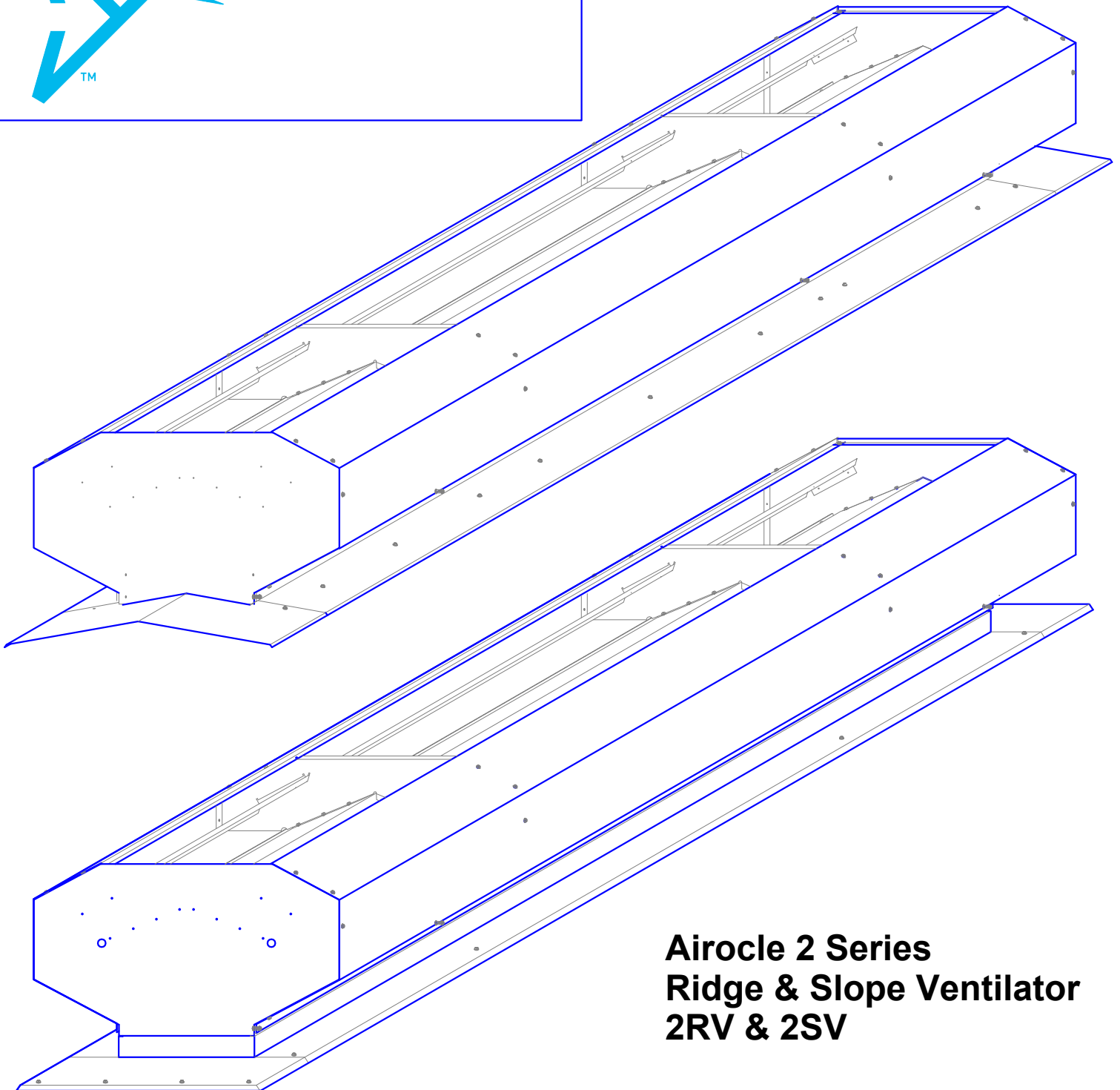
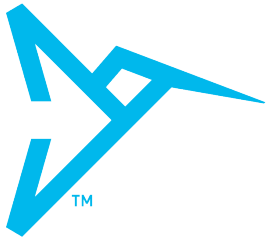


# Airocle™



**Airocle 2 Series  
Ridge & Slope Ventilator  
2RV & 2SV**

## ASSEMBLY INSTRUCTIONS

# CONTENTS

p2

## PAGE

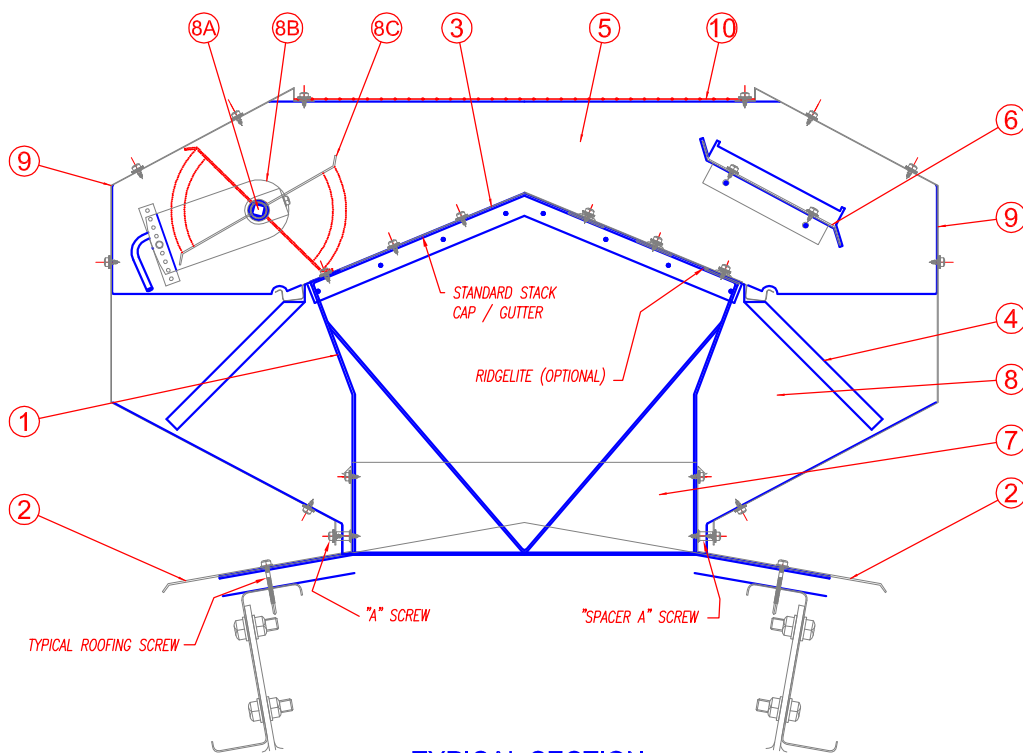
## DESCRIPTION

1	TITLE PAGE (RIDGE & SLOPEVENT ASSEMBLY)
2	CONTENTS & CONTACT INFORMATION
3	TYPICAL ASSEMBLY & SECTION
4	PARTS LIST & DESCRIPTION
5	PRE-INSTALLATION CHECKLIST
6	STEP #1 ILLUSTRATION & NOTES
7	STEP #2 ILLUSTRATION & NOTES
8	STEP #2A ILLUSTRATION (OPTIONAL RIDGELITE)
9	STEP #3 ILLUSTRATION & NOTES
10	STEP #4 ILLUSTRATION & NOTES
11	STEP #5 ILLUSTRATION & NOTES
12	STEP #6 ILLUSTRATION & NOTES
13	STEP #7 ILLUSTRATION & NOTES
14	STEP #8 ILLUSTRATION & NOTES
15	STEPS 1, 2, 2A & 3 DESCRIPTION & NOTES
16	STEPS 4, 5 & 6 DESCRIPTION & NOTES
17	STEPS 7, 8 & 9 DESCRIPTION & NOTES

