

7873 NE Day Road, Bainbridge Island, WA 98110

# Clearview<sup>®</sup> Railing System Installation Instructions - CABLE HARDWARE

Disclaimer: Hardware provided by AGS Stainless, Inc., when installed properly, can be used as 'infill' as defined by the national governing building codes. It is the responsibility of the end user to ensure that the railing system, in particular, the cable spacing, meets the requirements of the local governing code.

Note: The following guidelines are for cases where AGS hardware is attaching to wood, composite or other materials. They will address the most common scenarios. If you have a situation that is not covered and you cannot figure out, do not hesitate to call us at: (888) 842-9492.

## STANDARD FITTINGS

- 1. Layout the holes on each side of the posts in the run.
- 2. Drill a 9/32" hole half way into the post from each side, taking care to keep the hole straight (this applies to level and sloped conditions).
- 3. Repeat Step 2 for all of the posts in a run.
- 4. Slide a cable all the way into a threaded fitting and crimp it ½" from the end. Rotate the fitting 180 degrees and crimp it ½" from the previous one. TIP: Any distortion resulting from crimping is easily straightened by tapping lightly with a hammer.
- 5. Run the attached fitting through all of the posts.
- 6. Place a flat washer and screw one 1/4" jam nut onto the fitting so that threads extend 1/8" past the nut. Screw an acorn nut on to the fitting and securely tighten it against the jam nut, locking it in place.
- 7. At the other end, pull the cable taut and mark it at the *outside* face of the post.
- Cut the cable 2" shorter (1 ¾", if using a beveled washer) than this mark and attach a fitting as you did in Step 4.
- 9. Repeat Steps 4-8 until all the cables are installed.
- 10. TIGHTENING THE CABLES
  - a. Starting at the mid height of the post, tighten the barrel nut just until the slack is taken out.
  - b. From the initial cable, move up one, down two, up three, down four, etc., tightening each one as you did in Step 10a until all cables are taut.

# BARREL NUT ASSEMBLIES

- 1. Layout the holes on each side of the posts in the run.
- 2. Using a 9/32" bit, drill half way into the post from each side, taking care to keep the hole straight (this applies to level and sloped conditions).
- 3. Repeat Step 2 for all of the posts in a run.
- 4. String the cable through <u>all</u> of the posts in the run except for the end post.
- 5. Slide the cable all the way (about 2") into the threaded fitting and crimp it ½" from the end. Rotate the fitting 180 degrees and crimp it ½" from the previous one. **TIP: Any distortion resulting from crimping is easily straightened by tapping lightly with a hammer.**
- 6. From the outside face of the end post, use the 3/8" bit to widen the 9/32" hole to a depth of 1 ¾" into the post.



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- 7. Slide a flat washer over the barrel nut and insert into the enlarged hole. Screw the fitting into the barrel nut until you feel the resistance of the nylon patch. Tighten the barrel nut one and a half turns past this point.
- 8. At the other end, pull the cable taut and mark it at the outside face of the post.
- 9. Cut the cable 2" shorter (1 ¾", if using a beveled washer) than this mark and attach a fitting as you did in Step 5.
- 10. Repeat Steps 6 and 7.
- 11. Repeat Steps 4-10 until all the cables are installed.
- **12. TIGHTENING THE CABLES** 
  - a. Starting at the mid height of the post, tighten the barrel nut just until the slack is taken out.
  - b. From the initial cable, move up one, down two, up three, down four, etc., tightening each one as you did in Step 10a until all cables are taut.

## LAG TERMINALS

- 1. Layout the cable holes on the inside face of the end posts and on each side of the intermediate posts in the run.
- 2. Drill a  $1/8'' \times 2''$  deep pilot hole into the end posts.
- 3. Using a 5/32" drill bit, drill half way into the intermediate posts from each side, taking care to keep the hole straight (this applies to level and sloped conditions).
- 4. Run the cable through all of the intermediate posts.
- 5. At the end post, use a 10 mm or an adjustable wrench to run the lag terminal all the way in.
- 6. Unscrew the cover piece until it is held on to the terminal body by only a couple of threads. **NOTE: You** can also completely separate the parts. Just make sure not to lose the brass washer on the inside.
- 7. Work the cable into the center of the three jaws and feed it in until it stops.
- 8. Use a 12 mm or an adjustable wrench to tighten the jaws in the cover piece onto the cable.
- 9. Lock the cover piece in place with the jam nut.

#### ADJUSTABLE LAG TERMINALS

- 1. Follow Steps 2 and 5 for LAG TERMINALS.
- 2. Adjust the turnbuckle so that half of the total thread length is showing on each side of the turnbuckle body.
- 3. Pull the cable taut and mark it 1/8" from the base of the threads that receive the cover piece. Cut the cable at your mark.
- 4. Unscrew the cover piece until it is held on to the terminal body by only a couple of threads. **NOTE: You** can also completely separate the parts. Just make sure not to lose the brass washer on the inside.
- 5. Work the cable into the center of the three jaws and feed it in until it stops.
- 6. Use a 12 mm or an adjustable wrench to tighten the jaws in the cover piece onto the cable.
- 7. Lock the cover piece in place with the jam nut.
- 8. Tension the cable by tightening the turnbuckle with a small screwdriver or hex wrench.
- 9. Lock the turnbuckle by tightening the jam nuts against it.

#### **DECK TOGGLES**

- 1. Layout the cable holes on the inside face of the end posts and on each side of the intermediate posts in the run.
- 2. At the end posts, position the deck toggle so that it swivels in the desired direction, center it on the mark and make a new mark in the center of one of the screw holes



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- 3. Using a 5/32" drill bit, drill half way into the intermediate posts from each side, taking care to keep the drill straight.
- 4. Run a cable through all of the intermediate posts of one run.
- 5. Slide a cable all the way into the toggle and crimp it half an inch from the end. Rotate the fitting 180 degrees and crimp it half an inch from the previous one. **TIP: Any distortion resulting from crimping is easily straightened by tapping lightly with a hammer.**
- 6. Attach the deck toggle to the post with one of the #14 screws at the mark you made in Step 2.
- 7. Install the second screw.

# ADJUSTABLE DECK TOGGLES

- 1. Adjust the turnbuckle so that half of the total thread length is showing on each side of the turnbuckle body.
- 2. Attach the deck toggle to the post with one of the #14 screws at the mark you made in Step 2, above.
- 3. Install the second screw.
- 4. Pull the cable taut and mark it where it meets the end of the toggle.
- 5. Add 1 ½" of length to the cable and cut it.
- 6. Slide a cable all the way into the toggle and crimp it half an inch from the end. Rotate the fitting 180 degrees and crimp it half an inch from the previous one. **TIP: Any distortion resulting from crimping is easily straightened by tapping lightly with a hammer.**
- 7. Tension the cable by tightening the turnbuckle with a small screwdriver or hex wrench.
- 8. Lock the turnbuckle by tightening the jam nuts against it.