

# Retaining Walls

South East Queensland



## What's inside

### 1 – Retaining Wall Blocks p<sup>05</sup>

Bribie p<sup>08</sup>

Fitzroy p<sup>10</sup>

Daydream p<sup>12</sup>

Hayman p<sup>14</sup>

Heron p<sup>16</sup>

Moreton p<sup>18</sup>

Keystone p<sup>20</sup>

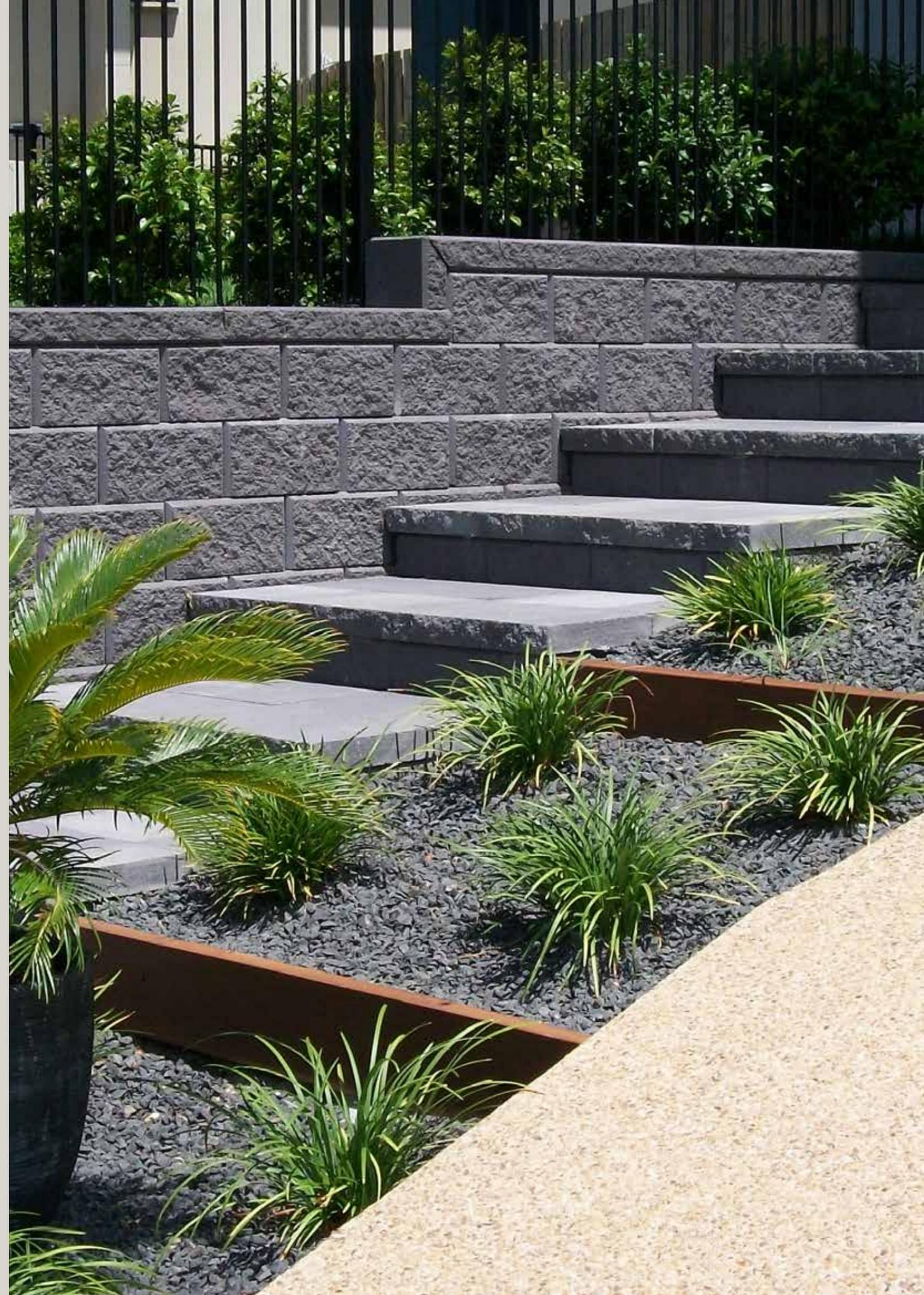
Keystone KeyMass p<sup>22</sup>

### 2 – Concrete Sleepers & Accessories p<sup>24</sup>

Explorer p<sup>26</sup>

Post and Brackets p<sup>28</sup>

### 3 – Product Details p<sup>30</sup>



A BRAND OF

**BRICKWORKS**



## Designed to last

—  
Not all landscaping products are the same. Our masonry range is designed to stand the test of time. Easy to install. Simple to care for.

**1.**

### **Affordable**

For a premium product, our concrete masonry range offers an affordable option.

**2.**

### **Low maintenance**

Minimal maintenance, maximum impact. You're guaranteed a long-lasting, tough, and easy to care for solution.

**3.**

### **All-weather resistant**

Heavy storms. Blistering heat. Sub-zero frosts. Our products are designed to hold up to anything our weather systems are capable of throwing at it.

**4.**

### **Fire resistant**

All of our products are non-combustible and highly fire resistant – making them ideal for bushfire prone areas.

**5.**

### **Termite resistant**

With no organic wood materials present in our concrete formulations, our masonry range is naturally termite resistant.

**6.**

### **Simple installation**

Easy to install and structurally robust – our products are perfect for 'do it yourself' installations.

**7.**

### **Environmentally aware**

We've designed our production processes to minimise effects on the environment ensuring they do not deplete precious natural resources.

**8.**

### **Impact resistance**

Our masonry range is also renowned for its toughness and hard-wearing properties, and can handle impacts from many external forces.

# Selecting the right product for you

Understanding which retaining wall products are best for your project can be challenging. To assist you we have compiled an overview of the key attributes for each range below.

	Range	Max Wall Height*	Applications	Best Suited to	Wall Systems	Finish	Components	Colours
	Keystone KeyMass	800mm (15m with engineering to AS 4678   25m using project specific engineer design)	<ul style="list-style-type: none"> <li>• Straight or Curved Walls</li> <li>• Steps</li> <li>• 90 Degree Corners</li> </ul>	Civil Applications	<ul style="list-style-type: none"> <li>• Gravity Walls</li> <li>• No Fines Concrete</li> <li>• Geogrid Reinforced</li> <li>• Extender Reinforced</li> </ul>	Near Vertical	<ul style="list-style-type: none"> <li>• Wall Blocks</li> <li>• Corner Unit</li> <li>• Capping Units</li> <li>• Extenders</li> </ul>	
	Keystone	800mm (15m with engineering)	<ul style="list-style-type: none"> <li>• Straight or Curved Walls</li> <li>• Steps</li> <li>• 90 Degree Corners</li> </ul>	Civil Applications	<ul style="list-style-type: none"> <li>• Gravity Walls</li> <li>• No Fines Concrete</li> <li>• Geogrid Reinforced</li> </ul>	Near Vertical	<ul style="list-style-type: none"> <li>• Wall Blocks</li> <li>• Corner Unit</li> <li>• Capping Units</li> </ul>	
	Explorer	800mm (3m with engineering)	<ul style="list-style-type: none"> <li>• Straight or Curved Walls</li> <li>• Steps</li> <li>• 90 Degree Corners</li> </ul>	DIY or Civil Applications	<ul style="list-style-type: none"> <li>• Cantilevered Walls</li> </ul>	Vertical	<ul style="list-style-type: none"> <li>• Sleepers</li> <li>• Posts</li> </ul>	
	Heron	800mm (3m with engineering)	<ul style="list-style-type: none"> <li>• Straight or Curved Walls</li> <li>• Steps</li> <li>• 90 Degree Corners</li> </ul>	DIY or Civil Applications	<ul style="list-style-type: none"> <li>• Gravity Walls</li> <li>• No Fines Concrete</li> <li>• Geogrid Reinforced</li> </ul>	Near Vertical	<ul style="list-style-type: none"> <li>• Wall Block</li> <li>• Corner Unit</li> <li>• Capping Unit</li> </ul>	
	Hayman	800mm (3m with engineering)	<ul style="list-style-type: none"> <li>• Straight or Curved Walls</li> <li>• Steps</li> <li>• 90 Degree Corners</li> </ul>	DIY or Civil Applications	<ul style="list-style-type: none"> <li>• Gravity Walls</li> <li>• No Fines Concrete</li> <li>• Geogrid Reinforced</li> </ul>	Near Vertical	<ul style="list-style-type: none"> <li>• Wall Block</li> <li>• Corner Unit</li> <li>• Capping Unit</li> </ul>	
	Moreton	800mm	<ul style="list-style-type: none"> <li>• Straight or Curved Walls</li> <li>• Steps</li> </ul>	DIY Applications	<ul style="list-style-type: none"> <li>• Gravity Walls</li> </ul>	Set back	<ul style="list-style-type: none"> <li>• Wall Block</li> <li>• Capping Unit</li> </ul>	
	Daydream	600mm	<ul style="list-style-type: none"> <li>• Straight or Curved Walls</li> <li>• Steps</li> </ul>	DIY Applications	<ul style="list-style-type: none"> <li>• Gravity Walls</li> </ul>	30mm set back	<ul style="list-style-type: none"> <li>• Wall Block</li> </ul>	
	Fitzroy	600mm	<ul style="list-style-type: none"> <li>• Straight or Curved Walls</li> <li>• Steps</li> </ul>	DIY Applications	<ul style="list-style-type: none"> <li>• Gravity Walls</li> </ul>	40mm set back	<ul style="list-style-type: none"> <li>• Wall Block</li> </ul>	
	Bribie	360mm	<ul style="list-style-type: none"> <li>• Garden Edging</li> </ul>	DIY Applications	<ul style="list-style-type: none"> <li>• Garden Edging</li> </ul>	Set back	<ul style="list-style-type: none"> <li>• Wall Block</li> </ul>	

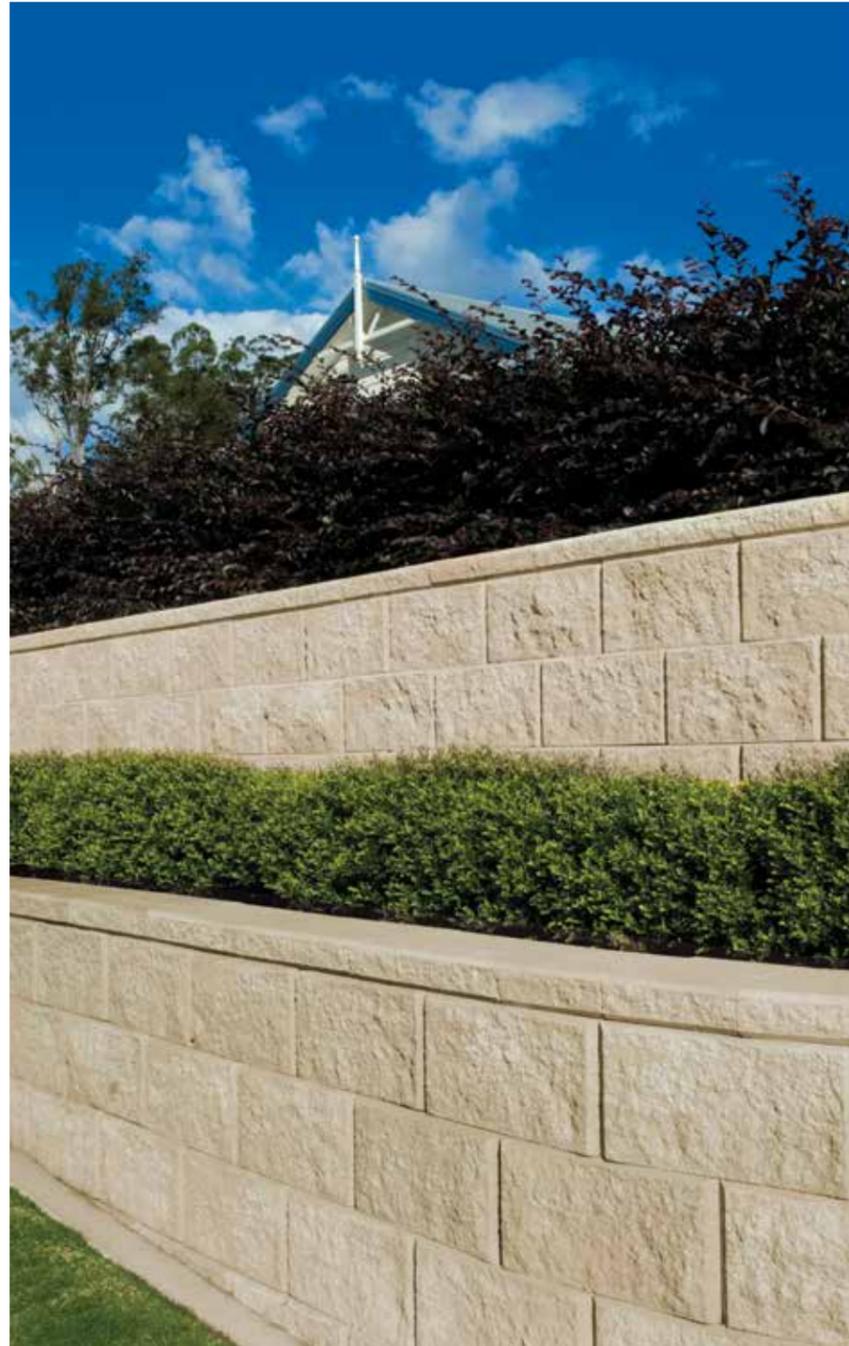
Wall heights shown are for gravity walls and assume good soil conditions and 2.5kPa loading behind wall.

