



Australian Design & Engineering Crafted for Australian conditions and standards for unmatched durability and performance.



Sustainable & Cost-Effective
EcoSleeper reduces environmental impact while offering a long-lasting alternative to traditional materials.



Independently Tested
Independtly tested, EcoSleeper
has set the benchmark for strong,
premium composite sleepers.



Strong & Built To Last
Our choice to optimise the sleepers'
design and use only premium
materials gives you peace of mind.



DIY-Friendly

Lightweight and easy to install, EcoSleeper makes building a professional-grade retaining wall simple for DIYers and professionals.

Proudly
Australian designed
& manufactured by
CSRWB



Australia's Premium Composite Sleeper

EcoSleeper sets the benchmark for composite retaining wall solutions, combining superior strength, durability, and innovation.

As the most rigorously tested FRP sleeper in Australia, engineered for exceptional vertical load performance, EcoSleeper is built to withstand the toughest conditions. With greater thickness, unmatched structural integrity, and a premiumquality finish, EcoSleeper offers a smarter, long-lasting solution for retaining walls.

Designed for both DIYers and professionals, it's the ultimate choice for those who want strength without compromise.

ECO SLEPERS

A CLOSER LOOK AT OUR REVOLUTIONARY FRP SLEEPERS

INDUSTRY-LEADING STRENGTH & QUALITY

Not all composite is made equal. That's why we chose to use premium FRP comprising:

- » 70% E-Glass
- » 20% Polyester
- » 10% Aluminum Hydroxide

ENGINEER CERTIFIED

Engineer certified for walls up to 900mm (using EcoPosts) and higher walls using steel posts.

AUSTRALIA'S MOST RIGOROUSLY TESTED

Independently tested at the University of South Australia, EcoSleeper is engineered for superior strength, durability, and compliance with key structural standards.

PREMIUM THICKNESS

At 3mm, our sleepers are thicker and stronger than standard composite sleepers, providing long-term reliability and structural integrity.

SUSTAINABLE & ECO-FRIENDLY

FRP reduces environmental impact while delivering a high-performance, long-lasting solution.

LIGHTWEIGHT & EASY TO INSTALL

Our sleepers are extremely lightweight which makes them incredibly easy to handle and ship.

» Sleepers: 3.2kg/m

» H-Posts: 2.1kg/m

» C-Posts: 1.3kg/m

» Corner: 2.6kg/m

How It Works

Getting started with your EcoSleeper System is easy.

Start by selecting the EcoSleeper sleepers that best match your design and project requirements.

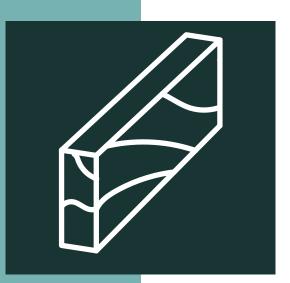
Then pick the FRP retaining wall posts you need to securely hold your wall in place.

To make planning effortless, use the project planning form at the back of this brochure. It's the easiest way to map out your project, calculate quantities, and write down product codes to simplify your order.

Need help?

Your local EcoSleeper stockist is on hand to help you.

Visit www.ecosleeper.com.au to find your nearest stockist, get help and order online.



CHOOSE SLEEPERS

Choose from our range of EcoSleeper lightweight sleepers. Available in Concrete Grey or Graphite for a light or dark look to suit your needs and style.



ADD POSTS & DRAINAGE

The EcoSleeper System comes with FRP posts (or steel available for higher walls) and drainage materials.



ORDER YOUR SYSTEM

Use the project planning form at the back of this brochure to calculate quantities and note down product codes. Then, order your system through your nearest stockist.



GET IT HOME

Once your order is ready, pick it up or have it delivered to your home or site. Your local stockist will help you seamlessly get your order home.

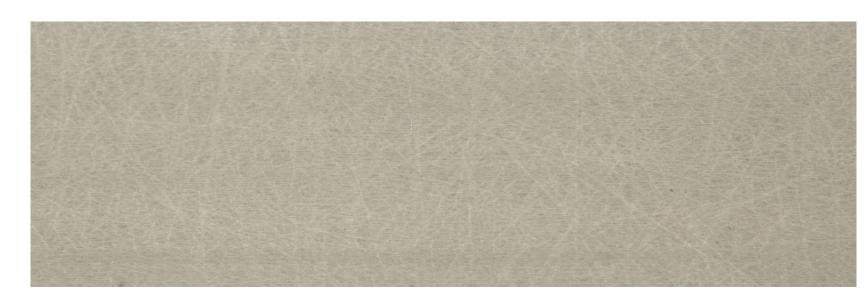
FRP ECOSLEPERS

The foundation of your project starts here as you choose the right sleeper for your project. Ecosleeper is the premium composite sleeper on the market, proven by our rigorous testing and our uncompromising approach to quality. Sleepers are 3mm thick and are available in 2 colours.



