



Crown[®]
Heritage

INSTALLATION GUIDE



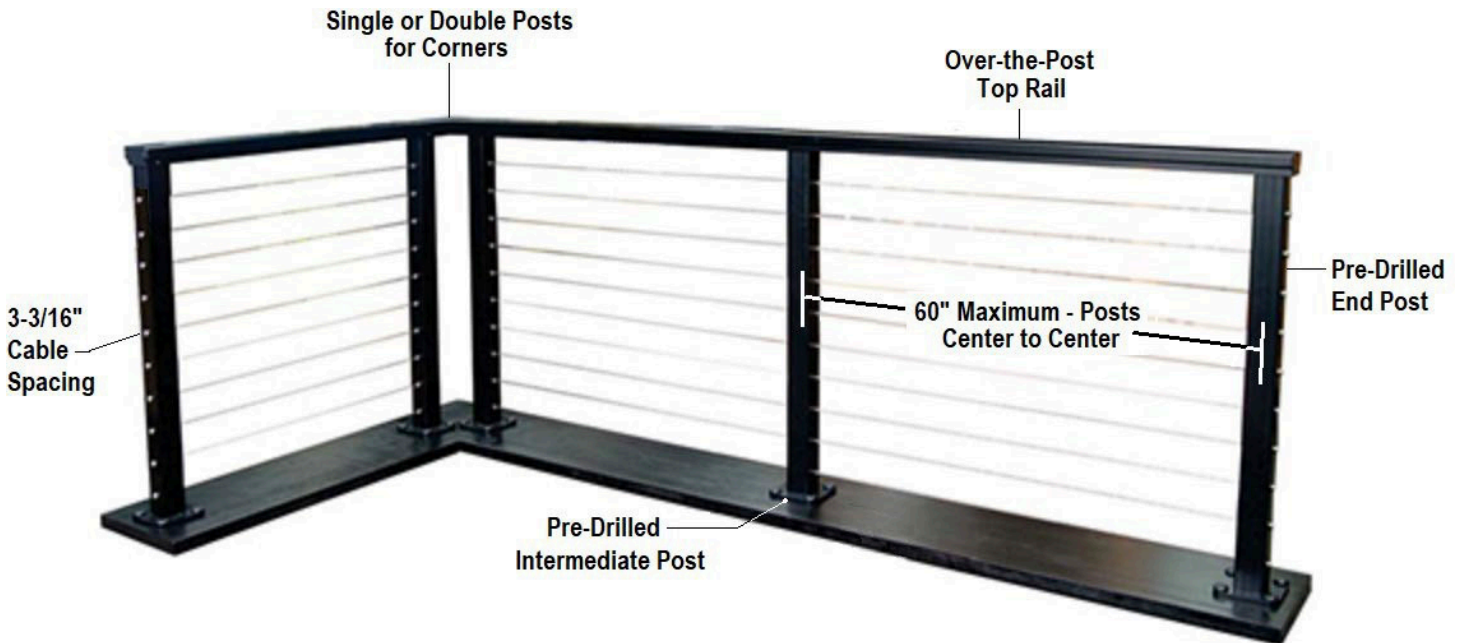


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RAILFX® RAILING OVERVIEW

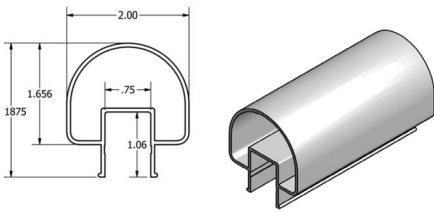


RailFX® Aluminum Rail and Cable System have been designed, engineered, and tested specifically for a cable, picket or glass application rail system. The aluminum framework and choice of infill options allows for railings to be lightweight, while still retaining exceptional durability.

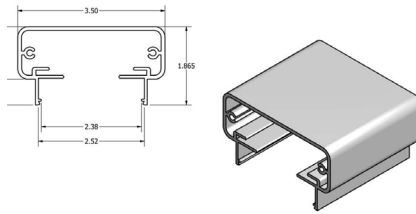
Rail Guidelines

To comply with engineering and testing, **posts must be spaced no more than 60" on center**. Cables are spaced 3-3/16" on center to keep cable from deflecting beyond 4" to meet code. Cable can either terminate at the corner or run continuously through corners. Single corner posts can be used with cable running through the corner. Top rail is required for all railing installations.

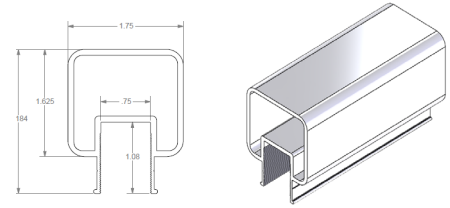
RAIL PROFILES



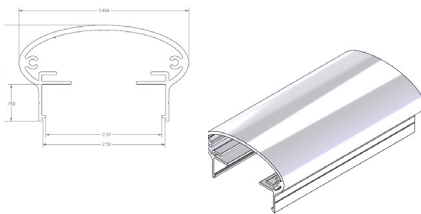
RFX100
Special Order



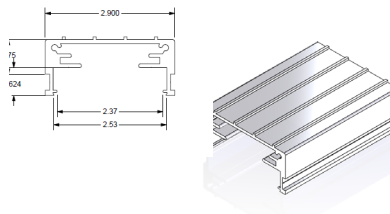
RFX200



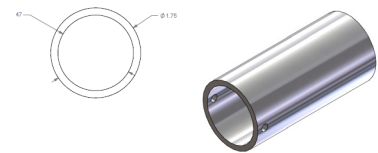
RFX250



RFX300
Special Order



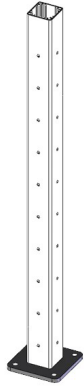
RFX400



RFXADA
Special Order

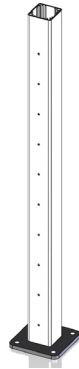


COMPONENT GUIDE



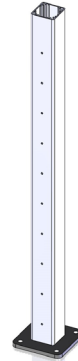
Corner Post

362SC (Surface 200/400 Rail)
362FC (Fascia 200/400 Rail)
366SC (Surface 250 Rail)



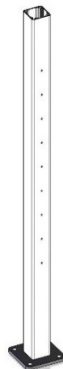
End Post

362SE (Surface 200/400 Rail)
362FE (Fascia 200/400 Rail)
366SE (Surface 250 Rail)



Intermediate Post

362SI (Surface 200/400 Rail)
362FI (Fascia 200/400 Rail)
366SI (Surface 250 Rail)



*Stair End Post

452US (10 Hole)

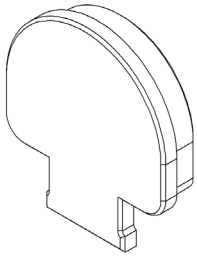


*Stair Intermediate Post

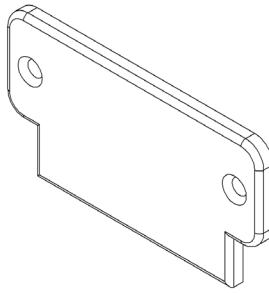
452UI (10 Hole)

*Bases ordered separately and post cut to length on site

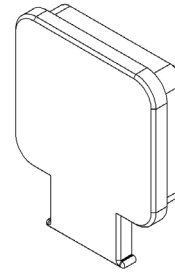
END CAPS AND CORNER BRACKETS



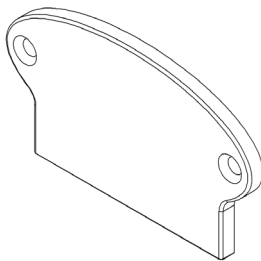
RFX 100 End Cap
Special Order



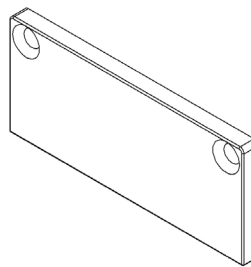
RFX 200 End Cap
Item# 0112



RFX 250 End Cap
Item# 0114



RFX 300 End Cap
Special Order



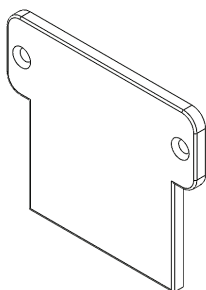
RFX 400 End Cap
Item# 0124



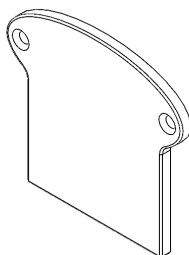
RFX ADA End Cap
Special Order



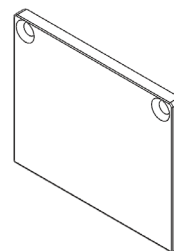
END CAPS AND CORNER BRACKETS (CONTINUED)



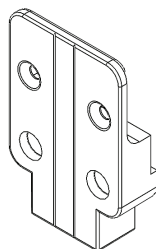
RFX 200 Extended End Cap
Item# 0113



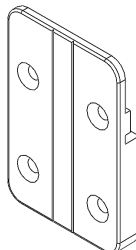
RFX 300 Extended End Cap
Special Order



RFX 400 Extended End Cap
Item# 0127



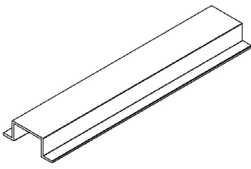
**RFX 200 Stair
Corner Connector**
Item# 0125



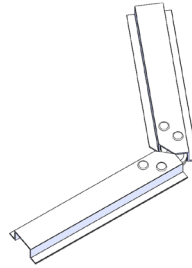
**RFX 400 Stair
Corner Connector**
Item# 0126



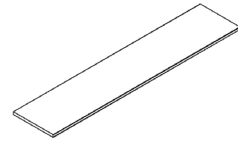
SPLICES / CONNECTORS



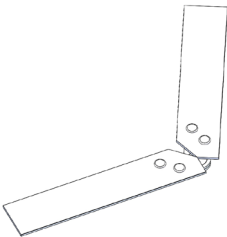
**RFX 200 / 300
Top Rail Splice**
Item# 0115



**RFX 200 / 300
Top Rail Hinged Splice**
Item# 0122



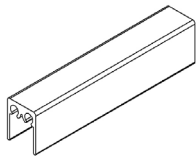
**RFX 400 Top
Rail Splice**
Item# 0413



**RFX 400
Top Rail Hinged Splice**
Item# 0123

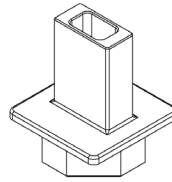


SPLICES / CONNECTORS



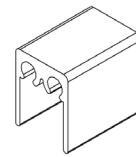
RFX 100 / 250 Top Rail Splice

Item# 011812



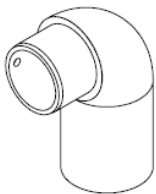
**RFX 100 / 250 Top Rail
Over The Post Fitting**

Item# 0412



**RFX 100 / 250 Top Rail
Connecting Block (RCB)**

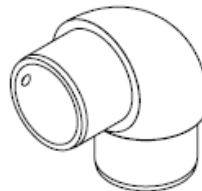
Item# 0118



**RFX ADA Female to
Male Corner**

*Available in 90 degrees

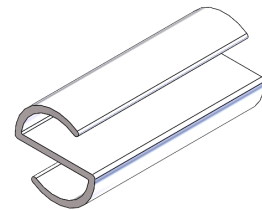
Special Order



**RFX ADA Male to Male
Corner**

*Available in 33, 36 and
90 degrees

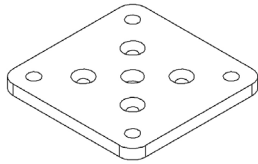
Special Order



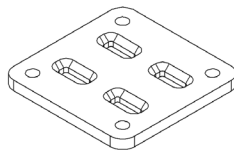
RFX ADA Rail Splice

Special Order

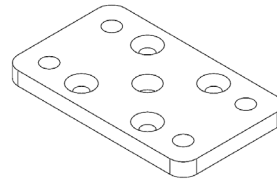
HARDWARE / ACCESSORIES



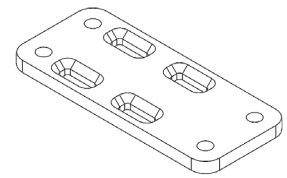
**5x5 RFX
Base Plate**
Item# 0414



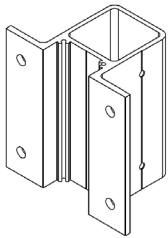
**5x5 RFX Slotted
Base Plate**
Item# 0422



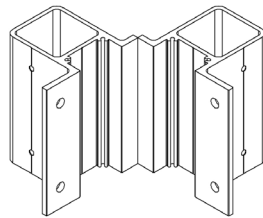
**3x5 RFX
Base Plate**
Special Order



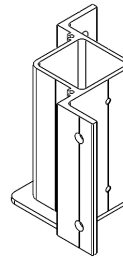
**3x7 RFX Slotted
Base Plate**
Special Order



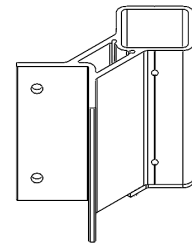
**RFX Straight
Fascia Bracket**
Item# 0415



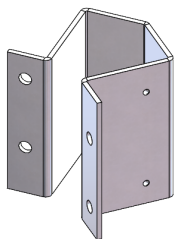
**RFX Double Outside Corner
Hinged Fascia Bracket**
Item# 0423



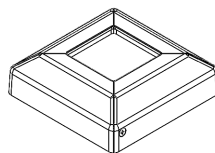
**RFX Single Inside
Corner Fascia Bracket**
Item# 0424



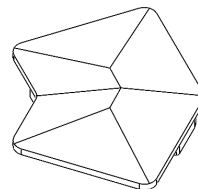
**RFX Single Outside
Corner Fascia Bracket**
Item# 0425



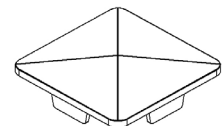
**RFX 135 Degree
Fascia Bracket**
Special Order



**RFX Post Skirt
(Optional)**
Item# 0120



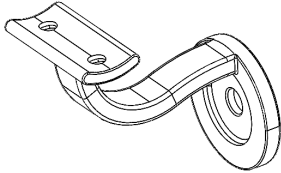
**RFX 135
Post Cap**
Special Order



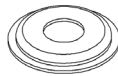
RFX Post Cap
Item# 0410



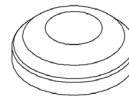
HARDWARE / ACCESSORIES



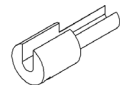
RFX ADA Mount
Special Order



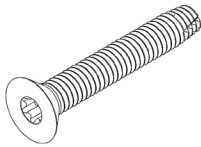
3/8" Stainless Steel Cup Washer
Included with post



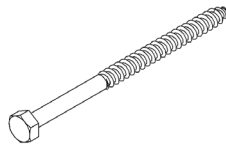
Vinyl Bolt Cap
Included with post



Push Lock Release Key
Item# 3066



T-40 Self Tapping Stainless Steel Screws
Included with base plate kit



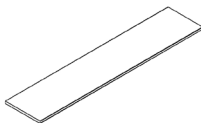
5.5" x 3/8" Stainless Steel Lag Bolt
Item# 0417



7.5" x 3/8" Stainless Steel Lag Bolt
Item# 0419



#10 - 3/4" Screw
Item# 0910 (100pk)



