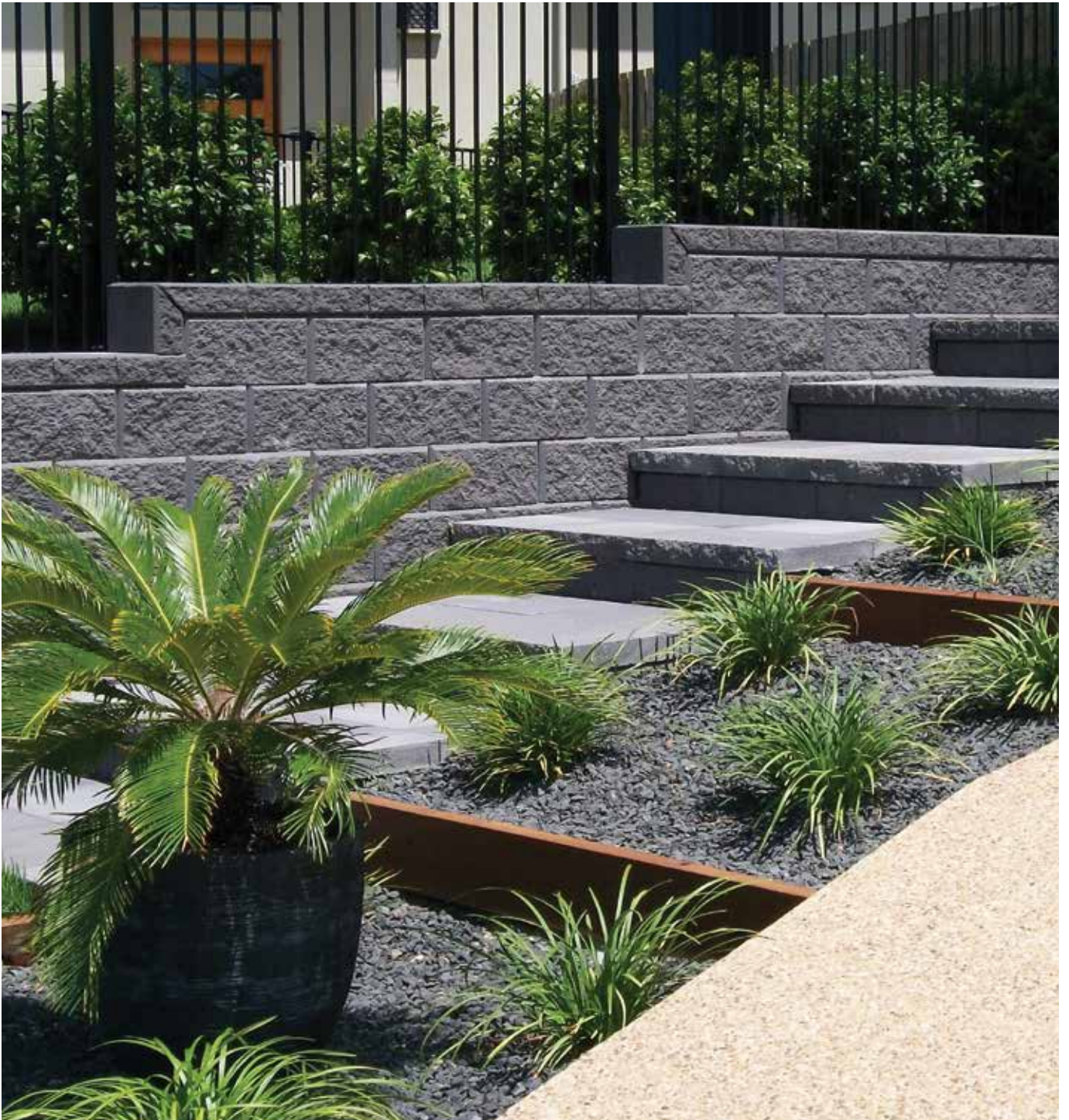


# RETAINING WALLS & PAVERS

*style and function*









# BEAUTIFUL PRODUCTS

*with enduring style*

Our range of coloured, standard and premium masonry have set a new standard in quality and style for the versatile concrete block.

