



## INTRODUCTION



We are proud to introduce you to an alternative construction material with many practical applications - that is a safer and recyclable replacement for MDF, Chipboard, Melamine Board and Plywood. Hygiene Board comes in sheet format from 3mm-32mm that can be machined and finished like traditional materials; but it's SIMPLY BETTER.

The product is a homogeneous material with a foam core made of closed cell PVCU with a hardened skin on both surfaces.

Hygiene Board is non-toxic, formaldehyde free, non-porous and can be used and processed using the same methods as wood-based panel products. The unique properties of Hygiene Board enables unparalleled possibilities for curves, profiles and bends, without affecting its structural integrity.

## Moisture Resistant



Suited to both interior and exterior environments, our non-toxic, eco-friendly PVC foam-based Hygiene Board, is a perfect alternative to wood, melamine, chipboard, and MDF due to its moisture resistant properties.

A relatively lightweight yet highly durable lifetime investment product, Hygiene Board complies with European emissions standards and RoHS Standards and is gaining popularity in international markets, as well as South Africa.

### Precipitation

Hygiene Boards do not absorb moisture from precipitation and will not deteriorate or degrade in the presence of moisture. Hailstorms may cause damage through the impact of large hailstones on cold panels.



## Why Hygiene Board is the obvious design and manufacturing choice



### Anti Bacterial

Germ and pathogen resistant. An anti-bacterial option is 97% effective against MRSA and E.coli.



### Acid Resistant

30 year lifespan with excellent chemical resistance.



### 100% Recyclable

Formaldehyde-free, non-toxic and entirely recyclable after use.



### Moisture Resistant

Moisture resistant, non-porous, impermeable and invulnerable to mold and mildew.



### Anti Fungal

Prevents the formation of biofilms on surfaces and the contamination by harmful microbes, such as bacteria and fungi.



### Fire Resistant

Excellent thermal properties ensure a naturally fire resistant surface.



### Fade Resistant

UV Print, paint, duco, lamination with timber veneer or an HPL Laminate. 100% UV and Fade Resistant.



### Work Friendly

Machined, saw-cut, CNC-cut, routed, profiled and edged with no special or additional tooling required, yet offers generates less wear and tear on machines and blades.



### Ultraviolet Resistance

Sunlight affects all materials to varying degrees. The weathering properties of Hygiene Board sheets are excellent but can be further enhanced by increasing the density from 0,50g/cm<sup>3</sup> to 0,70g/cm<sup>3</sup>.

The maximum, in service temperature is between 60°C and 70°C. For exterior use, lighter colours are preferable as darker sheets absorb heat from sunlight and can deform. If used behind glass, ensure adequate spacing is left between the foam sheet and the glass to ensure adequate ventilation.

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### Chemical Resistance

The inherent nature of the base PVC polymers has excellent chemical resistance. Resistant to:

- Salt Solutions
- Most Acid Solutions
- Petrol, alcohol, fats, and oils

PVC is, in varying degrees, not resistant to organic chemicals containing nitro and chlorine groups, aromatic hydrocarbons, amino compounds and some ethers.

### Cleaning and Maintenance

Clean lightly soiled surfaces with water and solvent-free, non-abrasive, and non-scouring liquids.

Heavily soiled boards can be cleaned with methylated spirits, methyl petroleum and alcohol ether solvents. Normal precautions should be taken.

Due to good electrical insulation properties, a static charge could develop during cleaning or handling.

## Bonding

Surfaces should be cleaned and free of any residue.

## Adhesive Systems

- Solvent or cement solutions of PVC Tetrahydrofuran dimethylformamide etc. containing 10-25% solid content.
- Reaction adhesives. One- or two-part polyurethane or epoxy.
- Contact adhesives using synthetic rubbers such as neoprene.
- Adhesive films.
- Pressure sensitive adhesive tapes.

**Fixing Methodology:** When fixing PVC foam sheet, the maximum spacing between screws is detailed below:

Thickness	Spacing
• 1mm	100 – 150mm
• 2mm	150 – 200mm
• 3mm	250 – 300mm
• 4mm	350 – 500mm
• 5mm+	500mm





## DATA SHEET



Thickness	3 – 32mm
Density	0.5 – 0.7g/cm <sup>3</sup>
Colour	White with other colours available on order
Executive standard	QB/T 2463.1-1999
Certificate	ISO 9001
Weldable	Yes
Foam process	Celuka
Water saturation	≤1%
Tensile strength	12 - 20MPa
Elongation at break	15 - 20%
Vicat softening point	73 – 76 °C
Impact strength	8 - 15 KJ/m <sup>2</sup>
Shore hardness	D 75
Flexural modulus of elasticity	800 - 900 MPa
Bending strength	12 - 18 MPa
Life span	>30 years
Flame retardance	Self-extinguishing ≤ 5 sec.



## DATA SHEET



### Thickness

3mm  
5mm  
6mm  
8mm  
10mm

### Attenuation

19dB  
22dB  
23dB  
24dB  
27dB

**Sound attenuation frequency range 100 - 3 000**

### Warranty

Manufacturers' warranty available on request.

## DATA SHEET



THERMAL	TEST METHOD	UNITS-SI	VALUE
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Service temperature	In house	°C	Minus 10-65
Heat distortion temperature	In house	°C	63
Vicat softening temperature	ASTM D-648	°C	75
Coefficient of thermal expansion	ASTM D-648	°C	75
ELECTRICAL	TEST METHOD	UNITS-SI	VALUE
Dielectric strengths	ASTM D-257	Ω	5X10
Surface resistivity	ASTM D-257	Ω-cm	5X10
FLAMABILITY	TEST METHOD	UNITS-SI	VALUE
EN 13501			B, s1, do
BS 476 part 7			Class 1
UL 94			V-o
NSP 92501,5			M-1, M-2
DIN 4102			B-1
IEC 695.2.1			Self Extinguish
ASTM E-84			Class A



## DATA SHEET



PROPERTY	TEST METHOD	UNITS-SI	VALUE
<b>PHYSICAL</b>			
Relative density	In house	g/cm <sup>3</sup>	50-72
Water absorption	ASTM-570	%	0.5-0.8
<b>MECHANICAL</b>			
Tensile strength at yield	ASTM D-638		
Elongation at break	ASTM D-638		
Flexural strength at yield	ASTM D-790		
Flexural modulus	ASTM D-790		
Charpy impact strength	ASTM D-256		
Shore D hardness		Value	n/a



## CONTACT US



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