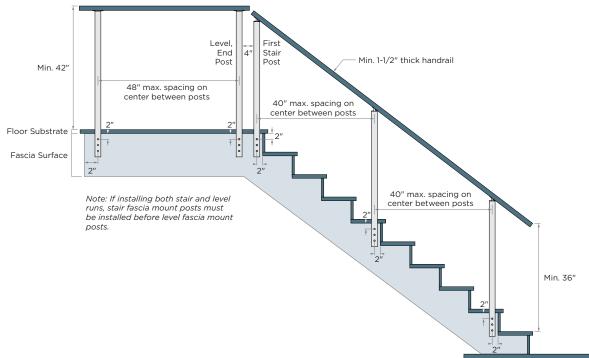
Installation Instructions for Posts Stair, Fascia Mount



A. Fascia Surface Construction Requirements

WOOD SURFACE

- Lumber grade must be a minimum of SPF Sawn Lumber No.2 or better
- ✓ Lumber must be a minimum of 3" thick
- ✓ Each 2x10 beam shall be affixed to the top plywood floor with fasteners at every 6"
- Wood must be dry and seasoned prior to installation and fabrication
- ✓ Wood should not be treated with fire retardants or other strength reducing chemicals

CONCRETE SURFACE

- Minimum 20 MPa compressive strength or better
- ✓ Concrete must be minimum 5" thick

STEEL SURFACE

- ✓ Minimum 300W grade or better
- ✔ Minimum 3/8" thick

FOR ALL TYPES OF FASCIA SURFACES, MINIMUM EDGE DISTANCES MUST BE MAINTAINED

POST SPACING

- First Stair Post: Maintain a maximum 4" space between Level, End Post and the First Stair Post (refer to diagram above).
- Stair Posts: Ensure 40" maximum spacing on center between posts on stairs (refer to diagram above).

MINIMUM EDGE DISTANCE

- Vertical: There must be at least 2" from the top edge of the fascia surface to the center of the first predrilled anchor hole of the post.
- Horizontal: There must be at least 2" from the edge of the fascia surface to the centerline of the post.

B. Handrail Requirement

- The handrail must be minimum 1-1/2" thick.
- Minimum overall 36" handrail height should be maintained for stair run.

C. Assembly of Post



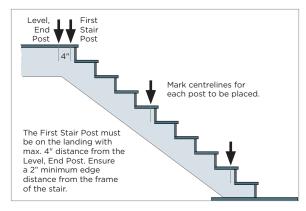
C1. Apply a thin layer of Bezdan approved stainless-steel grade quick-bonding adhesive glue to the sleeve of the bracket.



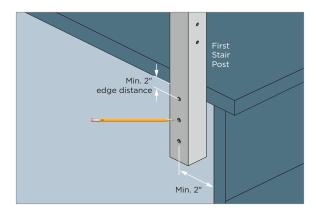
C2. Insert the top rail bracket into the hollow top end of the post sheath. Allow the glue to fully cure and dry.

NOTE: If using Bezdan approved quick-bonding adhesive, the cure time is 10 minutes and dry time is 24 hours.

D. Positioning of the Stair Posts



D1. **Post Spacing:** Using 40" on center as the maximum spacing between posts, determine where each post will be placed and mark their centerlines. Do this for the entire level run of your project. Spans greater than 40" will allow excess room for cable deflection.



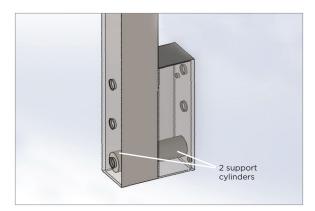
- D2. Beginning with the First Stair Post, determine the placement ensuring that minimum edge distances are maintained. Mark holes to be drilled.
- D3. Determine the placement of the remaining posts. Ensure 40" maximum spacing on center between posts (refer to diagram on page 1). All minimum edge distances must be maintained.

