VIEWRAIL

FLIGHT PLAN

Installation Instructions

Floor-to-Wall Installation

Unpack: What's in the Crate?

- Your Stringer
- Tread Screws – (8) per tread
- (1) Torque Wrench
- (1) Socket (for the brackets that bolt to the stringer)
- (8) Hanger Bolts (for the bottom tread only)
- (1) Hanger Bolt Driver
- (1) FLIGHT Installation Kit (contains mounting hardware unique to your project)

Tools You'll Need

- (1) Level
- (1) Tape Measure
- (1) Come Along Winch (Optional, strongly recommended)
- (2) Lag bolts to hold the stringer in place until the through bolts are mounted.
- (6) Lag bolts to attach L Bracket to Header (if necessary)

Preparation

- Unbox the stringer and carry it to the installation site.

  Note: These stringers are built from thick, mild steel, so you're going to need a team on hand to help move and position the stringer.

- Once the stringer is at the installation location, review and verify the accuracy of the measurements provided on your design drawing. If your measurements on the job site do not match the measurements on the drawing, view our bracket adjustment page. *Viewrail FLIGHT* tread brackets are adjustable up to 1/2″.

- Measure from the finished floor to where the top of the stringer's header plate will be located on your header. This measurement is provided on your drawing.

- Draw a horizontal line to represent where the top of the header plate will line up on the wall. Use a level to ensure that this line is level. Then find the center of the header and make a mark. (*see fig. A*)

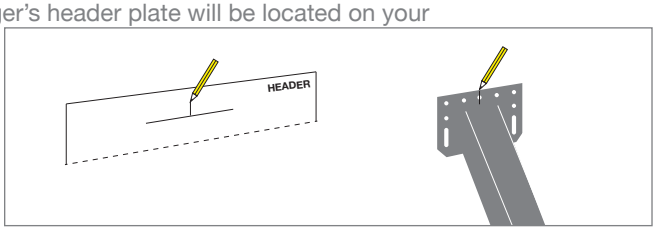


fig. A *fig. B*

- Next, place a mark on the center of the header plate. You'll use these marks to help align your stringer during installation. (*see fig. B*)

- Lift the stringer with a team, or simplify the process with the help of a come-along winch.

  When using a come-along winch, attach the winch to a strong point in the framing of the house. Place a strong strap around the stringer and connect it to the come-along winch. Ratchet the winch up to lift the stringer. You'll still want someone to help guide the stringer into place, but using a winch will significantly ease your installation.

Mount the Stringer

WARNING: Do not attempt to mount your stringer to drywall. At minimum double LVL header or triple 2x12 required.

- Set the stringer to the location notated in the drawings. Check to see that the top of the header plate follows the level line you drew on the header. Place a level on the header plate to ensure the center lines on the header and header plate align. (*see fig. C*)
- Insert a lag bolt through one slot of the header plate to help hold it in place.
- Place the bottom tread on the bottom bracket, and another tread on the top bracket. Align the predrilled holes on both treads with the corresponding holes on each bracket.

  Note: The bottom tread can be identified by its deeper plow.
- If mounting against a wall, ensure the bottom tread, top tread, and stringer are parallel to the adjacent wall. If any of these elements are not parallel, shim the header plate as necessary.
- Next, level the treads. Shim if necessary.
- Once everything is level, put a second lag bolt into the header plate to help hold the stringer in place as you through-bolt the stringer.
- Secure your stringer by through-bolting your header and base plates. Populate all (7) holes of the header plate with through bolts. Populate all (8) holes of the base plate with through bolts, lag bolts, or concrete anchors. Torque the bolts to 80 ft-lbs.

