

316 Stainless Steel Wire Deck Railing

Mounting & Installation Guide

Unobstructed waterfront views in genuine 316 marine-grade stainless — engineered for the coast, where galvanized coatings erode at welds and cuts and even 304 stainless pits under constant chloride. 316 delivers lifetime salt-spray and chloride resistance for BC's Pacific air, Atlantic ocean spray and Great Lakes humidity. The open grid preserves the view and meets Canadian deck code; a periodic freshwater rinse keeps it pristine. Factory-direct, delivered on our own trucks w

Before you start. Railing is a life-safety element. Your local building code governs height, maximum opening and load, and it may require inspection. Confirm all three before you build — a railing that fails inspection has to come off.

Note. Every post BarrierBoss sells is an IN-GROUND post, sized as panel height + 3 ft for concreting. We do not supply surface-mount post bases. If you are railing an elevated deck, read step 2 before ordering posts.

This product

Sizes	3' x 6' · 4' x 6' · 4' x 8'
Options	4" x 4" · 2" x 2" · 1" x 1" · 2" x 6"
Configurations	36
Example SKU	3SSDR-3x6-UF-4x4

Receiving and handling

- Your panels arrive as finished welded units with **sealed edges** — the wire is galvanized after welding and then dip-coated, so the perimeter is already protected. There is no raw cut edge to dress on arrival.
- **Carry panels on edge, two people, one at each end.** They are rigid and heavy; carrying flat lets the middle flex and can rack the weld pattern.
- Do not drag a panel across another panel or across concrete. The finish is tough but it is not a skid plate, and a dragged corner is the one place rust starts.
- Stand panels against a wall or lay them on timber battens off the ground while you work. Left flat on wet ground, the underside sits in water.

What you will need

- Drill and driver
- Level
- Tape measure
- Structural screws or through-bolts
- Post hole digger + concrete (in-ground only)
- Surface-mount post bases (elevated decks — sourced separately)
- Work gloves

Working out your posts

Post length	Panel height + 3 ft, rounded up to the stocked ladder — 6 ft, 9 ft or 12 ft.
How many	One post per section, plus one end post to close each run, plus one more for every gate.
Hole depth	About 3 ft for a 6 ft fence. Go deeper if your local frost line requires it — check your municipality.
Concrete	Fill while holding spacing and alignment. Brace the posts and let the concrete cure 24–48 hours before hanging anything.

Specific to this product

You can order this framed or unframed	Framed panels bolt through the frame into the post. Unframed panels are the bare welded sheet — you fix the wire directly to the post face, or drop it into a U-channel. Decide which you ordered before you set post spacing, because a framed panel is wider than the bare panel by the thickness of its frame on each side.
Pressure-treated frame	Kiln-dried before treatment, so it is stable and will not shrink away from its fixings the way green lumber does. Pre-drill before you screw near an end to avoid splitting.
Western Red Cedar frame	Cedar is softer than treated pine — pre-drill every fixing and do not overdrive. Use stainless or hot-dip galvanized fasteners only; plain steel reacts with cedar tannins and will bleed black streaks down the frame.
Wire opening: 4" x 4" · 2" x 2" · 1" x 1" · 2" x 6"	The opening you chose decides what the fence contains. Smaller openings hold smaller animals and children but catch more wind — on an exposed site a tighter mesh puts noticeably more load into your posts, so do not skimp on post depth.
316 stainless fixings only	Do not fix stainless with galvanized or plain steel hardware, and keep carbon-steel filings off it. Contamination from ordinary steel is what causes the brown spotting people mistake for stainless failing.
Rail height is set by code, not by the panel	Residential guard height is commonly 36 in and commercial 42 in, but your local authority governs. Confirm required height, maximum opening and load before you fix anything — a railing that fails inspection has to come off.

Installing this product

1 Confirm your code first

Check required rail height, maximum opening and load with your local authority. Residential guard height is commonly 36 in and commercial 42 in, but your authority governs. Build to the code, not to the panel.

2 Decide your mounting method — this decides what posts you order

AT GRADE (patio, path, pool surround, low deck you can dig beside): use our in-ground posts. Post length is panel height + 3 ft, concreted like any fence post, 24–48 hours to cure. ELEVATED DECK (posts land on the deck, not the ground): our in-ground posts are the wrong product — they are 3 ft too long and have nothing to foot into. You need surface-mount post bases, which we do not supply. Either bolt a base through the deck to the framing, or run a post down the outside of the rim joist and through-bolt it to the structure. Whichever you choose, it must engage the FRAMING — never decking boards alone, which will not hold a railing load.

3 Set the posts and check them under load

In-ground: plumb, concrete, brace, cure. Surface-mount or bolted: through-bolt into framing with structural fasteners, washers both sides. Before you hang a single panel, push hard on each post at rail height — if a post moves now it will move under a person.

