

KINGRIB HR-3 / HR-5 SERIES ROOF PANEL

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THESE DETAILS ARE PROVIDED AS A GUIDELINE FOR PROPER PANEL AND ASSOCIATED COMPONENT INSTALLATION, AND ARE BASED ON INDUSTRY ACCEPTED PRACTICES.

LOCATION OF VAPOR BARRIERS AND ASSOCIATED SEALANTS IN THESE DETAILS ARE BASED ON TYPICAL DESIGN PRACTICES FOR MOST U.S. CLIMATIC ZONES. (THE PRIMARY VAPOR BARRIER IS PLACED ON THE "WARM" SIDE IN WINTER).

PROJECTS LOCATED IN SPECIFIC AREAS SUBJECT TO EXTREME COLD AND/OR HIGH SNOW LOADS MAY REQUIRE MODIFICATIONS TO THESE DETAILS - CONTACT KINGSPAN TECHNICAL SERVICES FOR SPECIFIC PROJECT RECOMMENDATIONS.

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CORE DEPTHS:
1.5" (NON-STANDARD)
2.5", 4", 5", 6"

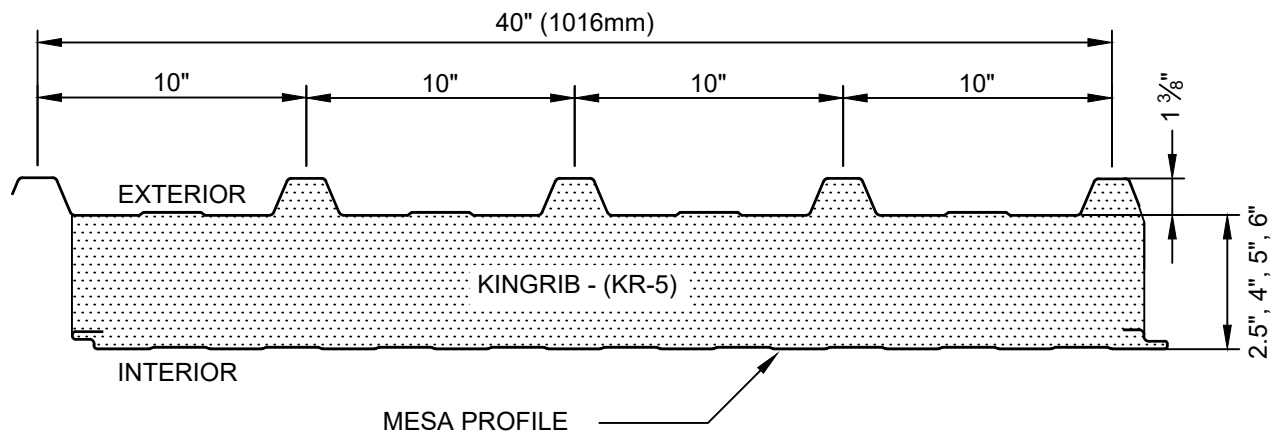
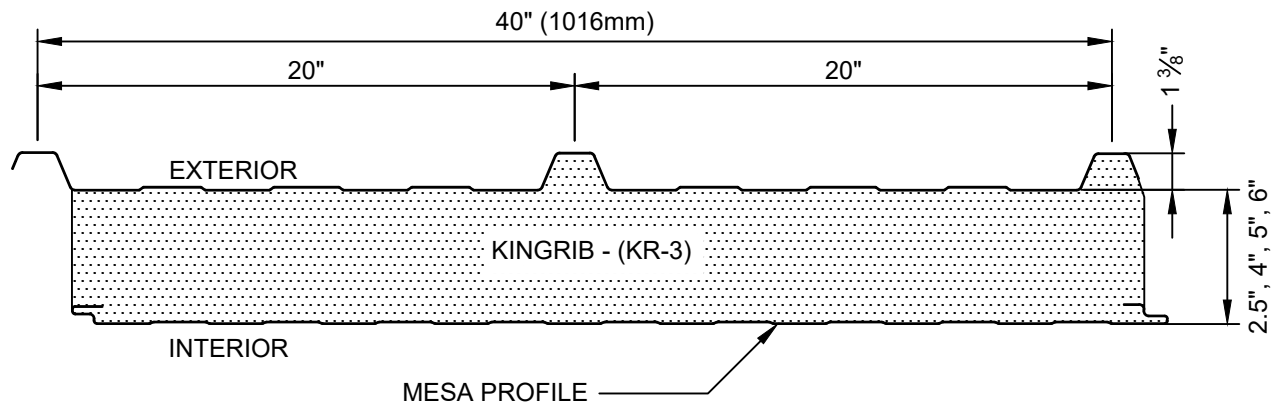
MODULE WIDTH:
40"

EMBOSSING:
EXTERIOR: STUCCO / NON-EMBOSSSED
INTERIOR: STUCCO / NON-EMBOSSSED

STEEL GAUGES:
EXTERIOR: 26 (STANDARD)
22, 24 (OPTIONAL)
INTERIOR: 26 (STANDARD)
22, 24 (OPTIONAL)

PANEL ORIENTATION:
ROOF

LENGTHS:
MINIMUM: 8'-0"
MAXIMUM: 59'-0"
(MAXIMUM ALLOWABLE LENGTH
SUBJECT TO SOLAR LOAD TABLE)



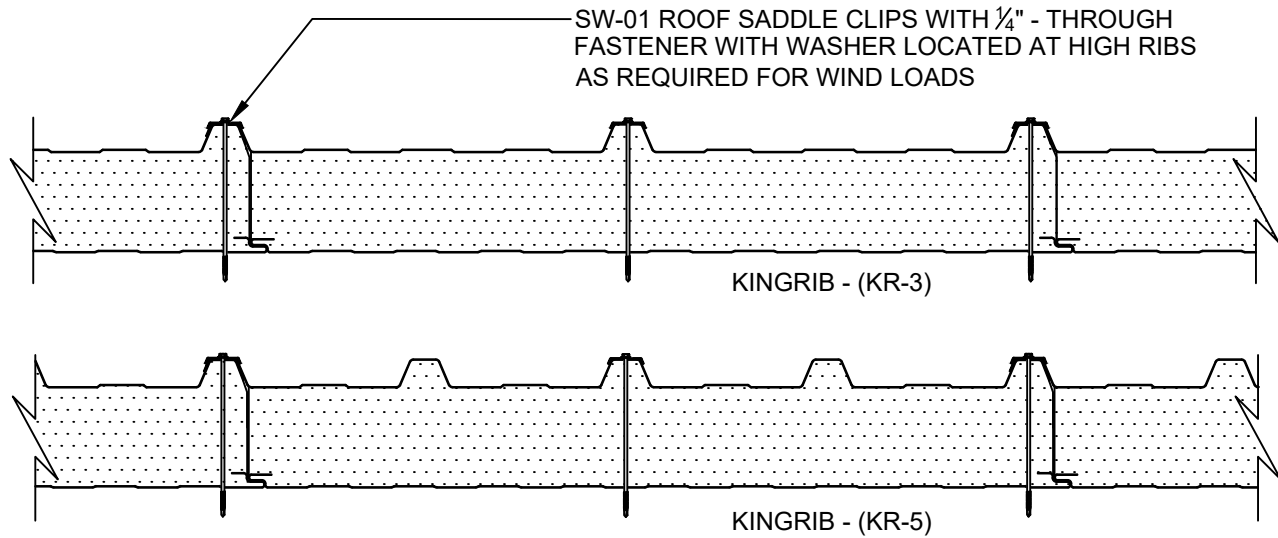
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PANEL PROFILE

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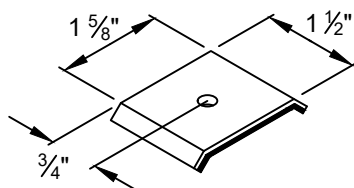
$\frac{1}{4}$ " - 14 X $\frac{7}{8}$ " STITCH TEK SCREWS
 * FOR SLOPES $\geq 1:12$ INSTALL AT 20" O.C. BETWEEN MAIN FASTENERS
 * FOR SLOPES $< 1:12$ INSTALL AT 12" O.C. BETWEEN MAIN FASTENERS

"SW-01" SADDLE WASHER W/ $\frac{1}{4}$ " Ø TEK FASTENER INTO SUPPORT MEMBER

1" x $\frac{3}{16}$ " BUTYL TAPE SEALANT ENTIRE LENGTH OF LAP JOINT

$\frac{1}{4}$ " - THROUGH FASTENERS WITH NEOPRENE WASHER

STAND ON THIS PANEL WHEN FASTENING



SW-01 SADDLE CLIP ISOMETRIC

DIRECTION OF INSTALLATION

CONTINUOUS BEAD OF FIELD APPLIED BUTYL SEALANT IN JOINT

$\frac{1}{4}$ " - THROUGH FASTENER WITH WASHER

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PANEL JOINT

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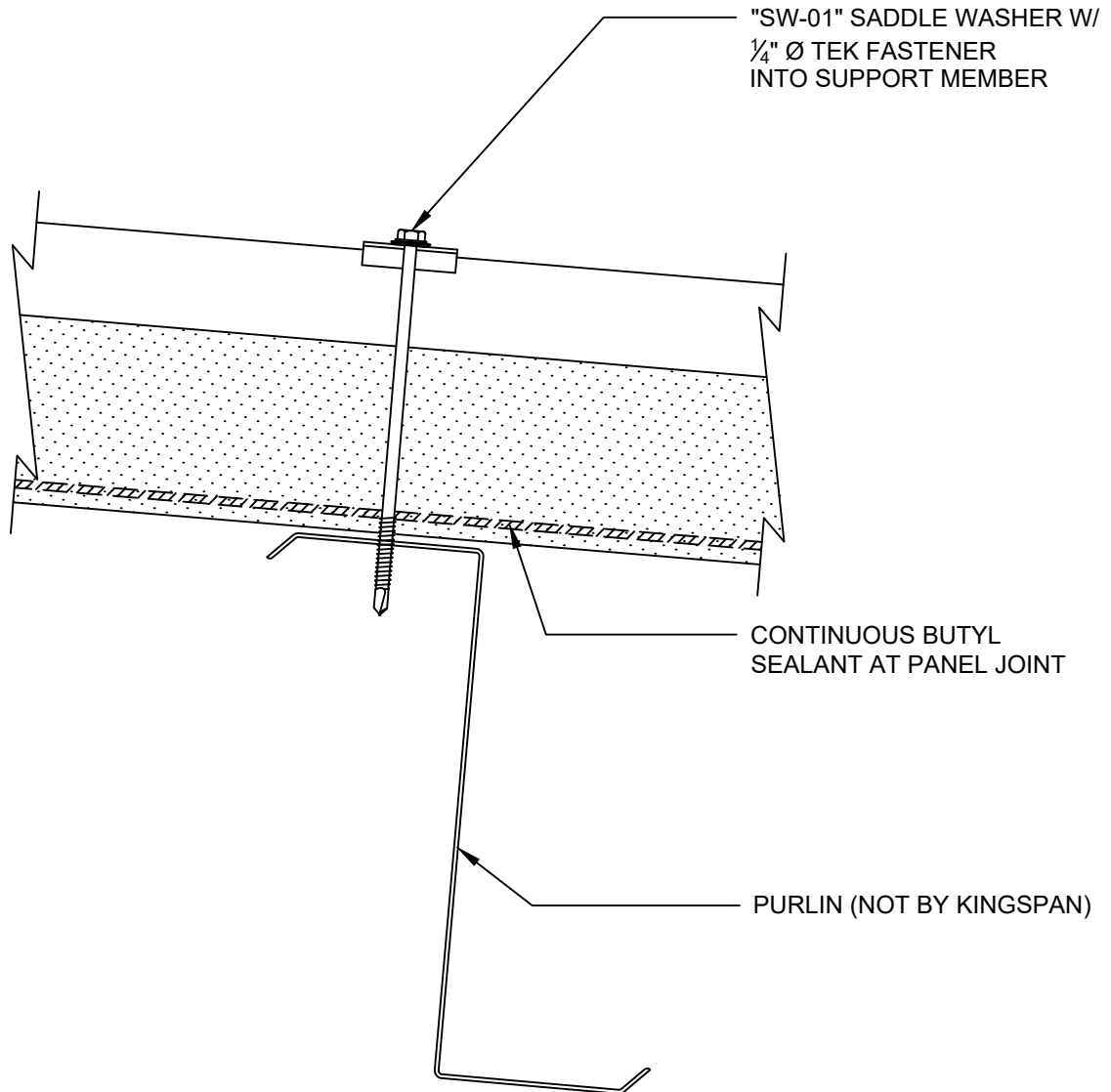
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INTERMEDIATE
SUPPORT

