



Text Amendment #2018-0003

Sheds and Other Small Accessory Buildings

Issue: (A) Initiation of a Text Amendment; and (B) Public Hearing and Consideration of a Text Amendment to the Zoning Ordinance to amend sections 7-202 and 2-145 regarding small accessory buildings in required yards and floor area ratio.	Planning Commission Hearing:	March 6, 2018
	City Council Hearing:	March 17, 2018
Staff: Mary Christesen, Acting Land Use Services Chief, mary.christesen@alexandriava.gov Shaun Smith, Acting Zoning Manager, shaun.smith@alexandriava.gov Anh Vu, Acting Supervisory Program Analyst, anh.vu@alexandriava.gov		

PLANNING COMMISSION ACTION, MARCH 6, 2018: On a motion made by Vice Chairman Macek and seconded by Commissioner Brown, the Planning Commission voted to initiate and also to recommend approval of Text Amendment #2018-0003. The motions carried on a vote of 7-0.

Reason: The Planning Commission agreed with staff analysis.

Vice Chairman Macek and Commissioner Brown commended staff on this effort to amend the regulations for sheds and small accessory buildings. Vice Chairman Macek commented that the current standards were restrictive and the proposed changes to the size and height for sheds and small accessory buildings are reasonable. He commented that the proposed height measurement standardization is practical. He believed that the proposed labeling for sheds and other small accessory buildings is appropriate and provides broader accessory building types. Commissioner Brown commented that he is comfortable with the empirical research completed for the proposed size and height changes.

Speakers: No individuals requested to speak on this item.

I. Issue

The purpose of this proposed zoning text amendment is two-fold:

Modify and amend the provision for sheds and other small accessory buildings permitted in required yards. The current standards of section 7-202(B)(4) allow specific accessory buildings and structures to be located in required side and rear yards with no setback requirements other than a requirement that the structure not obstruct light and ventilation. The recommended changes are intended to update the existing regulations to better align with functional sizes and heights for these types of structures on residentially zoned properties. Furthermore, these recommended changes will align the method of measurement for the height of accessory buildings to match the measurement for height of buildings as defined in section 2-154.

Modify and amend section 2-145 to allow floor area sheds and other small accessory buildings to be excluded from FAR if they meet certain requirements.

II. Background

Planning Commission and members of the public expressed concerns regarding the current standards regulating the size and heights of accessory structures set forth in section 7-202(B)(4). Planning Commission suggested that staff consider revising the provisions for sheds and other small accessory buildings to better reflect current market and industry trends regarding their size and heights. In response to the expressed concerns, staff reviewed and analyzed the current standards for sheds and other small accessory buildings regarding appropriate size, height, and their placement and visual impacts.

Accessory buildings are detached structures subordinate to the principal building and located on the same lot or site as the principal building. Typical accessory buildings may include, are not limited to, detached garages, sheds, playhouses, greenhouses, cabanas, gazebos, and other similar structures. The subject of this text amendment are small accessory structures that can be located in required side and/or rear yards and are eligible for exclusion from floor area. Larger accessory structures may be located on residential properties, but must comply with all required setbacks and are counted towards floor area.

The current standards as outlined within section 7-202(B)(4) regulate the height, square footage and location of sheds and other small accessory structures that may be located in required side and rear yards. For property zoned and used for semi-detached or townhouse dwellings, section 7-202(B)(4)(b), requires the small accessory structures to be located at the rear property line creating a difficulty for corner lots, that have two front yards and two side yards, but no rear property line or for properties that may have parking, or another obstruction located at the rear property line.

The 2008 infill regulations incorporated several exclusions for certain types of construction for the development of single and two-family dwellings. While the approved regulations allowed for exclusions of detached garages, an exclusion for sheds (a substantially smaller

type of accessory building) was not incorporated with these regulations. Sheds are included toward a property's gross floor area. This has often resulted in residents demolishing these accessory buildings on their lots in order to gain modest area for small additions to their homes.

