### Avery Dennison® ICS Performance Guarantee HP Durability Bulletin 1.8

EU Revision number 34 Date: 2-2024

#### **ICS PERFORMANCE GUARANTEE**

The ICS Performance Guarantee combines our films with other qualified components to form a system which is guaranteed to be compatible and provide superior performance. You know exactly what to expect from your finished Avery Dennison graphics because your combination has already withstood rigorous scientific testing and met a very stringent set of durability and physical performance specifications.

### **Printer configuration**

Avery Dennison ICS Performance Guarantee for digital inkjet printed graphics with the following HP printers and inks;

Equipment Manufacturer	Printer name	Ink series	ICS number
	HP Latex 3000 Series	HP 881/891 Latex Ink	1.8.3
	HP Latex 300 Series	HP 831/871 Latex Ink	1.8.3
	HP Latex 1500	HP 881 Latex Ink	1.8.3
	HP Latex 560/570	HP 831/871 Latex Ink	1.8.3
hp	HP Latex R1000/2000	HP 882 Latex Ink*	1.8.4
	HP Latex L2700 Series	HP 883 Latex Ink*	1.8.4
	HP Latex 700/ 700W	HP 832/832Y Latex Ink*	1.8.4
	HP Latex 800/ 800W	HP 873/873Y Latex Ink*	1.8.4
	HP Latex 630 / 630W	HP 832 Latex Ink*	1.8.4

\*With Gen 4 Latex, HP has removed the anti-scratch agent from the pigmented inks and replaced it with a new component called 'Overcoat'. In order for qualified HP Latex printers and Inks to be covered by the listed warranties, where overlaminate protection is needed, all prints must be done without the use of 'overcoat'. To ensure 'overcoat' is not used, two options are available to proceed: a) modify the overcoat setting at 0dpp from the substrate media presets, or b) check the option "Optimize for lamination" in the RIP's printer settings. Failure to do so will void any warranties stated within this document.

























### Avery Dennison® ICS Performance Guarantee HP Durability Bulletin 1.8.3 Please also refer to page 3 in regards to HP 831, 871, 881 and 883 Latex inks