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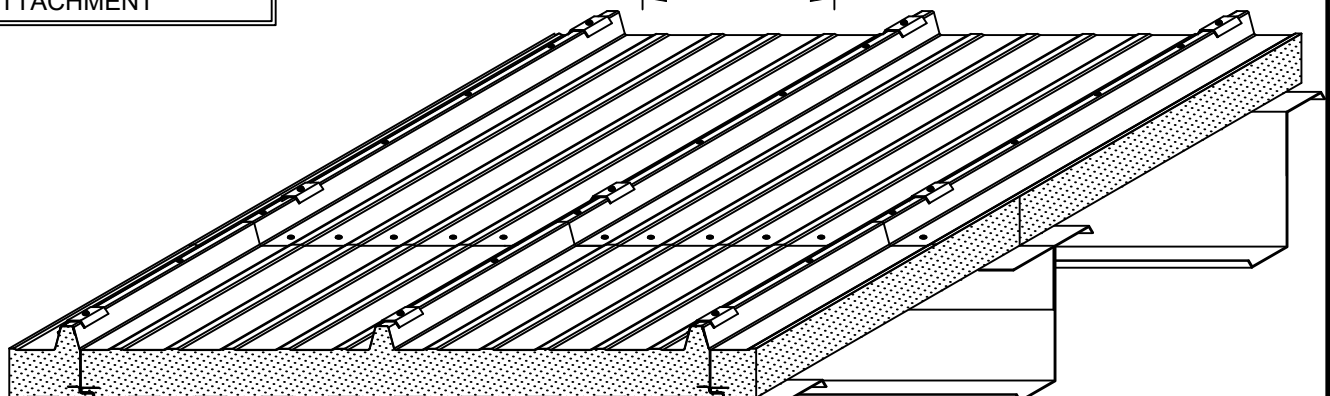
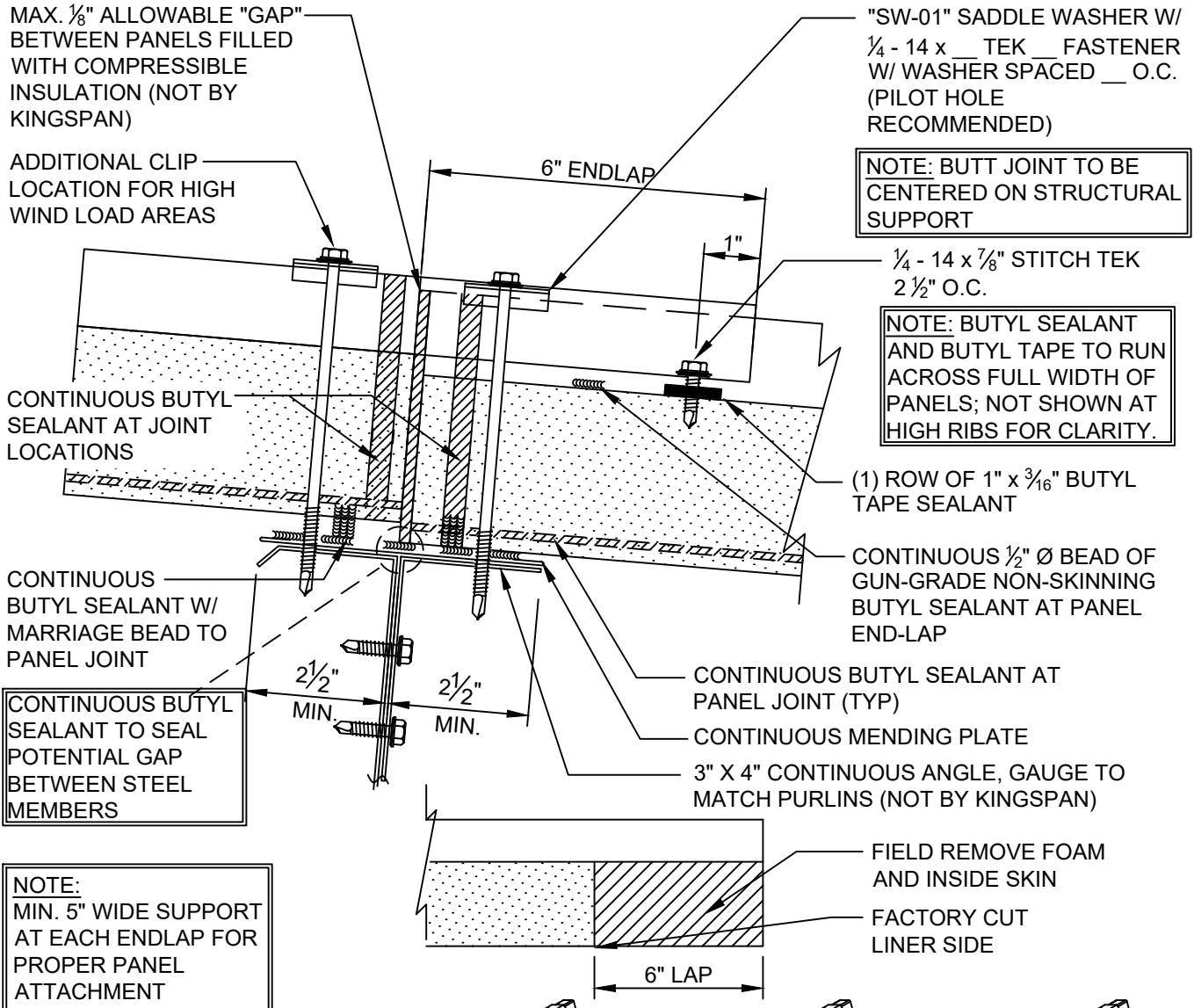
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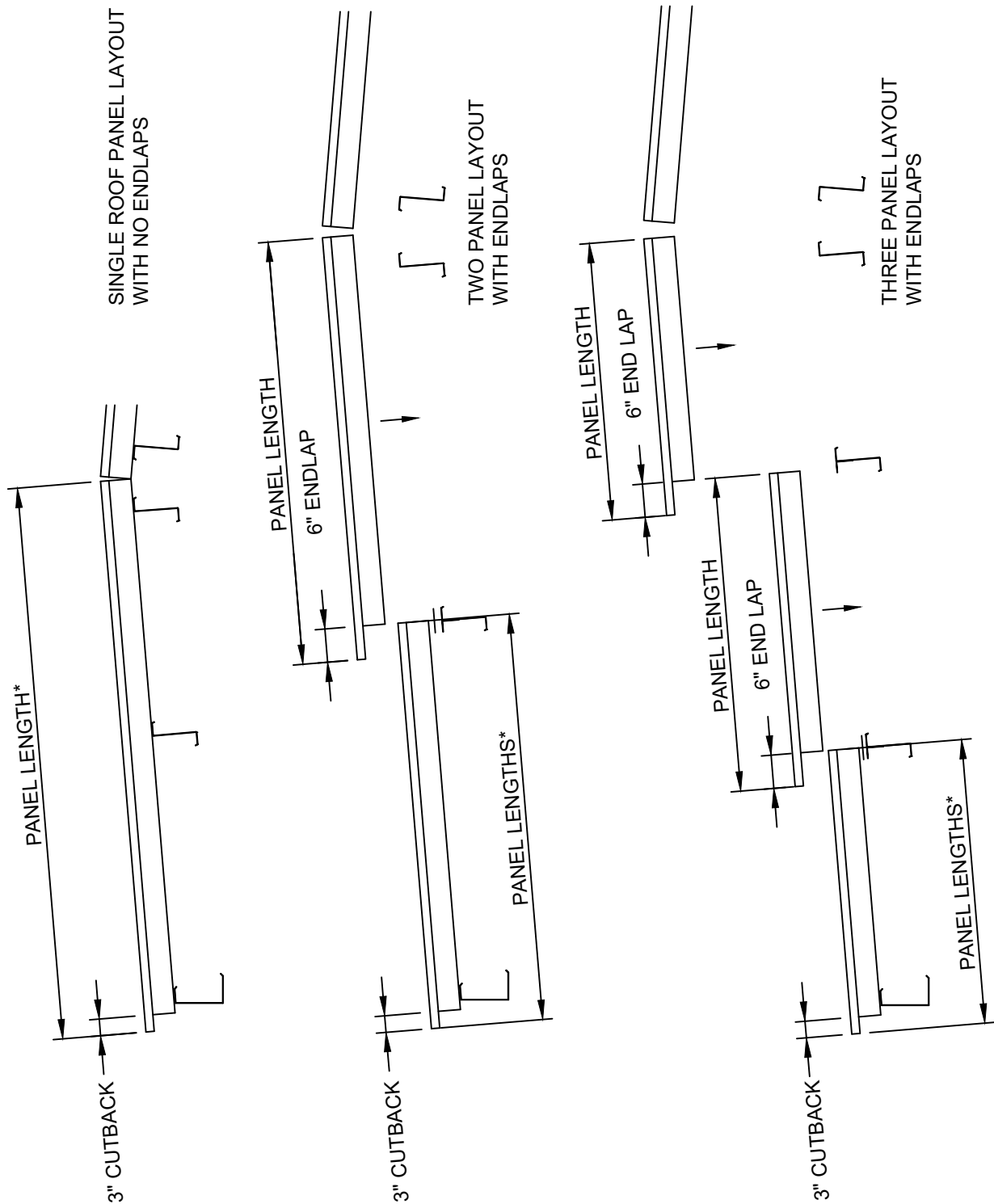
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ENDLAP

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(*) ADD WALL PANEL THICKNESS TO PANEL LENGTH

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ENDLAP CONDITIONS

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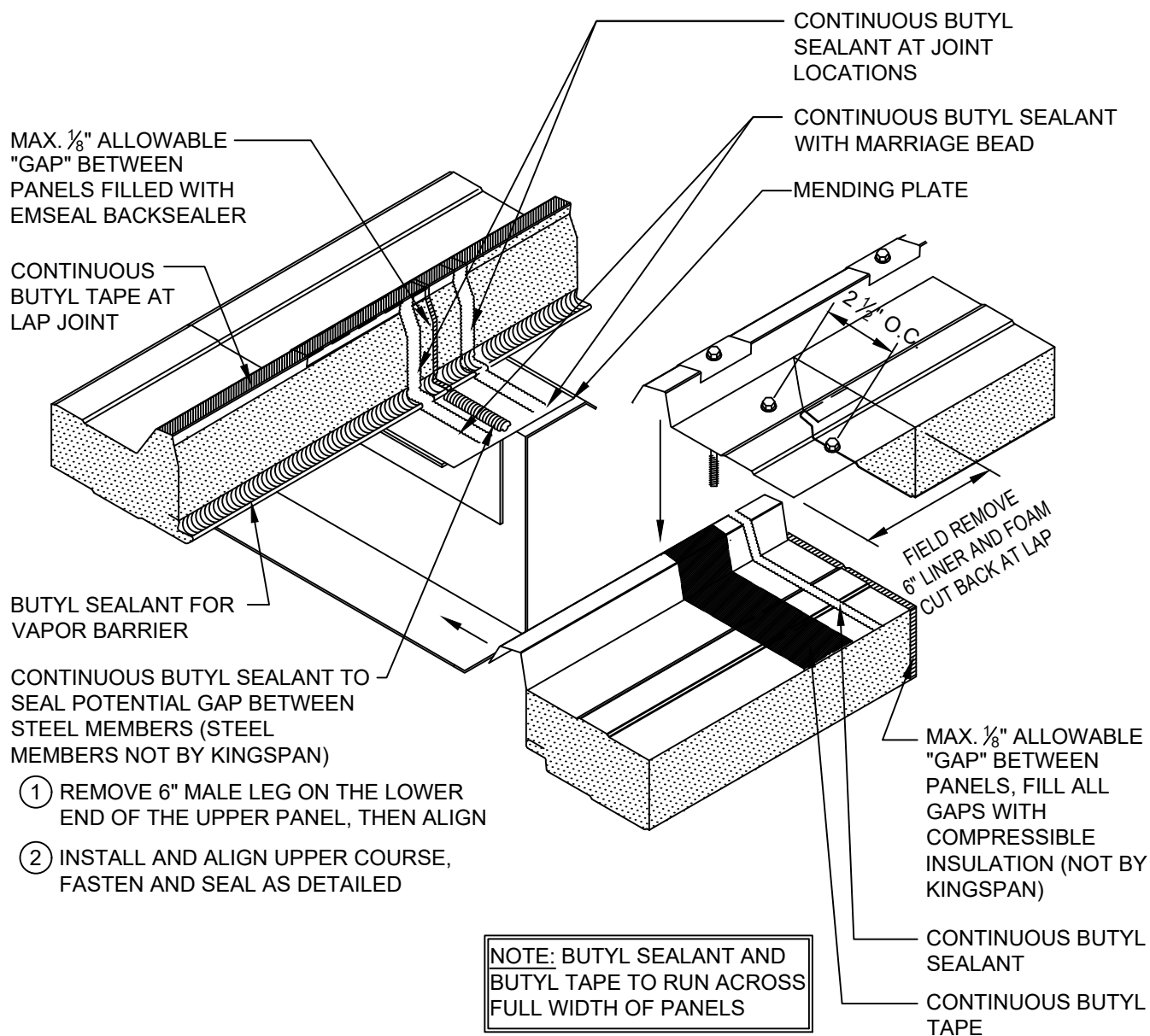
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NOTES:

1. SET LOWER COURSE ROOF PANEL IN PLACE. UPPER END OF PANEL AT THE ENDLAP MUST ALIGN WITH THE WEB OF THE ENDLAP PURLIN AND REST ON THE 3" X 4" SUPPORT ANGLE.
2. CHECK PANEL MODULE, ADJUST IF NECESSARY BEFORE ATTACHING PANEL TO THE SUPPORT ANGLE WITH FASTENING SYSTEM.
3. SET THE UPPER PANEL IN PLACE, FASTEN PANELS TO THE SUPPORT STRUCTURE USING A SINGLE HEX HEAD FASTENER WITH PAINTED SADDLE CLIP WHICH MUST PASS THROUGH ALL FOUR PANELS.
4. KINGSPAN DOES NOT RECOMMEND INSTALLING ALL LOWER COURSE PANELS FIRST.

