PALIGHT®

Flat Foamed PVC Sheet

SIGN & DISPLAY   FABRICATION

Overview

PALIGHT is a lightweight, versatile, flexible, and durable foamed PVC sheet that is ideal for use in advertising and construction.

PALIGHT exhibits the whitest available surface and was successfully tested by the majority of digital flatbed printer manufacturers. Printers and advertisers benefit from its constantly smooth and bright surface for producing high quality displays.

PALIGHT is easily handled, cut and fabricated using conventional tools and equipment, and can be printed, painted or laminated.

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Main Benefits

- Tested and approved for digital printing
- Bright white, smooth and uniform surface
- Available in a wide range of standard and special designer colors
- Standard matte or gloss finishes
- Good insulation, lower heat transmission
- Non-toxic
- Good flammability: self extinguishing
- Half the weight of solid PVC sheets
- Same thickness at lower cost
- Good mechanical properties
- Easily worked with conventional tools, prints and paints
- Can be easily bonded, nailed and bolted
- Low water absorption
- High chemical resistance
- Meet various international standards

Typical Applications

Advertising
Signs, displays, interior decoration, exhibition graphics, cladding etc.

Construction
Models, partitions, wall cladding, interior decoration, air conditioning ducts, etc..

Industry
Control cabinets and panels, structures for corrosive environments, ducts, etc.

Serigraphy (Screen Printing)
PALIGHT's flat, consistent surface makes it ideal for screen printing. It is suitable for use with aqueous and solvent-based inks. PALIGHT's sheet surface has low absorption giving excellent ink yield.

Digital Printing
PALIGHT was approved by major digital flatbed printer manufacturers, and is suitable for use with digital inks and UV curing. All 1-10mm white PALIGHT sheets have a bright and smooth surface for true color interpretation.

Build On.

Standard Dimensions*

	Color	Thickness Availability / Dimensions (mm)		
		1220x2440	1560x3050	2030x3050
PALIGHT®	White ST-10	1-13, 15, 19 24, 25, 30, 40	All	All
	Yellow ST-30	3, 5		
	Red ST-50	3, 5		3, 5
	Black ST-90	3, 5, 10	3, 5	3, 5, 6, 8, 10
	Blue ST-70	3, 5		3, 5
	Green ST-80	3		
	Grey ST-100	3, 5	3, 5	3, 5

* Special dimensions are available upon request.

Product Range

Product	Description
PALIGHT®	Flat foamed PVC sheet with matte finish, available in a wide range of standard and special thicknesses and designer colors.
PALFOAM™	Cost-effective, white only, light weight flat foamed PVC sheet.
PALIGHT® Print	Flat foamed PVC sheet made specifically to cost effectively meet the stringent requirements of large format print imaging industry.
PALFOAM™ LW	Low weight, white only, flat foamed PVC sheet for general purposes.

Typical Physical Properties

Property	ASTM Method	Conditions	Units	Value
Density	(D-792)		g/cm^3	0.57*
Water Absorption	(D-570)	24 hr. @ 23 °C	%	0.5-0.8**
Flexural Strength at Yield	(D-790)	1mm/min.	MPa	28*
VICAT Softening Temp	(D-1525)	Load: 1kg	°C	75
Coefficient of Linear Thermal Expansion	(D-696)		cm/cm °C	6.7x10^{-5}
Thermal Conductivity	(C-177)		W/mK	0.06-0.07**
Surface Resistance	(D-257)		Ohm	5X10^{15}
Volume Resistance	(D-257)		Ohm-cm	2X10^{16}

*Results refer to 3mm sheet   **Depending on thickness (3-10mm)

Flammability

PALIGHT is self extinguishing and complies with the most demanding international fire resistance standards defined in the field of plastics, as indicated by representative results in the attached table.

Standard	Classification*
EN 13501	B, s1-3, d0
BS 476/7	Class 1
NSP 92501,5	M-1, M-2
UL 94	V-0

*Depends on thickness, type and color.

Color Chart

Standard Colors	Code	PANTONE®	RAL
White*	ST-10		
Red	ST-50	1807U	-
Yellow	ST-30	108U	-
Blue	ST-70	288C	-
Green	ST-80	3415C	-
Black	ST-90	4C	9011
Grey	ST-100	430C	7037

* Whites are divided by thickness: 1-10mm: ST-10   12-25mm: Classic White

Designer Colors	Code	PANTONE®	RAL
Digital White	DE-11		
Cream	ST-20	-	9001
Antique Cream	DE-21	Warm Grey 2C	1013
Smoke Grey	DE-141	428C	7047
Dim Grey	DE-151	408C	-
Dark Grey	DE-131	431C	7012
Burgundy	DE-71	187C	3002
Cardinal Red	DE-211	193C	3031
Firebrick Red	DE-61	485C	-
Orchid Pink	DE-221	204C	4003
Orange	DE-51	21C	2004
Blaze Orange	DE-41	158C	2011
Bright Yellow	ST-40	1235C	-
Lemon	DE-31	102C	-
Lime green	DE-181	390C	-
Sea Green	DE-171	361C	6018
Mint Green	DE-111	340C	6024
Olive Green	DE-161	378C	-
Dark Green	DE-121	3308C	6005
Turquoise	DE-101	337C	-
Steel Blue	DE-81	2707C	-
Sky Blue	DE-201	7401C	-
Light Blue	ST-60	2935C	-
Royal Blue	DE-191	287C	-
Sapphire Blue	DE-91	2757C	5002