ROOF PRISMS(Bk7 and Fused silica)

The roof (or Amici) prism deviates or deflects the image through an angle of 90 degrees. It is a Right Angle prism whose hypotenuse has been replaced by a 90-degree roof. Glass that does not contribute to the clear aperture has been trimmed away to reduce size and weight.

Roof prisms are suitable for applications that demand both Right Angle deflection and image erection (a combination left-to-right angle deflection and a top-to-bottom inversion, equivalent to a 180-degree rotation about the optical axis).

Roof prisms normally are uncoated and are used in a TIR (total internal reflection) mode; however, protected aluminum or internal silver coatings may be specified for roof surfaces when used in wide-field applications beyond TIR limits.

Antireflection coated entrance and exit faces are also available.

Standard Specifications:

Optical Material:	BK7 and Fused Silica	
Dimension Tolerance:	± 0.2mm	
Clear Aperture:	>90%	
Angle Tolerance:	±5 are minutes	
Roof Angle Tolerance:	±3 are minutes	
Surface Quality:	40-20 scratch and dig	
Wavefront Distortion:	lambda/4 at 632.8nm	
Bevel:	<0.25mm X 45°	
Coating:	available upon request	



Standard BK7 Roof Prism

A(mm)	B(mm)	C(mm)	Optical Material	Product Number
9.0	9.0	12.18	BK7	UQT-RFPB0101
9.0	9.0	12.18	Fused Silica	UQT-RFPF0102
14.0	14.0	13.00	BK7	UQT-RFPB0103
14.0	14.0	13.00	Fused Silica	UQT-RFPF0104
20.0	20.0	27.40	BK7	UQT-RFPB0105
20.0	20.0	27.40	Fused Silica	UQT-RFPF0106
23.0	23.0	31.50	BK7	UQT-RFPB0107
23.0	23.0	31.50	Fused Silica	UQT-RFPF0108
30.0	30.0	41.1	BK7	UQT-RFPB0109
30.0	30.0	41.1	Fused Silica	UQT-RFPF0110

Please Contact ultiQuest for other dimensions in prototype and production quantities.

NOTES!

If you are looking for Fused silica roof prisms, please request us.

E 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.