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4-WAY INTERSECTION

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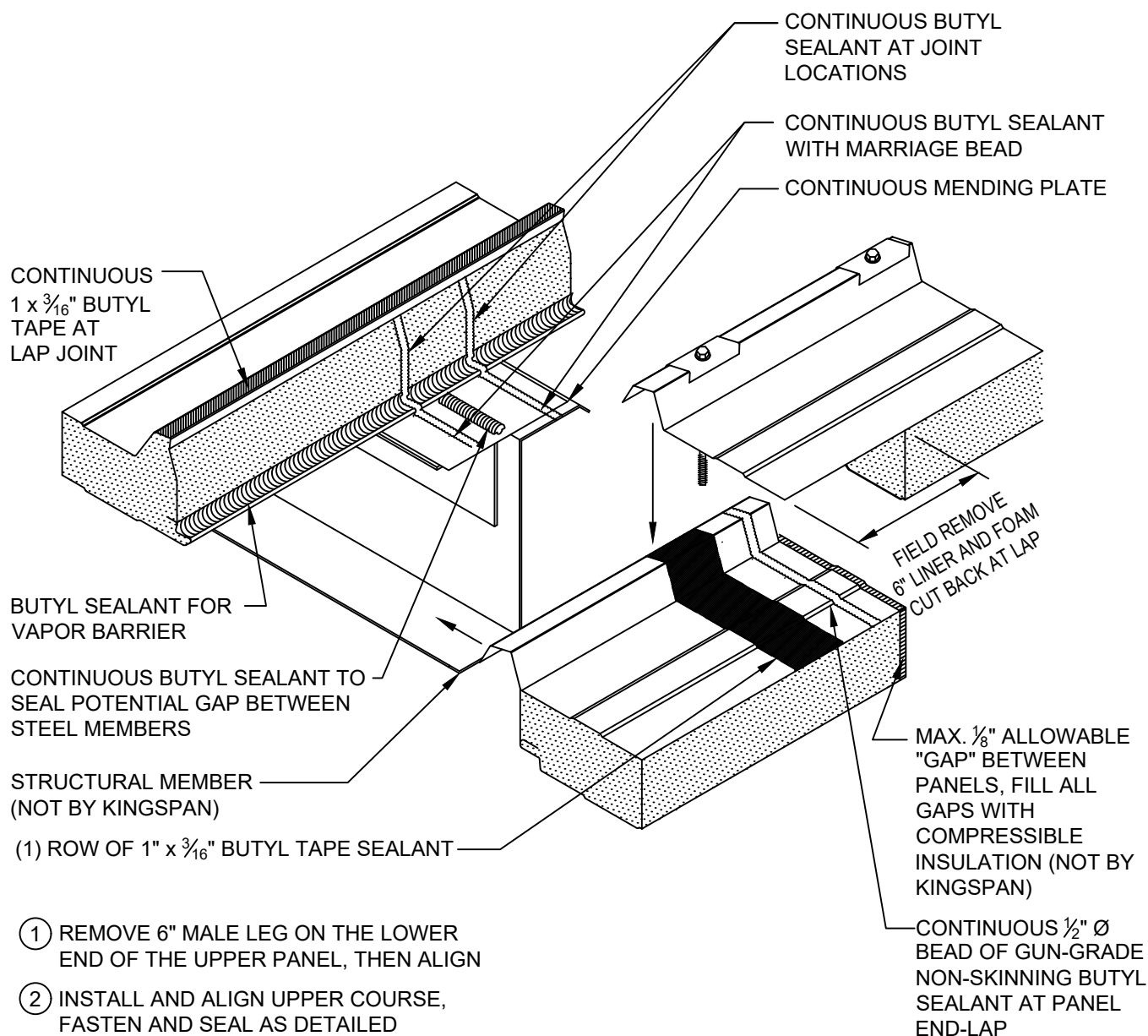
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NOTES:

1. SET LOWER COURSE ROOF PANEL IN PLACE. UPPER END OF PANEL AT THE ENDLAP MUST ALIGN WITH THE WEB OF THE ENDLAP PURLIN AND REST ON THE 3" X 4" SUPPORT ANGLE.
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4. KINGSPAN DOES NOT RECOMMEND INSTALLING ALL LOWER COURSE PANELS FIRST.

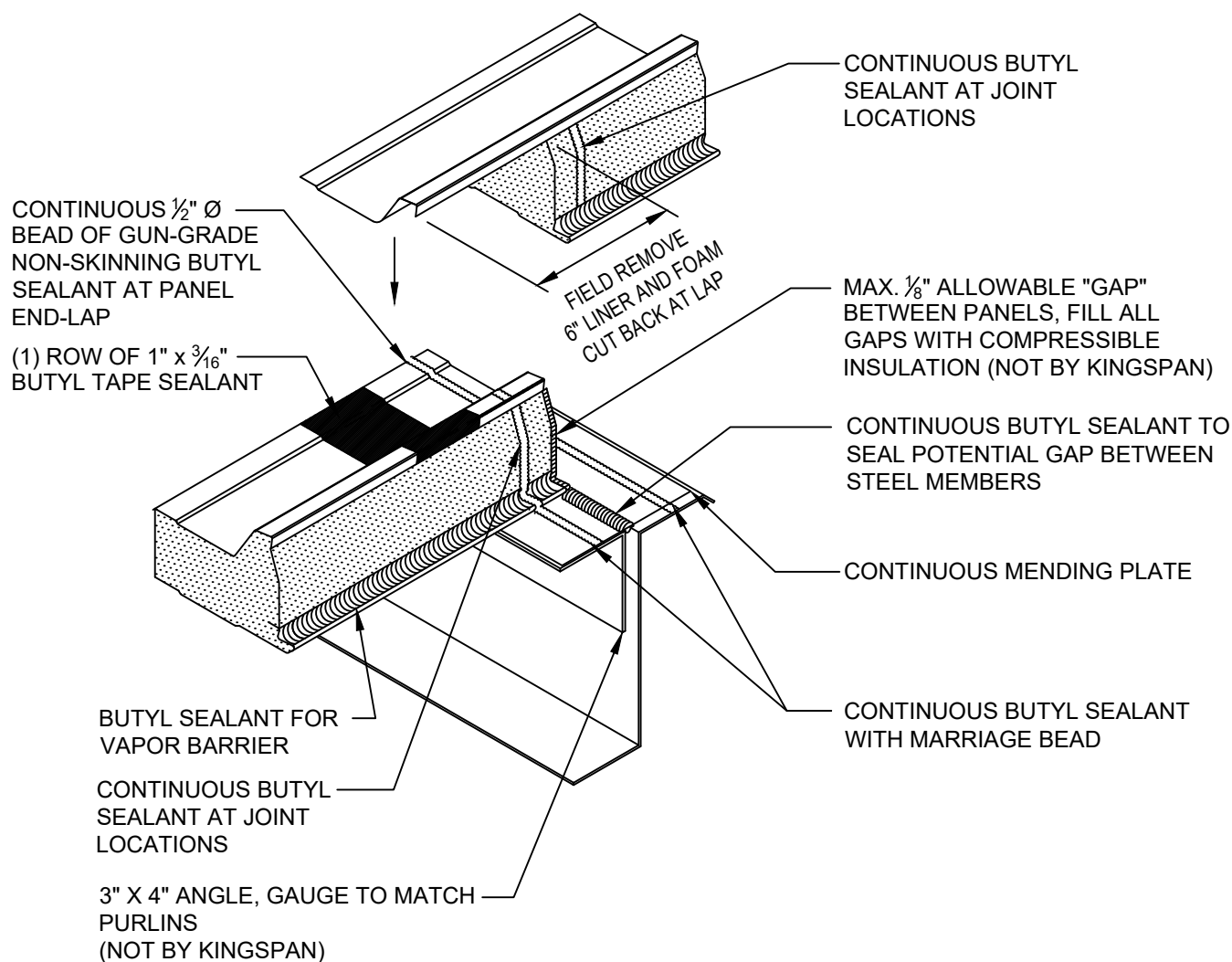
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**CONTINUOUS MALE LEG
AT STAGGERED ENDLAP /
FEMALE ENDLAP**

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- ① REMOVE 6" MALE LEG ON THE LOWER END OF THE UPPER PANEL, THEN ALIGN
- ② INSTALL AND ALIGN UPPER COURSE, FASTEN AND SEAL AS DETAILED

NOTES:

1. SET LOWER COURSE ROOF PANEL IN PLACE. UPPER END OF PANEL AT THE ENDLAP MUST ALIGN WITH THE WEB OF THE ENDLAP PURLIN AND REST ON THE 3" X 4" SUPPORT ANGLE.
2. CHECK PANEL MODULE, ADJUST IF NECESSARY BEFORE ATTACHING PANEL TO THE SUPPORT ANGLE WITH FASTENING SYSTEM.
3. SET THE UPPER PANEL IN PLACE, FASTEN PANELS TO THE SUPPORT STRUCTURE USING A SINGLE HEX HEAD FASTENER WITH PAINTED SADDLE CLIP WHICH MUST PASS THROUGH ALL FOUR PANELS.
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STAGGERED MALE LEG AT ENDLAP

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MAX. $\frac{1}{8}$ " ALLOWABLE "GAP"
BETWEEN PANELS, FILL ALL
GAPS WITH COMPRESSIBLE
INSULATION
(NOT BY KINGSPAN)

CONTINUOUS
BUTYL TAPE AT
LAP JOINT

CONTINUOUS BUTYL SEALANT
WITH MARRIAGE BEAD

BUTYL SEALANT FOR
VAPOR BARRIER

CONTINUOUS MENDING PLATE

CONTINUOUS BUTYL SEALANT TO
SEAL POTENTIAL GAP BETWEEN
STEEL MEMBERS

3" X 4" ANGLE, GAUGE TO MATCH
PURLINS
(NOT BY KINGSPAN)

