

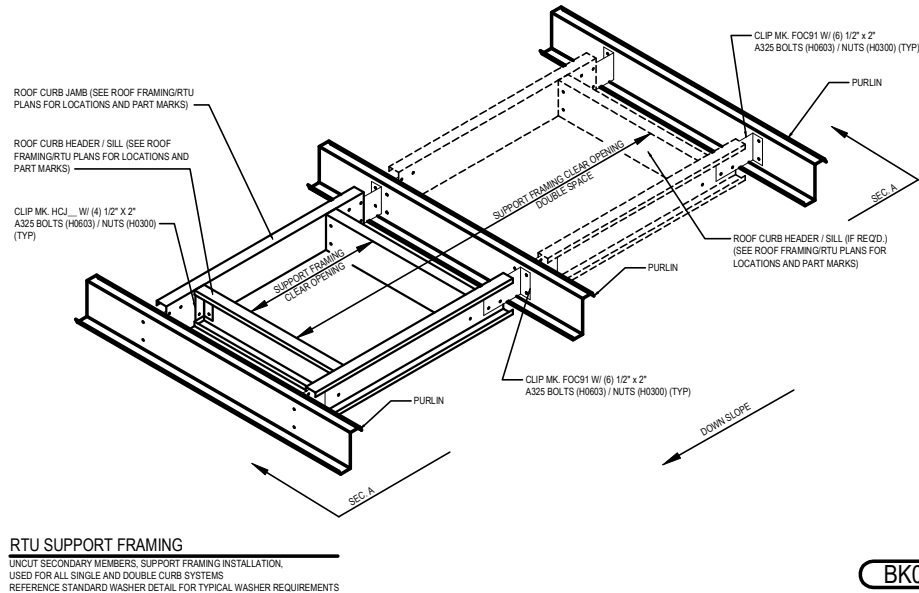
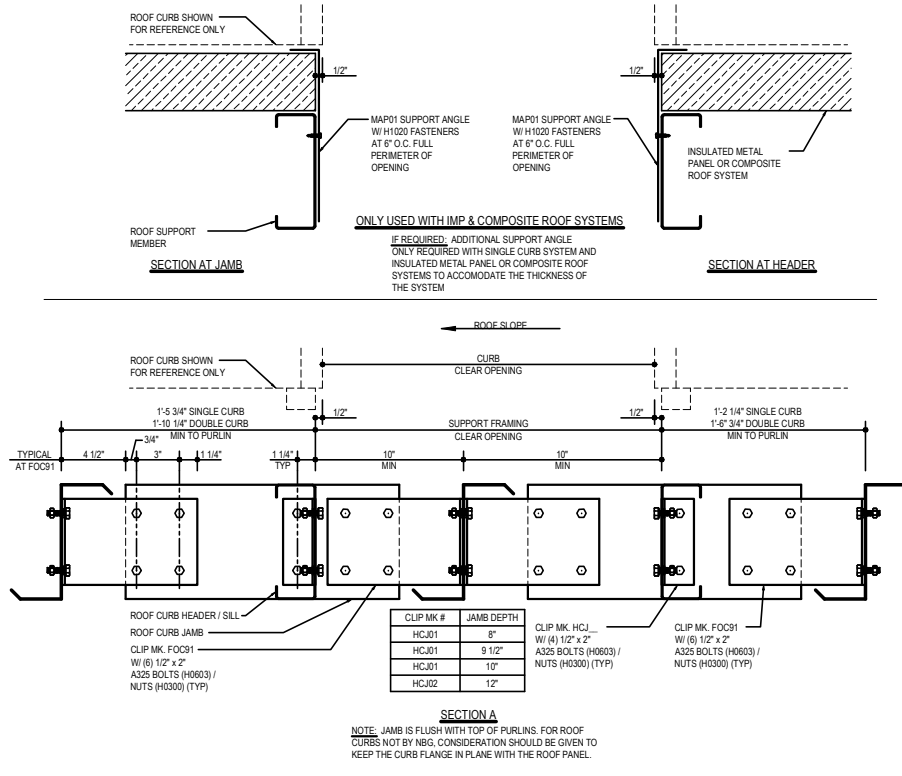
## ROOF FRAMED OPENING DETAILS

BK0100-OPTION #1 - PURLIN SUPPORT (PURLINS RUN THROUGH)
BK0150-OPTION #1 - PURLIN SUPPORT (PURLINS CUT)
BK0200-OPTION #2 - FULL BAY 'S' HEADER (PURLINS RUN THROUGH)
BK0250-OPTION #2 - FULL BAY 'S' HEADER (PURLINS CUT)
BK0300-OPTION #3 - FULL BAY HR HEADER (PURLINS RUN THROUGH)
BK0350-OPTION #3 - FULL BAY HR HEADER (PURLINS CUT)
BK0400-OPTION #4 - FULL BAY DOUBLE 'S' HEADER (PURLINS RUN THROUGH)
BK0450-OPTION #4 - FULL BAY DOUBLE 'S' HEADER (PURLINS CUT)
BK0500-OPTION #5 - FULL BAY BU-WF HEADER (PURLINS RUN THROUGH)
BK0550-OPTION #5 - FULL BAY BU-WF HEADER (PURLINS CUT)
BK0600-OPTION #6 - JOIST SUPPORT (JOISTS RUN THROUGH)
BK0650-OPTION #6 - JOIST SUPPORT (JOISTS CUT)
BK2000-LIGHTWEIGHT ROOF CURB INSTALLATION
BK2010-PURLIN CAVITY FRAMING - LIGHTWEIGHT CURB

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### BK0100 - OPTION #1 - PURLIN SUPPORT (PURLINS RUN THROUGH)

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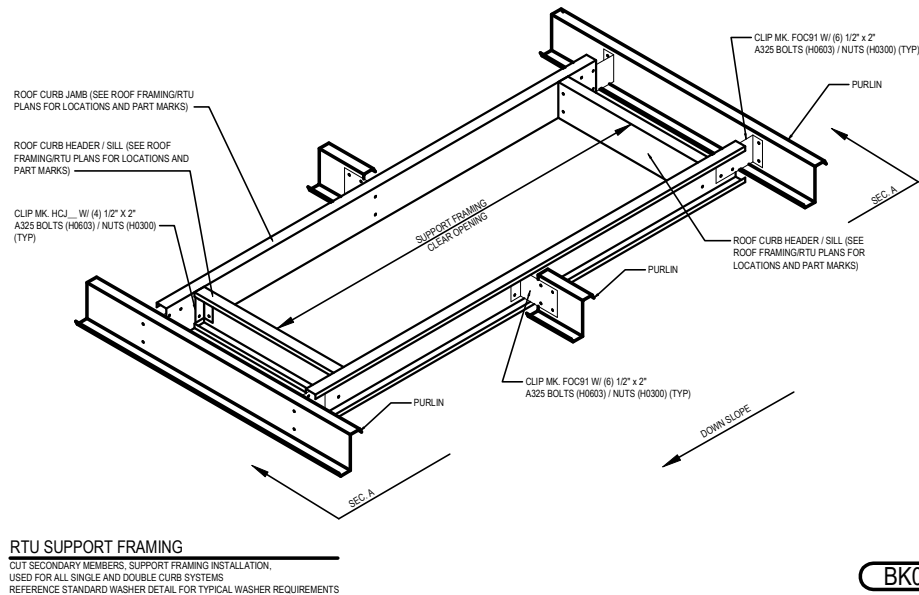
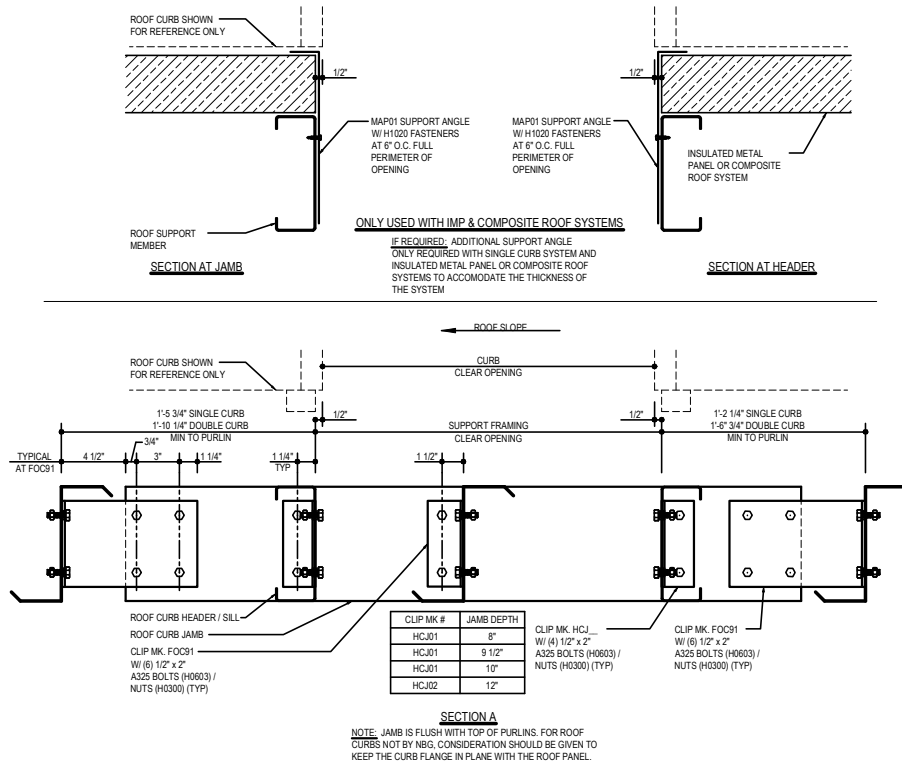
**BK0100**

