open door requirement based upon the use in the building.

535-22E(4) SHUTTERS

When shutters, whether functional or not, are utilized on a street or other primary facade of any building type, the shutters must meet the following requirements. See [Figure 2-K](#).

- (a) **Size.** All shutters must be sized for the windows, so that, if the shutters were to be closed, they would not be too small for complete coverage of the window.
- (b) **Materials.** Shutters must be wood, metal, or fiber cement. Synthetic and engineered woods are allowed provided that the applicant submits a sample and examples of high-quality, local installations of the material.

535-22E(5) AWNINGS & CANOPIES

Removable awnings and canopies attached to buildings and located on any street or primary facade must be constructed consistent with the requirements of this section. See [Figure 2-L](#) for examples of awnings.

- (a) **Material.** All awnings and canopies shall be canvas or metal. Plastic awnings are prohibited.
- (b) **Lighting.** Backlighting is allowed only on metal awnings.
- (c) **Structures.** Frames must be metal and wall-mounted. Support poles from the ground are prohibited except where the awning is over 8 feet in depth and utilized for outdoor eating areas or entrances.
- (d) **Canopies & Light Shelves.** Permanent canopies, projections, or overhangs used as architectural features, light shelves, or shading devices are allowed and not intended to be regulated by this subsection [535-22E\(4\)](#).
- (e) **Right-of-Way.** Awnings or canopies extending into any right-of-way require a permit per the municipal code, [466-18](#).
- (f) **Clearance.** All portions of any awning or canopy shall provide at least 7 feet of vertical clearance over any



Inappropriately Sized Shutters.



Appropriately Sized Shutters

Figure 2-K. Examples of Shutters



Metal Awning



Canvas Awning

Figure 2-L. Examples of Awnings

walkway and 15 feet of vertical clearance over vehicular areas.

(g) Signs. See [445-8](#) for signs on awnings and canopies.

535-22E(6) BALCONIES

Balconies on a facade facing any street or other primary facade shall be consistent with the requirements of this subsection. See [Figure 2-M](#) for examples of balconies.

(a) Definitions. For the purpose of this subsection, [535-22E\(6\)](#), the following definitions apply:

- (1) Balconies.** balconies include any roofed or unroofed platform that projects from the wall of a building above grade more than 18 inches and that is enclosed only by a parapet or railing. This definition does not include false balconies, Juliet balconies, or balconettes.
- (2) Balconettes.** Balconettes are false balconies, sometimes referred to as Juliet balconies, consisting of a rail and door, either without an outdoor platform or with an outdoor platform less than 18 inches in depth.

(b) Balconettes. Balconettes are allowed and not subject to any of the balcony regulations in this subsection.

(c) Size. Balconies must be a minimum of 4 feet deep and 5 feet wide.

(d) Facade Coverage. A maximum of 35 percent of street facades, calculated separately for each facade, may be covered by balconies. The balcony area is calculated by drawing a rectangle on the facade elevation around the following: the platform or floor of the balcony; any rails, walls, columns, or indentations; and any ceiling, roof, or upper balcony.

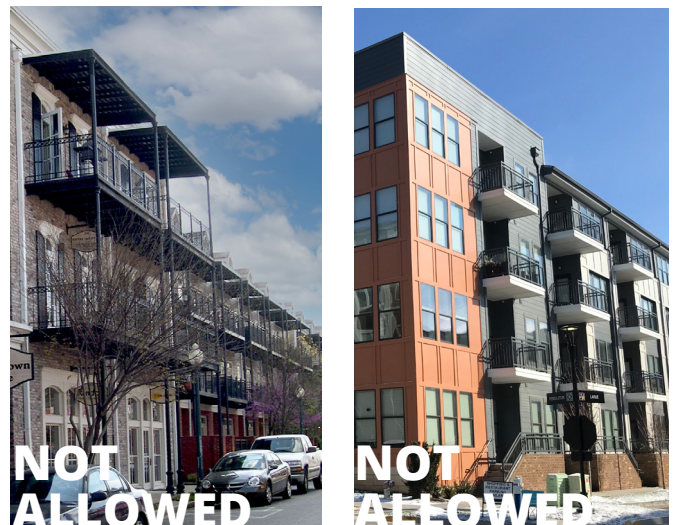
(e) Integrated Design. Balconies must be integrated within the design of the facade, avoiding tacking the balconies onto the facade after the elevation has been designed.

- [1] A minimum of 50 percent of the perimeter of each balcony must abut an exterior wall of the building, partially enclosing the balcony.
- [2] The balcony support structure must be integrated with the building facade; separate columns or posts supporting any balcony from the ground are not allowed.

(f) Platform. The balcony platform must be at least 3 inches thick and any underside of a balcony that is visible from any street or public way shall be finished.



Balconies Appropriately Attached to or Incorporated into Facade.



Balconies: Covers More than Allowed Facade Area

Balconies: Extending Off (Tacked onto) Facade

Figure 2-M. Examples of Balconies

535-22 Building Design

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- (g) **Build-to Zone Requirement.** When the balcony is in the build-to zone, the portion of the facade behind it is exempt from meeting the build-to zone requirement.
- (h) **Design Exception.** A design exception may be approved by the DRB for an alternative balcony design, provided the design meets the intent of these regulations.

535-22E(7) PRINCIPAL ENTRYWAY

See [Figure 2-N](#) for examples of defined principal entryways. Principal entrances to all buildings or units, except storefronts, must be visible from the street and clearly delineated through **one or more** of the following design features:

- (a) **Roof or Canopy.** The entryway is covered by a roof or canopy differentiating it from the overall building roof type.
- (b) **Porch.** The entryway is through a porch on any building type except a Storefront building.
- (c) **Sidelights and Transom.** Sidelights or transom windows are included around the entryway.
- (d) **Articulation.** The entryway is included in a separate bay of the building that extends up at least 2 stories or in a recessed bay with a change in material.
- (e) **Design Exception.** Other structural methods of substantially differentiating the entrance from the facade similar in scope to the examples of this section and not including paint, trim, or materials may be approved through the design exception process. See XXX.

535-22E(8) GROUND STORY AT SLOPING FACADES

- (a) **Intent.** Grade transitions on any building facade along a significantly sloped sidewalk or street must be designed to minimize blank walls and maximize pedestrian-scale frontages between waist and eye level. See [Figure 2-O](#) for examples of positive facades along slopes.
- (b) **Storefronts.** The following regulations apply to storefront facades along sloping streets or other primary frontages:
 - [1] The interior floor level must step to match the exterior grade within 3 feet and/or changes in grade may be accommodated by a storefront window display space.
 - [2] Knee walls and bulkheads must not exceed 24 inches in height except a maximum 10% or one 10-foot section, whichever is greater, may be up to 36 inches in height.

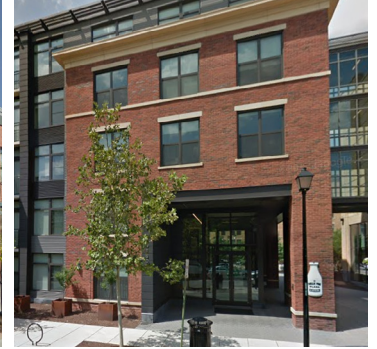


Figure 2-N. Examples of Defined Principal Entryways



Figure 2-O. Examples of Ground Story along Slopes Streets and Sidewalks

[3] Retaining walls at sloped facades must not exceed 18 inches in height except a maximum 10% or one 10-foot section, whichever is greater, of walls may be up to 30 inches in height.

[4] If the grade change is more than 9 feet in height along a single block face, entrance requirements may be increased to one entrance per 90 feet of building frontage.

[5] If the grade change is more than 9 feet along a single block face, building entrances adjacent to the street must be within 3 feet of the grade of the adjacent sidewalk.

(c) Non-Storefronts. The following regulations apply to all non-storefront facades along sloping streets:

[1] Multiple front entrances along the street **must** activate each segment of building section at each grade.

[2] The interior floor level must step to match the changes in exterior grade within a 3-foot range and/or deeper transition zones between the sidewalk and building facade of porches, terraces, and landscape areas may be used assist with grade changes.

[3] Changes may be accommodated by terraced planters and retaining walls. Retaining walls must not exceed 18 inches in height except a maximum 10% or one 10-foot section, whichever is greater, of walls may be up to 30 inches in height.

[4] When the elevation of the first floor is more than 3 feet above grade, windows must be provided into the basement or lower floor elevation. See definition of visible basement in [535-21J](#).

(d) Design Exception. An alternative method of addressing significant slopes along street and primary frontages may be approved as a design exception by the DRB⁶, provided the design meets the intent of these regulations.

535-22E(9) VISTAS

Views down streets that terminate at parcels must be considered when locating buildings, parking, and building elements on those parcels. [Figure 2-P](#).

(a) Rears of Buildings. The location of open space and streets shall not create views of the rear of buildings or

⁶ Once the exception process is defined, each instance will be searched and replaced with the same or similar language.

parking behind buildings from primary streets and open or civic space.

