## Salt Lake City // 2023 OFF-STREET PARKING STANDARDS MANUAL





DEPARTMENT OF COMMUNITY & NEIGHBORHOODS // PREPARED BY THE PLANNING DIVISION // VERSION 2.1 // 08.2023

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The standards of this manual can change, visit our website to ensure latest version of the manual.

www.slc.gov/planning/zoning

### **1.1 GENERAL OFF STREET PARKING DIMENSIONS**

- 1.1.1 All off-street parking designs shall conform to the accompanying standards and be approved by the Transportation Director or his/her designee.<sup>1</sup>
- 1.1.2 The dimensions for parking spaces and associated aisles are established by the Transportation Division and are set forth in *Table* 1 of this manual.<sup>2</sup>
- 1.1.3 Stalls shall be striped to 80% of the vehicle projection to encourage pulling further into the stall.<sup>3</sup>
- 1.1.4 Substandard stalls shall not be allowed in new uses or developments even when they are not needed to meet parking requirements.

Designated compact car stalls shall not be allowed. The dimensions given in the policy are for a 'one size fits all' design.<sup>4</sup>

- 1.1.5 Requests for parking angles other than those shown on *Table* 1 of this manual may be approved by the city Transportation Director or his/her designee.<sup>5</sup>
- 1.1.6 If a public alley is used as a parking aisle additional space shall be required on the lot to provide the full width of aisle as required on *Table* 1 of this manual.<sup>6</sup>
- 1.1.7 Tandem parking is allowed for single-family dwellings, two-family dwellings or twin homes.<sup>7</sup>
- 1.1.8 The dimensions of parking spaces in a valet attended parking lot can be modified with approval of the Transportation Director or his/her designee.<sup>8</sup>
- 1.1.9 Parking spaces in an automated parking garage are exempt from the off-street parking dimensions found in this Table 1 provided the design of the automated parking garage has been approved by the Transportation Director or his/her designee.<sup>9</sup>

<sup>1</sup> From SLC Engineering Standards – Section F1.c2.

<sup>2</sup> From current 21A.44.020.E(1).

<sup>3</sup> From SLC Engineering Standards – Section F1.c2.

<sup>4</sup> From SLC Engineering Standards – Section F1.c2.

<sup>5</sup> From current 21A.44.020.E(2)(B). Revised to reflect staff's redline edits.

<sup>6</sup> From current 21A.44.020.E(2)(C). Revised to reflect staff's redline edits.

<sup>7</sup> New provision to reflect staff's redline edits

<sup>8</sup> From current 21A.44.020.E(2)(D).

<sup>9</sup> From current 21A.44.020.E(2)(E).

#### Figure 1 // Diagrammatic Legend for Table 1



#### Table 1 // Off Street parking Dimensions<sup>10</sup>

Parking Angle	Stall Width	Vehicle Projection	Aisle Width	Wall-to-Wall Module Width	Interlock Reduction	Overhang Allowance
0	22'0"	8'3"	12'8"	29'2"	0'0"	2′0″
45	8'3"	16'10"	14'11″	48'7"	2′3″	2'0"
50	8'3"	17'5"	15'6"	50'4"	2′0″	2'0"
55	8'3"	17'11"	16'2"	52′0″	1'10"	2'1"
60	8'3"	18'3"	16'10"	53'4"	1′7″	2′2″
65	8'3"	18'6"	17'9"	54'9"	1′4″	2'3"
70	8'3"	18′7″	18'7"	55'9"	1′1″	2'4"
75	8'3"	18'6"	20'1"	57'1"	0'10"	2′5″
90	8'3"	17'6"	24'10"	59'10"	0'0"	2'6"

<sup>10</sup> Multiple adjustments have been suggested by staff to simplify the table so that it is more intuitive for the audience. Future adjustments to the table will be considered and made by the Transportation Department as part of future updates to the Off-Street Parking Standards Manual.

