



# NARANGBA TIMBERS

*GUIDE TO DIY*

*RETAINING WALLS*

*Before you know it, you've built something special!*

*A timber retaining wall is a great way to add functionality to your backyard. Not only do they allow you to stabilise your soil bed, they also inject decorative flair into your backyard space.*

*It's time to gather your helpers and get your materials ready to build your own DIY retaining wall.*

*This how-to guide to building a retaining wall will cover all the steps you need to build something special for you and your family.*





# *Contents*

*Types of retaining wall*

*Types of timber*

*What materials you'll need*

*Steps*

*Gallery*

*Maintenance tips*

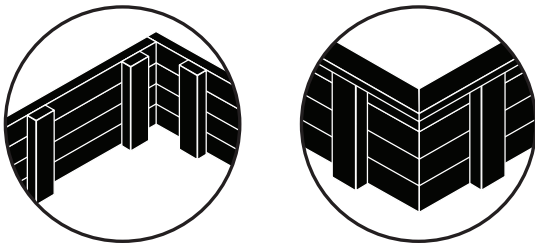
*At Narangba Timbers, we have a variety of timber options to cover all your retaining wall needs.*

## ***What style of retaining wall should I build?***

While there are many types of retaining walls, such as those built with masonry or steel sheets, a timber retaining wall will be the most affordable and easy to build yourself in most backyards.

Before you purchase your materials, spend some time developing a well-structured project plan. This means looking at where you're going to place your retaining wall, what materials you're going to use and – most importantly – how much you're looking to spend.

Once you've come up with a feasible plan, draw your floor plan and elevations, to scale, on graph paper.



*Tip: If you need help coming up with a plan to suit your needs and budget, give the team at Narangba Timbers a call. One of our timber experts can advise you on the ideal pergola for your property.*



## What kind of timber should I use for a retaining wall?



### SOFTWOOD



For an easy-to-work-with and economical timber option, we recommend treated pine. Not only is it ideal for creating a strong non-structural retaining wall, it's also light and highly durable, and offers quality protection against both decay and termites.

When building your timber retaining wall, ensure that the timber has a H4 durability rating. This will ensure that your new backyard feature will last for years to come.

Remember that treated pine is treated with chemicals, which means that you should always:

*Wear gloves and masks while sawing.*

*Reseal any cut or sawn surface.*

*Dispose of any off-cuts by burying them. Do not burn them.*



### HARDWOOD



Renowned for its strength and durability, hardwood timber is ideal for retaining walls (where strength is extra important). Another advantage is that many hardwood species also provide natural protection against termites and decay!

These days, the majority of retaining walls are built using H4 treated hardwood sleepers. Using this class of timber will give your retaining wall an average lifespan of 10 years.

***Before building your retaining wall, remember to use a wood preservative to treat any underground sections.***

*For more information about the price of each timber species, visit [NarangbaTimbers.com.au](http://NarangbaTimbers.com.au)*

### Before you begin



Check if council approval is required to build a retaining wall. If your retaining wall will be...

More than 1 m in height (or in some cases, 60 cm), it may need to be built by a licensed structural engineer.

Located 90 cm or less from an adjoining property.

#### ***I have:***

- ☐ Consulted any council regulations
- ☐ Contacted any relevant authorities for building permission

## Purchase Your Materials

Once you've decided on what type of pergola to build and received any necessary approval, here's what you'll need:



*Remember: The size of your sleepers and joiner posts will depend on the dimensions laid out in your plan.*

*Get it all at NBT!*



- |  |  |  |
|--|--|--|
| <input type="checkbox"/> <b>Treated Pine/Hardwood Sleepers</b><br>– use our calculator to find out how much timber you'll need | <input type="checkbox"/> <b>Shovel</b>                   | <input type="checkbox"/> <b>Spirit level</b>   |
| <input type="checkbox"/> <b>Joiner posts</b>   | <input type="checkbox"/> <b>Hand saw or circular saw</b> | <input type="checkbox"/> <b>Pencil</b>         |
| <input type="checkbox"/> <b>Scoria</b>   | <input type="checkbox"/> <b>Electric drill</b>           | <input type="checkbox"/> <b>Builder's line</b> |
| <input type="checkbox"/> <b>Rapid set concrete</b>   | <input type="checkbox"/> <b>Square</b>                   | <input type="checkbox"/> <b>Marker pegs</b>    |
| <input type="checkbox"/> <b>Drainage pipe</b>  | <input type="checkbox"/> <b>Tape measure</b>             | <input type="checkbox"/> <b>Safety glasses</b> |
|  | <input type="checkbox"/> <b>Batten screws</b>            |  |



# *Now it's time to build something special!*



*If you can't pick up the materials, don't worry!*

At Narangba Timbers, we deliver using our own trucks and staff to South-East Queensland – including Brisbane suburbs, Ipswich and Gympie.



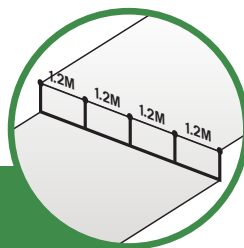
Before you know it, *you've built something special!*

## *It's time to build!*

*We're experts in timber retaining walls. Our team can help you cut your timber to size, get your timber sleepers ready, and advise on the right timber for your retaining wall.*

### **STEP 1:**

## **MEASURE OUT YOUR RETAINING WALL**



1. Use a builder's line and tape measure to measure out your retaining wall plan.
2. Mark out the line wall using marker pegs, ensuring that the measurements are consistent with your project plan. We recommend you space the posts by a minimum of 1200 mm.
3. Measure the desired height for your retaining wall. Then, run a string line between each marker peg.

