ADA Handrail

Installation Instructions



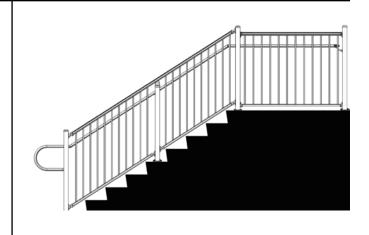




ADA Handrail

Alumi-Guard's® ADA compliant, powder-coated aluminum handrail is a low-maintenance addition to your ramps and stairs.

Always refer to your local building codes for all life safety regulations and requirments.





Warning:

- Improper installation of this product can result in personal injury. Always wear safety goggles when cutting, drilling and assembling the product.
- Incorrect installation may cause harm to the product or individual.
- Not pool code approved.

Notice:

- DO NOT attempt to assemble the kit if parts are missing or damaged.
- DO NOT return the product to the store. For assistance or replacement parts call: 1-877-258-6448

1 ■ Before You Begin

- This guide will be used to show how to install each of the parts in the Hand Rail system. For your convenience, the installation of each part is explained individually.
- Various TIPS are included within most sections to help simplify the installation process.
- Start all Hand Rail installations by laying out and marking the desired height of the top of the Hand Rail on all posts and mounting surfaces - Fig. 1. This Hand Rail layout line will be used in the following steps for mounting all components.

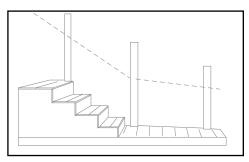


Fig. 1

2. Tips

- As stated in the 2018 International Building Code® "1012.2 Height. Hand Rail height, measured above stair tread nosings, or finish surface of ramp slope shall be uniform, not less than 34 inches and not more than 38 inches." Please check local building codes as code interpretation may vary by municipality.
- It is recommended that each of the Hand Rail components be dry fit before final installation to eliminate cutting and gluing errors.
- When cutting Hand Rail lineals, always cut the aluminum using a mitre saw with a carbide tipped blade with at least 60 teeth.
- When using aluminum adhesive, it is important to remove all excess adhesive from the lineals to maintain a smooth and clean joint.
- When applying adhesives be sure to apply to inside surfaces only to avoid overflow. Adhesives may damage the paint surface.
- Always clamp joints in place and allow to cure per the adhesive manufacturer's instructions.

3. Required Tools

- Drill
- Clamps
- Mitre Saw
- Touch-up Paint

- Aluminum Adhesive
- Appropriate Fasteners
- Tape Measure

4. Recommended Adhesives*

Aluminum Bonding:

- JB Weld®
- Gorilla[™] Epoxy Impact Tough[®]
- Loctite[®] Extra Time Epoxy
- Loctite[®] Metal/Concrete Epoxy[™]
- Loctite® Quick Set Epoxy

TIP: Stainless steel fasteners are recommended to prevent future rust streaking.

5. Hand and Rail Lineals

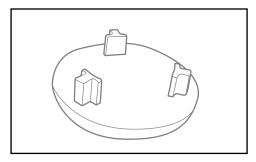
- When performing miter cuts on Hand Rail lineals, lay out and clamp all appropriate lineals in place. Make reference marks on each lineal and at each attachment point to ensure that miter cuts are made correctly.
- Once placement is confirmed, cut lineal at appropriate locations. Adjust accordingly and permanently attach. (6' maximum span between brackets.)

6- Hand Rail End Cap

At each open end of a Hand Rail installation, an end cap can be installed to provide a clean, finished end. Simply apply a dab of aluminum adhesive to the rail cap and rail end and insert into the end of the Hand Rail - Fig. 2.

Joint Ring

At each straight joint of a Hand Rail installation, a joint ring can be installed to conceal any uneven cuts. Simply apply a dab of adhesive and insert the joint ring during assembly - Fig. 3.