For walls outside these parameters, refer to Austral Masonry Installation guidelines for preliminary design charts.

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.

## Retaining Wall Blocks

–



- Bribie
- Fitzroy
- Daydream
- Hayman
- Heron
- Moreton
- Keystone
- Keystone KeyMass

7



## Bribie

Light weight but sturdy, Bribie masonry blocks combine a rugged textured surface with classic cut edges for visual appeal.

<b>Applications</b>	Straight Walls   Curved Walls
<b>Max Height</b>	360mm
<b>Minimum Circle</b>	18 blocks
<b>Minimum Radius</b>	450mm (to inside)

### Colours



Limestone



Sydney Blend



Charcoal

### Types

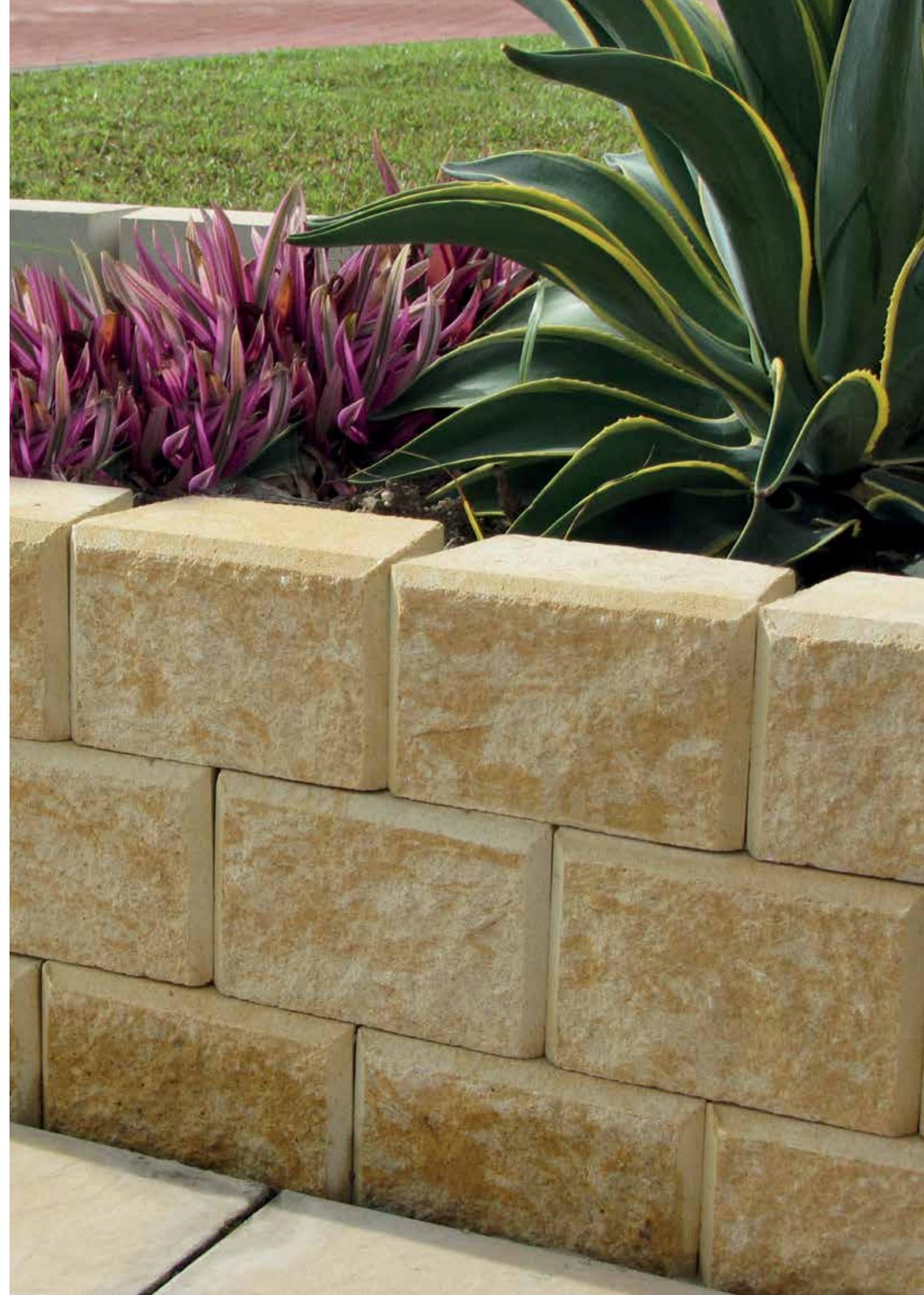


#### Standard Unit

Size: 190L x 100W x 120H mm

Weight (each): 4.5kg

Units per lineal metre: 5.25



Product - Bribie | Sydney Blend

## Fitzroy

Featuring a rustic textured finish with options to suit contemporary colour schemes, the Fitzroy range uses a mortarless interlock and is easy to install.

---

**Applications** Straight Walls | Curved Walls | Corners | Steps

---

**Max Height** 600mm (1.6m when engineered)

---

Please note: Queensland council guidelines require all retaining walls over 800mm are engineer designed.

### Colours



Beach



Charcoal



Sandstone

### Types



#### Standard Unit

---

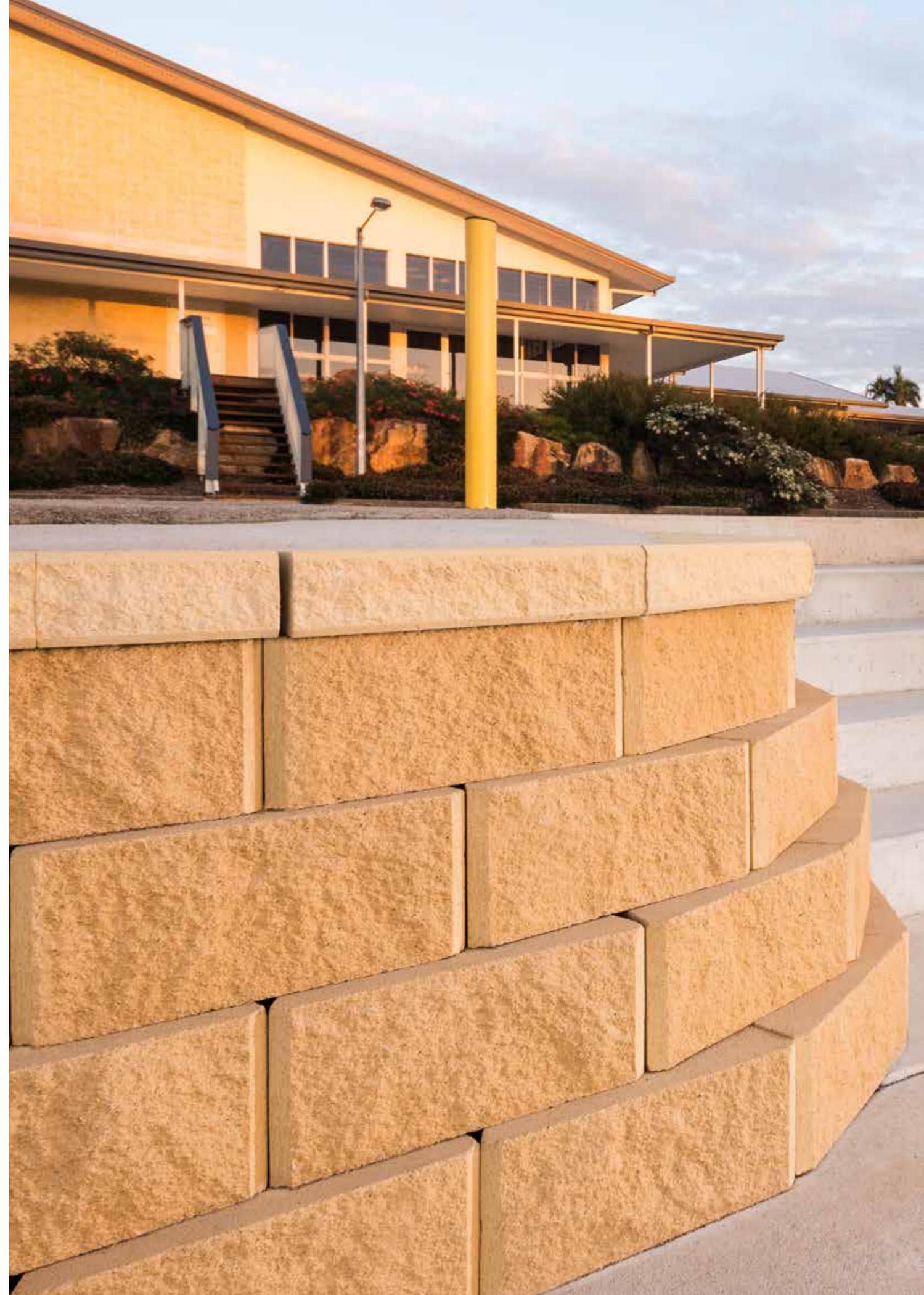
Size: 375L x 210W x 180H mm

---

Weight (each): 19.23kg

---

Face Area: 14 units per m<sup>2</sup>



Product - Fitzroy | Beach

## Daydream

Simple design, mortarless interlock, and manageable weight means you can lay Daydream yourself and enjoy a retaining wall which is virtually maintenance free.

---

**Applications**    Straight Walls | Curved Walls | Corners | Steps

---

**Max Height**    600mm (1.5m when engineered)

---

Please note: Queensland council guidelines require all retaining walls over 800mm are engineer designed.

### Colours



Beach



Charcoal



Sandstone

### Types



#### Standard Unit

---

Size: 295L x 203W x 130H mm

---

Weight (each): 12.19kg

---

Face Area: 25 units per m<sup>2</sup>

---



## Hayman

Hayman retaining wall blocks offer a smooth finish with options to suit contemporary colour schemes.

**Applications** Straight Walls | Curved Walls | Corners | Steps

**Max Height** 800mm\* (3m when engineered)

Please note: Queensland council guidelines require all retaining walls over 800mm are engineer designed.

### Colours



Limestone



Charcoal

### Types



Standard Unit

Size: 390L x 245W x 198H mm

Weight (each): 24kg

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



Universal Corner

Size: 160L x 360W x 198H mm

Weight (each): 17.2kg

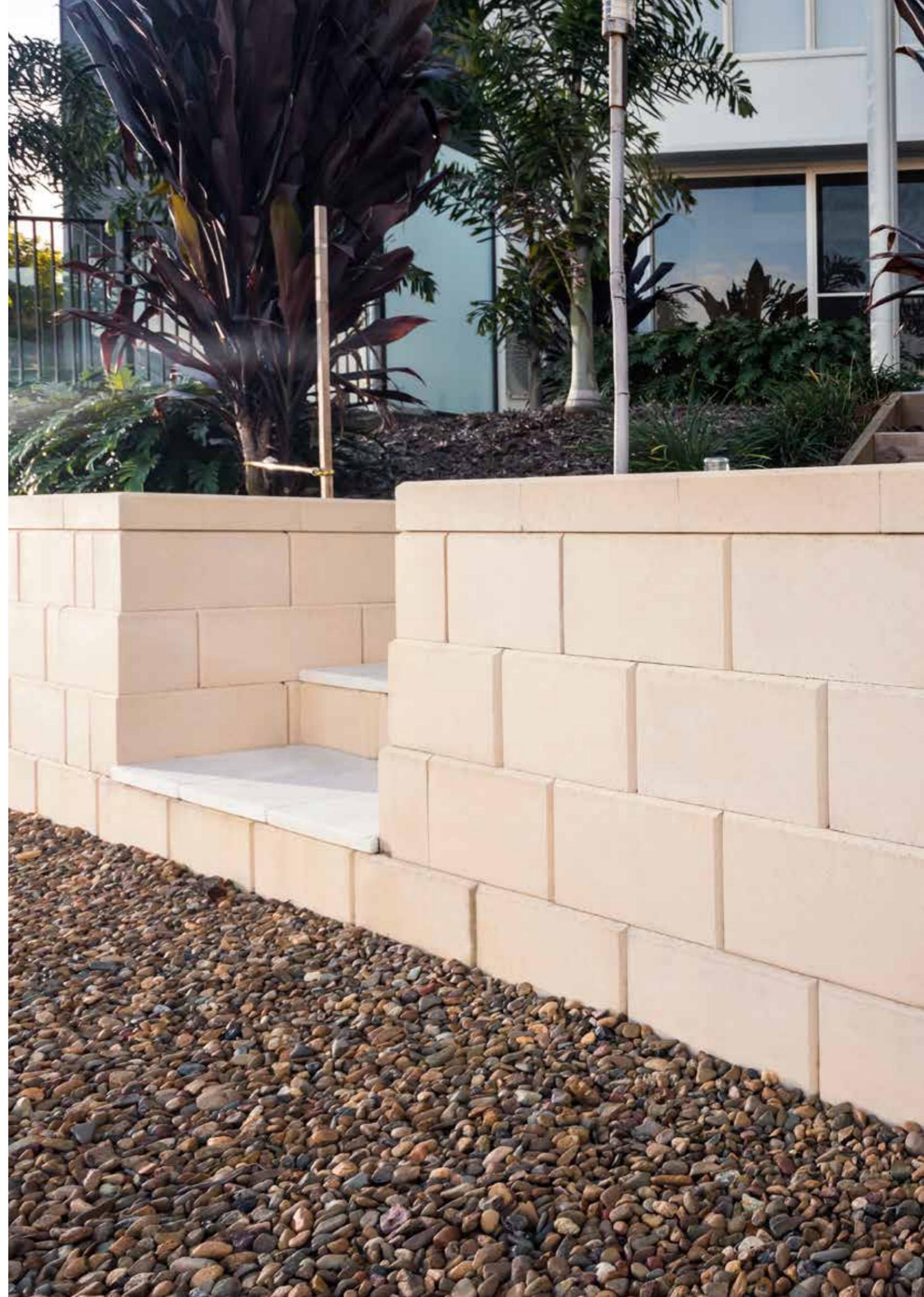


Capping Unit

Size: 390L x 245W x 90H mm

Weight (each): 16kg

Units per lineal metre: 2.56



## Heron

Heron retaining wall blocks have a colour and finish for all landscaping projects. Structurally sound and perfect for the 'do it yourself' weekend warrior, Heron blocks require no mortar and are virtually maintenance free.

