

## EX-CEL

### EX-CEL IF PVC Sheets

An expanded, lightweight foam PVC sheet made using the Celuka process. EX-CEL IF has an integral, solid PVC skin, and a foam PVC core, making the sheet stronger, more durable, and therefore longer lasting, which is particularly valuable for high traffic and exterior applications.

#### Main Features

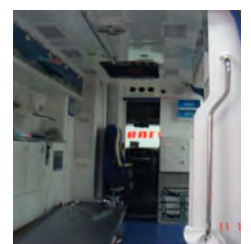
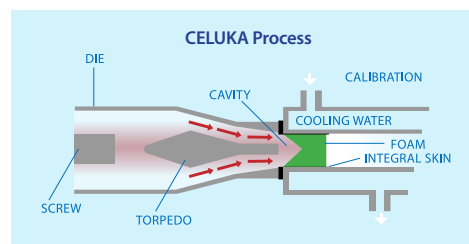
- Easy to fabricate with standard tools
- Lightweight
- Outstanding printability
- Fine cell structure
- Low Flammability rated UL 94 VO
- Non-corrosive
- Non-toxic
- High impact strength
- Safe for the environment (no heavy metals)
- Can be film-masked
- Chemical and moisture resistant
- Accepts most paints and vinyl
- High strength to weight with solid PVC surface and foam core
- Good thermal and sound barrier
- Smooth/hi-gloss finish

#### Fabrication Options

- Cut
- Rivet
- Saw/Cut
- Screw
- Rout
- Paint
- Engrave
- Print
- Drill
- Photo mount
- Heat bend/form
- Easily worked with standard tools

#### Applications/Markets

- Advertising signage
- Long-term signage
- POP Displays
- Furniture
- Exhibit stands and panels
- Models and prototypes
- Boat panels and cabins
- Embossing/Engraving
- Thermoforming
- Retail merchandising
- Refrigeration
- Replacement for wood
- Cabinetry
- Vehicles, including ambulances and RV's
- Theatrical, musical and movie sets



Jain Americas is a wholly owned subsidiary of Jain Irrigation Systems Ltd., one of the largest manufacturers of drip irrigation systems in the world. Jain Americas commenced operations Columbus, Ohio, in 1992 and now offers four different EX-CEL products lines from its 150,000+ square foot manufacturing/warehouse space. Product lines include: FF (Free Foam) Classic, FF Lite, IF (Integral Foam) and Edge. Jain Americas also has stocking locations in Ontario, California, and Chicopee, Massachusetts.



# EX-CEL IF PVC Sheets

## Sheet Sizes

Thickness	Sheet Size	Color
10mm	4' x 8'	White
10mm	4' x 10'	White
13mm	4' x 8'	White
13mm	4' x 10'	White
16mm	4' x 8'	White
19mm	4' x 8'	White
19mm	4' x 10'	White
25mm	4' x 8'	White
25mm	4' x 10'	White

SPECIAL SIZES AND CUSTOM COLORS AVAILABLE UPON REQUEST

## Technical Values

Property	Test Method	Unit	Value
<b>A] PHYSICAL</b>			
DENSITY	ASTM D 1505	g/cc	0.50 - 0.60
HARDNESS	ASTM D 2240	SHORE'D'	>40
WATER ABSORPTION	ASTM D 570	%	< 1.0
<b>B] MECHANICAL</b>			
TENSILE STRENGTH	ASTM D 638	Psi	> 1595
ELONGATION	ASTM D 638	%	>10
E-MODULUS	ASTM D 638	Psi	130000-220000
FLEXURAL STRENGTH	ASTM D 790	Psi	>4350
IZOD IMPACT STRENGTH	ASTM D 790	Psi	>9
CHARPY IMPACT STRENGTH	DIN 53253	KJ/M <sup>2</sup>	>10
COMPRESSIVE STRENGTH AT 10% DEFORMATION	ASTM D 695	Psi	>435
SCREW HOLD (TYPICAL FOR 25MM SHEET)	ASTM D 1761	lbs/inch	>265
<b>C] THERMAL</b>			
VICAT (B/50)	ASTM D 1525	°F	>160
COEFFICIENT OF LINEAR THERMAL EXPANSION	ASTM D 696	°C <sup>-1</sup>	5.56X10 <sup>-5</sup>
THERMAL CONDUCTIVITY	ASTM C 177	W/m K	0.1
HEAT DEFLECTION TEMP @ 1.8 MPa	ASTM D 648	°F	~ 140
RATE OF HEAT TRANSFER	DIN 52616	W/m <sup>2</sup> k	3.0 FOR 10mm 2.0 FOR 19mm
BURNING RATE	ASTM D 635	In/min	No burn when flame removed
<b>D] ELECTRICAL</b>			
SURFACE RESISTIVITY	ASTM D 257	Ω	>10 <sup>14</sup>
VOLUME RESISTIVITY	ASTM D 257	Ω-cm	>10 <sup>15</sup>
DIELECTRIC CONSTANT	ASTM D 150	-	1.7
<b>E] FLAMMABILITY</b>			
COUNTRY: UK	BS476; Part 7	-	Class 1
COUNTRY: USA	UL 94	-	94 V-0; 94 5-V
COUNTRY: FRANCE	NFP 92-501	-	M1
<b>F] STANDARD DIMENSIONS AND COLOR</b>			
COLOR	Cap Layer White J 1054		
THICKNESS	8, 10, 13, 19, 25, 30 mm		
WIDTH	1000, 1220, 1250, & 1560 mm (1560 width is only available up to 19mm)		
LENGTH	2000, 2440, 2500 & 3000, 4880 & 5490 mm		
FLATNESS	8mm per meter for 8 & 10 mm. Above 10mm – 3mm per meter		
*Special color, lengths and widths as per customer request			
<b>G] TOLERANCE ON DIMENSIONS</b>			
LENGTH	-0, +10 mm		
WIDTH	-0, +5 mm		
THICKNESS	+/- (0.1 + 0.05 x S) S = thickness of the sheet		

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**Thank you** for taking time to learn about Jain Americas and EX-CEL IF. Please contact us today for more information about the many ways we'd like to serve you. Please also visit our website if you'd like to download literature, request samples, view test data and certifications, and learn more about our company, and all four EX-CEL products.



**Jain Americas**

Leave this world better than you found it

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