

GABION WALLS, RETAINING WALLS AND FENCES

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A series of wire cages hold rocks in place to form a really solid retaining wall or fence.

It's the wire cage that allows a gabion wall to retain its shape and structural integrity so it makes good sense to choose superior welded steel wire panels to form your gabion baskets or mesh cages.



GABION WALL

Gabion walls offer so many options for character landscaping. Use a gabion wall to create an impressive statement flanking your property driveway.

A Gabion retaining wall works well even on a very small scale in your backyard to define a bank or to separate sections of your garden.

Gabion walls also make great additions to the patio area; think attractive surrounds for seating.

Or use a gabion simply as a low garden border or as part of a water feature, they can even make the perfect setting for a rock solid letterbox. The potential uses of gabion walls are endless.



RETAINING WALLS – WHY THEY ARE BECOMING SO POPULAR?

A gabion retaining wall is a highly effective way to control erosion and increase the amount of level space you have on your property.

GOOD DRAINAGE MAKES GABION WALLS ESPECIALLY USEFUL.

This is because the gaps between the rocks prevent the build-up of pressure from trapped water that commonly occurs with other types of retaining walls.

Gabion wall designs can be highly flexible and are appropriate for any sized project from very small to very large.

A gabion retaining wall also looks extremely attractive with the range of natural rock colourings and textures.

And of course, they are quite literally rock solid. Their outstanding durability makes them very cost-effective options for any retaining wall applications.



HOW TO BUILD A GABION WALL

As with any fencing project, it's good to do your research first so here are a few tips about gabion retaining wall design and installation.

Once you've measured out your fence and purchased the required wire mesh panels, rocks, and other materials you're ready to begin.

Obviously, you need to choose wire mesh apertures that are smaller than your chosen stones otherwise the rocks will fall out.

Level concrete footings provide a solid base for a gabion wall where the soil is really soft clay or sand.

However, concrete foundations can interfere with drainage and so may be counter-indicated in the case of retaining walls.

Join your galvanised wire panels together with wire to form the base and sides of the boxes. Hold each box in place by inserting wire down each corner of the box. This will hold the box shape while you fill the box with rocks.



Large size gabions may benefit from some diagonal bracing across the corners as well as horizontally at mid height.

You can save money by using old concrete blocks and cheaper stone in the middle of the gabion and saving the more expensive smart looking rocks for the visible outer parts.

Once you've got all the rocks in place simply wire the top panel on and you're finished.

YOU MAY NEED A COUNCIL PERMIT TO BUILD A GABION WALL BUT THAT WILL DEPEND ON THE SIZE OF THE WALL AND YOUR PARTICULAR LOCAL COUNCIL REGULATIONS.

If you intend to use a gabion wall as a retaining wall you may need to obtain comprehensive engineering specifications and council approval and you may need to use a licensed builder.



WIRE MESH – IDEAL TYPES FOR GABION WALLS

The wire mesh cage is a pretty important structural feature of any gabion wall.

The type of wire you choose can have a significant impact on the lifespan of your new gabion wall. There are three important aspects to keep in mind when choosing the right steel wire mesh.

