

CROSSWALK PAVEMENT MARKING STANDARDS

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Uniformity in crosswalk markings allows pedestrians and motorists alike to recognize, react, and comply with the messages communicated by traffic-control devices installed along public roads. When a pedestrian crossing is legally established using pavement markings, those markings must conform to statutory and regulatory requirements as outlined in the Vehicle Code (Title 75) and PennDOT's Publication 212, *Official Traffic-Control Devices*. These design and installation standards also help municipalities achieve uniformity of traffic-control devices on public roads.

Once a municipality determines that a pedestrian crossing should be marked (*LTAP Tech Sheet #191 provides information on how to do this*), the crosswalk must be properly designed and installed. Keep in mind that marking a crosswalk where none currently exists requires full compliance with the Americans with Disabilities Act and its regulations (i.e., installation of curb ramps, tactile warnings, etc.).

Crosswalk Location

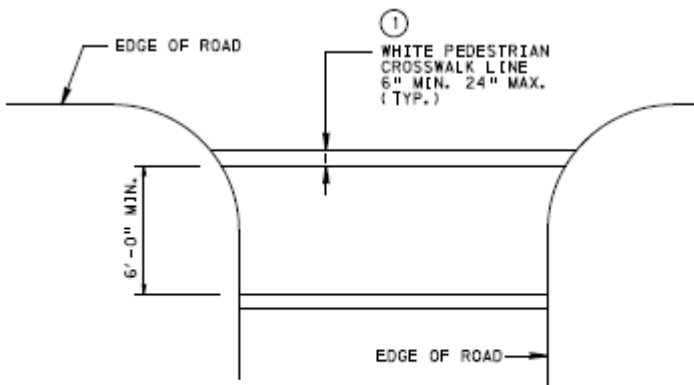
Crosswalks should be installed at approximately 90 degrees to the roadway (per Chapter 3 of PennDOT Publication 46, *Traffic Engineering Manual*) and extend from curb ramp to curb ramp or shoulder to shoulder. If stop bars are installed, they should be located at least 4 feet in advance of and parallel to the crosswalk lines.



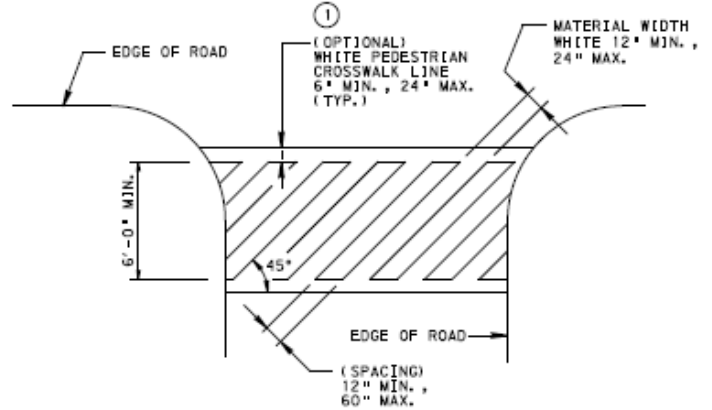
Pavement markings provide guidance on where pedestrians should cross a road.

Crosswalk Types

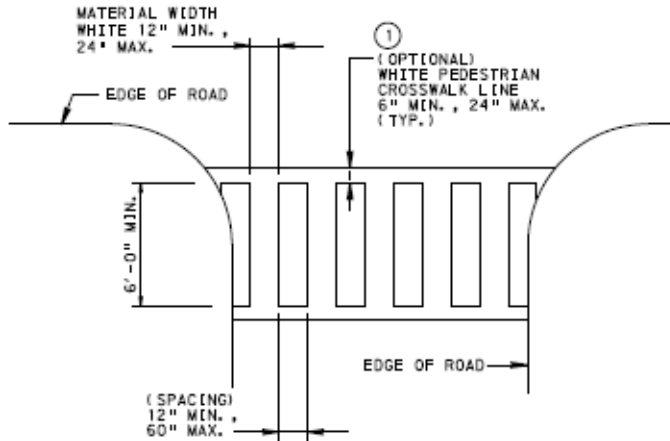
Three standard crosswalk markings are approved for use in Pennsylvania.