(b) Parking. Parking structures and surface parking lots are not permitted at the termination of a street vista.

(c) Street Termini. When a street terminates at a parcel, the parcel must be occupied by one of the following:

(1) Courtyard or Open Space. A courtyard or other open space must be located at the street terminus for the width of the subject street right-of-way. A vertical element shall terminate the view. Acceptable vertical elements include, but are not limited to, a stand or group of trees, a sculpture, a pergola or other public structure, or a fountain. Any open space must be treated as expanded streetscape per XXX.

(2) Building. The facade of a building, whether fronting a primary street or not, must terminate the view for the width of the subject street right-of-way. The building must incorporate one of the following treatments to terminate the view: an allowed tower per [535-22B\(6\)](#), a bay, an allowed courtyard per the building type regulations ([535-21](#)), or an articulated, principal entryway per [535-22E\(7\)](#). That portion of the facade must be treated as a primary facade.

535-22E(10) GARAGE DOORS

The following requirements apply to garage doors provided on any street facade.



Figure 2-P. Example of a Terminated Vista.

535-22 Building Design
535-22E Facade Elements

- (a) **Location.** Allowed locations for vehicular garage doors on street and non-street facades are regulated by the building types in [535-21](#).
- (b) **Recessed from Facades.** Garage doors located on street-facing facades must be recessed a minimum of **3 feet**⁷ from the dominant facade of the principal building facing the same street.
- (c) **Design.** Garage doors facing a street or visible from a street must meet the following:
 - [1] The doors must be clad with high-quality materials in a color used in the building facade.
 - [2] The minimum transparency of the building must be met on the garage door, unless otherwise approved by a design exception.
 - [3] Upgraded architectural doors or carriage-style doors are required on Row buildings.

⁷ The door on Kensington into the Cornerstone garage is setback about 12 inches, but it is only a single car entrance.



Figure 2-Q. Example of a Parking Structure

535-22E(11) PARKING FACADES ALONG STREETS

See [Figure 2-Q](#) for one illustration of a parking facade on a street. Parking facades are allowed only on non-primary street facades per the building type regulations in [535-21](#) and either as a separate accessory structure on the lot or in the rear of the building. The following standards apply to any parking facade visible from any street or other public way.

- (a) **Materials.** Major and minor material requirements, per [535-22D](#) shall be met on **all street facades**. An additional permitted minor material is stained, finished concrete on any story.
- (b) **Ramps and Slopes.** Ramps and slopes shall not be located on any street facades.
- (c) **Vertical Divisions.** Vertical divisions extending the full height of the structure are required every 30 feet to deemphasize the horizontal decks. Divisions shall be a minimum of 2 feet in width with a minimum projection of 3 inches.
- (d) **Screening of Vehicles.** Visibility of parked motor vehicles must be screened from the street by walls with a minimum opacity of 50%. Alternative screening may be approved through a design exception by the DRB.
- (e) **Blank Wall Limitations.** No rectangular area greater than 30 percent of any story's facade, as measured from floor to floor, and no horizontal segment of a story's facade greater than 15 feet in width may be solid wall without an opening.
- (f) **Entrances.**
 - [1] For all Storefront buildings, a pedestrian entrance directly into the parking structure from the street is required.
 - [2] Unless provided through a building lobby, all pedestrian entrances directly into the garage must be separate from the vehicular entrance and directly accessed from the sidewalk.
 - [3] All exterior pedestrian entrances into any garage must meet the principal entryway regulations in [535-22B](#). Stairwells must be located inside a tower per [535-22B](#) with windows at a transparency rate of 65%.
- (g) **Cap.** The top story of the parking structure shall include a parapet or other roof type along all facades. Refer to roof types defined in [535-22B](#).
- (h) **Vehicular Entrances.** Drive access location and width is regulated by the building type in [535-21](#).

535-22F BIRD-FRIENDLY DESIGN

535-22F(1) INTENT

The intent of the bird-friendly building design regulations is to reduce the bird injury and mortality from in-flight collisions with buildings.

535-22F(2) APPLICABILITY

The regulations of this section, [535-22F](#), apply to all facades of the building and all sites.

535-22F(3) NON-OPAQUE MATERIALS

All sites must be designed to make building facades and structures visible as physical barriers to birds.

- (a) **Material Threat Factor.** Material threat factors (MTF) are determined per the most recent version of the American Bird Conservancy's Bird Collision Deterrence: Summary of Material Threat Factors.
- (b) **Fritted Glass.** Any glass including windows, door glass, storefront glass, and glass curtain wall must be ceramic fritted glass with a material threat factor (MTF) of 41⁸ or less.
- (c) **Fly-Through Conditions.** Locations where one or more panels of glass provide clear line of sight through such elements, creating the illusion of a void leading to the other side, must be constructed with materials with a MTF of 25 or less. For example, a building corner consisting of 2 intersecting panels of glass.
- (d) **Other Non-Opaque Materials.** All other non-opaque building materials, allowed per [535-22D](#), must meet a material threat factor of 25 or less.
- (e) **Adjacency to Green Roofs.** Any exterior facade located adjacent to a green roof must be constructed of materials with a MTF of 25 or less.
- (f) **Design Exception.** An alternative design solution to non-opaque materials may be approved as a design exception by the DRB provided the MTF is lower than required by this section, [535-22F](#).
- (g) **Site Structures.** Freestanding non-opaque site structures other than buildings, such as handrails, guardrails, shelters, canopies, must be constructed entirely of materials with a threat factor (MTF) of 15 or less.

⁸ 41 is chosen because it is the highest MTF of glass below clear glass. New York's regulation uses 25 generally and 27 for storefront glass.

535-22G MECHANICAL EQUIPMENT

Mechanical equipment is necessary for any building design, but can have a negative visual impact and detract from the quality of the design of a building. The purpose of the regulations in this section, [535-22G](#), is to ensure that the visual impact of mechanical equipment and appurtenances is minimized to the maximum extent feasible.

535-22G(1) "MECHANICAL EQUIPMENT" DEFINED

When the following regulations refer to "mechanical equipment," any mechanical equipment or utility appurtenance, such as but not limited to HVAC systems, boilers, condensers, transformers, generators, vents, meters, ducts, are being referenced, except solar and wind energy systems, subject to [XXX](#) in accessory structure regulations.

535-22G(2) DESIGN EXCEPTION

Alternate locations for mechanical equipment other than those defined in this subsection, [535-22G](#), may be approved by the DRB as a design exception, provided the applicant proves the equipment cannot function in the locations allowed by these regulations and the equipment is screened to the maximum extent possible by methods other than only landscape.

535-22G(3) MECHANICAL EQUIPMENT IN BUILDING

Mechanical equipment must be located within the building, unless the applicant demonstrates that locating the equipment within the building would conflict with the equipment's function. See tower regulations in [535-22B\(6\)](#), as allowed per building types ([535-21](#)), for rooftop building structure to potentially accommodate mechanical equipment.

535-22G(4) ROOFTOP MECHANICAL EQUIPMENT

Any rooftop mechanical equipment shall be located consistent with the following. See [Figure 2-R](#) for an example.

- (a) Incorporate equipment into the roof design consistent with the applicable standards of roof types in [535-22B](#).
- (b) Set the equipment back a minimum of 15 feet from any street, trail, or alley facade.
- (c) Rooftop equipment must be screened from any street or trail.

535-22G(5) MECHANICAL EQUIPMENT ON STREET FACADES

- (a) Mechanical equipment must not be located on a street facade unless the applicant demonstrates that locating the equipment in a different location would conflict with the equipment's function.

535-22 Building Design

535-22G Mechanical Equipment

(b) Any mechanical equipment approved on a facade must be located consistent with the following standards:

(1) **Street Facade.** The mechanical equipment may be located on a street facade only if all of the following requirements are met:

- [a] The equipment is located on a surface perpendicular (and not parallel) to the adjacent street. The equipment may be located on a facade parallel to the street only with approval of a design exception by the DRB.
- [b] The equipment extends from the facade surface no more than 3 inches.
- [c] The equipment must be designed as part of the facade, integrating with windows and materials. See examples in [Figure 2-S](#).

(2) **Air Vents or Grills.** Air vents and grills may be successfully incorporated into storefront window systems, provided the transparency requirements are met by the actual windows in the system.

(3) **Alignment.** Multiple pieces of mechanical equipment must be organized on the facade in a regular pattern and aligned. Compliance with this standard must be illustrated on the drawing elevations submitted as part of the application.

(4) **Material Coordination.** To the extent practicable, facade-mounted mechanical appurtenances shall be located on a material that limits their visibility. For example, dark colored vents will be more visible on light colored fiber cement panels than a textured, darker surface such as brick.

535-22G(6) MECHANICAL EQUIPMENT ON OTHER HORIZONTAL SURFACES

Mechanical equipment, such as electrical transformers and air conditioners, located on the ground, decks, or horizontal surfaces other than the roof must be located consistent with the following standards:

(a) **No Encroachment.** Mechanical equipment shall not extend into any right-of-way or any easement, unless otherwise approved by the village.

