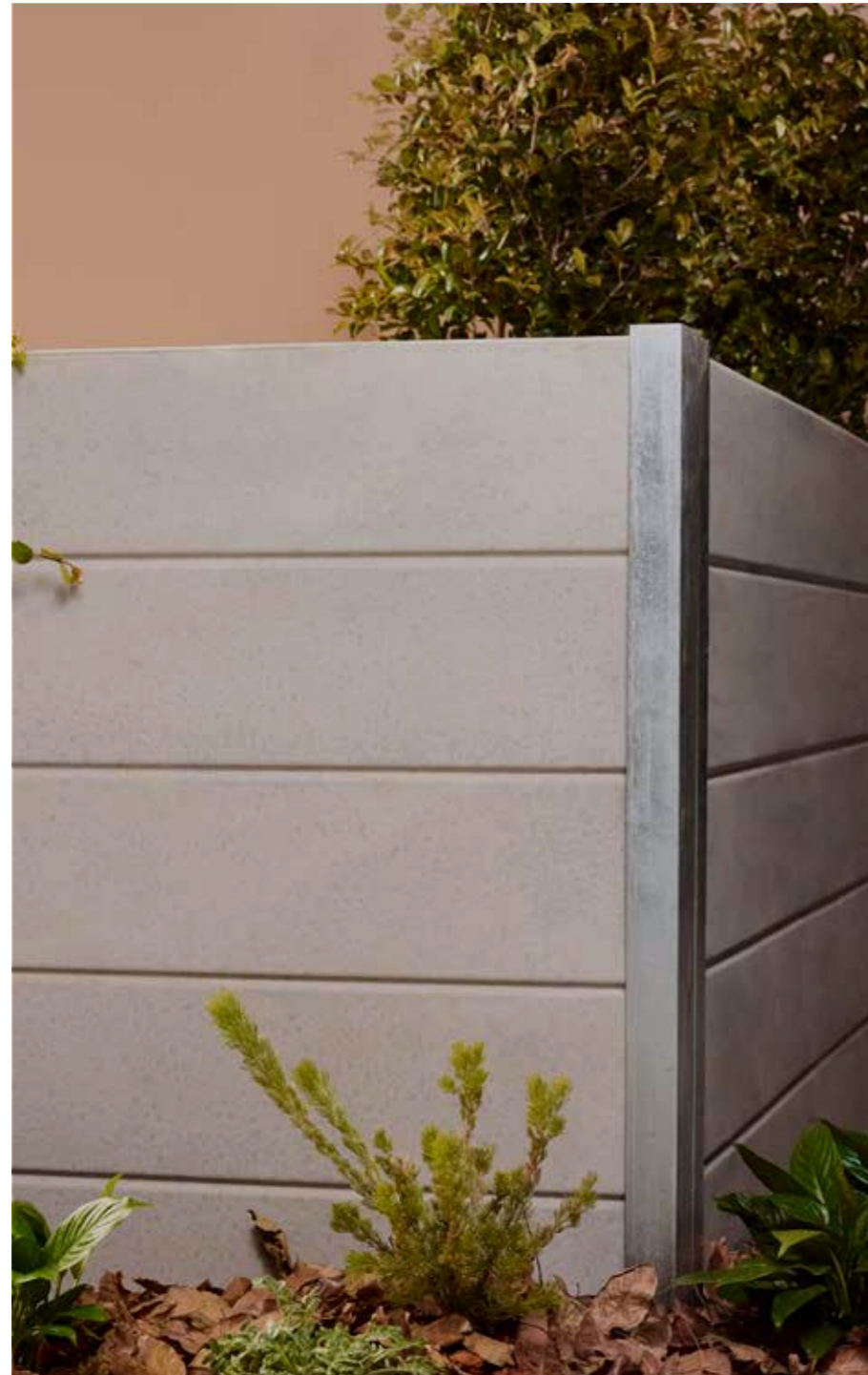


Concrete Sleeper Retaining Walls & Accessories

–



– Explorer

21

2

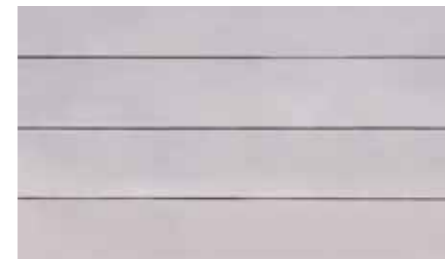


Explorer Concrete Sleeper Retaining Walls

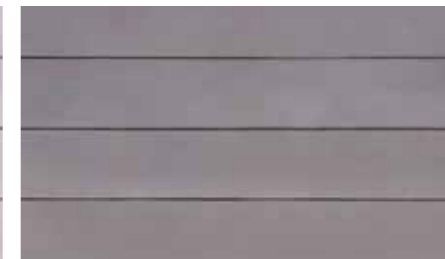
Both subtle and sleek, Explorer was crafted to blend in to any project whether it be commercial or residential.

Applications	Straight Walls Corners
Max Height	800mm (3m when engineered)

Colours



Grey | Smooth



Charcoal | Smooth



Natural | Sandstone



Graphite | Sandstone



Ironbark | Timberlook



Gumtree | 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): 40kg



Explorer 200 | 1530L*

Size: 1530L x 75W x 200H mm

Weight (each): 49kg



Explorer 200 | 1580L**

Size: 1580L x 75W x 200H mm

Weight (each): 50kg



Explorer 200 | 2000L^

Size: 2000L x 75W x 200H mm

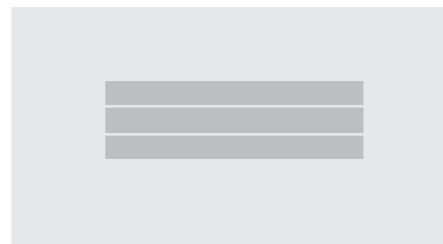
Weight (each): 67kg



Explorer 400*

Size: 2000L x 75W x 400H mm

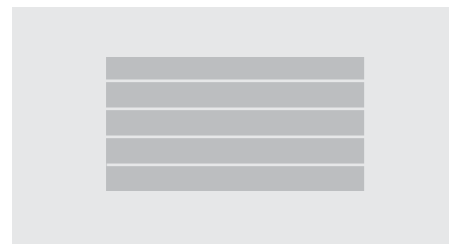
