

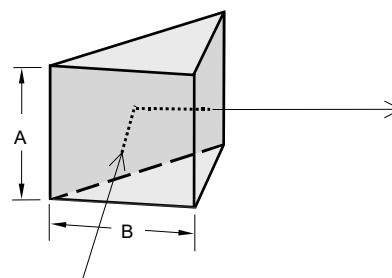
RIGHT ANGLE PRISMS

- 45–45–90 degree prisms
- Can be used as internal or external reflectors or as retro-reflectors

These prisms are used to direct beams at 90 degrees by using a hypotenuse face in total internal reflection (TIR). Right angle prisms are often preferable to an inclined mirror in applications involving severe acoustic or inertial loads, because they are easier to mount and deform much less than a mirror in response to external mechanical stress. As long as acceptance angle limitations for TIR from the roof faces are not exceeded, right angle prisms can serve as a retro reflector, turning beams back to the original direction.

For various HR or AR coatings, please refer to the Coatings section.

Contact us for other types of prisms
e.g. trapezoidal, various isosceles, Dove, Amici, Penta, etc.



SPECIFICATIONS

Material	BK7, FS, UV FS
Surface quality	40–20 scratch & dig
Surface flatness	λ/4 @ 633 nm
Clear aperture	80% of the face size
90° angle tolerance	±2 arcmin or ±5 arcsec
Pyramidal tolerance	±1 arcmin or ±30 arcsec
Dimensions	±0.25 mm

Catalogue number			Size of face, A × B mm	90° angle tolerance	Pyramidal tolerance	Price, EUR BK7 / UV FS / FS
BK7	UV FS	FS				
330-0102	330-1102	330-3102	10.0 × 10.0	2 arcmin	1 arcmin	20 / 49 / 42
330-0152	330-1152	330-3152	15.0 × 15.0	2 arcmin	1 arcmin	25 / 62 / 55
330-0202	330-1202	330-3202	20.0 × 20.0	2 arcmin	1 arcmin	31 / 75 / 69
330-0252	330-1252	330-3252	25.0 × 25.0	2 arcmin	1 arcmin	37 / 86 / 80
330-0105	330-1105	330-3105	10.0 × 10.0	5 arcsec	30 arcsec	42 / 93 / 85
330-0155	330-1155	330-3155	15.0 × 15.0	5 arcsec	30 arcsec	50 / 103 / 95
330-0205	330-1205	330-3205	20.0 × 20.0	5 arcsec	30 arcsec	57 / 116 / 106
330-0255	330-1255	330-3255	25.0 × 25.0	5 arcsec	30 arcsec	73 / 142 / 131

Custom fabrication also available: coating, cutting, edging, drilling according to your specification.

HOUSING ACCESSORIES

- Prism Holders
840-0160, 840-0170
See page 5.73

CORNER CUBES

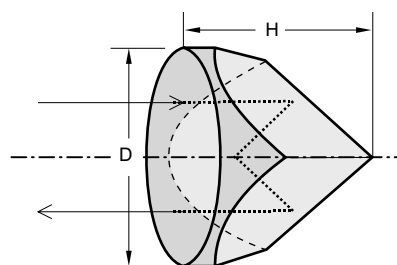
- Incident light deviates by 180 degrees independently of the angle of incidence

These prisms have 3 mirror surfaces making angles of 90° to each other, juxtaposed to form the corner of a cube with the entrance face perpendicular to the cube diagonal. Respective of an incident direction, all beams are reflected back to the original direction. Corner cubes are used in high precision applications or with lasers over very long distances. These "angle insensitive" mirrors therefore find frequent applications in situations where orientation is difficult or impossible to control and where a mirror would therefore be unsatisfactory.

Contact us for other types of prisms
e.g. trapezoidal, various isosceles,
Dove, Amici, Penta, etc.

HOUSING ACCESSORIES

- Kinematic Mirror and Beamsplitter Mount 840-0020
See page 5.51



SPECIFICATIONS

Material	BK7, UV FS
Surface quality	60–40 scratch & dig
Surface flatness	λ/10 @ 633 nm
Angular deviation	±5 arcsec
Size	diameter D=22 mm height H=17.5 mm

Material	Catalogue number	Price, EUR
BK7	340-0217	142
UV FS	340-1217	252