# HAMILTON AUSTRALIA

Hamilton Australia manufactures, distributes, installs, services and repairs a broad range of products for scientific, educational, industrial and domestic applications.



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## H Who are we

**Hamilton Australia** is an Australian-owned company based at Banyo that manufactures and distributes products for scientific, educational, industrial and domestic applications.

The business was founded in 1946 in the suburb of Hamilton, Brisbane and later relocating to a new factory in nearby Banyo, where we remain headquartered. We provide services across Australia, New Zealand and the Pacific Islands.

## H What we do

- Hamilton Australia produce Laboratory and classroom fume cupboards, exhaust systems and air purifiers (scrubbers)
- We design and fabricate Chemical Resistant Storage Tanks, Fans, Sedimentation and Neutralizing Tanks and Traps.
- Hamilton Australia also supplies a range of dangerous goods storage cabinets and cages.
- We have a complete service, repair and maintenance division with qualified tradespeople and NATA accredited technicians. We offer a complete design, fabrication, installation and after sales servicing of our product range.
- We fabricate a range of acrylic products including;
  - Reception Signs Balustrades Bar fronts
  - Sneeze guards Barriers and Privacy Screens
- We also have our own slumped acrylic designs (Acryform) to compliment your balustrading, signage and retail fit out needs.
- We fabricate machine guards and components, and many other custom designed products.
- We also offer CNC routing and "cut to size" plastic sheet services.

With acrylic being lighter, stronger and safer than glass it is the perfect product for use in many situations. It will not shatter like glass and is therefore now being used in many bars, clubs and retail settings for safety reasons.





## Mission

Hamilton Australia is a provider of a broad range of products for scientific, educational, industrial and domestic applications. We treat safety as a serious issue - whether it is about our processes, our products, or the safety and health of our employees and our customers. Hamilton Australia commits itself to the position of being a sustainable user of plastic materials by embracing an integrated long-term approach towards environmental protection, social equity and economic prosperity. We strive for continual improvement while maintaining the highest performance and quality of our products and services. We believe in good value for money and long term cooperative relationships.





We offer a complete design, fabrication, installation and after sales servicing of our product range.

#### NATA Accredited in Mechanical Testing ISO/IEC 17025

We are fully accredited with the National Association of Testing Authorities (NATA) to handle testing and certification of our fume management products. Our clients are spread across a range of industries from mining, engineering, signage, manufacturing, chemical production, scientific, schools and universities and food processing.



## **I**I Laboratories And Education

We provide our clients with a variety of Hamilton designed Fume Cupboards, Fume Scrubbers, Chemical Exhaust Fans, Industrial Chemical Storage Tanks, Sedimentation Tanks, Neutralising Tanks, Laboratory Bench Tops, Laboratory Equipment and Dangerous Goods Storage.

We design in house, offer complete installation packages, and provide on-going NATA standard service and maintenance to clients.

- Fume Cupboards
- Kiln Hoods
- Fume/Exhaust Extraction Systems
- Air Purifier's/Scrubbers
- Benchtops, Sinks & Fixtures
- Tanks and Vessels
- Chemical Exhaust Fans
- Sedimentation Tanks, Neutralising Tanks, Silt and Plaster Traps
- Dangerous Goods Storage Cabinets
- General Fabrication
- Annual Servicing
- Parts, Repairs and Maintenance





## Fume Cupboards

Hamilton Australia manufactures its own brands of fully ducted fume cupboards to the latest Australian Standard (AS:/NZS 2243.8) and is also a distributor of the globally regarded "ESCO" ductless fume cupboard range.

Hamilton fume cupboards are designed to provide a safe working environment and are backed by an extensive warranty and team of installers and service technicians.

We offer clients a variety of options in fume cupboard layout, manufacturing material, work surfaces, fittings, exhaust/venting options and fans and air scrubbing products.

You can chose from numerous types of our existing models, or we can work with you, your builder, architect or engineer to design and manufacture a special custom designed cupboard to suit your particular needs.

#### "H" Series Fume Cupboards (PVC or Polypropylene)

The original Hamilton H Series fume cupboard was introduced in 1977. Its design has been upgraded a number of times and it remains the most commonly used fume cupboard in Queensland.

It's reputation for high quality, design and workmanship is the result of over 60 years' experience in the Plastics Industry and a consistent, productive approach to research and development:

#### Modulaire Fume Cupboard

The Hamilton Modulaire fume cupboard is manufactured using highly chemical resistant GRP and was developed for heavy industrial and university use, where high chemical resistance and longevity are required. The design of the "Modulaire" range of cupboards is the result of over 60 year's experience Hamilton Australia has in the laboratory equipment industry.