III. Discussion of Proposed Text Changes

The proposed text amendments to Section 7-202 of the Zoning Ordinance modify and add language regarding size and height requirements. The proposed text amendment is intended to adjust the requirements to match more closely with accessory buildings which are readily available for purchase on the commercial market and meet today's storage needs for a typical resident. Allowing a slightly larger accessory building to be located in a require side or rear yard behind the main dwelling and excluded from floor area will incentivize property owners to locate these types of structures in the back corners of their properties to house and organize equipment or other items meant for yard maintenance. Single-family dwellings in the CL zone would benefit from the proposed change. These text changes would establish specific size requirements for sheds or other small accessory buildings located on single-family and two-family dwelling lots. The proposed text amendment is also intended to align the height measurement convention for the accessory buildings to match that of other buildings for better standardization (Table 1).

In addition, staff proposes to create an exclusion for sheds and other small accessory buildings to facilitate their placement on lots in accordance with infill standards. This exclusion shall be based on the minimum development standards as outlined within section 7-202(B)(4).

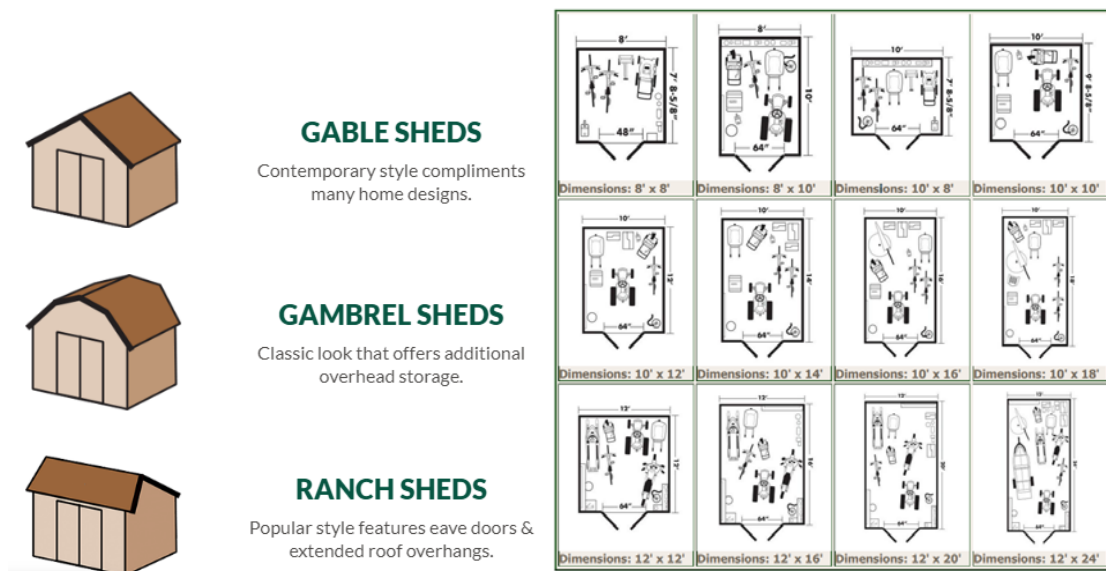


Table 1: Section 7-202(B)(4) Proposed Requirements:

Existing Requirements	Proposed Requirements	Existing Size*	Proposed Size*	Existing Height*	Proposed Height**	Existing Location	Proposed Location
Zone R-20, R-12, R-8, R-5 or R-2-5 and used for single-family dwellings	Single and two-family dwellings, outside of historic district	80 sq. ft.	100 sq. ft.	8.00 ft.	10.00 ft.	Any yard except a front yard	Any yard except a front yard (no change)
Zoned and used for semi-detached or townhouse dwellings	Townhouse dwellings or for single and two-family dwellings located within a historic district	50 sq. ft.	65 sq. ft.	7.00 ft.	8.00 ft.	Rear yard at the rear property line	Any yard except a front yard

* Maximum aggregate floor area

* Height measured at the structure's highest point.

