CI-CFR-INDX1	SHEET INDEX (1 OF 2)
CI-CFR-INDX2	SHEET INDEX (2 OF 2)
CI-CFR-INFO	C & I DISCLAIMER
CI-CFR-LG	LEGEND
CI-CFR-JT-01	PANEL JOINT
CI-CFR-JT-02	PANEL JOINT SEQUENCE
CI-CFR-JT-03	PANEL JOINT LAYOUT
CI-CFR-SQ-01	PANEL INSTALLATION SEQUENCE (1 OF 3)
CI-CFR-SQ-02	PANEL INSTALLATION SEQUENCE (2 OF 3)
CI-CFR-SQ-03	PANEL INSTALLATION SEQUENCE (3 OF 3)
CI-CFR-AT-01	INTERMEDIATE ATTACHMENT
CI-CFR-EL-01	ENDLAP ATTACHMENT
CI-CFR-EL-01-A	ENDLAP ATTACHMENT
CI-CFR-EL-02	ENDLAP ATTACHMENT EXPLODED VIEW
CI-CFR-EL-03	ENDLAP STRUCTURAL SEALANT
CI-CFR-EL-04	ENDLAP LOWER PANEL
CI-CFR-EL-05	ENDLAP LOWER PANEL BUTYL TAPE SEALANT (1 OF 2)
CI-CFR-EL-06	ENDLAP LOWER PANEL BUTYL TAPE SEALANT (2 OF 2)
CI-CFR-EL-07	ENDLAP UPPER PANEL
CI-CFR-EL-08	ENDLAP CONDITIONS
CI-CFR-EV-01	LOW EAVE WITH TRIM
CI-CFR-EV-01-A	LOW EAVE WITH TRIM
CI-CFR-EV-G1	LOW EAVE WITH NORTHERN GUTTER
CI-CFR-EV-G1-A	LOW EAVE WITH NORTHERN GUTTER
CI-CFR-EV-G2	LOW EAVE NORTHERN GUTTER HANGAR
CI-CFR-EV-G3	LOW EAVE WITH STANDARD GUTTER
CI-CFR-EV-G3-A	LOW EAVE WITH STANDARD GUTTER
CI-CFR-EV-G4	LOW EAVE STANDARD GUTTER HANGAR
CI-CFR-EV-02	HIGH EAVE
CI-CFR-EV-02-A	HIGH EAVE
CI-CFR-RK-01	RAKE WITH HIGH PROFILE TRIM
CI-CFR-RK-01-A	RAKE WITH HIGH PROFILE TRIM
CI-CFR-RG-01	RIDGE
CI-CFR-RG-01-A	RIDGE
CI-CFR-RG-02	RIDGE EXPLODED VIEW
CI-CFR-RG-03	RIDGE CLOSURE ASSEMBLY (1 OF 2)
CI-CFR-RG-04	RIDGE CLOSURE ASSEMBLY (2 OF 2)
CI-CFR-RG-05	RIDGE FLASHING ASSEMBLY
CI-CFR-TR-01	TRANSITION WALL TO ROOF RAKE
CI-CFR-TR-01-A	TRANSITION WALL TO ROOF RAKE
CI-CFR-TR-02	TRANSITION STACK JOINT TO ROOF RAKE
CI-CFR-TR-02-A	TRANSITION STACK JOINT TO ROOF RAKE

CI-CFR-TR-03	TRANSITION CONTINUOUS WALL TO ROOK RAKE
CI-CFR-TR-03-A	TRANSITION CONTINUOUS WALL TO ROOF RAKE
CI-CFR-TR-04	TRANSITION WALL TO HIGH EAVE
CI-CFR-TR-04-A	TRANSITION WALL TO HIGH EAVE
CI-CFR-TR-05	TRANSITION STACK JOINT TO HIGH EAVE
CI-CFR-TR-05-A	TRANSITION STACK JOINT TO HIGH EAVE
CI-CFR-TR-06	TRANSITION CONTINUOUS WALL TO HIGH EAVE
CI-CFR-TR-06-A	TRANSITION CONTINUOUS WALL TO HIGH EAVE
CI-CFR-TR-07	TRANSITION MASONRY WALL TO HIGH EAVE
CI-CFR-TR-07-A	TRANSITION MASONRY WALL TO HIGH EAVE
CI-CFR-TR-08	TRANSITION MASONRY WALL TO RAKE
CI-CFR-TR-08-A	TRANSITION MASONRY WALL TO RAKE
CI-CFR-VL-01	VALLEY ASSEMBLY
CI-CFR-VL-02	VALLEY ROOF PLAN
CI-CFR-RC-01	ROOF CURB SECTIONS
CI-CFR-RC-02	ROOF CURB SUPPORT
CI-CFR-RC-03	ROOF CURB INSTALLATION (1 OF 5)
CI-CFR-RC-04	ROOF CURB INSTALLATION (2 OF 5)
CI-CFR-RC-05	ROOF CURB INSTALLATION (3 OF 5)
CI-CFR-RC-06	ROOF CURB INSTALLATION (4 OF 5)
CI-CFR-RC-07	ROOF CURB INSTALLATION (5 OF 5)
CI-CFR-RC-08	ROOF CURB INSTALLATION (1 OF 1)
CI-CFR-PB-01	PIPE BOOT (1 OF 2)
CI-CRR-PB-02	PIPE BOOT (2 OF 2)

DISCLAIMER:

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).

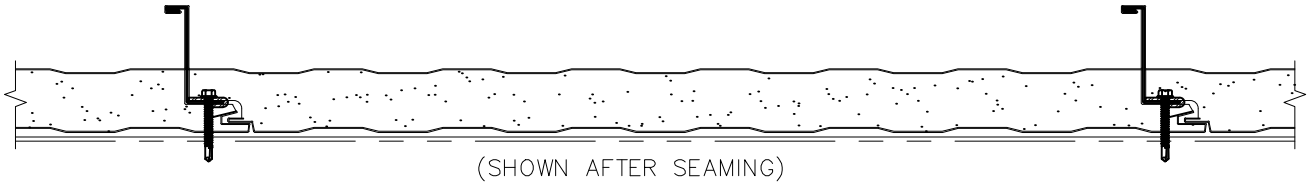
PROJECTS LOCATED IN AREAS SUBJECT TO EXTREME WIND AND/OR HIGH SNOW LOADS MAY REQUIRE MODIFICATIONS TO THESE DETAILS – CONTACT METL-SPAN TECHNICAL SERVICES FOR SPECIFIC RECOMMENDATIONS.

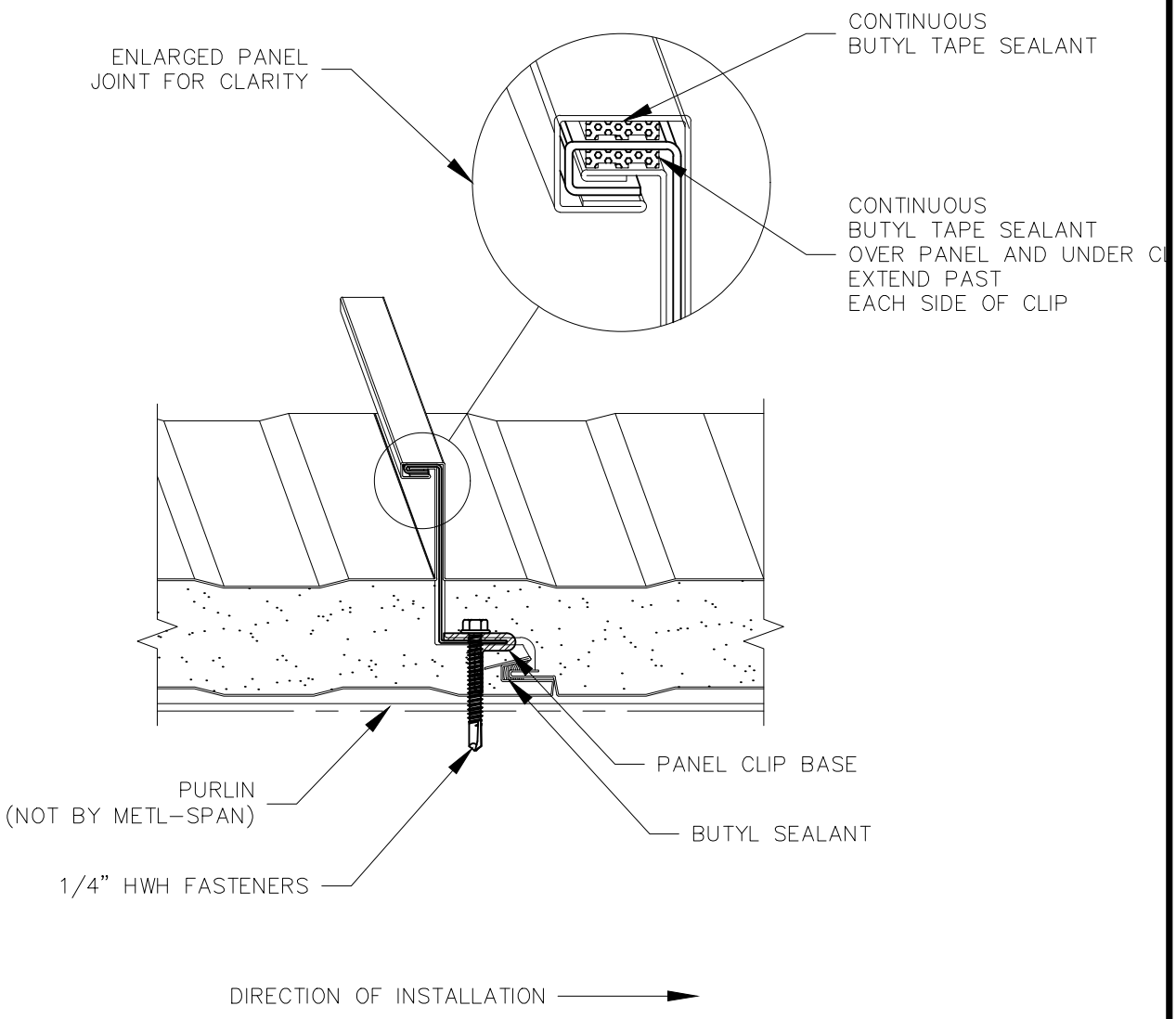
WE RECOMMEND THE USE OF METL-SPAN SUPPLIED SEALANTS AND BUTYL TAPES FOR OPTIMUM PANEL SYSTEM PERFORMANCE.