# Airocle<sup>TM</sup>



**IVR Group T/as Airocle**  
**15 Redbank Place**  
**PICTON NSW 2571**  
**Ph: (02) 4677 7300**



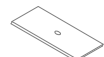
"SPACER A" SCREW



"A" SCREW



WEATHERLOK WASHER  
(FOR RIDGELITE OPTION ONLY)



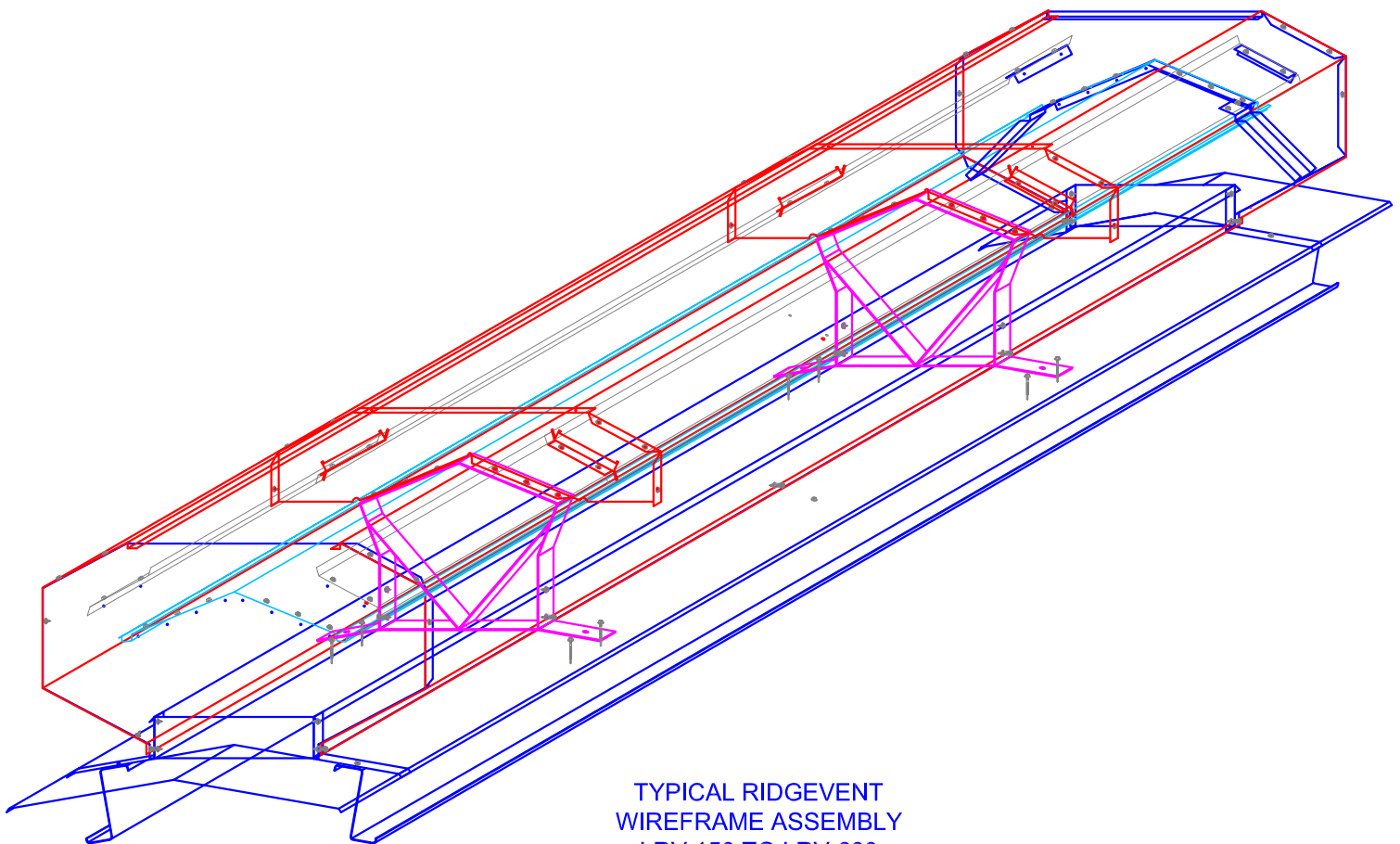
UNDERSIDE FIXING STRAP  
(FOR RIDGELITE LAP JOINTS ONLY)



10-16x16 TEK SCREW

TYPICAL SECTION  
LRV 150 TO LRV-600  
NOT TO SCALE

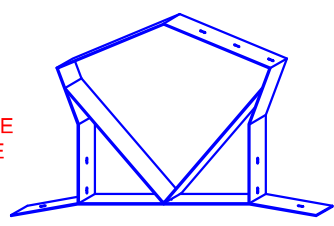
ITEMS 8A, 8B, 8C &  
10 ARE OPTIONAL



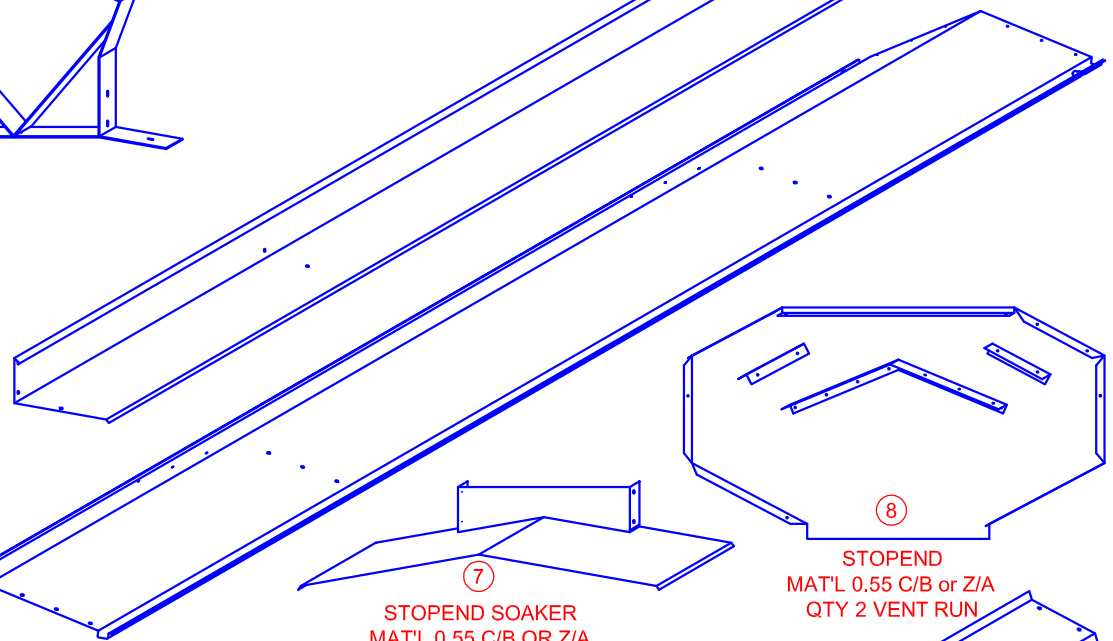
TYPICAL RIDGEVENT  
WIREFRAME ASSEMBLY  
LRV 150 TO LRV-600  
NOT TO SCALE

# RIDGE VENT ITEM IDENTIFICATION FOR MODELS LRV-150 TO LRV-600

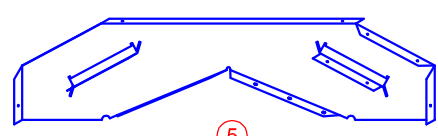
①  
MAIN FRAME  
MAT'L GAL FRAME  
QTY 2 / MODULE



