

# Sandstone in our built environment

Gosford Quarries' Piles Creek sandstone 80mm honed wall panels at 420 George Street, Sydney.

*In the last edition of Discovering Stone, Jim Mann mentioned in 'Sandstone Back to Basics' the significant changes which have taken place in relation to use of sandstone, as large format cladding and thin tiles, versus its early use as large bewn blocks. We take a look at some recent projects, prime suppliers and their products. A small but growing number of sandstone producers export product.*

## Resources & suppliers

Our Buyer's Guide in Issue 21 (March 2012) listed 23 active sandstone quarries. That list is by no means exhaustive. The generally wide availability of locally produced, high quality sandstone, coupled with the product's classification as a 'free stone', one that can be easily cut and shaped, continues to encourage extensive use of sandstone in public, commercial and residential projects. General use ranges from relatively thin tiles laid around pools, and on

pathways and entertainment areas, to large processed sandstone ashlars employed in the construction of new buildings, or the maintenance of heritage sites.

In addition to locally produced sandstone we imported sandstone blocks, slabs, and paving to the value of \$429,399 (2012: Australian Bureau of Statistics). In 2010 the value of this category was \$659,575. (Note: Australian Bureau of Statistics – HS Code description 251620: Sandstone merely cut, by sawing or otherwise into blocks or slabs of a rectangular shape – including square product).

Choosing the right sandstone for a specific project is often determined by quantifying the strength of the material and its porosity values. The latter is particularly critical when pavers or tiles are laid around saltwater pools. Prospective users should ask suppliers for the requisite 'Resistance to Salt Attack' test results.

All of our leading suppliers of adhesives and sealers will provide suppliers and end users with advice in regards to choosing the right product for a specific environment.



Bundanoon Sandstone

*These images of Bundanoon Sandstone illustrate the material's flexibility..*



Let us take a look at a few of the prime local producers and their products, presented in alphabetical order.

### Bundanoon Sandstone

The quarry was established in 1850. Bundanoon sandstone is principally used for building construction, landscaping, paving, pool surrounds and entertainment areas. The extensive quarry yields Banded, Fawn, Bundy Brown, Heritage Leaf and White sandstone. Heritage Leaf is a high density product ideal for paving and load bearing construction projects.

Bundy Brown is a medium-to-high density stone which is extensively used in a variety of building projects; including walling, capping, cladding, and paving.

The other listed materials are medium density products. Find out more about Bundanoon sandstone in our feature interview on page 68. Bundanoon sandstone is exported to several countries.

### Capricorn Sandstone

This extensive resource located in Rockhampton, Queensland yields high quality sandstone in a variety of colours which include Brown Banded, Capricorn Buff (and an attractive variant), Heritage Rose, Q8 and Q8 Light.

The Capricorn Buff and Heritage Rose materials are ideal for restoration projects. In general, Capricorn sandstone is defined as a medium-grained stone which comprises quartz and altered felsic volcanic rock grains – set in a binder of secondary silica and goethite and clay matrix – which is responsible for the stone's renowned hardness.

As usual there is an attractive field of colour variation within each product.

Capricorn sandstone is used widely in commercial, residential, restoration and residential projects. Rock, pebble and fill materials are also available.

In 2011 Capricorn Sandstone received the Trade Queensland Central Queensland Exporter of the Year Award.

The company was also recognised at the Premier of Queensland's Export Awards as recipients of the Tom Burns prize in 2010.



*Capricorn Sandstone is available in a variety of colours and finishes.*



Capricorn Sandstone has garnered a number of prestigious export awards.



Wollombi Sandstone

### Gosford Quarries

The company's catch cry, 'The sandstone people since 1922' says it all. With seven active sandstone quarries operating in three states, Gosford Quarries are clearly our largest producer of sandstone. The company quarries, processes and supplies stone for commercial and civil projects, and restoration and residential markets.

Prime colours include the Mount White range which is available in three distinct colours, White, Mount White Pink and Mount White Brown. This medium-grained quartz sandstone is quarried in New South Wales. Typically, it is used for wall cladding, flooring, landscaping, residential and restoration.



Wollombi Sandstone. Also a popular restoration product.

# WOLLOMBI SANDSTONE

SINCE 1989

*Dimension sandstone specialists*

YOUR ONE-STOP ALL SANDSTONE AND RESTORATION SERVICE



All enquiries welcome - Contact Albert Kraan  
 53 Glenloona Road, Laguna NSW 2325  
 Phone: (02) 4998 8340  
 Email: wollombisandstone@bigpond.com  
[www.wollombisandstone.com.au](http://www.wollombisandstone.com.au)



Piles Creek sandstone is also quarried in New South Wales in two complementary colours - Cream and Guinea Gold. It is generally used in the same areas as Mount White.

Gosford Buff is available in attractive Grey and Biscuit Buff colour tones, which features fine, random black speckles. Gosford Quarries process and supply their materials in a variety of popular finishes which include diamond sawn, gang sawn, honed, rockface and sparrow pecked.

Gosford's Wondabyne sandstone is produced at the Wondabyne quarry on the Hawkesbury River, New South Wales. This classic medium-grained quartzitic sandstone has been used extensively on landmark projects.

Gosford Quarries Warrego sandstone is quarried at the company's quarry at Helidon in south-east Queensland. This fine grained, brown banded stone has a salt and pepper appearance that makes it an attractive choice for wall cladding, carving and decorative projects.

