



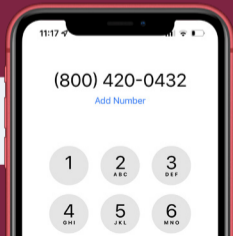
**CR** | FENCE  
& RAIL

SAFETY, MADE EASY.™

# Cable Stairs Handrail Kit Installation Guide

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

v060324



# 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.**

# 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.**

**Following CR Handrail's instruction does NOT constitute as proper installation as you and your installer must make the final means & method determination. Improper installation can lead to failure of rail system which can cause serious injury.**



**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.**



**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.**

# 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:** This will be a tight fit. In fact, the specification calls for the drill bit and anchors to be the same size. Some installers use a 3/8" drill bit to make the installation easier, and other installers wiggle the drill bit to bore the top of the hole slightly bigger. (We are aware of the tight fit and we must only recommend using our masonry drillbit without wiggling).

### **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.*

# What's in your Kit?

## ANCHOR KIT



8 Wedge Anchors



10 Flat Washers



8 Lag Screws



2 Metal  
Post Cover

## CORE KIT



1 Wood Pilot Hole Drill Bit



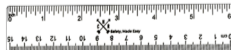
1 Masonry Drill Bit



1 Drill Bit Extender  
(for Hex Bit and Nut Holder)



1 Depth Measuring Pencil



1 Ruler



1 H4 Hex Bit



1 Hex Nut/  
Bolt Driver



1 Bubble  
Leveler



## MAIN PARTS



1 Lower Post



1 Upper Post



1 Top Rail

## ITEM SPECIFIC ACCESSORIES



2 Brackets



2 End Caps



4 Flat-end screws



4 Self-Drilling screws

## CABLE PARTS



1 Wire Rope Clamp



1 H5 Hex Bit



20 End Sleeves



1 Gloves



10 1/8" Cable Swage Tensioner



10 Cable with Terminals attached



# Installing Your Handrail in 1-2-3 Parts

1

Assemble  
Handrail





2

**Post to Ground  
Attachment**

3

**Install  
Cables**



PART

1



**Assemble Handrail**

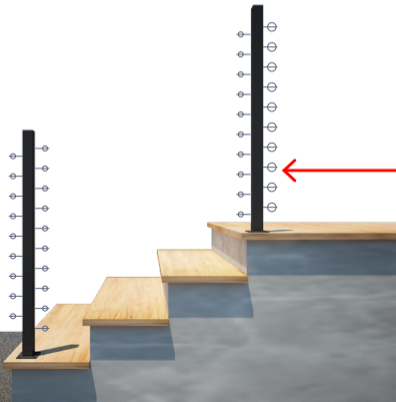
**Your kit includes posts labeled “Upper Post” and “Lower Post”. When positioning them, ensure correct alignment of the cable holes.**

## Determine Upper vs. Lower Post

# 1.1



Cable holes



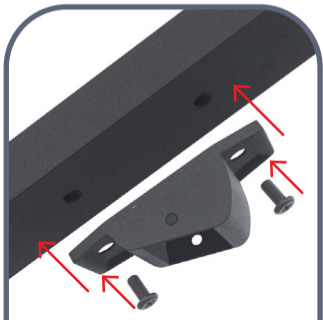
*Note that this side of the Upper Post has significantly larger holes to fit the Cable Swage Tensioner.*

# 1.2

## Assemble Top Rail

**Attach the Brackets to the Top Rail using 4x Flat-end screws, utilizing two screws per bracket for secure fastening. Then attach end caps.**

*Ensure both top rail brackets face the same direction.*



### Loosely Assemble Handrail Flat on Ground.

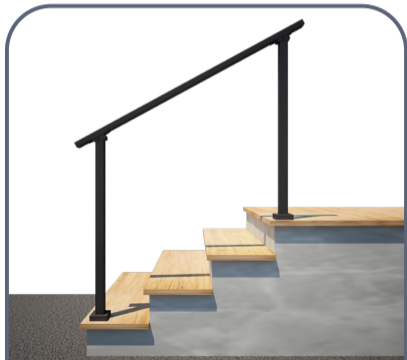
*The handrail will stay unsecured until the post is properly mounted. We will loosely position the handrail first to mark holes for post-installation.*



# 1.4

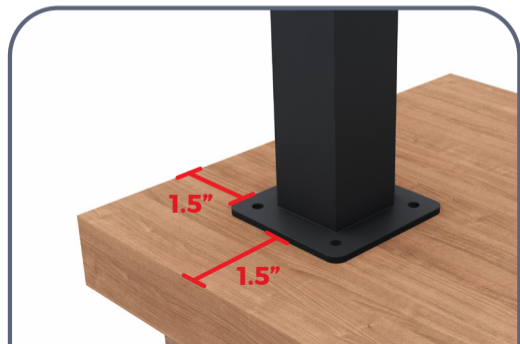
## Position and Mark the Holes

**Position the Handrail making sure that the baseplate is parallel to the edges.**



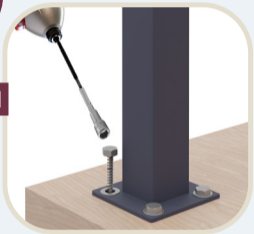


**Ensure that the baseplate is 1.5" (4 cm) away from the edges. Once properly aligned, mark the locations of the baseplate holes on the surface.**



