

HOT METAL® PRODUCT INFORMATION

Hot Metal® is an innovative and expressive metal laminate. Using patent technology, Hot Metal® is created by combining metals with vibrant colours and handcrafted patterns. It is highly durable and flexible. It can be applied to most surfaces or substrates, curved around columns, folded into ceiling tiles, laser embossed for signage and cut and installed with ease. Hot Metal® is a light responsive laminate achieving three dimensional effects with good quality lighting. It is light weight, requires little maintenance and is cost effective. Hot Metal® is a recyclable and environmentally sound product.

Applications

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Australian Designed and

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Applications

Hot Metal® is recommended for internal vertical applications and decorative or light duty horizontal surfaces. Consider the following application ideas;

Café & Restaurants

Clubs, Bars & Hotels

Feature walls, doors, panels

Decorative ceiling panels

Feature columns

Retail fit outs

Commercial fit outs

Reception desks

Lift Interiors

Signage

Exhibition stands

Set designs

Visual Merchandise

Laser emboss

Kitchen verticals & splash backs

Decorative horizontal features

Artworks

Benefits

Distinctive and unique

High visual impact

Is enhanced by light to give three dimensional qualities

Versatile, expressive, inspiring

Durable and flexible

Striking selection of colours and patterns

Special patterns can be supplied

Integrates beautifully with other textures and surfaces

Cost effective

Easy care

Simple installation

Environment friendly

Australian designed and manufactured

Deal direct with manufacturer

Fast turnaround from receipt of order to despatch

Dimensions

Material type: Aluminium
Sheet size: 2400mm x 1200mm
Sheet thickness: 0.6mm

Surface Protection

All Hot Metal® sheets are supplied with a peel off film to protect the decorative finish. It is recommended that this film remain on the decorative surface until all processing and installation stages are complete.

Recommended Substrates

- MDF, plywood, particle boards, decorative plastics.
- For applications where moisture is a consideration, a substrate that is suitable for wet areas must be used.
- Because Hot Metal® is a decorative laminate, it is recommended that only high quality substrates should be used.

Surface Preparation

To maintain a high quality standard when utilizing Hot Metal®, the surface that the sheeting is to be bonded to must be, relatively non-porous, very clean and free from oils and grease, evenly planed and free from defects and irregularities.

Cutting

- Good cutting results can be achieved with any of the following; panel saw, sharp carbide blades, guillotine, flat bed router. To deburr edges a fine file may be used.
- All cutting and machinery must be done with the decorative surface of Hot Metal® face up.

Bonding and Adhesives

- Adhesives containing harmful solvents should not be used when bonding Hot Metal® to a substrate.
- Contact STEW® Pty Ltd for information regarding recommended adhesives.
- It is important that an even distribution of adhesive be applied to the underside of the sheet of Hot Metal®. The adhesive must completely cover the entire underside surface of the sheet of Hot Metal® to obtain successful lamination and to prevent any future bubbling of the metal laminate.
- Best and lasting results are obtained by using adhesives that are sprayed.
- When bonding Hot Metal® to substrates use a roller to allow for even and complete coverage. This will be achieved by maintaining a constant pressure throughout the rolling process, over the entire sheet.
- Common causes of bonding failures are;
 1. insufficient adhesive coverage to the laminate
 2. insufficient pressure applied during the bonding process
 3. incorrect surface preparation to the laminate
 4. inferior quality substrate and incorrect type of substrate for the application
 5. low temperature environments accompanied by high humidity
- To obtain best results always follow adhesive manufacturer's instructions. Refer to the adhesive manufacturer for recommendations of a suitable solvent to remove excess glue.

Flexible Applications

- Hot Metal® is a flexible metal laminate which can be applied to curved surfaces and columns.
- For tight tension joinery it is recommended to use strapping and clamps combined with fast tack contact adhesive.
- If specifying Hot Metal® for decorative ceiling panels, it is recommended that a greater sheet thickness than standard be used.