Charcoal

SIZE	CODE	WEIGHT
2400mm x 200mm x 50mm	FRPSM24	7.68 kg



Concrete Grey

SIZE	CODE	WEIGHT
1600mm x 200mm x 50mm	FRPIG16	5.12 kg
2000mm x 200mm x 50mm	FRPIG20	6.40 kg
2400mm x 200mm x 50mm	FRPIG24	7.68 kg

TESTED TO GUALITY

We don't just say EcoSleeper is Australia's best composite sleeper, we've done the testing to prove it!

We chose to use premium materials, decided to increase thickness and optimsed quality at every point - and the results speak for themselves.



EcoSleeper is the most rigorously tested composite sleeper and posts in Australia, independently verified at the University of South Australia. Engineered for strength, durability, and performance, it meets key structural and earth-retaining standards—giving you confidence in every build.

ON QUALITY
so you don't have to compromise
ON PERFORMANCE

FRP ECO POSTS

Our FRP posts have also undergone rigorous independent testing and are 4mm thick, making them the premium composite posts on the market. FRP Eco Posts are available in Concrete Grey.

FRP Posts



	ENDERS (C-POSTS)		JOINERS (H-POSTS)		CORNER (90° C-POST)	
SIZE	CODE	WEIGHT	CODE	WEIGHT	CODE	WEIGHT
0.4m	65FRPC0.4M	0.52 kg	65FRPH0.4M	0.84 kg	65X90FRP0.4M	1.04 kg
0.8m	65FRPC0.8M	1.04 kg	65FRPH0.8M	1.68 kg	65X90FRP0.8M	2.08 kg
1.2m	65FRPC1.2M	1.56 kg	65FRPH1.2M	2.52 kg	65X90FRP1.2M	3.12 kg
1.6m	65FRPC1.6M	2.08 kg	65FRPH1.6M	3.36 kg	65X90FRP1.6M	4.16 kg
2.0m	65FRPC2.0M	2.60 kg	65FRPH2.0M	4.20 kg	65X90FRP2.0M	5.20 kg

65UC/PFC Posts



	ENDERS (C-POSTS)	JOINERS (H-POSTS)	CORNER (90° C-POST)	CORNER (90° C-POST)
SIZE	CODE	CODE	CODE	CODE
0.3m	65H0.3M	65H0.3M	65X90DEG0.3M	65X45DEG0.3M
0.6m	65H0.6M	65H0.6M	65X90DEG0.6M	65X45DEG0.6M
0.9m	65H0.9M	65H0.9M	65X90DEG0.9M	65X45DEG0.9M
1.2m	65H1.2M	65H1.2M	65X90DEG1.2M	65X45DEG1.2M
1.5m	65H1.5M	65H1.5M	65X90DEG1.5M	65X45DEG1.5M
1.8m	65H1.8M	65H1.8M	65X90DEG1.8M	65X45DEG1.8M

CHOOSING YOUR POSTS

Under 1m
For walls under 1m high, FRP
EcoPosts or 65 series steel
posts can be used.

Walls over 1m For walls over 1m high, 100 series steel posts must be used.



Fence Brackets

SIZE		CODE
3mm	Straight	FB3MM
3mm	Offset	FBOS3
5mm	Straight	FB6MM
ómm	Offset	FBOS6

