KAPADIVAV COMPOSITES

PVT LTD

Manufacturers of PVC Foam Sheet

POLYBOARD

WHAT IS POLYBOARD?

PolyBoard is a new age material made of foamed PVC (commonly known as uPVC).

The material is foamed to replicate wood and wood based panels but provide all the benefits of PVC, most importantly water-proof and pest-proof.

POLYBOARD features a closed-cell, smooth surface with a fine cell structure. It will fit the requirements for a multitude of applications, from substrates for graphics, point-of-purchase displays and backers for channel letters to wood replacement. Experience has shown that POLYBOARD is one of the highest-quality PVC sheet available.

PolyBoard is available in various thickness (5mm, 6mm, 8mm, 12mm, 18mm) and come in sizes of 8ft x 4ft.

Other thickness can be manufactured (from 5mm up to 20mm) upon order.

BENEFITS OF POLYBOARD

CHARACTERISTICS

THE General characteristics of POLYBOARD can be listed as follows

- Waterproof + Rustproof + Rot proof
- Pest Proof—Termites, ants, cockroaches etc
- Excellent chemical resistance
- Lightweight + Tough + Rigid
- Durable + Hygienic + Non-Toxic
- Good thermal insulation
- Machinable and Easily fabricated by readily available techniques and tools
- Non-flammable + Self-extinguishing
- Printable + Paintable
- Accommodates most fixing systems (screws, nut & bolts, glue)
- Smooth finish on both sides

APPLICATIONS OF POLYBOARD

POLYBOARD **Applications:**

- Furniture and Interior Decoration
- False Ceiling and Suspended Ceilings
- Exhibit and trade-show booths
- Point-of-purchase and 3D displays
- Photo mounting
- Arts and crafts
- Wood replacement

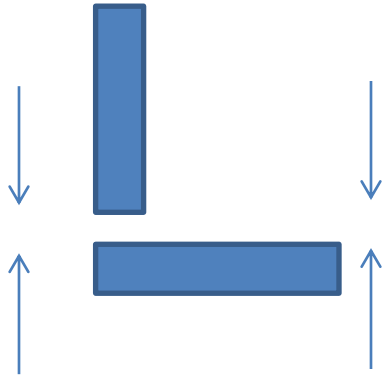
- Substrate for signs –printed, painted, laminated
- Arts and crafts
- Dimensional lettering
- Marine
- Refrigeration
- Vehicle manufacturing
- Theatre and stage sets
- Models, architectural prototypes

USING POLYBOARD

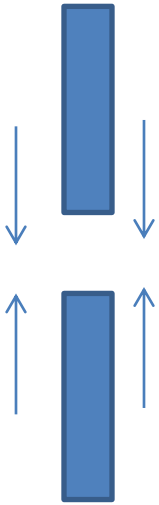
Fitting and Fixtures

Screwing fixtures and accessories to PolyBoard is easier than comparable products as it does not require any pilot hole when using screws.
Due to the nature of PolyBoard screwing will naturally expand the material and produce a robust fit.
It is highly recommended to use wood or dry-wall screws with PolyBoard for best result.

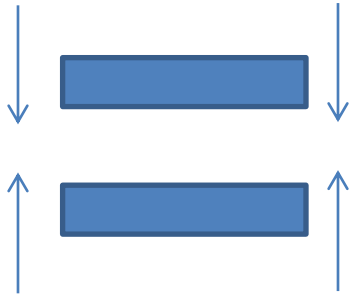
PolyBoard can also be glued to each other provide strong bonds. Various adhesives are used for bonding PolyBoard, but cyanoacrylate and PVC solvent cements provide the most effective results



Use cyanoacrylates for Edge-surface bonding



Use cyanoacrylates for Edge-Edge bonding



Use PVC Solvent Cement for Surface-Surface bonding

USING POLYBOARD

Painting

POLYBOARD can be painted using conventional techniques or spray painting. Polyurethane paints are best suited for POLYBOARD as this will form a strong adhesion with the POLYBOARD surface.

