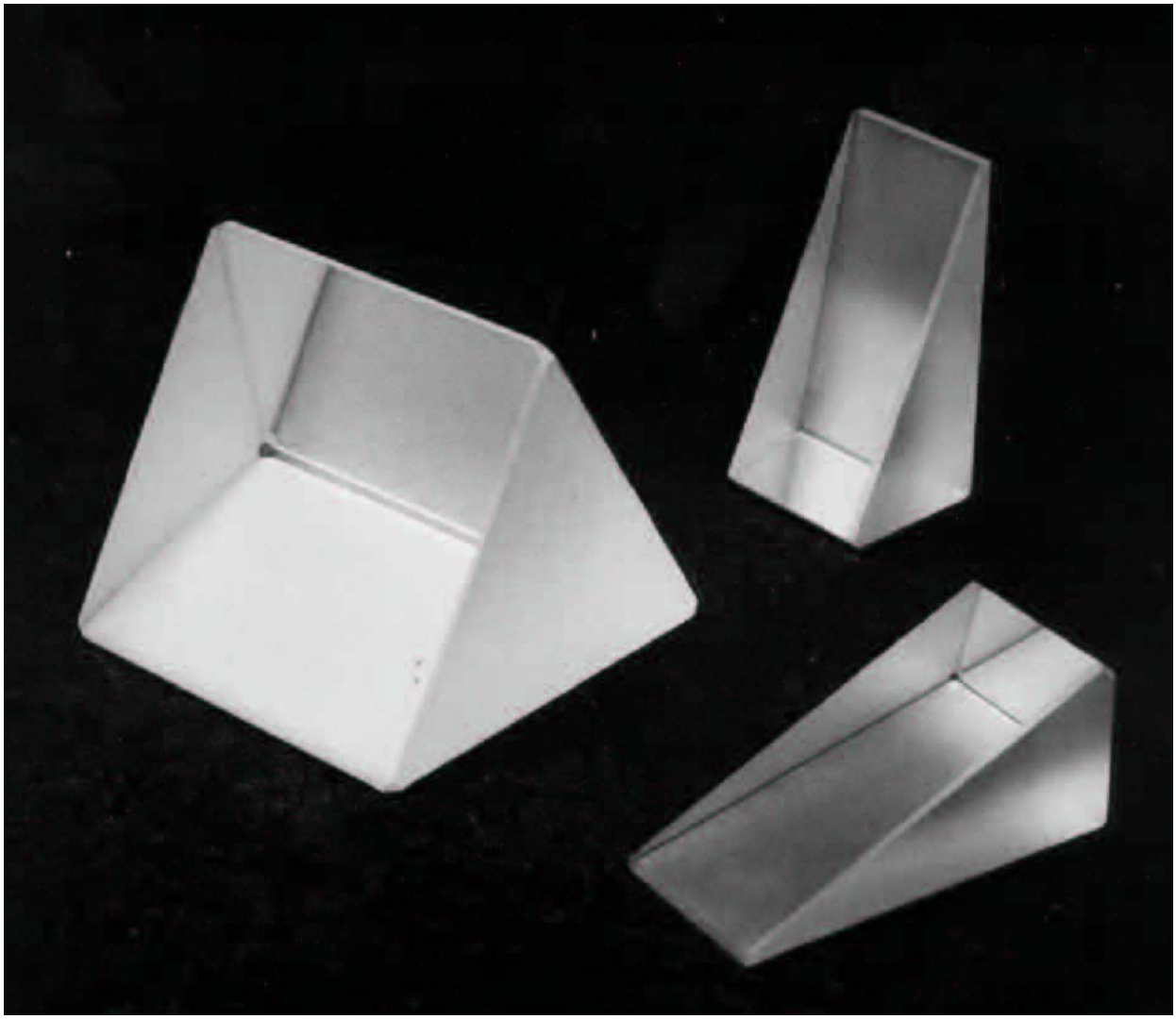
PRISMS



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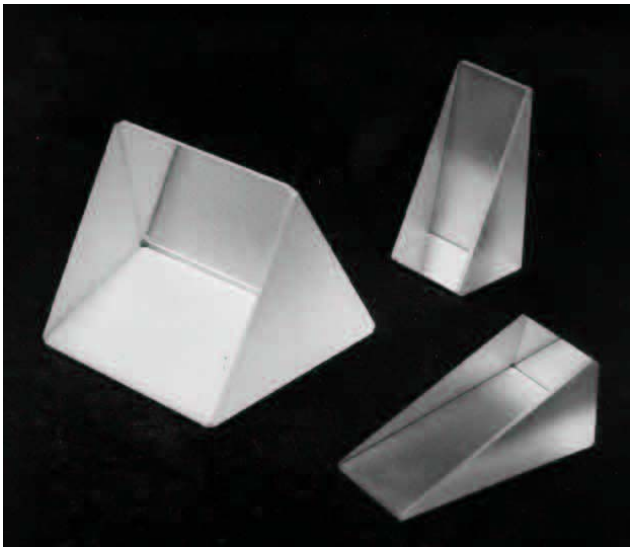

Fig. 56 Laser Dispersing and Littrow Prism.

LASER DISPERSING PRISMS

These prisms **(Model 31100)** have entrance and exit faces at the Brewster angle for the transmitted polarization. For this reason the surface reflection losses very low. The band of low surface reflection for these prisms is in the range 350-650 nm.

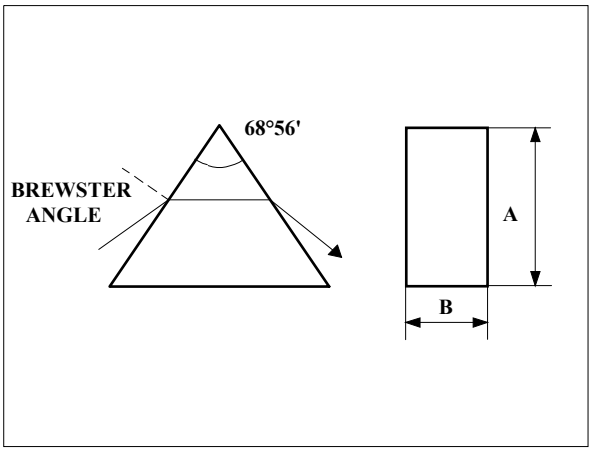

Fig. 57 Laser Dispersing Prism.

SPECIFICATIONS

Material	UV grade fused silica
Surface polish	20-10 scratch-dig
Flatness	λ/20