(b) **Allowed Yard Location.** See [535-21J](#) for definition of yards.

(1) **Primary Street Yard.** Mechanical equipment and appurtenances must not be located in the primary street yard, except as defined in [535-22G\(6\)\(e\)](#).

(2) **Non-Primary Street Yard.** Mechanical equipment may be located in the non-primary street yard only when the equipment cannot function or be located in a rear or side yard, and provided the equipment is screened from the street per [XXX](#).

(3) **Rear and Side Yard.** Mechanical equipment may be located in any rear or side yard.

(c) **Screening from Streets or Open Spaces.** All equipment must be screened from view from any streets or civic open space per the following:

- [1] Walls for screening must be consistent with the building design, colors, and materials, faced with an allowed major-facade material.
- [2] Where landscaping only is employed, the following must be met:
 - [a] The utility must be located in a larger landscape area and the landscape screen designed as part of the larger planting bed design.
 - [b] Shrubs must fully screen the equipment within 1 year of installation. Grasses that go dormant during winter months, but do not die to the ground are acceptable.
 - [c] The DRB may require additional landscape materials to fully screen the equipment.

(d) **Screening from Adjacent Parcels.** All equipment must be screened from adjacent parcels using the side and rear buffers in [535-23F](#).

(e) **Street or Primary Yard Location.** Mechanical equipment located in a street yard or other primary frontage yard is allowed only if all of the following are met:

- [1] The applicant demonstrates that the equipment cannot be located in a rear yard, non-primary street yard, or in a side yard.
- [2] No other utility cabinets, boxes, or other appurtenances are within 100 feet along the same side of the street as the proposed utility appurtenance.
- [3] The equipment is located a minimum of 15 feet from a street intersection, measured from the intersection of the curb line, and does not impact the visibility at intersections governed by [535-32B\(3\)](#).
- [4] The equipment is fully screened in a manner that is consistent with the building design, colors,



Figure 2-R. Rooftop Utilities Screened from the Public Way by a Parapet

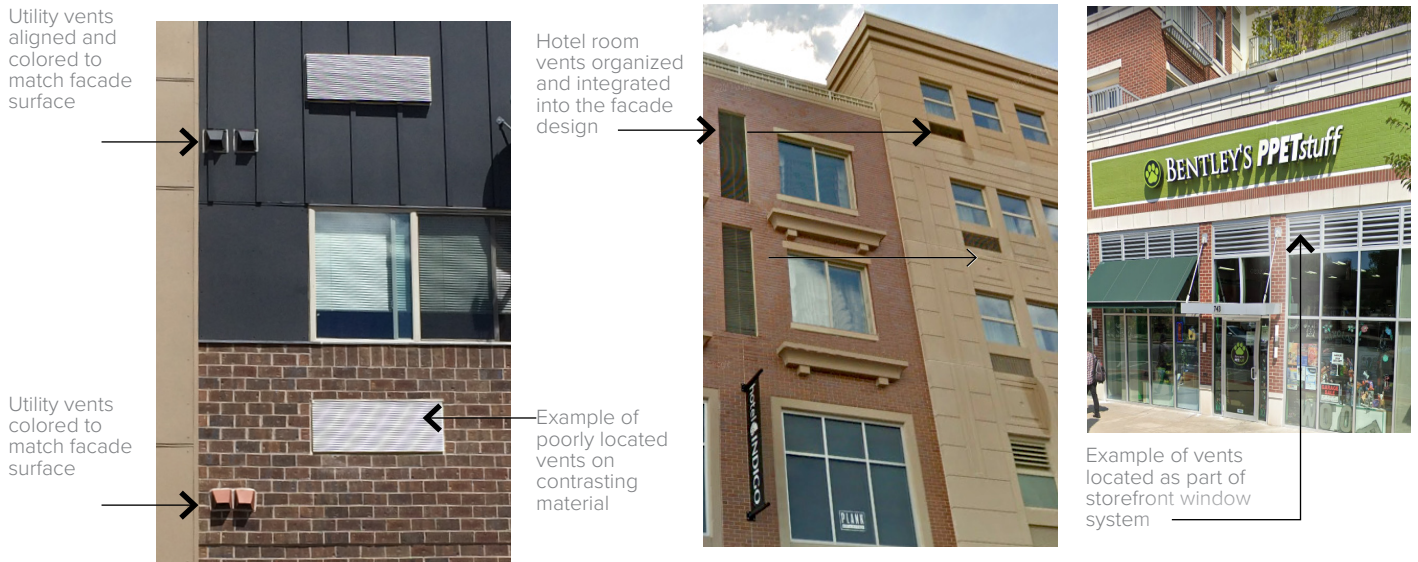


Figure 2-S. Utility Appurtenances located on Facades



Figure 2-T. Examples of Poorly Located Utility Appurtenances on Primary Streets

535-22G Mechanical Equipment

and materials; the screen height is the minimum to adequately screen the equipment; and the equipment and screening does not block any facade transparency. See [Figure 2-T](#) for examples of poorly located, unscreened equipment on primary streets.

535-23. LANDSCAPE & SITE DESIGN

- 535-23A General Regulations 23-2
- 535-23B Site Structures 23-2
- 535-23C Landscape Installation 23-4
- 535-23D Street Yard Landscape 23-5
- 535-23E Frontage Buffer 23-6
- 535-23F Side & Rear Buffers 23-8
- 535-23G Interior Parking Lot Landscape 23-10
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535-23 Landscape & Site Design

535-23A General Regulations

535-23A GENERAL REGULATIONS

535-23A(1) PURPOSE

The landscape and site design regulations of this article are intended to provide the following.

- (a) To protect the appearance of the village through context-sensitive, high-quality landscape and fencing that supports the goal of walkable corridors.
- (b) To increase the compatibility of adjacent uses and minimize the adverse impacts created by adjoining or neighboring uses.
- (c) To promote the prudent use of water through sustainable, functional landscapes.
- (d) To reduce energy demands through the shading of buildings and pavement, reducing urban heat island effects.

535-23A(2) APPLICABILITY

The regulations of this section 535-23 apply to all commercial and mixed-use zones as follows¹:

- (a) **New Development and Expansions.** New buildings constructed or whenever an existing building is enlarged or expanded by 5,000 square feet or more, unless otherwise stated in this article.
- (b) **New Landscape and Site Elements.** New landscape and site development elements constructed that are regulated by this section, [535-23](#), such as landscaping, parking or loading areas, outdoor seating or dining areas, and other vehicular areas (e.g. drive-through facilities, fueling stations).
- (c) **Expansion of Existing Parking, Loading Areas, or other Vehicular Areas.** Whenever an existing parking, loading, or other vehicular area (e.g. drive-through facilities, fueling stations, vehicular sales lots) is enlarged or expanded by more than 2,500 square feet, parking lot landscape, frontage buffers, and side and rear buffers must be applied per this article.
- (d) **Expansion of Outdoor Seating/Dining Areas.** Whenever an existing outdoor seating or dining area is enlarged or expanded by more than 500 square feet.

535-23A(3) VISION SETBACK

See 535-32B(3) for regulations requiring clear vision on corner lots at street intersections.

535-23A(4) STORMWATER

Stormwater detention, retention, or filtration systems, such as bioswales or rain gardens, may be located in any street

¹ These have not yet been fully vetted with staff.

yard or other required site landscape area, provided all other regulations are met.

535-23A(5) SIDEWALK CONNECTIONS

Continuous sidewalks must connect all building entrances to public sidewalks via the shortest possible route.

- (a) A minimum of 6 feet of pavement area must be clear to count as a sidewalk connection.
- (b) Building entrances located in the rear are exempt from this requirement when directly opening onto a public alleyway.

535-23A(6) PLANTERS OR PLANTING BEDS

All planters or planting beds must include shrubs, ornamental grasses (not turf or lawn grass), ground cover, vines, annuals, or perennials.

- (a) A minimum of 60% of any bed area must be covered in plant material at maturity. The remaining portion of the bed may be covered with natural, non-living permeable materials, such as mulch or pine straw. Colored rock is not allowed.²
- (b) Annual beds must be maintained seasonally, replanting as necessary.
- (c) All species in planting beds must be native or naturalized for the area, and non-invasive per [220-1B](#).

535-23A(7) LAWNS

See [220-3](#) for grass lawns and natural lawn management plans.

535-23B SITE STRUCTURES

535-23B(1) RETAINING WALLS

The following applies to all retaining walls in any street yard:

- (a) **Height.** Retaining walls must be no more than 18 inches in height above grade.
- (b) **Material.** Retaining walls must be faced in an allowable major facade material.
- (c) **Steep Slopes.** Multiple retaining walls with sloped landscape in between may be used to accommodate taller elevations. Landscape beds may not be sloped greater than 3:1.
- (d) **Design Exception.** Alternative retaining wall designs may be approved through a design exception by the DRB provided the walls are necessary for development of a site.

² This would allow natural rock or gravel. Okay?

