



Optical Components:
Mirrors

Table of Contents...

Metal Coated Mirror	2
Elliptical Plate Mirror	3
Prism Mirror	3
Dielectric Coated Mirror.....	4

Metal Coated Mirror

Specifications:

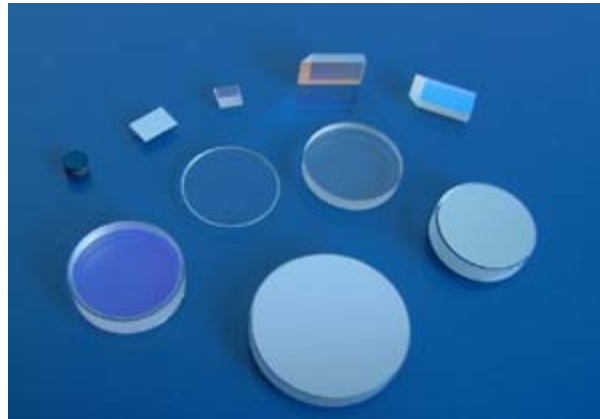
Substrate Material: BK7, Fused Silica,
and Pyrex

Diameter Tolerance: $\pm 0.2\text{mm}$

Thickness Tolerance: $\pm 0.2\text{mm}$

Coating Type: Protected aluminum,
protected silver, and gold
mirror

Surface Quality: 60-40



Reflection Range

- SiO_2 Protective Aluminum: $R_{\text{avg}} > 90\%$, 400nm-10 μm
- UV Enhanced Aluminum: $R_{\text{avg}} > 93\%$, 350nm-700nm
- Protective Silver: $R_{\text{avg}} > 95\%$, 450nm-50 μm
- Protective Gold: $R_{\text{avg}} > 95\%$, 1 μm -10 μm

Laser Quality Mirrors

Diameter	Thickness	Substrate	Flatness	Coating Type		
				Al+P	Ag+P	Au+P
12.7mm	6.35mm	BK7	$\lambda / 10$	MAL1112	MAG1112	MAU1112
25.4mm	6.35mm	BK7	$\lambda / 10$	MAL1125	MAG1125	MAU1125
30.0mm	6.35mm	BK7	$\lambda / 10$	MAL1130	MAG1130	MAU1130

Standard Quality Mirrors

Diameter	Thickness	Substrate	Flatness	Coating Type		
				Al+P	Ag+P	Au+P
12.7mm	6.35mm	BK7	$\lambda / 2$	MAL1212	MAG1212	MAU1212
25.4mm	6.35mm	BK7	$\lambda / 2$	MAL1225	MAG1225	MAU1225
30.0mm	6.35mm	BK7	$\lambda / 2$	MAL1230	MAG1230	MAU1230

Elliptical Plate Mirror

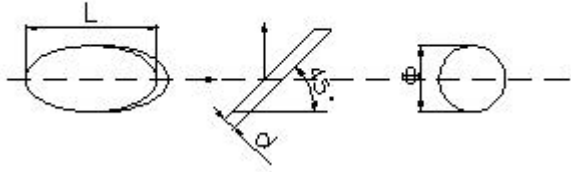
Specifications:

Substrate Material: Crown Glass or Pyrex

Diameter Tolerance: $\pm 0.2\text{mm}$

Thickness Tolerance: $\pm 0.2\text{mm}$

Surface Quality: 60-40



Size = Diameter x L (mm ²)	Thickness	Substrate	Flatness	Coating Type		
				Al+P	Ag+P	Au+P
20x28.3	3.0mm	BK7	$\lambda/2$	MAL1320	MAG1320	MAU1320
30x42.4	5.0mm	BK7	$\lambda/2$	MAL1330	MAG1330	MAU1330

Prism Mirror

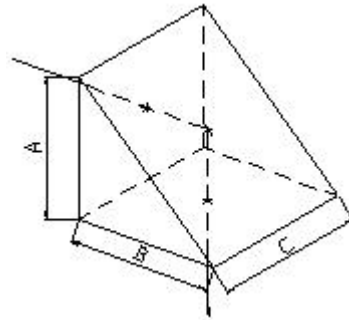
Specifications:

Diameter Tolerance: $\pm 0.2\text{mm}$

Clear Aperture: $> 90\%$

Surface Quality: 60-40

Bevel: 0.2-0.4mm



Size	Material	Flatness	Coating Type		
			Al+P	Ag+P	Au+P
A = B = C = 15	BK7	$\lambda/2$	MAL1415	MAG1415	MAU1415
A = B = C = 20	BK7	$\lambda/2$	MAL1420	MAG1420	MAU1420
A = B = C = 25.4	BK7	$\lambda/2$	MAL1425	MAG1425	MAU1425

Dielectric Coated Mirror

- For high power / high energy laser system application
- Dichroitic Mirror from Harmonic separators
- Output coupling coated for solid state laser
- Broadband mirror for UV, VIS, NIR application
- OEM design is available

Specifications:

Substrate Material: BK7, Fused Silica,
and Pyrex

Diameter Tolerance: $\pm 0.2\text{mm}$

Thickness Tolerance: $\pm 0.2\text{mm}$

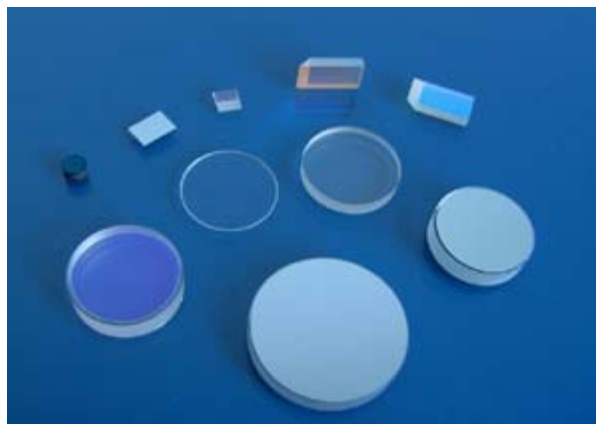
Surface Quality: 20-10 for laser
application

Surface Quality: 60-40 for instrumental
application

Flatness: Up to $\lambda/10$ @ 633nm

Coating: $R \geq 99.8\%$, 0° AOI

Coating: $R \geq 99.5\%$, 45° AOI



Type	Size
Round Plate	From 3mm - 400mm diameter
Square Plate	From 1x1mm - 300x300mm
Elliptical Plate	Up to 100x141mm
Round Concave Lens	Radii from R 1mm to R 10,000mm
Right Angle Prism	From 3x3mm - 80x80mm