LEGEND:

LL LONG LIFE

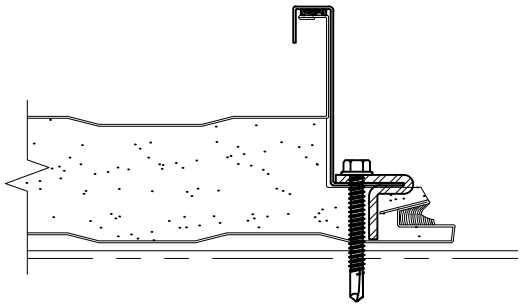
BN BONDED NEOPRENE WASHER



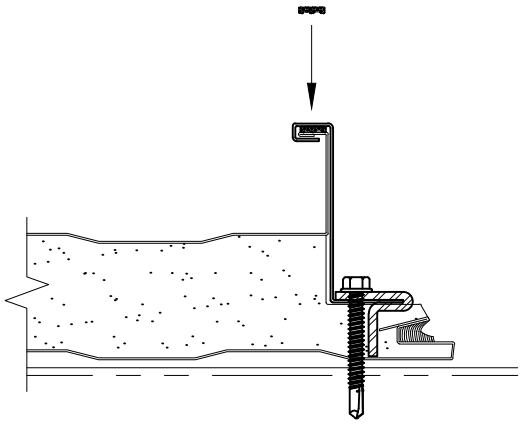


COMMERCIAL & INDUSTRIAL	PANEL JOINT	CI-CFR-JT-01
		DATE: Aug '19

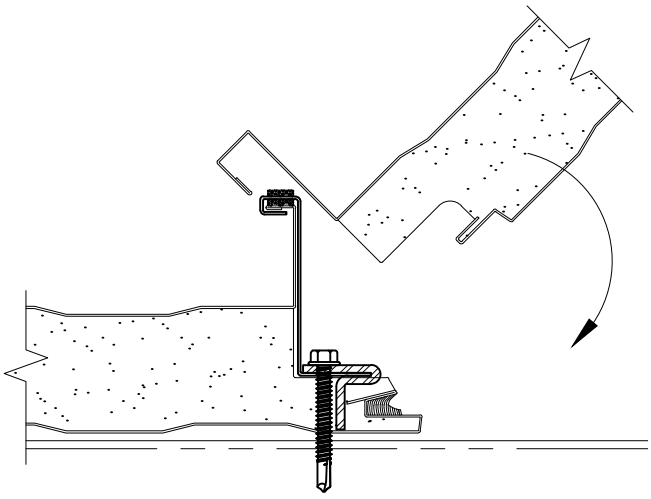
1. SET PANEL IN PLACE
2. INSTALL CFR CLIP W/BUTYL TAPE SEALANT
3. SECURE TO PURLINS W/ 1/4" HEX HEAD FASTENERS



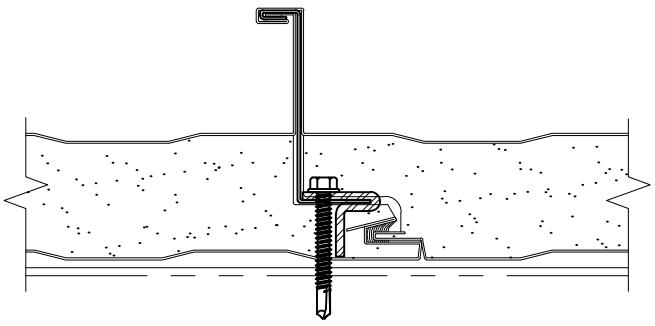
4. HAND "CRIMP" THE STANDING RIB/ CLIP ASSEMBLY AT EACH CLIP LOCATION
5. INSTALL CONTINUOUS BUTYL TAPE SEALANT ON TOP OF MALE STANDING SEAM



6. TILT NEXT PANEL TO BE INSTALLED AT 45 DEGREE ANGLE. ROTATE INTO POSITION.



7. USE CLAMPS TO ENSURE PROPER PANEL ENGAGEMENT
8. HAND CRIMP AT RIDGE, ENDLAP AND EAVES
9. INSTALL RIDGE, RAKE AND EAVE COMPONENTS THEN MECHANICALLY SEAM ROOF

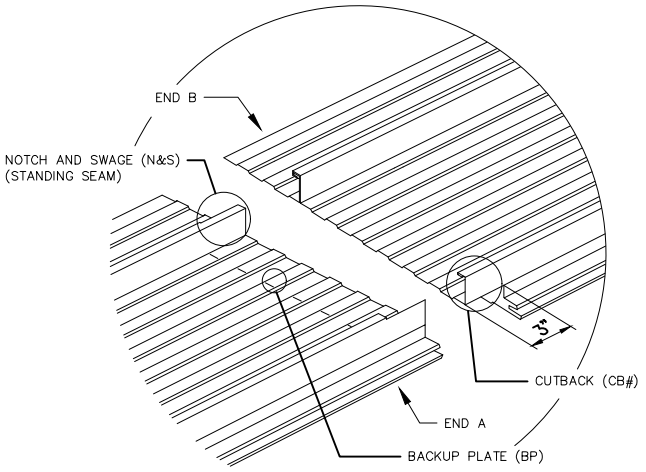


COMMERCIAL & INDUSTRIAL	PANEL JOINT SEQUENCE	CI–CFR–JT–02 DATE: Aug '19

1. ADD WALL PANEL THICKNESS (BOTH ENDS) PLUS OUT TO OUT DIMENSIONS OF RAKE STRUCTURAL SUPPORTS.
2. DIVIDE RESULT BY PANEL MODULE (30*", 36" OR 42") TO DETERMINE NUMBER OF PANELS REQUIRED.
3. DIVIDE FRACTIONAL PANEL REMAINDER (IF ANY) BY 2 TO DETERMINE STARTING PANEL WIDTH. IF RESULT IS LESS THAN 12", THEN CUT STARTER PANEL TO REMOVE INTERIOR JOINT ONLY – LAST PANEL WILL NEED TO ACCOMMODATE THE REMAINDER (LAYOUT WILL BE ASYMMETRICAL).

