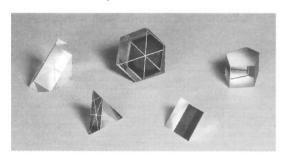
## Right Angle Prisms

The 45-45-90 degree prism is the most commonly purchased of all our prisms, and has several applications: to produce 90° reflection of light, to retro-reflect light (Porro prism) and even as a front-surface mirror with the hypotenuse aluminized. The surfaces of these prisms are flat within 1/10-wave. Angles are within 3 minutes. In addition, we select from our production those prisms to be used as the two components in making our SCL-series beamsplitter cubes.



Catalog Number	Square Aperture	Material	Transmission Spectrum	
ADV-15	15 mm	CaF <sub>2</sub>	130nm-9.6µm	
ADV-25	25 mm	CaF <sub>2</sub>	130nm-9.6µm	
ADU-15	15 mm	UV Silica	190nm-2.5ա	
ADU-25	25 mm	UV Silica	190nm-2.5µm	
AD-15	15 mm	Glass	380nm-2.5µm	
AD-25	25 mm	Glass	380nm-2.5µm	
AD-51	51 mm	Glass	380nm-2.5µm	

MECHANICAL :	SPECIFICATIONS		
Dimensions	+0, -0.1 mm		
Angles	±1-3 minutes		
Surface Flatness	1/10-1/20 wave		
Polish	10/5		
Bevels	0.3 mm X 45°		

## Pellin-Broca Prism

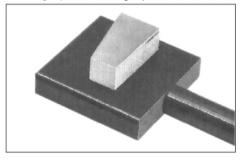
We fabricate Pellin-Broca in CaF<sub>2</sub> for the vacuum-ultraviolet, and in UV-grade fused silica for the ultraviolet and near-infrared. These are designed so that the entrance and exit faces are approximately at Brewster's angle for the design spectrum, thus minimizing reflection losses for p-polarized light.

PELLIN-BROCA PRISMS : SCHEMATIC			
90°			

Catalog Number	Square Aperture	Material	Design Limit of Spectrum Transmission		Separation λ <sub>2</sub> - λ <sub>1</sub>	Brewster's Angle
ADBV-10	10 mm	CaF <sub>2</sub>	130nm-250nm	9.6 µm	~3°	56° - 59°
ADBV-20	20 mm	CaF₂	130nm-250nm	9.6 µm	~3°	56° - 59°
ADBU-10	10 mm	UV Silica	190nm-425nm	2.5 µm	~7°	56° - 57°
ADBU-20	20 mm	UV Silica	190nm-425nm	2.5 µm	~7°	56° - 57°
ADB-10	10 mm	BK7	380nm-2.5µm	2.5 µm	~2°	56° - 57°
ADR-20	20 mm	BK7	380nm-2.5um	2.5 um	~2°	56° - 57°

Note: deviation is complex, please inquire,

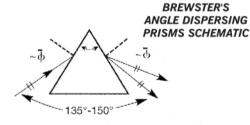
 $\lambda_2$ - $\lambda_1$  refers to design spectrum extremes for example 130/250 nm (ADBV)



MECHANICAL SPECIFICATIONS			
Dimensions	+0, -0.1mm		
Angles	±1-3 minutes		
Surface Flatness	1/10-1/20 wave		
Polish	10/5		
Bevels	0.3 mm X 45°		

## **Dispersion Prism**

We fabricate dispersing prisms in CaF<sub>2</sub> for the vacuum-ultraviolet, in UV grade fused silica for the ultraviolet, and in high-dispersion glass for the visible and near-infrared. These are designed so that the entrance and exit faces are approximately at Brewster's angle for the design spectrum, thus minimizing reflection losses for p-polarized light.



MECHANICAL SI	PECIFICATIONS
Dimensions	+0, -0.1 mm
Angles	±1-3 minutes
Surface Flatness	1/10-1/20 wave
Polish	10/5
Bevels	0.3 mm X 45°

Catalog Number	Material	Design Spectrum			Brewster's Angle	Apex Angle	
ABSV-15	CaF <sub>2</sub>	130nm - 250 nm	9.6 µm	~5°	56° - 59°	69.9°	
ABSV-25	CaF₂	130nm - 250 nm	9.6 µm	~5°	56° - 59°	69.9°	
ABSU-15	UV Silica	190nm - 425 nm	1.6 µm	~12°	56° - 57°	67.8°	
ABSU-25	UV Silica	190nm - 425 nm	1.6 µm	~12°	56° - 57°	67.8°	
ABS-15	SF14	380nm - 2.5 µm	2.5 µm	~10°	56° - 57°	60.0°	
ABS-25	SF14	380nm - 2.5 um	2.5 um	~10°	56° - 57°	60.0°	

Note: deviation is complex, please inquire.

 $\lambda_2$   $-\lambda_1$  refers to design spectrum extremes for example 130/250nm (ABSV)