High-Visibility Crosswalk

DESCRIPTION

- Distinctive from standard transverse (parallel) lines in that high-visibility crosswalks consist of wide longitudinal lines, a bar-pair pattern, ladder, or zebra markings.
- High-visibility crosswalks can help pedestrians decide where to cross.
- High-visibility crosswalks are often installed in conjunction with improved lighting and pedestrian signage.

CONTEXT

- High-visibility crosswalks help make crosswalks and/or pedestrians more visible to motorists, increasing driver recognition distance by twice that of standard parallel lines, which equates to 8 seconds of additional driving time at 30 mph.
- High-visibility crosswalks can help the driver better detect the presence of the crosswalk and potential for pedestrian crossings, particularly where a standard crosswalk might not get noticed due to roadway geometry or visual clutter.
- High-visibility crosswalks are often installed at:
  - High-volume pedestrian crossings,
  - Crossings ¼ mile between busy residential areas and schools or recreational areas,
  - Within ¼ mile of major transit transfer locations, and
  - Crossings in downtown Central Business Districts and at shared use path crossings.

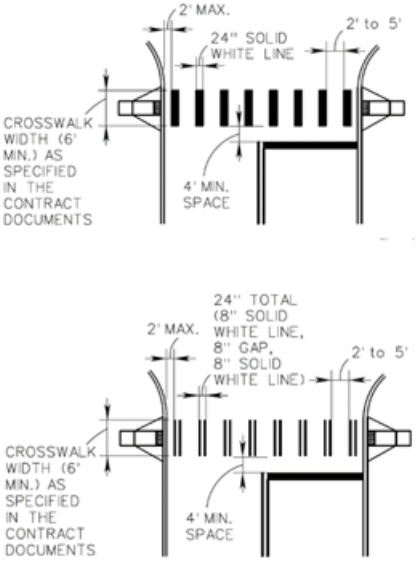
BENEFITS

- ✓ **Improved safety**
- ✓ **Improved comfort**
- ✓ **Traffic compliance**
- ✓ **Cost effective**
- ✓ **Aesthetics**

VDOT

POLICY AND DESIGN GUIDANCE

- Either longitudinal lines ("continental"), bar pair, zebra, or ladder patterns may be used; however, on VDOT-maintained roads VDOT policy is to only use continental or bar pair patterns as there is not enough evidence that zebra or ladder patterns provide any additional benefit.
- VDOT policy requires high-visibility markings:
  - At multilane roundabout crossings. They should be considered at single-lane roundabout approaches and exits.
  - At uncontrolled crossings of four or more lanes with speed limits greater than 35 mph.
  - At uncontrolled crossings of three or fewer lanes where the traffic volumes exceed 15,000 vehicles per day or where the speed limit is 45 mph or greater.
  - At crossings of shared use paths crossing an uncontrolled road with a speed limit greater than 25 mph.
  - At Pedestrian Hybrid Beacon (PHB) crossings.



VDOT TE-384 Pedestrian Crossing Accommodations at Unsignalized Locations

- High-visibility crosswalks should also be considered at uncontrolled crossings with speed limits greater than 35 mph and where speed limits are less than 35 mph but have traffic volumes exceeding 15,000 vehicles per day.
- High-visibility crosswalks typically cost five times more than transverse parallel lines or about $8 per linear foot. The bar pairs pattern can reduce costs since they use less material while performing similarly to longitudinal line in driver recognition.
- High-visibility crosswalks should be installed at an angle with adequate spacing to increase the longevity of the crossing.

RESOURCES

Treatment applications and general design guidance:

- MUTCD
- VDOT IIM 384.0
- Virginia Supplement to the MUTCD

General guidance:

- FHWA
- VDOT State Pedestrian Policy Plan
- Pedestrian and Bicycle Information Center

Guidelines are provided for informational purposes only. For detailed design guidance, please refer directly to design manuals and standards.

For more information on **High-Visibility Crosswalks** and other bicycle and pedestrian treatments, visit **virginiadot.org/programs/bikeped/bicycle_and_pedestrian_treatments.asp**

VDOT