



**TECHNICAL DATA SHEET**

## DPF 390

DPF 390 is a white seamless 19.5-oz. wide-width flexible substrate designed for large sign faces where durability and uniform light transmission are important. DPF 390 is recommended for digital and UV screen printing, PSA translucent vinyl, and other film decoration methods. It is compatible with cast translucent vinyl and has a 6-year outdoor durability. DPF 390 passes the NFPA 701 fire resistant certification test.

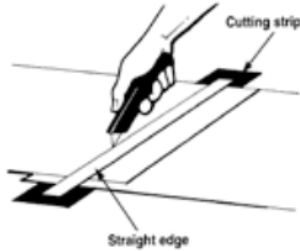
### PRODUCT ATTRIBUTES

- Digitally printable with Eco-Solvent, Solvent, UV, and Latex direct print systems
- Can be decorated with pressure-sensitive vinyl films and heat transfer decoration methods
- Indoor and outdoor backlit illuminated signage
- Intermediate flexible substrate applications including; indoor and outdoor backlit illuminated signage, LED and Fluorescent large and small light boxes, and awnings
- Optically clear and other cast overlaminates are recommended for DPF 390

REPRESENTATIVE PHYSICAL PROPERTIES			
PROPERTY	TEST METHODS	TYPICAL VALUE	
<b>THICKNESS</b>	Section 8, Vol. 08.01, D1593-89	22-mil	0.56 mm
<b>WEIGHT</b>	Section 8, Vol. 08.01, D1593-89	19.5 oz/sq yd	650 g/sq m
<b>YARN</b> (Denier)	Internal Test Method	500x500	
<b>THREAD COUNT</b> (Warp, Weft)	Internal Test Method	18/sq in	7/sq cm
<b>TENSILE STRENGTH</b> (Warp, Weft)	Section 8, Vol. 08.01, D1593-89	180 lbf/linear in	800 Newton Force
		150 lbf/linear in	670 Newton Force
<b>ELONGATION</b>	Section 8, Vol. 08.01, D1593-89	33%	
<b>TEAR RESISTANCE</b> (Warp, Weft)	Section 8, Vol. 08.01, D1593-89	23 lbf	102 Newton Force
		20 lbf	89 Newton Force
<b>OPACITY</b>	Internal Test Method	>75%	
<b>GLOSS</b>	Section 8, Vol. 08.03, D2457-90	10 - 20 Gloss Units	
<b>LIGHT TRANSMISSION</b>	Internal Test Method	19 to 21%	
<b>SHELF LIFE (IN BOX)</b>	Ideal storage temperature 70°F (21°C) and 50% relative humidity	1 year from factory shipment. (Free from excessive moisture, temperature, and direct sunlight)	
<b>PRINTABILITY</b>	Internal Test Method	Eco-Solvent, Solvent, UV, and Latex digital inks	
<b>FIRE RESISTANCE</b>	Flammability NFPA 701-2004 Test I		

*Product performance will vary in each application and is dependent upon composite construction. Arlon Innovations does not guarantee the replication of this data by third parties. None of the data or statements contained herein is intended to warrant the performance of this product. Data is representative and not intended as a manufacturing specification.*

## TRANSLUCENT FILM OVERLAP RECOMMENDATION ON DPF 390



Joined sections of film should overlap preferably 1/4" but at least 1/8".

### A COMMON METHOD

1. To create a uniform overlap, first tape a cutting strip onto the substrate. A two-inch (5 cm) piece of thin steel at 1/16" (1.6mm) thickness is a good dimension for cutting strip
2. Lay both pieces of vinyl over the cutting strip
3. Place a metal straight edge where the two pieces of film cover the cutting strip. With a sharp utility knife, cut through all layers of film
4. Remove the straight edge, excess film, and the cutting strip
5. Complete the squeegeeing procedure to create a proper overlap with uniform and straight edges

## OTHER PROPERTIES & INSTRUCTIONAL INFORMATION

### SUBSTRATE TEMPERATURE

The best temperature for tensioning DPF 390 is between 50°F to 100°F (10°C to 35°C). Once tensioned it will maintain its form without sagging between the temperatures -41°F to 176°F (42°C to 80°C).

### SMOOTH SURFACE

The manufacturing process in the production of DPF 390 provides for a flat, smooth surface. This flat, smooth surface allows for minimized dirt settlement and easier graphic application.

### DECORATION

DPF 390 is a bright white flexible, reinforced, vinyl substrate. It is created for the sign and awning industries for use in backlit graphic applications utilizing PSA vinyl and print decoration methods.

### HANDLING, PACKAGING, & SHIPPING

When handling DPF 390 do not fold tightly or bunch as creasing or wrinkling may occur. If a crease occurs, apply heat with a 1000-watt heat gun to remove crease. When packaging, roll up on an inner core measuring a minimum of 6 inches (76 cm) in diameter with graphics facing out. When shipping, use an appropriate, sure fitting shipping core.

### STORAGE

DPF 390 should be stored in a cool, dry environment. Preferred temperature is 60°F to 75°F (16°C to 24°C) with maximum humidity level of 50%.

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### **SHELF LIFE**

1 year

### **SIZES**

DPF 390 is available in 3'6", 4'6", 6'6", 8'6", 10'6", 12'6", and 16'4" seamless widths by 164' length.

### **PRE-CLEANING**

If the surface has to be cleaned, use a lint-free cloth moistened with a mixture of 1-part isopropyl alcohol to 1-part water. After cleaning, use a dry lint-free cloth to remove any wet areas.

### **CLEANING**

See FLEXcon Industrial's Cleaning Maintenance & Worldwide Warranty.

### **WARRANTIES**

Rated as a 6-year outdoor product.

### **CODES, APPROVALS, & CERTIFICATIONS**

DPF 390 has passed the following Codes, Approvals, and Certifications: California State Fire Marshal, NFPA 701, Underwriters Laboratories, and ASTM E84.

### **TERMS & CONDITIONS**

The following is made in lieu of all warranties expressed or implied:

All statements, technical information and recommendations published relating to products are based on tests believed to be reliable and within the accuracy of the equipment used to obtain the specific values. Their accuracy or completeness is not guaranteed and the manufacturer makes no warranty with regard thereto. Seller's and manufacturer's only responsibility shall be to replace any quantity of the product proved defective. Seller and manufacturer shall not be liable for injury, loss or damage, direct or consequential, arising out of use or the inability to use the product. Nor shall seller or manufacturer be liable for any costs or expenses incurred in the processing or printing on the product. Before using, user shall determine the suitability of the product for its intended use. User assumes all risk and liability of every nature in connection therewith. No statements or recommendations other than those contained in the technical information published shall have force or effect unless contained in an agreement manually signed by the officers of seller and manufacturer.

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