Gerard Installation Manual
Shingle Profiles

Granite Ridge Shingle

Guardian Shingle
This Installation Manual is designed as an instructional tool to clearly depict to the contractor, installer, distributor and architect, recommended installation techniques and procedures to confidently estimate and install a Granite Ridge and Guardian Shingle roofing system by Gerard Roofing Technologies.

This manual depicts generally practiced application techniques only, which should not be substituted for local building code specifications. Gerard Roofing Technologies carries product approval reports for most building code agencies in North America which should be referenced for specific local requirements. See Gerard’s website for further information.

These methods have been developed by Gerard Roofing as proven acceptable and tested methods of installing Gerard Stone Coated Steel Roofing. Gerard Roofing does not construe that these are the only methods but again are the tried and true proven techniques that are currently practiced by the majority of trained installers.

This manual emphasizes common roofing practices in use today. If application techniques vary from those illustrated in this manual or if using this manual for applications not covered, please consult the technical department at 1-800-237-6637.

As Gerard Roofing Technologies have no control over the installation techniques used, no warranty can be made relating to the installation of Gerard products.

Product Approval Reports for various areas are available which should be analyzed for additional procedures after careful review of this manual.

A careful study of this manual will give a full comprehension of a Granite Ridge and Guardian Shingle roof installation.

Gerard Roofing assumes no liability for either incorrect installation of its products or personal injury that may occur as a result of installing such products. The installation methods demonstrated in these materials are not the only ways to install Gerard products, but have been developed as a reference guide using acceptable, tested and proven methods for the standard installation of Gerard products. Contractors and installers should at all times use their professional judgment, and modify and tailor such methods where appropriate or necessary to suit each specific installation or any applicable local building codes or ordinances. Due to the fact that Gerard has no control over the actual installation techniques used, no warranty is expressed or implied relating to installation of the product. Gerard’s liability with respect to Gerard products is limited exclusively to its standard written limited lifetime warranty.

Please Note: It is the responsibility of the installer to adhere to local building codes.
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Gerard Shingle Description

Guardian Shingle

- Actual Exposure: 46 1/6” x 15 5/8”
- Average weight per shingle: 5 lbs
- Average weight per square: 120 lbs
- Roof Pitch: 4:12 minimum to vertical

Granite Ridge Shingle

- Actual Exposure: 44” x 13 11/16”
- Average weight per shingle: 5 lbs
- Average weight per square: 120 lbs
- Roof Pitch: 4:12 minimum to vertical
**Tool Requirements**

**List of Tools Required:**
- Standard claw hammer
- 50’ or 100’ tape measure
- Screw drivers (optional power drive)
- Utility knife (when re-roofing over composition shingle)
- Tin snips
- Caulking gun
- Chalk line
- One pair of needle-nose pliers

**Gerard Tile Cutter**
- creates neater, straighter cuts

The Tru-Cut Shear is reversible for left-handed or right-handed use. Assembly shown here is for right-handed use. Simply reverse assembly for left-handed use.
Materials

Granite Ridge Shingle
Stone Coated
24 pcs. / sq.

Guardian Shingle
Stone Coated
24 pcs. / sq.

Valley Cap
Stone Coated
120” Length

Char Filter Foam (Under Valley Cap)
Non-Stone Coated
3/4” x 4-1/2” x 118” Length

Valley
Non-Stone Coated
120” Length

Riglet
Non-Stone Coated
120” Length

Rake/Roof to Wall
Non-Stone Coated
120” Length
**Shingle Installation Manual**

**Materials**

**Z-Bar Attachment (Roof to Wall)**
- Stone Coated
- 120” (10 ft.) Lengths

**Rake Cover**
- Stone Coated
- 120” Length

**Starter Strip**
- Stone Coated
- 120” Length

**110˚ Head Metal**
- Stone Coated
- 120” Length

**Hip and Ridge Cap**
- Stone Coated
- 14” Length

**Pipe Jack Tray (Cut centre hole on site)**
- Non-Stone Coated
- 14” x 14”

**Pipe Jack Flashing:**
- Part no: See Inside Sales
- Coated or Non-coated
## Shingle Installation Manual

### Materials

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<thead>
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<th>Guardian Shingle</th>
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<td>![Guardian Shingle Image]</td>
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<table>
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<th>30 # Felt</th>
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### Panel Fasteners:
(Installing contractor responsible to check local code requirements for type of fastener).