E. Mounting The Posts to a Level Fascia Surface

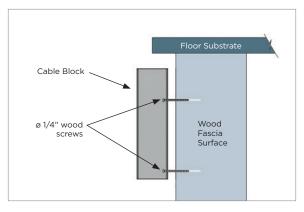
Option A: Use a Cable Block (refer to instruction on pages 3 to 4)

Option B: Notch the Deck Surface (refer to instruction on page 5)

Option A: Using a Cable Block

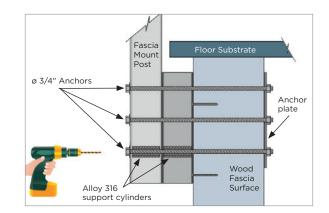


E1. The cable block requires a 0.94" x 0.125" x 1.75"
 Alloy 316 stainless steel support cylinder (supplied by others) to be installed in the lowest hole line of both the block and post.

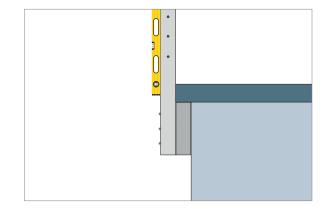


E2. Attach the cable block to the fascia surface using $\emptyset 1/4''$ wood screws (supplied by others).

NOTE: This option shows the wood fascia surface with a through bolt for illustrative purposes. The cable block can also be used with concrete or steel fascia.



E3. Mount the post and block to the fascia surface using the recommended fasteners for the appropriate frame substrate (see page 4). The support cylinders must be positioned before anchor installation on the lowest hole. The anchor holds the post and block together once tightened.



- E4. Check the posts to ensure they are level as the fasteners are tightened. Do not over tighten. Over tightening may cause stripping of the fastener and/ or may result in the post not sitting flush against the fascia surface.
- E5. Place the next sequenced post. Ensure 40" maximum spacing on center between posts (refer to diagram on page 1). Repeat steps E2 to E4 of Option A until all intermediate and end posts have been installed.

FASTENER SPECIFICATIONS FOR MOUNTING POSTS USING A CABLE BLOCK

FOR USE WITH WOOD (CORNER LOCATIONS)

BLOCK TO FASCIA (STEP E2)

- ✓ 1/4" x 3-1/2" GRK RSS wood screw (ESR-2442)
 ✓ SPF Sawn lumber
- no.2 or better

POST THROUGH BLOCK TO FASCIA (STEP E3)

- (STEP ES)
- ✓ Ø 3/8" x 8" GRK RSS screw
 OR

ø 3/8" x 8-1/2" through bolt (at least Grade A325 or Grade 5) with a hex nut and 3/8" x 2 x 0.105" fender washer

✓ Anchor bolts applied should go through at least three sheets of 2x10 beam

FOR USE WITH WOOD (OTHER LOCATIONS)

BLOCK TO FASCIA (STEP E2)

 ✓ Ø 1/4" x 3-1/2" GRK RSS wood screw (ESR-2442)

POST THROUGH BLOCK TO FASCIA (STEP E3)

- ✓ Ø 3/8" x 8-1/2" through bolt (at least Grade A325 or Grade 5) with a hex nut and 3/8" x 2 x 0.105" fender washer
- Anchor bolts applied should go through at least three sheets of 2x10 beam

FOR USE WITH CONCRETE

BLOCK TO FASCIA (STEP E2)

- ✓ ø 1/4" x 2-1/2" Hilti KH-EZ
- Minimum 20MPa concrete and 2" edge distance

POST THROUGH BLOCK TO FASCIA (STEP E3)

- Hilti Hit-HY 200
 Adhesive + ø 3/8"
 Hilti HIT-Z Threaded
 Rod
- ✓ Fastener should have a 4-1/2" embedment in concrete substrate to remain effective

