TECHSPEC® 76.2mm Silver Coated, Corner Cube Prism

N-BK7 Corner Cube Retroreflectors with Black Overpaint

Stock **#48-594** **20+ In Stock**

- 1 + **S$870**.80

ADD TO CART

Volume Pricing	
Qty 1-5	**S$870.80** each
Qty 6-25	**S$700.00** each
Qty 26-49	**S$655.20** each
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SPECIFICATIONS

General

Type:
Retroreflector

Note:

Black Overpaint is 30-60µm Thick

Physical & Mechanical Properties

Diameter (mm):
76.20 +0.0/-0.1

Height (mm):
57.15

Bevel:
Protective as needed

Clear Aperture (%):
95

Height Tolerance (mm):
±0.25

Optical Properties

Beam Deviation (arcsec):
3

Coating:
Silver with protective overcoat (black overpaint)

Substrate:
N-BK7

Surface Quality:
60-40

Image Orientation:
Left-Handed

Coating Specification:
Reflective Surfaces: R_{abs} > 97% FROM 400 - 2500nm @ 0° AOI
R_{avg} > 98% FROM 400 - 2500nm @ 0° AOI

Ray Deviation (°):
180

Wavelength Range (nm):
400 - 2500

Damage Threshold, Reference:
Entrance: 0.5 J/cm^2 @ 532nm & 1064nm, 10ns

Power (fringes) @ 632.8nm:
0.25

Irregularity (fringes) @ 632.8nm:
0.25

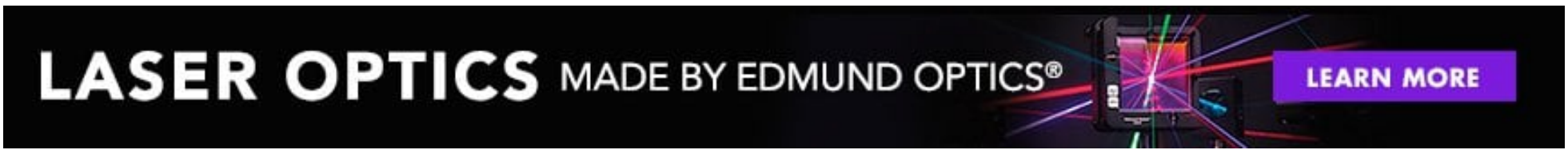
Regulatory Compliance

Certificate of Conformance:
View

PRODUCT DETAILS

- Incident Light is Reflected Back to the Source
- Down to 3 Arcsecond Beam Deviation
- Useful for Surveying and Alignment
- Also Available Mounted

TECHSPEC® N-BK7 Corner Cube Retroreflectors are designed to reflect any ray or beam entering the prism face, regardless of the orientation of the prism, back onto itself. A mirror will do that only at the normal incidence. As a result, corner cube retroreflectors are useful where precision alignment is impossible or time-consuming. TECHSPEC® N-BK7 Corner Cube Retroreflectors are available with the dihedral surfaces either uncoated or coated with silver. The silver coating provides a larger acceptance angle while the uncoated option, which relies on total internal reflection, provides optimum reflectivity. This coating is covered by a protective black overpaint. Please note, this protective coat increases the diameter of the corner cube retroreflector by 30-60 µm. The input face is available uncoated or coated with an antireflection coating optimized for either visible wavelengths or near infrared wavelengths, including 1064nm and 1550nm.



N-BK7 Corner Cube Retroreflectors provide high-reflectance cube performance with total internal reflection. Ideal for laser alignment, metrology, and interferometry applications requiring consistent optical return paths. Compact, durable, and designed for maximum angular accuracy without the need for precise alignment.

FAQ(s)

What is the benefit of N-BK7 glass in this cube reflector?
N-BK7 offers excellent transmission in the visible to near-infrared range and high durability, making it suitable for a wide range of environments.

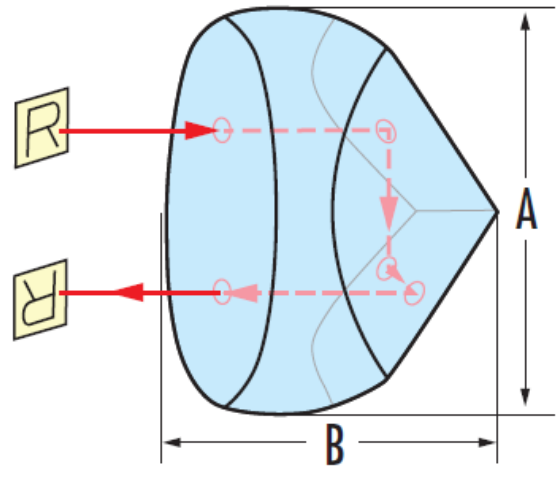
Do these retroreflectors require alignment?
No—corner cubes automatically return beams parallel to the input, eliminating the need for precise alignment.

Can these be used in laser-based applications?
Yes, they are commonly used in laser interferometry, alignment systems, and metrology due to their consistent beam return path.

Are AR coatings available?
Yes, Edmund Optics offers both uncoated and broadband AR-coated options to enhance performance across various wavelengths.

TECHNICAL INFORMATION

A (mm)	B (mm)	Stock No. Uncoated	Stock No. Silver Coated	Stock No. Silver and VIS 0° Coated	Stock No. Silver and NIR II Coated
7.16	6.1	#65-250	#43-305	#48-605	#12-488
12.7	10.16	#43-296	#45-202	#48-606	#12-489
25.4	19.05	#43-297	#45-187	#48-607	#12-490
38.1	29.21	#43-298	#45-189	#48-608	N/A
50.8	38.1	#43-299	#45-191	#48-609	N/A
63.5	48.26	#43-300	#48-593	#48-616	N/A
76.2	57.15	#43-301	#48-594	#48-617	N/A



CUSTOM

Edmund Optics offers comprehensive custom manufacturing services for optical and imaging components tailored to your specific application requirements. Whether in the prototyping phase or preparing for full-scale production, we provide flexible solutions to meet your needs. Our experienced engineers are here to assist—from concept to completion.

Our capabilities include:

- Custom dimensions, materials, coatings, and more
- High-precision surface quality and flatness
- Tight tolerances and complex geometries
- Scalable production—from prototype to volume

Learn more about our **custom manufacturing capabilities** or submit an inquiry **here.**