Retaining Walls and Pavers

New South Wales
What's inside

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Style and function

When it comes to inspiration, we start by simply looking at nature. From appearance and texture, to colour and form, our Landscaping Collection carefully balances each element to ensure flexibility to just about any design. Coupled with our thorough testing and technical innovation, you’re guaranteed long-lasting durability for decades to come.
Designed to last

Not all landscaping 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.
Retaining Walls

- Bribie
- Arrinastone
- Valleystone
- Sydneystone
- Hastings
- Vintagestone
- Valleystone
- Explorer Smooth
- Explorer Timberlook
- Explorer Sandstone
- Explorer Slate
Bribie

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

<table>
<thead>
<tr>
<th>Applications</th>
<th>Straight Walls</th>
<th>Curved Walls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max Height</td>
<td>360mm*</td>
<td></td>
</tr>
<tr>
<td>Minimum Circle</td>
<td>18 blocks</td>
<td></td>
</tr>
<tr>
<td>Minimum Radius</td>
<td>450mm (to inside)</td>
<td></td>
</tr>
</tbody>
</table>

**Colours**

- Limestone
- Sydney Blend
- Charcoal

**Types**

**Standard Unit**

- Size: 190L × 100W × 120H mm
- Weight (each): 4.5kg
- Units per linear metre: 5.25

*Please see Austral Masonry website for full product details. Austral Masonry recommends that all customers see actual product displays prior to making final selections.*
Arrinastone
Lightweight and simple to maintain, these blocks provide an easy way to create a practical outdoor space. Available in a fresh, naturally-inspired colour palette, Arrinastone adds a genuine touch of natural beauty to any environment.

<table>
<thead>
<tr>
<th>Applications</th>
<th>Straight Walls</th>
<th>Corners</th>
<th>Steps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max Height</td>
<td>600mm</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Colours

- Oyster
- Nougat
- Hawkesbury Yellow
- Charcoal

Types

<table>
<thead>
<tr>
<th>Standard Unit</th>
<th>Right Corner</th>
<th>Left Corner</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size: 300L × 200W × 150H mm</td>
<td>Size: 350L × 200W × 150H mm</td>
<td>Size: 350L × 200W × 150H mm</td>
</tr>
<tr>
<td>Weight (each): 12.8kg</td>
<td>Weight (each): 13kg</td>
<td>Weight (each): 13kg</td>
</tr>
<tr>
<td>Face Area: 22.2 units per m²</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Valleystone

Valleystone’s natural texture and clever curved angles allow you to make a bold statement with garden paths, courtyards or retaining walls – including stairs and façades.

<table>
<thead>
<tr>
<th>Applications</th>
<th>Straight Walls</th>
<th>Curved Walls</th>
<th>Steps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max Height</td>
<td>800mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimum Circle</td>
<td>22 blocks based on 1m radius</td>
<td>12 blocks based on 570mm radius</td>
<td></td>
</tr>
</tbody>
</table>

Colours

- Nougat
- Hawkesbury Yellow
- Charcoal

Types

- Angled Unit
  - Size: 295L × 203W × 125H mm
  - Weight (each): 13kg
  - Face Area: 27.1 units per m²

- Straight Sided Unit
  - Size: 295L × 203W × 125H mm
  - Weight (each): 14.9kg
  - Face Area: 27.1 units per m²
Sydneystone

The Sydneystone collection gives any design a strong and timeless look thanks to their classic chamfered edges. Great for both straight and curved dry stacked retaining walls, Sydneystone is simple to use, and enduringly effective.

<table>
<thead>
<tr>
<th>Applications</th>
<th>Straight Walls</th>
<th>Curved Walls</th>
<th>Corners</th>
<th>Steps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max Height</td>
<td>800mm (3m when engineered)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimum Radius</td>
<td>Approx 1,200mm</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Colours**

- Nougat
- Truffle
- Charcoal

**Types**

<table>
<thead>
<tr>
<th>Standard Unit</th>
<th>Corner Block</th>
<th>Capping Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size: 390L × 245W × 200H mm</td>
<td>Size: 340L × 140W × 200H mm</td>
<td>Size: 390L × 245W × 90H mm</td>
</tr>
<tr>
<td>Weight (each): 21kg</td>
<td>Weight (each): 20kg</td>
<td>Weight (each): 16kg</td>
</tr>
<tr>
<td>Face Area: 13 units per m²</td>
<td>Available in right and left (right shown)</td>
<td>Units per lineal metre: 2.56</td>
</tr>
</tbody>
</table>
Hastings

For colour, style, and presence, Hastings creates a bold statement thanks to its realistic naturally-inspired tones and rugged facings. The individual finish to each block makes it an ideal choice for straight and curved walls, corners and steps.