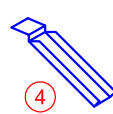
②  
STACK FLASHING  
MAT'L 0.55 C/B OR Z/A  
QTY 2 / MODULE



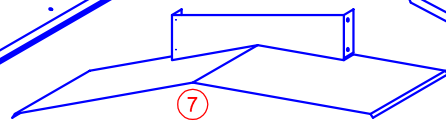
③  
STACK CAP / GUTTER  
MAT'L 0.55 C/B OR Z/A  
QTY 1 / MODULE



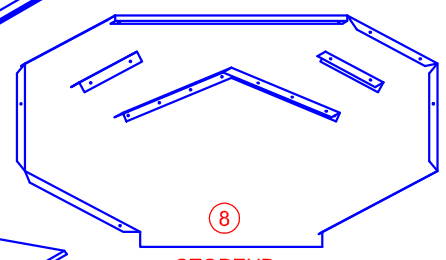
④  
GUTTER DRAINS  
MAT'L 0.55 Z/A  
QTY 2 / MODULE  
(USED ONLY ON LRV-450 TO LRV-600 VENTS)



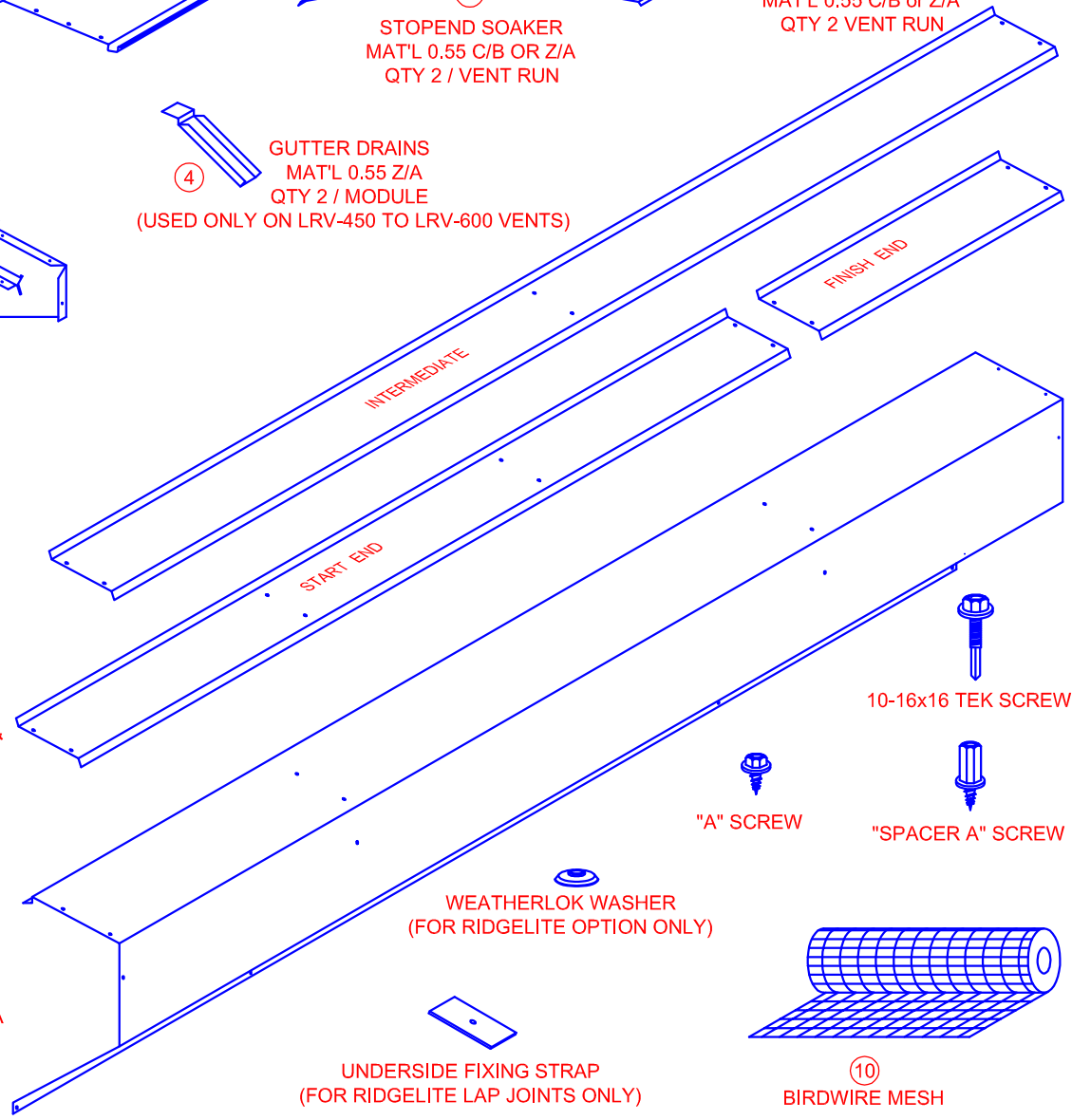
⑦  
STOPEND SOAKER  
MAT'L 0.55 C/B OR Z/A  
QTY 2 / VENT RUN



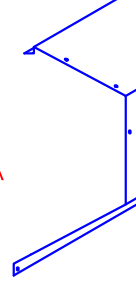
⑧  
STOPEND  
MAT'L 0.55 C/B or Z/A  
QTY 2 VENT RUN



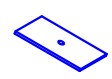
⑥  
FIXED GUIDEVANE BLADE  
(LRV-450- 600 ONLY)  
MAT'L 0.55 Z/A  
QTY 2 / MODULE  
NOTE: 3 BLADE LENGTHS  
(INTERMEDIATE 3050 / END 2280 &  
END 770)



⑨  
WINDBAND  
MAT'L 0.55 C/B OR Z/A  
QTY 2 /MODULE



UNDERSIDE FIXING STRAP  
(FOR RIDGELITE LAP JOINTS ONLY)



WEATHERLOK WASHER  
(FOR RIDGELITE OPTION ONLY)



"A" SCREW



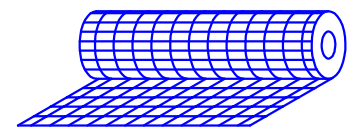
10-16x16 TEK SCREW



"SPACER A" SCREW



⑩  
BIRDWIRE MESH



## PRE-INSTALLATION CHECK LIST:

- CHECK ROOF OPENING CONFORMS TO THE NOMINATED THROAT WIDTH OF THE RIDGE VENT BEING INSTALLED.
- CHECK THAT THE PURLINS ARE IN THE CORRECT POSITION FOR SCREWING DOWN THE NOMINATED VENT.
- ENSURE THE SHEETS ARE TURNED UP TO NORMAL ROOFING PRACTICE.

## REMEMBER:

- ALL LAP JOINTS EXCEPT WINDBAND MUST BE WATER TIGHT USING SILICONE PROVIDED.
- LAPS OF ALL COMPONENTS ARE GOVERNED BY HOLE CENTRES. IN SOME CASES, HOLES MAY NOT APPEAR TO ALIGN BETWEEN COMPONENTS. ENSURE A PODGER IS USED IN AN ADJACENT HOLE TO ALIGN FOR SCREW FIXING.
- THE VENTILATOR IS ASSEMBLED USING 20x14 GUAGE "A" SCREWS THROUGHOUT, UNLESS OTHERWISE STATED. NOTE THAT AT LAP JOINTS, THE SMALL HOLE IS ALWAYS ON THE UNDERSIDE.

