

Avery Dennison® Supreme Wrapping Film

Extreme Textures - Carbon Fibre, Brushed Metallic and Rugged Finishes

Features:

- Super conformable cast film for reliable application on to concave, convex, compound curves and in to deep recesses without the need to make incisions
- Outstanding outdoor durability and performance
- Easy Apply RST™ adhesive system with air egress channels for fast and easy removal of entrapped air bubbles
- Adhesive slides smoothly on surface for exact positioning; RST™ technology allows film to stand-off from surface until pressure is applied
- Low initial adhesive tack allows graphics to be repositioned during application
- Available in 1.52m width for seamless vehicle wrapping
- Exceptional long term removability for the length of the applicable warranted period with little or no adhesive residue

Conversion

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| <input checked="" type="radio"/> Flat bed cutters* | <input type="radio"/> Cold overlaminating |
| <input checked="" type="radio"/> Friction fed cutters* | <input type="radio"/> Electrostatic printing |
| <input type="radio"/> Die cutting | <input type="radio"/> Latex inkjet |
| <input type="radio"/> Thermal transfer | <input type="radio"/> Eco solvent inkjet |
| <input type="radio"/> Screen printing | <input type="radio"/> Solvent inkjet |
| <input type="radio"/> Offset printing | <input type="radio"/> UV curable inkjet |

Application

- Dry application only, do not use water and detergent or a commercial application fluid to position the graphic.
- For processing tips and reference guides please refer to Avery Dennison Instructional Bulletins:
 - 1.01 Substrate Cleaning and Preparation
 - 1.4 Application Methods for Pressure Sensitive Adhesive Films
 - 1.19 Application instructions for Avery Dennison® Supreme Wrapping Film
 - 1.8 Vehicle Wrap and Graphics Maintenance

Uses

Avery Dennison® Supreme Wrapping Film is a premium quality super cast film for the use in applications where a high quality durable finish, superior conformability and easy of application is required. This film is designed for full or partial wrapping of vehicles or other objects, which require a conformable film.

Description:



Film: 88-114µm super cast vinyl



Adhesive: Permanent acrylic with Easy Apply RST™ and long term removability (Removability: For the length of the applicable warranted period.)



Backing: Two side PE coated StaFlat™ paper, 150 g/m²



Outdoor life:** Up to 5 years vertical exposure depending on colour and finish

Finishes: Carbon Fibre, Brushed Metallic and Rugged

Application

Surfaces: Flat, rivets, corrugations and deep recesses

Note: Films with face thickness 102µm and above may have reduced conformability.

Common Applications:

- Vehicle wraps
- Fleet graphics
- Transit wraps

General

Brushed Metallic

Calliper, face film	ISO 534	87.5 micron
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Carbon Fibre

Calliper, face film	ISO 534	107 micron
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Rugged

Calliper, face film	ISO 534	114 micron
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Calliper, adhesive	ISO 534	30 micron
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Gloss	ISO 2813	NA
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Dimensional stability	DIN 30646	0.25 mm max
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Elongation at break	DIN 53455	200%
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Adhesion, initial	FINAT FTM-1, Stainless steel	367 N/m
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Adhesion, ultimate	FINAT FTM-1, Stainless steel	437 N/m
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Adhesion, 1 week	FINAT FTM-1, Stainless steel	525 N/m
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Flammability	FMVSS 302	Self extinguishing
	ASTM E-84	Class 1 or A

Shelf life	Stored at 22° C/50% RH	2 years
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Expected Durability **	Zone 1 Vertical	5 years
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Thermal

Application temperature	Minimum: + 10°C
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Temperature range	- 45°C to + 82°C
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Chemical

Humidity resistance	120 hours exposure	No effect
Corrosion resistance	120 hours exposure	No contribution to corrosion
Water resistance	48 hour immersion	No effect
Chemical resistance	Applied to aluminium	No effect exposed to: Oil, grease, mild acids and alalis

Testing Methods

Dimensional stability:

Is measured on a 150 x 150 mm aluminium panel to which a specimen has been applied; 72 hours after application the panel is exposed for 48 hours to + 70°C, after which the shrinkage is measured.

Adhesion:

(FTM-1, FINAT) is measured by peeling a specimen at a 180° angle from a stainless steel or float glass panel, 24 hours after the specimen has been applied under standardised conditions. Initial adhesion is measured 20 minutes after application of the specimen.

Flammability:

A specimen applied to aluminium is subjected to the flame of a gas burner for 15 seconds. The film should stop burning within 15 seconds after removal from the flame.

Temperature range:

A specimen applied to stainless steel is exposed at high and low temperatures and brought back to room temperature. 1 hour after exposure the specimen is examined for any deterioration. Note: Prolonged exposure to high and low temperatures in the presence of chemicals such as solvents, acids, dyes, etc. may eventually cause deterioration.

Important

Information on physical 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 any material for their specific use.

All technical data is subject to change without prior notice.

Warranty

Avery Dennison® materials are manufactured under careful quality control and are warranted to be free from defect in material and workmanship. Any material shown to our satisfaction to be defective at the time of sale will be replaced without charge. Our aggregate liability to the purchaser shall in no circumstances exceed the cost of the defective materials supplied. No salesman, representative or agent is authorised to give guarantee, warranty, or make any representation contrary to the foregoing.

All Avery Dennison® materials are sold subject to the above conditions, being part of our standard conditions of sale, a copy of which is available on request.

**Expected Durability

The expected durability of Avery Dennison films are defined as the expected performance life of the Avery Dennison graphic film(s) within Zone 1 of the Avery Dennison zone system, in outdoor vertical exposure conditions.