STAGGERED MALE LEG AT
ENDLAP / CONTINUOUS
FEMALE LEG

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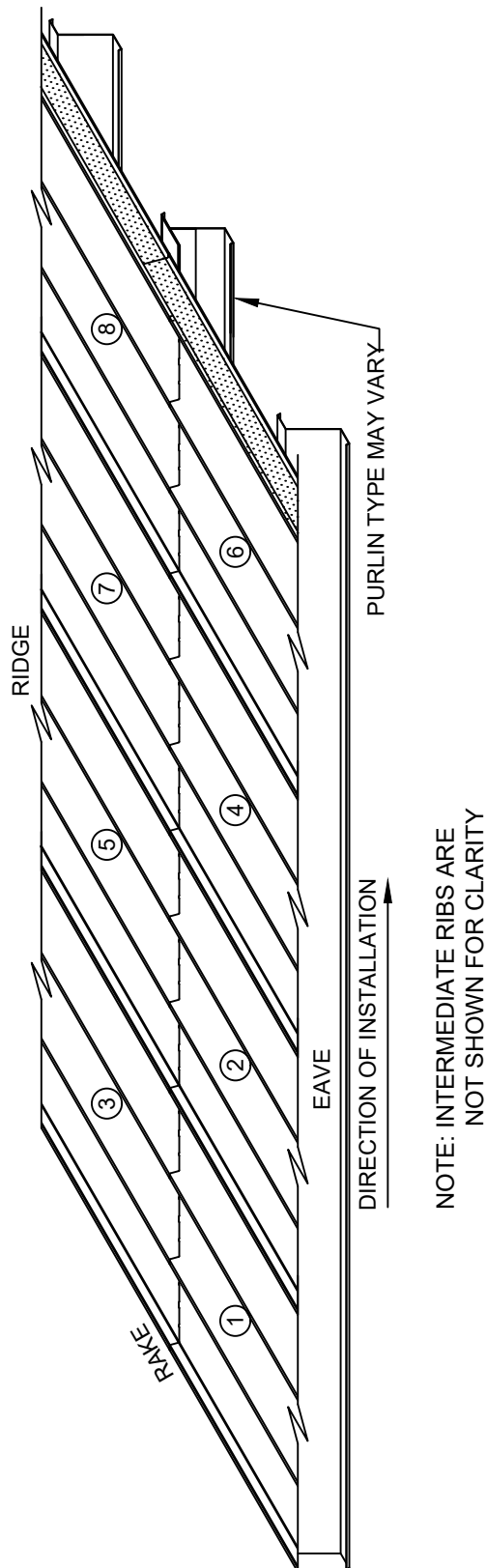
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ENDLAP INSTALLATION SEQUENCE

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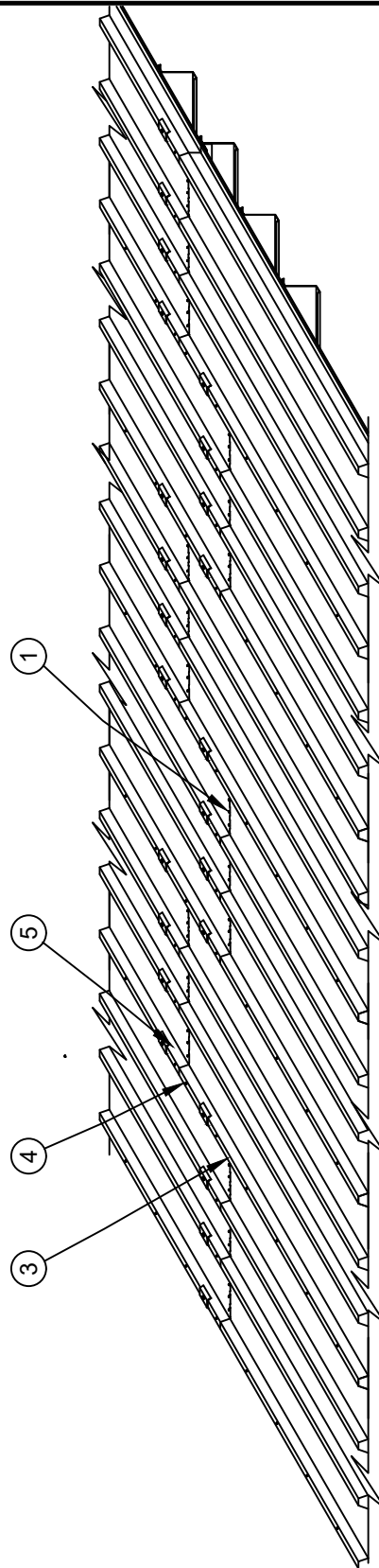
① FASTEN AT EVERY MINOR RIB VALLEY

② STAGGERED ENDLAPS

③ SEE MALE LEG ENDLAP DETAIL

④ SEE CONTINUOUS MALE LEG DETAIL

⑤ SEE FEMALE LEG ENDLAP DETAIL



STAGGERED ENDLAP ASSEMBLY
(ISOMETRIC VIEW - TYPICAL)

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STAGGERED ENDLAP ASSEMBLY

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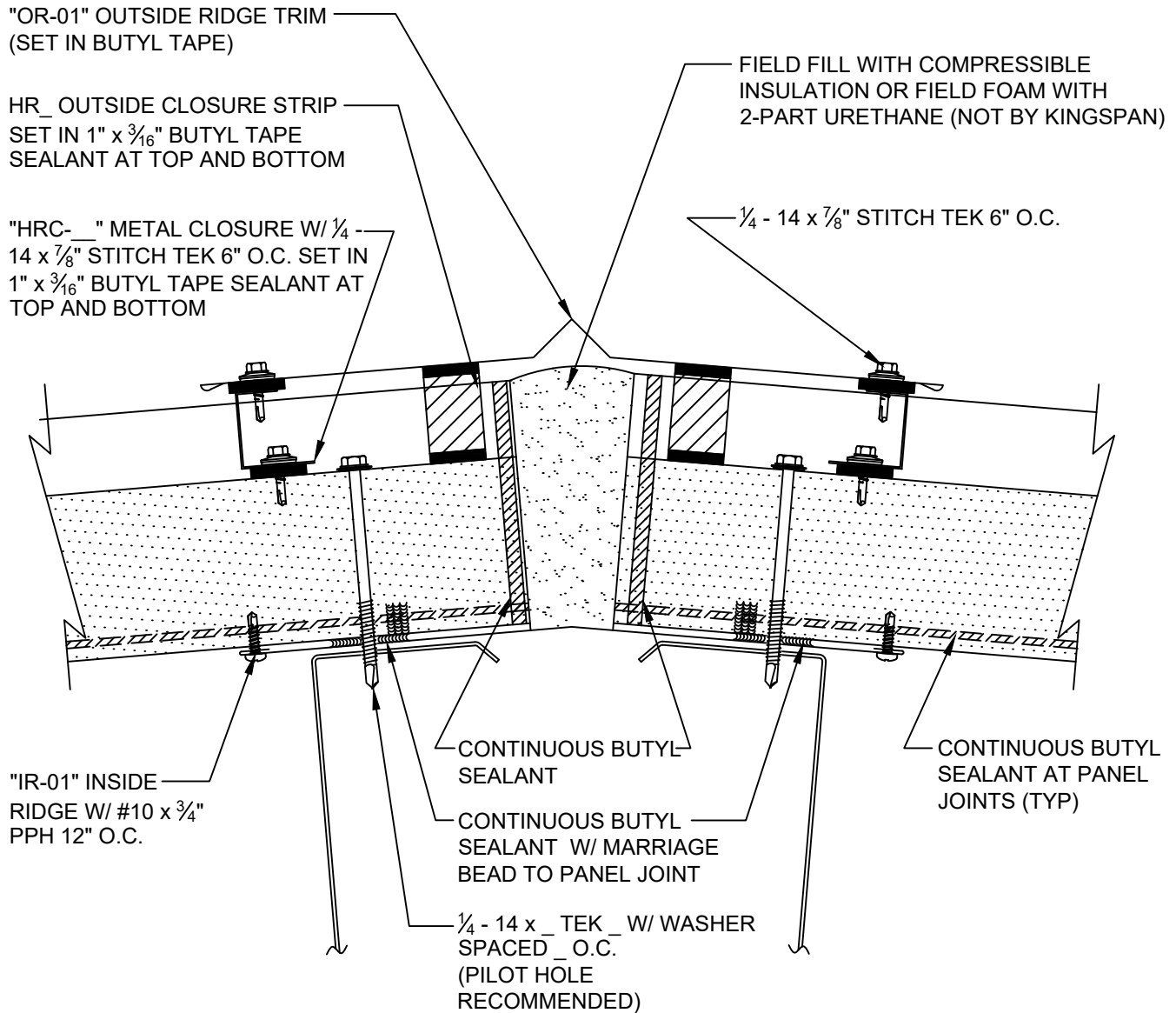
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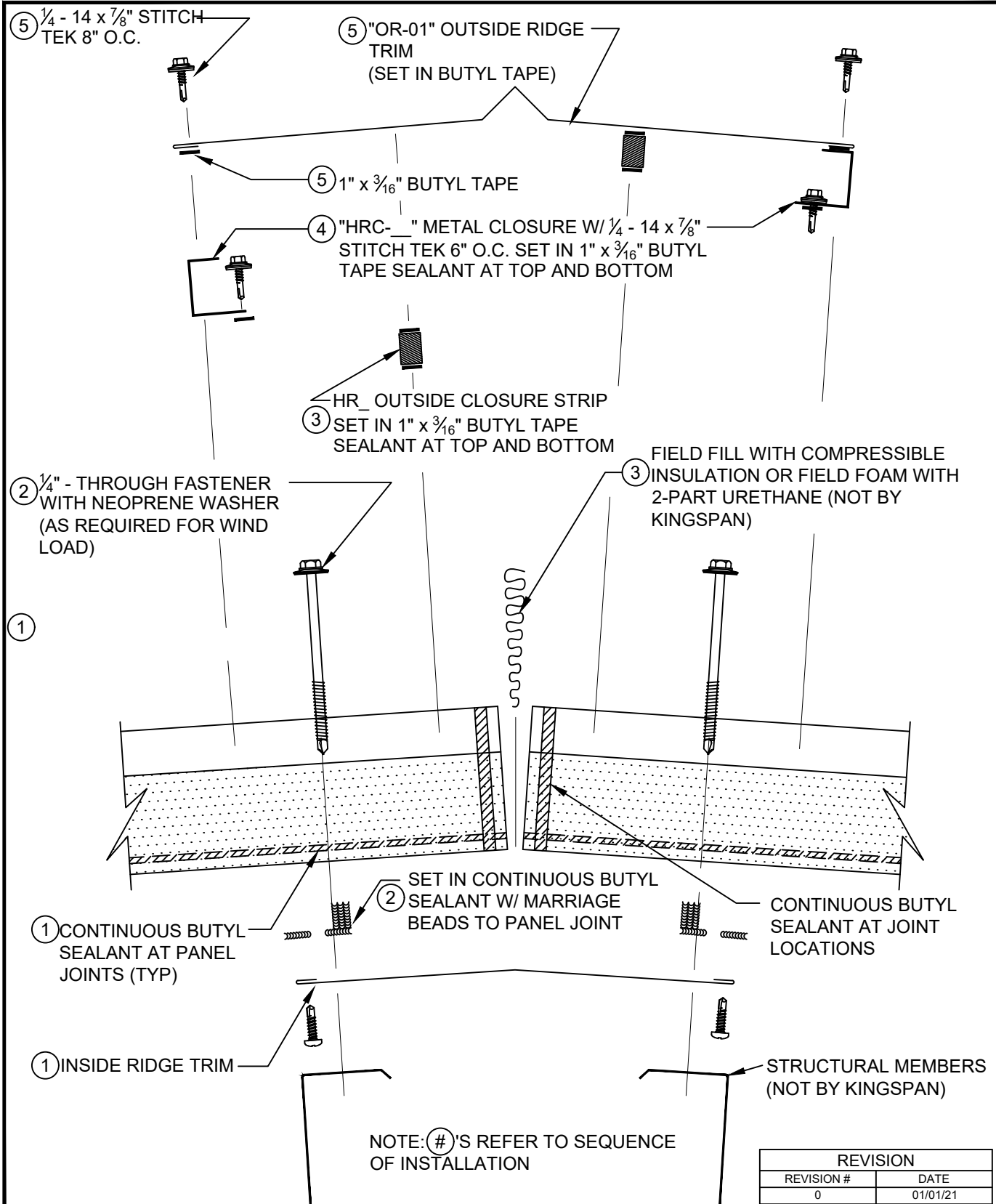
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RIDGE

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RIDGE ASSEMBLY

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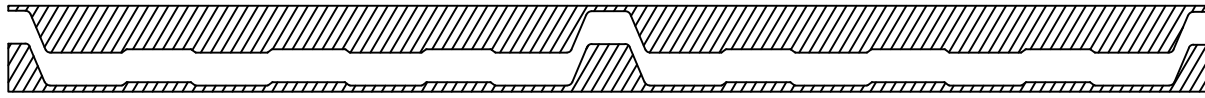
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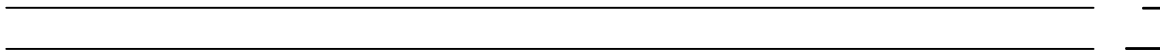


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HR 3 STANDARD ROOF CLOSURE SET



