SECTION 7:
NEW CONSTRUCTION

Historic districts can change over time and still retain the qualities that make the area historically, culturally, and architecturally significant. We accomplish this by managing the construction of new buildings and changes to existing ones. For the purposes of this document, new construction means an entirely new building or structure, rather than an addition. The construction of any new building or structure within a historic district requires a Certificate of Appropriateness.

IN THIS SECTION

NOTE:

The recommended design standards are in draft form for discussion purposes only. This material has not been reviewed by the City's legal counsel and is not final until after council consideration.

The raised foundation, shutters and windows on this new infill building are inappropriate. The foundation is too high, the windows are too elaborate and shutters are fake.

The mass and scale of this infill building would be appropriate. However, the stone materials, shutters, and solid-to-void ratio are incompatible.

The mass and scale of this new infill building would be appropriate in some Houston Heights contexts. In addition, the materials, porch, and window features are also appropriate because they are similar to other buildings in its context.

RULES FOR NEW CONSTRUCTION

The City of Houston's historic preservation ordinance establishes clear requirements for new construction within a historic district. These rules seek to differentiate old from new, while ensuring that all buildings within the district are compatible (or *harmonious*) with one another.

The construction of any new building or structure within a historic district requires a **Certificate of Appropriateness**, which must meet the following criteria:

1. The distance from the property line to the front and side walls, porches, and exterior features of any proposed new construction must be compatible with the distance from the property line of similar elements of existing contributing structures in the context area.
2. The exterior features of the proposed new construction must be compatible with the exterior features of existing contributing structures in the context area.
3. The scale and proportions of the new construction, including the relationship of the width, overall heights, eave height, foundation height, porch height, roof shape, and roof pitch, and other dimensions to each other, must be compatible with the typical scale and proportions of existing contributing structures in the context area unless special circumstances, such as an atypical use, location, or lot size, warrant an atypical scale and proportions.
4. The height of the new construction must not be taller than the typical height of existing contributing structures in the context are unless special circumstances, such as an atypical use, location, or lot size warrant an atypical height, except that:
    - In the Houston Heights Historic District East, Houston Heights Historic District West, and Houston Heights Historic District South, a new construction with two stories may be constructed in a context area with only one-story contributing structures as long as the first story of the new construction has proportions compatible with the contributing structures in the context area, and the second story has similar proportions to the first story.

DESIGN GUIDELINES FOR NEW CONSTRUCTION

This document provides both qualitative design guidelines for new construction, as well as quantitative (measurable) design standards. The design guidelines that follow require interpretation and good judgment, to ensure that the proposed project is compatible with the contributing structures in the context area. Each project is considered on its own merits; even if the same building were proposed to be constructed in multiple locations within the historic district, the differences in context areas for those various locations could result in different decisions regarding compatibility.

7.1 Design a new building to reflect contemporary trends in architecture.

New construction should reflect the time period in which they were built. While many people think that new buildings in a historic district should look "historic," best practices in historic preservation — in place for more than 50 years, and applied all over the United States — encourage new buildings and additions to look new.

Designs should be "differentiated but compatible." Attempts to design new "historic" buildings often fail because of inaccurate scale, proportions, and detailing. Instead, new buildings and additions or changes to noncontributing structures should either incorporate new design elements with traditional building forms, or utilize traditional design elements but apply those to unconventional or contemporary building forms. Either approach, if executed well, can result in the design being compatible with the context area but still easily identifiable as new.

If most contributing structures in the context area are fairly simple in design, the new building should similarly be fairly modest. In a context area where buildings are more highly ornamented or exuberant in design, a new structure could reflect that higher level of complexity.

Use new interpretations of porch columns, balustrades, rafter ends, and details to distinguish new from old.

Construct a new building to be compatible with contributing buildings in the context area.

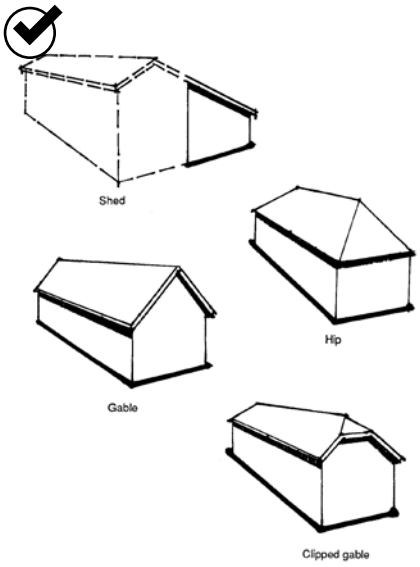
Contemporary interpretations of traditional designs and details are encouraged.

This new, contemporary infill building would be appropriate in most contexts; however, the roof material is inappropriate.

Design a porch to be compatible with the context area.

A hip roof, simple building form and raised porch are appropriate features on this building. Porch and eave height are scaled appropriately.

This new infill building would be incompatible within the Houston Heights Districts. The windows and building massing is out of proportion. Stone is also incompatible within the districts.



Use a roof form similar to those seen historically in the context area.

New construction is required to be compatible with the exterior features of the contributing buildings in the context area; see Criteria 2, on page 7-2. No specific architectural styles are required.

- Use materials that are similar in dimensions, profile, and finish to traditional materials.
- Do not use materials that only approximate the look of traditional building elements, such as window sills that do not project (stick out) from the wall or imitation keystones above windows or doors.
- Use new interpretations of porch columns, railings, windows, and doors to distinguish new construction from older buildings.
- Use contemporary designs for skirting or screening a foundation, but install the screening in a traditional manner.
- Use simple roof forms of moderate pitch.