By adding oxides and coloured sands to our mix of raw materials, we produce blocks 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.

Austral Masonry blends fine sand, cement, aggregate and quality colouring agents to produce unique coloured blocks. Having long been the workhorse of the construction industry, our products are frequently specified in cutting- edge residential and commercial designs due to their strength and versatility.

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 Timber.

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*style and function*

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*Inspired by  
design*

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*Top right: Keystone Almond*

*Bottom: Hastings Charcoal*





# ARRINASTONE

*elegant style*

These light weight blocks provide an easy way to create a practical outdoor space in your garden. The clean sharp lines provide a contemporary finish that will be the envy of the street.

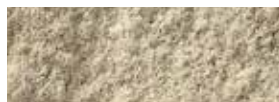
## **APPLICATIONS**

Maximum wall height: 600mm  
Straight walls  
Corners  
Steps





Oyster



Nougat



Hawkesbury Yellow



Charcoal



**Standard Unit**

Size: 300L x 200W x 150H mm  
Weight (each): 12.8kg  
Face Area: 22.2 units per m<sup>2</sup>



**Right Corner**

Size: 350L x 200W x 150H mm  
Weight (each): 13kg



**Left Corner**

Size: 350L x 200W x 150H mm  
Weight (each): 13kg





# VALLEYSTONE

*versatility and style*

From creatively designed paths and courtyards, to naturally textured garden retaining walls. The Valleystone system offers a versatile design, enabling curves to be built with ease, as well as stairs and straight walls.

## **APPLICATIONS**

Maximum wall height: 1000mm

Steps

Straight walls

Curved walls

Minimum circle.

22 Blocks based on 1m radius

12 blocks based on 570mm radius





Nougat



Hawkesbury Yellow



Charcoal



**Angled Unit**

Size: 295L x 203W x 125H mm

Weight (each): 13kg

Face Area: 27.1 units per m<sup>2</sup>



**Straight Sided Unit**

Size: 295L x 203W x 125H mm

Weight (each): 14.9kg

Face Area: 27.1 units per m<sup>2</sup>



# SYDNEYSTONE

*Contemporary and stylish*

The Sydneystone blocks are available in our standard split face finish with chamfered edges at the top and both sides. Whether you're building a straight or curved wall, Sydneystone offers a great solution for a clean and contemporary dry stacked retaining wall.

## **Applications**

Maximum wall height: 800mm  
(3 m when engineered)

Straight walls

Curved walls

Corners

Steps

Min radius: Approx 1,200 mm





Nougat



Truffle



Charcoal



**Standard Unit**

Size: 390 L x 245 W x 200 H mm  
Weight (each): 21 kg  
Face area: 13 units per m<sup>2</sup>



**Corner Block**

Size: 340 L x 140 W x 200 H mm  
Weight (each): 20 kg  
Available in right and left  
(right shown)



**Capping Unit**

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



# HASTINGS

*rich, natural colours*

Available in a collection of natural hues, Hastings is available in a colour to suit your next landscaping project. Each product contains natural tones to create a realistic and appealing finish to each block. Structurally sound and perfect for the 'do it yourself' weekend warrior, the Hastings retaining wall blocks require no mortar, and are virtually maintenance free.

## **APPLICATIONS**

Maximum wall height: 800mm  
3m when engineered.

(Please refer to Technical Manual)

Straight walls

Curved walls

Corners

Steps

Min Radius: Approx 1200mm





Sepia



Beach



Alpine



Charcoal



**Wall Block**

Size: 390L x 245W x 200H mm  
Weight (each): 21.5kg  
Blocks per m<sup>2</sup>: 1 m<sup>2</sup> wall  
= 13 blocks m<sup>2</sup>



**Corner Block**

Size: 340L x 140W x 200H mm  
Weight (each): 20kg  
Available in left or right  
(Right-hand corner block  
shown)



**Half Cap**

Size: 195L x 245W x 90H mm  
Weight (each): 9kg  
Half Caps per lineal metre: 5.13



# VINTAGESTONE

*The stylish, robust retaining wall system*

Vintagestone offers the structural robustness of an interlocking pin system, with elegance and durability. Vintagestone offers a solution for walls up to 12 metres when suitably designed by an engineer.