4 Fit the panel

Set the panel between posts at your code height with even clearance top and bottom. Keep the same clearance the whole way along; a drifting gap is the thing people notice.

5 Fasten

Fix through the frame into the post, top and bottom first, then the middle. On unframed panels, clamp the wire to the post face or drop it into a U-channel.

6 Load check before sign-off

Push firmly on the top rail at every bay. It should feel dead. Any flex means a fastener has missed framing — find it now, not at inspection.

Before you call it done

- Every bolt fully tightened.
- Panels snug in their channels with no rattle.
- Frame square, plumb and level.
- Consistent reveal between panel and post along the whole run.

Cutting, drilling and sealing

Panels and sheets leave the factory with their edges finished. Cutting or drilling breaks that seal and exposes bare steel, so how you make the cut — and what you do to it afterwards — decides whether the new edge lasts as long as the rest of the panel.

DO

- **Cut cold.** Tin snips, a nibbler, or a circular saw fitted with a fine-tooth carbide metal-cutting blade. These shear the steel without heating it.
- **Cut with the finished face down** when using a saw, so the burr forms on the back and the visible face stays clean.
- **Support the sheet close to the cut** so it cannot flex and distort the profile.
- **Drill, do not punch.** Use a sharp metal bit at moderate speed and deburr the hole afterwards.

NEVER

- **Never an abrasive wheel, chop saw or angle grinder with a cutting disc.** The heat burns the zinc and paint back from the edge — rust will start at that cut and travel.
- **Never cut over other panels.** Hot filings land on the finish and embed, and every one becomes a rust freckle.
- **Never leave swarf on a panel.** Sweep filings off immediately, before they sit in dew overnight.

SEALING THE CUT EDGE

Galvanized / dip-coated steel and wire	Touch the cut edge with a zinc-rich cold-galvanizing compound. The galvanizing protects a small exposed edge sacrificially, but a cut end or a snipped wire deserves the touch-up.
HDP-painted panels and sheet	Deburr, then apply matched touch-up paint to the cut edge. Two thin coats beat one thick one.
Corten weathering steel	Leave it. Corten is designed to rust to a stable protective patina — a cut edge simply joins in. Do not seal or paint it.
316 stainless	Deburr and clean. Avoid contaminating it with carbon-steel filings from another cut — that is what causes surface rust spotting on stainless.

Cut edges that are burnt or left bare are the most common cause of early edge rust, and damage from improper cutting is not a finish defect.

Maintenance and upkeep

These systems are built to be left alone. The upkeep below is what keeps the finish warranty intact — it is not a chore list.

Twice a year	Rinse with a hose. Where road salt, coastal spray or livestock is involved, rinse more often — salt left sitting is what shortens a coated finish.
Cleaning	Mild soap and water with a soft brush or cloth. Rinse it off. Never a pressure washer at close range, never an abrasive pad, never a solvent or bleach-based cleaner — all of them cut the finish.
Scratches	Touch up promptly with matched paint or, on galvanized, a zinc-rich compound. A scratch left through a winter becomes an edge rust line.
Fixings	Check bolts and fasteners after the first season and every couple of years after. Ground movement and thermal cycling loosen hardware; a loose panel wears at its contact points.
Vegetation	Keep soil, mulch and dense planting off the panel base. Constant damp against steel is the one condition that beats any coating.
Western Red Cedar frame	Cedar is the one part that genuinely needs attention. Re-apply an oil-based penetrating stain every 2–3 years, or let it silver naturally — both are fine, but an unfinished cedar frame will weather faster than the steel it holds.
Pressure-treated frame	Kiln-dried before treatment, so it is stable. Stain or seal if you want the colour held; leave it if you do not mind it greying.
316 stainless	Rinse to remove salt and any carbon-steel contamination. Surface spotting on stainless is almost always contamination from nearby steel, not the stainless itself failing.

Warranty

BarrierBoss warranties are set **by component**, not by product:

COMPONENT	TERM
Steel, wire and factory finish	40-Year Warranty
Pressure-treated lumber	Lifetime Limited (fungal decay and termite)
Western Red Cedar frame	10-Year Limited
Factory assembly	5-Year Limited Workmanship
Corten weathering steel	No coating warranty — the patina is intentional and protective
316 stainless (CoastalSafe)	30-Year Corrosion

Installation is the installer's responsibility. Concrete, hole diameter and depth, frost-line allowance, and setting panels square, plumb and level are down to the installer. Damage from improper installation or from cutting with an abrasive wheel is not covered.

BarrierBoss — made, moved and unloaded by us. Delivered and unloaded on your property.
Questions about your install? Contact us before you cut, drill or concrete — we would rather answer first.