

Sidewalk Defects

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ADA Standards

- Americans with Disabilities Act (ADA)
 - United States Access Board
 - <http://www.access-board.gov>
- Revised Draft Guidelines for Accessible Public Rights-of-Way
 - November 23, 2005
 - <http://www.access-board.gov/prowac/draft.htm>

Distress Rating System

**Overland Park
Sidewalk Distress Identification Manual**

May 8th, 2006

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- Overland Park, KS
- Assigns *Severity Ratings* to various types of sidewalk defects
- Useful when conducting wide-area evaluations
 - Prioritize repairs based on severity

Missing Walk



- **ADA Standards**
 - Required to “...connect pedestrian elements and facilities required to be accessible.”
- **FdL Standards**
 - Sidewalk required in all new developments
 - May be ordered for existing areas

Narrow Walk



- **ADA Standards**
 - 4 feet minimum width
 - Passing spaces (5 ft wide) required every 200 feet if under 5 ft wide
- **FdL Standards**
 - 5 feet wide in new areas
 - 4.5 feet wide in existing areas

Missing Curb Ramp



- **ADA Standards**
 - Required with street or sidewalk construction or reconstruction (including resurfacing)
- **FdL Standards**
 - Added as identified during field inspections or due to complaints
 - Installed as corner lots are developed

Vertical Joint Displacement



- ADA Standards
 - $\frac{1}{4}$ " maximum
 - $\frac{1}{4}$ " to $\frac{1}{2}$ " – 1:2 bevel allowed
- FdL Standards
 - $\frac{1}{2}$ " in direction of travel in walking path
 - $\frac{3}{4}$ " perpendicular to direction of travel or outside of walking path
 - Mudjacking allowed

Wedges / Patches



- **ADA Standards**
 - Covered under vertical displacement
 - $\frac{1}{4}$ " to $\frac{1}{2}$ " – 1:2 bevel allowed
- **FdL Standards**
 - Wedges are temporary fixes until sidewalk can be replaced (within one year)
 - Flexible patches may be approved (crack filler)

Horizontal Displacement (Gaps)



- **ADA Standards**
 - “...Shall not permit passage of a sphere more than 0.5 inches in diameter.”
- **FdL Standards**
 - $\frac{1}{2}$ " in direction of travel in walking path
 - $\frac{3}{4}$ " perpendicular to direction of travel or outside of walking path
 - Flexible filler may be allowed (crack filler)

Longitudinal Cracks



- **ADA Standards**
 - Minimize “surface discontinuities,” including texture
 - Vertical and horizontal displacement standards
- **FdL Standards**
 - 1/8” horizontal separation
 - Vertical displacement
 - Multiple panels

Vegetation



- **ADA Standards**
 - Minimize “surface discontinuities,” including texture
 - Vertical and horizontal displacement standards
- **FdL Standards**
 - 1/8” horizontal separation
 - Vertical displacement
 - Multiple panels

Transverse Cracks



- **ADA Standards**
 - Minimize “surface discontinuities,” including texture
 - Vertical and horizontal displacement standards
- **FdL Standards**
 - 1/8” horizontal separation
 - Vertical displacement
 - Multiple directions
 - Missing pieces (popouts)
 - “Adjacency”

Spalling / Popouts



- **ADA Standards**
 - Minimize “surface discontinuities,” including texture
 - Vertical and horizontal displacement standards
- **FdL Standards**
 - Popouts 1/2” deep and 2” diameter
 - 25% surface spalling

Cross Slope



- ADA Standards
 - Maximum 2% cross slope
- FdL Standards
 - Reverse pitch (street to house) not allowed
 - Excessive cross slope not allowed
 - Not explicitly measured
 - Typically part of joint displacement caused by terrace tree

Grade Change (Sunken)



- **ADA Standards**
 - Follow street grade
 - 11% maximum geometric grade change recommended
- **FdL Standards**
 - Slope not explicitly measured
 - Condemned if joint displacement or cracking standards are exceeded
 - Suspected drainage issues

Questions?

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