



INSTALLATION GUIDE

RailFX® Custom Railing System





THIS PACKET **MUST** ACCOMPANY MATERIALS TO JOB SITE

Call (206) 453-1123 or email support@railfx.net for INSTALLATION SUPPORT



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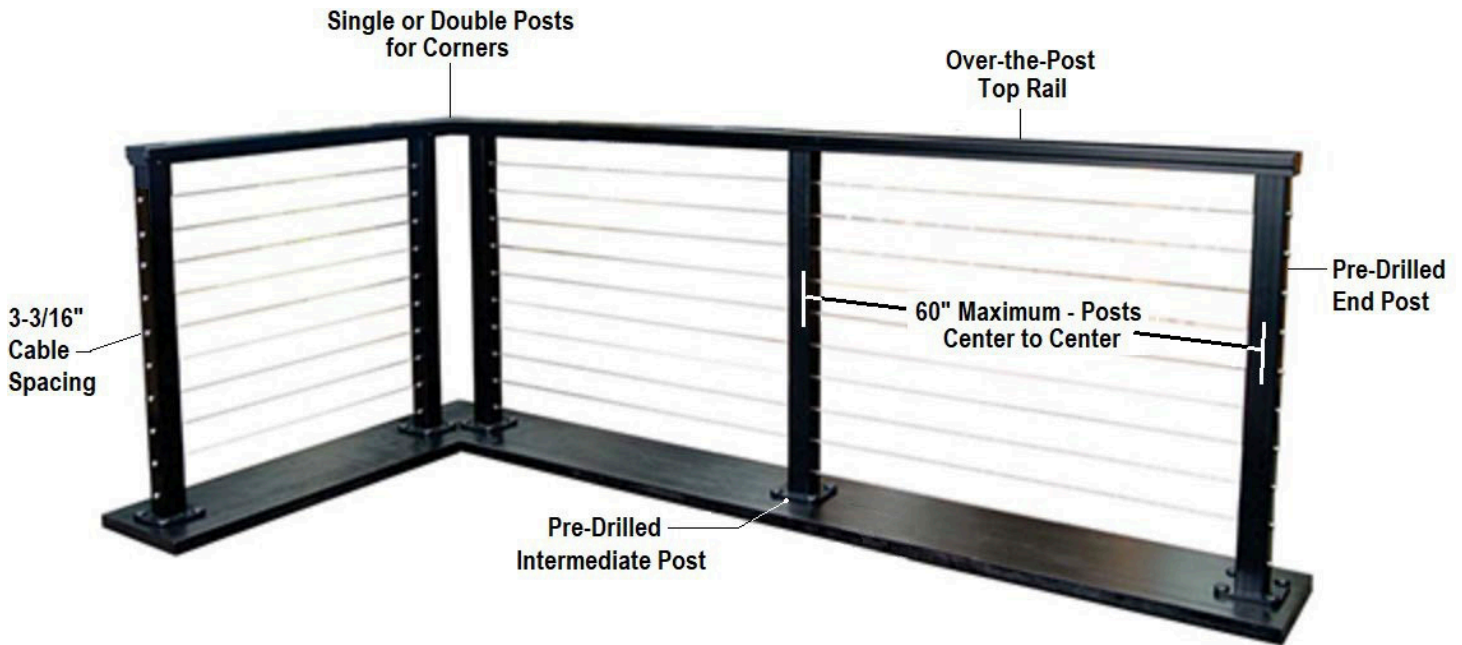
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RAILFX® RAILING OVERVIEW



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.

Posts

RailFX® posts for level and stair railings are pre-drilled and ready for cable installation. Posts for stairs come with a base plate unattached to maximize installation flexibility, which allows the post to accommodate most stair applications. All posts are available for surface mount or fascia mount and available for 36" and/or 42" rail heights. Custom lengths are also available.

Top Rails

There are 5 styles of top rail RailFX® railing offers: (Note: ADA rail does not qualify as a top rail).

RFX 100 has a rounded profile that qualifies as a graspable rail and is most often used for stairs.

RFX 200 is a contemporary flat top rail most often used for level applications. It can be used for stairs with the addition of a secondary handrail system.

RFX 250 is a square top that qualifies as a graspable rail and is commonly paired with RFX 200.

RFX 300 is a contemporary rounded top rail most often used for level applications. It can be used for stairs with the addition of a secondary handrail system.

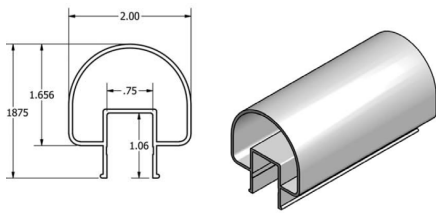
RFX 400 is a flat top rail that is designed to accept a wood or composite cap rail.

Available Colors:

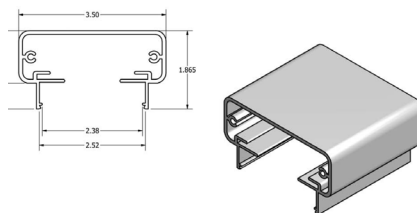


- Colors shown are approximate representation.
- Custom colors are available upon request.

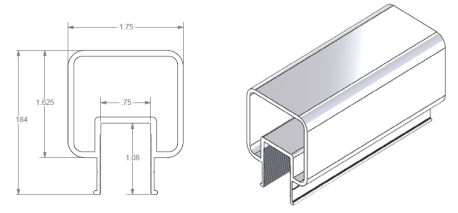
RAIL PROFILES



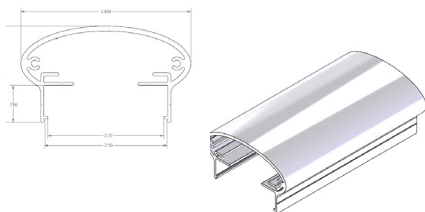
RFX100



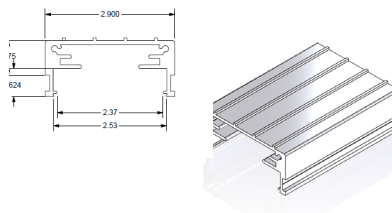
RFX200



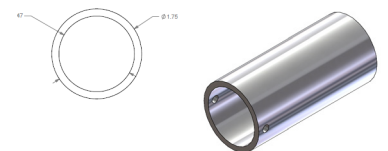
RFX250



RFX300

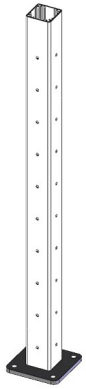


RFX400

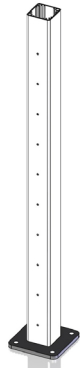


RFXADA

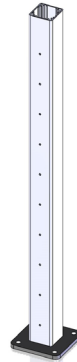
COMPONENT GUIDE



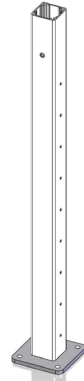
Corner Post



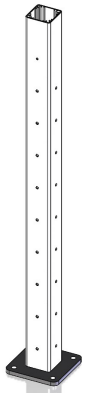
End Post



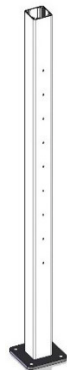
Intermediate Post



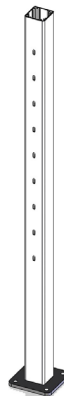
**Stair Corner Post
Left Hand**



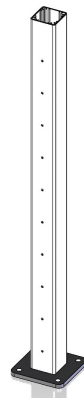
**Stair Corner Post
Right Hand**



***Stair End Post**



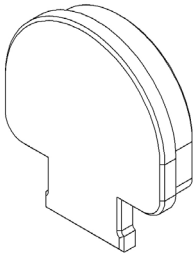
***Stair Intermediate
Post Slot**



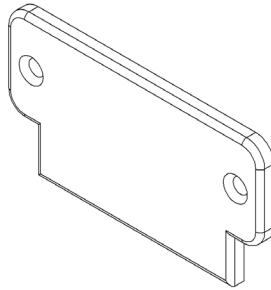
**Stair Top Terminating
Intermediate Post**

***Bases shipped loose and post cut to length on site**

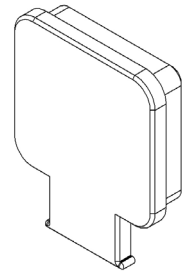
END CAPS AND CORNER BRACKETS



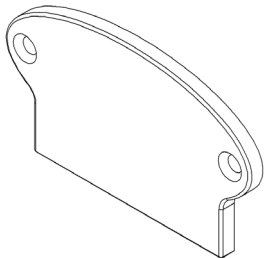
RFX 100 End Cap



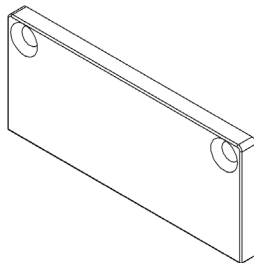
RFX 200 End Cap



RFX 250 End Cap



RFX 300 End Cap

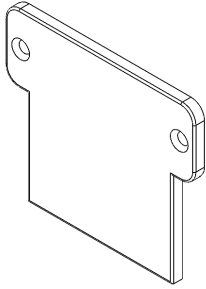


RFX 400 End Cap

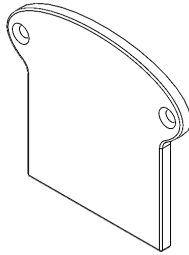


RFX ADA End Cap

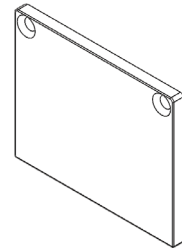
END CAPS AND CORNER BRACKETS (CONTINUED)



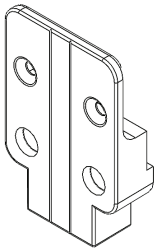
**RFX 200 Extended
End Cap**



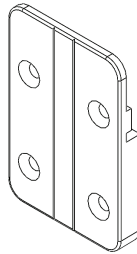
**RFX 300 Extended
End Cap**



**RFX 400 Extended
End Cap**



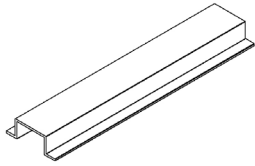
**RFX 200 Stair
Corner Connector**



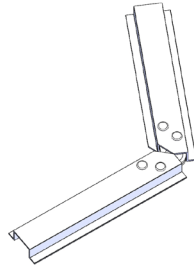
**RFX 400 Stair
Corner Connector**

SPLICES / CONNECTORS

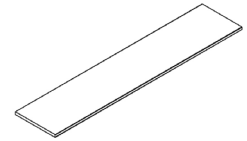
Custom angle splices are available upon request



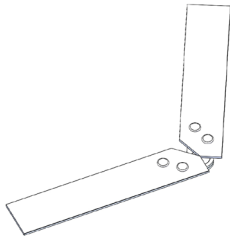
RFX 200 / 300
Top Rail Splice



RFX 200 / 300
Top Rail Hinged Splice

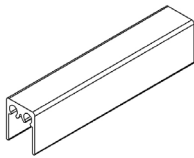


RFX 400
Top Rail Splice



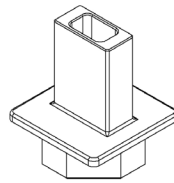
RFX 400
Top Rail Hinged Splice

SPLICES / CONNECTORS

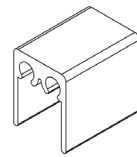


RFX 100 / 250 Top Rail Splice

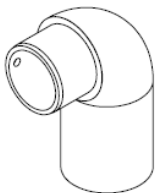
RCB12- used for stair rail
exceeding 20'



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

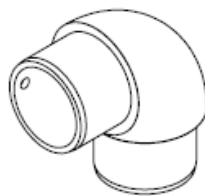


**RFX 100 / 250 Top Rail
Connecting Block (RCB)**



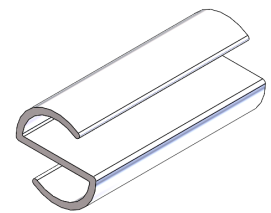
**RFX ADA Female to
Male Corner**

*Available in 90 degrees



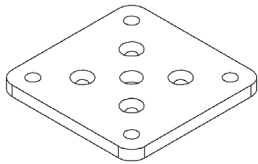
**RFX ADA Male to Male
Corner**

*Available in 33, 36 and
90 degrees

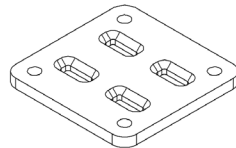


RFX ADA Rail Splice

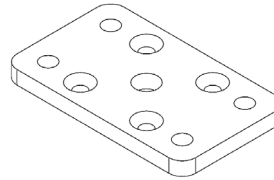
HARDWARE / ACCESSORIES



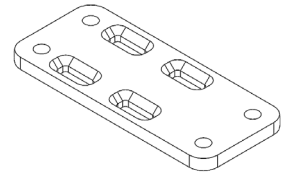
**5x5 RFX
Base Plate**



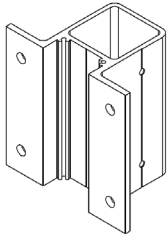
**5x5 RFX Slotted
Base Plate**



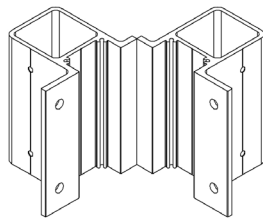
**3x5 RFX
Base Plate**



**3x7 RFX Slotted
Base Plate**

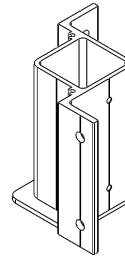


**RFX Straight
Fascia Bracket**

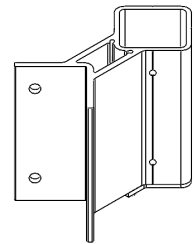


**RFX Double Outside
Corner Hinged
Fascia Bracket**

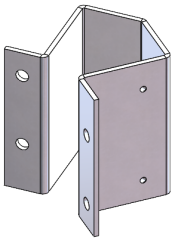
***Accommodates 90 and
180 degrees**



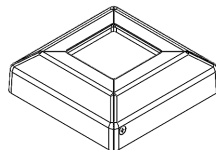
**RFX Single Inside
Corner Fascia Bracket**