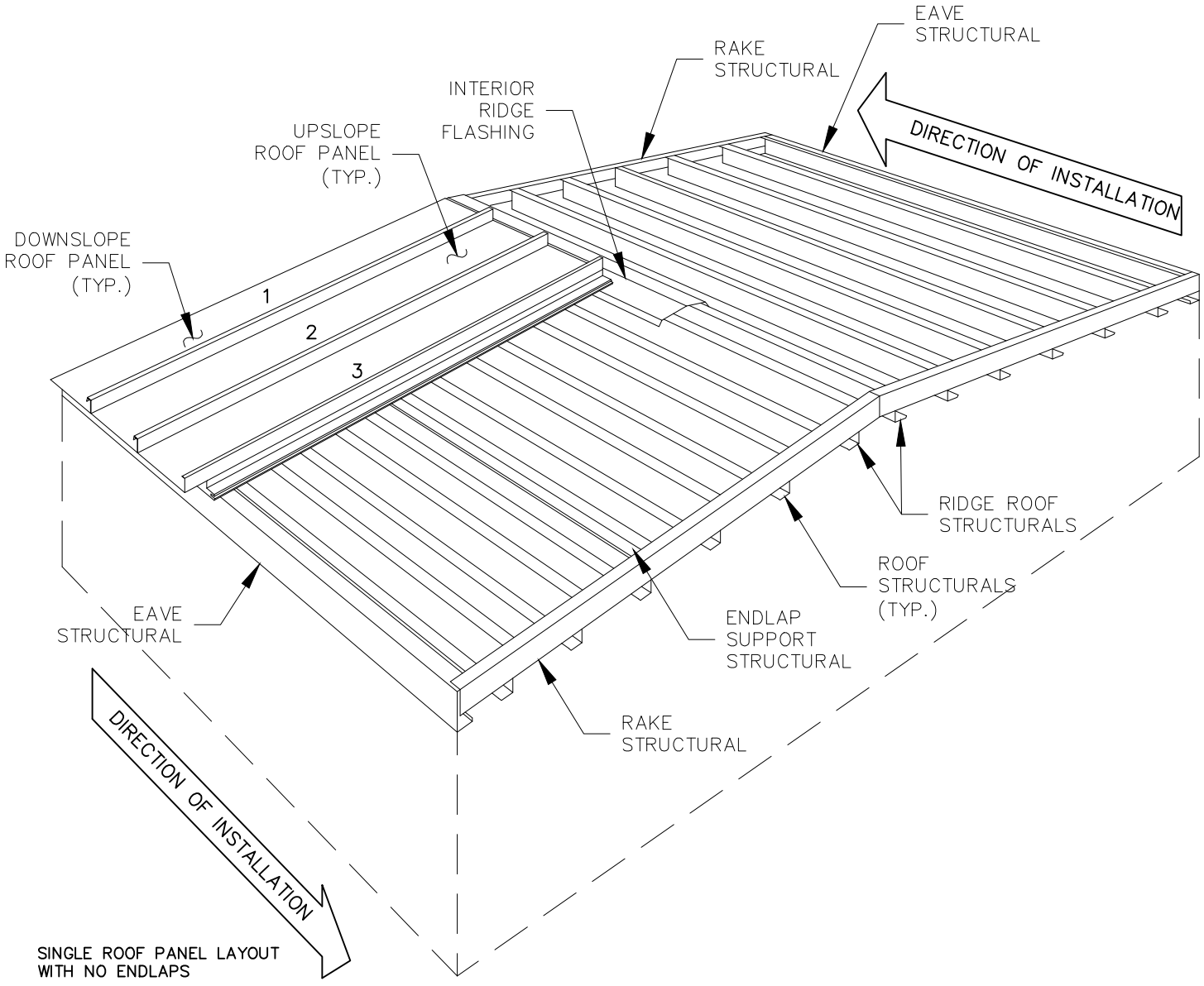
ROOF PANEL LAYOUT

COMMERCIAL & INDUSTRIAL	PANEL JOINT LAYOUT	CI–CFR–JT–03
		DATE: Aug '19



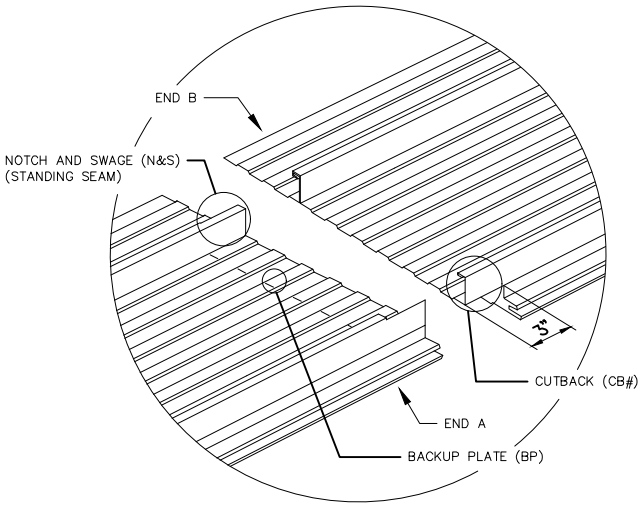
APPLICABLE END TREATMENT

CB#	COPED (CUT BACK) END (B END OF PANEL)	STANDARD CUT BACK IS 3" AT BOTTOM OF EVERY PANEL (2" AND 4" CUT BACK DIMENSIONS ARE AVAILABLE OPTIONS) IN CERTAIN CONDITIONS THE CB END MAY NOT BE REQUIRED DUE TO FIELD CUTTING OF PANEL OR OTHER FIELD CONDITIONS. IN THESE CASES, THE CUSTOMER WOULD NEED TO ORDER THE PANELS WITH AN "S" END.
BP/NS	BACKER PLATE/ NOTCH & SWAGE (A END OF PANEL	WHEN LAPPED, THE TOP OF THE BOTTOM PANEL IS TO BE NOTCHED 3" TO ALLOW FOR THE LAPPING OF THE PANEL ABOVE. A BACKER PLATE IS PLATE INSTALLED IN THE PANEL.
S	SQUARE CUT (A OR B END PANEL)	PANELS ARE SQUARE (FLUSH) CUT. NO END TREATMENT REQUIRED
BP	BACKER PLATE (A END OF PANEL)	NORMALLY ATTACHED AT THE TOP OF EVERY PANEL. IF PANELS ARE FIELD CUT, THIS PIECE CAN BE REMOVED AND THEN RE-INSERTED IN THE PANEL AFTER CUTTING. CAN ALSO BE ENTERED AS A "SHIP LOOSE" PIECES AND FIELD INSTALLED



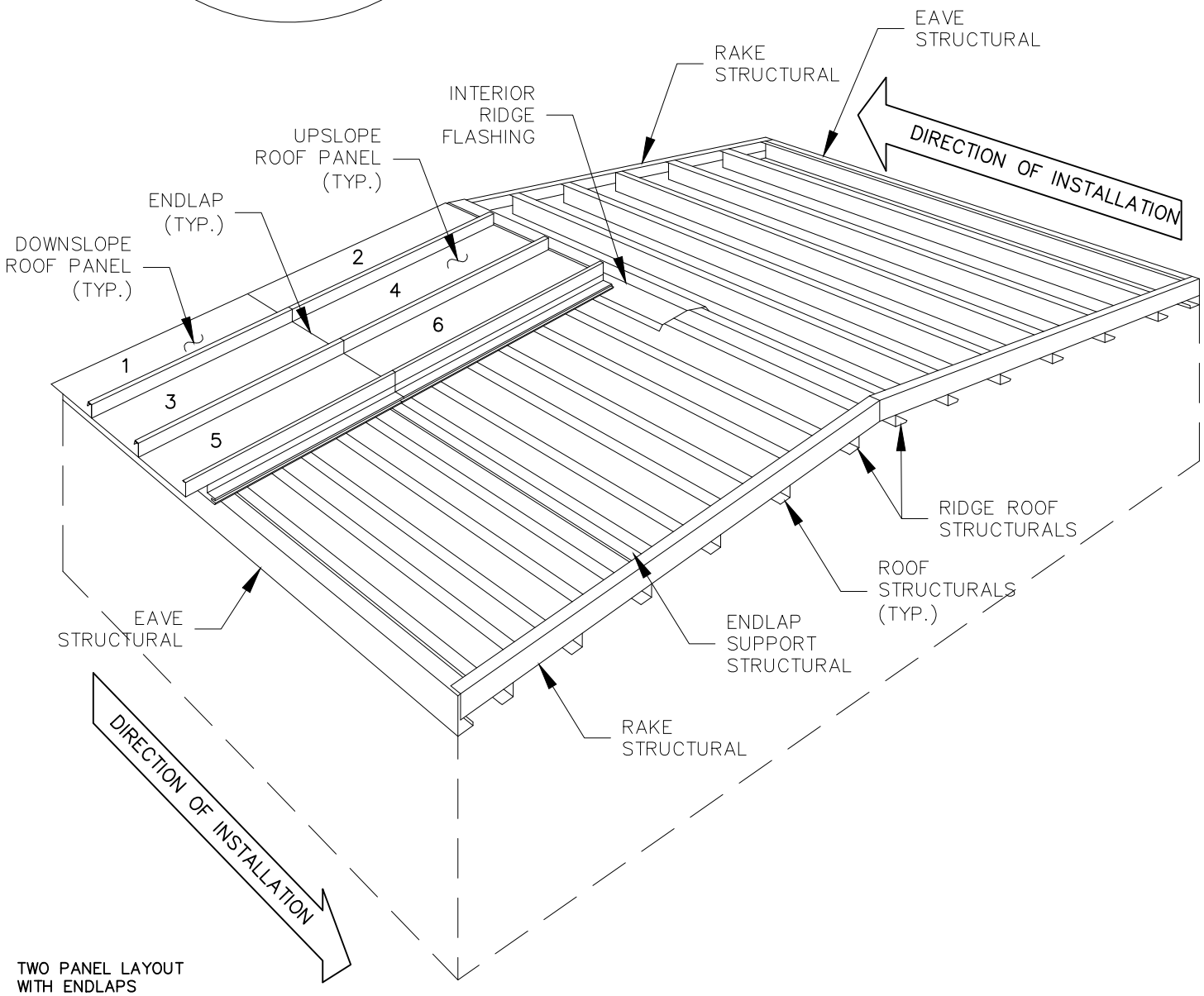
SINGLE ROOF PANEL LAYOUT WITH NO ENDLAPS

COMMERCIAL & INDUSTRIAL	PANEL INSTALLATION SEQUENCE	CI-CFR-SQ-01
		DATE: Aug '19



APPLICABLE END TREATMENT

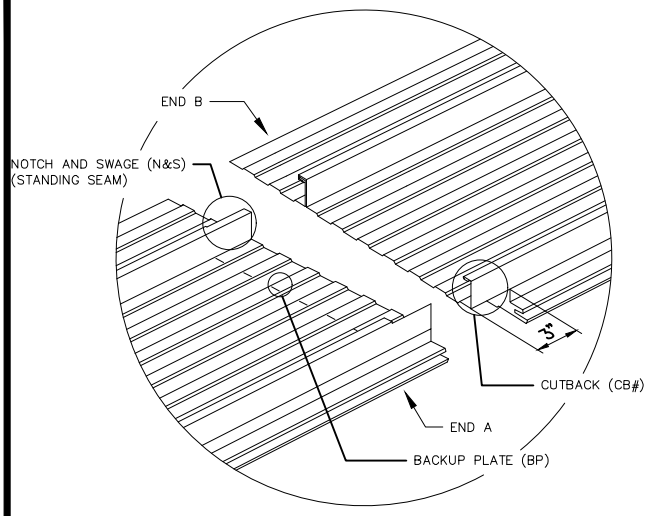
CB#	COPED (CUT BACK) END (B END OF PANEL)	STANDARD CUT BACK IS 3" AT BOTTOM OF EVERY PANEL (2" AND 4" CUT BACK DIMENSIONS ARE AVAILABLE OPTIONS) IN CERTAIN CONDITIONS THE CB END MAY NOT BE REQUIRED DUE TO FIELD CUTTING OF PANEL OR OTHER FIELD CONDITIONS. IN THESE CASES, THE CUSTOMER WOULD NEED TO ORDER THE PANELS WITH AN "S" END.
BP/NS	BACKER PLATE/ NOTCH & SWAGE (A END OF PANEL	WHEN LAPPED, THE TOP OF THE BOTTOM PANEL IS TO BE NOTCHED 3" TO ALLOW FOR THE LAPPING OF THE PANEL ABOVE. A BACKER PLATE IS PLATE INSTALLED IN THE PANEL.
S	SQUARE CUT (A OR B END PANEL)	PANELS ARE SQUARE (FLUSH) CUT. NO END TREATMENT REQUIRED
BP	BACKER PLATE (A END OF PANEL)	NORMALLY ATTACHED AT THE TOP OF EVERY PANEL. IF PANELS ARE FIELD CUT, THIS PIECE CAN BE REMOVED AND THEN RE-INSERTED IN THE PANEL AFTER CUTTING. CAN ALSO BE ENTERED AS A "SHIP LOOSE" PIECES AND FIELD INSTALLED



