Water Resistant PVC Sheets

Perfect replacement for wood & plywood

PVC Sheet Sizes: 3,35m³
                     2,750m x 1,220m

Colour & Thickness

White: 06mm x 0.5 density
          10mm x 0.5 density
          16mm x 0.5 density
          22mm x 0.5 density

Black: 16mm x 0.5 density
          22mm x 0.5 density

Product Features

Our PVC Board is a perfect MDF, Chipboard & Wood Substitute.

Extra Durability
- *Lightweight and extremely durable*
- *Crack Resistant*
- *High rigidity and strength*
- *Non-deformation*
- *Sound insulation and absorption*
- *High tear strength*
- *Life span of 30-40 years*

Weather & Ageing Resistant
- *Resistant to water, mold and mildew*
- *Resistance to extreme environments (slight alkalinity, acid, high humidity and seawater)*
- *Excellent chemical resistance (salt, petrol, alcohol, fats & oils, most acids), good resistance to light, UV and weathering*
- *Long lasting colour*
- *Suitable for both interior and exterior use*

100% Waterproof
- *Moisture resistance, mildew proof, rot proof and low water absorption*
- *Impermeable to water*
- *Will never swell in damp conditions*
- *Perfect for moisture and flood prone areas, indoor/outdoor use, including kitchens and bathrooms*

Fire Retardant
- *Fire retardant and self-extinguishing*
- *Excellent Heat insulation and preservation*
- *Safe and Ideal solution for ceilings, tenement houses, schools and amusement areas*

Easy Installation & Fabrication

- *Good mechanical performance, easily machined using circular saws, jigsaws, CNC'd, routed, profiled and edged identically to MDF*
- *Smooth surface suitable for silk-screen printing, laser, oil and water-based paints, Duco'd or laminated with vinyl.*
- *Dimensional Accuracy*
- *Can be welded in accordance with PVC Bonding materials*
- *Ideal substitute for aluminum, wood, plywood and other composites*
- *Light on tools*
- *Easy to paint*

Low Maintenance

- *High screw holding Capabilities making it suitable for tough environments both internally and externally*
- *Easy Cleaning (Lightly soiled: Wipe with water & solvent-free liquids. Heavily soiled: Wipe with methylated spirits/methyl petroleum and alcohol ether solvents)*
- *Little to no dust give off*

Eco-Friendly

- *Hygienic and non-toxic*
- *100% recyclable*
- *Formaldehyde free*

Resistant to Insects, germs and harmful pathogens

- *Non-porous (closed cell)*
- *Anti-bacterial option with a 97% effective rate against MRSA and E.coli*
- *Termite proof*
- *Anti-fungal*

Pvc Applications

PVC Boards have many design possibilities such as: kitchen cabinets, school desks, counter tops, showroom panels, wall panelling, reception counters, bulkheads, ceiling tiles, pause areas and restaurant counters, restrooms, **surgery rooms, laboratories,** signage, acoustic panelling, exhibition stands, scale models and marine industry products *(i.e., decking, interior panelling)*. Gates, doors, housing enclosures, dry-walling, partitioning, access flooring, toilet cubicles and **shop fittings**.

The unique properties of our **PVC board** enable an endless possibility of **curves**, **profiles** and **bends**, <u>**without affecting the surface integrity**</u>.

