Experience the DECRA® Difference

Batten Profile Installation Details
DECRA Shake / DECRA Tile
**Installed Exposure:** 12-5/8” x 51”
**Panels per Square:** 22.4
**Installed Weight:** 150 lbs./sq.
**DECRA Tile Panel – Detail**

- **Installed Exposure:** 14-1/2” x 50”
- **Panels per Square:** 20
- **Installed Weight:** 150 lbs./sq.
DECRA Shake Roof – Detail

- DECRA Shake Panel
- DECRA Shake Panel Vent
- Shake End Cap
- Flat Sheet
- DECRA Ridge Vent
- Shake Hip & Ridge (at hips and ridges)
- Shake Underpan
- "W" Style Valley
- Side Flashing
- 3.5" or 5" Fascia Metal
DECRA Batten Profile Installation

- These instructions, drawings and photos are intended as a guide for the installation of DECRA Shake and DECRA Tile.

- Adhere to recommended safety practices.

- Refer to local codes and/or ICC Reports – see links available at www.decra.com.

- Roof slopes of less than 3:12 are considered decorative and panels must be applied over a roof system complying with local codes.
Measuring, Cutting, Bending Panels

- Measurements are made on the roof, however, the panels are normally marked, cut and bent on the ground.

- Panels may be cut with a guillotine, tin snips, or circular saw with metal cutting blade. A portable brake press or hand bender is used to bend the cut edge of the panel for hips, ridges, and valleys.

- Safety equipment should be worn during the installation process.
Deck Preparation – New Construction

- Prepare roof deck to meet local building codes - Underlayment is required

- Underlayment shall comply with ASTM D 226, Type I or Type II, ASTM D 4869, Type I or Type II or ASTM D 1970.

- Check local code requirements as ice and water shield and additional requirements may apply.
Deck Preparation – Tear-off / Re-roof

- Tear off Old Materials
- Clean and prepare deck to meet local codes
- If the panels are installed over another roofing material, additional underlayment is not required unless specified by local code
Deck Preparation – Roof Over Asphalt

- Cut asphalt shingles back flush with the fascia or rakes as needed and remove hip & ridge pieces.

- If the panels are installed over another roofing material, additional underlayment is not required unless specified by local code.
Deck Preparation – Roof Over Wood Shake

- Use counter battens to obtain a level surface for battens when installing over an irregular surface.

- Follow local code regarding requirements for re-roofing over wood shake and other irregular surfaces.

- Remove existing hip & ridge and cut existing overhang back as needed to install battens.
Counter Battens & Battens

- Use counter battens when installing over an irregular surface.

- Position 1 x 4 counter battens over the framing members and secure using 16d common nails into rafters or through sheathing 7” on center.

- Proceed with batten installation as described above.
Steel Hat Sections

- As an alternative to wood battens, steel hat section purlins can be used.

- Fasten steel hat section through rafters using minimum two #9 Hex (1/4” diameter) x 1-1/12” long screws at each steel hat section to rafter intersection.

20 gauge thick batten suitable for rafters up to 4’ on center.

#9 Hex (1/4” diameter) x 1-1/2” long screw
Venting Preparation – Ridge Venting

- If using DECRA Ridge Vent material, prepare the deck for ridge venting (without center beam) by cutting both sides of the plywood 3/4” from the center of the ridge to expose attic space, or as required by local codes.

- Refer to Venting section or DECRA Ridge Venting wrapper for additional installation details.
Venting Preparation – Panel Vent

- Calculate the number of DECRA Shake / Tile Panel Vents* and estimate the approximate location.

- Continue with the installation process until you reach the approximate panel vent location.

*DECRA Venting Calculator available at DECRA.com
Ridge Venting – No Center Beam

- Install Tile or Shake panels up the last full course before the ridge to the edge of the opening that has been cut for the ridge vent.

- Install 2 x 2 battens along the ridge. Align the top edge of the 2 x 2 along the edge of the plywood on both sides of the ridge to expose attic opening.

- Measure cut, bend and install panels.

- Roll out ridge vent along the tops of battens, remove white paper to expose adhesive and apply pressure to hold material in place.

- Install Hip & Ridge over vent material.
Ridge Venting – Center Beam

- Install panels up the last full course before the ridge.
- Install 2 x 2 battens along the ridge. Cut, bend and install panels. Stack needed number of 2 x 2 and 1 x 2 (depending on roof slope) to roof center beam. Allow for ¾”-1” clearance between hip & ridge and top panel.
- Roll out ridge vent along the tops of battens, remove white paper to expose adhesive and apply pressure to hold material in place.
- Install Hip & Ridge.
Panel Vent - Installation

- Install DECRA panels until you reach the approximate panel vent location.

- Carefully measure, mark and cut a rectangle hole 29” x 5” in the roof deck to match the opening of the underside of the DECRA Panel Vent.

- Install the panel vents as you would normal DECRA panels.
Valley Application with Battens

- Install standard “W” style valley. Valley metal should be min. 7” wide.
- In new construction, the valley must have one layer of Type 30 felt underlayment, 36” wide or ice & water shield underneath as required by local building code.
- Install the valley metal overlapping the valley pieces a min. of 6”.
Valley Application with Battens cont’d

- Secure the valley metal to the top of the batten by notching the return at the top of the valley and fold the tab onto the top of the batten and secure with fastener.

- Paint visible areas of valley prior to installing panels.

- After valley flashing has been fit and secured into valley area and full panels have been positioned up to valley, measure for cut panels.
Open Valley

- To create an open valley, snap lines to desired opening.
- Working on one side of the valley at a time, measure, cut and bend panels starting at the bottom of the valley and working up.
- Bend and cut edge of panels down against the up-stand of the valley metal.
**Closed Valley**

- Find and establish the center of the valley by either snapping a line or following existing center rib.