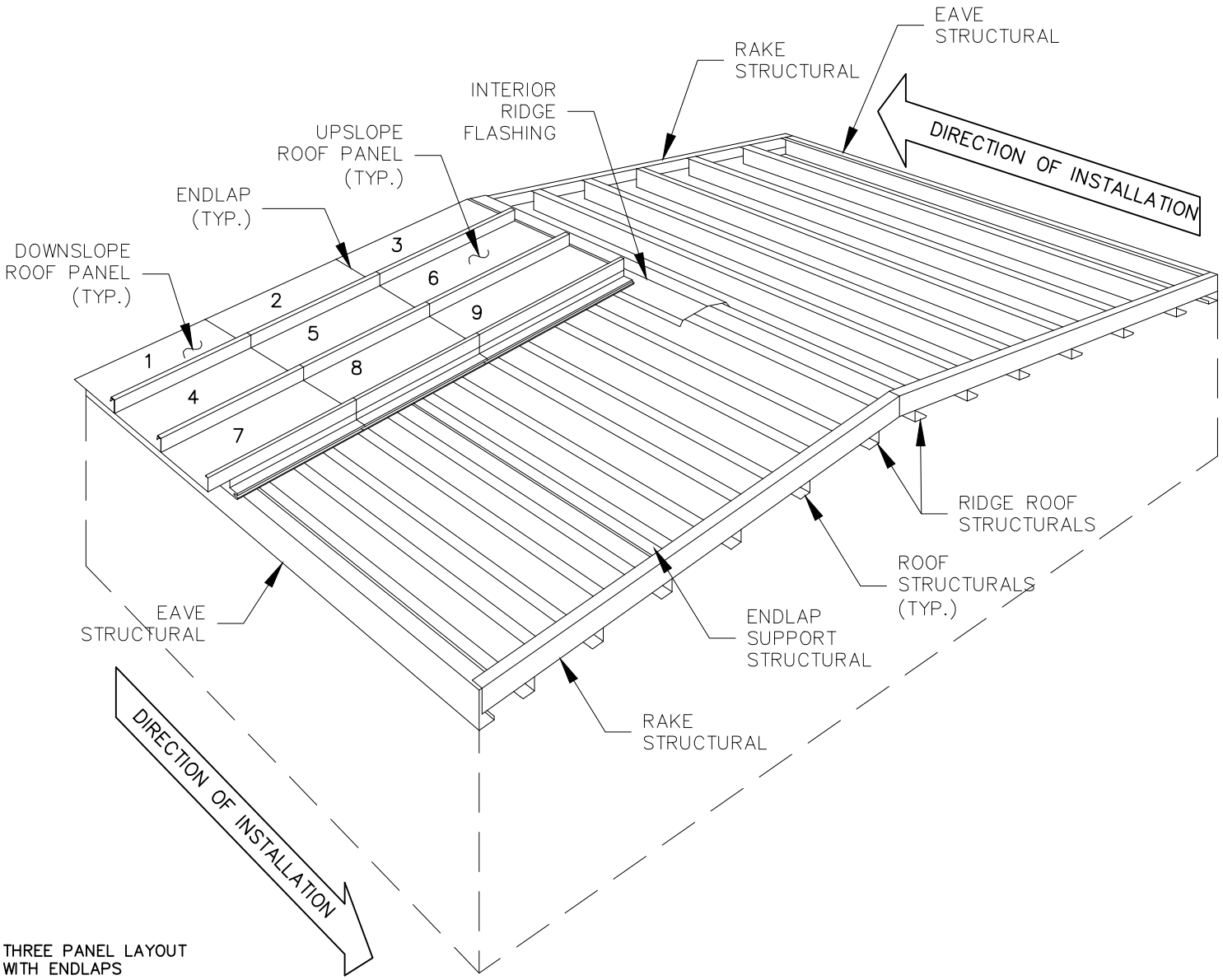
TWO PANEL LAYOUT
WITH ENDLAPS

COMMERCIAL & INDUSTRIAL	PANEL INSTALLATION SEQUENCE	CI-CFR-SQ-02
		DATE: Aug '19

APPLICABLE END TREATMENT

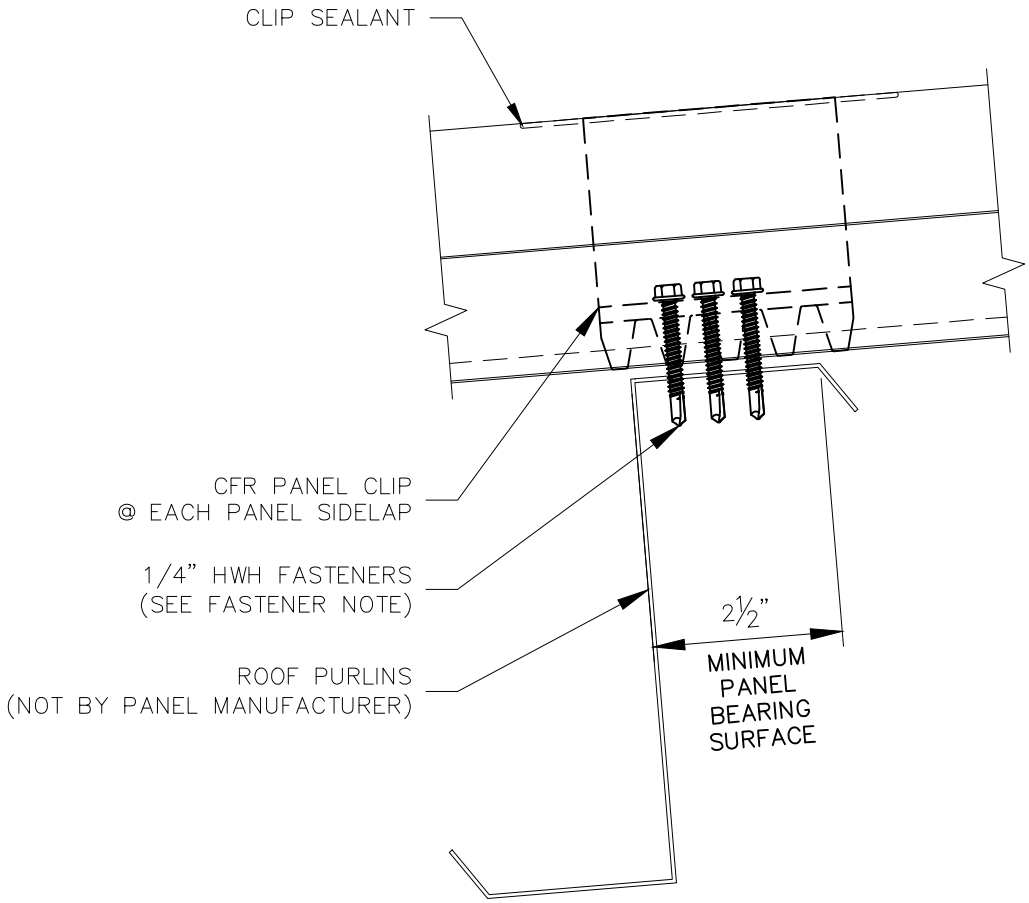


CB#	COPED (CUT BACK) END (B END OF PANEL)	STANDARD CUT BACK IS 3" AT BOTTOM OF EVERY PANEL (2" AND 4" CUT BACK DIMENSIONS ARE AVAILABLE OPTIONS) IN CERTAIN CONDITIONS THE CB END MAY NOT BE REQUIRED DUE TO FIELD CUTTING OF PANEL OR OTHER FIELD CONDITIONS. IN THESE CASES, THE CUSTOMER WOULD NEED TO ORDER THE PANELS WITH AN "S" END.
BP/NS	BACKER PLATE/ NOTCH & SWAGE (A END OF PANEL	WHEN LAPPED, THE TOP OF THE BOTTOM PANEL IS TO BE NOTCHED 3" TO ALLOW FOR THE LAPPING OF THE PANEL ABOVE. A BACKER PLATE IS PLATE INSTALLED IN THE PANEL.
S	SQUARE CUT (A OR B END PANEL)	PANELS ARE SQUARE (FLUSH) CUT. NO END TREATMENT REQUIRED
BP	BACKER PLATE (A END OF PANEL)	NORMALLY ATTACHED AT THE TOP OF EVERY PANEL. IF PANELS ARE FIELD CUT, THIS PIECE CAN BE REMOVED AND THEN RE-INSERTED IN THE PANEL AFTER CUTTING. CAN ALSO BE ENTERED AS A "SHIP LOOSE" PIECES AND FIELD INSTALLED



THREE PANEL LAYOUT
WITH ENDLAPS

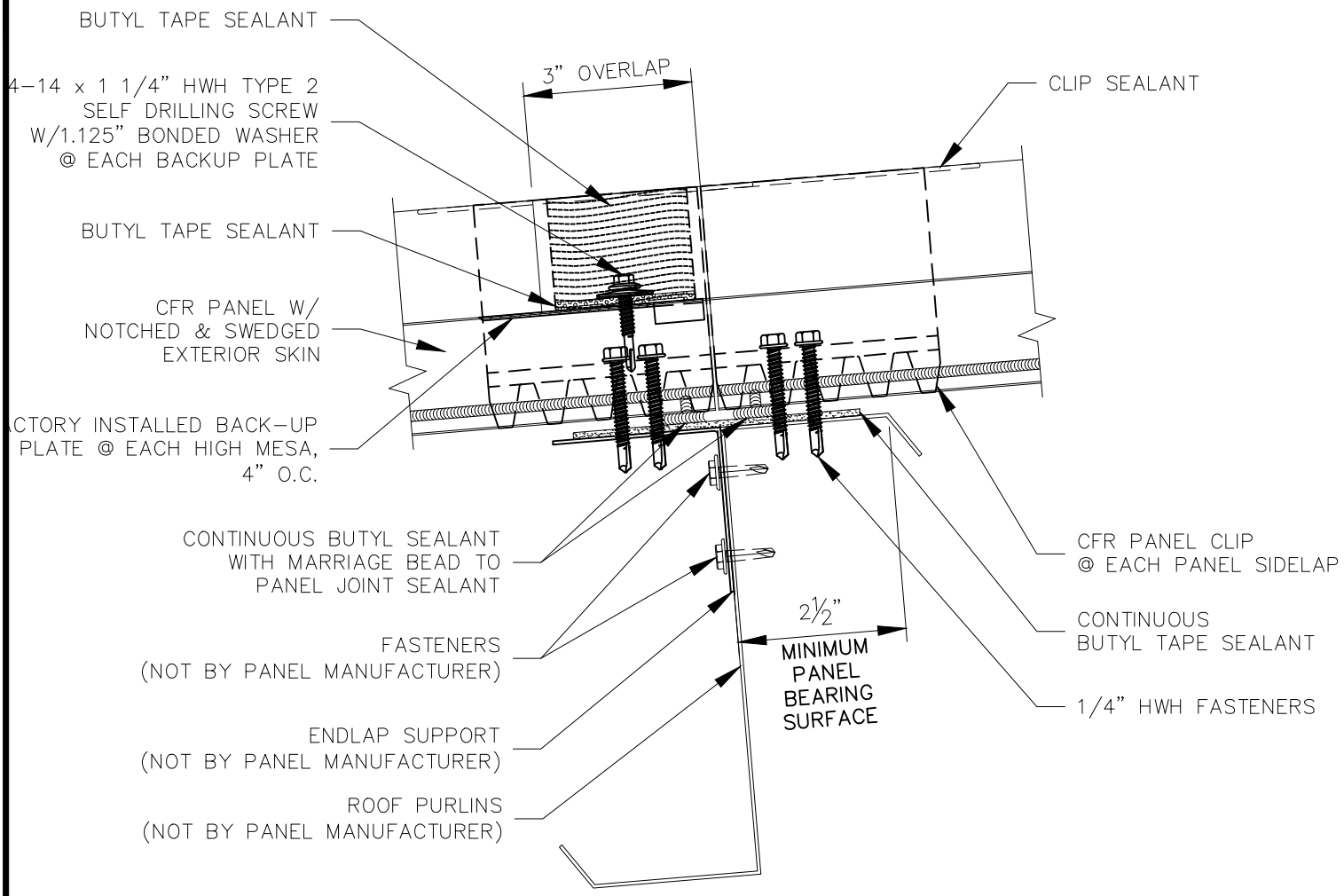
COMMERCIAL & INDUSTRIAL	PANEL INSTALLATION SEQUENCE	CI-CFR-SQ-03
		DATE: Aug '19