- **Ring Shank Roofing Nails:** 1-1/4” minimum
- **Sufficient length to penetrate sheathing per code (min. of 1/2”)**

- **Screws:** #8 x 1-1/4”
  (Higher wind load regions)

*In high wind regions refer to local building codes and manufacturer applicable product evaluation reports.*

- **Stitch Screw for Valley Cap Only:** #8 x 1/2”

### E Z Vent for Shingles:
Ventilation Option for high wind regions

![E Z Vent Image]

### Sealant
NP1 or equal

![Sealant Image]

### Finishing Kit / Touch Up
Comprises of 8 oz. squeeze bottle of base and 3 lbs. of color stone chosen.
How to Determine How Much Material You Will Need

Quick Step Method, USA Standard (approximate)

1. Determine roof square foot feet without waste.
3. Add totals from steps 1 and 2.
4. Multiply total by 1.03. This yields roof square feet including waste.
5. Divide total from step 4 by 100. This yields roof squares. Gerard Shingle is 24 panels per square.

1) 50 x 36 = 1800 s/f w/o waste
2) Hip x 4 = 84 x 2 = 168 linear feet
3) 168 + 1800 = 1968
4) 1968 x 1.03 = 2027
5) 2027 ÷ 100 = 20.27 sqs
Gerard Shingle can be installed over low profile composition shingle or over solid sheathing with a minimum type 30 felt underlayment. If you choose to re-roof over lower profile composition shingles the procedures are as follows:

1. Cut back existing shingles flush with the perimeter of the roof.

2. Remove existing drip edge.

3. Remove hip and ridge cap.

4. Cover the entire roof with a minimum of #30 felt. Lay one additional layer of 30 lb. felt up the valley. If you live in an area where ice damming occurs use ice and water shield. At the valleys, weave the opposing courses of underlayment. Install underlayment on top of the starter strip.
5. Use a chalk line when installing the starter strip. Do not depend on the roof edge to be straight or square. Nail starter strip every 16” along the fascia line. Reminder - underlayment installed on top of starter strip.

6. Install the uncoated rake roof to wall up the gable or rake, fastening it where shown. It is sometimes easier to assemble the rake cover on to the rake roof to wall before installing. When done this way, shorten the first (bottom piece) of rake cover in order to prevent all the ends from lining up. Head lap is necessary for the rake roof to wall (approx 3”). The rake cover should be notched at the top flange in order to achieve side lap 1 - 1 1/2” is sufficient.

7. Ensure that the bottom end of the rake roof to wall overlaps the top flange of the starter strip and extends to or slightly beyond the lower edge of the starter strip. Place sealant between the lower edge of the rake roof to wall and the starter strip.
Ensure that the full width of the valley overlaps the top flange of the starter strip and extends slightly beyond the lower edge of the starter strip. Place sealant between the lower edge of the valley and the starter strip. Trim lower edge of the valley as needed.
8. At the eave and starting from left to right, begin installing the Gerard Shingles. Take care to interlock the nose end of the shingle with the nose end of the Starter Strip. Nail the first course using seven nails per shingle along the nailing strip provided at the back of the shingle.

9. At the bottom of all rake to wall and valley runs clip and fold under the nose of the shingle to allow for drainage. The drainage opening should reveal the full width of the rake roof to wall or valley. This is only done on the bottom course. The same procedure is done at the bottom of a valley to the raised “V”. (see diagram page 11).

10. When installing any panel except for the first one in each course, it is very important to do the following: After positioning the panel on the roof and making sure the Pittsburgh lock is completely secure, place one hand on the left side of the shingle just below the center LEFT step and with the other hand pull up on the top left corner of the same shingle and bend it up to at least 45 degrees. Then push the shingle back down, double check the Pittsburgh lock and fasten the panel in the manner specified. This bending procedure will ensure that all of the side lap seams will remain tightly closed. Ensure the integrity of the side lap before fastening the shingle. If the side lap does not close tightly, hand work the shingle until it does close tightly.

11. On all gable, roof to wall, and valley panels, snip off the top corner of the nail strip to 45° (gable panels would be snipped on the gable side - valley and roof to wall panels snipped on the cut side). At the bottom of these same shingles, make a “v” shaped notch on the bottom of the Pittsburgh lock 1” from the cut edge.

