



Roeland Park, Kansas

Single-Family Residential Design Standards

2022



Introduction

The purpose of this guide is to provide a summary of the primary design standards required for building a new single-family home or modifying an existing single-family home within the City of Roeland Park, Kansas. Additional city and building code requirements not provided in this guide may apply. Please consult the city code for details and review your plans with city staff to ensure compliance. A permit is required prior to any construction. Certain construction activities require detailed construction plans and may only be completed by licensed contractors and trades professionals.



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Building Setbacks and Lot Standards (R-1)

The minimum dimensions of yards and setbacks, and the minimum lot frontage, area and distance between adjacent buildings and appurtenances thereto for each building, and the maximum height of structures, shall be as follows:

R-1 Single-Family Residence District

A. Front yard setback: There shall be a setback of no less than 35-feet from the front line of each lot, tract or parcel where the streets or highways upon which the same fronts are 50-feet or less in width, and upon streets or highways exceeding 50-feet in width, there shall be a setback of no less than 30-feet from the front line of the lot.

B. Side yard setbacks: No residence (including attached or semi-attached garages and porches, enclosed or unenclosed) shall be located within 5-feet of either side of the lot, tract or parcel of land upon which it is erected; nor shall any residence, including the above enumerated appurtenances, occupy more than 80% of the width of the lot, tract, or parcel of land upon which it is erected, measured along the front setback line. In addition, if the side yard abuts on a street or highway, no residence (including attached or semi attached garages and porches, enclosed or unenclosed) shall be located within 20-feet of the street or highway right-of-way line. A minimum distance of 10-feet shall be provided and maintained between the residence and any building located upon adjacent premises.

C. Rear yard: There shall be a rear yard having a minimum depth of 15-feet. In addition, if the rear yard abuts on a street or highway, no structure (including attached or semi attached garages and porches, enclosed or unenclosed) shall be located within 20-feet of the street or highway right-of-way line.

Exception for Platted Setback Lines: When a more restrictive setback line has been established on an approved plat, that setback shall apply.

Front Yard Setback Exceptions: When 40% or more of the single-family lots on the same side of a street between two intersecting streets are developed with homes having front yards with a variation of not more than 10-feet in depth, the average of these front yards shall establish the minimum front yard setback for that entire side of the street, provided this setback is not less than any setback established by an approved plat for these lots.

- A** Front yard setback: 35-ft (may be 30-ft as noted)
- B** Rear yard setback: 15-ft
- C** Side yard setback: 5-ft (building limited to max 80% of lot width)

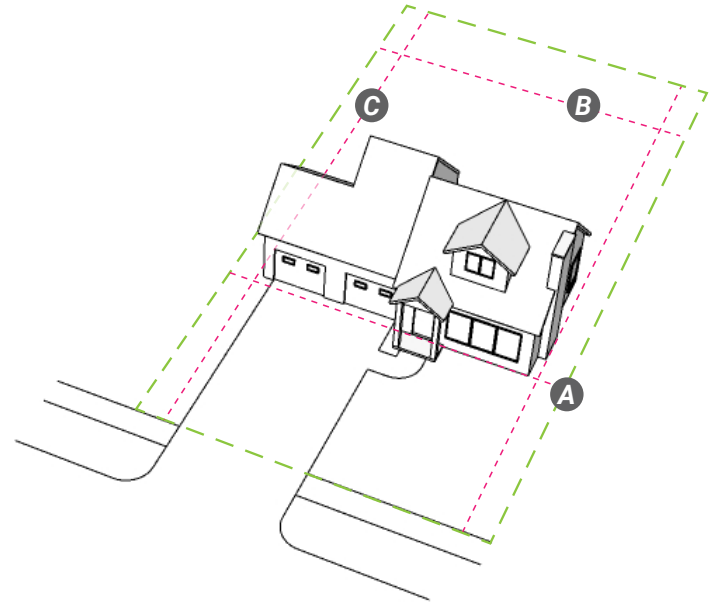
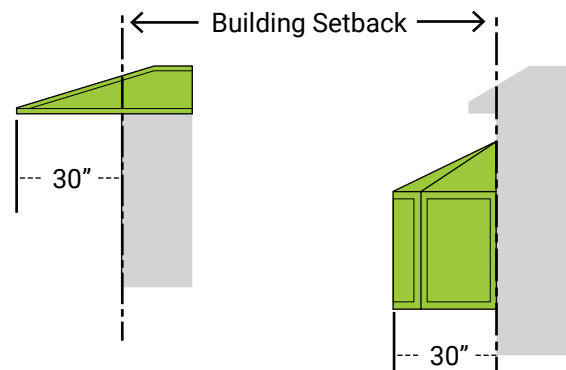


Figure 01 - Setback standards: R-1 single-family residence district



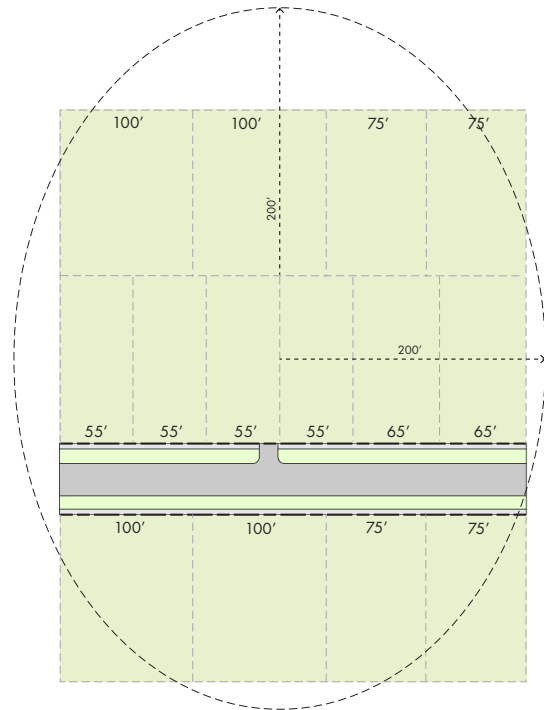
Roof and Wall Projections: Roof overhangs, eaves, chimneys, bay windows, and similar roof and wall projections may extend into a building setback no more than 30-inches.

Figure 02 - Roof and wall projections

Building Setbacks and Lot Standards (R-1)

D. Lot frontage and area: Every building hereafter erected, moved or altered shall provide a minimum lot frontage of 35-feet, or in the alternative, a minimum lot width at the setback line of 60-feet, and a lot area no less than 7,500 square feet per dwelling. No residential building nor accessory structure shall be constructed over or across any property line, lot line, or parcel line unless approved for merger via a lot-tie agreement or re-platted. All such lot mergers and re-platting should comply with the following:

- Does not create a through lot that has more than two street frontages.
- Does not create a lot with a width greater than 150% of the average lot widths of all the lots within 200 linear feet measured property line to property line.
- Does not create a lot with an area greater than 150% of average lot areas of all lots within 200 linear feet measured property line to property line.
- Exceptions to the above standards may be approved to address unique or special circumstances of the subject property.