LAMINATING

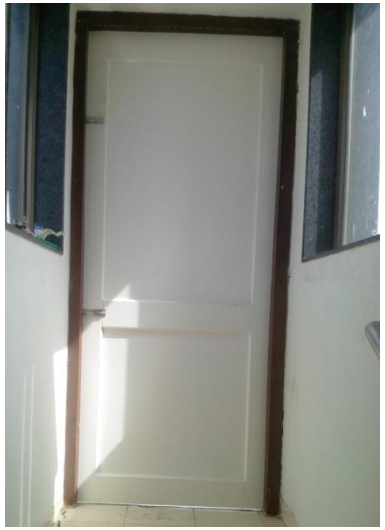
Laminates are applied to PolyBoard just as any other surface. A synthetic rubber based adhesive is highly recommended when applying laminates to POLYBOARD.
PVC Foils provide best results as laminating substrate, which are also applied using synthetic rubber based adhesive.

USING POLYBOARD

PolyBoard is generally used as an Indoor Material, but here we showcase the durability of PolyBoard used as a Roof-top Pyramid.

White sheets show great resistance to weathering due to its high reflective nature.

It should be noted that to use PolyBoard outdoors it should be fitted at all edges or provide reinforcements to avoid warpage.



APPLICATIONS

Lower thickness sheets used as ceiling tiles. The sheets are cut to size at the site using an art knife/utility knife.

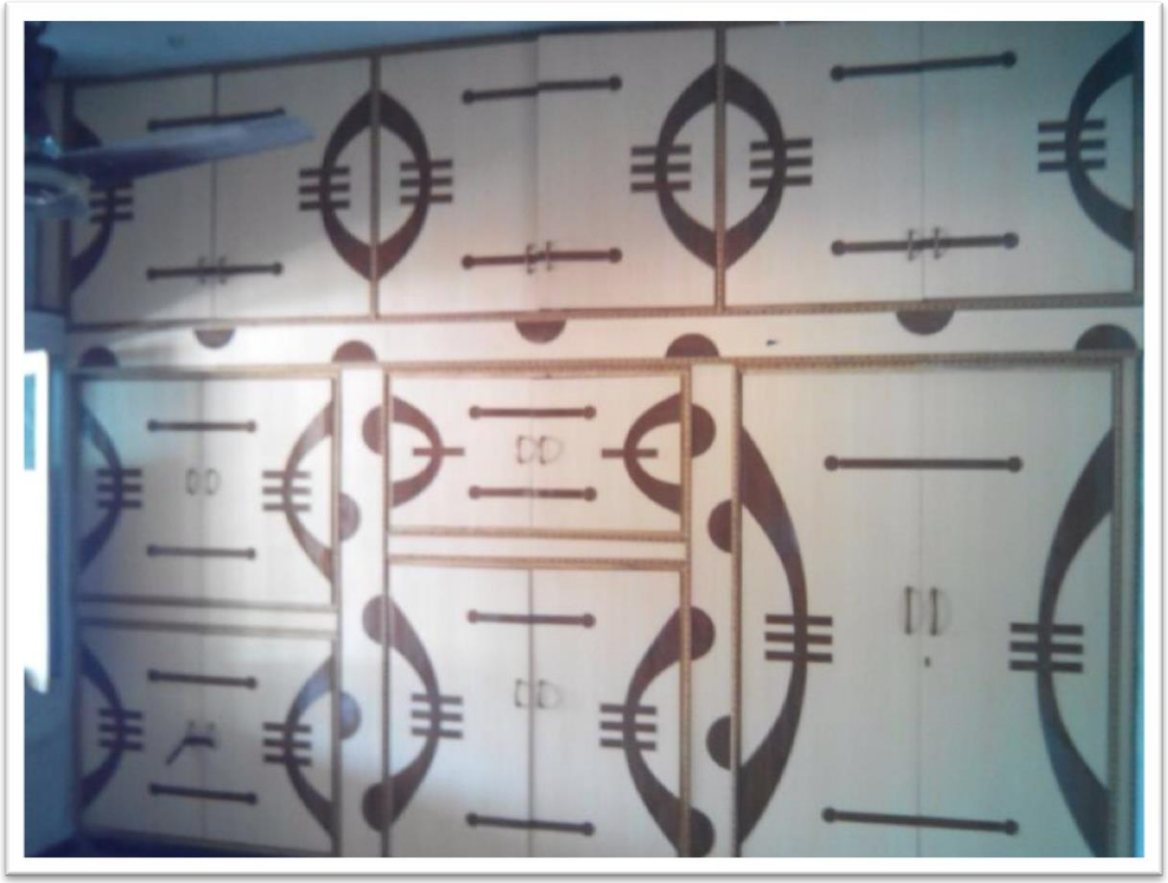
5mm or 6mm sheets are best suited to this application due to its low weight. Compared to other products PolyBoard can be cut to size, reduce breakages and damage during installation and cutting, is lighter, can hold accessories, can be cleaned and washed.

