### BRICKWORKS

# Go Carbon Neutral with Brickworks

Carbon neutral bricks and our carbon offsetting program





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# Together we can make a difference



# **Building a sustainable legacy**

Understanding the impact we have on our planet is a responsibility we all share. Reducing emissions and mitigating operational effects is now imperative for any business. The good news is, we're on the same journey as you – achieving sustainability targets and building a better future for both business and the planet.

#### The Brickworks commitment

# Foundations for the future

Brickworks is proud to be Australia's first brick and paver manufacturer to achieve not just one – but two – important Climate Active Product Certifications. The first certification was achieved in 2014, for Austral Bricks Longford in Tasmania. All of our bricks manufactured here are made sustainably using low emissions biofuel. The second is a genuine industry first – a new opt-in program to specify and procure any clay brick or paver made in our Australian facilities as a carbon neutral product.

#### Sustainability Milestone

Daniel Robertson 10 Years of Certified Carbon Neutral Bricks



#### The Brickworks commitment

# Sustainability built-in

Now architects, developers, designers and builders can work with us to build sustainability into the heart of their projects – from day one.

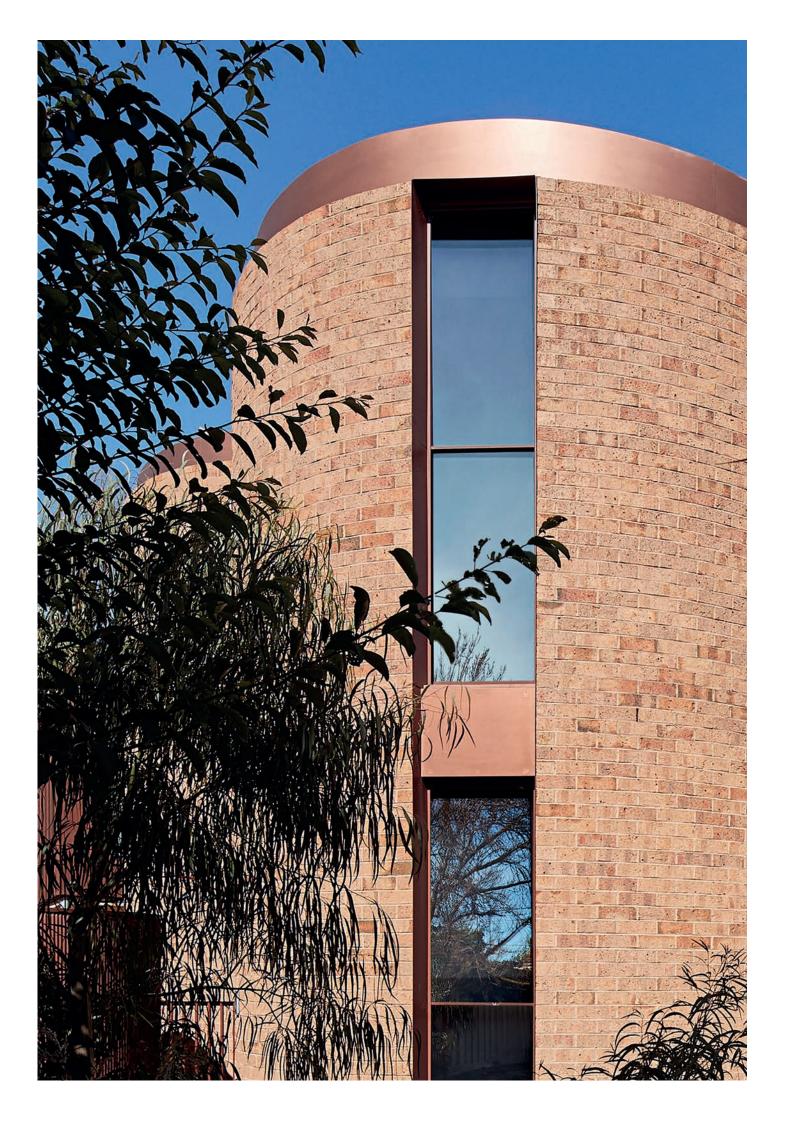
A carbon calculator has been developed for us by energy consultant, Energetics. The calculator estimates the carbon emissions generated from the entire life cycle of the brick – from extraction of clay, production of bricks, delivery to the customer, and end-of-life disposal.