Internal Post Stiffener
Item# 0413



RFX System Install Kit
Item# 3053-224



1/8" Cable Cutter (Optional)
Item# 3068



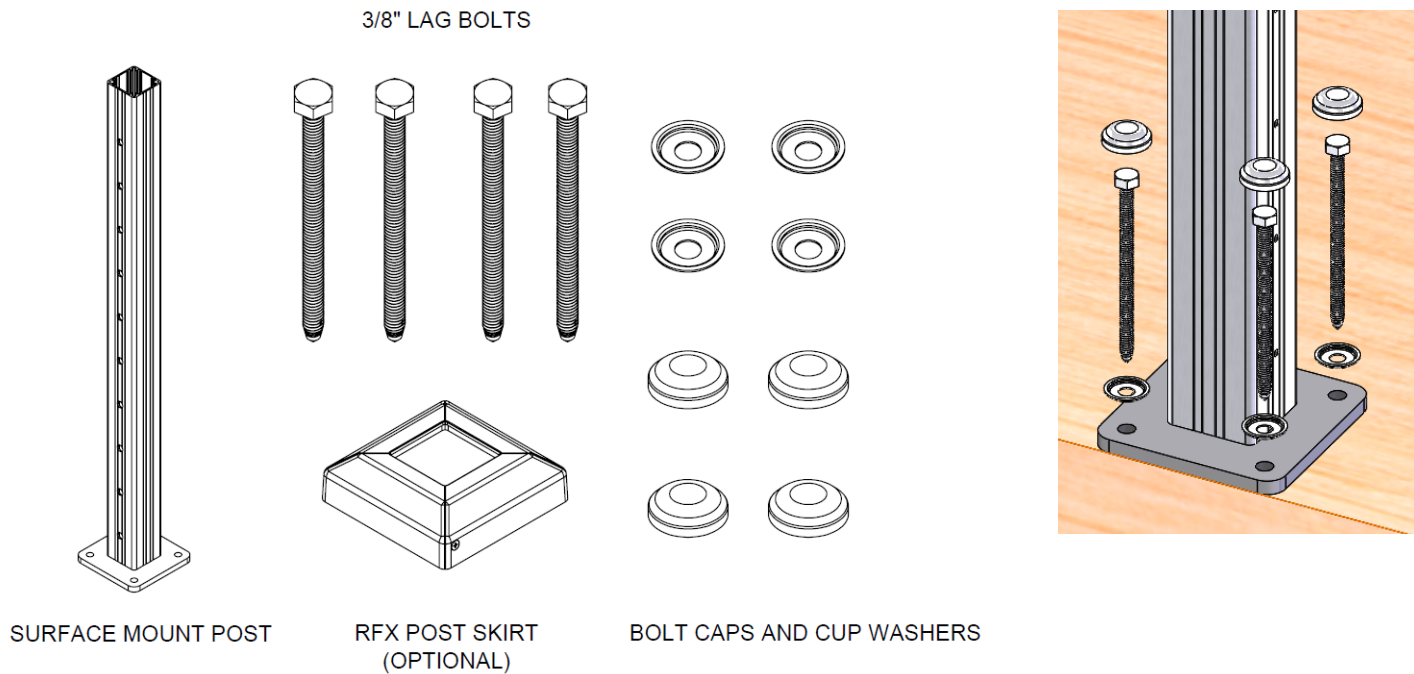
#14 - 1" Fascia Bracket Screw
Included with bracket



SURFACE MOUNT POST INSTALLATION

For 36"/42" RailFX® Aluminum Railing and Cable System

Materials included for installation:

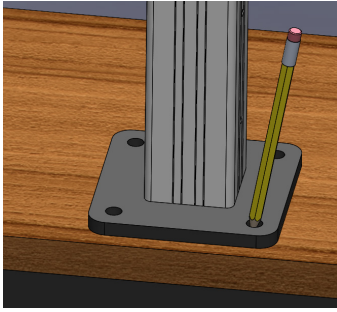


- Wood blocking must be constructed with treated dimensional lumber
- Secure wood blocking to deck frame on all four sides – using #10-3-1/2" deck screws
- Wood blocking must be constructed with a minimum thickness of 1-1/2"
- Base plate holes MUST be positioned a minimum 1/2" from the edge of the deck board
- Use only 3/8" diameter lag screws to attach post
- Secure each post with four bolts

It is the responsibility of the installer to meet all code and safety requirements, and to obtain all required building permits. The deck and railing installer should determine and implement appropriate techniques for each installation situation. RailFX® or its distributors shall not be held liable for improper or unsafe installations. Determine appropriate layout and post spacing- **Maximum post spacing is 60" on center.** Ensure that proper blocking is in place prior to mounting post. 5.5"/7.5" lag must be fully embedded into blocking.

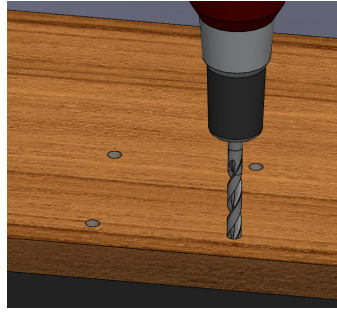
SURFACE MOUNT POST INSTALLATION

For 36"/42" RailFX® Aluminum Railing and Cable System



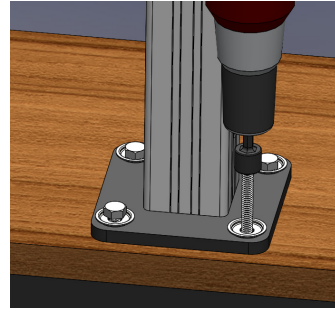
Step 1

Determine location of post and mark hole locations.



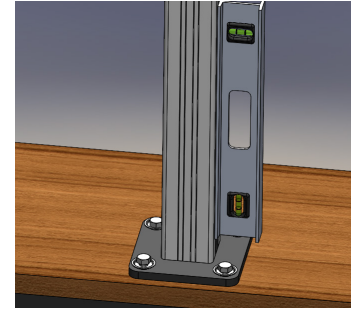
Step 2

Remove post and pre-drill pilot holes to accept 3/8" diameter lag bolt.



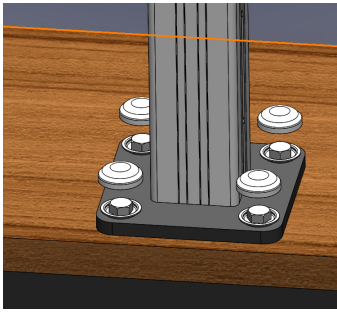
Step 3

Install cup washer under head of each fastener and drive fastener into blocking.



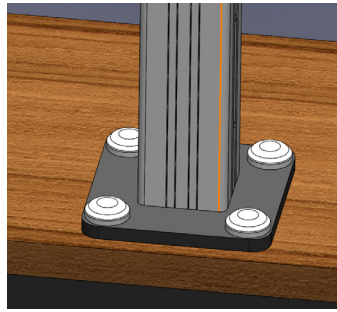
Step 4

Ensure post is plumb. If not, adjust as needed utilizing composite shims. Tighten fasteners and ensure proper engagement of lags.



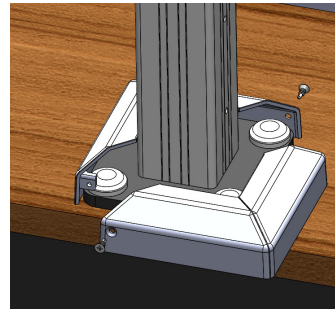
Step 5a

Press bolt caps onto cup washer to finish post.



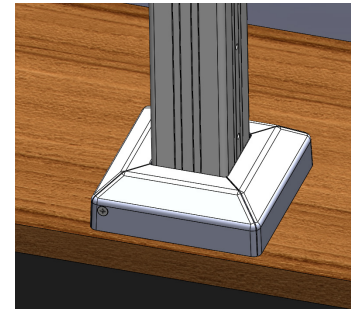
Step 5b

Finished Installation. (Unless using post skirt).



Step 6a

Install 2 piece post skirt (optional). Secure with 2 screws (included).

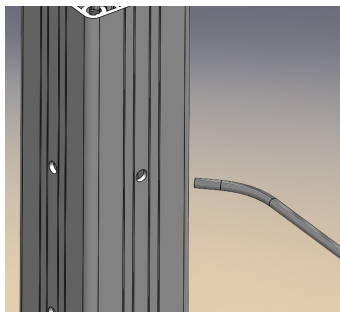


Step 6b

Finished Installation.

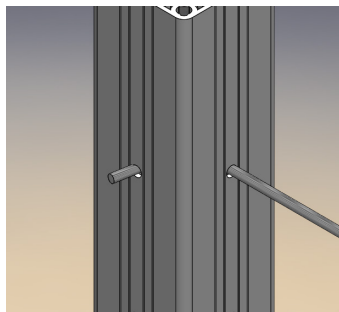


SINGLE CORNER POST INSTALLATION



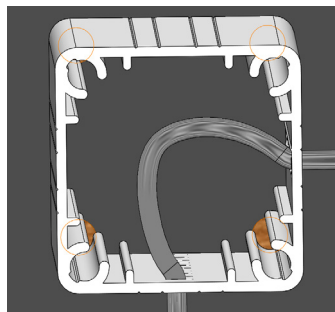
Step 1: Bend and Insert Cable

Create a bend in cable to allow for easier insertion into post. Do not fray cable end.



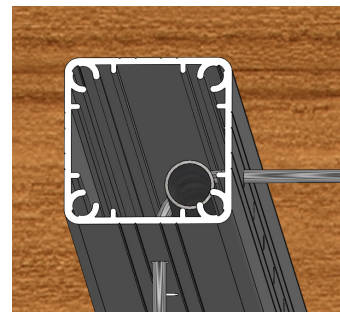
Step 2: Run Cable

Insert and pull through 1' on all cables on post.



Step 3: Create a Loop

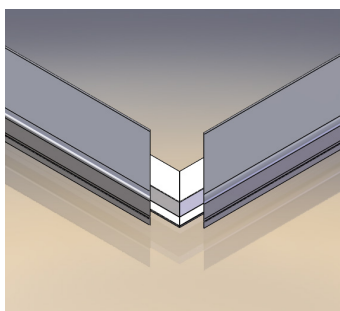
Push cable back into post creating a loop.



Step 4: Insert Conduit

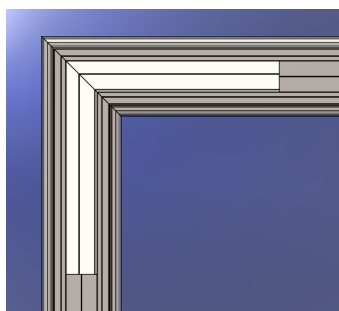
Insert conduit into post and align to inside corner. Pull cables tight to conduit.

RFX200/300 TOP RAIL – MITER, SPLICE & POST ATTACHMENT



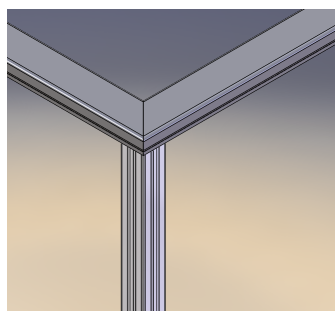
Step 1: Miter Top Rail

Miter top rails to create a 90 degree corner and slide splice into each end of the rail.



Step 2: 90 Degree Splice Install

Using 8 each screws, secure splice into top rail from the underside of the rail. Ensure screws do not interfere with post.



Step 3: Single Corner Post

Once top rail is secured with a splice, it can be placed onto the post. Use 2 each screws to attach top rail to post.

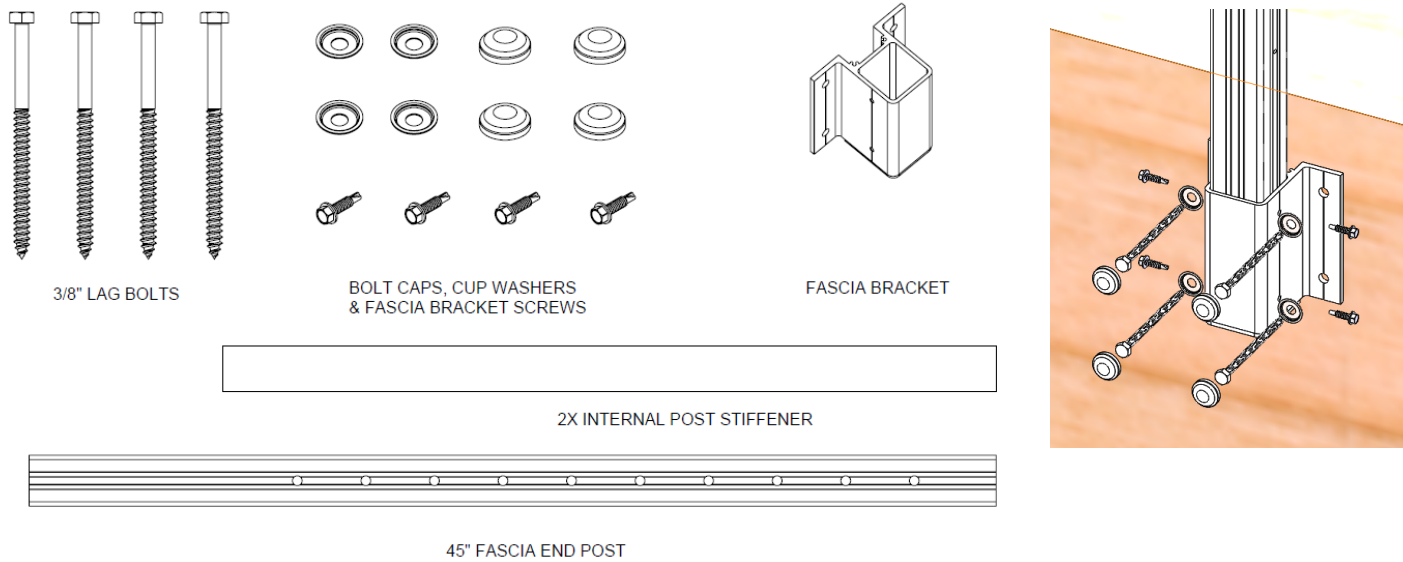




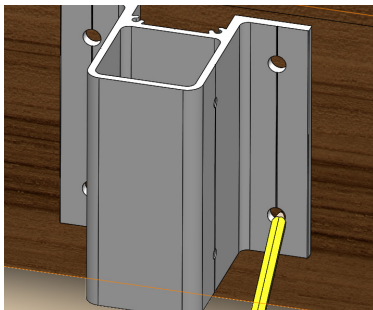
FASCIA POST WITH BRACKET

FASCIA MOUNT END POST WITH BRACKET

Materials included for installation:

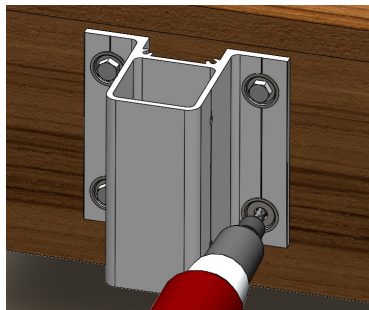


It is the responsibility of the installer to meet all code and safety requirements, and to obtain all required building permits. The deck and railing installer should determine and implement appropriate techniques to each installation. RailFX® or its distributors shall not be held liable for improper or unsafe installations. Determine appropriate layout and post spacing – **Maximum post spacing of 60" on center**. Ensure that proper blocking is in place before mounting post.



Step 1

Determine location of end post fascia bracket. Ensure bracket is plumb, mark holes, remove bracket and drill pilot holes to accept 3/8" diameter lag bolt.



Step 2

Install cup washer under head of each fastener and drive fastener loosely into blocking.



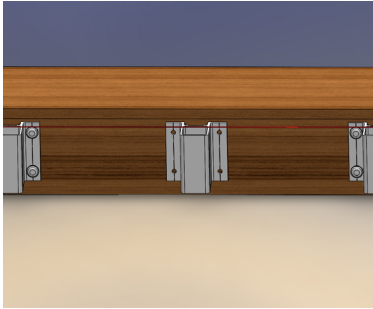
Step 3

Ensure bracket is plumb, adjust as needed. Tighten fasteners and ensure proper engagement into blocking.



