

# SMART-X<sup>®</sup>

## DISTINCTIVE AND UNIQUE

FOR YOUR SOPHISTICATED ADVERTISING.

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## PRODUCT

SMART-X® the distinctive and unique lightweight foam board for sophisticated applications in the field of visual communication.

SMART-X® is a lightweight, all-plastic sheet material with surfaces of UV and weather resistant solid polystyrene (HIPS) and a core of expanded polystyrene that is completely moisture-resistant. These characteristics make SMART-X® the world's only lightweight foam board for external applications without any significant change in colour for a period of up to two years. Due to its refined surface structure and the large format production (up to 2 metres width) SMART-X® is also perfectly suited for direct digital printing.

Moreover, SMART-X® is a mono-material composite made from 100% polystyrene and, therefore, perfectly meets the demand for ecological materials in the area of visual communication.

## SMART-X® – AT A GLANCE

- High stability and very low weight
- Very good resistance to weathering – with high UV stability and humidity resistance, no deformation
- Refined surface structure
- Brilliant printing results with direct digital printing
- Also available in 2 metres width
- Temperature resistance from -10°C up to +70°C
- Low resistance during contour milling

## SMART-X® – THE GREEN ASPECT

- SMART-X® is a mono-material composite made from 100 % polystyrene (no adhesive between core and cover layers)
- Ecological - SMART-X® with a homogeneous compound is 100% recyclable
- About 95% of the production waste of the SMART-X® production is collected and recycled on-site

## APPLICATION

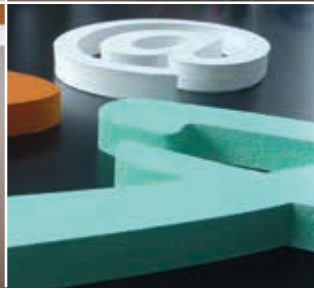
### PRINTING – CUTTING – ASSEMBLING

SMART-X® can be used with all lamination and printing techniques for applications in the field of advertising signage, event marketing and POS/POP displays. Thanks to the excellent ratio of extremely low weight and high rigidity and flatness, SMART-X® is ideal for the following two-dimensional applications:

- All types of signage, especially large-format or long and narrow signs – formats where other materials usually deform.
- Optimal for self-supporting, free-standing structures – directly printed – milled – shipped flat – assembled on site.
- Life-sized fashion displays made from SMART-X® – directly printed – contour milled – assembled on site – ready to go!

Our customers are convinced of the unique qualities of SMART-X®. Major furniture stores, DIY stores, food retail chains as well as suppliers of POS/POP displays and service providers in the event marketing industry are just a few examples of the satisfied SMART-X® customer base.

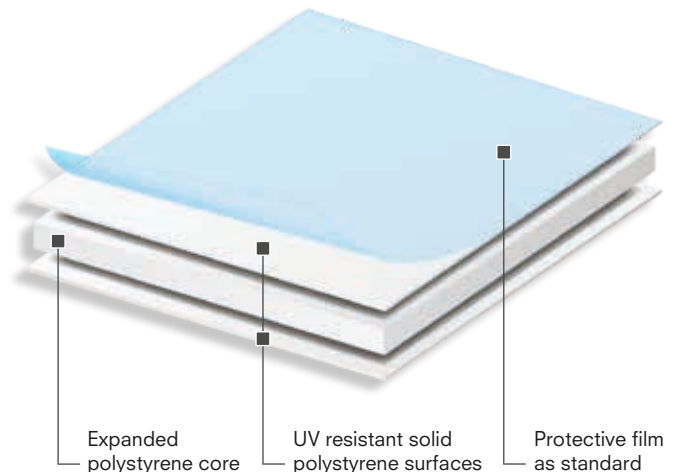
Additional safety requirements and detailed processing instructions for SMART-X® can be received upon request.



# SMART-X®

## PRODUCT RANGE

Colour	☐ white	
Thickness	<b>5 mm / 10 mm</b>	<b>19 mm</b>
Standard formats (WxL)	1220 x 2440 mm	1220 x 2440 mm
	1220 x 3050 mm	1220 x 3050 mm
	2030 x 3050 mm	2030 x 3050 mm
Protective film	on one side	both sides



## PRODUCT INFORMATION

Thickness		5 mm	10 mm	19 mm
Weight		1 kg/m <sup>2</sup>	1,90 kg/m <sup>2</sup>	3 kg/m <sup>2</sup>
Flexural strength	EN ISO 178	10 MPa	7 MPa	5 MPa
E-modul (bending test)	EN ISO 178	600 MPa	400 MPa	200 MPa
Service temperature	-	up to 70°C		
Thermal expansion	DIN EN ISO 75-2	0,08 mm/(mK)		

**100% homogeneous polystyrene – recyclable**

## ROHS DIRECTIVE

SMART-X® meets the requirements of the RoHS/WEEE directives of the European Union on the restriction of hazardous substances. SMART-X® foam boards do not contain lead, mercury, cadmium, hexavalent chromium, phthalate, formaldehyde, CFCs, asbestos, plasticizer nor silicone.

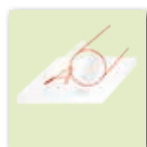
## REACH REGULATION

SMART-X® meets the requirements of the current version of the European Union chemicals regulation (REACH). In particular, SMART-X® foam boards do not contain any of the substances which are listed in the current version of the ECHA Candidate List of "Substances of Very High Concern" (SVHC).

## PROCESSING AT A GLANCE



Digital printing



Laminating/  
Mounting



Overlac-  
quering/  
Varnishing



Sawing



Contour  
cutting/  
Contour  
milling



Laser cutting



Routing and  
folding  
(V-groove cut)



Gluing



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