

Our new colour  
range is all green.

Plaspanel recycled plastic panels

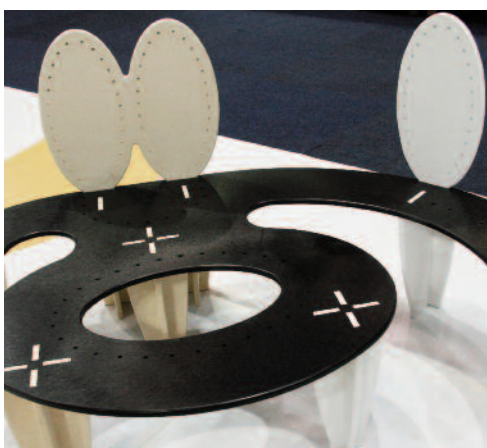


HDPE

**Plaspanel**<sup>®</sup>

*Multi-purpose plastic panels*

For application images, product specifications or to download technical data sheets visit [www.plaspanel.com.au](http://www.plaspanel.com.au)



Plaspanel® are strong yet lightweight flat panels manufactured from recycled plastic using a unique manufacturing process. Almost indestructible, Plaspanel flat sheet panels offer a number of distinct benefits over comparable flat sheet products. Plaspanel is waterproof so they do not rot, swell, delaminate, deteriorate or absorb moisture. The non-stick surface cleans easily, is scratch resistant and difficult to graffiti. They are rustproof, chemical, bacteria and mould resistant. The acoustic properties are similar to brick so they are ideal for many applications. Best of all, Plaspanel is easy to work with and can be cut, routed, drilled, welded and mechanically fixed with standard tools.

### Multi-use panels

The possible applications for Plaspanel are endless. The durability of the product makes it perfect for outdoor and high traffic areas and uses. The only limitations are your imagination.

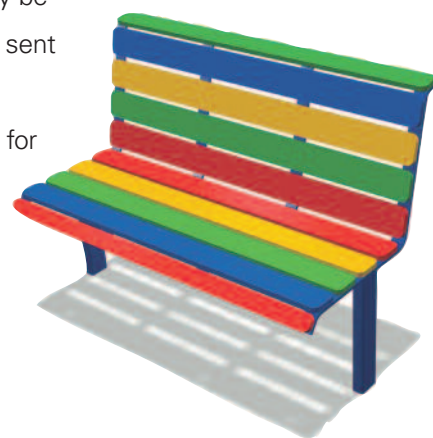
### New colours

Now available in nine colours in the recycled range, the opportunities are even greater. Signage and fit-out can be produced in corporate colours while playground and outdoor equipment looks the part. Other colours can be manufactured when ordered in larger quantities.

### Recycled and 100% recyclable

Plaspanel is the be-all and end-all of closed loop recycling. The product is manufactured from recycled plastic waste in high-density polyethylene (HDPE) and can itself be recycled. All waste or leftover product can simply be separated from other materials and sent for recycling.

Good news for you and good news for the environment.



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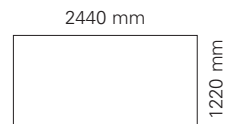
**Product applications** • **Agricultural** • Nursery Propagation benches • Planter  
• **Building and Construction** • Joinery and fitouts in wet areas • Formwork •  
• Tables and Trestles • Counter tops • Laboratory bench tops • Playground equipment •  
Fume cupboards • **Marine** • pontoons, marinas and jetties • Boat decks • Bulkhead and