**Applications** Straight Walls | Curved Walls | Corners | Steps

**Max Height** 800mm\* (3m when engineered)

**Minimum Radius** Approx 1,200mm

Please note: Queensland council guidelines require all retaining walls over 800mm are engineer designed.

### Colours



Limestone



Sandstone



Brisbane Blend



Sydney Blend



Charcoal

### Types



Standard Unit

Size: 390L x 245W x 198H mm

Weight (each): 24kg

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



Corner Block

Size: 160L x 360W x 198H mm

Weight (each): 20kg

Available in right and left (right shown)

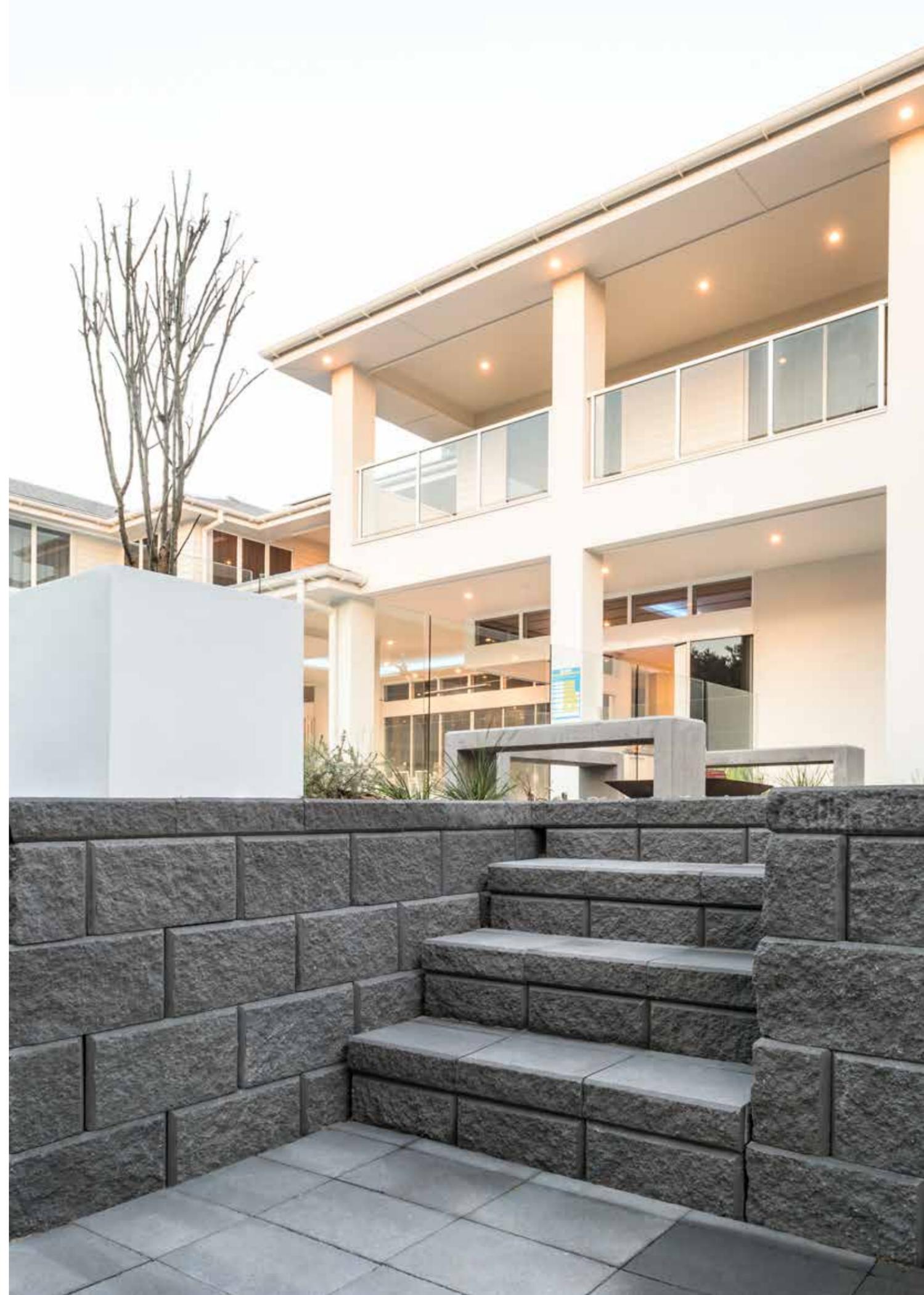


Capping Unit

Size: 390L x 245W x 90H mm

Weight (each): 16kg

Units per lineal metre: 2.56



Product - Heron | Charcoal

## Moreton

With natural colours and a split face finish, Moreton retaining wall blocks will complement any landscape with a unique and timeless appeal.

**Applications** Straight Walls | Curved Walls | Steps

**Max Height** 800mm

Please note: Queensland council guidelines require all retaining walls over 800mm are engineer designed.

### Colours



Limestone



Sydney Blend



Charcoal

### Types



Standard Unit

Size: 390L x 200W x 200H mm

Weight (each): 18.5kg

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



Capping Block

Size: 390L x 200W x 200H mm

Weight (each): 22kg

Units per lineal metre: 2.56



## Keystone

The Keystone retaining wall system is robust, 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 to engineered walls up to 15m in height.

**Applications** Straight Walls | Curved Walls | Corners | Steps

**Max Height** 800mm\* (15m when engineered)

\*When using front pin holes to secure units and there are no surcharge loads behind the wall. Please check with your local council in regards to engineering requirements.

### Colours



Dune



Natural



Charcoal

### Types



Standard Unit

Size: 457L x 305W x 203H mm

Weight (each): 34kg

Face Area: 11 units per m<sup>2</sup>



Flushface Unit

Size: 457L x 305W x 203H mm

Weight (each): 38kg

Face Area: 11 units per m<sup>2</sup>



Flushface Unit

Size: 460L x 305W x 100H mm

Weight (each): 22kg

Units per lineal metre: 2.2



Flushface Straight Side Cap

Size: 460L x 305W x 100H mm

Weight (each): 25kg

Units per lineal metre: 2.2



Corner Unit 90°\*

Size: 380L x 150W x 200H mm

Weight (each): 29kg



## Keystone KeyMass

Four times larger than our standard commercial retaining wall blocks and designed for walls up to 15m and higher, Keystone Keymass® offers a range of design and build options.

Simple to install and factory made for outstanding quality and efficiency at an affordable price.

**Applications** Straight Walls | Curved Walls | Corners

**Max Height** 800mm (15m when engineered using AS 4678 or up to 25m with a project specific engineered design)

Please note: Queensland council guidelines require all retaining walls over 800mm are engineer designed.

