

Architectural Window Film

Data Sheet

SolarZone™ Interior PerLite™ 20, 35, 50, 70

Introduction

PerLite is a highly durable, ceramic-based film, manufactured by depositing semi-transparent, advanced ceramic layers on ultra-clear film. The film adds a subtle grey appearance to glazing for an extremely effective reduction in heat gain that preserves the natural view through the glass.

The result achieved by the innovative product structure is more effective heat rejection, with a less reflective appearance.

Typical Usage

- PerLite is the ideal solution for economic energy-saving projects when it's important to preserve views and retain a natural appearance
- PerLite's attractive appearance and solar properties make it the perfect choice for residential, commercial and retail projects

Product Construction

Face: Perlite 20, 35, 50, 70 Adhesive: Pressure sensitive adhesive Liner: PET

Certificates

Fire Certificate: DIN EN 13501-1: 2010 B-s1, d0



Shelf Life and storage conditions:

When stored in original packaging upon arrival at the customer: 2 years. Recommended Storage conditions are 20 °C (± 2 °C) with 50 %RH (± 5%).

Key Features

- Effective heat rejection, with a less reflective appearance
- Advanced ceramic, metalloid coatings provides a form of spectral selectivity giving relatively high reflectivity in the Infra-Red (IR) region of the electromagnetic (EM) spectrum and relatively low reflectivity in the Visible light region of the EM spectrum

Film Performance

Warranted Durability in Years:

	PerLite 20	PerLite 35	PerLite 50	PerLite 70
Durability	12	12	12	12



Optical & Solar Properties

Glazing Unit: Pane Single Clear 3mm	PerLite 20	PerLite 35	PerLite 50	PerLite 70
Visible Light Transmitted %	22	40	51	68
Visible Light Reflected - Interior %	24	15	16	9
Visible Light Reflected - Exterior %	25	17	18	10
UV Block %	99	99	99	99
Total Solar Energy Reflected %	29	17	20	10
Total Solar Energy Transmitted %	14	29	40	59
Total Solar Energy Absorbed %	57	54	40	31
Emissivity (Room Side)	0.76	0.82	0.84	0.91
Glare Reduction %	76	56	43	25
Selective InfraRed Reduction %	91	78	67	44
InfraRed Energy Reduction %	74	60	53	33
Shading Coefficient	0.36	0.52	0.60	0.79
Solar Heat Gain Coefficient (G-Value)	0.30	0.45	0.52	0.69
U-Value Winter (IP)	1.00	1.03	1.04	1.08
U-Value Winter (SI)	5.68	5.85	5.91	6.13
Luminous Efficacy	0.62	0.77	0.85	0.86
Total Solar Energy Rejected	70	55	48	31

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