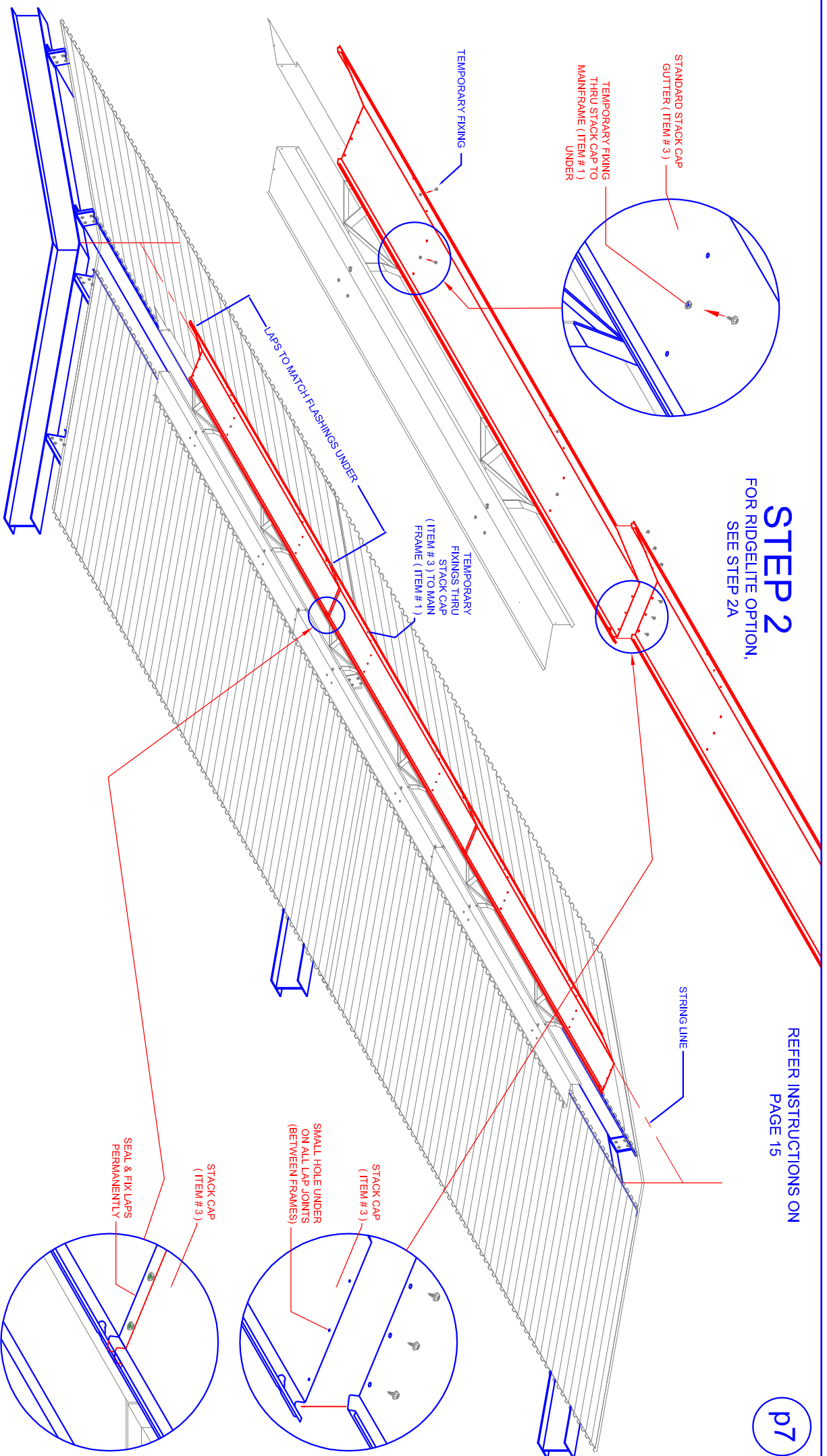
9d

PAGE 15



## STEP 2

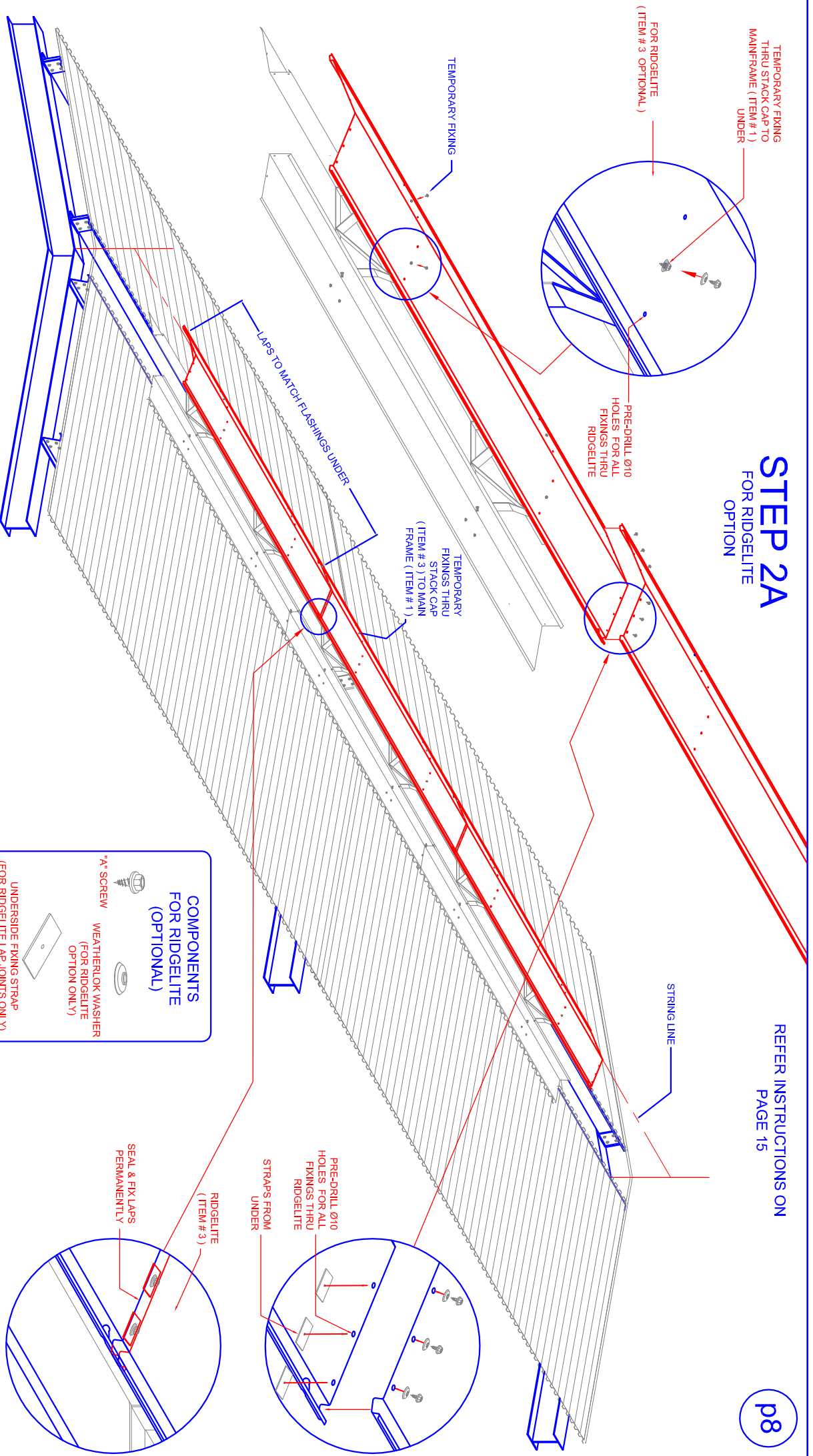
FOR RIDGELITE OPTION,  
SEE STEP 2A



# STEP 2A FOR RIDGELITE OPTION

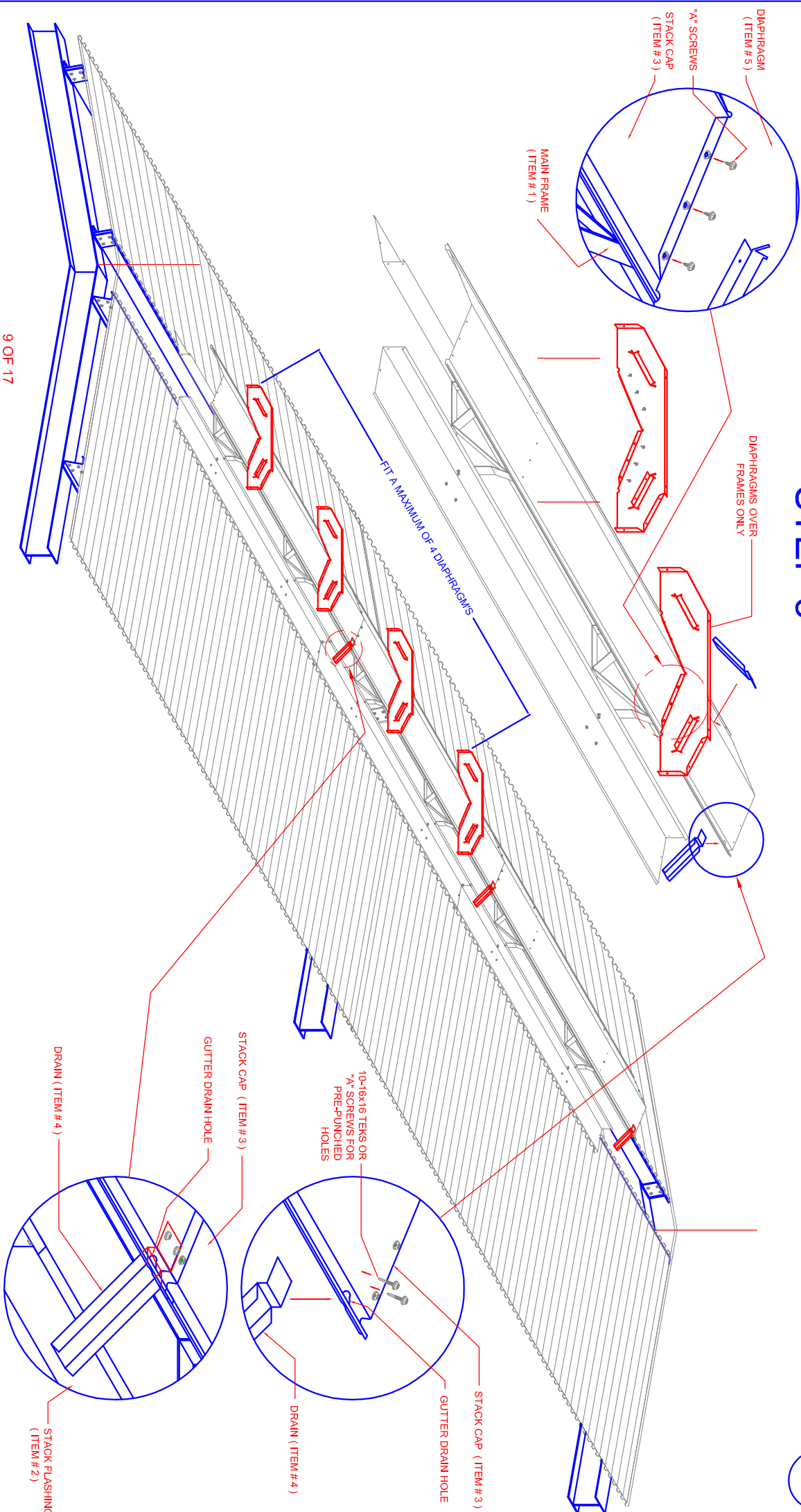