<table>
<thead>
<tr>
<th>Applications</th>
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<th>Corners</th>
<th>Steps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max Height</td>
<td>800mm* (3m when engineered)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimum Radius</td>
<td>Approx 1,200mm</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Colours

- Sepia
- Beach
- Alpine
- Charcoal

Types

<table>
<thead>
<tr>
<th>Type</th>
<th>Size: 390L × 245W × 200H mm</th>
<th>Weight (each): 21.5kg</th>
<th>Face Area: 13 units per m²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wall Block</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corner Block</td>
<td>Size: 340L × 140W × 200H mm</td>
<td>Weight (each): 20kg</td>
<td>Available in right and left (right shown)</td>
</tr>
<tr>
<td>Half Cap</td>
<td>Size: 195L × 245W × 90H mm</td>
<td>Weight (each): 9kg</td>
<td>Units per lineal metre: 5.13</td>
</tr>
</tbody>
</table>

*Please refer to Technical Manual*
**Vintagestone**

Elegant and durable, Vintagestone is designed to be structurally robust thanks to its interlocking pin system. This makes it the perfect choice for professionally engineered projects with walls up to 12-metres in height.

<table>
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<th>Steps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max Height</td>
<td>800mm (12m when engineered)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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**

**Hawkesbury Yellow**

**Types**

- **Standard Unit**
  - Size: 455L × 315W × 200H mm
  - Weight (each): 42kg
  - Face Area: 11 units per m²

- **Corner Unit**
  - Size: 438L × 210W × 200H mm
  - Weight (each): 29kg
  - Available in right and left (right shown)

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

*All Vintagestone products are made to order*
**Explorer Smooth**

Lightweight, practical and long-lasting, these sleepers can be arranged to create solid, straight walls with clean lines.

<table>
<thead>
<tr>
<th>Applications</th>
<th>Straight Walls</th>
<th>Corners</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Max Height</strong></td>
<td>800mm* (without engineering advise)</td>
<td>2m concrete sleepers can be used up to 1.2m in wall height depending on soil type (seek engineering advise prior to installation).</td>
</tr>
<tr>
<td></td>
<td>1.53m/1.58m concrete sleepers can be used up to 3m in wall height depending on soil type (seek engineering advise prior to installation).</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Colours</th>
<th>Types</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charcoal</td>
<td><img src="image" alt="Charcoal" /></td>
</tr>
<tr>
<td>Grey</td>
<td><img src="image" alt="Grey" /></td>
</tr>
</tbody>
</table>

**Types**

**Standard Unit**

Sizes:
- 1200L × 200H × 75T mm
- 1530L × 200H × 75T mm
- 2000L × 200H × 75T mm

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

For an authentic timber feel that’s practically maintenance-free, Timberlook offers a perfect retaining solution for many applications around the garden.

<table>
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<tr>
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<tr>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

**Colours**
- Ironbark
- Gumtree

**Types**
- Standard Unit
  - Sizes:
    - 1580L × 200H × 75T mm
    - 2000L × 200H × 75T mm

* Please check with your local council in regards to engineering requirements.
Explorer Sandstone
For a natural, earthy look Explorer Sandstone is made with strong 40MPA concrete reinforced with steel for outstanding strength and decades-long durability.