#### Detailer Notes:

- 1) FOR USE WITH ANY ROOF TYPE.
- 2) IMP AND COMPOSITE ROOF SYSTEMS REQUIRE THE ADDITIONAL SUPPORT ANGLES AS SHOWN.

### BK0150 - OPTION #1 - PURLIN SUPPORT (PURLINS CUT)

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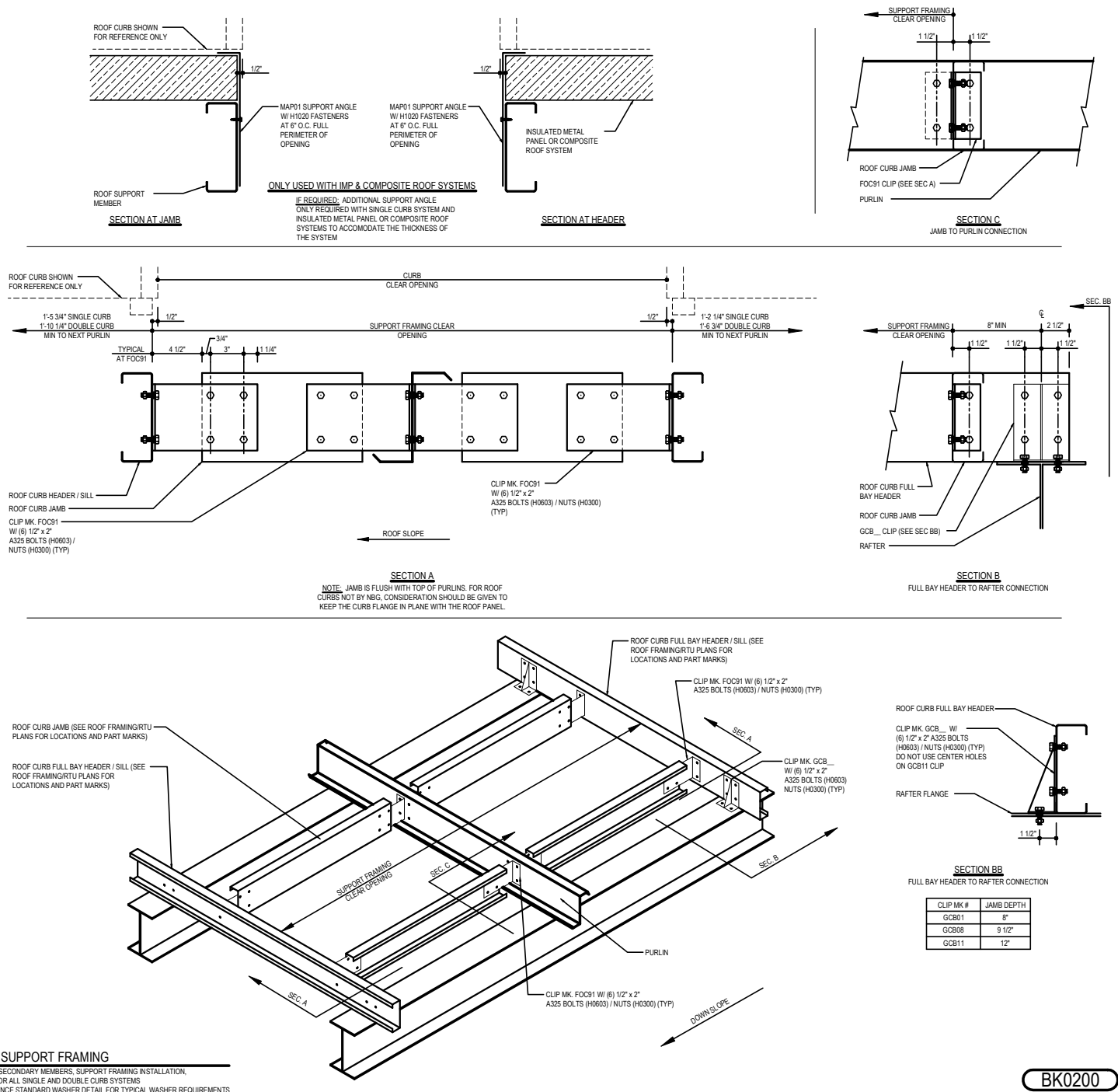
BK0150

#### Detailer Notes:

- 1) FOR USE WITH ANY ROOF TYPE.
- 2) IMP AND COMPOSITE ROOF SYSTEMS REQUIRE THE ADDITIONAL SUPPORT ANGLES AS SHOWN.