12. When installing Guardian or Granite Ridge panels, it is very important to install the panels in uniformly straight course. Always be sure to apply each panel with the Pittsburgh locks completely connected. Not doing so could allow panels to become disconnected from each other and pop up, creating a problem.
13. Chimneys, skylights and roof to wall are flashed using the rake/roof to wall accessory along with the Z-bar attachment. The Z-bar attachment is snapped over the top of the Rake/Roof to Wall Accessory Metal and inserted behind builder installed Z-bar. If there is nothing to slip behind, it becomes necessary to surface fasten and seal. Number and type of fasteners will vary with existing structural conditions.

14. Valley Cap along with Char Filter Foam is placed over the Gerard valley concealing the mitered valley cuts and screwed every shingle course along the length of the valley cut to shingles with a #8 corrosion resistant screw. **Take care not to penetrate the valley metal.**

15. Install $110^\circ$ Head Metal at front of the horizontal wall protrusion by putting one side behind builder installed Z-bar and other side over the top of the shingles laid in a bead of caulk. If there is nothing to slip behind, it becomes necessary to surface fasten and seal. Number and type of fasteners will vary with existing structural conditions.
16. The shingles above the eave course are installed by interlocking the nose end of the shingle with the back end (Pittsburgh lock) of the shingle of the preceding course concealing the nailing strip.

17. At the rake or gable end cut the shingles to fit and insert the cut edge into the rake/roof to wall.

18. Hip and Ridge shingles are mitered to fit nailed and covered using the Gerard Hip and Ridge accessory.

19. Before installing Hip and Ridge cap, place a strip of 5 to 6 inch wide Peel-N-Stick (high temperature) atop the cut hip and ridge shingles.

**NOTE:** Ensure Peel-N-Stick not exposed after cap installation.

**Optional Non-Vented Hip Detail:**
Left side panel cuts off at hip intersection with the right side panel overlapping over the hip intersection and left panel by approximately 2 inches.

**Note:**
This detail can also be used for “non-vented” ridge.
20. The Gerard Riglet is available for use with installations involving an offset at the eave. The Riglet is aligned with the offset, set in bed of caulk and nailed on the back apron every six inches. The shingles are then installed on the main roof interlocking with the nose end of the riglet and laying over the top of the shingle below.

21. If you have difficulty closing some side laps, the following procedure is acceptable:

Apply a 1-1/2”, corrosion resistant hex head screw directly beneath the mid shelf of the shingle and approximately 3” to the right of the left side of the shingle. This screw is to be of sufficient length to pass completely through the roof sheathing. Do not over tighten or penetrate the overlapped shingle. Make absolutely certain you have followed the procedure outlined on page 18 - Note 24.
22. Pipe Penetrations:

Pipe Jack Tray interlocks with lower Pittsburgh lock. Pipe Jack is placed over the pipe and down onto the Pipe Jack Tray. Provide weep holes to protect against any future moisture that may enter in or around the pipe penetration. A weep hole is created by making two vertical cuts at the shingle nose approximately 1” apart. Fold the 1” tab back under the shingle. Seal where indicated.
Easy 5-Step Installation

* **Masterflash** can be installed on-site quickly and easily, usually under 10 minutes.
* One piece construction makes **Masterflash** easy to handle.
* Bendable base forms seal with any contour, surface irregularities or roof pitch.
* Seals tightly and dependably with silicone sealant to eliminate costly call-backs.
* Pipe opening is easily customized with a sharp knife or scissors for any application.
* Fix flashing to pipe with stainless steel hose clamp where snow load conditions exist.

1. Select and Trim
Choose appropriate **Masterflash** with opening at least 20% smaller than pipe diameter. If necessary trim opening to 20% smaller than pipe diameter.

2. Slide
Slide **Masterflash** down over pipe. (A non-petro-leum based lubricant will ease installation.)

3. Form
Press **Masterflash** down, bending it to conform to roof profile or roof irregularities. A blunt tool will help press flashing into tight roof angles.

4. Seal
Apply sealant (NP1 or equal) between base and roof.

5. Fasten
Use fasteners to complete sealing.

**Note:**
For further protection it is recommended to install **Pipe Jack Tray** per details page 17 of Pipe Jack installation. Ensure sealing around roof pipe and **Pipe Jack Tray** prior to installing cover panel and **Masterflash**.
23. Inspect the roof and touch-up all exposed screws using the provided touch-up kit. Remove all debris from roof and job-site.

24. Acceptable Repair Option

Corrosion Resistant Screw
Minimum 1 1/2" #8

Apply small bead of sealant between panels at side lap. Ensure sealant is not exposed outside of sidelap.

Draw panels together

Do not over-tighten the screw fastener
Please Note: It is the responsibility of the installer to check the website for any updates or changes in the application of this product(s).