

TECHSPEC<sup>®</sup> 12.5mm Dia. 0.5° Beam Dev. Fused Silica Wedge Prism 355nm Laser V-Coat



TECHSPEC Fused Silica Wedge Prisms

Stock **#39-073** CLEARANCE **8 In Stock**

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1

+

A\$166<sup>40</sup>

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| Qty 1+         | A\$166.40 each                |
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General

Note:

Specifcy this is S1 & S2 power and irregularity, not the overall power of the wedge

Physical & Mechanical Properties

Diameter (mm):

12.50

Thickness (mm):

1.50

Bevel:

Protective as needed

|                                           |                                                       |
|-------------------------------------------|-------------------------------------------------------|
| 1° 3'                                     | Wedge Angle (arcmin):                                 |
| Optical Properties                        |                                                       |
| 30                                        | Angle Tolerance (arcsec):                             |
| Laser V-Coat (355nm)                      | Coating:                                              |
| 355                                       | Design Wavelength DWL (nm):                           |
| Fused Silica (Corning 7980)               | Substrate: <input type="checkbox"/>                   |
| 20-10                                     | Surface Quality:                                      |
| Beam Deviation                            | Image Orientation:                                    |
| R <sub>abs</sub> <0.25% @ 355nm           | Coating Specification:                                |
| 7.5 J/cm <sup>2</sup> @ 355nm, 20ns, 20Hz | Damage Threshold, By Design: <input type="checkbox"/> |
| 0.50                                      | Power (fringes) @ 632.8nm:                            |
| 0.20                                      | Irregularity (fringes) @ 632.8nm:                     |
| 0.50                                      | Ray Deviation @ 355nm (°):                            |
| 0.87                                      | Power (diopters):                                     |
| 1.05°                                     | Wedge Angle (°):                                      |

|                     |                                                              |
|---------------------|--------------------------------------------------------------|
| Material Properties |                                                              |
| 0.52                | Coefficient of Thermal Expansion CTE (10 <sup>-6</sup> /°C): |

|                       |                             |
|-----------------------|-----------------------------|
| Regulatory Compliance |                             |
| Compliant             | RoHS 2015:                  |
| Compliant             | Reach 209:                  |
| View                  | Certificate of Conformance: |

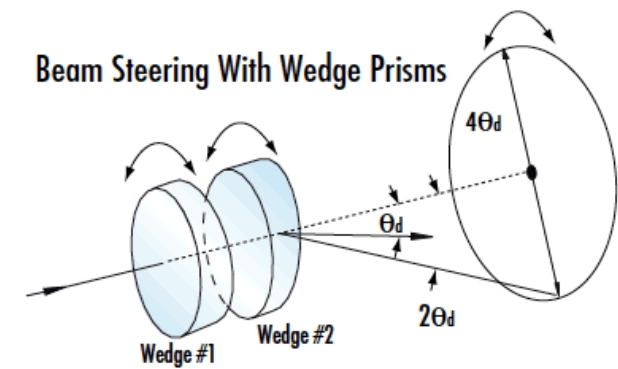
## Product Details

- Deviates Laser Beam Path from 0.5° - 5.0°
- Ideal for UV to NIR Beam Steering Applications from 250 to 1064nm
- Ideal for High Power Beam Steering Applications

TECHSPEC® Fused Silica Wedge Prisms are designed for a range of laser beam steering applications requiring UV-VIS or first through fourth Nd:YAG harmonic Anti-Reflection Coatings. They are optimized to ensure the highest level of system performance using tightly controlled specifications including *N*/10 surface flatness, 20-10 surface quality, and a wedge tolerance of 15 or 30 arcseconds. The Nd:YAG coated versions feature high transmittance and guaranteed laser damage thresholds specific to the design wavelength. TECHSPEC® Fused Silica Wedge Prisms utilize a wedge design to deviate laser beam path from 0.5° – 5°. By creating a risley prism pair using two wedge prisms with the same ray deviation, custom beam steering up to two times the wedge deviation is possible. A low coefficient of thermal expansion ensures accurate beam steering in high power laser applications.

**Note:** Power Diopter is defined as 1cm deviation at a distance of 1m from the prism. TECHSPEC® Wedge Prisms are also available in [N-BK7 versions](#).

## Technical Information





## Custom

Edmund Optics offers comprehensive custom manufacturing services for optical and imaging components tailored to your specific application requirements. Whether in the prototyping phase or preparing for full-scale production, we provide flexible solutions to meet your needs. Our experienced engineers are here to assist—from concept to completion.

Our capabilities include:

- Custom dimensions, materials, coatings, and more
- High-precision surface quality and flatness
- Tight tolerances and complex geometries
- Scalable production—from prototype to volume

Learn more about our [custom manufacturing capabilities](#) or submit an inquiry [here](#).

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