## **Applications**

Maximum wall height: 800 mm\*  
(12 m when engineered)

Straight walls

Corners

Steps

*\*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.*





Hawkesbury Yellow<sup>^</sup>



**Standard Unit**  
Size: 455 L x 315 W x 200 H mm  
Weight (each): 42 kg  
Face area: 11 units per m<sup>2</sup>



**Corner Unit\*\***  
Size: 438 L x 210 W x 200 H mm  
Weight (each): 29 kg



**Capping Unit**  
Size: 455 L x 320 W x 100 H mm  
Weight (each): 31 kg  
2.2 per lineal metre



# KEYSTONE

*Engineered perfection*

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 for engineered walls up to 15m in height.

## **Applications**

Maximum wall height: 800 mm\*  
(15 m when engineered)

Straight walls

Curved walls

Corners

Steps

*\*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.*





Natural\*



Almond



Charcoal



**Standard Unit**

Size: 455 L x 315 W x 200 H mm  
Weight (each): 39 kg  
Face area: 11 units per m<sup>2</sup>



**Flushface Unit**

Size: 455 L x 315 W x 200 H mm  
Weight (each): 42 kg  
Face area: 11 units per m<sup>2</sup>



**Capping Unit**

Size: 455 L x 320 W x 100 H mm  
Weight (each): 30 kg  
2.2 per lineal metre



**Flushface Straight Side Cap**

Size: 455 L x 320 W x 100 H mm  
Weight (each): 31 kg  
2.2 per lineal metre



**Corner Unit\*\***

Size: 438 L x 210 W x 200 H mm  
Weight (each): 29 kg

\*\*Corner Unit available in Left and Right  
^ 'Natural' colour is made to order





# EXPLORER SMOOTH

*simple and understated*

Add a sleek, modern look to any landscape using Explorer Smooth concrete sleepers. Manufactured using 40MPa concrete and reinforced with steel, Explorer Smooth concrete sleepers are an economical option for a durable, low maintenance retaining wall.

## **Applications**

Maximum wall height: 800 mm\*  
(3 m when engineered)

Straight walls

Corners

Steps

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



style and function



Charcoal



Grey



**Explorer Smooth Unit**

Sizes:

1200 L x 200 H x 75 T mm

1530 L x 200 H x 75 T mm

2000 L x 200 H x 75 T mm



# EXPLORER TIMBERLOOK

*create a timber look*

Explorer Timberlook is the ideal solution to create a stylish and cost effective retaining solution for your home.

By replicating the colours and textures of real timber, Explorer Timberlook concrete sleepers are distinguished by their natural finish.

## **Applications**

Maximum wall height: 800 mm\*  
(3 m when engineered)

Straight walls

Corners

Steps

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





Ironbark



Gumtree



**Explorer Timberlook Unit**

Sizes:

1580 L x 200 H x 75 T mm

2000 L x 200 H x 75 T mm



# EXPLORER SANDSTONE

*sandstone block finish*

Design an elegant, earthy look with the warm colours and textures in the Explorer Sandstone range.

Featuring a block face pattern, Explorer Sandstone concrete sleepers are manufactured using 40MPA concrete and reinforced with steel for strength and durability.

## **Applications**

Maximum wall height: 800 mm\*  
(3 m when engineered)

Straight walls

Corners

Steps

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





Graphite



Natural



**Explorer Sandstone Unit**

Sizes:

1580 L x 200 H x 75 T mm

2000 L x 200 H x 75 T mm



# EXPLORER SLATE

*for a unique finish*

Capture natural elegance and style with the Explorer Slate range. Manufactured using 40MPA concrete and reinforced with steel, the Explorer Slate range offers a unique slate finish in natural earthy colours.

## **Applications**

Maximum wall height: 800 mm\*  
(3 m when engineered)

Straight walls

Corners

Steps

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



style and function



Oak



Charcoal



**Explorer Slate Unit**

Sizes:

1580 L x 200 H x 75 T mm



# CAMINO 50

*small format paver*

The Camino 50 offers a small format paver ideal for driveways, paths and pool surrounds. These versatile pavers offer easy installation with a contemporary finish.