The actual performance life will depend on a variety of factors, including selection and preparation of substrate, angle and direction of exposure, application methods, environmental conditions and cleaning/maintenance of the films.

In case of films used in areas of high temperatures or humidity, high altitudes and industrially polluted areas the performance will be further reduced.

Expected Durability and Warranted Period Definitions

Expected durability is the expected period of time defined in the product data sheet, the product should, but is not warranted to, perform satisfactorily when applied in vertical exposure conditions as defined in Instructional Bulletin 1.30. The warranted period as defined in the appropriate ICS Performance Guarantee Bulletin, is the maximum period of time Avery Dennison will warrant the finished products performance in accordance with ICS Performance Guarantee Terms and Conditions 1.0, provided that the film is properly stored, converted and installed in accordance with Avery Dennison guidelines.

Chemical Resistance:

All chemical tests are conducted with test panels to which a specimen has been applied. 72 hours after application the panels are immersed in the test fluid for the given test period. 1 hour after removing the panel from the fluid, the specimen is examined for any deterioration.

Corrosion Resistance:

A specimen applied to aluminium is exposed to saline mist (5% salt) at 35°C. After exposure, the film is removed and the panel is examined for traces of corrosion.

Important Note: If the Supreme Wrapping Film has reached the end of its intended service life (warranted period) or you notice any decline in the appearance, loss of gloss, discolouration, cracking, crazing or degradation of the film, you must contact the company that installed the material for assessment immediately

***Important Note:** Avery Dennison® Supreme Wrapping Film is ideal for full or partial car wraps, colour change applications and large format cut graphics. Due to the nature of the adhesive and the special backing paper, not all intricate graphic designs and small lettering may be achievable. It is recommended to test the film for cutting of detailed graphics prior to production. See Avery Instructional Bulletin 2.01 for more information. For sign cutting of detailed letters and intricate graphics we recommend Avery Dennison® 900 Super Cast.

Application

See Instructional Bulletin 1.19 Application Instructions for Avery Dennison Supreme Wrapping Film for complete application recommendations. All vehicle substrates must be cleaned according to Avery Dennison recommended cleaning practices as outlined in Instructional Bulletin 1.01 Substrate Cleaning and Preparation.

Important Note: Due to the structured surface of Extreme Textured films, over posting of other materials to the surface may not reach suitable levels of adhesion.

Colour and Opacity: Some slight color shift may occur between rolls and/or production lots, therefore, minimizing the mixing of rolls/lots on a specific vehicle is encouraged. One roll should be used per vehicle to minimize any possible color shift between rolls or lots. If multiple rolls are needed be sure to use only rolls from the same production lot. Due to the unique finish and manufacturing process of carbon fibre and brushed metallic films, variances in color and finish can be visible when the material is oriented in different directions. When utilising carbon fibre and brushed metallic films, always keep the application direction of the film consistent with the orientation of the film when cut from the roll and applied to the vehicle. Most colours are considered opaque; however it is up to the end user to determine if the level of opacity meets their needs.

Important Note: It is recommended to use Avery Dennison cleaning products and solutions (noted in IB 1.8).

Other Cleaning and maintenance products should conform to the following:

- Free from abrasive components
- Ideally pH balanced, thus not highly acidic or alkaline (pH level between 5 and 9)
- Free from alcohols (non isopropyl), acids, ammonia, chlorine, glycol ethers, harmful detergents, petroleum distillates and phosphates

For cleaning and care recommendations see Instructional Bulletin 1.8 Vehicle Graphics and Wrap Care Maintenance.

Unsuitable Uses

This Avery Dennison product is not designed or recommended for the following uses. Unsuitable applications or exposure conditions include, but is not limited to:

- Paint that is not thoroughly cured or dried
- Low surface energy substrates (i.e. Tedlar® coatings)
- Substrates that are not clean and smooth (little or no variation in texture)
- Painted substrates with poor paint-to-substrate, or paint-to-paint bond
- Stainless steel
- Film applied to non-Avery Dennison Films
- Film applied to pre-existing graphics (pre approval required)
- Watercraft below the static water line
- Watercraft which are not edge sealed
- Non-OEM painted vehicles
- Graphic removal from paint with poor adhesion or existing graphics
- Graphics exposed to oil, harsh chemical, or gasoline vapors or spills
- Graphics where application tape must adhere to liner
- Plotter cut text where the minimum size of the text or dimension of the object is less than 2 in (51 mm)

Removability

The removability listed in the physical characteristics section 'Clean removability' is defined by being removable with less than 30% adhesive residue when using appropriate heat and chemical removal methods. See Instructional Bulletin 1.07 for removal instructions.

Avery Dennison does not warrant removability from the following substrates:

- Surfaces with poor paint-to-substrate adhesion
- Wallboard (painted or unpainted)
- Pre existing graphics that must remain intact; damage to existing graphic when film is removed
- Improperly cured paint
- Oxidized or chalked substrates
- Stainless Steel

Avery Dennison makes no warranty for:

- Paint/Clear Coat Staining: Avery Dennison does not warrant vehicle paint staining that may be visible after removing material which has cracked or discolored. At the first sign of a change in the surface of the material contact your Avery Dennison Sales or Technical Representative.
- Ease or speed of removal of any graphic
- Removal from automotive paint that is greater than 5 years old
- Removal from paint that is improperly cured
- Removal from aged paint or metals, surface oxidation or chalking; user must test, approve and accept liability for such applications