#### Table 1 // Continued

Parking Angle	Stall Width	Vehicle Projection	Aisle Width	Wall-to-Wall Module Width	Interlock Reduction	Overhang Allowance
0	22'0"	8'6"	11'11″	28'11"	0'0"	2'0"
45	8'6"	16'10"	14'2"	47'10"	2′3″	2′0″
50	8'6"	17'5"	14'9"	49'7"	2′0″	2'0"
55	8'6"	17'11"	15′5″	51′3″	1'10"	2'1″
60	8'6"	18'3"	16'1"	52'7"	1′7″	2'2"
65	8'6"	18'6"	17′0″	54'0"	1′4″	2'3"
70	8'6"	18'7"	17'10"	55'0"	1′1″	2'4"
75	8'6"	18'6"	19'4"	56'4"	0'10"	2'5"
90	8'6"	17'6"	24'1"	59'1"	0'0"	2'6"
0	22′0″	8'9"	10'8"	28'2"	0′0″	2'0"
45	8'9"	16'10"	13'5"	47'1"	2′3″	2'0"
50	8'9"	17'5"	14'0"	48'10"	2′0″	2'0"
55	8'9"	17'11″	14'8"	50'6"	1'10"	2′1″
60	8'9"	18'3"	15'4"	51'10"	1′7″	2'2"
65	8'9"	18'6"	16'3"	53'3"	1′4″	2′3″
70	8'9"	18'7"	17'1"	54'3"	1′1″	2'4"
75	8'9"	18'6"	18'7"	55'7"	0'10"	2'5"
90	8'9"	17'6"	23'4"	58'4"	0′0″	2'6"
0	22'0"	9'0"	9'5"	27′5″	0'0"	2′0″
45	9'0"	16'10"	12'6"	46'4"	2′3″	2′0″
50	9'0"	17'5"	13'3"	48'1"	2′0″	2′0″
55	9'0"	17'11″	13'11"	49'9"	1'10"	2′1″
60	9'0"	18'3"	14'7"	51'1"	1′7″	2'2"
65	9'0"	18'6"	15'6"	52'6"	1′4″	2'3"
70	9'0"	18'7"	16'4"	53'6"	1′1″	2'4"
75	9'0"	18'6"	17'10"	54'10"	0'10"	2′5″
90	9'0"	17'6"	22'7"	57'7"	0'0"	2'6"

### **1.2 DRIVE AISLES**<sup>11</sup>

1.2.1 Maneuverability around the end of the aisles (aisle cross-overs) is dependent on the minimum acceptable turning radius of the vehicle.

For one-way traffic, the minimum inside radius is 18 feet and the minimum outside radius is 28 feet. For two-way traffic, the minimum inside radius is 18 feet and the minimum outside radius is 36 feet.

If perimeter parking is provided, then the cross-over aisle dimension shall be the greater of that required for access to the stall or that required for turning.

1.2.2 The width of the drive aisle shall be increased by one foot when no curb stops are provided.





<sup>11</sup> From SLC Engineering Standards – Section F1.c2.

### **1.3 PARALLEL PARKING<sup>12</sup>**

1.3.1 Parallel parking spaces shall comply with the dimensional standards provided in *Figure 3: Parallel Parking Dimensional Standards*.

Figure 3 // Parallel Parking Dimensional Standards



#### 1.4 PARKING STALLS ADJACENT TO COLUMNS OR SIDEWALKS<sup>13</sup>

1.4.1 The stall width for parking spaces located adjacent to walls or columns, where door opening is impacted, shall be one foot (1') wider to accommodate door opening clearance and vehicle maneuverability.

Figure 4 // Dimensional Standards for Parking Adjacent to Columns or Side Walls



12 From SLC Engineering Standards – Section F1.c2 and current 21A.44.020.E(2)(A). Modified to reflect staff's redline edits from previous staff comments. 13 From SLC Engineering Standards – Section F1.c2.

### **1.5 ADA PARKING<sup>14</sup>**

- 1.5.1 The first ADA (handicap) stall shall be van accessible, sixteen feet (16') wide (eight foot (8') stall and eight foot (8') unload area).
- 1.5.2 The standard ADA stalls after that shall be a minimum of thirteen feet (13') wide (eight foot (8') stall and five foot (5') unload area).
- 1.5.3 The number and design of accessible parking spaces shall be pursuant to the International Building Code (IBC) as adopted in the Salt Lake City Code and the Americans with Disabilities Act (ADA), as amended.

Figure 6 // ADA Parking



<sup>14</sup> From SLC Engineering Standards – Section F1.c2.

### 2.1 MAXIMUM DRIVEWAY SLOPES AND CRITICAL ANGLES<sup>15</sup>

- 2.1.1 Driveways leaving a public right-of-way should not exceed a maximum slope of eight percent (8%) or (4.57°) from gutter to property line.
- 2.1.2 The slope should be transitioned beyond the property line no more than a maximum of sixteen percent (16%) or (9.09°) average grade to the parking pad.
- 2.1.3 Driveways cross-slopes of four percent (4%) to six percent (6%) or (2.3° to 3.4°) maximum.