### BK0200 - OPTION #2 - FULL BAY "S" HEADER (PURLINS RUN THROUGH)

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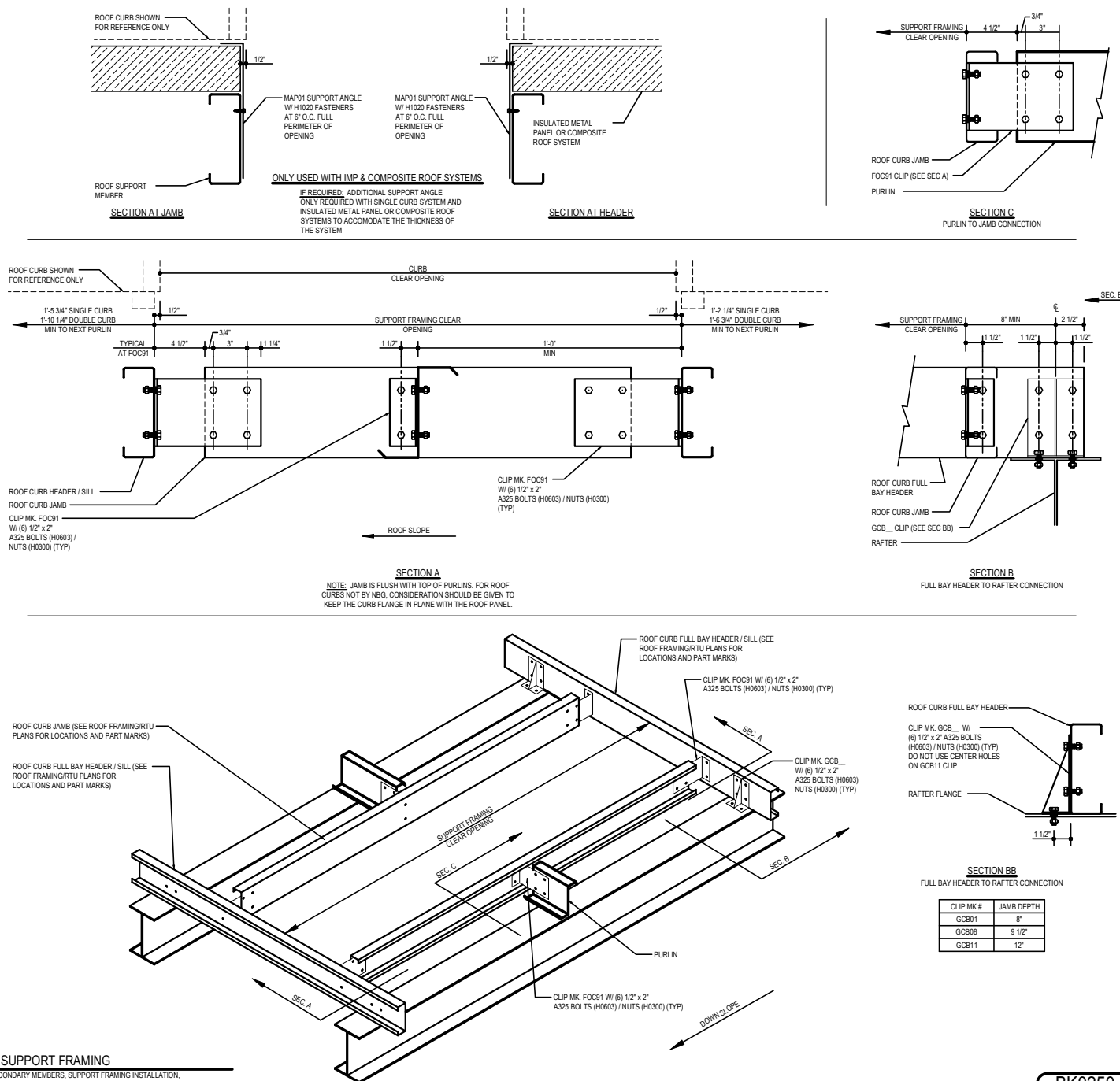
**BK0200**

#### Detailer Notes:

- 1) FOR USE WITH ANY ROOF TYPE.
- 2) IMP AND COMPOSITE ROOF SYSTEMS REQUIRE THE ADDITIONAL SUPPORT ANGLES AS SHOWN.

### BK0250 - OPTION #2 - FULL BAY "S" HEADER (PURLINS CUT)

[Download the DWG file by clicking here.](#)



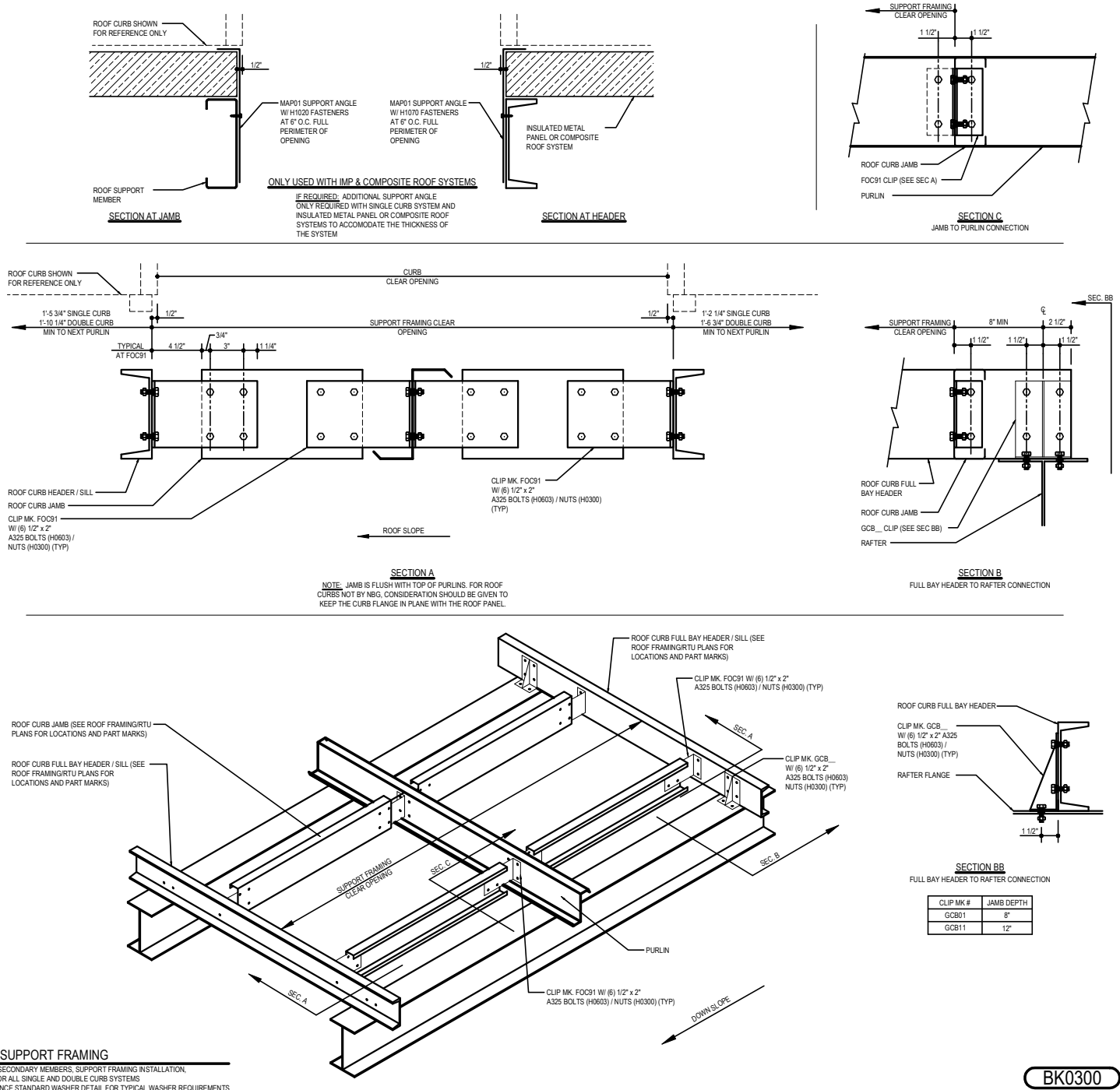
**BK0250**

#### Detailer Notes:

- 1) FOR USE WITH ANY ROOF TYPE.
- 2) IMP AND COMPOSITE ROOF SYSTEMS REQUIRE THE ADDITIONAL SUPPORT ANGLES AS SHOWN.

### BK0300 - OPTION #3 - FULL BAY HR HEADER (PURLINS RUN THROUGH)

[Download the DWG file by clicking here.](#)