Apex angle	68 degree 56' (± 5')
Size A×B	25 mm × 18 mm
Price:	**$280.00**

LITTROW PRISMS

These dispersing prisms **(Model 31110)** are our laser dispersing prisms (see previous page) cut in half from the apex to base. Use these prisms in a laser cavity or as the basis of a prism spectrometer.

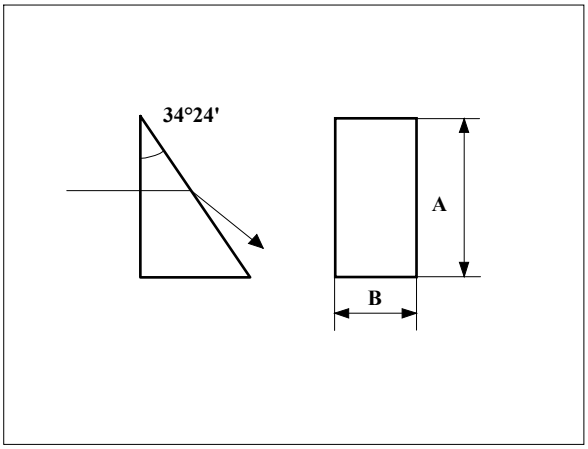

Fig. 58 Littrow Prism.

SPECIFICATIONS

Material	UV grade fused silica
Surface polish	20-10 scratch-dig
Flatness	λ/20
Apex angle	34 degree 24' (± 5')
Size A×B	25 mm × 18 mm
Price:	**$231.50**

Contact DDC TECHNOLOGIES for other types of prisms or for other size or precision demands or for antireflection coatings.