Driveway Slope and Angle Requirements	Stall Width
A) Maximum approach angle	20.2° = 36.8%
B) Maximum departure angle	9.2° = 16.2%
C) Minimum running ground clearance	4.3"
D) Design vehicle wheelbase	10.8' (Salt Lake City Design = 11')
E) Maximum ramp breakover angle	8.2° (Salt Lake City Design = 10.5% (6°))
F) Crest of curve arc	Design vehicle wheelbase ÷ Maximum ramp breakover angle (Salt Lake City Design = 1.05)

#### Figure 6 // Diagrammatic Legend for Table 2



A) Maximum approach angle

- B) Maximum departure angle
- C) Minimum running ground clearance



D) Design vehicle wheel baseE) Maximum ramp breakover angleF) Crest of curve arc

<sup>15</sup> From SLC Engineering Standards - Section E2.b1.



# 2.2 VISUALLY CLEAR SIGHT ZONE AREAS AT VEHICULAR INTERSECTIONS<sup>16</sup>

- 2.2.1 Bushes, trees, and other types of vegetation as well as walls and fences can visually block pedestrians, bicyclists, and cars from being seen by drivers. To provide the needed visibility for safety, vegetation should be kept trimmed within the clear sight zone areas on both sides of a vehicular intersection as illustrated in Figures 8 and 9.
- 2.2.2 A clear sight zone area is achieved when vision is not blocked between thirty inches (30") and seven feet (7') above ground within the sight distance triangle area and between the sidewalk and the street.
- 2.2.3 Sight distance triangle areas are defined in the zoning ordinance (Section 21A.62.040).
- 2.2.4 A new proposed driveway needs to provide a five foot (5') clearance in the park strip between the edge of driveway and edge of obstacle such as trees, poles and fire hydrants as illustrated in *Figure* 9.





<sup>16</sup> From SLC Engineering Standards - Section E2.c2.



#### CLEAR ZONE AREAS | EXAMPLE OF CITY BLOCK WITH BUILDINGS



#### 2.3 ADDITIONAL PARKING ACCESS STANDARDS<sup>17</sup>

2.3.1 Access to additional parking shall be provided by either;

- A. Widening the approach from the street to match the width of the new driveway provided all provisions for driveways from 21A.44.060.B.3.c can be met;
- B. A driveway taper from the sidewalk at no less than a forty five degree (45°) angle with the remnant area in the front yard area landscaped with a minimum of shrubs and ground cover, provided that this option is not allowed if the remnant landscaped area is less than forty five (45) square feet or if curb, gutter and sidewalk are not present.

<sup>17</sup> Newly proposed section to clarify options for drive approaches to widened driveways.

#### Option A //



Option B //



### 3.1 MATERIALS<sup>18</sup>

- 3.1.1 All driveways, parking areas or lots, and loading berths shall be improved and maintained as hard surface according to the following standards:
  - A. Materials used for driveway and parking areas for manufacturing, commercial or multi-family residential uses are limited to the following:
    - 1) Concrete: Minimum four inch (4") depth that covers the entire area used for access, maneuvering, and parking;
    - 2) Asphalt: Minimum two and one-half inch (2 <sup>1</sup>/<sub>2</sub>") depth that covers the entire area used for access, maneuvering, and parking; or
    - 3) Masonry or stone pavers rated for vehicle weight that cover the entire area used for access, maneuvering, and parking.
  - B. Materials used for driveway and parking areas for any single-family, two-family, or twin home uses are limited to the following:
    - 1) Concrete: Minimum four inch (4") depth that covers the entire area used for access, maneuvering, and parking;
    - 2) Asphalt: Minimum two and one-half inch (2 ½") depth that covers the entire area used for access, maneuvering, and parking; or
    - 3) Masonry or stone pavers rated for vehicle weight that cover the entire area used for access, maneuvering, and parking;
    - 4) Sod block

#### **Driveway Surface Materials //**



<sup>18</sup> Newly proposed standards related to acceptable hard surface materials, which are currently defined to "concrete, asphalt, brick, stone, turf block, or other surface approved by the City Engineer that is suitable for vehicle traffic"



