

# ONTARIO TRAFFIC MANUAL

## BOOK 15 COMPLIANT CROSSWALKS



### OTM Book 15 crosswalk guide

In 2016, the Ontario Ministry of Transportation unveiled Book 15, Pedestrian Crossing Treatments, which provides comprehensive guidelines for designing, implementing, and maintaining pedestrian crossings. It covers various crossing types, such as marked crosswalks and pedestrian signals, along with standards for sight distance, crossing width, signage, and more. The book also introduces new PXO layouts for low-speed, low-volume roads, offering municipalities options for non-signalized pedestrian crossings.

Carmanah's solar and AC-powered beacons are perfect for these crossings or at existing crossings. Our systems:

- Are easy to mount or retrofit onto a range of square and round poles
- Improve driver compliance to produce the highest yield rate per dollar spent on the system
- Support passive activation sensors and audible pushbutton stations to increase user accessibility.
- Are customized using our online [Solar Power Report](#) – a solar site assessment to recommend the optimal solar-powered beacons to meet project requirements
- Are customized using our online [Build Tool](#) to configure a product with desired options and solar sizing. The results are saved into a data sheet that can be downloaded and shared with colleagues easily.
- Solar-powered systems are free from trenching, cabling, and in-ground wiring
- With our MX Series of connected traffic beacon and sign systems, agencies can add connectivity to their infrastructure simply and affordably. [Learn more about MX.](#)

### Pedestrian crossovers

Pedestrian crossovers are marked crosswalks identified by signs and pavement markings. Pedestrians, vehicles, and cyclists must all understand the road rules at these crosswalks to ensure safety for everyone.

**Pedestrians** must exercise due care and cross only when traffic has come to a complete stop. If the PXO has a flashing beacon, the corresponding button should be pressed to activate it; the beacon will help increase driver awareness.

**Vehicles** must watch for pedestrians, be prepared to stop, and only start moving again once the pedestrian has cleared the roadway.

**Cyclists** must follow the same rules as vehicles. Cyclists wishing to cross at the PXO should dismount and walk the bike across.

### Types of PXOs

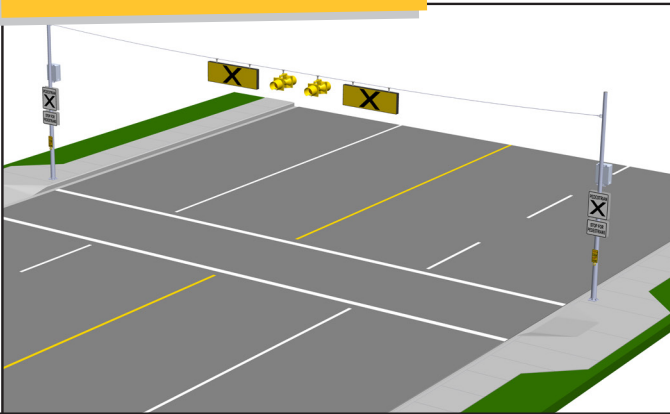
There are four different types of PXOs. Learn about the requirements, application, and Carmanah flashing beacon solutions available for each one. The full configuration requirements for each can be found in the [Ontario Traffic Manual Book 15](#).



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### PX0 – LEVEL 1: TYPE A

**What they are**

Level 1 Type A pedestrian crossovers include the use of regulatory signs, flashing circular amber LED beacons, internally illuminated signs, and “X” pavement markings. The circular LEDs and internally illuminated signs are mounted overhead on span wire. Two circular LEDs are required to face each direction of traffic.