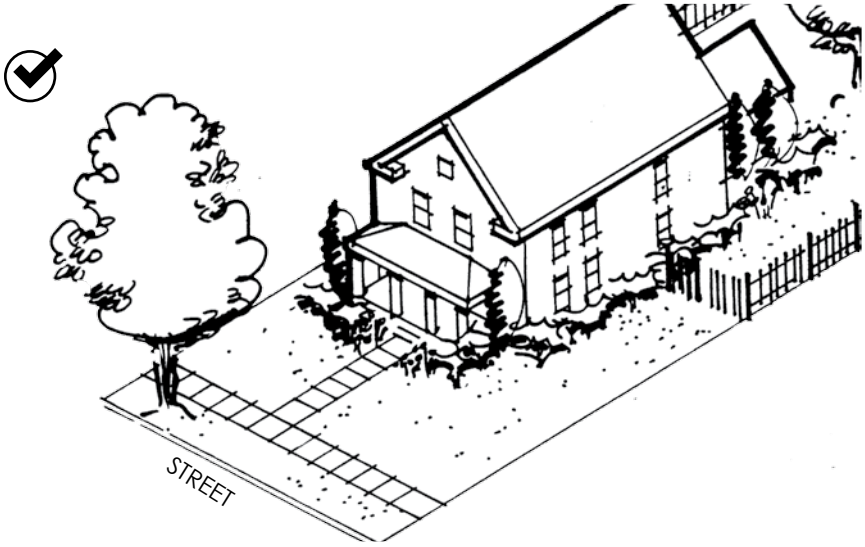
This column is out of scale with the porch.

Use a an eave overhang that appear similar to those seen on historic buildings in the context area.

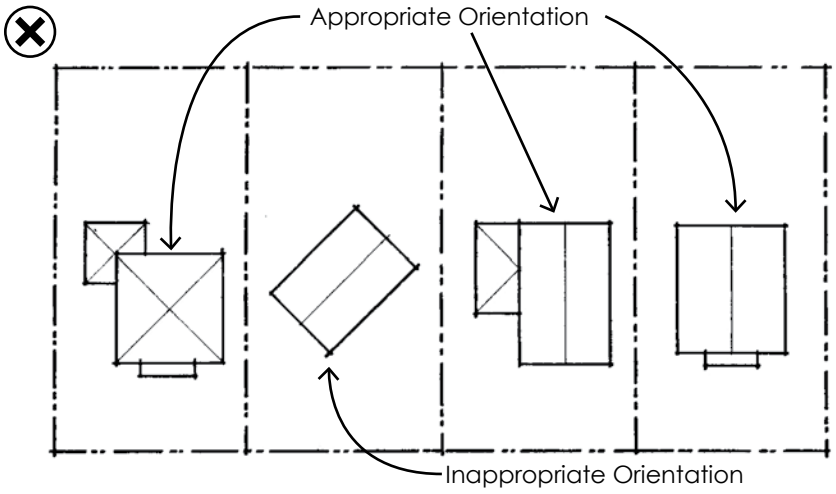
7.2 Orient a new building to match contributing buildings in the context area.

Orientation has to do with the way a building addresses the street. This is as contributing buildings within the context area. In most cases, this will mean that the front wall of a new building is perpendicular to the street, and its primary entrance faces the street.

- Locate the primary entrance to face the street and design it to be clearly identifiable.
- Design the new building with a front porch.



Orient the face of a building to the street.



A new building should be oriented to be compatible with contributing buildings in the context area

Select doors and windows that are durable, convey a sense of human scale, and are compatible with the context area.

Use materials that are similar in dimensions, profile, and finish to traditional materials.

7.3 Design a new building to be compatible with the scale and proportion of contributing buildings in the context area.

Because contributing structures are the most important buildings in the historic district, they must remain prominent. That means that new buildings should be visually subordinate, or secondary, to their contributing neighbors. New buildings should not overshadow (literally or figuratively) contributing structures within the context area.

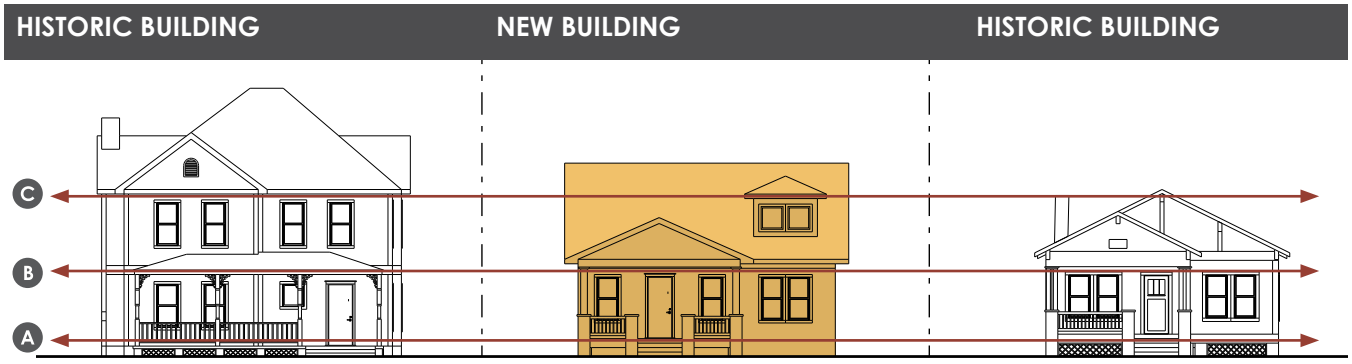
This building is not compatible with the Houston Heights historic districts context.

Use doors and windows with proportions and materials that are compatible with the context area in locations that will be highly visible from the street.

New construction is required to be compatible with the scale, proportion, and exterior features of the contributing buildings in the context area (see Criteria 2, 3, and 4 on page 7-2). The most important characteristics to match are scale and proportion. This applies to the building overall as well as to individual building elements.

