



The future starts here

Plastic Composite Board

All Round Edge Protected
PATENT PENDING

APPLICATION IN USE
CONCRETE SHUTTERING

Year 2011

Manufacturing and R&D

Our manufacturing facilities are based in Singapore with advance manufacturing equipments and efficient processes; produced items undergo stringent quality checks & are subjected to tests before delivery is made.

Emphasis are placed on continuous research and development and our team of dedicated engineers, production and service personnel ensures that your purchases are made and delivered to requirements, cost competitively and on time. With in-depth research into the formwork industry's requirement, we have developed a range of composite boards specifically designed to the harshed requirement of shuttering boards.

The TuffPly and PlasPly range has a repairable non-stick propriety thermoplastic surface that allows for easier formwork removal and a near perfect concrete finish without the frequent need for board replacement.



Models

- TuffPly-XL** All plastic with aluminum reinforcement composite board. Very good abrasion and water resistance.
- PlasPly-Plus** Double sided thermoplastic surface, plastic -wood composite board. Very Good abrasion resistance.
- PlasPly-Xtra** Double sided thermoplastic surface, plastic-wood composite board. Good abrasion resistance.
- PlasPly-Lite** Double sided thermoplastic surface, plastic-wood composite board. High abrasion resistance.
- PlasPly-Mono** Single sided thermoplastic surface, plastic-wood composite board. High abrasion resistance.
- PlasEdge** Double sided 120gsm quality phenolic film faced plywood. Moderate abrasion resistance.

Specifications

Product	TuffPly-XL	PlasPly-Plus	PlasPly-Xtra	PlasPly-Lite	PlasPly-Mono	PlasEdge
Core Material Base	Light weight plastic	Tropical hardwood, WBP bonded				
Surface - Front	H85 thermoplastic	H85 thermoplastic	H85 thermoplastic	H60 thermoplastic	H60 thermoplastic	120gsm phenolic
Plastic Edge Protection	All 4 sides	All 4 sides	All 4 sides	All 4 sides	All 4 sides	All 4 sides
Surface - Back	H85 thermoplastic	H60 thermoplastic	H60 thermoplastic	H60 thermoplastic	120gsm phenolic	120gsm phenolic
Surface Finishing	Smooth, matt					Smooth
Repairable	Yes					No
Density (Kg/m ³)	600 - 700					
Bending Modulus (Mpa)	4850 - 5500	Parallel to Grain		5700 - 6800		
		Perpendicular to		4200 - 5200		
Bending Strength (Mpa)	42 - 46	Parallel to Grain		40 - 60		
		Perpendicular to		28 - 45		
Operating Temperature (°C)	-20 to +70					
Moisture (%)	NA	12				

TuffPly with Edge Protection

TuffPly is an engineered plastic board and extremely suitable for concrete shuttering use. It is a drop-in replacement to plywood in formwork systems and is designed to work in the same way as plywood shuttering boards and can be sawn, nailed, screwed and machined.

The composition of lightweight plastic reinforced with metal plates provides superior long term consistent strength as compared with conventional concrete shutter boards and other general plastic boards.

No Rotting!

No Warping!

No Weakening!



*No Moisture Absorption
Mechanically Stable*



Tough, Repairable & Non-stick surface.....



Consistent Fair-Faced Finishing.....

TuffPly does not absorb water, crack or rot over time, It has bi-directional high strength to weight ratio with a density similar to typical hardwood and its mechanical strength will not deteriorate over time.

TuffPly UV resistant surface is impact & abrasion resistant to scratches & concrete to scratches & concrete vibrator knocks. Damages and punctures are repairable. Easily cleaned as concrete does not stick to plastic.

TuffPly thick plastic surface gives a consistent fair-faced concrete finish at every pour. The non-stick feature also means only a very thin layer of form oil is required.

PlasPly with Edge Protection

PlasPly consists of a plywood core with a proprietary non-stick thermoplastic overlay surface and edge fused all round with a solid thermoplastic edging.

The plastic edging grips and protects the ply layers while creating a tight seal which prevents moisture and water from entering into the plywood core.....no swelling, no ply delaminating, no chipping.....greatly enhancing the lifespan of the board.

