FRAMELESS GLASS RAILING & LIGHTING SYSTEM

INSTALLATION GUIDE











BEFORE YOU BEGIN

- Low Iron glass must be used to support our lighting system as advertised. Traditional float glass or hybrid low iron glass will not create illumination and violates any warranty.
- Compliance with local building codes is the responsibility of the installing party. IBA (Illuminated Balustrade Australia), nor her affiliates are responsible for code interpretations. Contact us at **info@IGrailing.com** for product testing results.
- Due to the weight and nature of glass panels we recommend a two-person lift when moving the panels.
- IG Railing Glass is low iron tempered glass. Each piece is durably packaged with corner guards, foam wrap, and individually boxed. Opened boxes are not returnable. When moving and storing glass, protect it in a manner that the edges do not make contact with hard surfaces such as concrete.
- We recommend the following safety gear when handling glass: safety glasses, safety boots, and gloves.

RECOMMENDED TOOLS

LEVEL

ALLEN KEYS 4MM & 6MM

TAPE MEASURE **CHALK LINE** & PENCIL

DRILL BITS 3/4" & 1/4"

8" DRILL **EXTENSION** **DRILL & IMPACT**







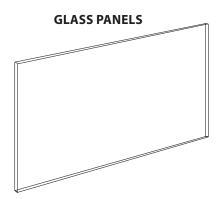


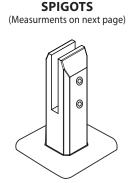






COMPONENTS





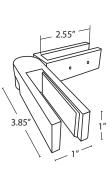


SCREW PLATE

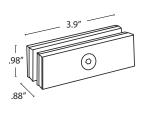


TOP RAILS

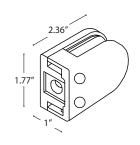
ADJUSTABLE CLAMP (Intended for glass to glass corners or angles)



180° CLAMP (Standard glass to glass connector)



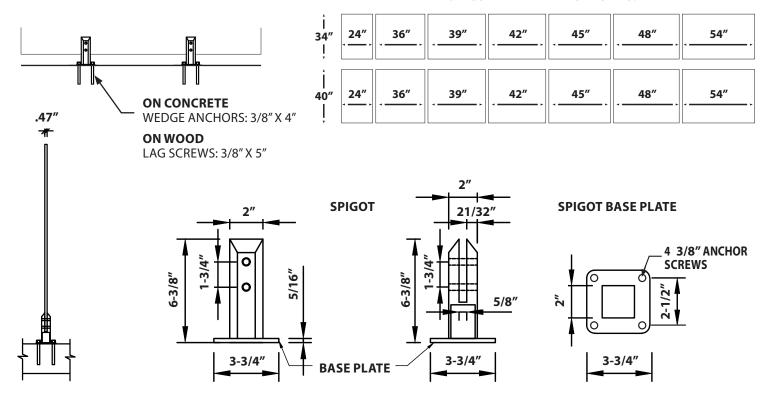
WALL CLAMP (Option to connect railing section end to structure)



LIGHT KIT (Full install guide on back page)

PART MEASURMENTS

GLASS PANEL AVAILABLE SIZES:



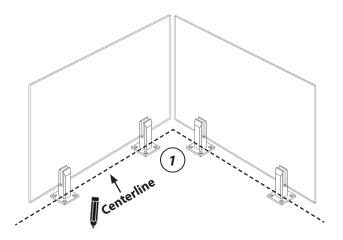
INSTALLATION

NOTE:

- For installation on wood deck surfaces, spigot screw holes must be aligned with proper deck blocking. Before installing the spigots, make sure to install vertical blocking where required.
- For installation on concrete surfaces, we suggest allowing a min 2" gap from the concrete slab edge to the closest spigot drilling hole, which will bring the centerline of your spigot (and therefore your glass panel centerline) to about 3-1/2" away from the edge.

(1) MARK THE RAILING CENTERLINE

Mark the glass panel centerline across all railing sections. Note where intersecting centerlines meet for panel sizing and placement.



(2) MARK THE PANEL POSITIONS

Mark the starting and finishing point of each glass panel along the railing centerline. Make sure to account for desired spacing between each panel. Inline panel gaps are a minimum of 1/2" and maximum 2". Corner gaps are a minimum of 2" and maximum 3-5/16".