Using PolyBoard greatly reduces labour time. The bed showed in this picture was completed within 12 hours. This shows the versatility of PolyBoard in the many bonding and fixing systems available to the carpenter to ensure quick working.

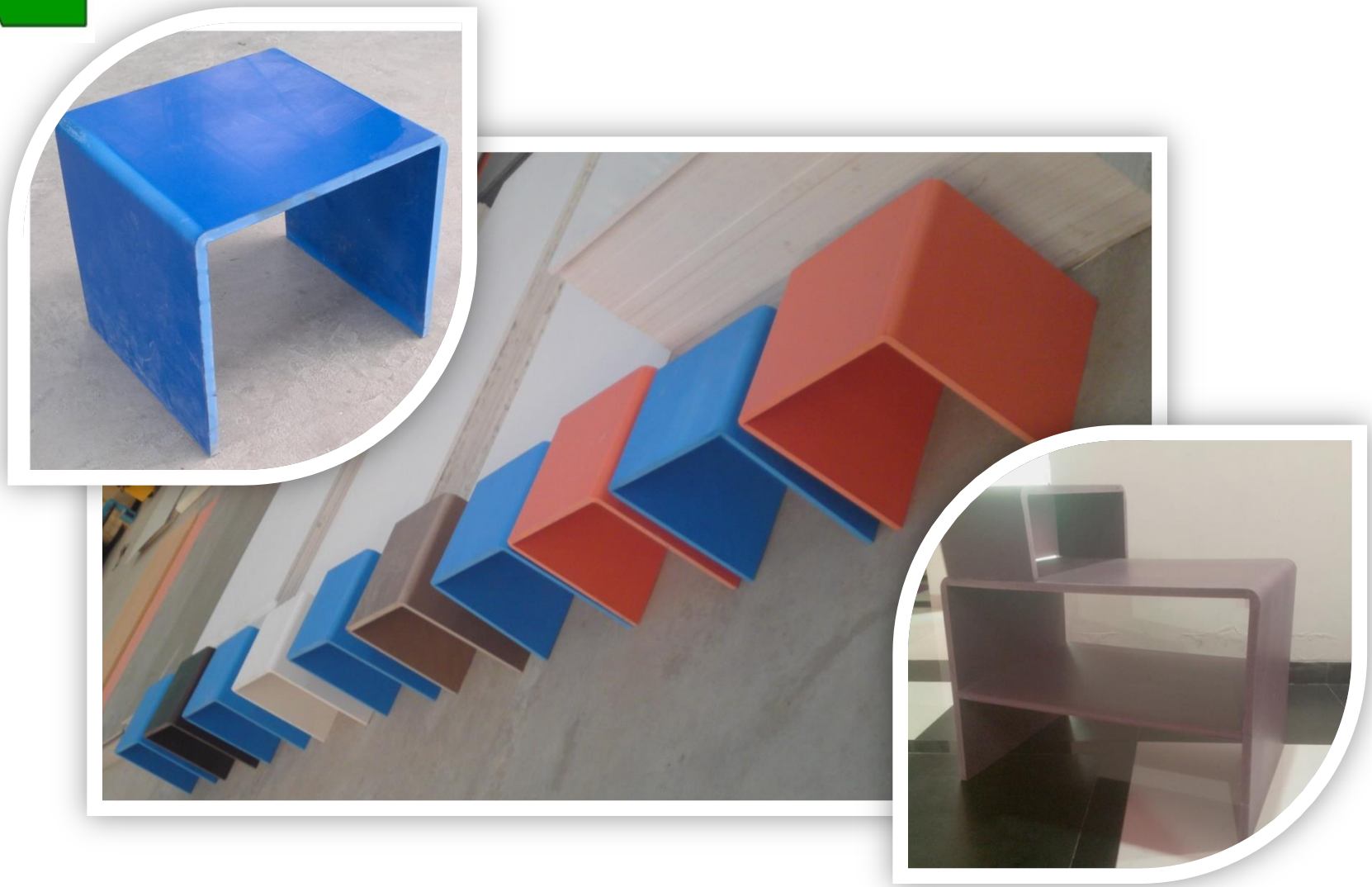
PolyBoard can be used to produce grills, letters and cut-outs. Thinner sheets (5mm and 6mm) can be laser cut, though it will produce a dark edge it is useful for cut out sharp edges as shown in the right-side Aum image.