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Max Height</td>
<td>800mm* (without engineering advise)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2m concrete sleepers can be used up to 1.2m in wall height depending on soil type (seek engineering advise prior to installation).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.53m/1.58m concrete sleepers can be used up to 3m in wall height depending on soil type (seek engineering advise prior to installation).</td>
<td></td>
</tr>
</tbody>
</table>

Colours
- Graphite
- Natural

Types
- Standard Unit
  - Sizes:
    - 1580L × 200H × 75T mm
    - 2000L × 200H × 75T mm

* Please check with your local council in regards to engineering requirements.
Explorer Slate
Available in two appealing natural colours, Explorer Slate provides a more subtle designer look. Yet it’s construction with 40MPA concrete and reinforced steel means it’s solid and enduring.

<table>
<thead>
<tr>
<th>Applications</th>
<th>Straight Walls</th>
<th>Corners</th>
</tr>
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<tbody>
<tr>
<td>Max Height</td>
<td>800mm* (without engineering advise)</td>
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</tr>
<tr>
<td></td>
<td>2m concrete sleepers can be used up to 1.2m in wall height depending on soil type (seek engineering advise prior to installation).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.53m/1.58m concrete sleepers can be used up to 3m in wall height depending on soil type (seek engineering advise prior to installation).</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Colours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oak</td>
</tr>
<tr>
<td>Charcoal</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Types</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Unit</td>
</tr>
<tr>
<td>Sizes:</td>
</tr>
<tr>
<td>1580L × 200H × 75T mm</td>
</tr>
</tbody>
</table>

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

– Camino
– Broadway
– Plazastone
Camino 50
An on-trend, practical solution for paths, pool surrounds and driveways – these tough and versatile pavers are simple to install, and timeless in their design.

Applications
- Pools
- Paths
- Patios
- Courtyards
- Driveways

Colours
- Stone
- Sandune
- Almond
- Charcoal

Types
Standard Unit
- Size: 230L × 115W × 50H mm
- Weight (each): 2.8kg
- Units per m²: 37.8
Broadway 150, 300, 400

Sharp lines, contemporary colours and rock-solid reliability, Broadway comes in a range of sizes you can apply any outdoor space from garden paths to courtyards.

Applications

| Pools | Paths | Patios | Courtyards |

Colours

- Oyster
- Sandune
- Almond
- Stone*
- Charcoal

Types

<table>
<thead>
<tr>
<th>Broadway 150*</th>
<th>Broadway 300</th>
<th>Broadway 400</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size: 300L × 150W × 60H mm</td>
<td>Size: 300L × 300W × 50H mm</td>
<td>Size: 400L × 400W × 45H mm</td>
</tr>
<tr>
<td>Weight (each): 5.8kg</td>
<td>Weight (each): 9.8kg</td>
<td>Weight (each): 16kg</td>
</tr>
<tr>
<td>Units per m²: 22.2</td>
<td>Units per m²: 11.11</td>
<td>Units per m²: 6.25</td>
</tr>
</tbody>
</table>

* Stone colour is only available in Broadway 400 size.
* Broadway 150 only available in Almond and Charcoal.
Plazastone 500

Ideal for larger format designs with its half-metre wide footprint, Plazastone can be used to create a striking visual impact in traditional or contemporary settings.

Applications
- Pools
- Paths
- Patios
- Courtyards
- Driveways

Colours
- Sandune
- Charcoal

Types
Standard Unit
Size: 500L × 500W × 45H mm
Weight (each): 23.6kg
Units per m²: 4
### Permits
Check with your local council to ensure all local Building Codes are complied with.

### 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.

### 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.

### 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.
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 (e.g. 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.
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 engineer’s specifications as approved by council.
   - Pour concrete into holes, one at a time.
   - Make the concrete stiff. If using ready mix 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 Details
Concrete sleeper walls for 5kPa walls

