

Parking Lot: Traffic Review

- **Parking requirements**
- **Parking space and drive aisle dimensions**
- **Accessible spaces and routes**
- **Visibility triangles**
- **Parking lot surface**
- **Cross Access/Joint Parking Agreements**



Parking Requirements

- **Provide the number of parking spaces required per the table found in Sec. 702.C**
- **Common uses include:**
 - **Retail (less than 50k sq. ft.) – 1 space per 300 net* sq. ft.**
 - **Office (less than 50k sq. ft.) – 1 space per 300 net* sq. ft.**
 - **Fitness – 1 space per 150 net* sq. ft.**
 - **Medical, Dental & Veterinarian – 1 space per 200 gross sq. ft.**
 - **Restaurant – 1 space per 50 net* sq. ft.**

*** Net square footage is taken at 80% for retail, office and fitness, and 65% for restaurants. A floor plan can be submitted if the numbers are lower.**



Retail Centers

- **Greater than 50,000 square feet.**
- **4 spaces per 1,000 square feet tenant leasable area, 4.5 spaces per 1,000 square feet for centers greater than 350,000 square feet.**
- **Tenant leaseable area is taken as 95% unless floor plan is provided.**
- **Parking surcharges are applied if public assembly uses exceed 20% or 15% if the center was built prior to 1999.**
- **Parking for hotels, theaters, schools and medical uses are calculated separately.**





Parking Calculations for Centers Built After 1999

- Subtract any area designated as hotels, theaters, schools and medical offices from gross area. This new area will be hereafter referred to as adjusted gross area (AGA). Parking for hotels, theaters, schools and medical offices shall be calculated separately. (A)
- Calculate 1 space per 250 square feet for the tenant leaseable area (typically 95% of AGA). (B)
- Determine the percentage of gross public assembly uses (Gross Public Assembly/AGA X 100%). If the gross public assembly exceeds 20%, a parking surcharge will be required.
- Determine the area of gross public assembly uses that exceeds 20%. This area will be called surcharge area (SA). Determine the ratio of each type of public assembly use (i.e. restaurants, outdoor dining, health clubs, etc.) and split up the SA into each use.
- Calculate the surcharge using the base parking requirements for each use. The net area for the SA (i.e. 65% for restaurants, 100% for outdoor dining, 80% for health clubs, etc.) should be used for the calculation. (C)
- To avoid double charging for the same area, subtract 1 space per 250 square feet of the tenant leaseable area of the SA. (D)
- Determine the total parking required. $(A + B + C - D = \text{Total Required})$

Parking Calculations for Centers Built Prior to 1999

- Subtract any area designated as hotels, theaters, schools, fitness centers and medical offices from gross area. This new area will be hereafter referred to as adjusted gross area (AGA). Parking for hotels, theaters, schools, fitness centers and medical offices shall be calculated separately. (A)
- Calculate 1 space per 250 square feet for the tenant leaseable area (typically 95% of AGA). (B)
- Determine the percentage of net public assembly uses (Net Public Assembly/AGA X 100%). If the net public assembly exceeds 15%, a parking surcharge will be required.
- Calculate the surcharge at 1 space per 100 square feet for the net public assembly area. (C)
- Determine the total parking required. $(A + B + C = \text{Total Required})$



Reductions in Parking Requirements

- **Downtown Code**
- **Transit Overlay District**
- **Infill Area**
- **Village Cores (Use Permit required)**
- **Shared Parking Model**



Parking Space and Drive Aisle Dimensions

- **Retail, restaurant and other public assembly uses**
 - 9.5' X 19' with 24' aisle or 9.5' X 18' with 26' aisle (25' for single loaded parking)
 - 9' wide spaces can be used for 50% of the spaces if double striping is used
- **All other uses**
 - 8.5' X 19' with 24' aisle or 8.5' X 18' with 26' aisle (25' for single loaded parking)
- **Use 2.5' overhang when parking is adjacent to curb or sidewalk**
- **Refer to parking area dimensions for angle parking requirements**