Weight (each): 145kg



Explorer 600*

Size: 2000L x 75W x 600H mm

Weight (each): 218kg



Explorer 1000*

Size: 2000L x 75W x 1000H mm

Weight (each): 362kg

^ Available in all finishes

* These types are only available in smooth finish

** Available in all finishes except smooth

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	Post Type	Wall Height	Post Height
100UC Joiner with deformed bar	0.4m	1.15m	100UC Joiner Full Length	0.4m	0.8m
	0.6m	1.15m		0.6m	1.2m
	0.8m	1.55m		0.8m	1.6m
	1.0m	1.95m		1.0m	2.0m
	1.2m	2.35m		1.2m	2.4m
	1.4m	2.75m		1.4m	2.8m
	1.6m	3.15m		1.6m	3.0m
	1.8m	3.55m		1.8m	3.4m
150UC Joiner with deformed bar	2.0m	3.95m	150UC Joiner	2.0m	3.6m
	2.2m	4.35m		1.6m	3.0m
	2.4m	4.75m		2.0m	3.6m
	2.6m	5.15m		2.2m	4.0m
	3.0m	5.95m		2.4m	4.4m
100PFC Ender	0.4m	0.8m	150PFC Ender	2.6m	4.8m
	0.6m	1.2m		0.4m	0.8m
	0.8m	1.6m		0.6m	1.2m
	1.0m	2.0m		0.8m	1.6m
150PFC Ender	1.2m	2.4m	1.0m	2.0m	
	1.4m	2.8m	1.2m	2.4m	
150PFC Ender	1.6m	3.0m	1.4m	2.8m	
	2.0m	4.0m	1.6m	3.0m	