## **APPLICATIONS**

- Pools
- Paths
- Patios
- Courtyards
- Driveways



style and function



Stone



Sandune



Almond



Charcoal



**Camino 50**  
Size: 230L x 115W x 50H mm  
Weight (each): 2.8 kg  
Units per m<sup>2</sup>: 37.8



# BROADWAY 150, 300 & 400

*style with impact*

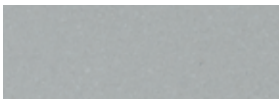
For contemporary style with impact, the Broadway range of pavers offer sharp modern lines and colours, making them ideal for courtyards, paths and other outdoor spaces.

## **APPLICATIONS**

Pools  
Paths  
Patios  
Courtyards



style and function



Oyster



Sandune



Almond



Stone^



Charcoal



**Broadway 150\***  
Size: 300L x 150W x 60H mm  
Weight (each): 5.8 kg  
Units per m<sup>2</sup>: 22.2  
*\*Broadway 150 only available in Almond and Charcoal*



**Broadway 300**  
Size: 300L x 300W x 50H mm  
Weight (each): 9.8 kg  
Units per m<sup>2</sup>: 11.11



**Broadway 400**  
Size: 400L x 400W x 45H mm  
Weight (each): 16 kg  
Units per m<sup>2</sup>: 6.25  
*^ Stone colour is only available in Broadway 400 size*



# HOW TO

## *build segmental block retaining walls*

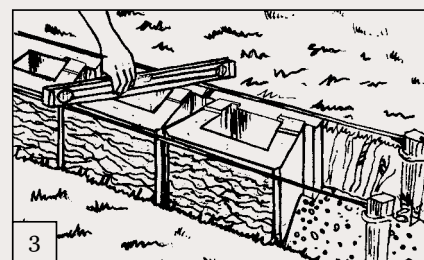
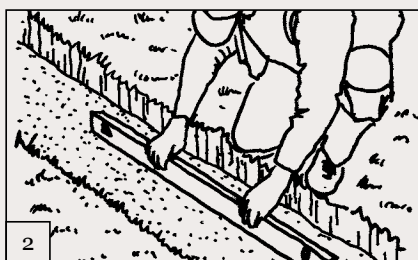
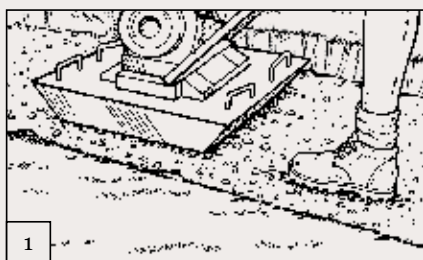
Austral Masonry retaining wall blocks are an ideal choice for retaining walls in gardens, a range of residential applications and commercial projects. The interlocking and dry stacked nature of these blocks makes them easy to install for the “Do It Yourself” landscaper. No matter what the project, the 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.***

### *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"/>	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: Levelling Pad (footing)**

The facing shall be built on a levelling 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**

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 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**

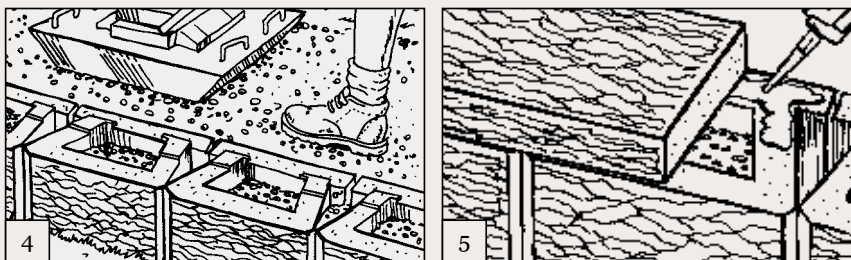
Clean any debris from the top of the wall to ensure the next block sits perfectly. Ensure each block is filled with free draining material, and place next course on top. Place the drainage material behind the blocks to 300 mm. Stack units, placing drainage aggregate and compact backfill for each block 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. (when using no fines concrete)*