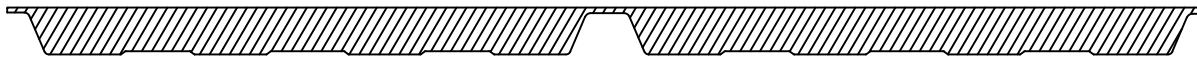
HRC 3 METAL CLOSURE



BUTYL TAPE



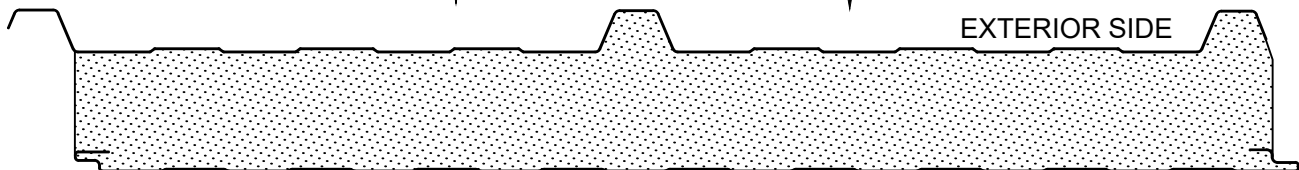
HR 3 OUTSIDE CLOSURE



BUTYL TAPE

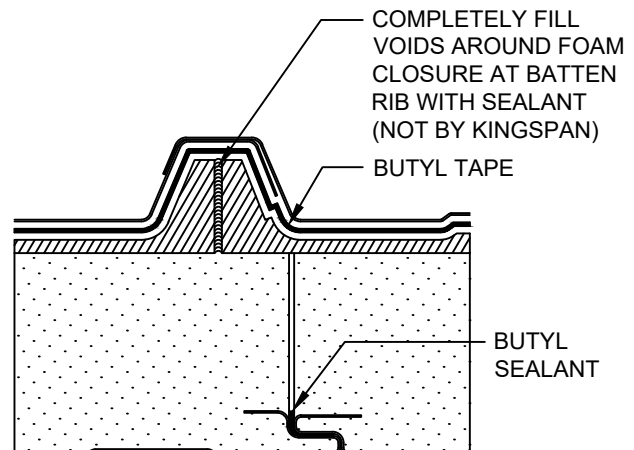
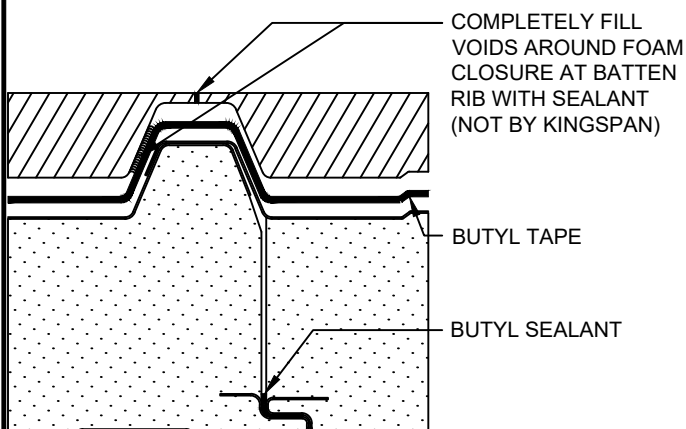


KINGRIB 3



EXTERIOR SIDE

INTERIOR SIDE



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RIDGE CLOSURE ASSEMBLY

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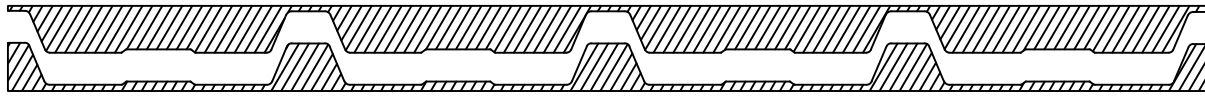
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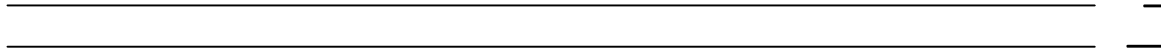


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HR 5 STANDARD ROOF CLOSURE SET



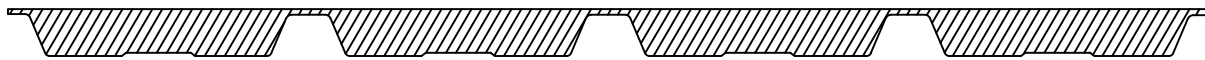
HRC 5 METAL CLOSURE



BUTYL TAPE



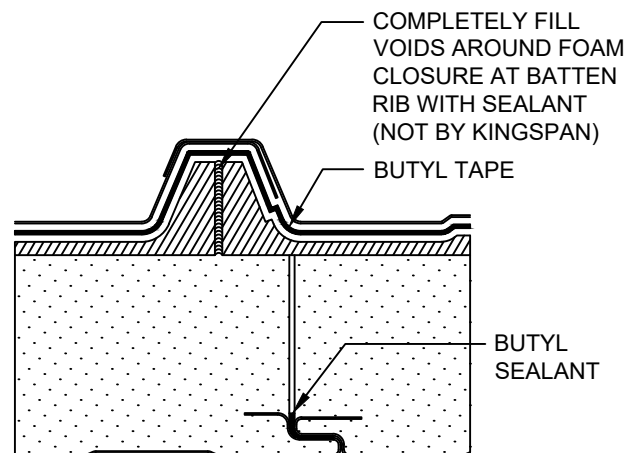
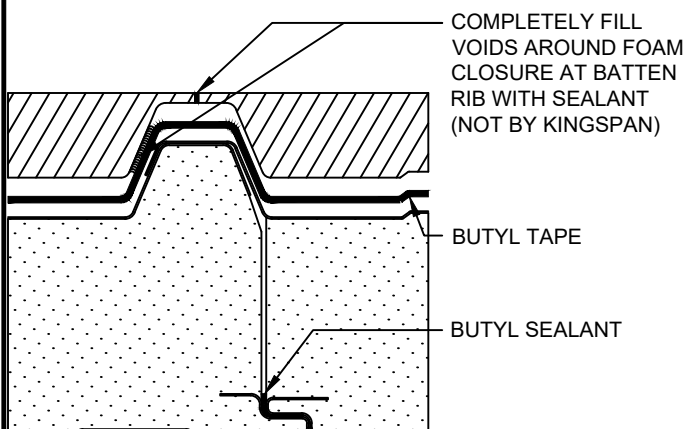
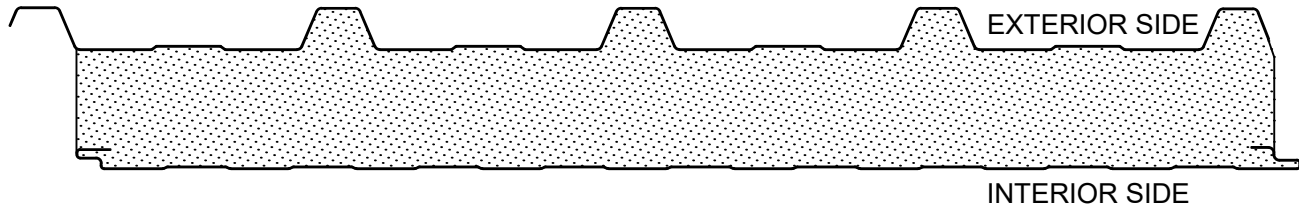
HR 5 OUTSIDE CLOSURE



BUTYL TAPE



KINGRIB 5



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RIDGE CLOSURE ASSEMBLY

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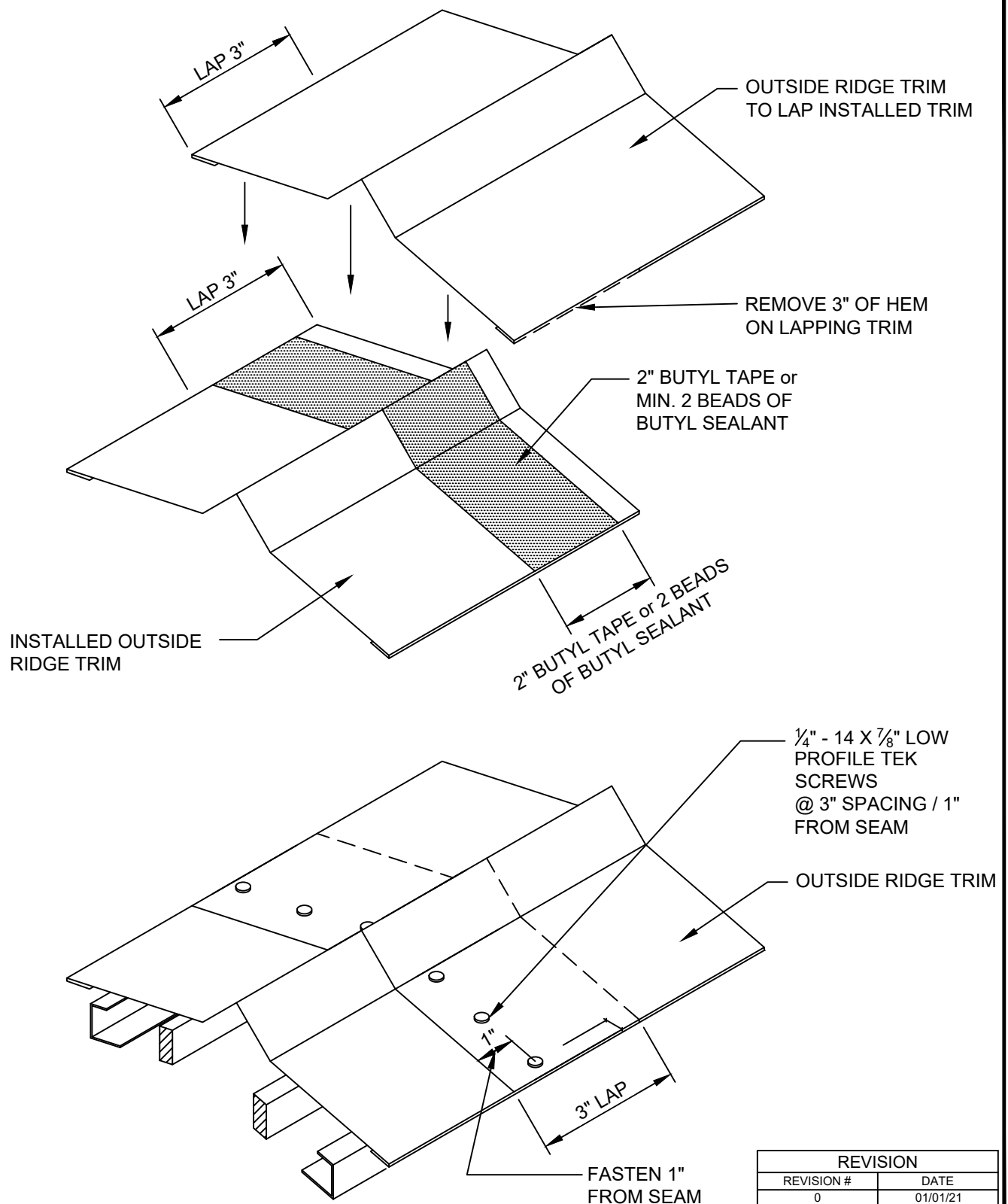
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RIDGE TRIM LAP