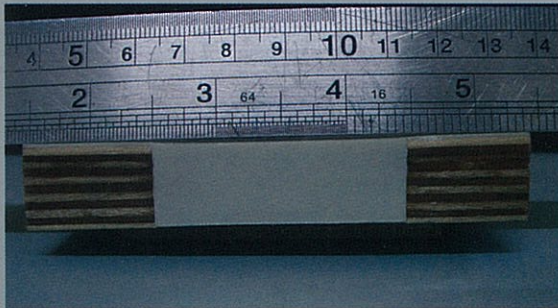
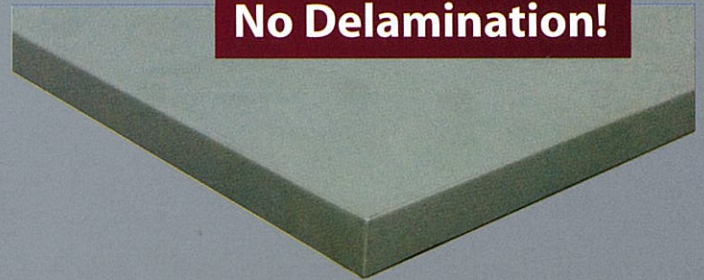
Stripping between panels will be much easier now as the 'rubbing' occurs between two smooth plastic edges.

This combination of thermoplastic plastic surface with wood core increases the lifespan and enhances the user experience in concrete shuttering and reduces the overall costs of ownership.

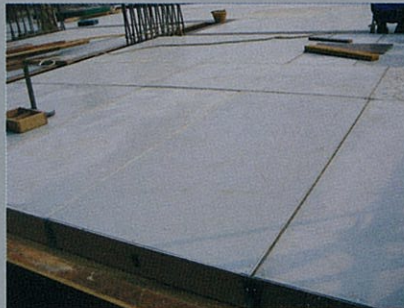
No Chipping!

No Swelling!

No Delamination!



Swelling does not occur along edging



Use in panels systems



Consistent & smooth finishing

Features

- Non-Stick & repairable thermoplastic surface
- Impact & high abrasion resistance which resists hard knocks from use
- Board debonds from concrete easily - ease of stripping - little or no formoil required
- Easy maintenance with high pressure cleaning jet
- Lifespan greatly enhanced with surface or plywood repair with plastic putty
- Different models to suit various re-use requirements

PlasRod Thermoplastic Repair Filler

BONDS ON WOOD, METALS & PLASTICS

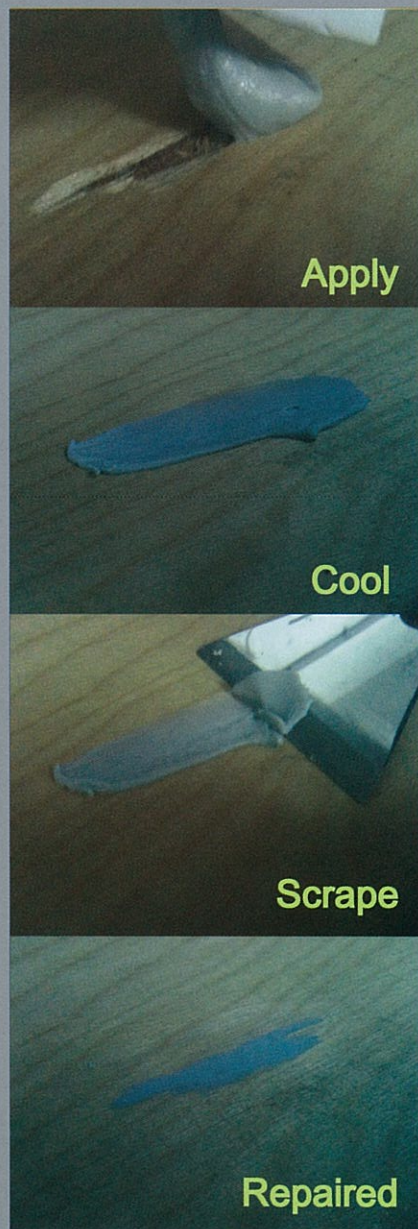
PlasRod is a thermoplastic repair filler that bonds onto wood, metal & selected plastic surfaces. It is a very fast & clean method to fill up damaged spots or it can be used as a temporary joint mechanism.

Easily applied on-site or in workshops , it is heat activated and cures within seconds after application, leaving behind a non-stick, hard, heat-water-moisture-chemical resistant plastic filler.

It comes in the form of a 4mm diameter rod strip and is easily applied with a plastic welding gun and leveled with a metal scrapper. For light repairs, a hot air gun can be used in replacement. Fine finishing can be done with a fine sander.