**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**

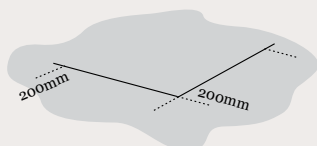
This information should be viewed as a guide only. The particular circumstances of retaining wall projects vary significantly in ways that often dictate the use of particular materials and techniques to address challenges presented by those circumstances. Austral Masonry recommends you to ensure that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





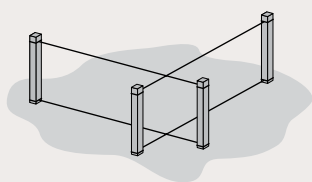
# HOW TO

## *build concrete sleeper retaining walls*



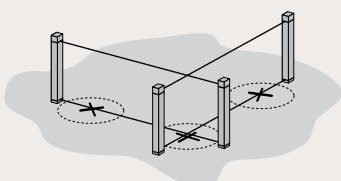
### 1. Prepare the Area

- 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

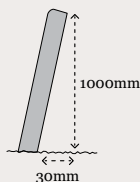
- Place a star piquet or peg at both ends of the proposed wall. Attach two string lines at each end of the wall, top and bottom, to keep your wall aligned.



### 3. Mark out Hole Positions

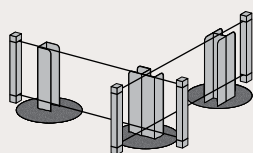
- Starting from one end of the wall, mark a cross on the ground at intervals with their centre being approximately 20mm more than the length of the sleeper.

**For example:** If you are using 1530mm sleepers the hole centres should be 1550mm apart – note, this will vary based on the length of sleeper used.



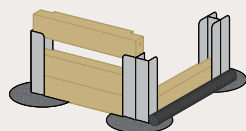
### 4. Auger Holes and Pour Concrete

- Auger holes as per your engineers 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.



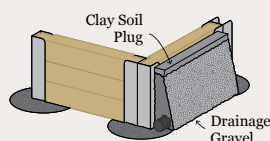
### 5. Checking Posts

- 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.

\*Retaining walls must be designed to AS4678

\*Most councils require that any retaining walls over 0.8m in height from natural ground level are subject to building approval.

\* Any retaining wall that is less than 1.5m away from a building or other retaining wall also requires building approval.



# DESIGN

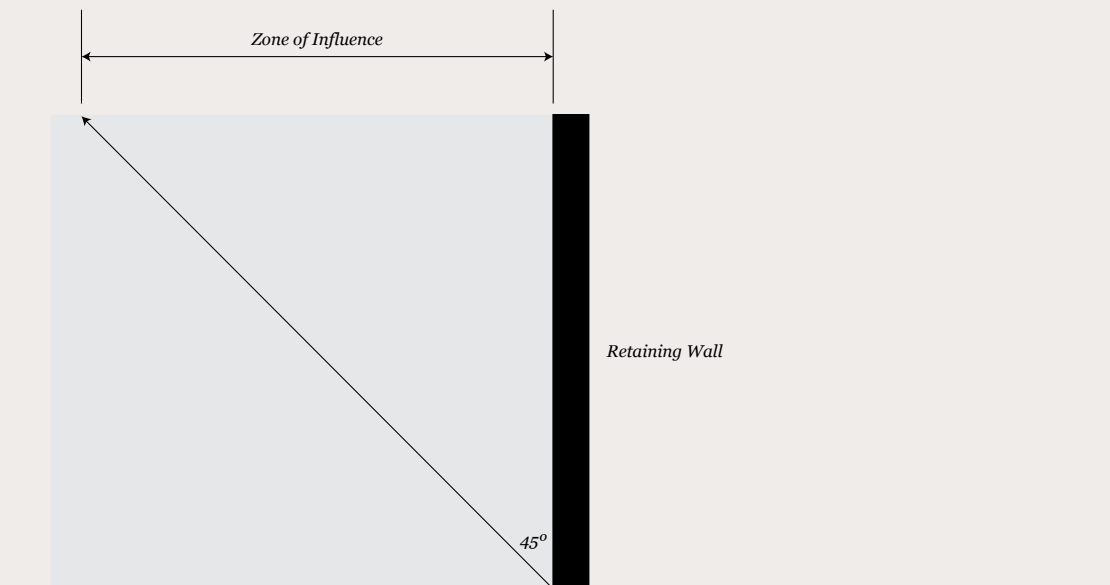
## *concrete sleeper walls for 5kPa walls*

