

Avery Dennison[®] Supreme Wrapping Film[™]

Opaque/Metallic/Specialty (ColorFlow[™]/ Diamond Line/ Extreme Texture)

Easy Apply[™] RS Long Term Removable - StaFlat[™]

Revision: 14EU Dated: 12/07/18

Uses:

Avery Dennison Supreme Wrapping Easy Apply Cast Vinyl Film Series is a premium quality cast film designed for use in vehicle and graphics segment where high quality film finish and cost effective full color wrapping is required. The patented Avery Dennison Easy Apply RS feature allows for faster positioning, application without bubbles, and long term removability.



Face: 80 µm to 140 µm high gloss, satin or matte cast film



Adhesive: Long Term Removable Acrylic



Liner: 90# StaFlat, Poly-Coated with Easy Apply RS technology



Durability: See durability table starting on page 5.

Application Surfaces:

Flat, Flat with Rivets, Corrugations, Deep Recesses

*NOTE: Films with face thickness 100 µm and above may have reduced conformability.

Features:

- Supreme Wrapping Film is available in gloss, satin, matte, pearl or metallic paint-like finish
- Extreme Texture series has unique Carbon Fiber and Brushed Metallic finishes
- Unique patented Easy Apply RS adhesive technology
- Superior conformability to irregular substrates
 - Deeply concave shaped
 - Extremely convex shaped
 - Best conformance in channels
- Outstanding durability and outdoor performance
- Excellent UV, temperature, humidity, and salt-spray resistance
- Supreme Wrapping Film custom colors available (contact your sales representative)
- Easy Apply RS feature helps prevent wrinkles and bubbles during application
- Excellent long term removability (LTR)
- REACH compliant standard colour range (EC1907/2006)

Common Applications:

- Trucks
- Trailers
- Cars & Vans
- Emergency Vehicles
- Buses

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Physical Characteristics:

Property		Typical Value
Caliper, face		80 µm to 140 µm Reference Color & Durability Chart in this document for caliper for specific film <i>*NOTE: Films with face thickness 100 µm and above may have reduced conformability.</i>
Caliper, adhesive		30 µm
Applied Shrinkage, max.		<0.25 mm
Tensile at Yield		0.7–1.5 kg/cm
Elongation		200% at break
Gloss	Measured @ 60°	Gloss - >85 GU Satin - 20-30 GU Matte - <15 GU
Adhesion: Stainless Steel	(FTM-1, FINAT)	
	15 min.	367 N/m
	24 hrs.	437 N/m
	1 week	525 N/m
Flammability		EN 13501-1 certified
Shelf-Life		2 years from date of manufacture when stored at the following temperatures and humidity conditions 20° - 25 °C and 50±5% R. H.
Durability		Reference color and durability charts in this data sheet. See page 5.
Min. Application Temperature		10 °C Flat & Simple Curves 16 °C Complex curves
Service Temperature		--50° to +110 °C (Reasonable range of temperatures which would be expected under normal environmental conditions).
Chemical resistance		Resistant to most mild acids, alkalis, and salt solutions.
Removable		For the length of the applicable durability period. Reference durability charts in this data sheet. See Page 5.

DISCLAIMER

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>

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Related Documents:

The following Avery Dennison literature will provide necessary information to the user for proper application, storage, and other requirements and is available upon request from your Avery Dennison representative or from the Avery Dennison website (www.graphics.averydennison.eu).

Important Note: Failure to install the film in full compliance with Avery Dennison's installation instructions may result in personal injury or property damage. Read and follow all instructions when installing the film.

Document Title	Reference Number
Cleaning and Preparation of Application Substrates	Technical Bulletin #1.1
Removal of self-adhesive films	Technical Bulletin #1.2
Cleaning and maintenance of Avery Dennison decals and Graphics	Technical Bulletin #1.6
Application Instructions for Avery Dennison Supreme Wrapping Film	Technical Bulletin #3.12
Durability of Avery Dennison Graphics Films	Instructional Bulletin #1.30EU

Application:

Avery Dennison Supreme Wrapping Film is designed for application on to solid surfaces such as passenger vehicles and buses.

Important Note: Never use a wet application method to apply this film.

