

Fantastic Facades

Design Tips & Considerations



Perforated Metal Facade Guide



arrowmetal



What is the one element that instantly changes a building's entire appearance, form, and function?

The most recognisable, first-impression feature, a facade can make a building blend, stand out, or even world-famous. It can also make a building green. Increasing numbers of architects are opting for eco-friendly perforated metal facades to help boost project environmental ratings.

In this guide, we look at some of the key design considerations of perforated metal facades – and why perforated metal has the advantage over other types of facades when it comes to creativity, architectural expression, and visual impact.

Advantages of a perforated metal facade



Perforated metal facade systems offer considerable benefits for modern architecture projects, including:

Green credentials

Perforated metal is one of the greenest materials around when project sustainability is key. Not only is it recyclable, a perforated metal facade can also help to **reduce a building's energy costs**. Through clever perforation specification, a perforated metal facade allows precise control of light and airflow, whilst also deflecting heat and solar radiation.

Design creativity

No other type of facade can be customised the way perforated metal can. Architects can make a building **truly unique**, without compromising on function and performance. There are endless patterns and CAD-drawn customisation options to suit every budget and project leadtime.

Acoustic & airflow advantages

Perforated metal is a sound solution to noise issues. Used together with acoustic materials, a perforated metal facade can **reflect, absorb, or scatter** nuisance indoor and outdoor noise depending on the specification. Many architects also use a perforated metal facade to attractively ventilate and hide building service machinery.

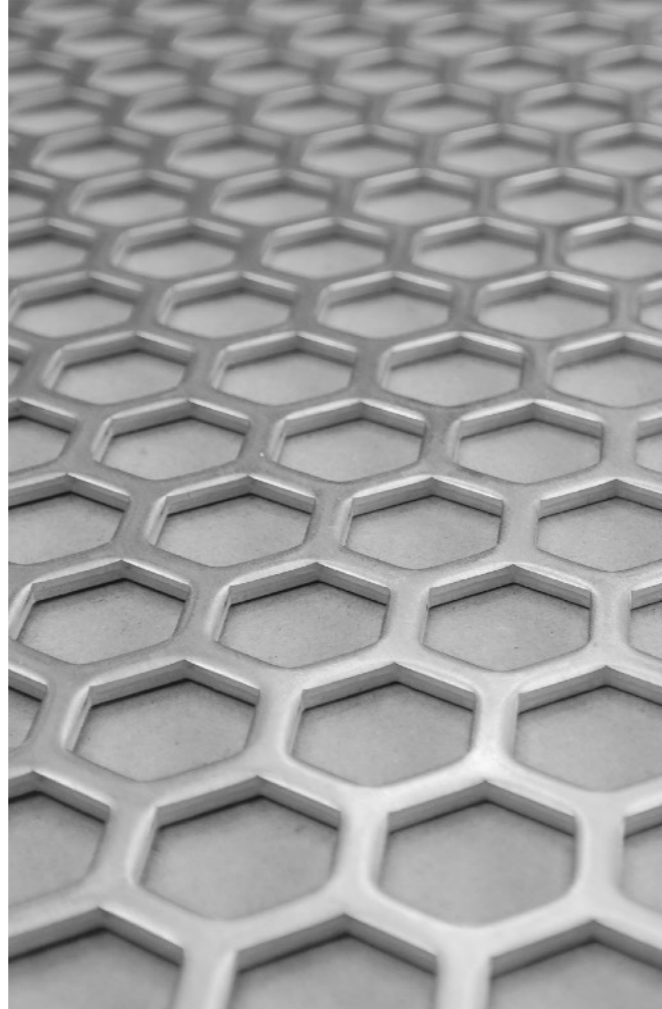
Perfect privacy solution

Many residential apartments and office blocks have a perforated metal facade because it offers privacy without compromising **views, light flow, and ventilation**. Choose a closely spaced profile for a sheer veiled effect or opt for a geometric or nature-inspired pattern for interior light play.