100UC/PFC Posts



ENDERS (C-POSTS)	JOINERS (H-POSTS)	CORNER (90° C-POST)	CORNER (90° C-POST)
CODE	CODE	CODE	CODE
C0.4	H0.4	-	-
C0.6	H0.6	-	-
C0.8	H0.8	C450.8	90DEG0.8M
C1.0	H1.0	-	-
C1.2	H1.2	C451.2	90DEG1.2M
C1.4	H1.4	-	-
C1.6	H1.6	C451.6	90DEG1.6M
C1.8	H1.8	-	-
C2.0	H2.0	C452.0	90DEG2.0M
C2.4	H2.4	-	-
C2.8	H2.8	C452.8	90DEG2.8M
C3.2	H3.2	_	_
C3.6	H3.6	-	-
	(C-POSTS) CODE CO.4 CO.6 CO.8 C1.0 C1.2 C1.4 C1.6 C1.8 C2.0 C2.4 C2.8 C3.2	CODECODECO.4HO.4CO.6HO.6CO.8HO.8C1.0H1.0C1.2H1.2C1.4H1.4C1.6H1.6C1.8H1.8C2.0H2.0C2.4H2.4C2.8H2.8C3.2H3.2	CODE CODE CODE CO.4 HO.4 - CO.6 HO.6 - CO.8 HO.8 C450.8 C1.0 H1.0 - C1.2 H1.2 C451.2 C1.4 H1.4 - C1.6 H1.6 C451.6 C1.8 H1.8 - C2.0 H2.0 C452.0 C2.4 H2.4 - C2.8 H2.8 C452.8 C3.2 H3.2 -

ALLCAPPS

AllCapps is our innovative capping solution designed to give your retaining wall a sleek and polished finish.

Perfect for maintaining the FRP look if you're using steel posts to build your wall.



SIZE	SUITED POST	GRAPHITE	CONCRETE GREY
1.6m	65mm	C65GG22	C65CG22
2.2m	100mm	C100GG22	C100CG22
2.6m	100mm	C100GG26	C100CG26





SIZE CODE 65mm P65SOC20M



1m x 50m GEO1MX50

DRAINAGE

A strong retaining wall starts with good drainage and a solid foundation so these products are not only nice to have, they're essential!

	FRP (EcoSleeper System)	Steel (A 709 Grade 50)	Aluminium (6061-T651 & 6061-T6)	Wood (Douglas Fir)
CORROSION, ROT & INSECT RESISTANCE	Resists a broad range of chemicals and is unaffected by moisture or immersion in water. Resists insect damage.	and corrosion. Requires	Can cause galvanic corrosion. (Anodizing and other coatings increase corrosion resistance.)	Can warp, rot and decay when exposed to moisture, water and chemicals. Susceptible to attack by insects.
WEIGHT	Weighs 75% less than steel and 30% less than aluminum.	Could require lifting equipment to move and place.	Lightweight — about a third of the weight of copper or steel.	Specific gravity 0.48
STRENGTH	Has greater flexural strength than timber and pound-for-pound is often stronger than steel and aluminum in the lengthwise direction.	Homogeneous material. Yield strength (Fy) = 36 ksi.	Homogeneous material. Flexural strength (Fu) = 35 ksi.	Modulus of rupture is 12,000 psi
IMPACT RESISTANCE	Will not permanently deform under impact. Glass mat in pultruded parts distributes impact load to prevent surface damage.	Can permanently deform under impact.	Easily deforms under impact.	Can permanently deform or break under impact.
COLOUR	Colour is moulded through; no painting required. Variety of colours available.	Must be painted for colour, and may require repainting over time.	Colours require prefinishes, anodic coatings and paints. Mechanical, chemical and electroplated finishes can be applied.	Must be primed and painted for colour, and may require repainting over time.
COST	Lower installation costs, less maintenance and longer product life allow for a lower lifecycle cost.	Lower initial material cost.	Part price comparable to FRP.	Has a lower initial cost, but usually requires more maintenance and replacement.
FABRICATION	Can be field-fabricated using simple carpenter's tools with carbon or diamond tip blades — no torches or welding required.	Often requires welding and cutting torches. Heavier material requires special equipment to erect and install.	Good machinability (welding, brazing, soldering or mechanical joining).	Can be field-fabricated using simple carpenter's tools.
DENSITY (LB/FT3)	107-120	490	169	30
TENSILE STRENGTH (PSI)	30,000 (LW) 7,000 (CW)	65,000	45,000	-
TENSILE MODULUS (X 106 PSI)	2.8 (LW) 1 (CW)	30	10	-
FLEXURAL STRENGTH(PSI)	30,000 (LW) 10,000 (CW)	65,000	45,000	12,000
FLEXURAL MODULUS (X 106 PSI)	1.8 (LW) 0.8 (CW)	30	10	1.6-1.8
THERMAL CONDUCTIVITY (BTU IN. /(HR FT2 °F))	4	323	1,165	13
THERMAL EXPANSION (X 10-6 IN./IN./°F)	7-8	6-7	13	1.7-2.5

Made For DIY

EcoSleeper is designed with DIYers in mind, making it easier than ever to build a professional-grade retaining wall without the heavy lifting or specialized equipment.