3 MARK THE SPIGOT POSITIONS

To mark the spigot center, measure from line 2 in for 1/4 length of the glass used:

24" wide = 6" in from edge

36" wide = 9" in from edge

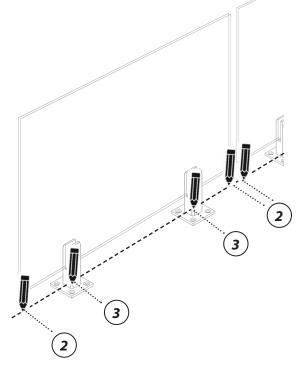
39" wide = 9.75" in from edge

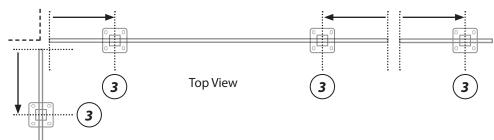
42" wide = 10.5" in from edge

45" wide = 11.25" in from edge

48" wide = 12" in from edge

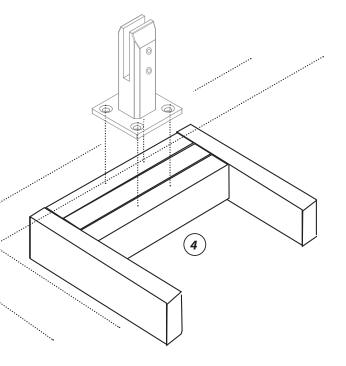
54" wide = 3 spigots required. 9" in from each edge with a middle spigot 27" in from either edge.





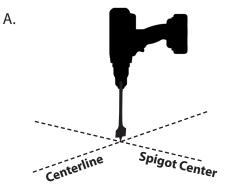


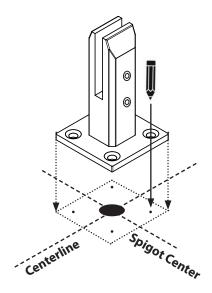
Vertical blocking vs. horizontal blocking is required to build adequate structural integrity underneath the decking to receive 4 lag screws into each spigot.



INSTALLING THE SPIGOTS

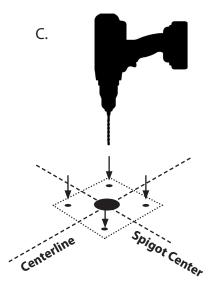
- A. Using a 3/4" drill bit, drill a hole on the spigot centerline. This will be used to route the LED lighting into the spigot.
- B. Align your spigot across the railing centerline and on its respective reference point completed in Step 3. Mark the 4 anchor points.
- C. Using a 1/4"-5/16" drill bit, drill holes for the 3/8" lag head screws.
- D. Install 8" extension onto your drill prior to securing the spigot with structural fasteners to eliminate scratching the spigot finish with your drill.
- E. Secure the spigot in place by inserting 4 lag head screws. Spigot's should be installed with set screws facing the interior of the deck. Tighten the 4 lag head screws firmly.
- F. Put the spigot cover in place.

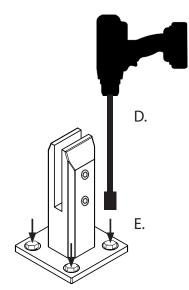


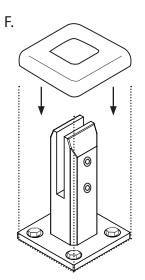


B.

Note: Use an 8" extension to not mar the finish of the spigot.



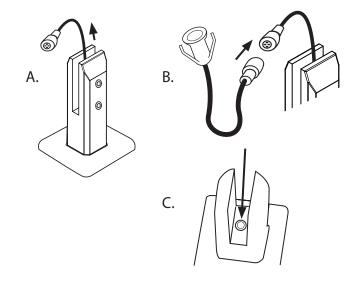




(6) INSTALLING THE LED LIGHTING

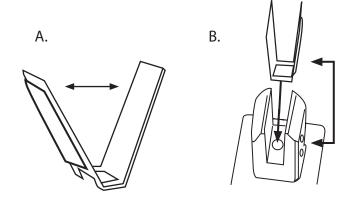
NOTE: Refer to the IG Railing Light Kit Installation Guide on the back page for more specific details on installation.

- A. Feed the end of the main cable extension lead through the center hole and out the top of spigot.
- B. Connect the end of the LED light to the end of the extension lead.
- C. Once all the lights are working correctly, feed the extension lead and LED light cable back through the hole in the spigot. The light should sit flush in the spigot base.



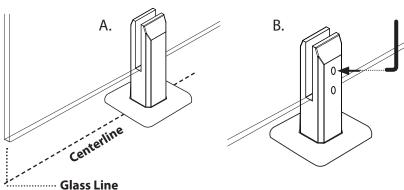
7 INSTALL THE SPIGOT SCREW PLATE

- A. Before inserting, flex screw plate into a V shape using your hands.
- B. Ensure the stainless steel plate faces the side with spigot set screws. Then insert into the spigot, lined up with the hole at base.



$oldsymbol{(8)}$ INSTALLING THE GLASS RAILINGS

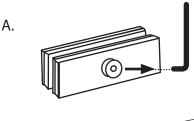
- A. Insert the glass panels and align so it is flush with the marks done in step 2.
- B. Secure the glass panel into the spigot by tightening the allen key screws.