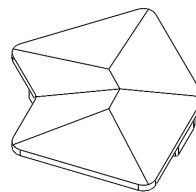
**RFX Single Outside
Corner Fascia Bracket**



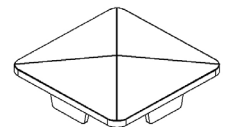
**RFX 135 Degree
Fascia Bracket**



**RFX Post Skirt
(Optional)**

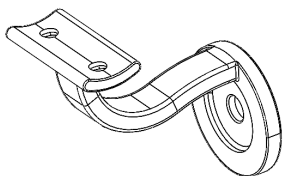


**RFX 135
Post Cap**



RFX Post Cap

HARDWARE / ACCESSORIES



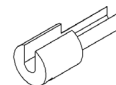
**RFX ADA
Mount**



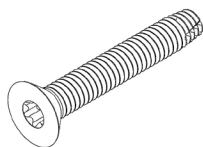
**3/8" Stainless
Steel Cup Washer**



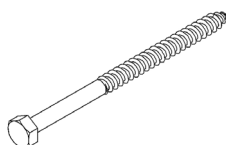
**Vinyl Bolt
Cap**



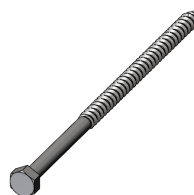
**Push Lock
Release Key**



**T-40 Self Tapping
Stainless Steel Screws**



5.5\"/>



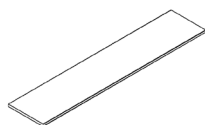
7.5\"/>



#10 – 3/4\"/>



#14 – 1\"/>



**Internal Post
Stiffener**



**RFX System
Install Kit**



1/8\"/>

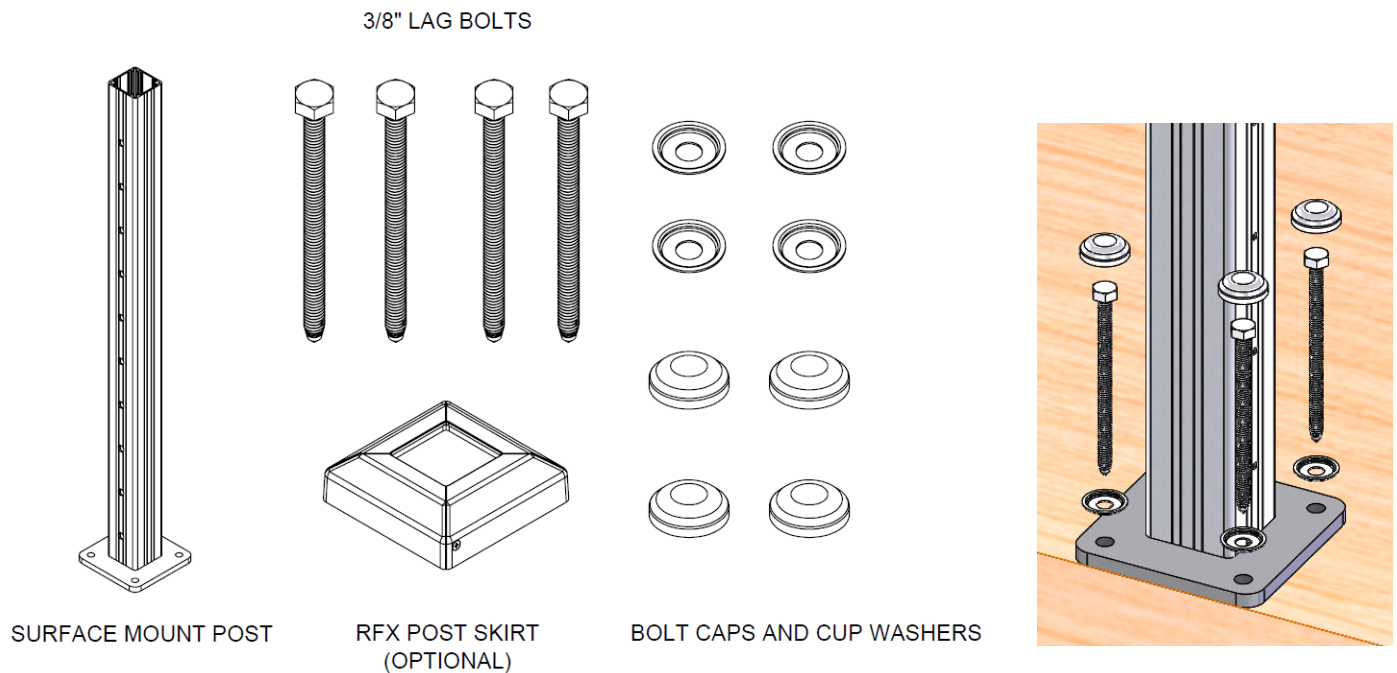


**Cable Gripping Pliers
(Optional)**

SURFACE MOUNT POST INSTALLATION

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

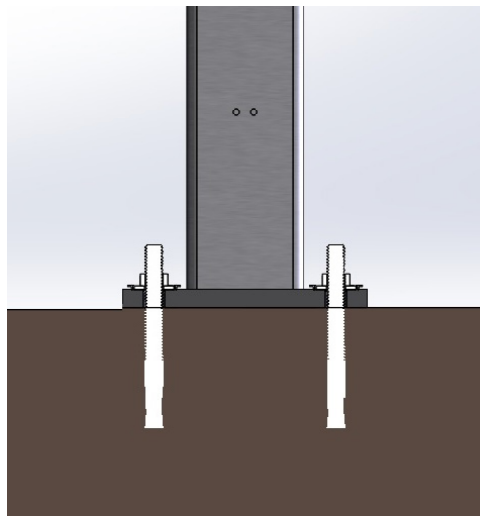
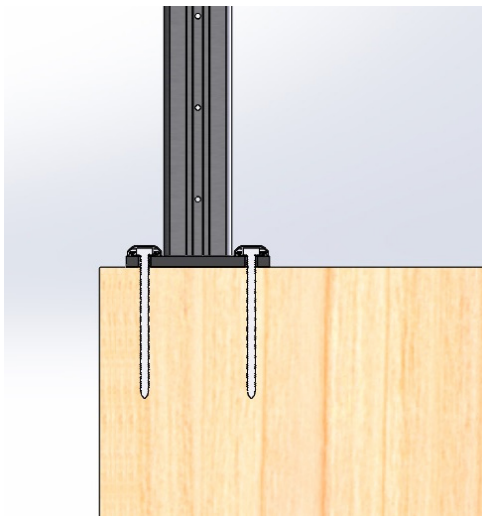
Materials included for installation:



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 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.

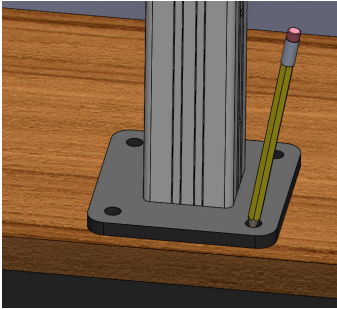
POST MOUNTING OPTIONS

- 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



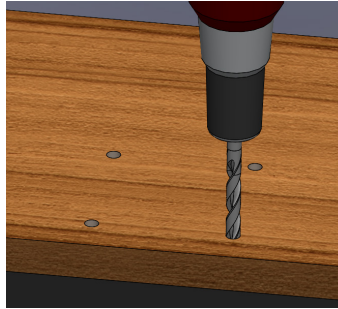
SURFACE MOUNT POST INSTALLATION

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



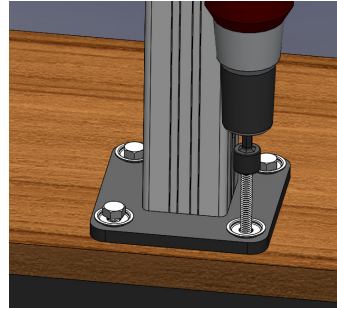
Step 1

Determine location of post and mark hole locations.



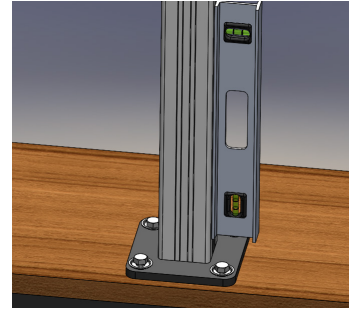
Step 2

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



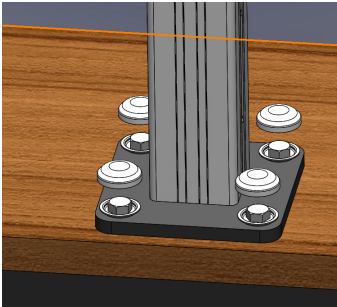
Step 3

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



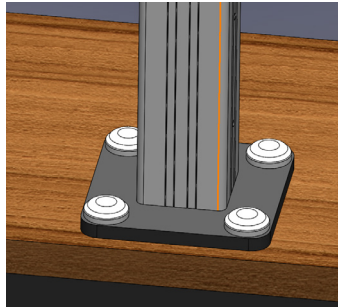
Step 4

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



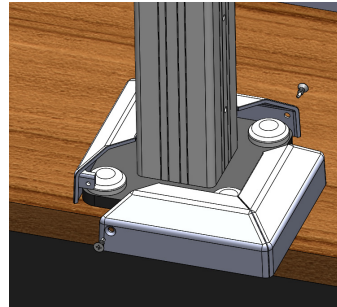
Step 5a

Press bolt caps onto cup washer to finish post.



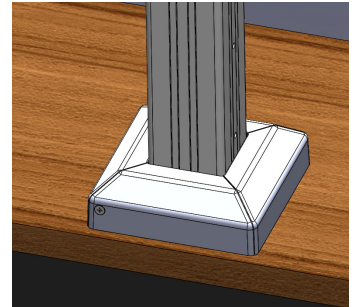
Step 5b

Finished Installation. (Unless using post skirt).



Step 6a

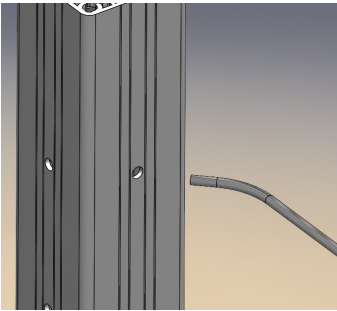
Install 2 piece post skirt (optional).
Secure with 2 screws (included).



Step 6b

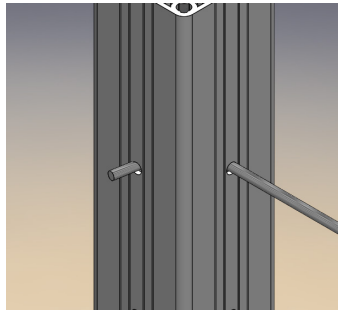
Finished Installation.

SINGLE CORNER POST INSTALLATION



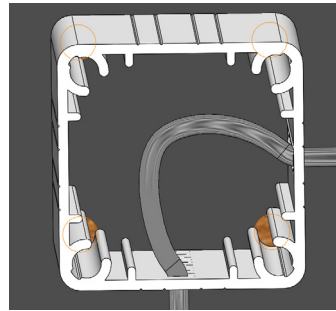
Step 1: Bend and Insert Cable

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



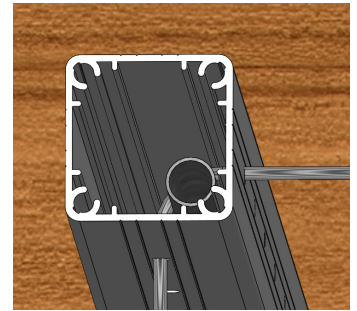
Step 2: Run Cable

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



Step 3: Create a Loop

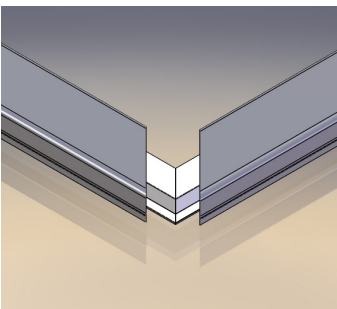
Push cable back into post creating a loop.



Step 4: Insert Conduit

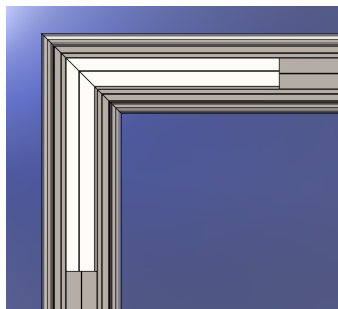
Insert conduit into post and align to inside corner. Pull cables tight to conduit.