Perforated metal screen walls by Arrow Metal made the grade for the University of Newcastle's \$95m landmark education precinct NUspace, creating a series of unique perforated metal booths on the exterior of the 10-storey building.





Choosing the pattern and metal. What to consider...

So now you know that a perforated metal facade is ideal for your project, the next questions are which **pattern**, and what **metal**? These are some of the key factors to bear in mind...

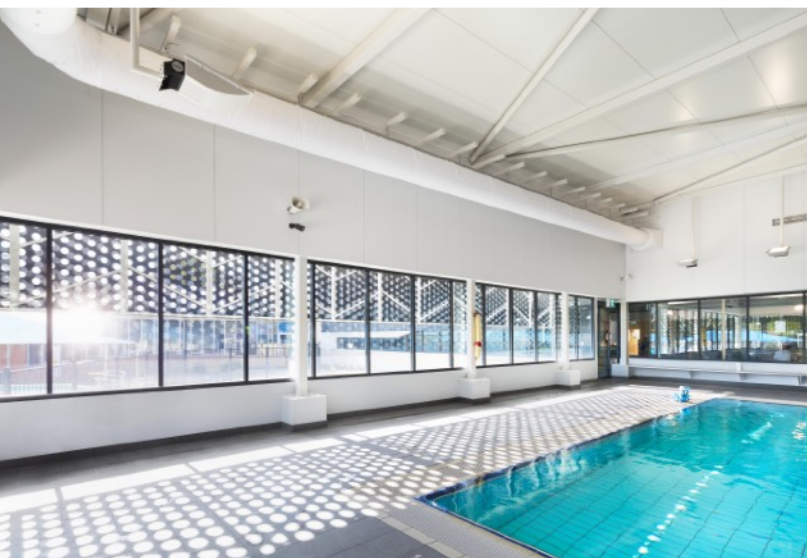
- **Whether the facade is purely decorative** or also needs to fulfil a particular function – such as acoustics, strength, or energy efficiency.
- **The location of the facade on the building** – it is possible to use different patterns across the facade to match solar position, heat loss and gain.
- **Any climate factors** – is the building near the coast? A windy location? The base metal, pattern, and finish need to be able to withstand local environmental conditions.

Talk to your perforated metal manufacturer about your facade requirements – they will be able to advise on the best metals and patterns to suit your needs and budget.





An outstanding feature in the Blacktown Tennis Centre is the unique sports-themed perforated metal mural, produced by Arrow Metal.



The contemporary charcoal grey facade made by Arrow Metal adds a splash of modern aesthetic to the state-of-the-art therapeutic aqua exercise and rehabilitation facility in Sunbury, Victoria.