** Measurement for height of buildings as defined in section 2-154

Small accessory buildings come in variety of sizes. The actual dimensions of factory-made ready-to-assemble structures are defined solely by the manufacturer at its own discretion based on storage type and purpose. Staff looked at 14 major brands of sheds and small buildings manufactures. The data sampled 180 accessory building sizes from the top major brands. The average size was used to represent the size of structures not located in a historic district. The distribution consisted of structures ranging from small (2x2 ft.) to large (10x10 ft. and up). The median was used to represent the size of structures located in a historic structure since it best captured the middle value of all structure sizes.

For lots developed with single and two-family dwellings, not located in a historic district, such structures may not exceed 100 square feet in floor area in the aggregate and a building height no greater than ten feet when measured from average existing grade or average finished grade, whichever is lower. This is an increase from 80 square feet in floor area and an increase from eight feet in height (Table 1). The proposed 20 percent increase is based off the average of common accessory building sizes.

For lots developed with townhouse dwellings or for properties located within a historic district, such structures may not exceed 65 square feet of floor area in the aggregate and a building height no greater than eight feet. This is an increase from 50 square feet in floor area and an increase from seven feet in height. In addition, the requirement for the structure to be located at the rear property line was removed. The proposed 30 percent increase is based off the median of common accessory building sizes.

Additionally, the amended text removes language specifying that the height be measured at the highest point, thus leaving the height to be measured at the more common convention, the mid-point of the roof slope.

IV. Recommendation

The proposed text amendments increase the allowed size and height for sheds and other small accessory buildings in required yards, aligns the convention for measuring the height of the structure to be the same as that of other building types and allows small accessory structures as an exclusion from floor area. Additionally, the proposed text amendments will allow these regulations to be applied to all single, two-family and townhouse properties and removes the restriction that all small accessory structures must be located at the rear property line for two-family and townhouse properties allowing property owners the flexibility to locate the small accessory structure in the most appropriate location on the property.

Staff **recommends approval** of the change to the Zoning Ordinance as proposed in Attachment #1.

Staff:

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Attachments: 1. Proposed Zoning Text Changes
2. Data (180 accessory buildings)

Attachment #1
PROPOSED ZONING TEXT CHANGES

Proposed Zoning Ordinance Changes – The following text will modify or replace text in section 7-202 and 2-145.

Note: New text is underlined

~~Deleted text is shown with a strikethrough~~

* Text Amendment #2017-0001 approved by Planning Commission on February 6, 2018 and being presented to City Council on February 24, 2018; implementation ordinance being presented to City Council on March 6, 2018 and March 17, 2018.

2-145 Floor area.

- A. For residential dwellings in the R-20, R-12, R-8, R-5, R-2-5, and single-family and two-family dwellings in the RA and RB zones (not including property located within the Old and Historic Alexandria and Parker-Gray Districts), the floor area of the building or buildings on a lot or tract or tract of land (whether "main" or "accessory") is the sum of all gross horizontal areas under roof on a lot. It shall include all space which is deemed habitable space by the Virginia Uniform Statewide Building Code (USBC) or seven feet or more in height, whichever is less. These areas shall be measured from exterior faces of walls or any extended area under roof and are to be measured from the shared lot line in the case of party walls. Floor area with a ceiling height 15 feet or greater shall be counted twice. Floor area with a ceiling height 25 feet or greater shall be counted three times. This space shall be based on permanent construction whether or not provided with a finished floor or ceiling. Excluded from floor area shall be:*
- (1) Stairs, and elevators. The term stairs includes ramps and other similar structures deemed necessary to provide access to persons with disabilities. *
 - (2) Floor space used for utilities, which may include accessory water tanks, cooling towers, mechanical and electrical equipment, and any similar construction not susceptible to storage or occupancy (but not including ductwork, pipes, radiators or vents). *
 - (3) Basements.
 - (4) Attic floor area with a ceiling height of 7 feet or less and where the space with the ceiling height of 7 feet or more is less than 4 feet wide, as measured from the attic floor or floor joists if there is no floor, to the bottom of the roof rafters. *