Avery Dennison MPI Digital Media	Graphics Protection		Warranty period in years <sup>1</sup>					Application Surface					
			Outdoor	Vehicles	Marine	Indoor	Flat	Simple curves	Rivets	Compound curves	Corrugations		
MPI 1405 Easy Apply RS	Unprotected and unprinted	12	-	-	-	-	•	•	•	•	•		
	SL 6560 Gloss		84	8	4	12	•	•	•	•	•		
	Unprotected and unprinted	12	-	-	-	-	•	•	•	•	•		
SP 1540 Ultra Clear (ex. MPI 1440 Ultra Clear	SP 1540 Ultra Clear		84	8	4	12	•	•	•	•	•		
	Unprotected and unprinted	10	_	_	_	_							
SP 1504 Easy Apply	SL 6560 Gloss		6 <sup>3</sup>	6	3	9							
	Unprotected and unprinted	10											
MPI 1105 Series	DOL 1460 Z Gloss, DOL 1470 Z Lustre, DOL 1480 Z Matte	10	6 <sup>3</sup>	6	3	9	•	•	•	•			
	DOL 1460 MAX					-	-		-	-			
	DOL 1400 MAX		83	8	3	9	•	•	•	•	•		
MPI 1104, MPI 1104 EA	Unprotected and unprinted	7	-	-	-	-	•	•	•	•	•		
MPI 1106, MPI 1106 EA	DOL 1460 Z Gloss, DOL 1470 Z Lustre, DOL 1480 Z Matte		5 <sup>3</sup>	5	2	7	•	•	•	•	•		
	DOL 1460 MAX		6 <sup>3</sup>	6	2	7	•	•	•	•	•		
MPI 1105 Series	Unprotected and unprinted	7	_	_	_								
MPI 1104, MPI 1104 EA MPI 1106, MPI 1106 EA	DOL 6040		3	3	-	6			-	-	-		
MDI 2000 (2001 MDI 2000 (2001 HOD MDI 2003 MDI 2003	Unprotected and unprinted	7	-	-	-	_		•	-	-	-		
MPI 2000/2001, MPI 2000/2001 HOP, MPI 2002, MPI 2003 MPI 2004 EA, MPI 2004 HOP EA, MPI 2005 EA RS, MPI 2005	DOL 2460 Gloss, DOL 2470 Lustre, DOL 2480 Matte		5 <sup>3</sup>	5	-	7			_	-	_		
EA RS Superslide, MPI 2020 MPI 2040, MPI 2041, MPI 2006, MPI 2006 HOP, MPI 2150	SL 4530		5 <sup>3</sup>	5	-	7		-	-	-	-		
	Unprotected and unprinted	7	-	-	-	-	•	-	-	-	-		
MPI 2001, MPI 2002, MPI 2001 HOP, MPI 2041	DOL 6000		-	-	-	9 <sup>2</sup>	•	-	-	-	-		
	Unprotected and unprinted	7	-	-	-	-	•	•	-	-	-		
MPI 2800/2801, MPI 2800/2801 HOP MPI 2804 EA	DOL 2860 Gloss, DOL 2880 Matte <sup>6</sup>		3	3	-	7	•	•	-	-	-		
	SL 4530		3	3	-	7	•	÷	-	-	ī		
MPI 3000/3001, MPI 3000/3001 HOP, MPI 3004 HOP EA	Unprotected and unprinted	3	-	-	-	-	•	-	-	-	-		
MPI 3020/3021, MPI 3020/3021 HOP, MPI 3024 HOP EA MPI 3026, MPI 3026 HOP, MPI 3040/3041, MPI 3151	DOL 3460 Gloss, DOL 3470 Lustre, DOL 3480 Matte		2	2	-	3	٠	-	-	-	-		
INIPI 3020, INIPI 3020 FIOP, INIPI 3040/3041, INIPI 3131	SL 4530		2	2	-	3	٠	-	-	-	-		
MPI 3001, MPI 3001 HOP	Unprotected and unprinted	3	-	-	-	-	•	-	-	-	-		
	DOL 5900		-	-	-	6 <sup>2</sup>	•	-	-	-	-		
MPI 3021 DOT, MPI 3041 DOT	Unprotected and printed	_ 1	-	-	-	1	٠	-	-	-	-		
	Unprotected and unprinted	3	-	-	-	-	•	-	-	-	-		
MPI 3601, MPI 3621	DOL 3460 Gloss, DOL 3470 Lustre, DOL 3480 Matte		2	2	-	3	•	-	-	-	-		
	SL 4530		2	2	-	2	•	-	-	-	-		
MPI 6021 Anti-Slip Floor Marking	Unprotected and printed	12	-	-	-	12	•	-	-	-	-		
	Unprotected and unprinted	3	-	-	-	-	•	•	-	-	-		
MPI 7201	DOL 4000 Ultra Clear Cast		3	3	-	3	•	•	-	-	-		
	SL 4510 Ultra Clear Polyester		2	2	-	3	•	-	-	-	-		
MPI 7301	Unprotected and unprinted	2	-	-	-	-		-	-	-	-		
	DOL 4000 Ultra Clear Cast, SL 4510 Ultra Clear Polyester		2	2		2				-	-		
SF 100 Ultra Clear	Unprotected and unprinted	2	-	-	-	-	•	-	-	-	-		
	SL 4510 Ultra Clear Polyester		2	-	-	6	•	-	-	-	-		
MPI 8000 Wall Film Series, SP 8000 Wall Film Series	Unprotected and printed	45	-	-	-	45	•	-	-	-	-		
SP 3523	Unprotected and printed	35	1	-	-	3⁵		-	-	-	-		

 $<sup>^{1}\</sup>mbox{Vertical}$  exposure, mid-European climatic conditions  $^{2}\mbox{Durability}$  in months





















<sup>3</sup> Stationary applications facing South, West or Southwest will have a 1 year durability deduction
4 Up to 12 months durability on textured surfaces
5 Indoor applications
6 Indoor only, 2 years outdoor





### Avery Dennison® ICS Performance Guarantee HP Durability Bulletin 1.8.3 Note: Not applicable for HP 832, 873 or 882 Latex Ink

Recommendation on how to avoid overlaminates delamination from graphics printed with HP 831, 871 or 881 Latex inks

Low adhesion values of Avery Dennison overlaminates may be observed when applied onto graphics printed with HP 831, 871 or 881 Latex inks.

The following guidelines explain which graphics or applications are particularly critical and excluded from our warranty, as low peel adhesion values may cause delamination of the Digital Overlaminate of the printed graphic.

#### 1. Avoid high ink load or solid colors

Graphics with high ink loads are especially critical in regards to reaching sufficient adhesion results of the overlaminate on the printed graphic. If your graphic requires a lot of ink, we recommend to test the adhesion of our Digital Overlaminates prior to starting the project.