Straight Fence Brackets



Offset Fence Brackets

Straight Fence Brackets

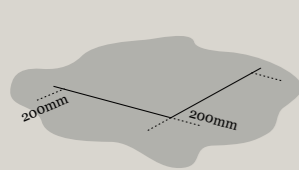
Colorbond Fence 580L x 100W x 3T mm
Timber Fence 580L x 100W x 6T mm

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.

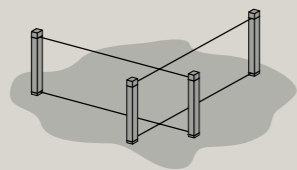
Build Concrete Sleeper Retaining Walls



1.

Prepare the Area

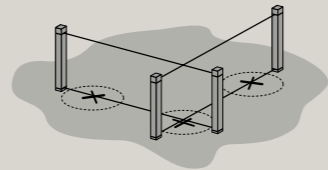
Clear and level your site where you plan to build the retaining wall. Ensure you leave 300mm behind the retaining wall area for backfill.



2.

Alignment

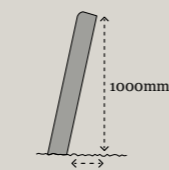
Place a star piquet or peg at both ends of the proposed wall. Attach two string lines at each end of the wall, top and bottom, to keep your wall aligned.



3.

Mark out Hole Positions

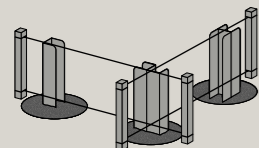
Starting from one end of the wall, mark a cross on the ground at intervals with their centre being approximately 30mm more than the length of the sleeper. For example: If you are using 1530mm sleepers the hole centres should be 1560mm apart – note, this will vary based on the length of sleeper used.



4.

Auger Holes and Pour Concrete

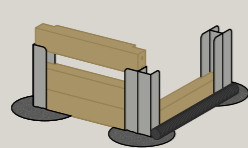
- Auger holes as per your engineer's specifications as approved by council.
- Pour concrete into holes, one at a time.
- Make the concrete stiff. If using readymix concrete, order 20/20, 80 slump.
- Set your post by lowering into ground until level with the top string lines.
- Ensure there is a minimum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



5.

Checking Posts

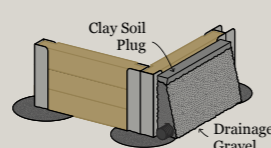
- Use a spirit level to make sure all your posts are aligned with the string line and are perpendicular on the sides.
- It is also important to measure the remaining distance to the top of your steel posts, to ensure the sleepers finish flush with the top of the posts.
- If required, lay a concrete pad 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 Size (Mm)	Post C/C Spacing	Post Length
0.4m	2.00m	UC100	2030mm	1.15m
0.6m	2.00m	UC100	2030mm	1.15m
0.8m	2.00m	UC100	2030mm	1.55m
1.0m	2.00m	UC100	2030mm	1.95m
1.2m	2.00m	UC100	2030mm	2.35m
1.4m	1.53m Smooth	UC100	1560mm	2.75m
1.6m	1.53m Smooth	UC100	1560mm	3.15m
1.8m	1.53m Smooth	UC100	1560mm	3.55m
2.0m	1.53m Smooth	UC150	1560mm	3.95m
1.4m	1.58m Sandstone and Timberlook	UC100	1610mm	2.75m
1.6m	1.58m Sandstone and Timberlook	UC100	1610mm	3.15m
1.8m	1.58m Sandstone and Timberlook	UC100	1610mm	3.55m
2.0m	1.58m Sandstone and Timberlook	UC150	1610mm	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.