- After valley flashing has been fit and secured into the valley area, start on one side of the valley by measuring, cutting, bending and installing panels in a clean straight line.

- Next, measure, cut and bend panels to fill in the other side of the valley. Make sure these panels meet the opposing side of the valley.
**Fascia Metal Flashing**

- Flashing is Required along the fascia to cover build up at the first batten.

- Stone coated fascia metal is available in 3.5” and 5” exposures in all colors.
**Roof to Wall w/ J Channel (Tile Pan)**

- Slide J Channel under existing under existing sidewall flashing, turn panel down into J Channel. If J Channel will not fit up the existing flashing, slide J Channel up under the existing siding.
If no existing flashing is present, turn the panel up 2” and counter flash with Side Flashing.

Seal turn up against the wall and seal Side Flashing before applying to wall.
Panel Layout with Battens

- Lay full panels starting with the first full course down from the ridge. Fasten first course along back flange. Lay panels by tucking them under the upper panels.

- DECRA Shake panels should be staggered to create an irregular appearance. DECRA Tile should be staggered sideways a minimum of one pan. DO NOT used even panel offsets.

- Panels can be laid either right to left or left to right.

- After laying three courses, begin fastening the nose and work down.
Fastening Panels with Battens

- Panels are fastened to wood battens with a min. of four 8d corrosion resistant common nails or four min. #9 Hex (1/4” diameter) x 1-1/2” long corrosion resistant screws.

- Screws should be used in freeze/thaw areas.

- One fastener is place on the downturn of the panel 1” from the overlapped edge.

- The remaining fasteners are evenly spaced across the panel.

Apply downward pressure to “seat” panel when fastening.
Panel Installation - Ridge

- Measure from the front of the back flange to front of 2 x 2 at the ridge and bend panel.
- Add 2” to the bend line and cut panel.
- Install panels along the ridge one side at a time. Conform each panel to the ridge and fasten.
- Install panels along the other side of the ridge. Keep panels straight.

Bend full panels before cutting.
Panel Installation - Hip

- When installing Tile or Shake, run a 2 x 2 vertically up the battens next to the hip.
- Bring the panel to the 2 x 2 and turn the panel up 1-1/2”.
- After cutting the panels, make a 1-1/2” bend that will run along the 2 x 2 at the hip.

[Diagram showing bend line and cut line]
**Rake / Gable with Battens**

- When installing panels along the rake/gable and finishing it with Hip & Ridge, run a 2 x 2 vertically along the rake.

- In a batten installation the 2 x 2 will sit on top of the battens.

- Bring the panel up to the 2 x 2 and bend panel up 1-1/2".
**Hip & Ridge**

- Install Hip & Ridge pieces along hips, ridges and rakes.
- Hip & Ridge pieces are overlapped and fastened on both sides along the ridges, rake/gables and hip boards with the same fasteners for securing panels.
- Bend and fold exposed ends of hips and ridges neatly and finish with an End Cap.
**Penetrations**

- Cut the Underpan to fit tightly around the plumbing jack. Do not use lead or Copper.
- The Underpan must lap over the lower field panel when positioned around pipe.
- Cut pipe-flashing apron to fit onto Underpan, cut panel to fit snug. Seal around and finish with Touch-Up Kit.

![Penetrations](image-url)
Chimneys

- Measure from panel below chimney up to base of chimney, cut panel to fit. Add 2” to all measurements.

- Panels to fit left and right sides of chimney will be measures and cut the same way.

- Measure the width of the chimney, cut, conform and install the chimney saddle to fit above chimney. For brick and stucco, counter flash over top of chimney saddle. For siding, tuck chimney saddle up under siding.
Start battening at the fascia with the longest width and work up to course above or below stepped fascia.

Measure and treat it like a ridge.

Measure panel from the front and cut excess from back of panel.
**Additional Installation Details**

- In high wind areas, top & bottom three courses of full panels should be fastened with 7 fasteners at 7 evenly spaced locations.
- Check local codes and standards in Hurricane Areas.
- For Cold Climate conditions it is recommended to use ice and water shield.
- Fastening panels with a minimum #9 Hex (1/4” Diameter) x 1-1/2” long corrosion resistant screw is recommended.
- Avoid walking on side laps of panels.
- Step on the panel where the nose is supported by the batten.
**Additional Installation Details**

- Where possible, Roofing Grade (Polyurethane) sealant / adhesive should be covered by roofing materials or by a matching stone granules.
- Sealant should not be used to refinished damaged panel surfaces.

- After Installation is completed, be sure to clean off ALL debris, ESPECIALLY any metal shavings.
- DECRA Touch Up Kits are available in all matching colors and should be used where it is necessary to touch up or repair panel finishes.
Helpful Online Tools

- MyDECRA App is available for free download at the Apple Store and Google Play.
- Eagleview Premium Reports are available at gold level pricing through MyDECRA.
- Comes with FREE DECRA Material list for ALL profiles.
HELPFUL TOOLS

DECRA Tile & Shake Estimating Sheet

- DECRA Tile
- DECRA Shake
- DECRA Shake Panel Vent
- Tile End Cap
- DECRA Ridge Vent
- 3/16" Fascia Metal (Curved) Fascia
- 3/16" Fascia Metal (Curved) Fascia
- Valley Metal
- Underpans
- Side Flashing
- Fasteners
- Color Coordinating Corrugation
- Resistant Square
- 2x2 Timber Battens
- 1x4 Counter Battens
- Truss Hardware

Call DECRA for additional details
800-258-9740

Support Materials available at www.decra.com
Code Compliance

- Code compliance information can be found at http://www.decra.com/technical/product-evaluations