



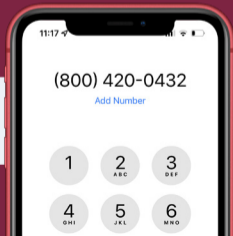
CR | FENCE
& RAIL
SAFETY, MADE EASY.™

Stairs Handrail Kit

Installation Guide

**Need help? Text us the
picture of your problem**

v022224

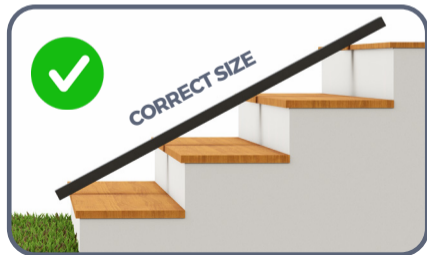
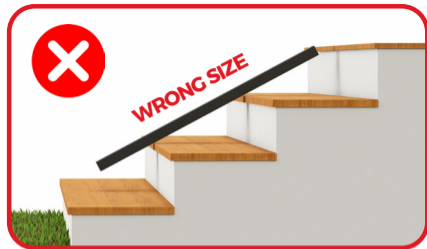


Wrong Size?

No Returns
Needed!

Contact us

Delivered in





Text or Call Us

(800) 420-0432

Can Accept Text Photos

Installing Multiple Rail Kits?

We offer **FREE** help & drawing
to make it easier to
connect multiple rail kits.

We want to help you save time
and effort

Contact us before you start!

You made the right choice of railing!



Cost-Effective



Safe & Durable



Quick to Install



**Easily Extendable
(Modular)**



Time Required

Ground attachment:

wood - **20+ minutes**

concrete - **60+ minutes**



Tools Required

An electric drill/hammer

An impact drill is preferred (although not required) for installing the concrete bolts for **concrete steps**, lag screws for **wooden steps**, or other ground attachments.

**We've made it easy for you
to install your post!**



**Scan this QR code
for a detailed video
explanation of how
to install your new
handrail correctly.**

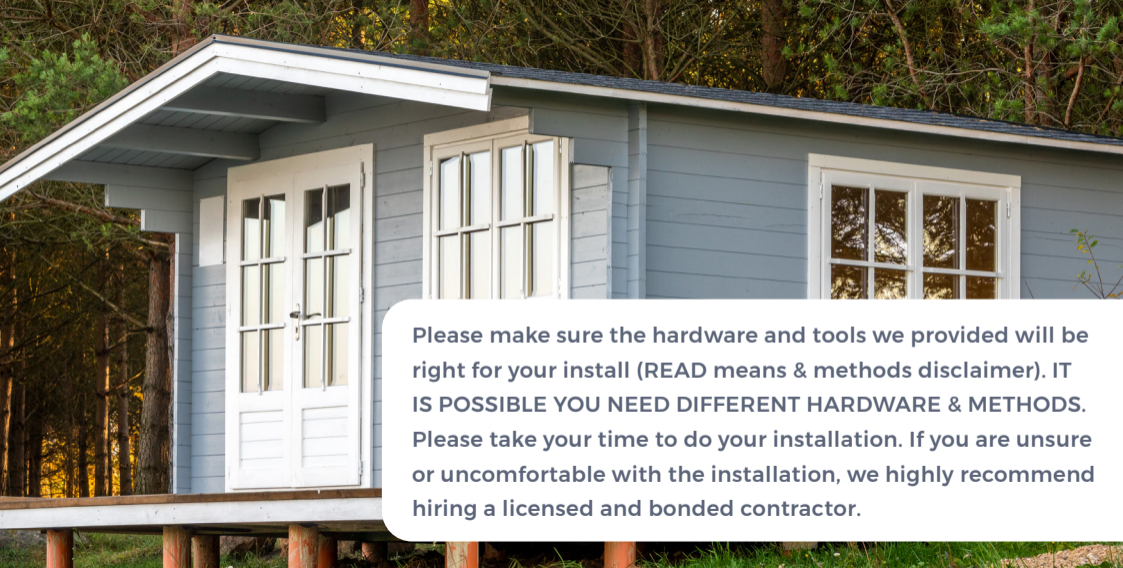
Means and Methods Disclaimer

In no event shall CR Handrail have any responsibility, control over, charge of, responsibility, or liability for the means, methods, techniques, sequences, or procedures, or for safety precautions in connection with the installation of the railing, since these are solely CM/GC's, Subcontractor's, and Owner's responsibilities.

Each installation site differs widely ranging from the construction & condition of attachment points, local building & safety code, local construction code, and local means & methods.

CR Handrail's installation guide (whether it be in text, illustration, video or in support discussion) constitute for ideal installation condition. There is no ideal installation in real life. There is no substitution for consulting a local licensed contractor, architect, engineer, nor code inspector.

