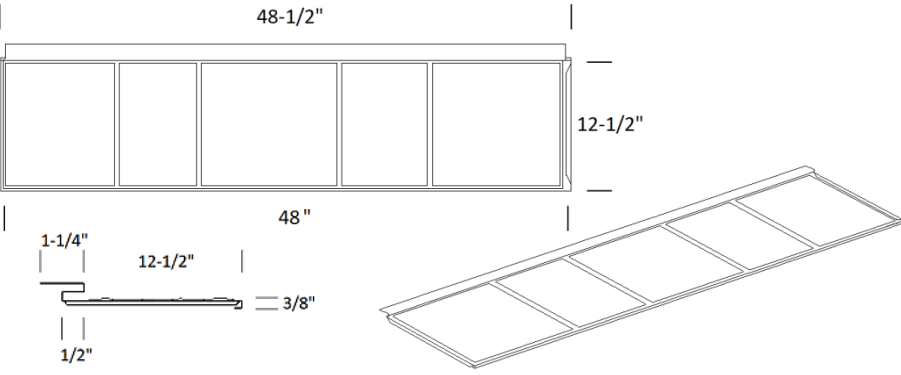
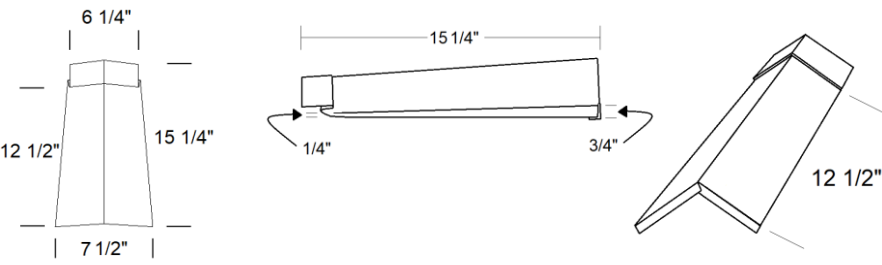

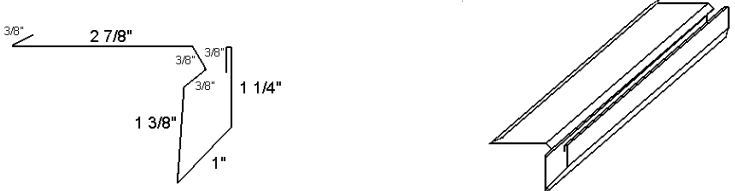

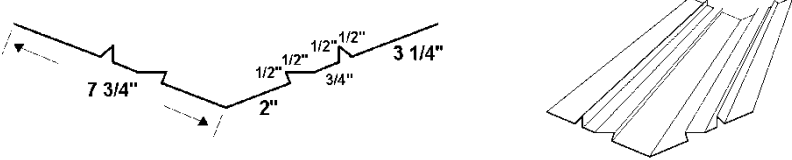


IRONSTONE SLATE & FLASHING SPECIFICATIONS (2019)