Test	Result	Test Method
Tensile Strength, MPa	19.2	ASTM D 638 Specimen Type: Dumbbell Type 1 Crosshead speed: 50 mm/minute Gauge length: 50 mm
Elongation at Break, %	35	
Flexural Strength, MPa	16.4	ASTM D 790 Crosshead speed: 4.2 mm/minute Support span distance: 157 mm
Flexural Modulus, MPa	850	
Density, g/cm <sup>3</sup>	0.86	ASTM D 792 Method A
Water Absorption, %	0.02	ASTM D 570 Immersion for 24 hours
Hardness, Shore D	64	ASTM D 2240 Thickness of specimen: 6 mm Indentation time: 1 second
Vicat Softening Temperature, °C	81	ASTM D 1525 Load: 5 kg Heating Rate: 50°C/hour
Heat Deflection Temperature, °C	58	ASTM D 648 Deformation: 0.25 mm Heating rate: 120°C/hour Support Span: 100 mm
a) Stress at 0.45 MPa b) Stress at 1.8 MPa		
Izod Impact Strength (Notched) J/m	112	ASTM D 256 Pendulum used: 7.5 Joule
Melt Flow Rate, g/10 minutes	0.88	ASTM D 1238 Temperature: 190°C Load: 5 kg
Melting Temperature, °C	126	MS ISO 11357-3 Differential Scanning Calorimetry (DCS) Analysis conditions - Heating Rate: 20°C/minute N: Flow Rate: 50 ml/minute



Product Details								
Sheet Size	2440 mm x 1220 mm							
Thickness (mm)	6	8	10	12	15	19	25	32
Weight per panel (kg)	15	20	25	30	38	48	64	82

Manufacturing Tolerances			
Length	-0 mm, +8 mm	Thickness	+/- 0.10 mm
Width	-0 mm, +2 mm	Diagonal	+/- 5 mm



**UV Stabilisation**

All Plaspanel colours are UV stabilised and manufactured to provide mechanical strength and colour consistency.

**Mechanical Strength**

Plaspanel is designed to produce a long-term mechanical life and 10 years would be a reasonable expectation.

**Colour**

Our colour base is selected to provide minimum degradation through a large range of external and internal applications. Over a period of time some light coloured surface degradation will develop depending on the severity of the environment. It must be noted that darker colours will provide the highest contrast ratio with the lighter colours the least.

\*Plaspanel Black 'Lite' is the stock black product for fabrication and is also ideal for industrial uses.

Colours may vary slightly from actual product colour. For complete satisfaction, contact us for a free product sample.



- boxes • Grass root barriers • Garden bed edges • Irrigation troughs and channel liners • Produce bins • Animal breeding pens
- Access floors • Theatre and concert staging • Industrial water proofing • Eaves and soffit linings • Shower and cubicle partitions • **Furniture**
- Manufacturing** • Moulding boxes for concrete products • Signage • Machinery enclosures • Conveyor wear strips • Noise Barriers •
- trims • Seat backs and bases • **Materials handling** • Storage bins • Van and truck linings • Food pallets and bins • Protective packaging





### **Fixing and Installation**

Plaspanel multi-purpose panels can be drilled, routed or sawn with standard wood working tools. Consideration should be given to thermal movement of the panel during installation as the panel can expand approximately 6 mm along the 2440 mm dimension through 40°C temperature change.

Screw holes should be drilled oversized to allow for movement, the larger you can make the hole and still fasten securely, the better the installation. Satisfactory adhesive bonds can not generally be achieved with polyethylene (PE) formulation panels.

### **Heat Welding**

A major advantage of Plaspanel is the ability to mitre cut, fold, and heat weld. Making them ideal for quick seamless fabrication on-site or off-site.

### **Fasteners**

In general it is recommended to use flat fasteners. Small headed nails and screws with cutting flutes under the head are likely to produce inferior pull through resistance. Plain head screws are preferable while self embedding screws should be avoided.

### **Adhesive**

Standard construction adhesive will bond Plaspanel to timber framing.

### **Painting**

Plaspanel can not be painted with conventional paint systems. Viponds 'rapid dry' sealer / undercoat will enable standard paint systems to be used.

### **Material Safety Data**

This product is not classified as hazardous according to criteria of Worksafe Australia. All work with these panels should be carried out in such a way as to minimise the generation of shavings and fines. Excessive levels of shavings and fines may present a slippage hazard on hard surfaces. General use safety glasses and a replaceable filter or disposable half face respirator should be worn when machining.

### **Recycling**

The manufacturing process not only produces panels from plastic waste but the panels can themselves be recycled. Off-cuts and general waste material should be placed in containers separate from other waste for recycling.

### **Storage**

Keep stock clear of the ground and away from sources of heat, flame or sparks. Store panels flat and fully supported.

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**Available From:**