- First floor finished floor height may not exceed 30".
- Do not use slab-on-grade construction, except for garages.
- Use engineered concrete pier foundations, or other pier-and-beam options which meet current construction code. Piers can be wrapped in brick for a traditional appearance.
- Use wall cladding materials, such as siding or brick, that are traditionally sized. Do not use oversized exterior building materials.
- Design the building with overall height, porch eave height, main roof eave height, and ceiling (plate) heights that are consistent with contributing buildings in the context area.
- Use header heights for doors and windows that are similar to contributing buildings in the context area.

The mass & scale of this new infill building would be appropriate in some Houston Heights contexts. However, the foundation is inappropriate.



Align a new building's features with contributing structures in the context area.

A Foundation and porch heights

B Porch eaves

C Ridge lines

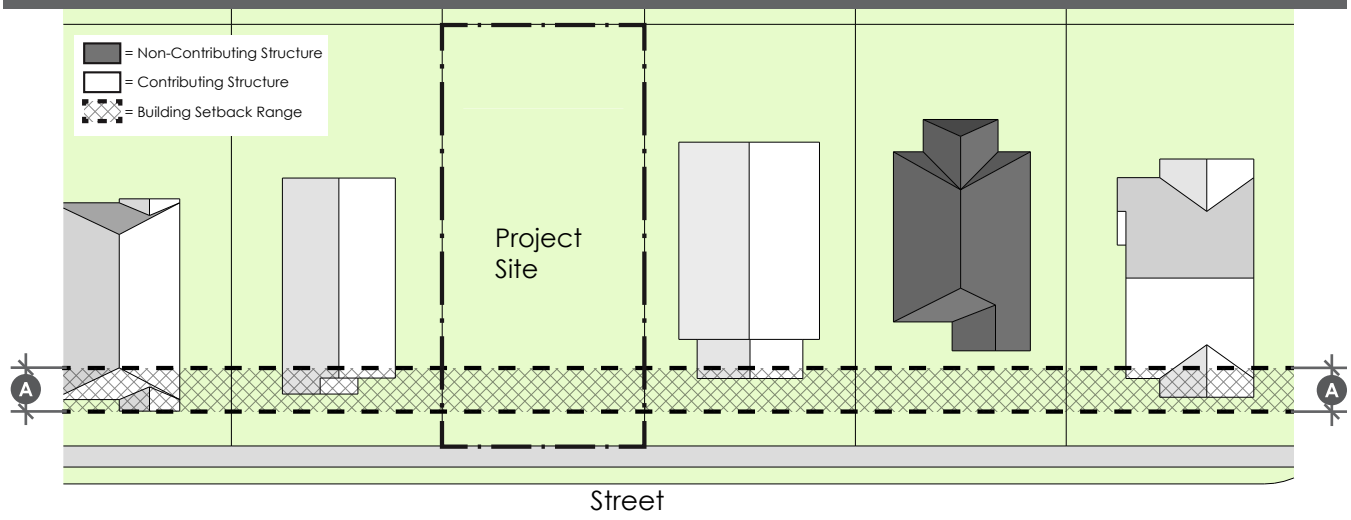
MEASURABLE DESIGN STANDARDS FOR NEW CONSTRUCTION

The following quantitative (measurable) standards apply to new construction. These do not require interpretation; the standards are either met or they are not.

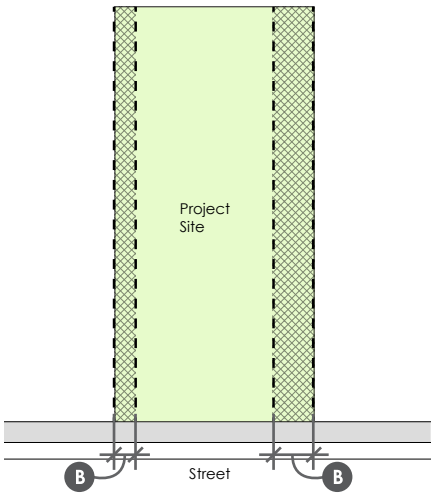
Table 1: Setbacks

New structures must be located at a minimum distance from the front and side property lines. Those distances, also known as setbacks, are measured from the property line to the closest wall, porch, or exterior feature.

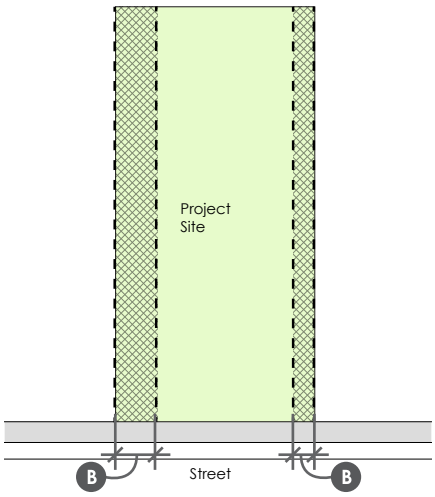
FRONT SETBACK RANGE



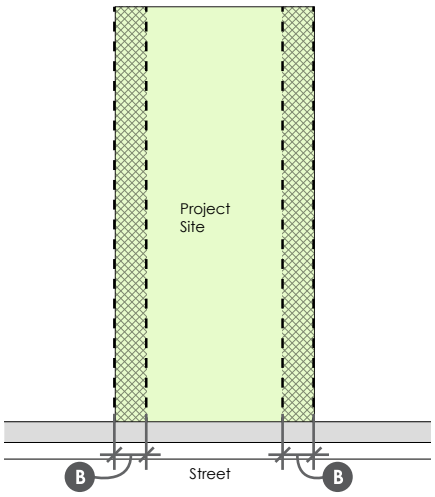
SIDE SETBACK RANGE (Left Side Minimum Setback)



SIDE SETBACK RANGE (Right Side Minimum Setback)



SIDE SETBACK RANGE (Centered Equal Setbacks)



KEY	MEASUREMENT	APPLICATION
A	**RANGE**	Locate the front of the primary building within the range of front setbacks for contributing buildings within the context area.
B	**5 FT.**	Each side wall must be a minimum distance from the property line.
	15 FT.	The minimum cumulative side setback is calculated by adding the lengths of the two side setbacks.

