

PRISMS

YOUR ONE-STOP SOURCE FOR PRISMS

From prototype to production, Rainbow Research Optics, Inc (RROI) manufactures and coats **prisms**.

- ✓ In-house grinding, polishing, activated bonding, machining, and coating
- ✓ Low distortion (down to $\lambda/10$ @ 633 nm) and beam deviation tolerances (arc sec range)
- ✓ Thin film engineering and optical assemblies

Right angle prisms: • [Right Angle Prisms \(https://www.rr-optics.com/prisms/#rightangleprism\)](https://www.rr-optics.com/prisms/#rightangleprism) • [Right Angle Bending Prisms \(https://www.rr-optics.com/prisms/#rightanglebendingprism\)](https://www.rr-optics.com/prisms/#rightanglebendingprism) • [Right Angle Folding Prisms \(https://www.rr-optics.com/prisms/#rightanglefoldingprism\)](https://www.rr-optics.com/prisms/#rightanglefoldingprism)

Other prisms: • [Isosceles Brewster Prisms \(https://www.rr-optics.com/prisms/#isoscelesbrewsterprism\)](https://www.rr-optics.com/prisms/#isoscelesbrewsterprism) • [Rhomboid Prisms \(https://www.rr-optics.com/prisms/#rhomboidprism\)](https://www.rr-optics.com/prisms/#rhomboidprism) • [Equilateral Dispersing Prisms \(https://www.rr-optics.com/prisms/#equilateraldispersingprism\)](https://www.rr-optics.com/prisms/#equilateraldispersingprism) • [Porro Prisms \(https://www.rr-optics.com/prisms/#porroprism\)](https://www.rr-optics.com/prisms/#porroprism) • [Littrow Prisms \(https://www.rr-optics.com/prisms/#littrowprism\)](https://www.rr-optics.com/prisms/#littrowprism) • [Penta Prisms \(https://www.rr-optics.com/prisms/#pentaprism\)](https://www.rr-optics.com/prisms/#pentaprism) • [Corner Cube Prisms \(https://www.rr-optics.com/prisms/#cornercubeprism\)](https://www.rr-optics.com/prisms/#cornercubeprism) • [Dove Prisms \(https://www.rr-optics.com/prisms/#doveprism\)](https://www.rr-optics.com/prisms/#doveprism)

STANDARD PRISMS

Customization is available beyond what's listed. [Contact us \(https://www.rr-optics.com/contact-page/\)](https://www.rr-optics.com/contact-page/) with your requirements.

RIGHT ANGLE PRISMS

(part code: RAP)

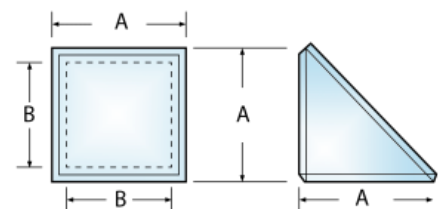
Substrate: SUPRASIL 1, UV Fused Silica, BK7, or SF2

Dimension Tolerance: +0.0/-0.20 mm

Angular Deviation: < 3 arc min.

Clear Aperture: > 85% of central circular dimension

Edge Bevel: 0.3 mm face width at 45°



RIGHT ANGLE BENDING PRISMS

(part code: BRP)

Substrate: SUPRASIL 1, UV Fused Silica, BK7, or SF2

Dimension Tolerance: +0.0/-0.20 mm

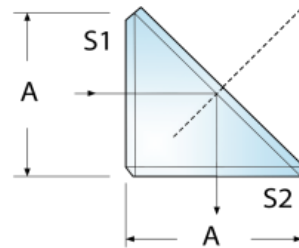
Angular Deviation: < 3 arc min.

