build for

Building a platform of commitment and responsibility August 2012



caustral masonry caustral precast shirt ileroofing



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meeting the sustainability challenge

Brickworks[™] Limited began in the suburbs of Sydney in 1934 when a group of Sydney's leading brick manufacturers, including The Austral Brick Company (with a history dating back to 1908), formed Brickworks[™] Limited. In the intervening 80 years, the company has grown, organically and by acquisition, to become one of Australia's largest and most diverse building products manufacturers.

This success is partly attributable to the company's ability to adapt to changing community needs. Few are more important in today's climate challenged and resource-hungry world, than the need to conserve our precious natural resources. Brickworks Building Products™ is comprised of well known product brands such as Austral Bricks®, Austral Masonry®, Austral Precast®, Bristile Roofing[™], Auswest Timbers[®], Austral Façades[™], Bowral Bricks[®], Nubrik[®], Daniel Robertson[®] and GB Masonry.

Brickworks Building Products[™] has taken up the sustainability challenge and is actively pursuing reform of its products and processes, from the quarry through to delivery to the building site, from the factory floor to the sales office.

Brickworks Building Products[™] has entrenched cultural values across the business that all employees work by. We are committed to encouraging concern and respect for the environment and emphasising every employee's responsibility for environmental performance. All businesses are managed in a sustainable manner and we don't make a profit by damaging the environment.

Our objective is to comply with all applicable environmental laws and regulations and community standards in a commercially effective way.

Lindsay Partridge **AM Managing Director**

sustainability leadership

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As one of Australia's largest and most diverse building product manufacturers, Brickworks Building Products[™] takes its position of industry leadership seriously. We believe the group and its member companies have a responsibility not just to our shareholders and employees but also to the industry, environment and the wider community.



Supporting scientific research.

Austral Bricks®, the largest component of the Brickworks Building Products™ group, is a foundation member of Think Brick Australia, the association representing the clay brick and paver industry. In collaboration with the Faculty of Engineering and the Built Environment at The University of Newcastle, Think Brick Australia is sponsoring pioneering research that is quantifying the thermal characteristics of popular walling systems, including cavity brick, brick veneer and lightweight systems. The project is ongoing but preliminary results (available from www.thinkbrick.com.au) demonstrate that brickwork has many of the thermal advantages that have been known anecdotally for many years but are now being supported by independent scientific research.

Bristile Roofing[™], through its membership of the Roofing Tile Association of Australia, supports scientific research and testing that has established the thermal properties of roof tiles and assisted in drafting specifications for their use in such extreme conditions as cyclone regions and bushfire-prone areas.

GreenSmart leader.

The Housing Industry Association's GreenSmart program recognises and encourages environmental responsibility in residential building and land development.

As well as the GreenSmart House Accreditation Program and GreenSmart Awards, the HIA encourages participation at Professional, Partner and Leader levels. Brickworks Building Products[™] is a GreenSmart Leader, working with the HIA to develop and deliver sustainable products for the construction industry. Brickworks Building Products[™] endeavours to actively participate and promote the use of our materials in energy efficient housing.







community support Children's Cancer Institute Australia

For the past decade Brickworks Building Products[™] has been a proud supporter of the Children's Cancer Institute Australia (CCIA) for Medical Research.

The CCIA is Australia's only independent medical research facility dedicated to research into the causes, prevention, treatment and ultimately a cure for childhood cancer. Ongoing company support for CCIA's work has been supplemented with staff donations, primarily through the Casual Friday program.

The contribution from both Brickworks Building Products[™] and staff has provided the opportunity for a number of pieces of vital equipment to be purchased by the CCIA. The ongoing support of corporate partners such as Brickworks Building Products[™] and staff will enable the CCIA to continue in its quest to unlock the secrets of childhood cancer.

smarter manufacturing for a better environment

Since 2000 Brickworks Building Products™ has slashed its greenhouse gas emissions by over



energy and greenhouse gas reduction strategy

Brickworks Building Products[™] has developed an energy and greenhouse gas reduction strategy to ensure we are constantly striving to reduce our impact on the environment.

From its very earliest days, Brickworks Building Products™ has been committed to updating it's manufacturing technology in a bid to contain costs and improve productivity and product quality. Today that same commitment is being applied to lowering the group's carbon footprint and building a sustainable future for the company and it's stakeholders.