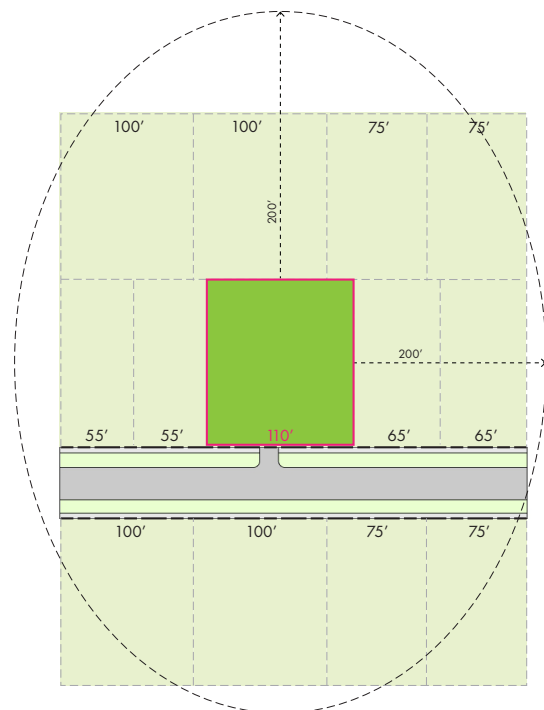


Average lot frontage: 75-feet
Allowable merged lot frontage: 112.5-feet

Figure 03 - Existing conditions

Definition

Lot Tie Agreement is an agreement executed by the property owner whereby the property owner agrees that the described lots and/or parcels shall be held under the same ownership and not sold separately unless otherwise approved by the City. Said agreement shall be recorded with the County as a restriction on the subject property.



Average lot frontage: 75-feet
Allowable merged lot frontage: 112.5-feet
Scenario merged lot frontage: 110-feet

Figure 04 - Merged lots scenario

Building Setbacks and Lot Standards (R-2)

R-2 Single-Family Residence District

A. Front yard setback: There shall be a setback of no less than 25-feet from the front line of each lot.

B. Side yard setbacks: No residence (including attached or semi-attached garages and porches, enclosed or unenclosed) shall be located within 5-feet of either side of the lot, tract or parcel of land upon which it is erected; nor shall any residence, including the above enumerated appurtenances, occupy more than 80% of the width of the lot, tract, or parcel of land upon which it is erected, measured along the front setback line. In addition, if the side yard abuts on a street or highway, no residence (including attached or semi attached garages and porches, enclosed or unenclosed) shall be located within 20-feet of the street or highway right-of-way line. A minimum distance of 10-feet shall be provided and maintained between the residence and any building located upon adjacent premises.

C. Rear yard: There shall be a rear yard having a minimum depth of 15-feet. In addition, if the rear yard abuts on a street or highway, no structure (including attached or semi attached garages and porches, enclosed or unenclosed) shall be located within 20-feet of the street or highway right-of-way line.

A Front yard setback: 25-ft

B Rear yard setback: 15-ft

C Side yard setback: 5-ft (building limited to max 80% of lot width)

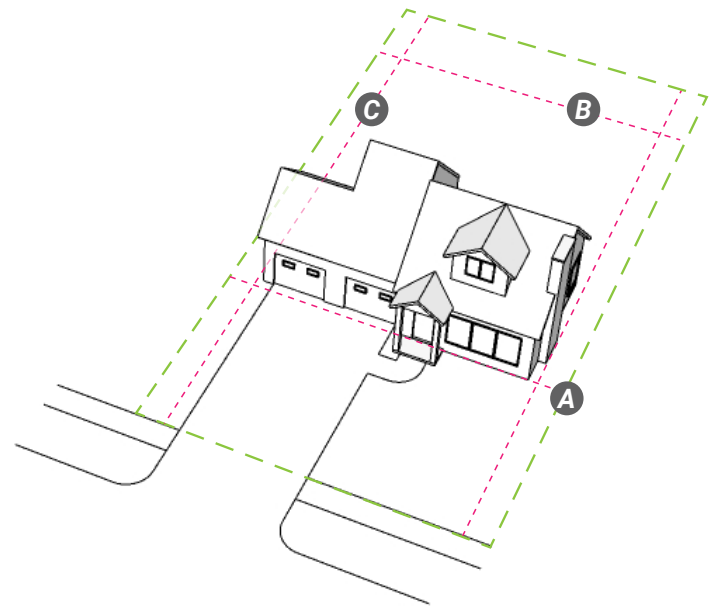
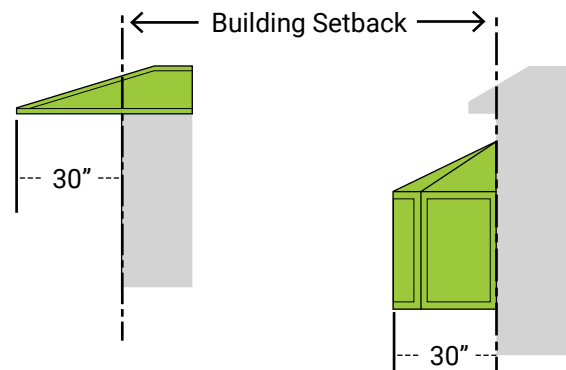


Figure 05 - Setback standards: R-2 single-family residence district

Exception for Platted Setback Lines: When a more restrictive setback line has been established on an approved plat, that setback shall apply.

Front Yard Setback Exceptions: When 40% or more of the single family lots on the same side of a street between two intersecting streets are developed with homes having front yards with a variation of not more than 10-feet in depth, the average of these front yards shall establish the minimum front yard setback for that entire side of the street, provided this setback is not less than any setback established by an approved plat for these lots.

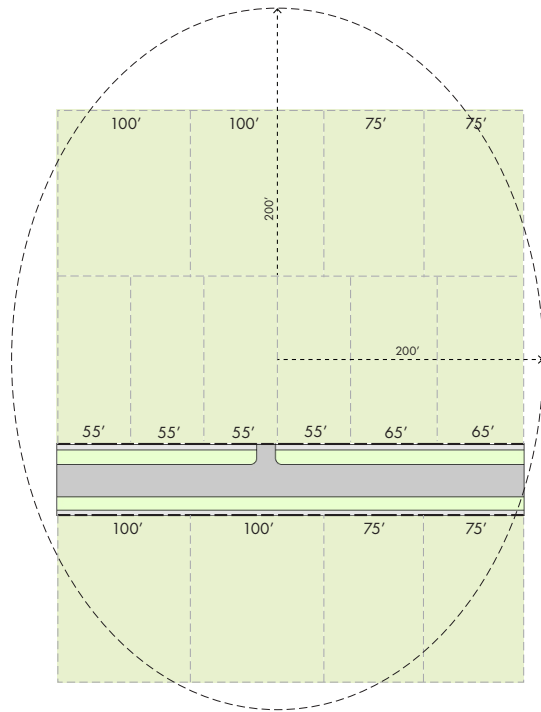


Roof and Wall Projections: Roof overhangs, eaves, chimneys, bay windows, and similar roof and wall projections may extend into a building setback no more than 30-inches.