#### Esco Ductless Fume Cupboards

Personal protection is provided in a manner similar to conventional fume hoods by drawing air at a controlled rate across a front opening into the hood.

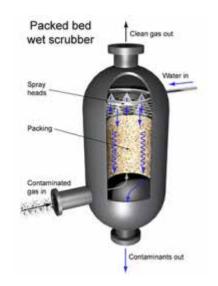




We design and make custom fit-outs across all types of industries. For almost 70 years we have provided comprehensive plastic fabrication services including: laboratory benchtops & sinks, exhaust hoods, chemical tanks, ducting, shop fittouts and signage.

We stock and supply most types of plastic (eg Polypropylene, PVC, Polyethylene, ABS etc) and can cut, weld, shape and mould as required.

- Tanks
- Fume/Exhaust Extraction Systems
- Air Purifier's/Scrubbers
- Dangerous Goods Storage Cabinets
- Machine Guards
- Acoustic Barriers
- General Fabrication





## Fume Scrubbers

Hamilton Australia can design and manufacture a wide range of scrubbers to assist air pollution control, removing particle and fume pollutants from a work place.

Our scrubbing systems are designed so polluted air is mixed with a cleaning agent and passed over a selected packing media that will best remove the contamination. The waste water is then removed and clean agent is reintroduced, the treated air is then allowed to escape safely into the atmosphere.

Our experienced designers can come up with a custom system to handle your needs, we then manage your project from concept to completion and our ongoing maintenance team will keep your scrubber performing.

Our service and Maintenance team can also provide you with spare parts and consumable packing media for almost any scrubber available.

#### Packed Tower Scrubbers

Hamilton Australia manufacture a range of large format Packed Tower Scrubbers for a large range of treatment possibilities. Packed Tower Scrubbers are the heavy weights in their field with some designs exceeding 30,000 Cubic Feet per Minute Treatable Air Flow. All Packed Tower Scrubbers are specially designed to reach a 95% or greater efficiency rating. Configuration will generally include a computerised monitoring system that can be integrated into your building management system.

#### IT Series Induced Turbulence Scrubber

Induced Turbulence Fume Scrubbers are used where space is at a premium. The Centrifugal / Vertical construction minimises the amount of floor space required. The units are self-contained and are ready for connection. We can manufacture the IT Scrubber from Glass Reinforced PVC, Polypropylene & High Density Polyethylene.

#### Hamilton "IB" Integral Scrubber Unit

Our In built Scrubber is a specifically designed scrubber that fits our range of Fume Cupboards or can be retro fitted to any other brand of fume cupboard or production line equipment.

Optimum performance in a small package that will reduce all acid fume into a dilute solution. Incorporated into the design are demister pads that keep all air born particles to an absolute minimum. A dosing system can be fitted if a desired PH level needs to be maintained.

• Scrubber ready for shipping to the UK.

## **I** Custom Fabrication

Hamilton Australia has a team of qualified tradespeople based at our Banyo factory that can assist with a large range of plastic fabrication jobs.

Our CAD design team can handle repeat runs or one-off custom fabrication – big or small – we are happy to help.

- Displays and Point of Sale
- Bars
- Acryform
- Vacuum Forming
- Exhibitions

- Reception Area's
- Privacy & Acoustic Screens
- Security Screens/Jump Barriers
- Marine Industry
- Repairs

Our factory is equipped with multiple bending stations, two vacuum formers and a CNC router.

Hamilton Australia stock a wide range of plastic materials, offer a "cut to size" service and can fabricate anything from a small machine guards to massive hoppers & ducting

Advantages of Plastics:

- Corrosion resistance
- Abrasion resistance
- Chemical resistance
- UV Tolerance
- Toughness

- Light weight
- Long lasting
- Wide temperature tolerance
- Versatility in shaping



## **Displays and Point of Sale**

If you need a product display to catch someone's eye you can't go past acrylic/perspex. It's so popular because of its optical grade clarity and its superior strength compared to glass, yet lighter and safer.

There are so many options now available with a huge range of colours and finishes.

We can fabricate something as a "one off" prototype or do large batch runs.

Common Applications:

- Point of Sale Displays
  - Model Covers
- Sneeze Guards

- Display Cabinets
- Corporate Signage
  - Privacy Screens



## Security Screens/Jump Barriers/Acoustic Barriers

Hamilton Australia has provided a number of customers with the solution to noise or privacy needs. Acrylic sheet is lighter, yet stronger than glass.