Some slight color shift may occur between rolls or lots, therefore, minimizing the mixing of rolls/lots on a specific vehicle is encouraged. If multiple rolls are needed be sure to use only rolls from the same production lot.

All vehicle substrates must be cleaned according to Avery Dennison recommended cleaning practices as outlined in TB # 1.1 "Cleaning and Preparation of Application Substrates".

Due to the unique finish and manufacturing process of metallic and pearlescent films, variances in color can be visible when the material is oriented in different directions. When utilizing metallic, pearlescent and ColorFlow 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. One roll should be used per vehicle, wherever possible to minimize any possible color shifts between rolls or lots.

See TB 3.12 "Application Instructions for Supreme Wrapping Film" for complete application recommendations. For cleaning and care recommendations see TB 1.6.

Important Note: Only use Avery Dennison recommended cleaning products and solutions. 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

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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)
- Substrate surfaces that are not clean and smooth (little or no variation in texture)
- Painted substrates with poor paint-to-substrate, or paint-to-paint bond
- 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 51 mm

Removability:

The removability listed in the physical characteristics section "Clean removability" means removable with less than 20% adhesive residue when using appropriate heat and chemical removal methods. See Technical Bulletin 1.2 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 overposted graphic and consequence thereof**
- **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**

Application to Glass:

There is no coverage for graphics applied to glass, and possible breakage for glass applications of this film series.

Note: Avery Dennison does not recommend the use of Supreme Wrapping Film as block out film for window applications.

Durability:

Durability is the period of time the product is expected to perform satisfactorily when applied in vertical exposure conditions by zone as defined in Instructional Bulletin 1.30EU, provided that the film is properly stored, converted and installed in accordance with Avery Dennison guidelines. The term of Avery Dennison's warranty is equal to the product's durability.

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Abrasion and Loss of Gloss are not covered by any Avery Dennison Warranty. These changes are considered normal wear and tear.

Other factors which may reduce the durability of this product series include: surface texture, surface preparation, application methods, angle and direction of sun, environmental conditions, cleaning & maintenance.

Products containing petroleum distillates or solvents such as, soaps, waxes, or protective coatings, void any warranty, and may cause premature failure of the material.

Matte finished materials are subject to extreme color and gloss shift when exposed to cleaners, wax, and polish. Test an inconspicuous area prior to using any cleaners, wax, and polish. The end user assumes complete responsibility to ensure that matte finishes are not affected during cleaning or protecting.

Supreme Wrapping Film Series Durability:

	Zone 1		Zone 2		Zone 3	
	Vertical	Non Vertical / Horizontal	Vertical	Non Vertical / Horizontal	Vertical	Non Vertical / Horizontal
SWF Black & White	12 years	6 years	10 years	5 years	8 years	4 years
SWF Colors	10 years	5 years	8 years	4 years	6 years	3 years
SWF Metallics & Pearlescent	5 years	2.5 years	3 years	1.5 years	1.5 years	0.75 year
SWF Metallics (with Gold Flakes)	3 years	1 year	2.5 years	6 months	1.5 years	4 months
SWF Extreme Texture	4 years	1 year	2 years	6 months	1 year	3 months
SWF Diamond Line	3 years	1 year	2.5 years	6 months	1.5 years	4 months
SWF ColorFlow Series	4 years	1 year	3 years	6 months	2 years	4 months

NOTE: The durability table in the Reference IB 1.30EU for zones by geographic location is not applicable for this product portfolio.

Non-vertical: The face of the graphic is between 10° to 45° from vertical. Specifically for Supreme Wrapping Film Non-vertical exposure performance will be calculated using the Horizontal exposure value.

Horizontal: The face of the graphic is between 45° and 90° from vertical.

Vertical: The face of the graphic is between 0 and 10 degrees from vertical.

Film Characteristics / Conformability:

Face Films with specific characteristics might have reduced conformability. These films include:

Name	Color	Face Caliper
AS1880001	Black Carbon Fiber	119 µm
AS1850008	White Carbon Fiber	119 µm
Supreme Wrapping Film Diamond line	All colors	137 to 140 µm

Avery Dennison is a registered trademark of Avery Dennison Corporation

Patent registration: US6,630,049, US7,060,351, US7,344,618, US7,332,205, EP1276605, EP1282472