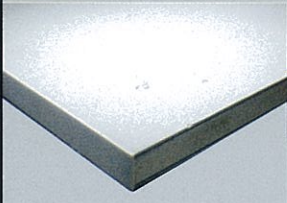
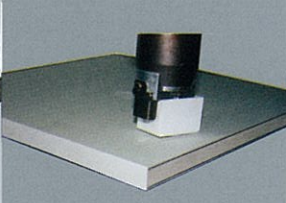
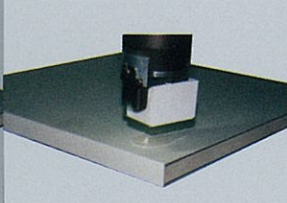
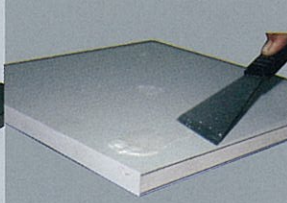
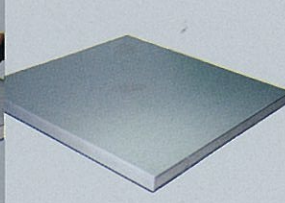
Main Features :-

- Cures and hardens within seconds
- Clean, simple and easy repair process
- Bonds onto wood, metal and selected plastic surfaces
- Environmentally friendly with no odors or any chemical emissions.
- Heat and Moisture Resistant, very good chemical and solvent resistance
- Can be re-worked over easily using heat
- Different colors available in rolls of 250, 500 & 1000m

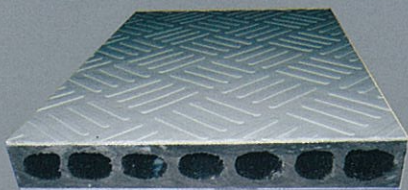


Surface Renewal Guide

Step as follows:

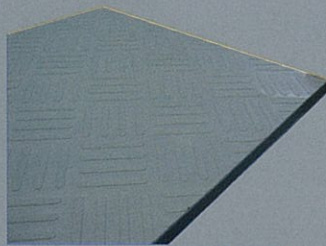
Step 1	Step 2	Step 3	Step 4	Step 5
				
Clean Damaged Area.	Pre-Heat damaged area and inject hot plastic over the damaged area.	Leave to cool for 3-5 seconds.	Scrap off excess with a metal scapper very quickly using a fast moving action.	Surface is repaired with immaculate results.

COMPANIONS



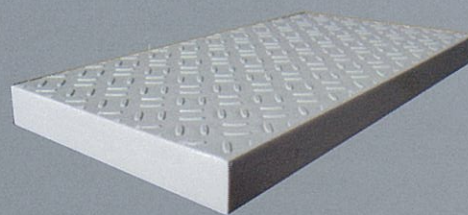
TuffPlank

All-plastic metal reinforced plank with anti-slip surface and hollow core



TuffDeck

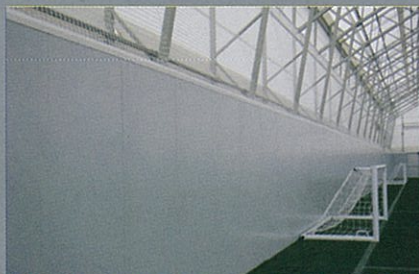
All-plastic metal reinforced board with anti-slip surface



PlasDeck

Thermoplastic overlay plywood with anti-slip surface, edge fused with solid plastic edging

APPLICATIONS

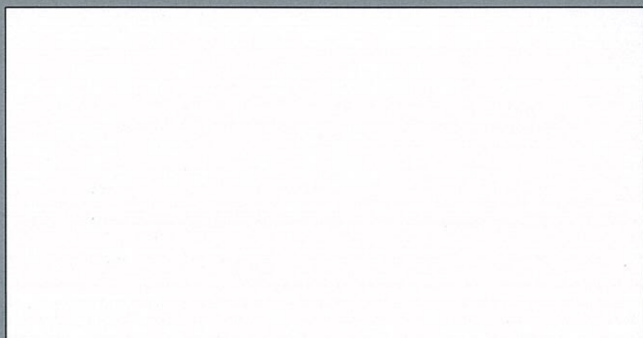


About Us

Uber Engineering is a Singapore manufacturer of plastic composite boards. At Uber, we design, develop and manufacture plastic composite boards with the aim to replace conventional materials through value-added product innovation.



Authorised Distributor



The future starts here

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