REFER INSTRUCTIONS ON  
PAGE 15

p8



# STEP 3

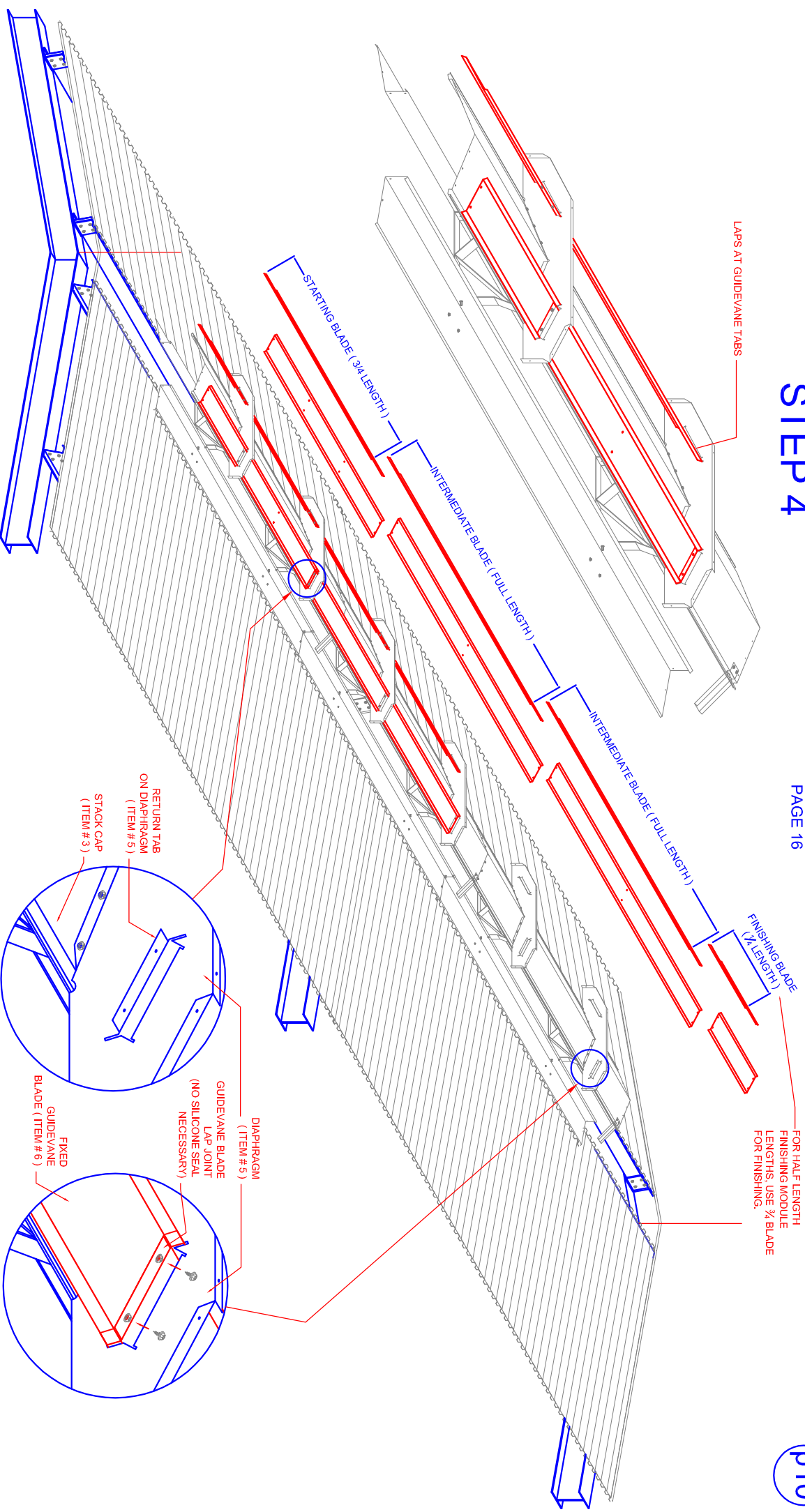
REFER INSTRUCTIONS ON  
PAGE 15



# STEP 4

REFER INSTRUCTIONS ON  
PAGE 16