Carbon credits are purchased by Brickworks, from a carbon broker, to offset the calculated emissions from the life cycle of bricks.

Keep reading to learn more about the projects we're supporting.

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#### 100 years of trust

# Made to last a lifetime

Longevity is a powerful sustainability benchmark – and one that literally builds a positive legacy into your projects. And while our unrivalled 100-year warranty on our bricks gives a lifetime of peace of mind, the thermal mass offered by clay bricks makes homes, schools and workplaces more comfortable to be in – with less artificial heating and cooling required. So your clients can, quite literally, save money while doing the right thing by the environment all year round.



#### **Certified Carbon Neutral Bricks**

Meet Australia's first range of carbon neutral bricks. Our Daniel Robertson range (manufactured out of the Austral Bricks Longford, Tasmania operation) achieved carbon neutral certification by reducing emissions through efficiency improvements and by offsetting any remaining emissions. It is assessed and certified by Climate Active Australia. A monumental effort that involved just about every part of our business – and we couldn't be more proud of the result.



#### Carbon neutral assessment and audit



Clay extraction and transport Excavation and stockpiling of clay and shale deposits.



Fuel usage for vehicles Diesel and petrol usage for onsite vehicles including forklifts and loaders.



**Transport from suppliers** Raw materials, additives and packaging delivered to site.



Production of labelling, pallets,

straps and shrink wrap.

Energy and fuels for production The use of sawdust, electricity, coal, natural gas and lubricants were measured.



Water usage Wastewater at Longford is recycled and mains water carefully monitored.



Transport

The delivery of any Austral Bricks Tasmanian products interstate and to anywhere in the world by our own transport fleet and contractors, including shipping to countries such as Japan and New Zealand.



Inherent emissions The kiln firing of clays and shales in the production process.



Waste handling

Cardboard is separated for recycling. Non-recyclable solid waste is transported to landfill from our site. Bricks and pavers that reach the end of their useful life are reused, recycled or sent to landfill.



Packaging

Business operations The day-to-day operations the Langford business including the running of business-provided company cars, interstate and international travel and the energy required to run office facilities.

#### Targets done and dusted

We use local biofuels, in the form of waste sawdust products, to fire our kiln in Tasmania. This simple switch has led to the reduction of approximately over 70,000 tonnes of carbon emissions since 2013.

# 70,000 $^{+}7,246$ 169-7.077

Carbon Emissions Avoided Since 2013 (Tonnes CO<sub>2</sub>)

Natural Gas Annual Emissions (Tonnes CO<sub>2</sub>)

Sawdust Annual Emissions (Tonnes CO<sub>2</sub>)

Annual Saving from sawdust emissions (Tonnes CO<sub>2</sub>)



## Why bricks are best

Our carbon neutral program will add even more benefits to our brick products. But it's also a good reminder why brick is such an outstanding building material. Not only do they last for decades, they can be reused and recycled, they're non-combustible and have great fire resistance and they won't fade, rot or rust in any weather. With outstanding durability and colourfastness for life, our bricks are quite literally a healthier, more efficient choice – as they breathe and allow moisture to escape, and emit zero volatile organic compounds.

#### Here's what makes bricks better:

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#### Low Maintenance

Bricks do not require any painting, coating or varnishing in order to maintain their aesthetics and durability, unlike other building materials. Long-lasting brick is weatherproof, even in extreme conditions, and because bricks do not contain plant matter they are resistant to pests and won't decay in hot or humid conditions.

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#### Natural

Brick is manufactured from naturally occurring materials that do not emit volatile organic compounds as many lightweight products can. Bricks can be reused, keeping their original properties and features intact, or even recycled.

### Flexible

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Durable

Brick can be a home, a school, or a commercial building. No other material translates as well across different uses, building in a safeguard for adaptive reuse. Time and time again, brick has continued to be a popular building material choice among architects and designers because of its design flexibility, strong structural capabilities, and intricate detailing.

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#### **Energy Efficient**

Bricks are high density materials, meaning they have an ability to effectively absorb and store heat energy keeping your home cooler in summer and warmer in winter. Correct use of thermal mass moderates internal temperatures, averaging out day and night temperature extremes, which makes a massive difference to your comfort, and reduces energy bills.