Furthermore, please ensure that the inks are completely cured before laminating onto the graphic. Insufficiently cured images may cause otherwise unwanted delamination.

For proper curing we recommend to use dedicated profiles for your Media/Printer/RIP combination and print in recommended environmental conditions (20°C/60%RH). If ideal environmental conditions cannot be met or proper curing cannot be achieved despite the use of dedicated profiles, an adjustment of profile settings may be required. Reducing the amount of ink, increasing the number of print passes or increase the curing temperature (if the media allows for higher temperature) may improve the curing of the printed graphic.

Media presets can be found on HP's Media Locator under www.printos.com/ml/

To validate proper ink curing performance, especially when printing outside environmental conditions mentioned above or when not using recommended media presets, we suggest to perform a preliminary test to ensure that samples are properly cured. Rolling a sample just after printing and performing a visual inspection after 1 day will show if samples are properly cured.

In order to ensure a hassle-free application of graphics printed with these inks, we recommend to test the overlaminate on the specific image. This is especially recommended before starting a larger project.

### 2. Avoid criticial applications such as overposting applications

Application of media on top of a MPI-SP/DOL-SL bundle is not recommended. Especially applications that are applied temporarily on top of the overlaminate applied on these inks may cause problems when removing the graphic from the overlaminate. The temporarily applied media may show higher adhesion properties on the overlaminate than the overlaminate on the printed graphic. When trying to remove the temporary graphic off the DOL-SL, it may lead to undesired delamination. Similar to the overposting example above, also applications that require installation with the help of an application tape may lead to undesired delamination due to the stronger adhesion properties of the application tape.

To prevent delamination of the DOL-SL from the printed graphic, we therefore recommend to avoid the above described critical applications when using these particular HP Latex inks.

Please note that we cannot guarantee sufficient adhesion properties of our overlaminates listed in the durability table of Bulletin 1.8.3 if the above guidelines are not taken into consideration.

Whearas the general compatibility of the respective inks and our MPI-SP films is guaranteed, we cannot warrant critical images and/or applications as described further under points 1. and 2. above.