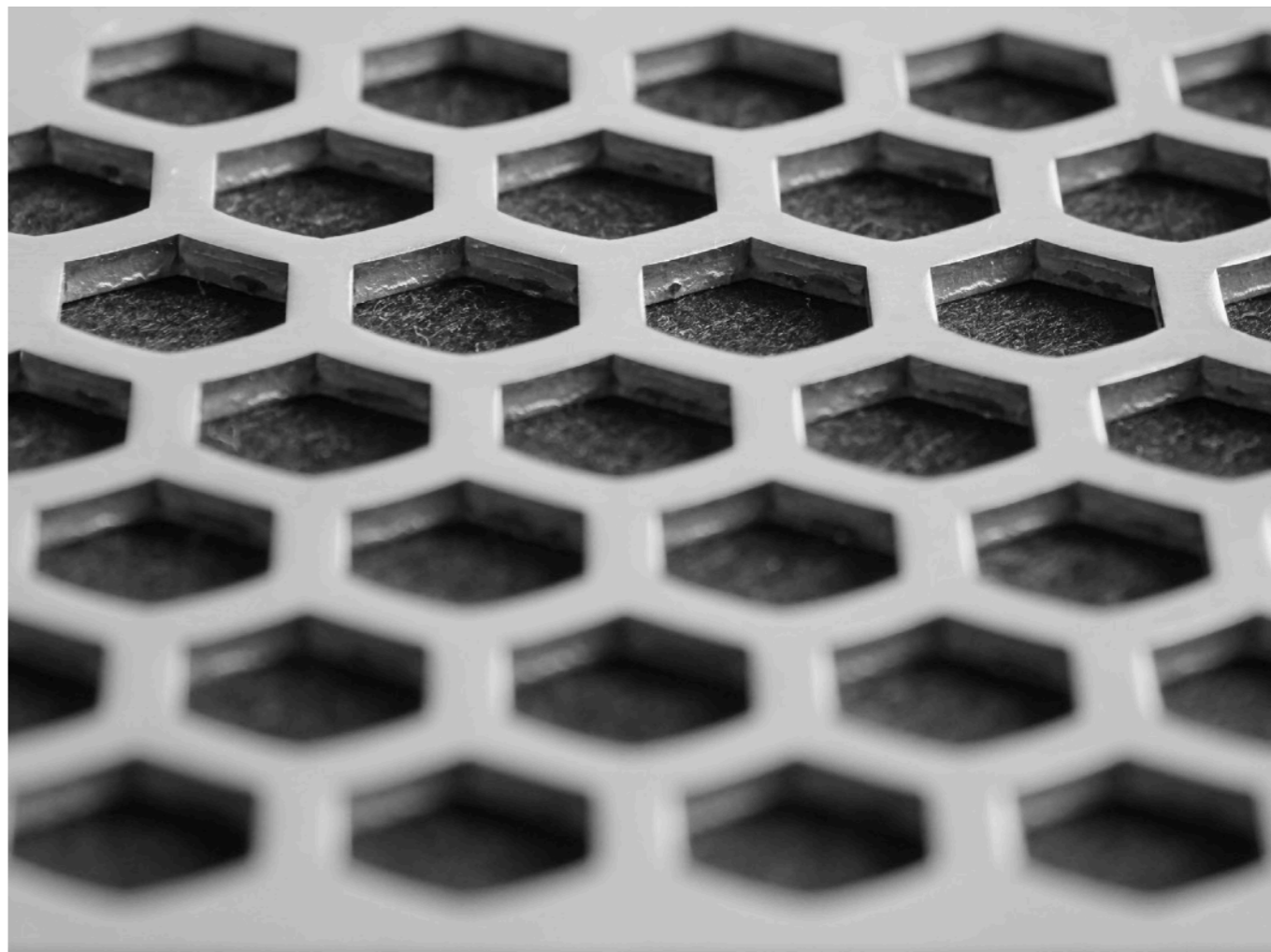
Pattern & Metal options

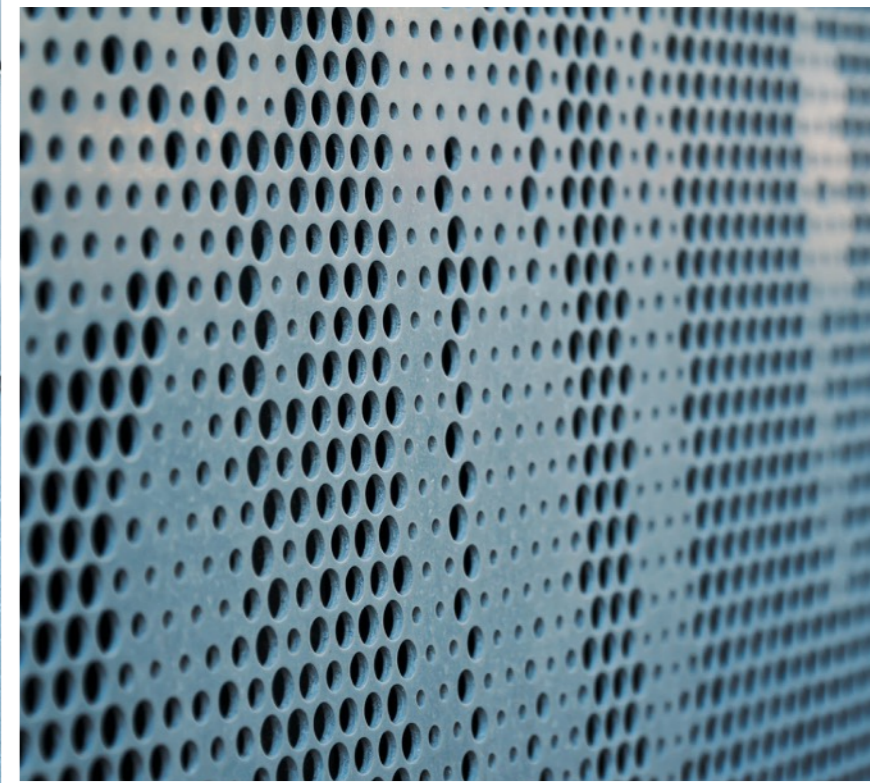
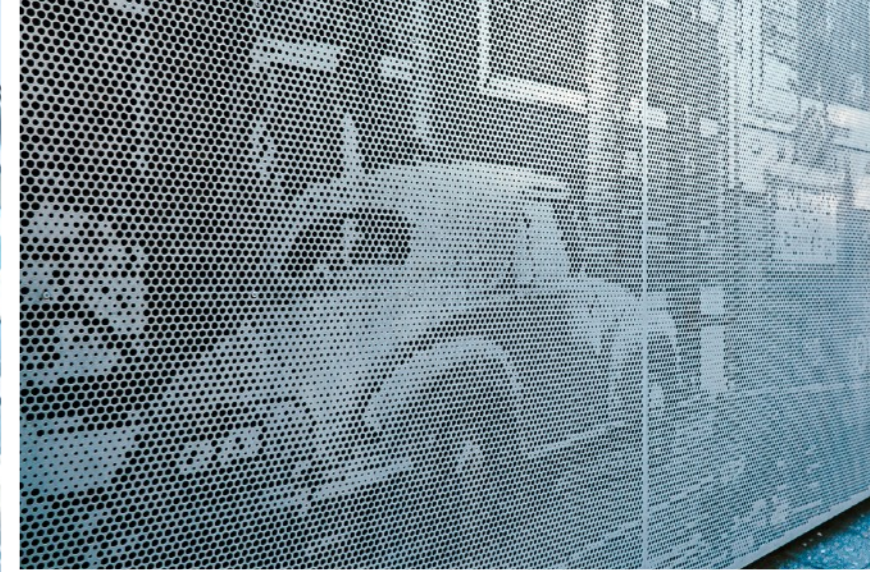
From custom, unique CAD-drawn designs to bold geometrics in a range of base metals, with perforated metal you have almost limitless design scope for a facade...

- **Words, illustrations, or images** – choose a theme, pay tribute to local history, or the building's location.
- **Classic round, rectangle, or square patterns** – these types of profiles never go out of style.
- **Modern geometrics and futuristic shapes** – created using the latest punching machinery tooling.
- **Mix-and-match designs** - different hole styles and sizes on a single panel for an unusual and unique architectural feature.

The most popular metal for facades is aluminium.

All patterns can be customised so that the pitch and open area percentage – the amount of open area or 'holes' in the panel – meet exact project requirements.