535-23B(2) DECKS³

(a) Yard Location. Decks may not be located in any primary street yard.

(b) Non-Primary Street Yards⁴. In non-primary street yards, the following applies:

- [1] Decks must be located a minimum of 1 foot from any lot line with landscape planting bed between any public streetscape sidewalk and the deck.
- [2] Deck floors may not be located more than 12 inches above any public sidewalk.
- [3] Deck rails must be metal, or a metal frame with wood and no higher than 42 inches.

(c) Rear or Side Yards. In rear or side yards, the following applies:

- [1] Decks must be set back a minimum of 3 foot from any lot line.
- [2] Decks may be no higher than 3 feet above the grade of the abutting lot line.

535-23B(3) PATIOS

(a) Definition. Patios include any hard-surfaced outdoor area, minimum 64 square feet and with minimum dimensions of length and width of at least 6 feet, that is designed for people and not for the storage or access of motor vehicles.

(b) Street Yards. Patios may be located in any street yard only when constructed within the following parameters:

- [1] No more than 30% of any street yard may be covered by a patio.
- [2] One entire side of a patio must be adjacent to the principal structure of the lot.
- [3] Street yard patios shall not be located closer than 3 feet to the any lot line abutting a street.
- [4] Patios may not exceed six inches above grade in any street yard.
- [5] All materials must be of high quality, such as cut stone, Lannon or blue stone, or decorative concrete
- [6] The patio surface must be screened from public view by year-round, continuous, natural vegetation

of at least 18 inches in height, such as shrubs, ornamental grasses or perennial plants that provide screening through the winter months. High quality, decorative masonry or concrete walls, and permanent planters, no higher than 3 feet as measured from the surface of the patio, may be used in combination with natural vegetation to achieve year- round screening. No fences shall serve as the primary screening materials.

(c) Side and Rear Yard. ~~Patios shall not be located in the minimum side setback or rear setback of the building type.~~ Patios must be set back a minimum of 3 foot from any lot line.

(d) ~~A scaled drawing of the proposed layout of the front yard or street side yard patio must be completed, along with a list of proposed materials to be used in construction, all of which shall be submitted to the Design Review Board for review and approval.⁵~~

⁵ Will be handled through site plan review. Proposing that the patio in a commercial -mu district does not require a design exception.

³ Commercial decks and patios are moved from 535-9 to consolidate regulations specific to commercial and mixed-use sites. 535-9 will later be rewritten specifically for R districts.

⁴ Allow here?

535-23 Landscape & Site Design
535-23C Landscape Installation

535-23C LANDSCAPE INSTALLATION

535-23C(1) INTENT

The following provisions aid in ensuring that all required landscaping is installed and maintained properly.

535-23C(2) APPLICABILITY

These provisions apply to landscape installation required by this section, [535-23](#).

535-23C(3) GENERAL INSTALLATION REQUIREMENTS

(a) Plant Size Requirements. Plant material must be sized according to [Table 535-23-1](#) unless otherwise noted in this section.

(b) Condition and Selection of Planting Materials. The plant materials used must be free from visible signs of disease, infestation, or physical defect at the time of planting. Plant materials must:

- [1] Be appropriate for the conditions of the location, including sun and wind exposure, air quality, salt exposure, soil type, expected moisture content of soil, and slope.
- [2] Not be an invasive or a potentially invasive species.
- [3] Be, wherever possible, native or naturalized to the Shorewood region.

(c) Compost, Mulch, and Organic Matter. Compost, mulch, and organic matter must be utilized within the soil mix to reduce the need for fertilizers and increase water retention.

(d) Maintenance. All installed plant material must be fully maintained, including watering, mulching, fertilizing, and replacement as necessary per [220-3](#).

535-23C(4) TREE INSTALLATION

(a) Permeable Surface. For each tree planted, a minimum amount of permeable surface area is required, unless otherwise stated in this code. See [Table 535-23-2](#) for estimated tree canopy sizes at maturity, soil volumes, and permeable area recommended per tree.

- [1] At least 50% of the limits of the mature canopy must be located above a permeable surface.
- [2] Permeable area for one tree cannot count towards that of another tree.

(b) Suspended Pavement System. When the required soil surface area of a tree (see [Table 535-23-2](#)) will extend below any pavement, a modular suspended pavement

system (Silva Cells, Root Space, or an approved equivalent), must be used below that pavement to ensure root growth and access to air and water

Table 535-23-1. Plant Material Size at Installation

PLANT MATERIAL TYPE	MINIMUM SIZE
Deciduous Shade/Overstory Tree	1.5 in. caliper/ 8 ft. height
Evergreen Tree	8 ft. height
Understory Tree	6 ft. height
Ornamental Tree	1.5 in. caliper
Shrubs - Deciduous	5 gallon container or 18 in. balled & burlapped
Shrubs - Evergreen	5 gallon container or 18 in. balled & burlapped
Groundcover	3 in. height

Table 535-23-2. Estimated Canopy & Permeable Surface Area by Tree Size

TREE SIZE	ESTIMATED MATURE CANOPY SIZE	MINIMUM REQUIRED PERMEABLE SURFACE AREA	RECOMMENDED PERMEABLE SURFACE AREA (70% OF CANOPY SIZE)
Small	300 sq. ft.	100 sq. ft. (e.g. 4 ft. x 25 ft.)	210 sq. ft. (e.g. 4 ft. x 52.5 ft.)
Medium	700 sq. ft.	225 sq. ft. (e.g. 4 ft. x 56.25 ft.)	490 sq. ft. (e.g. 5 ft. x 98 ft.)
Large	1,000 sq. ft.	400 sq. ft. (e.g. 4 ft. x 100 ft.)	700 sq. ft. (e.g. 7 ft. x 100 ft.)

535-23D STREET YARD LANDSCAPE

Street yard landscape addresses treatment of the private street yard, the area between any building facade and the lot line abutting the street right-of-way.

535-23D(1) INTENT

To ensure the space between any building and the street is treated as a cohesive landscape design, including planting and paving areas, that enhances the pedestrian experience.

535-23D(2) PUBLIC STREETScape

- (a)** Any damage to any existing public streetscape during construction or as a result of any construction on the private lot must be repaired or replaced per [Article V of Chapter 466](#).
- (b)** Replacement or revision of any element of public streetscape requires approval of the public works department. The new design must be consistent with the existing public streetscape and coordinated with any street yard landscape design.

535-23D(3) MINIMUM STREETScape AREA

In locations where the minimum streetscape area of [535-21D\(8\)](#) applies, the minimum area located in the street yard must be treated as part of the streetscape, matching the abutting and adjacent public streetscape design.

535-23D(4) STREET YARD AREAS

All areas between the lot line abutting the street right-of-way and the building must be designed as an extension to the existing public streetscape, but may include varying degrees of landscaped and paved areas as follows:

- (a) Storefront Windows.** Streetscape pavement must extend up to the storefront windows in the build-to zone on any Storefront Building, continuing the pavement design of the Village-installed public streetscape.
- (b) Maximum Site Coverage.** Landscape areas, decks per [535-23B\(2\)](#), and patios per [535-23B\(3\)](#) may be incorporated into street yards, but the site must not exceed the maximum site coverage area. See building type regulations in [535-21](#).
- (c) Courtyards.** Courtyards in the street yard are allowed or required as part of the building type. See Primary Streetwall Variation in supplemental regulations of certain building types, [535-21](#).
- (d) Outdoor Seating Areas.** Outdoor seating or dining areas in the build-to zone are allowed or required as part of the building type. See Primary Streetwall Variation in supplemental regulations of certain building types, [535-21](#).

535-23D(5) STREET YARD LANDSCAPE ELEMENTS

The following applies to landscaped and paved areas in any street yard:

- (a) Paving.** Additional paving materials may be introduced, provided the design incorporates elements of and coordinates with the public streetscape. For example, expansion or control joints in concrete in the streetscape and street yard must align.
- (b) Courtyards and Seating Areas.** Courtyards and outdoor seating or dining areas in the supplemental regulations for each building type ([535-21](#)) have specific requirements for furnishings and other amenities. Additionally, one of the following landscape area requirements must be utilized:
 - (1) Plaza.** Where 60% or more of the area is paved, a minimum of 5% of the area must include landscape planters or pots, tree wells, or in-ground or raised planter beds.
 - (2) Green.** Where less than 60% of the area is paved, a minimum of 30% of the area must include landscape planters or pots, tree wells, or in-ground or raised planter beds.
- (c) General Street Yard Planting Bed.** The following applies to any street yard area outside of a courtyard or seating/dining area, per the building type:
 - [1] When any unpaved street yard area is shallower than 6 feet, the entire area must be planting bed per [535-23A\(6\)](#).
 - [2] When any unpaved street yard area is deeper than 6 feet, the unpaved area must include a minimum of 30% planting bed planting bed per [535-23A\(6\)](#).
- (d) Trees.** Street yard areas must include at least one tree per every 1400 square feet of courtyard area. See [535-21](#) for allowed courtyards in building types. See [village tree list for allowed trees](#).⁶
- (e) Fences and Walls.** Metal fences or masonry walls may be incorporated into any street yard area to separate distinct seating areas.
 - (1) Primary Street Yard.** In the primary street yard, fences and walls may not exceed 24 inches in height.