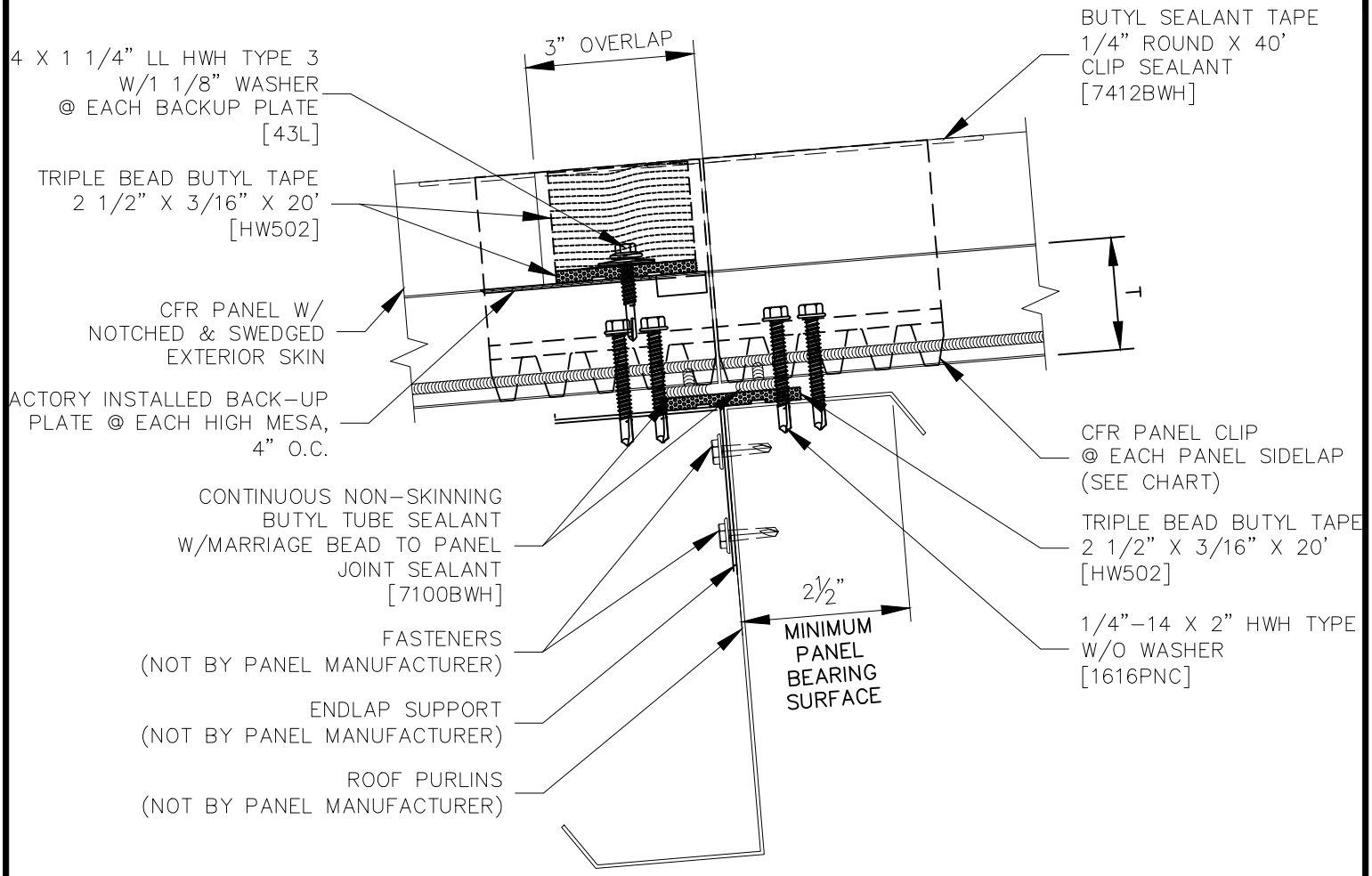
FASTENER NOTE:

THE NUMBER OF FASTENERS PER CLIP ARE BASED ON THE FOLLOWING CRITERIA

* SELF DRILLING, SELF-TAPPING SCREWS
  * 3 /CLIP IF PURLIN IS LESS THAN 12 GAUGE.
  * 2 /CLIP IF PURLIN IS GREATER OR EQUAL TO 12 GA.
* TYPE B SELF-TAPPING SCREWS – 2 /CLIP