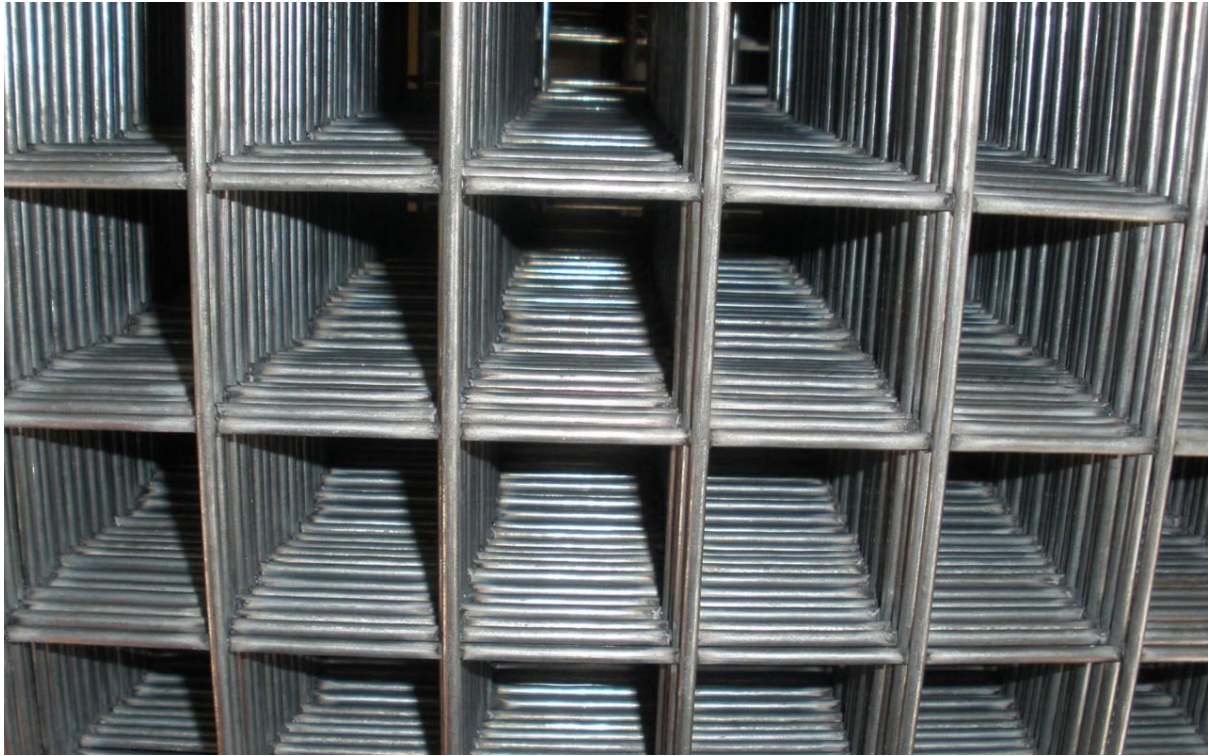
1. TYPE – GALVANISED OR STAINLESS STEEL

- Galvanised is cheaper and has traditionally been used in larger gabion retaining walls.
- Our galvanised welded wire mesh panels provide exceptional corrosion resistance and strength.
- Stronger and more durable than Standard Galvanised panels is Zalcote, this product is recommended in areas that require enhanced corrosion resistance.
- If you want to make a real style statement with your gabion wall then you should consider stainless steel mesh panels.
- Stainless steel combines superior corrosion resistance with aesthetic beauty for a stunning gabion wall.



2. WIRE DIAMETER

- The thickness of the mesh wires plays an important role in providing structural strength and integrity in any gabion wall.
- Larger gabion retaining walls can experience enormous pressures particularly from water build-up and soil expansion.
- Wire mesh should also be strong enough to withstand deformation pressures if stones move when the wall settles.
- Cost and aesthetics are also important factors to consider especially if you are thinking about creating a gabion wall as an iconic landscaping feature.



3. APERTURE SIZE

- Usually, it's a case of the larger the wall the larger the rocks you'll need to use and therefore the larger the mesh apertures.
- If you're constructing a large gabion retaining wall then the engineering specifications will dictate these factors.
- But if it's only a small wall or garden feature you can play around with these factors to get the effects you want.



We supply steel wire mesh panels in galvanised steel and both 304 and 316 grade stainless steel.

Panel sizes are generally 2.4m x 1.2m or 2.4 x 3.0m but we can do custom sizes as well. We supply an enormous range of wire diameters (up to 10mm) and aperture sizes (from 12mm up to 150mm).

We do not supply ready-made gabion baskets but we do supply custom size panels and we can provide all the materials (including joining wire) you need to make superior gabion baskets.

It's really important to get the right materials for the job. So, come and talk with the friendly experts at Protective Fencing.

We can help with all aspects of gabion retaining wall design and we'll make sure you get the right wire mesh for your requirements.

WALL COSTS – THINGS TO CONSIDER

Gabion walls offer highly cost effective solutions for many fencing and retaining wall challenges.

The size of your wall is obviously an enormous factor in the cost especially if your wall exceeds council specified dimensions.



Larger walls and gabion retaining walls will require comprehensive engineering reports, council permits, and licensed builders.

You may also need to install additional drainage or carry out other earthworks.

Good quality stone with attractive colourations and textures can be very expensive.

You might be able to save some money here by using cheaper stone or recycled concrete blocks to fill the centre of the wall and only using the more expensive stone for the visible exterior.