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



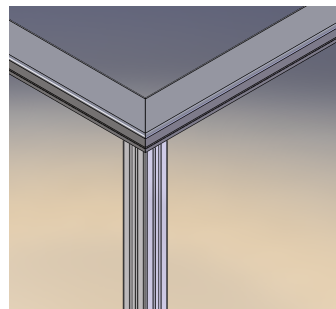
Step 1: Miter Top Rail

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.



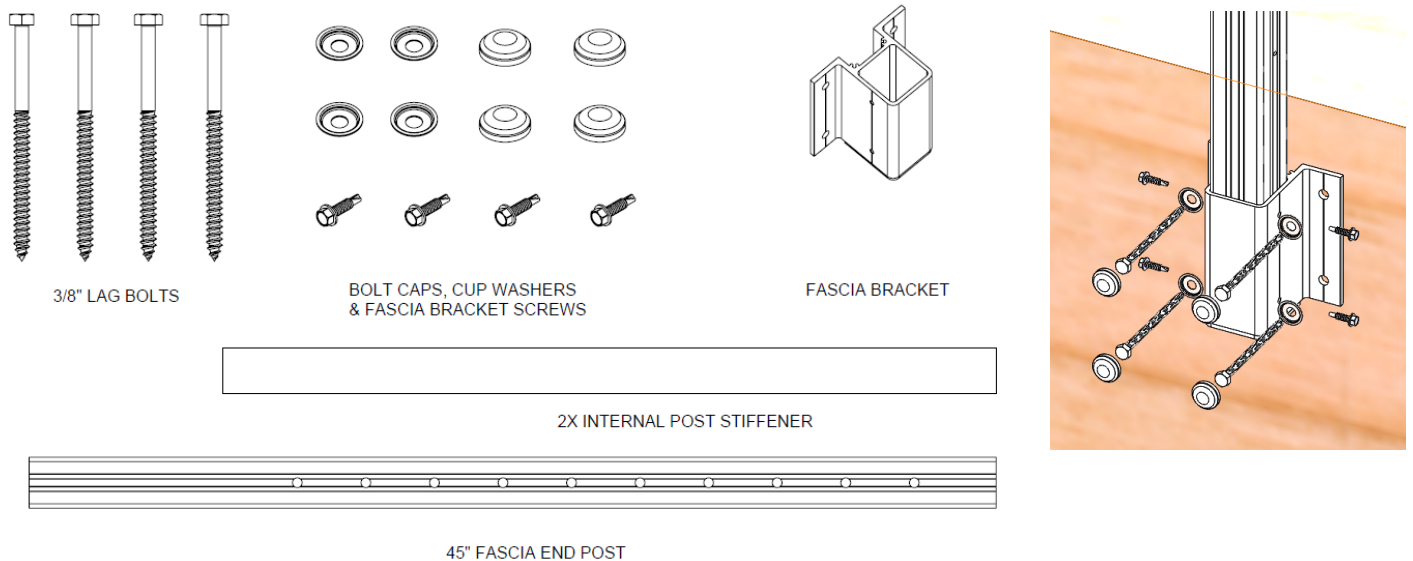
Step 3: Single Corner Post

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.

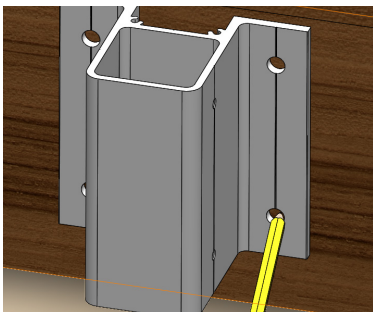
FASCIA POST WITH BRACKET

FASCIA MOUNT END POST WITH BRACKET

Materials included for installation:

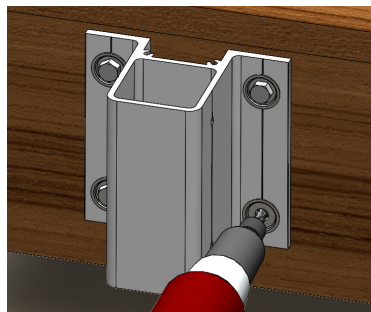


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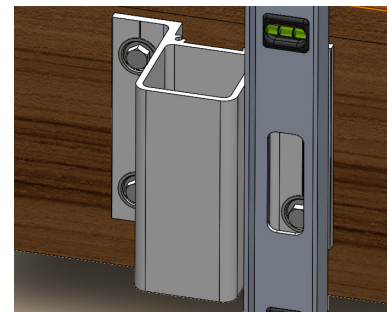
Step 1

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.

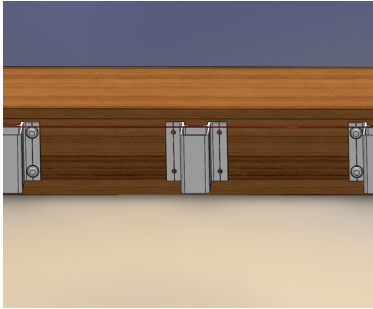


Step 3

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

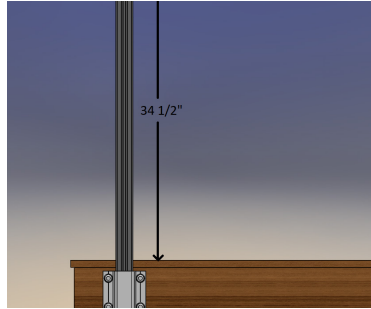
FASCIA POST WITH BRACKET

FASCIA MOUNT END POST WITH BRACKET



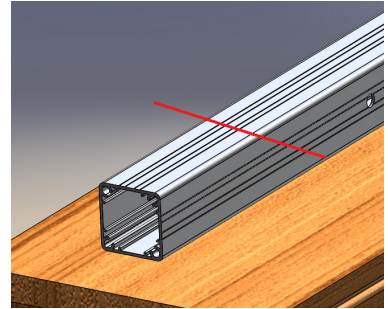
Step 4

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



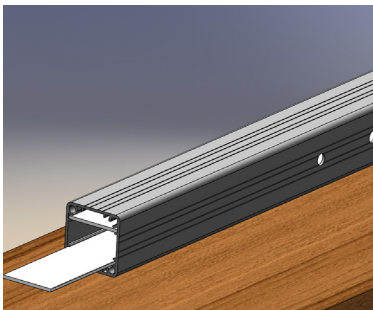
Step 5

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



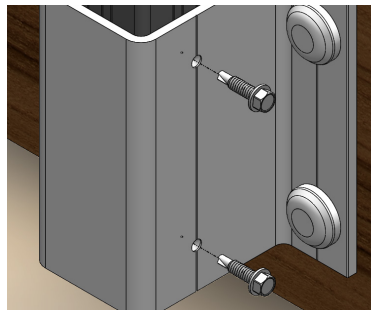
Step 6

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



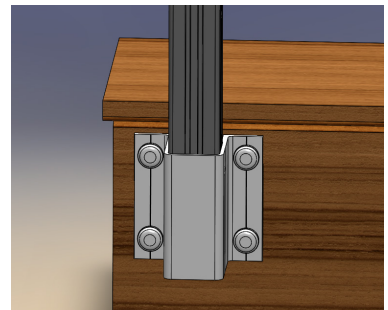
Step 7

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.



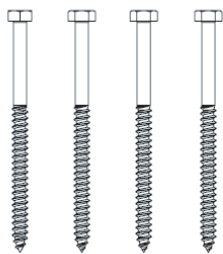
Step 9

Install nylon bolt cap covers for a finished look.

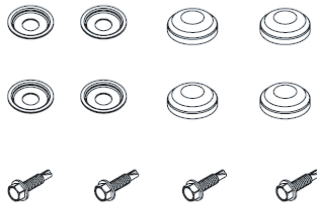
FASCIA POST WITH BRACKET

FASCIA MOUNT INTERMEDIATE POST WITH BRACKET

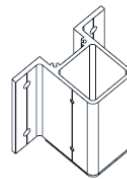
Materials included for installation:



3/8" LAG BOLTS



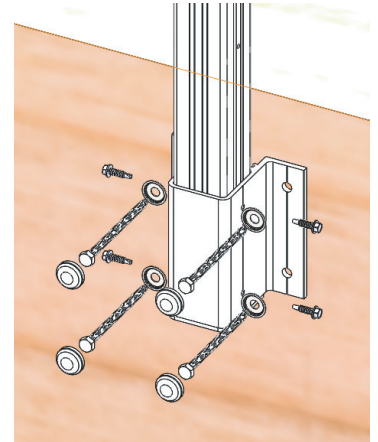
BOLT CAPS, CUP WASHERS
& FASCIA BRACKET SCREWS



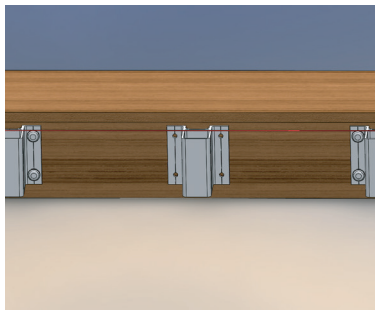
FASCIA BRACKET



45" FASCIA INTERMEDIATE POST

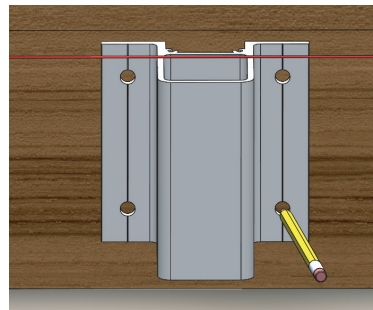


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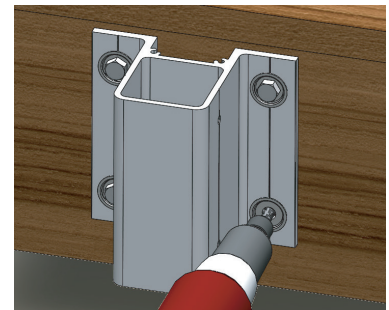
Step 1

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.

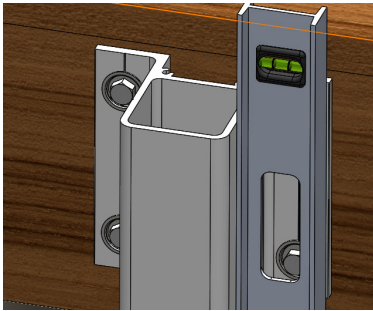


Step 3

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

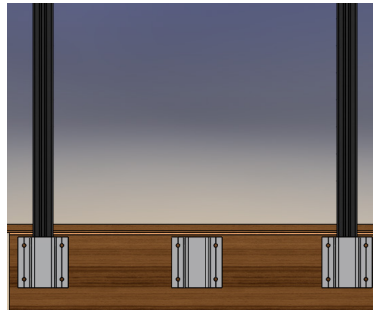
FASCIA POST WITH BRACKET

FASCIA MOUNT INTERMEDIATE POST WITH BRACKET



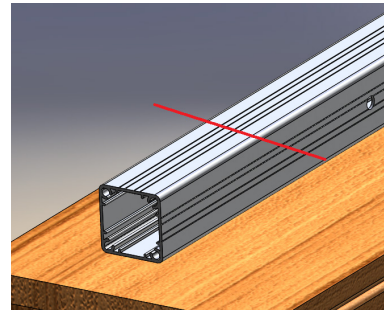
Step 4

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



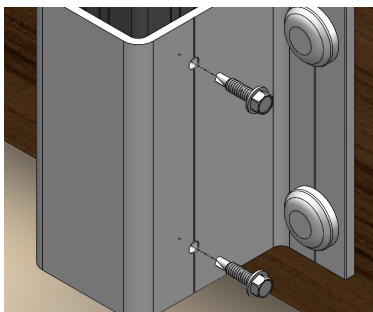
Step 5

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.



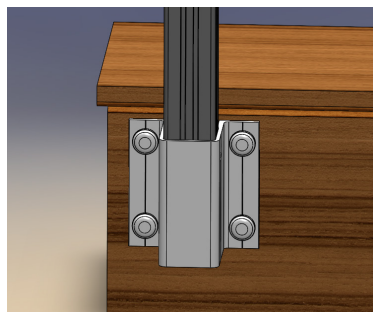
Step 6

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.



