

---

## SIDEWALK DESIGN

### 3.1 SIDEWALK GRADES

1. **Sidewalk Cross-Section Grade:** The maximum cross slope for sidewalks shall be 2%. For sidewalks located across an entrance, the driveway grade may need to be adjusted to meet this maximum. For commercial and other areas where a wide sidewalk creates grade problems for access drives, it should be noted that only the minimum sidewalk width (4') must be constructed at a maximum 2% cross slope across the entrance. The remaining width of the sidewalk may be constructed at a grade closer to that of the drive. For commercial entrances, the portion of the sidewalk that crosses the driveway should be delineated by joint lines so it is clear where the sidewalk crosses the entrance. (See Figure 2.14 and Chapter 5, Section 5, Figure 5.16A, Figure 5.16B, and Figure 5.17).
2. **Sidewalk Longitudinal Grade:** The grade of the pedestrian sidewalk shall not exceed the grade established for the adjacent roadway. However, along roadway grades which are less than 5%, the sidewalk longitudinal grade may be steeper than the roadway, provided the sidewalk longitudinal grade is less than 20:1 (5%).
3. **Parking:** The parking grade (between the sidewalk and street) shall be a minimum of 2% for parking widths 10' wide or less and 4% for parking width greater than 10' unless the Jurisdiction approves a special grade.

---

### 3.4. SIDEWALK THICKNESS

The sidewalk thickness shall be 4" (minimum) of Portland cement concrete. Where the sidewalk crosses the driveway, the thickness shall be 6" (minimum) or the thickness of the driveway, whichever is greater. The 6" thickness also applies to curb ramps.

### 3.5. SUBGRADE

The subgrade shall be carefully brought to the elevation of the bottom of the proposed slab. The subgrade in embankments and fill shall be compacted in a maximum lift of six (6) inches or less. All soft spongy or yielding spots and all vegetation or other perishable matter shall be removed and refilled with suitable material approved by the Jurisdictional Engineer.

---

### 3.6 JOINTS

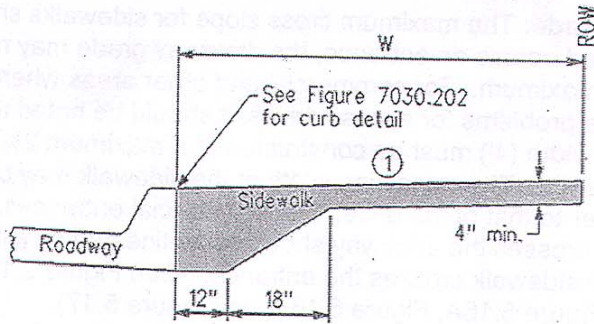
Isolation joints should be installed whenever sidewalk is placed against roadway pavement, parking lots, buildings, or structures. Isolation joints should be placed on the property side of the driveway and sidewalk intersection.

---

### 3.8. PERMITS

The builder shall obtain sidewalk permits from the Jurisdiction prior to construction of any sidewalk. The Jurisdiction shall be notified 24 hours before starting work for inspection and approval of the work.

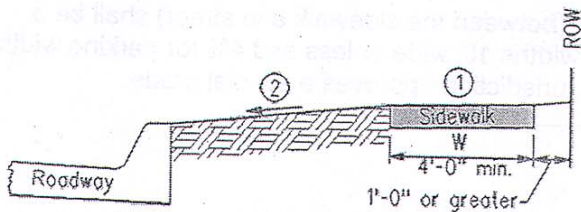
FIGURE 3.1 - CLASSES OF SIDEWALKS AND RECREATIONAL TRAILS  
(Corresponds to Figure 7030.201 in the SUDAS Standard Specifications)



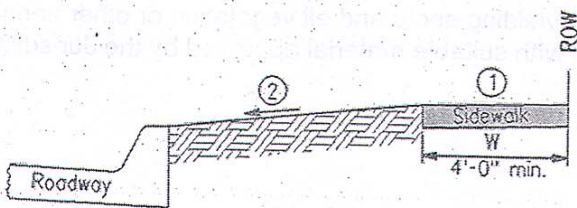
**CLASS A SIDEWALK**  
(Sidewalk extends from back of curb to ROW)

- ① Maximum cross slope of sidewalk (including sidewalk through driveway) is 2%.
- ② Parking slopes:  
Less than 10 feet wide: 1/4 inch per foot  
Over 10 feet wide: 1/2 inch per foot.  
  
Special grade may be specified in the contract documents.

W = Sidewalk width as specified in the contract documents.

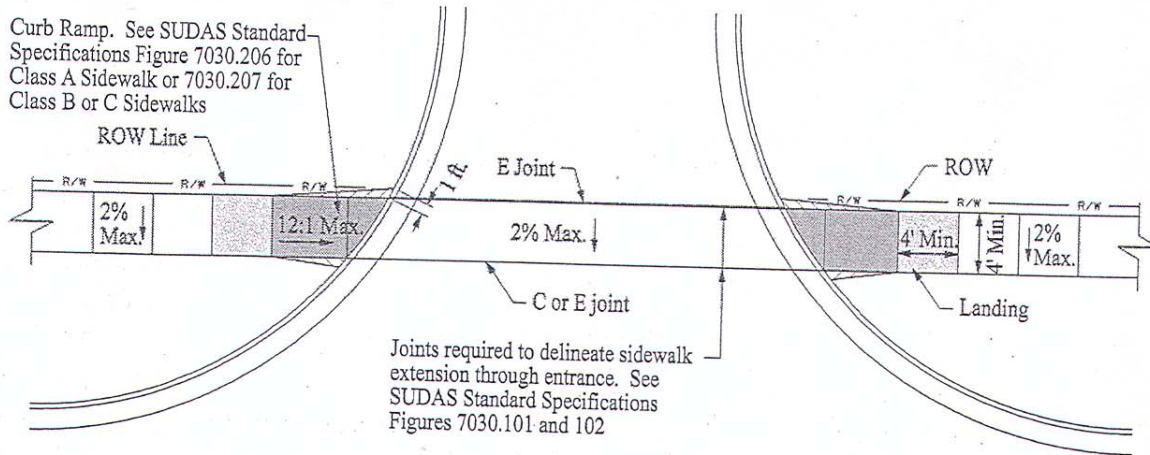


**CLASS B SIDEWALK**



**CLASS C SIDEWALK**

FIGURE 3.6 - TYPICAL COMMERCIAL ENTRANCE WITH CURB RAMP



PLAN VIEW - TYPICAL COMMERCIAL ENTRANCE WITH CURB RAMP

SIDEWALK LONGITUDINAL AND TRANSVERSE SLOPE TRANSITION DISTANCE

If the above grade restrictions required a depressed sidewalk through the driveway, a transition section shall be provided between the normal sidewalk grade and the depressed section. The transition section shall vary both longitudinally and transversely. As a general rule, use the following transition lengths:

<u>Elevation Difference from normal sidewalk grade</u>	<u>Transition distance</u>
1 to 2"	8'
2 to 4"	12'
4 to 6"	16'
Greater than 6"	Desirable max. slope is 16:1 Absolute max. slope is 12:1