CR Handrail's installation hardware and tools are provided as building material and does NOT constitute as the specific nor final installation hardware. Once again, you and your installer must make the final on-site determination to the specific means and methods of installation appropriate for your installation.



Please make sure the hardware and tools we provided will be right for your install (READ means & methods disclaimer). IT IS POSSIBLE YOU NEED DIFFERENT HARDWARE & METHODS. Please take your time to do your installation. If you are unsure or uncomfortable with the installation, we highly recommend hiring a licensed and bonded contractor.

Masonry Tools & Hardware Explained

FOR CONCRETE

**5/16" (8mm)
Anchor Bolt**



**5/16" (8mm)
Masonry Drill Bit**



****SDS+ available
upon request***

**Diamond Core
Drill Bit**



***For hard stone
*available upon request***

Note: Expect the wedge anchor to fit tightly since the specification requires the anchor and drill bit to be the same size. To insert it more easily, you may try these options:

1. Use a slightly bigger drill bit, like a 3/8" one, to make the hole a little more extensive.
2. Gently wiggle the drill bit while in use to enlarge the top portion of the hole subtly.

However, do not enlarge the entire hole, which may compromise the anchor's grip.

WARNING

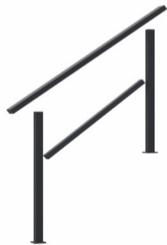
The strength of the anchor is dependent on the hole size & concrete integrity. A hole that's too big or concrete that's not up to standard grade can make the anchor wiggle or possibly come out. This is what can cause a rail to fail & fall over.

Installing Your Handrail

1-2-3 Parts

01

Assemble your
Handrail



02

**Post to Ground
Attachment**



03

**Secure your
Handrail**



Part 01



Assemble Your Handrail

Identify the Bottom Post and Top Post.

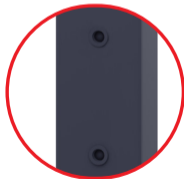
The holes on the Bottom Posts are higher compared to the holes on the Top Post.



Top vs. Bottom Post

1.1

BOTTOM POST



TOP POST



Make sure to
correctly position
the posts.

1.2

Attach Bracket to Post

Use Smaller Brackets

Note the direction and height of brackets



BOTTOM POST



Face Up



TOP POST



Face Down



**(a) Use the hex bit
& bit extension**

HEX BIT



BIT EXTENSION



**(b) Screw on 4x
flat-end screws**

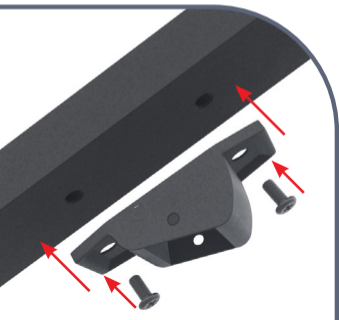


**Note: 2 Screws
per bracket**



1.3 Attach Top Rail (Larger) Brackets and End Caps

(a) Attach Larger Brackets using 4x Flat-end screws (2 screws per bracket)



Note: Both top rail brackets face same direction

(b) Insert End Caps



Loosely Assembled

1.4

The handrail will be unsecured until the end. We will loosely position the handrail first to mark holes for post-installation.



Common Mistake

Reversed Post

(Middle Rail too Short)

Top Rail
too long



Middle Rail
too short



The top or middle rail is too short?

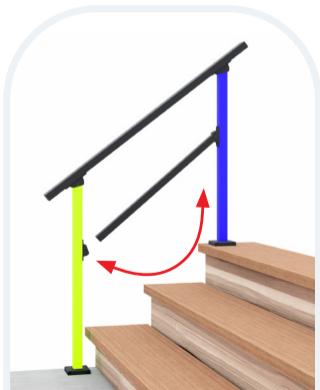
You have reversed the post.

To fix:

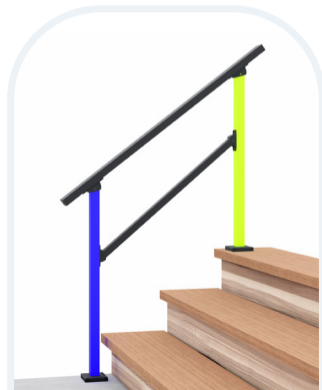
- 1.) flip the bracket's direction
- 2.) swap the post (see step 1.1)