NOTE:

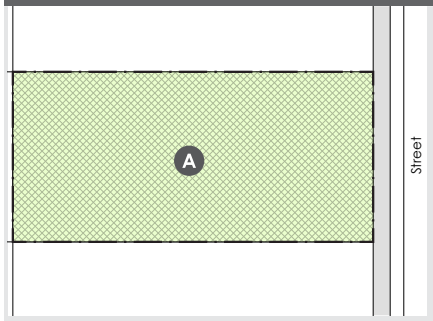
The above side setback examples only illustrate three of numerous combinations that comply with the cumulative 15 ft. minimum setback.

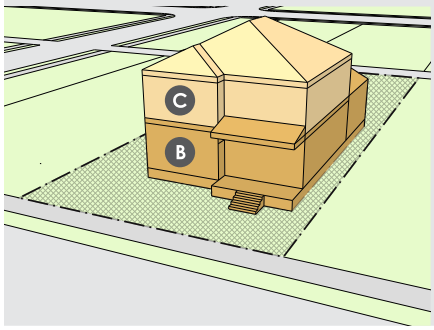
Table 2: Maximum Floor Area Ratio

Floor Area Ratio (FAR) is the ratio of eligible building area to lot size. FAR is calculated by dividing the total square footage of conditioned and unconditioned space in eligible buildings by the square footage of the lot, with the result expressed as a two-digit decimal (such as 0.44). FAR applies to all construction, including both new buildings and additions to existing ones.

The following are excluded from FAR calculations: building space with less than 7 foot ceiling height which are not considered habitable due to lack of headroom (per the current City of Houston Construction Codes and International Building Code), up to 250 square feet of a detached garage, and enclosed conditioned or nonconditioned space in detached accessory structures of120 square feet or less.

CALCULATING FLOOR AREA RATIO





A	Lot Area
B	1st Floor Area
C	2nd Floor Area

Example:

1st Floor Area = 1,307 sf.
+ 2nd Floor Area = 1,280 sf.

Total Building Area = 2,335 sf
÷ Lot Area = 6,600 sqft.

Floor Area Ratio (FAR) = 0.35

LOT SIZE	MAXIMUM FAR
<4000	.48
4000-4999	.48
5000-5999	.46
6000-6999	.44
7000-7999	.42
8000+	.40

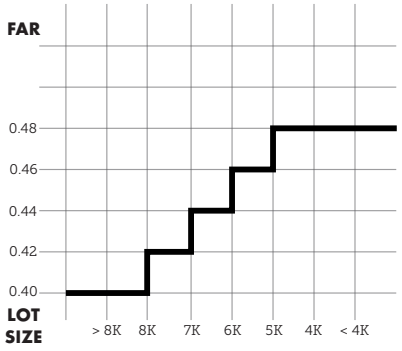


Table 3: Maximum Lot Coverage

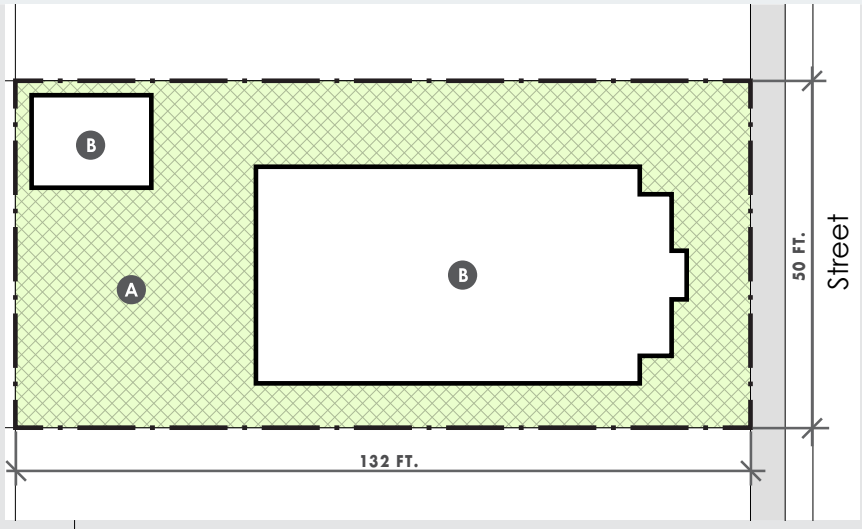
Lot coverage is a measure of the amount of a lot's surface that is covered by buildings, expressed as a percentage (such as 43%). Lot coverage is calculated by dividing the total area of included building footprints by the total area of the lot, where building footprints are measured at the outside of exterior walls.

Lot coverage calculations include primary structures, porches, attached garages and storage space, and detached garages and accessory buildings (whether conditioned or not). Not included are roof overhangs, uncovered decks or patios, and detached accessory structures which are open or only partially enclosed (such as a gazebo), and roofed structures less than 120 square feet, and 250 square feet of a detached garage.