⁶ To be coordinated with DPW.

535-23 Landscape & Site Design
535-23E Frontage Buffer

- (2) **Non-primary Street Yard.** In the non-primary street yard, fences and walls may not exceed 48 inches in height.⁷
- (3) **Fence Materials.** Metal fences must be steel or iron, and have a maximum opacity of 60%.⁸
- (4) **Design Exception.** Other fence or wall designs may be approved by the DRB as a design exception.⁹

535-23E FRONTAGE BUFFER

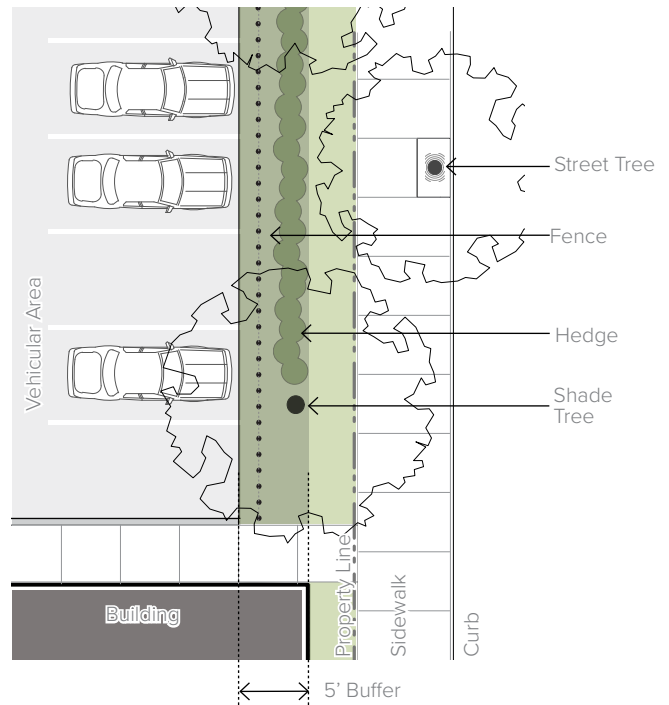
535-23E(1) INTENT

To lessen the visual impact of on-site vehicular parking, loading, and other activities from the street.

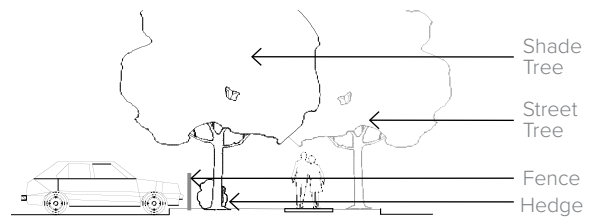
535-23E(2) APPLICABILITY

The frontage buffer is required on all lots for all building types in the commercial and mixed-use zoning districts in accordance with the following:

- (a) **Vehicular Areas along Street Frontages.** Along the perimeter of any off-street surface parking, driveway, loading, fuel pump, drive-through, or other vehicular areas fronting a street right-of-way, not including along any alley.



Front Buffer Plan



Front Buffer Section

Figure 3-A. Frontage Buffer Plan & Section

7 Height of Fiddleheads fence. Is it aluminum?
 8 Allow aluminum? Not as big an issue since cars will not be parked next to it.
 9 Is there a minimum height for fences separating areas that serve alcohol anymore?

(b) Vehicular Areas along Open Space. Along the perimeter of any off-street surface parking, driveway, or loading areas abutting any P3 zoning district or other open or civic space.

535-23E(3) REQUIREMENTS

Refer to [Figure 3-A](#) for illustration of these requirements.

- (a) Buffer Depth.** The required buffer area must be a minimum 5 feet in depth, measured from the street-facing lot line into the lot.
- (b) Buffer Location.** The required buffer area must extend the width of the vehicular area, but may allow for the perpendicular crossing of driveways.
- (c) Fence.** A continuous fence is required in the frontage buffer as follows:
 - (1) Fence Location.** The fence must be located 2 feet from the back of curb or edge of the vehicular area into the buffer and a minimum of 3 feet from the front of the buffer.
 - (2) Fence Alignment.** The fence must be either aligned directly with any adjacent buildings or deeper into the lot than the building. In order to align the fence with the building, the buffer may need to be located deeper into the lot to maintain the fence location requirements in (1), above.
 - (3) Gate or Opening.** One pedestrian opening, maximum 4 feet in width, is permitted for every 30 feet of fence.

- (4) Fence Materials.** The fence must be black, gray, or dark green aluminum, steel or colored PVC. Masonry columns (maximum 2.5 feet in width) and base (maximum 18" in height) are allowed, but not required.
- (5) Fence Height.** The fence must be a minimum of 3 feet and a maximum of 4 feet in height.
- (6) Fence Opacity.** The fence must be a minimum of 25 percent and a maximum of 60 percent opaque.
- (d) Buffer Landscape.** The following landscape is required within the buffer.
 - (1) Shade Trees.** If no street trees exist in the streetscape abutting the buffer area, medium or large shade trees are required at a minimum of 40 feet on center, with at least one shade tree required for each segment of buffer. If street trees exist, any buffer trees provided should alternate spacing with street trees.
 - (2) Shrubs.** A single row of shrubs is required on the street side in front of and along the fence.
 - [a] The shrubs must have a minimum mature width and height of 24 inches.
 - [b] The height of the shrubs must be maintained at no more than 36 inches.
 - [c] The shrubs must be spaced no more than 36 inches on center.
 - (3) Existing Vegetation.** The **DRB** may credit existing vegetation toward meeting buffer requirements.

Table 535-23-3. Side & Rear Buffer Required

BUFFER REQUIRED ON LOTS ZONED:	ABUTTING LOTS ZONED:					
	CX	MX1, MX2	GX1, GX2, GX3	RX	R	P2, P3
CX	-	-		BUFFER	BUFFER	BUFFER
MX1, MX2	-	-		BUFFER	BUFFER	BUFFER
GX1, GX2, GX3	-	-	-	BUFFER	BUFFER	FENCE
RX	-	-	-	-	FENCE	-

See [535-23F\(4\)](#) for activities triggering buffer requirement.

535-23F SIDE & REAR BUFFERS

535-23F(1) INTENT

To minimize the impact that one zoning district may have on a neighboring district and to provide a transition between districts.

535-23F(2) APPLICABILITY

A side and rear buffer is required along the side and rear lot lines of all lots for all building types per this subsection, [535-23F](#).

535-23F(3) EXCEPTIONS

The buffer width may be reduced in accordance with the following:

(a) **Alleys.** Buffers are not required abutting alleys.

(b) **Existing Landscape.** Where the buffer will interfere with existing mature, healthy landscape, the **DRB** shall determine the extent of the needed buffer.

(c) **Access Points.** Driveways and other access points may interrupt buffers as necessary.

535-23F(4) ACTIVITIES REQUIRING BUFFERS

(a) Side and rear buffers are required where the following occurs in the rear or side yards of a lot:

(1) **Motor Vehicle Areas.** Any vehicular areas, abutting or adjacent to districts designated in [Table 535-23-3](#). Vehicular areas include such areas as parking