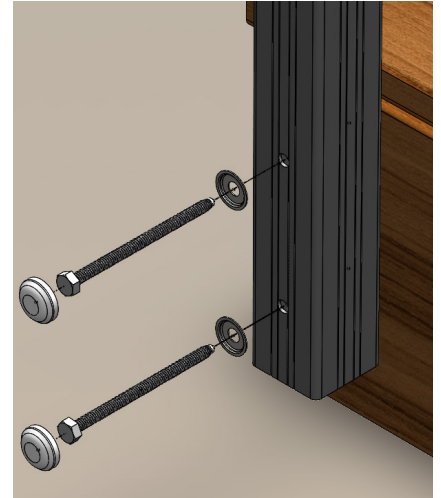
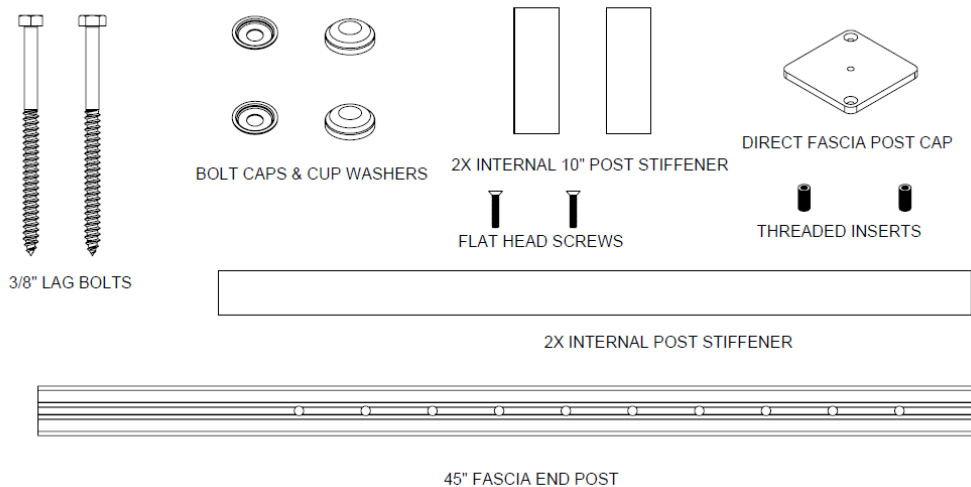
Step 8

Install nylon bolt cap covers for a finished look.

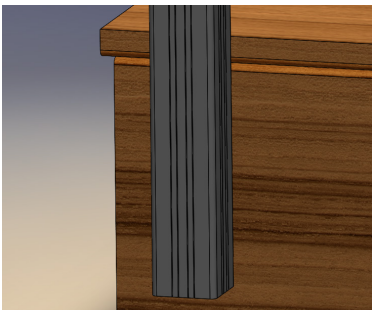
DIRECT TO FASCIA MOUNT

FASCIA MOUNT END POST WITHOUT BRACKET

Materials included for installation:

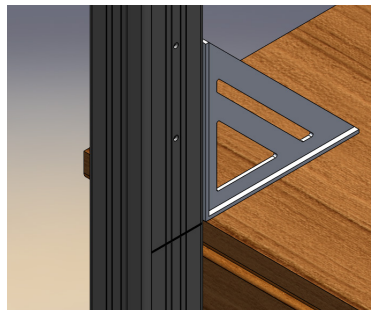


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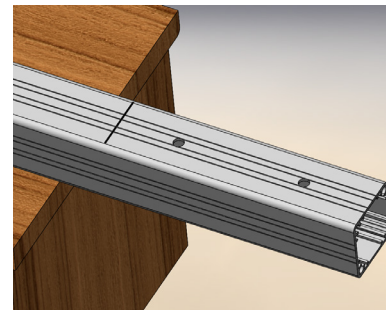
Step 1

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.

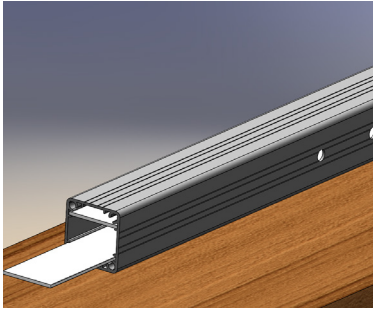


Step 3

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.

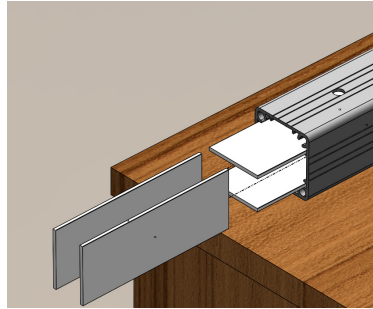
DIRECT TO FASCIA MOUNT

FASCIA MOUNT END POST WITHOUT BRACKET



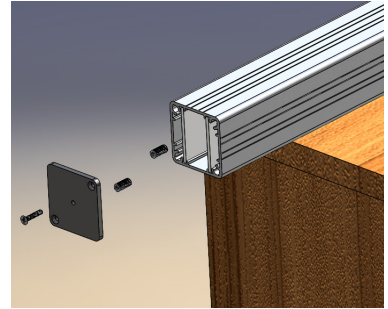
Step 4

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.



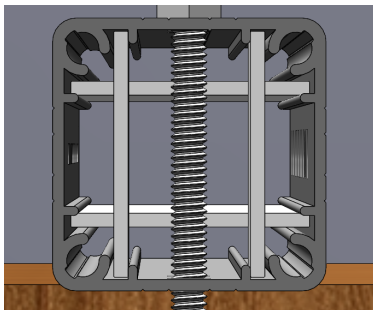
Step 4a

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



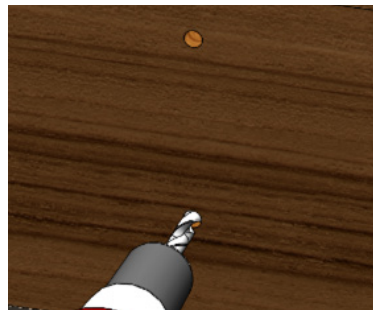
Step 4b

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.

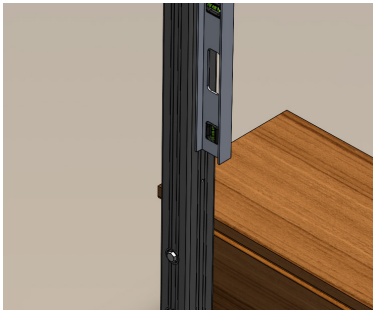


Step 6

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

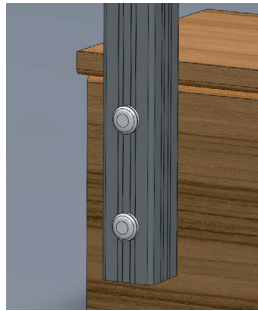
DIRECT TO FASCIA MOUNT

FASCIA MOUNT END POST WITHOUT BRACKET



Step 7

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



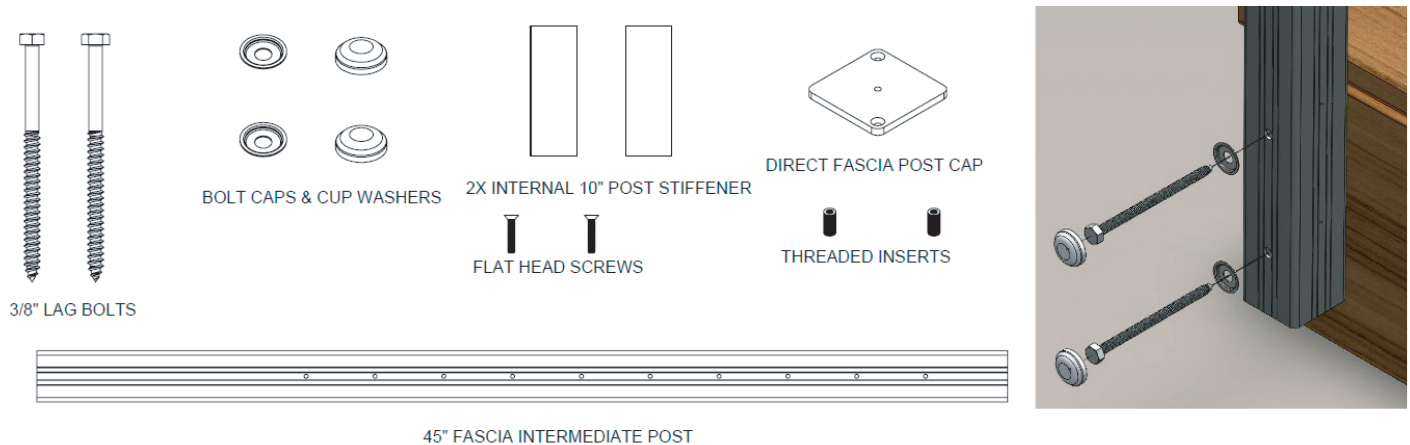
Step 8

Install nylon bolt cap covers for
a finished look.

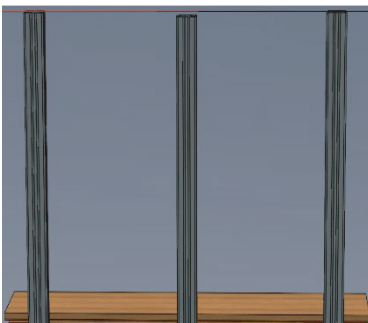
DIRECT TO FASCIA MOUNT

FASCIA MOUNT INTERMEDIATE POST WITHOUT BRACKET

Materials included for installation:

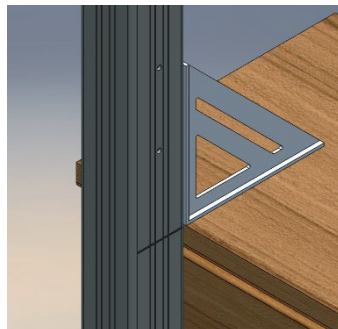


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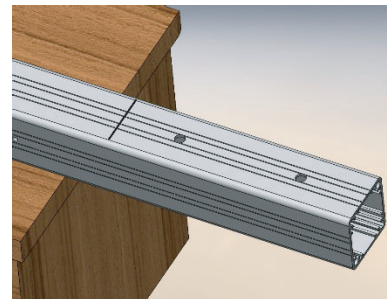
Step 1

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.

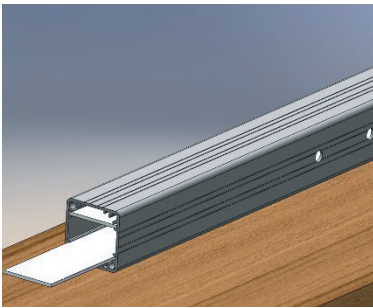


Step 3

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.



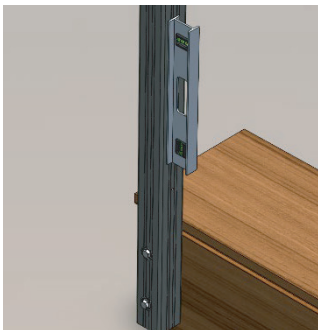
Step 5

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.



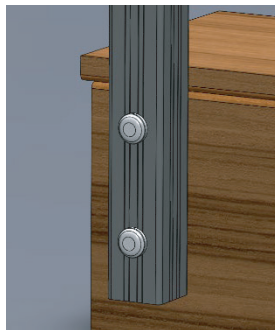
Step 6

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



Step 7

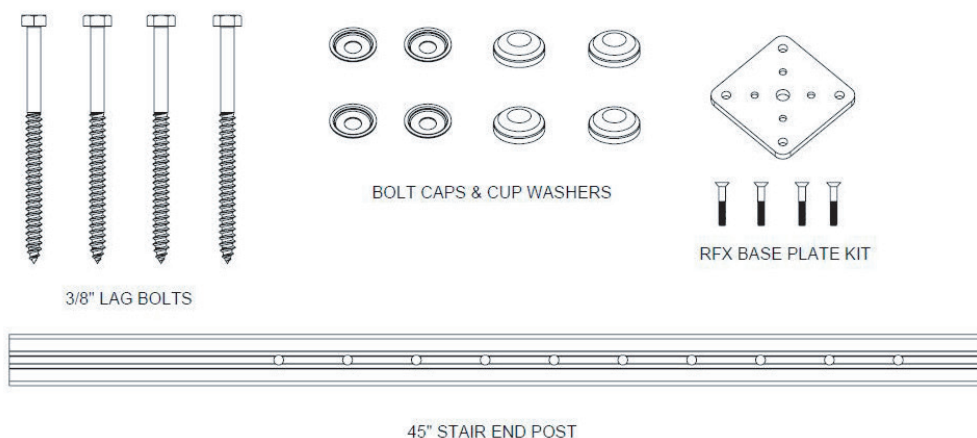
Plumb post, adjust as needed. Tighten fasteners and ensure proper engagement into blocking.



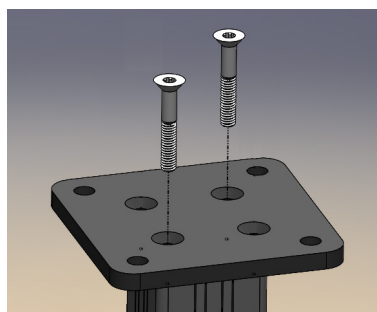
Step 8

Install nylon bolt cap covers for a finished look.

SURFACE MOUNT STAIR END POST

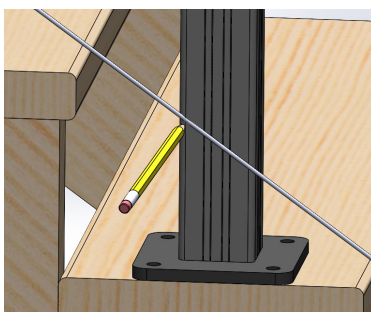


NOTE: Post comes long on top and bottom and will require trimming prior to installation.



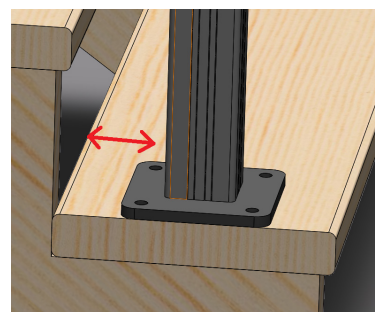
Step 1

Temporarily fasten base plate to post using 2 screws.