S1 and S2 AR Coating: Single Wavelength AR R < 0.25%,

Broadband AR $R_{avg} < 0.50\%$

Clear Aperture: $> 85\%$ of central circular dimension

Edge Bevel: 0.3 mm face width at 45°



RIGHT ANGLE FOLDING PRISMS

(part code: FRP)

Substrate: UV Fused Silica or BK7

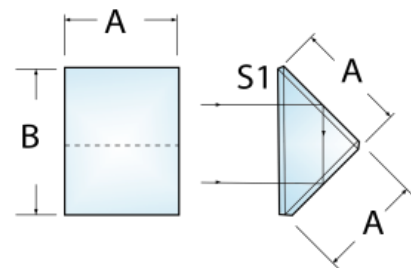
Dimension Tolerance: $+0.0/-0.20$ mm

Angular Deviation: < 3 arc min.

S1 and S2 AR Coating: Single Wavelength AR $R < 0.25\%$,
Broadband AR $R_{avg} < 0.50\%$

Clear Aperture: $> 85\%$ of central circular dimension

Edge Bevel: 0.3 mm face width at 45°



ISOSCELES BREWSTER PRISMS

(part code: IBP)

Substrate: SUPRASIL 1, UV Fused Silica, or SF10

Dimension Tolerance: $+0.0/-0.20$ mm

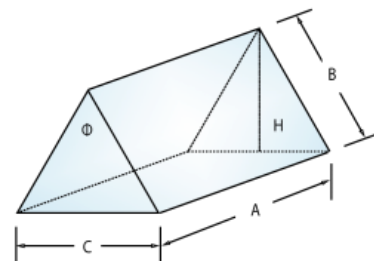
Angular Deviation: < 10 arc min.

Surface Figure: $\lambda/10$ @ 633 nm

Surface Quality: 10-5 (SUPRASIL 1 and UV Fused Silica), 20-10 (SF10)

Clear Aperture: $> 85\%$ of central circular dimension

Edge Bevel: 0.3 mm face width at 45°



RHOMBOID PRISMS

(part code: RBP)

Substrate: UV Fused Silica or BK7

Dimension Tolerance: $+0.0/-0.20$ mm

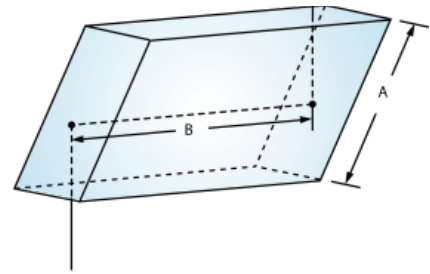
Angular Deviation: < 3 arc min.

Surface Figure: $\lambda/10$ @ 633 nm

Clear Aperture: $> 85\%$ of central circular dimension

Edge Bevel: 0.3 mm face width at 45°





EQUILATERAL DISPERSING PRISMS

(part code: EDP)

Substrate: UV Fused Silica or BK7

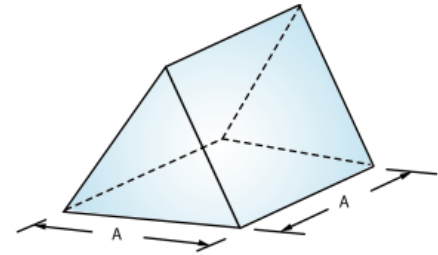
Dimension Tolerance: +0.0/-0.20 mm

Angular Deviation: < 3 arc min.

Surface Figure: $\lambda/8$ @ 633 nm

Clear Aperture: > 85% of central circular dimension

Edge Bevel: 0.3 mm face width at 45°



PORRO PRISMS

(part code: PRP)

Substrate: UV Fused Silica, BK7, or SF2

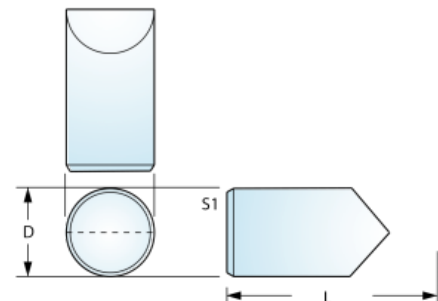
Dimension Tolerance: +0.0/-0.20 mm

Angular Deviation: ≤ 10 arc min.