#### Anti-jump barriers in banks – tough stuff!



## **I**I Signage

At Hamilton Australia we specialise in creating three dimensional slumped acrylic signage for your corporate needs. High quality reception signs will depict a professional image for your company.

Appropriate signage is one of the most effective and affordable marketing activities a business can undertake. A well presented reception area is crucial for every business in order to make a good impression. A unique and eye catching reception sign can attract attention and complement your business.

Using a combination of our slumped acrylic (Acryform) designs and vacuum forming of 3 dimensional letters, corporate logos, emblems, etc we can create impressive and unique 3 dimensional artistic signs for reception areas, bars, restaurants and retailers.

With the optical quality of glass, Acryform illuminates magnificently.

We also supply, cut, bend and shape a range of plastic sheet (including clear and coloured acrylics and Perspex)

With a huge range you have plenty of choice to inspire creativity for domestic or retail use. We can also supply a large range of fixing options including glass clamps, stand offs and multi mounts of varying sizes, colours and materials.



## **|** Thermoforming

Thermoforming is one of the processes we use to mould/shape plastic sheet or film. The sheet is heated and then it is stretched over or into a mould until it cools to leave a shaped material/sheet.

## ► Vacuum forming

Vacuum forming is also a moulding process that involves heating sheet plastic and then applying it onto a three-dimensional mould. Once the thermoplastic sheet (a type of plastic that can be reformed via heat many times) is heated into a semi-molten state it is laid over a mould and vacuum sucked into place, tight around the mould for a great definition in the final product.

Hamilton have been vacuum forming plastic for close to 30 years, and now have two vacuum forming machines – offering a size to match your needs.

Our large machine can form sheets/signage/parts as large as 5200mm x 2600mm! Our smaller machine can handle high volume small jobs.

## Pressure forming

We also offer a pressure forming service - that's similar to vacuum forming except we use a mould on each side of the molten sheet to create extremely crisp detail like lettering on logos without the need for injection moulding.





- Acryform
- Balustrade
- Stairways
- Pool Fencing and Panels
- Splashbacks

One of the most common types of plastic used is commonly called Acrylic. The chemical name of it is Polymethyl methacrylate (PMMA) which belongs to a family of synthetic polymers. PMMA is a tough, highly transparent material with excellent resistance to ultraviolet radiation and weathering. It can be coloured, moulded, cut, drilled, and formed.

These properties make it ideal for many applications including architecture, retail, signage, automobile and glazing.

PMMA has been sold under a variety of brand names and generic names.

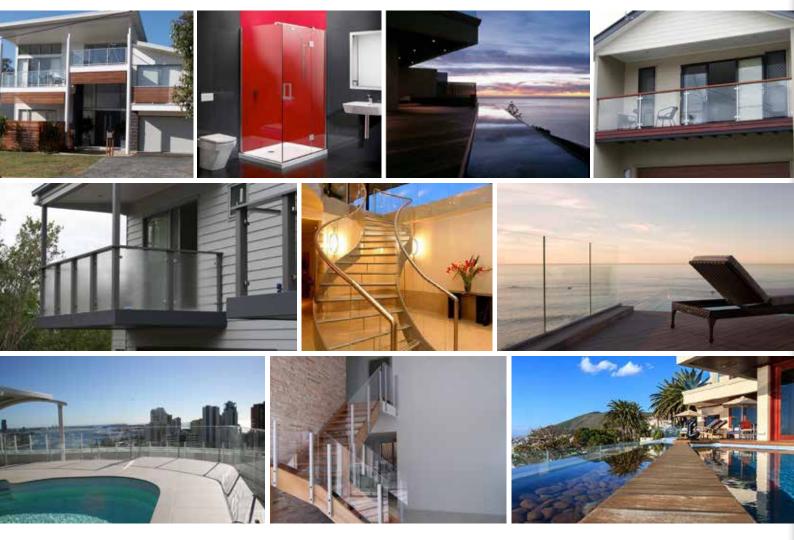
Notable trade names include:

- ACRYLITE® (by Evonik)
- Lucite (by du Pont)
- Plexiglas
- Perspex® (a brand name for premium acrylic sheet manufactured by Lucite International)

It is shatter resistant and half the density of glass.

A very large range of colours, finishes, transparency, and textures are available.





