

Viking Highland Slate

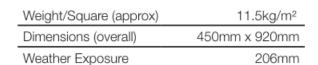
Version:1.0

INTRODUCTION

The Highland Slate Shingle is especially designed for Extra High wind areas, offering one of the highest wind resistant warranties in the industry and classic beauty at an affordable price. Featuring an oversized shingle, extra-heavy fibreglass reinforcing, and a technologically advanced sealant. Highland Slate Shingles are algae-resistant and thus protect against staining or discolouration from algae.

PROPERTIES

Highland Slate Shingles are composed of fibreglass mat base. Ceramic-coasted mineral granules are tightly embedded in carefully refined, water resistant asphalt.



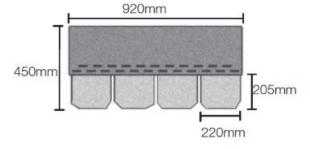


Figure 1

Standard Colours	Product Code	Install coverage
Black Granite	DDB260	2.98m²
Smokey Quartz	DDB265	2.98m²

APPLICABLE STANDARDS

ASTM D 3018 Type 1

ASTM D 3462

ASTM E 108 Fire Resistance: Class A

ASTM D 3161 Class F Wind Resistance

ASTM D 7158 Class H Wind Resistance

UL 790 Fire Resistance: Class A

UL 997 Wind Resistance

NTC-MEA-120-79-M

BOCA & SBCCI Building Code

ICC-ES Evaluation Report ESR

ICC-ES Evaluation Report ESR-3537

CSA Standard A123.5

Florida Product Approval # FL5444

Miami-Dade Product Control Acceptance (Regionally)

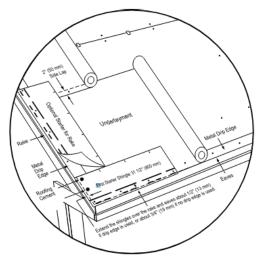
TDI Windstorm Resistance

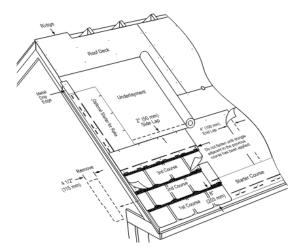
BRANZ Appraisal Certificate No 276



INSTALLATION

Installation instructions including diagrams, are supplied on each bundle of Highland Slate series shingles, or separate installation guides can be obtained by contacting Viking Roofspec.





ROOF DECK REQUIREMENTS

Apply shingles to a minimum of 15mm thick plywood, or 16.3mm H3.1 treated Superstrand Sarking. Please see refer to the Viking CertainTeed substrate check list.

VALLEYS

Valley liner must be applied before shingles. The closed-cut valley application method is recommended using Viking Peel & Stick Waterproofing Underlayment, or Viking approved equivalent, to line the valley prior to being fully covered by the shingles.

VENTILATION

To best ensure adequate ventilation, use a combination of continuous ridge ventilation, incorporating an external baffle, and balanced drip edge ventilation. At the gable ridge, leave a minimum 150mm substrate unvented. See Figure 3.

UNDERLAYMENT

Use on roofs with slopes greater than 9° . Low slope applications (9 – 18°) require additional underlayment. In areas where icing along eaves can cause the back-up of water, apply Viking Peel & Stick Waterproofing Underlayment, or Viking approved equivalent, or Viking approved equivalent, according to application instructions provided with the product and on the shingle package.

On slopes greater than 60°, apply eight 25mm diameter spots of Viking Roofspec roofing cement under each shingle tab corner, according to application instructions provided on the shingle package.

STARTER

- Use CertainTeed's High-Performance Starter Shingles or remove the lower 101mm tab portions from Highland Slate shingles. Starters to be applied up the gable rake, this is a requirement for the high and extra wind zone. Sealant stripes must be at lower-most edge at the drip edge and facing outwards at the gable edge.
- 2. Cut 114mm off the LEFT end of the first starter shingle only.
- Apply the 800mm remaining piece to the lower left corner of the roof. Make sure there is 12.7mm overhanging the rakes and eaves if drip edge is being used. If you are not using drip edge, make the overhang 6mm. Install nails approximately 75mm up from eave, assuring they go into solid wood.