FOR USE WITH STEEL

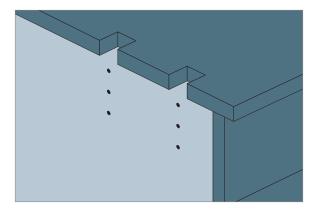
BLOCK TO FASCIA (STEP E2)

- ✓ ø 1/4"-20 x 1-1/2" self-tapping screw
- ✓ 3/8" Steel 300W substrate or better

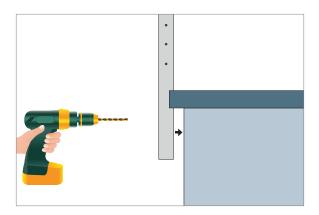
POST THROUGH BLOCK TO FASCIA (STEP E3)

- ✓ Ø 3/8"-16 x 6" selftapping screws (SAE grade 5 steel)
- Fastener must have UNC threads in load region of the shank

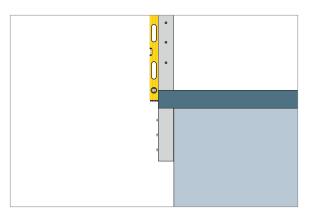
Option B: Notching the Deck Surface



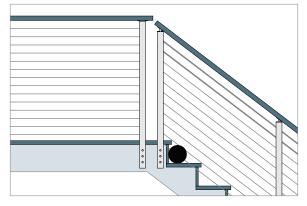
E1. The post is attached to the fascia surface. In order for the post to sit flush against the surface, the floor substrate's overhang may need to be notched prior to post installation.



E2. Mount the post to the fascia surface using the recommended fasteners for the appropriate frame substrate (see below).



- E3. Check the posts to ensure they are level as the fasteners are tightened. Do not over tighten. Over tightening may cause stripping of the fastener and/ or may result in the post not sitting flush against the fascia surface.
- E4. Place the next sequenced post. Ensure 40" maximum spacing on center between posts (refer to diagram on page 1). Repeat steps E2 and E3 of Option B until all intermediate and end posts have been installed.



NOTE: A 6" sphere should not pass through the landing of the stair and the first intended cable run.

FASTENER SPECIFICATIONS FOR MOUNTING POSTS DIRECTLY TO FASCIA SURFACE

FOR USE WITH WOOD

- ✓ Ø 3/8" x 6" Through Bolt (at least Grade 5) with Hex Nut and 4" x 8" x 1/16" Plate Washer
- ✓ Anchor bolts applied should go through at least two sheets of 2 x 10 beam

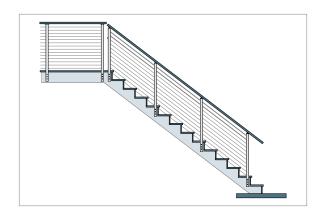
FOR USE WITH CONCRETE

- ✔ Hilti Hit-HY 200 Adhesive
 + ø 3/8" Hilti HIT-Z Threaded
 Rod
- ✓ Fastener should have a 4-1/2" embedment in concrete substrate to remain effective

FOR USE WITH STEEL

- ✓ Ø 3/8"-16 x 3" self-tapping screw (SAE grade 5 steel)
- Fastener must have UNC threads in load region of the shank

F. Assembly of Cable Fittings



F1. Handrail must be mounted prior to cable infill installation. Complete the railing by adding infill. Please refer to <u>Installation Instructions for Metal Posts</u> on Stair Runs, Tensioning

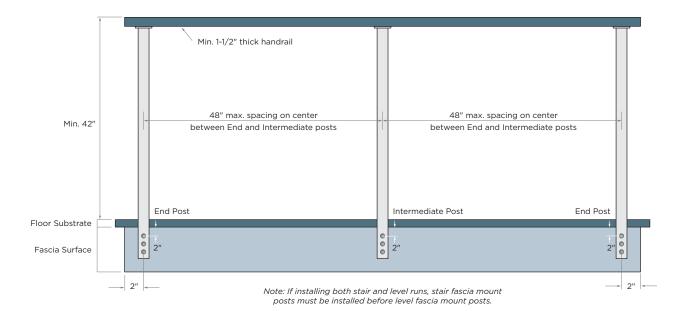
G. Cleaning

G1. Cleaning is absolutely required for the post installation to avoid discoloration, rust or corrosion. Please refer to our <u>Stainless Steel Care and Maintenance Guide</u>.