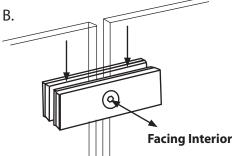


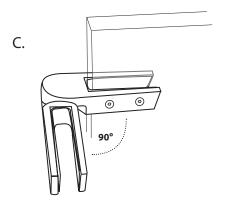
INSTALLING THE GLASS TO GLASS CLAMPS

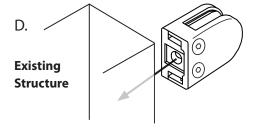
Installing glass clamps eliminates scissor action of the glass which could prevent harm. They also offer an easy way to align of the glass panels in a run. We recommend installing glass connectors approx. 2" below the top edge of glass.

- A. Loosen the allen screw and separate the metal components. Install vinyl grip to the glass in desired location of where clamp will be placed.
 - **Tip, use double sided tape to adhere vinyl to glass. We recommend placement 2" below the top edge of glass.
- B. Install the glass clamp over the vinyl grip with the screw facing the interior of the deck. Manually tighten the allen screw to secure clamp.
- C. The adjustable corner clamp is used for a 90 degree corner and angles between 42 and 180 where necessary. Adjustable corner clamps include vinyl grip, screw plate, and adjustable corner clamp. Install the vinyl grip as recommended in 9B, using double sided tape to secure to the glass. Using double sided tape again, secure the metal screw plate to the vinyl with screws facing in to the deck.
- D. (When Applicable) To connect railing section end to an existing structure, use a Wall Clamp. Fastener is not provided to secure to existing structure. Select recommended fastener depending on the material securing to. Secure the Wall clamp to structure first, then insert glass railing and manually tighten the allen screws to secure clamp.
- E. When connectors are secure, check spigot set screws to tighten, and then again check tightness of all glass clamps.



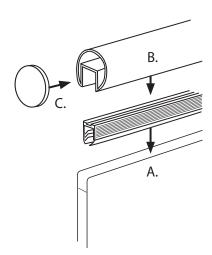






INSTALLING TOP RAIL

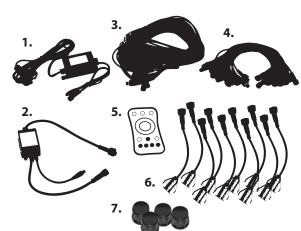
- A. Push gusset over glass first.
- B. Next press top rail over the gusset onto glass.
- C. Press endcaps, insert inline connectors and adjustable connectors as applicable.



LIGHTING KIT INFO & INSTALL

IMPORTANT

- Light kits are available in 10, 16 or 30 light offering. Modification will transfer warranty responsibility to the installer.
- DO NOT increase the power supply as overheating may occur.
- 1. LED POWER SUPPLY
- 2. RGB CONTROL BOX
- 3. MAIN CABLE
- 4. EXTENSION LEADS
- 5. RGB TOUCH PAD
- 6. LED LIGHTS
- 7. SPARE TWIST CAPS



INSTALLATION

- 1. Start with the LED power supply (1) and RGB control box (2). Connect the male 2-pin connection on the LED power supply to the female 2-hole connection for the RGB control box. Find the flat spot on each connection, line up, and push together (A). There are also arrows that can be lined up (B). Once the connection has been made, seal the joint by twisting the tightening cap. Ensure this is tight as it also keeps the connection waterproof.
- Unwind the main cable (3) and undo all twists. Find the female end of the main cable with 4 holes and connect to the 4-pin connection on the RGB control box (2). Find the flat spot on each connection, line up, and push together. Once the connection is made, again seal the joint by twisting the tightening cap.
- 3. Determine how many lights will be required, connect that number of extension leads (4) to the main cable (3) - one extension lead per junction. Connect the male 4-pin junction to the female 4-hole extension lead, again line up the flat spots when making connection, twist and seal the connection with the tightening cap. Any junction that does not require an extension lead, MUST BE SEALED by using the spare twist caps (7) provided. Your main cable is now ready to use.
- 4. Remove the RGB control touchpad from its wrapper (5), then remove the plastic shim located at the bottom of the touchpad. This will make a positive connection between the pad and the battery. Your touch control is now ready to use.
- 5. Run main cable (3) under your deck, loosely clipping the cable to the sub-structure of the deck. Only use cable clips to attach the cable to the structure, ensuring the cable is not crushed or pinched when installing.
- 6. Once your main cable (3) is connected to your sub-structure, feed the end of the extension lead (4) through the 3/4" hole you have already pre-drilled in step 5A of this guide, and out the top of the spigot.
- 7. Connect the end of each LED light (6) to the end of each extension lead (4) that is protruding out of the top of the spigot. Again, match the flat spots on each connection and twist the cap on tightly, sealing the connection. Repeat this for every light connection. Any lights that have not been used keep as spares. Now you are ready to test the light kit to ensure all connections are working correctly.
- Plug the LED power supply (1) into a power source and turn on the power.
- Using the RGB touchpad (5), press each button to ensure everything works correctly. Should a light be a different color, this means you have connected either the LED light (6) or extension lead (4) incorrectly. Simply disconnect and reconnect correctly.
- 10. Once all the lights are working correctly, feed the remaining extension lead (4) and LED light cable back through the hole in the spigot. The light should sit flush in the spigot base. Repeat this for every light.