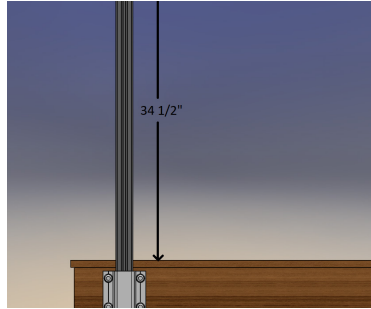
FASCIA POST WITH BRACKET

FASCIA MOUNT END POST WITH BRACKET



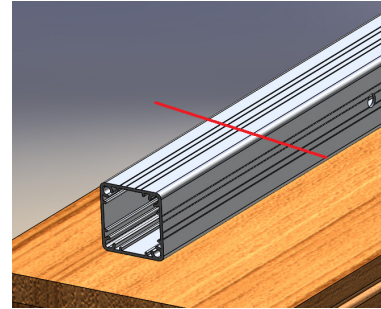
Step 4

Install fascia end bracket at opposite end. Measure down from deck boards the same distance as the first bracket.



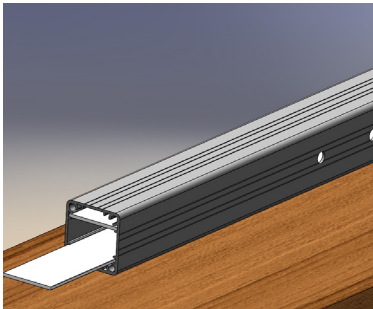
Step 5

Insert top of post into bracket and mark bottom of post at 34-1/2" above deck surface to meet 36" rail height requirements.



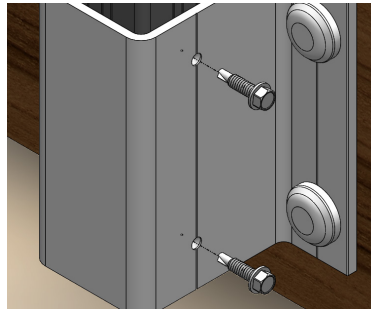
Step 6

Cut post end using a sharp carbide 80 tooth blade on a miter saw.



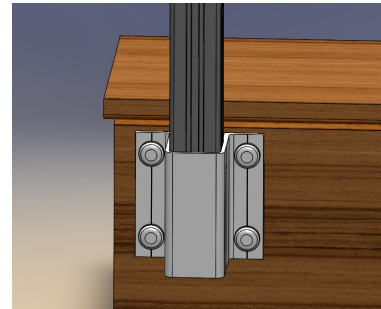
Step 7

Insert 2 each post stiffeners into end post parallel to pre-drilled cable fitting holes as shown. Carefully install post with stiffeners into mounted fascia bracket.



Step 8

Plumb post and secure into bracket by installing 4 each self-drilling #1/4 x 1" screws.



Step 9

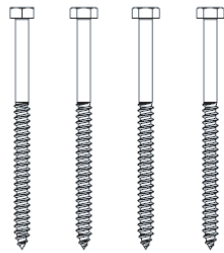
Install nylon bolt cap covers for a finished look.



FASCIA POST WITH BRACKET

FASCIA MOUNT INTERMEDIATE POST WITH BRACKET

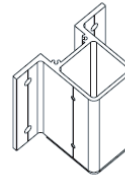
Materials included for installation:



3/8" LAG BOLTS



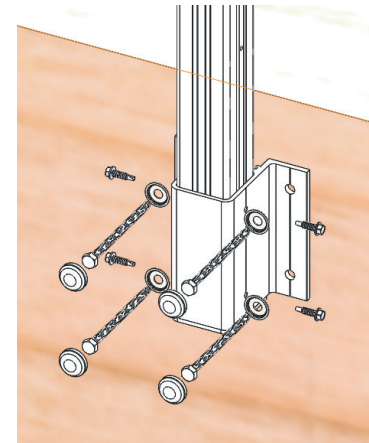
BOLT CAPS, CUP WASHERS
& FASCIA BRACKET SCREWS



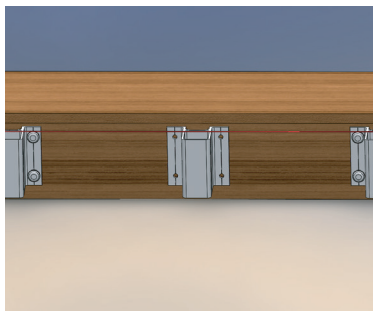
FASCIA BRACKET



45" FASCIA INTERMEDIATE POST

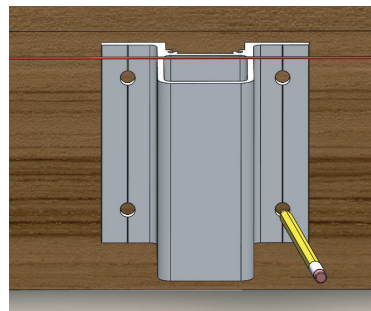


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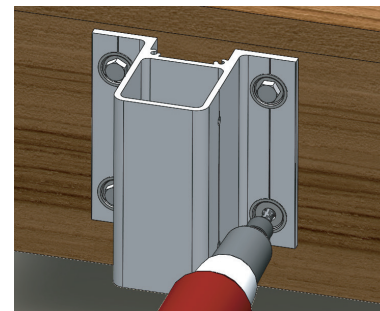
Step 1

End post brackets must be installed prior to intermediate bracket placement. A level string is used to place intermediate bracket, ensuring all brackets are on same plane.



Step 2

Determine location of fascia bracket. Ensure bracket is level, mark holes, remove bracket and drill pilot holes to accept 3/8" diameter lag bolt.

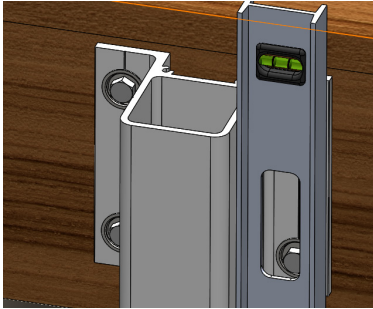


Step 3

Install cup washer under head of each fastener and drive fastener loosely into blocking.

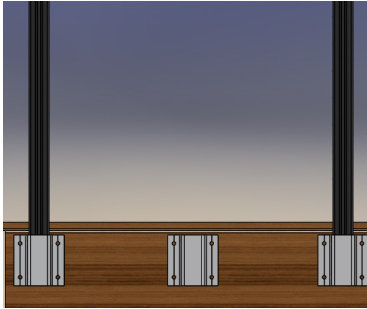
FASCIA POST WITH BRACKET

FASCIA MOUNT INTERMEDIATE POST WITH BRACKET



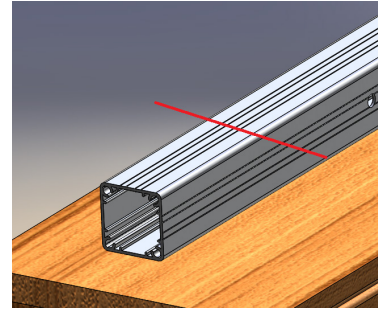
Step 4

Ensure bracket is plumb, adjust as needed. Tighten fasteners and ensure proper engagement into blocking.



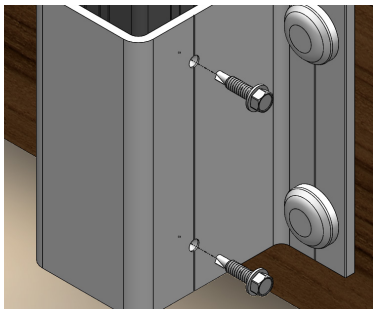
Step 5

End posts must be installed prior to intermediate post placement. A level string can be used to properly align all intermediate posts. Posts must be 34-1/2" above deck board for a 36" rail height.



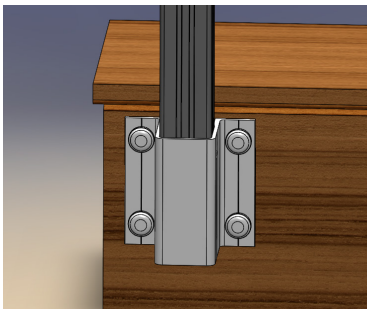
Step 6

Insert top of post into fascia bracket and mark where string line intersects. Cut post end using a sharp carbide 80 tooth blade on a miter saw.



Step 7

Plumb post and secure into bracket by installing 4 each self-drilling #1/4 x 1" screws.



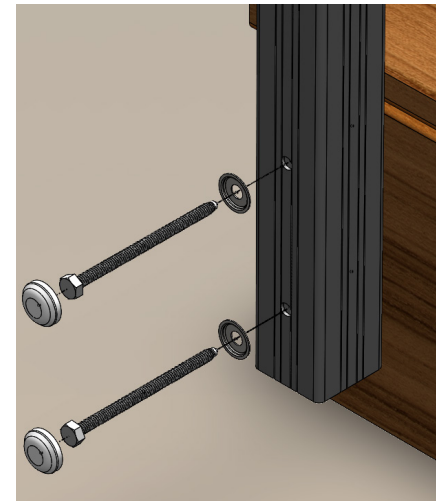
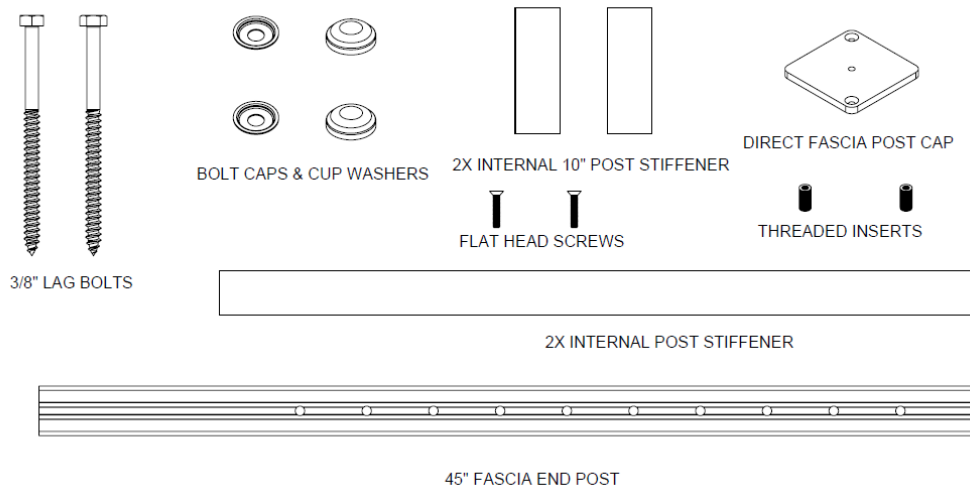
Step 8

Install nylon bolt cap covers for a finished look.

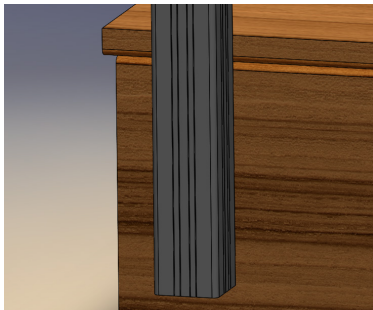


DIRECT TO FASCIA MOUNT FASCIA MOUNT END POST WITHOUT BRACKET

Materials included for installation:

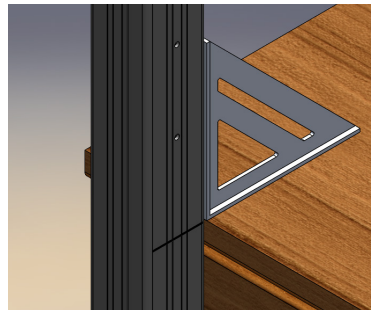


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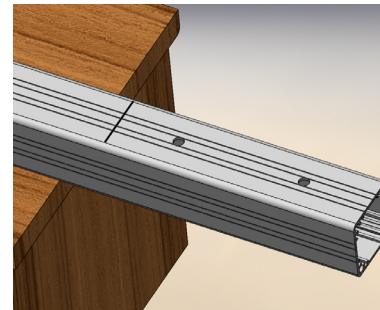
Step 1

Determine location of end post. (Max. post spacing of 60" on center) Posts must be 34-1/2" above deck board for a 36" rail height.



Step 2

Mark post at deck height to use as a reference point.



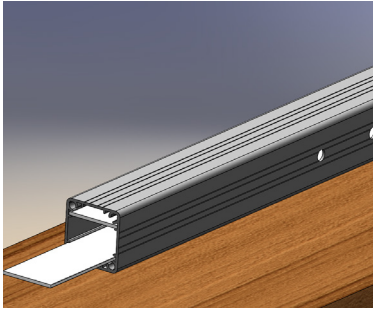
Step 3

From the mark created, measure down to first hole and mark. The second hole must be at least 4-1/2" down from the first hole. After marking, drill holes. Holes should be marked and drilled separately. If needed, trim excess off end of post.



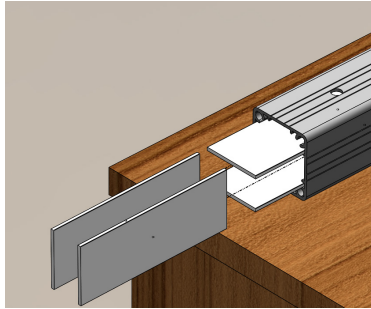
DIRECT TO FASCIA MOUNT

FASCIA MOUNT END POST WITHOUT BRACKET



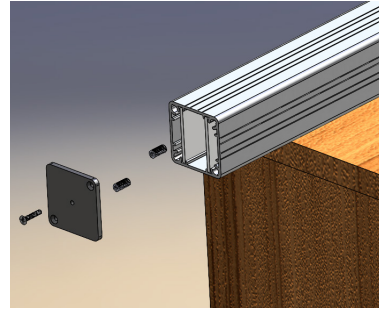
Step 4

With post laying horizontally, slide 2 each 34" post stiffeners into existing channels parallel to pre-drilled cable holes. Stiffeners provide necessary rigidity for posts.



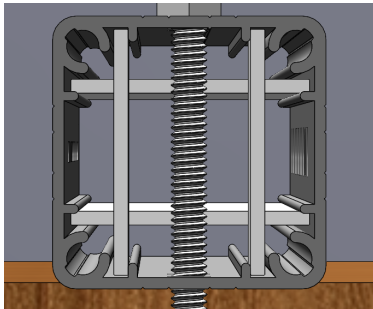
Step 4a

Then, slide 2 each 10" post stiffeners into other channels perpendicular to pre-drilled cable holes. Stiffeners provide support for posts.



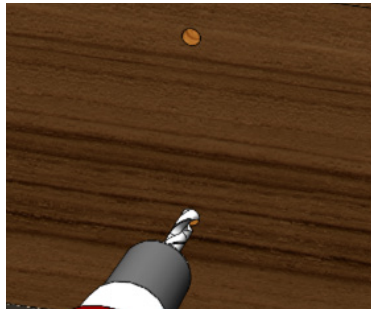
Step 4b

Install threaded inserts into opposite corners of post. Then install direct fascia post cap using 2 each provided screws.



Step 4c

This cross section looking up from the bottom of the post shows how the stiffeners crisscross inside the post.



Step 5

Confirm location of fascia post. (Max. post spacing 60" on center). Mark holes, remove post and drill pilot holes to accept 3/8" lag bolts.



Step 6

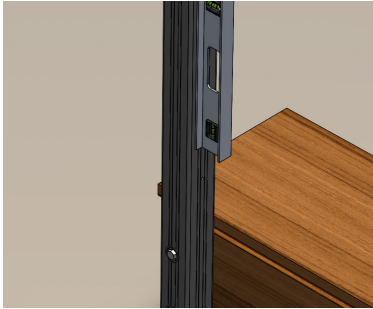
Install cup washer under head of fastener and drive fastener loosely into blocking.





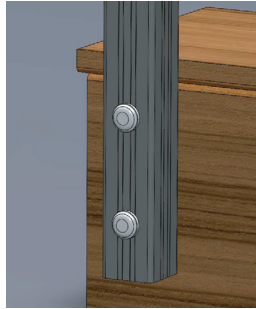
DIRECT TO FASCIA MOUNT

FASCIA MOUNT END POST WITHOUT BRACKET



Step 7

Plumb post, adjust as needed. Tighten fasteners and ensure proper engagement into blocking.