The ultimate aim of our programs is to do more with less; higher output, higher quality, less raw materials, reduced energy consumption, lower emissions. The strategy focuses on 4 key areas:

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improving manufacturing inputs

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product re-engineering

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improving manufacturing processes

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alternate fuels and renewable energy



improving manufacturing inputs

Australia has abundant supplies of natural gas which led to the conversion across the group of brick, block and tile kilns from oil many decades ago. As well as being costeffective, natural gas generates considerably lower greenhouse gas emissions than the generation of electricity of the same energy value.

Reducing energy consumption continues to be a key target especially in high consumption operations such as brick manufacture. The high-capacity, state-of-the-art kilns at Austral Bricks[®] Wollert (Victoria) plants use a remarkable one-third less gas than a comparable conventional brick kiln. (See case study page 17)

However, even older kilns are capable of improvement as demonstrated by the installation of new high-efficiency burners in the firing zone at Austral Bricks® Horsley Park Plant 21 which resulted in a 15 percent productivity improvement and similar energy savings.

Improvements have also been made in kiln door sealing at Bristile Roofing™ concrete roof tile plants. Although these kilns operate at a much lower temperature than a brick kiln, there are still substantial savings to be made.

Considerable savings have also been made by process improvements such as the conversion from high maintenance, high energy

consumption pneumatic and hydraulic drives and constant-speed electric drives to variable-speed electric drives.

Thanks to these and other initiatives, Brickworks Building Products[™] has slashed its greenhouse gas emissions by over 30 percent since 2000.

Water use and dependence reduced

As in the wider community, Brickworks Building Products[™] awareness of the value and scarcity of water has increased in the past decade. Water is used to varying extents across the group. Brick manufacture, for example, requires considerable

process water. Other activities such as concrete masonry manufacture use less. Water is also required for washing machinery and for staff consumption and amenities such as washrooms.

In the past decade there has been a concerted effort in the group to reduce water consumption and, importantly, to reduce our dependence on town water. Water harvesting is widely practised across the group. Bowral Bricks® plant and Austral Bricks® Wollert, Horsley Park Plant 3 and Riverview plants are totally water self-sufficient, using only water that is collected and stored on the site.

Process water is also captured and recycled at many sites and development work is ongoing to further improve our performance.

Use of non-virgin raw materials on the increase

Across the group there is a growing awareness of the value of using nonvirgin materials as production inputs.

Traditionally green (that is, unfired) bricks have been returned to the clay mix. Post-consumer and post-industrial waste have been successfully introduced into a range of products, especially as a partial replacement for cement in concrete panels

(Austral Precast[®]) and masonry blocks (Austral Masonry[®]). Austral Masonry's® Alphalite® blocks, for example, are comprised of 85 percent recycled content.

Common additives include fly ash, bottom ash and furnace slag (all by products of steel manufacture) and crushed glass. Coal slurry and coal shale are also used where appropriate, the latter having the added benefit of reducing natural gas consumption. Sawdust is also used at the Austral Bricks® Longford (Tasmania) plant as a fuel and an additive.



clay and shale: two of our most abundant minerals

It isn't commonly appreciated that clay and shale, the majority raw material of clay bricks and pavers, are among the most abundant minerals on our planet. And the ancient, time-worn landscape of Australia is a significant source of these minerals.

Unlike many other mineral extraction processes, the 'winning' of clay and shale has relatively low environmental impact. The amounts extracted are comparatively small which means that some extraction sites are active for up to a century. The extraction process does not require the use of chemicals or other agents.

At the end of their productive life, these quarries are highly valued as landfill sites. Frequently they are filled and replanted and returned to nature or used for housing. Many inner city parks, Sydney's Olympic Park being just one example, now occupy the site of former brick quarries.

Manufacturing sites are usually located at or close to the extraction site which also means raw material transport costs are minimised.

Because clay bricks, pavers, Terraçade® panels and terracotta roof tiles are manufactured without the use of chemicals, solvents or fillers, they do not emit harmful gases. And if consigned to landfill, these units remain inert as they are simply returning to the earth from which they came.

new Victorian mega-plants are productive and sustainable

The new plant now uses **65%**

less energy than the previous plant

The 600 hectare site on Melbourne's northern fringe has been the site of brick manufacture since the late 1940's, largely thanks to its extensive deposits of clay and shale. It now holds two identical brick plants that have ultimately replaced three redundant plants and demonstrated remarkable savings in energy and raw materials, increased productivity and product quality and improved air quality.