Text Amendment #2018-0003
Sheds and Other Small Accessory Buildings

- (5) Open front porches and porticos in accordance with section 7-2504.
- (6) Free-standing garages to the rear of the main building in accordance with section 7-2505.
- (7) Architectural features up to a maximum projection of 30 inches extending beyond an exterior face of a building wall or column. *
- (8) Space under open balconies (decks) and similar structures projecting from the first floor or below. *
- (9) Space under open balconies and similar structures projecting from a floor above the first floor up to a maximum depth of 8 feet. *
- (10) Retractable awnings not enclosed by a wall, pole, or fence on three sides and that do not use poles or posts for structural support. *
- (11) Sheds and other small accessory buildings in accordance with section 7-202(B)(4).

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B. For properties except for those specified in subsection A. above, the floor area of the building or buildings (whether "main" or "accessory") on a lot or tract or tract of land is the sum of all gross horizontal areas under a roof on a lot. These areas shall be measured from the exterior faces of walls or any extended area under roof and are to be measured from the shared lot line in the case of party walls. It shall include all space which is deemed habitable space by the Virginia Uniform Statewide Building Code (USBC) or seven feet or more in height, whichever is less. It shall include all space within an above grade parking garage. This space shall be based on permanent construction whether or not provided with a finished floor or ceiling. Excluded from floor area shall be: *

- (1) Stairs and elevators. The term stairs includes ramps and other similar structures deemed necessary to provide access to persons with disabilities. *
- (2) Floor space used for utilities, which may include accessory water tanks, cooling towers, mechanical and electrical equipment, and any similar construction not susceptible to storage or occupancy (but not including ductwork, pipes, radiators or vents). *
- (3) Lavatories of which only a maximum of 50 square feet of each lavatory can be excluded. The maximum total of excludable area for lavatories shall be no greater than of 10% of gross floor area. *

Text Amendment #2018-0003
Sheds and Other Small Accessory Buildings

- (4) Basements (except shall be included for purposes of calculating the off-street parking requirements pursuant to Article VIII). *
- (5) Architectural features up to a maximum projection of 30 inches extending beyond an exterior face of a building wall or column. *
- (6) Space under open balconies (decks) and similar structures projecting from the first floor or below. *
- (7) Space under open balconies and similar structures projecting from a floor above the first floor up to a maximum of depth of 8 feet. *
- (8) Retractable awnings not enclosed by a wall, pole, or fence on three sides and that do not use poles or posts for structural support. *
- (9) Loading spaces of which only a maximum of 850 square feet for each required loading space per section 8-200(B)(2) can be excluded. *
- (10) Any floor area that was used as a private or public garage prior to [date of adoption] that had a headroom less than 7 feet 6 inches. *
- (11) Floor areas excluded as part of a development site plan that were approved prior to **[date of adoption]** within a Coordinated Development District. *
- (11) Sheds and other small accessory buildings in accordance with section 7-202(B)(4).

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7-202 - Permitted obstructions.

The following obstructions shall be permitted when located in a required yard and placed so as not to obstruct light and ventilation and when otherwise permitted by law:

- (A) In all yards:
 - (1) Open fences which do not exceed three and one-half feet in height.
 - (2) Awnings or canopies provided they do not project more than five feet in depth from the existing building face.
 - (3) Bay or display windows, projecting 20 inches or less into the yard and gutters, eaves, cornices, window sills, and roof overhangs projecting 30 inches or less into the yard. *