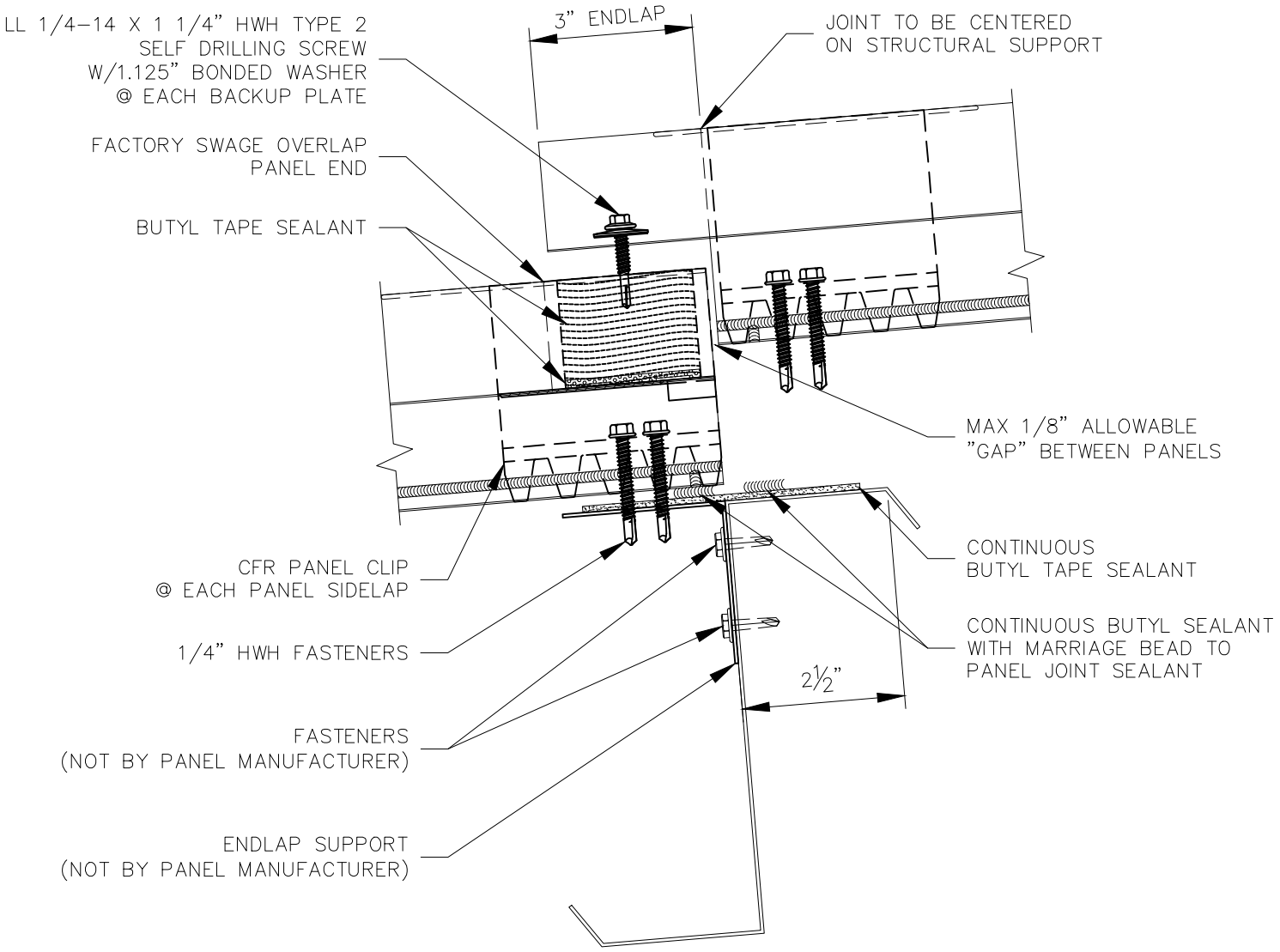


COMMERCIAL & INDUSTRIAL	ENDLAP ATTACHMENT	CI–CFR–EL–01
		DATE: Aug '19

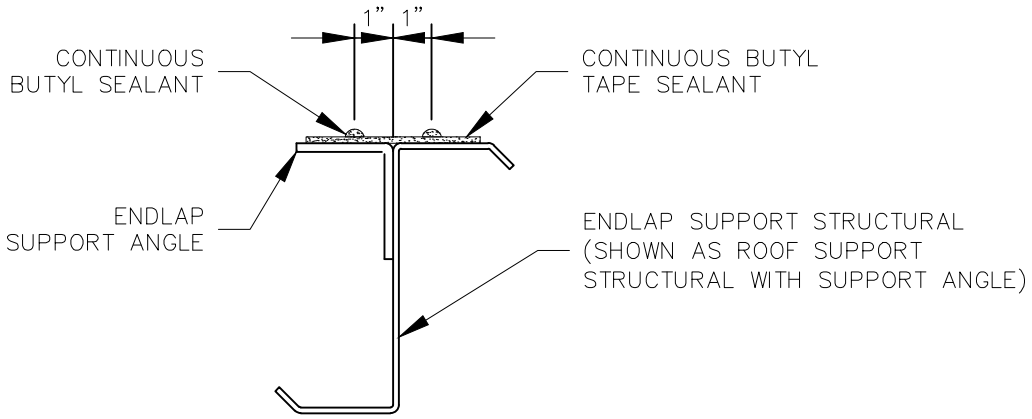


T	PANEL CLIP
2"	4102GNC
2.5"	4125GNC
3"	4103GNC
4"	4104GNC
5"	4105GNC
6"	4106GNC

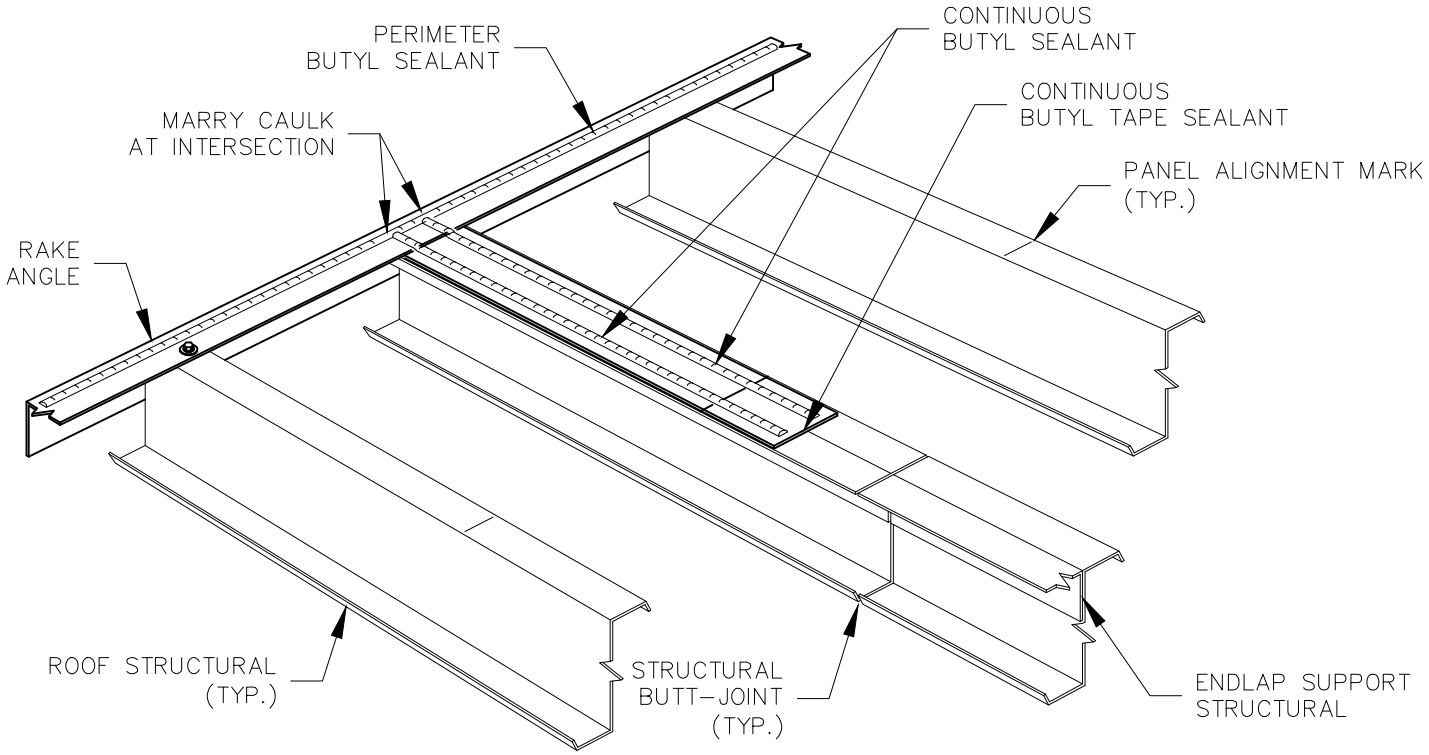
COMMERCIAL & INDUSTRIAL	ENDLAP ATTACHMENT	CI-CFR-EL-01-A DATE: Aug '19



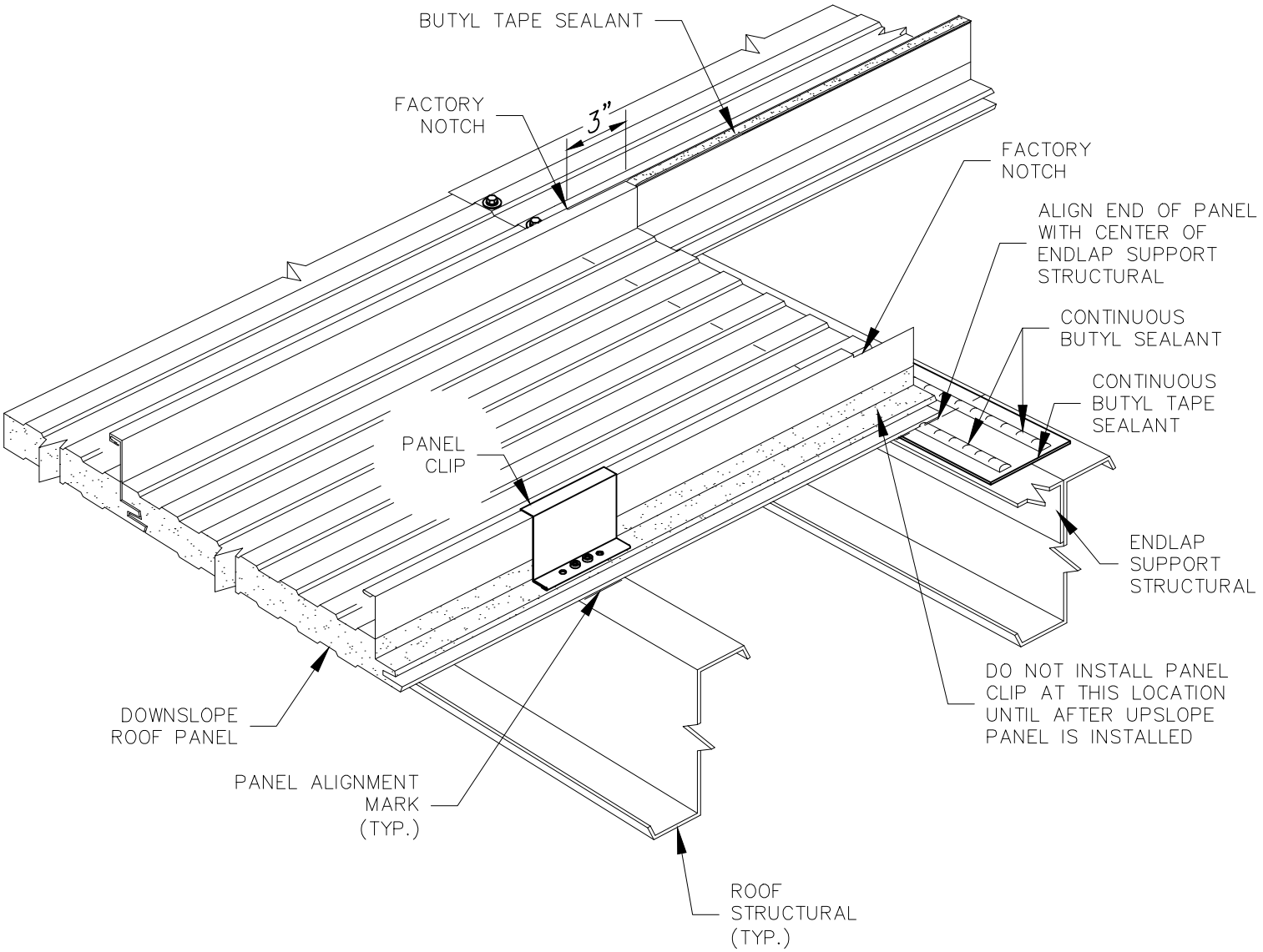
COMMERCIAL & INDUSTRIAL	ENDLAP ATTACHMENT EXPLODED VIEW	CI–CFR–EL–02
		DATE: Aug '19