Brickworks Building Products" \$125 million investment in these plants demonstrates its faith in the future of the industry and its commitment to replacing redundant plant with stateof-the-art facilities.

Onsite clay and shale extraction

Most of the constituent minerals of bricks and pavers are extracted on site, reducing transport costs. The site has reserves of approximately 50 years for the most popular clay types, increasing to 200 years for some lower usage minerals.

Lower energy consumption

Scale, automation, efficient design, 24/7 operation and the extensive use of variable-speed electric drives in place of hydraulic or pneumatic drives combine to lower electricity consumption to one-third less than that of a comparable conventional plant. Natural gas consumption has been slashed: The kilns use onethird less gas than comparable conventional kilns. The dryer tunnels use only kiln exhaust heat.

Self-contained water supply

All water used in the production process is harvested on site, including runoff from the plant roof and hardstand. The site's fire service has two 750,000 litre tanks, sufficient for four hours supply to hydrants.



Total waste management

All production waste is returned to the mix. Post-production waste is collected and crushed for return. Worn machine parts are collected for recycling.

Lower emissions

Each plant has a scrubber holding 400 tonnes of granulated limestone which absorbs areater than 75 percent of fluorines. A peeling drum strips the outer layer of the granules. The limestone waste is recycled as an additive in concrete masonry units.

Efficient delivery

Like most Austral Bricks[®] plants, the Wollert site is located strategically close to a major artery, in this case the Hume Freeway, allowing swift access into Melbourne and Southern Victoria or north to the rest of the state.

02

improving manufacturing processes

Improved manufacturing technology

Considerable strides have been made in the past decade in improving the energy efficiency and reliability of manufacturing technology.

For example, many processes were controlled by pneumatic or hydraulic drives. These have proven to be inefficient and subject to high maintenance costs. Similarly, although constant-speed electric motors, for example in pumps, fans and blowers, were more reliable, their constant operation consumed high levels of energy.

The companies in the group have made a concerted push to introduce variable-speed electric drives which are reliable, low maintenance and low in energy consumption. They are able to vary their energy demands by slowing or switching off as required.

Brickworks Building Products[™] has also undertaken a national compressed air survey at all its energy-intensive plants which resulted in numerous energy savings being identified and implemented. For example at Austral Masonry's[®] Port Kembla (NSW) plant, two old air compressors were replaced with new, energy-efficient technology including variable-speed electric drives.

The ultimate productivity improvements and savings in energy consumption are made when old manufacturing plants are replaced with new technology plants, as was the case with the Wollert plants.

Recycling and re-processing of production waste

The ultimate aim of any manufacturer is to eliminate production waste and Brickworks Building Products[™] member companies are constantly striving to meet this objective.

For example, Austral Bricks® new Wollert (Victoria) plant has markedly reduced the instance of malformed or off-specification green (unfired) bricks. Any such units are automatically recycled into the clay mix rather than going to landfill.

This principle also applies at other Brickworks Building Products™ manufacturing sites. Where this is not possible or feasible, some production waste is repurposed, for example sub-standard concrete roof tiles may be crushed for use as a roadbase material. Other by-products of the manufacturing process are also collected and despatched for recycling. These include cardboard, timber, strapping and plastics such as packaging.

Worn machine parts recycled

Wear and tear is an inevitable part of any manufacturing process. For example, the dies used on brick extruders to form the column from which the finished-size, unfired bricks are cut, is subject to high wear levels. Rather than being consigned to landfill, these and other worn machine parts are sent to recycling facilities for reprocessing.

improved manufacturing technology

Changing to low-energy and reliable variable-speed electric drives

Old manufacturing plants replaced with new technology plants

worn machine parts recycled

Worn machine parts sent to recycling facilities for re-processing

recycling and re-processing of production waste

Malformed/off specification green bricks recycled into clay mix

Sub-standard rooftiles crushed for use as roadbase



product re-engineering

Product engineering is the design or re-design of a product in order to improve its characteristics such as cost, saleability, ease of manufacture or, increasingly, to reduce its carbon footprint and improve its sustainability. Brickworks Building Products[™] is actively involved in product re-engineering across our divisions to reduce the environmental impact of our manufacturing processes and ensure the long-term viability of our products.

Existing products

All our existing products are subject to critical examination and incremental improvement. For example, in Victoria a range of Austral Bricks[®] clay bricks has been re-designed to increase the capacity of their core holes and thereby reduce the amount of material required.