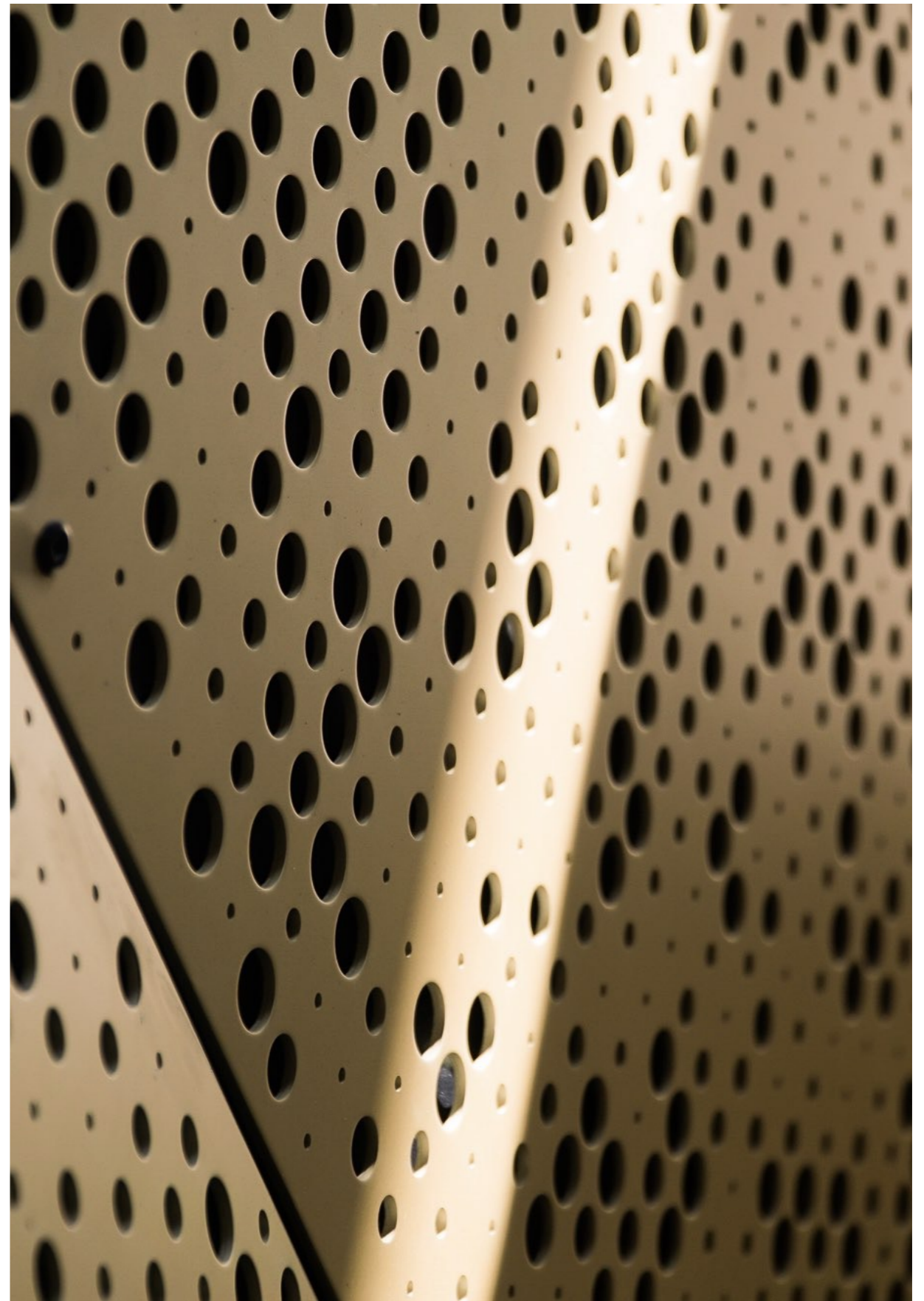


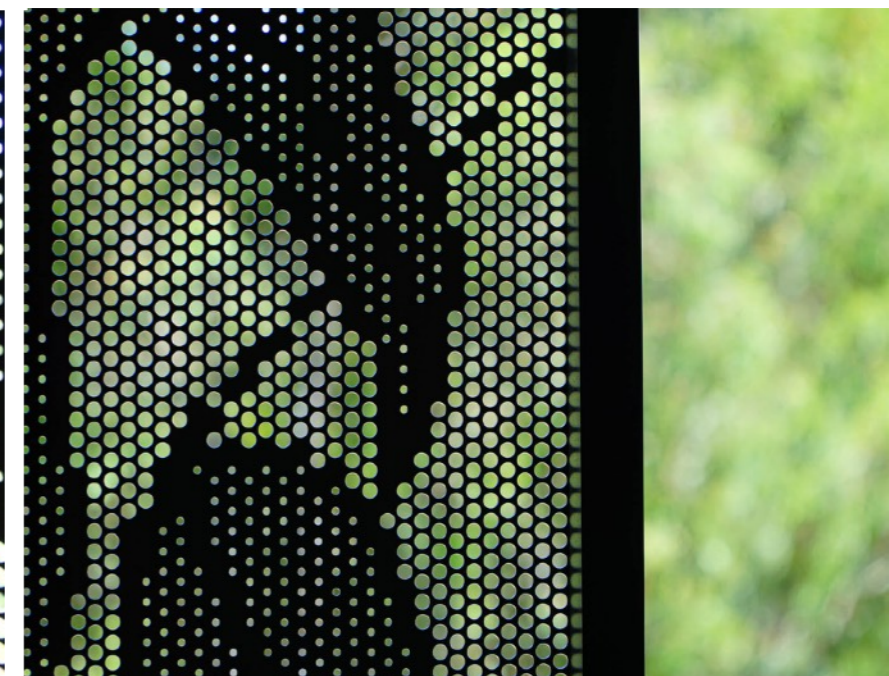
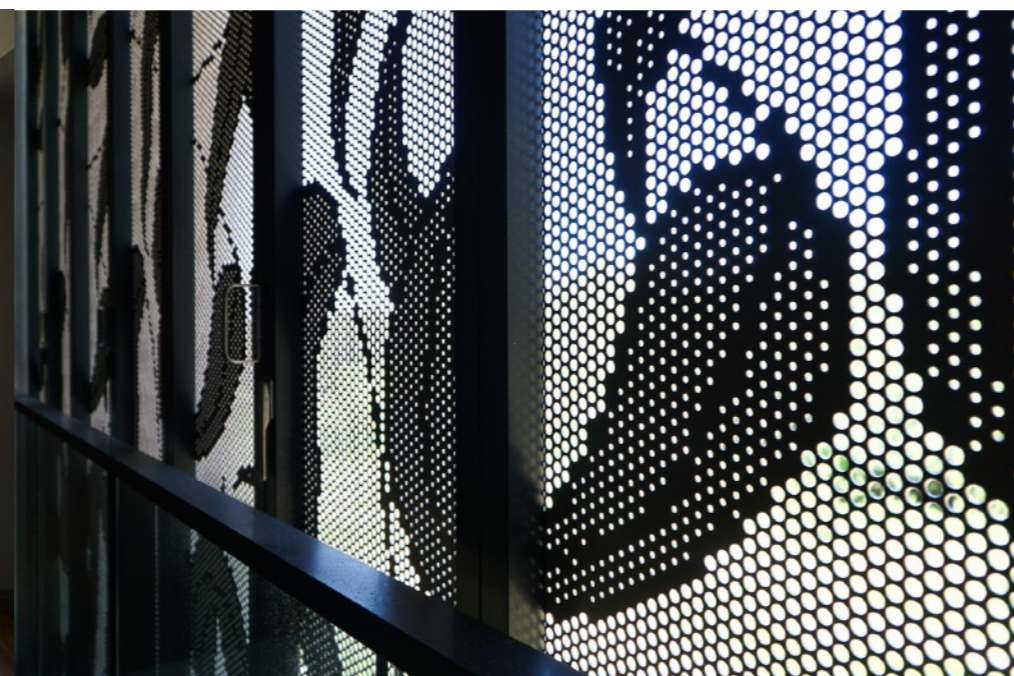
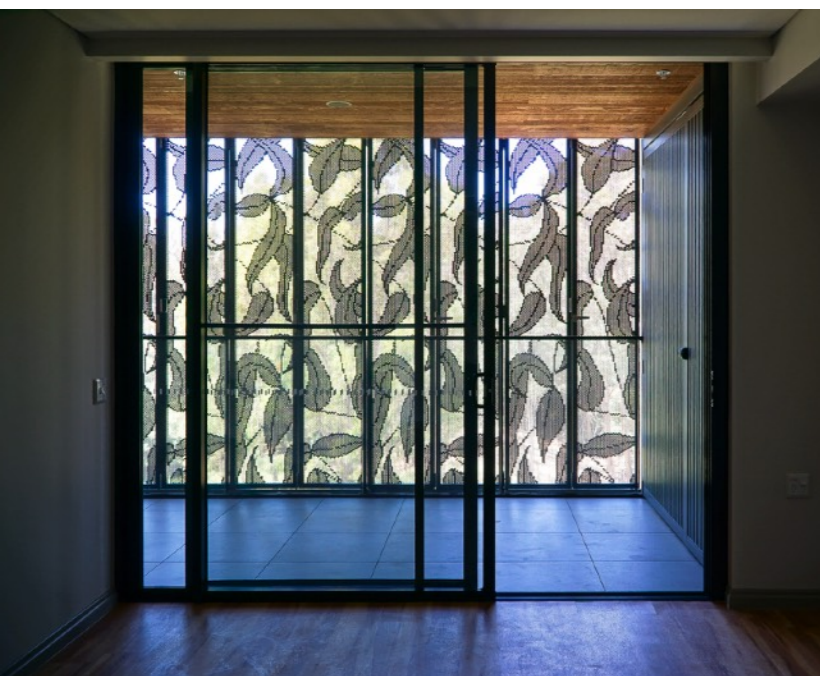
Sydney's iconic trams have been brought back to life at Bondi Junction's new upmarket Archibald Residences, with old black and white photographs of the city's tramway recreated as perforated metal ventilation screens by Arrow Metal.