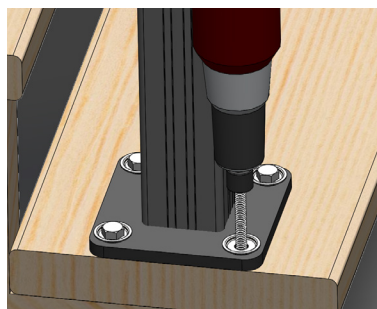
Step 2

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



Step 3

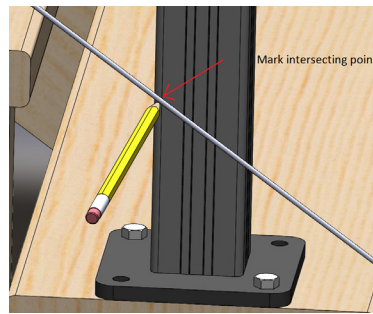
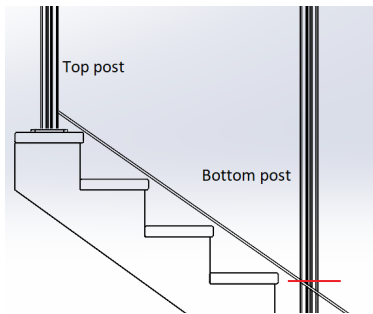
Determine location of bottom end post and mark base plate holes.



Step 4

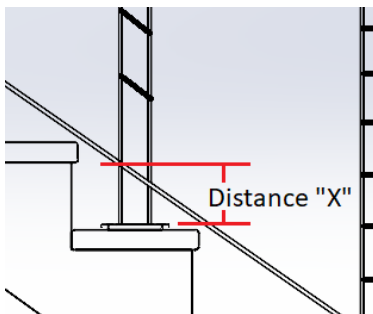
Temporarily fasten post.

SURFACE MOUNT STAIR END POST



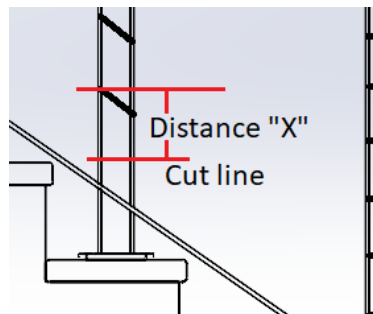
Step 4

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

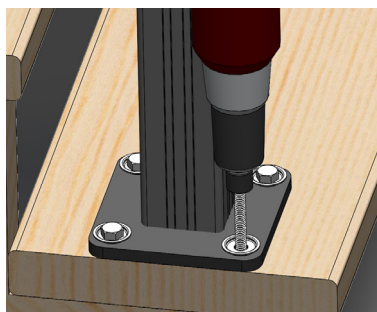
Measure distance (Distance "X") from the mark made in Step 4 to the top of the base plate.



Step 6

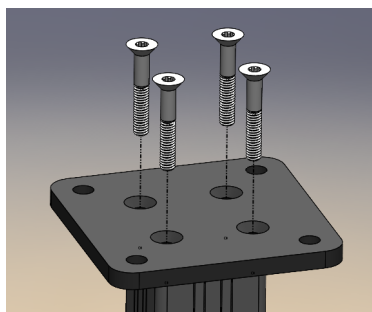
Use Distance "X" from Step 5 and measure down from the center of the first hole (closest to the tread).

SURFACE MOUNT STAIR END POST



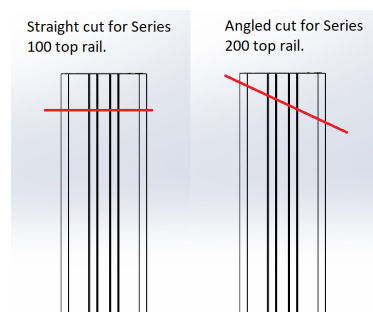
Step 7

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



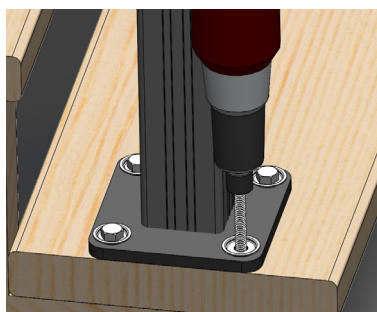
Step 8

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



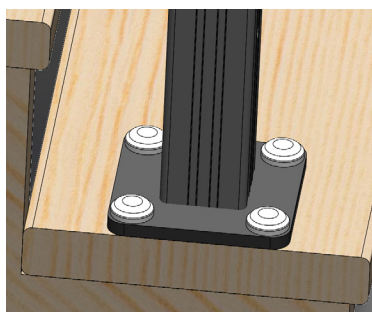
Step 9

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.

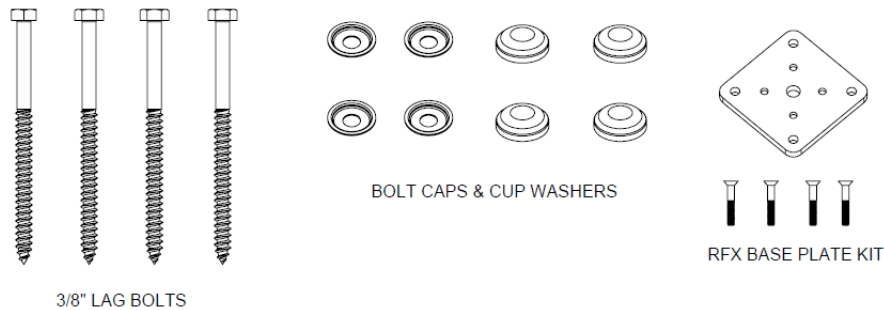


Step 11

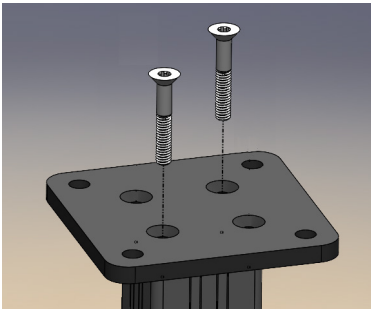
Finished post installation. Bolt caps (shown) or post skirt.

SURFACE MOUNT STAIR INTERMEDIATE POST

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

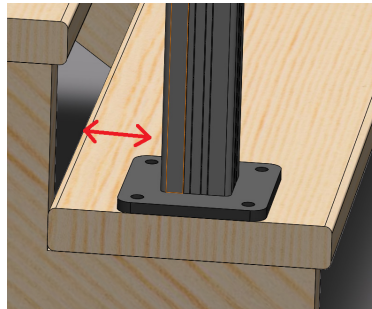


45° STAIR INTERMEDIATE POST



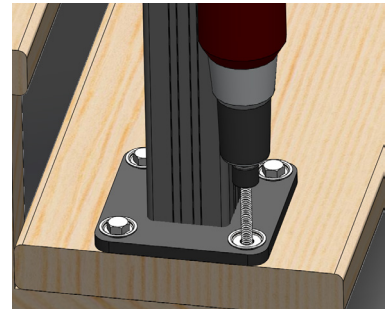
Step 1

Temporarily install base plate with 2 screws.



Step 2

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

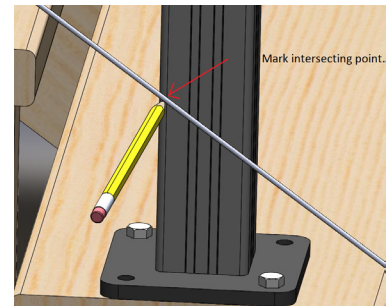
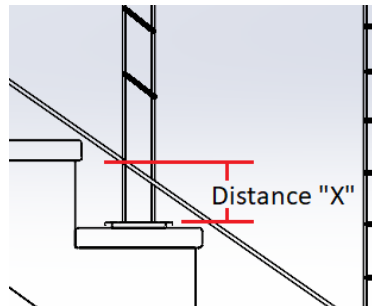


Step 3

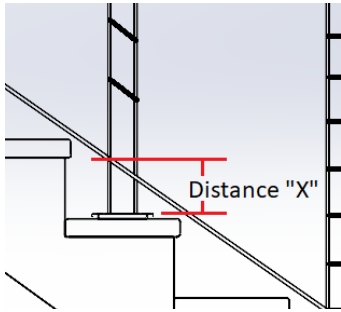
Temporarily fasten post.

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.

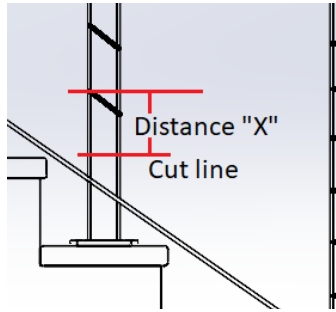


SURFACE MOUNT STAIR INTERMEDIATE POST



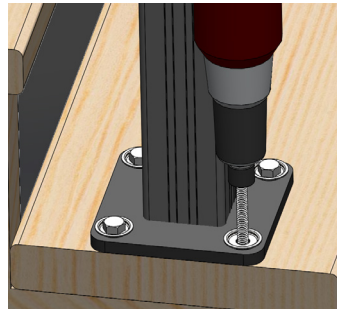
Step 5

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



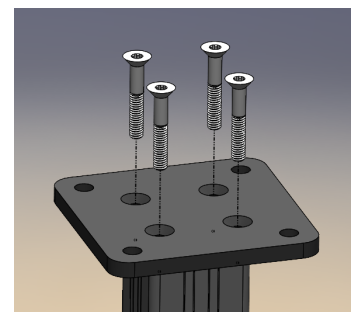
Step 6

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



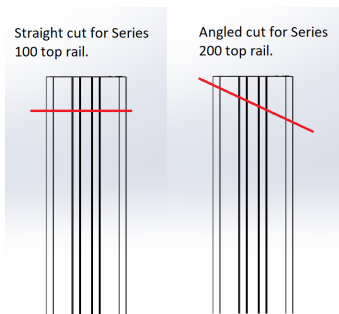
Step 7

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



Step 8

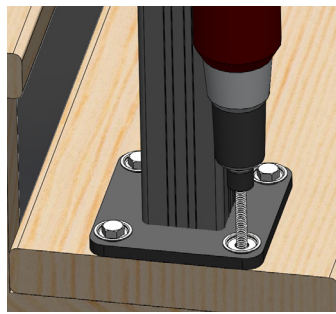
Re-attach base plate to bottom of cut post with all 4 screws. (Use beeswax for easier install).



Step 9

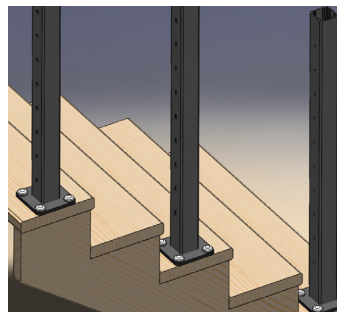
Before final post attachment, the top of the post will need to be cut accordingly, so cable is 3-1/2" or less from top rail.

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



Step 10

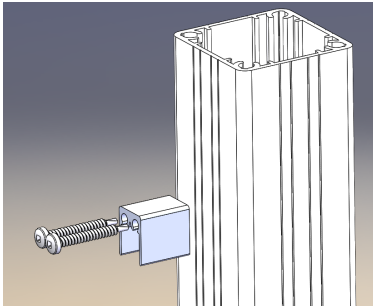
Attach post to surface.



Step 11

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

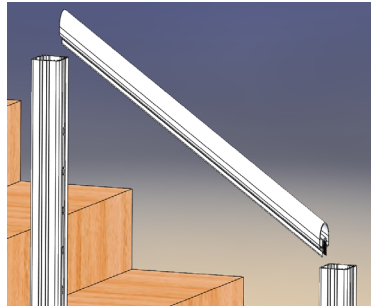
RFX100/250 TOP RAIL INSTALLATION



Rail Connecting Block

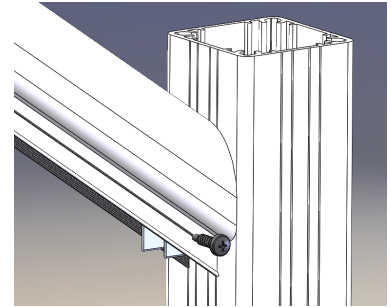
Measure 3-1/2" from middle of top hole to determine install location of RCB. Secure fitting in place with 2 each screws. Cut top of post to desired height.

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



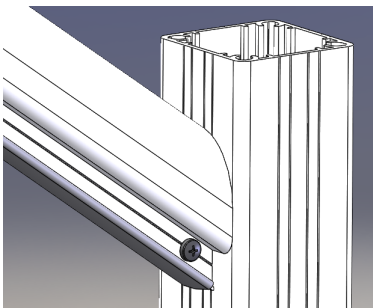
Cutting Top Rail

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



Attaching Top Rail

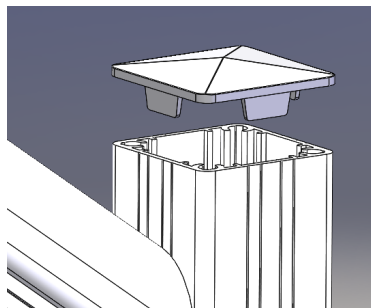
Slide top rail over top of RCB and secure with 2 each screws one on each side.



