



BENEFITS OF CONCRETE SLEEPERS



Code compliant
Pioneer is the only product in the market that exceeds AS4678 requirements and satisfy the National Construction Code.



Low maintenance
With Pioneer sleepers there is minimal maintenance required to keep your retaining wall looking good.



Designed to last
Pioneer is offered with a 35 Year product warranty and 60 Year design life. When built to engineers specifications Pioneer walls are rated to 5kPa.



Rust, rot and termite resistant
Pioneer sleeper products wont rust, rot or corrode and are termite resistant.



Hot dipped galvanised posts
Steel posts are hot dipped galvanised to satisfy AS/ NZ4680 ensuring long lasting performance.



Range of finishes
Pioneer is available in a range of three finishes to suit your style.

How It Works

It's as simple as 1,2,3! Follow the steps shown to purchase or order your product. If you need further advice, speak to a team member at the Special Orders Desk in-store.

1. Select The Product You Want

View the extensive range available in this brochure or online. Use the number/s shown below to order your product in-store.



IRONBARK
1580 L x 200 H x 75 T mm 1080366

POST TYPE	WALL HEIGHT	POST HEIGHT	ITEM NO.
100UC JOINER	400mm	1.15M	1080371
BRACKET	FENCE TYPE	BRACKET SIZE	ITEM NO.
STRAIGHT	Colourbond	580mm x 100mm x 3mm	1080367

2. Order at the Special Orders Desk

After you have selected the product you want, take this brochure to the Special Orders Desk.

3. Get It Home

We Will Deliver

Delivery to your home or site can be arranged in-store when purchasing your products

Pick-Up In-Store

If you decide to pick-up in-store and need help to get it home, you can:

- borrow a courtesy trailer
- hire a vehicle

Check with your local Bunnings store for availability.

Please note minimum order values apply

Please check with Special Orders team member to confirm direct delivery lead times and cost.

PIONEER CONCRETE SLEEPERS

RETAINING WALL SYSTEM



DESIGNED AND MADE IN AUSTRALIA, PIONEER REINFORCED CONCRETE SLEEPERS ARE A PERFECT SOLUTION FOR TERMITE PROOF RETAINING WALLS.

AVAILABLE IN A LARGE RANGE OF COLOURS AND FINISHES.



WARRANTED TO LAST

Added Peace of Mind

Designed and made in Australia, Pioneer Reinforced Concrete Sleepers are guaranteed for up to 35 years making them the perfect solution for termite proof retaining walls up to 3m high.*

*Engineer design required depending on application and site conditions.



For more product information or help with retaining walls above call Austral Masonry on 07 3097 2600 or visit australmasonry.com.au/concrete-sleepers



Take This Brochure to the Special Orders Desk to place an order



PIONEER CONCRETE SLEEPERS RANGE

All Pioneer Reinforced Concrete Sleepers are 200mm high and 75mm thick, with 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.

Pioneer's matching galvanised post system makes design and install easy – just draw out your wall, count your posts and select your sleepers – it's that easy!

PIONEER SMOOTH

simple and understated



GREY

PIONEER SANDSTONE

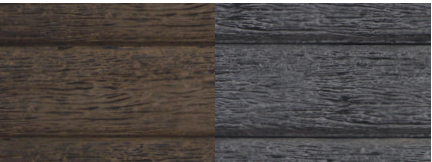
sandstone block finish



NATURAL

PIONEER TIMBERLOOK

create a timber finish



IRONBARK

GUMTREE

Grey Sleeper	ITEM NO.	Natural Sleeper	ITEM NO.	Ironbark Sleeper	ITEM NO.
1200 L x 200 H x 75 T mm	1080354	1580 L x 200 H x 75 T mm	1080363*	1580 L x 200 H x 75 T mm	1080366
1530 L x 200 H x 75 T mm	1080355			Gumtree Sleeper	
2000 L x 200 H x 75 T mm	1080357			1580 L x 200 H x 75 T mm	1080426