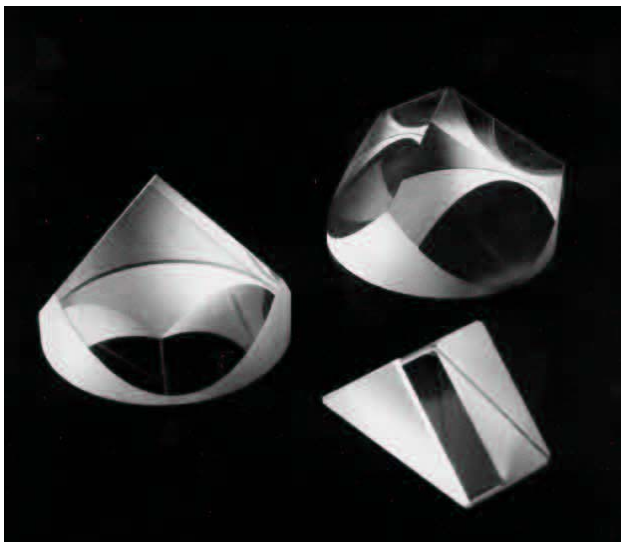

Fig. 59 Roof and Retro-reflector prisms.

ROOF PRISMS

These roof or Amici prisms **(Model 31120)** are 45-45-90 degree prisms, which are used to return the entering ray with the help of the total internal reflections (TIR) (see Fig. 60)

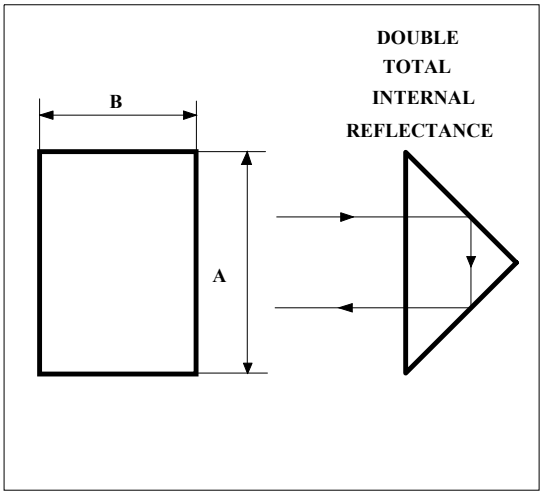

Fig. 60 Roof Prism Model.

SPECIFICATIONS

Material	UV grade fused silica
Surface polish	40-20 scratch-dig
Angle between entrance and return rays	5 second or less
Flatness	λ/10 all faces
Size A×B	35.9 × 25.4mm
Price:	**$310.00**

RETRO-REFLECTOR PRISM

Retro-reflector prisms **(Model 31130)** made from cylinder which is cut by plane perpendicular to its axes from one and by three planes from another one so the form thrihedral is originated. The light ray exposure three total internal reflections (TIR) inside the prism (Fig. 61) so a beam entering its base is returned parallel to itself regardless of prism orientation to within the stated degree of accuracy.

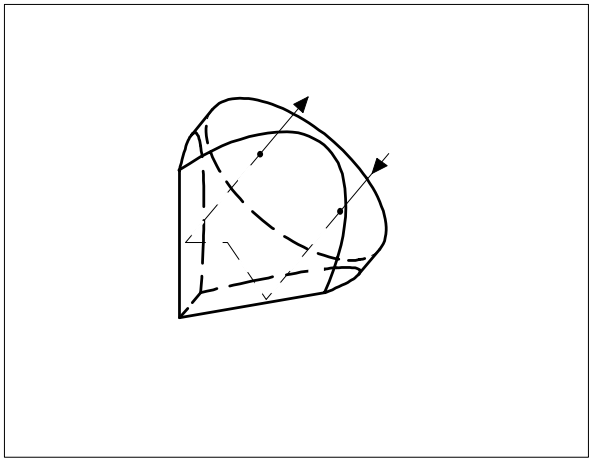

Fig. 61 Retro-reflector Prism Model.

SPECIFICATIONS

Material	BK7/A
Surface polish	60-40 scratch-dig
Flatness	λ/10 all faces
Size (dia.)	25.4 mm or other upon request
Return ray parallel within	5 seconds or less
Price:	**$291.50**

Contact DDC TECHNOLOGIES for other types of prisms or for oth er size or accuracy or for antireflection coatings.