Reverse
Post placement



CORRECT
Post placement



Part 02



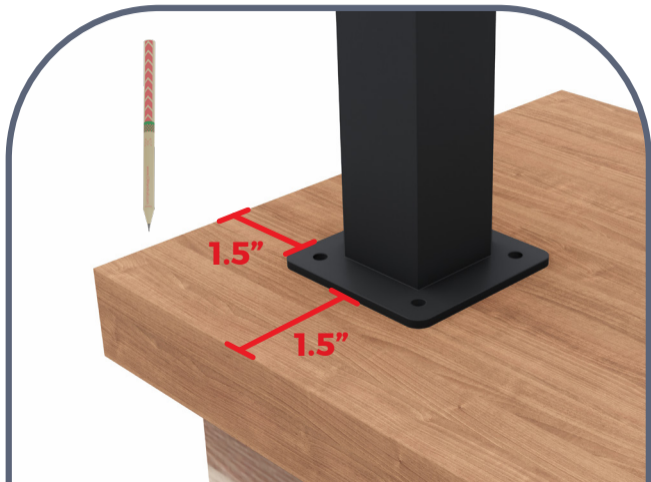
Post to Ground Attachment

2.1 Position and Mark the Holes

FOR CONCRETE

Please adhere to local & statewide building code. Recommended distance from the edge is based on standard-grade concrete (2500 psi).

If your concrete is 'high-strength' concrete, the edge distance can be reduced. (See ICC Chapter 19, Table 1908.2)



Post should be at least 1.5" (4cm) away from edges.

Ensure the post baseplate is parallel with edges.

2.2

Position and Mark the Holes

**Smaller drill bit
(Please go straight to Step 2.5)**



**Larger drill bit
(Continue to Step 2.3)**



FOR CONCRETE

Ensure Correct Depth

2.3

Use the CR Handrail pencil to measure the depth of the hole with the flat end of the pencil.

Note: This is only for rough measurements. This is to ensure the hole is deep enough.

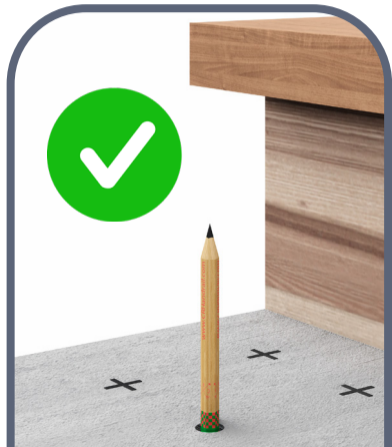
*For Wood,
please go
straight to
Step 2.5*

Tip: holes must be deep enough or will have a serious issue.

Hole NOT deep enough
Keep drilling deeper



PERFECT DEPTH



Hole TOO DEEP!
Careful NOT to insert
Anchor too deep



2.4

Install Anchors

FOR CONCRETE



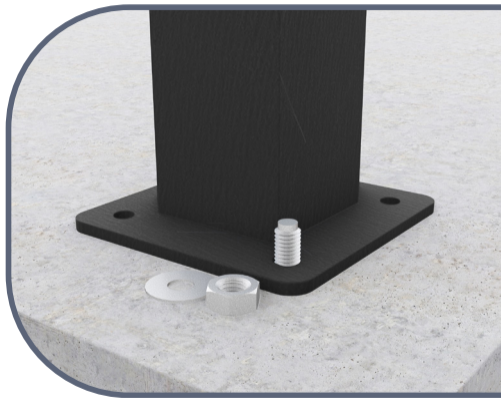
Once the holes are made and depth verified, hammer the anchors into the holes.



Tip: Hammer the anchor with 2 washers and 2 nuts (with nut at the very tip) to prevent over insertion.

Periodically Double Check!

Put the post onto the anchor and physically verify the washer and nut has only enough thread to for the full height of the nut to screw on.



2.5

Secure Post to Ground

NUT SOCKET



BIT EXTENSION



Use the nut socket & bit extension

FOR WOOD



LAG SCREW

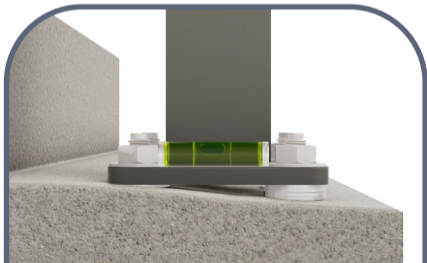
FOR CONCRETE



WEDGE ANCHORS

What if Post Not Level?

If ground is not level, use included extra washers to shim the baseplate



FOR WOOD



1. Position the posts (along with the complete railing) over predrill holes.

2. Install a washer & lag screw, one-by-one

3. When all are installed, doublecheck each of them again, to ensure all are tightened.

Note: If your drill has a hammer (or impact) function, enable it.

FOR CONCRETE



1. With all the nuts & washers removed, put the posts onto the anchor bolts (along with the rest of the rail). Install a nut and washer on each anchor bolt, one-by-one.