WALL HEIGHT	SLEEPER LENGTH (MAX.)	POST SIZE (mm)	POST C/C SPACING	POST LENGTH
0.4m	2.00m	UC100	2020mm	1.15m
0.6m	2.00m	UC100	2020mm	1.15m
0.8m	2.00m	UC100	2020mm	1.55m
1.0m	2.00m	UC100	2020mm	1.95m
1.2m	2.00m	UC100	2020mm	2.35m
1.4m	1.53m Smooth	UC100	1550mm	2.75m
1.6m	1.53m Smooth	UC100	1550mm	3.15m
1.8m	1.53m Smooth	UC100	1550mm	3.55m
2.0m	1.53m Smooth	UC150	1550mm	3.95m
1.4m	1.58m Sandstone and Timberlook	UC100	1600mm	2.75m
1.6m	1.58m Sandstone and Timberlook	UC100	1600mm	3.15m
1.8m	1.58m Sandstone and Timberlook	UC100	1600mm	3.55m
2.0m	1.58m Sandstone and Timberlook	UC150	1600mm	3.95m

*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.

*The following Australian Standards should be consulted when designing a concrete sleeper retaining wall system:*



# RETAINING WALL

## *information*

Product	Range	Description	Max Wall Height	Size	Weight	Coverage	Applications
	Arrinastone	Standard Unit	600mm	300L x 200W x 150H	12.8kg	22.2 Blocks per m <sup>2</sup>	Straight Walls, Corners, Steps
	Arrinastone	Right Corner	-	350L x 200W x 150H	13kg	N/A	Corners
	Arrinastone	Left Corner	-	350L x 200W x 150H	13kg	N/A	Corners
	Hastings	Standard Unit	800mm*	390L x 245W x 200H	21.5	13 Blocks per m <sup>2</sup>	Curved Walls, Straight Walls, Corners, Steps
	Hastings	Corner Block	-	340L x 140W x 200H	20kg	N/A	Corners
	Hastings	Half Cap	-	195L x 245W x 90H	9kg	5.13 per lineal metre	Capping
	Valleystone	Angled Unit	1000mm*	295L x 203W x 125H	13kg	27.1 Blocks per m <sup>2</sup>	Curved Walls, Straight Walls, Steps
	Valleystone	Straight Sided Unit	-	295L x 203W x 125H	14.9kg	27.1 Blocks per m <sup>2</sup>	Curved Walls, Straight Walls, Steps
	Sydneystone	Wall Block	800mm*	390L x 245W x 200H	21kg	13 Blocks per m <sup>2</sup>	Curved Walls, Straight Walls, Corners, Steps
	Sydneystone	Corner Block	-	340L x 140W x 200H	20kg	N/A	Corners
	Sydneystone	Capping Block	-	390L x 245W x 90H	16kg	2.56 Blocks per lineal metre	Capping

Maximum wall heights in good soils (gravels, sandy gravels, crushed sandstone).