Once it's built, your brick home remains weatherproof and age-proof, with minimal upkeep. Brick doesn't get tired like other man-made materials, giving you both a sound mind and a sound home.



#### Achieving carbon neutrality

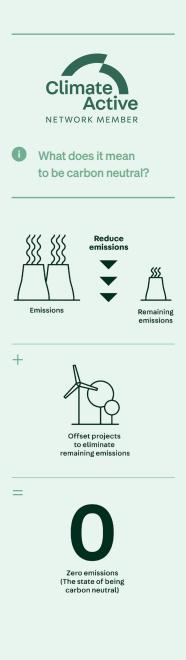
# What is Climate Active Certification?

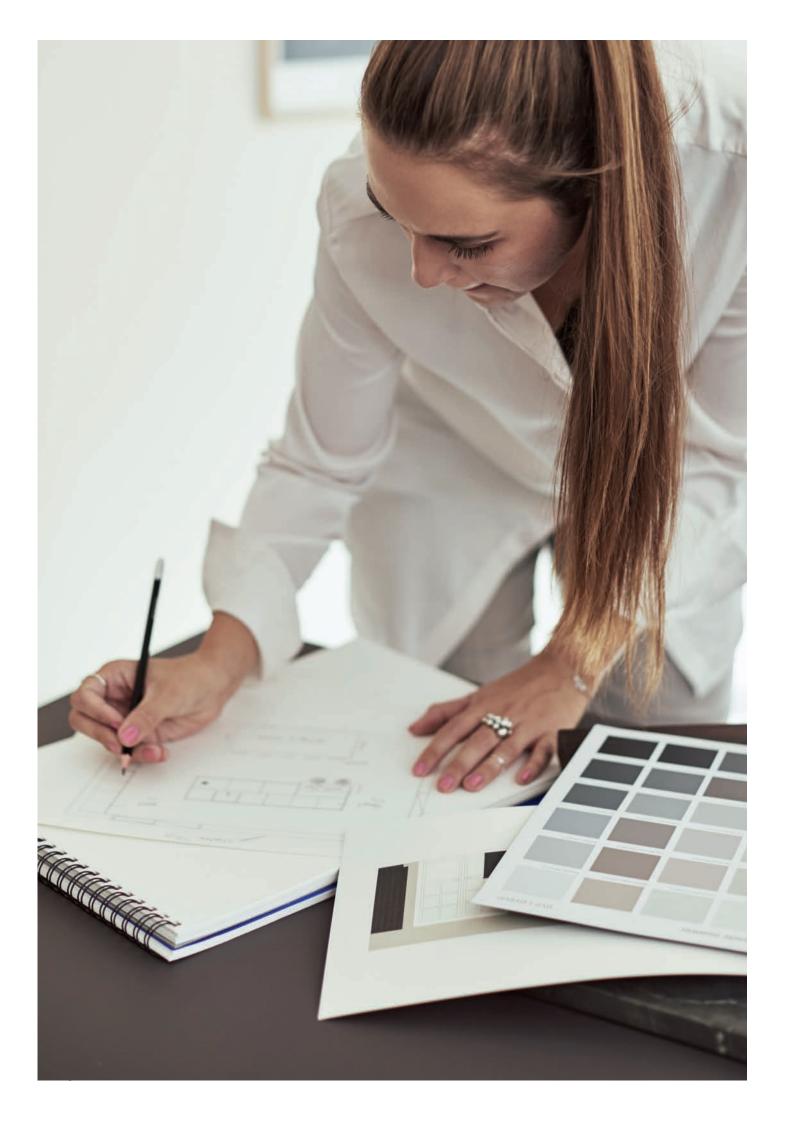
Climate Active is a unique, Government-backed program that enables businesses, governments, and consumers to reduce their carbon emissions.

We've been working with Climate Active to examine our sourcing, manufacturing and delivery of everything from raw materials to end products. To create the lifelong colour and strength associated with the beautiful natural materials in brick, many energy sources are used in the manufacturing process. The sum total of this is known as embodied carbon.

Our expanded Climate Active carbon neutral offer gives confidence that all embodied carbon has been offset. Not just during production, but measured through the entire life cycle of the brick – from extraction of the natural clay and delivery to the customer to end-of-life disposal. Once we identify the amount of embodied carbon, we then consider the most appropriate programs to align with for carbon offsets which you can read more about on page 28 of this brochure.