### Colours



Almond

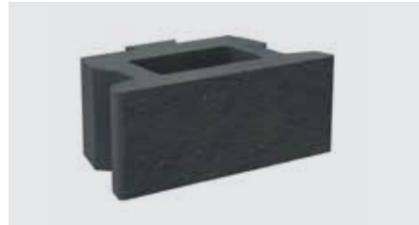


Natural



Charcoal

### Types



Standard Unit

Size: 1000L x 600W x 400H mm

Weight (each): 270kg

Face Area: 2.5 units per m<sup>2</sup>



Right Corner Unit

Size: 1000L x 487W x 400H mm

Weight (each): 287kg

Face Area: 2.5 units per m<sup>2</sup>



Left Corner Unit

Size: 1000L x 487W x 400H mm

Weight (each): 287kg

Face Area: 2.5 units per m<sup>2</sup>



Extender Unit

Size: 600L x 500W x 400H mm

Weight (each): 151kg

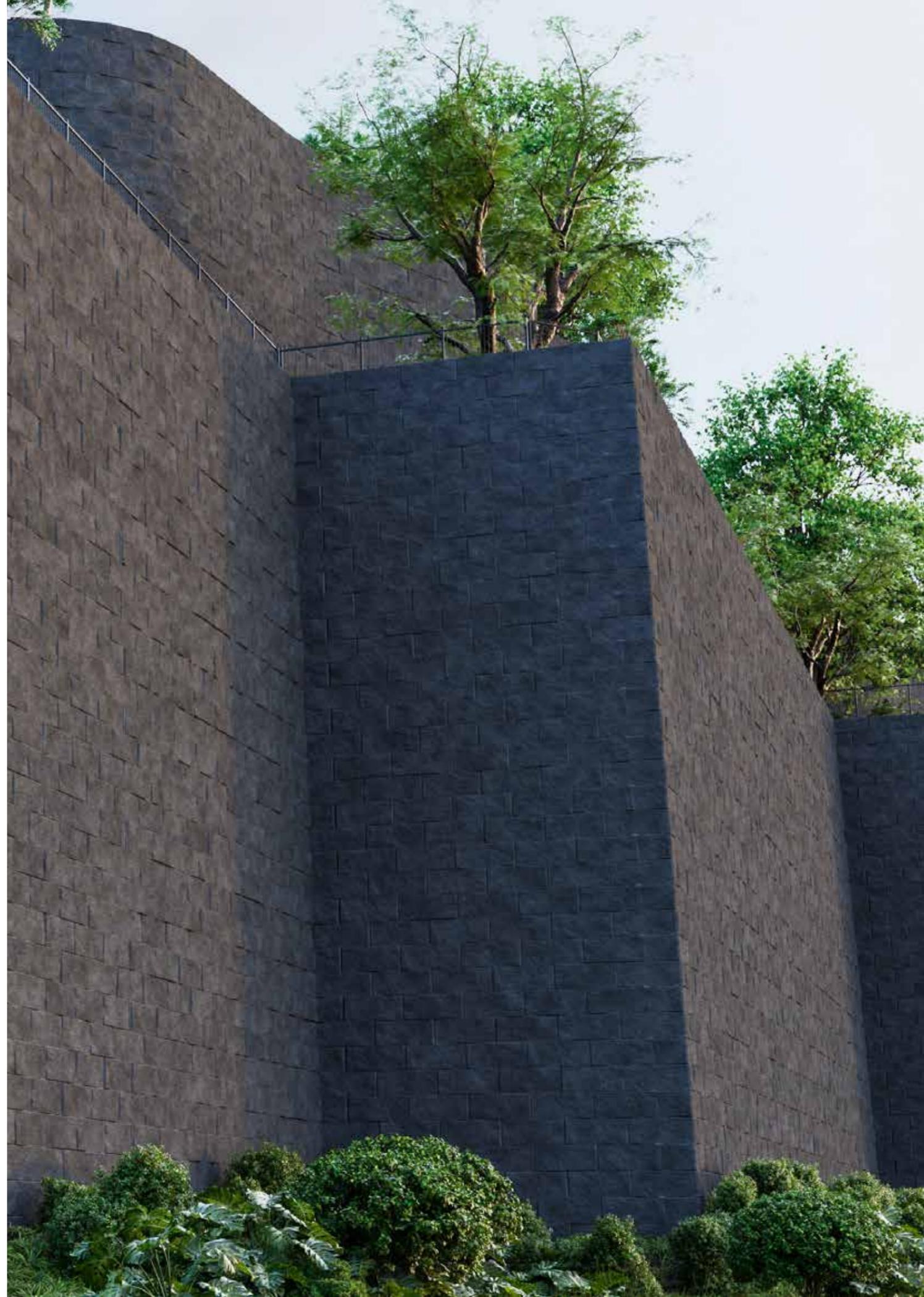


Corner Unit 90°\*

Size: 1000L x 425W x 200H mm

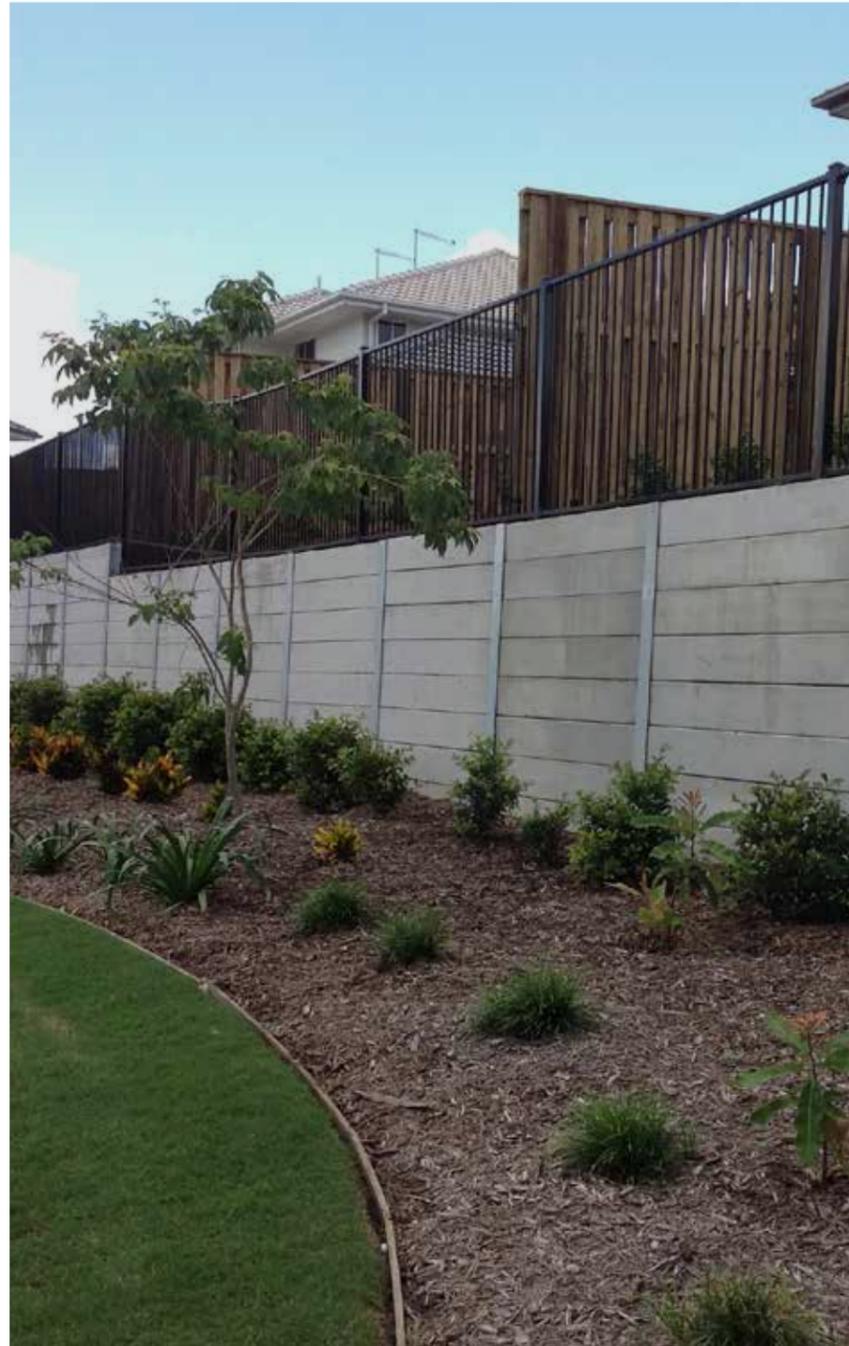
Weight (each): 168kg

Product – Keystone KeyMass | Charcoal



## Concrete Sleeper Retaining Walls & Accessories

–



– Explorer

25

# 2

24



## Explorer Concrete Sleeper Retaining Walls

Both subtle and sleek, Explorer was crafted to blend in to any project whether it be commercial or residential.

---

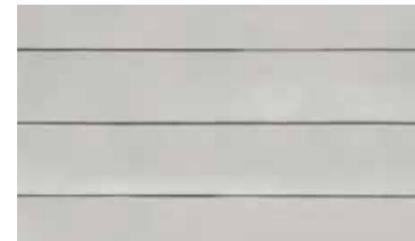
**Applications**      Straight Walls | Corners

---

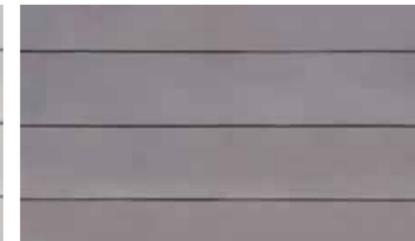
**Max Height**      800mm (3m when engineered)

---

### Colours



Grey | Smooth



Charcoal | Smooth



Natural | Sandstone



Merbau | Timberlook



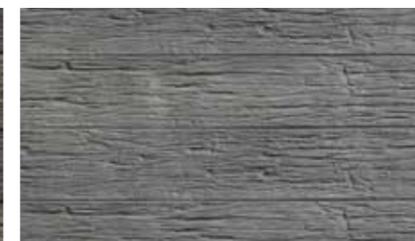
Ironbark | Timberlook



Graphite | Sandstone



Gumtree | Timberlook



Weathered Ash | Timberlook



Charcoal | Timberlook



Charcoal | Slate

## Explorer Concrete Sleeper Sizes

Each of our sleeper finishes is available in a range of sizes to suit your project and design. Please see the sizes available for each finish below.

### Sizes



Explorer 200 | 1200L

Size: 1200L x 75W x 200H mm

Weight (each): 43kg

Finishes Available: Smooth

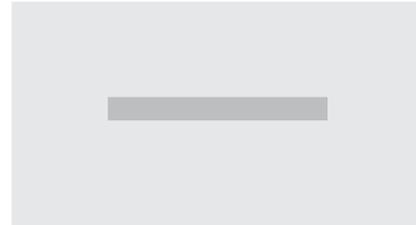


Explorer 200 | 1530L

Size: 1530L x 75W x 200H mm

Weight (each): 53kg

Finishes Available: Smooth



Explorer 200 | 1580L

Size: 1580L x 75W x 200H mm

Weight (each): 58 / 54 / 63kg

Finishes Available: Slate, Timberlook, Sandstone

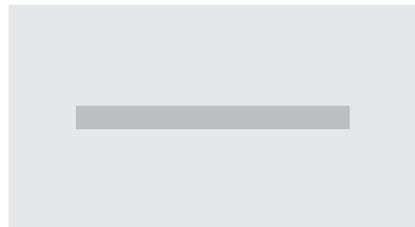


Explorer 200 | 2000L

Size: 2000L x 75W x 200H mm

Weight (each): 70.3 / 78 / 81.3kg

Finishes Available: Smooth, Timberlook, Sandstone



Explorer 200 | 2400L

Size: 2400L x 75W x 200H mm

Weight (each): 89 / 105 / 110kg

Finishes Available: Smooth, Timberlook, Sandstone

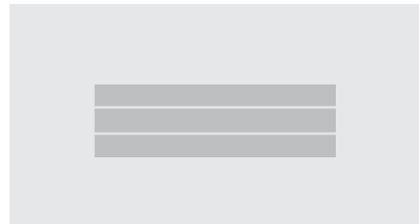


Explorer 400

Size: 2000L x 75W x 400H mm

Weight (each): 146 / 105 / 110kg

Finishes Available: Smooth, Timberlook and Sandstone



Explorer 600

Size: 2000L x 75W x 600H mm

Weight (each): 220 / 105 / 110kg

Finishes Available: Smooth, Timberlook and Sandstone



Explorer 1000

Size: 2000L x 75W x 1000H mm

Weight (each): 362 / 105 / 110kg

Finishes Available: Smooth, Timberlook and Sandstone

Please note: Products in this range are made to order.

## Explorer Post & Bracket Range

We offer an extensive range of galvanised posts and fence brackets which are designed to complement our concrete sleeper collection.

### Post Types



Joiner

Size: please see sizes in the tables below



Joiner with Deformed Bar

Size: please see sizes in the tables below



Ender

Size: please see sizes in the tables below

Post Type	Wall Height	Post Height
100UC 14.8 Joiner with deformed bar	0.6m	1.55m
	1.0m	1.95m
	1.2m	2.35m
	1.4m	2.75m
	1.6m	3.15m
	1.8m	3.55m
	2.0m	3.95m
150UC 23.4 Joiner with deformed bar	2.0m	3.95m
	2.2m	4.35m
	2.4m	4.75m
	2.6m	5.15m
100PFC Ender	0.4m	1.2m
	0.6m	1.6m
	1.0m	2.0m
	1.2m	2.4m
	1.4m	2.8m
150PFC Ender	1.6m	3.2m
	1.8m	3.6m
	2.0m	4.0m
	2.2m	4.4m
	2.4m	4.8m
	2.6m	5.2m

Post Type	Wall Height	Post Height
100UC Joiner	0.4m	1.2m
	0.6m	1.6m
	1.0m	2.0m
	1.2m	2.4m
	1.4m	2.8m
	1.6m	3.2m
	1.8m	3.6m
150UC Joiner	1.8m	3.6m
	2.0m	4.0m
	2.2m	4.4m
	2.4m	4.8m
	2.6m	5.2m



Straight Fence Brackets



Offset Fence Brackets

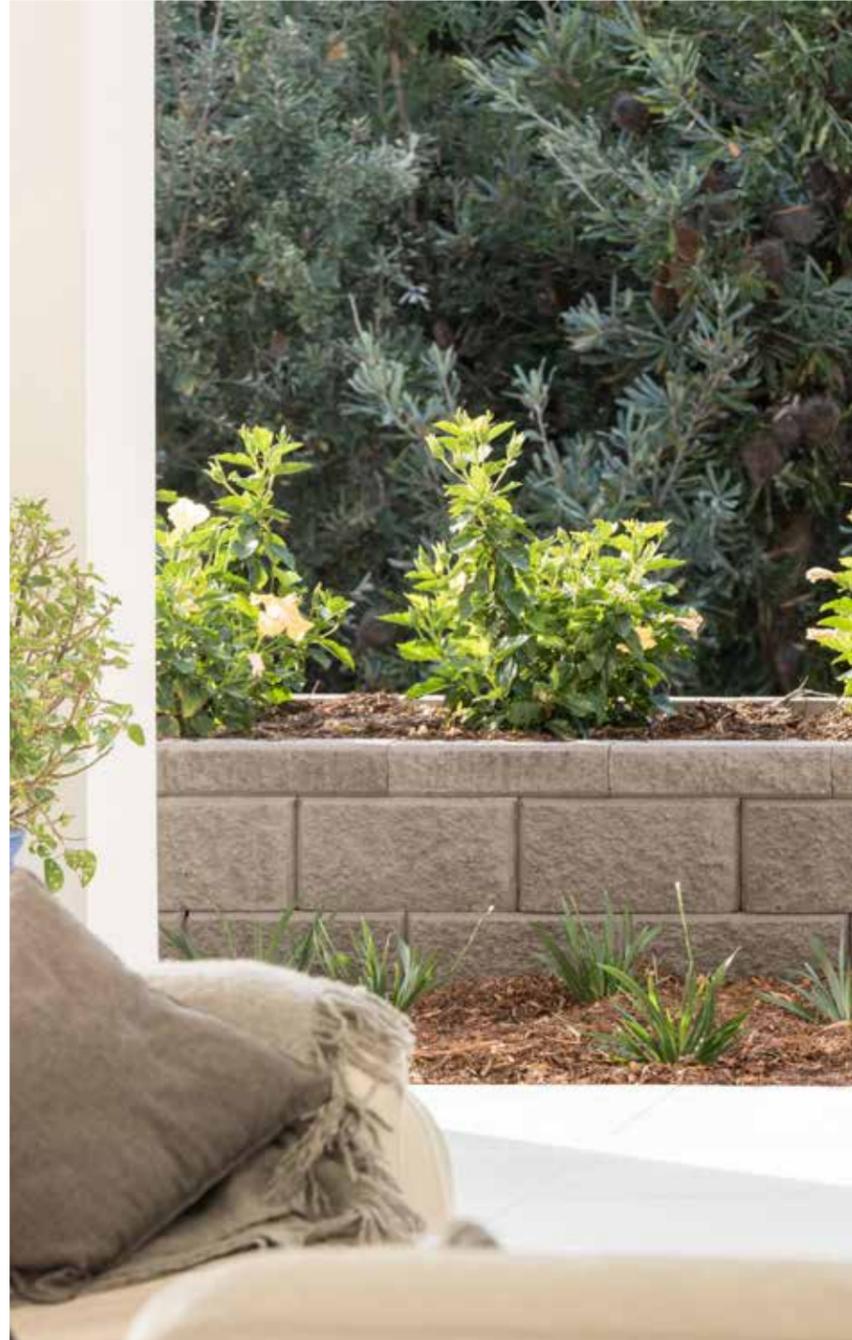
#### Straight Fence Brackets

Colorbond Fence 580L x 100W x 3T mm  
Timber Fence 580L x 100W x 6T mm

#### Offset Fence Brackets

Colorbond Fence 580L x 187W x 3T mm  
Timber Fence 580L x 187W x 6T mm

\*Please note: Fence brackets are not suitable for use in cyclonic areas. Nuts and bolts are included with each bracket.



