

PRODUCT DATA SHEET

Avery Dennison® Exterior Dual Reflective Solar Films

Issued: 01/2021

Introduction

Avery Dennison® DR Grey X films combine a high performance, high privacy exterior with a low reflective interior appearance. This ensures maximum heat rejection, energy efficiency and privacy, with the advantage of clear views out day and night, and pleasant indoor ambiance.

Conversion

For conversion information please review the Technical Bulletin "Avery Dennison® Solar Window Films Exterior".

Recommendations

Typical applications include hotels, banks and residential buildings. These films are available with a neutral grey interior finish and a reflective silver exterior finish, in four different light transmission levels.

Features

- » Energy Efficient: Exceptional energy saving, reducing need for air-conditioning
- » Dual Reflective: Transforms and unifies building's exterior and pleasant interior ambiance
- » Rejection: Excellent heat and glare rejection

Fire Certification: B-s1, d0 (DIN EN 13501-1)

Warranted Durability ¹⁾ :	DR Grey 10X	DR Grey 20X	DR Grey 35X	DR Grey 50X
Vertical	5 years	5 years	5 years	4 years
Horizontal/Sloped	3 years	3 years	3 years	2 years

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 not differ between the climatic zones, but the same durability shall apply to all climatic zones.



Face Film

DR Grey 10X; DR Grey 20X; DR Grey 35X; DR Grey 50X; Vacuum metal deposition + Nanotechnology; in: neutral black-grey; out: silver reflective



Adhesive

Pressure sensitive Permanent – Solvent based acrylic



Backing

PET



Durability

See below



Shelf Life

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

Physical Characteristics

Optical & Solar Properties:

	DR Grey 10X		DR Grey 20X		DR Grey 35X		DR Grey 50X	
	Single Pane	Double Pane	Single Pane	Double Pane	Single Pane	Double Pane	Single Pane	Double Pane
Visible Light Transmitted %	8	7	19	18	36	32	53	48
Visible Light Reflected (Int) %	17	23	14	21	14	21	19	25
Visible Light Reflected (Ext) %	55	55	34	35	22	23	18	21
U V Block %	99	99	99	99	99	99	99	99
Total Solar Energy Reflected %	58	58	38	38	26	27	22	24
Total Solar Energy Transmitted %	7	6	18	15	31	26	40	35
Total Solar Energy Absorbed %	35	36	45	47	44	47	38	41
Shading Coefficient	0,20	0,14	0,36	0,27	0,50	0,40	0,59	0,49
Total Solar Energy Rejected %	83	88	69	77	57	65	49	58
Solar Heat Gain Coefficient	0,17	0,12	0,31	0,23	0,43	0,35	0,51	0,42
Emissivity (Room side)	0,84	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	0,48
K-Value Winter	5,91	2,73	5,91	2,73	5,91	2,73	5,91	2,73
Glare Reduction %	91	91	79	78	61	61	41	41
Luminous Efficacy	0,40	0,50	0,54	0,66	0,70	0,80	0,89	0,98

Important

Information on physical and chemical characteristics and values in this document are based upon tests we believe to be reliable and do not constitute a warranty. 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. In case of any ambiguities or differences between the English and foreign versions of this document, the English version shall be prevailing and leading.

Avery Dennison warrants that its Products meet its specifications. Avery Dennison gives no other express or implied guarantees or warranties with respect to the Products, including, but not limited to, any implied warranties of merchantability, fitness for any particular use and/or non infringement. All Avery Dennison products are sold with the understanding that the purchaser has independently determined the suitability of such products for its purposes. The period of warranty is one (1) year from the date of shipment unless expressly provided otherwise in the product data sheet. All Avery Dennison's products are sold subject to Avery Dennison's general terms and conditions of sale, see <http://terms.europe.averydennison.com>.

Avery Dennison's aggregate liability to Purchaser, whether for negligence, breach of contract, misrepresentation or otherwise, shall in no circumstances exceed the price of the defective, non-conforming, damaged or undelivered Products which give rise to such liability as determined by net price invoices to Purchaser in respect of any occurrence or series of occurrences. In no circumstances shall Avery Dennison be liable to Purchaser for any indirect, incidental or consequential loss, damage or injury, including without limitation, loss of anticipated profits, goodwill, reputation, or losses or expenses resulting from third party claims.

© 2021 Avery Dennison Corporation. All rights reserved. Avery Dennison and all other Avery Dennison brands, this publication, its content, product names and codes are owned by Avery Dennison Corporation. All other brands and product names are trademarks of their respective owners. This publication must not be used, copied or reproduced in whole or in part for any purposes other than marketing by Avery Dennison.