CNC Routers are essential for producing grills in thickness of up to 18mm. Grills are wide used in the interior design industry as it can provide virtually any design at a low cost. Using PolyBoard to produce grills removes the need to apply any after-finish coatings and also gives a much smoother finish. (Particle board , MDF, Plywood are all fibrous material and machining them will inevitably result on a rough surface with individual fibres appearing at the routed edge. And wood based materials will require further treatment to protect the machined edge from moisture, mold and pests)

PolyBoard is now replacing standard plywood sheets as stackers for Rubber-mould pavers. Though expensive compared to commercial plywood, PolyBoard has a longer life giving more cycles. (Paver manufacturers had to change pylwood sheets every 4 weeks, PolyBoard has now lasted them over 6months.)



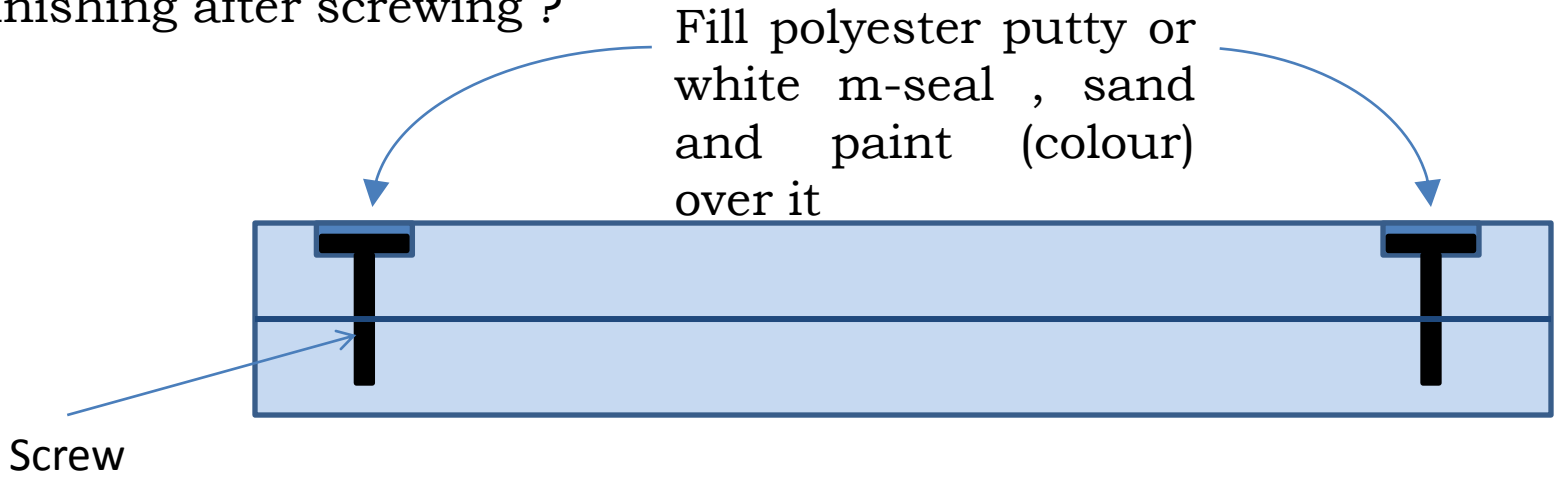
PolyBoard sheets can be directly used for indoor furniture or can be laminated.