While we're proud of all the hard work we've done – remember you can benefit from it too, simply by opting to specify carbon neutral bricks or pavers.





**Carbon offset applications** 

# Real change starts here

Whether you're just starting your carbon offset journey, or are actively looking for new and innovative ways to be more environmentally sustainable, we can help.

If you're about to start on a new project for example, think about the sustainability benchmarks you'd like to aim for (we're happy to guide you on this too).

From there, you'll need to consider materiality. It's always a great idea to start off by looking at local options to reduce embodied carbon through transport – plus you'll be actively supporting local businesses. We can help here too, as Brickworks has an extensive range of clay bricks and pavers, made across Australia, creating employment and contributing to triple bottom line sustainability.

Once you've settled on the right colours and textures for your project, get in touch with our team at Brickworks to discuss the application for complimentary carbon offsets.

### Leading the way

As one of Australia's true pioneers of brick, we're honoured to work with like-minded leaders with a passion for sustainable design, architecture and building. They've been instrumental in coming on this journey with us, and each has committed to their own carbon neutrality. This is their story.

The Testimonials

Bonnie Herring <sup>Breathe</sup>
Monique Woodward <sup>WOWOWA</sup>
Tristan Wong <sup>SJB</sup>







"Breathe were early signatories to Architects Declare Australia, which is an acknowledgement that we're all facing the twin threats of climate change and biodiversity loss. So we've been really vocal advocates, appealing to the broader industry to go carbon neutral. It's energising to see the expanded carbon neutral offer by Brickworks and I hope to see more industry leaders and suppliers coming to the forefront, and matching this challenge."

#### **Bonnie Herring**

Director of Architecture and Sustainability, Breathe

#### About Breathe

Breathe projects are differentiated by a rigorous pursuit of architecture and design that is simultaneously effortless, beautiful, and environmentally positive. Their projects successfully balance the unique needs of people and place, to create spaces that are meaningful and accessible to everyone.

Breathe has generously provided insights to Brickworks on a sustainable manufacturing journey and looks forward to ongoing supply of carbon neutral bricks to projects across Australia. With a portfolio of award-winning homes, apartment buildings, workplaces, hotels and commercial fitouts -Breathe sees every project as an opportunity to use design for good. Designing bespoke and iconic low carbon buildings that provide a platform for community to flourish in our increasingly disconnected urban landscape.



"There's something really robust, beautiful and almost ancient about bricks – a reminder to stay grounded in nature and remember the homes we build, or the buildings we work and play within are always connected to the earth. Brickworks has always been a leader in this space and so we're really excited about the Climate Active carbon neutral certification. We'll definitely be running all of our projects through that process, because it's in alignment with our values – we couldn't be more passionate about sustainability and contributing to a regenerative environment."

Monique Woodward Director, WOWOWA

#### About WOWOWA

Based in Melbourne, WOWOWA is committed to creating colourful, meaningful, contemporary, idea driven spaces and is led by Monique Woodward and Scott Woodward. WOWOWA projects champion context – a philosophy based on a full and thorough realisation of local potential – unique buildings, on unique sites in unique environments. WOWOWA is a practice of optimistic lateral thinkers, passionate about inventive projects and working collaboratively within the community.



"The urgent and ever-present reality of our carbon footprint defines SJB's purpose to lower our environmental impact and design solutions for a more equitable and sustainable future. The certification and new offering from Brickworks encourages designers, builders and everyone in the built environment to be thinking about how materials can positively contribute to environmental and social outcomes while also adding value to their buildings."