Panel finishes

A finish is the final process, which alters the surface of the facade panels to create varied looks, brightness, colours, and textures. Some finishes can also help improve durability and resistance to corrosion and wear.

- **A coloured finish:** Available in a spectrum of shades, colours are applied through powder coating for precise coverage
- **Anodising:** Most used for aluminium, often in conjunction with a colour, anodising creates a hard, durable, and weather-resistant coating
- **Weathered and metallic effects:** Make a visual feature or give a classic pattern a modern makeover
- **Folds and curves:** Create a striking 3D effect or a functional, folding facade for privacy and light





Installed as folding balcony screens the nature-themed panels used throughout the prestigious Riverview development reflect its beautiful bushland surroundings and the modern resort lifestyle that awaits.

The Arrow Metal team worked closely with the builders and architects to translate this into a workable eucalyptus leaf pattern, which would achieve all the necessary privacy, ventilation, light flow, and aesthetic requirements across the site.

Installing the facade

For seamless and easy fitting, panels typically come with hidden numbers or indicators, which show the order and positioning. This is particularly useful for intricate designs and panels that make up a composite image, logo, or words.

Key takeaway summary

- ❖ **Perforated metal offers** endless creative design scope and environmental benefits for building facades
- ❖ **Extensive range of patterns,** metals, and finishes – customised to exact project requirements
- ❖ **Create your own CAD-drawn** architectural design – unique to your project
- ❖ **Easy and seamless installation**



About Arrow Metal

Perforated metal facade expertise

Arrow Metal perforated metal facade panels have been used for major architectural projects throughout Australia, including luxury residential schemes and cutting-edge, award-winning green buildings.

We have considerable expertise in custom facade solutions – contact our expert team for expert advice on metal materials, design options, bespoke facade creation and more.



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To see some of our facade projects, visit

www.arrowmetal.com.au