Step 8

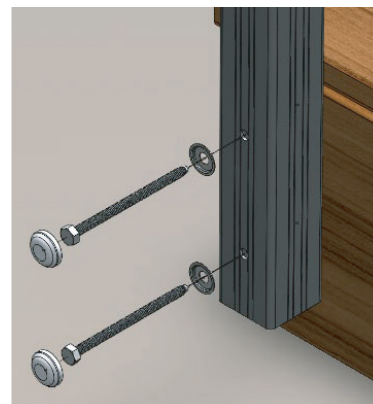
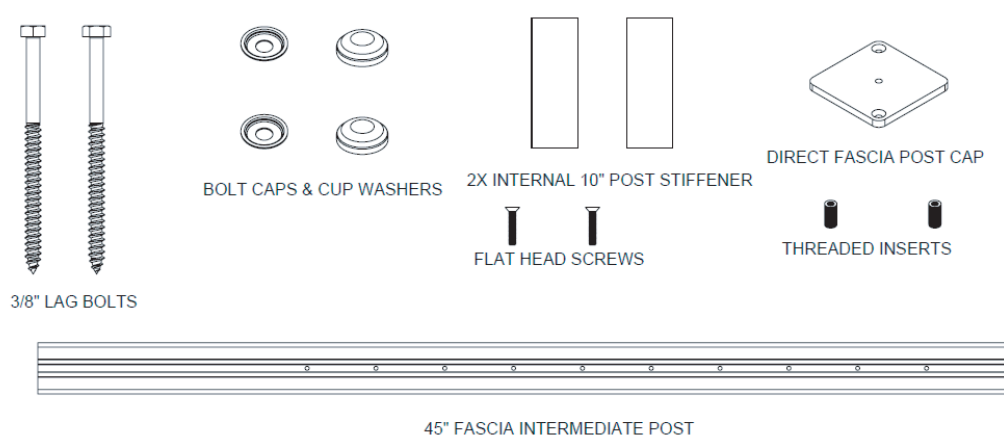
Install nylon bolt cap covers for a finished look.



DIRECT TO FASCIA MOUNT

FASCIA MOUNT INTERMEDIATE POST WITHOUT BRACKET

Materials included for installation:

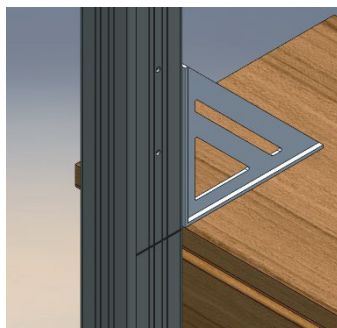


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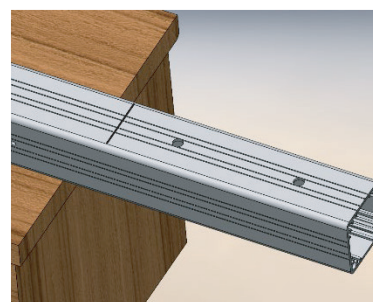
Step 1

End posts must be installed prior to intermediate post placement. A level string can be used to properly align all intermediate posts. Posts must be 34-1/2" above deck board for a 36" rail height.



Step 2

Mark post at deck height to use as a reference point.



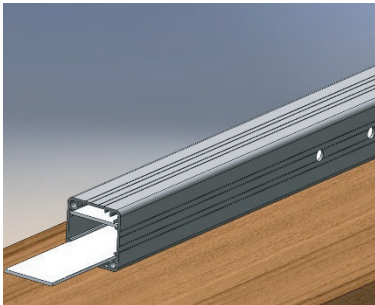
Step 3

From the mark created, measure down to first hole and mark. The second hole must be at least 4-1/2" down from the first hole. After marking, drill holes. Holes should be marked and drilled separately. If needed, trim excess off end of post.



DIRECT TO FASCIA MOUNT

FASCIA MOUNT INTERMEDIATE POST WITHOUT BRACKET



Step 4

Slide 2 each 10" post stiffeners into other channels perpendicular to pre-drilled cable holes. Stiffeners provide support for posts. If using picket infill, place post stiffeners perpendicular to rail connecting block holes.



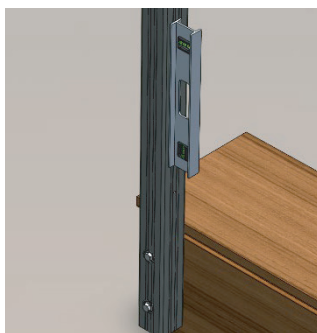
Step 5

Confirm location of fascia post. (Max. post spacing 60" on center). Mark holes, remove post and drill pilot holes to accept 3/8" lag bolts.



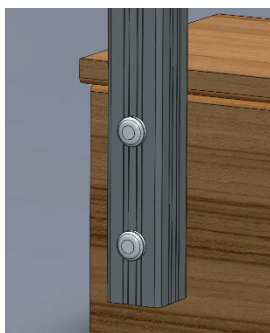
Step 6

Install cup washer under head of fastener and drive fastener loosely into blocking.



Step 7

Plumb post, adjust as needed. Tighten fasteners and ensure proper engagement into blocking.



Step 8

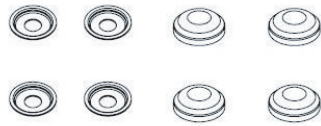
Install nylon bolt cap covers for a finished look.



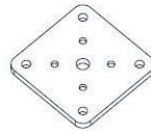
SURFACE MOUNT STAIR END POST



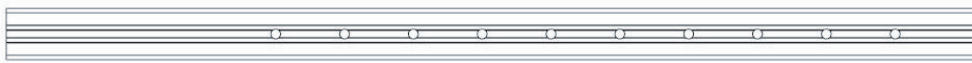
3/8" LAG BOLTS



BOLT CAPS & CUP WASHERS

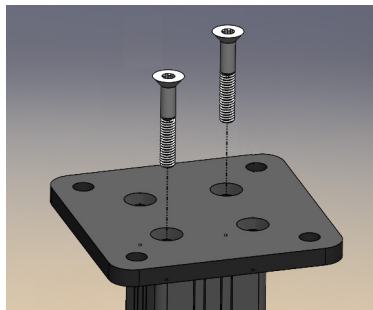


RFX BASE PLATE KIT



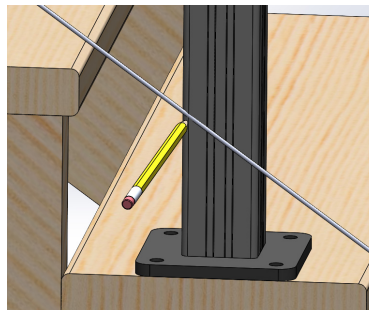
45° STAIR END POST

NOTE: Post comes long on top and bottom and will require trimming prior to installation.



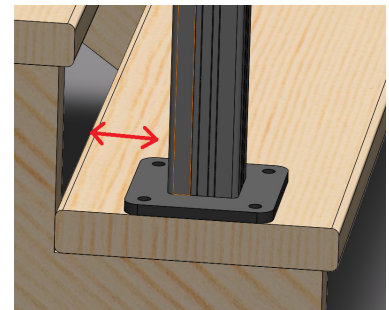
Step 1

Temporarily fasten base plate to post using 2 screws.



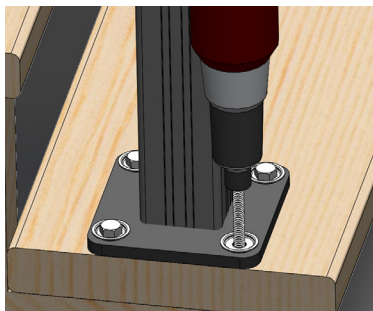
Step 2

Measure desired height of post and add 3/8" to accommodate base plate.



Step 3

Determine location of bottom end post and mark base plate holes.

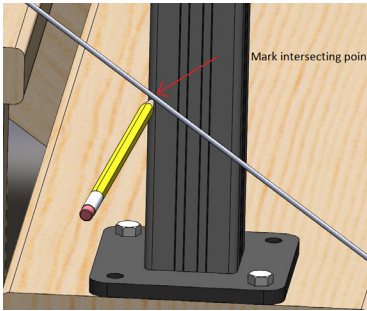
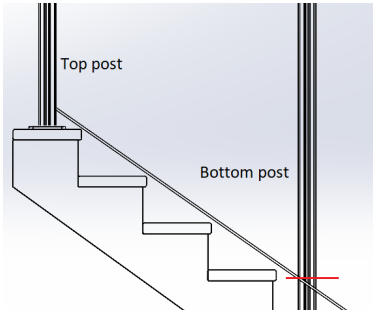


Step 4

Temporarily fasten post.

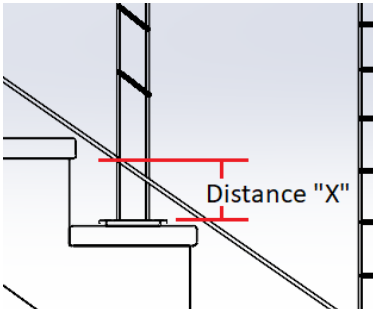


SURFACE MOUNT STAIR END POST



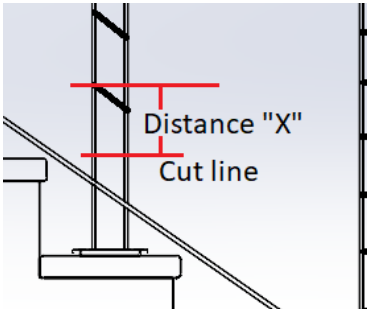
Step 4

Insert cable into first hole of top end post (previously mounted) and pull tightly along side the bottom end post. Ensure that cable is evenly spaced above the nose of the treads, then mark the bottom end post, using masking tape, where the cable intersects the post.



Step 5

Measure distance (Distance "X") from the mark made in Step 4 to the top of the base plate.

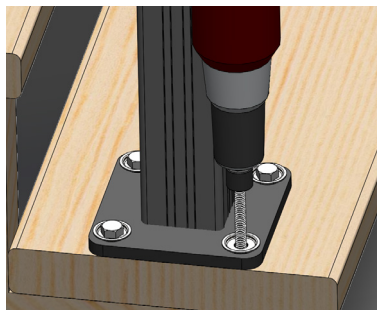


Step 6

Use Distance "X" from Step 5 and measure down from the center of the first hole (closest to the tread).

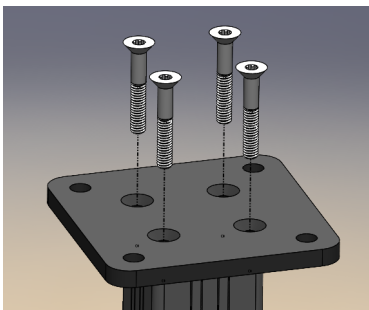


SURFACE MOUNT STAIR END POST



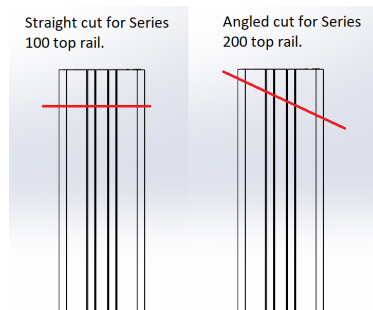
Step 7

Remove post from tread and remove base plate from post before cutting. Then, cut post at marked cut line from Step 6.



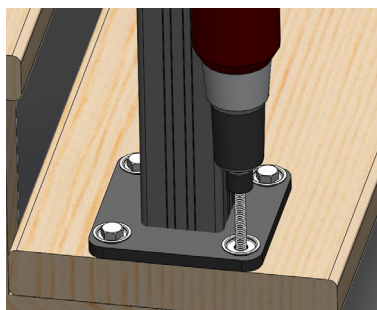
Step 8

Re-attach base plate to bottom of cut post with all 4 screws. (Use beeswax for easier install).



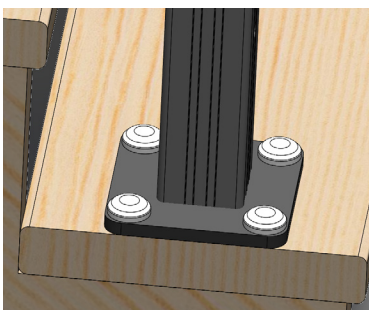
Step 9

Before final post attachment, the top of the post will need to be cut accordingly, so cable is 3-1/2" or less from top rail.



Step 10

Attach post to surface.



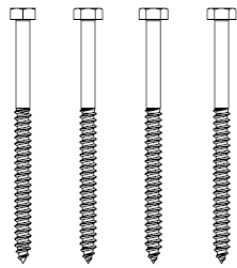
Step 11

Finished post installation. Bolt caps (shown) or post skirt.

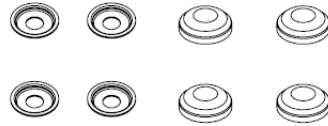


SURFACE MOUNT STAIR INTERMEDIATE POST

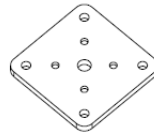
NOTE: Post comes long on top and bottom and will require trimming prior to installation.



3/8" LAG BOLTS



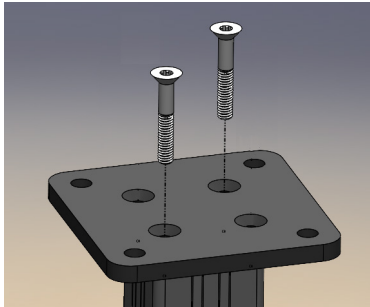
BOLT CAPS & CUP WASHERS



RFX BASE PLATE KIT

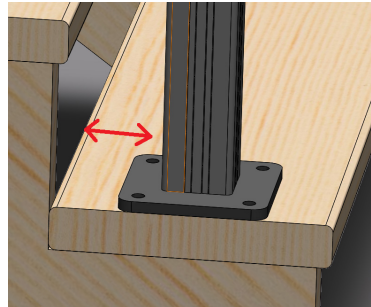


45° STAIR INTERMEDIATE POST



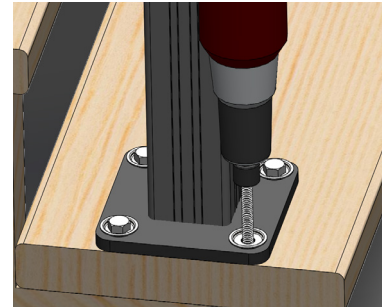
Step 1

Temporarily install base plate with 2 screws.



Step 2

Determine location of bottom end post and mark base plate holes.

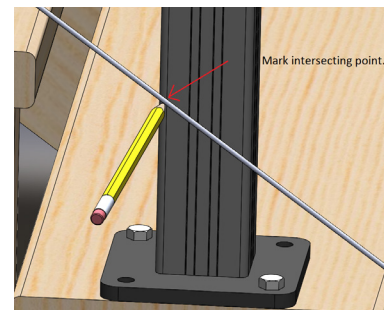
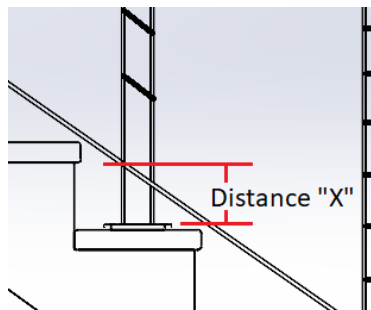


Step 3

Temporarily fasten post.

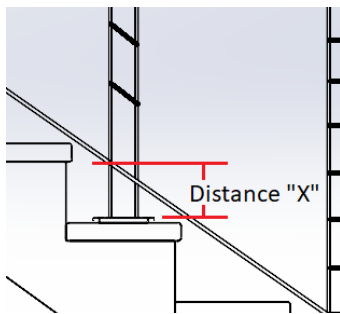
Step 4

Insert cable into first hole of top end post (previously mounted) and pull tightly along side the bottom end post. Ensure that cable is evenly spaced above the nose of the treads, then mark the bottom end post, using masking tape, where the cable intersects the post.