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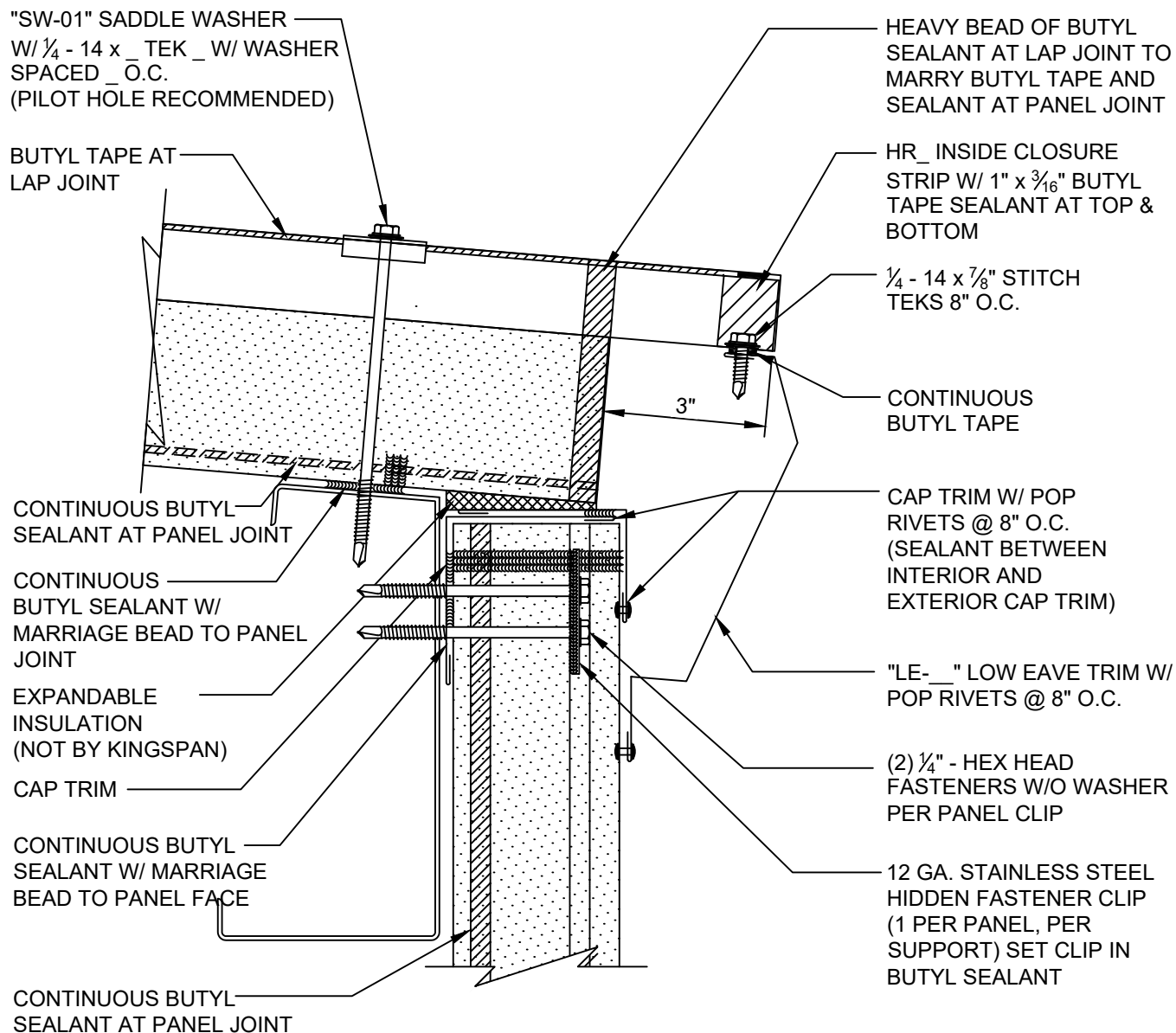
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LOW EAVE W/O
GUTTER

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"GH-01" GUTTER HANGER AT INTERIOR HI-RIBS 40" O.C. ATTACH W/ (3) $\frac{1}{4}$ " - 14 x $\frac{7}{8}$ " STITCH TEKS AND (1) $\frac{1}{4}$ " - 14 X _ TEK _ FASTENERS W/ WASHER

BUTYL TAPE AT LAP JOINT

CONTINUOUS BUTYL SEALANT AT PANEL JOINT

CONTINUOUS BUTYL SEALANT W/ MARRIAGE BEAD TO PANEL JOINT

EXPANDABLE INSULATION (NOT BY KINGSPAN)

CAP TRIM

CONTINUOUS BUTYL SEALANT W/ MARRIAGE BEAD TO PANEL FACE

STRUCTURAL MEMBER (NOT BY KINGSPAN)

CONTINUOUS BUTYL SEALANT AT PANEL JOINT

GUTTER HANGERS @ 40" O.C.

HEAVY BEAD OF BUTYL SEALANT TO MARRY BUTYL TAPE AND SEALANT AT PANEL JOINT

HR_ INSIDE CLOSURE STRIP W/ 1" x $\frac{3}{16}$ " BUTYL TAPE SEALANT AT TOP & BOTTOM

"GT- _" GUTTER TRIM

"BB-01" BIRD BLOCK W/ POP RIVETS @ 8" O.C.

(2) $\frac{1}{4}$ " - HEX HEAD FASTENERS W/O WASHER PER PANEL CLIP

12 GA. STAINLESS STEEL HIDDEN FASTENER CLIP (1 PER PANEL, PER SUPPORT) SET CLIP IN BUTYL SEALANT

FOR SNOW LOAD AREAS, ADD INTERMEDIATE GUTTER HANGERS, TWO PER PANEL MAXIMUM / AS REQUIRED (LOCATE AT HIGH RIBS)

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LOW EAVE W/ GUTTER

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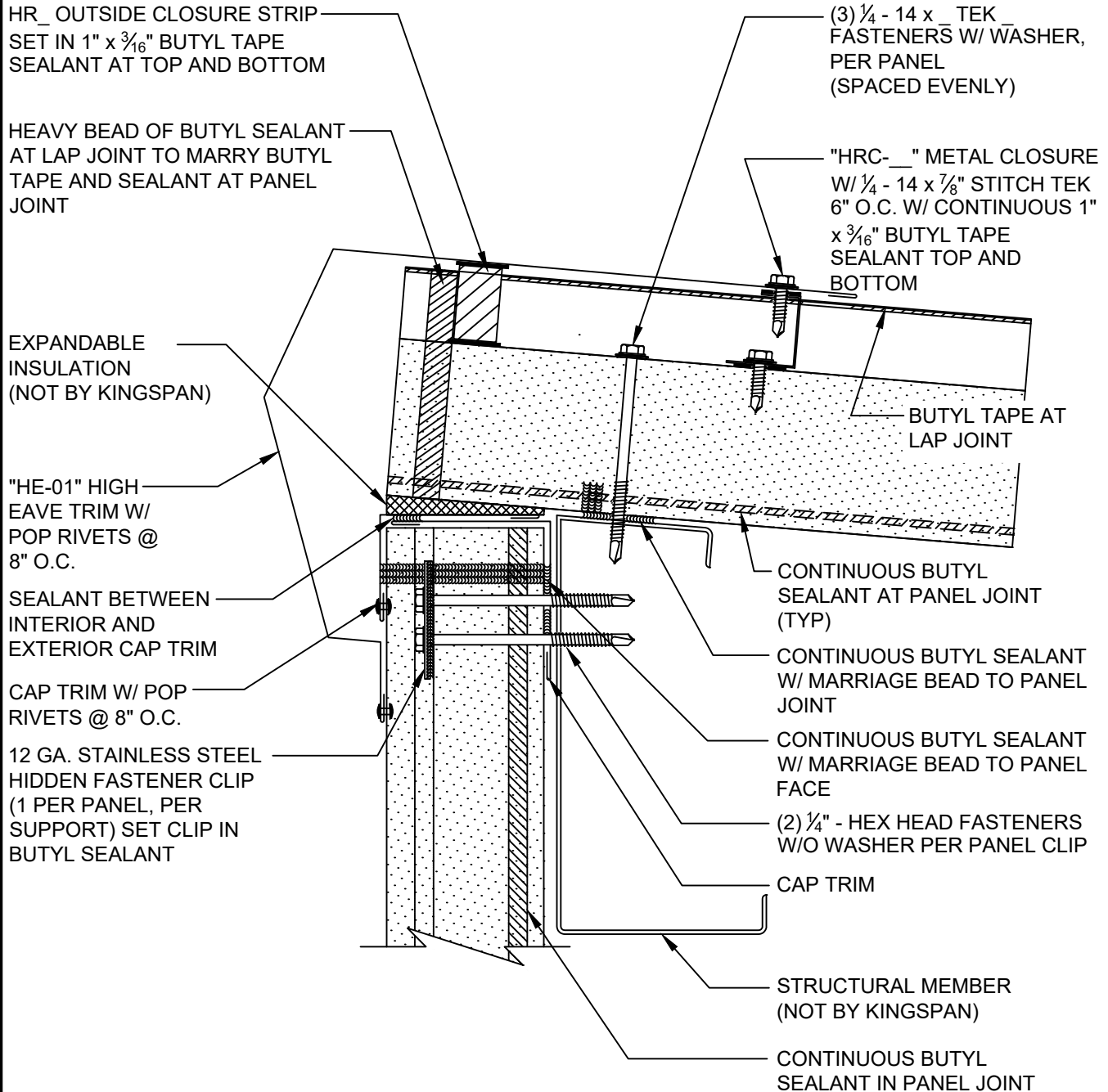
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HIGH EAVE

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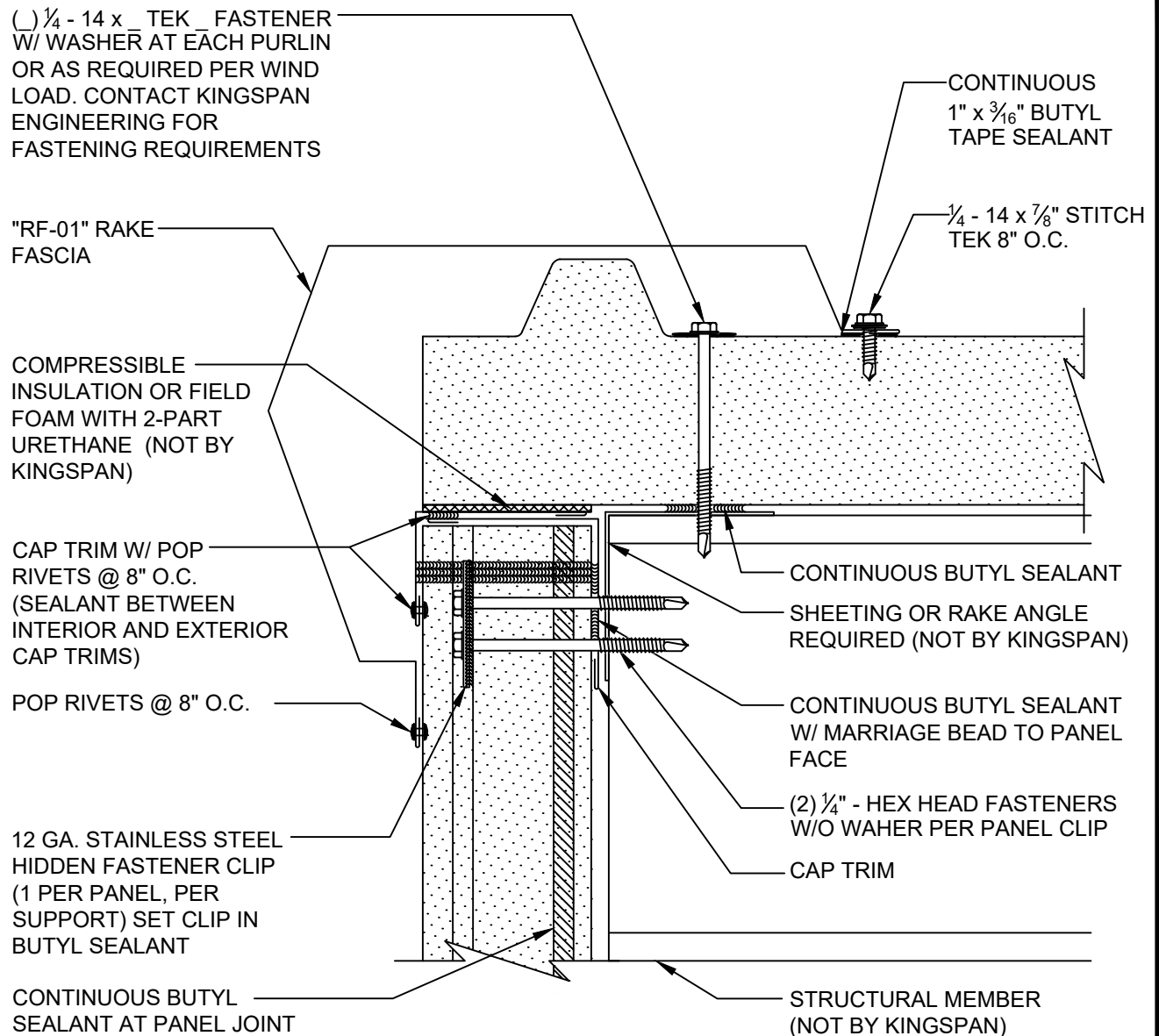
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RAKE

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UPPER VALLEY FLASHING
(FIELD BREAK FROM FLATSTOCK)