<table>
<thead>
<tr>
<th>Wall Height</th>
<th>Sleeper Length (Max.)</th>
<th>Post Size (Mm)</th>
<th>Post C/C Spacing</th>
<th>Post Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.4m</td>
<td>2.00m</td>
<td>UC100</td>
<td>2020mm</td>
<td>1.15m</td>
</tr>
<tr>
<td>0.6m</td>
<td>2.00m</td>
<td>UC100</td>
<td>2020mm</td>
<td>1.15m</td>
</tr>
<tr>
<td>0.8m</td>
<td>2.00m</td>
<td>UC100</td>
<td>2020mm</td>
<td>1.55m</td>
</tr>
<tr>
<td>1.0m</td>
<td>2.00m</td>
<td>UC100</td>
<td>2020mm</td>
<td>1.95m</td>
</tr>
<tr>
<td>1.2m</td>
<td>2.00m</td>
<td>UC100</td>
<td>2020mm</td>
<td>2.35m</td>
</tr>
<tr>
<td>1.4m</td>
<td>1.53m Smooth</td>
<td>UC100</td>
<td>1550mm</td>
<td>2.75m</td>
</tr>
<tr>
<td>1.6m</td>
<td>1.53m Smooth</td>
<td>UC100</td>
<td>1550mm</td>
<td>3.15m</td>
</tr>
<tr>
<td>1.8m</td>
<td>1.53m Smooth</td>
<td>UC100</td>
<td>1550mm</td>
<td>3.55m</td>
</tr>
<tr>
<td>2.0m</td>
<td>1.53m Smooth</td>
<td>UC150</td>
<td>1550mm</td>
<td>3.95m</td>
</tr>
<tr>
<td>1.4m</td>
<td>1.58m Sandstone and Timberlook</td>
<td>UC100</td>
<td>1600mm</td>
<td>2.75m</td>
</tr>
<tr>
<td>1.6m</td>
<td>1.58m Sandstone and Timberlook</td>
<td>UC100</td>
<td>1600mm</td>
<td>3.15m</td>
</tr>
<tr>
<td>1.8m</td>
<td>1.58m Sandstone and Timberlook</td>
<td>UC100</td>
<td>1600mm</td>
<td>3.55m</td>
</tr>
<tr>
<td>2.0m</td>
<td>1.58m Sandstone and Timberlook</td>
<td>UC150</td>
<td>1600mm</td>
<td>3.95m</td>
</tr>
</tbody>
</table>

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.
No loads are to be located within 1.0 metre behind the top unit.

Fall Away

Maximum height 600mm

First Course to be buried: 30mm

Depth of footing: 100mm

Dish drain to direct surface run off

Backfill to be placed and compacted in block layers

Crushed Stone (free draining medium) 300mm wide

100mm diameter ‘ag’ pipe

Compacted Road Base 100D × 350W mm

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

* 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.

Capping Block

Step back angle 20°

Fall Away

Maximum height “H”

Half to one block buried below ground

Depth of footing: 150D × 500W mm

Dish drain to direct surface run off

1m (no loading)

Soil or mulch

Backfill

Crushed Stone (free draining medium) 300mm wide

100mm diameter ‘ag’ pipe

Compacted road base
Valleystone

Dish drain to be installed to direct surface run off (if required)

For straight walls

First Course to be buried as per engineer specifications

No loads to located within 1m behind wall

Filter fabric to keep dirt out of drainage layer

Backfill placed and compacted in 250mm layers

Drainage granular material, filling voids in and around units

300mm width of 12–20mm free drainage granular materials e.g. blue metal

100mm diameter ‘ag’ pipe

Compacted Road Base, crushed stone or gravel levelling pad: 100mm by 350mm wide

Vintagestone

Capping Block

Granular material for drainage 300mm

Filter fabric or dish drain

Backfill to be placed and compacted in block layers

12–20mm free drainage granular material, filling voids in and around units

Drainage pipe

Compacted Road Base, crushed stone or gravel levelling pad: 150mm by 600mm wide
### Design Details