PVC Ceiling Panels
Custom Design your pattern inserts

General Information

DESCRIPTION	INFORMATION
Packaging and Storage	There is a thin plastic on every sheet which must be removed by the customer. This is to protect the sheets against scratching. Storage should be in a standard warehouse conditions out of direct sunlight. (Temp 15°- 25°C) Store flat on a pallet. Do not store close to heat sources. Lift product and don't drag on ground.
Ultra Violet Resistance	Direct Sunlight affects all materials. Maximum Surface Temperature is between 60° - 70°C
Precipitation	Supa PVC Board does not absorb moisture from precipitation. Supa PVC Board does not deteriorate or degrade in the presence of moisture.
Chemical Resistance	Resistance to: Salt Solutions, Most Acid solutions, Most Petrol, Alcohols, fats and oils.
Cleaning & Maintenance	Clean Lightly soiled sheets with water and solvent free non-abrasive and non-scouring liquids can be cleaned with Methylated Spirits.
Specifications	Size: 2750mmx 1220mm Thickness: From 3mm – 50mm Colour: White Weldable: Yes Water Saturation: <1% Tensile Strength: >6 mpa Elongation at break: >6% Life Span: >50 years Flame Retardance: Self-extinguishing Acoustic Properties: 3mm 19db 16mm+ >27db Density 16 & 22mm: Between 50-70, depending on material thickness
Warranty	5 years only on white plain board. Does not include any printing, lamination, painting, ect.

Packaging and Storage

The product will generally be supplied on a **wooden pallet** determined by quantity. The bottom of the pallet will have a **"deck sheet"** at the bottom and a **"top sheet"** that provides protection.

Storage should be in **standard warehouse** conditions with an ambient temperature of **15°C – 25°C**. Products should be <u>stored flat on a pallet</u>, <u>undercover</u> and not in direct sunlight. Do not store close to heat sources such as boilers or radiant heaters.

Sheets should be **carried on edgewise and lifted directly** instead of dragged off the pallet. Any protective film (where applicable) should be removed when necessary.

Ultraviolet Resistance

Sunlight affects all materials to varying amounts. The weathering properties if PVC Foamboard sheets are **excellent** but can be further enhanced by changing grade. The maximum, in service, surface temperature is between **60°C – 70°C**.

For Exterior use, lighter colours or darker sheets, covered with light coloured printing or laminates are best suited.

If used behind glass, <u>ensure adequate spacing is left between the foam sheet and the glass to ensure adequate ventilation</u>.

Our **PVC Product** is an excellent **Eco-Friendly** Alternative for all your <u>MDF, Chipboard, Wood projects & Melamine-Faced Particleboard</u>.

Technical Specifications & Profile

Project	Index Unit
Main Ingredient	Polyvinyl Chloride
Size	2000 – 6000mm x 1220mm
Thickness	3 – 22m
Colour	White/Colour
Foam Process	Celuka
Elongation at break	≥6 %
Vicat Softening Strength	≥70°C
Apparent Density	450-650 Kg/m³
Water Absorption	1.0%
Tensile strength	≥6 Mpa
Free Beam Impact Strength	≥8 KJ/m²
Schauder Hardness	D ≥55
Flexual modulus of Elasticity	≥1000 Mpa
Bending Strength	≥12 Mpa
Heating Size Variance Ration	± 3.0%
Screw Holding Capacity	≥400 N
Fire Classification	EN 13501 (B S1 D0) B Speed of combustion weak or absent S1 Limited smoke D0 No Burning droplets Self extinguishing < 5 seconds
Certificate	ISO 9001

Fixing Methodology

When fixing PVC Foamboard sheets, the maximum spacing between screws as detailed below:

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

Bonding

Surfaces should be **cleaned** and if necessary degreased.
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**.

Thermal expansion must be considered. *(Refer to Coefficient of thermal expansion)*

Coefficient of Thermal Expansion

Value m/mK   50x10(-6)
Value mm/mK   0.05

Comparison:
PVC Board vs Timber Products

	PVC	Timber Products
Environmental Impact	100% Recyclable	Deforestation
Exterior Suitability	Extremely Good	Sealant Required
UV Resistance	High UV Resistance	Easily Affected
Fade Resistance	Virtually No Fade	Fades Under Exposure
Moisture Resistance	100% Waterproof	Water absorbent
Rot Resistance	100% Rot Resistant	Rots Unless Treated
Spilt Resistance	Will not Split	Split Due To UV/Moisture
Durability	.>30-40 Years	Constant Maintenance
Painting	Not Required	Periodically
Configuration	Extrusion Possible	Simple Sheet
Distortion Resistance	Contraction/Expansion	Distortion due to UV/Moisture