TYPE A - PARALLEL



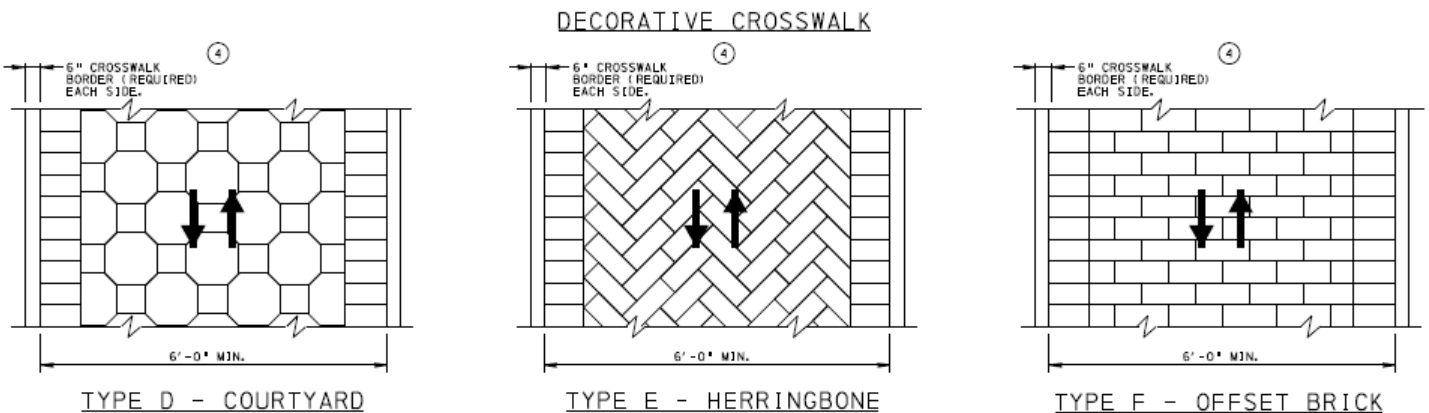
TYPE B - DIAGONAL



TYPE C - PERPENDICULAR

These standard crosswalk designs are found in PennDOT Publication 111, Traffic Control – Pavement Markings and Signing Standards, TC-8600, Sheet 6 of 13. The most commonly used are Types A and C.

There are also three decorative crosswalk markings and six non-reflective decorative pattern colors (white, black, brown, silver-gray, tan, and maroon) approved for use in Pennsylvania. These are also included in PennDOT Publication 111, TC-8600, Sheet 6 of 13.



APPROVED NON-REFLECTIVE COLORS: WHITE, BLACK, BROWN, SILVER-GRAY, TAN AND MAROON

Three decorative crosswalk designs are approved for use.

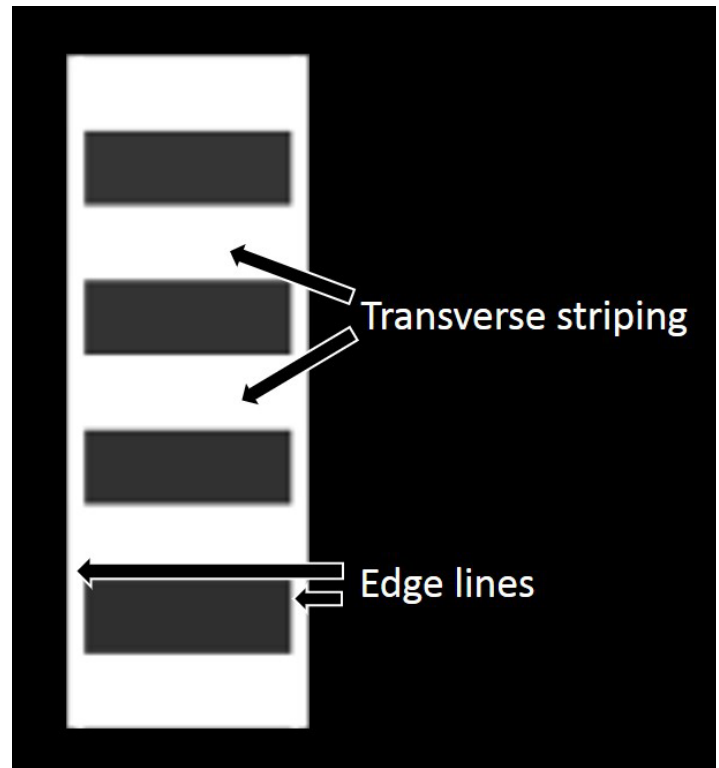
Design Standards

The following summarizes some of the design standards for crosswalk markings:

- **Crosswalk width** – Crosswalks can vary in width although the gap between the transverse lines must be at least 6 feet wide. Wider crosswalks are typically seen in city or college settings where pedestrian volumes are high.
- **Transverse striping** – For Types B and C crosswalks, the transverse stripes must be retroreflective white and between 12 and 24 inches wide. The spacing between the stripes must be at least 12 inches but no more than 60 inches. Typically, the width of the stripes and spacing are the same, although this is not required.
- **Crosswalk edge lines** – When edge lines are used, they must be retroreflective white and a width of 6 to 24 inches. Edge lines are required for Type A crosswalks and on each side of the pattern of a decorative crosswalk. They are optional for Types B and C crosswalks.

Approved Material

A list and description of approved pavement marking materials is provided in Chapter 3 of PennDOT Publication 46. Corresponding sections in the PennDOT specifications (PennDOT Publication 408) along with a list of approved manufacturers (PennDOT Publication 35/Bulletin 15) are also provided for quick reference. In general, waterborne paint with Type A glass beads is the least expensive application. However, it requires more maintenance than an epoxy or hot thermoplastic pavement marking application.



Material	Section in Publication 408	Section in Publication 35
Hot thermoplastic	960	960
Cold plastic	961	961
Waterborne paint	962	962
Epoxy markings	964	964
Preformed thermoplastic	965	965
Snowplowable RPMs	966	966
Glass beads for traffic paint	1103.14	1103.14

