

TECHSPEC® 8" Dia. Enhanced Aluminum, $\lambda/10$ Flat ZERODUR®

#31-394-533



TECHSPEC® Precision Optical Flat Mirrors are ideal for various applications, including interferometry, imaging systems, laser applications, optical path folding, and autocollimation. These mirrors are available in multiple coating and substrate options and surface flatness options of $\lambda/10$ and $\lambda/20$. The first substrate option ZERODUR®, a yellow-tinted glass ceramic, features an extremely low coefficient of thermal expansion. TECHSPEC® Precision Optical Flat Mirrors are ideal for applications where temperature fluctuation is a concern using the ZERODUR® substrate. The second option, Fused Silica, is optically clear and features excellent resistance to abrasion and high durability, making it the best choice for applications in harsh environments.

[TECHSPEC® \$\lambda/10\$ and \$\lambda/20\$ Precision Optical Flats](#) are available for testing and measurement applications.

Note: Surface flatness specifications are measured before coating.

General

Note:	Flatness is specified as Peak to Valley
Type:	Flat Mirror

Physical & Mechanical Properties

Diameter (mm):	203.20 +0.0/-1.0
Back Surface:	Commercial Polish
Clear Aperture CA (mm):	182.88
Thickness (mm):	38.10 ±2.5
Thickness Tolerance (mm):	±2.5

Optical Properties

Surface Flatness (P-V):	$\lambda/10$
Substrate:	ZERODUR®
Surface Quality:	60-40
Coating Specification:	$R_{\text{avg}} > 95\%$ @ 450 - 650nm
Coating:	Enhanced Aluminum (450-650nm)
Coating Type:	Metal
Wavelength Range (μm):	0.45 - 0.65
Wavelength Range (nm):	450 - 650
Damage Threshold, Reference:	0.2 J/cm ² @ 532nm, 10ns



May 15, 2025

To Whom It May Concern,

This document certifies that the product stated below has been reviewed as requested by Edmund Optics:

<i>Stock No.</i>	<i>Description</i>
31-394-533	8" Dia. Enhanced Aluminum, $\lambda/10$ Flat ZERODUR®

This item is EU RoHS (2015/863/EU) compliant without the use of exemptions.

This certification means that:

- EO's suppliers have confirmed the material composition of this product.
- EO has implemented rigorous procedures to document this compliance.
- The information provided may, or may not, be based upon actual test data, or on information from our Vendors, Raw Material Suppliers or Subcontractors.



Jay Budd, Director of Corporate Compliance

May 15, 2025

Edmund Optics Inc. - 101 E Gloucester Pike, Barrington, NJ 08007 | 1-800-363-1992 | Compliance@edmundoptics.com



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Edmund Optics certifies that all articles included in this shipment are in compliance with the terms and conditions of this order. The company also certifies that the articles included in this shipment are in accordance to all agreed upon specifications and quality assurance provisions. Please call 1-800-363-1992 should any questions arise from this shipment.



Jeff Harvey- EVP of Operations



May 15, 2025

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This document certifies that the product stated below has been reviewed as requested by Edmund Optics:

Stock No.	Description
31-394-533	8" Dia. Enhanced Aluminum, $\lambda/10$ Flat ZERODUR®

This item does not contain any of the substances listed on the Reach SVHC list as of 07 November 2024 in quantities exceeding 0.1% weight by weight.

Please note the following:

- Entry 11 of Annex V of the REACH regulation EC 1907/2006 as amended by regulation 987/2008, exempts "non-hazardous" glass components from registration.
- Items considered to be packing materials and which do not form part of, or are not required for the operation of, the product, are not considered to be within scope of this declaration.
- EO does not routinely analyze products for substances not purposely added or specified within the design specifications, drawings and assembly procedures.

This certification means that:

- EO's suppliers have confirmed the material composition of this product.
- EO has implemented rigorous procedures to document this compliance.
- The information provided may, or may not, be based upon actual test data, or on information from our Vendors, Raw Material Suppliers or Subcontractors.



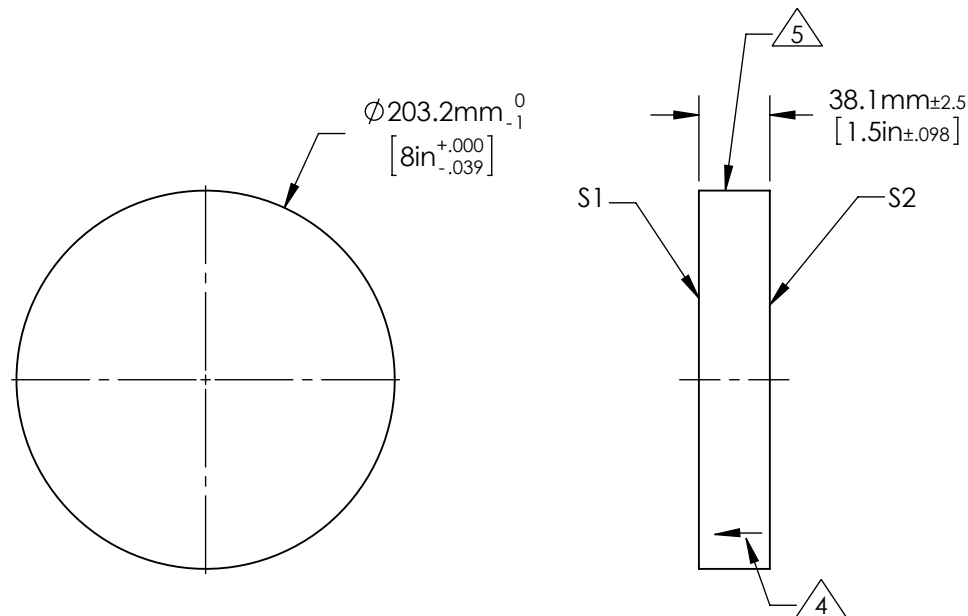
Jay Budd, Director of Corporate Compliance
May 15, 2025

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NOTES:

- 1. ALLOWABLE OPTICAL MATERIAL:
SCHOTT: ZERODUR 542/562
- 2. SURFACE S2 TO BE PARALLEL WITH SURFACE S1 TO < 3 ARCMIN
- 3. COATING (APPLY ACROSS COATING APERTURE)
S1: ENHANCED ALUMINUM
Ravg ≥ 95% 450-650nm @ 0° AOI

- S2: NONE
- 4. ARROW ON EDGE POINTING TOWARDS SURFACE S1.
- 5. FINE GROUND SURFACE



FOR INFORMATION ONLY:
DO NOT MANUFACTURE PARTS TO THIS DRAWING

	S1	S2	EFL (AT 587.6nm)	NA	 Edmund Optics®	
SHAPE	PLANO	PLANO				
SURFACE ACCURACY AT 632.8nm	1/10 WAVE	NA			TITLE	1/10λ Optical Flat, Zerodur, 8inch Diameter ENHANCED ALUMINUM
SURFACE QUALITY	60 - 40	COMMERCIAL POLISH	BFL (AT 587.6nm)	NA		
CLEAR APERTURE	ϕ 182.9	ϕ 182.9			DWG NO	31394-533
BEVEL MAX FACE	1.0 x 45°	1.0 x 45°	ALL DIMS IN	mm		