



MPS002 Monitoring Prism for Road Monitoring Surveying Prism Reflector Prism:

The prism offset is dependent on the mounting, measurement range within 2km

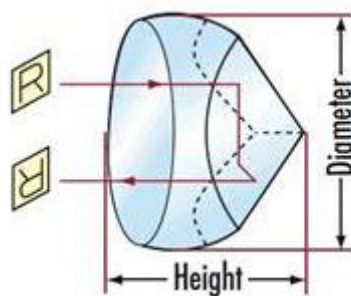
A corner cube prism has three mutually perpendicular surfaces and a hypotenuse face.

Light entering through the corner cube prism's hypotenuse is reflected by each of the three surfaces in turn and will emerge through the hypotenuse face parallel to the entering beam regardless of the orientation of the incident beam.

For corner cube prism's special performance, it is often used to the distance measurement, optical signal process and laser.

Uses:

- 3-dimensional monitoring of bridges.
- Simple and quick measurement and monitoring of buildings, facades, supporting structures, pillars, high rack storage facilities, dams and much more.
- For monitoring formwork during the concrete work, e.g. in the case of bridge arches and single-faced wall formworks.
- For monitoring earth and rock movements - e.g. up steep ascents or along cliffs.
- For monitoring railway tracks where there is surrounding building work (bridge and tunnel construction, pressure grouting of railway lines etc.)



High Precision Corner Cube Prism specifications:

| | |
|---------------------|--------------|
| Material | BK7 Grade A |
| Diameter | 12.7mm |
| Height | 10.16mm |
| Dimension Tolerance | +0.0, -0.1mm |

| | |
|-----------------|------------------------|
| Clear Aperture | >85% of diameter |
| Surface Quality | 40-20 scratch and dig |
| Flatness | $\lambda/8$ at 632.8nm |
| Deviation | ± 3 arc seconds |
| Bevel | 0.25mmx45deg |
| Coating | Upon requirement |

Standard Corner Cube Prism specifications:

| | |
|---------------------|------------------------|
| Material | BK7 Grade A |
| Diameter | 12.7mm |
| Height | 10.16mm |
| Dimension Tolerance | +0.0, -0.2mm |
| Clear Aperture | >80% of diameter |
| Surface Quality | 60-40 scratch and dig |
| Flatness | $\lambda/4$ at 632.8nm |
| Deviation | ± 3 arc min |
| Bevel | 0.25mmx45deg |
| Coating | Upon requirement |

- Range: 200m + by the majority of current total stations.
- Tested temperature rating of -112°F to +212°F
- Diameter: 12.7mm with a tolerance of +/- 0.2 mm
- Height of the 12.7 mm prism: 9.525 mm with a tolerance of +/- 0.2 mm
- Accuracy is 5 arc sec with a tolerance of +/- 2 arc sec.
- Offset: 10mm
- Constant: ZERO

Corner Cube Prism AR coating curve:

BBAR coating

