

Installation Guide

DECRA SHINGLE

General Instructions

Failure to use these guidelines may void the product warranty. Local building codes may require additional application techniques beyond these instructions. In such cases, the local codes must be followed. Note: **Do not use lead or copper with this steel roofing system.**

Roof Slope

Install on roof slopes of at least 3:12. Slopes less than 3:12 are considered decorative and must be applied over a roof system complying with local codes.

Deck Preparation

New Construction: Panels are to be installed over solid decking. Acceptable substrates include exterior grade plywood (min. $\frac{3}{8}$) conforming to specifications of the American Plywood Association and/or $\frac{7}{16}$ oriented strandboard or chipboard. Fire retardant plywood is NOT an approved decking substrate.

Reroof: Panels may be installed over existing asphalt shingles or applied over existing spaced sheathing provided the space between the boards is filled as necessary to provide a base for fastening.

When installing over existing asphalt shingles, cut-back the existing roofing material approximately 8" along the Eave and Rake/Gable Edges. In situations where code allows re-roofing over 2 layers of asphalt shingles, follow the local code.

Fasteners

Screws: Use a minimum of at least 4 corrosion resistant screws not smaller than a #8 hex head. Make sure they are long enough to penetrate the deck by a minimum of 1/2". Recommended length is 1-1/2" long.



DO NOT USE DRYWALL SCREWS.

High Wind

In areas prone to hurricanes and high winds (in excess of 100 mph 3 second gust), installation must meet local standards and codes. A minimum of four #12 screws must be used in the field of the roof. Panels around the perimeter at rakes, directly along the hips and gables, on the top two courses and bottom two courses should be fastened with eight #12 screws at eight evenly spaced locations. Also, these panels around the perimeter should have a DECRA Shingle High Wind Channel over the back Clip-Lock.

DECRA Shingle Installation Guidelines

Underlayment

Standard underlayment should consist of one layer of Type 15 or one layer of Type 30 felt. It is required, that a layer of underlayment be used before applying the DECRA Shingle.

In areas subject to ice build-up, a self-adhering modified bitumen sheet shall be used in lieu of a standard underlayment around the perimeter of the roof and any other areas prone to ice build-up or as code requires. This protection should extend from the roof edge to a point at least 36" inside the exterior wall line of the building.

Starter/Eave

Use the Starter Clip w/Drip Edge that includes a preformed drip edge. Fasteners should be spaced 6" on center. **NOTE: Strike a straight line to assure Starter Clip w/Drip Edge is straight.**



In the event that the Short Course Clip is used in place of the Starter Clip w/ Drip Edge, a bead of polyurethane sealant is required between the Short Course Clip and the existing drip edge. The bead should be of adequate size to alleviate any water penetration between the two materials.

Rake/Gable Channel

Standard metal drip edge should be installed along all rake/gable edges. Position and fasten the Rake/Gable Channel directly to the drip edge allowing it to extend 3/4" beyond the fascia. Screws should be spaced 6". Where the Shingles fit into the Rake /Gable Channel, proper drainage will be attained by removing 2" from the front and back Clip-Locks on each panel. The Rake/Gable Channel provides a finished channel/cover for the panels at the roof's edge.



Class A Rated Material • Class 4 Impact Resistance to UL 2218 • 120 mph Wind Warranty • Registe

Roof Penetrations

Roof penetrations should be finished by installing standard roof jacks over a corrosion resistant Underpan which drains over the panel immediately below. A 2" wide notch must be cut out of the front Clip-Lock of the Shingle panel covering the jack. This will allow water drainage from the Underpan onto the Shingle panel below.



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Roof-To-Wall Side Flashings

Install the Roof-To-Wall Channel allowing it to extend 3/4" beyond the fascia or onto the panel below. Cut the Shingle panel to length. Make a 2" notch at the front and back Clip-Locks where the panel fits into the Channel. Lock the panel into place and screw down.