**Retaining Walls**

<table>
<thead>
<tr>
<th>Product</th>
<th>Range</th>
<th>Description</th>
<th>Max Wall Height</th>
<th>Size (mm)</th>
<th>Weight</th>
<th>Coverage</th>
<th>Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Arrinastone</strong></td>
<td></td>
<td>Standard Unit</td>
<td>600mm</td>
<td>300L × 200W × 150H</td>
<td>12.8kg</td>
<td>22.2 Blocks per m²</td>
<td>Straight Walls, Corners, Steps</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Right Corner</td>
<td>-</td>
<td>350L × 200W × 150H</td>
<td>13kg</td>
<td>N/A</td>
<td>Corners</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Left Corner</td>
<td>-</td>
<td>350L × 200W × 150H</td>
<td>13kg</td>
<td>N/A</td>
<td>Corners</td>
</tr>
<tr>
<td><strong>Hastings</strong></td>
<td></td>
<td>Standard Unit</td>
<td>800mm*</td>
<td>390L × 245W × 200H</td>
<td>21.5kg</td>
<td>13 Blocks per m²</td>
<td>Curved Walls, Straight Walls, Corners, Steps</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Corner Block</td>
<td>-</td>
<td>340L × 140W × 200H</td>
<td>20kg</td>
<td>N/A</td>
<td>Corners</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Half Cap</td>
<td>-</td>
<td>195L × 245W × 90H</td>
<td>9kg</td>
<td>5.13 Blocks per lineal metre</td>
<td>Capping</td>
</tr>
<tr>
<td><strong>Valleystone</strong></td>
<td></td>
<td>Angled Unit</td>
<td>1000mm*</td>
<td>295L × 203W × 125H</td>
<td>13kg</td>
<td>27.1 Blocks per m²</td>
<td>Curved Walls, Straight Walls, Steps</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Straight Sided Unit</td>
<td>-</td>
<td>295L × 203W × 125H</td>
<td>14.9kg</td>
<td>27.1 Blocks per m²</td>
<td>Curved Walls, Straight Walls, Steps</td>
</tr>
<tr>
<td><strong>Sydneystone</strong></td>
<td></td>
<td>Wall Block</td>
<td>800mm*</td>
<td>390L × 245W × 200H</td>
<td>21kg</td>
<td>13 Blocks per m²</td>
<td>Curved Walls, Straight Walls, Corners, Steps</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Corner Block</td>
<td>-</td>
<td>340L × 140W × 200H</td>
<td>20kg</td>
<td>N/A</td>
<td>Corners</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Capping Block</td>
<td>-</td>
<td>390L × 245W × 90H</td>
<td>16kg</td>
<td>2.56 Blocks per lineal metre</td>
<td>Capping</td>
</tr>
</tbody>
</table>
### Design Details

#### Retaining Walls

<table>
<thead>
<tr>
<th>Product</th>
<th>Range</th>
<th>Description</th>
<th>Max Wall Height</th>
<th>Size (mm)</th>
<th>Weight</th>
<th>Coverage</th>
<th>Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vintagestone</td>
<td>Standard Unit</td>
<td>800mm**</td>
<td></td>
<td>455L × 315W × 200H</td>
<td>41kg</td>
<td>11 Blocks per m²</td>
<td>Straight Walls, Corners, Steps</td>
</tr>
<tr>
<td>Vintagestone</td>
<td>Corner Unit (Left and Right)</td>
<td>-</td>
<td></td>
<td>438L × 200W × 200H</td>
<td>29kg</td>
<td>N/A</td>
<td>Corners</td>
</tr>
<tr>
<td>Vintagestone</td>
<td>Capping Unit</td>
<td>-</td>
<td></td>
<td>455L × 320W × 100H</td>
<td>31kg</td>
<td>2.2 per lineal metre</td>
<td>Capping</td>
</tr>
<tr>
<td>Explorer</td>
<td>Smooth</td>
<td>Standard Unit (3m with engineering)</td>
<td>800 mm*</td>
<td>1200L × 200H × 75T 1530L × 200H × 75T 2000L × 200H × 75T</td>
<td>41kg</td>
<td>4.17 Units per m²</td>
<td>Straight Walls, Corners, Steps</td>
</tr>
<tr>
<td>Explorer</td>
<td>Timberlook</td>
<td>Standard Unit (3m with engineering)</td>
<td>800 mm*</td>
<td>1580L × 200 H × 75T 2000L × 200 H × 75T</td>
<td>51kg</td>
<td>3.16 Units per m²</td>
<td>Straight Walls, Corners, Steps</td>
</tr>
<tr>
<td>Explorer</td>
<td>Sandstone</td>
<td>Standard Unit (3m with engineering)</td>
<td>800 mm*</td>
<td>1580L × 200H × 75T 2000L × 200H × 75T</td>
<td>58kg</td>
<td>3.16 Units per m²</td>
<td>Straight Walls, Corners, Steps</td>
</tr>
<tr>
<td>Explorer</td>
<td>Slate</td>
<td>Standard Unit (3m with engineering)</td>
<td>800 mm*</td>
<td>1580L × 200H × 75T</td>
<td>58kg</td>
<td>3.16 Units per m²</td>
<td>Straight Walls, Corners, Steps</td>
</tr>
</tbody>
</table>

Max Wall Heights in good soils (gravels, sandy gravels, crushed sandstone).