LOT SIZE	MAXIMUM LOT COVERAGE
<4000	44%
4000-4999	44%
5000-5999	42%
6000-6999	40%
7000-7999	38%
8000+	38%

Property Line = — · — · —
Lot Area =

CALCULATING LOT COVERAGE



A	Lot Area
B	Building Footprint

Example:

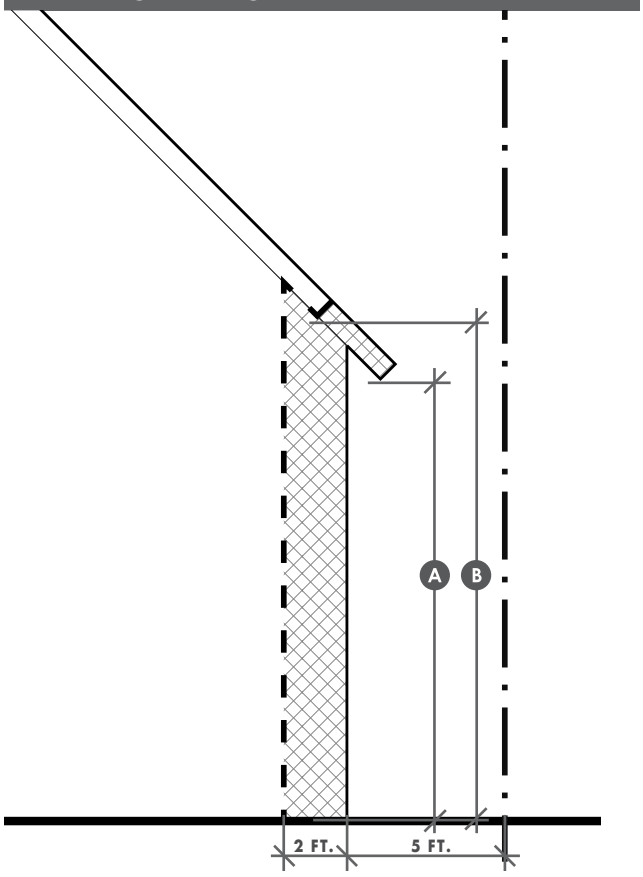
Lot Width = 50 ft.
X Lot Length = 132 ft.
Lot Area = 6,600 sf.

Building Footprint = 2,500 sf.
÷ Lot Area = 6,600 sf.
Lot Coverage = 38%

Table 4: Eave Height

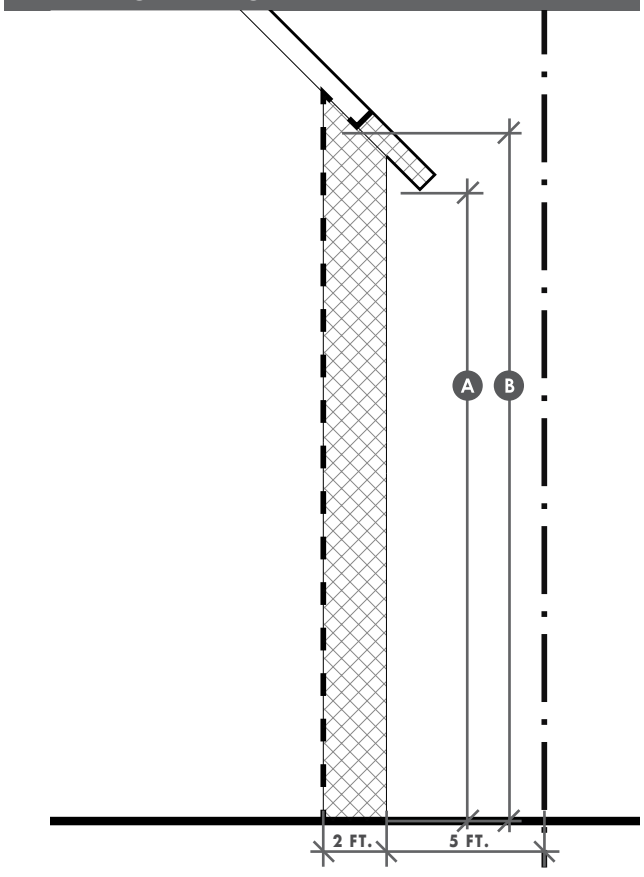
An eave is the overhanging lower edge of a roof. Eave height is the vertical distance from the ground to the eave, as measured from existing natural grade relative to a fixed point in the right-of-way, such as the crown of the street or a manhole cover. The maximum eave height is established at the minimum side setback from the property line; it can increase one foot (1') in height for each one foot (1') increase in side setback. Smaller increases in side setback qualify for the equivalent increase in eave height; for example, an additional seven inches of side setback would result in a maximum of 14' 7" eave height for a one-story roof.

PRIMARY BUILDING 1-STORY EAVE HEIGHT RANGE



KEY	MEASUREMENT	APPLICATION
A	**14 FT.**	Maximum 1-story eave height at the 5 FT. MIN. side setback
B	**16 FT.**	Maximum 1-story eave height with an increase of one foot (1') in height for each one foot (1') increase in side setback

PRIMARY BUILDING 2-STORY EAVE HEIGHT RANGE



KEY	MEASUREMENT	APPLICATION
A	**20 FT.**	Maximum 2-story eave height at the 5 FT. MIN. side setback
B	**22 FT.**	Maximum 2-story eave height with an increase of one foot (1') in height for each one foot (1') increase in side setback

Property Line = — · — · —
Range =

Table 5: Building Wall (Plate) Height

Plate height is the distance from the subfloor of a building to the top of the framed wall; in other words, it is the height of the wall of the building. Because plate height can be difficult or impossible to determine in an existing building, this measurement is typically applied to new construction or additions.