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

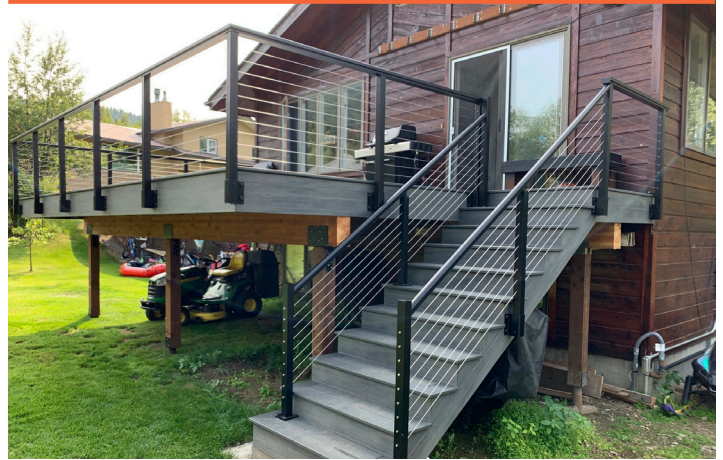
Install post cap. Use adhesive to secure cap to post.

RFX100/250 TOP RAIL INSTALLATION

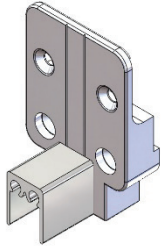
**RFX 100 Top Rail over the post using
RFX OPF Fitting**



**RFX 200 Top Rail – Level
RFX 100 Rail - Stair**

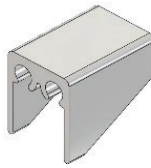


RFX200 TOP RAIL STAIR CORNER CONNECTOR INSTALLATION



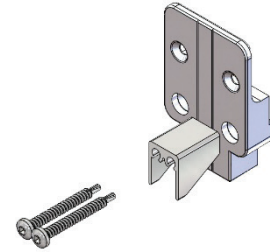
Rail Connecting Block

Align bottom of Rail Connecting Block (RCB) with bottom of RFX200 Stair Corner Connector (RFX200 SCC). Predrill RFX200 SCC with a 5/32" drill once RCB is centered on RFX200SCC.



Cutting RCB

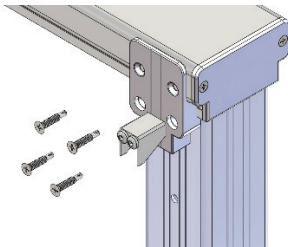
Using tin snips, clip back edges of RCB to match angle of stairs.



Attaching RCB to RFX200SCC

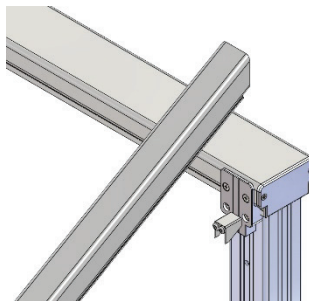
Using provided #2 square drive screws, attach RCB to RFX200SCC.

NOTE: Do not fully seat screws on this step.



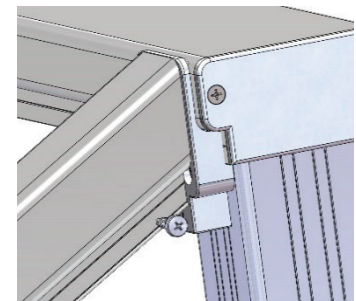
Attach RFX200SCC to Top Rail

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.

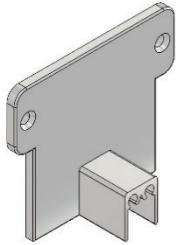


Install Stair Top Rail

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

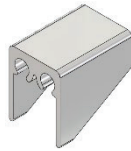
NOTE: Screws to be offset to avoid collision on rail.

RFX200 TOP RAIL STAIR STRAIGHT CONNECTOR INSTALLATION



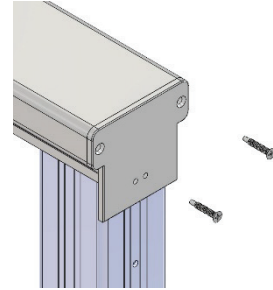
Rail Connecting Block

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.



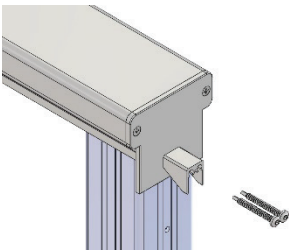
Cutting RCB

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



Attaching RFX200EEC to RFX200 Top Rail

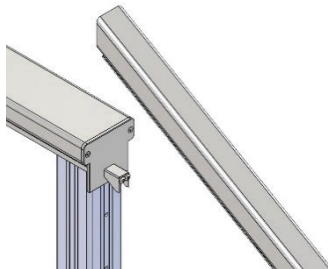
Using provided 2 screws, attach RFX200EEC to RFX200 Top Rail. Once attached, use 5/32" drill to predrill post.



Attach RCB to RFX200EEC

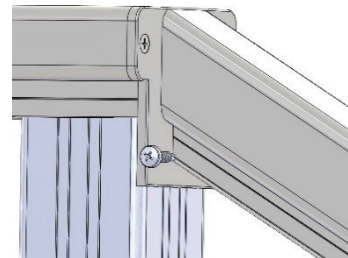
Attach RCB using provided #2 square drive screws.

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.

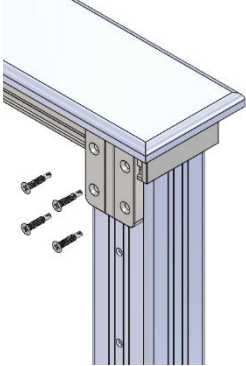


Install Stair Top Rail

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

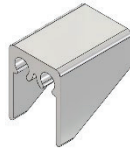
NOTE: Screws to be offset to avoid collision on rail.

RFX400 TOP RAIL STAIR CORNER CONNECTOR INSTALLATION



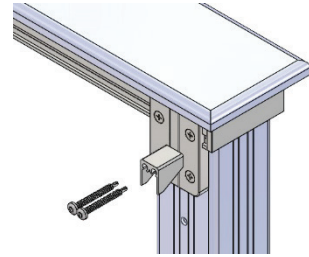
Stair Corner Connector

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



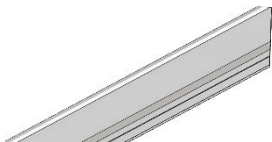
Cutting RCB

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



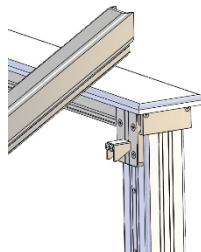
Attaching RCB to RFX-400SCC

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.



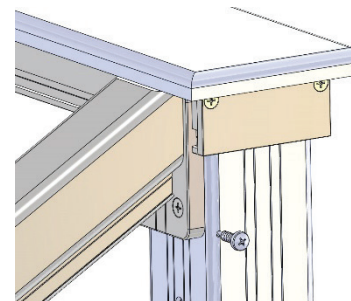
Cut Top Rail

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.

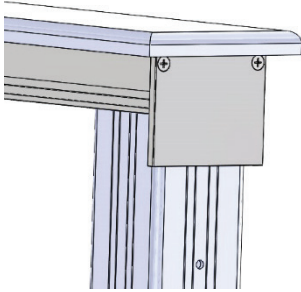


Install Stair Top Rail

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

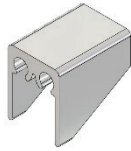
NOTE: Screws to be offset to avoid collision on rail.

RFX400 TOP RAIL STAIR STRAIGHT CONNECTOR INSTALLATION



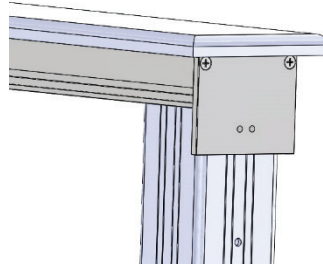
Attach End Plate

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



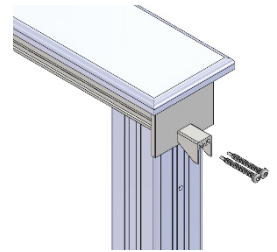
Cutting RCB

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



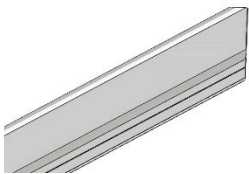
Drill RCB Alignment Holes

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.



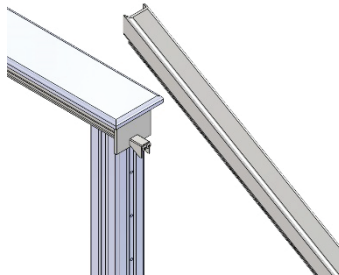
Attach RCB to RFX200EEC

Attach RCB using provided #2 square drive screws.



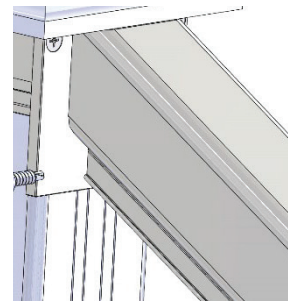
Cut Stair Top Rail

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

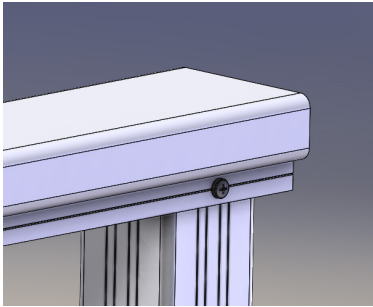
Place Top Rail onto RCB to ensure correct fit.



Install Stair Top Rail

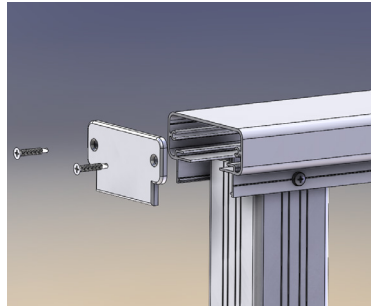
Secure Top Rail to RCB using self drilling screw on each side.

RFX200/300 TOP RAIL FOR LEVEL APPLICATIONS



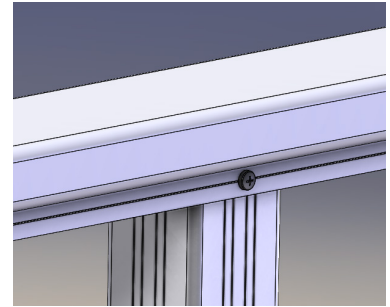
Attaching to End Post

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



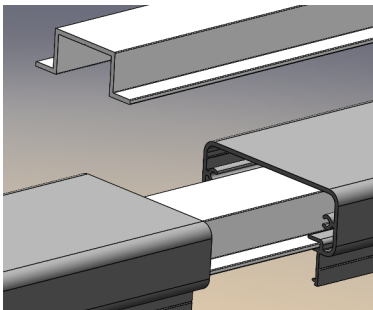
Attaching End Cap

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.



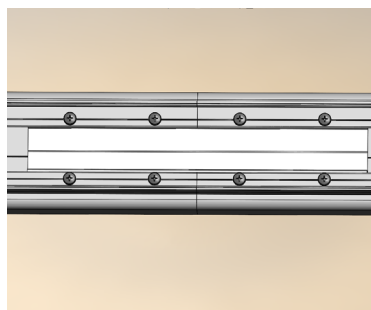
Attaching to Intermediate Post

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



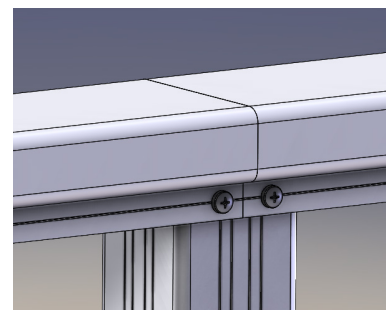
RFX200/300 Level Splice - 1

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



RFX200/300 Level Splice - 2

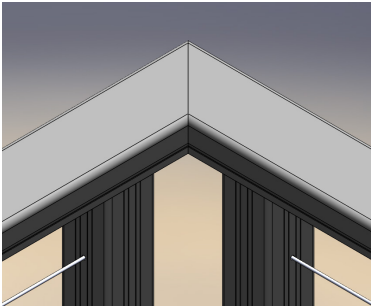
Use 8 each self-tapping screws to secure splice into rail from the underside.



Option to Splice Over a Post

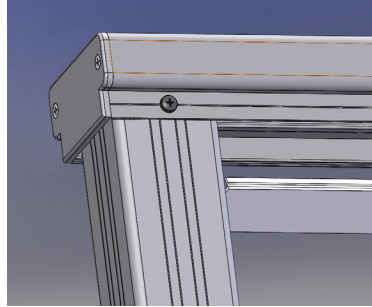
Splice must be installed into rail and then rail mounts to post. Secure rail with 4 each screws.