Text Amendment #2018-0003
Sheds and Other Small Accessory Buildings

- (4) Chimneys projecting 30 inches or less into the yard, provided that such projection does not reduce the width of the remaining side or rear yard to less than five feet.
 - (5) Arbors and trellises. If a wall on a dwelling on an adjacent lot has any windows or doorways that have a sill lower than eight feet, measured from grade, facing the shared property line and located within three feet of that shared property line, the new arbor or trellis' setback shall be five feet from that shared lot line. This setback from that shared lot line is required at the location of the affected window(s) or doorway(s) and is required to extend along the width of those window(s) or doorway(s) and shall extend for a minimum of five feet in each direction from that window or doorway.
 - (6) Flag poles which do not exceed 15 feet in height.
 - (7) Open stairs, provided that the stairs do not reduce a side or rear yard to less than five feet.
 - (8) Ramps and similar structures necessary to provide access for the handicapped.
 - (9) Porticos, provided that they do not extend more than six feet from the main building wall, do not extend more than nine feet in length, which dimensions include any roof overhang, and provided further that they remain open.
- (B) In any yard except a front yard:
- (1) Sandboxes, swings and other small items of children's play equipment.
 - (2) Clotheslines.
 - (3) Open and closed fences which do not exceed six feet in height. If a wall on a dwelling on an adjacent lot has any windows or doorways that have a sill lower than six feet, measured from grade, facing the shared property line and located within three feet of that shared property line, the new fence shall not exceed three and a half feet in height along the width of those window(s) or doorway(s). If the fence has a setback of five feet or more from that shared lot line, it is permitted to be taller than three and a half feet but shall not exceed six feet in height. This setback from that shared lot line is required at the location of the affected window(s) or doorway(s) and is required to

Text Amendment #2018-0003
Sheds and Other Small Accessory Buildings

extend along the width of those window(s) or doorway(s) and shall extend for a minimum of five feet in each direction from that window or doorway.

- (4) Sheds and other small accessory buildings ~~Small sheds, doghouses, dollhouses and structures used for storage, provided:~~
- (a) For lots developed with On land zoned R-20, R-12, R-8, R-5 or R-2-5 and used for single-family single and two-family dwellings, not located in a historic district, such structures may not exceed 80 100 square feet in floor area in the aggregate and eight feet ~~in may have a building height no greater than 10 feet height when measured at the structure's highest point.~~
 - (b) For lots developed with On land zoned and used for semi-detached or townhouse dwellings or single or two-family dwellings located within a historic district, such structures ~~may only be placed in the rear yard at the rear property line,~~ may not exceed 50 65 square feet of floor area in the aggregate and may have a building height no greater than eight feet seven feet in height when measured at the structure's highest point.
 - (c) If a wall of a dwelling on an adjacent lot has any windows or doorways that have a sill lower than eight feet, measured from grade, facing the shared property line and located within three feet of that shared property line, the new small shed or structure used for storage's setback shall be five feet, including any roof overhang, from that shared lot line. This setback from that shared lot line is required at the location of the affected window(s) or doorway(s) and is required to extend along the width of those window(s) or doorway(s) and shall extend for a minimum of five feet in each direction from that window or doorway.
- (5) Freestanding air conditioning machinery, provided it can be demonstrated to the director that it will not exceed a noise level of 55 decibels (55 dB(A)) when measured at any property line of the lot, and provided it is placed in a location which has the least adverse impacts to adjoining lots of those locations available.
- (6) Open terraces and decks not over two feet above the average level of the adjoining ground and two feet above ground at any property line of the lot but not including a roofed-over terrace or porch.

Text Amendment #2018-0003
Sheds and Other Small Accessory Buildings

- (7) Free-standing private garages to the rear of the main building in accordance with section 7-2505.
- (C) In the Old and Historic Alexandria and the Parker-Gray Districts, the requirement of sections 7-202(A)(1) and 7-202(B)(3) may be waived or modified by the board of architectural review where the board finds that a proposed fence would be architecturally appropriate and consistent with the character of the district.
- (D) In any residential zone a ground level covered open front porch is permitted to project a maximum of eight feet from the front building wall into the required front yard, or primary front yard if a corner lot, of a single-family, semi-detached, duplex or townhouse dwelling; provided that a special exception under section 11-1302 of this ordinance is approved.