KEY	MEASUREMENT	APPLICATION
A	**10 FT.**	Maximum first floor plate height *See guideline 7.3 on page 7-6
B	**8 FT.**	Maximum second floor plate height

PRIMARY BUILDING WALL PLATE HEIGHT

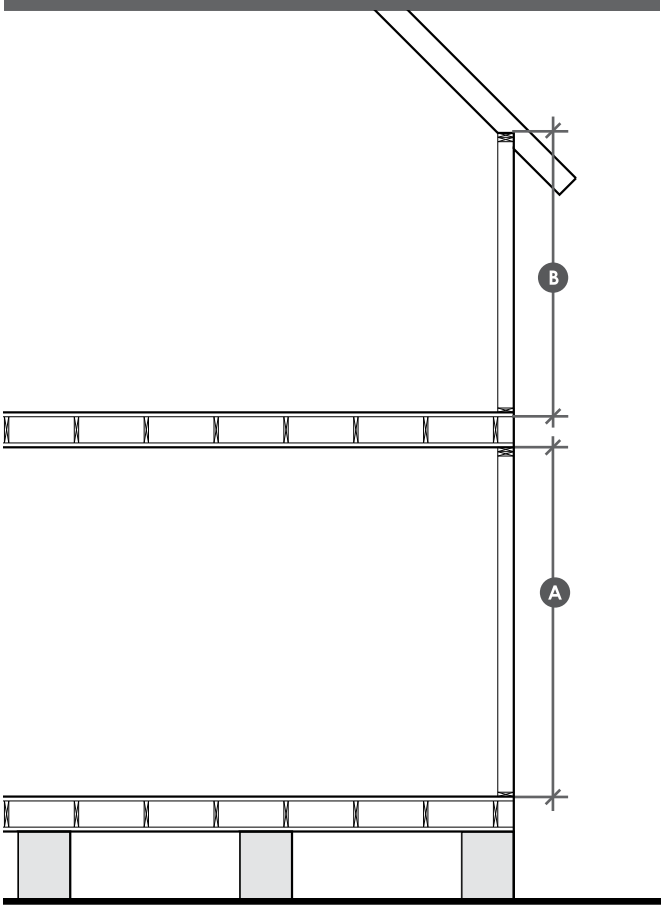
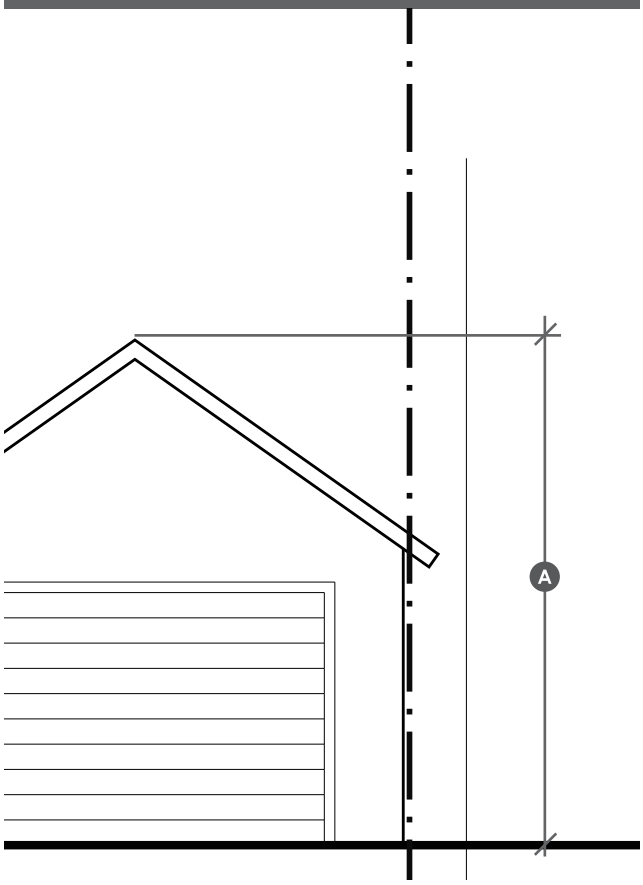


Table 6: Garage Ridge Height

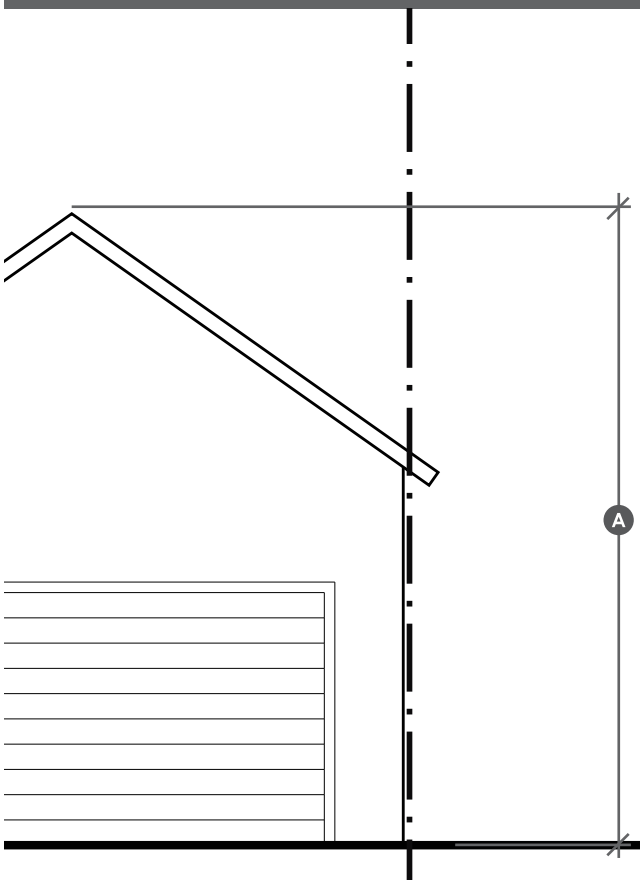
Ridge height is the distance from grade to the top of ridge. These measurements apply to both one-story and two-story garages.

GARAGE 1-STORY RIDGE HEIGHT



KEY	MEASUREMENT	APPLICATION
A	16 FT.	Maximum 1-story garage ridge height

GARAGE 2-STORY RIDGE HEIGHT



KEY	MEASUREMENT	APPLICATION
A	25 FT.	Maximum 2-story garage ridge height

Property Line = — · — · —
Range =

Table 7: Front Wall Width and Offsets

Maximum overall wall lengths have been established for front walls. In addition, within those overall maximum lengths, these design standards establish how long a wall can be before it must be offset, with a portion of a wall set farther in or out relative to the rest of the wall. These measurements apply to both one-story and two-story buildings.