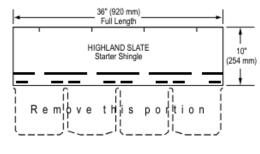


Figure 4

4. Use full 915mm long by 254mm wide starter shingles for the rest of the course.



FASTENINGS

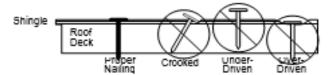


Figure 5

Five nails are required per shingle. They are to be located within the nailing line 235mm above the bottom edge of the shingle 25mm in from each side of the shingle and above the cutouts. Nails must be of sufficient length to penetrate the deck 20mm or through the thickness of the decking, whichever is less. Nails are to be 11- or 12-gauge, corrosion resistant roofing nails with 9mm heads. Staples are not allowed for the Highland series.

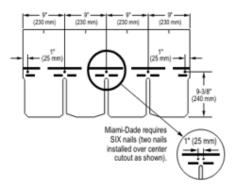


Figure 6: Use FIVE nails for every Highland Slate® shingle.

Steep Slopes and Very high/Extra high wind zone

On slopes, greater than 60° and very high/extra high wind zones fasten each shingle with 6 nails and eight 25mm diameter spots of Viking Roofspec roofing cement (ASTM D 4586, Type II) placed under each shingle according to application instructions provided on the shingle package. Fasteners must penetrate the two-layer common bond area, also illustrated on the shingle package.

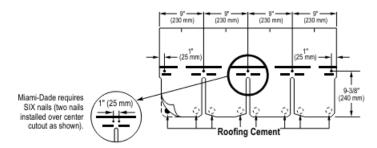


Figure 7

Important: Failure to follow these steep slope instructions can void the warranty in the event of shingle delamination.

Caution: Excessive use of roofing cement can cause shingles to blister.

1ST COURSE: (Figure 3). Apply a full Highland Slate shingle at the lower left corner of the roof, flush with the starter course left corner. Fasten with 5 nails.

2ND COURSE: (Figure 3). Cut 114mm off the left end of a full shingle and apply remaining 801mm piece over left edge of 1st course. Fasten with 5 nails and ensure 203mm exposure.

SUCCEEDING COURSES: Begin application of the 3rd course with a full shingle. Fasten with 4 nails, leaving the right end unfastened until later. (Figure 3). Begin the 4th course using a shingle with 114mm cut off its left end. Fasten with 5 nails. To begin the application of subsequent courses, alternate full shingles (915mm) and cut shingles [801mm] up the rake edge, fastening as described above.



REMAINING COLUMNS AND COURSE COMPLETION: Apply a full shingle against the right edge of each shingle in previous column. When applying a shingle against a covered shingle, carefully lift the right edge of the shingle above and slip the new shingle under it. Fasten as usual with 5 fasteners; then, fasten the loose right edge of the shingle above.

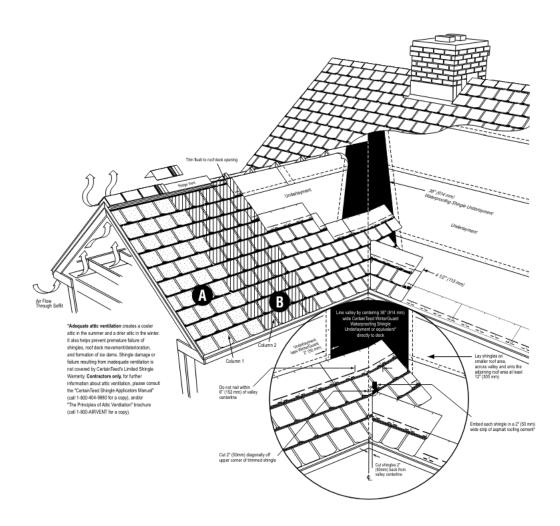


Figure 8



FLASHING

Use corrosion-resistant flashing.