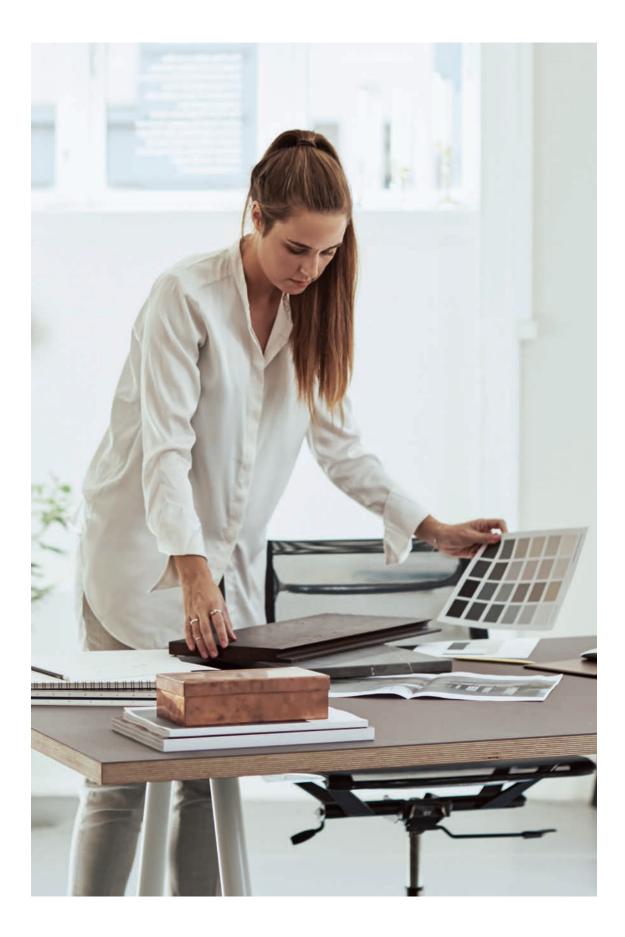
**Tristan Wong** Director, SJB

#### About SJB

For more than four decades, SJB has made a significant contribution to Australia's built environment specialising in architecture, interior design, urban design and town planning with studios in Sydney and Melbourne. SJB make cities, towns and buildings better places to live.

In January 2021, SJB, together with a number of Australian practices, committed to the Architects Declare movement and became a fully carbon-neutral office. Architecture has a role to play in supporting the future of our environment; both the natural and the built. SJB employs a number of sustainable and innovation principles to guide design methodology and respond to the health and wellbeing of communities and the planet.





## Ready to get started?

Settled on your preferred brick or paver? Then just head to our website and complete the application for complimentary carbon offsets against your sustainable project.

Once your application has been received and approved, a member of the Brickworks team will be in touch.

**Apply now** 

To apply for complimentary carbon offsets on your sustainable project, head to brickworks.com.au/climateactive

Get in touch

For more information, get in touch with our team at climateactive@brickworks.com.au

#### Our carbon offset initiatives

We're proud to support these initiatives through pre-purchased carbon credits.

#### **Tasmanian Native Forest**

Austral Bricks supports the Redd Forests Grouped Project, which protects Tasmanian Native Forest from logging or agricultural clearing, which has severely impacted the biodiversity of the area. Carbon revenue protects a total of 32,771 hectares of land from further degradation and encourages the return of endangered and vulnerable species.



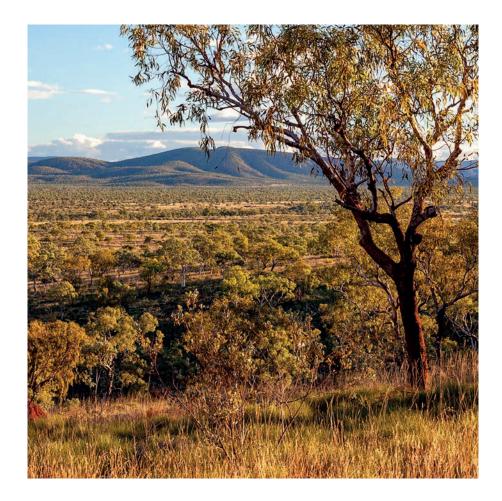


#### Paroo River North Environmental Project

This project establishes permanent native forests through assisted regeneration from in situ seed sources (including rootstock and lignotubers) on land that was cleared of vegetation and where regrowth was suppressed for at least 10 years prior to the project having commenced.

