

# PRODUCT DATA SHEET

## Avery Dennison® Exterior Reflective Solar Films

Issued: 02/2019  
Revision: 5

### Introduction

The **R Silver X** films provide maximum energy efficiency and value. By rejecting excess solar radiation, R Silver films cut heat buildup through the glazing. The R Silver X films are particularly energy efficient on insulated glass (IGU), rejecting solar energy on the outer pane, keeping the inner pane cool thereby reducing the HVAC load still further.

R Silver 20X Poly is engineered with a novel adhesive formulation to ensure compatibility with plastic substrates.

### Description

**Color:** Silver  
**Technology:** Exterior durable SR hard coat vacuum metal deposition, with a thin optical Aluminum layer

**Face:**  
**R Silver 20X**  
**R Silver 35X**  
**R Silver 50X**  
**R Silver 20X Poly**

**Adhesive:** Pressure sensitive **Permanent** – Solvent based acrylic  
**Liner:** PET

**Warranted Durability<sup>1</sup>:**

	R Silver 20X	R Silver 35X	R Silver 50X	R Silver 20X Poly
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Vertical	7 years	7 years	4 years	4 years
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Horizontal/ Sloped	4 years	4 years	3 years	3 years
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**Fire Certification:** B-s1, d0 (DIN EN 13501-1)

### Features:

- **Highest level of energy efficiency**
- **Excellent solar heat and glare rejection**
- **Upgraded building appearance**
- **Daytime privacy**
- **99+% UV block**

### Common Applications:

**R Silver X** films are the most popular choice for commercial projects with their strong visual statement, effective heat rejection, and the quickest return on investment.

**Optical & Solar Properties:**

	R Silver 20X		R Silver 35X		R Silver 50X		R Silver 20X Poly
	Single Pane	Double Pane	Single Pane	Double Pane	Single Pane	Double Pane	Single Pane
Visible Light Transmitted %	17	16	33	31	48	44	16
Visible Light Reflected (Int) %	62	62	42	44	28	32	63
Visible Light Reflected (Ext) %	62	62	42	43	27	29	64
U V Block %	99	99	99	99	99	99	99
Total Solar Energy Reflected %	63	64	45	46	30	32	65
Total Solar Energy Transmitted %	12	11	25	22	37	31	12
Total Solar Energy Absorbed %	25	25	30	32	33	37	23
Shading Coefficient	0,22	0,18	0,39	0,32	0,53	0,44	0,22
Total Solar Energy Rejected %	81	85	66	72	54	62	81
Solar Heat Gain Coefficient	0,19	0,15	0,34	0,28	0,46	0,38	0,19
Emissivity (Room side)	0,84	0,84	0,84	0,84	0,84	0,84	0,84
U-Value Winter	1,04	0,48	1,04	0,48	1,04	0,48	1,04
K-Value Winter	5,91	2,73	5,91	2,73	5,91	2,73	5,91
Glare Reduction %	81	80	63	62	46	45	82
Luminous Efficacy	0,75	0,91	0,84	0,96	0,90	0,90	0,75

**Important**

Information on physical and chemical characteristics is based upon tests we believe to be reliable. The values listed herein are typical values and are not for use in specifications. They are intended only as a source of information and are given without guarantee and do not constitute a warranty. Purchasers should independently determine, prior to use, the suitability of this material to their specific use.

All technical data are subject to change without notice.

**Warranty**

All Avery Dennison statements, technical information and recommendations are based on tests believed to be reliable but do not constitute a guarantee or warranty. All Avery Dennison products are sold with the understanding that purchaser has independently determined the suitability of such products for its purposes. All Avery Dennison's products are sold subject to Avery Dennison's general terms and conditions of sale, see <http://terms.europe.averydennison.com>

**1) Warranted Durability**

The durability is based on middle European exposure conditions. Actual performance life will depend on substrate preparation, exposure conditions and maintenance of the marking. For instance, in the case of signs facing south; in areas of long high temperature exposure such as southern European countries; in industrially polluted areas or high altitudes, exterior performance will be decreased. With regard to Avery Dennison Architectural Window Film Products, the durability shall no differ between the climatic zones, but the same durability shall apply to all climatic zones.