Building Setbacks and Lot Standards (R-2)

D. Lot frontage and area: Every building hereafter erected, moved or altered shall provide a minimum lot frontage of 35-feet, or in the alternative, a minimum lot width at the setback line of 60-feet, and a lot area of not less than 6,000 square feet per dwelling. No residential building nor accessory structure shall be constructed over or across any property line, lot line, or parcel line unless approved for merger via a lot-tie agreement or re-platted. All such lot mergers and re-platting should comply with the following:

- Does not create a through lot that has more than two street frontages.
- Does not create a lot with a width greater than 150% of the average lot widths of all the lots within 200 linear feet measured property line to property line.
- Does not create a lot with an area greater than 150% of average lot areas of all lots within 200 linear feet measured property line to property line.
- Exceptions to the above standards may be approved to address unique or special circumstances of the subject property.

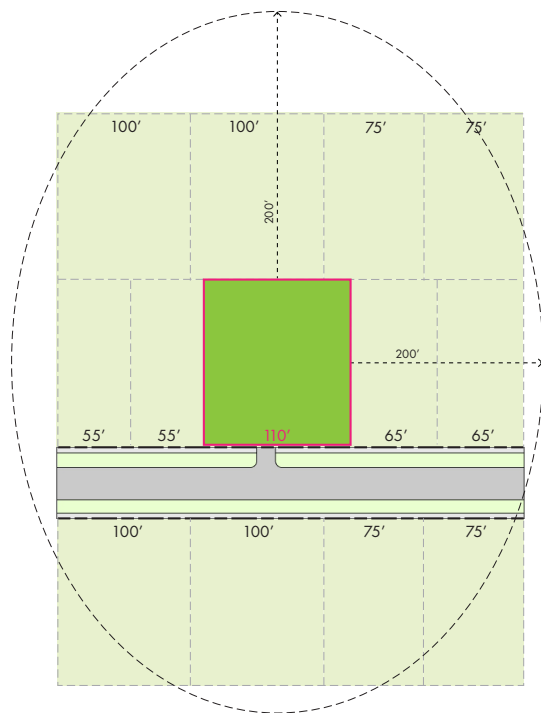


Average lot frontage: 75-feet
Allowable merged lot frontage: 112.5-feet

Figure 06 - Existing conditions

Definition

Lot Tie Agreement is an agreement executed by the property owner whereby the property owner agrees that the described lots and/or parcels shall be held under the same ownership and not sold separately unless otherwise approved by the City. Said agreement shall be recorded with the County as a restriction on the subject property.



Average lot frontage: 75-feet
Allowable merged lot frontage: 112.5-feet
Scenario merged lot frontage: 110-feet

Figure 07 - Merged lots scenario

Building Heights

Height Standard Applicable to all Single-Family Residence District

The maximum height of dwellings shall be two and one-half stories, not exceeding 35-feet. The height of accessory uses and structures shall not exceed the height of the dwelling. The height of non-residential structures shall not exceed 35-feet, except that the maximum height may be increased by one foot for each additional foot that yards are increased on all sides above minimum requirements, up to a maximum height of 75-feet.

Definition

Building Height is defined as the vertical dimension measured from the average elevation of the finished lot grade at the front of the building to the highest point of ceiling or the top story in the case of a flat roof; to the deck line of a mansard roof; and to the average height between the plate and ridge of a gable, hip or gambrel roof.

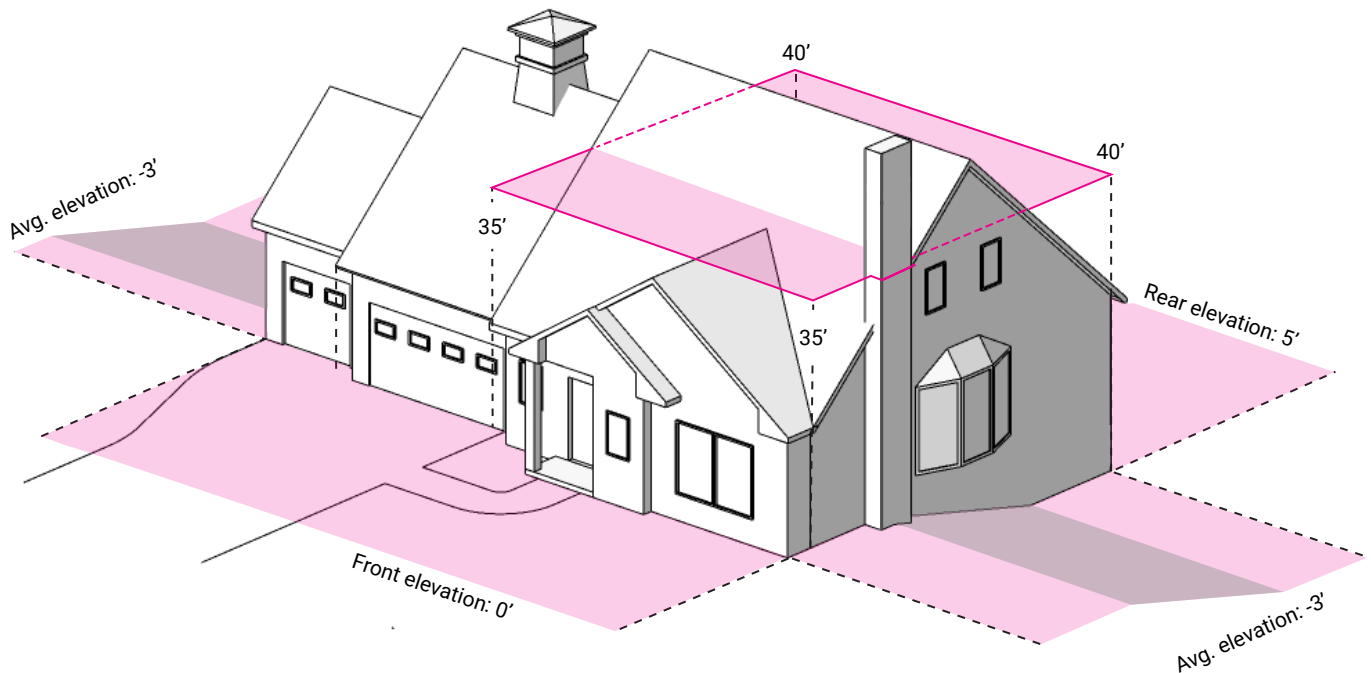


Figure 08 - Example of maximum building height standard calculation

Lot Coverage Standards

- A.** Residential lots less than 15,000 square feet in size shall maintain a minimum of 55% of the lot area as green space.
- B.** Residential lots 15,000 square feet to 18,999 square feet in size shall maintain a minimum of 55% of the lot area as green space plus an additional 1% of green space area for each 400 square feet of lot size over 15,000 square feet.
- C.** Residential lots 19,000 square feet in size and larger shall maintain a minimum of 65% of the lot area as green space.