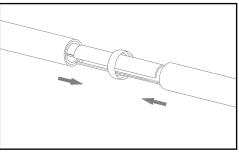


Fig. 3

8 Hand Rail Bracket

- Place a mark 4-9/16" below the Hand Rail lay out line to establish placement of the Hand Rail bracket Fig. 4. This mark denotes the bottom edge of the Hand Rail mounting bracket.
- If using a steel post, pre-drill prior to attaching the bracket to the galvanized steel post or aluminum post.
- Align the bracket according to the Hand Rail layout line and match up with the pre-drilled hole positions. Attach bracket with 3 fasteners appropriate for the material to which it is being mounted.
- After Hand Rail has been mounted, pre-drill the Hand Rail lineal with a 13/64" drill bit and attach to the bracket to the lineal using the provided fasteners Fig. 5.

9. Post Return

- Align the post return according to the Hand Rail layout line and mark attachment hole positions Fig. 6.
- Pre-drill and attach post return with 3 fasteners appropriate for the material to which it is being mounted.
- Insert the provided joiner in the post return and dry fit the lineal in place.
- After railing installation has been dry fit, disassemble and apply aluminum adhesive and permanently mount the Hand Rail lineal Fig. 7.

TIP: If your Hand Rail is being mounted with a post return at each end, cut lineal to length and assemble before attaching post returns to mounting surface.

10. **Straight Return**

- Insert the straight return into the lineal, dry fit to determine the finished length, and cut to fit.
- Dry fit and check length.
- Attach the assembly to the mounting surface using the appropriate fastener through middle of straight return.
- Apply aluminum adhesive and insert the straight return into the Hand Rail lineal Fig. 8.

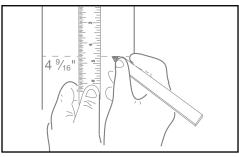


Fig. 4

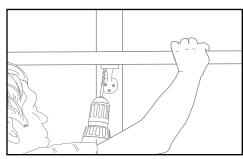


Fig. 5

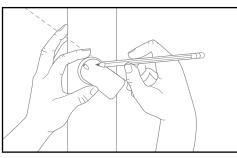


Fig. 6

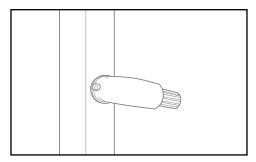


Fig. 7

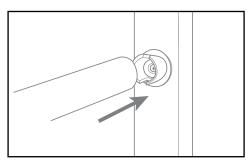


Fig. 8

11 Straight Joiner

NOTE: For maximum strength, all Hand Rail joints should be supported by a Hand Rail bracket at the joint, or at the nearest possible location.

- Cut Hand Rail lineals to length.
- Apply aluminum adhesive and slide the internal joiner half way into the aluminum lineal Fig. 9.
- Permanently attach the first Hand Rail lineal to the nearest Hand Rail bracket.

TIP: If the joint is not supported with a bracket, allow enough time for the aluminum adhesive to cure prior to installing the second lineal.

Apply aluminum adhesive to the second Hand Rail lineal. Slide Hand Rail lineal onto joiner. Mount in place.
Clamp and allow to dry.

12. Internal Adjustable Joiner

NOTE: All adjustable joiners should be supported by a Hand Rail bracket as closely as possible to each side of the joint.

• Measure the angle of the joint and cut lineals accordingly. Dry fit both Hand Rail lineals, making sure that the miter cuts match up properly.

TIP: While lineals are in place, reference marks can be made on the lineals and mounting hardware, to ensure proper alignment during final installation.

- Assemble and position the adjustable joiner on the outside of the Hand Rail and tighten the bolt at the appropriate angle Fig. 10.
- Dry fit the assembly and adjust if necessary.

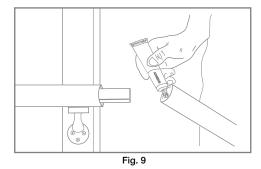
TIP: Use the joiner bolt as a reference to keep the lineals in proper alignment, by aligning both mitered ends with the center of the bolt.

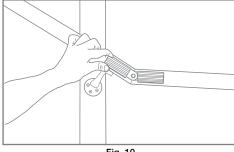
- Apply aluminum adhesive and assemble the joint.
- Permanently attach the Hand Rail lineals to the mounting support.

NOTE: Joint should be clamped in place until adhesive has had time to cure.