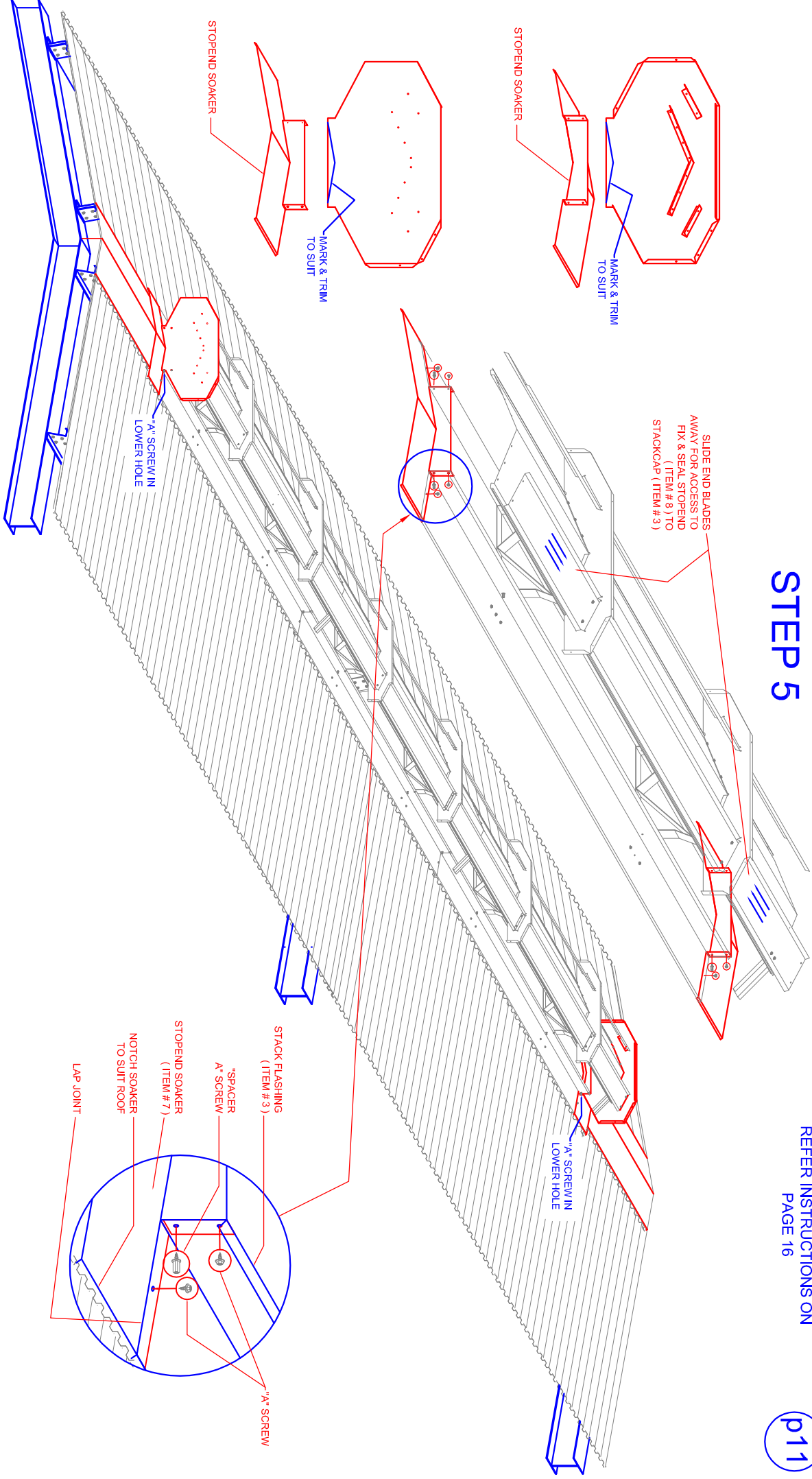
p10



# STEP 5

REFER INSTRUCTIONS ON  
PAGE 16

p11



p12

p12



SCREW FLASHING TO  
NORMAL ROOF  
PATTERN WITH OWN  
ROOF SCREWS

STACK FLASHING  
(ITEM # 2)

