



Installation Guide

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Introduction

- Thank you for your selection of NorthRidge Stone Panels. As a purchaser and/or installer we recognize that you have demonstrated your confidence in NorthRidge Stone with your purchase. Our hope is that you have a great experience and you become a repeat purchaser or installer.
- NorthRidge Stone is a unique stone panel system that provides many advantages. The
 most unique feature of the system is the patented insert system that allows fasteners
 to be distributed throughout the panel. It is a simple, strong, and unique way of
 attaching stone siding. This system is effective, innovative and is likely to be completely
 new to most users.

Again, Thank you!



These are not critical items, but our suggestions to make your installation as efficient as possible.

- Use a conventional cordless driver vs an impact gun. We have found that regular screw-guns provide a much better "feel" to tell when the screws have been fully seated. Impact drivers tend to mute out the feel of the screws tightening inside the panel and are more likely to result in overdriving or spinning screws.
- 2. Start your screws before bringing a panel to the wall. We have found installation works best when there is a simple bench-level work surface next to the pallet for starting screws. Pull each panel from the pallet and set with finished surface up. Setting the panel in this way will reduce the shadow in the joints and make it much easier to see and start screws.
- Two-person job Panels can definitely be installed by a single person, but the job is much easier and enjoyable with two people. Have one person hold the panel while the other drives screws. Have your workmate sing a popular song while you work. Have them stop if they are terrible.
- 4. Start from your corners Start with your exterior corners and work away from there.
- 5. Get rainscreen right. Some rainscreen products are produced with a 1" x 1" pressed grid. This grid will be visible through the outside surface felt and allow you to compare your rows of panels with for straightness and level now. If you take additional care to make sure your rainscreen is installed straight and level, it can serve as a convenient secondary reference.
- 6. Install ledges before stone. Layout a horizontal reference line 3" above where you would like your stone to stop. The layout for the stone panels should be predictable and on a 9" center-to-center dimension.
- 7. Don't use rainscreen behind ledges. Rainscreen product is not required or advised behind trim or ledge components. Securing directly to sheeting will make for a much more stable mounting.

Install Challenges

- Let's get the challenges resolved first. These are areas where challenges with the project are most likely to arise. You may find these points repeated throughout this installation manual.
- 1. **Panel Resting** Bring your panels to your lines! Don't rest panels on the row below. Doing so can result in the minor manufacturing variations in the panel heights adding up, and you will notice that the rows are no longer a horizontal and straight line.
- 2. Getting Rainscreen Right It is our recommendation to use rainscreen. Make sure that if you are choosing not to, that your building jurisdictions allow you to go without rainscreen...then be really sure. We suggest always following all building practices for your community.
- 3. Doing the "Panel Z Cuts" You will notice that the end of each panel has a small tab or overlap, depending on what end of the panel you are looking at. This allows one panel to lap over the next for the entire perimeter of the panel. We have found that this little overlap makes a big difference in water penetration. When cutting a panel to length, we suggest that this shape be replicated with a small angle grinder. Instruction are here:
- 4. Do you have the right screw-driver tip? The specialized screws sent with the panels require a small T-15 driver tip with a narrow and long shank.
- 5. Check for breakage first We do our best to make the highest quality, strongest product. But accidents can, and do, happen in transit. Do your best to inspect each pallet as it arrives to ensure you have enough product to complete the job!
- 6. Bits and pieces Did you receive everything you ordered?
 - a. Screws Do you have the correct screws? 4 are required for every panel and 3-5 for each complete corner set.
 - b. Rainscreen
 - c. Panels
 - d. Corners
- 7. Are you installing over 1" Styrofoam? If so, has your dealer supplied longer screws that will be required? (3" length screws will be required for installation over 1" of Styrofoam product)



Component List

Critical numbered graphic of all system components.

- 1. Rainscreen
 - a. Roll Product
 - b. Optional Bug Screen
- 2. Stone Panels
 - a. Flat Panels
 - b. Outside Corners
 - c. Finished Edges
- 3. Corners (Left and Right)
- 4. Finished Edges Rainscreen
- 5. Accessories
 - a. Plug Surrounds
 - b. Light Surrounds



Tools Required

- 1. Safety Gear Glasses, Ear Protection, Dust Protection, Gloves
- 2. Measuring Tape Gotta have one
- 3. Marking Pen Sharpie will do
- 4. Square for marking square lines across panels
- 5. Chalk Line Color selected for a contrast with your rainscreen product (Blue for black rainscreen, or black for blue rainscreen)
- 6. Cordless Screw Driver We recommend a conventional screw driver vs. an impact type.
- Appropriate Screw Driver tip Check that the tip matches the screws delivered with the product. Your tip should be a t-15 torx type with an extended shank as pictured here:



- Angle grinder with 4.5" or 5" diamond blade. Segmented blade or 'turbo' type blades will work fine.
- 2. Tin snips for cutting ledge bracket brackets to shape.

