

**ITEM 626 BARRIER REFLECTORS**

**626.01 Description**

**626.02 Materials**

**626.03 Layout**

**626.04 Installation**

**626.05 Method of Measurement**

**626.06 Basis of Payment**

**626.01 Description.** This work consists of furnishing and installing barrier reflectors on guardrail blockouts, concrete barrier, retaining wall, and bridge parapets.

**626.02 Materials.** Furnish materials from the City’s Qualified Products List (QPL) conforming to the following:

Barrier Reflectors ..... 720.04

Conform to the manufacturer’s recommendations for corrosion resistant fasteners, brackets, or adhesives.

Use barrier reflectors that are mountable on guardrail blockouts, concrete barriers, retaining walls, and bridge parapets. For wall or parapet mount, the barrier reflector may not extend further than 5 inches (125 mm) in a horizontal direction towards the traffic lanes.

**626.03 Layout.** Lay out all locations to ensure proper placement. The Engineer will approve the layout before installation of the reflectors.

Furnish reflectors at the beginning and the end of all barrier runs and at least one additional point evenly spaced between the termini. Space the reflectors at 100 feet (30 m) on tangents and on curves of less than 5 degrees (more than 350 m radius). Space the reflectors at 50 feet (15 m) for curves of greater than 5 degrees (350 m radius or less).

The Contractor may vary the spacing on tangents and curves of less than 5 degrees (more than 350 m radius) from 65 feet to 125 feet (20 m to 40 m) in the final 250 feet (80 m) to achieve even spacing of the reflectors.

If using a buffer end section or similar device on the end of the guardrail, place the first reflector so that it is visible to approaching traffic.

If tying guardrails, barriers, retaining walls, or bridge parapets together in a continuous run, use the total length of the run for determining the number and location of reflectors.

If installing a run of rail or barrier that is at varying distances from the edge of pavement, place a reflector where the run first approaches closest to the pavement. If this results in spacing greater than 125 feet (40 m), or 65 feet (20 m) in cases where 50-foot (15 m) standard spacing is required, install an additional reflector. If a non-reflectORIZED impact attenuator is in place, place an additional reflector on the face of the attenuator nearest to, and directed toward, approaching traffic.

**626.04 Installation.** Attach the reflector with a suitable corrosion resistant fastener or adhesive conforming to the manufacturer’s recommendations.

On concrete barriers, retaining walls, and bridge parapets, place the top of the reflector so its height is 26 inches (650 mm) above the near edge of pavement, except that the top of the reflector is at least 3 inches (75 mm) below the top of the concrete barrier.

Install guardrail blackout reflectors on the side of the blackout away from traffic. Install guardrail blackout reflectors on the side of the blackout nearest the edge of pavement. Install the guardrail blackout reflector so that the reflective surface is above the guardrail.

Remove loose concrete, rust, dirt, and other loose material from the surface of the concrete barrier using a wire brush. Remove dust created by wire brushing before applying adhesive. Apply adhesive to clean and moisture-free surfaces according to the manufacturer's recommendations.

Ensure that the reflector face is clean and free of dust, dirt, adhesive, or any foreign material after installation.

Except if mounted on a guardrail blackout, rotate the reflective face of one-way reflectors upward from the vertical (or plumb) position 2 to 3 degrees to facilitate "rain washing" of the reflector face.

When replacing reflectors on a concrete surface, locate the new reflector approximately 3 inches (75 mm) horizontally in either direction from the old location.

If specified, use bi-directional reflectors (white/white) on the outside of curves on two-lane highways.

Use barrier reflectors that are the same color as the adjacent edge line.

The City will classify the reflectors as follows:

<b>Mounting Location</b>	<b>One-Way</b>	<b>Bi-Directional</b>
Guardrail	Type A	Type A2
Concrete barrier, retaining walls, or bridge parapets	Type B	Type B2

**626.05 Method of Measurement.** The City will measure Barrier Reflector by the number of each in place, completed and accepted.

If a bi-directional reflector consists of two one-way reflectors mounted back-to-back, the City will measure it as one bi-directional reflector.

**626.06 Basis of Payment.** The City will pay for accepted quantities at the contract price as follows:

<b>Item</b>	<b>Unit</b>	<b>Description</b>
626	Each	Barrier Reflector