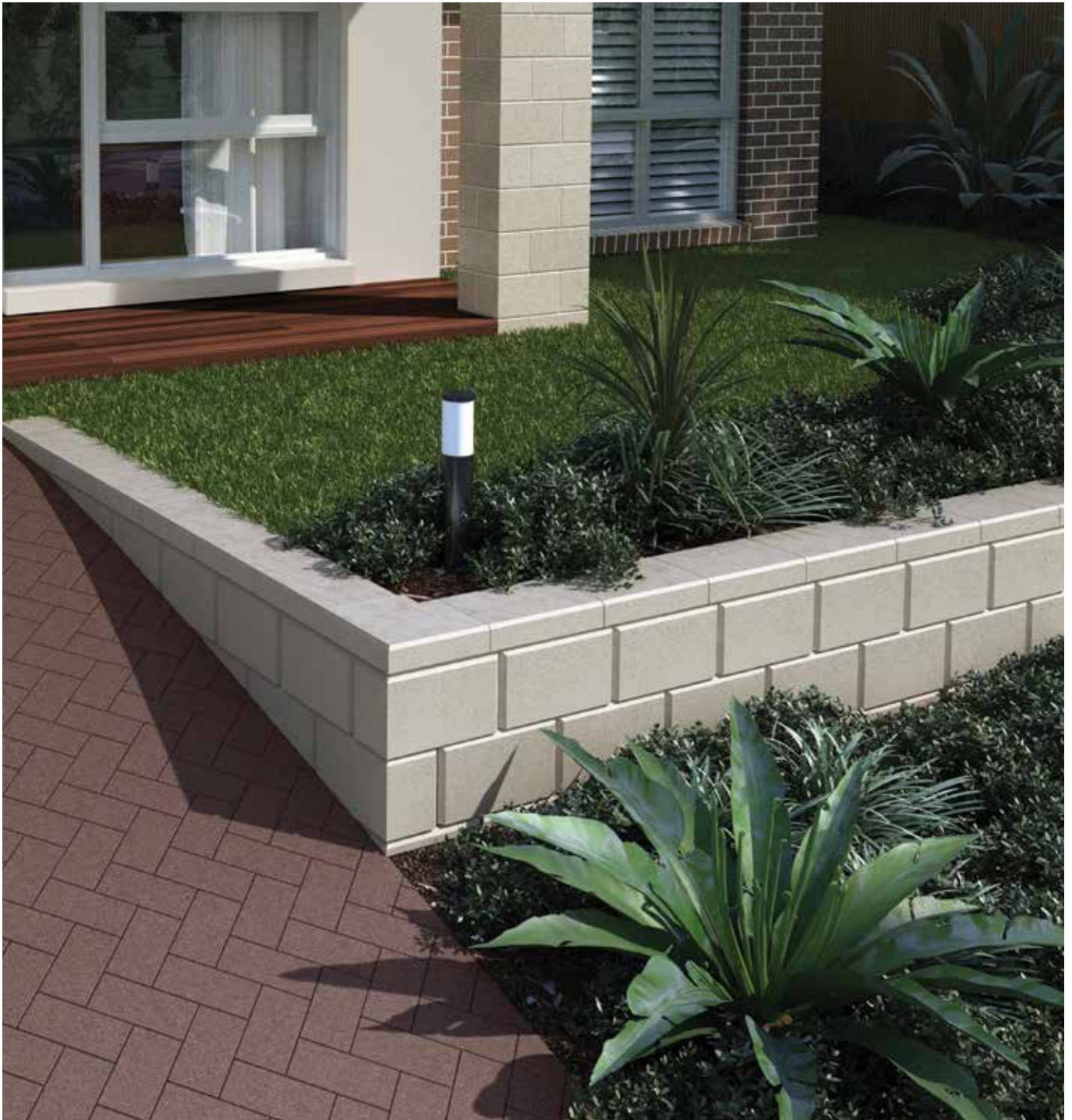


# RETAINING WALLS & PAVERS

*style and function*





# BEAUTIFUL PRODUCTS

*that last a lifetime*

Our range of coloured, standard and premium masonry and natural stone products have set a new standard in quality and style.

By adding oxides and coloured sands to our mix of raw materials, we produce products with contemporary colours, textures and appeal.

Ideal for a range of projects from a modern beach residence to impressive commercial projects Austral Masonry has an array of products to suit your style.

Our concrete retaining walls and pavers are created by blending fine sand, cement, aggregate and quality colouring agents to produce unique coloured blocks. Our range of stone products are quality controlled and only the finest samples offered for projects of distinction.

Part of the Brickworks Building Products Group, one of Australia's largest and most innovative building product manufacturers, Austral Masonry is part of a group of manufacturers which includes other industry leading brands such as Austral Bricks, Bristle Roofing, Austral Precast and Auswest Timbers.

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*style and function*

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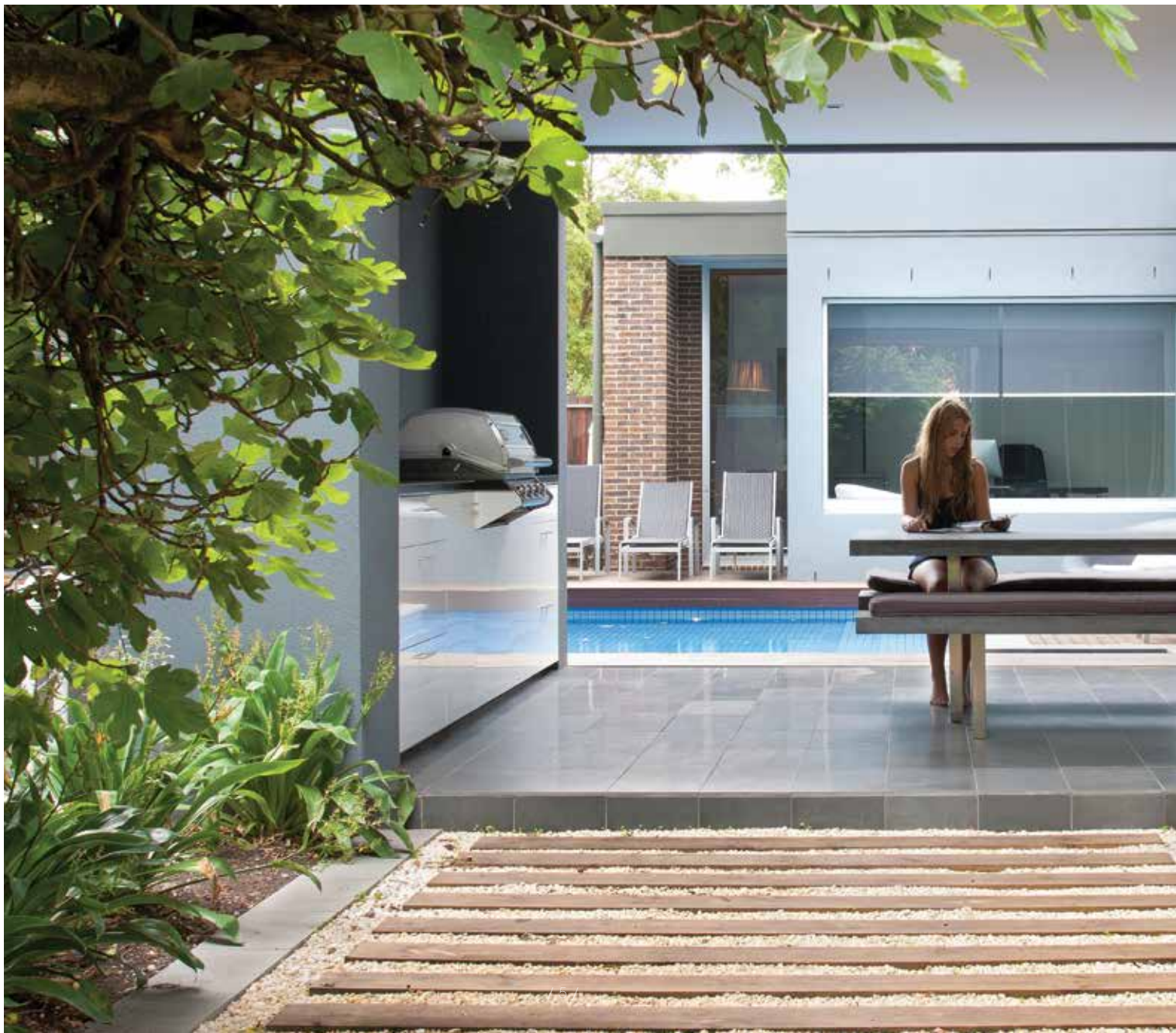
*style and function*

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*inspired  
by design*

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*Cover Image: Hayman Limestone  
Top right: Heron Charcoal  
Bottom right: Endurastone Flamed Black Granite*





# HAYMAN

*contemporary colours & smooth finish*

Hayman retaining wall blocks offer a smooth finish with options to suit contemporary colour schemes. Their simple design, mortarless interlock, and manageable weight means you can lay them yourself and enjoy a retaining wall which is virtually maintenance free.