Fire Behaviour

Hot Metal® has a Certificate of Test - Report No: FNE7630, conducted by CSIRO & NATA, in accordance with Australian Standard 1530, Part 3-1989, Simultaneous Determination of Ignitability, Flame Propagation Heat Release and Smoke Release.

Ignitability Index	(0-20)	0
Spread of Flame Index	(0-10)	0
Heat Evolved Index	(0-10)	0
Smoke Developed Index	(0-10)	3

Handling and Storage

- Hot Metal® sheets must be handled with care to prevent creasing of sheets.
- Hot Metal® sheets should be stored indoors and protected from moisture, dust and impurities.
- Hot Metal® sheets should be supported and stored vertically, off the ground with appropriate padding material at the base to protect edges.

Care

- For cleaning Hot Metal® the following can be used with a clean, soft cloth; warm soapy water, mild household detergent, diluted methylated spirits.
- **Do Not Use:** Steel wool, scrapers, abrasive cleaning clothes, scouring liquids or powders to remove deposits as these will permanently scratch the coating surface.
- Note that detergents that recommend the use of gloves, should be avoided as this is a good indication that the detergent is harsh and therefore unsuitable for cleaning Hot Metal®. For example **do not use:** thinners, acetone, solvents, caustics, chlorine liquid or any form of stripping agent.

Environment Friendly

- Hot Metal® is made from aluminium which can be melted down and recycled to be used for the production of new materials.
- During the colour process no solvents are used and there are no emissions which means less waste and pollution to the environment.
- All Hot Metal® processes require low energy inputs which means they help preserve our energy resources.

Australian Designed and Manufactured

Hot Metal® is proudly Australian, and is featured in the Australian Technology Showcase. It is designed, manufactured and distributed by STEW® Pty Ltd, NSW Australia.

Colours and Patterns

Due to the transparent nature of Hot Metal® colours there may be a slight variation from batch to batch. Hot Metal® patterns are handcrafted artistic works, therefore each sheet may not be entirely uniform. It is recommended that an actual sample be obtained before specifying. Some variations in colours and patterns may occur when comparing the actual product to images viewed in printed brochure material and the website. The displayed colours and patterns are indicative only.

Lighting

Hot Metal® is a light responsive laminate therefore its transparent colours, handcrafted patterns and three dimensional qualities are best enhanced by shining substantial and appropriate lighting onto its surface. When designing with Hot Metal® consider quality lighting for example quartz halogen. Beam the light onto the Hot Metal® surface from different angles for stunning illusionary effects which will bring a wow factor to any interior or application. Add life and an extra dimension to dark interiors with powerful Hot Metal® colours, patterns and strategic light. Any mode and ambience can be created with selected Hot Metal® colours and patterns and the right choice of lighting and lighting design.

Limitations

- Hot Metal® is recommended for internal vertical and decorative horizontal (light duty) use.
- Hot Metal® is not recommended for bench tops requiring heavy duty workloads.
- Hot Metal® is not recommended for applications where extensive heat temperatures are prevalent. When Hot Metal® is used as a domestic splash back, ensure that an appropriate distance is maintained between the Hot Metal® sheeting and oven or hot plate area. For further information contact the appliance manufacturer.
- Hot Metal® is not suitable in applications that have direct contact with salt water.

Disclaimer

The Buyer assumes all responsibilities and risks in relation to the final location and installation of the Goods. Any advice that the Seller (STEW® Pty Ltd) may give to the Buyer in relation to the installation and/or fixing of the Goods is given without any assumption of responsibility for the advice given by the Seller. The Buyer assumes responsibility to check and clarify installation and/or fixing advice with an appropriate qualified engineer or other qualified professional adviser. STEW® Pty Ltd advises the Buyer to test our products as to their suitability for the desired purpose and application method. The Buyer shall have no recourse of any kind against the Seller in respect of any such advice. Contact STEW® Pty Ltd for Terms of Trade.