Lightweight & Easy to Handle

With sleepers from 5.16kg each, EcoSleeper is a fraction of the weight of concrete, making transport and installation effortless.

Simple Installation

No heavy machinery needed—just slide the sleepers into place with minimal effort.

Complete System

Includes FRP sleepers, posts and accessories, so you have everything in one easy-to-assemble package.

Professional Results

Get the strength and durability of a highend retaining wall with a system designed for easy, mistake-free installation.

MORE THAN JUST RETAINING WALLS

Our EcoSleeper Sleepers are wonderful for retaining walls - but they can be used for so many different applications too.

The only limit is your imagination...



GARDEN BEDS

PATIOS



PRIVACY WALLS

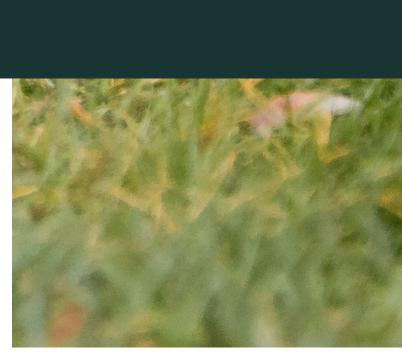


EDGING



STAIRWAYS

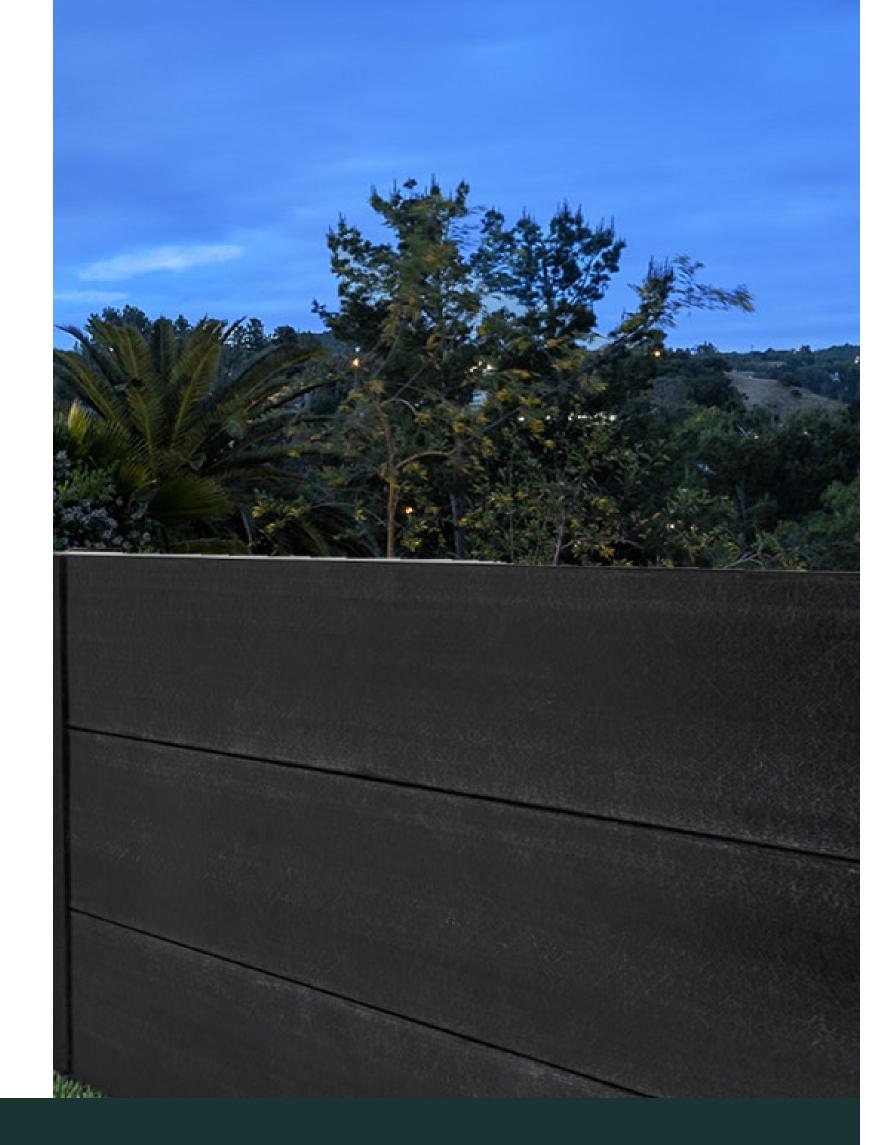
FEATURE WALLS



Built with Precision. Delivered with Care.