## Applications

Maximum wall height: 1,200 mm\*  
(3 m when engineered)

Straight walls

Curved walls

Corners

Steps

*\*Please check with your local council in regards to engineering requirements.*





style and function



Limestone



Oak



Gumnut



Charcoal



**Standard Unit**

Size: 390 L x 245 W x 198 H mm  
Weight (each): 24 kg  
Face area: 13 units per m<sup>2</sup>



**Universal Corner**

Size: 160 L x 360 W x 198 H mm  
Weight (each): 17.2 kg



**Capping Unit**

Size: 390 L x 245 W x 90 H mm  
Weight (each): 16 kg  
2.56 per lineal metre



# HERON

*rich natural colours*

Depending on what suits your overall desire, one thing is certain Heron retaining wall blocks have the colour and finish for all landscaping projects. They are structurally sound and are perfect for the 'do it yourself' weekend warrior. Heron blocks require no mortar and are virtually maintenance free.

## **Applications**

Maximum wall height: 1,200 mm\*  
(3 m when engineered)

Straight walls

Curved walls

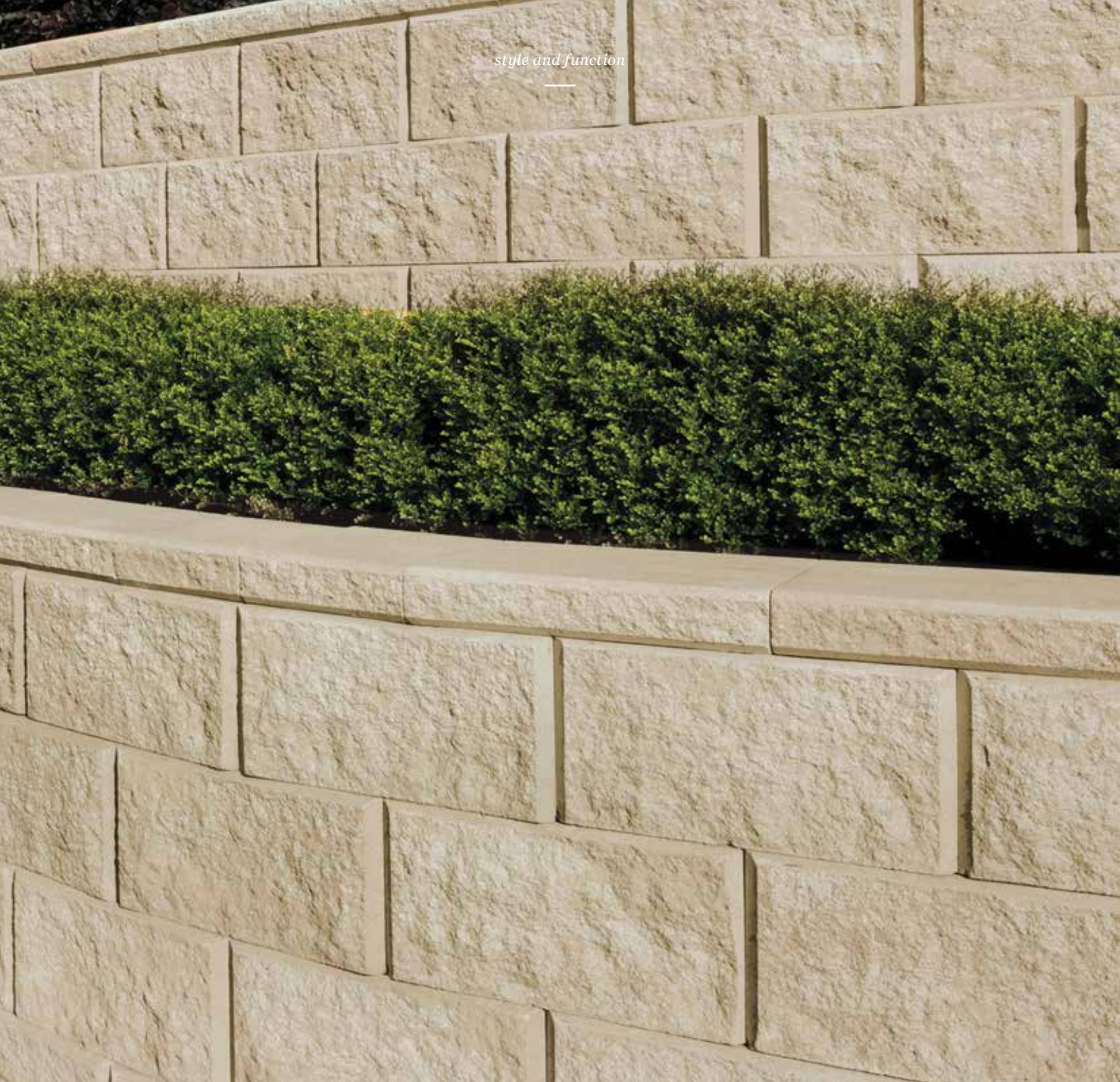
Corners

Steps

Min radius: Approx 1,200 mm

*\*Please check with your local council in regards to engineering requirements.*





style and function



Limestone



Brisbane Blend



Sydney Blend



Sandstone



Oak



Gumnut



Charcoal



**Standard Unit**

Size: 390 L x 245 W x 198 H mm

Weight (each): 24 kg

Face area: 13 units per m<sup>2</sup>



**Corner Block**

Size: 160 L x 360 W x 198 H mm

Weight (each): 20 kg

Available in right and left



**Capping Unit**

Size: 390 L x 245 W x 75 H mm

Weight (each): 14 kg

2.56 per lineal metre



**End Block**

Size: 160 L x 245 W x 198 H mm

Weight (each): 18 kg



# MORETON

*accentuate your outdoor area*

With one enticing blend and three contemporary monotone colours, Moreton retaining wall blocks will complement any landscape with a unique and timeless appeal. High quality and robust in nature, Moreton Retaining Wall Blocks are easy to install and require minimal maintenance. Moreton is used in a mortarless dry stack retaining wall system.

## **Applications**

Maximum wall height: 1,200 mm\*  
(3 m when engineered)

Straight walls

Curved walls

Steps

*\*Please check with your local council in regards to engineering requirements.*





Limestone



Oak



Charcoal



Sydney Blend



**Standard Unit**

Size: 390 L x 200 W x 200 H mm

Weight (each): 18.5 kg

Face area: 13 units per m<sup>2</sup>



**Capping Block**

Size: 390 L x 200 W x 200 H mm

Weight (each): 22 kg

Blocks per lineal metre: 2.56



# GRANDWALL

*beautifully bold*

The magnificent texture and natural tones of Grandwall create a realistic and appealing finish to each block. Perfect for the 'do it yourself' project, these blocks require no mortar, and are virtually maintenance free.

## APPLICATIONS

**Maximum wall height: 810mm\***

**Straight walls**

**Curved walls**

**Corners**

**Steps**

**Min Radius: Approx 1200mm**

*\*Please check with your local council in regards to engineering requirements.*





**Wall Block**  
Size: 390L x 245W x 162H mm  
Weight (each): 17.5kg  
Blocks per m<sup>2</sup>: 1m<sup>2</sup> wall  
= 16 blocks



Sand



Charcoal



**Corner Block**  
Size: 340L x 140W x 162H mm  
Weight (each): 20kg  
Available in left or right



**Capping Block**  
Size: 195L x 245W x 65H mm  
Weight (each): 6kg  
Blocks per lineal metre: 5.13



# BRIBIE

*simple yet distinctive*

These light weight blocks are the ideal solution to add style to your landscaping project with the greatest of ease. The simple design of this unit is designed to offer flexibility in applications from long winding garden beds to those that feature curved corners.