PART

2



**Post to Ground Attachment**

**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)*

**Smaller drill bit  
(Continue to Step 2.4)**



**Larger drill bit  
(Continue to Step 2.2)**



# 2.2

## Ensure Correct Depth

FOR CONCRETE

**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.*

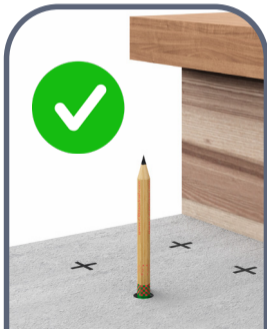
*For Wood,  
please go  
straight to  
Step 2.4*

*Ensure that the holes are deep enough to avoid encountering serious issues later on.*

Hole NOT deep enough  
Keep drilling deeper



**PERFECT DEPTH**



Hole TOO DEEP!  
Careful NOT to insert  
Anchor too deep



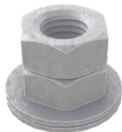
# 2.3

## Install Anchors

FOR CONCRETE



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



*Tip: To avoid pushing the anchor too deep, stack two washers and two nuts at the end of each anchor before hammering.*

## Periodically Double Check!

*Place the post on the anchor and ensure the nut has enough thread for secure tightening.*



# 2.4

## Secure Post to Ground

NUT SOCKET



BIT EXTENSION



Use the nut socket & bit extension

FOR WOOD



LAG SCREW

FOR CONCRETE

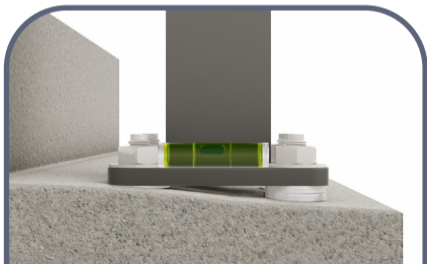


WEDGE ANCHORS



## What if Post Not Level?

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



**FOR WOOD**



**1. Align the posts above the pre-drilled holes.**

**2. Secure each post by installing a washer and lag screw, one at a time.**

**3. Once all posts are installed, double-check each to confirm they are firmly tightened.**

*Tip: Turn on your drill's hammer or impact feature for better performance if it has one.*

## FOR CONCRETE

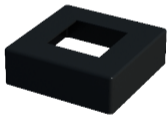


- 1. Remove all nuts and washers, then place the posts on the anchor bolts. Attach a washer and nut to each post, one after the other.**
- 2. Tighten a washer and nut by hand on each anchor bolt for a secure connection.**
- 3. Use an electric drill to firmly tighten the nuts. Make sure the drill's hammer or impact setting is off to prevent damage.**

# 2.5

## Put Post Cap on

**Insert the Metal Post Cover into the Post by sliding it in.**



## Attach Top Rail

# 2.6

Use the provided self-drilling screws to attach the brackets securely to the posts.



H4 HEX BIT

BIT EXTENSION



4X SELF-DRILLING SCREWS

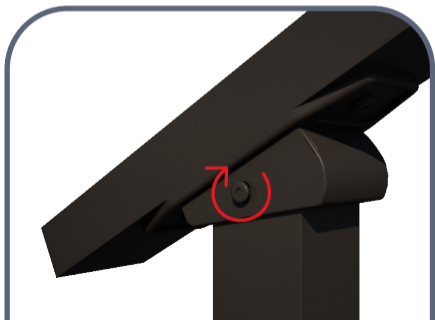


# 2.6

## Attach Top Rail

**Use 2x self-drilling screws per bracket. Apply pressure as needed, taking care to protect your fingers while holding the screws in place.**

*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.*



*Make sure that the handrail is firmly and securely assembled before moving forward with the installation of the cables. This ensures stability and safety throughout the installation process.*



PART

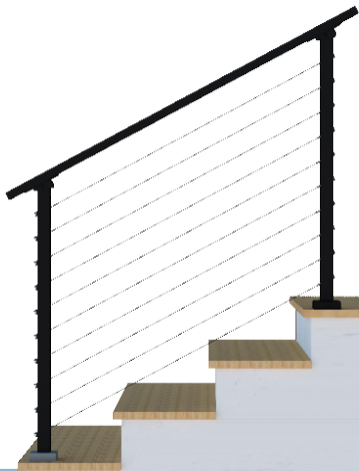
3



**Install Cable Wire**

**The Cable Terminal will be on the Lower Post while the Stud Terminal End and Cable Swage Tensioner will be on the Upper Post.**