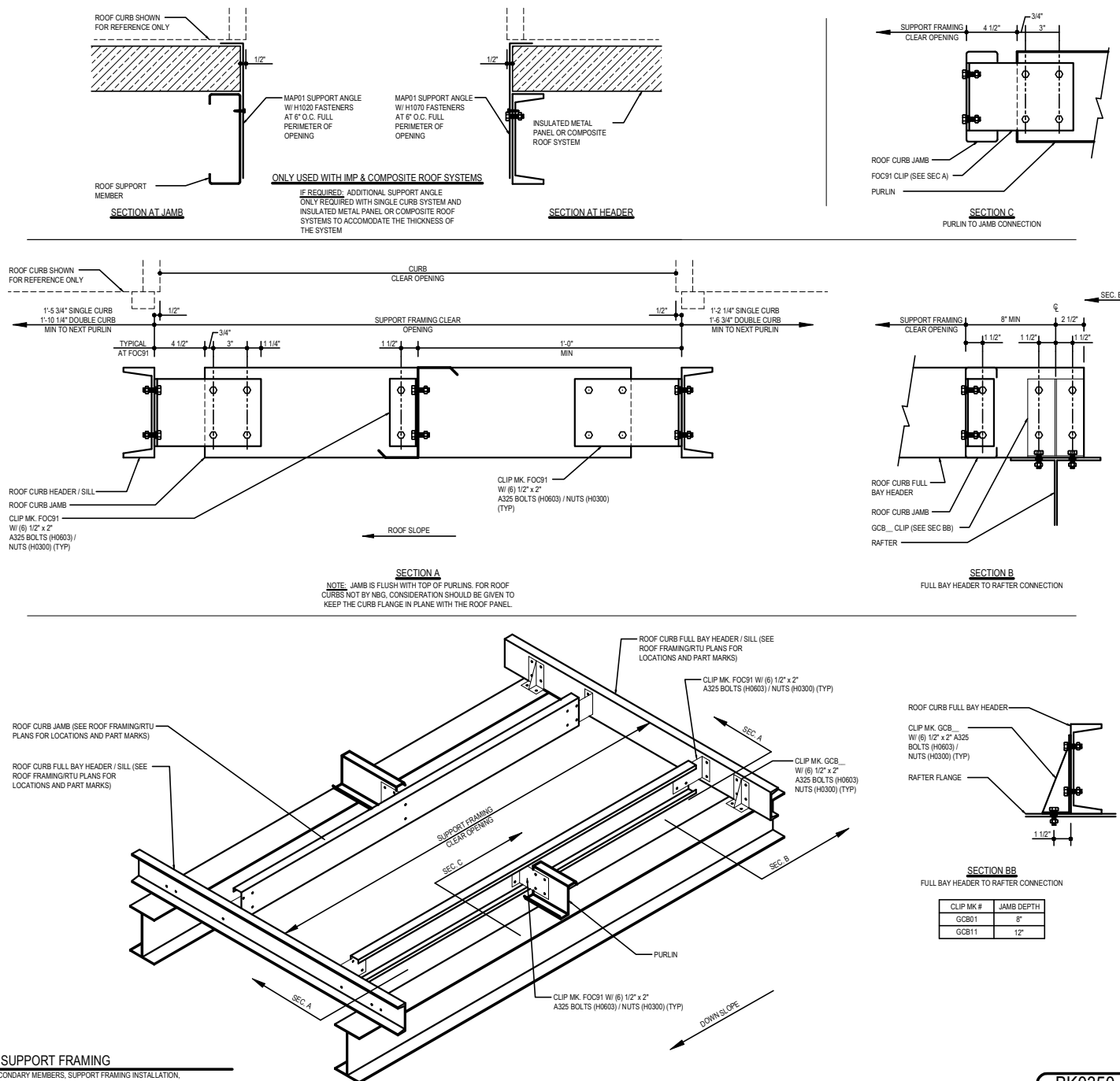
**BK0300**

#### Detailer Notes:

- 1) FOR USE WITH ANY ROOF TYPE.
- 2) IMP AND COMPOSITE ROOF SYSTEMS REQUIRE THE ADDITIONAL SUPPORT ANGLES AS SHOWN.
- 3) DETAIL DOES NOT WORK WITH 9 1/2" PURLINS. USE DOUBLE "S" FULL BAY HEADER (BK0400)

### BK0350 - OPTION #3 - FULL BAY HR HEADER (PURLINS CUT)

[Download the DWG file by clicking here.](#)

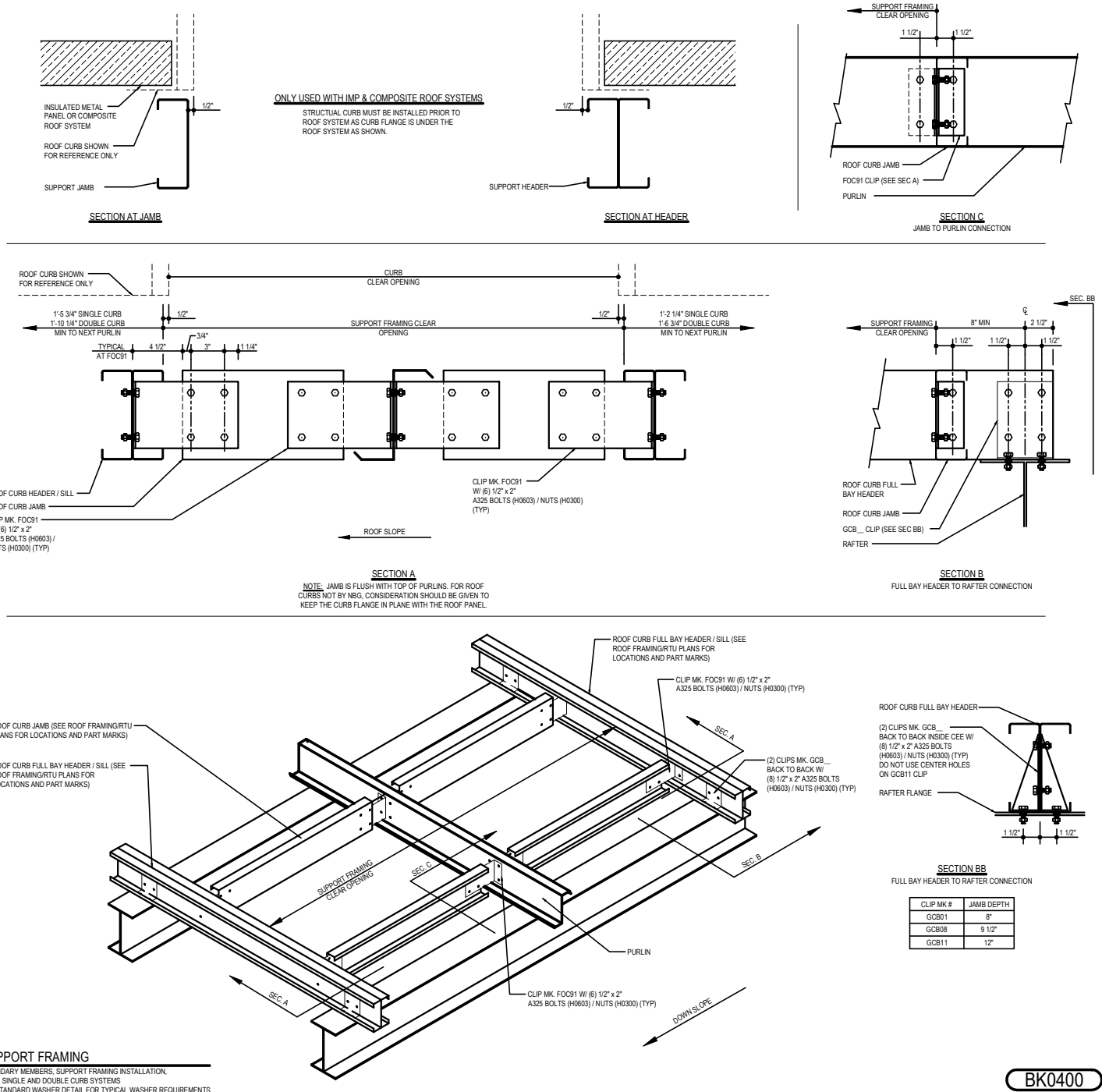


#### Detailer Notes:

- 1) FOR USE WITH ANY ROOF TYPE.
- 2) IMP AND COMPOSITE ROOF SYSTEMS REQUIRE THE ADDITIONAL SUPPORT ANGLES AS SHOWN.
- 3) DETAIL DOES NOT WORK WITH 9 1/2\" PURLINS. USE DOUBLE \"S\" FULL BAY HEADER (BK0450)

### BK0400 - OPTION #4 - FULL BAY DOUBLE "S" HEADER (PURLINS RUN THROUGH)

[Download the DWG file by clicking here.](#)