ROOF SHEETING

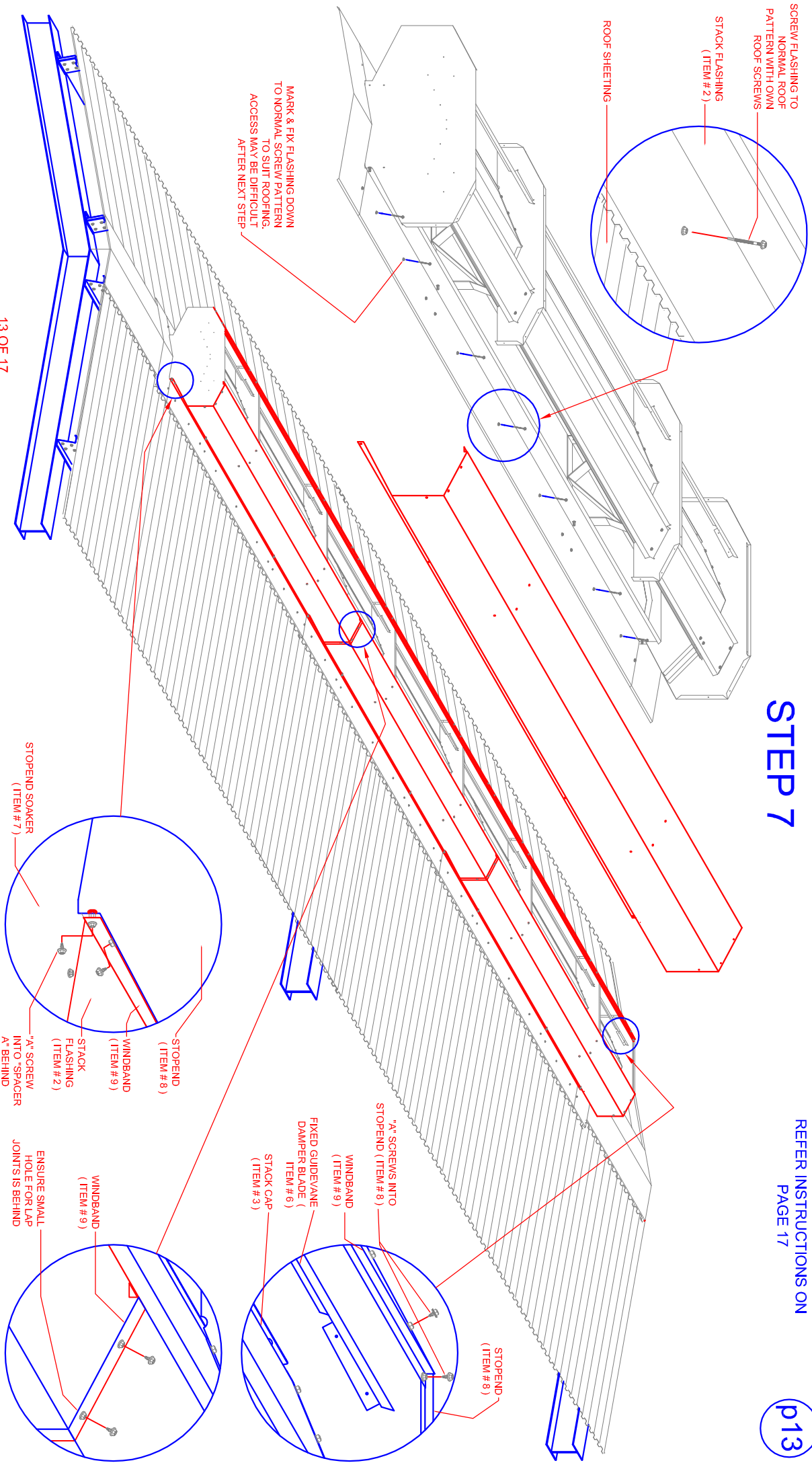
# STEP 7

REFER INSTRUCTIONS ON  
PAGE 17

p13

MARK & FIX FLASHING DOWN  
TO NORMAL SCREW PATTERN.  
ACCESS MAY BE DIFFICULT  
AFTER NEXT STEP

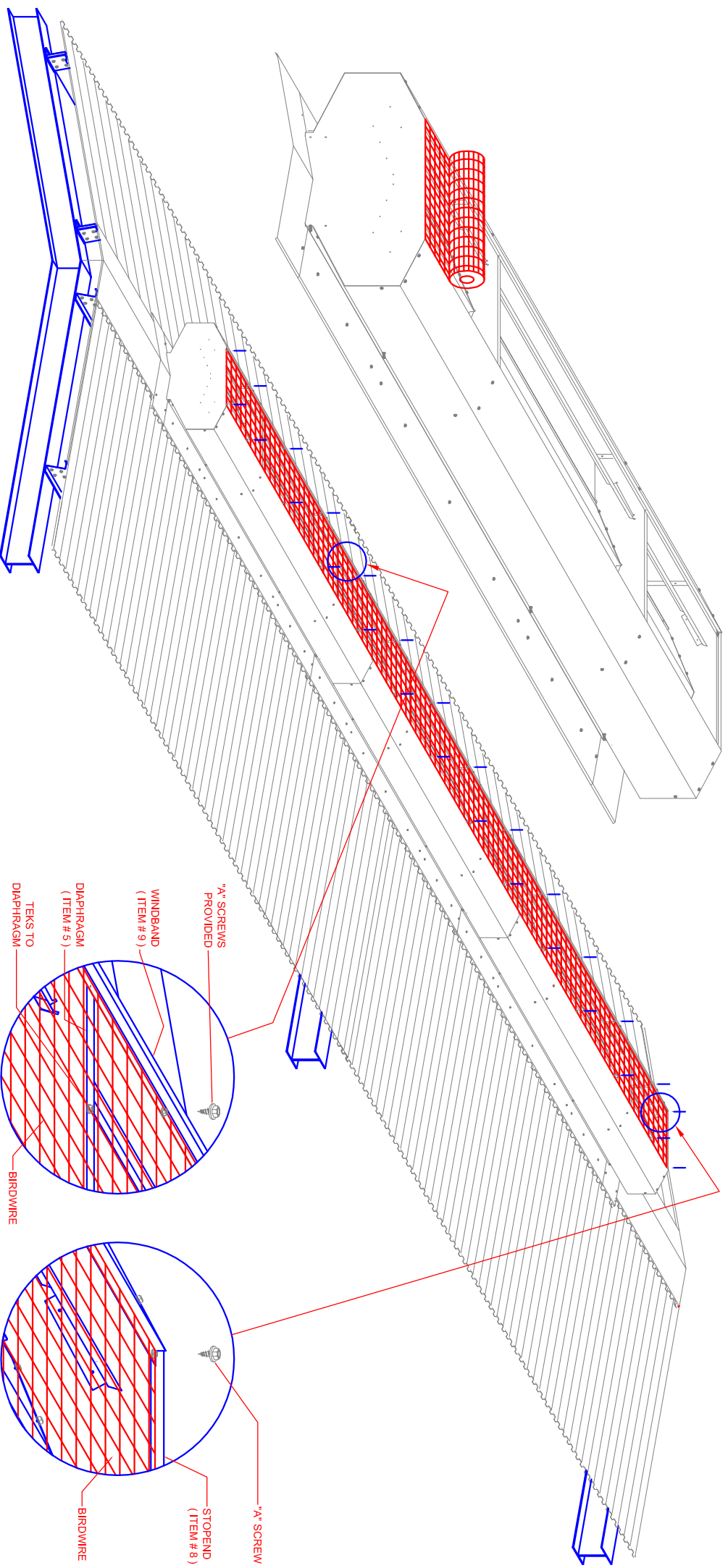
13 OF 17



# STEP 8 & 9

REFER INSTRUCTIONS ON  
PAGE 17

p14



STEP 1:

PLACE 2 MAINFRAMES ( ITEM # 1 ) APPROX 1500mm APART & FIX STACK FLASHING ( ITEM # 2 ) THRU HOLES PROVIDED TO FRAMES.

A "SPACER A" SCREW IS TO BE INSTALLED IN THE LOWER VERTICAL HOLE.

A "A" SCREW IS TO BE INSTALLED IN UPPER VERTICAL HOLE.

NOTE: PRE-PUNCHED HOLES MAY VARY IN POSITION ACCORDING TO VENT SIZE.

ALIGN ASSEMBLY MODULE LENGTH ALONG CENTRELINE OF RIDGE, WHILE MAKING SURE DIAGONALS ARE EQUAL (THIS WILL ENSURE SQUARENESS & ALIGNMENTS OF OTHER COMPONENTS IN LATER STEPS.

NOTCH STACK FLASHING ( ITEM # 2 ) TO SUIT ROOF SHEET PROFILE.

USING YOUR OWN ROOF SCREWS, FIX VENT TO ROOF WITHIN 15-20mm EACH SIDE OF BASE FRAMES THRU FLASHING / ROOF SHEETS TO PURLINS UNDER. THE FRAMES WILL SIT ON TOP OF ROOF SHEETING & THE SCREWS WILL ENSURE THAT THE FLASHING ACTS AS A STRAP OVER THE FRAMES BASE.

USING A STRING LINE, REPEAT THE ABOVE STEPS FOR ADDITIONAL MODULE LENGTHS.

NOTE:

ALL LAP JOINTS OF FLASHINGS ARE TO BE SEALED & WATER TIGHT USING THE SILICONE PROVIDED.

STEP 2:

SIT STACK CAP / GUTTER ( ITEM # 3 ) ON MAINFRAMES ( ITEM # 1 ). MAINFRAMES ARE ONLY REQUIRED TOWARDS CENTRE OF EACH MODULE (APPROX 756mm CTRS FROM EACH END), FRAMES ARE NOT TO BE USED AT THE LAP JOINTS.

TEMPORARILY PIN THE STACK CAP TO FRAMES AS THE DIAPHRAGMS ( ITEM # 5 ) ARE TO BE INSTALLED AT A LATER STAGE, & REQUIRE TO BE FIXED TO THE FRAMES THROUGH THE STACK CAP.

FIX LAPS OF STACK CAP / GUTTER AS SHOWN WITH DRAIN & SMALL PUNCHED HOLES UNDER. LAPS ARE TO BE WATER TIGHT USING SILICONE PROVIDED, & THE "A" SCREWS WITH NEO WASHERS ARE TO BE USED.

STEP 2A: (IF INSTALLING OPTIONAL RIDGELITE)

THE FIXING OF THE LAP JOINTS IS TO INCLUDE THE WEATHERLOK WASHERS UNDER SCREW HEADS, AND FIXING STRAP TO UNDERSIDE OF RIDGELITE WHICH WILL CLAMP THE JOINTS. THE LAPS ARE TO BE PRE-DRILLED WITH A Ø10mm HOLE FOR EACH SET OF FIXINGS. LAPS ARE TO BE WATER TIGHT USING SILICONE PROVIDED.

STEP 3:

ON MODELS LRV-450 & UPWARDS WITH INBUILT GUTTER , LOCATE DRAIN HOLES IN GUTTER OF STACK CAP & FIX DRAINS ( ITEM # 4 ) TO UNDERSIDE WITH 10-16x16 TEKS PROVIDED OR "A" SCREWS FOR PRE PUNCHED HOLES (FIXINGS INSTALLED FROM TOP).

