



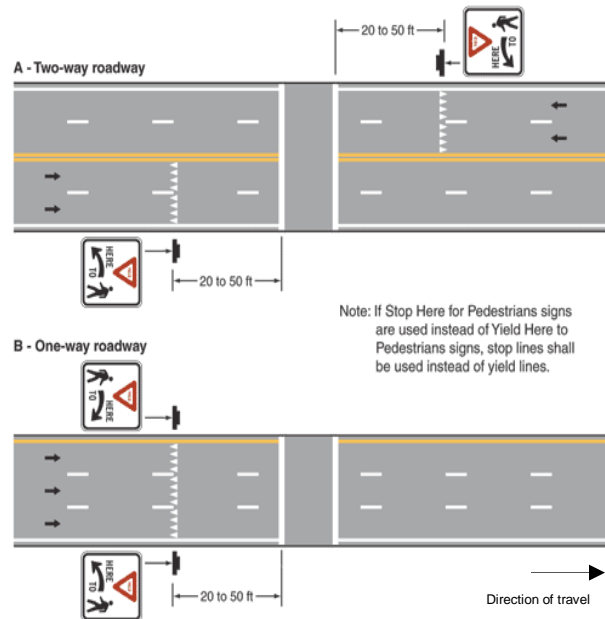
## When to Install Crosswalks

Crosswalk markings provide guidance for pedestrians who are crossing roadways by defining and delineating paths on approaches to and within signalized intersections, and on approaches to other intersections where traffic stops.

In conjunction with signs and other measures, crosswalk markings help to alert road users of a designated pedestrian crossing point across roadways at locations that are not controlled by traffic control signals or STOP or YIELD signs. At non-intersection locations, crosswalk markings legally establish the crosswalk.

As per the MUTCD Section 3B.18, crosswalk lines should not be used indiscriminately. An engineering study should be performed before a marked crosswalk is installed at a location away from a traffic control signal or an approach controlled by a STOP or YIELD sign. The engineering study should consider the number of lanes, the presence of a median, the distance from adjacent signalized intersections, the pedestrian volumes and delays, the average daily traffic (ADT), the posted or statutory speed limit or 85th-percentile speed, the geometry of the location, the possible consolidation of multiple crossing points, the availability of street lighting, and other appropriate factors.

Figure 3B-17. Examples of Yield Lines at Unsignalized Midblock Crosswalks



New marked crosswalks alone, without other measures designed to reduce traffic speeds, shorten crossing distances, enhance driver awareness of the crossing, and/or provide active warning of pedestrian presence, should not be installed across uncontrolled roadways where the speed limit exceeds 40 mph and either:

- A. The roadway has four or more lanes of travel without a raised median or pedestrian refuge island and an ADT of 12,000 vehicles per day or greater; or
- B. The roadway has four or more lanes of travel with a raised median or pedestrian refuge island and an ADT of 15,000 vehicles per day or greater.

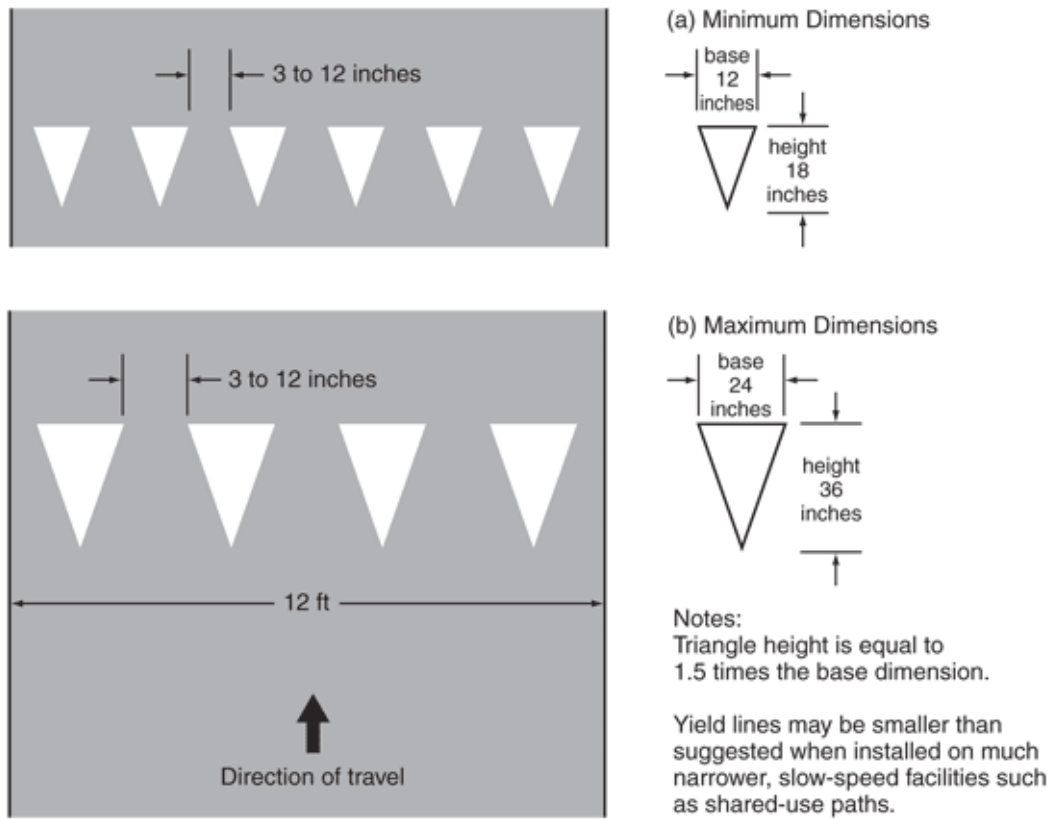
Because non-intersection pedestrian crossings are generally unexpected by the road user, warning signs should be installed for all marked crosswalks at non-intersection locations and adequate visibility should be provided by parking prohibitions that restrict parking within the 20 to 50 foot area between the yield line and the crosswalk.

See the **Manual on Uniform Traffic Control Devices (MUTCD, Section 2C.50 and 3B.17)**

## Non-Intersection Crosswalks

At non-intersection locations, in addition to the crosswalk markings, yield lines may be used to indicate the point at which vehicles should yield to pedestrians. Yield lines consist of solid white isosceles triangles pointing toward approaching vehicles and extend across the approach lane. The individual triangles have a base 12 to 24 inches wide and a height of 1.5 times the base, and are spaced 3 to 12 inches apart. If used, yield lines should be placed next to a “Yield Here to Pedestrians” (R1-5) sign. See the *MUTCD Section 3B.16 and 3B.17* for additional details at these locations.

**Figure 3B-16. Recommended Yield Line Layouts**



## Crosswalks at Intersections

At locations controlled by traffic control signals or on approaches controlled by STOP or YIELD signs, crosswalk lines should be installed where engineering judgment indicates they are needed to direct pedestrians to the proper crossing path(s). Crosswalks should be marked so that:

- They help pedestrians find their way across a complex intersection;
- They show pedestrians a safe route across traffic;
- They minimize exposure to vehicles, bicycles, and traffic conflicts; and
- They position pedestrians where they can best be seen by oncoming traffic.
- Their curb ramps are within the extension of the crosswalk markings.

Reference: *Baystate Roads Program (Mass LTAP), TechNotes #60*