



# Leading Edge Plus™

## Application Instructions

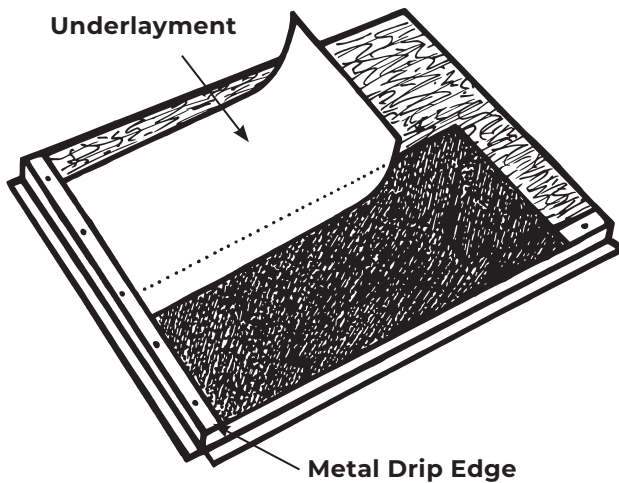
ENGLISH

**IMPORTANT MESSAGE • PLEASE READ!** Products must be applied properly. They are designed for use as starter strip shingles only, and should not be used for any other application. We assume no responsibility for leaks or defects resulting from poor application or failure to properly prepare the surface to be roofed over, or failure to provide proper ventilation in accordance with minimum property standards requirements. Review all applicable building codes, minimum property standards, and requirements prior to applying these shingles using the application instructions found on this wrapper. Use caution when stacking bundles on sloped roofs.

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**ROOF SLOPE:** Never apply asphalt shingles to roof slopes less than 2:12. For slopes 2:12 to less than 4:12 (LOW SLOPE), see special underlayment requirements outlined below.

## STEPS 1-5



### STEP 1:

**PREPARE THE ROOF DECK:** Deck must be smooth, firm, clean, dry and securely nailed. Wood panel decking is to be exterior grade, conforming to building code requirements. Panels are to be 3/8" min. thick plywood, or 7/16" min. thick non-veneer. The installation of asphalt shingles on dimensional lumber (including shiplap/board decks) is not recommended as it may potentially cause buckling problems, and may not be covered by the applicable Asphalt Shingle Limited Warranty.

### STEP 2:

**APPLY DRIP EDGE ALONG EAVES:** Apply metal drip edge over underlayment or directly to the deck along the eaves, spacing nails approximately 12" apart, conforming to building code requirements.

### STEP 3:

**EAVE PROTECTION:** Apply eave protection, such as IKO StormShield® Ice & Water Protector, as per building code requirements and manufacturer's instructions, overhanging

eaves by 1/4" to 3/4" and extending up the roof at least 24" beyond the vertical projection of the interior surface of the outside wall. NOTE: IKO recommends the use of eaves protection in all situations, however, if no ice and water protector is required by your local code or standard, then alternately apply first course of underlayment overhanging the eaves by 1/4" to 3/4".

### STEP 4:

**UNDERLAYMENT:** Apply either asphalt saturated felt or synthetic underlayment, such as IKO's Stormtite™, in horizontal courses up the roof with 2" side laps and 4" end laps. Trim the sheet to fit the final course at the peak. One layer of underlayment is required over the entire deck to qualify for an ASTM E108/UL790 Class A fire rating or which may be required per the local building code.

**LOW SLOPE:** For roof slopes less than 4:12 down to 2:12 apply underlayment in successive courses by overlapping the preceding sheet by 19" with 4" end laps. Alternatively, apply a single layer of ice and water protector over the entire deck per manufacturer's instructions. NOTE: SHINGLES APPLIED ACCORDING TO THESE INSTRUCTIONS ON SLOPES 3:12 TO 4:12 WILL BE WARRANTED FOR THE FULL WARRANTY TERM. SHINGLES ON SLOPES LESS THAN 3:12 DOWN TO 2:12 WILL BE WARRANTED FOR 12 YEARS.