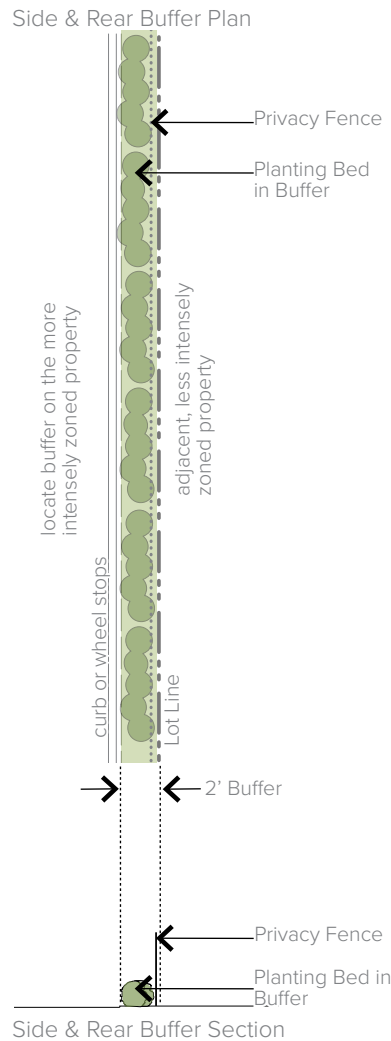


Figure 3-B. Fence Buffer

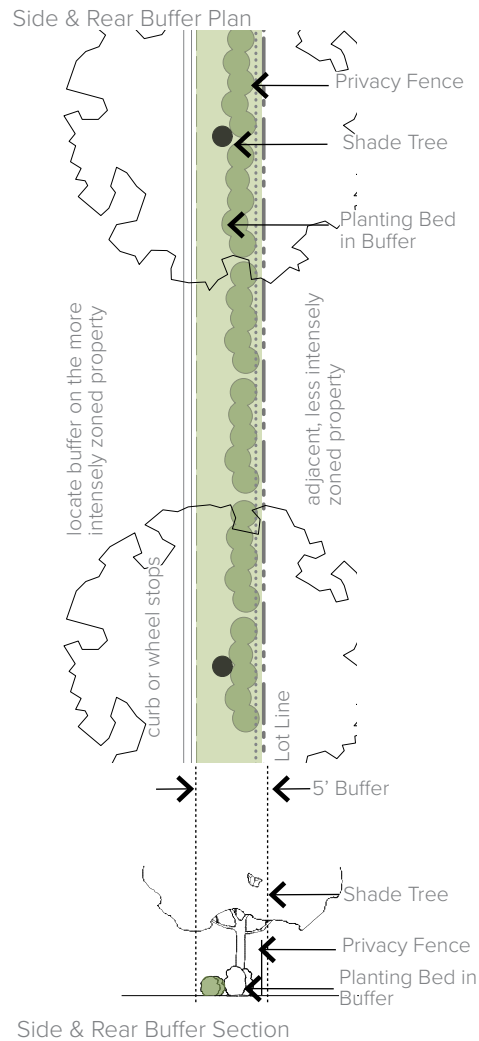


Figure 3-C. Landscape Buffer

lots or spaces, drives, drive-through uses, fueling stations, truck parking, and structured parking.

- (2) **Loading Areas.** Any loading areas abutting or adjacent to districts designated in [Table 535-23-3](#). Loading areas include such areas as loading bays, loading docks, service bays, garage doors, other outdoor trucking facilities.
- (3) **Service Areas.** Any service areas abutting or adjacent to districts designated in [Table 535-23-3](#). Service areas include such areas as delivery doors, refuse and recycling areas, outdoor employee break areas.
- (4) **Other Areas.** Other outdoor activities emitting sounds, smells, or other by-products, such as outdoor dining, as determined by the plan commission¹⁰.

535-23F(5) BUFFER LOCATION ON LOT

Side and rear buffers must be installed in one of the following locations on the lot:

- (a) **Abutting the Lot Line.** Along the lot line of lot requiring the buffer.
- (b) **Abutting the Activity.** The buffer may be located at the edge of the activity being buffered, provided the area between the buffer and the lot line is landscaped and includes at least one tree per every 2,000 square feet.

535-23F(6) FENCE BUFFER

See [Table 535-23-3](#) where required. See [Figure 3-B](#) for illustration.

- (a) **Buffer Depth.** A minimum 2-foot wide buffer, measured from the lot line onto the subject lot, is required.
- (b) **Privacy Fence.** A 6-foot opaque, privacy fence screening the activity must be located in the buffer adjacent to the lot line.

[1] Allowed materials include PVC, composite wood, FSC wood (cedar, redwood, or other approved by the zoning administrator), stone, or brick. Concrete panels and concrete masonry units are not allowed, except when faced on all sides with brick or stone.

[2] When located abutting an R or RX district front yard, the fence must step down to a 3-foot height within 20 feet of the street right-of-way or the depth of the abutting R or RX district yard, whichever is less.

- (c) **Curbs or Wheel Stops.** A curb or wheel stops must be provided along the buffer edge, minimum 18" from the fence, at any vehicular area to prevent motor vehicles from damaging the fence. Parking may not overhang into the buffer.

- (d) **Landscape.** The buffer area must be landscaped.

535-23F(7) LANDSCAPE BUFFER

See [Table 535-23-3](#) where required. See [Figure 3-C](#) for illustration.

- (a) **Buffer Depth.** A minimum 5-foot wide landscape buffer, measured from the lot line onto the subject lot, is required.
- (b) **Privacy Fence.** A privacy fence is required. See [535-23F\(6\)\(b\)](#) for fence requirements.
- (c) **Shade Trees.** Medium or large shade trees are required at a minimum of 40 feet on center, with at least one shade tree required for each segment of buffer.
- (d) **Landscape.** The buffer area must be landscaped with a continuous shrub hedge, consisting of a staggered, double row of shrubs with a minimum mature width of 24 inches each, spaced no more than 36 inches on center, and height maintained between 48 and 72 inches.

¹⁰ Need to revisit this -- what triggers the plan commission determining it?

535-23 Landscape & Site Design
535-23G Interior Parking Lot Landscape

535-23G INTERIOR PARKING LOT LANDSCAPE

The parking lot interior is the area dedicated to parking on a given parcel from the edge of pavement to edge of pavement, and including any islands or medians. See [Figure 3-D](#) for illustration of these requirements.

535-23G(1) INTENT

To provide shading of pavement surfaces to reduce heat island effects and to improve the appearance of parking lots by breaking up the large expanses of pavement with trees and landscaped islands.

535-23G(2) APPLICABILITY

All off-street surface parking lots with more than 10 spaces and/or more than one drive aisle must meet the interior parking lot regulations.

- (a) See [535-23E](#) for required perimeter buffer along street frontages and [535-23F](#) for required perimeter buffers at side and rear lot lines.
- (b) When the number of required off-street parking spaces on a lot conflicts with the provision of the required landscape islands, the landscape islands shall be supplied and the number of off-street parking spaces reduced by the least amount possible.

535-23G(3) REQUIRED LANDSCAPE ISLANDS

- (a) **Terminal End Islands.** Landscape islands are required at the terminal ends of freestanding rows or bays of parking. Freestanding rows or bays of parking are those not abutting the parking lot perimeter or building face, and may have a single or double row of parking.
- (b) **Row Islands.** For rows of parking with more than 10 spaces, a landscape island is required to result in no more than 10 continuous parking spaces in a row without a landscape island.
- (c) **Island Width.** The minimum width for an island is 5 feet, measured perpendicular to the adjacent parking space, and the depth of the island is equal to the depth of the adjacent parking space.

[1] Islands less than 15 feet in width must utilize a suspended pavement system per [535-23C\(4\)](#) under any paved surface within a tree's critical root zone equal to 50% of the mature canopy diameter.

[2] Islands less than 9 feet in width must install an aeration system and utilize permeable paving within the mature tree canopy area.

- (d) **Minimum Number of Trees.** All of the following must be met for any interior parking lot.

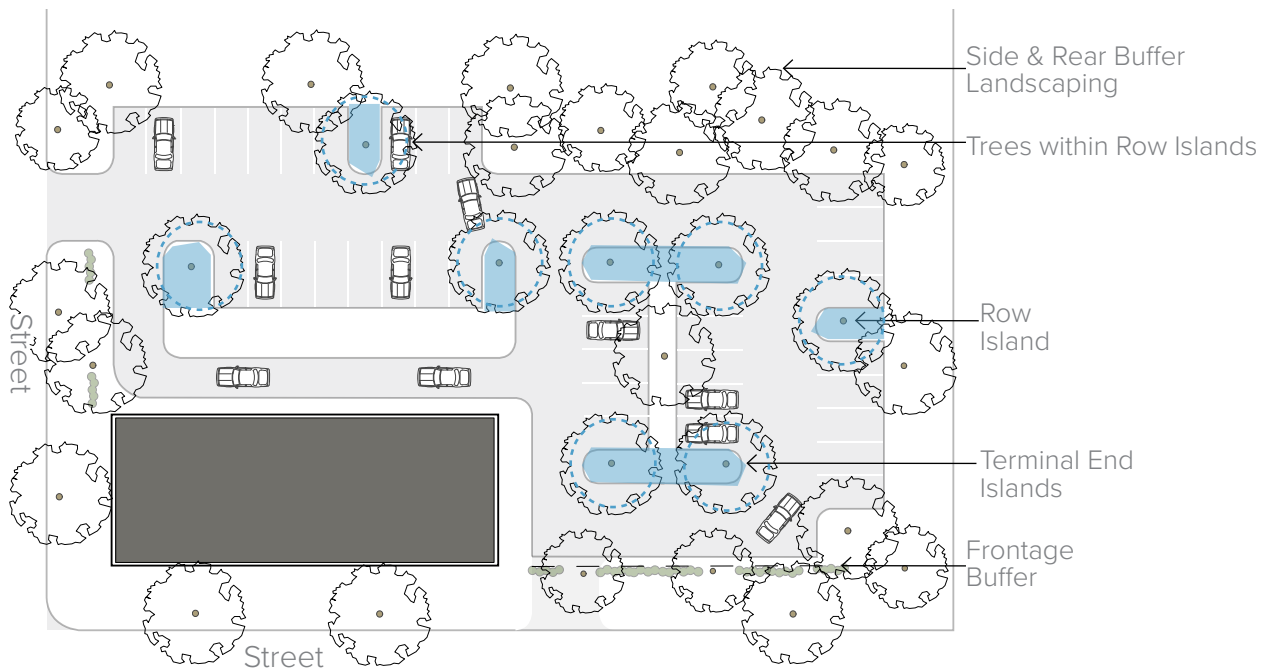


Figure 3-D. Interior Parking Lot Landscape

- (1) **Island Trees.** A minimum of 1 medium or large shade tree is required within each island.
- (2) **50-foot Rule.** Each parking space must be located within 50 feet of a tree.
- (3) **Shading Requirement.** At maturity, tree canopies must shade a minimum of 30 percent of the interior of the parking lot. Refer to [Table 535-23-2](#) for mature canopy sizes.

