## CEO INSTRUMENTS

# L-Bar Survey Prisms



L-Bar Mini Prism

**L-Bar Mini Prisms** are used at monitoring points and control points. They can be installed on tunnel walls, building facades, retaining walls, or almost any other location.

**Prism:** 25 mm optical glass with silver backing and clear appearance.

**Offset:** -25.5 mm for Topcon, Trimble,etc. +8.92 mm for Leica.

**Bracket:** Anodized aluminum, 3 inch arms, two 5/16 inch holes for mounting screws.



**L-Bar Micro Prism** 

**L-Bar Micro Prisms** are tiny 0.5 inch prisms designed for low visual impact and are nearly invisible in most environments. These prisms are best used for indoor monitoring points.

**Prism:** 12.7 mm optical glass prism with silver anti-reflection coating.

**Offset:** -17.5 mm for Topcon, Trimble, etc. 16.9 mm for Leica.

**Bracket:** Black-anodized aluminum bracket has 25 mm arms and a single mounting hole.



L-Bar 360 Prism

**L-Bar 360° Prisms** can be targeted by two more AMTS as a monitoring point, a control point, or a tie-in point between separate AMTS networks.

**Prism:** Omni-directional prism consists of 6 triple prisms.

**Offset:** -6.5 for Topcon and Trimble, 27.9 for Leica.

**Bracket:** Anodized aluminum, 3-inch arms, two 5/16-inch holes for mounting screws.



L-Bar Prism on Soldier Pile



L-Bar Prisms in Subway Tunnel



L-Bar Prisms on Building Facade

### Applications

L-Bar Survey Prisms are used with AMTS systems to monitor structural displacements and deformations.

Prisms are installed on the structure are monitoring points that provide settlement and displacement data.

Prisms installed outside the zone of influence are control points used to measure the position of the AMTS itself at every observation cycle.

### Installation

- 1. Choose a location that provides a clear line of sight to the AMTS.
- 2. Determine the best method for anchoring the L-Bar: screws, magnets, or epoxy putty.
- 3. Determine the best orientation for the L-bar bracket and mount the bracket.
- 4. Attach the prism to the bracket, rotate it to face the AMTS, and tighten the mounting screws.

#### Advantages

- **Durable:** Prisms are waterproof and dustproof.
- Low Visual Impact: Mini prisms are almost unnoticeable from street level. Micro prisms are nearly invisible.
- Easy Installation: The compact bracket can be installed in any orientation and fits nearly any location.
- **Cost Effective:** L-Bar prisms provide a low cost per monitored point.