RFX200/300 TOP RAIL FOR LEVEL APPLICATIONS



Angled Splice

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



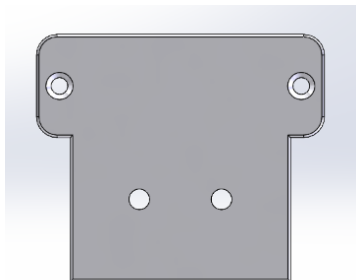
RFX200/300 – Flat In

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

NOTE: Install prior to tensioning the cables.

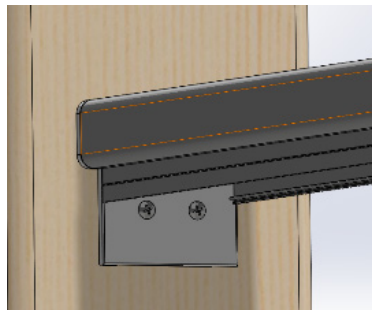
RFX200/300 TOP RAIL FOR LEVEL APPLICATIONS

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



RFX200/300 Terminating into Post - 1

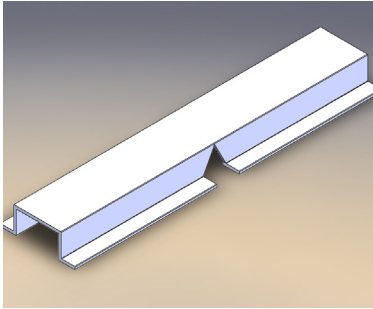
Drill 2 holes through the end cap for screws.



RFX200/300 Terminating into Post - 2

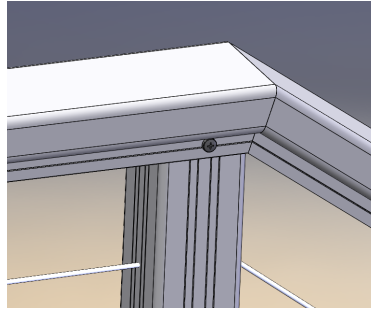
Use 2 each wood screws to attach end cap to top rail then attach rail to column using two each screws.

RFX200/300 TOP RAIL FOR STAIR APPLICATIONS



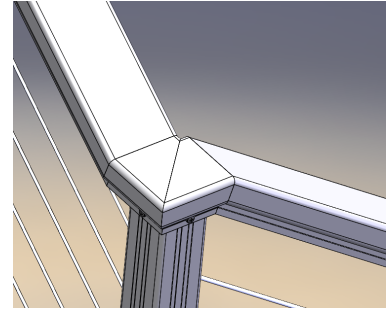
RFX200/300 – Stair Splice

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.



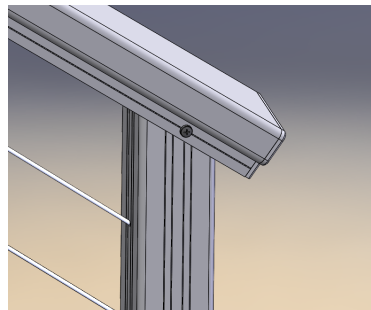
Stair Splice – Application 2

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:

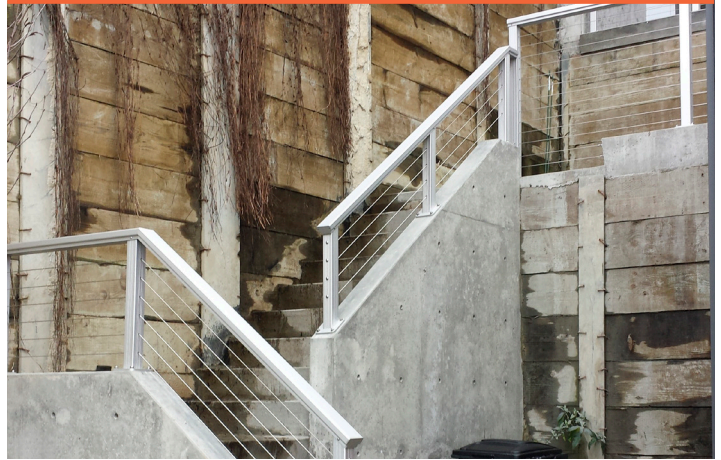
- RFX200/300 does not qualify as a graspable rail down the stairway. A secondary handrail must be used (ADA Sub-Rail) or RFX100/250 top rail can be used.
- Painting the ends of the railing that has been cut will help prevent oxidation.
- Railing must be cut square to allow end cap to securely attach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

RFX200/300 TOP RAIL FOR STAIR APPLICATIONS

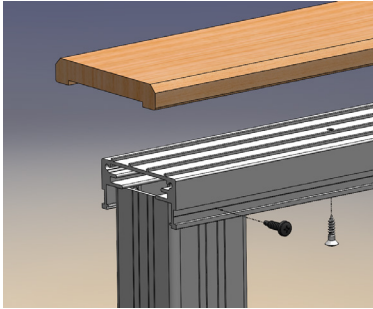
**RFX200 Top Rail with
Fascia Mount Post - Black**



**RFX200 Top Rail with
Surface Mount Post - Silver**

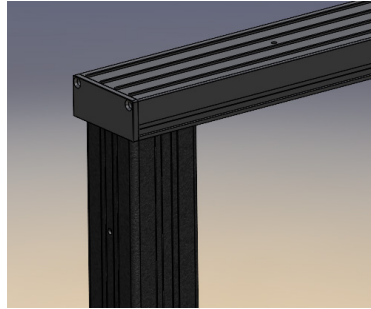


RFX400 TOP RAIL FOR LEVEL APPLICATIONS



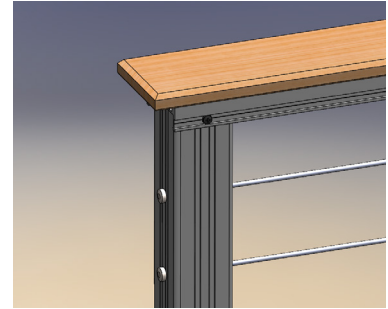
RFX400 Top Rail

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.



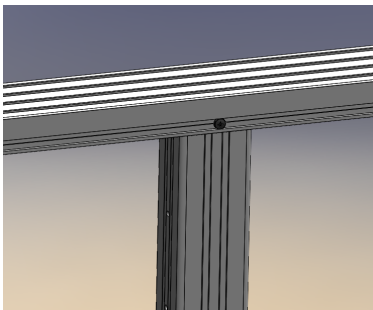
Attaching to End Post

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



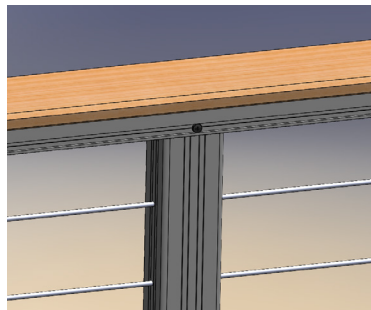
Attaching to End Post

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



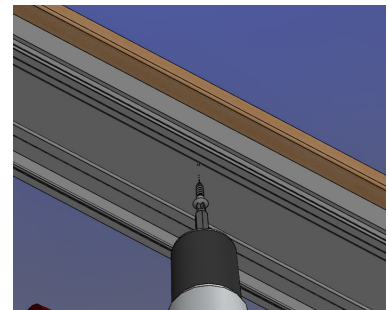
Attaching to Intermediate Post

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



Attaching to Intermediate Post

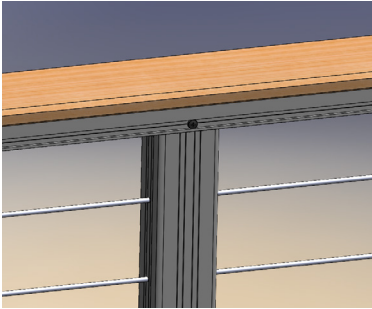
Wood / Composite cap attaches to RFX400 top rail by screws from the bottom side.



Screwing from Bottom Side

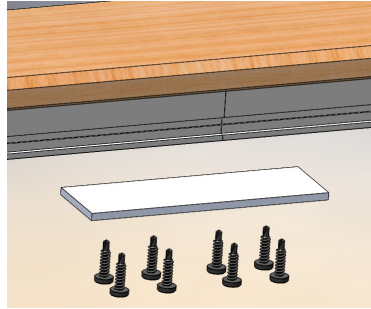
Wood / Composite cap attaches to RFX400 top rail by customer provided screws from the bottom side. Attach cap before installing flat infill.

RFX400 TOP RAIL FOR LEVEL APPLICATIONS



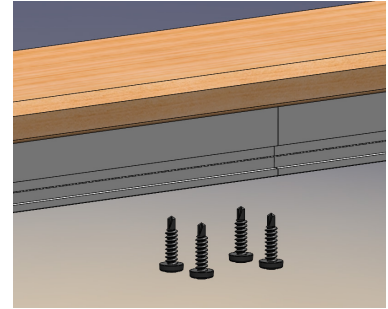
Straight Splice Option 1

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



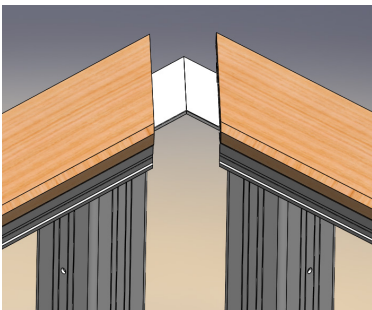
Straight Splice Option 2

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



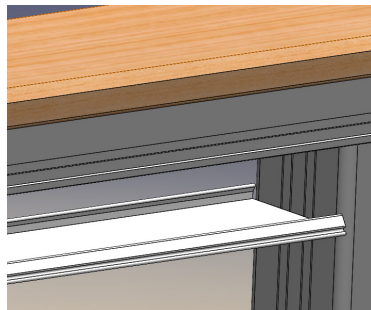
Straight Splice Option 3

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.

RFX400 TOP RAIL FOR LEVEL APPLICATIONS

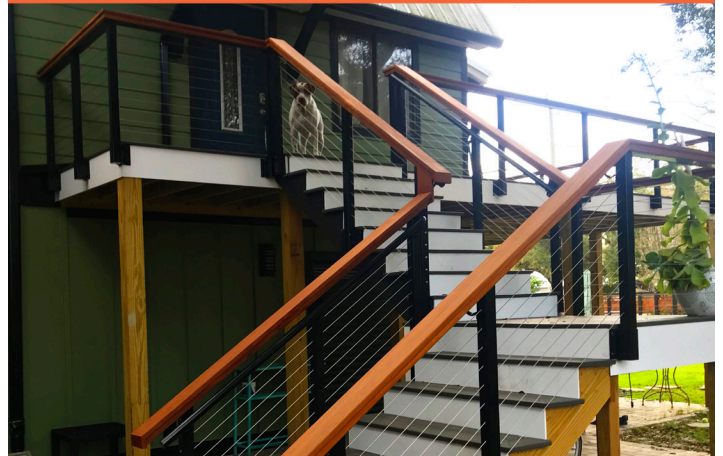
Special Notes:

- RFX400 top rail is designed to allow for the attachment of a wood or composite cap rail.
- Cap rail **MUST** add 1" or more to overall rail height to reach the required rail heights for both 36" and 42" rails.
- A scarf joint should be used to allow for expansion and contraction of cap rail.
- Joints between top rail and cap rail should be staggered.
- Painting the ends of railings that have been cut will help to prevent corrosion.

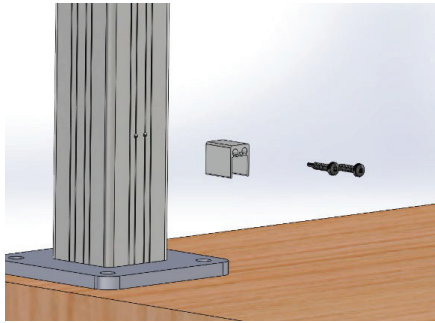
RFX 400 Top Rail with Composite Cap Rail



RFX 400 Top Rail with Wood Cap Rail



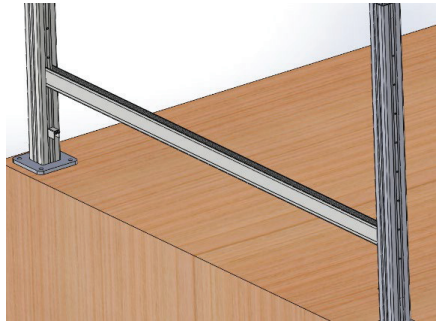
BOTTOM RAIL INSTALLATION



Attach Rail Connecting Block (RCB)

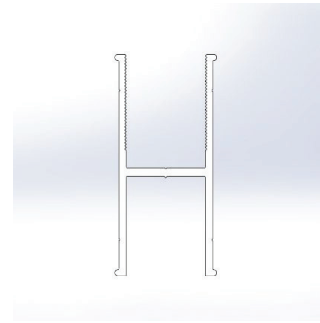
Using provided screws, mount RCB to post utilizing predrilled holes in bottom of post.

NOTE: Holes drilled on site for all stair posts

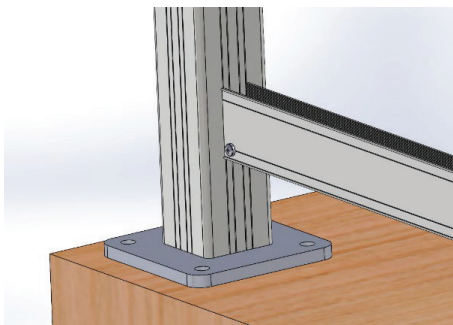


Measure and Cut Bottom Rail

Measure distance between posts and cut bottom rail with saw.