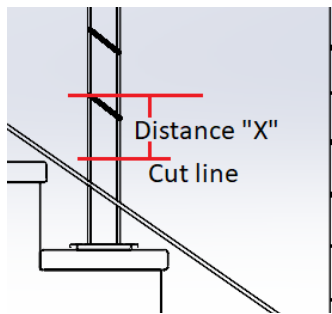


SURFACE MOUNT STAIR INTERMEDIATE POST



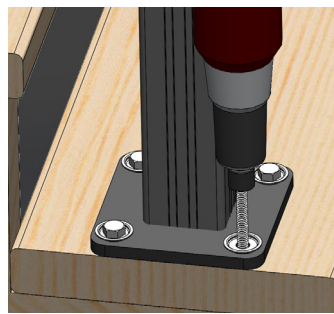
Step 5

Measure distance (Distance "X") from the mark made in Step 4 to the top of the base plate.



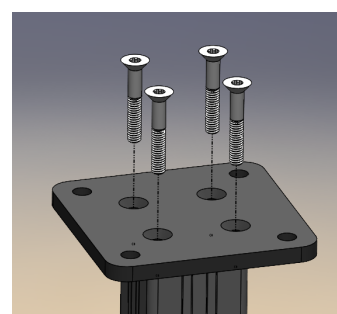
Step 6

Use Distance "X" from Step 5 and measure down from the center of the first hole (closest to the tread).



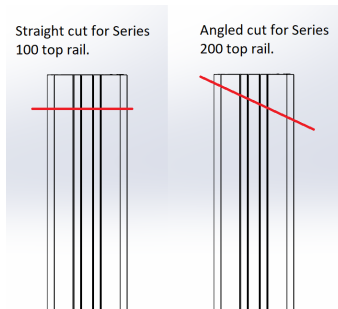
Step 7

Remove post from tread and remove base plate from post before cutting. Then, cut post at marked cut line from Step 6.



Step 8

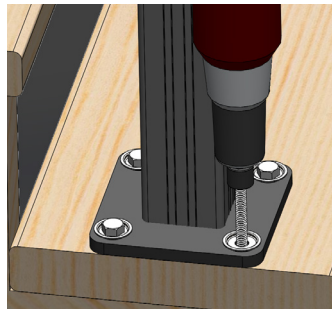
Re-attach base plate to bottom of cut post with all 4 screws. (Use beeswax for easier install).



Step 9

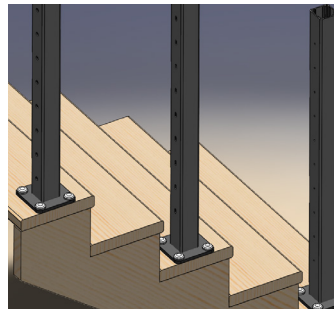
Before final post attachment, the top of the post will need to be cut accordingly, so cable is 3-1/2" or less from top rail.

NOTE: Ensure that top rail is 34" above stair.



Step 10

Attach post to surface.

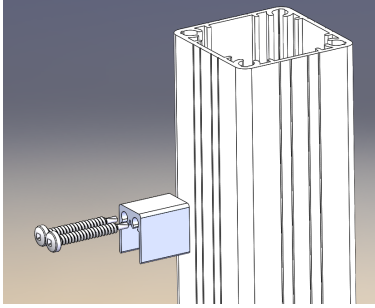


Step 11

Finished post installation. Bolt caps (Shown) or post skirt.



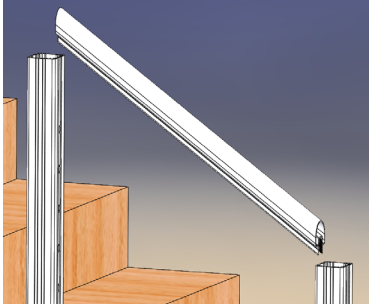
RFX100/250 TOP RAIL INSTALLATION



Rail Connecting Block

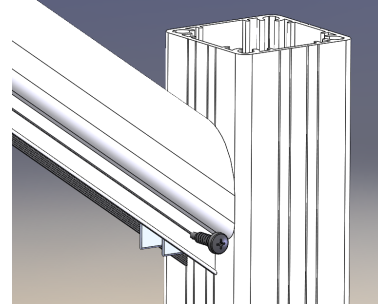
Measure 3-1/2" from middle of top hole to determine install location of RCB. Secure fitting in place with 2 each screws. Cut top of post to desired height.

NOTE: Ensure that top rail is 34" above stairs.



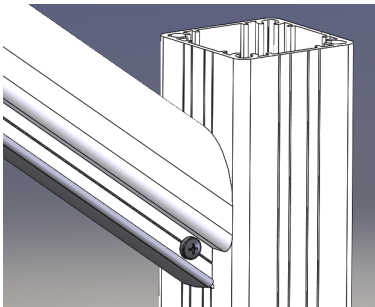
Cutting Top Rail

Measure the distance and angle needed for top rail to fit between posts. Cut top rail using a saw.



Attaching Top Rail

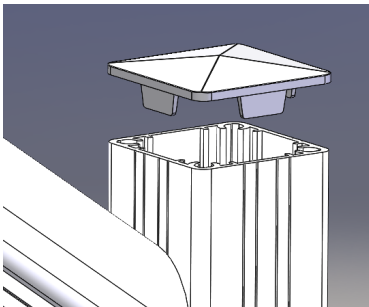
Slide top rail over top of RCB and secure with 2 each screws one on each side.



RFX100/250 Infill

Snip RCB to allow Infill to be snapped on for a finished look.

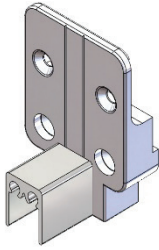
NOTE: Install prior to tensioning the cables.



Install Post Cap

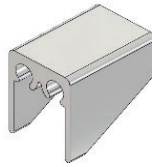
Install post cap. Use adhesive to secure cap to post.

RFX200 TOP RAIL STAIR CORNER CONNECTOR INSTALLATION



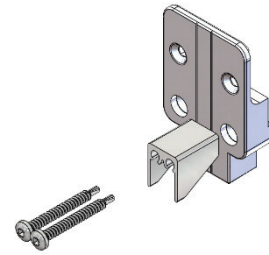
Rail Connecting Block

Align bottom of Rail Connecting Block (RCB) with bottom of RFX200 Stair Corner Connector (RFX200 SCC). Predrill RFX200 SCC with a 5/23" drill once RCB is centered on RFX200SCC.



Cutting RCB

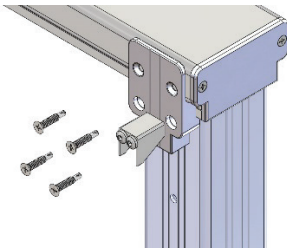
Using tin snips, clip back edges of RCB to match angle of stairs.



Attaching RCB to RFX200SCC

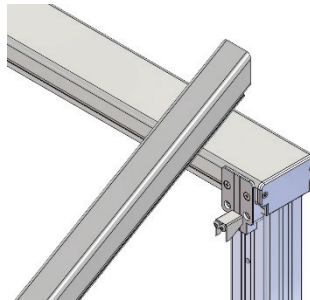
Using provided #2 square drive screws, attach RCB to RFX200SCC.

NOTE: Do not fully seat screws on this step.



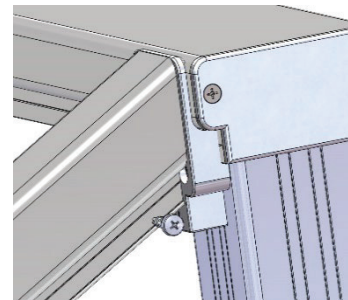
Attach RFX200SCC to Top Rail

Attach RFX200SCC to Top Rail using 4 provided screws. Grooves in post help center RFX200SCC. Fully seat #2 square drive screws once connector is installed.



Install Stair Top Rail

Cut Top Rail to angle of stairs. Place Top Rail onto RCB to ensure correct fit.



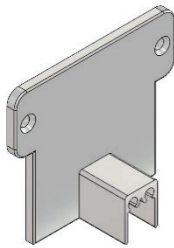
Install Stair Top Rail

Secure Top Rail to RCB using self drilling screw on each side.

NOTE: Screws to be offset to avoid collision on rail.

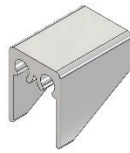


RFX200 TOP RAIL STAIR STRAIGHT CONNECTOR INSTALLATION



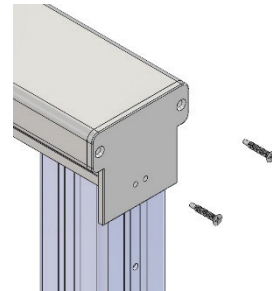
Rail Connecting Block

Align bottom of Rail Connecting Block (RCB) with bottom of RFX200 Extended End Cap (RFX200 EEC). Predrill RFX200 EEC with a 5/32" drill once RCB is centered on RFX200EEC.



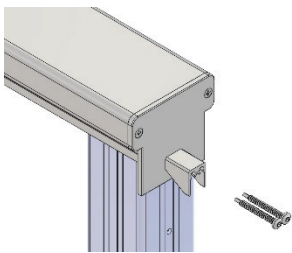
Cutting RCB

Using tin snips, clip back edges of RCB to match angle of stairs.



Attaching RFX200EEC to RFX200 Top Rail

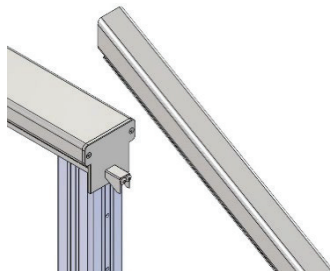
Using provided 2 screws, attach RFX200EEC to RFX200 Top Rail. Once attached, use 5/32" drill to predrill post.



Attach RCB to RFX200EEC

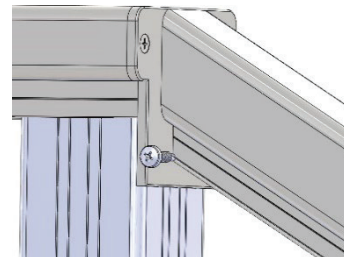
Attach RCB using provided #2 square drive screws.

NOTE: Follow same steps for RFX300 Top Rail.



Install Stair Top Rail

Cut Top Rail to angle of stairs. Place Top Rail onto RCB to ensure correct fit.

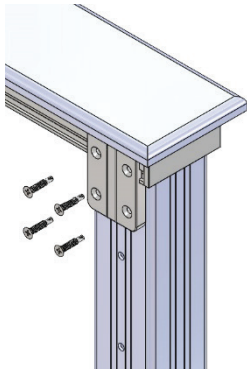


Install Stair Top Rail

Secure Top Rail to RCB using self drilling screw on each side.

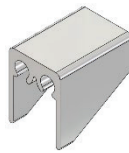
NOTE: Screws to be offset to avoid collision on rail.

RFX400 TOP RAIL STAIR CORNER CONNECTOR INSTALLATION



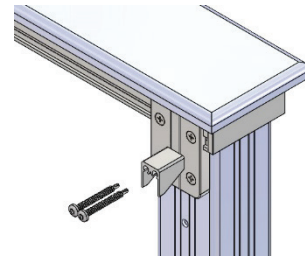
Stair Corner Connector

Attach RFX 400 Stair Corner Connector (RFX400SCC) to post. Grooves allow centering of bracket.



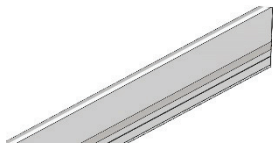
Cutting RCB

Using tin snips, clip back edges of RCB to match angle of stairs.



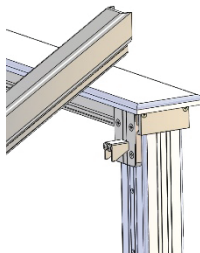
Attaching RCB to RFX-400SCC

Measure down 1-3/4" from top of RFX400SCC and mark a line. Using provided #2 square drive screws, attach RCB to RFX400SCC on marked line.



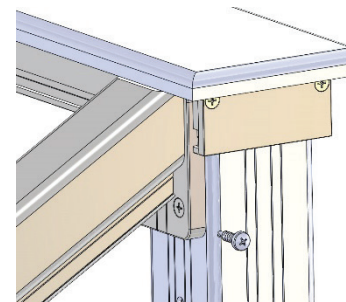
Cut Top Rail

Cut Top Rail to match stair angle. Tip of rail must be cut 5/16" down to fit under wood top rail.



Install Stair Top Rail

Place Top Rail onto RCB to ensure correct fit.



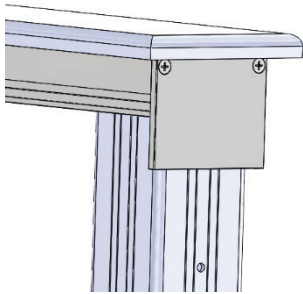
Install Stair Top Rail

Secure Top Rail to RCB using self drilling screw on each side.

NOTE: Screws to be offset to avoid collision on rail.

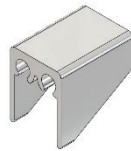


RFX400 TOP RAIL STAIR STRAIGHT CONNECTOR INSTALLATION



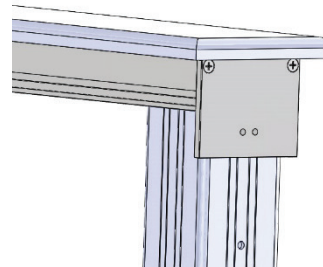
Attach End Plate

Attach RFX 400 Extended End Cap (RFX400EEC) using provided screws.



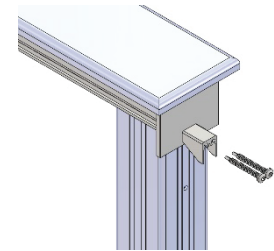
Cutting RCB

Using tin snips, clip back edges of RCB to match angle of stairs.



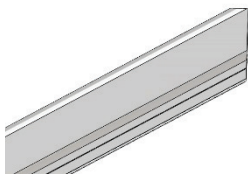
Drill RCB Alignment Holes

Measure 1-3/4" from top of RFX400EEC and mark a line. Align RCB holes with line and center RCB. Drill RFX400EEC with 5/32" drill bit.



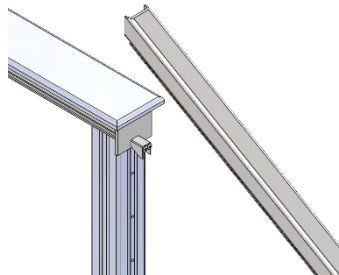
Attach RCB to RFX200EEC

Attach RCB using provided #2 square drive screws.



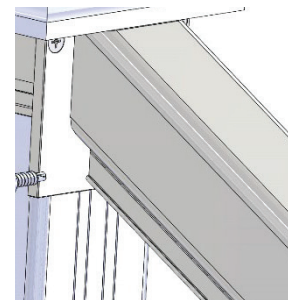
Cut Stair Top Rail

Cut Top Rail to angle of stairs. Tip of rail must be cut 5/16" down to fit under wood top rail.



Install Stair Top Rail

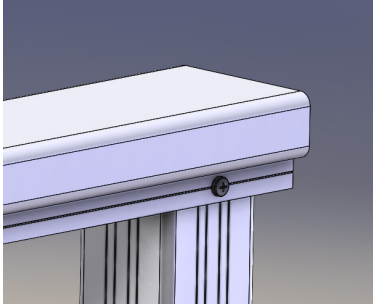
Place Top Rail onto RCB to ensure correct fit.



Install Stair Top Rail

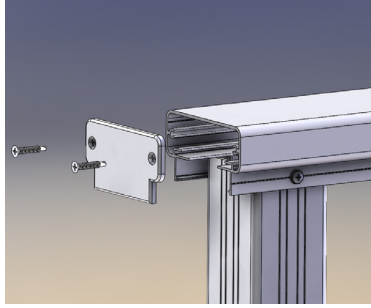
Secure Top Rail to RCB using self drilling screw on each side.