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Valley Application

To notch the panels, cut 2" off of the front and back Clip-Locks of each panel on the side that fits into the Shingle Valley. The first panel on each side at the bottom of the valley must also have a 1" notch cut 4" from the end of the panel where it fits into the DECRA Shingle Valley. The figure below shows the areas that must be notched.



The Shingle Valley must be positioned along the center line of each valley area. Overlap valley a minimum of 4" over the valley piece below. Fasteners should be positioned outside the last turn-up on each side. Cut Shingle panels to length and notch where they fit into the Valley piece. Shingle Valley Cap (stone coated) can be installed by snapping or sliding into place (as shown below). Fasten Cap to Valley where required.

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Field Panels

DECRA Shingle Installation PATTERN Uses Full and 1/2 Panels.

The first course of panels lock into the Starter Clip w/Drip Edge. Subsequent courses of panels simply lock into place by sliding the nose of each panel onto the clip that is formed at the top edge of each panel. The right side of each panel must be compressed and pushed into position to engage the Side-Lap locking mechanism. This will secure the right Side-Lap and provide a clean appearance. Stagger Shingle panels and install from right to left. Make sure the front Clip-Lock at the nose of each panel is not bent.



1. FIRST COURSE:

Start at the rake edge, valley or hip and continue course with full panels locking into the Starter Clip w/Drip Edge.

2. SECOND COURSE:

Start at the rake edge, valley or hip with a panel that is 28" in length (panel exposure is 25"). Measure from the left side of the panel 28" to make the cut.

3. THIRD COURSE:

Start at the rake edge, valley or hip and continue course with full panels.

4. FOURTH AND SUBSEQUENT COURSES:

Continue application, repeating second and third course instructions.



Field Panel Installation (suggested)

- **1.** Set the panel into the top Clip-Lock of the panels on the course below. Firmly push (by hand or foot) at the front edge of the panel in the area that overlaps the joint of the two panels below.
- **2.** After positioning the panel in Step #1, firmly push (by hand or foot) on the left side of the panel until it is locked firmly into the Clip-Lock of the panels on the course below. Install a fastener straight down into the upper left portion of the panel as shown.
- **3.** Firmly push (by hand or foot) on the right side of the panel and make sure it is locked into the previously installed panel. Install a fastener in the upper right portion of the panel. Placing this fastener at a slight upward angle (45°) will help draw the Shingle panel into the proper locking position.
- **4.** Install the remaining fasteners straight down into the panel as shown.
- **5.** When installing panels, the Clip-Lock on the left will drop down approximately 1/8" to 1/4" below the Clip-Lock on the right panel. The maximum allowable gap between panels should be 3/16".



Hip & Ridge

Overlap Shingle panels at hips/ridges and cut along a parallel line beyond the crest of the hip or ridge overlap that provides adequate protection. Install a 1 x 2 batten directly over the Shingle using fasteners sufficient to penetrate the roof deck. The DECRA Shingle Hip/Ridge should be attached directly to the battens. Each Hip/Ridge piece should clip together by inserting the return at the nose of each piece into the clip that is located at the top of the Hip/Ridge piece.



DECRA Shingle Field Panel Installation Helpful Hints



Step One

Using the recommended offset, the center of each field panel will be placed directly above the overlap of the panels on the previous course.









Make sure the top Clip-Locks of each panel are flush. The

maximum allowable gap should be 3/16".





Step Four

Once the panel is in position, firmly push (by hand or foot) on the panel in the area that overlaps the joint of the two panels below. This will help position the panel for fastener placement.





Step Five

After positioning the panel, firmly push (by hand or foot) on the left side of the panel until it is locked firmly into the Clip-Lock of the panel on the course below. Install a fastener in the upper left corner straight down through the panel.





Step Six

Firmly push (by hand or foot) on the right side of the panel and make sure it is locked into the previously installed panel. Install a fastener in the upper right portion of the panel. Placing this fastener at a 45° angle will help draw the Shingle panel into the proper locking position. Complete the installation with 2 additional fasteners.





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