

RIGHT ANGLE PRISMS

Right Angle prisms are used to direct a beam of light at 90 degrees from the incident. They may also be used to retroreflect a beam.

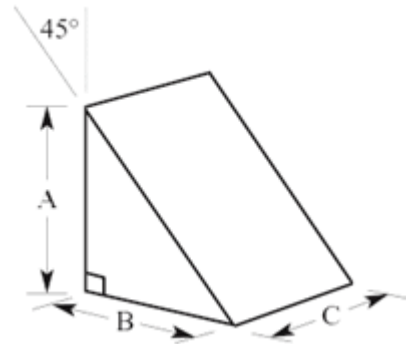
For collimated beams, the index of refraction for BK7 is sufficient to guarantee TIR (total internal reflection) at the hypotenuse for wavelengths in the visible and near infrared regions as long as the light is normally incident to the entrance aperture, and the hypotenuse is kept clean.

A prism with an aluminized hypotenuse is recommended for applications where the prism is frequently handled, or where convergent or divergent beams are used.

A wide variety of antireflection coatings may be used on the entry faces of the Right Angle prism to reduce reflection loss.

Standard Specifications:

Optical Material:	BK7, Fused Silica
Dimension Tolerance:	+0.0,-0.15mm
Clear Aperture:	>90%
Angle Tolerance:	see the table
Surface Quality:	40-20 scratch and dig
Wavefront Distortion:	$\lambda/4$ at 632.8nm
Bevel:	<0.25mm X 45°
Coating:	available upon request



Standard Right Angle Prism

Size(mm)	Material	3min.deviation	1min.deviation	30sec.deviation
		Product Number	Product Number	Product Number
BK7				
A=B=C=3.2	BK7	UQT-RAPB0101	UQT-RAPB0201	UQT-RAPB0301
A=B=C=5.0	BK7	UQT-RAPB0102	UQT-RAPB0202	UQT-RAPB0302
A=B=C=10.0	BK7	UQT-RAPB0103	UQT-RAPB0203	UQT-RAPB0303
A=B=C=12.7	BK7	UQT-RAPB0104	UQT-RAPB0204	UQT-RAPB0304
A=B=C=15.0	BK7	UQT-RAPB0105	UQT-RAPB0205	UQT-RAPB0305
A=B=C=20.0	BK7	UQT-RAPB0106	UQT-RAPB0206	UQT-RAPB0306
A=B=C=25.4	BK7	UQT-RAPB0107	UQT-RAPB0207	UQT-RAPB0307
A=B=C=30.0	BK7	UQT-RAPB0108	UQT-RAPB0208	UQT-RAPB0308
A=B=C=40.0	BK7	UQT-RAPB0109	UQT-RAPB0209	UQT-RAPB0309
A=B=C=50.8	BK7	UQT-RAPB0110	UQT-RAPB0210	UQT-RAPB0310
UV Grade Fused Silica				
A=B=C=5.0	Fused Silica	UQT-RAPF0101	UQT-RAPF0201	UQT-RAPF0301
A=B=C=10.0	Fused Silica	UQT-RAPF0102	UQT-RAPF0202	UQT-RAPF0302
A=B=C=12.7	Fused Silica	UQT-RAPF0103	UQT-RAPF0203	UQT-RAPF0303

A=B=C=15.0	Fused Silica	UQT-RAPF0104	UQT-RAPF0204	UQT-RAPF0304
A=B=C=20.0	Fused Silica	UQT-RAPF0105	UQT-RAPF0205	UQT-RAPF0305
A=B=C=25.4	Fused Silica	UQT-RAPF0106	UQT-RAPF0206	UQT-RAPF0306
A=B=C=30.0	Fused Silica	UQT-RAPF0107	UQT-RAPF0207	UQT-RAPF0307
A=B=C=40.0	Fused Silica	UQT-RAPF0108	UQT-RAPF0208	UQT-RAPF0308

Please Contact [ultiQuest](#) for other dimensions in prototype and production quantities.

NOTES!

- ➔ Please contact us for OEM with mass production..
- ➔ Every edge of these prisms is chamfered (beveled) for chipping prevention. The dimensions of these prisms are values not including chamfer.
- ➔ Be sure to wear laser safety goggles when checking optical path and adjusting optical axis.