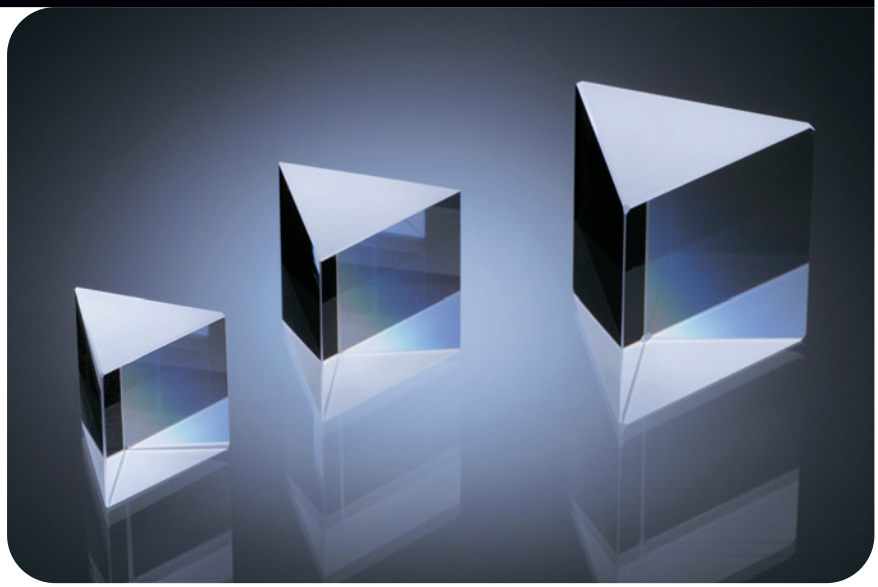
Equilateral Prisms

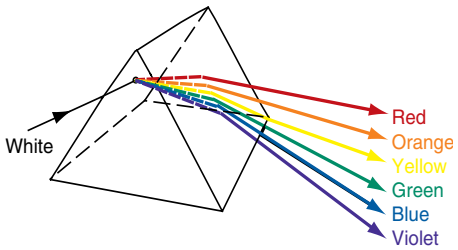
- *Ideal for wavelength separation in broadband applications*
- *BK7, SF10, or F2*

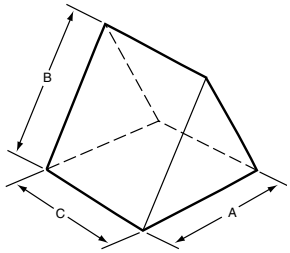


Equilateral Prisms are used routinely as dispersing elements where spectral separation is required. They provide better brightness (lower stray light) than diffraction gratings. They also have greater power handling capabilities and avoid possible confusion when trying to interpret overlapping spectral orders. It must be remembered that dispersion is non-linear with wavelength and that surface reflection losses may affect throughput. Ealing offers Equilateral Prisms in three materials designed to suit a wide variety of dispersion, wavelength, and surface reflection requirements. In general, a higher refractive index material produces greater angular separation.

Specifications

Material and Wavelength Range:
BK7: 330-2100 nm
SF10: 400-2400 nm
F2: 350-2200 nm
Refractive Index:
BK7: n_d=1.517
n_F- n_C=0.0081
SF10: n_d=1.728
n_F-n_C=0.0256
F2: n_d=1.620
n_F-n_C=0.0173
Angular Dispersion:
BK7: 0°42'37"
SF10: 2°58'25"
Dimensions Tolerance: ±0.5 mm
Angles Tolerance: ±5 arcmin
Surface Quality: 80-50
Flatness: 2λ per 25 mm
Uncoated





Equilateral Prisms

Dimensions A=B (mm)	Dimensions C (mm)	BK7 Glass Catalog Number	BK7 Glass Price US	SF10 Glass Catalog Number	SF10 Glass Price US	F2 Catalog Number	F2 Price US
20	20	24-2158	$50.00	-	-	-	-
25	25	24-3006	$50.00	-	-	-	-
30	30	24-3600	$80.00	24-2966	$106.00	24-2156	$260.00
40	40	24-3501	$90.00	-	-	-	-
60	60	24-3527	$110.00	24-2959	$250.00	24-2944	$320.00