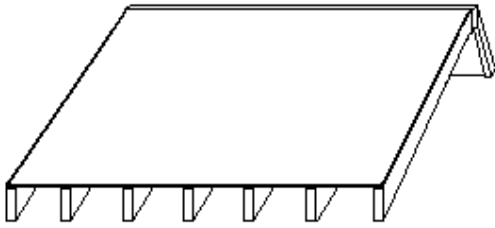
	<p style="text-align: center;">IRONSTONE SLATE</p> <table style="width: 100%; border-collapse: collapse;"> <tr><td>Overall Length</td><td style="text-align: right;">48 ½"</td></tr> <tr><td>Length of Coverage</td><td style="text-align: right;">48"</td></tr> <tr><td>Width of Coverage</td><td style="text-align: right;">12 ½"</td></tr> <tr><td>Total Panel Coverage</td><td style="text-align: right;">4.17 sq. ft.</td></tr> <tr><td>Weight</td><td style="text-align: right;">3.58 lbs</td></tr> <tr><td>Panels per box</td><td style="text-align: right;">20 pcs</td></tr> <tr><td>Panels per square</td><td style="text-align: right;">24 pcs</td></tr> <tr><td>Per pallet</td><td style="text-align: right;">22 bxs / 440 pcs</td></tr> <tr><td>Square per pallet</td><td style="text-align: right;">18.26 sq</td></tr> <tr><td>Weight per Pallet</td><td style="text-align: right;">1575 lbs</td></tr> </table>	Overall Length	48 ½"	Length of Coverage	48"	Width of Coverage	12 ½"	Total Panel Coverage	4.17 sq. ft.	Weight	3.58 lbs	Panels per box	20 pcs	Panels per square	24 pcs	Per pallet	22 bxs / 440 pcs	Square per pallet	18.26 sq	Weight per Pallet	1575 lbs
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	<p style="text-align: center;">IRONSTONE CAP</p> <table style="width: 100%; border-collapse: collapse;"> <tr><td>Overall Length</td><td style="text-align: right;">15 ½"</td></tr> <tr><td>Length of Coverage</td><td style="text-align: right;">12 ½"</td></tr> <tr><td>Weight</td><td style="text-align: right;">0.9 lbs</td></tr> <tr><td>Slate Caps per box</td><td style="text-align: right;">50 pcs</td></tr> <tr><td>Boxes per pallet</td><td style="text-align: right;">12 boxes</td></tr> <tr><td>Slate Caps per pallet</td><td style="text-align: right;">600 pcs</td></tr> <tr><td>Weight per pallet</td><td style="text-align: right;">540 lbs</td></tr> </table>	Overall Length	15 ½"	Length of Coverage	12 ½"	Weight	0.9 lbs	Slate Caps per box	50 pcs	Boxes per pallet	12 boxes	Slate Caps per pallet	600 pcs	Weight per pallet	540 lbs						
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	<p style="text-align: center;">IRONSTONE DRIP</p> <table style="width: 100%; border-collapse: collapse;"> <tr><td>Overall Length</td><td style="text-align: right;">96"</td></tr> <tr><td>Length of Coverage</td><td style="text-align: right;">93"</td></tr> <tr><td>Weight (6")</td><td style="text-align: right;">3.62 lbs</td></tr> </table>	Overall Length	96"	Length of Coverage	93"	Weight (6")	3.62 lbs														
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Length of Coverage	93"																				
Weight (6")	3.62 lbs																				
	<p style="text-align: center;">IRONSTONE GABLE</p> <table style="width: 100%; border-collapse: collapse;"> <tr><td>Overall Length</td><td style="text-align: right;">96"</td></tr> <tr><td>Length of Coverage</td><td style="text-align: right;">93"</td></tr> <tr><td>Weight (8")</td><td style="text-align: right;">4.83 lbs</td></tr> </table>	Overall Length	96"	Length of Coverage	93"	Weight (8")	4.83 lbs														
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	<p style="text-align: center;">IRONSTONE WALL</p> <table style="width: 100%; border-collapse: collapse;"> <tr><td>Overall Length</td><td style="text-align: right;">96"</td></tr> <tr><td>Length of Coverage</td><td style="text-align: right;">93"</td></tr> <tr><td>Weight (8")</td><td style="text-align: right;">4.83 lbs</td></tr> </table>	Overall Length	96"	Length of Coverage	93"	Weight (8")	4.83 lbs														
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	<p style="text-align: center;">IRONSTONE 16" VALLEY</p> <table style="width: 100%; border-collapse: collapse;"> <tr><td>Overall Length</td><td style="text-align: right;">96"</td></tr> <tr><td>Length of Coverage</td><td style="text-align: right;">93"</td></tr> <tr><td>Weight (16")</td><td style="text-align: right;">9.66 lbs</td></tr> </table>	Overall Length	96"	Length of Coverage	93"	Weight (16")	9.66 lbs														
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IRONSTONE SLATE INSTALLATION