EcoSleeper is proudly designed by CS Retaining Walls Brisbane and manufactured in line with Australian standards. With decades in the retaining wall industry, CS Retaining Walls Brisbane maintains exceptional quality control at every stage of production. This ensures that every sleeper and steel post meets the highest standards of durability and performance.

Their commitment to excellence extends beyond manufacturing. From assisting with project planning to ensuring timely delivery, the CS Retaining Walls Brisbane team is dedicated to providing outstanding customer support. Your satisfaction is their priority.



Choosing the Right Manufacturer Matters

QUALITY CONTROL

On-site manufacturing & a rigourous supplier selection process means CS Retaining Walls Brisbane can ensure every sleeper meets the highest standards.

RELIABILITY YOU CAN TRUST

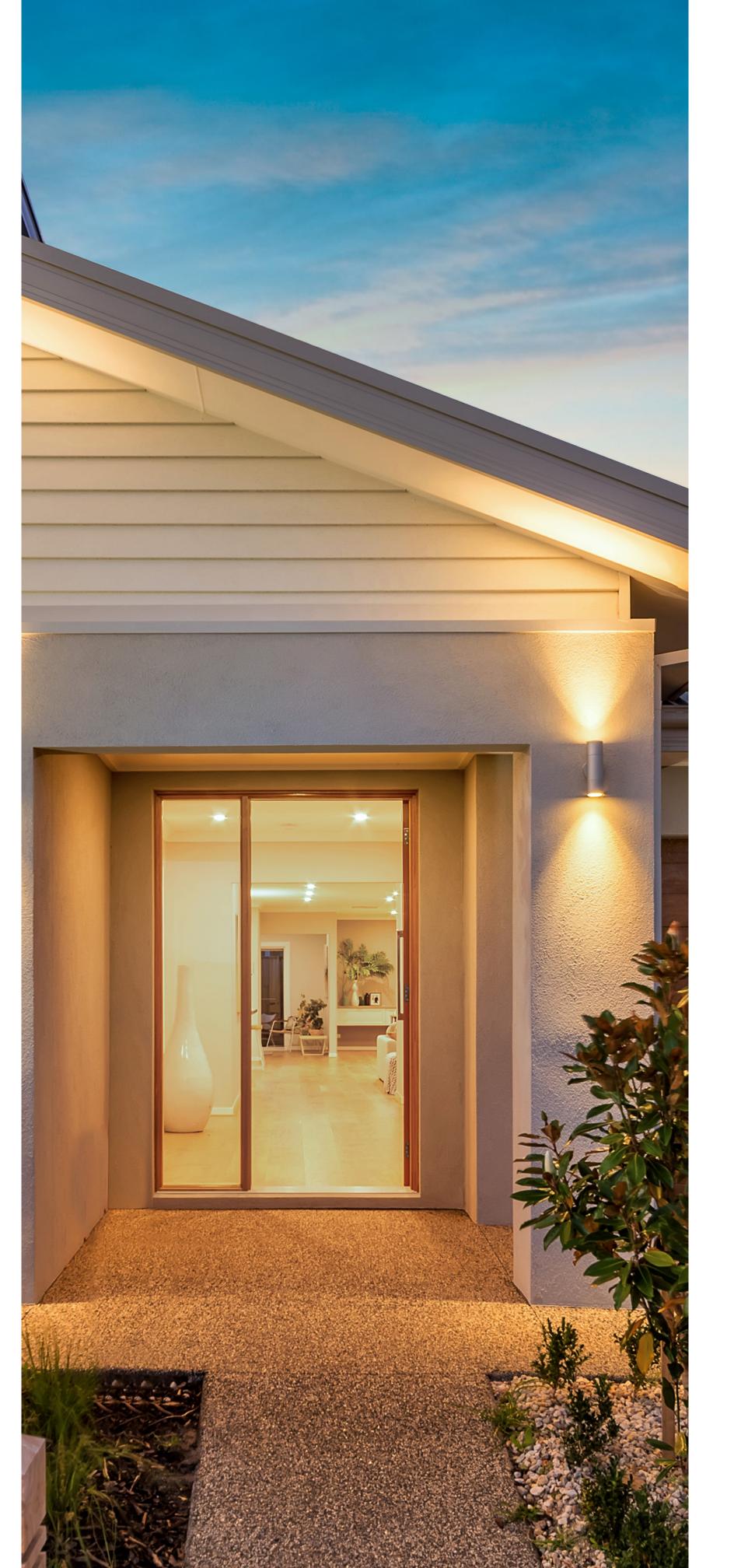
Choosing a reputable manufacturer means confidence in the consistency and longevity of your materials.

