

MPI 2105 Easy Apply™ RS

Long Term Removable StaFlat™

Revision 6

Introduction

Avery Dennison® HP MPI 2105 Easy Apply™ RS Calendered Vinyl films are flexible high gloss calendered vinyls. MPI 2105 Easy Apply™ (RS) offers exceptional value for applications requiring premium calendered film durability combined with a permanent or removable adhesive performance. MPI 2105 Easy Apply™ RS (Repositionable, Slidable) offers the benefits of reduced wrinkling and air entrapment inherent in the application of decals. MPI 2105 Easy Apply™ RS is designed for ease of application on a wide range of durable outdoor and general signage applications, vehicles graphics with flat or simple curved surfaces, and where good outdoor durability, high opacity and good print quality are required.

Common Applications

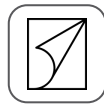
- General Signage
- Trains and light rail
- Buses
- Flat sided trucks
- Outdoor advertising
- Vehicle Graphics (Flat or Simple Curved Surfaces)



Face Film
80 micron high gloss white polymeric calendered vinyl



Adhesive
Grey permanent acrylic with Easy Apply and long term removability (Up to 4 years)



Backing
Two side PE coated StaFlat™ paper, 145g/m²



Outdoor Life**
Up to 7 years unprinted

Features

- Easy Apply™ adhesive system with air egress channels for fast bubble and wrinkle free application
- RS adhesive allows graphics to be repositioned during application
- Excellent printability on eco-solvent, solvent, latex and UV curable inkjet printers
- Two side PE coated StaFlat™ liner provides easy handling and converting properties
- Excellent outdoor durability and performance
- Excellent dimensional stability during use
- High gloss finish for superior appearance
- Grey adhesive provides extra opacity for blackout performance
- Easy removability with heat for up to 4 years with little or no adhesive residue
- Fire Group Number 1, certification# under the latest NCC specification C1.10 Fire Hazard Properties Standards

Conversion

- Flatbed cutters
- Friction fed cutters
- Die cutting
- Thermal transfer
- Screen printing
- Offset printing
- Cold overlaminating
- Electrostatic printing
- Eco solvent inkjet
- Solvent inkjet
- UV curable inkjet
- Latex inkjet

Certified for
HP Latex Inks

Standards

Fire Group Number 1, certification# under the latest NCC specification C1.10 Fire Hazard Properties, Clause 4: Wall and Ceiling Linings. Standards (AS 5637.1: 2015 - Determination of fire Hazard. Part 1: Wall and Ceiling Linings). All films with a Group Number 1 fire rating can be used in any internal walls/ceiling building areas..

Applications

- Avery Dennison Graphics recommend a maximum ink limit of 250% to ensure optimal performance
- Dry application only. Do not use water and detergent or a commercial application fluid to position the graphic.
- Refer to Instructional Bulletins 1.01, 1.4, 4.06 & 4.14 for printing, laminating and application instructions.

General

Calliper, face film	ISO 534	80 micron
Calliper, face film & adhesive	ISO 534	120 micron
Gloss	@60°	85%
Elongation	DIN 53455 (Unprinted film)	Min 100%
Dimensional stability^^	DIN 30646	< 1.016mm max
Adhesion, initial	ASTM 1000, Stainless steel	450 N/m
Adhesion, ultimate	ASTM 1000, Stainless steel	600 N/m
Removability^^	Smooth OEM painted surfaces	Up to 4 years
Shelf life	Stored at 22° C/50% RH	2 years
Flammability	Meets ASTM E84-04 AS/NZS 3837:1998 ISO 5660-1:2002	Self extinguishing Group 1 Group 1
Fire Standard Certification#	NCC specification C1.10 Fire Hazard Properties, Clause 4: Wall and Ceiling linings AS 5637.1: 2015 #Refer to Avery Dennison Fire Rating Overview document Certification available upon request	Group Number 1
Expected Durability**	Vertical exposure	Up to 7 years (unprinted)

Thermal

Application temperature	Minimum: + 10°C
Temperature range	-45°C to +80°C

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	Mild acids Mild alkalis	No effect No effect
Solvent resistance	Applied to aluminium	No effect exposed to: Oils, greases, aliphatic solvents, motor oils, heptanes, kerosene, JP-4 fuel

Note

Materials have to be properly dried and cured before further processing, like laminating, varnishing, trimming, contour cutting or application. The residual solvents can otherwise change the products' specific features and properties.

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.

**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.

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.

^^ Removability

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

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.

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.

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.



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