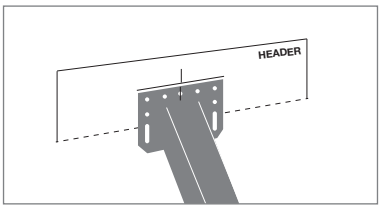


fig. C

Touch Up Your Stringer

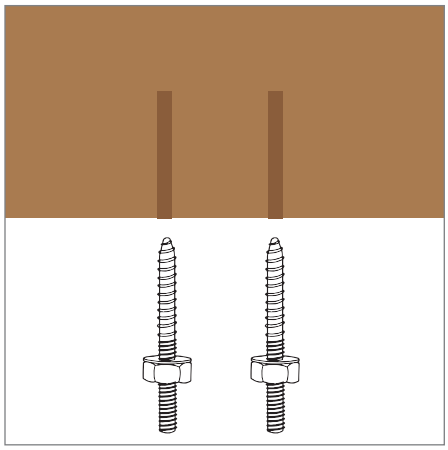
- Use touch up paint to fix any powder coat that was chipped or scratched during your stringer installation.

  Note: It's easiest to complete this step before adding your treads because the full stringer is exposed. However, you may repeat this step when your installation is complete.

Mount Nosing and Treads

Note: There are separate instructions for the bottom tread of the stringer. The bottom tread will likely be routed so it can sit lower on the stringer. It will require rail bolts for installation, giving it a slightly different installation process. Be sure to follow the Installing the Bottom Tread *instructions for the bottom tread of your staircase.*

- Start by drilling (4) 1” diameter holes evenly spaced across the nosing. Hole depth is dependent on fastener. Then measure and mark location for pre-drilled holes in the substrate if required and predrill holes using a bit appropriate for material and fastener size.
- Position the nosing level with finished flooring. Secure one fastener and check that the nosing is level before securing the remaining fasteners.
- Apply glue to 1” wood plugs (provided) and install in the holes.
- Next, place your treads on the tread brackets.
- Position the treads on the brackets so that their predrilled holes align with the holes of each bracket. **If any adjustments are needed, follow the bracket adjustment steps on page 4 before mounting your treads.**
- Make sure the treads are level. Shim if necessary.
- Using a T30 torx bit, install the tread mounting screws.

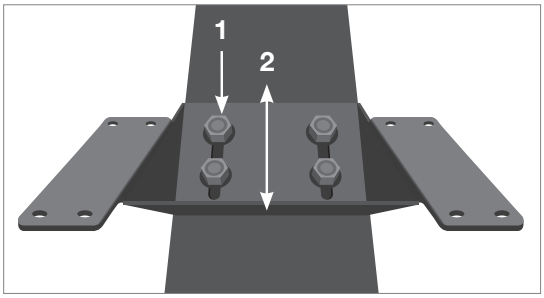


Installing the Bottom Tread

- Mark the center of the tread and make sure that the space between the first and second tread matches the drawing.
- Mark the location of the tread bracket holes.
- Remove the tread from the bracket and pre-drill 1/4″ pilot holes 2″ deep at the marked locations for the rail bolts.
- Insert the hanger bolts into the tread with the hanger bolt driver (provided).
- Place the tread back on the bracket.
- Put nuts on the hanger bolts and tighten.

Adjusting your Tread Brackets

Remember, this step is only required if the measurements on the installation site do not match the ones we received when we created your drawing. If all actual measurements match your drawing, your tread brackets should be positioned correctly, and you will not need to complete this section.



Adjusting Tread Location

1. Loosen the nuts on the tread base plate.
2. Slide the base plate up or down until it is at your desired position.
3. Place a level on top of the base plate and verify that it is positioned correctly.
4. Torque the stud plates to 70 lbs.
5. Repeat this process until all tread brackets are level and positioned as needed.

Wall-to-Wall Installation

Unpack: What's in the Crate?

