

Right-Angle Prisms

A Right-Angle Prism is usually used as a mirror to deviate light through 90 degree, and also as a retroreflector to deflect light 180 degree by total internal reflection.

90-degree Deflection occurs at the hypotenuse face. The image is erect and reversed.

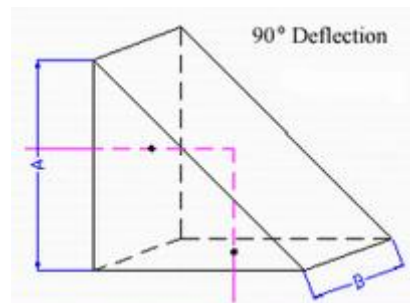
180-degree Deflection uses with hypotenuse as the entrance and exit face. The main application of it is used as a retroreflector provided that the Plane of incident beam includes the vertex.



BK7 Right-Angle Prisms

Specifications:

- Material: **BK7 Grade A optical glass**
- Dimension Tolerance: +0.0/-0.2mm
- Clear Aperture: >80%
- Angle Tolerance: see the table
- Surface Quality: 60/40
- Flatness: $\lambda/2$
- Bevel: 0.2mm up to 0.5mm
- Coating: HR coating on reflection surface and covered with black paint
AR coating on input and output surface



| Size (mm) | 3 Min. Deviation | 1 Min. Deviation | 30 Sec. Deviation |
|------------|------------------|------------------|-------------------|
| A,B,C | Part No. | Part No. | Part No. |
| A=B=C=2.0 | RAP1101 | RAP1201 | RAP1301 |
| A=B=C=3.2 | RAP1102 | RAP1202 | RAP1302 |
| A=B=C=5.0 | RAP1103 | RAP1203 | RAP1303 |
| A=B=C=10.0 | RAP1104 | RAP1204 | RAP1304 |
| A=B=C=12.7 | RAP1105 | RAP1205 | RAP1305 |
| A=B=C=15.0 | RAP1106 | RAP1206 | RAP1306 |
| A=B=C=20.0 | RAP1107 | RAP1207 | RAP1307 |
| A=B=C=25.4 | RAP1108 | RAP1208 | RAP1308 |
| A=B=C=30.0 | RAP1109 | RAP1209 | RAP1309 |
| A=B=C=40.0 | RAP1110 | RAP1210 | RAP1310 |

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| A=B=C=50.0 | RAP1111 | RAP1211 | RAP1311 |
|------------|---------|---------|---------|

Fused Silica Right-Angle Prisms

Specifications:

- Material: **UV Fused Silica**
- Dimension Tolerance: +0.0/-0.2mm
- Clear Aperture: >80%
- Angle Tolerance: see the table
- Surface Quality: 60/40
- Flatness: $\lambda/2$
- Bevel: 0.2mm up to 0.5mm
- Coating: HR coating on reflection surface and covered with black paint
AR coating on input and output surface

| Size (mm) | 3 Min. Deviation | 1 Min. Deviation | 30 Sec. Deviation |
|------------|------------------|------------------|-------------------|
| A,B,C | Part No. | Part No. | Part No. |
| A=B=C=5.0 | RAP2101 | RAP2201 | RAP2301 |
| A=B=C=10.0 | RAP2102 | RAP2202 | RAP2302 |
| A=B=C=12.7 | RAP2103 | RAP2203 | RAP2303 |
| A=B=C=15.0 | RAP2104 | RAP2204 | RAP2304 |
| A=B=C=20.0 | RAP2105 | RAP2205 | RAP2305 |
| A=B=C=25.4 | RAP2106 | RAP2206 | RAP2306 |
| A=B=C=30.0 | RAP2107 | RAP2207 | RAP2307 |