RFX200/300 TOP RAIL FOR LEVEL APPLICATIONS



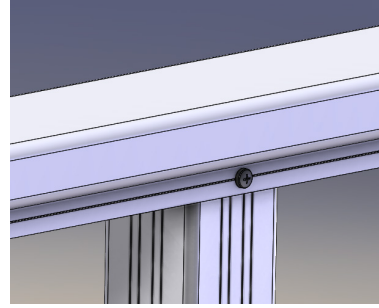
Attaching to End Post

Rail slides over top of post and attaches with 2 each screws.



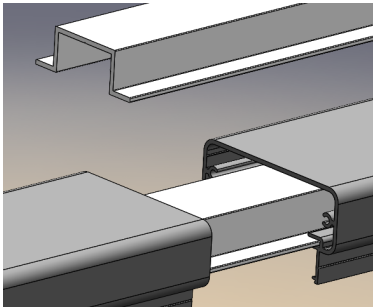
Attaching End Cap

End cap goes on open end of top rail. Use 2 each included self-tapping screws to attach to top rail. End cap must be installed first if ending against a wall.



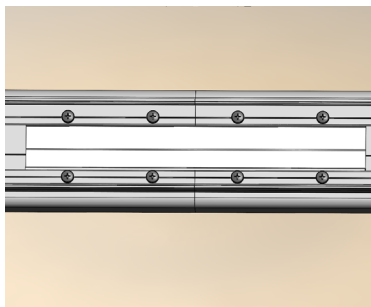
Attaching to Intermediate Post

Rail slides over top of post and attaches with 2 each screws. 1 screw on each side.



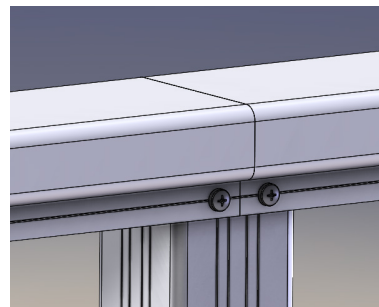
RFX200/300 Level Splice - 1

Level splice slides into each end of the rail. Splice is acceptable between posts or over posts.



RFX200/300 Level Splice - 2

Use 8 each self-tapping screws to secure splice into rail from the underside.

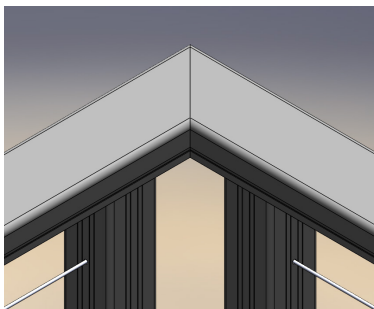


Option to Splice Over a Post

Splice must be installed into rail and then rail mounts to post. Secure rail with 4 each screws.

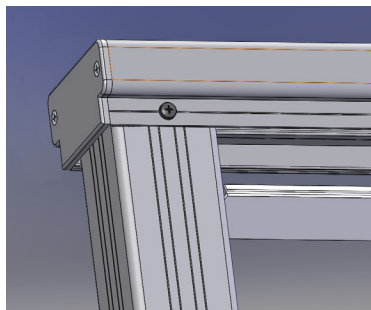


RFX200/300 TOP RAIL FOR LEVEL APPLICATIONS



Angled Splice

Splices are also used to attach corner rails. Angles include 45, 90 and custom degrees.



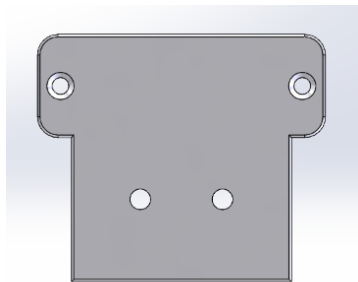
RFX200/300 – Flat In

Cut flat infill to length and snap into bottom side of to rail.

NOTE: Install prior to tensioning the cables.

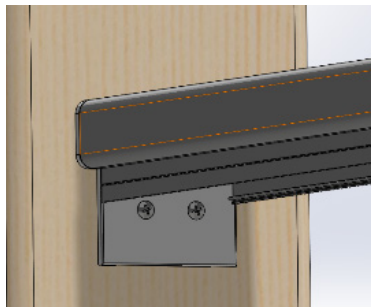
RFX200/300 TOP RAIL FOR LEVEL APPLICATIONS

NOTE: Standard end cap can also be used if desired.



RFX200/300 Terminating into Post - 1

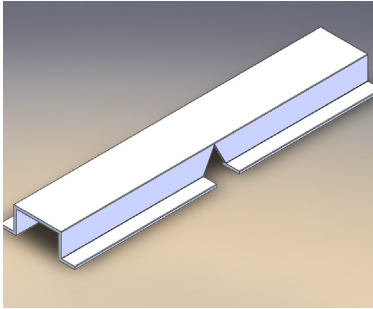
Drill 2 holes through the end cap for screws.



RFX200/300 Terminating into Post - 2

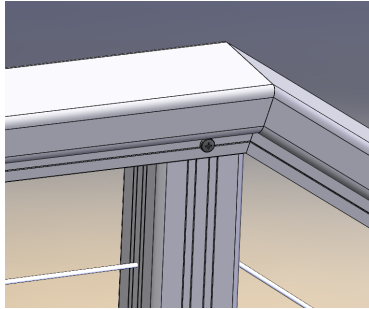
Use 2 each wood screws to attach end cap to top rail then attach rail to column using two each screws.

RFX200/300 TOP RAIL FOR STAIR APPLICATIONS



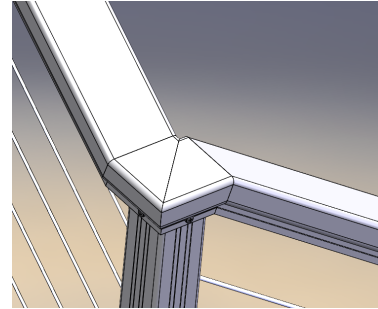
RFX200/300 – Stair Splice

Bend splice to the correct angle of the stairs and secure splice into place with 8 each screws.



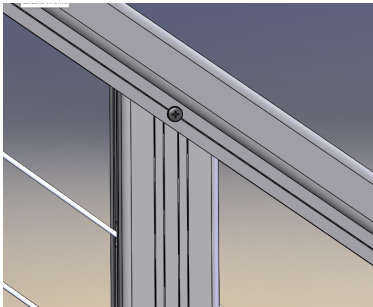
Stair Splice – Application 1

Example of rail mitered down the stairs in a continuous line.



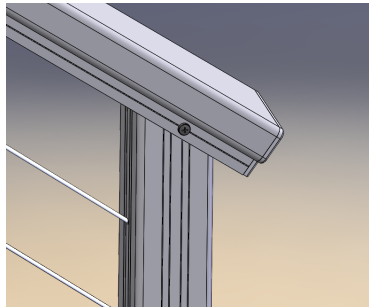
Stair Splice – Application 2

Example of rail mitered down the stairs in with a 90 degree turn.



RFX200/300 Stair Intermediate Post

Cut post at the angle of the stairs. Rail slides over top of post and attaches with 2 each screws. 1 screw per side.



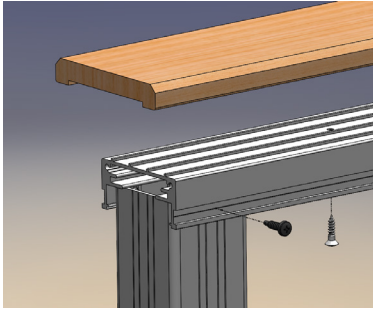
RFX200/300 Level Splice - 2

Cut post at the angle of the stairs. Rail slides over top of post and attaches with 2 each screws. 1 screw per side.

NOTE:

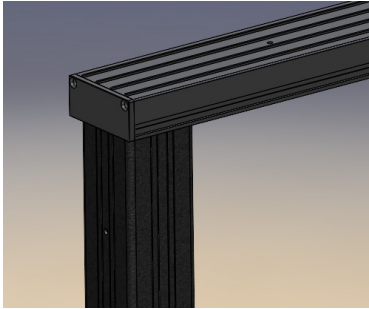
- RFX200/300 does not qualify as a graspable rail down the stairway. A secondary handrail must be used (ADA Sub-Rail) or RFX100/250 top rail can be used.
- Painting the ends of the railing that has been cut will help prevent oxidation.
- Railing must be cut square to allow end cap to securely attach to rail.

RFX400 TOP RAIL FOR LEVEL APPLICATIONS



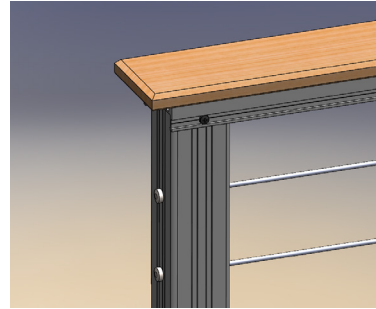
RFX400 Top Rail

Allows for a wood / composite cap to be attached to the RailFX rail system. Cap can be screwed directly to top rail or dadoed out.



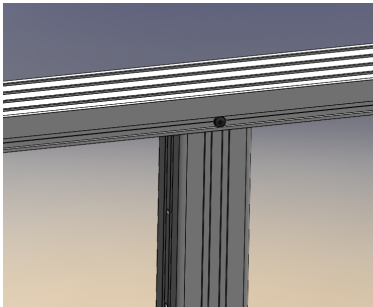
Attaching to End Post

Top rail slides over top of post and attaches with 2 each screws. 1 screw on each side.



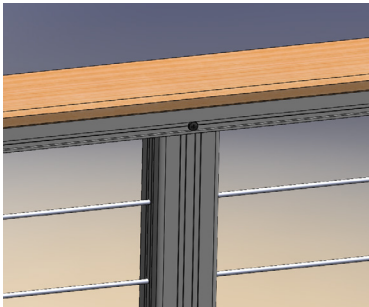
Attaching to End Post

Wood / Composite cap attaches to RFX400 top rail by screws from the bottom side.



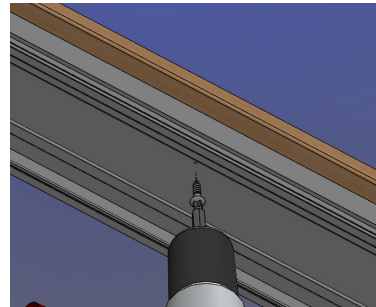
Attaching to Intermediate Post

Rail slides over top of post and attaches with 2 each screws. 1 screw on each side.



Attaching to Intermediate Post

Wood / Composite cap attaches to RFX400 top rail by screws from the bottom side.

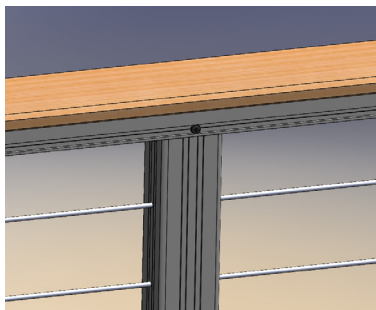


Screwing from Bottom Side

Wood / Composite cap attaches to RFX400 top rail by customer provided screws from the bottom side. Attach cap before installing flat infill.

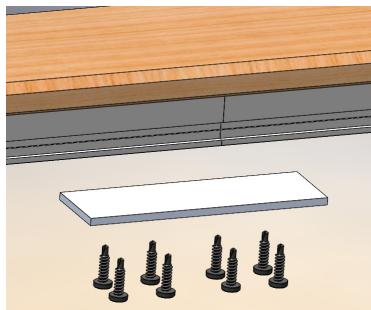


RFX400 TOP RAIL FOR LEVEL APPLICATIONS



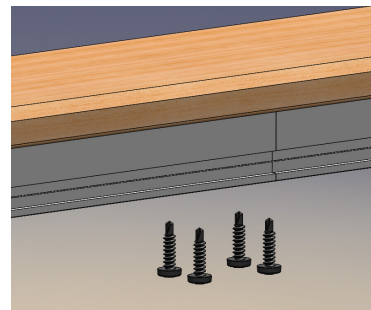
Straight Splice Option 1

Both top rails slide over top of post and attach with screws. 1 screw on each side. (Total of 4 each screws).



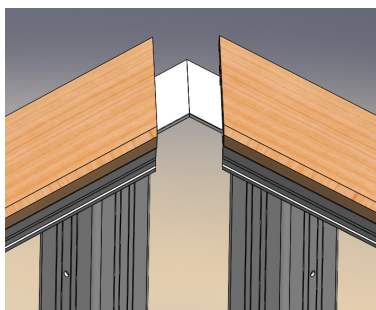
Straight Splice Option 2

Splice must be secured into place with 8 each screws from underside. Splice is made from a cut piece of Internal Post Stiffener.



Straight Splice Option 3

Use wood / Composite as splice to connect rails together where RFX400 rails meet between posts.



Angle Splice

Splice must be secured into place with 8 each screws from underside. (Top rail must be mitered).



RFX400 - Flat Infill

Cut flat infill to length and snap into bottom side of top rail.

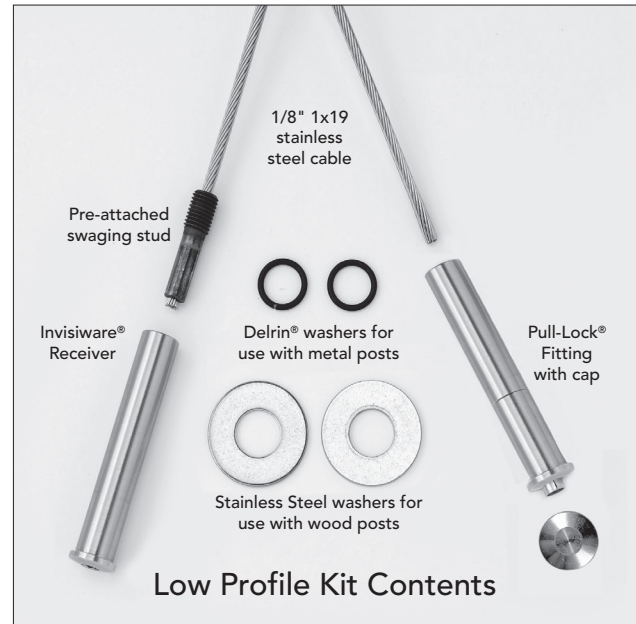
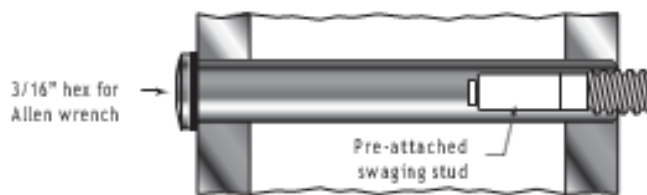
NOTE: Install prior to tensioning the cables.



CABLE INSTALLATION GUIDE

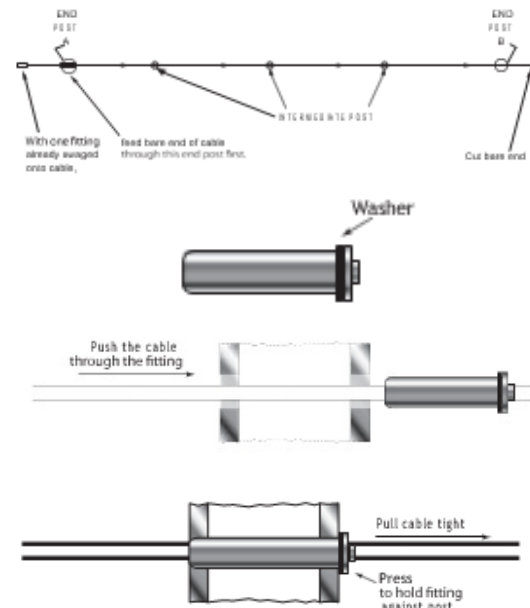
RailFX® LOW PROFILE CABLE KIT INSTALLATION INSTRUCTIONS

1. Install the tensioning end first with the 2-3/8" long receiver.
2. Slip the Delrin washer over the body of the receiver and insert the receiver into the post.
3. Start the threaded stud attached to the cable into the receiver and turn 3 complete turns. This will thread about half the stud into the receiver.



NOTE: Parts must be kept clean and free of debris before installation for best results.