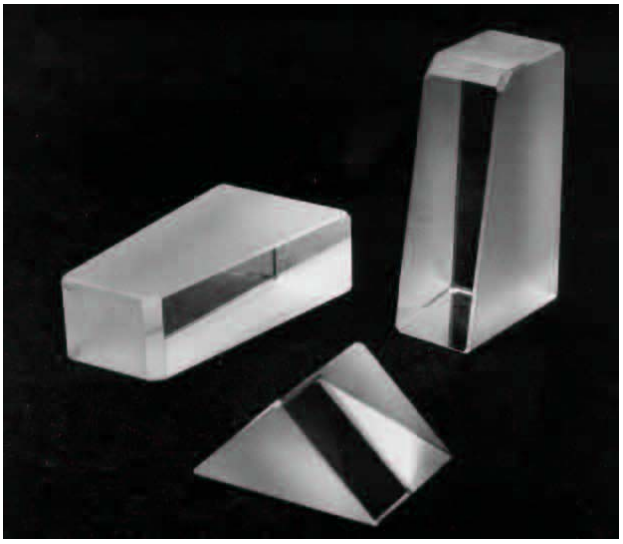

Fig. 62 Right Angle and Pelling-Broca Prisms.

Size A×B (mm)	Flint glass		Fused silica	
	Model	Price	Model	Price
25.0 × 18.0	31140	$165.00	31142	$310.00

PELLING-BROCA PRISMS

This dispersing prism of high index, high dispersion flint glass deflects a beam 90 degrees. The prism is cut so that the entrance and exit beams pass through at the Brewster angle.

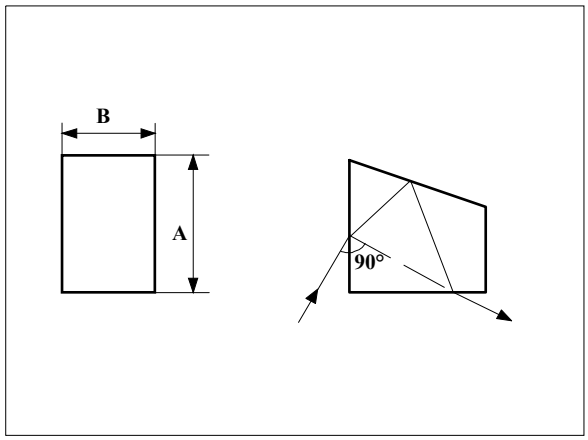

Fig. 63 Pelling-Broca Prism.

SPECIFICATIONS

Material	High optical quality flint glass or UV grade fused silica
Surface polish	40-20 scratch-dig
Flatness	λ/8 all faces
Size A×B	25 mm × 18 mm
Clear aperture	15 mm

RIGHT ANGLE PRISMS

These prisms are a 45-45-90 degree prisms, which are used to reflect beam at approximately 90 degree using total internal reflection (TIR) from the hypotenuse.

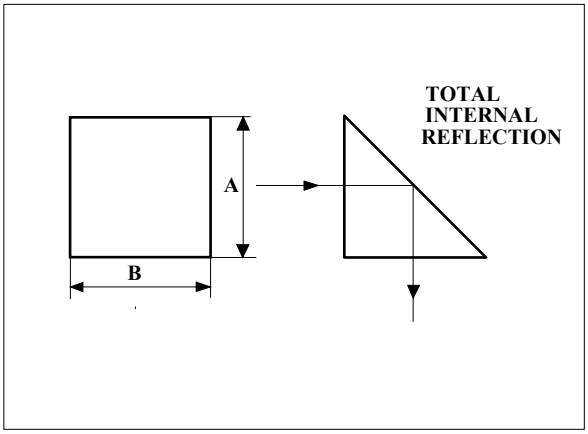

Fig. 64 Right Angle Prism.

SPECIFICATIONS

Material:	UV grade fused silica or BK7/A
Surface polish:	40-20 scratch-dig
Flatness:	λ/8 all faces
Clear aperture:	80% of the face size

Size A×B (mm)	Fused Silica		Borosilicate crown glass	
	Model	Price	Model	Price
15.0 ×15.0	31005	$127.00	31055	$65.00
25.4 × 25.4	31010	$180.00	31060	$72.00
30.8 × 30.8	31015	$315.00	31065	$87.00

Contact DDC TECHNOLOGIES for other types of prisms or for other size or precision demands or for antireflection coatings.