## Grade

Where pedestrian access routes are contained within a street or highway right-of-way, the grade of pedestrian access routes shall <u>not</u> exceed the general grade established for the adjacent street or highway. Where pedestrian access routes are not contained within a street or highway right-of-way, the grade of pedestrian access routes shall be 5 percent maximum.

## Slope

Cross slope shall not exceed 48:1 (2%). A level area with minimal cross slope is necessary for accessible passage across a driveway. Driveway aprons constructed like a ramp with steep short side flares can render a section of sidewalk impassible, especially when encountered in series as in residential neighborhoods.

## **Surfaces**

Sidewalk surfaces shall be **stable**, **firm and slip resistant** and shall be generally in a continuous plane with a minimum of surface warping. "Materials such as gravel, wood chips, or sand, often used for outdoor walkways, are neither firm nor stable, nor can they generally be considered slip-resistant. Thus, these materials do not constitute an accessible route. However, some natural surfaces, such as compacted earth, soil treated with consolidants, or materials stabilized and retained by permanent or temporary geotextiles, gridforms, or similar construction may perform satisfactorily for persons using wheelchairs and walking aids."

**Changes in level** up to  $\frac{1}{4}$  inch may be vertical and without edge treatment. Changes in level between  $\frac{1}{4}$  inch and  $\frac{1}{2}$  inch shall be beveled with a slope no greater than  $\frac{1}{2}$  inch shall be accomplished by means of a ramp.

Where sidewalks cross rail systems at grade, the surface of the pedestrian access route shall be level and flush with the rail top at the outer edge and between the rails.

**Grates** in sidewalks shall have spaces no greater than ½ inch wide in the direction of traffic flow. If grates have elongated openings, they shall be placed so that the long dimension of the opening is perpendicular to the dominant direction of travel. All efforts shall be made to avoid grates being located in pedestrian access routes. \*

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<sup>\*</sup> Rev. 7/15