CUSTOMER-FOCUSED

With 15+ years of experience, CS Retaining Walls Brisbane creates products specifically to suit the needs of their customers.

LOCAL EXPERTISE

Locally manufactured products are designed to suit Australian conditions, ensuring they perform in even the harshest climates.



PRODUCT ADVICE

Not sure where to start? Your local stockist will be able to answer all of your EcoSleeper questions. Head to our website, ecosleeper.com.au to find a stockist and get more product information.

PROJECT PLANNING

We've included a handy planning tool at the back of this brochure to help you work out what you need for your project and write down the products you want.

EASY ORDERING

You can easily order your EcoSleeper system by:

Ordering Online

Head to ecosleeper.com.au and order your system quickly and easily online. Your order will be placed directly with the manufacturer, CS Retaining Walls Brisbane.

Ordering Through Your Local Stockist

If you need additional ordering support, head to the website to find your local stockist. Simply call, visit or email your stockist to order.

DELIVERY OR PICK UP

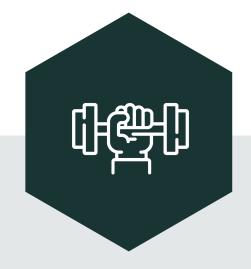
For online ordering, CS Retaining Walls Brisbane's fleet of trucks delivers throughout Queensland and northern New South Wales daily. We can arrange next day delivery on stocked items. Alternatively, pick up can be arranged.

Note: individual stockists may have varying delivery terms.

INSTALLATION

EcoSleeper are designed for easy DIY installation. Our handy installation guide will support you as you bring your project to life!

QUALITY PRODUCTS THAT LAST A LIFETIME



ENGINEER

CERTIFIED

EcoSleeper sleepers engineer certified for walls up to 900mm. Built to withstand the harshest conditions, these lightweight sleepers are made to endure Australia's toughest climates without compromising on strength or style.



WILL NOT DEFORM **UNDER PRESSURE**

Using premium FRP (70% E-Glass, 20% Polyester 10% Aluminum Hydroxide), EcoSleeper sleepers and accessories will have been rigoroulsy tested to proove that they will not permanently deform under pressure meaning you can rest assure that your wall will stand the test of time.



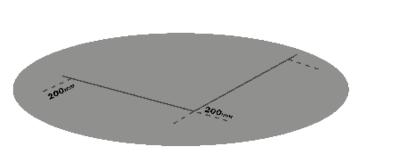
LIFETIME WARRANTY

Rest assured knowing your investment is protected. EcoSleeper sleepers come with lifetime warranty coverage, giving you peace of mind and confidence in the quality of your wall for years to come.

At CS Retaining Walls Brisbane, our commitment doesn't end when you complete your purchase. We're here to support you every step of the way, offering expert advice for ongoing maintenance, warranty coverage for peace of mind, and a team ready to assist whenever you need help.

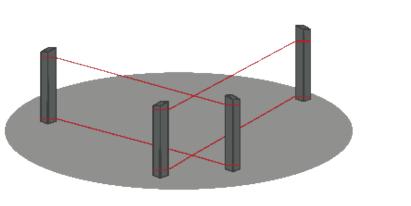
Your project's success is our priority, long after the materials are delivered.

Retaining Mall Quick Install Guide



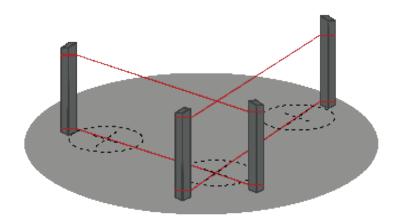
Prepare the area

Clearandlevelyoursitewhere you plan to build the retaining wall. Ensure you leave 300 mm behind the retaining wall area for backfill.