**BK0400**

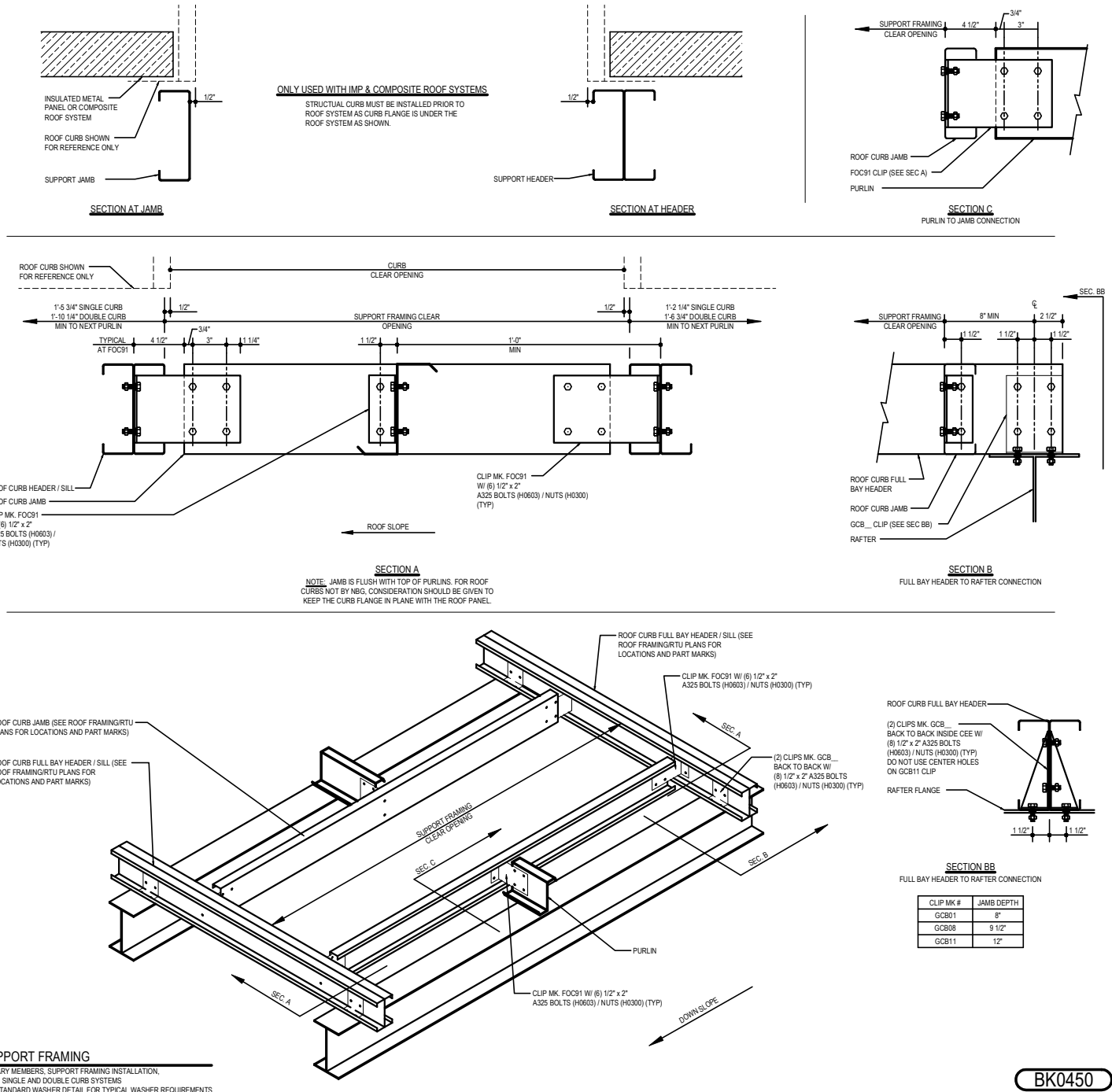
#### Detailer Notes:

- 1) FOR USE WITH ANY ROOF TYPE.
- 2) THIS SYSTEM IS DESIGNED TO WORK WITH DOUBLE ROOF CURB SYSTEMS.



### BK0450 - OPTION #4 - FULL BAY DOUBLE "S" HEADER (PURLINS CUT)

[Download the DWG file by clicking here.](#)



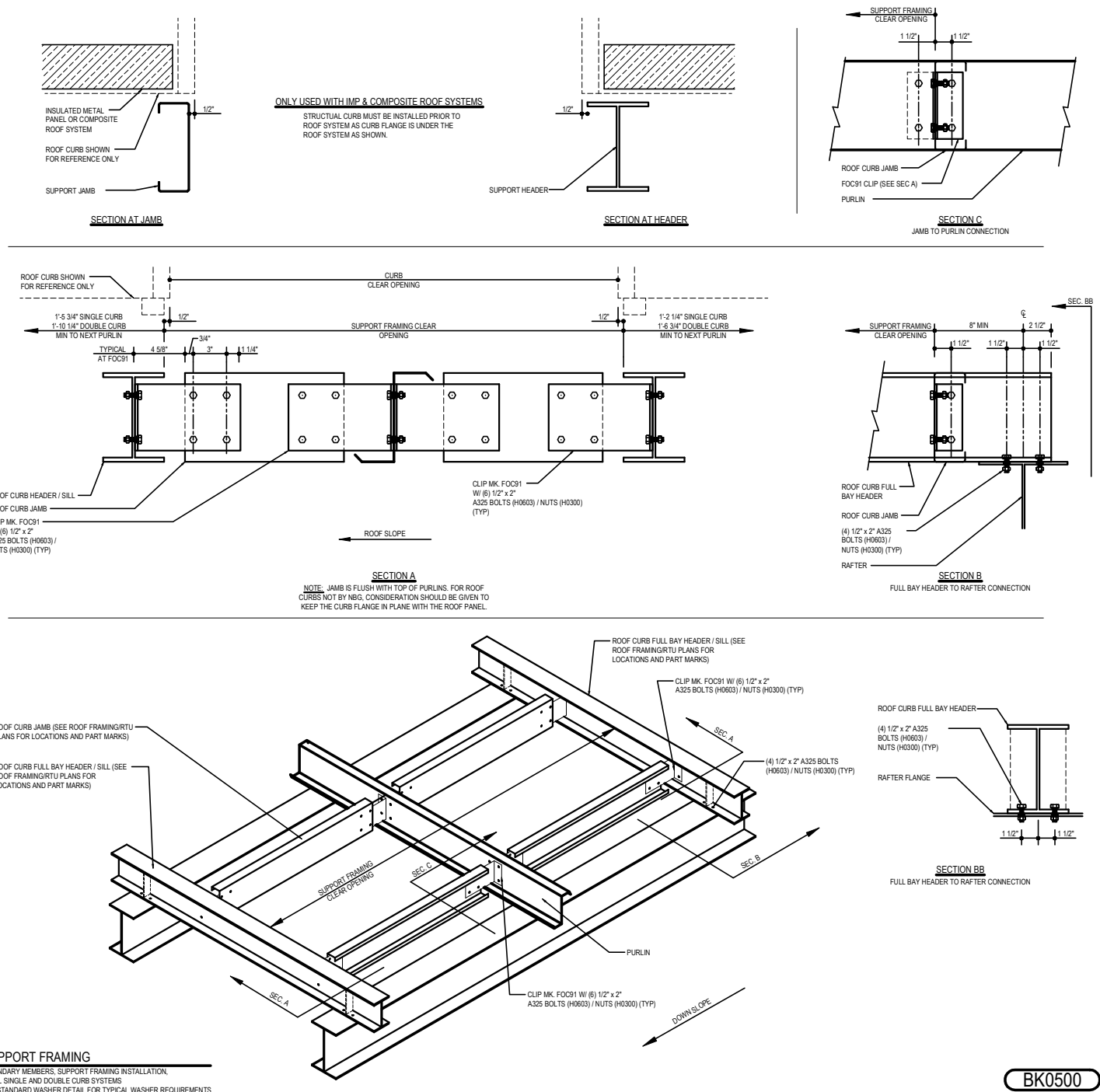
**BK0450**

#### Detailer Notes:

- 1) FOR USE WITH ANY ROOF TYPE.
- 2) THIS SYSTEM IS DESIGNED TO WORK WITH DOUBLE ROOF CURB SYSTEMS.