INSTALL SEVERAL DIAPHRAGMS ( ITEM # 5 ) ENSURING THEY ALL FACE THE SAME WAY AS EACH OTHER. DIAPHRAGMS ARE FIXED TO MAINFRAMES ( ITEM # 1 ) THROUGH STACK CAP ( ITEM # 3 ) USING "A" SCREWS WITH WASHERS PROVIDED. THE TEMPORARY FIXING INSTALLED THROUGH THE STACK CAP ( ITEM # 3 ) EARLIER SHOULD NOW BE REMOVED, & THE DIAPHRAGM ( ITEM # 5 ) CAN BE FIXED PERMANENTLY.

THE DIAPHRAGM'S DO NOT REQUIRE A SILICONE SEAL UNDER TABS.

NOTE: AT THIS STAGE, ONLY INSTALL SEVERAL DIAPHRAGMS ( MAX 4 )

STEP 4: (ON MODELS LRV-450 TO LRV-600 ONLY)

FOR MODELS LRV-150 TO LRV-380, GO TO STEP 5.

INSTALL FIXED GUIDEVANE BLADE ( ITEM # 6 ) SETS FOR EACH PAIR OF DIAPHRAGMS ( ITEM # 5 ) INSTALLED. THE GUIDEVANES MAY BE SLID THROUGH THE SLOTS IN THE DIAPHRAGM'S UNTIL ALIGNMENT OF HOLES IS ACHIEVED.

NOTES:

- THE FIXED GUIDEVANES BLADES ( ITEM # 6 ) ARE THE ONLY COMPONENTS THAT LAP AT THE DIAPHRAGM'S ON THE RETURN TAB.
- THE LAP JOINTS OF THE BLADES DO NOT REQUIRE A SILICONE SEAL.

THE FIRST SET OF FIXED GUIDEVANE BLADES TO INSTALL FROM ONE END OF VENT RUN ARE THE 2280 mm LONG STARTERS ( APPROX  $\frac{3}{4}$  LENGTH ). THESE BLADES WILL START AT THE STOPEND ( ITEM # 8 ) & LAP AT THE SECOND DIAPHRAGM TAB (THIS BLADE SET HAS AN ADDITIONAL PAIR OF HOLES TO SUIT USE ON BOTH SIDES OF THE VENTILATOR. THIS SPARE SET OF HOLES MAY BE SEALED AS NECESSARY).

FROM HEREIN, THE FULL LENGTH (INTERMEDIATE GUIDEVANE BLADE ( ITEM # 6 ) 3050mm LONG) WILL BE INSTALLED AFTER EACH ADDITIONAL PAIR OF DIAPHRAGMS (ITEM # 5) ARE INSTALLED AS IN STEP 3 TO FINISH THE VENT RUN.

THE LAST PAIR OF GUIDEVANE BLADES ( ITEM # 6 ) TO BE INSTALLED WILL BE THE SHORT FINISHING GUIDEVANE BLADE SET (UNLESS A  $\frac{1}{2}$  MODULE IS USED, IN WHICH CASE THE FINISHING BLADES WILL BE THE SAME AS THE STARTING GUIDEVANE BLADES).

STEP 5:

MARK & CUT STOPEND ( ITEM # 8 ) TO SUIT STOPEND SOAKER ( ITEM # 7 ) & ROOF RIDGELINE CAPPING.

FIT STOPEND SOAKER ( ITEM # 7 ) USING "A" SCREWS PROVIDED.

THE LOWER VERTICAL HOLE IN THE STACK FLASHING ( ITEM # 2 ) IS TO BE FIXED TO THE STOPEND SOAKER ( ITEM # 7 ) USING THE "SPACER A" SCREW.

SEAL JOINTS TO BE WATER TIGHT WITH SILICONE PROVIDED.

THE STOPEND SOAKER ( ITEM # 7 ) SHOULD BE JOINED & SEALED TO THE ROOF CAPPING & TURNDOWN NOTCHED TO SUIT THE ROOF PROFILE.

NOTE: (ON MODELS LRV-450 TO LRV-600 ONLY)

THE STARTING & FINISHING FIXED GUIDEVANE BLADES ( ITEM # 6 ) SHOULD BE TEMPORARILY SLID AWAY FROM THE STOPEND ( ITEM # 8 ) TO ENSURE ACCESS TO FIX & SEAL THE STACKCAP / GUTTER ( ITEM # 3 ) TO THE STOPEND ( ITEM # 8 ) AT THE NEXT STEP.

STEP 6:

USING THE "A" SCREWS PROVIDED, FIT STOPEND ( ITEM # 8 ) OVER SOAKER END ( ITEM # 7 ) & SEAL JOINTS TO BE WATER TIGHT USING SILICONE PROVIDED.

USING THE "A" SCREWS PROVIDED, FIX & SEAL THE STACK CAP ( ITEM # 3 ) TO THE STOPEND (ITEM # 8) ENSURING A WATERTIGHT SEAL USING THE SILICONE PROVIDED.

(ON MODELS LRV-450 TO LRV-600 ONLY)

AFTER THE STOPEND ( ITEM # 8 ) IS INSTALLED, THE GUIDEVANE BLADES ( ITEM # 6 ) MAY THEN BE SLID BACK & BE PERMANENTLY INSTALLED & SILICONE SEALED TO STOPENDS ( ITEM # 8 ) WITH THE SILICONE PROVIDED.

NOTE :

USING YOUR OWN ROOF SCREWS, ENSURE THE STACK FLASHING ( ITEM # 2 ) IS SCREWED OFF TO PURLINS UNDER TO SUIT THE ROOF SCREW PATTERN / NORMAL PRACTICE. ACCESS MAY BE DIFFICULT AFTER THE WINDBAND ( ITEM # 9 ) IS INSTALLED.

STEP 7:

PLACE & FIX WINDBAND ( ITEM # 9 ) TO DIAPHRAGM ( ITEM # 5 ) USING "A" SCREWS PROVIDED.

USE "A" SCREWS TO FIX WINDBAND ( ITEM # 9 ) TO THE SPACER SCREWS USED IN THE STACKFLASHING ( ITEM # 2 ).

NOTES:

- LAPS ARE NOT AT MAINFRAMES, BUT IN BETWEEN ( TO MATCH THE STACK FLASHING ( ITEM # 2 ) & STACKCAP / GUTTER ( ITEM # 3 ) LAPS ).
- IT IS NOT NECESSARY TO SEAL THE WINDBAND LAPS.
- KEEP THE SMALL SET OF PUNCHED HOLES UNDER AT LAP JOINTS TO ENSURE THE SCREWS CLAMP THE JOINTS SUFFICIENTLY.
- ALL SWARF IS TO BE CLEANED TO ENSURE LONGEVITY.
- ALL DAMAGED SURFACES TO BE TOUCHED UP ACCORDINGLY.

STEP 8:

FIT BIRDWIRE ( ITEM # 10 OPTIONAL) TO TOP OPENING BY FIXING WIRE TO STOPENDS ( ITEM # 8 ), WINDBAND ( ITEM # 9 ) & DIAPHRAGM'S ( ITEM # 5 ) USING TEKS OR "A" SCREWS PROVIDED.

STEP 9:

CONDUCT FINAL INSTALLATION INSPECTION OF LRV RIDGE VENT, INCLUDING:

- ALL SCREWS ARE CORRECTLY FIXED.
- ALL JOINS & LAPS WHICH REQUIRE WATER TIGHTNESS ARE SEALED ACCORDINGLY.
- ALL PANELS ARE CORRECTLY FITTED & LAPPED.
- ALL PANELS ARE PROPERLY INSTALLED.
- ALL SWARF IS CLEANED AS TO NORMAL ROOFING PRACTICE.
- ALL DAMAGED SURFACES ARE TOUCHED UP APPROPRIATELY.