## **Applications**

Maximum wall height: 480 mm\*

Straight walls

Curved walls

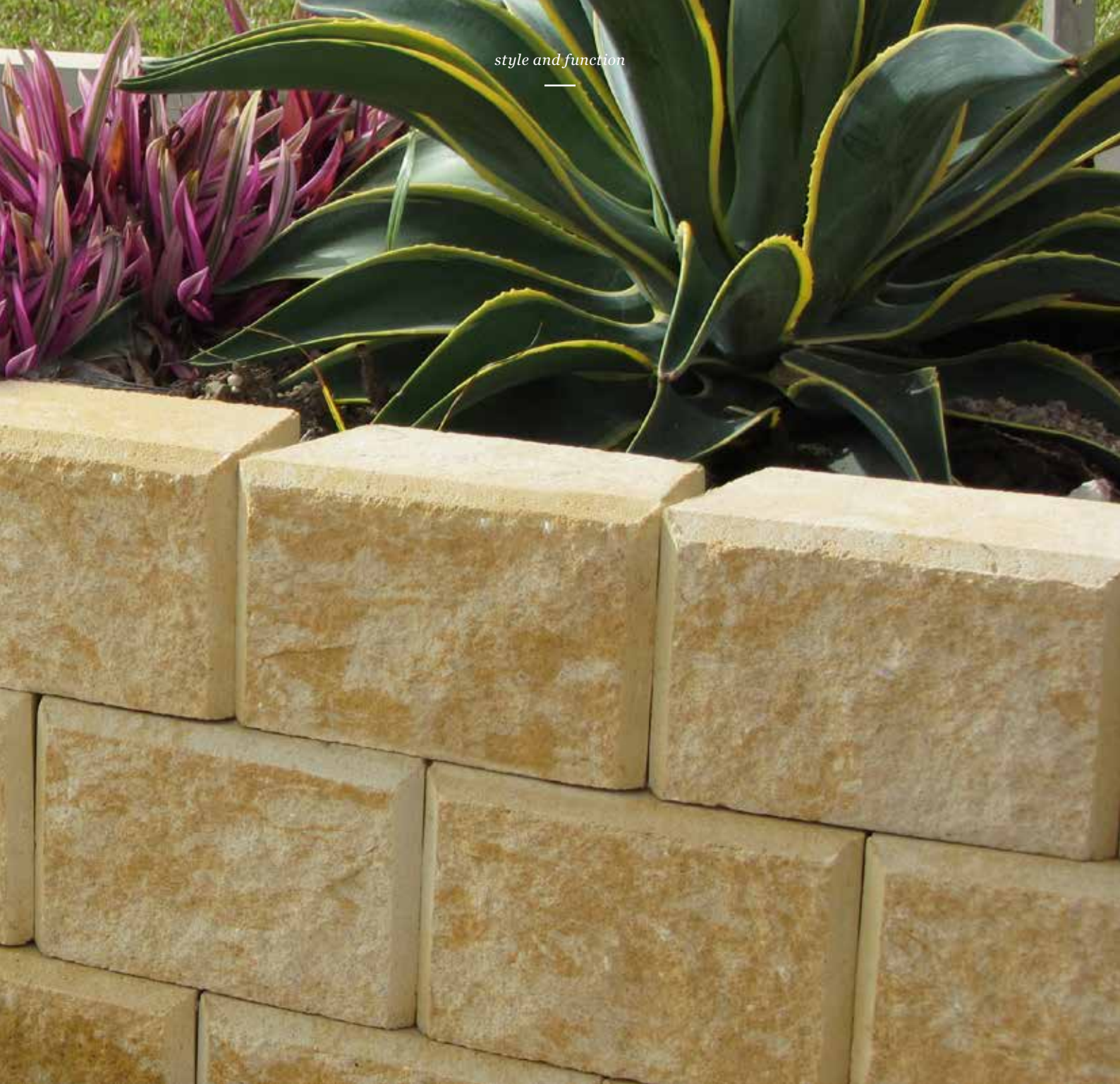
Minimum circle: 18 blocks

Minimum radius to inside: 450 mm

*\*Please check with your local council in regards to engineering requirements.*



style and function



Limestone



Sydney Blend



Oak



Charcoal



**Standard Unit**

Size: 190 L x 100 W x 120 H mm

Weight (each): 4.5 kg

Blocks per lineal metre: 5.25



# KEYSTONE

*Engineered perfection*

The Keystone retaining wall system is robust and strong, and available in standard and flushface finishes. This product is ideal for both straight and curved walls and features a patented interlocking pin connecting system that is best suited for engineered walls up to 15m in height.

## Applications

**Maximum wall height: 1,200 mm\*  
(15 m when engineered)**

**Straight walls**

**Curved walls**

**Corners**

**Steps**

*\*Please check with your local council in regards to engineering requirements.*





Dune



Charcoal



**Standard Unit**

Size: 457 L x 305 W x 203 H mm  
Weight (each): 36 kg  
Face area: 11 units per m<sup>2</sup>



**Flushface Unit**

Size: 457 L x 305 W x 203 H mm  
Weight (each): 36 kg  
Face area: 11 units per m<sup>2</sup>



**Capping Unit**

Size: 460 L x 305 W x 100 H mm  
Weight (each): 30.8 kg  
2.2 per lineal metre



**Flushface Straight Side Cap**

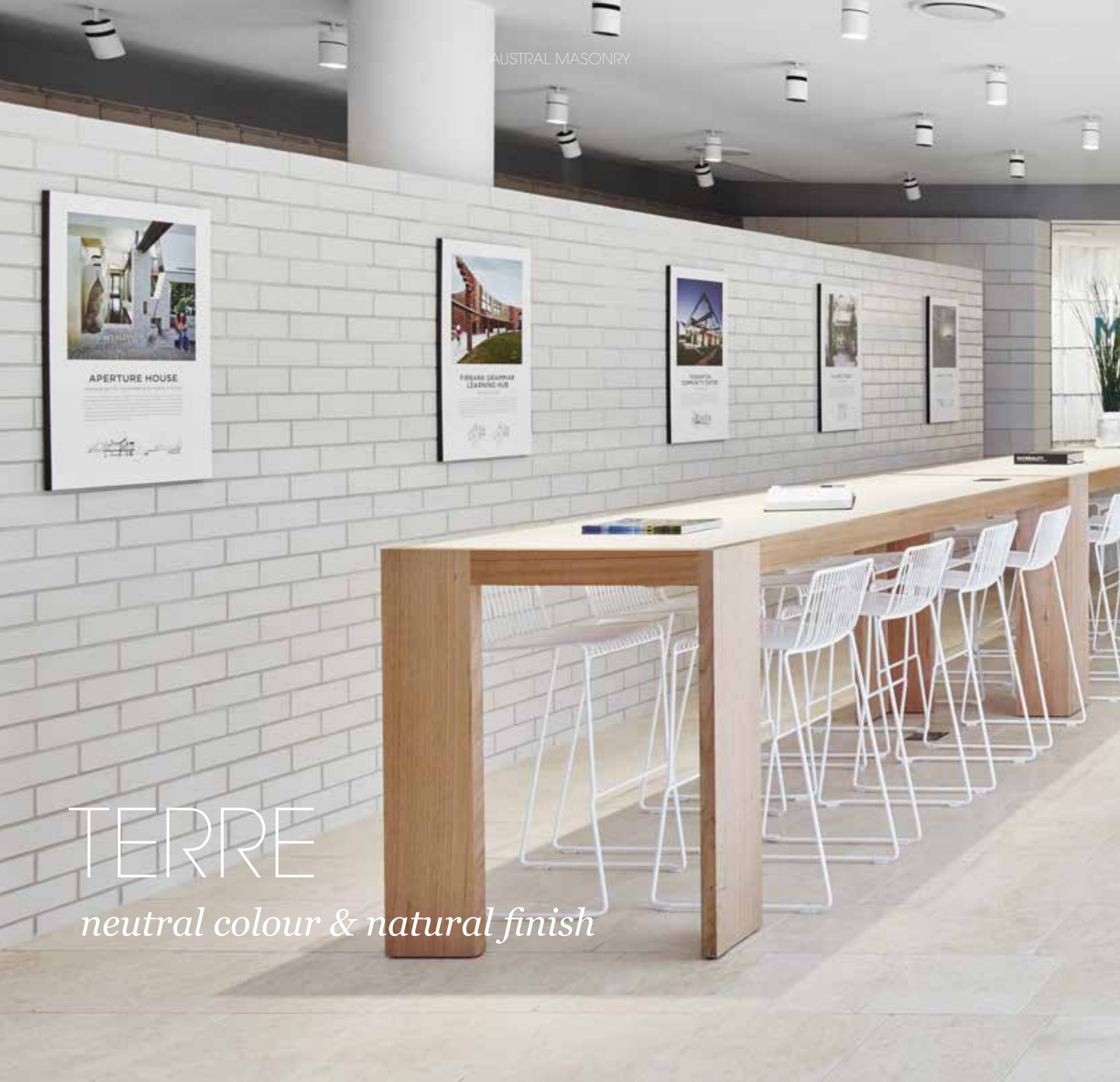
Size: 460 L x 305 W x 100 H mm  
Weight (each): 30.8 kg  
2.2 per lineal metre