### BK0500 - OPTION #5 - FULL BAY BU-WF HEADER (PURLINS RUN THROUGH)

[Download the DWG file by clicking here.](#)

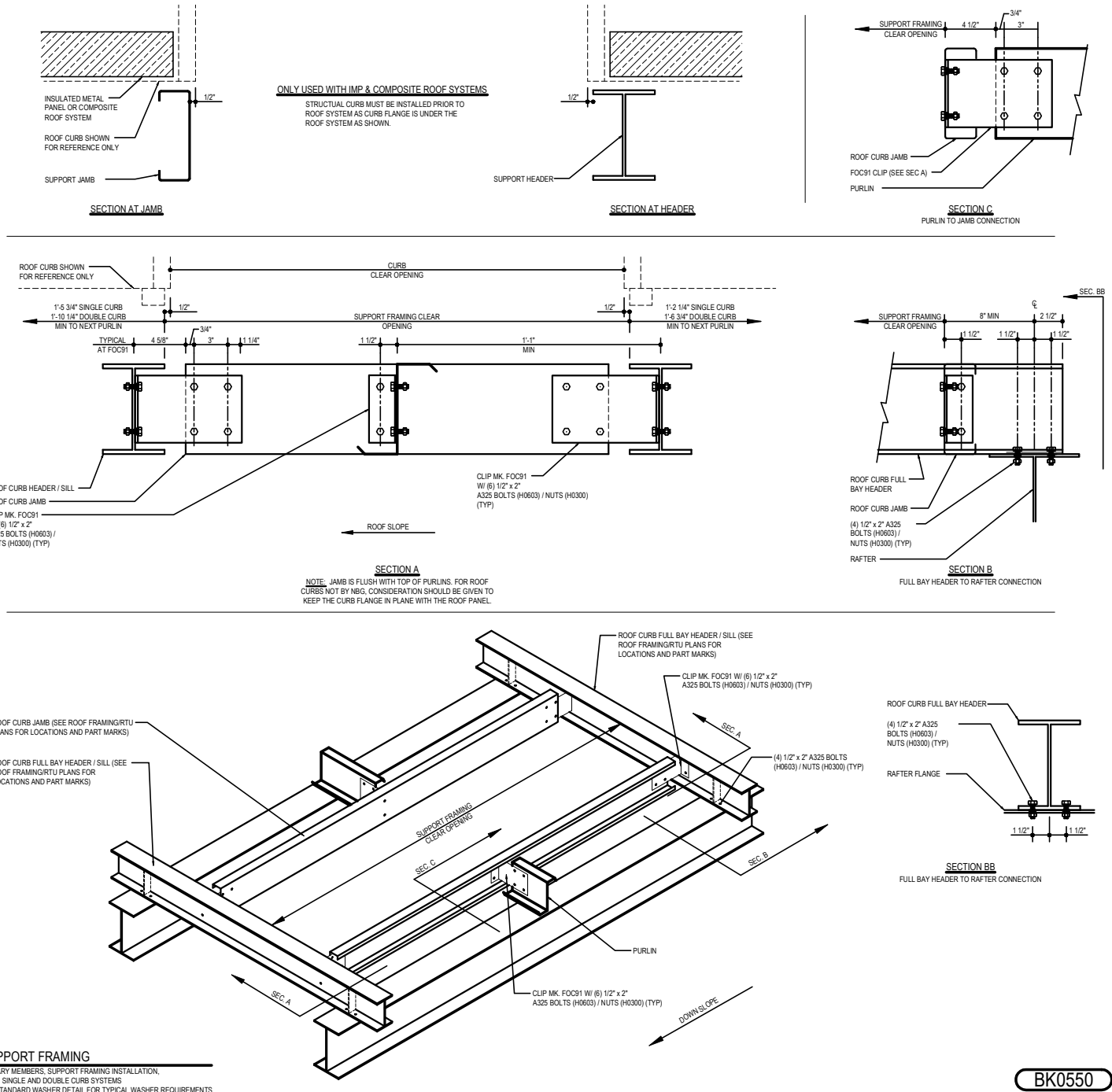


#### Detailer Notes:

- 1) FOR USE WITH ANY ROOF TYPE.
- 2) THIS SYSTEM IS DESIGNED TO WORK WITH DOUBLE ROOF CURB SYSTEMS.
- 3) THERE ARE NO WF MEMBERS AVAILABLE FOR 9 1/2" SECONDARY FRAMING.

### BK0550 - OPTION #5 - FULL BAY BU-WF HEADER (PURLINS CUT)

[Download the DWG file by clicking here.](#)



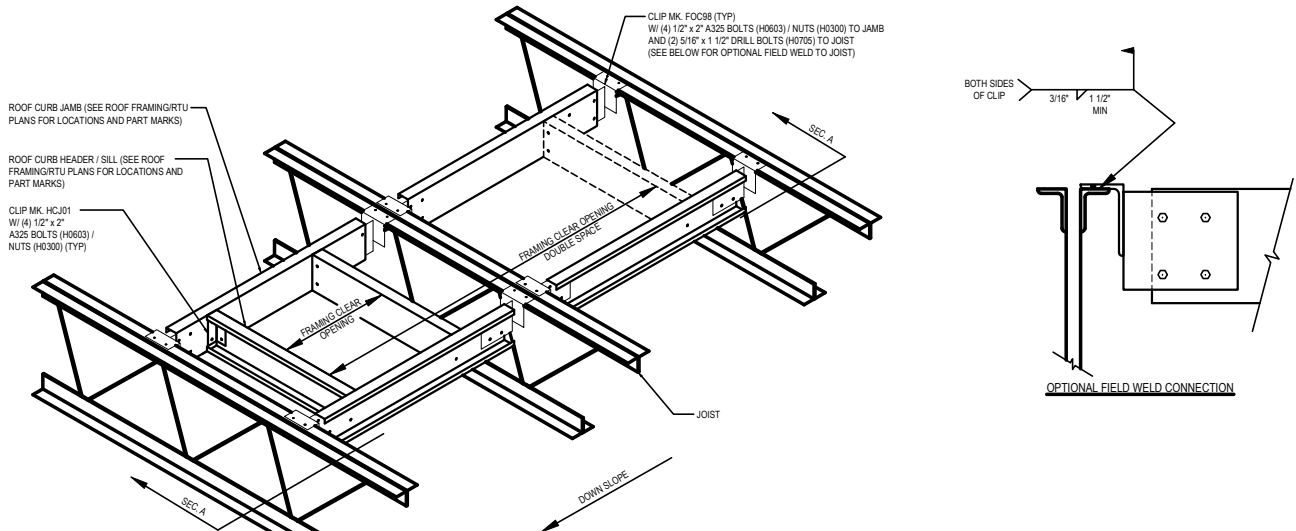
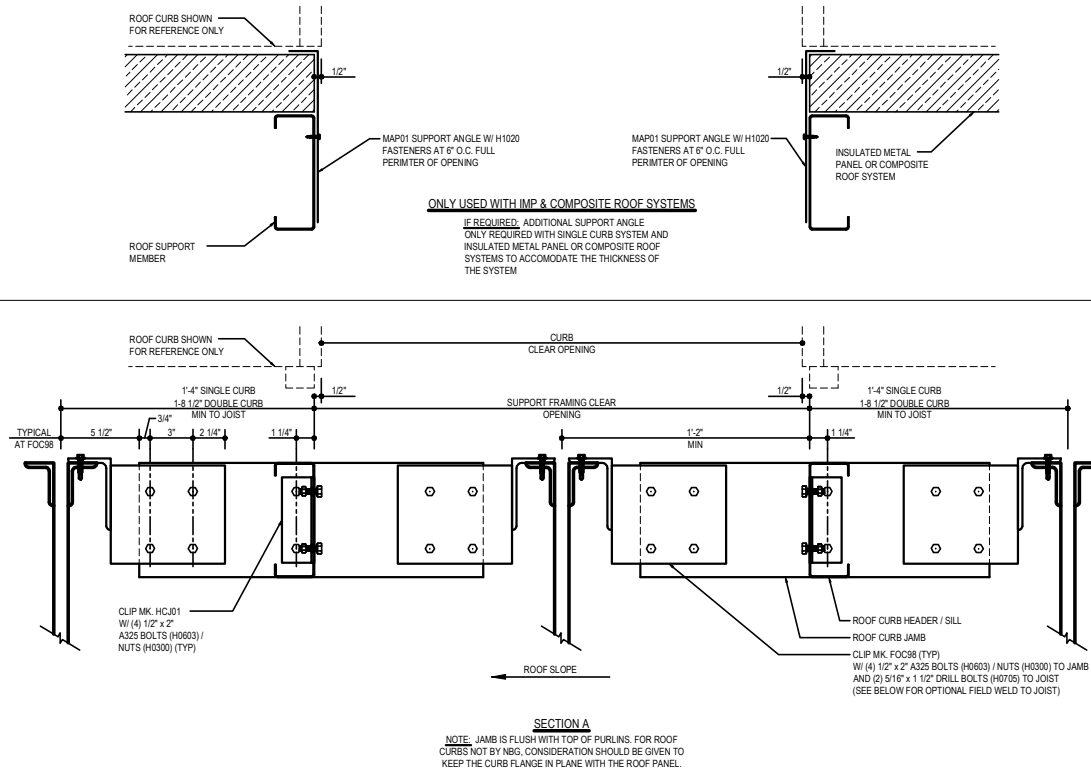
**BK0550**