PolyBoard sheets can be bent using hot air gun or heat coil. Bending can be done at the site, again proving the versatility and ease of use of PolyBoard. Wood based panels cannot be bent at the site and require heavy machinery for bending purposes

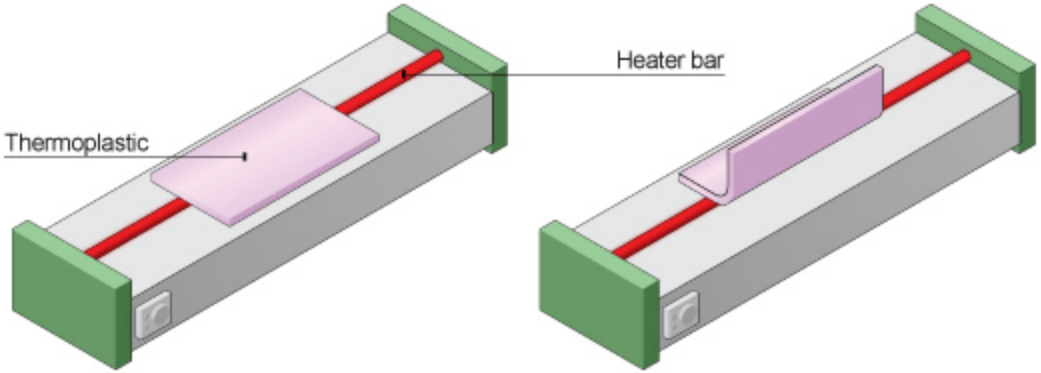
FAQ

Finishing after screwing ?



Hot Bending?

Bending is achieved by using an industrial hot air gun or encased heater coil. Heat is applied to the PolyBoard edge that is to be bent. At 90°C PolyBoard becomes more elastic which can then be bent to the desired angle and cooled.



COST ANALYSIS

USING PLYWOOD FOR MAKING FURNITURE

PLYWOOD 18MM (COMMERCIAL)	= 55 RS/FT2
WHITE INNER (BOTH-SIDES)	= 25 RS/FT2
GLUE (BOTH-SIDES)	= 15 RS/FT2
LABOUR (BOTH-SIDES)	= 30 RS/FT2
TOTAL	= 125 RS/FT2

USING POLYBOARD FOR MAKING FURNITURE

18MM POLYBOARD	= 120 RS/FT2

POLYBOARD FOR LIFETIME IS
100% WATER-PROOF
100% TERMITE- PROOF AND INSECT-PROOF
100% FIRE RETARDANT (WILL NOT CATCH FIRE, AND ACT AS AN EXTINGUISHER)

NOT ALL PLYWOOD CAN PROVIDE AS MANY BENEFITS AS POLYBOARD DOES WITH ITS PRICE