Definition

Green space is an open area that is landscaped with turf grass, ornamental grasses, trees, shrubs, flowers, or vegetables and that contains no structures, garages, sheds, play structures, pools, decks, driveways, patios, walkways or other paved or hard-surfaced areas including permeable pavers or gravel.

Figure 09 - Lot Coverage Example 1

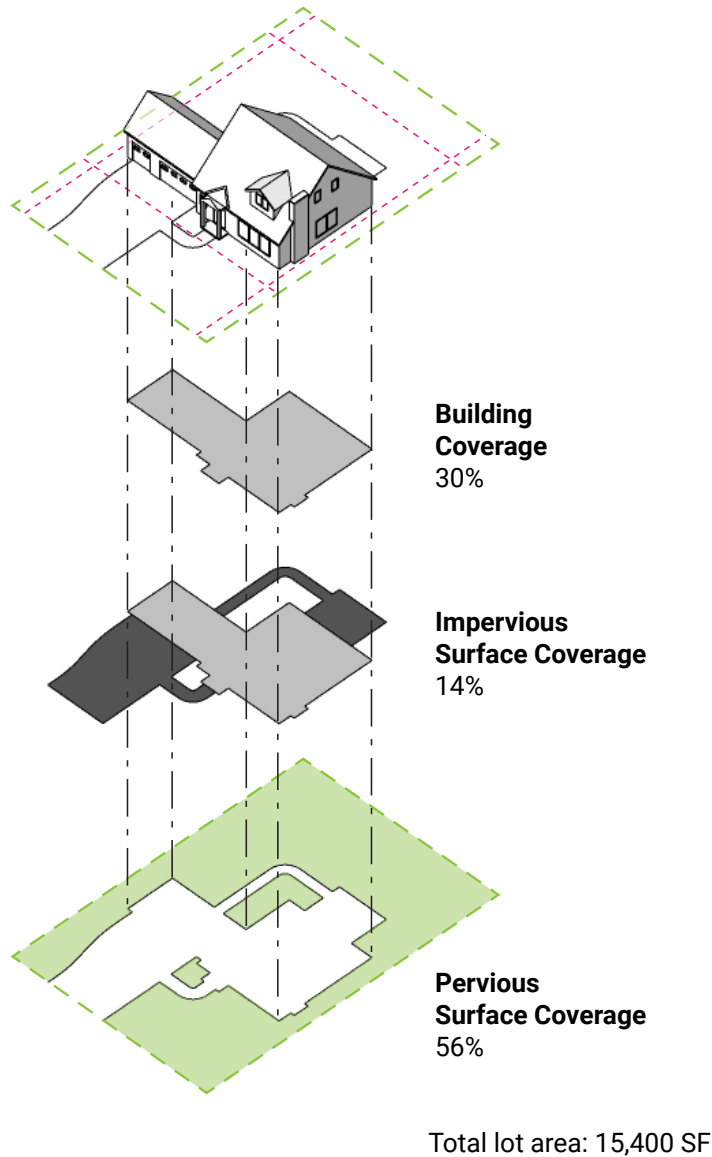
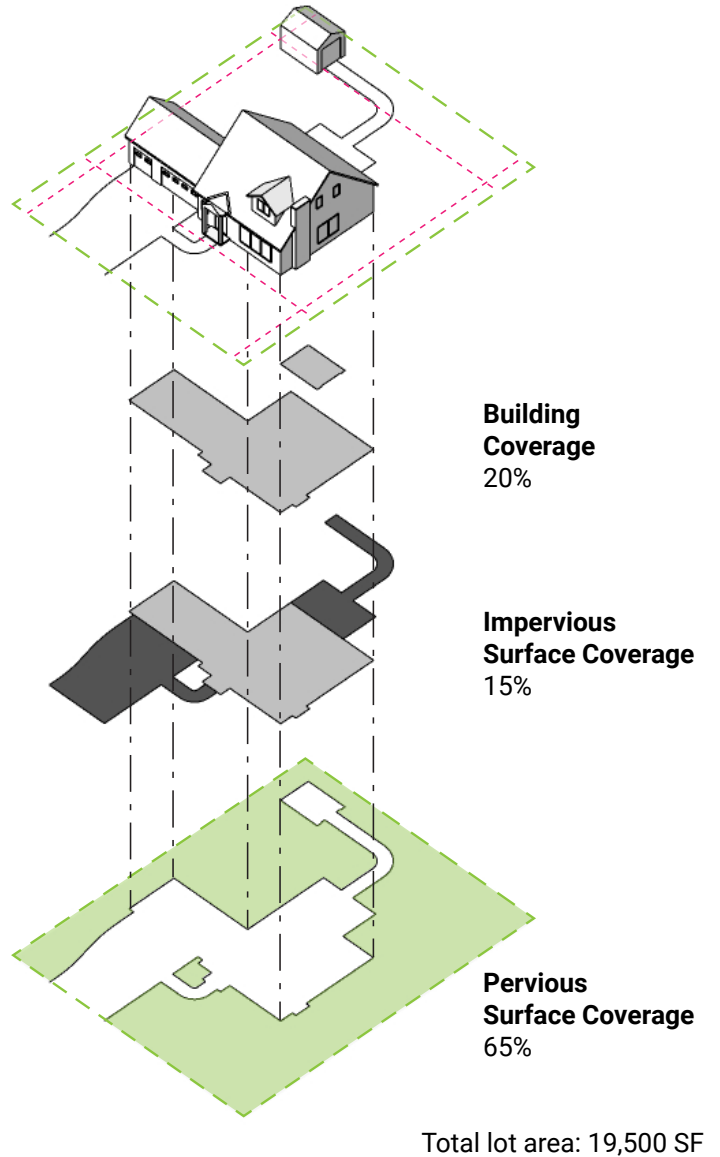


Figure 10 - Lot Coverage Example 2



Setback Requirements for Detached Garages, Sheds, and Accessory Structures

- A.** The design and construction of any garage, carport or storage building shall be similar to or compatible with the design and construction of the main building. The exterior building materials and colors shall be similar to the main building or shall be commonly associated with residential construction.
- B.** No more than one detached garage or covered carport not exceeding 250 square feet for each 3,000 square feet of lot area, for a maximum total of 1,200 square feet.
- C.** A detached garage, carport, or storage building shall be setback no less than 5-feet from any property line and shall not encroach the front yard setback nor be located closer to the street right-of-way line than the principal structure. In the case of a corner lot, no accessory structure shall be closer than 20-feet from the street right-of-way line nor located closer to the street right-of-way line than the principal structure. In the case of a double frontage lot, no accessory structure shall be closer than 15-feet from the street right-of-way line located at the rear of the property.