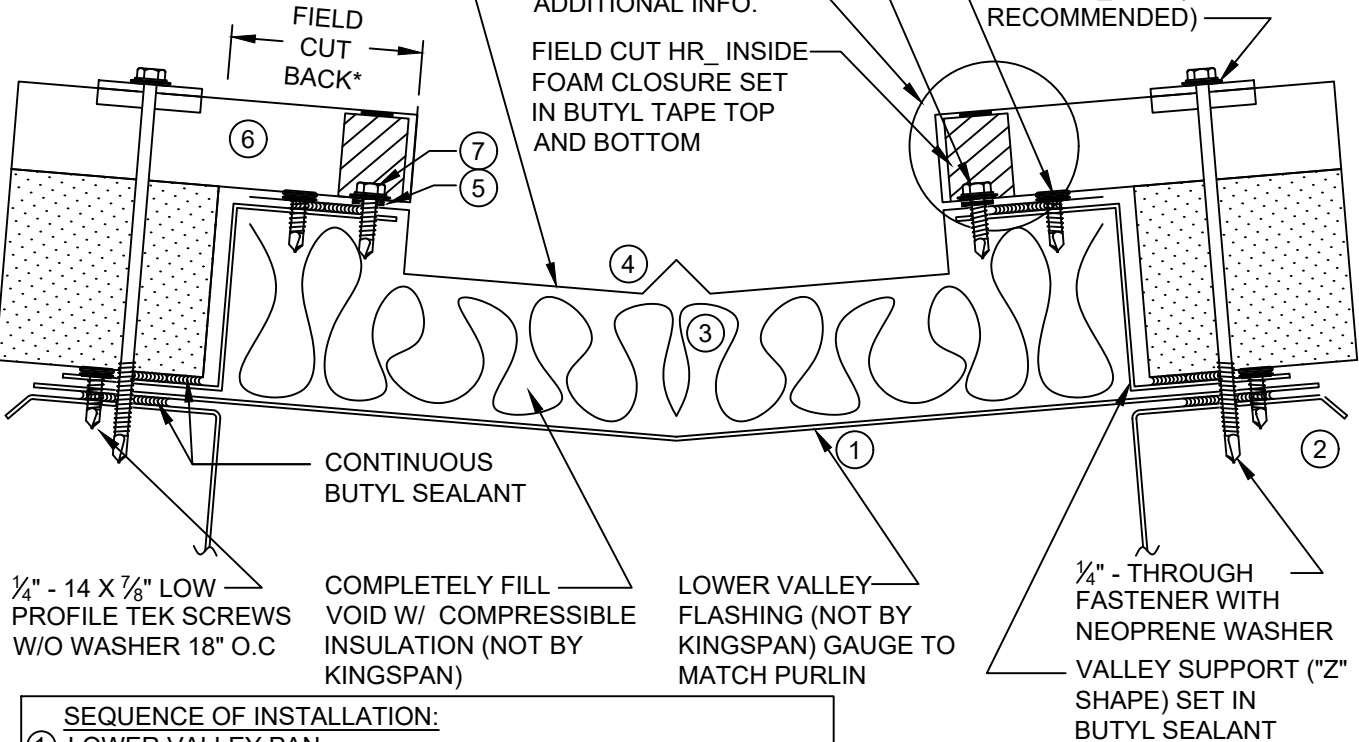
1/4" - 14 X 7/8" STITCH
TEK SCREWS 4" O.C.
(IN LOWS)

1/4" - 14 X 7/8" LOW PROFILE
TEK SCREWS W/O
WASHER

"SW-01" SADDLE WASHER W/
1/4 - 14 x _ TEK _ W/ WASHER
SPACED _ O.C. (PILOT HOLE
RECOMMENDED)

SEE BELOW FOR
ADDITIONAL INFO.

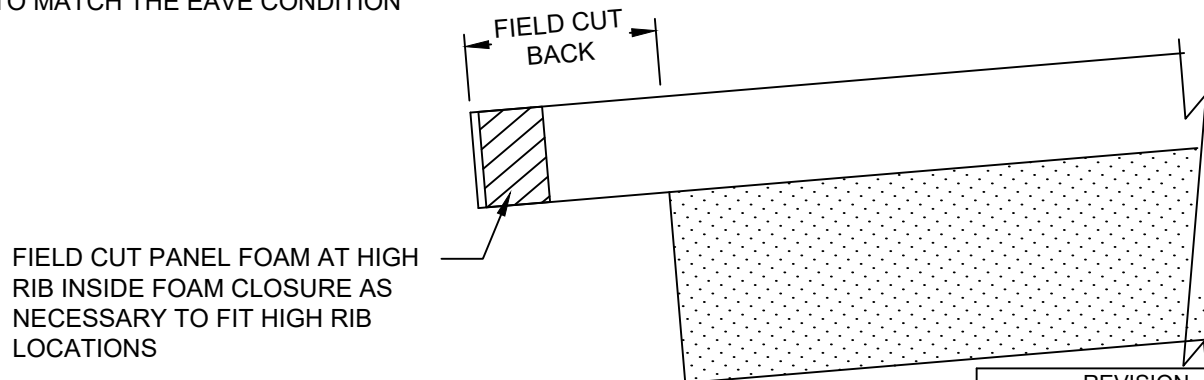
FIELD CUT HR_ INSIDE
FOAM CLOSURE SET
IN BUTYL TAPE TOP
AND BOTTOM



SEQUENCE OF INSTALLATION:

- ① LOWER VALLEY PAN
- ② "Z" SHAPED VALLEY SUPPORT
- ③ FILL VOID W/ INSULATION
- ④ INSTALL SECONDARY & UPPER VALLEY PAN
- ⑤ APPLY TAPE MASTIC TO TOP OF UPPER VALLEY PAN
- ⑥ CUT ROOF PANELS. REMOVE CUT BACK & FOAM AT HIGH RIB
- ⑦ FASTEN ASSEMBLY

* FIELD CUT ROOF PANELS FOR 4 1/4" OR 3" CUTBACK. CUTBACK SIZE
TO MATCH THE EAVE CONDITION



FIELD CUT PANEL FOAM AT HIGH
RIB INSIDE FOAM CLOSURE AS
NECESSARY TO FIT HIGH RIB
LOCATIONS

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VALLEY CONDITION

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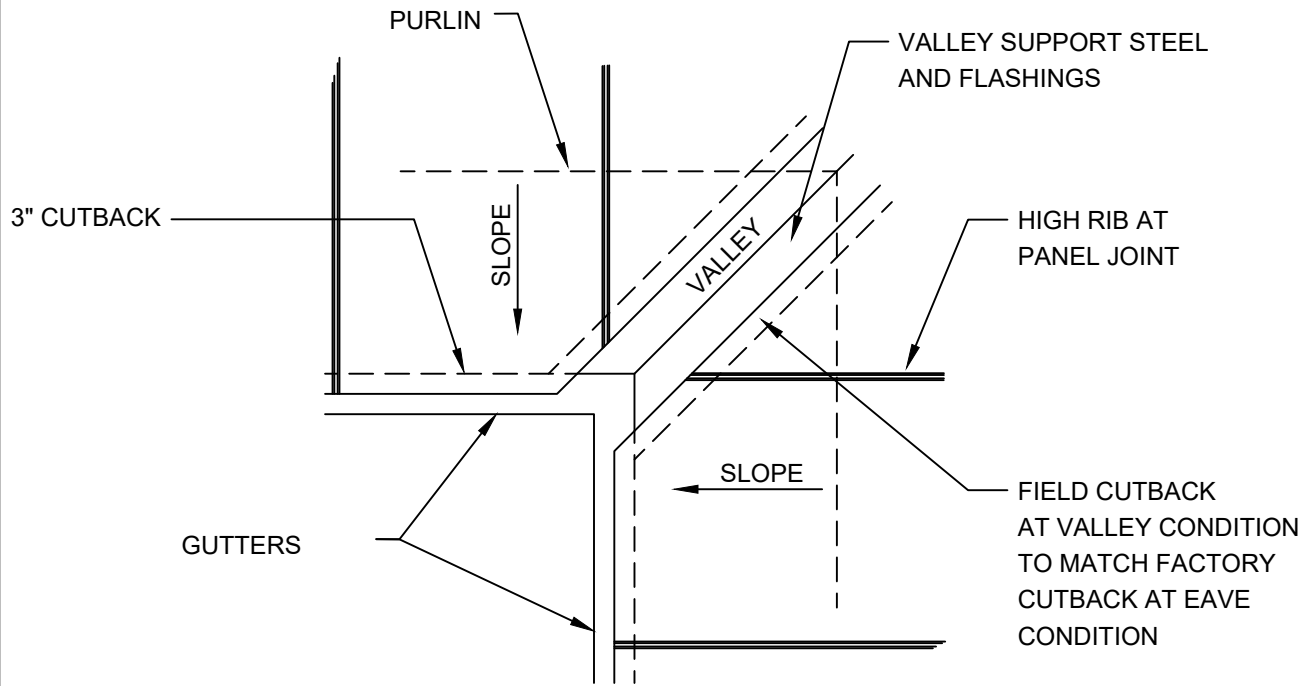
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ROOF VALLEY PLAN