Overall building widths are dependent on the width of the lot. The maximum width of a building on a 50'-wide lot with a 15' minimum cumulative side setback is 35'. As a lot gets wider, the building can be wider, to a point; for every two feet of additional lot width, the building can be one foot wider. Smaller increases in lot width qualify for the equivalent increase in building width, using a 2:1 ratio; for example, a 60'-wide lot would result in a maximum 40'-wide building.

KEY	MEASUREMENT	APPLICATION
A	**30 FT.**	Maximum front wall width before inset
B	**4 FT.**	Minimum width of inset section of front wall
C	**35 FT.**	Maximum width of building for lots </= 50 ft wide
	50 FT.	Maximum width of building for lots > 50 ft wide

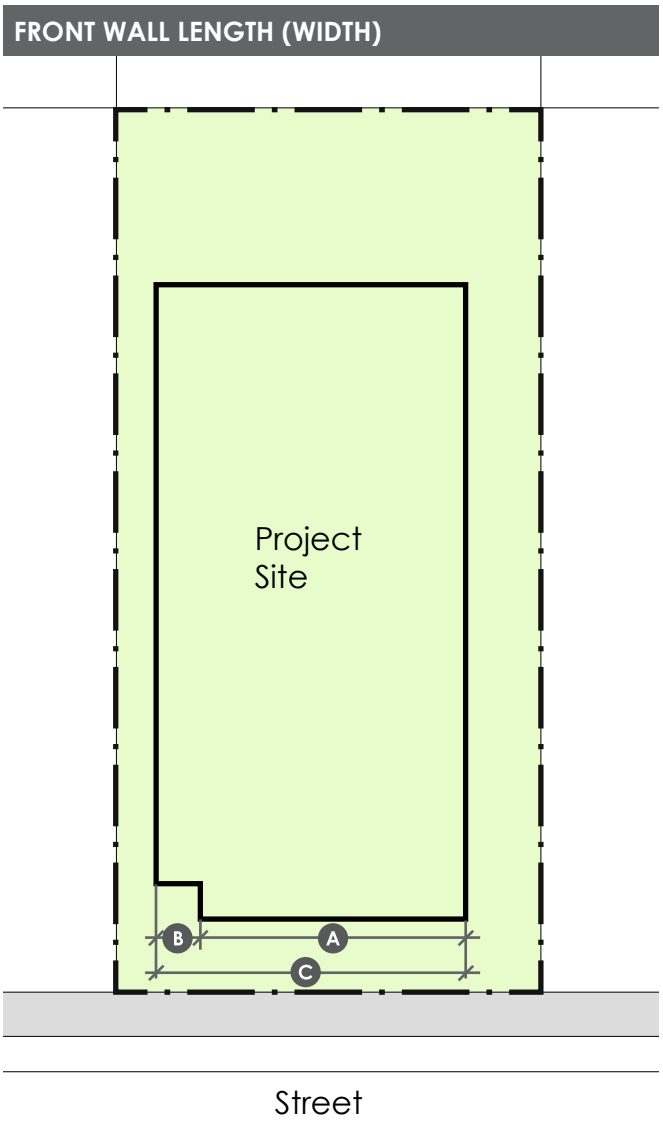
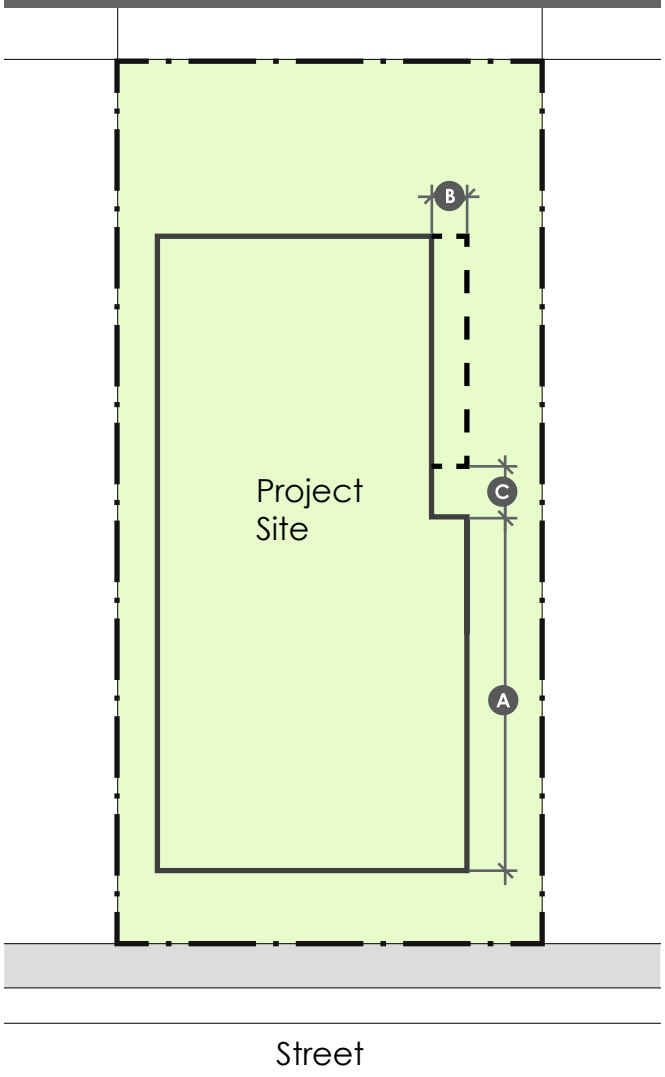


Table 8: Side Wall Length and Offsets

Maximum overall wall lengths have been established for front walls and side walls. In addition, within those overall maximum lengths, these design standards establish how long a wall can be before it must be offset, with a portion of a wall set farther in or out relative to the rest of the wall. These measurements apply to both one-story and two-story buildings.