## Product Details

—

3

# Build Segmental Block Retaining Walls

## 1.

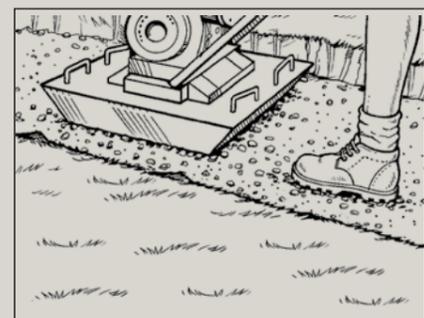
### Permits

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

## 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 150mm. Trenches shall be dewatered and cleaned prior to construction, such that no softened or loosened material remains.

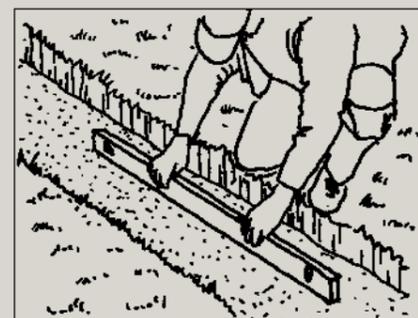


## 3.

### Levelling Pad (footing)

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

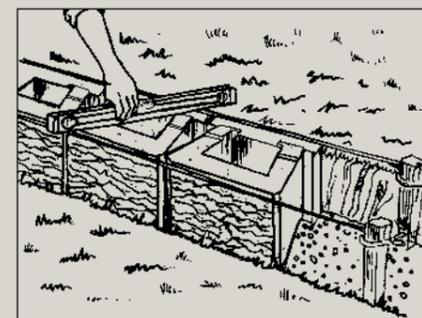
- Compacted road base
- Compacted crushed rock, well-graded and of low plasticity (without clay content), compacted by a plate vibrator;
- Cement-stabilized crushed rock, with an additional 5% by mass of cement thoroughly mixed, moistened and compacted by a plate vibrator; or
- Lean-mix concrete with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



## 4.

### First Course

Place the first course on the levelling pad and tap into place ensuring blocks are level, front to back and side to side (check with a spirit level). 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 200mm for walls over 1 metre high and up to 3 metres high. These walls will need to be engineered.



### Your Checklist

- String line
- Tape measure
- Walling units
- Compaction tool
- Shovel
- Spirit level
- Wheelbarrow
- Agriculture drain pipe
- Pegs or stakes
- Broom
- Gloves & eye protection
- Saw (to cut blocks if required)
- 10–20mm crushed stone
- Crushed rock (for base)

Austral Masonry retaining wall blocks are an ideal choice for retaining walls in gardens, a range of residential applications and commercial projects. The interlocking and dry stacked nature of these blocks 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.

## 5.

### Drainage and Back Fill

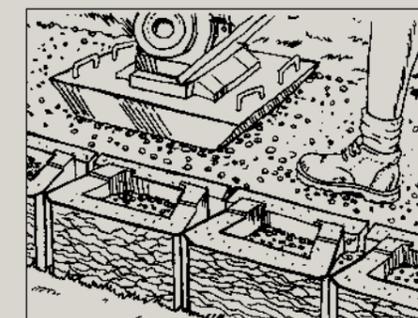
Place 100 mm diameter agricultural pipe with geotextile sock behind the wall, with a 1 in 100 fall. Backfill behind the courses of blocks to a width of 300 mm using 10-20 mm free draining material (eg. crushed rock aggregate / blue metal). Ensure each block is also well filled with free-draining material.

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.

## 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 300mm. Stack units, placing drainage aggregate and compact backfill for each block layer until the wall is complete. For Sydneystone and Hastings walls it is recommended that you break 20–30% of the back ‘wings’ off to allow backfill material to lock into the block wall. (when using no fines concrete)



## 7.

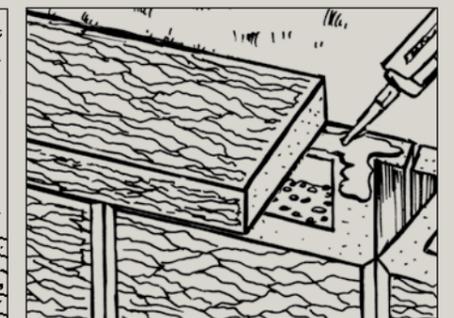
### Capping Units

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

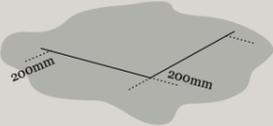
## 8.

### Maximum Wall Height

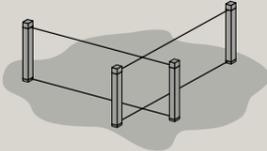
This information should be viewed as a guide only. The particular circumstances of retaining wall projects vary significantly in ways that often dictate the use of particular materials and techniques to address challenges presented by those circumstances. Austral Masonry recommends you to ensure that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



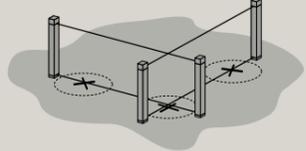
# Build Concrete Sleeper Retaining Walls



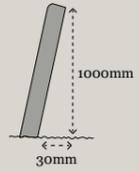
**1. Prepare the Area**  
Clear and level your site where you plan to build the retaining wall. Ensure you leave 300mm behind the retaining wall area for backfill.



**2. Alignment**  
Place a star piquet or peg at both ends of the proposed wall. Attach two string lines at each end of the wall, top and bottom, to keep your wall aligned.

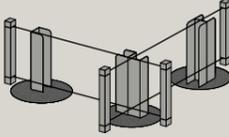


**3. Mark out Hole Positions**  
Starting from one end of the wall, mark a cross on the ground at intervals with their centre being approximately 30mm more than the length of the sleeper. For example: If you are using 1530mm sleepers the hole centres should be 1560mm apart – note, this will vary based on the length of sleeper used.



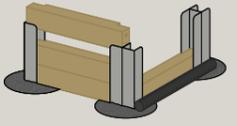
**4. Auger Holes and Pour Concrete**

- Auger holes as per your engineer's specifications as approved by council.
- Pour concrete into holes, one at a time.
- Make the concrete stiff. If using readymix concrete, order 20/20, 80 slump.
- Set your post by lowering into ground until level with the top string lines.
- Ensure there is a minimum lean back of 30mm for every 1.0m in height.

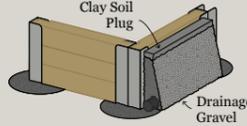


**5. Checking Posts**

- Use a spirit level to make sure all your posts are aligned with the string line and are perpendicular on the sides.
- It is also important to measure the remaining distance to the top of your steel posts, to ensure the sleepers finish flush with the top of the posts.
- If required, lay a concrete pad on both sides of the steel post.



**6. Ag Pipe and Backfill**  
Allow the concrete to cure for two to three days before you place your sleepers in. Place ag pipe at the base, then backfill with gravel to 200mm from the top.



**7. Soil Plug**  
A soil plug is then placed in, to fill the wall to the top.

## Design Details

### Concrete sleeper walls for 5kPa walls

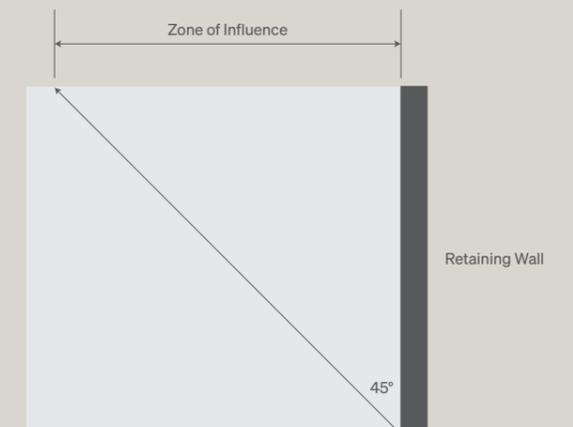
Wall Height	Sleeper Length (Max.)	Post C/C Spacing	Post Length Joiner with Deformed Bar	Post Length Joiner /Ender
0.4m	2.00m	2030mm	1.35m	1.6m
0.6m	2.00m	2030mm	1.55m	1.6m
0.8m	2.00m	2030mm	1.75m	1.8m
1.0m	2.00m	2030mm	1.95m	2.2m
1.2m	2.00m	2030mm	2.35m	2.4m
1.4m	1.53m Smooth	1560mm	2.75m	2.8m
1.6m	1.53m Smooth	1560mm	3.15m	3.2m
1.8m	1.53m Smooth	1560mm	3.55m	3.6m
2.0m	1.53m Smooth	1560mm	3.95m	4.0m
1.4m	1.58m Sandstone, Timberlook and Slate	1610mm	2.75m	2.8m
1.6m	1.58m Sandstone, Timberlook and Slate	1610mm	3.15m	3.2m
1.8m	1.58m Sandstone, Timberlook and Slate	1610mm	3.55m	3.6m
2.0m	1.58m Sandstone, Timberlook and Slate	1610mm	3.95m	4.0m

Please note: The above table does not allow for the additional loading of Colorbond fences when they are clamped to the walls using fence brackets which will require additional design criteria to be considered.

## Exclusion Zone

There must be an exclusion zone behind the wall at an angle of 45° – no structure can be placed within that exclusion zone. Zone of influence = height of the wall. Backfill must be placed and compacted in layers to not exert pressure on the wall due to consolidation over time.

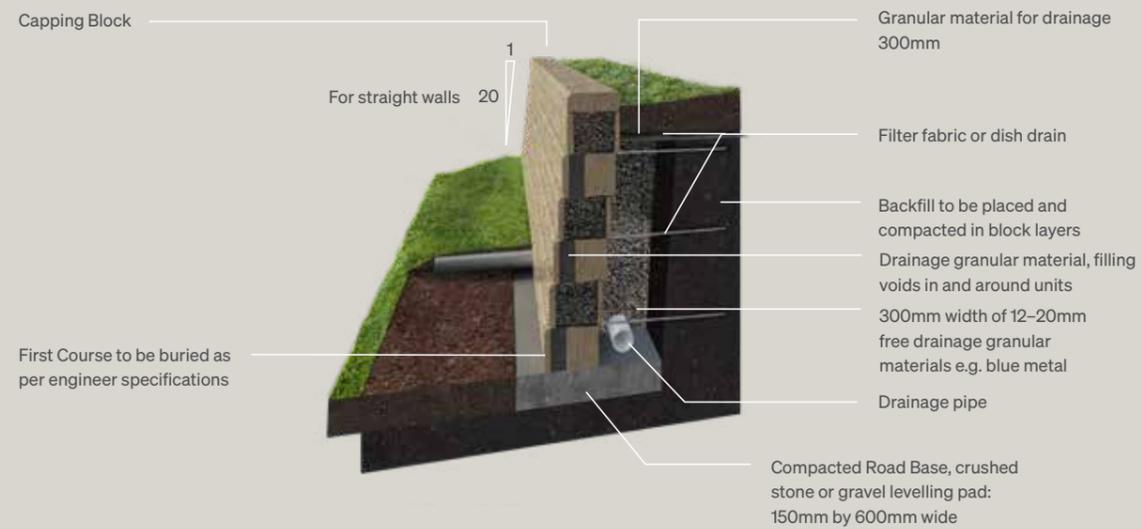
Global stability and tiered wall design is excluded and should be assessed by a qualified Geotechnical engineer.



# Retaining Wall Cross Sections

## Heron/Hayman

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



## Moreton/Fitzroy/Daydream

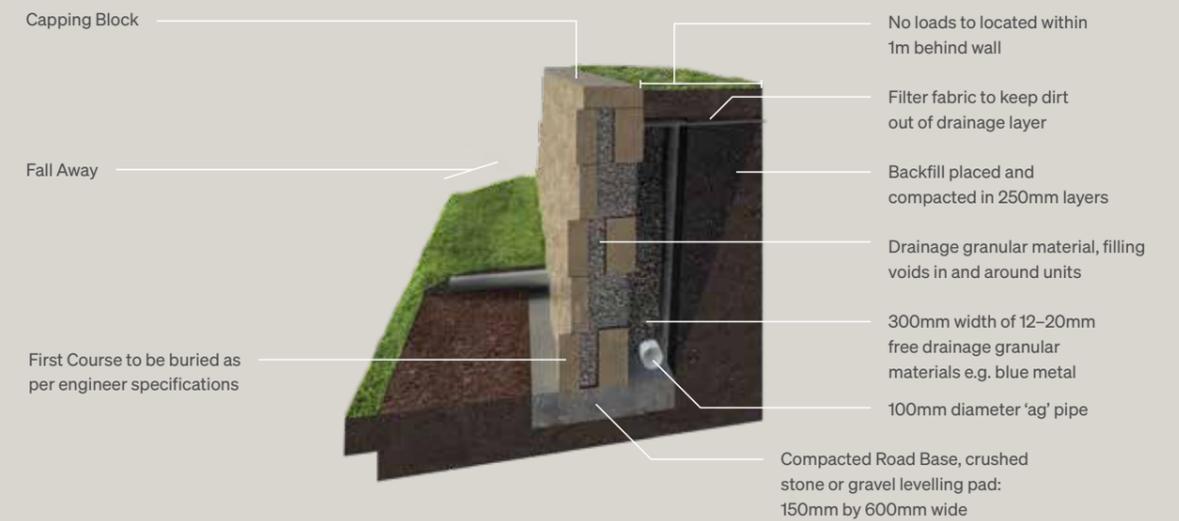
Please Note: Backfill should be no higher than the top of the retaining wall.