Revised JUL 2020

DECK REQUIREMENTS



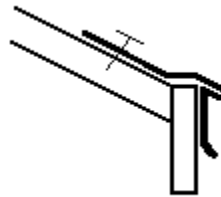
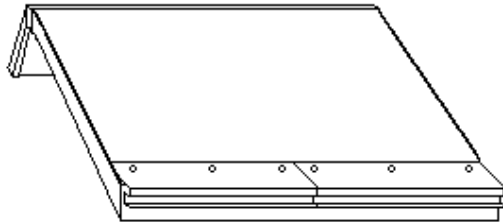
SOLID SHEETED DECK REQUIRED
FOR NEW CONSTRUCTION

New Construction: Requires solid sheeted deck

Asphalt Re-Roof:
Per local building code. Okay to install over asphalt if roof slope is over 6/12

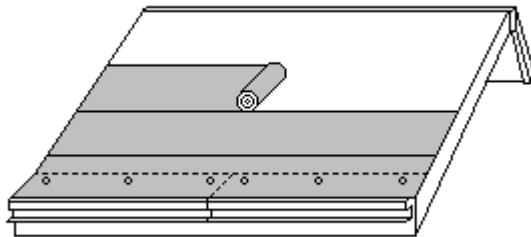
Cedar Re-Roof:
Tear-off cedar, fill in deck as necessary – max. spacing 4" gap.

DRIP FLASHING



Drip Flashing:
Drip flashing to be installed prior to underlayment. Install flashing to hang over fascia board

UNDERLAYMENT



APPLY UNDERLAYMENT
OVER PREPARED DECK

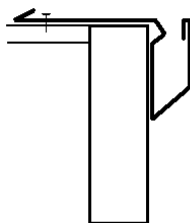
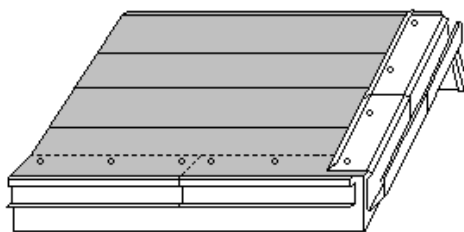
New Construction: Requires min. ASTM D226 Type II

Asphalt Re-Roof:
Per local building code. If no underlayment required, must ensure existing roof is water tight (i.e. spot repair with ice & water shield) prior to installation of metal panels

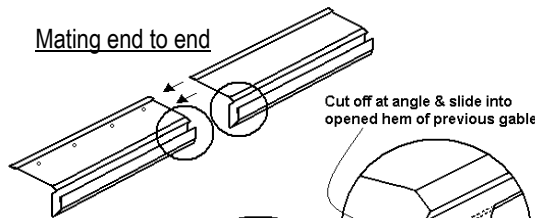
Cedar Re-Roof:
Requires min. ASTM D226 Type II

NOTE: ROOF INTERRUPTIONS SUCH AS VENTS, SKYLIGHTS, PLUMBING STACKS, CHIMNEYS, WALLS, ETC. ARE TO BE FULLY WATERPROOFED WITH SELF-ADHERING MEMBRANE UNDERLAYMENT TO A MINIMUM OF 1 FT. ONTO THE ROOF SURFACE (OR PER THE LOCAL BUILDING CODE WHEN SPECIFIED)

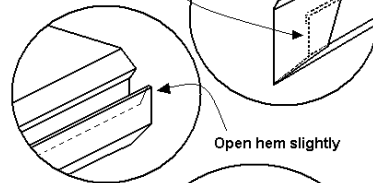
GABLE FLASHING



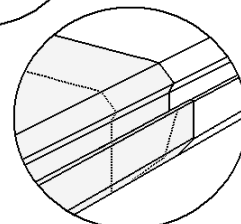
Mating end to end



Cut off at angle & slide into opened hem of previous gable



Open hem slightly



Gable:
Starting at the eave, install gable flashing to hang over fascia board.

Mating end to end:
Open hem on top end, cut off corner of next piece at angle as shown to fit inside the previous installed section of gable flashing. The cut piece should slide into the opened hem until it stops.

