# Highland Slate Shingles

#### Technical Information

The Highland Slate Shingle is especially designed for Very 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.

#### Limitations

Use on roofs with slopes greater than 9°. Lowslope 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 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.

### **Product Composition**

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

## **Technical Data**

Weight/Square (approx)	11.5kg/m <sup>2</sup>
Dimensions (overall)	450mm x 920mm
Weather Exposure	206mm

# Applicable Standards

ASTM D 3018, Type I

**ASTM D 3462** 

ASTM E 108 Class A Fire Resistance

ASTM D 3161Class F Wind Resistance

ASTM D 7158 Class H Wind Resistance

UL 790 Class A Fire Resistance

ICC-ES Evaluation Report ESR-1389

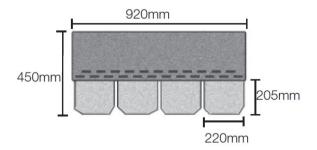
ICC-ES Evaluation Report ESR-3537

CSA Standard A123.5

Miami-Dade Product Control Approved

Florida Product Approval # FL5444

**TDI Windstorm Resistance** 





# 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 minimum 15mm thick plywood, or 16.3mm H3.1 treated Superstrand Sarking. Please see individual suppliers technical information for up to date specification.

#### Ventilation

To best ensure adequate ventilation, use a combination of continuous ridge ventilation (ShingleVent II), incorporating an external baffle, and balanced drip edge ventilation.

#### Valleys

Valley liner must be applied before shingles. The closedcut valley application method is recommended using Viking Peel & Stick Waterproofing Shingle Underlayment or two or three layers of underlayment to line the valley prior to being fully covered by the shingles.

#### Underlayment

At standard slopes (18° or greater) a single layer of 15w High-Performance shingle underlayment (product meeting ASTM D 4869 or ASTM D 6757) is recommended. Corrosion-resistant drip edge is recommended and should be placed over the underlayment at the rake and beneath the underlayment at the eaves.

On low slopes (9-18°) apply Viking Peel & Stick Waterproofing Shingle Underlayment or two layers of 900mm wide felt shingle underlayment lapped 450mm, over entire deck according to the application instructions provided with the product. When Peel & Stick is applied to the rake area, the drip edge may be installed under or over membrane. At the eave, the Peel & Stick is to be installed over the flashing.

# Fastenina

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 into the deck 20mm or through the thickness of the decking, whichever is less. Nails are to be 11 or 12 gauge, corrosionresistant roofing nails with 9mm heads. Staples are not allowed for the Highland series.

### Application (Metric-Sized Shingles)

The recommended application method is the 112mm Stepped-Off, Single Column Vertical Racking Method found on each bundle of shingles. These shingles may be used for new construction or in tear-off applications. Separate instructions are available for overlaving details. The weather exposure of these shingles is 205mm. An alternative application method is the "Six Course, Stepped-Off, Diagonal Method", Contact Viking Roofspec for a copy of this application.

Use corrosion-resistant metal flashing.

#### Hips and Ridges

Use Highland Slate Accessory roofing shingles of a matching colour for capping hips and ridges. As an alternative the product itself can be cut from full shingles for capping the hips and ridges.

#### Maintenance

Highland Slate Shingles require virtually no maintenance when installed according to manufacturer's application instructions. However, to protect the investment, any roof should be routinely inspected at least once a year. Older roofs should be looked at more frequently.

NOTE - Refer to application instructions supplied with the shingles for further information and procedures.

