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High Durability Anti-Reflection (HDAR) Coated Fused Silica Windows



- HDAR Coating Achieves Severe Abrasion Requirements of MIL-C-675C
- Low Reflectivity Across the VIS-NIR
- Ideal for Use in Harsh Environments
- [Uncoated Fused Silica Windows](#) Also Available

Common Specifications

Physical & Mechanical Properties

Bevel:	Protective as needed	Edges:	Fine Ground
Knoop Hardness (kg/mm²):	522.00	Parallelism (arcsec):	<5
Poisson's Ratio:	0.16	Young's Modulus (GPa):	73

Optical Properties

Abbe Number (v_d):	67.8	Coating:	Hardened VIS-NIR (400-1100nm)
Coating Specification:	R _{avg} <1.5% @ 400 - 1100nm R _{abs} <2.0% @ 400 - 1100nm	Index of Refraction (n_d):	1.458
Substrate:	Fused Silica	Surface Quality:	20-10

Transmitted Wavefront, P-V:	$\lambda/10$	Wavelength Range (nm):	400 - 1100
Coating Temperature (°F):	-80 to +160 per MIL-M-13508C Paragraph 4.4.4		
Material Properties			
Coefficient of Thermal Expansion CTE (10⁻⁶/°C):	0.52 (+5 to +35°C) 0.57 (0 to +200°C) 0.48 (-100 to +200°C)		
Density (g/cm³):	2.20		
Environmental & Durability Factors			
Coating Abrasion:	Severe, per MIL-C-675C Paragraph 4.5.10		
Coating Adhesion:	Per MIL-M-13508C Paragraph 4.4.6	Coating Humidity:	≥24 Hours per MIL-C-675C paragraph 4.5.8
Coating Salt Solubility:	≥24 Hours Immersion per MIL-C-675C paragraph 4.5.7	Coating Salt Spray:	≥24 Hours per MIL-C-675C paragraph 4.5.9

Technical Information

Products

Dia. (mm)	Thickness (mm)	Coating	Stock Number	Price	Buy
5.00	1.00	Hardened VIS-NIR (400-1100nm)	#29-974	£153.21 Volume Pricing	20+ In Stock
12.50	1.50	Hardened VIS-NIR (400-1100nm)	#29-976	£161.97 Volume Pricing	20+ In Stock
25.00	3.00	Hardened VIS-NIR (400-1100nm)	#29-978	£179.48 Volume Pricing	9 In Stock
50.00	3.00	Hardened VIS-NIR (400-1100nm)	#29-981	£275.78 Volume Pricing	20+ In Stock



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