****Acceptable install procedures may vary slightly due to local requirements****

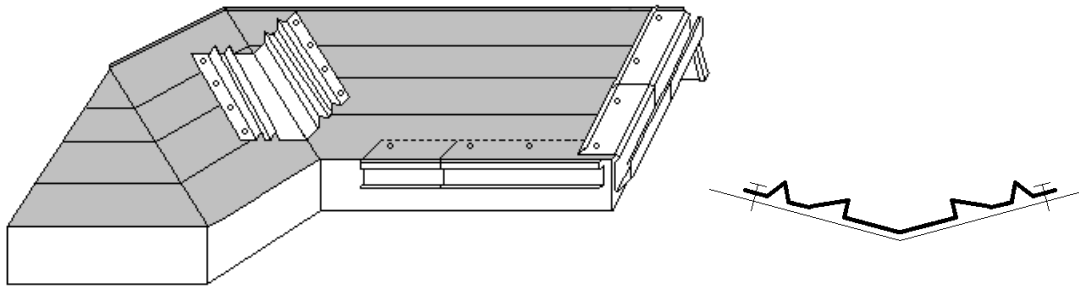
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IRONSTONE SLATE INSTALLATION

Revised JUL 2020

VALLEY FLASHING



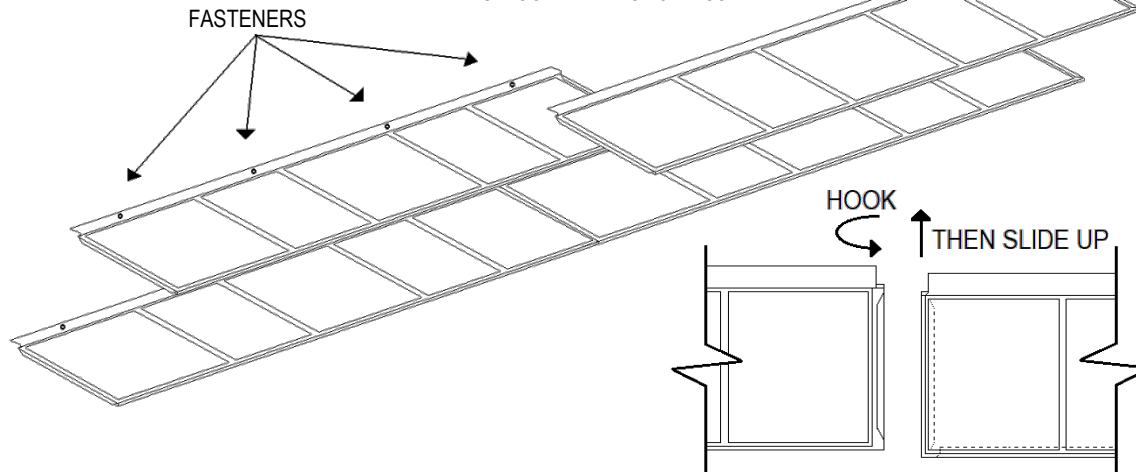
Valley Flashing:
Install valley flashing, fasten as shown (Do not fasten inside the ridges of valley flashing)

AT THIS POINT ALL DRIP CAP, GABLE AND VALLEY FLASHING SHOULD BE INSTALLED BEFORE PROCEEDING WITH THE PANEL INSTALLATION

IRONSTONE SLATE PANELS

PANELS LAID LEFT TO RIGHT
RIGHT PANEL OVER THE LEFT PANEL

MINIMUM 4 FASTENERS PER PANEL
STAGGER PANELS FOR VISUAL APPEAL

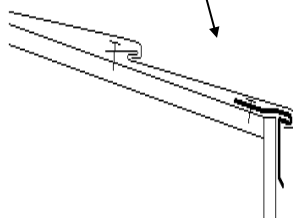


Laid Left to Right:
Metal panels should be laid left to right so that the right one is overlapping the left one. Starting at the eave ending at the ridge.

