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RECOMMENDED PRACTICES	PART
	SECTION
	SUB-SECTION

General

Beacons, also referred to as flashers or flashing lights, are signals that flash amber or red, either at intersections or in advance of hazardous locations.

At such locations, drivers are required to stop, reduce speed and proceed with caution, or take greater care due to unusual or concealed roadway conditions.

Beacons alert drivers to physical obstructions in the roadway, pedestrian areas or hidden intersections, and become instrumental when regulatory or cautionary signs require greater visual conspicuity.

Beacons may effectively advise drivers to take action (e.g., prepare to stop for a changing signal).

Beacons appear in two functions:

Warning Beacons - flash continuously.

Control Beacons - flash intermittently (for a limited duration) and only when they are activated. The regulatory requirement or warning is not in effect if the beacon(s) is not flashing (e.g. pedestrian crossing).

The following guidelines provide details for the operation of warning and control beacons along provincial highways. They are not intended to provide warrants for installing beacons.

For specific warrants, users should consult the provincial guidelines, or in the absence of the provincial guidelines, the Manual of Traffic Control Devices for Canada (the MUTCD).

Guidelines for Use

Warning Beacons

Beacons may be used as a supplementary warning device to draw the attention of approaching drivers to an important warning sign or hazard.

Beacons may be installed in the following situations:

- in conjunction with other regulatory or warning signs
- at divided highway transitions
- in advance of pedestrian areas.

Warning beacons normally consist of a flashing amber ball indication.

Typical applications of Warning Beacons include:

- Watch For Pedestrians on Highway (WC-2A)
- Keep Right Assembly (RB-25, beacons are mounted at the top of the sign)

Control Beacons

Control beacons may be used as a means of controlling traffic at locations where vehicles are required to stop, or take other regulatory action.

Control beacons may be installed in the following situations:

- in advance of traffic signals in conjunction with an advance signal warning sign

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- at pedestrian crossings
- at railway crossings
- at vehicle inspection stations (VIS) stations where vehicles are required to report
- for overheight detection
- to indicate smoke ahead
- to indicate fog.

Control beacons, if used with warning signs, normally have a flashing amber ball indication. A flashing red ball indication is used exclusively with a Stop sign.

Typical applications of Control beacons include:

- Pedestrian Crossing (RA-5, RA-102, RA-102A, RA-103)
- Prepare to Stop (Traffic Signal Advance signs WB-5, WB-5A, WB-5-T)
- Railway Crossing Ahead (WB-6, WB-6A)
- Stop sign (RA-1, a single beacon is mounted at the top of the sign). The stop sign beacon is considered an exception among control beacons because it flashes continuously.

These signs may be found in the Alberta sign panel catalogue at the following address:

<http://www.transportation.alberta.ca/1842.htm>

Flashing Beacon Indications

Flashing beacons should operate continuously with flash rates as shown in Table 1.

Table 1
Flash Rate For Beacon Indications

Indication	Minimum Rate (Flash/min)	Maximum Rate (Flash/min)
Red Ball	50	60
Amber Ball	50	60

Dual Beacon Display

Signs may have two beacons that operate in a flashing mode. The display (i.e., alternating flash or simultaneous flash) in a two signal unit will depend on whether beacons have a control or warning function.

- Warning Beacons

Warning beacons with two signal sections should be wired with a single-circuit flasher so that the beacons on the sign will flash simultaneously.

The simultaneous flash has a warning function. It simply diverts the motorist's attention to a traffic control device.

- Control Beacons

Control beacons with two signal sections should be wired with a double-circuit flasher so that the beacons on the sign will flash alternatively. One beacon is energized, while the other is de-energized at a rate shown in Table 1.

The alternating flash has a "control" function requiring some action by the motorist (e.g., school bus, pedestrian crossing, advance warning, etc.).

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Size of Beacons

Flashing beacons for vehicular traffic are normally round. Two sizes of lenses are used for signal displays: 200 mm and 300 mm. A 200 mm lens is considered to be a standard size, suitable for most beacon applications.

The 300 mm lens is recommended for traffic conditions requiring greater emphasis due to visibility problems or other geometric or operational constraints.

The following situations may warrant the use of the oversize beacon lens:

- specific problem locations, such as those with conflicting or competing background light, or
- increased visibility requirement as determined by an engineering study
- safety problems at Stop controlled intersections (e.g., oversize beacon is installed at the top of a Stop sign).