**PARKING AREA DIMENSIONS FOR MULTIFAMILY, OFFICE AND INDUSTRIAL
8.5 X 18 PARKING SPACES WITH 26' AISLE**

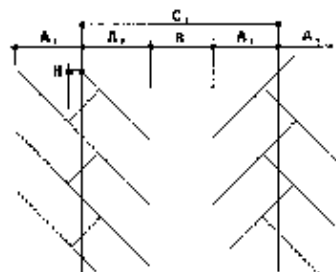
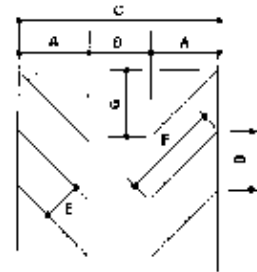
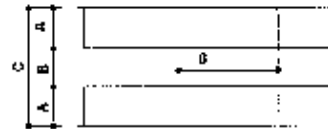
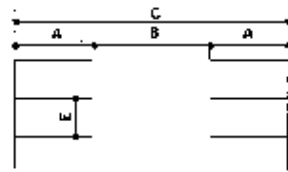
**DEVELOPMENT SERVICES DEPARTMENT
CITY OF PHOENIX**

>	A	B	A+B	C	D	E	F	G	H	A ₁	C ₁
ANGLE OF PARKING	DEPTH OF STALL	AISLE WIDTH		WIDTH OF BAY	CURB LENGTH	WIDTH OF STRIPE	LENGTH OF STRIPE	WASTE SPACE	DEPTH OF OVERHG	DEPTH OF STALL	WIDTH OF AREA
0	8.5	12 *	20.5	29	23 **						
30	16.4	13 *	29.4	45.8	17	8.5	32.7	28.3	3.7	12.7	38.4
45	18.7	14 *	32.7	51.4	12.0	8.5	26.5	18.7	3.0	15.7	45.4
60	19.8	20	39.8	59.6	9.8	8.5	22.9	11.4	2.1	17.7	55.4
90	18	26	44	62	8.5	8.5	18				

* The Fire Department may require wider isles for emergency access.

** Curb length may be reduced to 16' for open end stalls.

NOTE: Paint stripe width
will be 4" minimum.



WHERE AN ALLEY IS CREDITED AS MANEUVERING AREA FOR A PARKING SPACE, THIS POLICY WILL APPLY SUBJECT TO THE APPROVAL OF A VARIANCE THROUGH THE ZONING ADMINISTRATOR FOR ALLEY MANEUVERING.

ANGLE OF PARKING	MIN. DEPTH ON PVT. PROP.	TOTAL DEPTH INCL. ALLEY
45	18.7	31.7
60	19.8	37.8
90	18	42

TRAFFIC ENGINEERING POLICY T-10-1R
EFFECTIVE DATE: February 3, 1999

REVISED: January 14, 2009

TRAFFIC ENGINEERING CODE CONSISTANCY COORDINATOR:

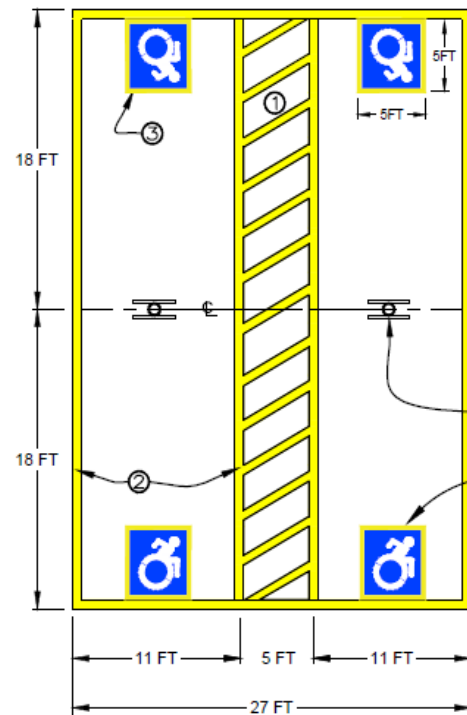
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Accessible Parking

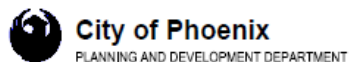
- **Number of spaces required per Sec 702.G**
- **Accessible parking requirements are based on the number of parking spaces provided**
- **For parking lots with covered spaces, accessible spaces must be provided at the same ratio**
- **Refer to Accessible Parking Requirement handout for dimension, signing and striping requirements**