Fasteners & Lapping:
Each metal panel should be fastened with a minimum of four fasteners. Lapping should be staggered for visual appeal

INSTALLING IRONSTONE SLATE PANELS

PANELS HOOK ONTO **DRIP FLASHING**

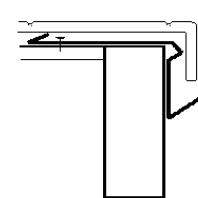


1/2"

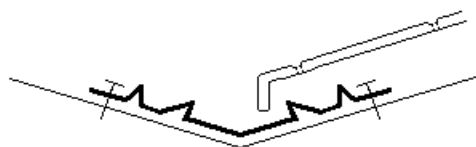
BEND PANEL ON ANGLE
FOR VALLEY & GABLE BENDS

1"

BEND PANELS DOWN INTO **GABLE FLASHING**



BEND PANELS DOWN INTO **VALLEY FLASHING**



Drip Cap:
First row of panels hook onto drip flashing

Gable Flashing:
Bend panel down into gable flashing on angle as shown. Cut off end of subsequent sections of gable, as shown on page one, to ensure proper fit end to end.

Valley Flashing:
Bend panel down into valley on angle as shown

****Acceptable install procedures may vary slightly due to local requirements****
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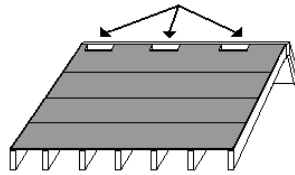


IRONSTONE SLATE INSTALLATION

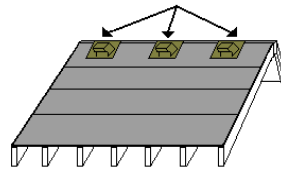
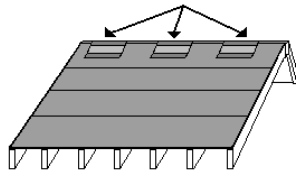
Revised JUL 2020

RIDGE VENTILATION

OPEN RIDGE (per local building code)



APPLY VENT TAPE **OR** INSTALL ROOF VENTS



**INSTALLATION OF SLATE PANELS OVER ROOF VENTS
SAME AS PLUMBING VENT (SEE NEXT SECTION)**

Ventilation:

New construction and re-roof both require venting installed as per the current local building codes

Vents **OR** Vent Tape:

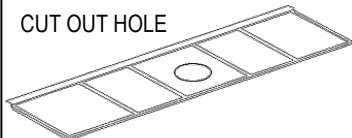
Install a section of vent tape over each vent opening **OR** install a roof vent over each vent opening.

Note: Ridge venting is also acceptable – see separate detail sheet.

PLUMBING AND/OR ROOF VENT INSTALLATION

FIRST PANEL

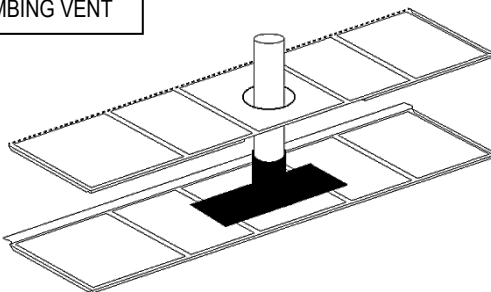
CUT OUT HOLE



INSTALL OVER PLUMBING VENT

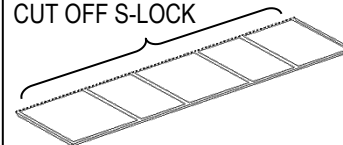
SECOND PANEL

FIRST PANEL

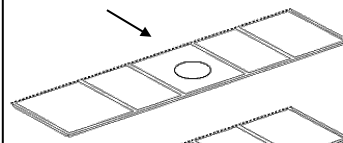


SECOND PANEL

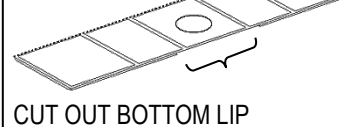
CUT OFF S-LOCK



CUT OUT HOLE



CUT OUT BOTTOM LIP



First Panel:

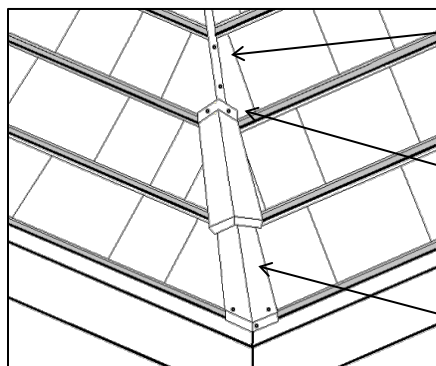
Cut out hole in first panel & install over plumbing vent. Slide plumbing vent flashing overtop.

Second Panel:

Cut a second panel as shown, note the top s-lock portion is cut off and a section matching the width of the vent flashing is cut out of the bottom lip to allow for drainage. Install second panel directly overtop of first panel tucking cut edge under s-lock and hook bottom lip on.

HIP AND RIDGE CAP

HIP

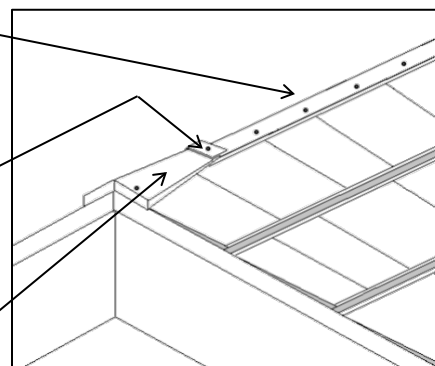


OVERLAP,
FOLD OVER
& FASTEN

FASTENERS

HIDDEN
FASTENER
SHAKE CAP

RIDGE



Hip & Ridge:

Cut panels, one side flush with hip/ridge, other side overlap 2", fold over & fasten to ensure the seam is weathertight. In severe climate areas use 6" peel & stick tape along seam as well. Install caps starting at the bottom/eave using minimum two fasteners per cap. Each cap overlaps and hooks onto the previous one. All fasteners must penetrate wood deck/sheathing. Flatten high points of the shake panels with rubber mallet to allow caps to lay flat.

****Acceptable install procedures may vary slightly due to local requirements****

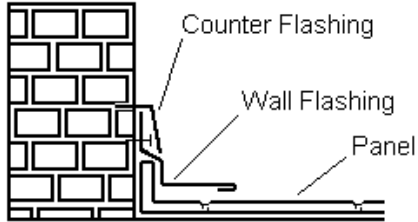
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IRONSTONE SLATE INSTALLATION

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WALL/CHIMNEY FLASHING



Wall Flashing:
Bend panel up against wall, fasten wall flashing overtop as shown, underneath existing counter flashing or siding

ADDITIONAL INFORMATION:

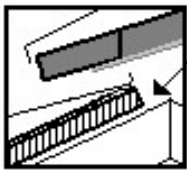
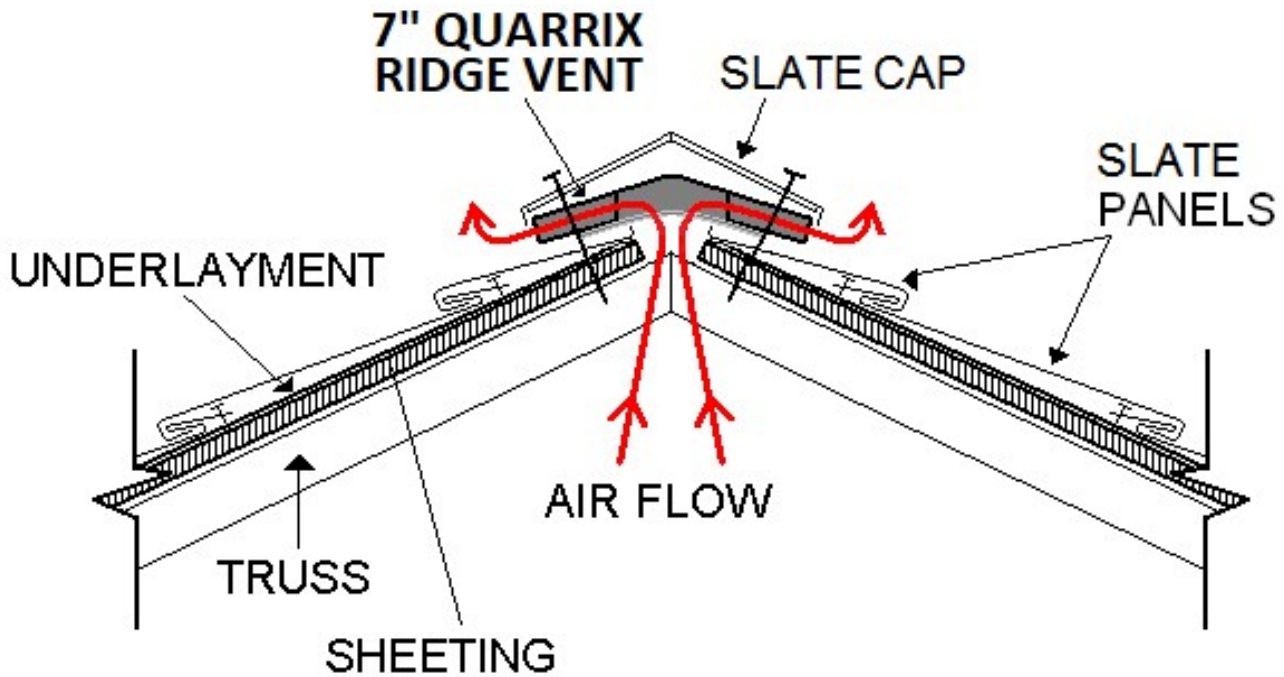
Tools: screw gun & driver finder, nail gun, tin snips/power snips to cut panels (no saw blades) & hand folder supplied by Rare Mfg.

Severe Climate Areas: In areas subject to wind-driven snow, ice build-up, wind-driven dust or sand, or in other areas designated by the building official, both of the following must be provided:

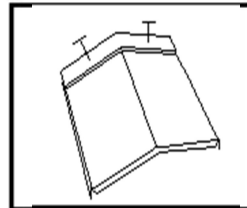
- solid sheathing with two layers of Type I or one layer of Type II for the field of the roof.
- solid sheathing with two layers of Type I applied shingle-fashion, solid-cemented together with approved cementing material between the plies, or a self-adhering polymer-modified bitumen sheet, extending from the eave up the roof to a point 24 inches inside the exterior wall of the building.

****Acceptable install procedures may vary slightly due to local requirements****
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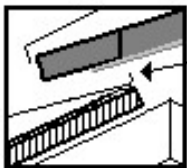
IronStone SLATE – Ridge Vent Details



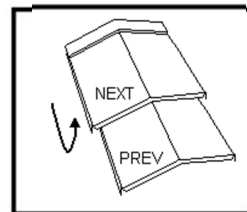
CUT SHEETING 1.5" BACK FROM RIDGE ON BOTH SIDES TO ALLOW FOR PROPER AIR FLOW



FASTEN CAP THRU S-LOCK PORTION OF CAP ONLY



BEND PANEL UP 1/2" TO CATCH ANY POSSIBLE MOISTURE DRIPPING FROM TOP INSIDE EDGE OF RIDGE VENT

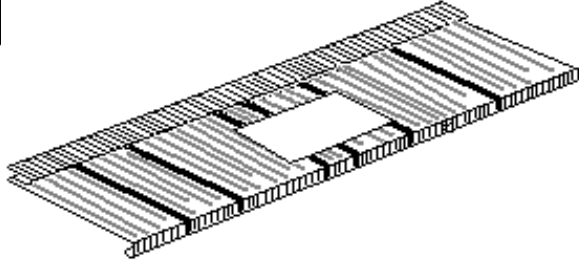


NEXT CAP HOOKS ONTO PREVIOUS CAP

Ironwood Shake – Residential Vent Details

Note: These installation details are for a generic/standard type of residential roofing vent. This is our recommended way to install such a vent within our Ironwood shake roofing system. You may use other suitable roofing vents and adjust the install method to suite the vent accordingly.