#### Detailer Notes:

- 1) FOR USE WITH ANY ROOF TYPE.
- 2) THIS SYSTEM IS DESIGNED TO WORK WITH DOUBLE ROOF CURB SYSTEMS.
- 3) THERE ARE NO WF MEMBERS AVAILABLE FOR 9 1/2" SECONDARY FRAMING.

### BK0600 - OPTION #6 - JOIST SUPPORT (JOISTS RUN THROUGH)

[Download the DWG file by clicking here.](#)



#### RTU SUPPORT FRAMING

UNOUT SECONDARY MEMBERS, SUPPORT FRAMING INSTALLATION,  
USED FOR ALL SINGLE AND DOUBLE CURB SYSTEMS  
REFERENCE STANDARD WASHER DETAIL FOR TYPICAL WASHER REQUIREMENTS

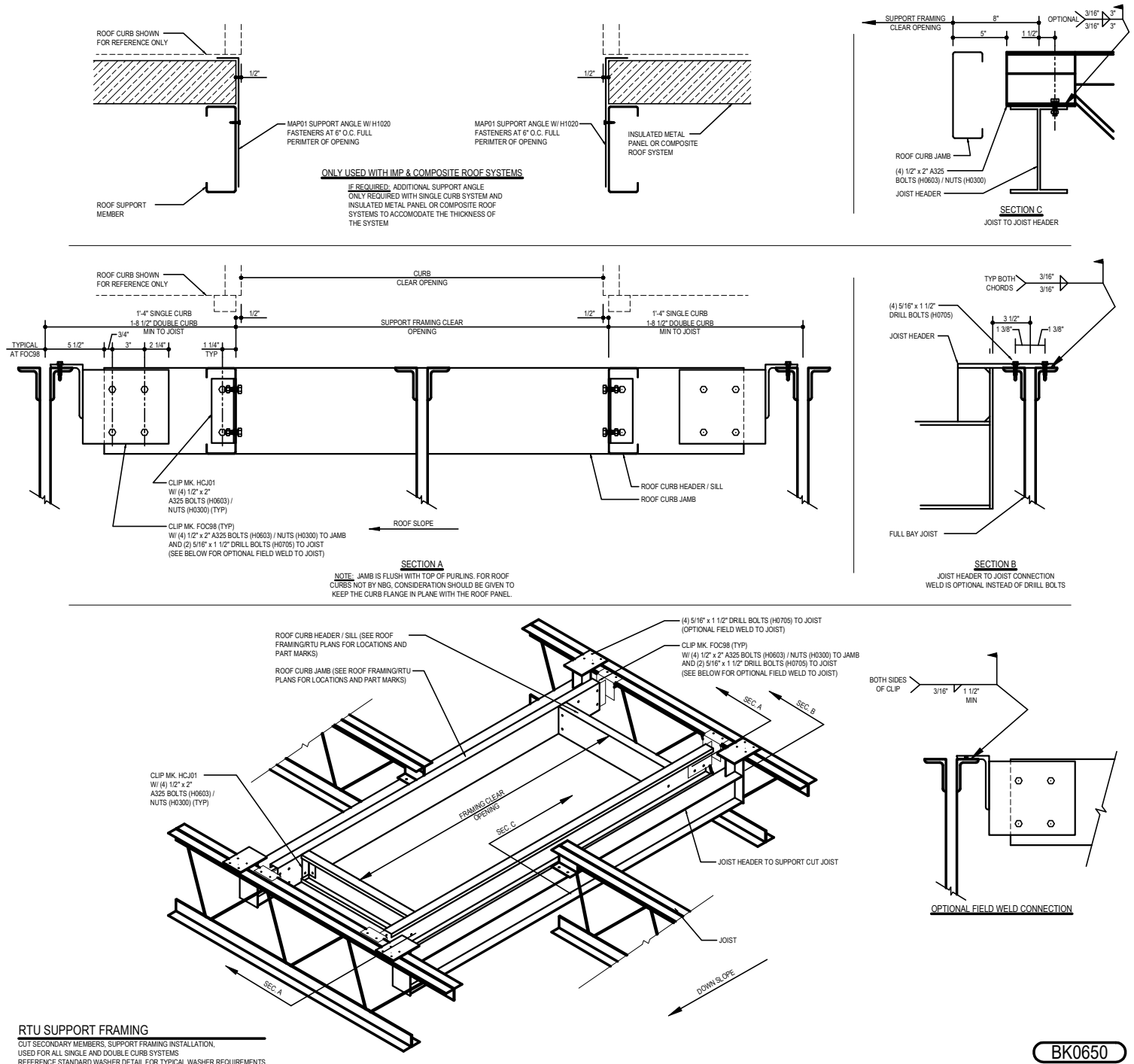
BK0600

#### Detailer Notes:

- 1) FOR USE WITH ANY ROOF TYPE.
- 2) IMP AND COMPOSITE ROOF SYSTEMS REQUIRE THE ADDITIONAL SUPPORT ANGLES AS SHOWN.

### BK0650 - OPTION #6 - JOIST SUPPORT (JOISTS CUT)

[Download the DWG file by clicking here.](#)



**BK0650**

### BK2000 - LIGHTWEIGHT ROOF CURB INSTALLATION

Download the DWG file by clicking [here](#).

**SAFETY PRECAUTION:**  
WORKERS SHOULD MAINTAIN A CONSTANT AWARENESS OF THEIR LOCATION IN RELATION TO THE ROOF EDGE AND ANY ROOF OPENINGS AT ALL TIMES. DO NOT WALK OR STAND ON CURB FRAMING UNTIL PANELS ARE SECURED PROPERLY.

- DO NOT FASTEN OR ATTACH BACKER SUPPORT/CROSS CHANNELS TO SECONDARY.
- BACKER SUPPORT AND CROSS CHANNELS ARE DESIGNED TO "FLOAT".

ROOF SECONDARY IS NOT DESIGNED TO BE CUT AND MUST REMAIN CONTINUOUS BELOW THE BACKER CHANNEL FRAMING AS SHOWN.