**Corner Unit 90°**

Size: 460 L x 230 W x 200 H mm  
Weight (each): 36 kg





# TERRE

*neutral colour & natural finish*

Created by nature, the Terre range are made from limestone deposited by mineral springs.

Natural and beautiful, this exciting range offers a sophisticated finish that suits a range of designs and colour schemes.

## Applications

Internal Living Areas

Paths

Patios

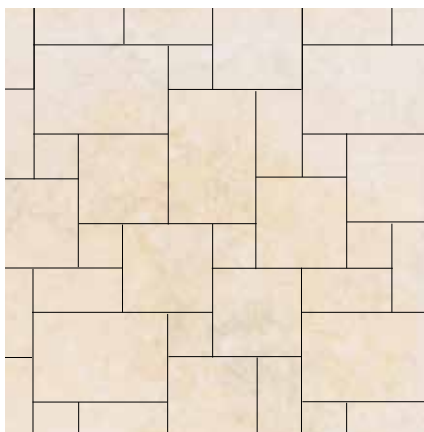
Pools\*

Courtyards

\*Check installation requirements with Austral Masonry.

All colours P4 Slip Rating.





**French Pattern\***

Sold in 1.44 sq metre  
units composed of the  
following sizes:

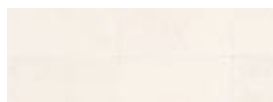
2 x 600 L x 400 W mm

4 x 400 L x 400 W mm

2 x 400 L x 200 W mm

4 x 200 L x 200 W mm

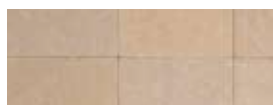
\* Only available in Marigold



Marigold



Sinea Pearl



Oryx



**Standard Unit**

Size: 400 L x 400 W x 30 H mm

600 L x 400 W x 30 H mm



# ENDURASTONE FLAMED

*create a look of distinction*

Endurastone Flamed pavers are available in a flamed finish so they can be used for internal and external areas, or even around pool areas. Made from granite, each colour shows a subtle sparkle where the light touches.

## **Applications**

Internal Living Areas

Pools\*

Paths

Patios

Courtyards

\*Check installation requirements with  
Austral Masonry.

Silver Granite P5 Slip Rating.

Black Granite and Grey Granite P4 Slip Rating.



style and function



Black Granite



Grey Granite



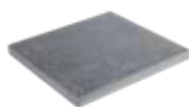
Silver Granite



**Standard Unit**

Size: 400 L x 400 W x 20 H mm  
400 L x 400 W x 30 H mm  
600 L x 400 W x 20 H mm\*  
600 L x 400 W x 30 H mm\*

\*Silver Granite and  
Grey Granite only



**Bullnose Unit**

Size: 400 L x 400 W x 20 H mm  
400 L x 400 W x 30 H mm  
600 L x 400 W x 20 H mm\*

\*Silver Granite and  
Grey Granite only



# ENDURASTONE POLISHED

*enjoy the luxury of natural stone*

Polished to create a lustrous sophisticated finish, Endurastone Polished tiles are the epitomy of luxury and style. From the striking dark colours of our Black Granite through to the light sophistication of our Silver Granite, you will not be disappointed with your selection.

## **Applications**

Internal Living Areas\*

Walling

\*P1 Slip Rating. Wet areas require non-slip sealer.





Black Granite



Grey Granite



Silver Granite



**Standard Tile**

Size: 400 L x 400 W x 12 H mm

600 L x 300 W x 12 H mm

600 L x 600 W x 12 H mm



# LONDON

*traditional but classy*

The Bowral Bricks architectural bricks have been transformed into dry pressed pavers. Manufactured using time honoured techniques with today's technology guarantees premium quality.

## **Applications**

Pools  
Paths  
Patio  
Courtyards  
Driveways



*style and function*

---



Silver Sand



Brahman Granite



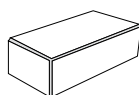
Maple



Regency Grey



Chestnut



**London Paver**

Size: 230 L x 114 W x 65 H mm



# PARADISE

*for outdoor living*

From driveways to garden paths and courtyards, Paradise pavers come in a colour range of Tugun, Miami, Kirra, Coolangatta, Tweed and Burleigh, suited to our famous Queensland outdoor living.

