

Privacy – with a flick of a switch

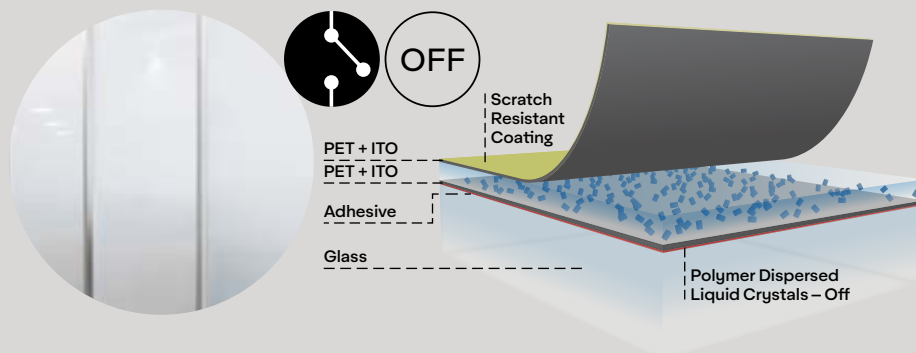
Incorporate privacy on-demand with Vela™ – by Avery Dennison, a new simple retrofit solution delivering instantaneous privacy with the flick of a switch.

Transform spaces on demand

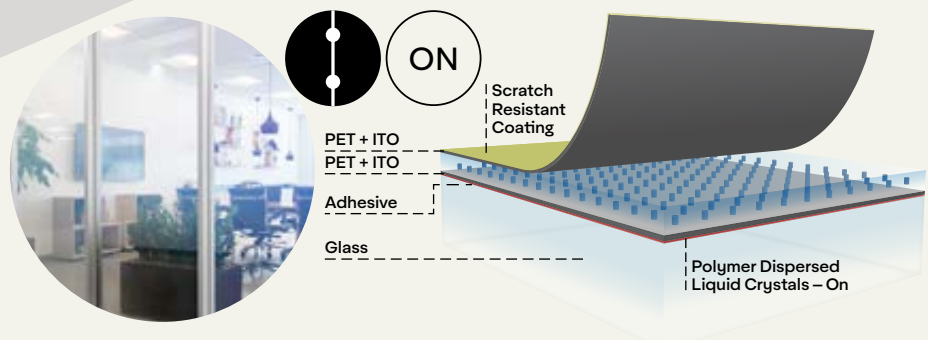
Avery Dennison Vela™ is a retrofit window film that places a thin translucent film over indoor glass panes allowing for privacy, consumer engagement and erasable whiteboard applications. When switched-on, Vela™ film transforms to transparent, providing high optical clarity and visually opening up spaces. Vela™ delivers easy to operate, flexible functionality on demand.

HOW DOES IT WORK?

The Vela™ film is designed with a Pressure Sensitive “PS” adhesive on one side for a wet application and a Scratch Resistant “SR” Coating on the other side to ensure scratch-free installation and maintenance. Inside the film structure are two opaque, sputtered transparent conductive layers of Indium Tin Oxide, “ITO” and in between these layers are the Polymer Dispersed Liquid Crystals, “PDLC” which is the basis for the technology.



In the absence of an electrical current, the liquid crystal particles disperse randomly, scattering light which results in a translucent appearance.



Activating the Vela™ film introduces electricity to the film which causes the liquid crystal particles to orient in a manner that permits light to traverse the film and results in a transparent state.

Key advantages of Vela™ Dynamic System

END USER

- Flexible use of open-concept space
- White-board functionality*
- Ability to transform windows into digital signage
- Fully integrated system installed by certified applicator network
- Retrofit upgrade to existing glass
- High quality and easy to maintain
- Option for smart connection via remote control, voice activation or home apps
- High optical quality and low haze
- Up to 3 years manufacturer warranty
- Low power consumption

INSTALLER

- Scratch resistance hardcoat for scratch-free installation and maintenance
- Ability to test & validate visual quality and functionality before and after application
- Precut with busbars for fast installation
- Safe to use - controllers are UL/CE certified

*Customer is responsible for testing functionality with specific markers and cleaners



Hospitals



Corporate



Hospitality



Retail

Innovation from a trusted brand

Physical Characteristics

Parameter	Value					
	Vela™ 1000		Vela™ 2000		Vela™ 1010	
Product	Vela™ 1000		Vela™ 2000		Vela™ 1010	
Application Method	Wet		Dry		Wet	
Mode	OFF	ON	OFF	ON	OFF	ON
Appearance	Translucent	Opaque	Translucent	Opaque	Translucent	Opaque
Parallel Visible Light Transmittance	3%	78%	4%	74%	4.6%	76%
Total Visible Light Transmittance	65%	81%	67%	77%	65%	80%
Haze ² - (25° C)	>99%	3%	>99%	4.8%	>99%	3.5%
Switching Time	OFF ON 10 msec	ON OFF 150 msec	OFF ON 10 msec	ON OFF 150 msec	OFF ON 10 msec	ON OFF 150 msec
Operating Modes	ON/OFF, Dimmer					
Operating Voltage	70 VAC sq wave					
Operating Frequency	25-30, 32, 50-60 Hz					
Power Consumption	-	1-3 W/m ²	-	1-3 W/m ²	-	1-3 W/m ²
Net Film Thickness	250 micron (10mil)		460 micron (18mil)		250 micron (10mil)	
UV Block	99%					
PS Adhesion Strength	600-800 gr/in		100 gr/in		600-800 gr/in	
Operating Temperatures	-4°F - 158°F (-20°C - 70°C)		-4°F - +158°F (-20°C - +70°C)		-4°F - 194°F (-20°C - +90°C)	
Width Availability	- 1.22m (48")		- 1.50m (59")		- 1.22m (48")	
SR Hardcoat Taber Abrasion Resistance (ASTM D1044)	ΔHaze ≤ 2%					

Data represents average values

¹ Optical performance measured using a square wave signal provided by Vela™ controllers.

² Haze tested on "haze-gard i" by BYK, and according to wet retrofit process on glass

³ Installations on outdoor windows are not warrantied.

⁴ For interior applications on exterior facing glass with direct exposure to sunlight

VELA™