# Retaining Wall Cross Sections

## Keystone

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



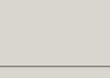
## Design Details

### Retaining Walls

Product	Range	Description	Max Wall Height	Size (mm)	Weight	Coverage	Applications
	Fitzroy	Wall Block	600mm	375L x 210W x 180H	19.23kg	14 per m <sup>2</sup>	Curved Walls, Straight Walls, Corners, Steps
	Daydream	Wall Block	600mm	295L x 203W x 130H	12.19kg	25 per m <sup>2</sup>	Curved Walls, Straight Walls, Corners, Steps
	Hayman	Wall Block	800mm*	390L x 245W x 198H	24kg	13 per m <sup>2</sup>	Curved Walls, Straight Walls, Corners, Steps
	Hayman	Corner Block	-	160L x 360W x 198H	17.2kg	N/A	Corners
	Hayman	Capping Block	-	390L x 245W x 190H	16kg	2.56 per lineal metre	Capping
	Heron	Standard Unit	800mm**	4390L x 245W x 198H	24kg	13 per m <sup>2</sup>	Curved Walls, Straight Walls, Corners, Steps
	Heron	Corner Block	-	160L x 360W x 198H	20kg	N/A	Corners
	Heron	Capping Block	-	390L x 245W x 90H	16kg	2.56 per lineal metre	Corners
	Moreton	Capping Block	-	390L x 200W x 200H	22kg	2.56 per lineal metre	Capping
	Moreton	Standard Unit	800mm	390L x 200W x 200H	18.5kg	13 per m <sup>2</sup>	Curved Walls, Straight Walls, Steps
	Keystone KeyMass	Standard Unit	800mm^	1000L x 600W x 400H	270kg	2.5 per m <sup>2</sup>	Curved Walls, Straight Walls, Corners, Steps
	Keystone KeyMass	Corner Unit	-	1000L x 487W x 400H	287kg	2.5 per m <sup>2</sup>	Corners
	Keystone KeyMass	Extender	-	600L x 500W x 400H	151kg		Reinforcement
	Keystone KeyMass	Capping Unit	-	1000L x 425W x 200H	168kg		Capping

## Design Details

### Retaining Walls

Product	Range	Description	Max Wall Height	Size (mm)	Weight	Coverage	Applications
	Keystone	Standard Unit	800mm*	455L x 305W x 200H	36kg	11 per m <sup>2</sup>	Curved Walls, Straight Walls, Corners, Steps
	Keystone	Flushface Unit	800mm*	455L x 305W x 200H	36kg	11 per m <sup>2</sup>	Curved Walls, Straight Walls, Corners, Steps
	Keystone	Capping Block	-	455L x 305W x 100H	28kg	2.2 per lineal metre	Capping
	Keystone	Flushface Straight - Side Cap	-	455L x 305W x 100H	28kg	2.2 per lineal metre	Capping
	Keystone	Corner Block	-	460L x 230W x 200H	36kg	-	Corners
	Explorer Smooth	Standard Unit	800 mm* (3m with engineering)	1200L x 200H x 75T 1530L x 200H x 75T 2000L x 200H x 75T 2400L x 200H x 75T 2000L x 400H x 75T 2000L x 600H x 75T 2000L x 1000H x 75T	43kg 53kg 70.3kg 89kg 146kg 220kg 365kg		Straight Walls, Corners, Steps
	Explorer Timberlook	Standard Unit	800 mm* (3m with engineering)	1580L x 200H x 75T 2000L x 200H x 75T 2400L x 200H x 75T 2000L x 400H x 75T 2000L x 600H x 75T 2000L x 1000H x 75T	54kg 78kg 105kg 176kg 265kg 360kg		Straight Walls, Corners, Steps
	Explorer Sandstone	Standard Unit	800 mm* (3m with engineering)	1580L x 200H x 75T 2000L x 200H x 75T 2400L x 200H x 75T 2000L x 400H x 75T 2000L x 600H x 75T 2000L x 1000H x 75T	63kg 81.3kg 110kg 176kg 265kg 360kg		Straight Walls, Corners, Steps
	Explorer Slate	Standard Unit	800 mm* (3m with engineering)	1580L x 200H x 75T	58kg		Straight Walls, Corners, Steps

Please note that Queensland council guidelines require that all retaining walls above 800mm be designed by an engineer. Max Wall Heights noted are in good soils (gravels, sandy gravels, crushed sandstone).

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

^ Max wall height noted applies when using interlocking pins in the front pin holes to secure units. Keystone can be built up to 15m high when designed by a suitably qualified engineer and combined with soil reinforcement. KeyMass can be built to 15m with

## Ideas for Inspiration

Whatever your ideas, your local Brickworks Design Centres and Studios have the products to turn them into reality.



**Bricks and Advanced Brick Systems**  
We offer Australia's largest collection of bricks, with an extensive range of colours and finishes. Our advanced brick systems offer a brick finish with increased speed and ease of installation.



**Blocks and Breeze Blocks**  
Our block and breeze blocks are available in an extensive range of colours, sizes, and finishes designed to complement modern architectural designs.



**Roofing**  
Explore our concrete, terracotta and solar roofing selection. Practical and clean-lined, our roofing products are designed to add style to your project whether residential or commercial.



**Pavers**  
We offer a vast paving range which includes a range of styles, colours and finishes to suit modern landscape designs.



**Natural Stone**  
Our Granite, Marble, Limestone and Porcelain flooring products are crafted to complement inspired outdoor spaces.



**Retaining Wall Blocks and Concrete Sleepers**  
Our retaining wall range offers options to suit DIY, general landscaping or large scale commercial retaining wall applications.



**Wall Cladding**  
We offer a collection of ceramic, terracotta and natural stone wall cladding products crafted to suit residential and commercial applications.



**Limestone Blocks\***  
The limestone block range is sourced through quarries in Western Australia.



**Mortar and Accessories**  
From preblended mortar, to concrete sealers and mortar additives, we offer a host of installation accessories.

\* These products are stocked in selected locations.



# Get in touch

—  
For more information, advice and samples get in touch with the Austral Masonry team.

Visit. [australmasonry.com.au](http://australmasonry.com.au)

Call. 1300 Masonry

---

#### Design Centres and Studios

#### Rochedale

Tel. 07 3347 2111  
105 Gardner Road  
Rochedale QLD 4122

#### Toowoomba

Tel. 07 4632 6377  
29 Mort St  
Toowoomba QLD 4350

#### Sunshine Coast

Tel. 07 5293 5001  
200 Nicklin Way  
Warana QLD 4575

#### Brisbane

Tel. 07 3634 5604  
27 James Street  
Fortitude Valley QLD 4006

---

#### Follow Us



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.

Visit. [australmasonry.com.au](http://australmasonry.com.au)