- 3.1.2 Driveway and parking spaces for single-family, two-family, or twin home uses can be formed as a continuous pad or as drive strips designed to accommodate the wheels of the vehicle.
  - A. Each drive strip should be between sixteen inches (16") and twenty four inches (24") wide.
  - B. The interior space between the drive strips may be filled with ground cover, landscaping or gravel, but not dirt or road base.
- 3.1.3 Surface Materials for Recreational Vehicle Parking
  - A. The accessory parking area for a recreational vehicle shall be constructed with:
    - 1) An approved hard surface material or drive strips as described in subsection 3.1.1 of this manual;
    - 2) A gravel or crushed concrete surface as an alternative surface material, provided:
      - The gravel or crushed concrete is at least four inches (4") deep, compacted, and is sized between half inch (1/2") to one and one half inch (1 1/2").
      - II) A poured concrete or masonry border with a minimum four inch (4") width and four inch (4") depth is constructed on all exterior sides of the surface with masonry being limited to either brick, stone or precast concrete.
      - III) Road-base or other materials shall not be substituted for gravel or crushed concrete.
      - IV) The surface material is properly maintained, kept free of weeds or other vegetation and is kept fully contained within the allowed area.
      - V) The portion of the driveway providing access to the accessory parking area is constructed with a material described in subsection 3.1.1 of this manual.

#### **Recreational Vehicle Parking //**



#### **Alternative Surface Materials //**

#### **Border Materials //**



### 4.1 LOCATION AND DISTRIBUTION<sup>19</sup>

- 4.1.1 Except for multi-family uses that have provided a portion of their required bicycle parking spaces in an enclosed facility within a secure location, bicycle parking spaces, shall be:
  - A. Located on the same lot as the principal use;
  - B. Located within a principal building or located outside a principal building in a location(s) that is no more than fifty feet (50') from the primary entrance of each principal building, and that does not interfere with pedestrian access to any primary entrance of a building;
  - C. Distributed to serve all buildings if the development has multiple buildings on one or more lots;<sup>20</sup>
  - D. Racks should:
    - 1) Be visible from within the building.
    - 2) Be placed in parking garages only if the garage serves employees (not visitors) and is staffed.<sup>21</sup>
    - Be connected to the right-of-way, sidewalk or bicycle lane by a path that is clearly distinguished from the parking lot and drive lanes by color, materials, surface texture, or grade separation.<sup>22</sup>

<sup>19</sup> From current 21A.44.050.B(4). Requirements simplified to avoid subjective standards.

Did not carry forward design standards from 21A.44.050.B(5).

<sup>20</sup> Revised to require distribution to different buildings, but not different entrances of a principal building.

<sup>21</sup> From SLC Engineering Standards – Section F1.f2

<sup>22</sup> From current 21A.44.050.B(4). Requirement simplified to avoid subjective standards.

### 4.2 PREFERRED BICYCLE RACK

- 4.2.1 Concrete Pier Foundations: On private property, rack feet may be submerged in concrete without hardware
- 4.2.2 Material: Galvanized, paint over galvanization, powder-coated, or stainless steel.

Figure 10 // Standard Dimensions for an Inverted "U" Rack



Inverted "U" (2 bike capacity)

### 4.3 BICYCLE RACK PARKING AREA DIMENSIONS

4.3.1 Bicycle parking stall dimensions shall be provided as illustrated in *Figure 11: Bicycle Parking Area Dimensions*.



### 4.4 UNPERMITTED RACKS

4.4.1 The following racks do not meet the bicycle parking standard and will not be permitted to meet the requirements of Salt Lake City's bicycle parking ordinance (Salt Lake City Code, Section 21A.44.080).

#### Figure 12 // Unpermitted Bicycle Racks



#### 4.5 BICYCLE PARKING AREA OUTLINE

4.5.1 It is recommended that paint or pavers be used to outline the footprint and discourage intrusion of merchandise, motor vehicles, etc., into the bicycle parking area.



### 4.6 COVERED BICYCLE RACKS

4.6.1 It is recommended that bicycle racks be installed under an overhang or roof (pictured), with a seven foot (7') minimum overhead clearance. The roof should cover the entire bicycle area footprint.



#### 4.7 CUSTOM RACK DESIGNS

- 4.7.1 Bicycle racks shall be approved by the Transportation Division on a case-by-case basis and shall:
  - A. Support the bicycle frame at two contact points;
  - B. Meet specifications for materials and diameter provided in Section 4.1: Preferred Bicycle Rack; and
  - C. Enable the frame and one wheel to be secured with a U-lock.

### 4.8 RACKS ON PUBLIC PROPERTY

4.8.1 Bicycle racks located on public property (sidewalk, park strip, etc.) shall be approved by the SLC Transportation Division's Design Section and City Property Management (see Section F1.g1, "Rack Install on City Property").<sup>23</sup>

<sup>23</sup> STAFF: This information was not provided in the materials we received for the manual. If it is available, we can include those standards here and remove the reference.