STEP FLASHINGS

First course of flashing must consist of a minimum 127 mm x 305 mm piece applied flush with the lowermost edge of the first shingle. Succeeding courses of flashing must consist of pieces that are a minimum 127mm x 254mm in size. Each succeeding course of flashing must "overlap" the flashing course beneath it a minimum of 50 mm.

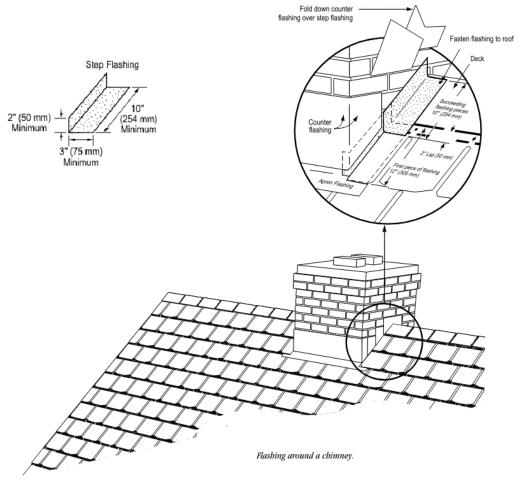


Figure 9

HIPS AND RIDGES

Use Cedar Crest® accessory shingles to cover hips and ridges. Carefully separate the three-piece units prior to application, by first folding along the pre-cut lines and then detaching the pieces (see Figure below). No cutting is necessary. There are 30 individual shingles (10 three-piece units) in each bundle. One bundle will cover 6m. Each 300mm x 300mm shingle has a shadow line that is a design feature which is visible when applied properly. To prevent shingle damage during application, they must be sufficiently warm to allow proper forming.

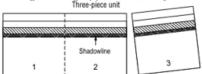
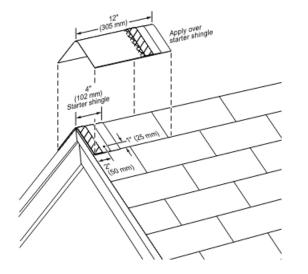


Figure 10: Separate to make 3 cap shingles

FASTENING IMPORTANT: Use TWO nails to fasten each shingle. Fasteners must be minimum 45mm long. For the starter shingle, place fastener 25mm in from each side edge and about 50mm up from the starter shingle's exposed butt edge, making sure fastener goes 20mm into the deck or all the way through the deck. (see Figure 11). For each full Cedar Crest shingle, place fasteners 219mm up from its exposed butt edge and 25mm in from each side edge (see Figure 12).





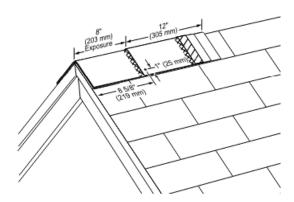


Figure 11 Figure 12

CEDAR CREST® APPLICATION

- Apply primary roofing up to hip or ridge on both sides of roof and trim flush. Ensure that the Cedar Crest shingles will adequately cover the top course of the shingles on both sides of the hip or ridge.
- Prepare a 100mm "starter" shingle by cutting off the lower 200mm colour granule portion of one Cedar Crest shingle.
- Apply the 100mm starter piece with raised overlay edge over the bottom corner of the hip or to either end of the
 ridge, overhanging the corner or end by approximately 12mm and bending the starter shingle along its centreline
 to form into place (see Figure 11).
- Install a nail on each side about 50mm up from the starter shingle's exposed butt edge and 25mm in from each side edge of the shingle. Then apply a full piece over the starter, bending the shingle along its centreline and forming it into place over the hip or ridge, flush with the bottom and side edges of the starter shingle.
- Fasten with two nails minimum 50mm long with one nail on each side of shingle 220mm up from the butt edge and 50mm in from each side edge (see Figure 12)
- Continue application of Cedar Crest shingles up the hip or along the ridge, forming each shingle over the hip or ridge, and fasten as shown in Fastening. Expose Cedar Crest shingles 203mm, covering all fasteners.
- Add a Dab of pitched roof sealant between the shingle layers.
- To assist in proper alignment, snap a chalk line (not red) parallel to the hip or ridge applying along the line where the side edges of the Cedar Crest shingles should be.