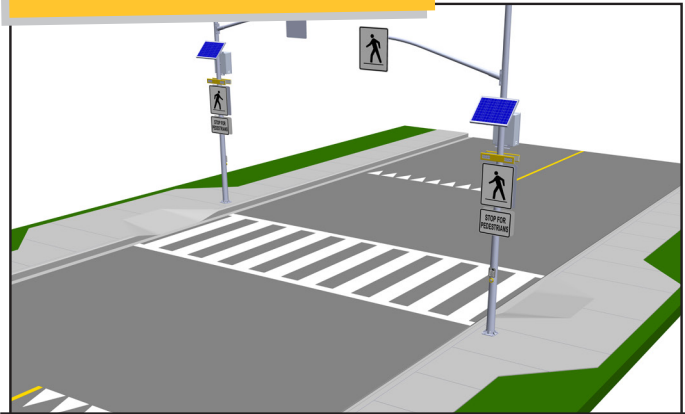
**Where to use them**

Midblock and at uncontrolled intersections.

**Suitable Carmanah solutions**

[R920-MX](#), [R820 series beacons](#)

### PX0 – LEVEL 2: TYPE B

**What they are**

Level 2 Type B pedestrian crossovers include the use of regulatory signs, rectangular rapid flashing beacons (RRFBs), and pavement markings. This configuration uses side-mounted RRFBs, along with side-mounted and overhead-mounted regulatory signs.

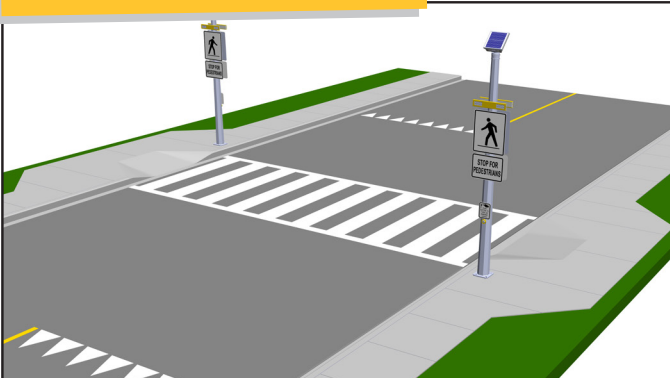
**Where to use them**

Mid-block crosswalks, uncontrolled intersections, single-lane roundabouts, and double-lane roundabouts.

**Suitable Carmanah solutions**

[R920-MX](#), [R920-E](#), [R920-F](#), [SC315](#)

### PX0 – LEVEL 2: TYPE C

**What they are**

Level 2 Type C pedestrian crossovers include the use of regulatory signs, warning signs, and pavement markings. This type of pedestrian crossover only uses side-mounted regulatory signs and rectangular rapid flashing beacons (RRFBs).

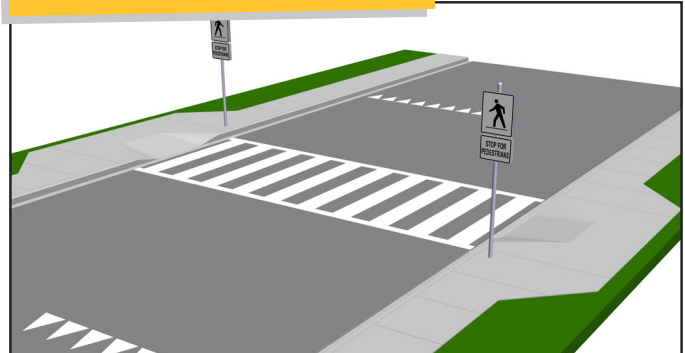
**Where to use them**

Mid-block crosswalks (with or without a raised refuge), uncontrolled intersections (with or without a raised refuge), single-lane roundabouts, and double-lane roundabouts.

**Suitable Carmanah solutions**

[R920-E](#), [R920-F](#), [SC315](#)

### PX0 – LEVEL 2: TYPE D

**What they are**

Level 2 Type D pedestrian crossovers include the use of regulatory signs, warning signs, and pavement markings. This type of pedestrian crossover uses only side-mounted regulatory signs; flashing beacons are not required for this type of crossover.

**Where to use them**

Mid-block crosswalks (with or without a raised refuge), uncontrolled intersections (with or without a raised refuge), single-lane roundabouts, double-lane roundabouts, and right-turn channelization.

**Suitable Carmanah solutions**

No beacons required.