



SIDEWALK

Strictly speaking, the sidewalk is the paved portion of the overall street right-of-way intended to provide for pedestrian through travel. For that reason, and to avoid confusion, in this guide the term “sidewalk” is used only to refer to the **through zone** of the pedestrian zone. It is important to remember that the entire pedestrian zone (which is sometimes referred to as the “sidewalk”) includes the frontage zone and parkway zone, in addition to the sidewalk through zone.

Access and movement for people of all ages and abilities is critical in sidewalk design. Sidewalks must permit the unimpeded travel of individuals walking and those using mobility assistance devices year round.

Sidewalks contribute to the social environment of the city and should be designed to comfortably accommodate two people walking abreast and still permit the passing of one individual in the oncoming direction.

USE

- Sidewalks are needed on every street in the city. The one exception is specifically designed and managed shared streets with low volumes of vehicle traffic where pedestrians may safely and comfortably mix with the range of other street users (such as on very low volume Neighborhood Residential streets in modern neighborhoods).
- Sidewalks should be provided on both sides of the street—this is particularly true on commercial streets (Neighborhood Business and Urban Center), streets with higher volumes of auto traffic (Network Residential and Crosstown Connector), and streets with transit service or industrial uses (Maker/Industrial Streets). Explicit justification is needed when sidewalks are provided on only one side of the street.
- The effective width, and the dimension that should be used to calculate sidewalk width, is established by drawing a straight line parallel to the curb along the inner edge of any and all obstacles in the Frontage Zone of the street and any and all obstacles in the Parkway Zone.
- Pedestrians are the priority users of the sidewalk. Bicycling on the sidewalk is prohibited in downtown³ and should generally be discouraged elsewhere because of the different travel

³ Grand Rapids Municipal Code Article 8, Sec. 10.132. - Sidewalks, Bicycle Lanes and Bicycle Trails.

characteristics of people walking versus bicycling. The provision of low stress community bicycle facilities can reduce bicyclist use of sidewalks.

- Some bicyclists, especially children and those uncomfortable with riding in the street, choose to ride on sidewalks. However, since sidewalks are designed for walking speeds, people who choose to ride on sidewalks must maintain a low rate of speed and exercise caution around people walking, provide generous space when passing pedestrians, always yield to pedestrian movements, and be aware of potential safety conflicts with motor vehicles, especially when crossing driveways, alleys, and intersections.
- Motor vehicles, including motorcycles or motor scooters, are prohibited on sidewalks.⁴ Drivers crossing the sidewalk at driveways and alleys and at crosswalks at intersections must yield to people walking and/or bicycling.⁵
- Vehicle Parking and loading/unloading shall not occur within or across a sidewalk.

4 [Michigan Legislature: Michigan Vehicle Code \(Public Act 300 of 1949, as amended\)](#)

5 [Michigan Legislature: Michigan Vehicle Code \(Public Act 300 of 1949, as amended\)](#)

DESIGN

- Sidewalks should be continuous throughout the city and connected across streets with marked or unmarked crosswalks.
- Accessible curb ramps must be provided at every legal crossing, unless there are safety considerations due to the intersection operations or configuration.
- Sidewalks should have a minimum clear, unobstructed width of five feet in residential areas or six feet in all other areas, except in areas with design constraints, where a minimum of four feet would be permissible.
- Sidewalks should be appropriately scaled to anticipated pedestrian volumes. Narrow sidewalks with high pedestrian volumes lead to crowding and discomfort. Wide sidewalks with few pedestrians feel desolate and empty.
- Sidewalks must have adequate cross slope to facilitate stormwater runoff, but not so great as to introduce a noticeable and uncomfortable slope to sidewalk users (typically less than two percent).⁶
- Sidewalks should be designed with the minimal grade practical given street topography. Grades greater than 8 percent should be avoided to the extent possible.⁷

6 United States Access Board. Proposed Guidelines for Pedestrian Facilities in the Public Right-of-Way. 36 CFR Part 1190. Cross Slope (R302.6) <https://www.access-board.gov/guidelines-and-standards/streets-sidewalks/public-rights-of-way/proposed-rights-of-way-guidelines/chapter-r3-technical-requirements>

7 United States Access Board. Proposed Guidelines for Pedestrian Facilities in the Public Right-of-Way. 36 CFR Part 1190.



