
Wheel Stops: A Hazard in Parking Lots?

By design, parking lots are areas with frequent motor vehicle and pedestrian activity. Certain design features, like wheel stops, may appear desirable initially, but in practice, they cause problems. Yet, in certain jurisdictions, wheel stops are required by local ordinance. Property owners and managers should consider the hazards associated with wheel stops when installing and maintaining parking lots.

Wheel stops are an effective way to prevent vehicle overhangs from reducing the clear width of accessible routes (e.g., sidewalks). Their use is encouraged in the Americans with *Disabilities Act Standards for Accessible Design, General Site and Building Elements* section. It addresses parking spaces and access aisles. It recommends that parking spaces be designed so that cars and vans, when parked, cannot obstruct the required clear width of adjacent accessible routes. Use of wheel stops may also be required by local zoning requirements.

Wheel stops are responsible for many trips and falls by pedestrians in parking lots. They are made of concrete, metal, plastic, or wood (e.g., old railroad ties). If not properly maintained, wheel stops can become damaged, increasing the chance of pedestrian injury. They may interfere with snow plowing in cold weather climates and they present a hazard to pedestrians walking between cars. To help visibility, they require contrast markings, preferably with retroreflective paint, so that they are able to be seen by pedestrians.

In many parking lots, paint striping is adequate to provide separation between vehicles. When parking is allowed at an angle alongside buildings, a raised walkway is preferable to a wheel stop. Wheel stops are used to prevent encroachment and because vehicles can encroach upon the pathway required for accessible routes. However, if the path is widened and raised, then the need for installing wheel stops is reduced.

If wheel stops must be used, then they should be painted a contrasting color, such as yellow, with white striping paint used for marking the parking space. The contrasting color helps the wheel stop to stand out and be conspicuous to pedestrians. They should also be centered on the space, properly maintained, and if used for angled parking, they should be aligned. This helps reduce the chance of exiting a vehicle and tripping on a wheel stop in the adjacent parking space.

Consider the following best practices to minimize the hazards of wheel stops in parking lots.

- Maintain a distance between adjacent wheel stops at least three feet (91 cm).
- Position wheel stops so that they do not extend between the front ends of vehicles or span painted lines between parking spaces.
- Position wheel stops so that when a vehicle parks facing a sidewalk area, the front bumper does not extend over the sidewalk.
- Inspect wheel stops to ensure they are conspicuous, and free of debris, weeds, snow, ice, etc.
- Paint and/or clearly mark wheel stops and traffic parking rows.
- Maintain wheel stops in good condition.
- Secure wheel stops so that they cannot be easily moved.