## Plastic Products & Sheets

Hamilton Australia has extensive experience in the manufacture of a range of plastic and glass replacement products for a variety of situations including:

- Boat and Caravan Windows
- Balustrade
- Stairways
- Privacy Screens
- Pool Fencing
- Splashbacks

#### Some of the benefits of Plastics are:

- Excellent UV resistance some products have been used outdoors for over 30 years without significant deterioration. Cast and extruded sheet is warranted for an 8 year outdoor service life.
- Excellent Clarity with 92% light transmission, it has superb water white clarity and transmits about 10% more light than glass. Recent fashions for POP displays, shelving and furniture have required a material to resemble the edge colour of glass and by adding a dye, a green glass look grade can be produced.
- Colour Choice All forms of acrylic, because of their clarity, readily accept a wide variety of dyes and pigments. Over the last 50 years, colour fashions have changed and acrylic has been made in 2000+ different colours.
- Safe to Use Acrylic and Polycarbonate sheets are often used in glazing applications and are safety glazing product meeting the relevant safety standards. It is half the weight of glass (of the same thickness) with at least 5 times the impact strength and with none of the breakage problems associated with glass.
- Easy to Use fabricating items in acrylic is relatively simple, as acrylic is easy to work with using standard workshop techniques. And it's not heavy like glass!
- Fully Recyclable unlike other plastics, acrylic has one very unique attribute end of life products and waste can be fully recycled.



"The Great Alternative to Glass" – Lighter, Stronger, Safer

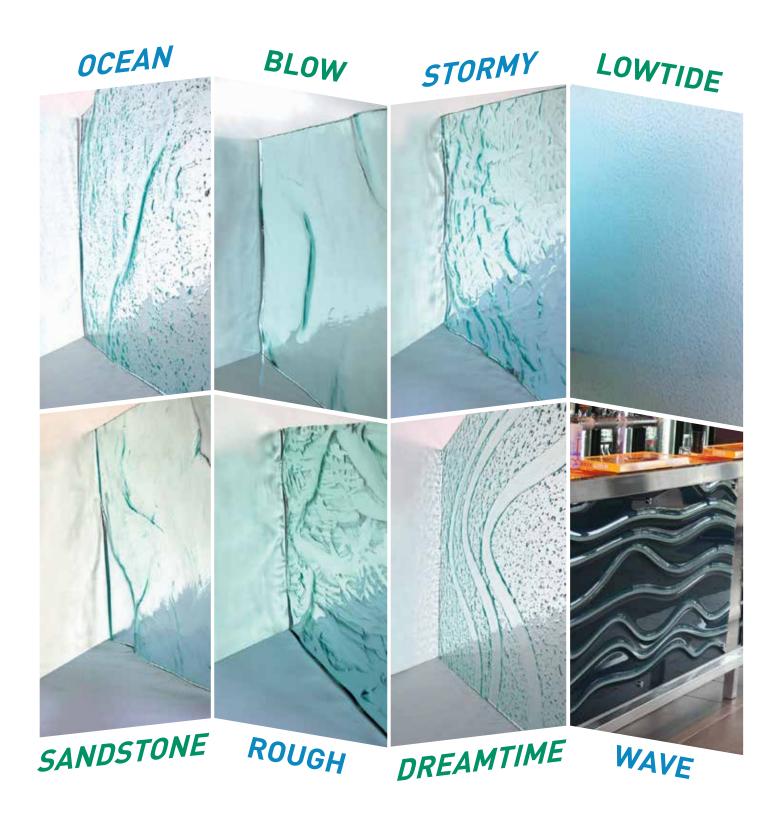
Acryform is our unique brand of slumped acrylic sheet that we manufacture as a great alternative to slumped glass. It looks so similar, is stronger and yet lighter and easier to handle.

- It can be used in interior or exterior situations, for residential or commercial fit outs.
- It is difficult for the practiced eye to differentiate between slumped glass and Acryform.
- This lightweight material can be cut to any shape, bent/curved, drilled & fabricated.
- It's ideal for privacy screens, bar fronts, dividers, pool fencing, balustrade and signage.
- Company Logos, three dimensional embossed graphics, lettering, murals and many other creations from the designer's imagination can be embossed for stunning eye-catching results.
- Vinyl for lettering and graphics can make a logo or lettering really standout.
- Acryform has the optical quality of glass and illuminates magnificently.

Acryform is most popular in the glass like colour of "Marine Tint", and also comes in super clear acrylic and coloured acrylics.

Hamilton Australia can also assist with a range of glass fixings - stainless steel standoffs, balustrade brackets, etc.





\*Wave, Dreamtime and Lowtide are specifically designed for applications that require a flat profile (eg splashbacks). We can also provide a custom designed texture on request.



Hamilton Australia

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