### STEP 5:

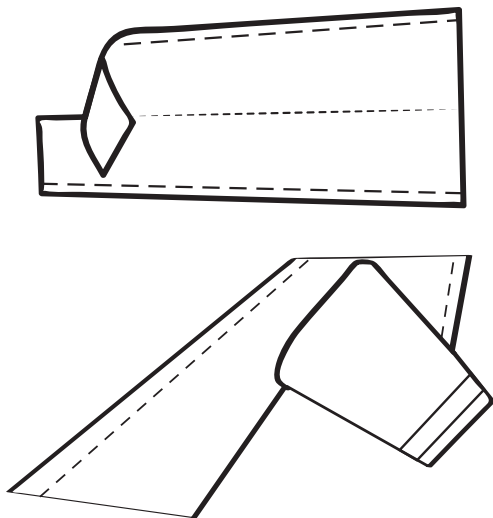
**APPLY DRIP EDGE AT THE RAKES:** Apply metal drip edge on top of any underlayment along rake edges, spacing nails approximately 12" apart.

**STEP 6:**

**INSTALL FLASHING:** Corrosion-resistant flashing must be used to help prevent leaks where a roof meets a wall, another roof, a chimney or other objects that penetrate a roof. Flashing shall conform to the requirements of applicable building code and good roofing practice.

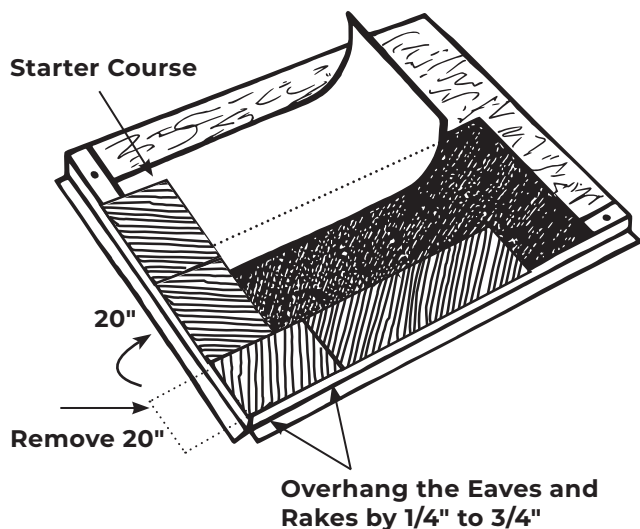
**STEP 7:**

**INSTALL OPEN METAL VALLEYS:** Metal valleys are recommended. (Closed valley applications are acceptable but not recommended. Please see Limited Warranty for details.) Complete valley flashing before shingles are applied. Center a 36" wide strip of ice and water protector in the valley and then fasten at the edges with only enough nails to hold in place. Center a minimum 24" wide, minimum 28 gauge pre-finished/galvanized metal valley liner in the valley, and fasten the edges with only enough nails to hold in place. Snap two chalk lines the full length of the valley, 6" apart at the top and increasing in width 1/8" per foot towards the bottom. When the shingles are being applied, lay them over the valley flashing, trim the ends to the chalk line, and cut a 2" triangle off the corner to direct water into the valley (A). Embed the valley end of each shingle into a 3" band of asphalt plastic cement (B). Do not place a nail in the shingle closer than 2" from the chalk line.

**STEP 8****STEP 8:**

**INSTALL STARTER STRIP SHINGLES:** Each 40-7/8" x 15-3/4" IKO Leading Edge Plus shingle is perforated lengthwise for separation into two (2) starter strips. Take one IKO Leading Edge Plus shingle and fold flat at perforation to separate.

## STEPS 9-12



### STEP 9:

Take one of the separated starter strips 40-7/8" x 7-7/8" and remove approximately 20". Install this starter strip on the lower left corner of the roof deck, granule side up, with the factory installed sealant adjacent to the eaves. The starter strip should overhang the rake edge and eaves by 1/4" to 3/4". Fasten the starter strip to the roof deck with nails located 3" to 4" from the eave edge and 1" in from each end.

### STEP 10:

Take the leftover 20" piece starter strip. Rotate the piece and align it vertically up the rake edge with the factory installed sealant adjacent to the outer edge of the roof. The starter strip should overhang the rake edge by 1/4" to 3/4". Fasten the starter strip to the roof deck with fasteners located 3" to 4" from the rake edge and 1" in from each end.