13. Adjustable Joiner

- Measure the angle of the joint and cut lineals accordingly. Dry fit both Hand Rail lineals, making sure that the lineals match up properly.
- Assemble and position the adjustable joiner on the outside of the Hand Rail and tighten the bolt at the appropriate angle Fig. 11.
- Dry fit the assembly and adjust if necessary.
- Apply aluminum adhesive and assemble the joint.
- Permanently attach the Hand Rail lineals to the mounting support.





NOTE: Brackets are required on both sides of the adjustable joiner. Joint should be clamped in place until adhesive has had time to cure.

14_ 90° Corner

- Dry fit the two Hand Rail lineals. The Hand Rail lineals to be joined should extend far enough to allow for scribing and final cutting Fig. 12.
- Place the corner in line with each lineal. Scribe and cut the lineals Fig. 13.
- Insert the joiners into the corner. Dry fit the assembled corner with the lineals. If all components are aligned properly, make reference marks Fig. 14.
- Disassemble the corner. Apply aluminum adhesive to the inside of the corner and the inside of the lineals. Reassemble the components using the reference marks from Step 3 as a guide. Clamp in place and allow to cure.
- Permanently attach the lineals to the mounting brackets with the screws provided.

15. Inside Corner Bracket

 Place a mark 2-9/16" below the Hand Rail layout line to establish placement of the Inside Corner Bracket -Fig. 15.

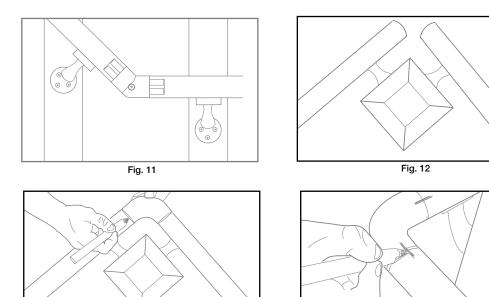


Fig. 13

 Align the top surface of the bracket with the mark made is Step 1 and attach to the mounting surface using appropriate fasteners.

Fig. 14

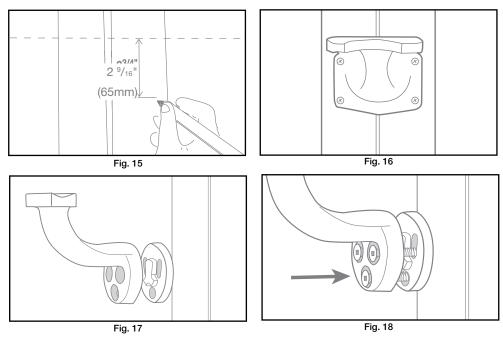
• Clamp the Hand Rail corner assembly to the inside corner bracket. Using a 1/8" bit, pre-drill and attach the bracket using the provided screws - Fig. 16.

16. Spacer Block

Note: Spacer blocks are 1/4" thick and can be used with any Aluminum Hand Rail mounting bracket and post return for aluminum posts. They are designed such that you could mount a bracket on a 2 1/2" post and mount another bracket on a 2" post and have them align by user the space with the bracket on the 2" post.

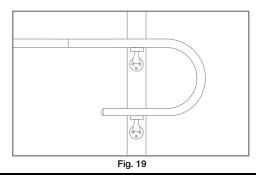
- Align bracket or post return on post and mark as shown in instructions for each respective bracket. Before attaching to the post, insert the spacer block on the back of the bracket as shown Fig. 17.
- Once in place, secure the bracket to the post by driving the screw through the holes in the bracket and slots in the spacer Fig. 18.

Note: For mounting brackets, it is recommended to stack no more than 2 spacers together with the hardware provided. For post returns, the screws are at an angle and will only be able to receive 2 spacer blocks.



17. 180° Return Loop

- Position Hand Rail loop in desired location. Dry fit the loop in place to make any necessary marks for cutting.
- Once cuts have been completed and loop is ready to install, attach to Hand Rail system using a straight or adjustable joiner following the instructions outlined in this guide.
- Attach Hand Rail loop to the mounting surface using 2 Hand Rail brackets Fig. 19. following the instructions in this guide.
- To complete the installation, mount a Hand Rail end cap to the end of the Hand Rail loop following the instructions in this guide for the Hand Rail end cap.



