FLIGHT STACK Information Packet





Table of Contents

Stack Timeline	3
Stack System Overview	4
Stack Rules	9
Stack Reveal Feature	10
"Steel First" Shipping	11
Stack Preliminary Drawing Example	12



Stack Timeline

The goal of this timeline is to clarify all timeframes and important details necessary for the Viewrail Stack System. There are clear expectations of documents required before production, as well as for on-site installation requirements. Here are a few important points to keep in mind:

- 1. Timeframe Start Date. All timeframes start from the date we receive your measurements.
- **2. Revisions Add Time.** The more revisions, the longer the timeframe. Accurate measurements are key to expediting the process.
- **3. Custom Designs.** "Outside the box" designs will <u>always</u> extend lead time. Products that are "firsts" or require testing inevitability require additional weeks or months in fabrication.
- **4. Timeframe Scope.** Straight configurations will be on the shorter end of the time estimates, and U-Shape configurations will be on the longer end of time estimates. Again, complexity adds lead time.

2 WEEKS

Preliminary Drawings

Based off the on-site measurements, our engineers will put together the first round of preliminary drawings.



Revisions (Multiple)

Clear communication between the client and engineer is imperitive for efficient & accurate revision drawings.



Final Drawings

Once revisions are complete, a final drawing will be sent for final approval



Production Drawings & Data Entry

Detailed production drawings and data will be generated in our machines for custom fabrication.



Production

By beginning with raw materials, we guarentee the highest standards of craftsmanship for your Stack system.



Total Timeframe

If all the above steps are met, the average timeframe will take 13-17 weeks.





Stack System Overview



With awe-inspiring artistry, FLIGHT Stack stands a level above the rest. As you travel from one level to the next, the beautiful tread blocks create a seamless waterfall effect, blending rise and run in seamless perfection. As the first of its kind, Stack hides all of its metal hardware and components, leaving the appearance of only wood treads connecting one floor to the next. This masterpiece is thoughtfully engineered and intentionally designed for open spaces, creating a bold statement in modern homes and business complexes alike.

Materials Needed for Wall & Floor Connections

Stack is similar to all of our FLIGHT Systems in Header and Footer Requirements. Triple 2X Blocking or Double LVL Blocking are the minimum requirements for code.



Header Template

The first thing you will need to do is install your header template. This is made from ½" thick Plywood, and is much easier to manipulate than a typical steel header. Be sure to connect this directly to your blocking material, cutting out the drywall with a straight edge if necessary. It is important that the template is completely level, as this sets how your stringers will attach, determining how level your overall system is.

Header Template



Installation Overview

After your Header Template is level and properly installed, you can attach your header brackets on either side. It is important to start at the top floor and work your way down to the bottom. This will be the same for all Stack systems (Straight, Switchback, 90 Degree, or U-Shape). Once your Header Brackets are installed, you can attach both the metal stringers to the sides.



Once your stringers are anchored in the headerbrackets, move down to both pre-attached foot brackets. Take a 3-axis laser level and confirm that each of the stringers are both straight and level. Then, anchor the feet into the sub-floor.





After your steel stringers are anchored, attach the 1" Russian Birch cutouts to both stringers on the inside of the stringer for each run. Then, attach the ½" Plywood stringer cutout on the outside of the stringer. If you are working against a wall, the step will need to be completed before anchoring the stringer into the floor, since you will only have a half inch of clearance. Attach the plywood with finish screws through the pre-drilled holes in the steel stringers, into the 1" Russian birch on the interior side of the stringer.



After this, you will be able to attach your $\frac{1}{2}$ " Plywood front support and 1" Russian Birch rear brace in the back. You will use either Wood Glue or Construction Adhesive and screws to attach both the $\frac{1}{2}$ " Plywood and 1" Russian Birch.

*If you are installing LEDs, this is the point at which you will run your wire from the bottom of the stringer up to the top, preferably using the inside stringer.

Once both of these are installed, you are ready to install your treads and risers.