* Hastings and Sydney Stone 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. Vintage Stone and Keystone can be built up to 12m high when designed by a suitably qualified engineer and combined with soil reinforcement.
How to

Lay Pavers on Flexible Base

Materials required

- Pavers
- Gravel Roadbase (1m³ covers 10m² at a compacted depth of 100mm)
- Bedding Sand (1m³ will cover 30m² at a depth of 30mm)
- String lines, tape measure and pegs
- Spirit level
- Two Screed Rails – two flat steel bars (Approx. 3m × 50mm × 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.
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.

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

#### Pavers

<table>
<thead>
<tr>
<th>Product</th>
<th>Range</th>
<th>Description</th>
<th>Size (mm)</th>
<th>Weight</th>
<th>Coverage</th>
<th>Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Camino 50</td>
<td>Standard Unit</td>
<td>230L × 115W × 50H</td>
<td>2.8kg</td>
<td></td>
<td>37.8 Units per m²</td>
<td>Pools, Pedestrian</td>
</tr>
<tr>
<td>Broadway 150</td>
<td>Standard Unit</td>
<td>300L × 150W × 60H</td>
<td>5.8kg</td>
<td></td>
<td>22.2 Units per m²</td>
<td>Pools, Pedestrian</td>
</tr>
<tr>
<td>Broadway 300</td>
<td>Standard Unit</td>
<td>300L × 300W × 50H</td>
<td>9.8kg</td>
<td></td>
<td>11.11 Units per m²</td>
<td>Pools, Pedestrian</td>
</tr>
<tr>
<td>Broadway 400</td>
<td>Standard Unit</td>
<td>400L × 400W × 45H</td>
<td>16kg</td>
<td></td>
<td>6.25 Units per m²</td>
<td>Pools, Pedestrian</td>
</tr>
<tr>
<td>Plazastone 500</td>
<td>Standard Unit</td>
<td>500L × 500W × 45H</td>
<td>23.6kg</td>
<td></td>
<td>4 units per m²</td>
<td>Pools, Pedestrian</td>
</tr>
</tbody>
</table>

**Need more information?**

Please contact your Austral Masonry representative or visit our Design Centres
Ideas for Inspiration
Whatever your ideas, we have the products to turn them into reality.

**Retaining Walls**
Choose from concrete retaining wall blocks or concrete sleepers suitable for DIY, general landscaping or large scale commercial retaining wall applications.

**Grey Masonry Blocks**
Austral Masonry offer an extensive range of sizes and formats with light weight options available in selected locations.

**Concrete Pavers**
For commercial and residential applications, our range includes a collection of sizes, textures and a plethora of colours.

**Engineered Stone Pavers**
Offered exclusively from UrbanStone, the engineered stone range of pavers are the pinnacle in quality and style.

**Natural Stone**
Granite and Limestone flooring, and natural stone wall cladding are style solutions created by nature and perfected by UrbanStone.

**Porcelain Stoneware**
Created in Italy by Keope Ceramiche, our porcelain stoneware collection is the epitome of style, designed to suit indoor and outdoor applications.

**Coloured Masonry Blocks and Breeze Blocks**
Our extensive range of architectural masonry products are available in a range of sizes, formats, and finishes from Austral Masonry and GB Masonry.

**Limestone Blocks**
The engineered limestone and natural limestone block range is sourced through quarries in Western Australia with two finishes available to complement the natural limestone colour.

**Preblended Mortar and Accessories**
From Mortex preblended mortar, to concrete sealers and mortar additives, Austral Masonry offers a host of installation accessories.

* These products are stocked in selected locations.
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Call. 1300 Masonry