Transferable Limited Lifetime Warranty

You're not just purchasing a fence, you're investing in your property.

Protecting what you love

At Alumi-Guard® we understand that fencing needs to be as durable as it is beautiful. That's why we use only the finest materials and why we back all our products with a transferable limited lifetime warranty.

You've worked hard to make your fence - functional, comfortable, a natural expression of your personality. With Alumi-Guard®, that feeling doesn't stop at your door. From the strength and beauty of their craftsmanship, to the guarantee of their future, our outdoor living products make your project complete, safe and secure.

Who is covered:

- The limited lifetime warranty covers single-family residential properties only. This limited warranty extends to the original purchaser and one (1) individual transferee as specified herein.
- A thirty (30) year limited warranty covers any other type of building or property including those owned by corporations, governmental agencies, partnerships, trusts, religious organizations, schools, condominiums, homeowner associations, cooperative housing arrangements and apartment buildings. The warranty period will be thirty (30) years following the original date of Product purchase.

Aluminum - What is covered: Barrette Outdoor Living warrants that its aluminum fencing products ("Product") will be free from defects in material and workmanship for the warranty period. This limited warranty is valid beginning on the date of Product purchase.

Barrette Outdoor Living warrants the Product against peeling, flaking, rotting, chipping, cracking, blistering, splintering, corrosion and rusting; or abnormal discoloration/fading* under normal atmosphere and weather conditions.

*After prolonged exposure to outdoor environments, all products will experience some gradual fading over time and is considered normal (up to a standard variation determined by Delta E color measurement, not to exceed Delta 5). Degrees of fading vary depending on geographical location, air pollution, exposure and other factors.

What this warranty does not cover: This limited warranty does not cover damage resulting from: misuse, abuse, improper storage or handling, improper installation, other aluminum products and accessories that are not manufactured by Barrette Outdoor Living, or manufactured for specific use in aluminum fence applications; damage caused by events beyond human control including but not limited to damage caused by animals or natural events; impact of foreign objects, fire, earthquake, flood, lightning, hail, hurricane, tornado or other casualty or act of God; movements, distortion, collapse or settling of ground or structure on which the fence is installed. This limited warranty does not cover costs of removal or disposal of product, or reinstallation of replacement product.

What Barrette Outdoor Living does to remedy the problem: Should your Barrette Outdoor Living product prove defective under warranty, visit the website or call the phone number listed below. Barrette Outdoor Living requires written notice or phone call within thirty (30) days of discovering the defect and you must show original proof of purchase receipt. You will be required to provide to Barrette Outdoor Living pictures and/or samples of the defective Product. If it is determined by Barrette Outdoor Living, in its sole discretion, the Product has a manufacturer defect in material or workmanship, Barrette Outdoor Living will replace with new or equivalent products; labor is not included in warranty. If the Product is discontinued, Barrette Outdoor Living will repair or replace the Product with a product in comparable quality or price range.

Barrette Outdoor Living reserves the right to discontinue or modify any of its products, including the color of its products without notice to the purchaser. Barrette Outdoor Living does not warrant that any replacement material will match or be identical to the

original Product as replacement products may vary in color or gloss in comparison to the original Product as a result of normal weathering.

Transferee Coverage: Limited lifetime warranty coverage will be extended to one (1) transferee with the following limitations: the one (1) transfer shall only be from residential homeowner (original Product purchaser) to a second homeowner. After a transfer, the warranty is valid thirty (30) years from the date of the original purchase.

The thirty (30) year limited warranty for commercial installations cannot be transferred.

Registration: To activate this warranty, fill out the product registration form on the website listed below, or mail a completed registration card to Barrette Outdoor Living. Registration of Product must be within thirty (30) days from date of Product purchase for warranty to be valid.

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This warranty is effective for products purchased after January 1, 2019. This warranty can also be found online at Alumi-Guard.com/warranty.

To register your product, visit Alumi-Guard.com In case of a warranty claim call 1.877.258.6448