- Your Stringer
- Tread Screws – (8) per tread
- (1) Torque Wrench
- (1) Socket (for the brackets that bolt to the stringer)
- (1) Container of Touch Up Paint

Tools You'll Need

- (1) Level
- (1) Tape Measure
- (2) Come Along Winch (Optional, strongly recommended)
- Attaching Hardware – (15) 1/2″ through bolts grade 5 min. Grade 8 preferred.
- (4) Lag bolts to temporarily hold the stringer in place until the through bolts are mounted. Not acceptable for permanent mounting.

Preparation

- Unbox the stringer and carry it to the installation site.

  Note: These stringers are built from thick, mild steel, so you're going to need a team on hand to help move and position the stringer.

- Once the stringer is at the installation location, review and verify the accuracy of the measurements provided on your design drawing. If your measurements on the job site do not match the measurements on the drawing, view our bracket adjustment page. *Viewrail FLIGHT* tread brackets are adjustable up to 1/2″.

- Measure from the finished floor to where the top of the stringer's header plate and base plate will be located on your header. This measurement is provided on your drawing.

- Draw a horizontal line to represent where the top of the header plate will line up on the wall. Use a level to ensure that this line is level. Repeat this process for the base plate. Then find the center of the header and base and make a mark. (*see fig. A*)

- Next, place a mark on the center of the header plate and base plate. You'll use these marks to help align your stringer during installation. (*see fig. B*)

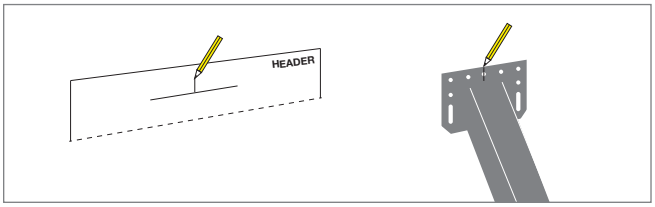


fig. A *fig. B*

- Lift the stringer with the help of a come-along winch.

  When using a come-along winch, attach the winch to a strong point in the framing of the house. Place a strong strap around the stringer and connect it to the come-along winch. Ratchet the winch up to lift the stringer. You'll still want some people to help guide the stringer into place, but using a winch will significantly ease your installation.

Mount the Stringer

WARNING: Do not attempt to mount your stringer to drywall. At minimum double LVL header or triple 2x12 required.

- Set the stringer to the location notated in the drawings. Check to see that the top of the header plate follows the level line you drew on the header. Place a level on the header plate to ensure the center lines on the header and header plate align. (*see fig. C*)
- Insert a lag bolt through the header and base plates to help hold the stringer in place as you mount it.
- Next, place the level on the tread brackets (running from front to back) to ensure that they are level as well.
- Once everything is level, put a second lag bolt into the header and base plates to help hold the stringer in place as you complete the through-bolting process.
- Secure your stringer by through-bolting your header and base plates. Populate all (7) holes of the header plate with through bolts. Populate all (8) holes of the base plate with through bolts, lag bolts, or concrete anchors. Torque the bolts to 80 ft-lbs.

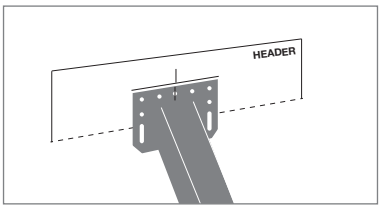


fig. C

Touch Up Your Stringer

- Use touch up paint to fix any powder coat that was chipped or scratched during your stringer installation.

  Note: It's easiest to complete this step before adding your treads because the full stringer is exposed. However, you may repeat this step when your installation is complete.

Add Treads

- Place your treads on the tread brackets.
- Position the treads on the brackets so that their rise and run match the rise and run on your project drawing. **If any adjustments are needed, follow the the bracket adjustment steps on page 4 before mounting your treads.**
- Examine the treads, checking to see that they are centered on the stringer and are sitting level on their brackets.
- When all the treads are in their correct position, drill 1/8″ pilot holes, 2″ deep.
- Using a T30 torx bit, install the tread mounting screws.