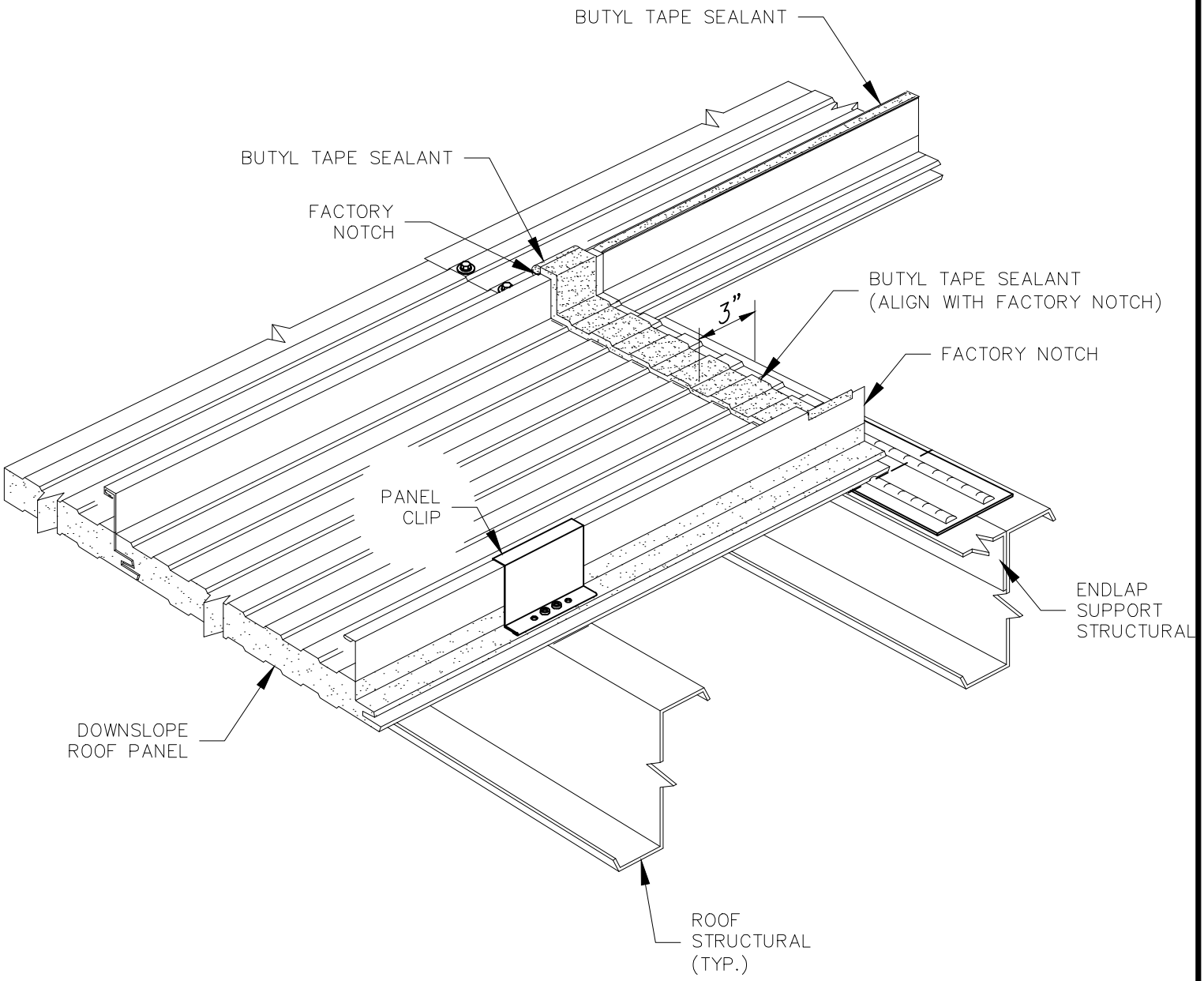
ENDLAP SUPPORT STRUCTURAL SECTION



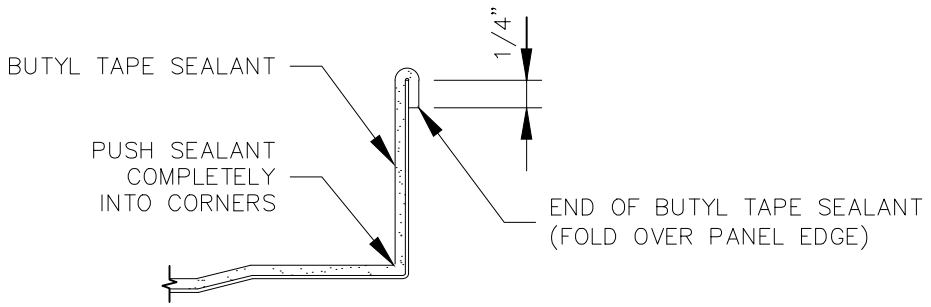
COMMERCIAL & INDUSTRIAL	ENDLAP STRUCTURAL SEALANT	CI-CFR-EL-03
		DATE: Aug '19



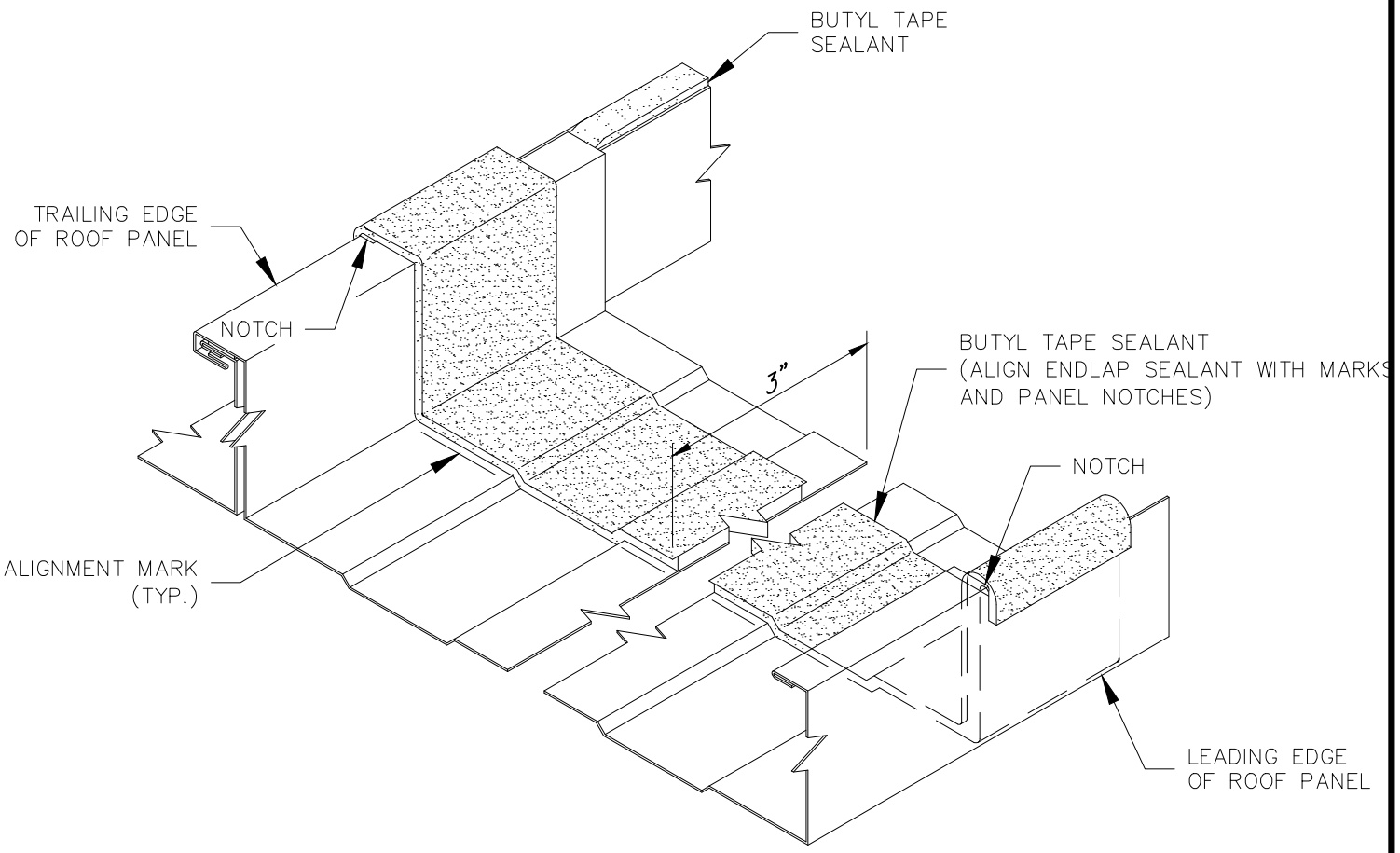
COMMERCIAL & INDUSTRIAL	ENDLAP LOWER PANEL	CI–CFR–EL–04
		DATE: Aug '19