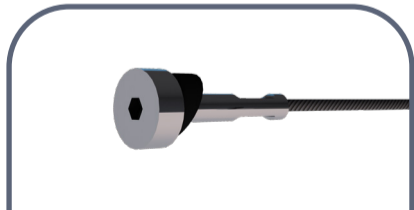
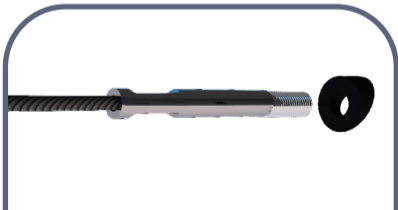




# 3.1

## Insert End Sleeve

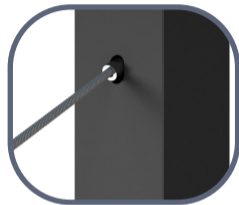
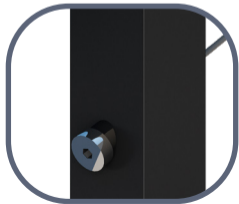
**Insert one Cable End Sleeve starting from the Stud terminal end, ensuring it is correctly positioned on the Cable Terminal End.**



**Pass the cable with the stud terminal end through the holes on the post, starting from the lower post and moving towards the upper post.**



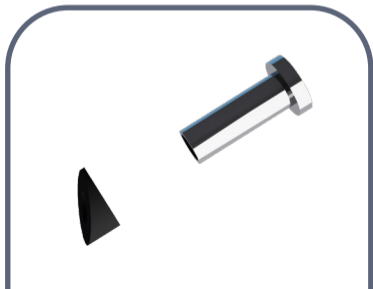
*Our kit is designed with the terminals already attached to the cables, ensuring safe and easy installation. No cutting or crimping is required.*



## Insert End Sleeve

# 3.3

**Insert another Cable End Sleeve onto the Cable Swage Tensioner**



# 3.4

## Connect Tensioner

**Connect the Cable Swage Tensioner onto the Stud Terminal to initially secure the cables.**



## Prevent Cable Twisting

**Use the wire rope clamp to prevent the rotation or twisting of the Cable while it's being tightened.**

**Attach as close to the stud as possible.**



# 3.5

## Tighten Cable

H5 HEX BIT



BIT EXTENSION

**Tighten the cable terminal using a hex bit and a bit extension.**



**Tighten the cable until there is no slack remaining.**



# 3.6

## Equalize Tension



**After installing all cables, make slight adjustments to each tensioner to ensure balanced tension across all cables.**

*Press on each cable to ensure they all feel equally firm, making further adjustments as needed for uniform tension.*



**Great  
JOB!**



Congratulations on  
successfully completing  
the installation of your  
Cable Stairs Handrail Kit!



**Rail kits for your  
home's every need!**

**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**

TRConCA



TRConSA



TRConSF



TRConCF-Slm



SCAN ME

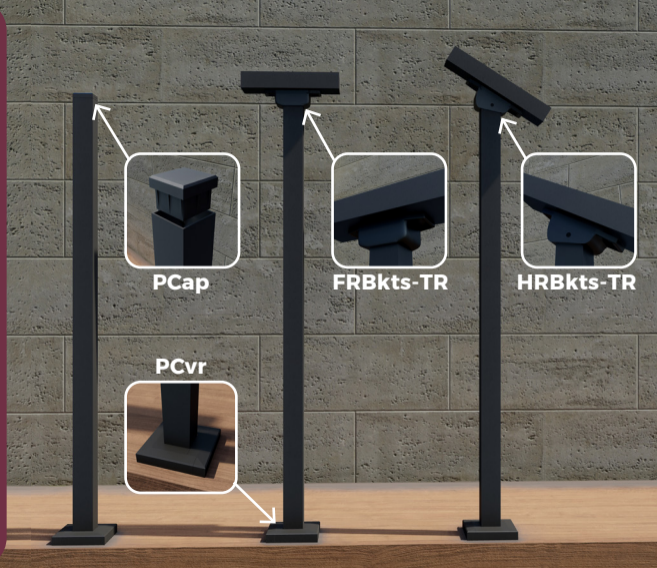


Connect your CR Fence & Rail  
Kits using our wide variety of  
**Top Rail Connectors**

Explore CR Fence & Rail's  
**Brackets and Covers**



**SCAN ME**



# 10 Years' Free Warranty

We've doubled our support from 5 years to 10, showing our commitment to you and the trust we have in our railings for outdoor steps.

To view our full warranty policy, visit:  
[www.fencerail.com/warranty](http://www.fencerail.com/warranty)








\*Real Customer

## 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 Handrail**

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 CRH 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, 20

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 peo-

2 people found this useful



**SAFETY  
FOR ALL!**



**Help Us Make  
a Difference.**

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



**Missing Parts?**  
[www.fencrail.com/parts](http://www.fencrail.com/parts)

## **Support**



**Text with Photos**  
**(800) 420-0432**



**WhatsApp**  
**(775) 324-8877**