### STEP 11:

Repeat Steps 9 – 10 for the right lower corner of the roof deck.

### STEP 12:

Apply full-length IKO Leading Edge Plus starter strips to the remaining eave and rake edges of the roof deck. Install the starter strips granule side up with the factory applied sealant adjacent to the edges. The starter strips should overhang the rake edge and eaves by 1/4" to 3/4". Fasten the starter strips to the roof deck with nails located 3" to 4" from the eave edge, 4 nails per starter strip.

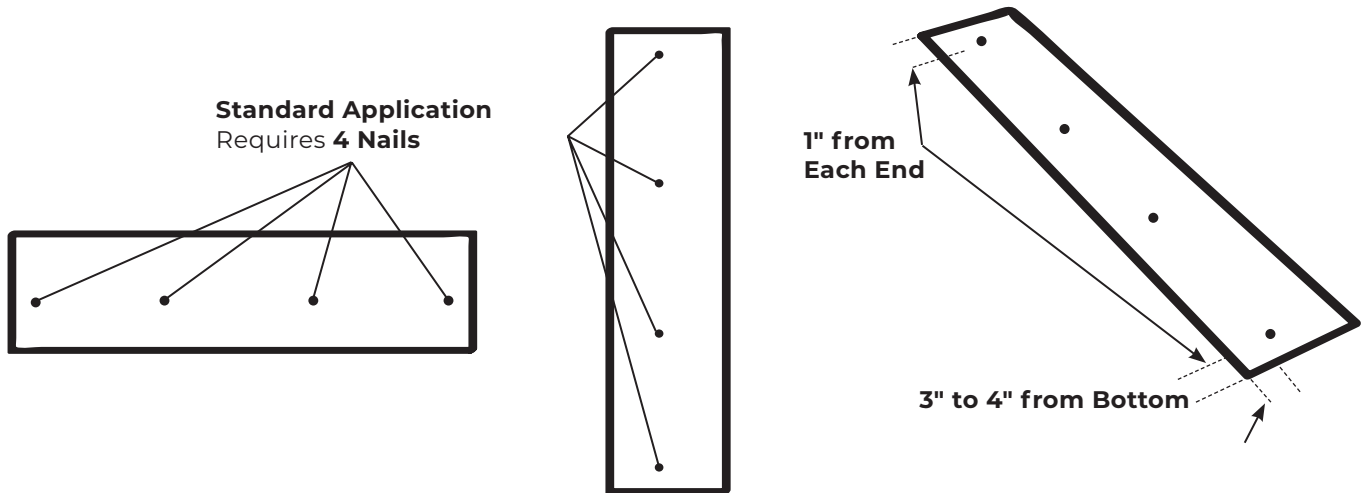
### STEP 13:

**INSTALL SHINGLES:** Follow instructions on the wrapper. Make certain the first course of field shingle lies flush with the edges of the fastened IKO Leading Edge Plus.

### STEP 14:

**INSTALL HIPS AND RIDGES:** IKO recommends its pre-cut hip and ridge products, or pre-formed high profile IKO UltraHP. For IKO pre-cut hip and ridge products, bend each piece over the hip or ridge, and nail per instructions on the wrapper. The exposed nail heads of the final shingle should be covered with roofing cement. For IKO UltraHP, follow the instructions on the box. Prior to application in cold weather, store hip and ridge shingles in a heated area to allow for easier bending.

## IMPORTANT! — PROPER NAILING



### IMPORTANT MESSAGE • PLEASE READ!

To ensure coverage under the High Wind Resistance Limited Warranty: Starter strip shingles must be used at all eaves and rakes. The shingles must be installed with additional nails as specified, or they must have an opportunity to seal or be manually sealed at the time of installation. In Canada, manual sealing along with additional nails is required. In Florida, manual sealing is not required.

**FASTENERS:** Nails must be 11 or 12-gauge roofing nails, corrosion-resistant, with at least 3/8" heads, and at least 1" long. For decks 3/4" thick or thicker, nails must go at least 3/4" into the deck. On thinner decks, nails must go at least 1/8" through the deck.