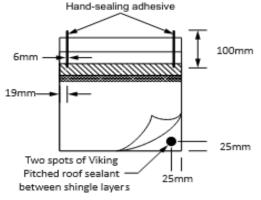


Figure 12

IMPORTANT: High and Extra Wind Instructions.

In order to achieve the High and Extra High wind rating, each "hip and ridge" shingle must be both 1) fastened with nails as shown and 2) hand-sealed with two 6mm wide beads of Viking pitched roof sealant applied from the middle of the shingle's raised overlay on the top piece and extending approximately 100mm along the sides of the headlap along a line 19mm from each side edge of the shingle's headlap as shown in figure 12. Immediately align and apply the next overlying shingle, gently pressing tab sides into adhesive. Only one side of the double thickness tab is laminated together; to secure the other side, after folding the shingle over the ridge and nailing into position, a 25mm spot of pitched roof sealant must be applied between the shingle layers as shown. Immediately align and apply the next overlying shingle, gently pressing tab sides into adhesive.



CLEANING AND MAINTENANCE

Please refer to the CertainTeed Cleaning and maintenance guide.

N.B If potable water is being collected from the roof, disconnect all down pipes prior to applying the chlorine solution. Viking Roofspec does not recommend the use of any other alternative form of treatment.

PRECAUTIONS

Order for the entire project all at once: To ensure the best colour match for your whole roof, order everything you need all at once. If you do require more stock for a project, please tell customer services that you have had a previous order and want to order from the same batch.

- **Follow Manufacturer's Instructions**: Always refer to the installation instructions provided by CertainTeed for the Landmark shingles. With Viking Roofspec standard details, these instructions detail the specific requirements and recommendations for installation. There is a basic install at the back of every pack.
- Check Weather Conditions: Ensure that the weather conditions are suitable for installation. Avoid installing
 shingles during extremely hot or cold temperatures, high winds, or precipitation, as these conditions can affect
 the integrity of the installation. If the packs are too cold you will need set them out in the sun for a bit to allow
 them to find their natural form.
- **Prepare the Roof Deck**: The roof deck should be clean, dry, and free from any debris or protrusions that could affect the installation or the performance of the shingles. Repair any damaged areas of the roof deck before installing the shingles. Deck should be 18% or less moisture content. Substrate bust be installed in a brick bond pattern. Substrate to be installed perpendicular to the rafters.
- Use Proper Fasteners: Use the recommended nails or fasteners specified for the Landmark shingles. Proper
 fastening is essential to ensure that the shingles are securely attached to the roof deck and can withstand wind
 uplift. Ensure that you use the right nails grade for the corrosion zone. Use the right number of fixings and fixing
 patterns for the required wind zone.
- Install Underlayment: Install an appropriate underlayment beneath the shingles to provide an additional layer
 of protection against moisture infiltration and to enhance the roof's waterproofing. Minimum 100m overlap for
 joins.
- Follow Correct Installation Technique: Install the shingles according to the recommended technique, including the proper overlap and alignment. Ensure that each shingle is properly positioned and fastened to prevent water intrusion and wind damage.
- Apply Sealant: Use Viking pitched roof sealant to seal around flashing, vents, and other roof penetrations to prevent water leakage.
- **Inspect Regularly:** After installation, perform regular inspections of the roof to check for any signs of damage or deterioration. Promptly repair any issues to maintain the integrity of the roof system.

STORAGE

Handling and storage of all materials whether on or off site is under the control of the Viking Roofspec Licensed and Trained Installers. Dry storage must be provided for all products, do not let products get crushed under weight of stacking pallets on top of each other.

80 Alexander Crescent, Otara PO Box 14-541, Panmure, Auckland 1741, New Zealand 2 Nazareth Avenue, Middleton, PO Box 9117, Tower Junction Christchurch 8149, New Zealand

Wellington office

19 Pretoria St, Lower Hutt 5010, New Zealand **T:** 0800 729 799 **F:** 0800 729 788

info@vikingroofspec.co.nz www.vikingroofspec.co.nz

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