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



Product	Range	Description	Max Wall Height	Size	Weight	Coverage	Applications
	Vintagestone	Standard Unit	800mm <sup>^***</sup>	455L x 315W x 200H	41kg	11 Blocks per m <sup>2</sup>	Straight Walls, Corners, Steps
	Vintagestone	Corner Unit (Left and Right)	-	438L x 210W x 200H	29kg	N/A	Corners
	Vintagestone	Capping Unit	-	455L x 320W x 100H	31kg	2.2 per lineal metre	Capping
	Keystone	Standard Unit	800mm <sup>^</sup>	455L x 315W x 200H	39kg	11 Blocks per m <sup>2</sup>	Curved Walls, Straight Walls, Corners, Steps
	Keystone	Flushface Unit	-	455L x 315W x 200H	42kg	11 Blocks per m <sup>2</sup>	Straight Walls, Corners, Steps
	Keystone	Capping Unit	-	455L x 320W x 100H	30kg	2.2 per lineal metre	Capping
	Keystone	Flushface Straight Side Cap	-	455L x 320W x 100H	31kg	2.2 per lineal metre	Capping
	Keystone	Corner Unit (Left and Right)	-	440L x 210W x 200H	29kg	N/A	Corners
	Explorer Smooth	Standard Unit	800 mm* 3m with engineering	1200 L x 200 H x 75T mm 1530 L x 200 H x 75T mm 2000 L x 200 H x 75T mm	41 kg 53 kg 67 kg	4.17 Units per m <sup>2</sup> 3.27 Units per m <sup>2</sup> 2.50 Units per m <sup>2</sup>	Straight Walls, Corners, Steps
	Explorer Timberlook	Standard Unit	800 mm* 3m with engineering	1580 L x 200 H x 75T mm 2000 L x 200 H x 75T mm	51 kg 66 kg	3.16 Units per m <sup>2</sup> 2.50 Units per m <sup>2</sup>	Straight Walls, Corners, Steps
	Explorer Sandstone	Standard Unit	800 mm* 3m with engineering	1580 L x 200 H x 75T mm 2000 L x 200 H x 75T mm	58 kg 72 kg	3.16 Units per m <sup>2</sup> 2.50 Units per m <sup>2</sup>	Straight Walls, Corners, Steps
	Explorer Slate	Standard Unit	800 mm* 3m with engineering	1580 L x 200 H x 75T mm	58 kg	3.16 Units per m <sup>2</sup>	Straight Walls, Corners, Steps

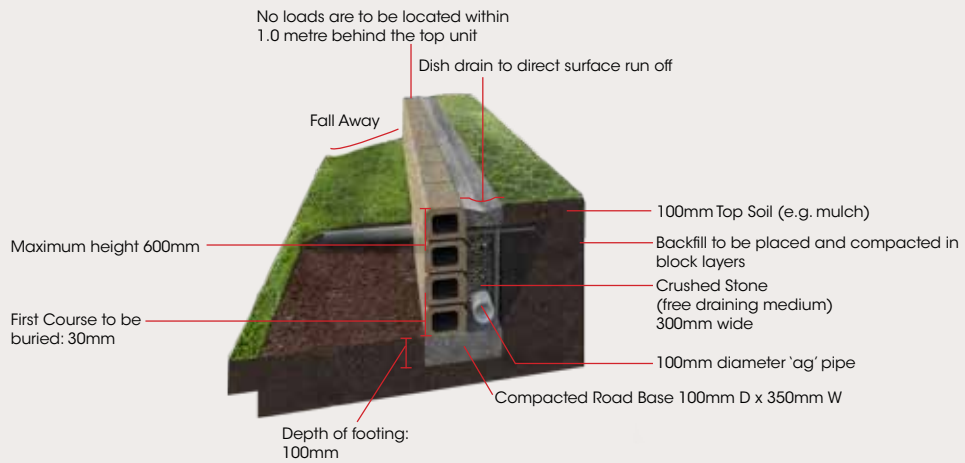
Please contact your Austral Masonry representative for more information.



# RETAINING WALL

## *cross sections*

### *Arrinastone*



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

### *Hastings/Sydneystone*



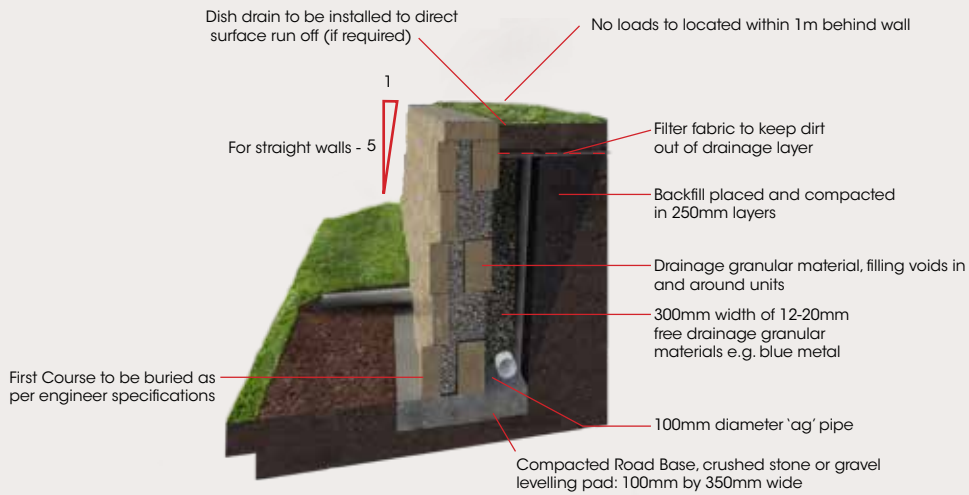
\* Hastings and Sydneystone can be built up to 3m when designed by a suitably qualified engineer and combined with soil reinforcement or no fines concrete. Contact your local Austral Masonry representative for more information.