Call. 1300 Masonry

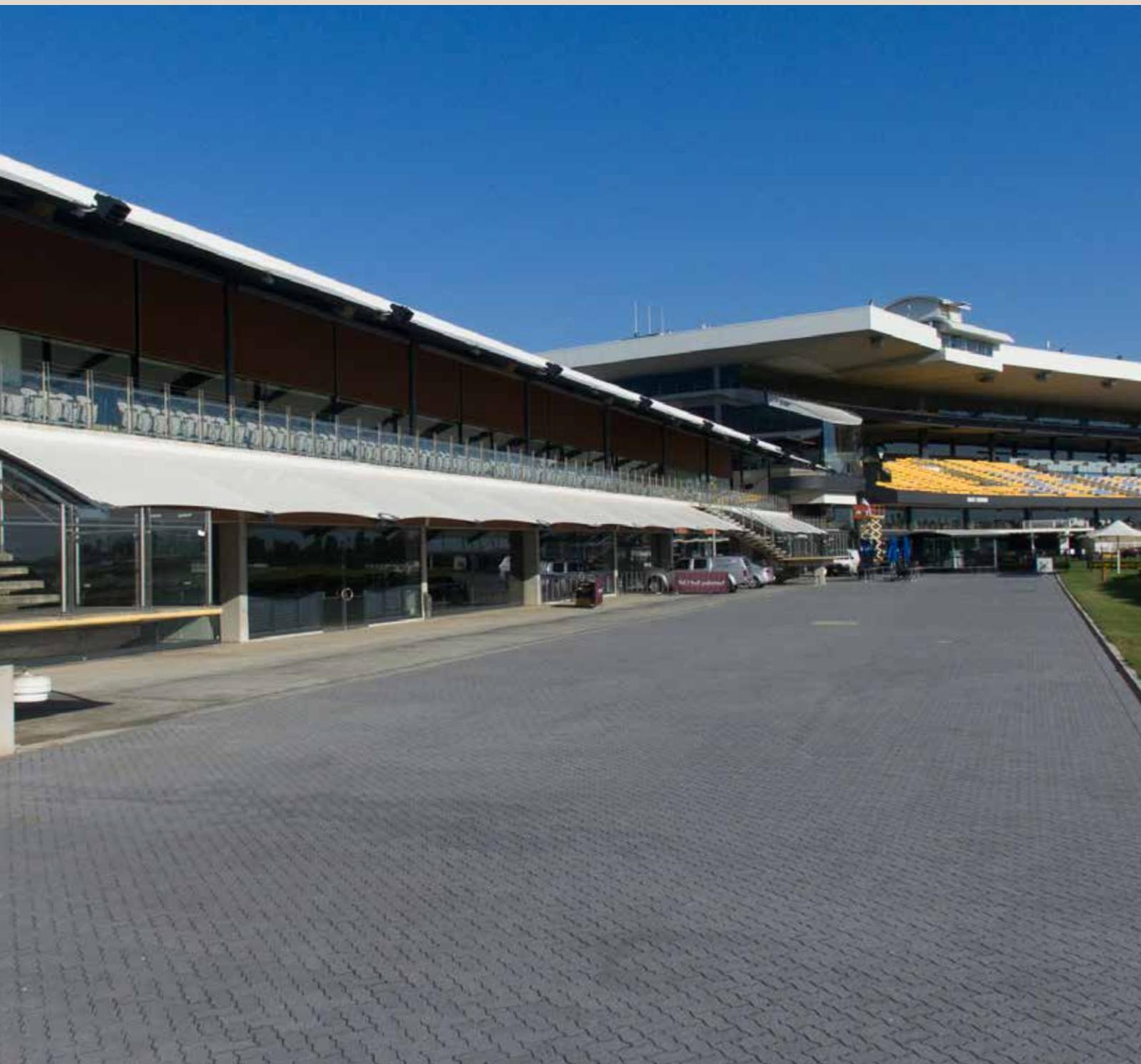
A BRAND OF

**BRICKWORKS**



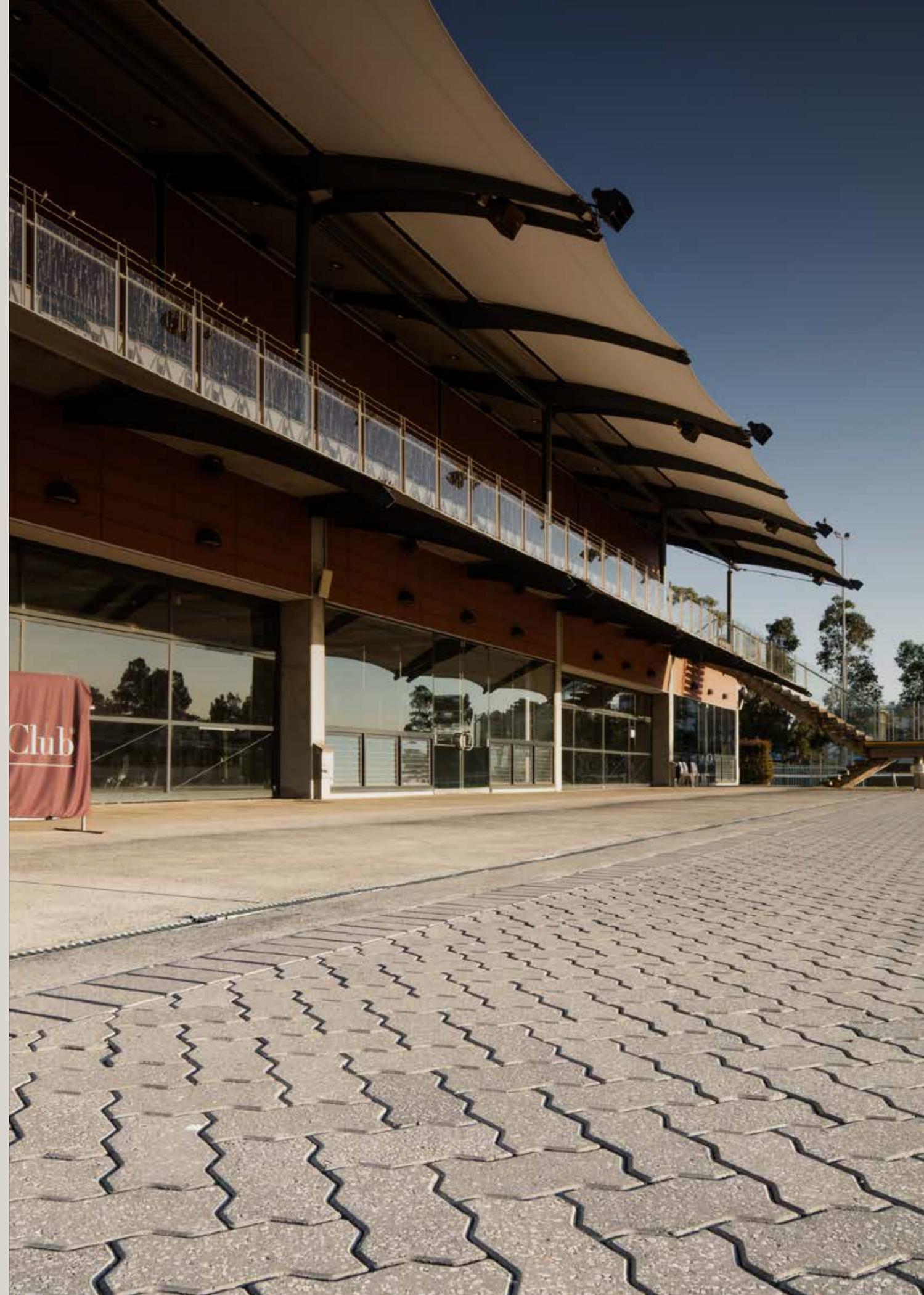
# Concrete Pavers

South East Queensland



## What's inside

- 1 – Pavers p<sup>05</sup>
  - Interlock p<sup>08</sup>
  - Techpave p<sup>10</sup>
- 2 – Product Details p<sup>12</sup>





## Designed to last

Not all paving products are the same. Our masonry range is designed to stand the test of time in all weather, situations and locations. Easy to install. Simple to care for.

**1.**

**Affordable**

For a premium product, our concrete masonry range offers an affordable option.

**2.**

**Low maintenance**

Minimal maintenance, maximum impact. You're guaranteed a long-lasting, tough, and easy to care for solution.

**3.**

**All-weather resistant**

Heavy storms. Blistering heat. Sub-zero frosts. Our products are designed to hold up to anything our weather systems are capable of throwing at it.

**4.**

**Fire resistant**

All of our products are non-combustible and highly fire resistant – making them ideal for bushfire prone areas.

**5.**

**Termite resistant**

With no organic wood materials present in our concrete formulations, our masonry range is naturally termite resistant.

**6.**

**Simple installation**

Easy to install and structurally robust – our products are perfect for 'do it yourself' installations.

**7.**

**Environmentally aware**

We've designed our production processes to minimise effects on the environment ensuring they do not deplete precious natural resources.

**8.**

**Impact resistance**

Our masonry range is also renowned for its toughness and hard-wearing properties, and can handle impacts from many external forces.



## Pavers

–

- Interlock
- Techpave

5

# 2

## Interlock

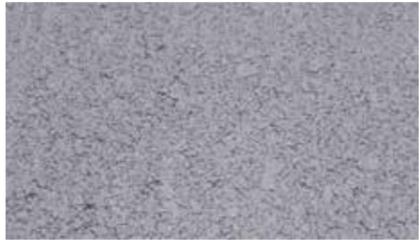
Interlock pavers are ideal for areas such as heavy transport and container terminals, industrial facilities, aircraft terminals etc.

Interlock installations are generally used with header and border rows of Techpave to finish the edges.

### Applications

Domestic Driveways | Commercial and Industrial Vehicle  
Airport Taxiways | Car Parks | Low-Medium Volume Pedestrian Traffic  
Laneways, Residential Streets and Roads | Factory and Container Yards

### Colours



Natural



Charcoal\*

### Types



Interlock 80

Size: 225L x 112W x 80H mm

Weight (each): 4.3kg

Units per m<sup>2</sup>: 40



Product - Interlock 80 | Natural

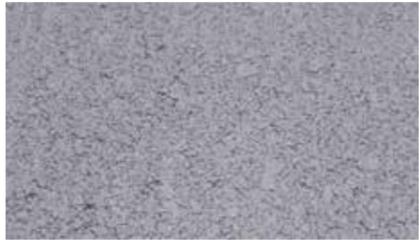
## Techpave

Techpave can support considerable loads and means they are ideal for industrial, commercial and residential applications. The Techpave range is available in two different sizes and two colours to suit a range of applications.

### Applications

Domestic Driveways | Commercial and Industrial Vehicle  
Car Parks | Low-Medium Volume Pedestrian Traffic  
Laneways, Residential Streets and Roads | Factory and Container Yards

### Colours



Natural



Charcoal\*

### Types



Techpave 80

Size: 230L x 115W x 80H mm

Weight (each): 4.5kg

Units per m<sup>2</sup>: 38

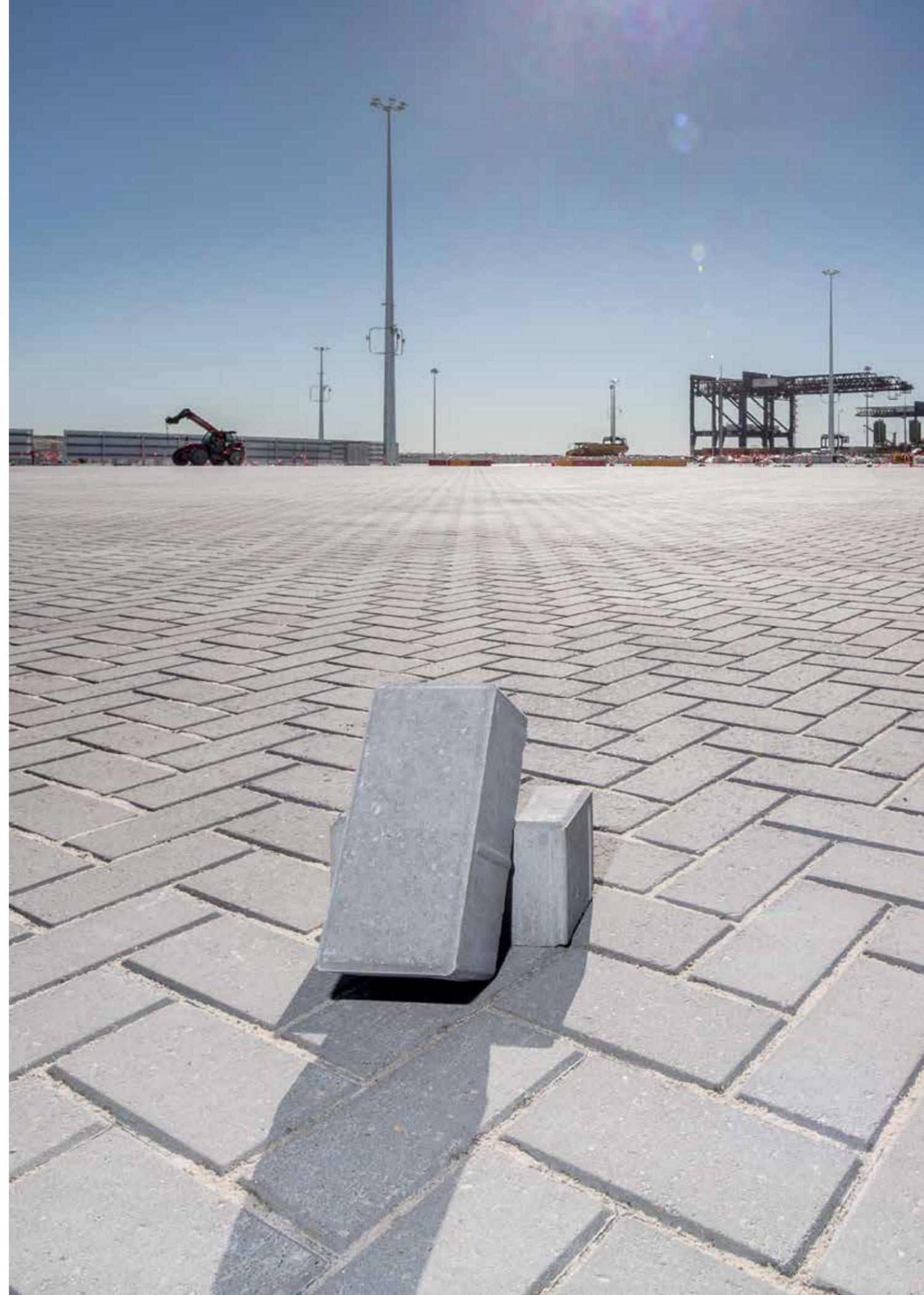


Techpave 100

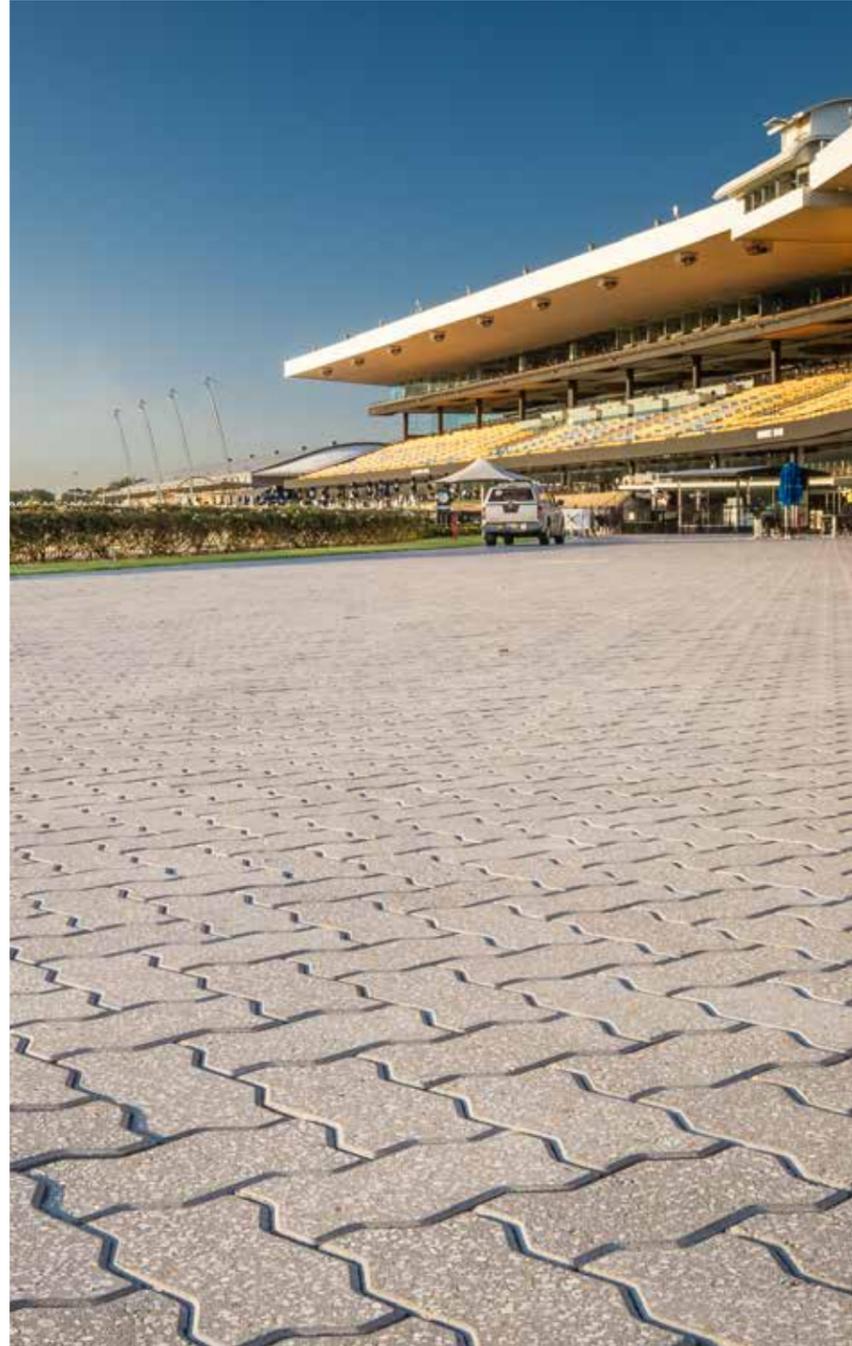
Size: 210L x 105W x 100H mm

Weight (each): 4.5kg

Units per m<sup>2</sup>: 45.4



Product - Techpave100 | Natural



## Product Details

—

# 2

# Lay Pavers on Flexible Base

## Materials required

- Pavers
- 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.

