

Sputtered Helios Dark Neutral

NHE 1020 ER HPR

Performance Data



Technical data according To EN 410 and EN 673*	4 mm single	4/16/4 mm double
Solar Energy Transmission, τ_e	20%	18%
Solar Energy Reflection, ρ_e	24%	28%
Solar Energy Absorption, α_e	56%	54%
Visible Light Transmission, τ_v	22%	21%
Visible Light Reflection (External), ρ_{ve}	26%	30%
Visible Light Reflection (Internal), ρ_{vi}	30%	
Ultraviolet Transmission, τ_{UV}	<1%	
Ultraviolet Rejection	>99 %	
g value	0.32	0.24
Shading Coefficient	0.4	0.3
Total Solar Energy Rejected	68%	76%
Glare Reduction	75%	74%
U value, single glazing (W/m ² .K)	5.71	
U value, double glazing, Air filled (W/m ² .K)		2.69
Emissivity, ϵ_n	0.86	
Colour Rendering Index, R_a	99	98
Film Colour / Appearance	Neutral	
Installation position	External	
Warranty**: 10 Years vertical / 5 Years sloping		

Installation Notes: Edge sealing required. Use Film On for installation.

Please check the complete Film to Glass Thermal Stress Compatibility Guidelines before film installation; Contact Eastman Performance Films for full details.

*The solar performance data reported for LLumar architectural window films was measured and/or calculated using EN410 methodology for glazing solar performance measurement as measured on single pane, 4mm clear glass. Reported values are taken from representative product samples and are subject to normal manufacturing variances. Actual performance will vary based on a number of factors, including glass type and properties.

**Warranty validity: UK only

Datasheet created on 10/06/16. For a more recent version please contact your LLumar representative.

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