Beginning at the top, install your first pre-assembled tread and riser. Apply Construction Adhesive on the outer edges on the stringer for both the tread and riser. Then, utilizing the #8-1 ¹/₄" Pocket Holes underneath, screw through the stringer into the underside of the tread. Finally, secure the riser by screwing finish screws through the backside of the 1" riser bracket. Continue this process down the system on the top-side only. Once all top-side treads and risers are installed, you are ready for the underside.



Beginning at the top, take your pre-assembled anti-riser and anti-tread and apply construction adhesive to the outer edges. Fit and press them up, utilizing finishing nails to hold them in place. Continue this process until you reach the bottom of the stringer. At this stage, it is important to make sure that your top-side and underside are completely flush with one another. Sand down any areas where there is overhang or the two wood systems are not flush. Once you are satisfied, you are ready to install the exterior rubber gasket, and prepare for glass railing installation.





Starting at the top and working down to the bottom, install your black rubber gasket over the $\frac{1}{2}$ " Plywood. This will protect the glass from any sharp edges. After this install your Glass Clamp and the rest of your components for the Vedera Glass System.

Once your components are installed, you are ready for glass installation. After your glass is installed, place the wood caps over top of the glass clamps to conceal your glass components. Finally, install your glass handrail top cap to complete the look of your Stack system.







Stack Rules

Viewrail maintains certain standards and requirements that must be met. If these requirements are not reached, Viewrail will not be able to produce a Stack system for the client. Please verify your project meets our standard rules:

- Max Width 60"
- Min Width 27" between glass; 34" between opening
- Max Depth 13"
- Min Depth 11", no nosing
- Code Compliance on the rise
- Railing Always Vedera Glass, no other option
 - 1/2" tempered
 - 9/16" laminate
- **Pans -** No pans for 12 treads and under.
- Systems at or over 15 treads Requires additional engineering; must go through R&D
 - · Requires pans and most likely wall blocking on one side
- Systems at or over 12 treads If you are without wall blocking on either side, you will require a custom solution
 - Requires feasibility check, cannot be waived.





Stack Reveal Feature

The Stack Reveal is a 1" black border that segments each tread across the Stack system providing contrast between each tread and riser. If the system has LEDs the reveal on the front will house the LED strip as well. The Glass Extension is how far the glass extends beneath and behind the caps in the Stack system. It is typically 1/8" in height.



I understand and agree that my FLIGHT Stack system will be engineered and manufactured to the standards above, and that it will have both \sim 1" black reveal and \sim 1/8" glass extension.



"Steel First" Shipping

"Steel First" Shipping is an innovative step Viewrail is taking to provide a seamless installation experience for our customers. This initiative will both expedite the installation process and ensure accuracy of measurements for the final production of the finished wood products and glass panels. Currently, Viewrail is able to fabricate steel much faster than wood products. Instead of holding to longer lead times, it is highly beneficial for installers to receive the steel framing and internal wood supports ahead of time, expediting the in-field install time. Below are some of the benefits of the "Steel First" initiative:

- · Your project is not held up by wood lead times
- · You can see if in-field measurements are accurately applied in fabricated products
- · You can install the steel structure with the supporting Plywood and Russian Birch ahead of time
- · Viewrail will ship out temporary plywood panels to the dimensions of your glass panels

Here is a list of what you can expect to receive in your "Steel First" shipment:

- All steel structural supports, both for stringers and platforms
- Russian Birch stringer supports
- Plywood stringer supports
- · Russian Birch tread and anti-tread supports
- · All screws, hardware, and components necessary for on-site installation
- · Installation instructions, engineered drawings, and paperwork for installation

As a final note, it is important to measure and level often when installing your stringers and support systems on site. Verify that all in-field measurements are correct and meet the requirements as laid out within the engineered drawings. This will ensure your wood treads, risers, and glass panels are fabricated correctly. If there is need for adjustment, contact your Project Engineer as soon as possible. This will enable them to correct your project before production in our wood and glass departments.





Example Drawings

