### Base Course

The base course shall be gravel road base and be 75 to 100mm thick. The Base course shall be levelled within a tolerance of no more than 5mm from the base of the level in any direction. It shall be of an even thickness and adequate drainage precautions taken. It should be correctly compacted to suit the intended application. There should be no ponding on the surface of the base course as this may cause problems with the integrity of the paving application

## 2.

### Bedding Sand

Bedding Sand - cover the sub base with well graded coarse bedding sand. Ensure that the sand is relatively dry and spread evenly then compact with a hand held or mechanical compactor. The thicknesses of the bedding sand should be between 25 and 30mm thick when compacted.

## 3.

### Levelling

Use a screed to level the sand and allow for a slight fall away from any walls to ensure adequate drainage.

For Pedestrian only (no vehicles)  
eg: patios, courtyards and paths.  
It is recommended to use a qualified experienced trades person.

## 4.

### Grid Lines

The pavers can be placed on the bedding sand and the grid lines.

## 5.

### Edge Restraints

The perimeter of all paved areas should be provided with edge restraints to prevent lateral spread of the pavers and consequent loss of interlock. An edge beam may be necessary to put in place if the paving area doesn't provide them i.e. a wall or kerb etc. The edge beams are generally made using a concrete mix to the relative Australian Standards.

## 6.

### Compacting

Compacting of the paver can be done using an appropriate compacting plate with the plate covered with a soft layer of material to avoid chipping the surface of the pavers (ie carpet).

## 7.

### Joints

The joints in the pavers should be a minimum of 6mm and can be filled after compaction with appropriate jointing sand swept into the joints. Spread dry sand over the paved area and brush it into the vertical joints with a stiff bristled broom. Please clean the area of excess sand before final compaction.

## 8.

### Re-compacting

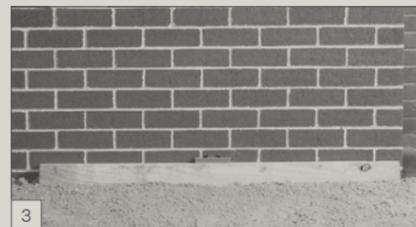
The area can be re-compacted after the joints have been swept with sand and more sand applied where necessary.

## 9.

### Regular Checks

Regular checks should be done to ensure that the paving is performing as desired and any maintenance should be carried out to ensure the structural integrity of the paving.

Austral Masonry recommends sealing of all pavers after installation.



## Design Details

### Pavers

Product	Range	Description	Size (mm)	Coverage	Applications
	Interlock	Standard Paver	225L x 112W x 80H	40 Units per m <sup>2</sup>	Driveways Airport Taxiways Car Parks Pedestrian Streets & Yards
	Techpave 80	Standard Paver	230L x 115W x 80H	38 Units per m <sup>2</sup>	Driveways Airport Taxiways Car Parks Pedestrian Streets & Yards
	Techpave 100	Standard Unit	210L x 105W x 100H	45.4 Units per m <sup>2</sup>	Driveways Airport Taxiways Car Parks Pedestrian Streets & Yards

## Ideas for Inspiration

Whatever your ideas, your local Brickworks Design Centres and Studios have the products to turn them into reality.



### Bricks and Advanced Brick Systems

We offer Australia's largest collection of bricks, with an extensive range of colours and finishes. Our advanced brick systems offer a brick finish with increased speed and ease of installation.



### Blocks and Breeze Blocks

Our block and breeze blocks are available in an extensive range of colours, sizes, and finishes designed to complement modern architectural designs.



### Roofing

Explore our concrete, terracotta and solar roofing selection. Practical and clean-lined, our roofing products are designed to add style to your project whether residential or commercial.



### Pavers

We offer a vast paving range which includes a range of styles, colours and finishes to suit modern landscape designs.



### Natural Stone

Our Granite, Marble, Limestone and Porcelain flooring products are crafted to complement inspired outdoor spaces.



### Retaining Wall Blocks and Concrete Sleepers

Our retaining wall range offers options to suit DIY, general landscaping or large scale commercial retaining wall applications.



### Wall Cladding

We offer a collection of ceramic, terracotta and natural stone wall cladding products crafted to suit residential and commercial applications.



### Limestone Blocks\*

The limestone block range is sourced through quarries in Western Australia.



### Mortar and Accessories

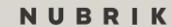
From preblended mortar, to concrete sealers and mortar additives, we offer a host of installation accessories.

# Backed by Brickworks

Local expertise. Global quality. Brickworks Building Products are one of Australia's biggest building material producers. 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

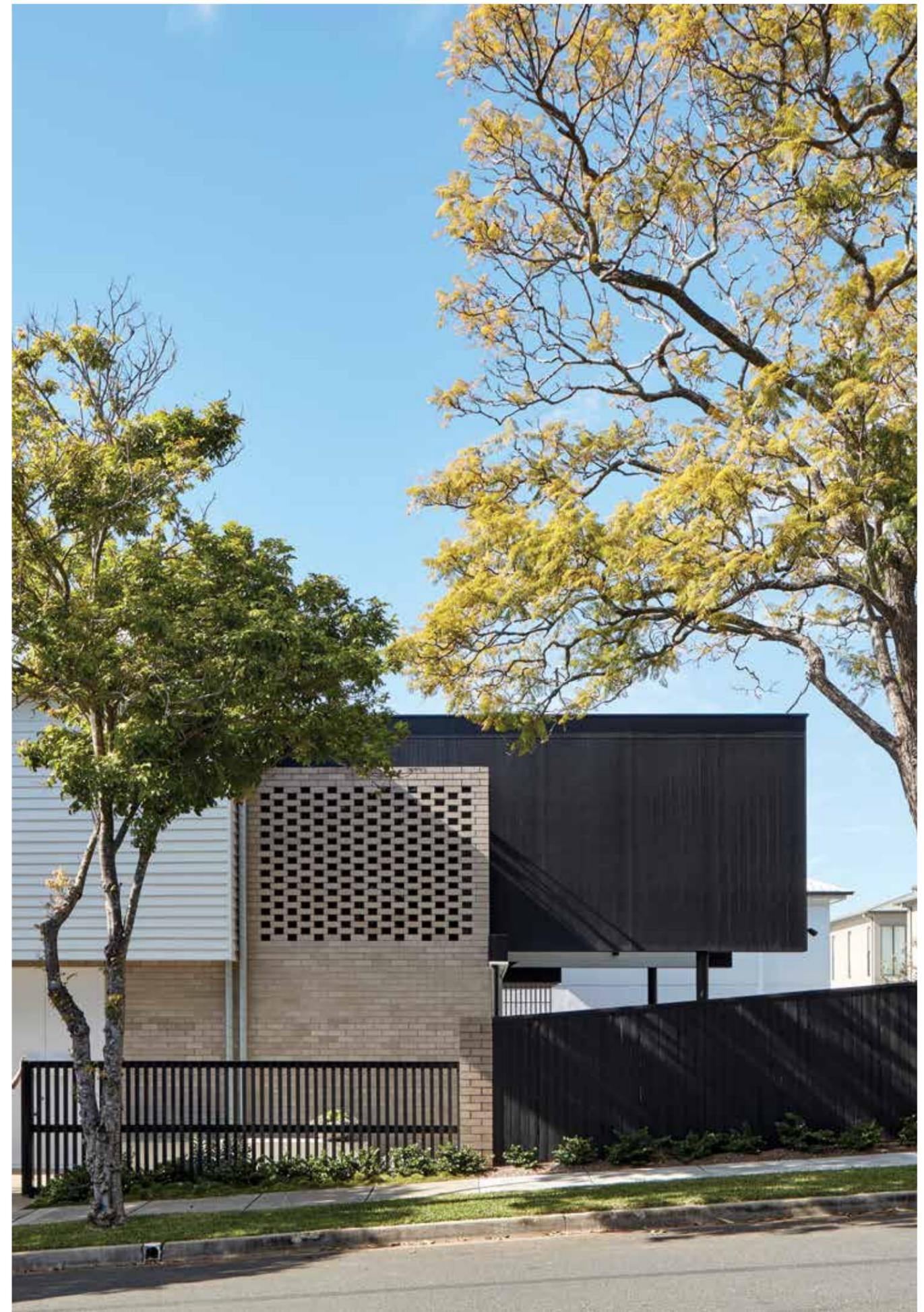
### AUSTRALIA



### NORTH AMERICA

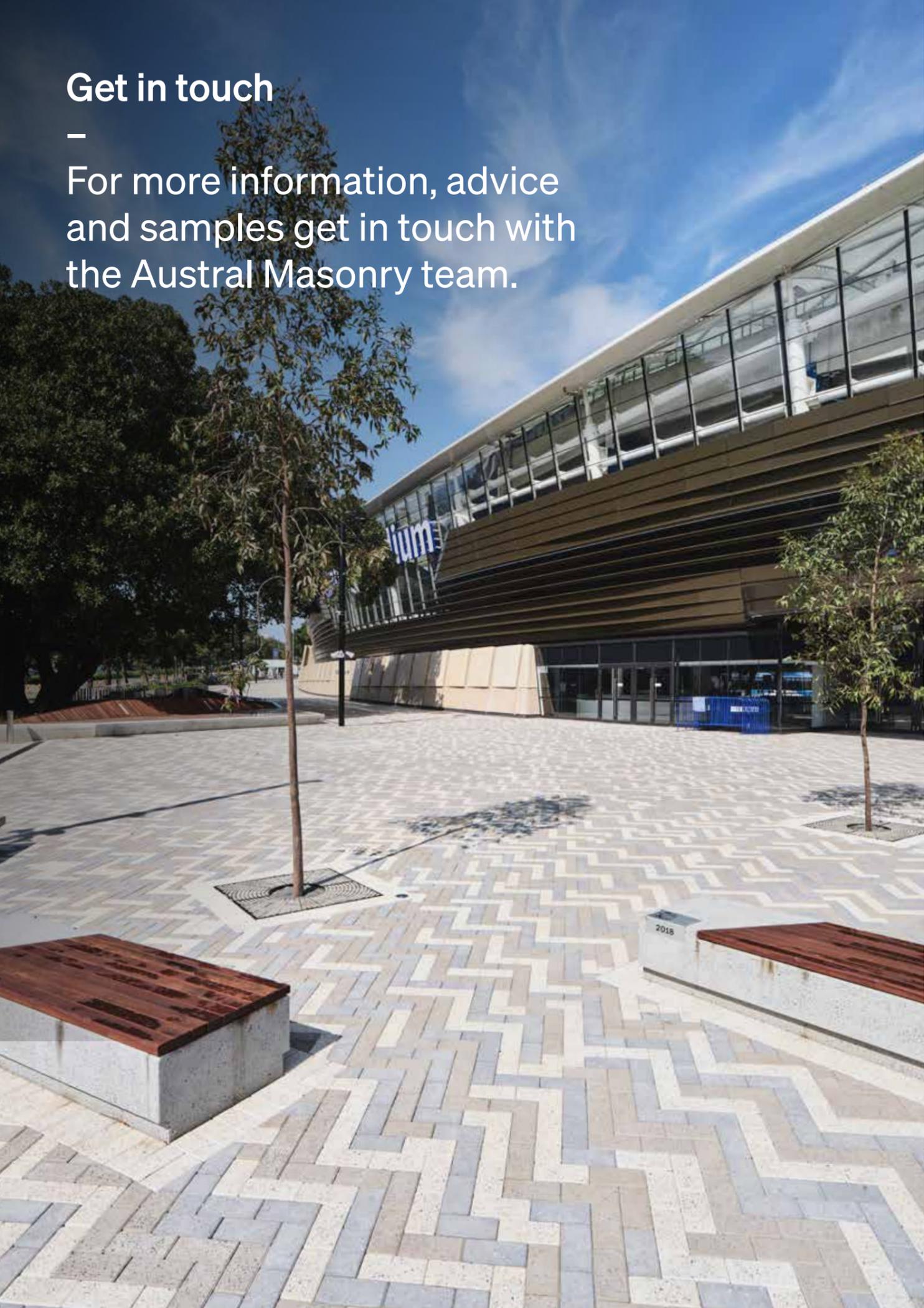


### INTERNATIONAL BRANDS



# Get in touch

—  
For more information, advice and samples get in touch with the Austral Masonry team.



Visit. [australmasonry.com.au](http://australmasonry.com.au)

Call. 1300 Masonry

## Design Centres and Studios

### Rochedale

Tel. 07 3347 2111  
105 Gardner Road  
Rochedale QLD 4122

### Sunshine Coast

Tel. 07 5293 5001  
200 Nicklin Way  
Warana QLD 4575

### Toowoomba

Tel. 07 4632 6377  
29 Mort St  
Toowoomba QLD 4350

### Brisbane

Tel. 07 3634 5604  
27 James Street  
Fortitude Valley QLD 4006

## Follow Us



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.

Visit. [australmasonry.com.au](http://australmasonry.com.au)

Call. 1300 Masonry

A BRAND OF

**BRICKWORKS**