Rainscreen Decision

Rainscreen decision – Some building jurisdictions or geographies may our may not require 10mm of rainscreen product be installed behind siding or masonry products. But our general recommendation IS to use rainscreen. Think of it as an extra insurance policy for your home. Rainscreen offers three additional levels of protection against rain and moisture.

- 1. Shielding The continuous felt layer acts as a back-up shield against driven rain droplets, such as may be present in a storm or coastal application.
- 2. Draining Because the rainscreen spaces the stone product off the wall, any intruded water drains down the back of the stone, without contact to building structure or sheeting.
- **3. Drying** IF any water does make it past the stone and felt, it will drain to bottom of the cavity. However, the fact there is a full gap allows air movement to dry the cavity back to normal conditions.

Rainscreen Application

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- 1. Snap a target line the width of your rainscreen product above the starting edge.
- 2. Check the orientation of your rainscreen. If your product has a lappling flap of felt, make sure that the lap is facing down. If it is the first row of rainscreen (Starting from the bottom) the felt flap may be rolled back underneath to form an effective bug screen for the 10mm cavity. On successive rows of rainscreen, the flap will simply overlap the next successive row of rainscreen and allow intruded water to drain over this next row.
- 3. Align your roll of rainscreen with the snapped line. Check that. Then unroll the rainscreen along the wall while driving staples approximately 2-4" from top edge of rainscreen. Drive staples 12-24" horizontally on top edge. Keep in mind that he spacing of the staples is not critical and needs only to hold the rainscreen in place temporarily, and flat until the stone is installed over.
- 4. To Achieve a bug screen, start with your lowest roll of rainscreen with the extra flap pointed down. Curl the extra flap back underneath the rainscreen and staple to form a screen to prevent insect infiltration behind the stone.



Snap Horizontal Lines

- Decide what lower elevation you want your stone to start at, then snap a series of horizontal lines working your way up the wall from that elevation. You may want to shift this pattern up or down to align with eaves or eliminate "slivers" of panels.
- You will use these lines to align each row of panels . Measure up 9.5" for your first line, then every 9" for successive lines. The math for the first few numbers to mark from the bottom elevation are:
 - 9.5"
 - 18.5"
 - 27.5"
 - 36.5"
 - 48.5"
 - 54.5"
 - 63.5"
 - 72.5"
 - 81.5"
 - 90.5"
 - 99.5"
 - 108.5"

Installing Ledges/Trim

Our ledge piece and trim system is typically used for a horizontal transition between stone and siding products or underneath windows. The system is very simple and involves a Sheet metal "J" mounting bracket and the trim component itself. This system allows for the attaching screws to be located within the footprint of the component itself.

- 1. Ledges as a horizontal transition (Used in a wainscot application)
 - i. Decide where you want your ledge to go. Generally, it is best to decide this location during layout phase of installation. With the trim component being 3" high on the wall, the horizontal installation line for the trim component should 3" above wherever your stone is stopping. *It may aid in the installation to install trim components before beginning installation of the stone.*
 - ii. Orient the bracket such that the "J" shape is upside down (Bent portion if up, unbent portion is down).
 - iii. Align the top edge of the bracket with the marked reference line.
 - iv. Attach bracket with 4 of the #8 x 1.25" screws
 - v. Position the trim component into the metal J in the indicated manner
 - vi. Locate the 4 "keyhole" features on the underside of the trim component
 - vii. Drive 4 of the #10 x 3.5" Screws in the shown way. Screw should be driven at an angle approximating 30 degrees off horizontal. The head of the screw should seat in the rounded "pocket" of the keyhole shape.
- 2. Ledges installed under windows:

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- i. Orient the bracket such that the "J" shape is upside down (Bent portion if up, unbent portion is down).
- ii. Align the top edge of the bracket with the Window surround or brick mold as shown.
- iii. Attach bracket with 4 of the #8 x 1.25" screws
- iv. Position the trim component into the metal J in the indicated manner
- v. Locate the 4 "keyhole" features on the underside of the trim component
- vi. Drive 4 of the #10 x 3.5" Screws in the shown way. Screw should be driven at an angle approximating 30 degrees off horizontal. The head of the screw should seat in the rounded "pocket" of the keyhole shape.