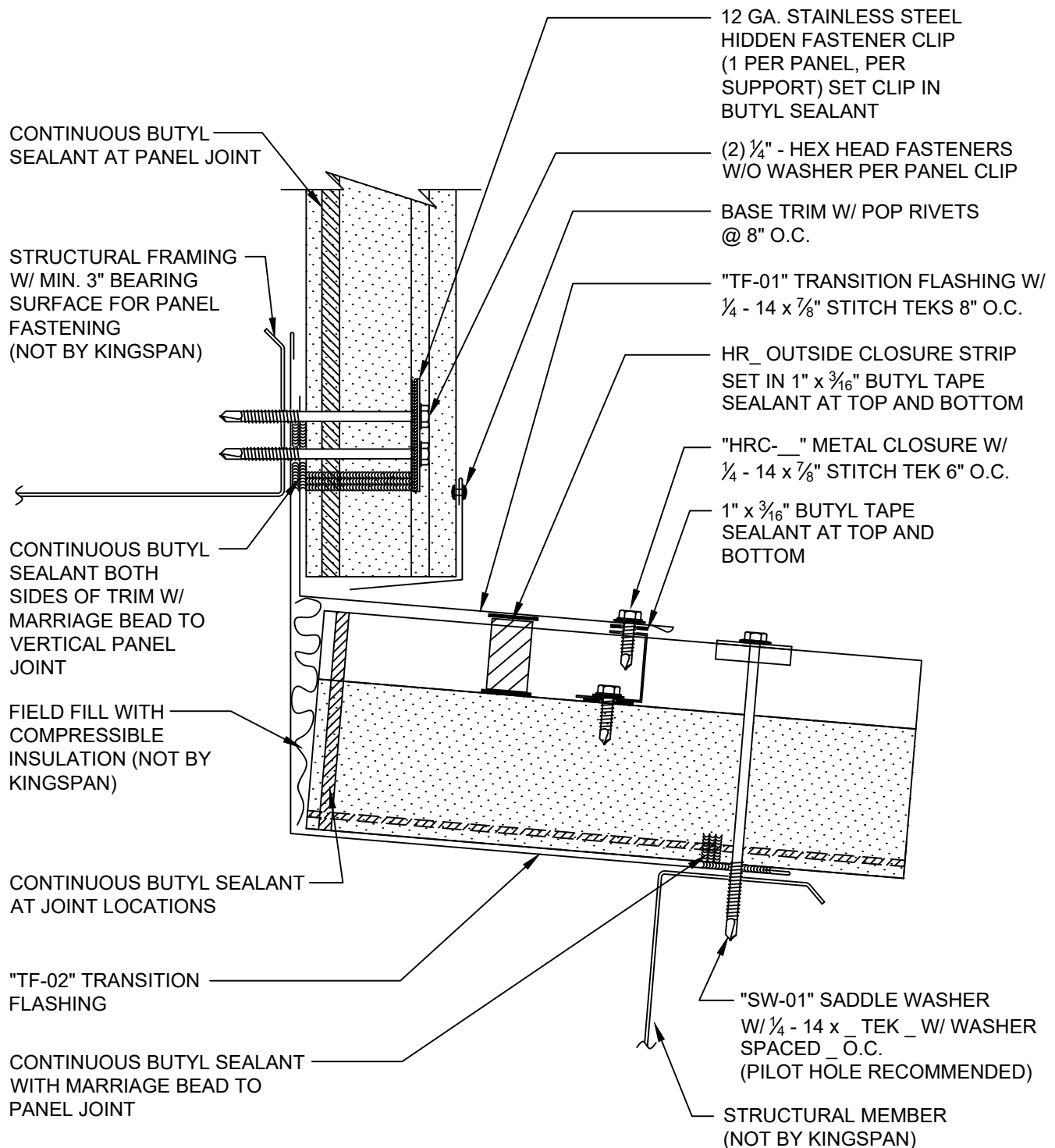
REVISION	
REVISION #	DATE
0	01/01/21

VALLEY ASSEMBLY

DETAIL #: CI-VL-02-KINGRIB
RELEASE: 2022
REGION: NORTH AMERICA
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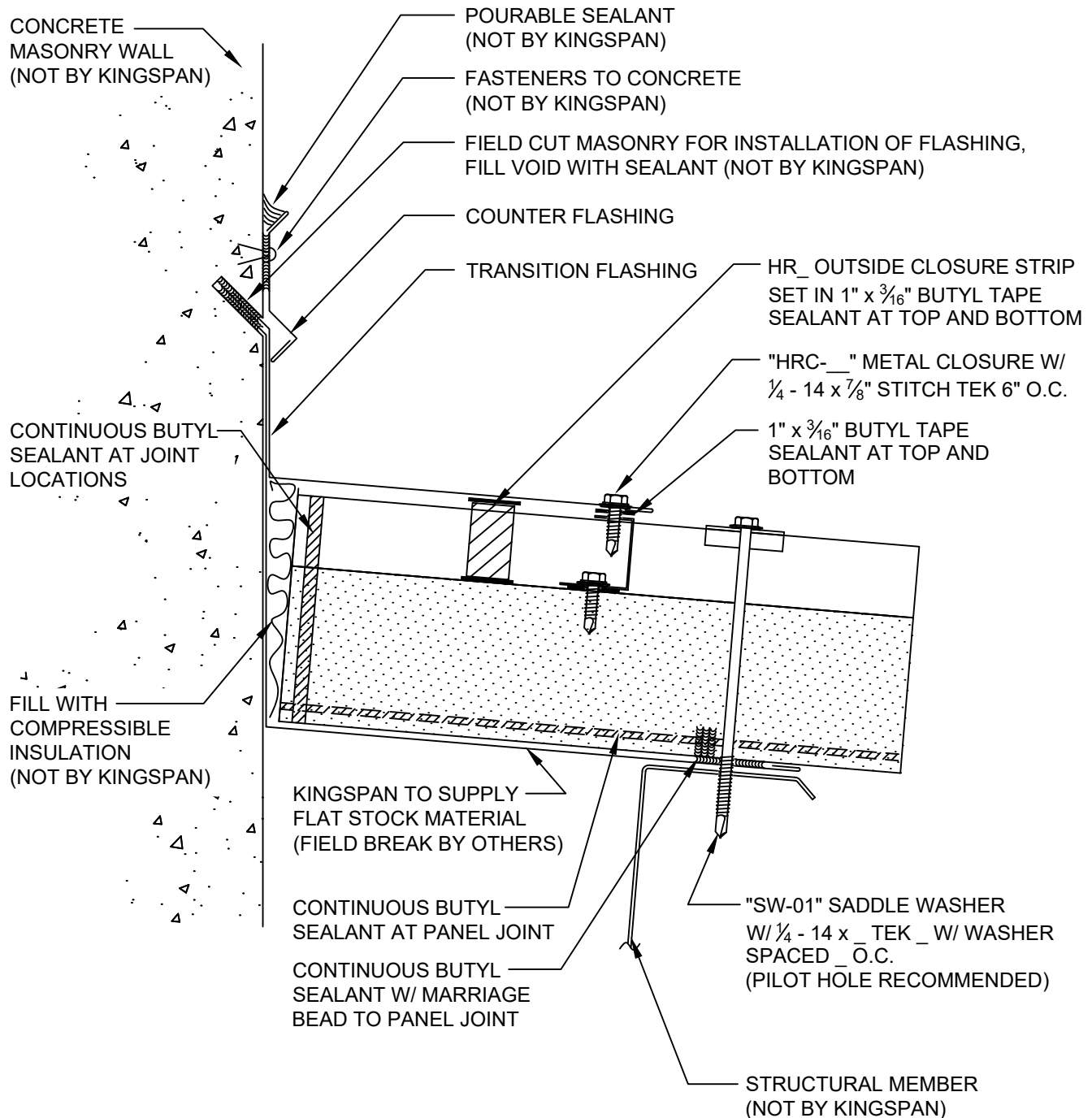
REVISION	
REVISION #	DATE
3	04/14/22

WALL TO ROOF
HIGH EAVE

DETAIL #: CI-WR-01-KINGRIB
RELEASE: 2022
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REVISION	
REVISION #	DATE
1	03/25/21

CONCRETE WALL
TO HIGH EAVE

DETAIL #: CI-WR-02-KINGRIB

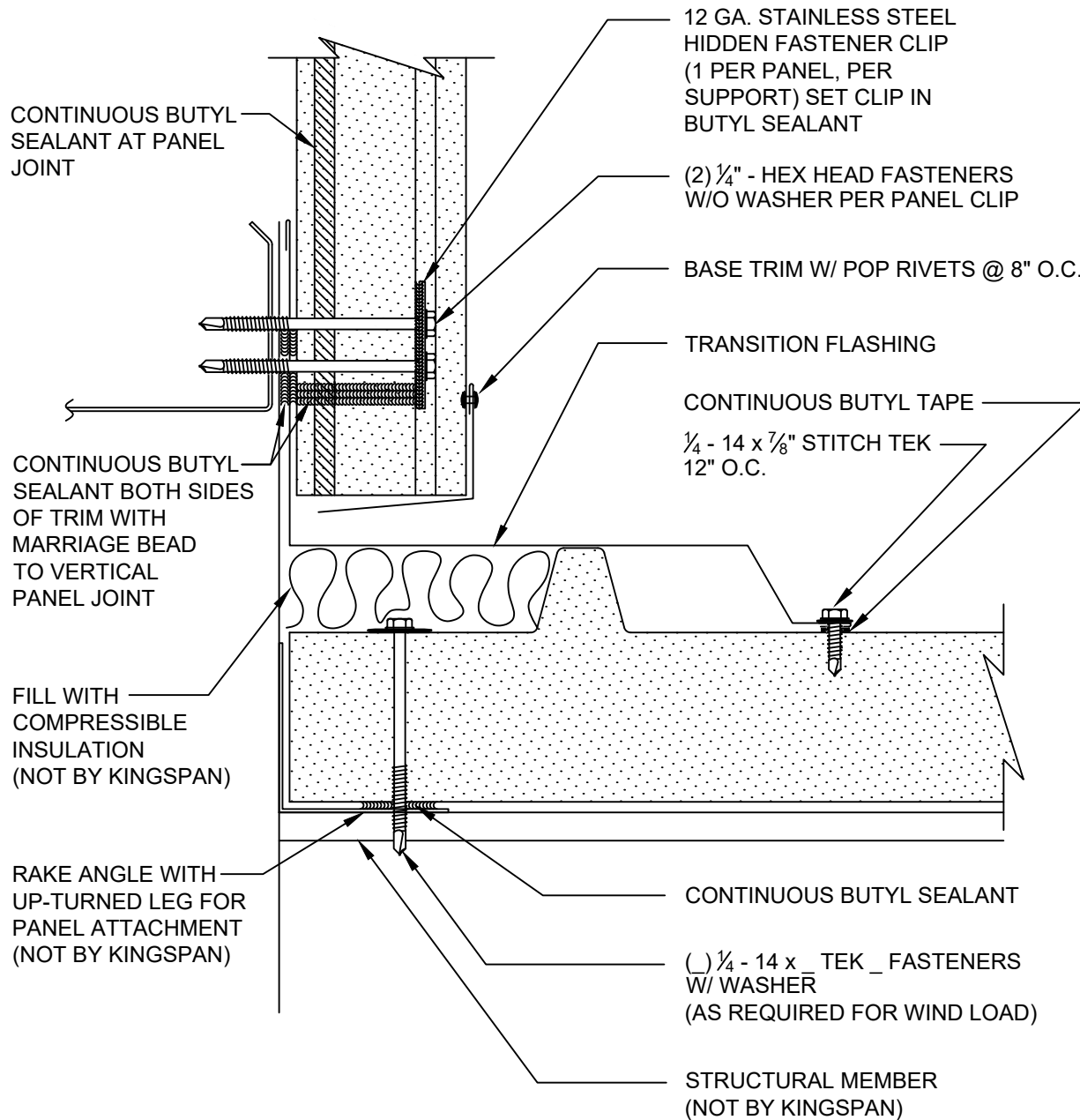
RELEASE: 2022

REGION: NORTH AMERICA

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REVISION	
REVISION #	DATE
3	04/14/22

WALL TO RAKE

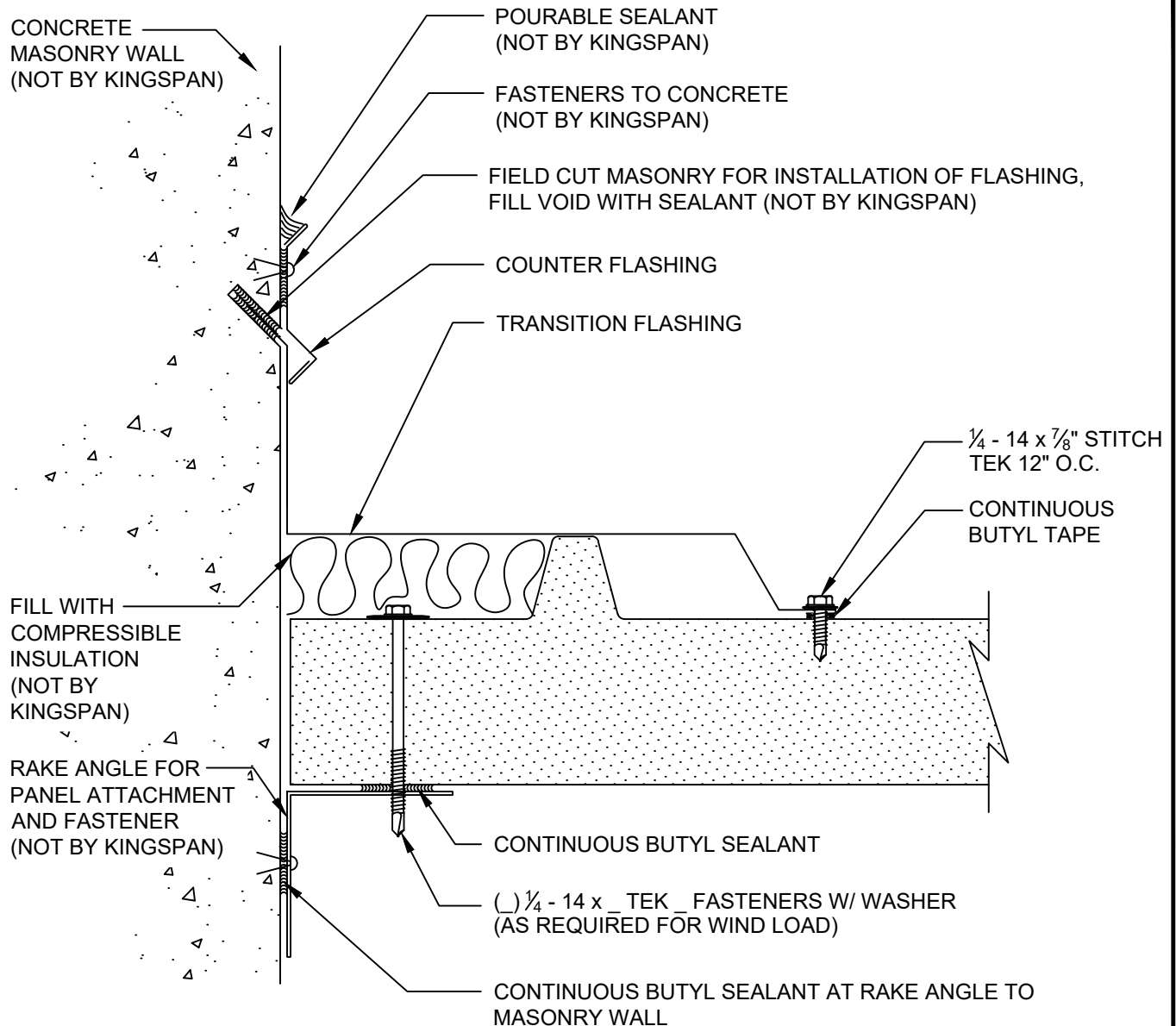
DETAIL #: CI-WR-03-KINGRIB

DATE: 2021



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REVISION	
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CONCRETE WALL TO
ROOF

DETAIL #: CI-WR-04-KINGRIB

DATE: 2021

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