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Attachment #2

DATA (180 ACCESSORY BUILDINGS)

Manufacturer	Size	Square Feet
Rubbermaid	2x2	4
	2x4	8
	2x4.5	9
	2x5	10
	3x7	21
	4x5	20
	4x4.5	18
	4.5x6	27
	5x6	30
	6x6	36
	7x7	49
	7x10	70
	7x11	77
DuraMax Building	2x5	10
	4x6	24
	4x8	32
	5x5	25
	5x8	40
	5x10	50
	6x6	36
	6x8	48
	7x7	49
	8x8	64
	8x10	80
	10x10	100
	10x13	130
	10x15	150
	10x18	180
	10x20	200
Suncast Tremont Gable	2x2	4
	4x7	28
	7x7	49
	7x8	56
	8x10	80
	8x13	104
	8x16	128
Suncast Covington	2x2	4
	2x3	6

Text Amendment #2018-0003
Sheds and Other Small Accessory Buildings

Manufacturer	Size	Square Feet
	2x6	12
	3x5	15
	3x7	21
	4x4	16
	4x6	24
	4x7	28
	4x8	32
	5x6	30
	6x8	48
	7x7	49
	7x8	56
	7x10	70
	8x10	80
	8x13	104
Lifetime Products	2.5x8	20
	3x8	24
	4.5x7	32
	5x8	40
	6.5x8	52
	7x7	49
	8x8	64
	8x10	80
	8x12.5	100
	8x15	120
	8x17.5	140
	8x20	160
	11x11	121
	11x13.5	149
	11x14	154
	11x18.5	204
Duramax Building Products	11x21	231
	3x10.5	32
	4x6	24
	4x8	32
	5x5	25
	5.25x8	42
	5x10.5	53
	6x6	36
	6x8	48
	7x7	49

Text Amendment #2018-0003
Sheds and Other Small Accessory Buildings

Manufacturer	Size	Square Feet
	8x8	64
	8x10.5	84
	10x10	100
	10.5x10.5	110
	10.5x13	137
	10x13	130
	10.5x15.5	163
	10x18	180
	10x21	210
	10x23.5	235
Keter	2.5x4.5	11
	2.5x4.75	12
	3x6	18
	4x6	24
	4x7.5	30
	6x8	48
	7x7.5	53
	7.5x9	68
	7.5x11	83
Arrow	2x7	14
	3x4	12
	4x6	24
	4x7	28
	4x8	32
	4x10	40
	5x6	30
	6x8	48
	6x10	60
	7x8	56
	7x10	70
	8x8	64
	8x10	80
	9x10	90
	10x10	100
	10x12	120
	10x14	140
	10x15	150
	10x20	200
	10x25	250
	10x30	300

Text Amendment #2018-0003
Sheds and Other Small Accessory Buildings

Manufacturer	Size	Square Feet
	12x17	204
	12x24	288
	12x31	372
	14x21	294
	14x31	434
Heartland	4x8	32
	8X8	64
	8x10	80
	8x12	96
	10x10	100
	10x12	120
	10X16	160
	12x12	144
	12x16	192
	12x20	240
	12x24	288
Best Barns	8x12	96
	10X10	100
	10x12	120
	10x14	140
	10x16	160
	12x12	144
	12x16	192
	12x20	240
	12x24	288
	16x20	320
	16x24	384
	16x28	448
	16x32	512
Cedarshed	2x4	8
	3X6	18
	3X8	24
	4x4	16
	4X8	32
	4x12	48
	6x6	36
	6x9	54
	6x10	60
	6x12	72
	8x8	64

Text Amendment #2018-0003
Sheds and Other Small Accessory Buildings

Manufacturer	Size	Square Feet
	8x10	80
	8x12	96
	8x16	96
	9x10	90
	10x12	120
	12x12	144
	12x14	168
	12x16	192
	14x16	224
	14X20	280
Outdoor Living Today	2x4	64
	3x6	18
	4x8	32
	6x9	54
	8x8	64
	8x12	96
	9X9	81
Leisure Season	3x2	6
	6x3	18
All Things Cedar	2x2	4
	2X3	6
	2x4	8
Count		180
Average		95
Median		64