4. Run the bare end of the cable through all your intermediate posts and through the end post where the pull-lock fitting will be installed.
5. Slip the Delrin washer over the body of the pull-lock fitting prior to running cable through fitting.
6. Push the cable into the hole in front of the pull-lock fitting. Twist the cable in the right-hand direction as it is being pushed. If the cable begins to "unravel" it is being rotated the wrong way. Push the cable until it is through the fitting.
7. Once the cable is through the fitting, pull cable while holding the pull-lock fitting firmly in the hole on the post. Hold the fitting in one hand while pulling the cable through as tightly as possible.



NOTE: Longer runs of cable and cables that go around corners may need to be pretensioned.

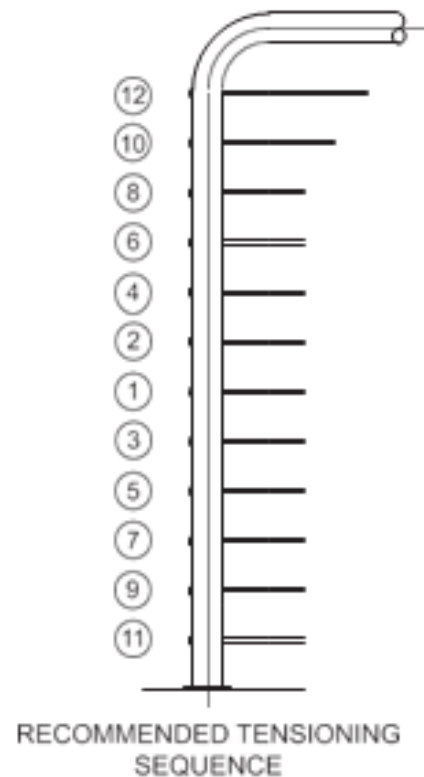
CABLE INSTALLATION GUIDE

RailFX® LOW PROFILE CABLE KIT INSTALLATION INSTRUCTIONS

8. Go to the other end and tension the cable by holding the cable tightly with cable gripping pliers while turning the receiver with an Allen hex wrench. **Be careful to protect the cable from damage while tensioning.**

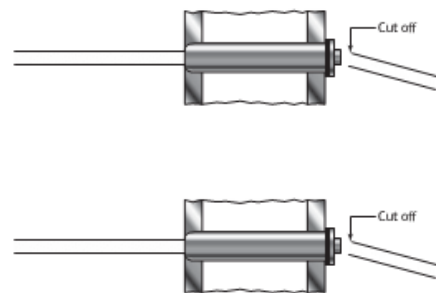


The swaging stud will be pulled into the Receiver by the tensioning.



9. Tension in sequence beginning with the center cable and moving back and forth toward the top and bottom. As each cable is tensioned, give a sharp pull downward midspan to help set the locking wedges in the pull-lock fitting. Then re-tension as necessary in the same sequence.

10. Cut the cable flush with the hole in the back of the fitting using a cut-off wheel. Then press cap onto fitting.



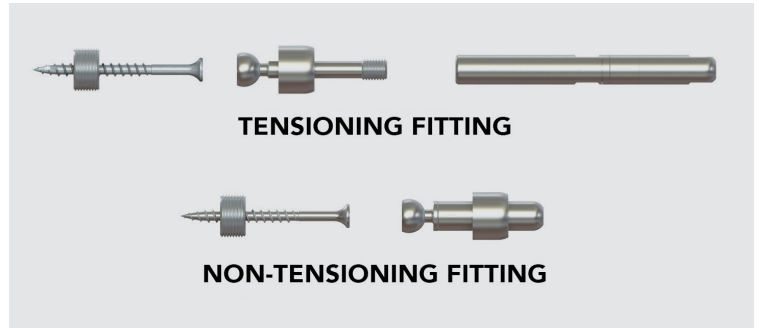
FlexFX INSTALLATION INSTRUCTIONS

FOR WOOD, WOOD WRAPPED, AND COMPOSITE SLEEVE POSTS

TOOLS REQUIRED FOR INSTALLATION

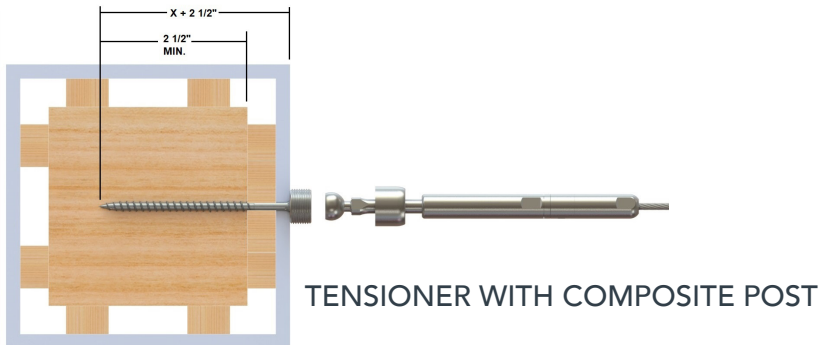
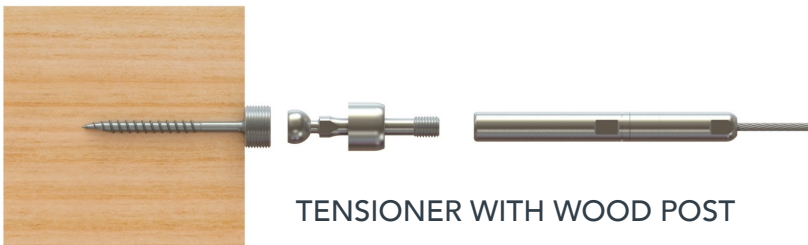
- Tape measure
- Cordless drill
- T25 screw bit
- RailFX Universal Drilling Template (4900912)*
- RailFX Flex Cable Install Kit (4903053FLX)*
- Cable cutters (4903068)*

*sold separately







NOTE: Same fitting is used for level and stair applications.

TO MEET CODE REQUIREMENTS, CABLES MUST NOT SPAN MORE THAN 4' WITHOUT A POST OR CABLE SUPPORT BRACE.



SCREW LENGTHS FOR VARIOUS POST SIZES

-  4X4 POST (3-1/2" X 3-1/2") - 2-1/2" LENGTH SCREW REQUIRED
-  4X4 POST W/ 4.5" SLEEVE (4-1/2" X 4-1/2") - 3" LENGTH SCREW REQUIRED
-  4X4 POST W/ 5.1" SLEEVE (5.1" X 5.1") - 3-1/2" LENGTH SCREW REQUIRED
-  4X4 POST W/ 5.5" SLEEVE (5-1/2" X 5-1/2") - 3-1/2" LENGTH SCREW REQUIRED

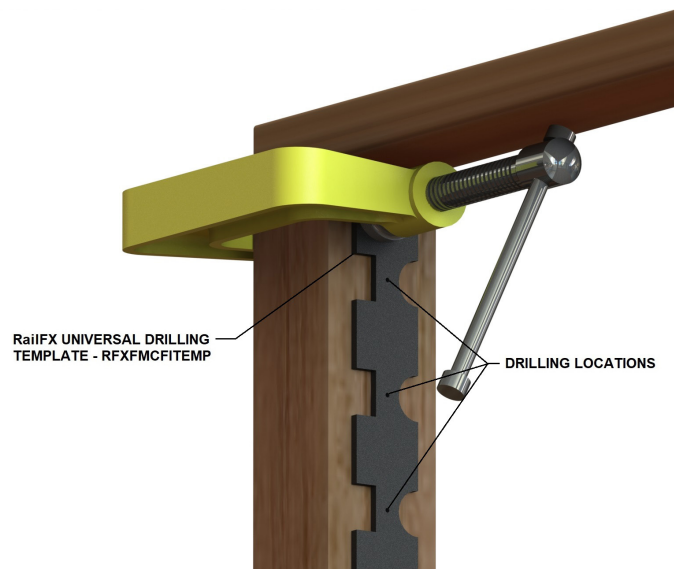
NOTE: If using Flex Fittings with a composite sleeve or wrapped post, alternative screws will need to be purchased that will provide 2-1/2" of embedment to the structural post.

STEP 1:

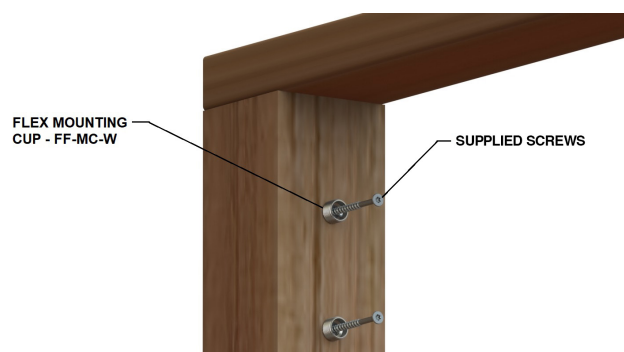
Update Step 1 to read: Drill posts for cable and fittings using the RailFX Universal Post Drilling Template. For 36" rail heights, cut 8" off one end of drilling template to fit the posts. If not using the drilling template, use a tape measure and mark 3-1/8" from bottom of top rail to first hole. (**Note:** cable spacing is 3-1/8").

END POSTS:

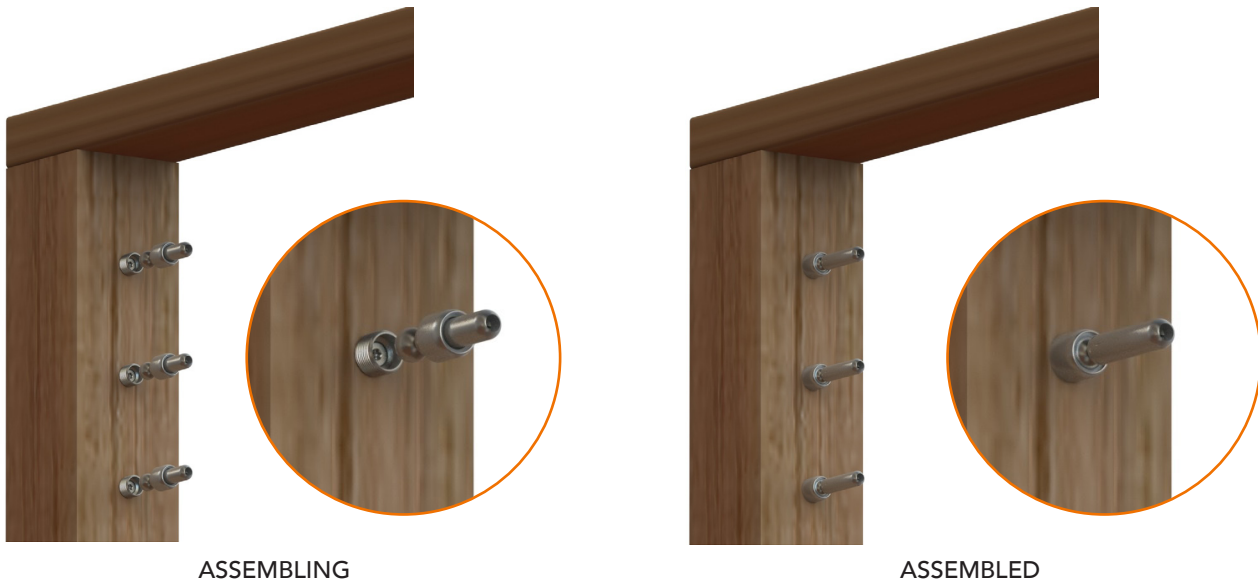
- Using RFX Universal Drilling Template, clamp the template to the inside face of each end post, aligning the top side of the template to the underside of the top rail and center the template to the post.



- Using a 1/8" drill bit, drill approximately 1/4" into the post. This will mark where each fitting will be attached to the post with the supplied 2-1/2" screw.
- Using a T25 bit, attach Flex Mounting Cups (FF-MC-W) to the post using the supplied 2-1/2" Stainless Steel Screw or longer screws (sold separately) for sleeved posts. It may be necessary to pre-drill before the mounting bases are installed if screws are being installed into a hard wood.



- Attach all non-tensioning and tensioning hardware to the mounting bases. (**Note:** Make sure all tensioning fittings are adjusted to the same location - ensuring enough thread turns remain for final tensioning of the cables).



STEP 2: DRILL INTERMEDIATE POSTS

- Each intermediate post will need to be drilled all the way through so the cable can pass through to the next intermediate post or end post. Center and clamp Universal Post Drilling Template to one side of the intermediate post. Mark hole locations with pen or marker for each hole in the template. Then move the template to the other side of the post and repeat this process for all intermediate posts.

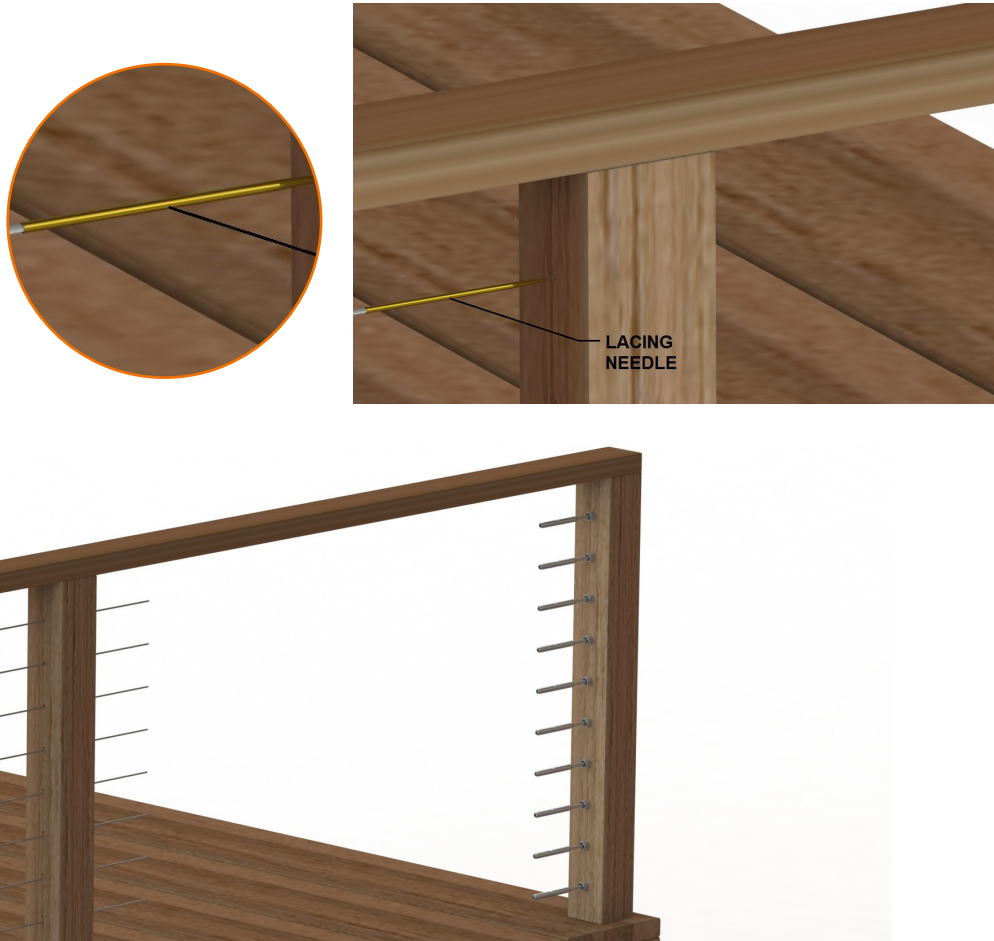


- Remove template and, using a 7/32" drill bit, drill halfway through posts for all holes on each side of post.

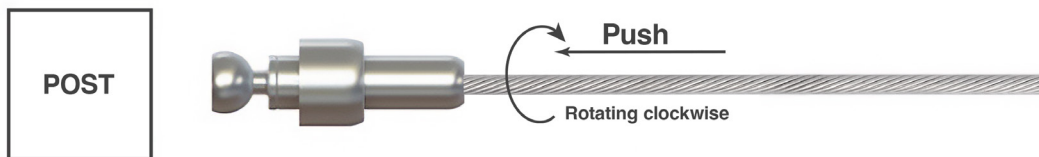
NOTE: If cable is transitioning out of the post at an angle, use RFX Post Protector Tubes (4903061). Holes in post must be 1/4" diameter for installation of 3061.