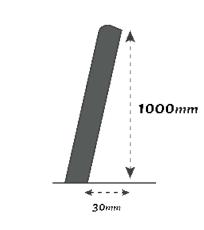
Align post position

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.



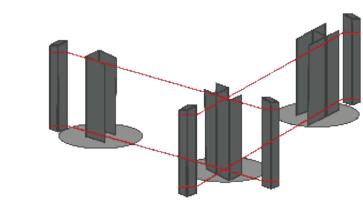
Mark out holes

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.



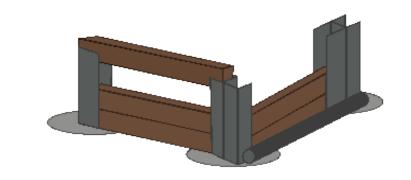
Pour concrete

Auger holes as per your engineer's specifications. Pour concrete into holes, one at a time.



Check posts

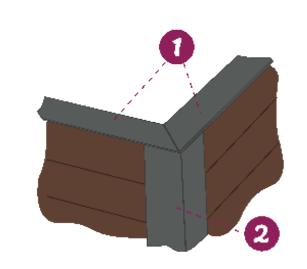
Use a spirit level to make sure all your posts are aligned with the string line and are perpendicular on the sides.



Drainage & Backfill

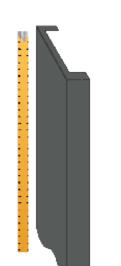
Allow the concrete to cure for two to three days before you place your sleepers in. Place agg pipe at the base, then backfill with gravel.

All Capps Capping Quick Install Guide



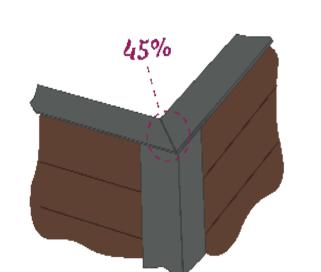
Top first, posts second

There is no right or wrong way to install AllCapps but we recommend capping the sleepers and then the posts.



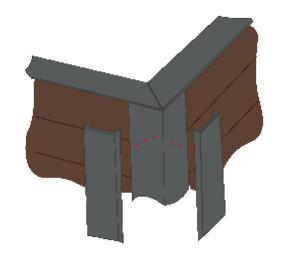
Measure & cut

We recommend cutting and trial fitting it all without glue first. Start at the edge of the wall and create joins in the center of the posts.



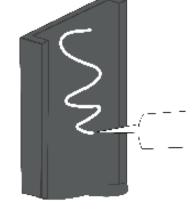
Installing corner pieces

You can butt the 2 pieces together, but we recommend cutting the cap at a 45° angle and joining them for the neatest finish.



Check capping on posts

Lay your AllCapps capping on your wall and posts to ensure your capping fits prior to applying any glue.



Glue capping in place

Apply glue to the back of the capping. The more surface you cover with glue the more of the cap will stick holding the capping on stronger.



Get the Complete EcoSleeper Installation Guide

Scan the QR code below to access our more detailed EcoSleeper Installation Guide.

SLEEPERS

SLEEPER NAME	SIZE	CODE	QUANTITY
POSTS			
POST TYPE	SIZE	CODE	QUANTITY
ALLCAPPS			
ALLCAPPS TYPE	SIZE	CODE	QUANTITY
DRAINAGE			
ITEM	SIZE	CODE	QUANTITY
			- -

PLANNING TIPS

HOW MANY SLEEPERS DO YOU NEED?

Divide your wall height by 200mm to calculate the number of rows.

Divide wall length by the sleeper length to calculate number of columns.

Multiply to no. of rows by the no. of columns to determine the number of sleepers needed.

HOW MANY POSTS DO YOU NEED?

1 x H-Post for each sleeper bay join.1 x C-Post for each end.1 x Corner Post for each corner

WHAT POST LENGTHS DO YOU NEED?

Post lengths should be double your wall height.

HOW MUCH ALLCAPPS DO YOU NEED?

1 x cap per H-Post. 2 x caps per C-Post & corner. Capping comes in 1.6m, 2.2m or 2.6m lengths and can be cut, so choose the quantity that provides the least wastage.

Allow 200mm of capping per sleeper drop.



WWW.ECOSLEEPERS.COM.AU

DESIGNED AND MANUFACTURED BY