LANDSCAPE DESIGNERS

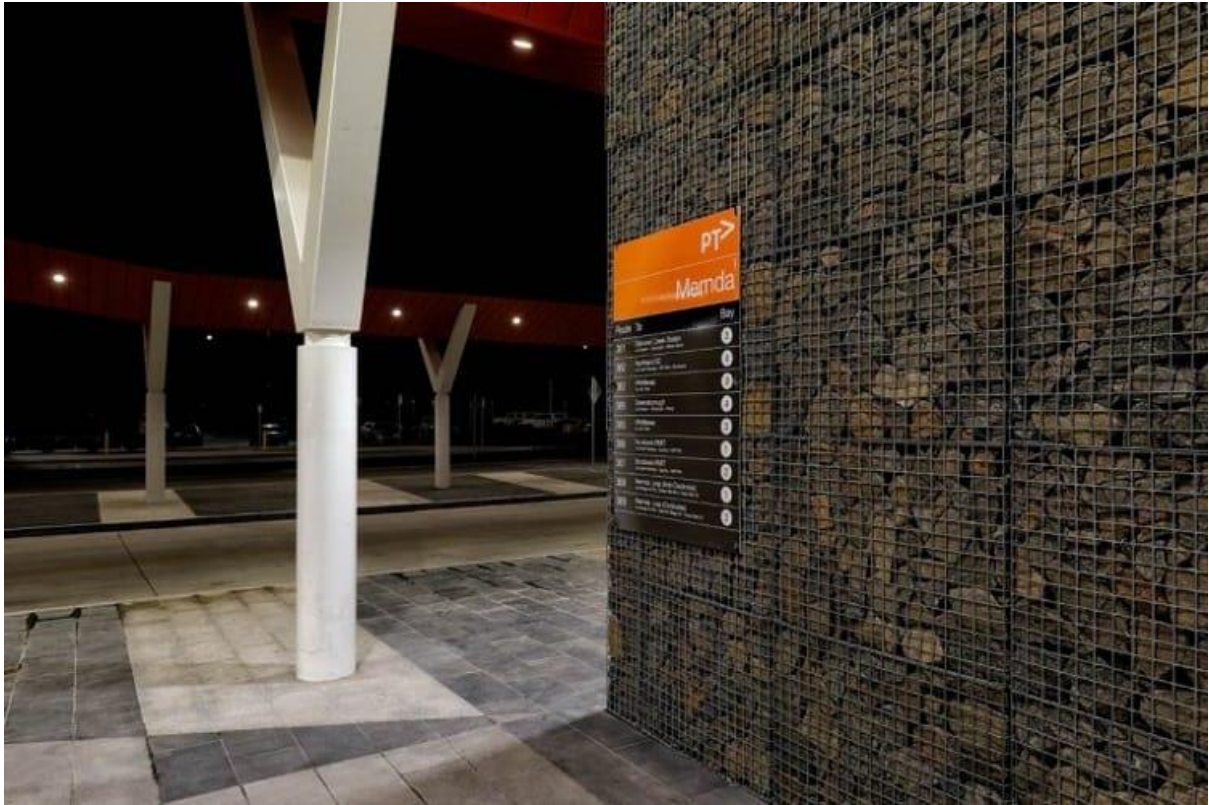
Gabion walls offer almost limitless possibilities for landscape designers. You can use gabion walls to control erosion and serve other very functional roles but gabion walls can do so much more.

Gabion walls can provide an aesthetic link between home and the outdoors either as a contrast with a timber backdrop or to blend in with a naturally rocky landscape.

There's no need to feel trapped between a rock and a hard place; gabion wall design offers infinitely flexible options for creative landscaping designers.

RECENT PROJECTS

Protective has provided rock solid steel fencing and retaining wall products for major Australian infrastructure projects as well as commercial and residential projects for many years.



As an Australian owned company we pride ourselves on helping Australian communities to grow stronger and better.

We supplied steel and mesh wire panels for the brand new [Mernda Rail extension in Melbourne](#).

The \$600 million rail extension boasts three new stations at Mernda, Hawkstowe and Middle Gorge and it was ready six months ahead of schedule.

Check out the stunning gabion walls that greet visitors to Mernda station.



The gabion theme continues into the ticketing, lift access area and provides a marvelous contrast with the steel columns and glass panels.

As well as creating an eye-catching impression the gabion walls will help keep the station cool in summer.

Talk to [Protective Fencing](#) today about how our steel products can transform your creative vision.