### Avery Dennison® ICS Performance Guarantee HP Durability Bulletin 1.8.4

Avery Dennison MPI Digital Media	Graphics Protection	Warranty period in years <sup>1</sup>				Application Surface						
			Outdoor	Vehicles	Marine	Indoor	Flat	Simple curves	Rivets	Compound curves	Corrugations	
MPI 1405 Easy Apply RS	Unprotected and unprinted	12	-	-	-	-	•	•	•		•	
INFT 1400 Lasy Apply No	SL 6560 Gloss		63,4	6	4	12	•	•				
SP 1540 Ultra Clear (ex. MPI 1440 Ultra Clear)	Unprotected and unprinted	12	-	_	_	-						
3F 1340 Oltra Clear (ex. MPT 1440 Oltra Clear)	SP 1540 Ultra Clear		63,4	6	4	12						
SD45045 A L	Unprotected and unprinted	10	_	_	_	_						
SP 1504 Easy Apply	SL 6560 Gloss	10	5 <sup>3</sup>	5	3	9	•	•	•	•	•	
	Unprotected and unprinted	10	_			_						
MPI 1105 Series	DOL 1460 Z Gloss, DOL 1470 Z Lustre, DOL 1480 Z Matte	10	5 <sup>3</sup>	5	3	9						
	DOL 1460 MAX		5 <sup>3</sup>	5	3	9	•		•			
		7		-								
MPI 1104, MPI 1104 EA MPI 1106, MPI 1106 EA	Unprotected and unprinted	/					•					
WIFT 1100, WIFT 1100 LA	DOL 1460 Z Gloss, DOL 1470 Z Lustre, DOL 1480 Z Matte		4 <sup>3</sup>	4	2	7	•	•	•	•	•	
	DOL 1460 MAX		4-	4	2	/		•	•			
MPI 1105 Series MPI 1104, MPI 1104 EA	Unprotected and unprinted	7	-	-	-	-	•	•	•	٠	•	
MPI 1106, MPI 1106 EA	DOL 6040		3	3	-	6	•	•	-	-	-	
MDI 2000/2001 MDI 2000/2001 HOD MDI 2002 MDI 2002	Unprotected and unprinted	7	-	-	-	-		•	-	-	-	
MPI 2000/2001, MPI 2000/2001 HOP, MPI 2002, MPI 2003 MPI 2004 EA, MPI 2004 HOP EA, MPI 2005 EA RS, MPI 2005	DOL 2460 Gloss, DOL 2470 Lustre, DOL 2480 Matte		5 <sup>3</sup>	4	-	7	•	•	-	-	-	
EA RS Superslide, MPI 2020 MPI 2040, MPI 2041, MPI 2006, MPI 2006 HOP	SL 4530		5 <sup>3</sup>	4	-	7		-	-	-	-	
	Unprotected and unprinted	7	-	-	-	-		-	-	-	-	
MPI 2001, MPI 2002, MPI 2001 HOP, MPI 2041	DOL 6000		-	-	-	9 <sup>2</sup>	•	-	-	-	-	
	Unprotected and unprinted	7	-	-	-	-		•	-	-	-	
MPI 2150	DOL 2460 Gloss, DOL 2470 Lustre, DOL 2480 Matte		4	-	-	7	•	•	-	-	-	
	Unprotected and unprinted	7	_	_	_	-			_	_	-	
MPI 2800/2801, MPI 2800/2801 HOP MPI 2804 EA	DOL 2860 Gloss, DOL 2880 Matte <sup>6</sup>		3	3	-	7			_	_	-	
IVII I 2004 EA	SL 4530		3	3	-	7		-	-	-	-	
MDI 2000/2001 MDI 2000/2001 HOD MDI 2004 HOD FA	Unprotected and unprinted	3	-	-	-	-		-	-	-	-	
MPI 3000/3001, MPI 3000/3001 HOP, MPI 3004 HOP EA MPI 3020/3021, MPI 3020/3021 HOP, MPI 3024 HOP EA	DOL 3460 Gloss, DOL 3470 Lustre, DOL 3480 Matte		2	2	-	3	•	-	-	-	-	
MPI 3026/ MPI 3026 HOP, MPI 3040/3041, MPI 3151	SL 4530		2	2	-	3	•	-	-	-	-	
	Unprotected and unprinted	3	-	-	-	-	•	-	-	-	-	
MPI 3001, MPI 3001 HOP	DOL 5900		-	-	-	6 <sup>2</sup>	•	-	-	-	-	
	DOL 5800		-	-	-	3 <sup>2</sup>	•	-	-	-	-	
MPI 3021 DOT, MPI 3041 DOT	Unprotected and printed	1	-	-	-	1	•	-	-	-	-	
	Unprotected and unprinted	3	-	_	_	_	•	-	-	-	_	
MPI 3601, MPI 3621	DOL 3460 Gloss, DOL 3470 Lustre, DOL 3480 Matte		2	2	_	3		_	-	-	-	
	SL 4530		2	2	-	2		_	_	-	-	
MPI 6021 Anti-Slip Floor Marking	Unprotected and printed	12	-	-	-	12		-	-	-	-	
	Unprotected and unprinted	3	-	-	-	-	•	•	-	-	-	
MPI 7201	DOL 4000 Ultra Clear Cast	-	3	3	-	3		•	-	-	-	
	SL 4510 Ultra Clear Polyester		2	2	-	3	•	-	-	-	-	
MDI 7201	Unprotected and unprinted	2	-	-	-	-	•	-	-	-	-	
MPI 7301	DOL 4000 Ultra Clear Cast, SL 4510 Ultra Clear Polyester		2	2	-	2	•	-	-	-	-	
	Unprotected and unprinted	2	-	-	-	-		-	-	-	-	
SF 100 Ultra Clear	SL 4510 Ultra Clear Polyester		2	-	-	6		-	-			
MPI 8000 Wall Film Series, SP 8000 Wall Film Series	Unprotected and printed	45				45						
	<u> </u>						•					
SP 3523	Unprotected and printed	3⁵	1		-	3⁵	•					





















<sup>1</sup> Vertical exposure, mid-European climatic conditions
2 Durability in months
3 Stationary applications facing South, West or Southwest will have a 1 year durability deduction
4 Up to 12 months durability on textured surfaces

<sup>&</sup>lt;sup>5</sup> Indoor applications <sup>6</sup> Indoor only, 2 years outdoor





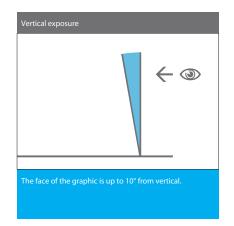
# Avery Dennison® ICS Performance Guarantee Additional information on graphics durability

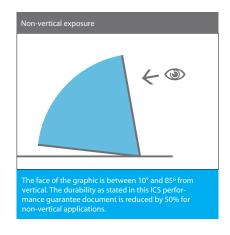
### Definition of durability and potential durability reductions.

