

TECHSPEC® 38.1mm Silver and VIS 0° Coated, Corner Cube Prism



N-BK7 Corner Cube Retroreflectors with Black Overpaint

Stock #48-608 12 In Stock

1 £308^{.80}

ADD TO CART

Volume Pricing	
Qty 1-5	£308.80 each
Qty 6-25	£247.20 each
Qty 26-49	£231.20 each
Need More?	Request Quote

Prices shown are exclusive of VAT/local taxes

Product Downloads	
STEP:step	Curve:pdf
PDF Drawing:pdf	IGES:igs
eDrawing:eprt	
EO Spec Sheet	Download All

General

Type: Retroreflector	Note: Black Overpaint is 30-60µm Thick
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Physical & Mechanical Properties

Diameter (mm): 38.10 +0.0/-0.1	Height (mm): 29.21
Bevel: Protective as needed	Clear Aperture (%): 95
Height Tolerance (mm): ±0.25	

Optical Properties

Beam Deviation (arcsec): 3	Coating: S1 Silver with protective overcoat (black overpaint) & S2 VIS 0°
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 Entrance: R _{avg} ≤ 0.4% @ 425 - 675nm
Ray Deviation (°): 180	Wavelength Range (nm): 425 - 675

Damage Threshold, By Design: ⓘ	Entrance: 0.5 J/cm ² @ 532nm & 1064nm, 10ns Reflective Surfaces: 5 J/cm ² @532nm, 10ns	Power (fringes) @ 632.8nm:	0.25
Irregularity (fringes) @ 632.8nm:	0.25		

Regulatory Compliance

RoHS 2015:	Compliant	Certificate of Conformance:	View
REACH 241:	Compliant		

Need different specs or modifications?

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:

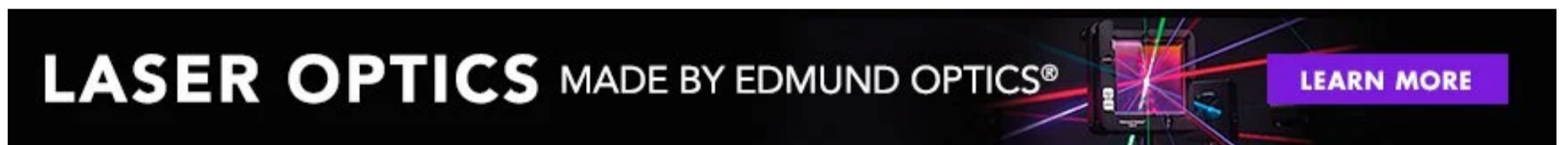
- Custom dimensions, materials, coatings, and more
- High-precision surface quality and flatness
- Tight tolerances and complex geometries
- Scalable production—from prototype to volume

Learn more about our [custom manufacturing capabilities](#) or submit an inquiry [here](#).

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.

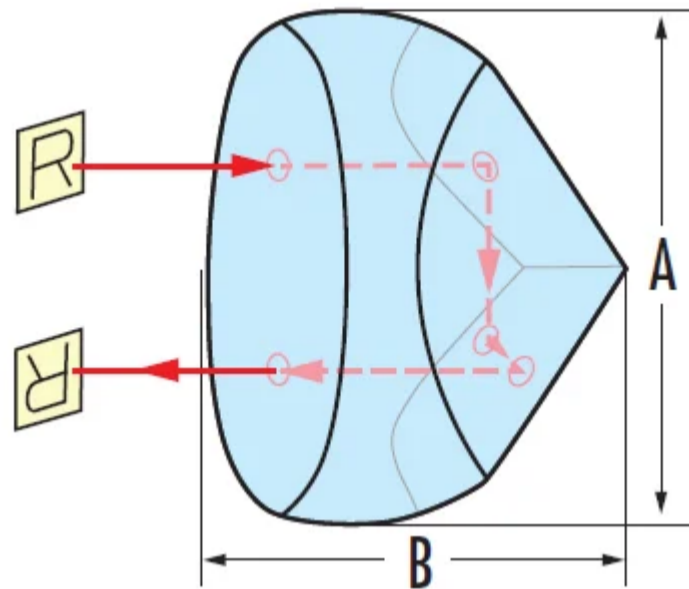
❓ Are AR coatings available?

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



Frequently Purchased Together



#35-088 - 1/4-20 Mounting Adapter for IDS Imaging USB 3/GigE/PoE Camera - Rev 2
£36.00

Qty



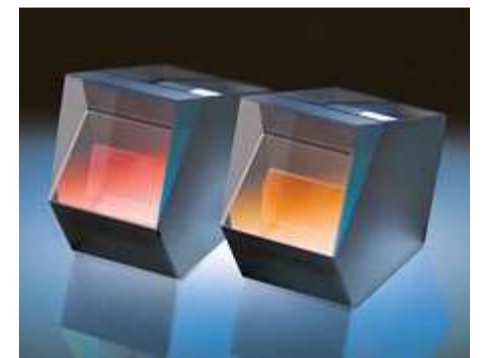
#47-458 - 25mm, MgF₂ Coated, High Tolerance Penta Prism
£142.40

Qty



#58-983 - 8-32 Male to 1/4-20 Male, Thread Adapter
£6.36

Qty



#66-634 - 25mm, MgF₂ Coated, Penta Prism Beamsplitter
£249.60

Qty

Resources

Media Type

- Application Note
- Video

APPLICATION NOTE

Anti-Reflection (AR) Coatings

APPLICATION NOTE

An Introduction to Optical Coatings

VIDEO

Optical Prisms Review

FAQ

Glossary

? FAQ

I'd like to
adhere two
prisms
together. ho...

GLOSSARY

Dove Prism

GLOSSARY

Equilateral
(Dispersing)
Prism

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