Corner Lot Example

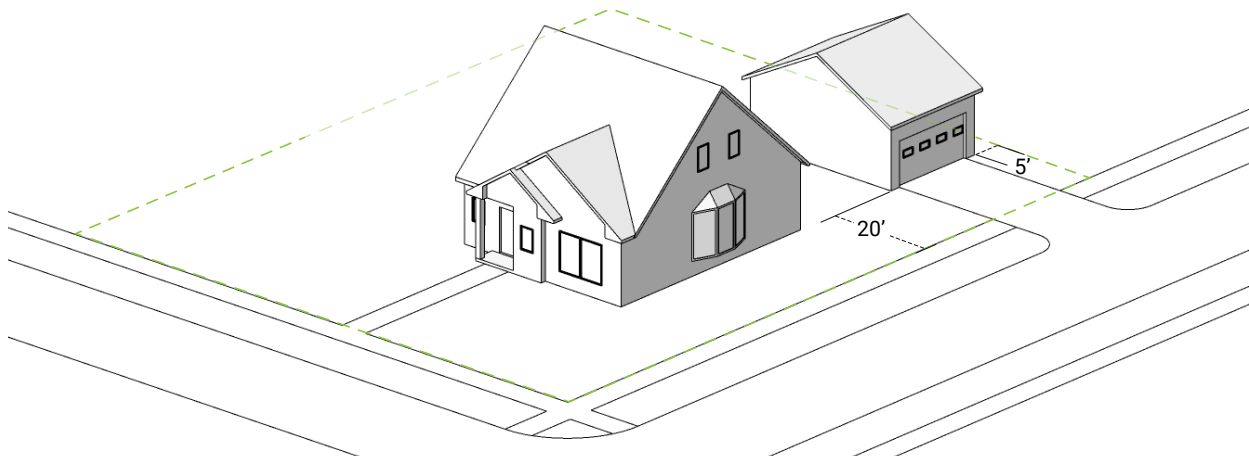


Figure 11 - Detached garage

Fences and Walls

- A.** A decorative fence or wall not taller than 30-inches may be constructed in the front yard up to the property lines.
- B.** A fence or wall up to 8-feet tall may be constructed within the rear yard up to the property lines. In the case of a double frontage lot, the fence may be no closer than 15-feet to the street right-of-way line at the rear of the property. In the case of a corner lot, the fence may be no closer than 15-feet to the street right-of-way line along the side of the property, except that a fence or wall no taller than 42-inches may be constructed up to this side street right-of-way line.
- C.** In no case shall any fence conflict with the required sight distance triangle required at street intersections.
- D.** All fences and walls shall be constructed with a finished side facing outward from the property. The posts and support beams shall be on the inside or shall be designed as an integral part of the finished surface.
- E.** All fence segments abutting a designated thoroughfare, except on corner lots, shall provide one gate opening per lot to allow access to the area between the fence and the edge of the street for maintenance and mowing.