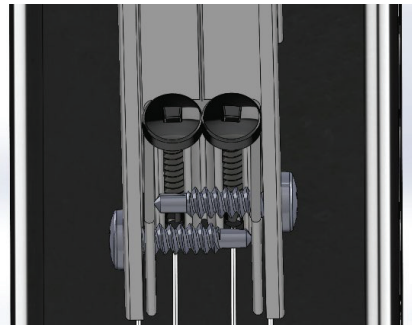


NOTE: Orientation of rail profile is necessary. Ridged side of profile faces up.

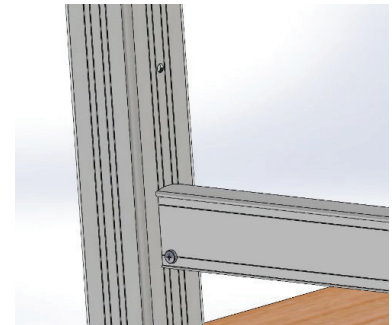


Attach Bottom Rail

Attach Bottom Rail to RCB with 2 each screws.



NOTE: Screws must be spaced on Bottom Rail to prevent collisions.

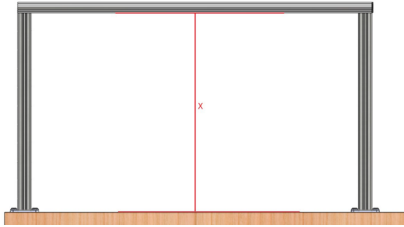


Measure and Cut Picket Infill

Measure and cut Picket Infill to size. (measurement will match Bottom Rail measurement). Snap Picket Infill onto Bottom Rail to complete installation.

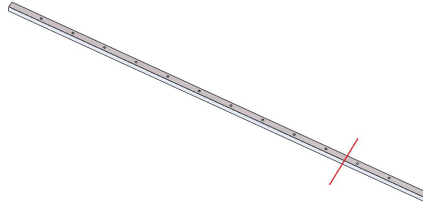
NOTE: For picket installation, Picket infill is provided cut to length.

CABLE BRACE INSTALLATION



Step 1

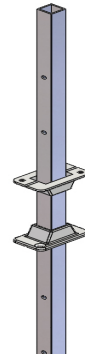
Measure distance from bottom of top rail to deck surface.



Step 1

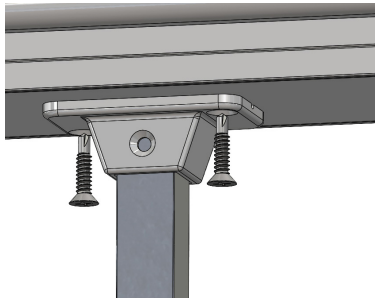
Cut cable brace to length measured earlier.

NOTE: Align holes on cable brace with holes on post prior to cutting.



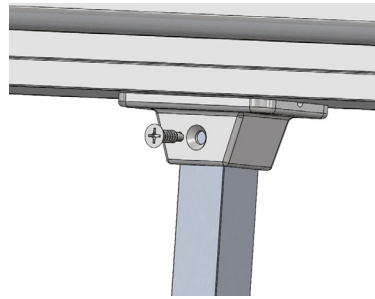
Step 3

Slide floor plates over cable brace as shown. Be sure orientation of floor plates matches image.



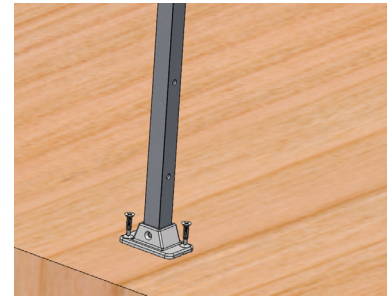
Step 4

Center cable brace on top rail and screw floor plate to top rail using included screws. Be sure that cable brace holes align with post holes.



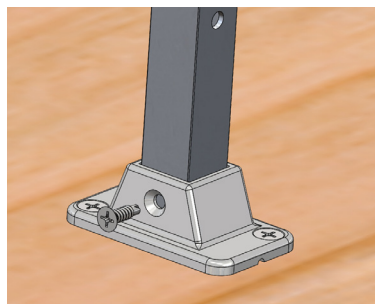
Step 5

Screw floor plate to cable brace with supplied screw.



Step 6

Ensure cable brace is plumb and screw bottom floor plate to deck using supplied screws.



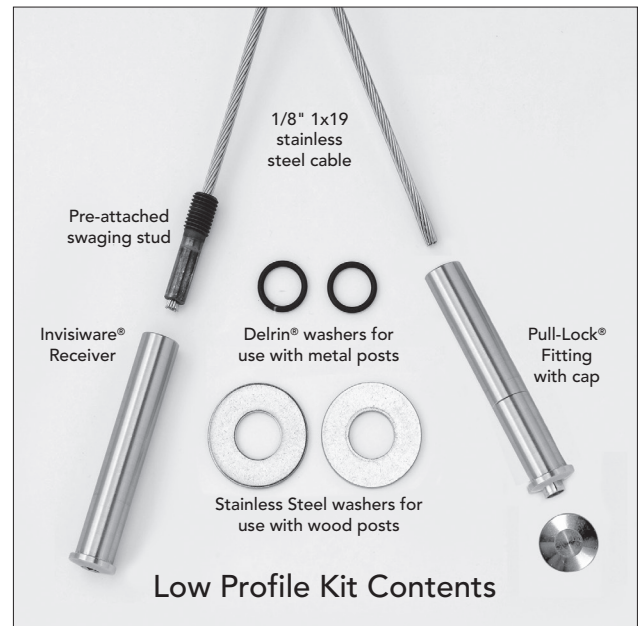
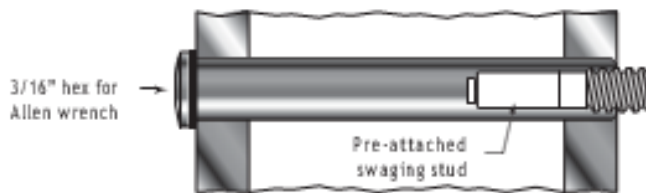
Step 7

Screw floor plate to cable brace using supplied screw.

CABLE INSTALLATION GUIDE

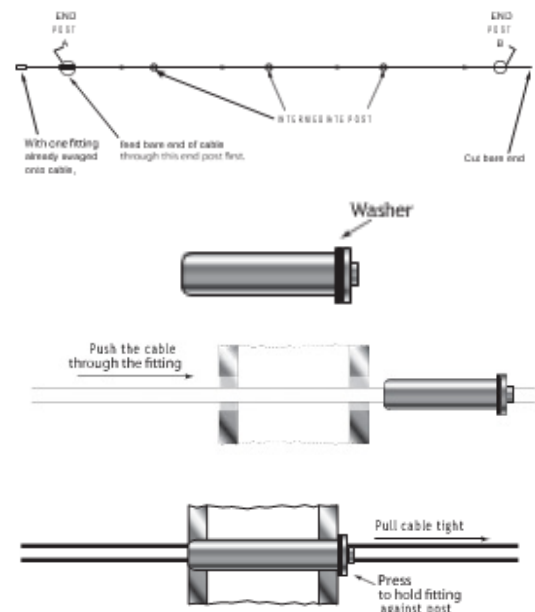
RailFX® LOW PROFILE CABLE KIT INSTALLATION INSTRUCTIONS

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.

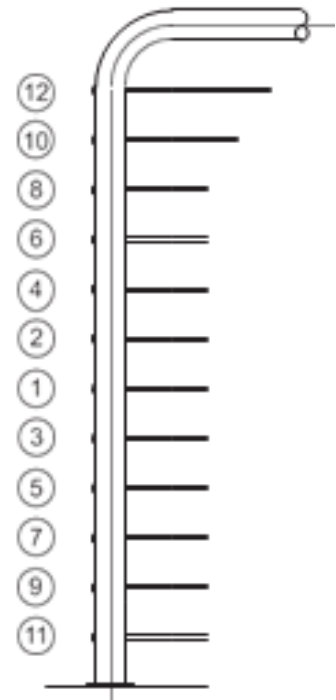
CABLE INSTALLATION GUIDE

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.**

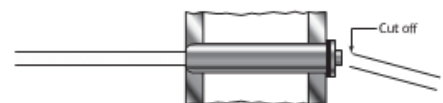
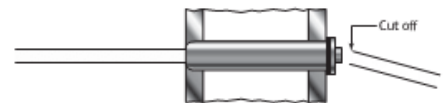


The swaging stud will be pulled into the Receiver by the tensioning.

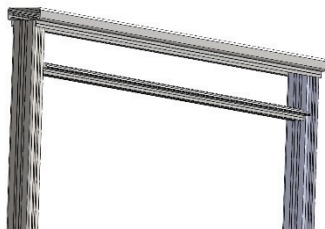


RECOMMENDED TENSIONING SEQUENCE

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.



PICKET INFILL INSTALLATION



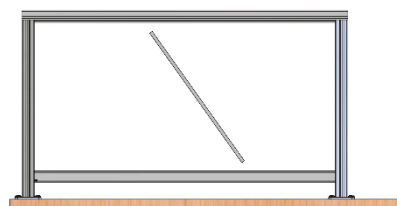
Step 1

Snap RailFX® Glass Picket Filler into top rail.



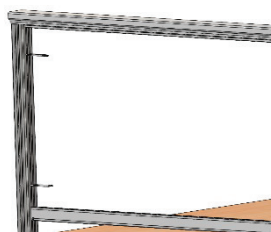
Step 2

Snap RailFX® Vinyl Gasket into Glass Picket Filler and Bottom Rail.



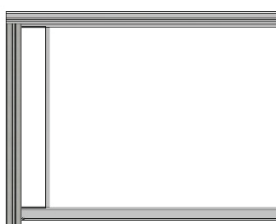
Step 3

Insert Picket Balusters into top and bottom rail. Slide all balusters to one side of post.



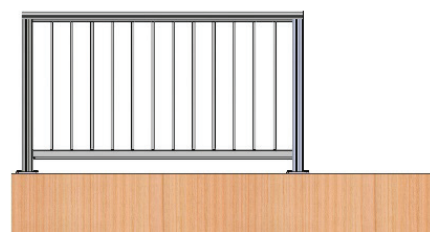
Step 4

Snap Picket Infill into top and bottom rail. Slide over until touching post.



Step 5

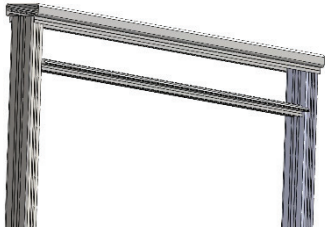
Slide Picket over until touching Picket Infill.



Step 6

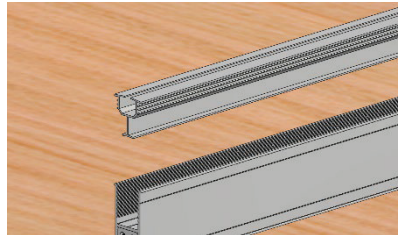
Repeat Step 4 and Step 5 until all Pickets and Picket Infill are installed.

GLASS INFILL INSTALLATION



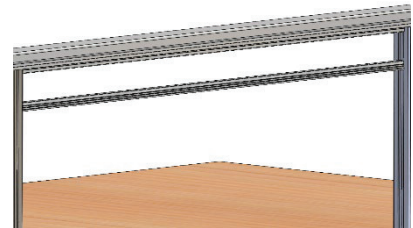
Step 1

Snap RailFX® Glass Picket Filler into top rail.



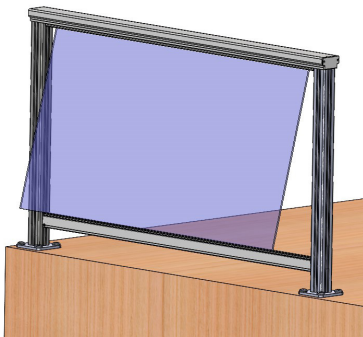
Step 2

Snap RailFX® Lower Glass Gasket into Bottom Rail.



Step 3

Snap RailFX® Vinyl Gasket into Glass Picket Filler.



Step 4

Install glass panel into RailFX® Vinyl Gasket as far as possible. Rotate glass panel over RailFX® Lower Glass Gasket and lower into gasket until seated.

NOTE: Customer is responsible for sourcing glass panels locally. For information on glass panel size, see panel.

GLASS PANEL SIZE GUIDELINES

- 1/4" Tempered Glass, polished on the "H" side (height)
- For a 36" finished rail height, glass panels should be 29" tall.
NOTE: Gasket to gasket measurements should range between 28" to 28-1/4" if the provided rail connecting blocks are attached to the posts. If not, simply add 3/4" to your gasket to gasket measurement.
- For a 42" finished rail height, glass panels should be 35" tall.
NOTE: Gasket to gasket measurements should range between 41" to 41-1/4" if the provided rail connecting blocks are attached to the posts. If not, simply add 3/4" to your gasket to gasket measurement.
- Subtract 4" from the "B" dimension (inside of post to inside of post). This will result in a 2" gap between panel and post so the panel can be installed without issues.



SCAN FOR RAILFX®
INSTALLATION RESOURCES

LEAN ON US®

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