This is not simply a process of making larger holes: the size of the core holes has a considerable effect on the curing and firing of the unit and simply enlarging them may lead to units that are out of square or of inconsistent size. The re-engineering program required considerable research and the development of innovative new processes. The resulting lighter units use fewer materials and energy, reduce transport loads and are easier to handle on the building site. Austral Masonry[®] is also applying higher core values to some of its products and, as mentioned previously, making use of post-industrial waste products such as fly ash as a replacement for energy-hungry cement.

Austral Precast[®] uses these cement substitutes where possible for its production of concrete panels and other structural units. Panel design is also subject to innovation. For example, in a recent Western Australian project, the mounting bolts were left accessible to allow the panels to be demounted without requiring demolition when the building was extended or reconfigured.

Bristile Roofing[™] has replaced the solvent-based glazes that adorn many of its concrete roof tiles with water-based glazes which, although they are more difficult to apply, are considerably better for our environment.

Ultimately, we may identify products that cannot be re-engineered to reduce excessive inputs, waste or high emission levels. We will consider their elimination if such products are unsustainable.



product re-engineering

New product design

Sustainability issues are top of mind when the various divisions of Brickworks Building Products[™] develop new products for the market.

In the design of bricks and concrete masonry, the focus is very much on lighter-weight products, an example being Austral Bricks® Boxer Lite™ clay bricks and blocks that, thanks to a revolutionary new core hole design, weigh up to 22 percent less than conventional units and use 20 percent less raw material and require commensurately less energy in manufacture. Boxer Lite™ bricks and blocks are also designed for manufacture using recycled clay and water. Austral Bricks[®] Everyday Life clay bricks are a range of attractive, lightweight face bricks developed to complement the Boxer Lite[™] bricks. Increasing the core hole percentage resulted in a similar reduction in weight, material and energy use to that of the Boxer Lite[™] series.

Austral Masonry's® Port Kembla NSW plants manufacture Alphalite® concrete masonry units which have a high, 85 percent, recycled content including waste by products of the local steel industry. These grey blocks, the workhorse of the commercial building industry, are light weight while retaining excellent loadbearing capacity. They also achieve a high fire rating and have excellent sound attenuation and thermal characteristics.

Elimination of products with excessive waste

We are currently investigating products that produce excessive waste and researching ways in which these can be reduced.



alternative fuels and renewable energy

Carbon friendly manufacturing

With the cost of gas and electricity mounting, as well as our endeavours to reduce our carbon footprint, the members of Brickworks Building Products[™] have been actively exploring the use of alternative fuels for manufacturing processes. Sources that have been mooted include coal shale and biogases (such as methane, a by-product of landfill sites). Research and development is ongoing. For decades the kilns at the Austral Bricks[®] Longford plant have been fuelled by sawdust, a locallysourced by-product of the timber industry. Natural gas is only used to commence the firing cycle. The sawdust also gives bricks from this plant their distinctive, earthy finish.



The Austral Bricks® Longford plant produces the lowest energy intensive bricks in Australia







efficiency through innovation, research and development

9 Star Home – Western Australia

Brickworks Building Products[™] has been assisting industry participants in the delivery of energy efficient housing through the supply of our products and extensive research and development programs.

Austral Bricks[®] and Bristile Roofing[™] are long-term supporters of Jade Projects, a Perth-based designer/builder that specialises in affordable, energyefficient housing. Their latest offering, the 9 Star Jade 909, had the highest

rating of any project on an estate established by the WA government to showcase energy efficient design.

The Jade 909 exploits the four well established design principles orientation, insulation, ventilation and thermal mass.

The home has no air conditioning, just ceiling fans to assist ventilation and the three kilowatt PV cells exceed the homes power requirements. The result is a water saving of 76 percent over a standard house, nothing to pay on energy bills, and receive energy credits.

The use of clay bricks and terracotta roof tiles is a feature of all three of Jade's star rated house designs.

The home has won numerous awards at the WA GreenSmart Awards including the coveted Home of the Year and the Water Efficiency Award.

8 Star Home – Queensland

Brickworks Building Products[™] is keen to support and encourage development that demonstrates the sustainability values of our products.

On the East Coast, Austral Bricks® and Bristile Roofing[™] partnered with Ausbuild to unveil an 8 Star display and demonstration home in the Eprapah Estate, Victoria Point, Queensland.