SIDE WALL LENGTH (DEPTH)



SIDE WALL LENGTH (1-STORY BUILDING)

KEY	MEASUREMENT	APPLICATION
A	50 FT.	Maximum side wall length without offset
B	1.5 FT.	Minimum depth of inset section of side wall
C	6 FT.	Minimum length of inset section of side wall

SIDE WALL LENGTH (2-STORY BUILDING)

KEY	MEASUREMENT	APPLICATION
A	40 FT.	Maximum side wall length without offset
B	1.5 FT.	Minimum depth of inset section of side wall
C	6 FT.	Minimum length of inset section of side wall

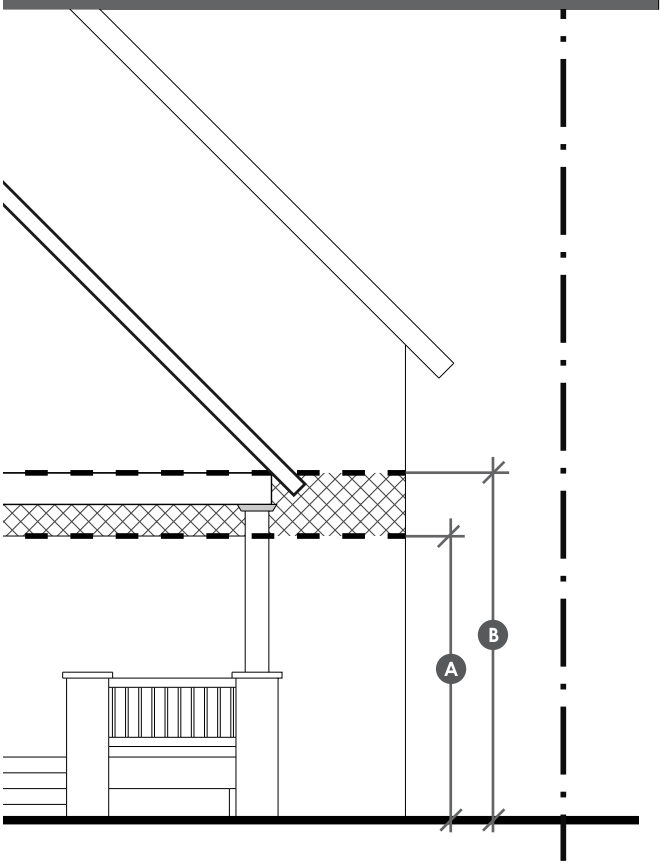
Table 9: Porch Eave Height

A porch eave is the overhanging lower edge of a porch roof. Eave height is the vertical distance from the ground to the eave, as measured from existing natural grade relative to a fixed point in the right-of-way, such as the crown of the street or a manhole cover.

Porch roofs should be lower than the main roof of the building, unless the main roof extends over the porch.

KEY	MEASUREMENT	APPLICATION
A	**9 FT.**	Minimum 1-story porch eave height.
B	**11 FT.**	Maximum 1-story porch eave height.

FRONT AND SIDE PORCH EAVE HEIGHT RANGE



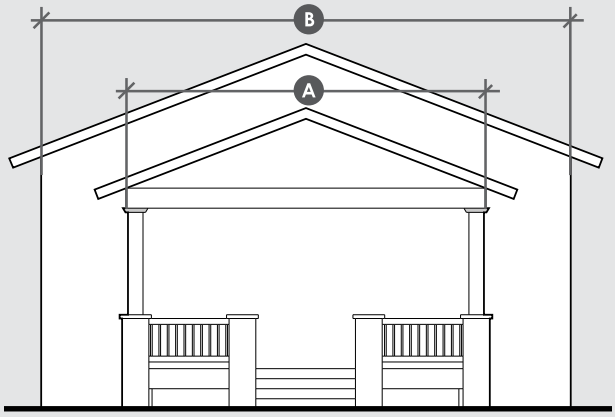
Property Line = — · — · —
Range =

Table 10: Front Porch Width and Depth

A front porch must be at least half as wide as the front of the house. If a portion of the front wall is inset, the overall width (including the width of the inset section) is used for this calculation. The width of a porch is measured between the corners of the porch roof.

A front porch must be at least 6' deep. Porch depth is measured from the front of the porch deck at the center of the steps, along a line perpendicular to the front edge of the porch deck, to the closest front wall of the house.

FRONT WALL-TO-PORCH WIDTH

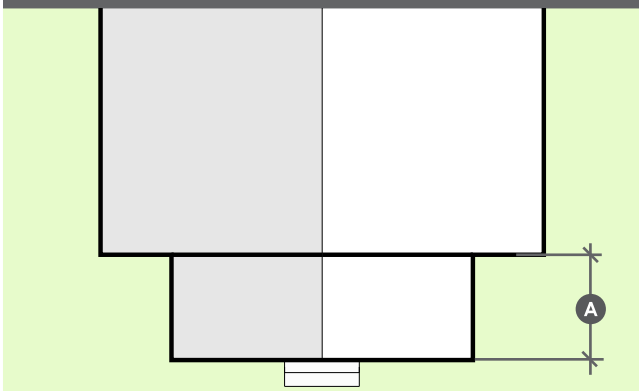


A	Porch Width
B	House Width at Front Wall

Example:
Porch Width = 18 ft.
÷ House Width at Front Wall = 35 ft.
Porch Front Wall Percentage = 51%

KEY	MEASUREMENT	APPLICATION
A	**50%**	Minimum width of front wall that is covered by porch

FRONT PORCH DEPTH



KEY	MEASUREMENT	APPLICATION
A	**6 FT.**	Minimum depth of front porch