Limited Warranty

Bezdan warrants to the original property owner/purchaser that Bezdan stainless steel cable and fittings are free of defect for a period of ten (10) years from the date of receipt. This warranty covers defects in workmanship and materials under normal use, conditions, installation and maintenance in accordance with the product specifications and procedures described in the cable rail installation and maintenance instructions. Learn more at geobezdan.com/bezdan-cable.

Installation Instructions for Posts Level Run, Fascia Mount



A. Fascia Surface Construction Requirements

WOOD SURFACE

- Lumber grade must be a minimum of SPF Sawn Lumber No.2 or better
- ✓ Lumber must be a minimum of 3" thick
- ✓ Each 2x10 beam shall be affixed to the top plywood floor with fasteners at every 6"
- Wood must be dry and seasoned prior to installation and fabrication
- ✓ Wood should not be treated with fire retardants or other strength reducing chemicals

CONCRETE SURFACE

- Minimum 20 MPa compressive strength or better
- ✓ Concrete must be minimum 5" thick

STEEL SURFACE

- ✓ Minimum 300W grade or better
- ✓ Minimum 3/8" thick

FOR ALL TYPES OF FASCIA SURFACES, MINIMUM EDGE DISTANCES MUST BE MAINTAINED

POST POSITIONING

- Width: 48" maximum spacing on center between posts (refer to diagram above).
- Height: A minimum 42" height from floor substrate to top of the handrail must be maintained throughout the level railing.

MINIMUM EDGE DISTANCE

- Vertical: There must be at least 2" from the top edge of the fascia surface to the center of the first predrilled anchor hole of the post.
- Horizontal: There must be at least 2" from the edge of the fascia surface to the centerline of the post.

B. Handrail Requirement

- ▶ The handrail must be minimum 1-1/2" thick.
- Minimum overall 42" handrail height should be maintained for level run.

C. Assembly of Post



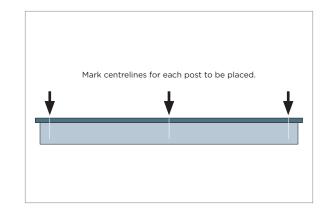
C1. Apply a thin layer of Bezdan approved stainless-steel grade quick-bonding adhesive glue to the sleeve of the bracket.



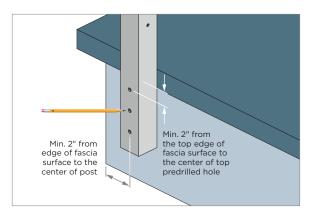
C2. Insert the top rail bracket into the hollow top end of the post sheath. Allow the glue to fully cure and dry.

NOTE: If using Bezdan approved quick-bonding adhesive, the cure time is 10 minutes and dry time is 24 hours.

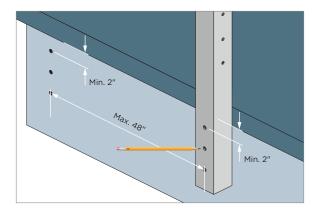
D. Positioning of the Level Posts



D1. Using 48" on center as the maximum spacing between posts, determine where each post will be placed and mark their centerlines. Do this for the entire level run of your project. Spans greater than 48" will allow excess room for cable deflection.



D2. Begin with the end post, determine the placement ensuring that minimum edge distances are maintained. Mark holes to be drilled.