Installing Stone Panels (When working Right to Left)

- 1. Start with the bottom row and work your way up. Because of the overlap arrangement of the stone, **it is much easier to work right-to-left.** And to minimize cuts, it is best to work starting at an outside corner and working away from it.
- 2. Identify the right side of an outside corner set. It can be either a "short" or "long" leg. The only important thing to remember is to start the next row above with the opposite choice. The purpose of this is to alternate the seams where panels end and make the outside shape of the panels less obvious.
- 3. Start screws in the panel before putting it up to the wall.
- 4. Place the corner side on the wall and position with the indicated face flush with adjacent wall. (Graphic required showing corner) Top lip of the component should be aligned with the first level line.
- 5. Drive screws home.
- 6. Install successive full panels in the following way, left to right:
- 7. Start 4 screws in full panel
- 8. Bring to wall and align vertically with level line and
- 9. Butt horizontally against the installed corner or panel component.
- 10. Drive screws home



Installing Stone Panels (When working Left to Right)

Starting from an outside corner and working right – Each component must slide "under" the component directly to its right, so screws on adjoining component are left loose to accommodate.

- 1. If a right side of a corner set is already installed on the wall, sealant is to be applied as indicated.
- 2. Identify the left side of an outside corner set. If the corresponding corner side already installed on the wall is a short leg, select a long leg or visa versa.
- 3. Start screws in the panel before holding up it up to the wall.
- 4. Place the corner side on the wall and position with the indicated face flush with adjacent wall. (Graphic required showing corner) Top lip of the component should be aligned with the first level line.
- 5. Drive screws on left side of the panel until they are flush with rubber face of insert.
- 6. Drive screws on right side of the panel until they lightly engage with wood structure but panel has not been driven home.
- 7. Install successive full panels in the following way, left to right:
- 8. Start 4 screws in full panel
- 9. Bring to wall and align vertically with level line.
- 10. Slide horizontally, underneath the overlap of previous panel and against the installed corner or panel component.
- 11. When you have completed the row, and are happy with the placement of all panels, drive all screws in



Installing Stone Panels (Two outside corners filling between)

Starting from two outside corners and filling in between – In this scenario, you will be going outside corner to outside corner. One panel on each row will be required to be cut to length.

- 1. Install your right side corner on the left hand side of the wall
- 2. Install your left side corner on the right side of the wall
- 3. Starting from the right exterior corner, place successive full panels until placing the next panel would overlap the corner piece:
 - i. Take a measurement as shown from the outside layer of stone on the corner to the outside layer of stone on the final installed panel.
 - ii. Transfer that measurement onto a full panel as shown and make a mark.
 - iii. Place step-cut template onto the panel with the arrow aligned with the mark.
 - iv. Trace the edge of the step-cut template onto the face of the panel as shown.
 - v. Flip the panel and replace the template on the back of the panel align shown feature on the template with the mark as shown.
 - vi. Trace the template onto the back of the panel. This creates a cut line for the $\frac{1}{2}$ " backset undercut.
 - vii. Flip panel again with stone faces up. With the angle grinder and diamond blade, Make a full cut along line A and continue the cut to the edge of the panel. Continue cuts around the edges of the panel.
 - viii. Flip the panel and continue the straight cut between the marks visible on the edges.
 - ix. Tap the panel and break along the cut.
 - x. Complete cut lines B and C as shown. You may have to flip the panel and continue the cuts on the back until they join.
 - xi. Tap the blocked shape as shown to remove. Touch up the corner with grinder to provide clean faces.
 - xii. Place grinder blade in template as shown and trace reference mark onto blade with marker. This mark will provide a reference for a $\frac{1}{2}$ " cutting depth.
 - xiii. Flip the panel and make cuts along lines D, E, and F. Being careful to not dramatically exceed the cutting depth reference mark on the blade. on the
 - xiv. Transfer the ½" mark on the template to faces as shown.
 - xv. Cut along line as shown. Again, cutting only as deep as reference line.
 - xvi. Remove cut material and clean up the cut. You may need to remove material from the inside corner with the grinder.



Installing Stone Panels (Inside Corners)

- Inside corners are quite simple.
- Run one panel to within ³/₄" of the corner. Adjacent panel may be measured and cut square to the textured face of the abutting panel.
- Alternately, a more precise fit of an inside corner may be achieved by square cutting to the longest dimension of the textured face, then scribing the cut back to the required profile with grinder as dictated by the care and skill of the installer.



Installing Stone Panels (Finished Edge Components)

Finished edge components are used where the edge of the panelized product might be visible.

- Finished edge packs are sold in units containing left and right edges and 4 components.
- Each pack covers 0.75 linear feet of exposed edge and contains 3 sq. ft. of flat surface coverage.
- Most installations that require finished edges require both a left and a right edge.

NOTE: It is worth noting that If your project requires only a left or right edge, the unused opposite components can be used in many places in the jobsite and need not be wasted.



No Cut - Columns



See above illustrations for easy no cut columns inside dimensions



Other Guides

Please also refer to our FAQ's here:

www.Northridgestone.com/FAQ's

Please also refer to our Video Installation Guides on our website:

www.Northridgestone.com/VideoInstallationGuides





Thank you and have a great install!

Your NorthRidge Stone Team

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