3M

Projection Screen Whiteboard Film
PWF-500

Product Bulletin

Product Description	White calendered PVC film with hard coat. This communication film with both whiteboard and projection capabilities offers great versatility for interior application of office rooms, retail, schools and other private or public buildings. 3M Comply™ air release feature in the adhesive guarantees a fast and easy application. The use is restricted to indoor applications on flat or moderately curved surfaces.

Product Line	Communication film	PWF-500	white, opaque, matte, permanent adhesive (clear)

Product Characteristics	These are typical values for unprocessed products. Contact your 3M representative for a custom specification.

Physical & Application		
Material	calendered vinyl (polymeric)	
Surface finish	matte	
Thickness (film)	230 µm (0.23 mm)	
Adhesive type	solvent acrylic; pressure-sensitive	
Adhesive appearance	clear	
Liner	double-sided Polyethylene coated paper with Comply™ feature	
Adhesion	35.5 N / 25 mm	FTM 1: 180° peel, substrate: glass; cond: 24 h 23°C/50%RH
Application method	dry only!	
Applied shrinkage	< 0.3 mm	FTM 14
Application temperature	+12°C minimum (air and substrate)	
Service temperature	-20°C to +50°C	
Surface type	flat to simple curved	
Substrate type	aluminium, paint, galvanised steel, PVC coated steel, polyester, ABS	
Graphic removal	Fair to remove with heat and/or chemicals from supported substrates. No liability is given for ease or speed of removal of any graphic. Pay attention to adequate air and substrate temperature.	
Notice	For different substrates: please contact Tech Service for an adhesion test	

Warranty	This warranty does not apply to film problems caused by defective application and is given for unprocessed film only!	
	Indoor application	Film application in-side a building without direct exposure to sunlight
		12 years for all areas

Durability	The durability data are given for unprocessed film only!	
	Indoor application	Film application in-side a building without direct exposure to sunlight
		> 12 years; depending on frequency of use

Storage	Shelf life	- 2 years from the date on the original box - up to 2 years unprocessed, or processed within 1 year and apply within 1 year of processing
	Storage conditions	+4°C to +40°C, out of sunlight, original container in clean and dry area.

Flammability	Flammability standards are different from country to country. Please ask your local 3M contact for details. DIN EN 13823 European SBI. Part of the new Norm 13501-1. Results: C - s1, d0.

Limitations of End Uses

3M specifically does **not** recommend or warrant the following uses, but please contact us to discuss your needs to recommend other products.

Graphics applied to	- exterior applications. - other than flat or moderate curved/corrugated surfaces.
Important Notice	- Wet application method is not recommended for this film. - Do not stretch the film during application - performance of hard coat will be destroyed. - White board markers with oil based ink might be difficult to be removed. - Printing on film is not recommended. - Film is not intended to use with e-cut.

Graphics Manufacturing

Application	Please consult the following 3M literature for more information about - Surface preparation: Instruction Bulletin 5.1 'Select and Prepare Substrates for Graphic Application' - Application methods: Instruction Bulletin 5.5 'General Procedures for Interior and exterior Dry Application'
Shipping finished graphics	Flat, or rolled film side out on 130 mm (5 inch) or larger core. These methods help to prevent the liner from wrinkling or application tape, if used, from popping off.
Notice!	After installation of the film it is necessary to wipe with sufficient pressure the entire surface with the eraser to ensure proper performance. This is needed to ensure proper wet-out and adhesion of the writings. Handle the film with caution as the edges are sharp! Overlaps/butt joints are possible but not recommended for full functionality. If an overlap is needed apply primer (3M primer 94) before overlapping.

Maintenance and Cleaning

	Use a cleaner designed for high-quality painted surfaces. The cleaner must be wet, non-abrasive, without strong solvents, and have a pH value between 3 and 11 (neither strongly acidic nor strongly alkaline). Refer to Instruction Bulletin 6.5 'Storage, handling, maintenance and removal of films and sheetings', for general maintenance and cleaning information. When the film surface becomes soiled (dirt or old dried ink), wipe the surface using a soft cloth and warm water. If necessary add a mild detergent.
Notice!	Do not use permanent pens. If a permanent pen is mistakenly used, wipe off immediately with an alcohol based cleaner. This will reduce the overall performance of the film. Writing and erasability of markings are dependent on the frequency of cleaning/erasing and overall maintenance of the film. Clean/replace the whiteboard eraser regularly. For easiest use it is recommended to avoid having writings standing on the board for very long periods of time.

Remarks

This bulletin provides technical information only.

Important notice	All questions of warranty and liability relating to this product are governed by the terms and conditions of the sale, subject, where applicable, to the prevailing law. Before using, the user must determine the suitability of the product for its required or intended use, and the user assumes all risk and liability whatsoever in connection therewith.
Additional information	Visit the web site of your local subsidiary at www.3M.eu/ArchitecturalMarkets for getting more: - additional instruction bulletins - a complete product overview about materials 3M is offering