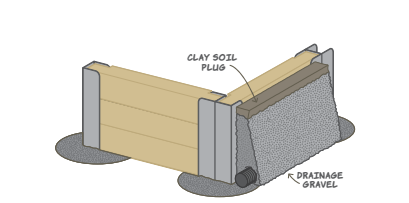
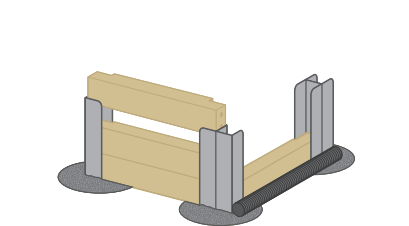
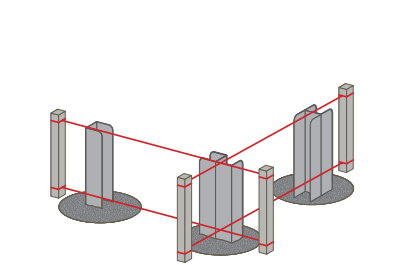
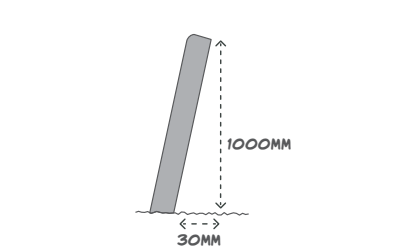
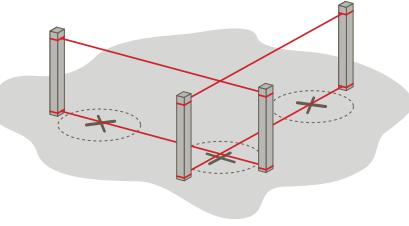
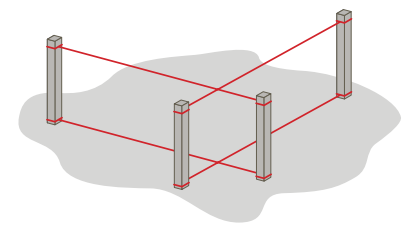
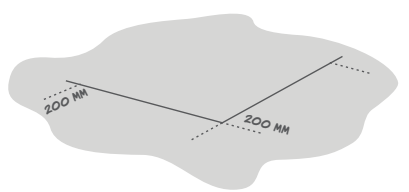
*Please note: Pioneer Sandstone sleepers are available in 'half' and 'full' units.
To create your Pioneer Sandstone wall you will need both of these to create a running bond pattern.

POSTS AND BRACKET RANGE

POST TYPE	WALL HEIGHT	POST HEIGHT	ITEM NO.	POST TYPE	WALL HEIGHT	POST HEIGHT	ITEM NO.
100UC JOINER	0.4M	1.15M	1080371	100PFC ENDER	0.4M	0.8M	1080382
	0.6M	1.15M	1080373		0.6M	1.2M	1080383
	0.8M	1.55M	1080374		0.8M	1.6M	1080384
	1.0M	1.95M	1080375		1.0M	2.0M	1080385
	1.2M	2.35M	1080376		1.2M	2.4M	1080386
	1.4M	2.75M	1080377		1.4M	2.8M	1080387
	1.6M	3.15M	1080378	150PFC ENDER	1.6m	3.0m	1080388
	1.8M	3.55M	1080379		2.0m	4.0m	1080390
	2.0M	3.95M	1080381				

BRACKET	FENCE TYPE	BRACKET SIZE	ITEM NO.	BRACKET	FENCE TYPE	BRACKET SIZE	ITEM NO.
STRAIGHT	Colourbond	580mm x 100mm x 3mm	1080367	OFFSET	Colourbond	580mm x 187mm x 3mm	1080368
	Timber	580mm x 100mm x 6mm	1080369		Timber	580mm x 187mm x 6mm	1080370

INSTALLATION OVERVIEW



1 PREPARE THE AREA

- Clear and level your site where you plan to build the retaining wall. Ensure you leave 200mm 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 on the length of sleeper used.

4 AUGER HOLES AND POUR CONCRETE

- Auger holes as per your engineer's specifications.
- Pour concrete into holes, one at a time.
- Make the concrete stiff. If using readymix concrete, order 20/20, 60 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

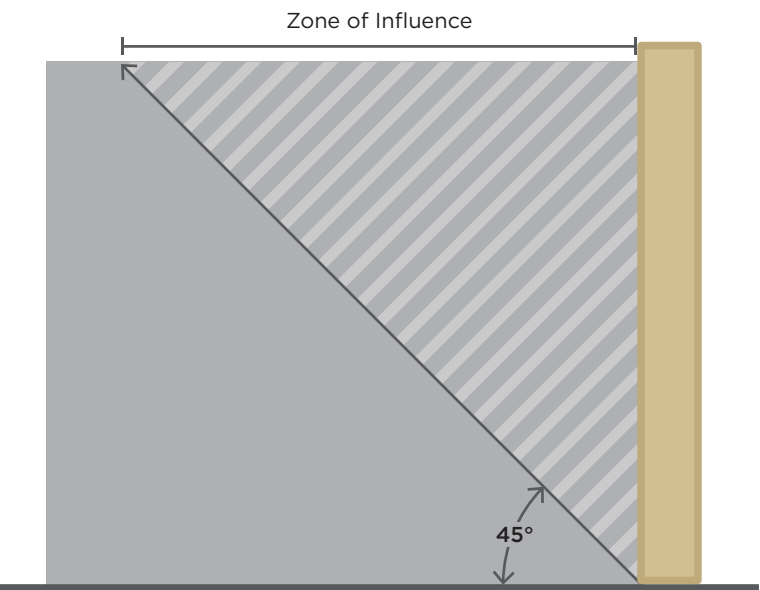
- A soil plug is then placed in, to fill the wall to the top.

* 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.

GENERAL DESIGN GUIDE FOR 5KPA SURCHARGE

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	UC100	1550mm	2.75m
1.6m	1.53m	UC100	1550mm	3.15m
1.8m	1.53m	UC100	1550mm	3.55m
2.0m	1.53m	UC150	1550mm	3.95m

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.

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

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

- AS4678-2002 Earth Retaining Structures
- AS4100-1998 Steel Structures
- AS3600-2018 Concrete Structures
- AS2159-2009 Piling-Design and Installation