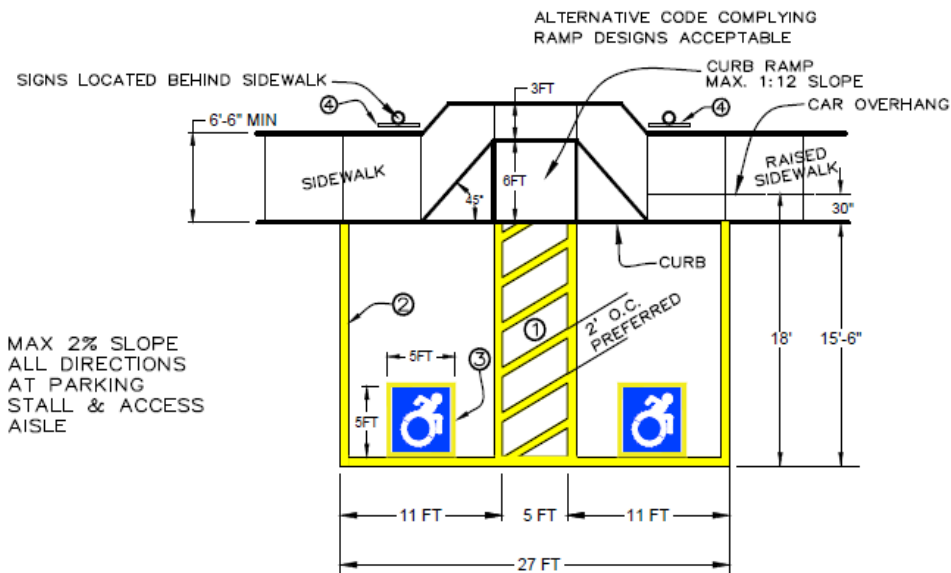


BACK TO BACK ACCESSIBLE PARKING

ACCESSIBLE PARKING REQUIREMENTS
PER CITY OF PHOENIX ZONING ORDINANCE SEC. 702.G
Sheet 2 March 2013



MAX 2% SLOPE
ALL DIRECTIONS
AT PARKING
STALL & ACCESS
AISLE



DOUBLE ACCESSIBLE PARKING

NOTES:

- ① 5 FT ACCESS AISLE REQUIRED. ACCESS AISLES LOCATED ON EITHER SIDE OF THE PARKING SPACE EXCEPT FOR ANGLED PARKING SPACES WHICH SHALL HAVE ACCESS AISLES LOCATED ON THE PASSENGER SIDE OF THE PARKING SPACES.
- ② ACCESS SPACES MUST BE PROMINENTLY OUTLINED IN COLORS OR MATERIALS CONTRASTING FROM REGULAR PARKING SPACES
 - * 4" OUTLINE STRIPING REQUIRED (TRAFFIC YELLOW PREFERRED)
 - * ACCESS AISLE SHALL BE CLEARLY MARKED (CROSSHATCHING STRIPES SPACE 2 FT O.C. PREFERRED)
- ③ INTERNATIONAL ACCESSIBLE SYMBOL REQUIRED, BLUE AND WHITE SYMBOLS PREFERRED. A SYMBOL CAN BE DISPLAYED WITHOUT BLUE BACKGROUND. PREFERRED SYMBOL SHOWN.
- ④ ACCESSIBLE SIGN REQUIRED – MUST NEVER BE OBSCURED. RECOMMENDED LOCATION IS TO BE NO GREATER THAN 10 FEET FROM CURB.
- ⑤ ONE OUT OF EVERY 6 SPACES SHALL BE VAN ACCESSIBLE AND HAVE A MINIMUM VERTICAL CLEARANCE OF 8 FT 2 INCHES AT GARAGE AND UNDER CONOPIES. THE VERTICAL SIGN SHALL CONTAIN THE DESIGNATION "VAN ACCESSIBLE"
- ⑥ CURB STOPS ARE REQUIRED WHERE SIDEWALKS ARE FLUSH WITH THE PARKING SPACES. CURB STOPS AT OTHER LOCATIONS ARE OPTIONAL.
- ⑦ SEE PARKING AREA DIMENSION POLICIES FOR ANGLED PARKING.
- ⑧ WHERE A TOTAL OF 4 OR FEWER PARKING SPACES ARE PROVIDED, IDENTIFICATION OF ACCESSIBLE PARKING SPACES SHALL NOT BE REQUIRED. ACCESSIBLE PARKING SPACE DIMENSIONS SHALL BE MAINTAINED AND THE ACCESS AISLE SHALL BE PROVIDED.
- ⑨ SEE ZONING ORDINANCE SECTION 702 AND SHEET 3 FOR THE LAYOUT SPECIFICATION FOR ASSIGNED MULTI FAMILY ACCESSIBLE PARKING SPACES.



Visibility Triangles

- **10' X 20' at driveways**
- **15' X 33' at local-arterial intersections**
- **33' X 33' at all other intersections**
- **No landscaping or structures over 36" and no parking permitted in visibility triangles**



Parking Lot Surface

- **All parking and maneuvering areas must be on either asphalt or concrete**
- **Alternative surfaces must be approved by the Zoning Administrator**



Cross Access / Joint Parking Agreements

- **Cross access/joint parking agreements must be submitted when required parking is located on a separate lot.**



Questions?

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