## **Applications**

- Pools
- Paths
- Patios
- Courtyards
- Driveways



style and function

---



Miami



Coolangatta



Tugun



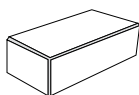
Tweed



Kirra



Burleigh



**Paradise Paver**

Size: 230 L x 114 W x 50 H mm



# HAMLET

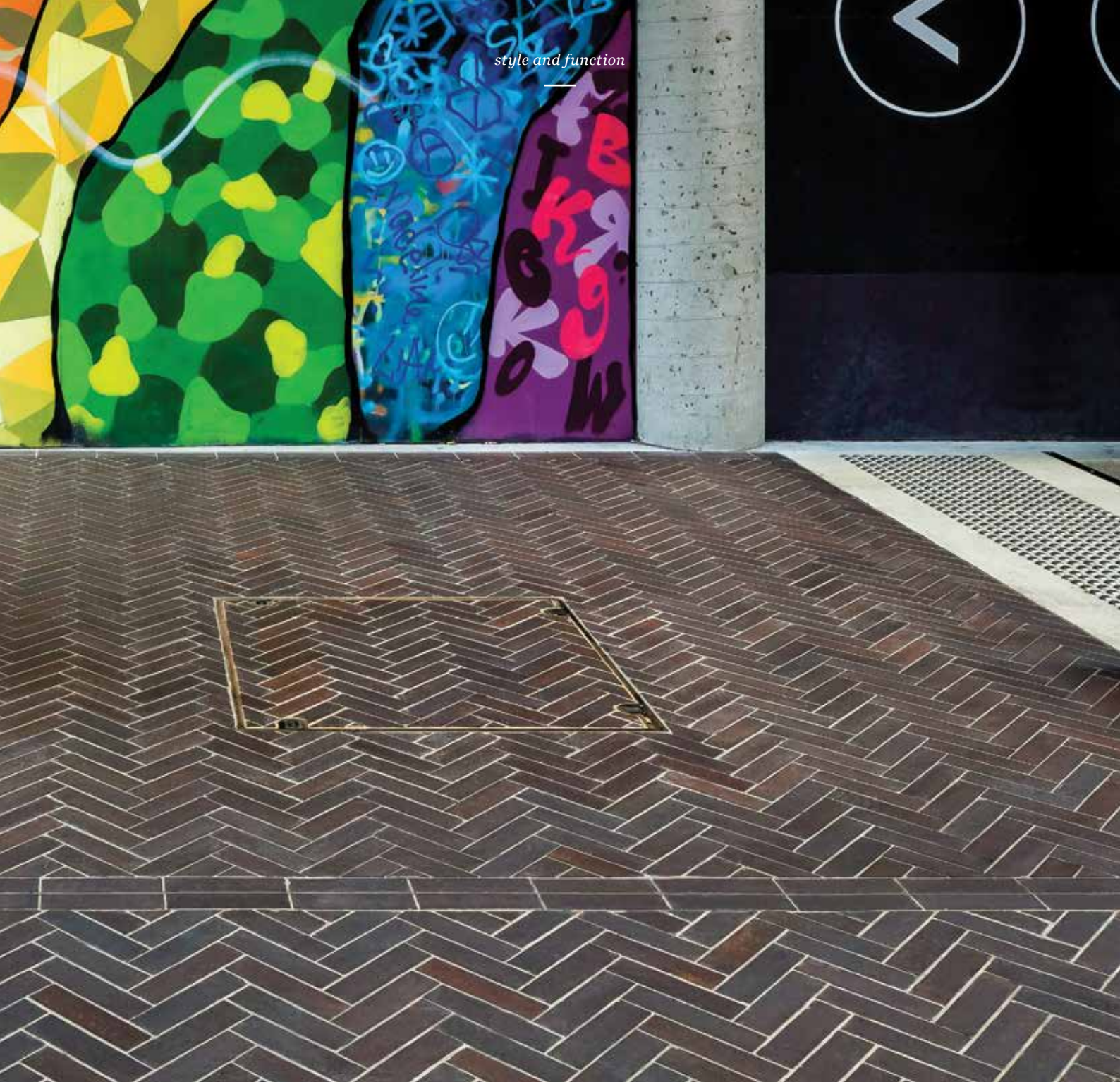
*architecturally inspired*

The Hamlet paver collection will set your project apart. Whether they be used indoors or out, this special sized paver produced in the renowned Bowral colours is in a class of its own.

## **Applications**

Pools  
Paths  
Patios  
Courtyards  
Driveways





style and function



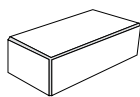
Blue



Sepia



Ash



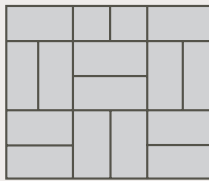
**Hamlet Paver**  
Size: 230 L x 76 W x 65 H mm



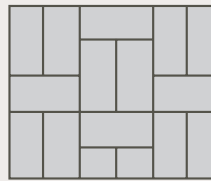
# HOW TO

## *lay pavers, Endurastone and Terre*

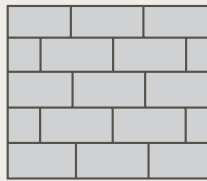
### *Paver Patterns*



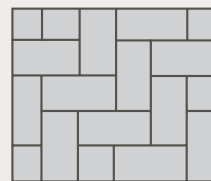
Basket



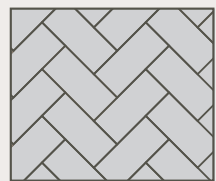
Weave Variation



Running Bond



Herringbone 90°



Herringbone 45°

### *Materials required*

- Pavers, Endurastone and Terre
- Gravel Roadbase (1m<sup>3</sup> covers 10m<sup>2</sup> at a compacted depth of 100mm)
- Bedding Sand (1m<sup>3</sup> will cover 30m<sup>2</sup> at a depth of 30mm)
- String lines, tape measure and pegs
- Spirit level
- Two Screed Rails – two flat steel bars (Approx. 3m x 50mm x 2mm)
- 2-3m long concreter's screed
- Broom, rake and shovel
- Plate vibrator compactor
- Edge restraints (concrete, cement or timber)
- Cutting Equipment – Paver Splitter/ Masonry Brick Saw



1



2



3



7



8



9



### 1. Excavating

Remove all vegetation, rubble and surplus soil from the selected area. A metal headed rake is ideal for excavation. This will give you a formation on which to work. The sub base goes over the sub grade. If using sub base for domestic driveways, minimum 100mm of limestone or roadbase is recommended. For patio and pedestrian areas, cemented stabilised sand may be used. See Figure 1. It is recommended that all large format pavers, Endurastone and Terre when used in vehicle areas are bedded in either a sand and cement mortar bed or fixed using a flexible adhesive.

### 2. Compacting

Compact the sub base with a hand held / mechanical compactor to a maximum deviation of 10mm from true level. Though hand-held compactors will be adequate for small jobs, mechanical compactors should be hired for driveways and larger areas. After compaction, cover the sub base with 20 to 50mm of well graded coarse bedding sand. Ensure that the sand is relatively dry. With 3% clay the bedding sand provides a barrier and protects the pavers, Endurastone and Terre from harmful salt attacks. Concreting sand is suitable for this purpose. NB. Compactor not included in DIY paving kit. See Figure 2.

### 3. Levelling

Place the screeding board along the base of a wall or straight vertical structure. This will give you a level for the bottom of the paver, Endurastone and Terre unit. This level is called the benchmark. See Figure 3.

### 4. Screeding

Lay the screeding board at right angles to the benchmark to create a level for the screeding irons. For drainage purposes, always allow for a slight fall-away from the edge of the wall. This should be about 25mm over a distance of three metres. (Use your spirit level to measure fall-away. Bubble should reach outer line.) Repeat the above process at one screeding board length along the benchmark. These two indentations will be your height marks. See Figure 4.

### 5. Screeding continued

Continue to push the screeding board into the sand along the full length of the area to be covered, maintaining the level of the first height marks. Starting at the benchmark, place the screeding board on the screeding iron and drag it back and forth until the sand between the screeding irons is smooth and level. Move the screeding irons along the height marks, and continue to level the sand with the screeding board. See Figure 5.

### 6. Screeding continued

Further Screeding Repeat steps (3) and (5) to level the next section of sand. Allow one of the height marks to slightly overlap the area you have already levelled. When the entire area is level,

you are ready to use your pavers, Endurastone or Terre units. Look for any hollows or bumps in the levelled sand. This stage may be your last chance to smooth them out. See Figure 6.

### 7. Selecting Patterns

Austral Masonry pavers Endurastone and Terre units are available in a wide range of colours and shapes. See page 16. However, for vehicular traffic, only herringbone patterns should be used.

### 8. Gauging

Determine the average length and width of pavers by measuring the cumulative dimensions of 20 pavers and dividing by 20. The laying gauge is then determined for the pattern selected by using the average dimensions determined together with a nominal joint width of 2.3mm. Before laying pavers, a grid of string lines not more than 1 metre apart should be set up covering the area to be paved. No contact should exist with adjacent pavers. See Figure 8.

### 9. Trimming

After whole pavers, Endurastone or Terre units have been laid, the units are cut for use at the edges, corner, curves and obstructions if any. This can be effectively achieved when safely using a diamond blade brick saw or a masonry saw. See Figure 9.

### 10. Edge Restraint

The most effective way to keep edge pavers, Endurastone or Terre units in position is to set them in cement. Take up the last row of pavers, Endurastone or Terre units and drag away 20cm of sand to a depth of 6cm (10cm for driveways). Level out the cement mortar and place the pavers in position by lightly tapping them. Do not use the laid area for at least 24 hours after the cement is laid.

A driveway should not be used for 48 hours. See Figure 10.

### 11. Jointing Sand

Masonry pavers, Endurastone or Terre units are designed to function with sand completely filling the vertical joints. This is essential for effective lock-up and shear transfer. Spread dry sand over the laid area and brush it into the vertical joints with a stiff bristled broom. Please clean the area of excess sand before final compaction. See Figure 11.

### 12. Final Compaction

Use the rubber mallet and the flat length of timber provided to compact small areas. However for larger area and driveways, it is advisable to use a plate compactor and protect the laid area with a layer of excess jointing sand (approx 5 to 10mm) and plyboard to prevent it from coming in direct contact with the units. Top up the joints with jointing sand after compaction. See Figure 12.