# RETAINING WALL

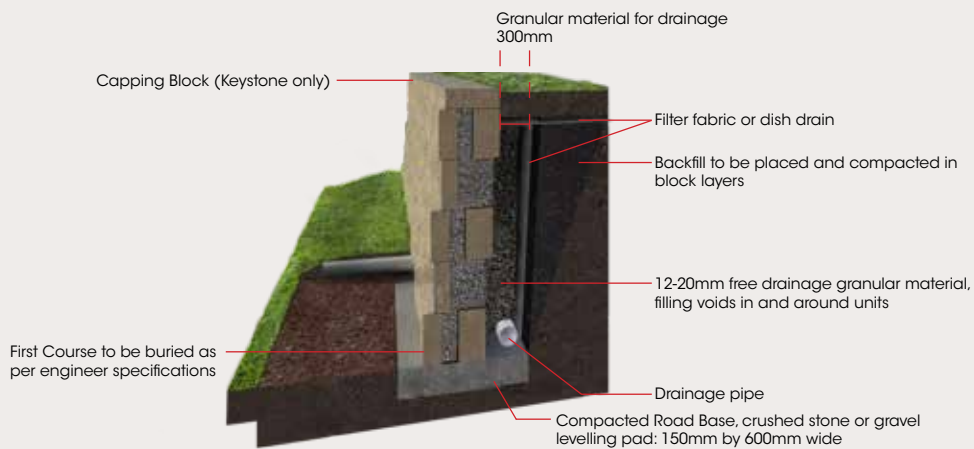
## *cross sections*

### *Valleystone*



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

### *Keystone/Vintagestone*



\* 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.



# HOW TO

## *lay pavers on flexible base (residential pedestrian applications only)*

### *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



# HOW TO

## *lay pavers on flexible base (residential pedestrian applications only)*

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*For Pedestrian only (no vehicles) eg patios, courtyards and paths.*

*It is recommended to use a qualified experienced trades person.*

### *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.

### *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.*



# PAVER

## *information*

Product	Range	Description	Size	Weight	Coverage	Colours	Applications
	Camino 50	Standard Unit	230L x 115W x 50H	2.8kg	37.8 Units per m <sup>2</sup>	Sandune, Almond, Charcoal	Pools Pedestrian Driveways
	Broadway 150	Standard Unit	300L x 150W x 60H	5.8kg	22.2 Units per m <sup>2</sup>	Sandune, Almond, Charcoal	Pools Pedestrian
	Broadway 300	Standard Unit	300L x 300W x 50H	9.8kg	11.11 Units per m <sup>2</sup>	Sandune, Almond, Charcoal	Pools Pedestrian
	Broadway 400	Standard Unit	400L x 400W x 45H	16kg	6.25 Units per m <sup>2</sup>	Sandune, Almond, Charcoal	Pools Pedestrian

# MAINTENANCE

## *of pavers*

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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 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 concrete 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 due to 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 White King or a proprietary weed killer. The solution should be left for a short period and then brushed off the treated area with hot water or damp sand.

Repeat as necessary.



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Brickworks Building Products is one of Australia's largest and most diverse building material producers and providers. With our heritage as one of Australia's founding brick businesses many generations ago, we hold the values of family, community, sustainability, innovation and quality at our core. We know our quality products last forever, which is why our some of products come with a 100 year guarantee.

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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.