

# Product Care Guide

*Long Lasting - your product care guide...*

## THE RIGHT WAYS TO TREAT WEATHERING & GALVANISED STEEL

In our Longevity guide we touch on the special qualities of Weathering Steel that make it so tough and appealing for use in the outdoors. This has led to extraordinary uses around the world where it is celebrated for both its characteristic enduring qualities and for its beautiful weathered appearance.

We like the upfront simplicity of referring to our products as Weathering Steel, which also means whether you use our products or someone else's, the tips below to extend lifespan will hold true.

Further, although the below is written with Weathering Steel in mind, some of the tips and understandings would hold true for Galvanised Steel, especially those relating to improving drainage and protecting buried steel along with threats to be mindful of.

*Making the point...*

## THE KEY UNDERSTANDING

The naturally forming protective patina on Weathering Steel is the make or break factor here. Knowing where it happens, how it happens and what to do where it doesn't happen are valuable insights we'd like you to know about straight up

*Forming patina...*

## WHERE AND HOW IT HAPPENS

Simply put, a patina forms where the surface is exposed to the air and experiences the continuous action of air and water— wet and dry cycles - gradually creating the desired patina. This stable 'rust' layer then regenerates continually in the environment and it is this characteristic that retards the corrosion of the steel beneath.

*Do Not...*

*continually wet down the edge to hurry along the process, periods of dry time early on are the secret for success. So limit your enthusiasm to twice a day. Patina formation can be more difficult in humid/damp climates, although human intervention such as excessive watering regimes on a new lawn are more likely threats to healthy patina development. Instead of instant gratification, let's work with slow appreciation. It's worth the wait!*

Early on patina development may appear patchy. The hot rolling of steel creates an oxidised layer itself, which needs to break down first. Also, some oil residues left over from manufacturing can introduce variance.

*It's OK...*

*to sponge the surface in diluted soapy water in the early stages to assist with the residual oils issue and prevent water beading. Acetone can be used to clean off any sticky residue from stickers or tape if you find any, but wash clean with water once done.*

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## *Do Not...*

*apply chemicals to hasten the patina along. Salt, vinegar, acid, hydrogen peroxide etc will hasten rusting, but prohibit even patina development. You risk damaging the steel and making it vulnerable to further corrosion. There are rust solution products that produce the patina on the surface themselves rather than eating into the surface, these are OK to use.*

Humidity, acidity, salinity, soil density and pollutants influence corrosion considerably. Proximity to the ocean, working in clay soils, atmospheric pollutants in large cities may cause Weathering Steel to corrode faster than in a rural or less urban environment.

## *We Won't...*

*advise that you move home, we've seen steel performs really well in gardens near the sea. You can look at rust treatments that effectively penetrate and seal out air and moisture once the patina itself is developed. These will then require reapplication from time to time, but will make a difference.*

## *Forming patina...*

### WHERE IT DOESN'T HAPPEN

Weathering Steel behaves differently in the ground where no patina development can occur so it will continue to rust slowly there. This rust forms sheets that thicken the flat surface of the steel and ideally remain undisturbed for continued structural integrity. Be aware that steel thickens to 7x its thickness when it corrodes, so any fattening can represent the tiniest amount of actual steel impacted - no need to panic.

## *It's Smart...*

*if the soil/fill level drops to expose previously buried edging to top up the fill to the original level. With above ground edging bitumen paint can also be used to protect this vulnerable zone before filling against the edge.*

Water pooling is always an enemy of any steel. It is something to avoid by whatever strategy suits the situation and where soil density is high (ie clay) drainage improvement is recommended.

## *Ideally...*

*encourage sufficient drainage against the steel with fill like pebbles, rocks and/or coarse sand behind it and as a foundation. You may also use perforated drainage pipes slightly away from the edge itself to help.*

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## *On Concrete...*

use packers to raise all edging at least 10mm off ground which is a must. with geofabric or similar fill retention liner then required to prevent unsightly underspill. Bitumen paint might also be considered here for added confidence. Better still, set them back from the concrete with excellent drainage conditions instead.

## *Near pools ...*

Chlorinated pool chemicals (salts) can be very aggressive and corrode steel too quickly for stable patina formation. Be sure to set your edging well back from the splash zone; we'll let you be the judge of how far that is.

## *Extra piece of mind...*

when using our above ground range; you can paint the inside of the panels with a protective coating. This is particularly useful in wet areas (tropics) or more acidic soils. You'll never get access or that opportunity again, so this is your chance.

## *Forming patina...*

### AS IT HAPPENS

Some wood chips & mulches can be acidic, bear that in mind when dressing your garden!

There is little more to be said. We trust this gives you some ideas to work off and that your edging looks as great in your garden as it does in mine!

*"Nature does not hurry, yet everything is accomplished." Lao Tzu*