The 8 Star Home demonstrates how heavy weight materials used in combination with clever design principles can reach unprecedented energy efficiency levels while still achieving a contemporary style and pleasing aesthetic.

The high rating promises a reduction of up to 25 percent in energy bills in an affordable design that uses conventional and familiar construction materials and processes.

Every feature in Ausbuild's 8 Star Home has been included because it meets the expectations of a modern, well designed home. From the positioning of the windows, to the choice of materials, the home has been designed to be cool in the dry summer months and warm in the cold season. The rooms are light and airy because the home is orientated to make the most of the winter sun and

summer airflows and the exterior has deeper roof eaves to provide shade.

The classic brick exterior, roof tiling and internal brick walls are not only distinctive design elements but they also combine to store energy from the sun and replace the need for artificial heating and cooling.

The home is an impressive example of sustainable design with real world application.

environmental management and controls in each state

Controlling legislation

Brickworks Building Products[™] is subject to significant environmental regulation, particularly in respect of its clay building products manufacturing (clay bricks, pavers and roof tiles) and associated activities. Manufacturing facilities are located in all Australian states and each site holds a current licence and/or consent in consultation with the local environment protection authority.

Queensland

Production facilities and mining leases operate and are licensed under the Environmental Protection Act 1994 and Regulations. Each site is regulated by Environmental Management Overview Strategy documentation or plans of operations. Various approvals relating to the operation of the Wacol concrete roof tile facility have also been obtained from Brisbane City Council.

New South Wales

Production facilities and mines are administered under the Protection of the Environment Operations Act 1997, which licences organisations and regulates the level of discharges into the environment. Load-based licensing fees are determined by the EPA based on the discharge levels The Environmental Planning and Assessment Act 1979 applies to the approval conditions of the group's activities. Some sites

also operate within additional requirements imposed by local government and the state Department of Primary Industries.

Victoria

Production sites are licensed under the Environment Protection Act 1970, including various state environmental protection policies and regulations. Mining leases operate under the Extractive Industries Development Act 1995.

South Australia

Production facilities are licensed under the Environment Protection Act 1993, while mining and rehabilitation plans are approved in accordance with Regulations under the Mines and Works Inspection Act 1920.

Western Australia

Operations operate under the Environmental Protection Act 1986. Licences are issued by a number of government agencies, including the Department of Environment and the Department of Mines and Petroleum. A number of sites also operate under additional requirements issued by local government.

Tasmania

Operations and mining leases operate under the Environment Protection Act 1973.

Timber Management

Timber operations in Western Australia, ACT and Victoria operate under their unique legislative controls. The Karri and Jarrah forests of Western Australia and the hardwood forests of Victoria are sustainably managed and harvested by the relevant state agencies and departments. The softwood processed by Auswest Timbers[®] in the ACT is harvested from sustainable plantations.

Auswest Timbers® hardwood operations comply with the requirements of the international standard AS/NZS ISO 14001 as certified to the Australian Forestry Standard. The AFS is endorsed by the Programme for Endorsement of Forest Certification, an internationally recognised certification.

All Auswest Timbers® operations also operate under a certified Chain of Custody system that allows the tracing of the source of logs used in timber products back to the forest from which they came.



winner Strzelecki Rehabilitation

Award

environmental award Strzelecki winner

Environmental performance initiatives and actions undertaken by Brickworks Building Products[™] have resulted in a number of national and state awards.

Rehabilitation of the Scoresby (Victoria) extraction and manufacturing site won the top prize in the 2009 Strzelecki Awards for Austral Bricks[®] and engineering contractor Golder Associates.

The awards are conducted by Victoria's Department of Primary Industries to recognise sustainable development in earth resource industries and named in honour of mineralogist, Sir Pawel Edmund de Strzelecki, who explored extensively in Australia in the 1830s.

Although Austral Bricks® has many years experience in rehabilitating former brickworks sites for new community uses, the Scoresby project was the largest and most complex rehabilitation and development initiative undertaken.

Work was completed in July 2009 after four years of planning, demolition and earthworks which required processing over one million cubic metres of soil and bricks as engineered fill. Ground engineering was carried out by Golder Associates, co-recipients of the award.

"The Strzelecki Awards recognise companies that are taking sustainable development beyond what is required through legislation and showing a genuine commitment to the communities and environment where they operate," says Victoria's Energy and Resources Minister, Peter Batchelor.