STEP 3: INSTALL AND TENSION CABLES

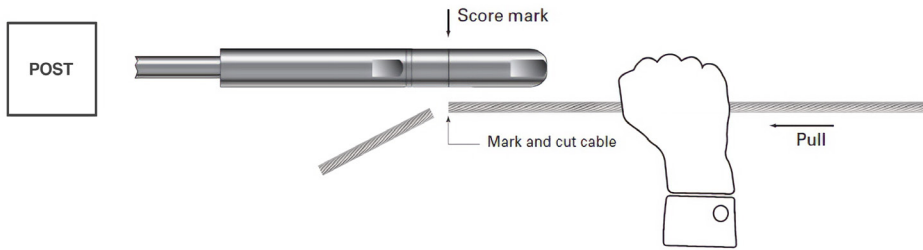
- Using 100' or 500' bulk cable, lace cable through the intermediate post starting at the end the tensioning fittings are installed. Use Cable Lacing Needle included in the RailFX installation kit (3053FLX).



- Push cable into the non-tensioning fitting by pushing cable into fitting while rotating cable in a clockwise direction. After insertion, stop rotating cable and push in. This will keep the cable from unraveling.



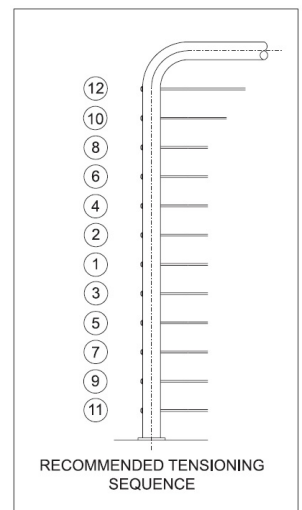
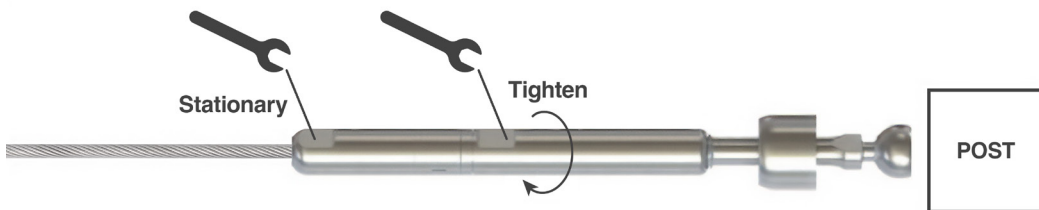
- Go to the other end of the cable and pull cable tight and align cable with cut mark on the tensioning end fitting. Mark cable and cut with RFX cable cutters (3068).



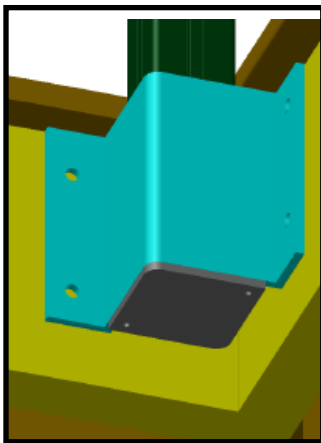
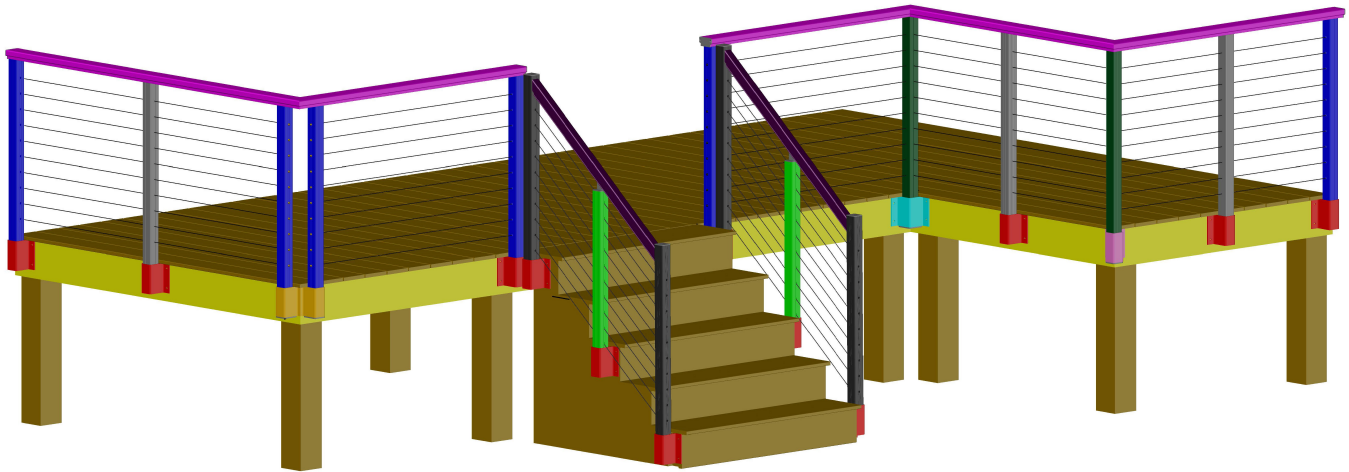
- Push cable into the Tensioning fitting by pushing cable into fitting while rotating cable in a clockwise direction. After insertion, stop rotating cable and push in. This will keep the cable from unraveling. Repeat this process for each run of cable.



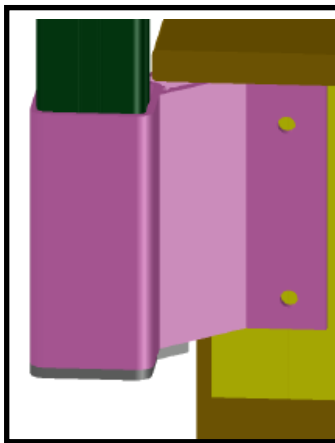
- Tension cable using the wrenches in the RFX installation kit. Tension all cables to specified tension of 225 lbs., beginning with the center cables, moving up and down toward the top and bottom. As you tension each cable, give it a sharp pull downward mid-span to help set the wedges, then re-tension as necessary in the same sequence. Be aware that the cable may move as much as 3/16" toward the tensioning terminal as the wedges seat.



Basic 200/250 Fascia Mount Layout



0424 Detail



0425 Detail

Diagram Color	Item #
Black	452US
Green	452UI
Dark Green	362FC
Gray	362FI
Blue	362FE
Teal	0424
Pink	0425
Red	0415
Orange	0423
Magenta	200 (Rail)
Purple	250 (Rail)

- Max Post Spacing- 5'
- Max Cable Run 40' (2 Corners), 50' (1 Corner), 60' (Straight)
- Add appropriate rail lengths
- 452US- Add 0118, 0410, 0415
- 452UI- Add 0412, 0415
- 362FC (Inside Corner) - Add 0122, 0424
- 362FC (Outside Corner) - Add 0122, 0425
- 362FI- Add 0415
- 362FE (End of Run) - Add 0112, 0415
- Add 0417 (wood) or 0418 (concrete) for every post
- Add 0910 (estimate 6 screws per post, sold 100 per pack)
- Add 0911

Note: Runs over the allowed span must use a double post corner using the 0423 bracket to create two separate shorter runs. Add 362FE (x2), 0122, 0423

Basic 200/250 Surface Mount Layout

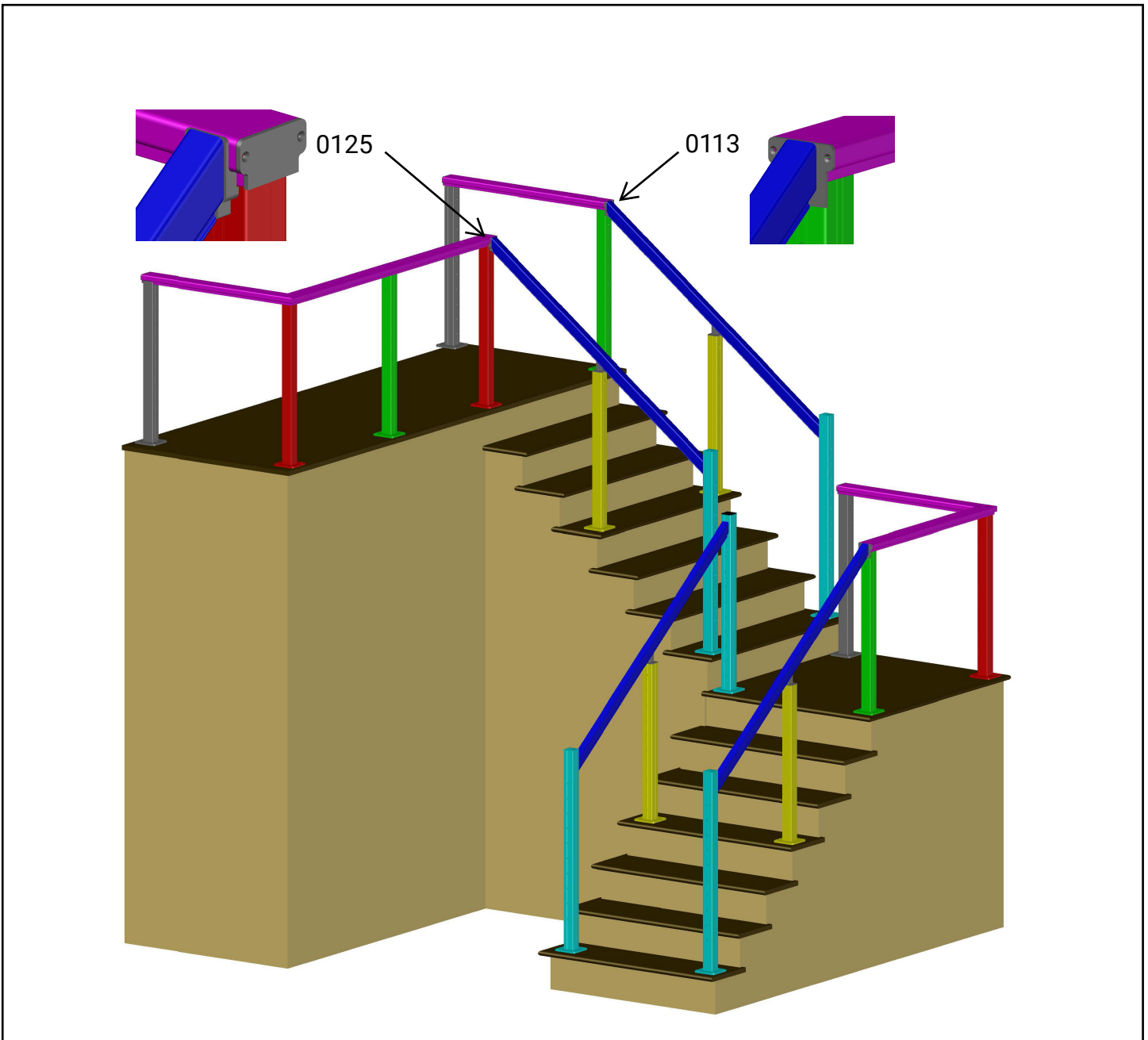
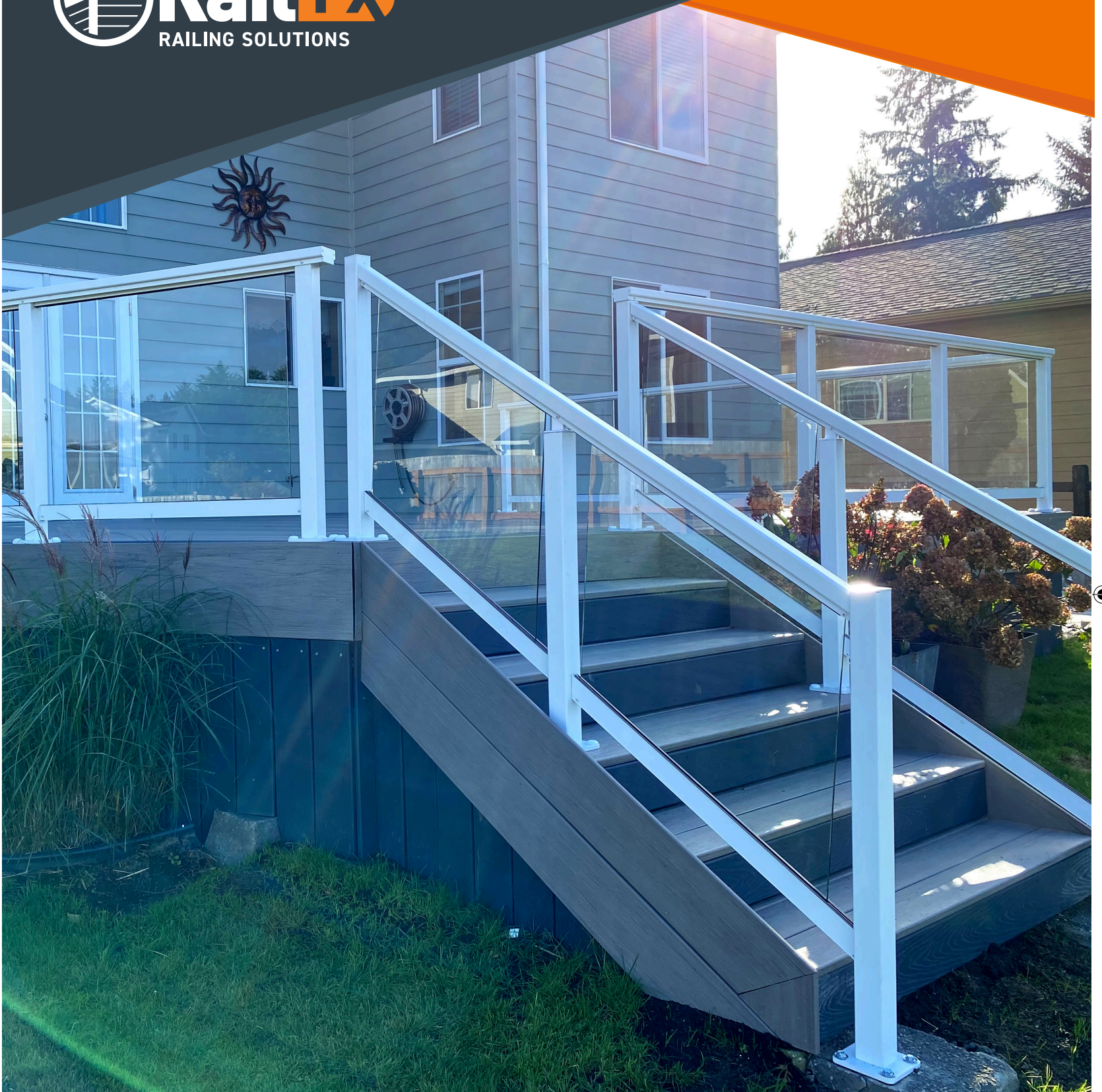


Diagram Color	Item #
Light Blue	452US
Yellow	452UI
Red	362SC
Green	362SI
Gray	362SE
Pink (Rail)	200
Blue (Rail)	250

- Max Post Spacing- 5'
- Max Cable Run 40' (2 Corners), 50' (1 Corner), 60' (Straight)
- Add appropriate rail lengths
- 452US- Add 0118, 0410, 0414
- 452UI- Add 0412, 0414
- 362SC (Standard)- Add 0122
- 362SC (Top of Stair)- Add 0118, 0125, 0112
- 362SI (Top of Stair)- Add 0118, 0113
- 362SE- Add 0112
- Add 0120 for every post
- Add 0417 (wood) or 0418 (concrete) for every post
- Add 0910 (estimate 6 screws per post, sold 100 per pack)
- Add 0911



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