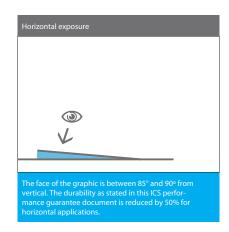
The durability of Avery Dennison Graphics and Reflective Solutions films are defined as the expected performance life of the Avery Dennison graphic film(s) within the European region in outdoor vertical exposure conditions. The durability is defined such that the films will not deteriorate excessively, i.e the finished graphic remains effective for its advertising or identification purpose when viewed under normal conditions from the intended viewing distance.

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, industrially polluted areas or the durability will be further reduced below levels stated in this ICS Performance Guarantee document.

### Angle and direction of exposure.







### Definition of durability and potential durability reductions.

High elevations: In mountain areas UV damage is increased over exposures at sea level. This is due to the air being thinner and therefore damage of UV radiation increases significantly.

Congested urban or industrial areas: Due to increased smog, pollutants and particulates in the atmoshpere, applications have reduced durability expectations. Also horizontal application traps chemicals on the surface of the material, increasing the impact of UV exposure and reducing durability.

"Indoor" durability means that the Product in a finished graphic situated within the interior of a building without direct exposure to sunlight and applied to recommended surfaces, will not deteriorate excessively such that the finished graphic is ineffective for its advertising or identification purpose(s) when viewed under normal conditions from the intended viewing distance, due solely to a defect in the Product in manufacturing or workmanship.





















# Avery Dennison® ICS Performance Guarantee Additional information on graphics durability

### Zone sytem Europe

Based on a 3-tier climatic Zone System (as attached), durability in regions as located in Zone 1 will perform in vertical applications as stated in the product datasheets and this particular ICS Performance Guarantee Bulletin. Films used in regions identified in Zone 2 will have a reduction of two years. Films used in regions identified in Zone 3 will have a reduction of the stated durability of Zone 2 by an additional two years. Where the Zone 2 durability is less than three years, the Zone three durability is 50% of Zone 2

Zone 1 (displayed	in ICS Bulletin table above)	Zoi	ne 2	Zone 3					
Vertical	Non-vertical / Horizontal	Vertical	Non-vertical / Horizontal	Vertical	Non-vertical / Horizontal				
8	4	6	3	4	2				
7	3.5	5	2.5	3	1.5				
6	3	4	2	2	1				
5	2.5	3	1.5	1.5	0.75				
4	2	2	1	1	0,5				
3	1.5	1	0.5	0.5	0.25				
2	1	-	-	-	-				
1	0.5	-	-	-	-				

#### Zone chart

Zone 1

Andorra, Austria, Belarus, Belgium, Bosnia & Herzegovina, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, Finland, France (excluding Corsica & Réunion), Georgia, Germany, Hungary, Iceland, Ireland, Italy (North and Central), Kosovo, Latvia, Liechtenstein, Lithuania, Luxemburg, Macedonia F.Y.R., Moldova, Monaco, Montenegro, The Netherlands, Norway, Poland, Romania, Russia, San Marino, Serbia, Slovakia, Slovenia, Sweden, Switzerland, Ukraine, United Kingdom, Vatican City.

Zone 2

Albania, Armenia, Azerbaijan, Corsica, Greece, Italy (South of Rome), Kazakhstan, Kyrgyzstan, Malta, Mauritius, Portugal, Réunion, San Marino, South Africa, Spain (excluding Canary Islands), Tajikistan, Turkey, Turkmenistan, Uzbekistan. Zone 3

Durability in years

Afghanistan, Algeria, Bahrain, Canary Islands, Cyprus, Egypt, Iraq, Israel, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Qatar, Saudi Arabia, Tunisia, United Arab Emirates, Yemen.

Excluding all sites (mentioned in zones 1, 2 and 3) above altitudes of 1000 meters.

WARRANTY: 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

For full warranty details see the Avery Dennison ICS Performance Guarantee Bulletin (Terms & Conditions) 1.0. Warranty is subjected to the Avery Dennison ICS Platinum Warranty Bulletin (Terms & Conditions) and/or Avery Dennison ICS Performance Guarantee Bulletin (Terms & Conditions), available on request.

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