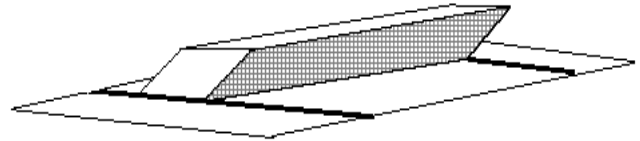
1



FIRST SHAKE PANEL:

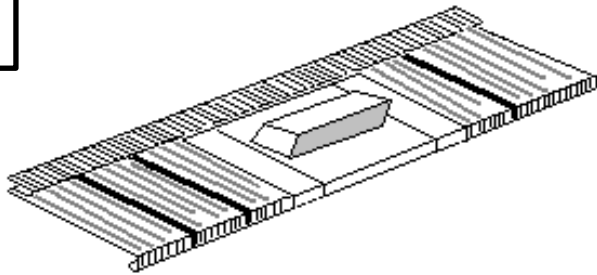
Cut hole in panel to allow required amount of air flow per local bldg. code. Install this panel over roof vent hole.

2



Residential Roofing Vent

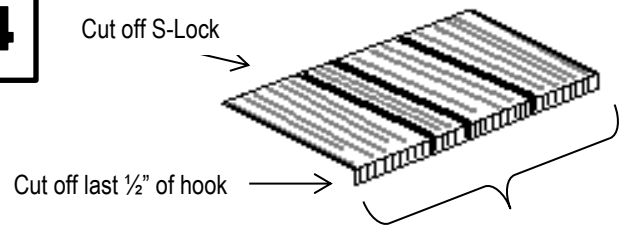
3



FIRST SHAKE PANEL:

Insert residential vent under the S-lock portion of the IW panel, centered over the air space. Bend down 1/2" front edge to cover the roof panel edge.

4

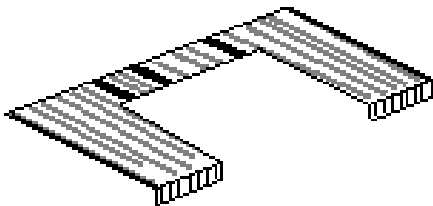


SECOND SHAKE PANEL:

Cut out the matching section from another IW panel to use as a cover panel overtop of the vent skirt area. Cut off both the S-lock from the top edge and the 1/2" hook portion from the bottom/front edge as indicated above.

Min. 22" wide – make side cuts at the bottom of the nearest separation groove to provide extra support

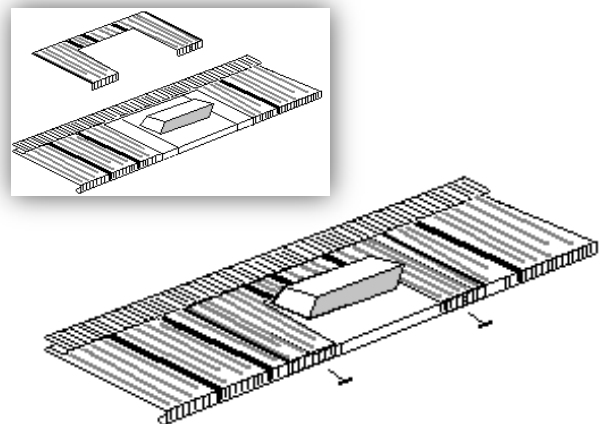
5



SECOND SHAKE PANEL:

Cut out a rectangle slightly larger than the raised vent and cut off adjacent front edge of the panel.

6



Insert cover shake over vent skirt and slide it up into the S-lock of the first shake panel. Fasten with 2 screws through the front edge as shown above.

Installed Ironwood Shake Residential Vent



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