

# Avery Dennison® Conform Chrome Easy Apply™ RS SF 100 S with Long Term Removability

## Features

- High gloss and matte semi conformable mirror like chrome finish
- Good conformability to irregular substrates like concave and convex shapes
- Outstanding outdoor durability and performance
- Good UV, temperature and humidity resistance
- Easy Apply RS™ adhesive system with air egress channels for fast and easy removal of entrapped air bubbles
- Adhesive slides smoothly on surface for exact positioning: RS™ technology allows film to stand-off from surface until pressure is applied
- Low initial adhesive tack allows graphics to be repositioned during application
- Exceptional long term removability for the length of the applicable warranted period with little or no adhesive residue

## Conversion

- |   |  |
|---|--|
| <input checked="" type="checkbox"/> Flat bed cutters*     | <input type="checkbox"/> Cold overlaminating |
| <input checked="" type="checkbox"/> Friction fed cutters* | <input type="checkbox"/> Latex Inkjet        |
| <input type="checkbox"/> Die cutting                      | <input type="checkbox"/> Eco Solvent inkjet  |
| <input type="checkbox"/> Thermal transfer                 | <input type="checkbox"/> Solvent inkjet      |
| <input type="checkbox"/> Screen printing                  | <input type="checkbox"/> UV Cured 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
  - 1.05 Procedures for Acrylic & Polycarbonate Preparation
  - 1.4 Application Methods for Pressure Sensitive Adhesive Films
  - 1.19 Application instructions for Avery Dennison® Supreme Wrapping Film
  - 1.21 Application Instructions SF 100 S Conform Chrome
  - 1.8 Vehicle Wrap and Graphics Maintenance

## Uses

Avery Dennison™ Conformable Chrome Easy Apply™ RS (SF 100 S) is a premium quality specialty film designed for use in vehicle and graphics markets where high-end chrome accents are desired. The patented Avery Dennison™ Easy Apply RS feature allows for faster positioning, bubble free application, and long-term removability.

## Description



142µm chrome finish film



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



Liner: Two side PE coated StaFlat™ paper, 150 g/m<sup>2</sup>



Expected Durability\*\*:  
Up to 3 years vertical exposure depending on colour and finish



Colours: 8 colours: Chrome, Black, Blue, Red, Gold, Rose Gold, Violet and Matte Silver

### Application

Surfaces: Flat, flat with rivets and corrugations

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

## Common

### Applications

- Vehicle accents
- Fleet graphics
- Transit wraps

## Physical characteristics

### General

Caliper, facefilm	ISO 534	142 micron
Caliper, facefilm & adhesive	ISO 534	172 micron
Dimensional stability	DIN 30646	<0.51 mm (max)
Tensile strength	DIN 53455	>1.5 kg/cm (min)
Elongation at break	DIN 53455	200%
Gloss	Measured @60°	90%
Adhesion, initial (20mins)	FINAT FTM-1, stainless steel	350 N/m
Adhesion, ultimate (24hrs)	FINAT FTM-1, stainless steel	437 N/m
Adhesion, 1 week	FINAT FTM-1, stainless steel	525 N/m
Removability ^	Smooth OEM painted surfaces	For the length of the applicable warranted period.
Flammability		Self extinguishing
Shelf life	Stored at 22° C/50-55 % RH	2 years
Accelerated ageing	SAE – J 1960 2000 hours exposure	No negative impact on film performance
Expected Durability **	Zone 1 - Vertical	Up to 3 Years
Warranted Period**		Please consult ICS Bulletin 2.5 - Wrapping Films for details

^ Not removable when applied to nitrocellulose paints, fresh screen print inks, ABS, polystyrene & certain types of PVC

### Thermal

Application temperature	Minimum: + 10°C
Temperature range	- 42°C to + 82°C

### Chemical

Humidity resistance	120 hours exposure	No effect
Corrosion resistance	120 hours exposure	No contribution to corrosion
Water resistance	48 hours immersion time	No effect
Chemical Resistance	Applied to aluminium	No effect exposed to: Oil, greases, motor oils, mild acids and alkalis.

## Test 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.

### \*\*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 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. For details on warranted period please see ICS Performance Guarantee Bulletin 2.5 – Wrapping Films.

\*May be covered by one or more US patents 7,344,618, 7,332,205, and other US and foreign patents pending.

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#### 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.

## Additional Information

**Important Note:** If the SF 100 S Conform Chrome 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

### Application

See Instructional Bulletin 1.21 Application Instructions SF 100 S Conform Chrome 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:** Never use a wet application method to apply this film.

**Colour and Opacity:** 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. 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 and pearlescent 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. 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:** Only use Avery Dennison recommended cleaning products and solutions (noted in IB 1.8). 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