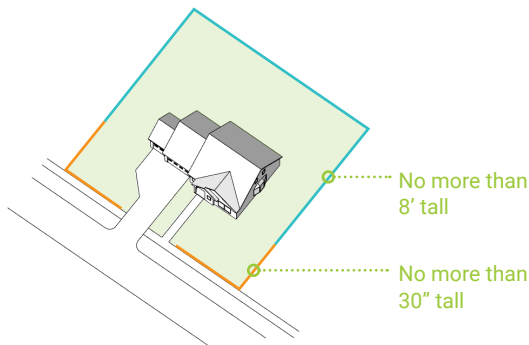


Figure 12 - Fence along property lines

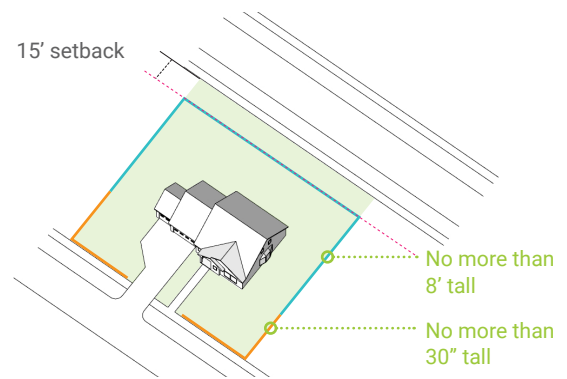


Figure 13 - Double frontage lot

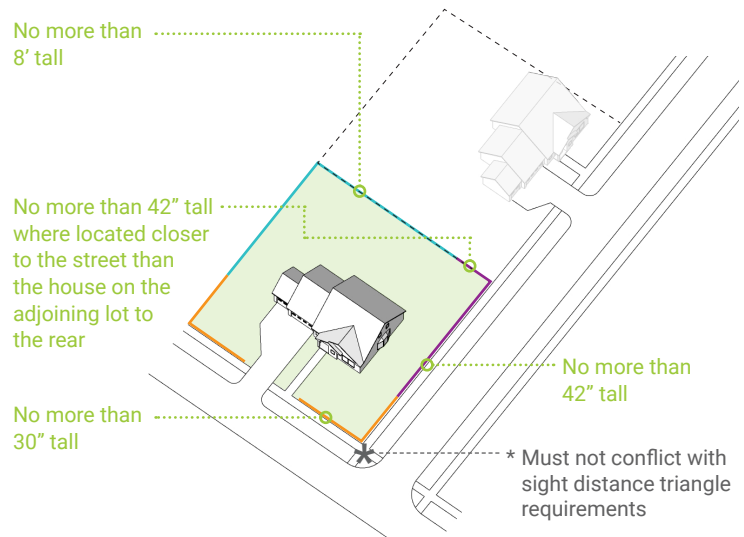


Figure 14 - Corner lot: fence along property line

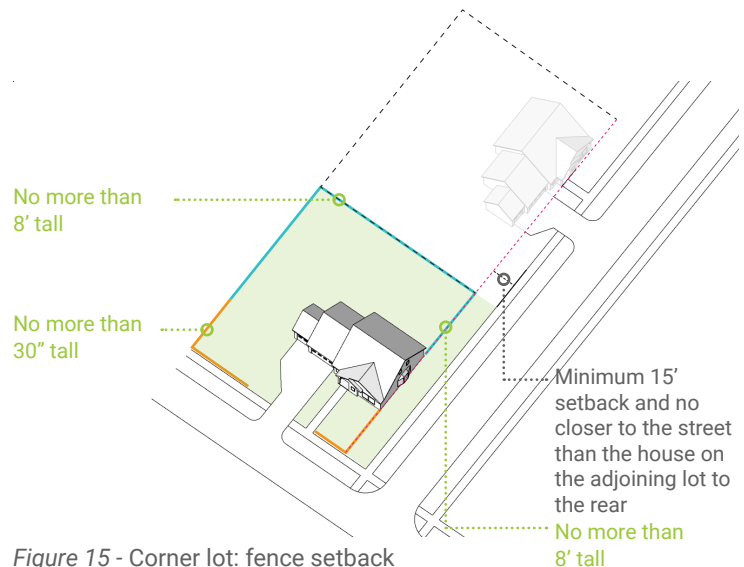


Figure 15 - Corner lot: fence setback

Front Porches

Canopies or open porches having a roof area projecting a maximum of 8-feet into the required front yard setback and with a 120 square foot maximum floor area shall be allowed to be added on to single-family residential structures where they meet the following criteria:

- A.** The porch must be designed and finished with materials that match the existing house, including the roofing shingles, as to appear that it was part of the original house.
- B.** The covered porch shall be attached to the main house structure.
- C.** The roof pitch shall be a minimum of a 3:12 pitch.
- D.** The covered porch shall remain open and free of any screening or glass that encloses the space.
- E.** The covered porch shall have a defined access point(s) with an open decorative railing, plantings, or other built items around it that complements the porch and house structure. The railing shall be no higher than 38-inches above the porch floor level and the minimum post size shall be at least 6-inches by 6-inches in nominal dimensions.

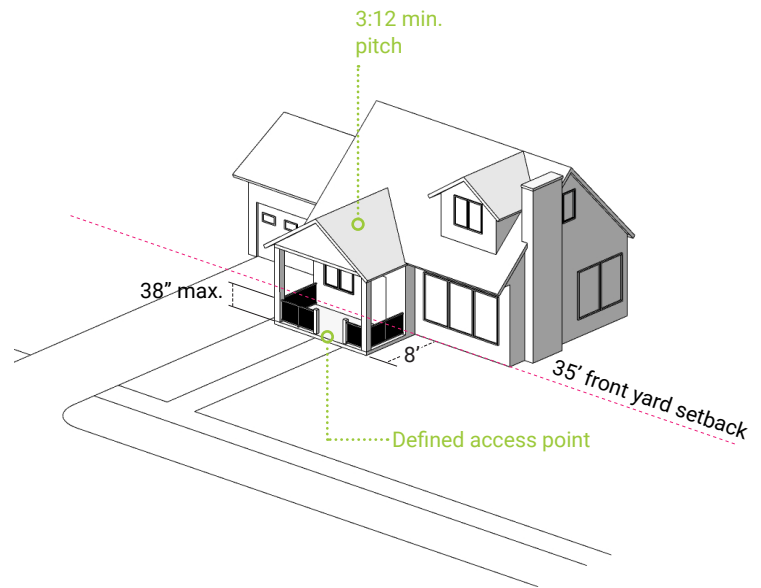


Figure 16 - Front porch standards

Attached Garages

Street facing garage doors that either exceed 50% of the width of the street-facing facade or have a combined total width of 30-feet shall be setback a minimum 2-feet from the front facade of the house and include windows or other architectural treatment. This standard does not apply to detached accessory structures.

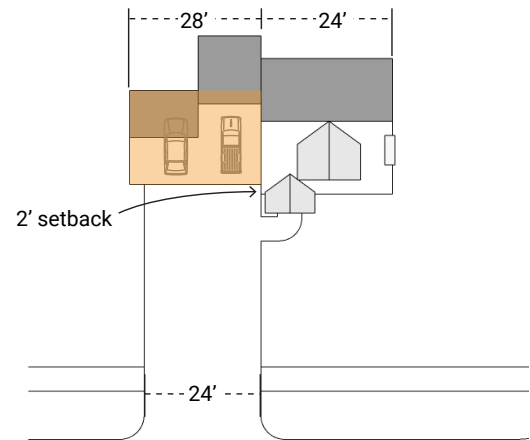


Figure 17 - Two-car garage

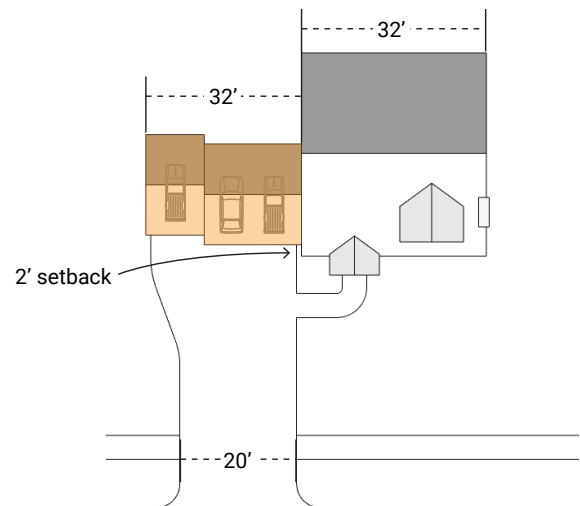


Figure 18 - Three car garage

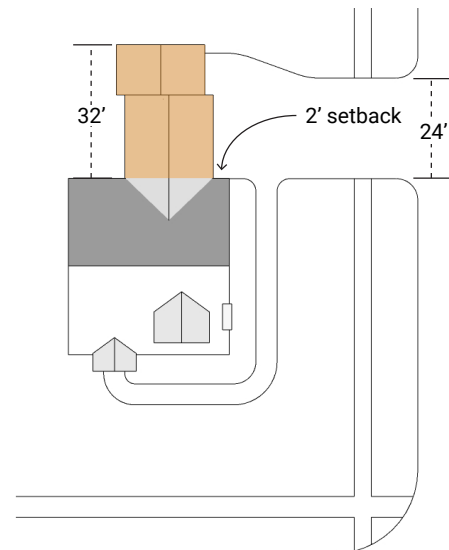


Figure 19 - Three-car garage - corner lot

Driveways

No driveway serving a one- or two-family dwelling shall be located within 2-feet of an adjoining lot line except for a driveway serving two properties.

Paved parking areas or customary driveways in the required yards abutting streets shall not exceed 35% of the area of the yards.