### **STEP 2:**

## **MARK AND DIG POST HOLES**

1. Mark the post holes using a bright-coloured spray paint.
2. Dig the post holes.

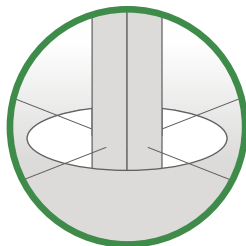


**Remember:** Excavate at least 200 mm behind the proposed wall line to make room for a drainage system.

### **STEP 3:**

## **INSERT POSTS**

Insert the joiner posts to the height of your string line. Ensure that they are far enough forward to be placed in front of the retaining wall.



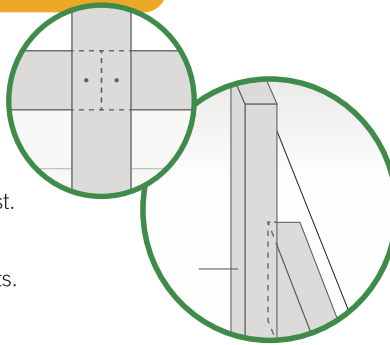
**Note:** Remember when attaching the sleepers, make sure they only go half the width of the Joiner post to allow space for the next sleeper.



## STEP 4:

### ATTACH SLEEPERS

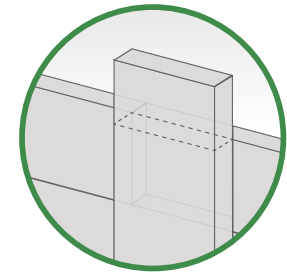
1. Attach a bottom sleeper using a drill, starting at the first end post. Ensure that the bottom sleepers sit 100 mm below ground level.
2. Continue until all bottom sleepers are attached to the joiner posts.
3. Repeat this process for each row of sleepers.



## STEP 5:

### LEVEL THE POSTS

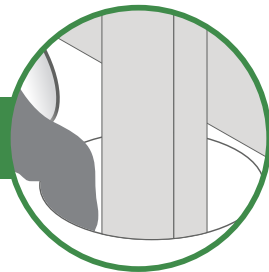
1. Using a pencil and square, mark the height of the top sleeper on each joiner post.
2. Use a saw to cut the top off each post, so that they fall flush with the wall.



## STEP 6:

### POUR THE CONCRETE

1. Brace the joiner posts first with temporary bracing. This will help to keep them in line as you pour the concrete and while it sets.
2. When setting posts, set back on a slight angle (4-5 degrees) to counteract the weight load after backfilling.
3. Fill in the holes with rapid set concrete mix. The concrete should set in around 30 minutes.



## STEP 7:

### INSTALL DRAINAGE SYSTEM

1. Backfill the trench behind the retaining wall with scoria, once the concrete has set.
2. Place your drainage pipe on top of the scoria and extend it along the retaining wall.
3. Add another layer of scoria on top of the drainage pipe and top it with soil.

**Note:** Remember to run the end of the drainage pipe to an area where you can easily access it – preferably a garden or storm drain to allow for water run-off.



## *Final Steps*

### **STEP 8:**

#### **ADD CAPPING**

*A great way to improve the look of your retaining wall is to add capping.*

All you have to do is cap the retaining wall with a series of horizontally-laid sleepers and drill them in place. Too easy!

### **STEP 9:**

#### **FINISH AND CUSTOMISE**

*Looking to prolong the life of your timber retaining wall?*

As with fences, we recommend staining the wood and using a sealant to protect against rot from excessive moisture. Just remember to apply the sealant thoroughly and to do it on a clear, sunny day, using a paintbrush or a roller.

**Narangba Timbers recommends QCOAT Outdoor Oil!**



***Congratulations!***  
***You've built something special***

## *Retaining wall hints and tips:*

### **MEASURE TWICE... CUT ONCE!**

*Make sure to double-check all of your measurements and markings before you cut any piece of timber.*

### **DRAINAGE**

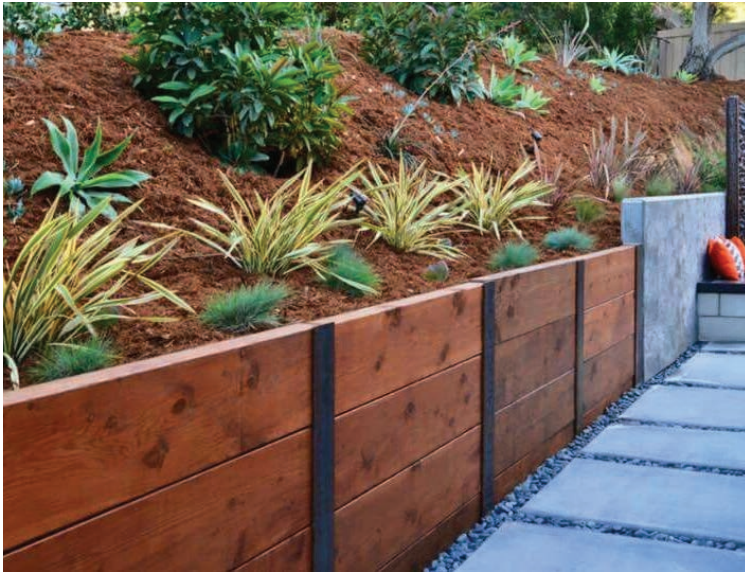
*If you don't have the time or budget to install a drainage pipe, instead backfill the slope side of the wall with landscape gravel and top it off with soil. This will promote drainage along the bottom of the wall and prevent premature rotting of the wood.*

### **HALF IN, HALF OUT!**

*A universal rule in timber retaining walls is that the half of the joiner post must be in the ground and the other half should be out, to ensure optimal strength and support.*

## Gallery

*Get some inspiration, with these beautiful retaining wall ideas.*





# NARANGBA TIMBERS'

*GUIDE TO DIY  
RETAINING WALL*



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