**SECTION A-A**

**TABLE**

	AA MIN DIM	BB MIN DIM
PURLIN	6"	3"
JOIST	4 1/2"	4 1/2"

**DETAIL "A"**

**INSTALLATION PROCEDURE (RETRO-FIT):**

- 1) DETERMINE ROOF CURB LOCATIONS. IF POSSIBLE, TRY TO CENTER OPENING/CURB OVER A MAJOR RIB/SEAM. KEEP OPENING MINIMUM 2" FROM EDGE OF RIB. SEE SECTION A-A.
- 2) FOLLOW ROOF PANEL CUT-OUT PROCEDURE (AT RIGHT) FOR PROPERLY CUTTING OPENING IN ROOF PANEL.
- 3) INSTALL BACKER SUPPORT CHANNELS (SIDES), USING CAUTION NOT TO TEAR/CUT ROOF INSULATION WHEN PLACING WITHIN OPENING.
- 4) CENTER BACKER FRAMING OVER SECONDARY MAKING SURE THE ENDS OF THE BACKER SUPPORT CHANNELS REST ON SECONDARY EQUALLY. (IF A NON-THERMAL BLOCK ROOF APPLICATION, THE BACKER SUPPORT CHANNELS WILL COME FACTORY NOTCHED AT SECONDARY).
- 5) INSTALL BACKER CROSS CHANNELS (UPSLOPE/DOWNSLOPE), WITH FACTORY NOTCHED ENDS, ON TOP OF BACKER SUPPORT CHANNELS AND UNDER ROOF PANEL.
- 6) FOLLOW INSULATION TIE-OFF PROCEDURE (FROM BELOW) FOR PROPERLY REMOVING INSULATION FROM ROOF OPENING.

**INSTALLATION PROCEDURE (NEW CONSTRUCTION):**

- 1) DETERMINE ROOF CURB LOCATIONS. IF POSSIBLE, TRY TO CENTER OPENING/CURB OVER A MAJOR RIB/SEAM. KEEP OPENING MINIMUM 2" FROM EDGE OF RIB. SEE SECTION A-A.
- 2) ASSEMBLE BACKER SUPPORT/CROSS CHANNELS. PLACE (2) POP RIVETS IN EACH CORNER TO HELP HOLD BACKER CHANNELS TOGETHER AS REQUIRED.
- 3) LAY BACKER FRAMING ON TOP OF INSULATION. IF NO INSULATION IS UTILIZED, THEN LAY DIRECTLY ON TOP OF SECONDARY.
- 4) CENTER BACKER FRAMING OVER SECONDARY MAKING SURE THE ENDS OF BACKER SUPPORT CHANNELS REST ON THE SECONDARY EQUALLY. (IF A NON-THERMAL BLOCK ROOF APPLICATION, THE BACKER SUPPORT CHANNELS WILL COME FACTORY NOTCHED AT SECONDARY).
- 5) START SHEETING OVER BACKER FRAMING. ATTACH ROOF PANELS PER STANDARD PRACTICE.
- 6) PLACE A FASTENER AT LOWER AND UPPER CORNER OF SUPPORT FRAMING.
- 7) FOLLOW INSULATION TIE-OFF PROCEDURE (AT RIGHT) FOR THE INSTALLATION. CONTINUE SHEETING ROOF PANELS AND PLACE A FASTENER AT OTHER LOWER AND UPPER CORNERS OF SUPPORT FRAMING.
- 8) FOLLOW INSULATION TIE-OFF PROCEDURE (FROM BELOW) FOR PROPERLY REMOVING INSULATION FROM ROOF OPENING.

**ROOF PANEL CUT-OUT PROCEDURE:**

WHEN FIELD CUTTING PANELS DO NOT USE ABRASIVE SAWS OR OTHER CUTTING METHODS WHICH PRODUCE HOT METAL PARTICLES AND/OR BURN THE CUT EDGES. THESE METHODS WILL DAMAGE THE PAINTED AND ALUMINUM COATED FINISH AND VOID ANY WARRANTIES. USE DOUBLE CUT SHEARS, NIBBLERS OR OTHER CUTTING DEVICES WHICH DO NOT PRODUCE HOT METAL PARTICLES OR BURNED EDGES.

- 1) FOR RETRO-FIT INSTALL, THE ROOF OPENING WIDTH DIMENSION WILL BE THE OUTSIDE OF CURB FLANGE DIMENSION MINUS (4) 6". THE ROOF OPENING LENGTH DIMENSION WILL BE THE INSIDE OF CURB DIMENSION. ONCE DIMENSIONS ARE LAID OUT AND CONFIRMED, DRILL A HOLE IN PANEL AT EACH CORNER AND CUT AWAY ROOF PANELS. USING CAUTION NOT TO CUT INTO ROOF INSULATION (IF UTILIZED).
- 2) FOR NEW CONSTRUCTION, PLACE A FASTENER AT EACH CORNER OF THE SUPPORT FRAMING AS SHOWN IN DETAIL "A" (THIS IS TEMPORARY AND WILL HELP ENSURE THE SUPPORT FRAMING DOES NOT MOVE DURING PANEL INSTALLATION). LOCATE CORNER FASTENERS UNDER ROOF PANELS. DRILL A HOLE IN ROOF PANEL AT EACH FASTENER LOCATION AND CUT AWAY ROOF PANELS. USING CAUTION NOT TO CUT INTO ROOF INSULATION (IF UTILIZED).
- 3) DEBURR ALL FIELD CUT PANEL CORRELATIONS AND PANEL EDGES OF SHARP EDGES BEFORE PROCEEDING.

**INSULATION TIE-OFF PROCEDURE AT BLANKET INSULATION:**

USE WITH PURLINS OR JOIST AS ROOF SECONDARY MEMBER TYPES.

- 1) REMOVE INSULATION BACKING FROM THE LINER WITHIN THE ROOF OPENING AREA. CUT LINER INSIDE OF THE ROOF OPENING AREA.
- 2) TUCK LINER UNDER ROOF PANEL AND ON TOP OF BACKER CHANNELS (SIDES).
- 3) HOLD LINER OVER UP/HILL/DOWN/HILL BACKER CHANNELS AND TAPE LINER TO BACKER CHANNELS.
- 4) OPTIONAL TIE-OFF PROCEDURE: INSTALL ROOF CURB (WITH PROPER SEALANTS UNDER CURB FLANGES). SECURE ROOF CURB, WRAP LINER UP AND OVER INNER CURB FLANGE PERIMETER, SECURE LINER WITH TAPE OR FASTENERS WITH OVERSIZED WASHERS (TAPE, FASTENERS NOR WASHERS NOT BY METAL BUILDING SUPPLIER).

**SECTION B-B**

**SECTION C-C**

**SECTION B-B**

IF ORDERED AND SUPPLIED ONLY

**INSULATION TIE-OFF PROCEDURE AT PURLIN CAVITY FRAMING:**

USE WITH CAVITY FILLED INSULATION (BASKET) SYSTEMS AND/OR WITH METAL ROOF LINER IF ORDERED.

- 1) REMOVE ADDITIONAL INSULATION FROM WITHIN THE ROOF OPENING AREA TO BE ABLE TO INSTALL PURLIN CAVITY FRAMING. BUT NOT SO MUCH AS TO CREATE VOIDS. INSULATION NEEDS TO BE SNUG AROUND PURLIN CAVITY FRAMING.
- 2) INSTALL PURLIN CAVITY FRAMING PARTS WITH MULTU-USE SEALANT TAPE APPLIED ON TOP SIDE FLANGE, TO CREATE SEAL BETWEEN BACKER CHANNELS AND PURLIN CAVITY FRAMING.
- 3) FILL INSULATION VOIDS WITH ADEQUATE INSULATION, AS REQUIRED.
- 4) SECURE INSULATION WITH METAL LINER WITH TAPE OR FASTENERS WITH OVERSIZED WASHERS TO BOTTOM SIDE FLANGE OF PURLIN CAVITY FRAMING (TAPE, FASTENERS NOR OVERSIZED WASHERS BY METAL BUILDING SUPPLIER).

**SECTION C-C**

LIGHTWEIGHT ROOF CURB INSTALLATION  
UNCUT SECONDARY MEMBERS, SUPPORT FRAMING INSTALLATION.  
PREPPING ROOF OPENING FOR ALL STANDARD ROOF PANEL TYPES.  
FOR USE WITH CURB MOUNT PRISMATIC DOMES & PRISMATIC SMOKE VENTS ONLY

**BK2000**

#### Detailer Notes:

1) FOR USE WITH CURB MOUNT PRISMATIC DOMES & PRISMATIC SMOKE VENTS ONLY