The company continues to export stone to a variety of countries.

### Wollombi Sandstone

Early settlers in the Wollombi area of the Hunter Valley, New South Wales quickly discovered a variety of small quarries located in close proximity to the Great North Road. The settlers used the fine-to-medium grained sandstone to build churches, public buildings, culverts and retaining walls.

In those days sandstone slabs were typically split and shaped with pick axes near the building site. Wollombi Sandstone is not heavily banded, colour tones range from soft pastel colours to light brown, grey and purple tones.



An intriguing sandstone product by Marble Matters

Wollombi Sandstone will primarily focus on processing six tonne quarry blocks for a variety of uses which include restoration, sculpture, letter carving and mouldings. Processing and supplying stone for restoration projects is a key element of the business.

### Additional Resources

**Marble Matters Pty Ltd** imports a wide range of natural stone materials, including the attractive modular pattern which features traces of flora, known as Dendrites, small fern-like forms made of iron and manganese oxides, they record the passage of fluids through the sandstone.

**Rockmark Sandstone Group Pty Ltd** has access to a number of attractive sandstone products, including the Bister collection of pavers and cladding materials, and

Rockmark's new factory consists of state of the art machinery operated by highly experienced stonemasons. We can accommodate orders of all sizes from small residential to commercial sized projects right through to intricate carving work.

**ROCKMARK**  
Australia's Finest Sandstone



Exquisite luxury stonework is our speciality



Sienna Mosaic Range



Talk to us today or visit our new showroom in Sydney:  
330A Parramatta Rd, Homebush West, NSW 2140

Tel : 02 9746 8335 Fax: 02 9746 7335  
Mob: 0452 188 819 Email: sales@rockmark.com.au  
Web: www.rockmark.com.au

Sydney banded sandstone, which is ideal for paving, cladding and walling projects. Rockmark Sandstone also markets the Ranch range of pavers, the Ivory range of cladding and walling products, and the impressive Sienna Mosaic collection.

Rockmark Sandstone has gained a strong foothold in the export market.

**SAI Sandstone** also supplies imported bluestone and granite. However, they specialise in supplying sandstone in virtually all of its forms. The company supplies square and rectangular pavers in a variety of contemporary formats in 20mm and 30mm thicknesses.

Coping and bullnose tiles are available. SAI Sandstone also supplies sandstone blocks and bricks. The company can process sandstone and cladding to precise dimensions. The material is available in three standard colours – Grampian Sand, Coffee and Snow White. Additional colours are available to order.

SAI Sandstone is a member of the Australian Stone Advisory Association (ASAA) and SPASA, the swimming pool association. The attractive sandstone is a salt tolerant, anti-slip option for pool surrounds.

Pavers are available in a variety of finishes for use in multiple internal and external applications.

### Processing and the environment

A combination of traditional stonemasonry skills and modern technology has advanced sandstone production processes. Large blocks are swiftly cut into slabs using gang saws, before secondary cutting takes place to produce materials sawn on all sides.

Complex shapes are customised using CNC/Profile saws. Columns are fashioned using lathes. A wide variety of finishes are applied to produce the required texture, these vary from smooth and hand rubbed to rockfaced.

Albert Kraan of Wollombi Sandstone pointed out the sustainable attributes of sandstone by emphasising that sandstone takes three times less energy to manufacture than fired bricks, reconstituted stone or concrete modules, which provides an outstanding low carbon dioxide (CO<sub>2</sub>) emission rating.

Many of the historic sandstone buildings in our capital cities have stood the test of time. Demand still exists for high quality materials, and the availability of sophisticated production and processing techniques will ensure the future of this tried and tested surface finish.

Nevertheless, competition from alternative surface finishes continues to grow and while most of our existing sandstone quarries still operate, one or two have closed either temporarily or permanently.



*SAI Sandstone, a popular choice poolside.*

### Australian sandstone quarries

(Note: this list may not be complete)

#### NEW SOUTH WALES

- Gosford Quarries: Somersby, East Kurrajong, Mount White, Piles Creek, Wondabyne, Caitai
- Australian Sandstone Merchants, Glenorie
- Bundanoon Sandstone, Bundanoon
- Wollombi Sandstone, Wollombi

#### VICTORIA

- Grampian Sandstone, Dunkeld
- Pyrenees Quarry, Castlemaine

#### QUEENSLAND

- 4 Mile Sandstone, Goomboorian
- Ablatio Sandstone, Helidon
- Capricorn Sandstone Quarries, Rockhampton
- Gosford Quarries, Warrego
- Helidon Sandstone Industries, Helidon
- Stonehouse Creations, Beaudesert
- J H Wagner & Sons, Helidon

#### SOUTH AUSTRALIA

- Fernglen Estate Quarry, Basket Range
- Hill Quarry, Carey Gully
- Evans Sandstone Quarry, Aldgate
- Hindmarsh Valley Stone, Hindmarsh Valley
- Finnis River, Finnis River

#### WESTERN AUSTRALIA

- Irishtown Sandstone, Donnybrook
- Meteor Stone, Kimberley Ranges

#### TASMANIA

- Dunn Stone Industries, Launceston
- Old English Town Sandstone, Deddington <sup>OS</sup>



*The Sienna Mosaic collection from ASAA member Rockmark Sandstone*