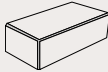
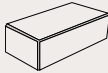

*Austral Masonry recommends sealing of all pavers, Endurastone and Terre products after installation.*





# PAVER, ENDURASTONE AND TERRE

## information

Product	Range	Description	Size	Coverage	Slip Rating	Applications
	Endurastone Flamed	Standard Unit	400 L x 400 W x 20 H mm	6.25 Units per m <sup>2</sup>	Black Granite - P4 Grey Granite - P4 Silver Granite - P5	Pools*
			400 L x 400 W x 30 H mm	4 Units per m <sup>2</sup>		Pedestrian
		Bullnose Unit	600 L x 400 W x 20 H mm	4.166 Units per m <sup>2</sup>		Driveways^
			600 L x 400 W x 30 H mm	2.77 Units per m <sup>2</sup>		Indoor
	Endurastone Polished	Standard Tile	400 L x 400 W x 12 H mm	6.25 Units per m <sup>2</sup>	Black Granite - P1 Grey Granite - P1 Silver Granite - P1	Indoor**
			600 L x 300 W x 12 H mm	4 Units per m <sup>2</sup>		
			600 L x 600 W x 12 H mm	4.166 Units per m <sup>2</sup>		Walling
				2.77 Units per m <sup>2</sup>		
	Terre	Standard Unit	400 L x 400 W x 30 H mm	6.25 Units per m <sup>2</sup>	Marigold - P4	Pools*
		Bullnose Unit	600 L x 400 W x 30 H mm	4.166 Units per m <sup>2</sup>	Oryx - P4 Sinea Pearl - P4	Pedestrian Indoor*
	London	Standard Unit	230 L x 114 W x 65 H mm	37 Units per m <sup>2</sup>	Silver Sand - P5	Pools
					Brahman Granite - P5 Maple - P5, Regency Grey - P5, Chestnut - P5	Pedestrian Driveways Indoor
	Paradise	Standard Unit	230 L x 114 W x 50 H mm	37 Units per m <sup>2</sup>	Miami - P5, Tugun - P5, Kirra - P5, Burleigh - P5, Coolangatta - P5, Tweed - P5	Pools Pedestrian Driveways Indoor
	Hamlet	Standard Unit	230 L x 76 W x 65 H mm	57 Units per m <sup>2</sup>	Blue - P5 Sepia - P5 Ash - P5	Pools Pedestrian Driveways Indoor

### Slip Rating

### Applications according to Australian Standard HB198:2014

#### P5

External ramps steeper than 1:14 | Loading docks | Commercial kitchens | Swimming pool ramps and stairs

#### P4

External colonnade and walkway | Pedestrian crossings, driveways | Verandahs, Balconies | Serving areas behind bars, cold stores  
| Swimming pool surrounds | Communal shower rooms

#### P1

Entries & access areas - public buildings - DRY | Supermarket aisles (except fresh food)

\* Endurastone and Terre ranges being used as pool coping are recommended to be sealed on the top and bottom of the unit.

\*\* indicates these units are suitable for applications that are not in wet areas. ^Contact Austral Masonry regarding installation requirements







# MAINTENANCE

## *of pavers*

---

Maintaining your paved area will guarantee that it holds its good looks and natural appeal forever, ensuring added resale value to your home.

All paved areas, over time, are subject to spillages and a build up of dirt and grime. By following certain guidelines and cleaning procedures, maintaining the good look of your Austral Masonry concrete pavers need not be a problem.

### *Efflorescence*

Efflorescence is a powdery deposit of salts (usually white or yellow) and is often found on the surface of clay pavers after a period of rain. Efflorescence appears due to external sources from surrounding materials. For example, salty soils or fertilisers draw up through the pavers by the drying effect.

Prior to laying your pavers, make sure a clean bed of sand is the foundation of the paving – this will form a barrier to salts migrating to the pavers from below. Efflorescence can be removed by using either a dry brushing technique or wiping with a damp cloth making sure the salts are carried away from the pavers.

### *Organic Growths – Fungus, Mould and Moss*

Porous masonry may provide an environment for organic growth when it is continuously moist, especially in light but shady conditions and when there are plenty of nutrients available.

Clean off the growth as much as possible with a dry bristle brush. Organic growths should be treated with liquid chlorine, or common household chemicals such as Exitmould and WhiteKing or a proprietary weed killer. The solution should be left for several days and then brushed off with hot water and detergent. Repeat as necessary.



# MAINTENANCE

## *of endurastone and terre*

---

Maintaining your Endurastone and Terre will ensure its inherent beauty is preserved forever.

By following certain sealing and cleaning guidelines, you can rest assured that your Endurastone and Terre paving will look stylish for the life of your home.

### *Sealing*

Austral Masonry recommends that all Endurastone and Terre products supplied be sealed with a penetrating sealer. Sealing your Endurastone and Terre is a way to protect it from staining and to make your day to day cleaning easier.

Most stone products can stain when they absorb liquids or moisture that are allowed to remain in contact with them for extended periods of time. If you are laying your Endurastone and Terre in an area where they are likely to come in contact with liquids, a sealer should be applied to help avoid future staining.

It is always recommended to seal a test area first and seek advice from your sealer company.

Where Endurastone and Terre is being used as a pool capping, it is recommended to seal underneath the stone units to mitigate potential issues resulting from exposure to chemicals in the pool water.

### *Cleaning*

It is advised that you regularly sweep your Endurastone and Terre to minimize the amount of dirt and debris which settles on the paving and to allow your Endurastone and Terre to continue looking its best.

Depending upon water restrictions, the use of high pressure water cleaners on an annual basis will assist in maintaining your Endurastone and Terre in pristine condition.

In order to prevent staining or dirt build up, Endurastone and Terre should be rinsed regularly with warm water and a non abrasive, clear, non acidic detergent. A pH neutral cleaner is recommended. Austral Masonry does not recommend the use of acids on stone products as this can cause damage.

All spills should be wiped up immediately. Soft drinks, coffee, tea and fruit juices contain mild acids which can etch and stain the stone quite rapidly.

These should be cleaned off with a mild soap and warm water.



# HOW TO

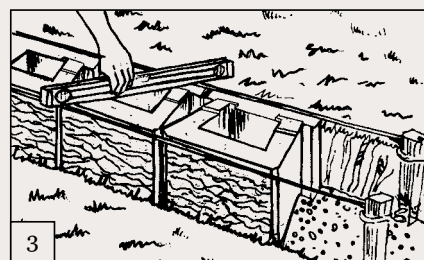
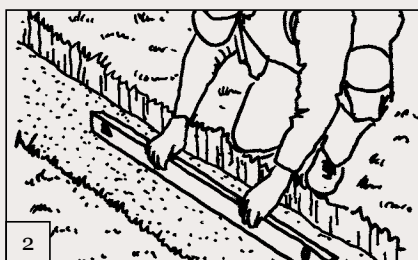
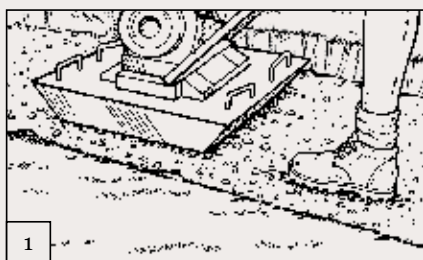
## *build retaining walls*

Austral Masonry retaining wall blocks are an ideal choice for retaining walls in gardens, other residential applications and commercial projects. The interlocking and dry stacked nature of these, makes them easy to install for the “Do It Yourself” landscaper. No matter what the project, the result is always an attractive and low maintenance retaining wall. The flexibility of the system provides tremendous scope, from edging to terraces, straight walls to curves.

***Note: Please consult with regulating council for local design requirements prior to the commencement of any retaining wall. Councils may request walls over 0.8m in height and / or where a surcharge exists (e.g. driveway, house, fence or other structure) be designed and certified by a suitably qualified consulting engineer.***

### *Your Checklist*

<input type="checkbox"/>	String line	<input type="checkbox"/>	Agriculture drain pipe
<input type="checkbox"/>	Tape measure	<input type="checkbox"/>	Pegs or stakes
<input type="checkbox"/>	Walling units	<input type="checkbox"/>	Broom
<input type="checkbox"/>	Compaction tool	<input type="checkbox"/>	Gloves & eye protection
<input type="checkbox"/>	Shovel	<input type="checkbox"/>	Mitre saw (to cut blocks if req'd)
<input type="checkbox"/>	Spirit level	<input type="checkbox"/>	10-20 mm crushed stone
<input type="checkbox"/>	Wheel barrow	<input type="checkbox"/>	Crushed rock (for base)



*Step 1: Permits*

**Check with your local council to ensure all local Building Codes are complied with.**

*Step 2: Foundation*

The foundation material shall be compacted by several passes of a mechanical plate vibrator. Where there are significant variations of foundation material or compaction, soft spots, or where there is ponding of ground water, the material shall be removed, replaced and compacted in layers not exceeding 150 mm. Trenches shall be dewatered and cleaned prior to construction, such that no softened or loosened material remains.