Driveways shall be no greater than 24-feet in width or the width of the garage door opening that faces the street, whichever width is greater, and shall taper to no greater than 24-feet in width at the street right-of-way line. Additional parking of vehicles may be permitted on a surfaced area off to one side of a driveway. This auxiliary parking area shall be no more than 10-feet in width and shall not encroach into the right-of-way.

There shall be no more than one driveway approach per lot, except that a corner lot may have a second driveway approach subject to the street classification. The City may grant an exception to permit a circle drive for a home based on specific traffic considerations. The 35% paved coverage maximum and 2-foot paving setback shall be maintained in all scenarios.

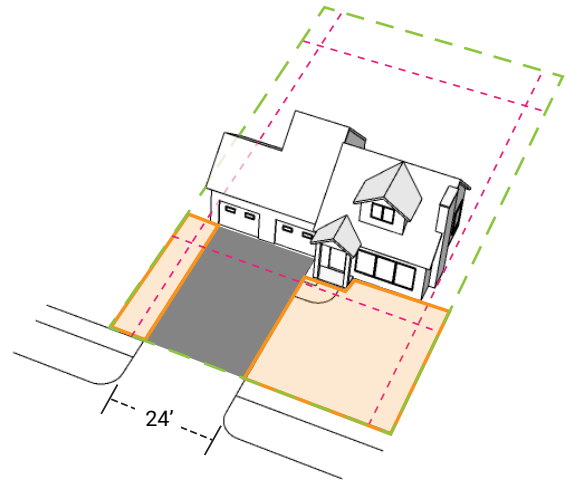


Figure 20 - Two-car driveway



Figure 21 - Three-car driveway

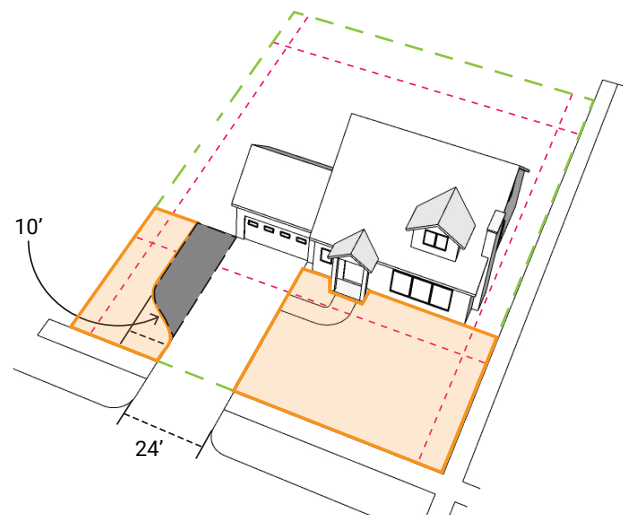


Figure 22 - Auxiliary Parking

Wall Articulation

The walls on all sides of each residential dwelling shall be varied by a combination of methods including window and door openings, dormers, changes in the wall plains, wall projections and off-sets, or changes in exterior building materials. No street facing building wall shall exceed 30-feet in width without a change of articulation in the wall plane by means of a horizontal off-set of at least 2-feet in depth or projection running vertically from top to bottom of the wall.

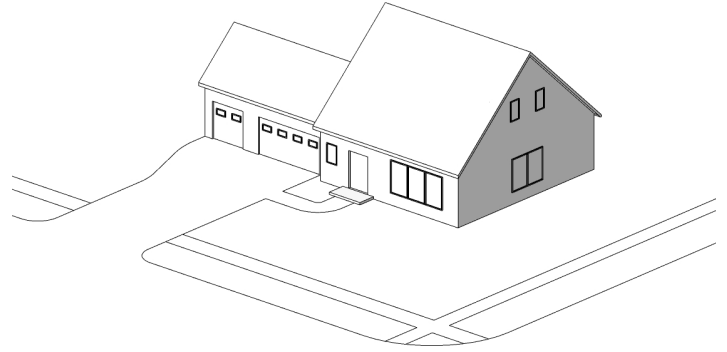


Figure 23 - **Without** wall articulation

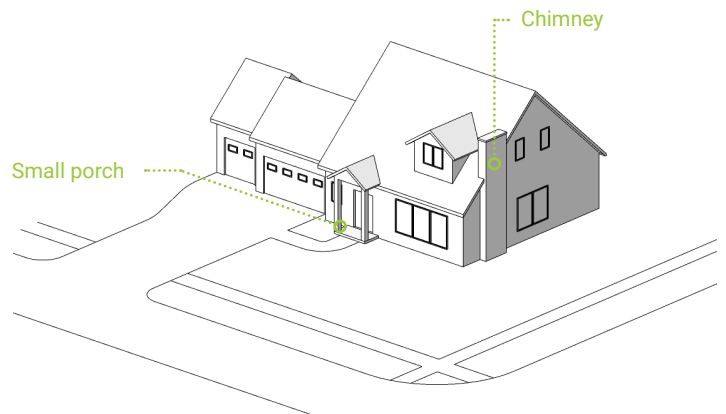


Figure 24 - **With** wall articulation: Variation 1

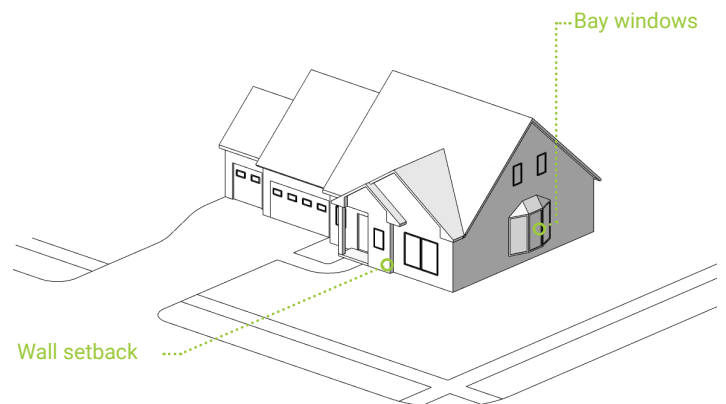
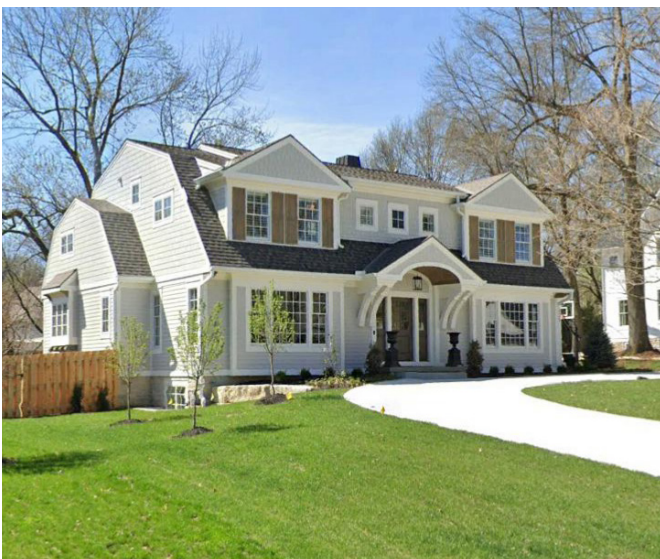


Figure 25 - **With** wall articulation: Variation 2

Window Coverage

Each street facing facade of a residential dwelling shall include window openings that comprise at least 10% of the total wall area of that facade.

