EXPLORER
CONCRETE SLEEPERS
retaining wall system
COLOURS & FINISHES

SANDSTONE
sandstone block finish

Graphite

SLATE
create a unique finish

Oak
Charcoal

SLATE UNIT
Size:
1580 L x 200 H x 75 T mm - 58kg

SANDSTONE UNIT
Size:
1580 L x 200 H x 75 T mm - 58kg
2000 L x 200 H x 75 T mm - 72kg
SMOOTH
simple and understated

**Grey**

**Charcoal**

**SMOOTH UNIT**

**Size:**
- 1200 L x 200 H x 75 T mm - 41kg
- 1530 L x 200 H x 75 T mm - 53kg
- 2000 L x 200 H x 75 T mm - 67kg

**TIMBERLOOK**
create a timber finish

**Ironbark**

**Gumtree**

**TIMBERLOOK UNIT**

**Size:**
- 1580 L x 200 H x 75 T mm - 51kg
- 2000 L x 200 H x 75 T mm - 66kg

Concrete Sleepers
DESIGNED TO LAST

All Explorer Reinforced Concrete Sleepers are 200mm high and 75mm thick, and include internal reinforcing so they’re solid, strong, and dependable. Available in a variety of lengths, and a range of finishes, they’re adaptable to almost any project. The Explorer range offers matching galvanised post system which makes design and installation easy – just draw out your wall, count your posts and select your sleepers - it’s that easy!

CODE COMPLIANT
Explorer exceeds AS4678 requirements and satisfies the National Construction Code.

LOW MAINTENANCE
With Explorer sleepers there is minimal maintenance required to keep your retaining wall looking good.

DESIGNED TO LAST
The Explorer range is offered with a 35 Year product warranty and 60 Year design life. When built to engineers specifications Explorer walls are rated to 5kPa.

RUST, ROT AND TERMITE RESISTANT
Explorer sleeper products won’t rust, rot or corrode and are termite resistant.

HOT DIPPED GALVANISED POSTS
Steel posts are hot dipped galvanised to satisfy AS/NZ4680 and ensure long lasting performance.
**CONCRETE SLEEPER**

**INSTALLATION OVERVIEW**

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, top and bottom, to keep your wall aligned.

3. **MARK THE 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 on the length of sleeper used.

4. **AUGER HOLES AND POUR CONCRETE**
   - Auger holes as per your engineers specifications as approved by council.
   - The hole depth should be an extra 200mm deeper than the wall height to allow the concrete to encase the steel post.
   - Make the concrete stiff. If using readymix concrete, order 20/20, 80 slump.
   - Pour concrete into holes, one at a time.
   - 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 to create a level surface on which to place your concrete sleepers.

6. **AG PIPE AND BACKFILL**
   Allow the concrete to cure for two to three days before placing your sleepers. Place ag pipe at the base, then backfill with gravel to 200mm from the top.

7. **SOIL PLUG OR FILTER FABRIC**
   A soil plug or filter fabric is compacted over the drainage layer to prevent silt intrusion.
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.

**Post types**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td><img src="image" alt="Ender" /></td>
<td>Ender</td>
</tr>
<tr>
<td><img src="image" alt="2 x Enders" /></td>
<td>2 x Enders</td>
</tr>
<tr>
<td><img src="image" alt="Joiner" /></td>
<td>Joiner</td>
</tr>
</tbody>
</table>

**NOTE:**

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

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**GENERAL DESIGN GUIDE FOR 5KPA SURCHARGE**

<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>
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<tr>
<td>0.6m</td>
<td>2.00m</td>
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<tr>
<td>1.4m</td>
<td>1.53m Smooth</td>
<td>UC100</td>
<td>1550mm</td>
<td>2.75m</td>
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*Please note.* The above table does not allow for the additional load of attached Colorbond fences. Additional design criteria is required to allow for their wind loads.
## POSTS AND BRACKET RANGE

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<tr>
<th>Post Type</th>
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<tbody>
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### Bracket Fence Type Bracket Size

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<tr>
<th>Bracket Type</th>
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<td>Colourbond</td>
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<td></td>
<td>Timber</td>
<td>580mm x 100mm x 6mm</td>
</tr>
<tr>
<td>Offset</td>
<td>Colourbond</td>
<td>580mm x 187mm x 3mm</td>
</tr>
<tr>
<td></td>
<td>Timber</td>
<td>580mm x 187mm x 6mm</td>
</tr>
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</table>

Bracket thicknesses of 3 or 6mm are available.

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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.

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

RETAINING WALLS
Choose from concrete retaining wall blocks or concrete sleepers suitable for DIY, general landscaping or large scale commercial retaining wall applications.

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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Concrete Sleepers
The product images in our brochures give a general indication of colour for your preliminary selection. We also recommend you view current product samples before making your final selections.