

# Walkway

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## **Walkway**

### **Definition:**

Defines a walkway as "a passage or path for walking along, esp. a raised passageway connecting different sections of a building or a wide path in a park or garden." The word is used to describe a footpath as well.

A walkway more specifically refers to a covered or raised passage in a building, typically connecting separate buildings.

### **Purpose:**

To provide guidance on the preferred methods for routing pedestrians and sometimes to provide a safe route for the pedestrians through work zones occupying public space when a traffic control plan is required (sometimes, the walkway must be covered in the working areas)

It also comes as a part of landscape designs in gardens, houses and buildings.

### **Covering the walkway floor:**

There are two types of walkway paving:

Natural pavers: which consist of laying natural stone with certain shapes or random shapes, and sometimes gravel or/ and wood

Concrete pavers: Concrete pavers fall into two categories:

interlocking and architectural slab. Interlocking pavers were invented by the Dutch after World War II, when brick, their traditional paving material, was in short supply. Billions of the chunky blocks found their way onto European roads, and many of the originals are still in good shape despite of many years of traffic.

Architectural slab pavers provide a more aesthetic alternative. Though these thinner cakes can't handle auto traffic like their interlocking kin (and are slightly more sensitive to the vagaries of the freeze-thaw cycle), they neatly mimic the look of brick or natural stone. Best of all, they do it for much less than the real deal.

All concrete pavers contain sand, gravel, Portland cement, and water, but their durability and texture vary depending on how they're made.

While plain gray concrete is still the most often surface installed, as seen on most concrete sidewalks, there are numerous decorative concrete alternatives sure to dress it up, taking your sidewalk from boring to amazing.

#### **Difference between interlocking paver and Architectural slab: Interlocking**

- Edge spacers create uniform joints.
- Made with stiff, very strong concrete mix.
- Thick; suitable for all uses, including driveways.

#### **Architectural Slab**

- No edge spacers.
- Molded from wetter concrete to resemble stone or brick.
- Sometimes thin; not good for driveways.

#### **Safety Benefits of Walkways, Sidewalks, and Paved Shoulders:**

##### **Walkways:**

Annually, around 4,000 pedestrians are killed in traffic crashes with motor vehicles in the United States. Pedestrians killed while "walking

along the roadway" account for almost 1 percent of these deaths. Many of these tragedies are preventable. Providing walkways separated from the travel lanes could help to prevent up to 11 percent of these "walking along roadway crashes."

Walkways can be created either by providing stabilized or paved surfaces separated from the roadway, or by widening paved shoulders. These treatments can not only improve the safety of pedestrians, but also make pedestrian trips more viable.

### **Benefits of Sidewalks**

Side walks separated from the roadway are the preferred accommodation for pedestrians. Sidewalks provide many benefits including safety, mobility, and healthier communities.

In addition to reducing walking along roadway crashes, sidewalks reduce other pedestrian crashes. Roadways without sidewalks are more than twice as likely to have pedestrian crashes as sites with sidewalks on both sides of the street.

Providing walkways for pedestrians dramatically increases how well pedestrians perceive their needs are being met along roadways. The wider the separation between the pedestrian and the roadway is, the more comfortable the pedestrian facility.

By providing facilities that are more comfortable, we can increase the number of trips made by walking, particularly in areas with mixed land uses. Providing sidewalks, widened paved shoulders, or stabilized shoulders— particularly when providing access to public transit— can increase the transportation options for individuals who may not be able to drive a car. Additionally, by moving pedestrians off the travel lanes, motorist operations are improved and capacity increased.

Research indicates that people will walk for recreational purposes if a facility is provided. Recreational walking is one of the easiest ways for people to get the recommended allotment of physical exercise each day. Moderate exercise, such as walking, contributes to both physical and mental well being.

### **Benefits of Paved Shoulders**

Paved shoulders provide numerous safety benefits for motorists and pedestrians. Installing or widening paved shoulders has the following benefits:

- Provides a stable surface off of the roadway for pedestrians to use when sidewalks cannot be provided.
- Reduces numerous crash types including the following:
  - Head on crashes (10%-70% reported reduction)
  - Sideswipe crashes (10%-41%)
  - Fixed object crashes (29%-49%)
  - Pedestrian (walking along roadway) crashes (71%)
- Improves roadway drainage
- Increases effective turning radii at intersections
  - Reduces shoulder maintenance requirements
  - Provides emergency stopping space for broken-down vehicles
- Provides space for maintenance operations and snow storage
- Provides space for variable message signs
- Provides an increased level of comfort for bicyclists

### **Requirements for the Design of Sidewalks and Walkways**

#### **• Surface:**

- Using textural and tonal contrast on ground surfaces will help

define primary routes and assist with way finding. Consider locating all plantings and street furniture in an amenity zone, adjacent to the sidewalk or walkway. Use different tone or material to emphasize the difference in function of the amenity zone

- **Clear width:**

Consider a width to allow wheelchairs and scooters to comfortably pass. If a sidewalk or walkway is less than 1800 mm wide, consider providing 1800 mm x 1800 mm passing/turn-around spaces, spaced no more than 30 meters apart. Providing passing/turn-around spaces at such intervals will minimize the distance people who use wheelchairs or scooters will have to back-up, if a route is not wide enough for passing. If a route is at least 1800 mm wide, persons who use wheelchairs or scooters can pass each other or turn around, anywhere along the route

- **Running slope:**

Consider making it as flat as possible.

- **Level stopping places and rest areas:**

Consider providing level stopping places and rest areas along walkways especially sloped walkways longer than 30 meters, to maximize the usability of the paths for people with reduced stamina.

- **Clear Height:**

Consider providing a minimum 2,300 mm head room clearance to increase safety for tall people, as well as for people carrying objects.

- **Surface openings, including horizontal openings:**

Consider providing openings that will not allow passage of an object more than 12 mm in diameter, to further reduce the possibility of small wheels, cane tips and shoe heels getting caught in openings, grilles and gratings

- **Changes in level:**

Consider minimizing level changes as much as possible — continuous surfaces are more accessible and safer for everyone to use.

- **Street furniture:**

Consider possible obstructions once the path is in regular use. Items such as garbage cans, newspaper boxes and bicycle racks can find their way onto what were previously well designed accessible paths. Providing amenity strips adjacent to paths may alleviate this.

- **Open areas:**

Consider making direct routes distinct from the surrounding open space where paths cross open areas. Including contrast in surface tone and texture may help a user with vision loss to stay on track.

- **Edge protection:**

Where a walkway is located next to an area which slopes down, or is adjacent to a potential hazard such as a water feature, consider providing edge protection to enhance safety. A curb at least 50 mm high, a railing or other barrier may be used.