2. Hand-tighten a nut and washer over each anchor bolt.

3. Use the electric drill to tighten the nut (turn off hammer or impact driver function).

Part
03



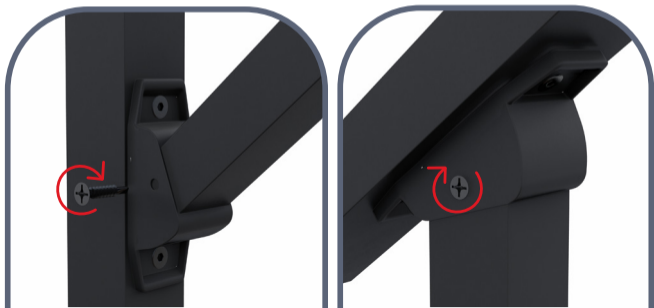
Secure Your Handrail

Secure All Joints

3.1



Using the included self-drilling screws, with some force applied (careful for your fingers as you hold the screws in place), drill the screws through the pre-made holes on all the brackets into the metal railing. This will lock the metal in place.



HEX BIT



BIT EXTENSION



8X SELF-DRILLING SCREWS

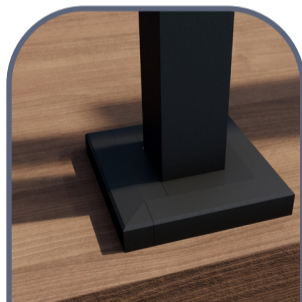


Tip: Pre-drilling hole is NOT necessary. The self-drilling screw will make a hole when force is applied. If you must, use a small drill bit to make a pilot hole.

3.2

Attach Post Covers

**For a seamless look,
simply attach the
Post Covers to hide
the base plate and
hardware**



Installation is
Complete!



TRC90AR



TRC180A



TRC180F



TRC90Fs



SCAN ME

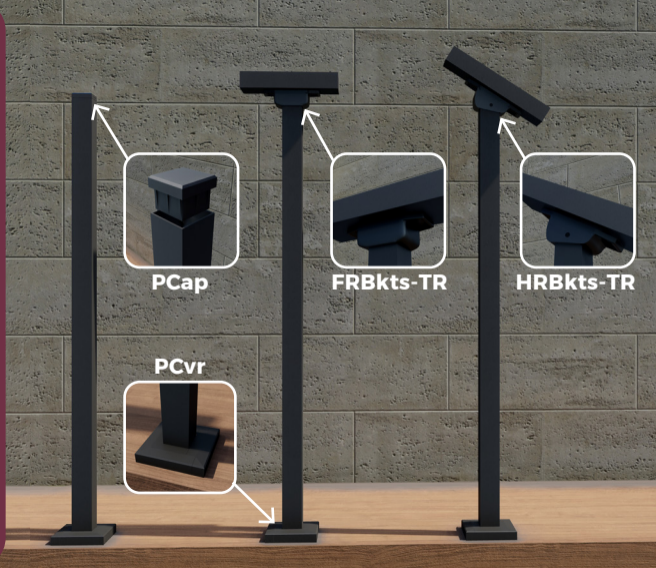


Connect your CR Fence & Rail Kits using our wide variety of **Top Rail Connectors**

Explore CR Fence & Rail's
Brackets and Covers



SCAN ME



Rail kits for your home's every need!

Safety doesn't end
with the staircase.
Explore our range of
rail kits!



WPFKChn-38

WPFKChn-48

WPFKChn-60

For **BGR4R** and
BGR6R Guardrails



Ensure the top and bottom
rail has just the right spacing
between posts

CR Fence & Rail's
Specialty Post



Included



NOT included

5

Years' Free Warranty

- 1) Scan the barcode within 30 days.
- 2) Register your product.

Or, register your product at
www.crhandrail.com/5yearwarranty






Need help?

- Connect Multiple Railings
- Technical Drawings
- Complicated Installations
- Installation Error
- Missing Parts

Text with Photos

(800) 420-0432





Chi & Richard with family at San Diego Safari Park

A heartfelt message from the owners of **CR Fence & Rail**

Chi is an architect and Richard is in real estate construction. With the combined knowledge and expertise, Chi & Richard believe they can provide the best commercial grade railing product that can be installed by anyone. They want to take the time to say thank you. If you got the time, Chi, Richard & the **CR Fence & Rail** team love to see a photo or video of your installation!

- Chi & Richard from CR Handrail

Your picture and video post helps those who are worried about the installation.



Susanna P.

★★★★★ I was worried

Reviewed in Canada on October 12, 2022

Size: 4 Steps | **Verified Purchase**

I was a little worried that the handrail would be difficult to install. It comes with everything you could possibly need to install the railing. Hats off to the people who put the kit together.

2 people found this useful



Help Us Make a Difference:

SAFETY FOR ALL!

**How can we
make it easier
for you?**



Missing Parts?
www.crhandrail.com/parts

Support



Text with Photos
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