#### The Northern Savanna

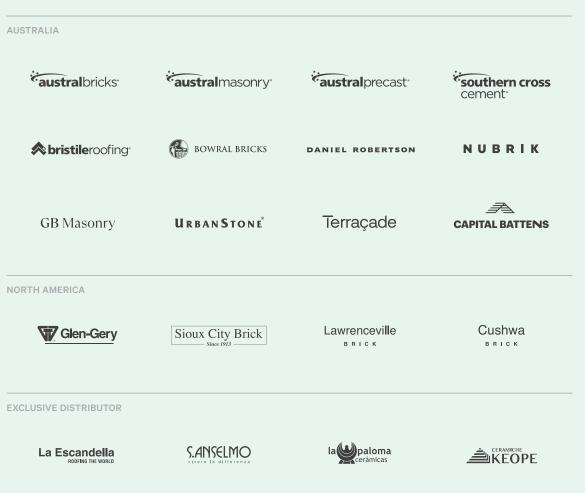
The Northern Savanna is an early dry season savanna burning project aimed at reducing late dry season wildfires. The project is run by the Alka Bawar (Kalpowar) Aboriginal Corporation which undertakes strategic burning that is intended to reduce the risk of late dry season wildfires which produce substantially more greenhouse gas emissions.



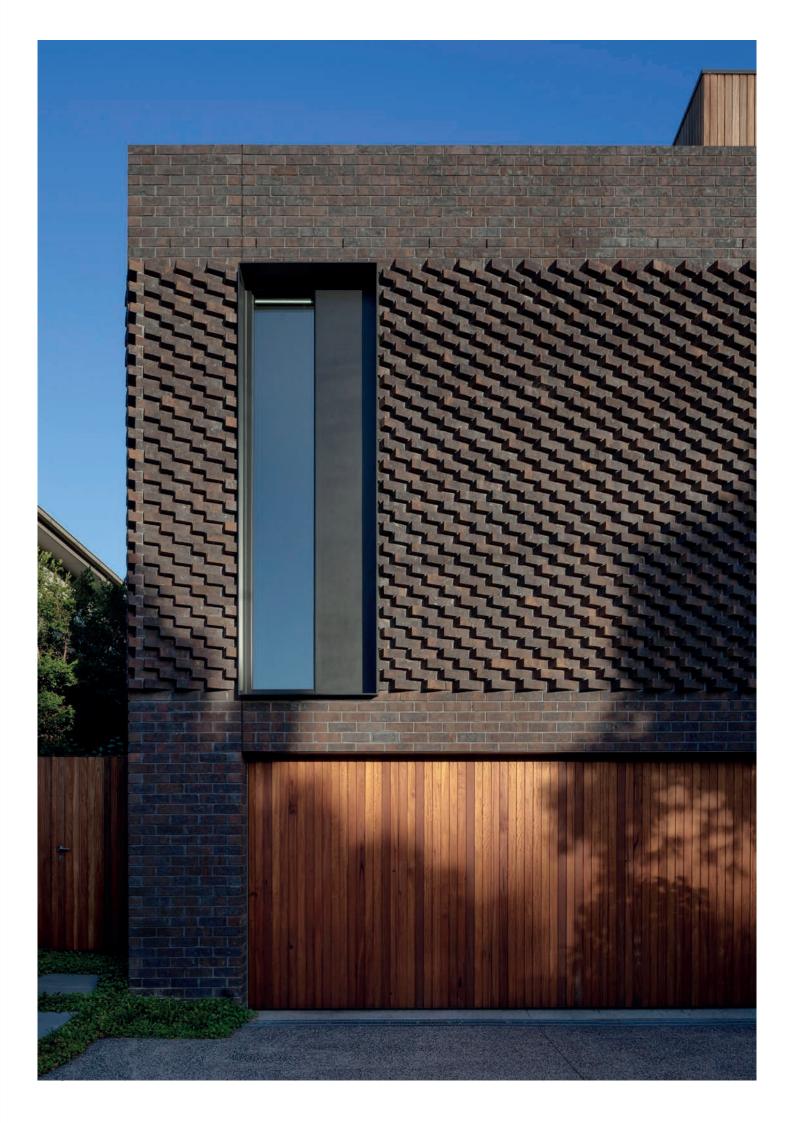
## **Backed by Brickworks**

Local expertise. Global quality. Brickworks is one of Australia's biggest building material manufacturers. With heritage going all the way back to one of Australia's founding brick producers, we're proud of our reputation for design, innovation and sustainability.

### BRICKWORKS



Project – North Balwyn House by Matyas Architects Product – Daniel Robertson Carbon Neutral Bricks in Hawthorn, London



## Get in Touch

For more information, advice and samples get in touch with the Brickworks team.

#### Visit. brickworks.com.au

Call. 13 BRICK

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