*Step 3: Bearing Pad*

The facing shall be built on a bearing pad, not less than 150 mm thick and 300 to 600 mm wide, consisting of one of the following options:

- Compacted road base
- Compacted crushed rock, well-graded and of low plasticity (without clay content), compacted by a plate vibrator;
- Cement-stabilized crushed rock, with an additional 5% by mass of cement thoroughly mixed, moistened and compacted by a plate vibrator; or
- Lean-mix concrete with a compressive strength of not less than 15 MPa.

*Step 4: First Course*

Spread 25mm of crusher dust with an additional 5% by mass of cement over the compacted base. The first course is now bedded into the crusher dust. The use of a level and string line is recommended to ensure the first course is laid correctly. Ensure each block is also well filled with free-draining material (eg. crushed rock aggregate / blue metal). For walls up to 1 metre high, make sure at least 100mm of the first-course blocks are buried below the finished ground level. Allow 200 mm for walls over 1 metre high and up to 3 metres high. These walls will need to be engineered.

*Step 5: Drainage and Back Fill*

Place 100 mm diameter agricultural pipe with geotextile sock behind the wall, with a 1 in 100 fall. Backfill behind the courses of blocks to a width of 300 mm using 10-20 mm free draining material (eg. crushed rock aggregate / blue metal). Ensure each block is also well filled with free-draining material.

Backfill behind the drainage layer with selected backfill material in a maximum of 200mm layers. Compaction rate of 95% must be achieved (use only hand operated plate compactors within 1 metre from the back of the wall). Do not use expansive clays to backfill. Be careful not to mechanically compact too close to the wall.

*Step 6: Laying Additional Courses*

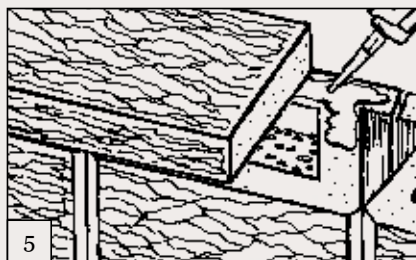
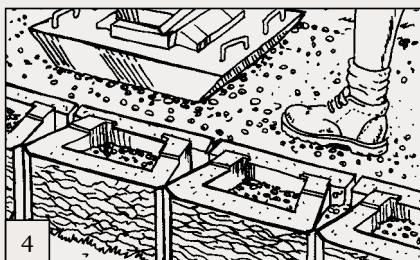
Clean any debris from the top of the wall to ensure the next block sits perfectly. Ensure each block is filled with free draining material, and place next course on top. Place the drainage material behind the blocks to 300 mm. Stack units, placing drainage aggregate and compact backfill for each block layer until the wall is complete. *For Heron and Hayman walls it is recommended that you break 20-30% of the back 'wings' off to allow backfill material to lock into the block wall.*

*Step 7: Capping Units*

Once backfilling and cleaning is completed as per Step 5 and Step 6 fix the purpose made Capping Blocks with a flexible adhesive.

*Step 8: Maximum Wall Height*

This information should be viewed as a guide only. The particular circumstances of retaining wall projects vary significantly in ways that often dictate the use of particular materials and techniques to address challenges presented by those circumstances. Austral Masonry recommends you to ensure that you obtain appropriate professional advice tailored to your circumstances before commencing retaining wall projects.





# RETAINING WALL

## *information*

Product	Range	Description	Max Wall Height^	Size	Weight	Coverage	Applications
	Heron	Standard Unit	1,200 mm* 3m with engineering	390 L x 245 W x 198 H mm	24 kg	13 Blocks per m²	Curved Walls, Straight Walls, Corners, Steps
	Heron	Corner Block	1,200 mm* 3m with engineering	160 L x 360 W x 198 H mm	20 kg	Available in left or right	Curved Walls, Straight Walls, Corners, Steps
	Heron	End Block	1,200 mm* 3m with engineering	160 L x 245 W x 198 H mm	18 kg	Available in left or right	Curved Walls, Straight Walls, Corners, Steps
	Heron	Capping Unit	1,200 mm* 3m with engineering	390 L x 245 W x 75 H mm	14 kg	2.56 Blocks per lineal metre	Curved Walls, Straight Walls, Corners, Steps
	Moreton	Standard Unit	1200 mm	390 L x 200 W x 200 H mm	18.5 kg	13 Blocks per m²	Curved Walls, Straight Walls, Steps
	Moreton	Capping Unit	1200 mm	390 L x 200 W x 200 H mm	22 kg	-	Curved Walls, Straight Walls, Steps
	Hayman	Standard Unit	1,200 mm* 3m with engineering	390 L x 245 W x 198 H mm	24 kg	13 Blocks per m²	Curved Walls, Straight Walls, Corners, Steps
	Hayman	Universal Corner	1,200 mm* 3m with engineering	160 L x 360 W x 198 H mm	17.2 kg	Universal - can be used for left and right corners	Curved Walls, Straight Walls, Corners, Steps
	Hayman	Capping Unit	1,200 mm* 3m with engineering	390 L x 245 W x 90 H mm	16 kg	2.56 Blocks per lineal metre	Curved Walls, Straight Walls, Corners, Steps
	Bribie	Standard Unit	480 mm	190 L x 100 W x 120 H mm	4.5 kg	5.25 per lineal metre	Curved Walls, Straight Walls

Product	Range	Description	Max Wall Height <sup>^</sup>	Size	Weight	Coverage	Applications
	Keystone	Standard Unit	1200mm**	457L x 305W x 203H	36kg	11 Blocks per m <sup>2</sup>	Curved Walls, Straight Walls, Corners, Steps
	Keystone	Flushface Unit	-	457L x 305W x 203H	36kg	11 Blocks per m <sup>2</sup>	Corners
	Keystone	Capping Unit	-	460L x 305W x 100H	30.8kg	2.2 per lineal metre	Curved Walls, Straight Walls, Corners
	Keystone	Flushface Straight Side Cap	-	460L x 305W x 100H	30.8kg	2.2 per lineal metre	Curved Walls, Straight Walls, Corners
	Keystone	Corner Unit 90°	-	460L x 230W x 200H	36kg	N/A	Curved Walls, Straight Walls, Corners
	Grandwall	Wall Block	810mm*	390L x 245W x 162H	17.5kg	16 Blocks per m <sup>2</sup>	Curved Walls, Straight Walls, Corners, Steps
	Grandwall	Corner Block	-	340L x 140W x 162H	20kg	N/A	Curved Walls, Straight Walls, Corners, Steps
	Grandwall	Capping Unit	-	195L x 245W x 65H	6kg	2.56 Blocks per lineal metre	Curved Walls, Straight Walls, Corners, Steps

<sup>^</sup>Maximum wall heights in good soils (gravels, sandy gravels, crushed sandstone).

\* Heron, Grandwall and Hayman can be built up to 3m when designed by a qualified engineer and combined with soil reinforcement or No Fines concrete.

\*\* Keystone can be built up to 12m high when designed by a qualified engineer and combined with soil reinforcement.

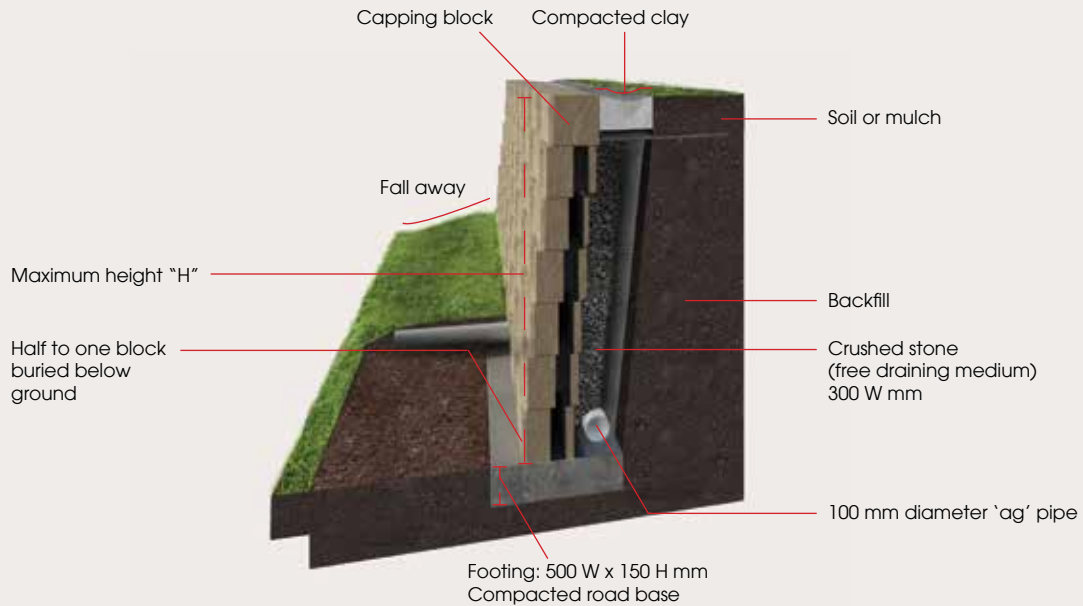
Please contact your Austral Masonry representative for more information.