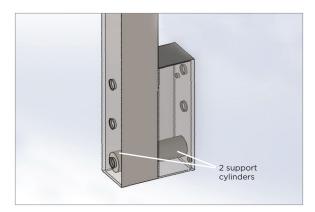


- D3. Determine the placement of the next post. Ensure 48" maximum spacing on center between posts (refer to diagram on page 1).
- D4. Continue marking the drill holes for all remaining posts ensuring all minimum edge distances and maximum spacing between posts are maintained.

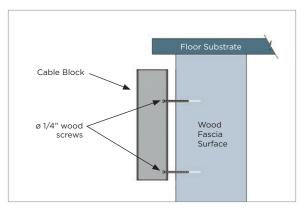
Option A: Use a Cable Block (refer to instruction on pages 4 to 5)

Option B: Notch the Deck Surface (refer to instruction on page 6)

Option A: Using a Cable Block

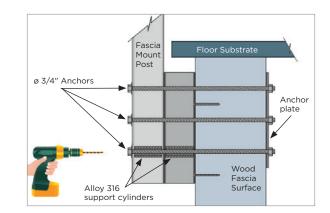


E1. The cable block requires a 0.94" x 0.125" x 1.75"
 Alloy 316 stainless steel support cylinder (supplied by others) to be installed in the lowest hole line of both the block and post.

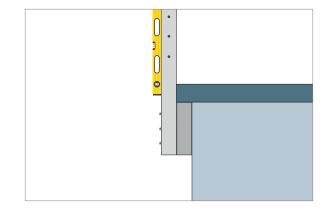


E2. Attach the cable block to the fascia surface using $\emptyset 1/4''$ wood screws (supplied by others).

NOTE: This option shows the wood fascia surface with a through bolt for illustrative purposes. The cable block can also be used with concrete or steel fascia.



E3. Mount the post and block to the fascia surface using the recommended fasteners for the appropriate frame substrate (see page 5). The support cylinders must be positioned before anchor installation on the lowest hole. The anchor holds the post and block together once tightened.



- E4. Check the posts to ensure they are level as the fasteners are tightened. Do not over tighten. Over tightening may cause stripping of the fastener and/ or may result in the post not sitting flush against the fascia surface.
- E5. Place the next sequenced post. Ensure 48" maximum spacing on center between posts (refer to diagram on page 1). Repeat steps E2 to E4 of Option A until all intermediate and end posts have been installed.

FASTENER SPECIFICATIONS FOR MOUNTING POSTS USING A CABLE BLOCK

FOR USE WITH WOOD (CORNER LOCATIONS)

BLOCK TO FASCIA (STEP E2)

- ✓ 1/4" x 3-1/2" GRK RSS wood screw (ESR-2442)
 ✓ SPF Sawn lumber
- no.2 or better

POST THROUGH BLOCK TO FASCIA (STEP E3)

- (STEP ES)
- ✓ Ø 3/8" x 8" GRK RSS screw
 OR

ø 3/8" x 8-1/2" through bolt (at least Grade A325 or Grade 5) with a hex nut and 3/8" x 2 x 0.105" fender washer

✓ Anchor bolts applied should go through at least three sheets of 2x10 beam

FOR USE WITH WOOD (OTHER LOCATIONS)

BLOCK TO FASCIA (STEP E2)

 ✓ Ø 1/4" x 3-1/2" GRK RSS wood screw (ESR-2442)

POST THROUGH BLOCK TO FASCIA (STEP E3)

- ✓ Ø 3/8" x 8-1/2" through bolt (at least Grade A325 or Grade 5) with a hex nut and 3/8" x 2 x 0.105" fender washer
- ✓ Anchor bolts applied should go through at least three sheets of 2x10 beam

FOR USE WITH CONCRETE

BLOCK TO FASCIA (STEP E2)

- ✓ ø 1/4" x 2-1/2" Hilti KH-EZ
- Minimum 20MPa concrete and 2" edge distance

POST THROUGH BLOCK TO FASCIA (STEP E3)