- Sidewalks are to continue at grade across driveways, alleys and service drives. Sidewalk materials should continue through these crossings to indicate the priority of the pedestrian zone.
 - Sidewalks should be constructed of concrete. Brick or alternative materials may be used upon approval by city staff and completion of a maintenance agreement. Materials should be consistent, at a minimum, along an entire block face, and consistent materials should be used throughout a distinct district.
 - The sidewalk surface must be firm, stable, smooth, slip-resistant, well-maintained, and free of tripping hazards. The sidewalk zone should have a consistent material along the entire block face. Coursing is discouraged and should be avoided, as it frequently has settlement issues.
 - Objects hanging over the sidewalk, such as signs, banners, planter boxes or baskets, or other features must provide at least seven feet of clear vertical height, or have an encroachment permit. In areas where it is legal to ride on the sidewalk, clearance should accommodate bicyclists operating height of 8.3 feet.
 - Sidewalks and the adjacent parkways are typically separated from vehicular travel with a raised curb. Shared streets, also known as woonerfs or home zone streets, are the exception. Shared streets are very slow speed, low volume streets that do not provide a distinct zone for pedestrians, static activities, or vehicular travel—all uses mix together and share the space equally.
 - Sidewalks should be level with building entrances. Where they are not, curb ramps compliant with the Americans with Disabilities Act (ADA) should be provided either outside the right-of-way or within the frontage zone.
 - Planters may be used in the frontage zone to keep pedestrians away from door and driveway openings.
 - Whenever possible, sidewalks should not be immediately adjacent to travel lanes. Sidewalks are more comfortable when buffered from moving traffic by parked cars and parkway space.
 - Sidewalks should be appropriately lit. Pedestrian oriented lighting is desired in areas with significant pedestrian use. Pedestrian crossings should always be well lit.
-  Sidewalks may utilize flexible porous pavements with maintenance agreements in place. Flexible porous pavement allows stormwater to pass through the pavement to a stone storage layer beneath. The water then either infiltrates into the soil or flows through an underdrain to the storm drain network. It is effective in storing, infiltrating, and treating runoff from impervious surfaces. A variety of flexible porous pavements exist, including concrete pavers, paving grids, pervious concrete, porous asphalt, porous rubberized asphalt, and glass porous paving.



 Parkway are ideal for the infiltration of sidewalk stormwater runoff through green infrastructure. If unimproved, the parkway can infiltrate the runoff from the sidewalk. If improved with bioswales and in the right soils, parkways adjacent to the road can take runoff from the street too, not just the sidewalk.

SPECIAL CONSIDERATIONS

- Sidewalk materials and patterns may vary in certain districts of the city per locally adopted streetscape plans or with city approval. Sidewalk materials and designs should not vary property by property.
- Continuous safe and accessible pedestrian walkways should be maintained even in areas of construction. Maintenance of traffic plans should address pedestrian connections and minimize repeated pedestrian crossings to navigate construction zones.

OPERATIONS AND MAINTENANCE

- Sidewalks must be kept clear of snow and ice and should never be used for snow storage.
- Property owners are responsible for the day to day clearing of sidewalks from snow, ice, and other debris to maintain a clear and accessible path of travel.⁸
- The City is responsible for general sidewalk maintenance and construction.
- Continuous, safe and accessible pedestrian walkways should be maintained even in areas of construction.⁹

REFERENCES

- United States Access Board. Proposed Guidelines for Pedestrian Facilities in the Public Right-of-Way. Published in the Federal Register on July 26, 2011. 36 CFR Part 1190. <https://www.access-board.gov/guidelines-and-standards/streets-sidewalks/public-rights-of-way/proposed-rights-of-way-guidelines>



⁸ Grand Rapids Municipal Code. Chapter 58. Article 3. Snow and Ice Removal and Article 7. Cleaning Sidewalks.

⁹ Grand Rapids Municipal Code. Chapter 58. Article 4. Obstructing Streets. https://www.municode.com/library/mn/grand_rapids/codes/code_of_ordinances?nodeld=COOR_CH58STSIOTPUPL_ARTIINGE_S58-4OBST