Surface Figure: $\lambda/10$ @ 633 nm

Clear Aperture: > 85% of central circular dimension

Edge Bevel: 0.3 mm face width at 45°



LITTROW PRISMS

(part code: LOP)

Substrate: UV Fused Silica

Dimension Tolerance: +0.0/-0.20 mm

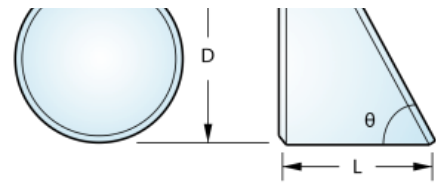
Angular Deviation: ≤ 10 arc min.

Surface Figure: $\lambda/10$ @ 633 nm

Clear Aperture: > 85% of central circular dimension

Edge Bevel: 0.3 mm face width at 45°





PENTA PRISMS

(part code: PTP)

Substrate: BK7

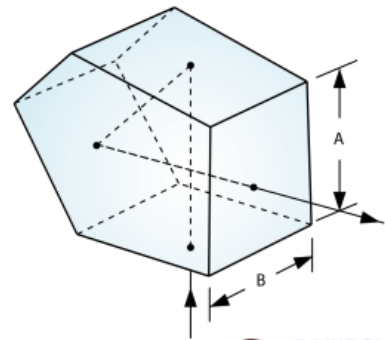
Dimension Tolerance: +0.0/-0.20 mm

Angular Deviation: ≤ 10 arc min.

Surface Figure: $\lambda/4$ @ 633 nm

Clear Aperture: $> 85\%$ of central circular dimension

Edge Bevel: 0.3 mm face width at 45°



CORNER CUBE PRISMS

(part code: CCP)

Substrate: BK7A

Dimension Tolerance: +0.0/-0.20 mm

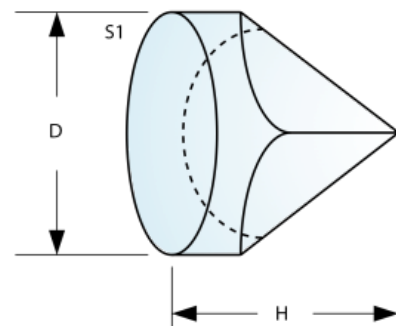
Beam Deviation: $180^\circ \pm 2, 5, \text{ or } 10$ arc sec.

Surface Figure: $\lambda/8$ @ 633 nm

Surface Quality: 40-20

Clear Aperture: $> 85\%$ of central circular dimension

Edge Bevel: 0.3 mm face width at 45°



DOVE PRISMS

(part code: DOP)

Substrate: UV Fused Silica or BK7

Dimension Tolerance: +0.0/-0.20 mm

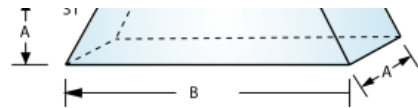
Angular Deviation: \leq arc min.

Surface Figure: $\lambda/4$ @ 633 nm

Clear Aperture: $> 85\%$ of central circular dimension

Edge Bevel: 0.3 mm face width at 45°





GET A FREE QUOTE TODAY

Send us your requirements below and we will respond quickly.

YOUR INFO.

Name*

Company

Phone

E-mail*

PRODUCT DETAILS

Fill in fields if applicable.

Part Name or Part
Code*

Material*

Quantity*

Delivery Time

Diameter

Thickness

Length

Width

S1 Radius

Parallelism or Wedge

Flatness/Irregularity
@633nm

Surface Quality
(Scratch/Dig)

Coating Requirements

QUESTIONS & COMMENTS

Any additional product details or questions?