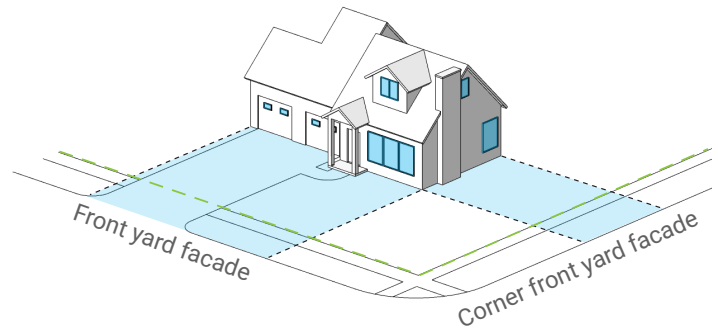


Figure 26 - Front and corner yard facade

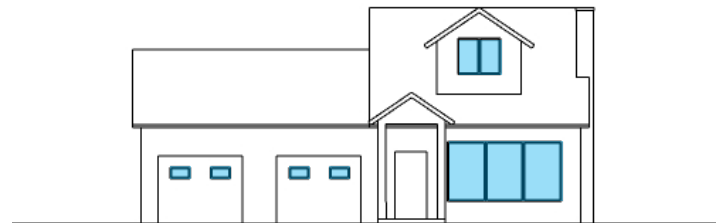


Figure 27 - **Front** yard facade
Minimum 10%

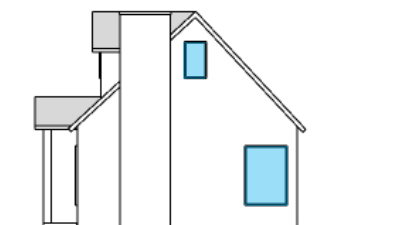


Figure 28 - **Corner front** yard facade
Minimum 10%

Exterior Building Materials

Exterior finish building and roofing materials shall be based on the quality of its design, relationship and compatibility to building materials in the immediate neighborhood. The exterior of single-family dwellings must be composed of quality, exterior grade materials customary for residential construction, such as the following:

- A.** Brick and stone veneer
- B.** Stucco - traditional Portland based
- C.** Wood - panels, siding, and trim
- D.** Cement fiberboard and composite wood - panels, siding, and trim
- E.** Architectural grade metal and vinyl siding and trim designed for residential applications
- F.** Exterior Insulation and Finish System (EIFS) - water managed
- G.** Glass windows and doors, and glass block
- H.** Concrete block and cast-in-place concrete - foundation walls only
- I.** Roofing materials include:
 - (1) *Laminate style asphalt shingles (architectural asphalt shingles)*
 - (2) *Standing seam metal roofing*
 - (3) *Slate and tile (including synthetic and composite)*
 - (4) *Solar energy collectors and panels and related apparatus*

The non-glass exterior surfaces of the dwelling shall not be made of shiny metal or other highly reflective materials and shall, in general, not reflect light to a greater extent than would a coat of semi-gloss enamel applied to wood. Copper, standing seam and other metal roofing materials are acceptable for use in residentially zoned areas and if used, must be installed over a solidly sheathed surface. Painted metal or steel roofing and siding materials shall be limited to earth tones or typical colors produced by composition shingle manufacturers. However, corrugated metal siding and roofing materials shall be prohibited.



Figure 29 - Material examples

Solar-Ready

All new structures must provide a solar-ready zone. Additions and renovations to existing structures are not subject to the solar-ready requirement. Said zones require certification of allowable roof loading for the defined solar-ready zone to accommodate permanently mounted solar collection devices. In addition, new structures must provide chases adequately sized and strategically located to accommodate future installation of conduit and conductors used in conveying power from the solar system to the electrical load distribution center and/or batteries.

Solar-Ready Zone: A solar-ready zone shall be located on the roof of buildings that are 5 stories or less in height above grade plane and are oriented between 110 degrees and 270 degrees of true north or have low-slope roofs. This shall include detached garages and carports. Solar-ready zones shall comply with applicable design standards.

Design Standards: A permit is required prior to installation of any solar system and the following standards and conditions apply.

- A.** All solar energy systems or solar collection devices shall be incorporated into a building (which may be either a principal or accessory building) and shall be visually integrated into the basic form and main structure of such building as viewed from the public right-of-way.
- B.** Any panel inclusive of the mounting system which is used to receive, collect or transfer solar energy, shall be mounted on the roof of a building and such panels and mounting system shall be visually integrated into the roof. The panels shall be mounted parallel to the roof plane and no more than 6-inches from the roof surface to accomplish visual integration with the roof where the panels are visible from an adjacent residential property. If the panels are screened from view via a parapet wall, they may stand off from the roof more than 6-inches, so long as they do not project above the parapet wall. If panels are located on a flat roof (less than 3:12 pitch) that is not visible from a residential property the panels need not be visually integrated with the roof, however the panel should not stand off more than 12-inches from the surface of the roof.
- C.** Mounting arrangements which allow panels or apparatus to project more than 12-inches above the roof surface are prohibited unless screened from view by adjacent properties.
- D.** No panels or apparatus shall be free standing or mounted on the ground.
- E.** All mechanical piping, electrical conduits, motors and similar items which comprise a solar energy system shall be concealed within the building envelope or through a creative design, preventing view from either adjoining properties or the road right-of-way. For the purposes of this section, "Building Envelope" shall be defined as the physical separator between the conditioned and unconditioned environment of a building, including the resistance to air, water, heat, light, and noise transfer. The building envelope consists of a roof, subfloor, exterior doors, windows, and exterior walls.
- F.** All exposed metal, including the framework of active collector panels or exposed mullions and framework of passive systems shall be of finished warm earth tones, or black, in color and unpainted aluminum is prohibited.
- G.** All solar energy system components shall be located as to be accessible for required routine maintenance without trespassing on adjoining property or disassembling any major portion of the structure or building.
- H.** All solar energy system components must be obtained from manufacturers who regularly engage in production of solar energy apparatus. The design and drawings of any system or apparatus shall be completed and sealed by a licensed design professional.



Figure 30 - Examples of roof-mounted solar panels