The site is now being redeveloped by Mirvac as a new 800-lot residential neighbourhood in Melbourne's prosperous eastern suburbs.



Sustainability Advantage under NSW Office of Environment and Heritage



environmental award sustainability advantage program

Silver Level Recognition, Sustainability Advantage Program

Austral Bricks[®] NSW has received Silver Level Recognition for demonstrated environmental achievements from the NSW Department of Environment, **Climate Change and Water** (DECCW) under the Sustainability Advantage Program.

The NSW DECCW Sustainability Advantage Program and subsequent recognition levels reflect organisations that are committed to and demonstrate this commitment to sustainability and achieving environmental improvements. By continuing with this program we stand to significantly improve the ecological sustainability of the business, lower operational costs and build a reputation as market leader in the field of environmental management.

It is increasingly recognised that considering the life-cycle

of a product is essential when assessing its ecological credentials.

Fired clay (bricks, pavers, terracotta roof tiles, Terraçade[®] façade panels) can have an extraordinarily long life. This material also has the inestimable advantage of not requiring a finish such as render or paint (which has a recurring high cost and extreme levels of embodied energy) to maintain its appearance, colour and durability.

Similarly, concrete products such as precast panels and structural elements and concrete masonry have a very long life, although they may require finishing for aesthetic purposes.

However the end-of-life treatment of all building products must be considered.

Products suitable for reuse without reprocessing

Roof tiles (both concrete and terracotta), Terraçade® facade panels, passive retaining wall systems and pavers (laid without cement) may

be reused without further processing. In each case the units remain intact when removed and may be applied to a new application without further intervention, except possibly light cleaning to remove grime. All their original technical and structural properties remain unaltered. It is also possible to design precast concrete wall panels with exposed mounting bolts to allow their removal without demolition.

Segmental units that have been mortared into a structure, for example, bricks, concrete masonry and mortared pavers, are also suitable for reuse after the mortar has been removed. Again, their original technical and structural properties remain unaltered.

Timber may be suitable for reuse as is but it will generally require processing to remove nails and other fasteners and trimming and planning to rejuvenate the surface.

Product recycling

All the above products may be recycled for other purposes. Bricks and roof tiles for example are commonly crushed for use as road base. Similarly, concrete in all its forms, including reinforced concrete, is frequently crushed and used as road base, for erosion control and in wire gabions (cages).

recycling and reuse of products





Manufactured in our factory

Loaded onto a truck



making an environmental contribution

22%

reduction in energy use through energy efficiency improvements

35% reduction in CO_2 emissions

Audit and assurance programs are an integral aspect of Brickworks Building Products'[™] environmental management systems which assist in measuring performance and mitigating environmental risks. The purpose of these programs is to ensure compliance with all current licenses and regulations and identify risks of an adverse environmental event.

The group actively participates in energy efficiency and greenhouse gas reporting programs that assist in improving systems and processes for data capture and storage, as well as the measurement and calculation of emissions and the implementation of energy saving initiatives.

These include:

Energy Efficiency

Energy Efficiency Opportunities (EEO) Act 2006

Under the Act, Brickworks Building Products™ is encouraged to implement management systems aimed at measuring and analysing energy usage within its operations and identifying and implementing energy reduction strategies. Our largest sites have been assessed and audited to Level 2 status. The data collected shows that energy use in manufacturing has been reduced by 22 percent through energy efficiency improvements over the past 10 years, corresponding to a reduction in carbon dioxide emissions of 35 percent.



National Greenhouse and Energy Reporting (NGER) Act 2007

This Act requires Brickworks Building Products™ to measure and report energy consumption, production and greenhouse gas emissions under strict protocols. Members of the group have been measuring its energy consumption and emissions for 15 years.



Brickwork Building Products[™] reports under this program that provides the government, community and industry information about substance emissions.

Environment and Resource Efficiency Program (EREP)

This Victorian program was established under the Environment Protection Act 2006 to assist the state's largest energy and water users to achieve financial benefits by assessing their resource use efficiency, that is, energy, water, materials and waste generation.



This program is administered by the NSW Office of Environment and Heritage and requires the NSW-based divisions of Brickworks Building Products[™] to submit a detailed energy efficiency plan and subsequent annual progress reports.

build for

We are committed to social and environmental responsibility and sustainability, and are proud of our record of community support.



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