535-23G(4) LANDSCAPE AREAS

Areas in the parking lot not specifically designed for use as drive aisles, parking spaces, loading, refuse, or sidewalks must be unpaved, landscape areas. The intent is to reduce pavement area to that which is required for a functioning parking lot.

535-23H SCREENING OF REFUSE & UTILITY AREAS

535-23H(1) INTENT

To reduce the visibility of open storage, refuse areas, loading, and utility appurtenances from public areas and adjacent properties.

535-23H(2) APPLICABILITY

All dumpsters, loading areas, refuse areas, mechanical equipment, and utility appurtenances must be screened as follows.

535-23H(3) LOCATION

- (a) **Refuse and Recycling.** See [535-21D\(5\)](#) for building type regulations, including allowed location of refuse and recycling areas.
- (b) **Loading.** See [535-21D\(6\)](#) for building type regulations, for the allowed location of loading areas.
- (c) **Utility Equipment.** See [535-22G](#) for the allowed location of mechanical and utility equipment and appurtenances.

535-23H(4) LOADING AND REFUSE AREAS

- (a) **Concrete Pad.** For all loading, refuse and recycling areas, a concrete pad is required.
- (b) **Opaque Screen.** An opaque masonry, wood, or composite wood screen wall is required on at least 3 sides of the loading or refuse area.
- (c) **Screen Height.** The height of the screen wall must be tall enough to screen the use inside, and a minimum

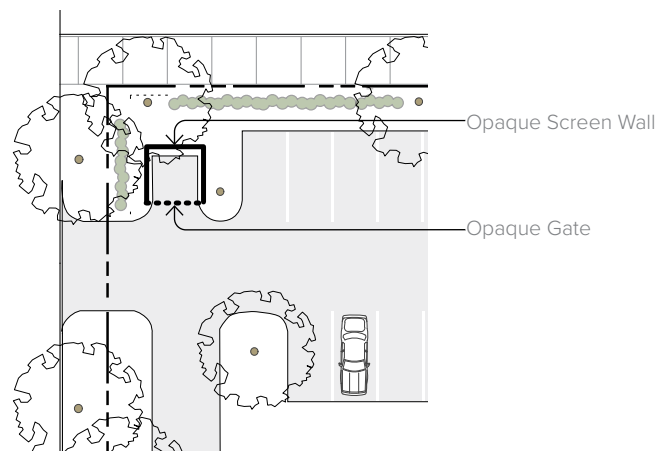


Figure 3-E. Screening of Refuse Area

535-23 Landscape & Site Design

535-23H Screening of Refuse & Utility Areas

of 6 feet. The DRB may request additional height as needed for complete screening.¹¹

(d) **Gate.** An opaque gate is required on the 4th side.

535-23H(5) UTILITIES

(a) Large Private Mechanical Equipment.¹²

- (1) **Definition.** Large private mechanical equipment includes ground-mounted equipment at least 4 feet in height.
- (2) **Fence or Wall.** An opaque wood fence or brick-faced masonry screen wall is required on all sides facing street right-of-way.
- (3) **Shade Trees.** Medium or large shade trees are required at a minimum of 40 feet on center, with at least one shade tree required for each segment of buffer.¹³
- (4) **Shrubs.** Planting beds consisting of a double row of mixed shrubs with a minimum mature width of 24 inches each, spaced no more than 36 inches on center, and height maintained between 30 and 72 inches.

(b) Small Private Mechanical Equipment.

- (1) **Definition.** Small private mechanical equipment includes ground-mounted equipment less than 4 feet in height.
- (2) **Screening.** Landscape screening with shrubs is required as follows:
 - [a] Shrubs must be spaced no more than 30" on center, fully screening the equipment within within 2 years.
 - [b] Shrubs must be incorporated into a larger landscape bed and design.

¹¹ What is the trigger for DRB to request additional height? Site plan review?

¹² Not sure this would occur anywhere in the commercial-mixed-use zones?

¹³ Purpose of the trees to avoid a fence and shrubs surrounding it sitting in the landscape without any context. Too much?

535-23I COMMERCIAL OUTDOOR LIGHTING¹

[Added 2-16-2016 by Ord. No. 2060]

535-23I(1) PURPOSE AND INTENT

The purpose of this subsection is to provide for adequate and safe lighting and limit light spillover and glare onto adjacent properties and public streets.

535-23I(2) APPLICABILITY

Except as set forth in this subsection, all outdoor lighting installed or any interior lighting fixture that projects light outside the structure in the commercial and mixed-use districts after the effective date of this subsection shall comply with the requirements of this subsection.

535-23I(3) PERMITS AND APPROVAL PROCESS

- (a) Installation or modification of any outdoor light fixture in commercial and mixed-use districts shall require an electrical permit.
- (b) On all developments or projects requiring site plan approval, all exterior light fixtures shall be depicted and described on said site plan, required prior to development of a property or project, or on a separate lighting plan submitted with the site plan.
- (c) A photometric plot plan, indicating the location of all lighting fixtures proposed, mounting and/or installation height in feet, and overall illumination levels (in footcandles) all around the site and at property lines.
- (d) The Design Review Board must review and approve all lighting plans.

535-23I(4) GENERAL REQUIREMENTS.

- (a) Light fixtures shall be selected with care to ensure that they are appropriately scaled in relation to their setting and to ensure that they are of a style that is compatible with the character of their immediate environment.
- (b) Luminaires shall be aimed, shielded, or relocated so as to minimize glare. All light fixtures shall be located, aimed or shielded so as to eliminate stray light trespassing across property boundaries.
- (c) All luminaires mounted or recessed into the lower surface of service station canopies shall be shielded and utilize flat lenses.
- (d) The maximum allowable light spillover to an adjacent property shall be 2 average footcandles, measured across three photometric points.

¹ Current regulations verbatim, reformatted.

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535-23H Commercial Outdoor Lighting

(e) Illumination of uses shall be in accordance with Illuminating Engineering Society of North America (IES) standards.

535-23I(5) LIGHT COLOR

Correlated color temperature of any outdoor light source shall not exceed 4,000 Kelvins within the commercial and mixed-use districts unless the light fixture is fully shielded, preventing glare.

535-23I(6) EXTERIOR LIGHTING (ALTERNATIVE SYSTEM)¹

Site, building, and canopy-mounted lighting is intended to enhance safety and provide light levels appropriate with minimal glare, light trespass and excess site brightness. Lighting shall not be a nuisance or a hazard and shall be designed to reduce bird injury and mortality from in-flight collisions with buildings.

(a) **Canopy-Mounted Fixtures.** Light fixtures mounted under fueling station or other canopies shall be completely recessed into the canopy with flat lenses that are translucent and completely flush with the bottom surface (ceiling) of the canopy.

[1] Lights shall not be mounted on the top or sides (fascias) of the canopy.

[2] Internally illuminated/entirely translucent canopies are prohibited, except accent lighting on the sides (fascias) of the canopy may be provided.

(b) **Maximum Lighting.** Table 535-23-4 shows the maximum lumens per site and the maximum backlight, uplighting, and glare (BUG) ratings for luminaires by lighting zone, using the lighting zone designations from the Illuminating Engineering Society of North America (IESNA) recommended practices.

(c) **Light Orientation.** Luminaires must be mounted with its backlight perpendicular to any lot line located within the mounting height distance of the lot line and facing into the lot.

¹ This is a more detailed approach to lighting regs taken from a model lighting ordinance prepared by the International Dark Sky Association and IESNA. <https://www.darksky.org/our-work/lighting/public-policy/mlo/>
 Should this updated method of review be substituted? or is the current system working.
 BUG ratings are supposedly pretty standard, though I do not find them on any Home Depot or Build.com outdoor lights.

(d) **Automatic Shut-Off.²** Exterior building fixtures that are not necessary for safety, building entrances, and circulation shall be automatically shut off from midnight until 6 a.m. Manual override capability may be provided for occasional after-hours use.

(e) **Additional Lighting.** Additional exterior lighting for a site may be approved by the DRB, using the lighting zone designations from the Illuminating Engineering Society of North America (IESNA) recommended practices.

Table 535-23-4. Maximum Lighting by Zone

LOCATION	COMMERCIAL & MIXED-USE ZONING DISTRICTS (LIGHTING ZONE 2)
Maximum lumens allowed per square feet of hardscape area	2.5
MAXIMUM BACKLIGHT RATING	
>2 mounting heights from lot line	B4
1 to <2 mounting heights from lot line	B3
0.5 to <1 mounting heights from lot line	B2
>0.5 mounting heights from lot line	B0
MAXIMUM UPLIGHT RATING	
Maximum Uplight Rating	U2
Allowed light emission above 90 degrees for area lighting	0%
Maximum Glare Rating	G1

² This is new bird-friendly regs that should be added.