# RETAINING WALL

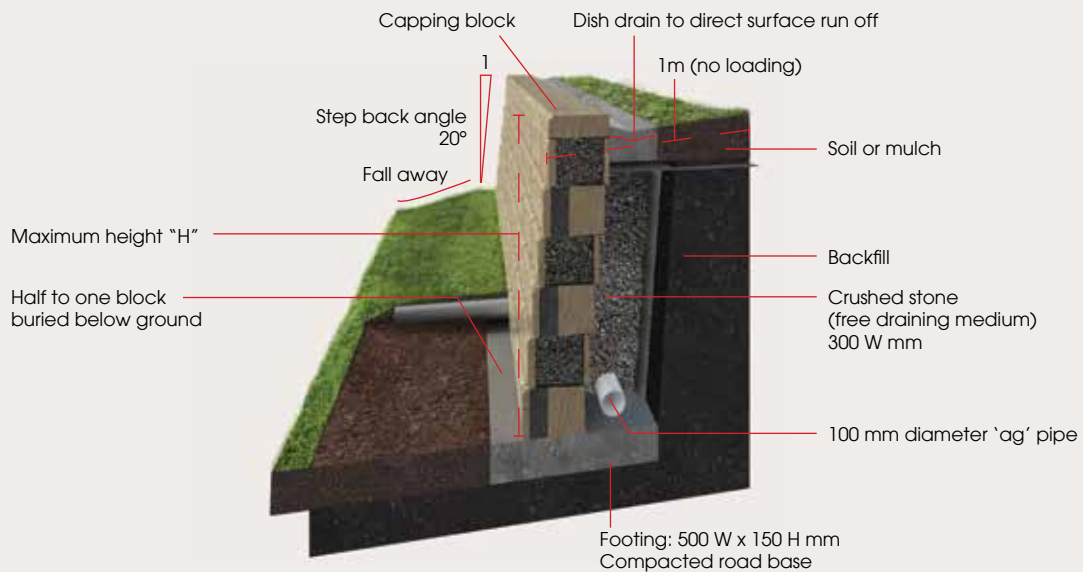
## *cross sections*

### *Moreton*



Please Note: Backfill should be no higher than the top of the retaining wall.

### *Heron / Hayman*

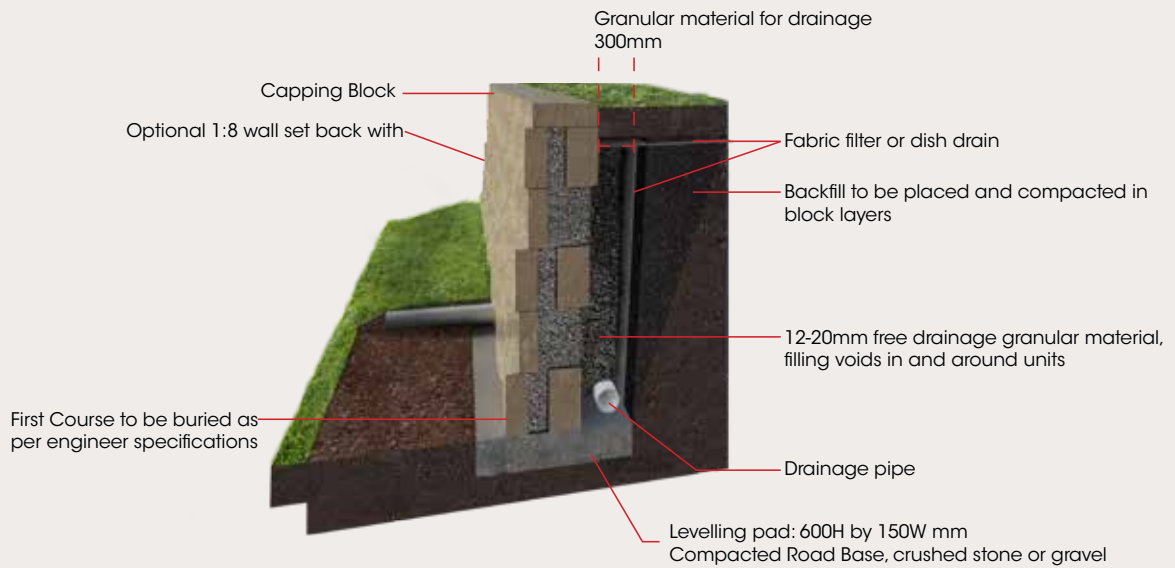


\* Heron and Hayman can be built up to 3m when designed by a suitably qualified engineer and combined with soil reinforcement or no fines concrete. Contact your local Austral Masonry representative for more information.

# RETAINING WALL

## *cross sections*

### *Keystone*



\* Keystone can be built up to 15m when designed by a suitably qualified engineer and combined with soil reinforcement or no fines concrete. Contact your local Austral Masonry representative for more information.





# WE ARE

## *Brickworks*

Brickworks Building Products is one of Australia's largest and most diverse building material manufacturers. Under the Brickworks Building Products umbrella are some of Australia's best known building materials brands. Our products include bricks, pavers, masonry blocks, retaining wall systems, precast concrete panels, concrete and ceramic roof tiles, timber products, terracotta façades and specialised building systems.

With a broad product portfolio and manufacturing and sales facilities across Australia, Brickworks Building Products is uniquely placed to service the demands of the building industry.

With over 1,200 staff across Australia and New Zealand, we pride ourselves on our commitment to product, service excellence and our leadership position.

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Pronto Panel™





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## DESIGN CENTRES

### Gympie

Cnr Woondum Rd  
and Bruce Highway  
Gympie QLD 4570

### Ormeau

184 Burnside Rd  
Yatala QLD 4208

### Rosedale

105 Gardner Rd  
Rosedale QLD 4122

### Caloundra

14 Daniel St  
Caloundra QLD 4551

## DESIGN CENTRES

### Brisbane

27 James St, Fortitude  
Valley QLD 4006

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BUILDING PRODUCTS

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Austral Masonry is part of the Brickworks Group

The product images shown in this brochure give a general indication of product colour for your preliminary selection. Austral Masonry recommends all customers see actual product samples at a selection centre prior to making final selections.

**1. Stock colours.** Colours other than stock colours are made to order. Contact your nearest Austral Masonry office for your area's stock colours. A surcharge applies to orders less than the set minimum quantity. **2. Colour and texture variation.** The supply of raw materials can vary over time. In addition, variation can occur between product types and production batches. **3.** We reserve the right to change the details in this publication without notice. **4.** For a full set of Terms & Conditions of Sale please contact your nearest Austral Masonry sales office. **5. Important Notice.** Please consult with your local council for design regulations prior to the construction of your wall. Councils in general require those walls over 0.5m in height and/or where there is loading such as a car or house near the wall be designed and certified by a suitably qualified engineer. **6. Max wall heights disclaimer.** The gravity wall heights are maximum heights calculated in accordance with CMAA MA-53 Appendix D guidelines and a qualified engineer should confirm the suitability of the product for each application. As such, due consideration must be given to but not limited to: Cohesion. Dry backfill, no ingress of any water into the soil behind the retaining wall. All retaining walls are designed for zero surcharge unless noted otherwise. These walls are intended for structure Classification A walls only as defined in AS4678 Earth Retaining Structures as being where failure would result in minimal damage and/or loss of access.