Upload Your File

No file chosen

Upload Your File

No file chosen

Upload Your File

No file chosen

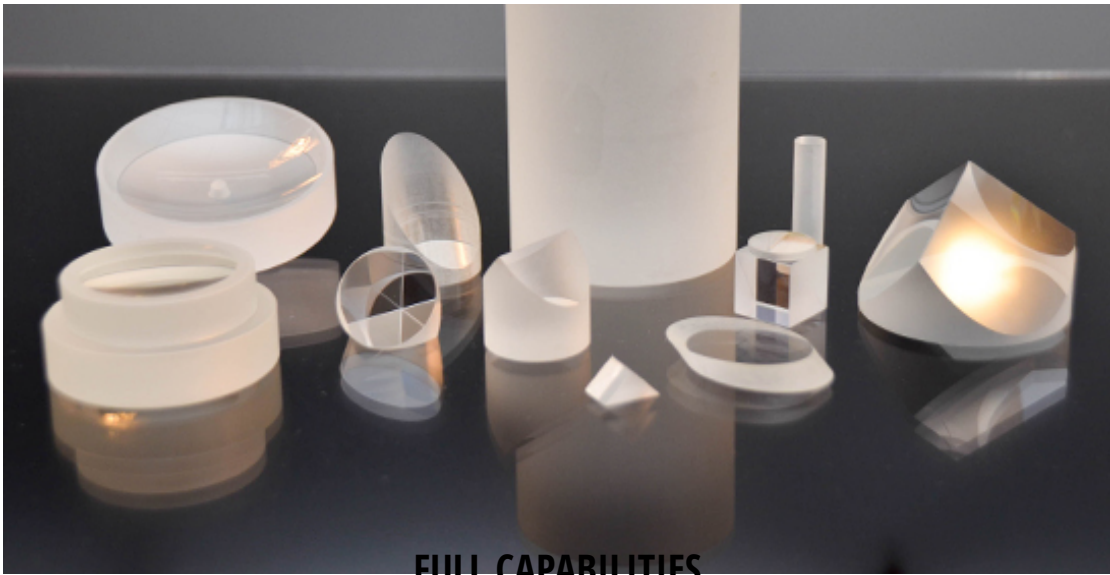
Rainbow Research Optics, Inc (RROI) is ISO 9001:2015 Certified and ITAR Registered



CUSTOM OPTICS

(<https://www.rr-optics.com/custom-optics/>)





FULL CAPABILITIES
[\(https://www.rr-optics.com/capabilities/\)](https://www.rr-optics.com/capabilities/)



WORLD CLASS COATINGS
[\(https://www.rr-optics.com/coatings/\)](https://www.rr-optics.com/coatings/)

OPTICS

Request a Quote (<https://www.rr-optics.com/request-a-quote/>)

Custom Optics (<https://www.rr-optics.com/custom-optics/>)

In-Stock Now – coming soon (<https://www.rr-optics.com/under-construction/>)

SERVICES

Coating Service (<https://www.rr-optics.com/coatings/>)

Environmental Testing (<https://www.rr-optics.com/environmental-testing/>)

Design Help (<https://www.rr-optics.com/custom-design/>)

Design Help (<https://www.rr-optics.com/system-design/>)

Metrology Service (<https://www.rr-optics.com/metrology/>)

ABOUT

News & Blog (<https://www.rr-optics.com/news-events/>)

Factory Tour (<https://www.rr-optics.com/factory-tour/>)

Capabilities (<https://www.rr-optics.com/capabilities/>)

ITAR Registration (<https://www.rr-optics.com/itar/>)

ISO Certification (<https://www.rr-optics.com/iso/>)

Careers (<https://www.rr-optics.com/employment/>)

Contact Us (<https://www.rr-optics.com/contact-page/>)

QUICK QUESTION? ()



[\(https://www.rr-optics.com/itar/\)](https://www.rr-optics.com/itar/)



[\(https://www.rr-optics.com/iso/\)](https://www.rr-optics.com/iso/)



[\(https://www.rr-optics.com/iso/\)](https://www.rr-optics.com/iso/)

©2017 Rainbow Research Optics, Inc.® - All rights reserved.

TOS (<https://www.rr-optics.com/terms-of-service/>) | Privacy Statement (<https://www.rr-optics.com/privacy-policy/>)