535-23 Landscape & Site Design
535-23J River Shorelands

535-23J RIVER SHORELANDS¹²

535-23J(1) FINDINGS OF FACT

Uncontrolled use of the shorelands and pollution of the navigable waters in the village would adversely affect the public health, safety, convenience, and general welfare and impair the tax base.

535-23J(2) PURPOSE

For the purpose of promoting the public health, safety, convenience and welfare, this subsection, [535-23J](#), has been established to:

- (a) Further the maintenance of safe and healthful conditions and prevent and control water pollution through:
 - [1] Limiting structures to those areas where soil and geological conditions will provide a safe foundation.
 - [2] Controlling filling and grading to prevent serious soil erosion problems.
- (b) Protect spawning grounds, fish and aquatic life through:
 - [1] Preserving wetlands and other fish and aquatic habitat.
 - [2] Regulating pollution sources.
 - [3] Controlling shoreline alterations.
 - [4] Reducing effluent and controlling nutrients.
- (c) Control placement of structures and activities through:
 - [1] Prohibiting certain activities detrimental to the shoreland area.
 - [2] Regulating building setbacks from the river.
- (d) Preserve shore cover and natural beauty through:
 - [1] Restricting the removal of natural shoreland cover.
 - [2] Preventing shoreline encroachment by structures.
 - [3] Controlling shoreland excavation and other earthmoving activities.

535-23J(3) AREAS TO BE REGULATED.

- (a) Areas regulated by this subsection, [535-23J](#), shall include all the lands (referred to herein as "shorelands") in the village which are located within the described boundaries:

¹ [Added 10-23-2006 by Ord. No. 1917]
² This is an existing section moved from 535-9H with the goal of 535-9 being clearly defined as applying to residential districts.

- [1] South of Capitol Drive. The Milwaukee County Park System Trail to the east, East Capitol Drive to the north, the ordinary high-water mark of Milwaukee River to the west, and Village limits to the south.
- [2] North of Capitol Drive. Estabrook Parkway Road, Village limits to the north, the ordinary high-water mark of Milwaukee River to the west, and East Capitol Drive to the south.

- (b) The area regulated by this subsection, [535-23J](#), generally described herein, is shown on a map dated October 1, 2006, that is maintained and available for inspection at the Village Hall. This map shall be known as the "Shoreland Zoning Map." "Ordinary high-water mark" means the point on the bank or shore up to which the presence and action of surface water are so continuous as to leave a distinctive mark, such as by erosion, destruction or prevention of terrestrial vegetation, predominance of aquatic vegetation, or other easily recognized characteristics.

535-23J(4) COMPLIANCE

The use of any land or water, the size, shape and placement of lots, the use, size, type and location of structures on lots, the installation and maintenance of water supply and waste disposal facilities, the filling, grading, or dredging of any lands, the cutting of shoreland vegetation, and the subdivision of lots shall be in full compliance with the terms of this subsection, [535-23J](#), and other applicable local, state or federal regulations. Buildings, signs and other structures shall require a permit unless otherwise expressly excluded by a provision of this subsection, [535-23J](#). Property owners and their agents or lessees, including builders and contractors, are responsible for compliance with the terms of this subsection, [535-23J](#).

535-23J(5) PERMIT.

- (a) Persons and entities seeking a permit under this subsection, [535-23J](#), shall submit an application on a form provided and with the information and certifications as described in this subsection, [535-23J](#).
- (b) The applicant shall reimburse the Village for all of the Village's costs and expenses, including professional and attorney fees, as may be incurred in reviewing the application.
- (c) If the permit application is disapproved, the Village shall detail in writing all deficiencies or reasons for disapproval.

535-23J(6) INTERPRETATION

In their interpretation and application, the provisions of this subsection, [535-23J](#), shall be held to be minimum

requirements and shall be liberally construed in favor of the Village of Shorewood and shall not be deemed a limitation or repeal of any other powers granted by Wisconsin Statutes.

535-23J(7) CERTIFICATION BY A PROFESSIONAL ENGINEER

Within the area regulated by this subsection, [535-23J](#), a registered professional engineer hired by the owner of the lot shall certify to the Village that any grading or earthmoving, construction of footings, buildings or structures, the methods of construction and the materials used therein are adequate from an engineering standpoint so as not to:

- (a) Adversely affect the slope stability of the bluff;
- (b) Increase the runoff of water on the surface of the bluff;
- (c) Create or add to a problem of erosion on the shoreland or bluff; or
- (d) Adversely affect the structural integrity of any structure located on adjoining or adjacent lots.

535-23J(8) SETBACKS

(a) All setbacks are measured on a horizontal plane from the roof overhang and any cantilevered portions of the structure at the point of the structure that is nearest to the ordinary high-water mark or bluffline. Except as may be allowed under [535-23J\(8\)\(c\)](#) and (d), all buildings and structures shall be set back the greater of:

- [1] Twenty feet measured horizontally to the east from the bluffline;
 - [2] Seventy-five feet as measured horizontally from the ordinary high-water mark; or
 - [3] Such distance as to not adversely impact the stability of the bluff slope; sufficient distance from the bluff area as to prevent injury or damage to adjacent property; and sufficient distance from the bluff area to provide for the natural runoff of surface water or provide for an approved drainage according to applicable law.
- (b) The bluffline is defined as the line along the top of the bluff where the slope riverward is 12% or more as measured horizontally for a distance of not more than 50 feet or less than 25 feet. Portions of the bluffline defined herein have been surveyed and marked on the Shoreland Zoning Map dated October 1, 2006.
- (c) Conditional use permit application. Property owners and their agents and lessees, including builders and contractors, must apply for and obtain a conditional use permit under the procedures established in Article V

of this chapter before commencing activities within the area between the river ordinary high-water mark and the setbacks described within subsection, [535-23J\(8\)\(a\)](#), including:

- [1] Filling, excavation, alteration or modification of the land or modification to grade.
 - [2] Removal of vegetation as described in [535-23J\(9\)](#) and [535-23J\(11\)](#).
 - [3] Temporary access uses when these described areas may be affected by construction or other activities in the adjacent area.
 - [4] Construction of any building or structures.
- (d) Conditional use permit consideration. In considering an application for conditional use permit, the Plan Commission shall follow the process for review and approval established in [535-28](#), taking into account the purposes of this subsection, [535-23J](#), as described in [535-23J\(2\)](#) and those standards contained in [535-28](#) as may be applicable.

535-23J(9) SHORELINE CUTTING

Tree and shrubbery cutting is prohibited without a conditional use permit in the area bound by the ordinary high-water mark of the Milwaukee River and the bluffline described within [535-23J\(8\)\(b\)](#) or, in those portions where there is no bluffline, in the area 75 feet inward from the ordinary high-water mark.

- (a) The cutting of dead, diseased, or dying trees or shrubbery shall be subject to Village approval.
- (b) Natural shrubbery shall be preserved as far as practicable and, where removed, it shall be replaced with other native vegetation that is equally effective in minimizing runoff, preventing erosion and preserving natural beauty.
- (c) The removal of vegetation requires an application for a conditional use permit where the following information shall be provided:
 - [1] Existing vegetation with a tree inventory of all trees larger than four-inch diameter at breast height;
 - [2] Identification of any species on the Wisconsin Department of Natural Resources' Natural Heritage Inventory Working List;
 - [3] Proposed cutting and vegetation removal; and
 - [4] Proposed maintenance, landscaping and replanting plan.

535-23 Landscape & Site Design

535-23J River Shorelands

535-23J(10) SHORELINE GRADING

Any grading, excavation or filling in the area bound by the ordinary high-water mark of the Milwaukee River and the setbacks described within [535-23J\(8\)\(a\)](#) is prohibited without a conditional use permit.

535-23J(11) GRADING INLAND OF THE BLUFFLINE

Any grading within the area regulated by this subsection, [535-23J](#), but inland of the bluffline described within [535-23J\(8\)\(b\)](#) shall require a permit and approval. In addition to the requirements of Chapter 250, Article I, Construction Site Erosion Control, of the Village Code the following conditions shall be met:

- (a) The smallest amount of bare ground shall be exposed for as short a time as feasible.
- (b) Temporary ground cover (such as mulch or jute netting) shall be used and permanent vegetative cover shall be established.
- (c) Diversion berms or bales, silting basins, terraces, filter fabric fencing, and other methods shall be used to prevent erosion.
- (d) Bare ground shall be stabilized according to accepted engineering standards.
- (e) Grading shall comply with the County Floodplain Zoning Ordinance and shall not restrict a floodway or destroy the flood storage capacity of a floodplain.³
- (f) Grading shall comply with state and federal regulations pertaining to adverse impacts on wetlands.

³ Editor's Note: Amended at time of adoption of Code (see Ch. 1, General Provisions, Art. I).