- Hilti Hit-HY 200
 Adhesive + ø 3/8"
 Hilti HIT-Z Threaded
 Rod
- ✓ Fastener should have a 4-1/2" embedment in concrete substrate to remain effective

FOR USE WITH STEEL

BLOCK TO FASCIA (STEP E2)

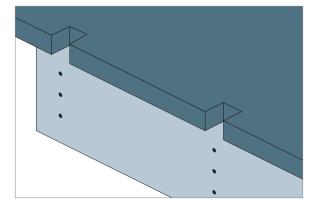
- ✓ Ø 1/4"-20 x 1-1/2" self-tapping screw
- ✓ 3/8" Steel 300W substrate or better

POST THROUGH BLOCK TO FASCIA (STEP E3)

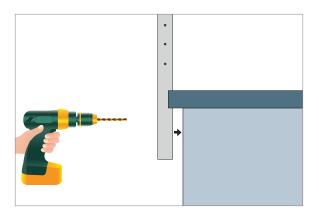
- ✓ Ø 3/8"-16 x 6" selftapping screws (SAE grade 5 steel)
- Fastener must have UNC threads in load region of the shank



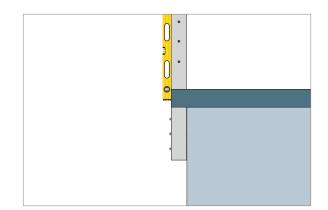
Option B: Notching the Deck Surface



E1. The post is attached to the fascia surface. In order for the post to sit flush against the surface, the floor substrate's overhang may need to be notched prior to post installation.



E2. Mount the post to the fascia surface using the recommended fasteners for the appropriate frame substrate (see below).



- E3. Check the posts to ensure they are level as the fasteners are tightened. Do not over tighten. Over tightening may cause stripping of the fastener and/ or may result in the post not sitting flush against the fascia surface.
- E4. Place the next sequenced post. Ensure 48" maximum spacing on center between posts (refer to diagram on page 1). Repeat steps E2 and E3 of Option B until all intermediate and end posts have been installed.

FASTENER SPECIFICATIONS FOR MOUNTING POSTS DIRECTLY TO FASCIA SURFACE

FOR USE WITH WOOD

- ✓ Ø 3/8" x 6" Through Bolt (at least Grade 5) with Hex Nut and 4" x 8" x 1/16" Plate Washer
- ✓ Anchor bolts applied should go through at least two sheets of 2 x 10 beam

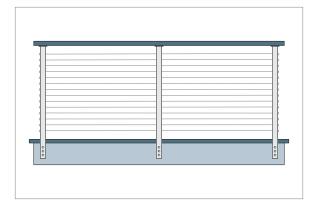
FOR USE WITH CONCRETE

- ✔ Hilti Hit-HY 200 Adhesive
 + ø 3/8" Hilti HIT-Z Threaded
 Rod
- ✓ Fastener should have a 4-1/2" embedment in concrete substrate to remain effective

FOR USE WITH STEEL

- ✓ Ø 3/8"-16 x 3" self-tapping screw (SAE grade 5 steel)
- Fastener must have UNC threads in load region of the shank

F. Assembly of Cable Fittings



F1. Handrail must be mounted prior to cable infill installation. Complete the railing by adding infill. Please refer to <u>Installation Instructions for Metal Posts</u> <u>on Level Runs, Tensioning</u>

G. Cleaning

G1. Cleaning is absolutely required for the post installation to avoid discoloration, rust or corrosion. Please refer to our <u>Stainless Steel Care and Maintenance Guide</u>.

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Bezdan warrants to the original property owner/purchaser that Bezdan stainless steel cable and fittings are free of defect for a period of ten (10) years from the date of receipt. This warranty covers defects in workmanship and materials under normal use, conditions, installation and maintenance in accordance with the product specifications and procedures described in the cable rail installation and maintenance instructions. Learn more at **geobezdan.com/bezdan-cable**.