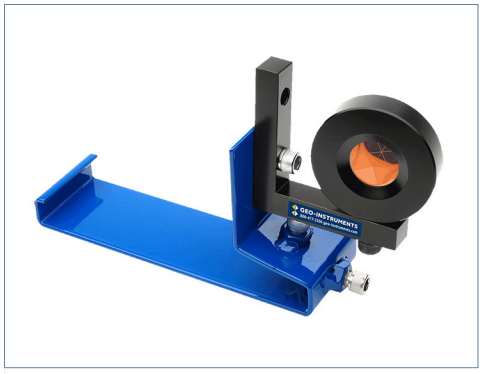
Rail Clip Prisms

Rail Clip Prisms installed along a 60 foot span of track to monitor for potential settlement



Rail Clip Prism

Paired Prisms Monitor Changes in Cant

AMTS Monitoring Rail Clip Prisms

Applications

Rail clip prisms are designed for use with automated total stations (AMTS) to monitor railroad tracks for settlement, heave, lateral displacements, and changes in super-elevation.

Advantages

- **Durable:** Simple, waterproof construction with no moving parts or electronics.
- **Quick Installation:** Fit rail clip and tighten screws. No drilling or wiring required.
- **Cost Effective:** Low cost per monitored point compared to conventional sensors.

Installation

Depending on the monitoring requirement, Rail clip prisms are installed on one or both rails, spaced at regular intervals to span the track to be monitored.

Each prism has two components: a rail clip and an L-bar mini-prism. The only tool needed for installation is a hex wrench.

1. Fit the rail clip to the rail. Tighten the hex screws until the clip is firmly attached.
2. Attach the L-Bar to the rail clip.
3. Attach the prism to the L-bar and align it toward the AMTS.

Specifications

Rail Clip: Power-coated steel, stainless steel screws. Available in 5.5 or 6-inch sizes.

L-Bar Bracket: 3 inch arms, black anodized aluminum.

Mini Prism: 25 mm optical glass with anti-reflection and copper coatings.

Mini Prism Offset: -25.5 mm.

Mini Prism Offset for Leica: +8.92 mm.

Part Numbers

Rail Clip for 5.5" Rail, with prism TSP705

Rail Clip for 6" Rail, with prism TSP706