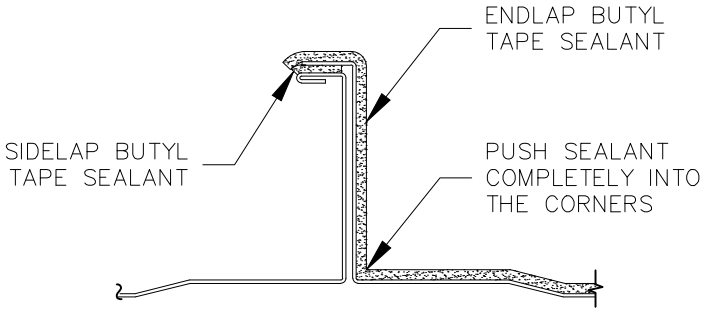


COMMERCIAL & INDUSTRIAL	ENDLAP LOWER PANEL BUTYL TAPE SEALANT (1 OF 2)	CI–CFR–EL–05 DATE: Aug '19



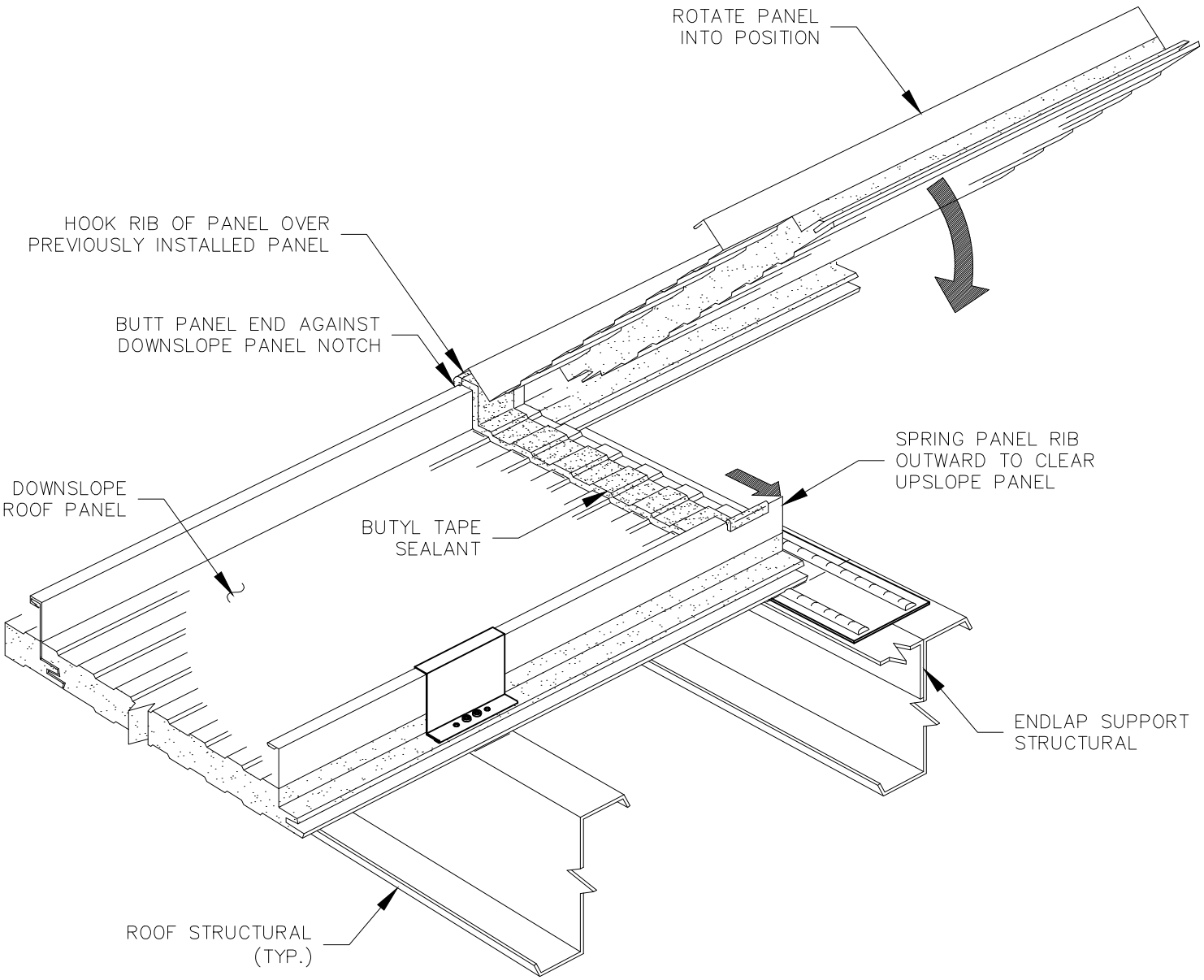
LEADING EDGE SECTION



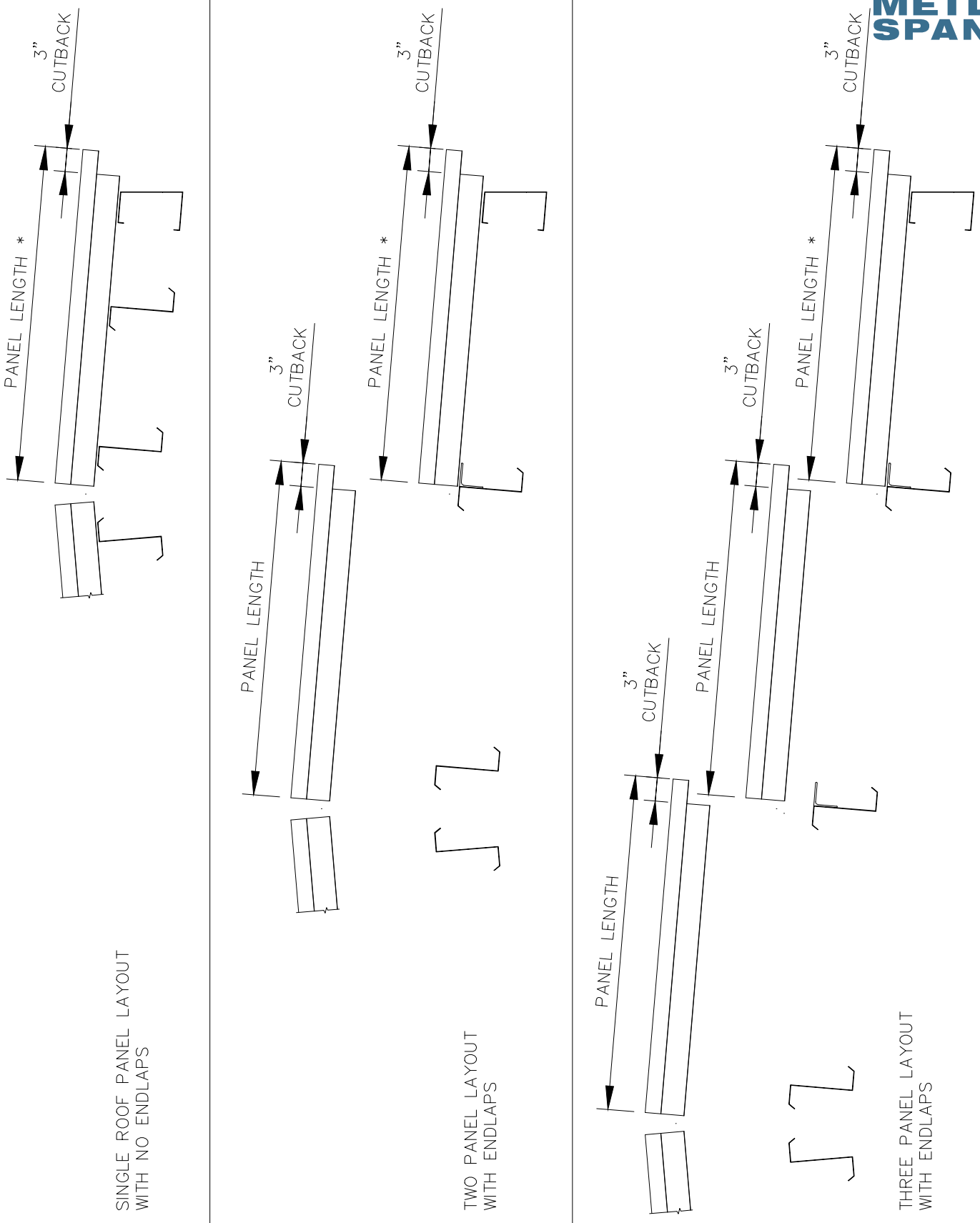


TRAILING EDGE SECTION

COMMERCIAL & INDUSTRIAL	ENDLAP LOWER PANEL BUTYL TAPE SEALANT (2 OF 2)	CI–CFR–EL–06 DATE: Aug '19



COMMERCIAL & INDUSTRIAL	ENDLAP UPPER PANEL	CI–CFR–EL–07
		DATE: Aug '19

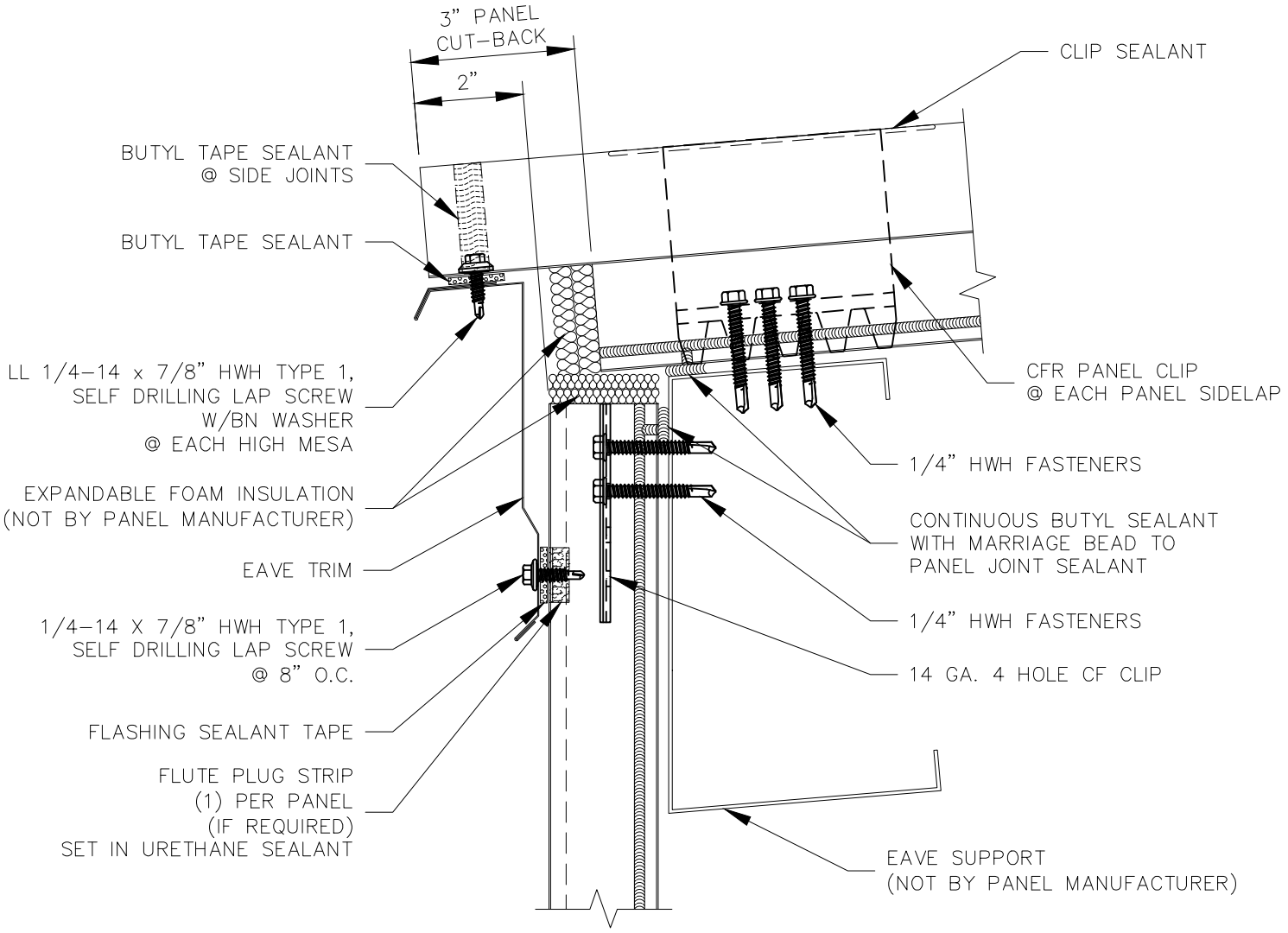


COMMERCIAL & INDUSTRIAL

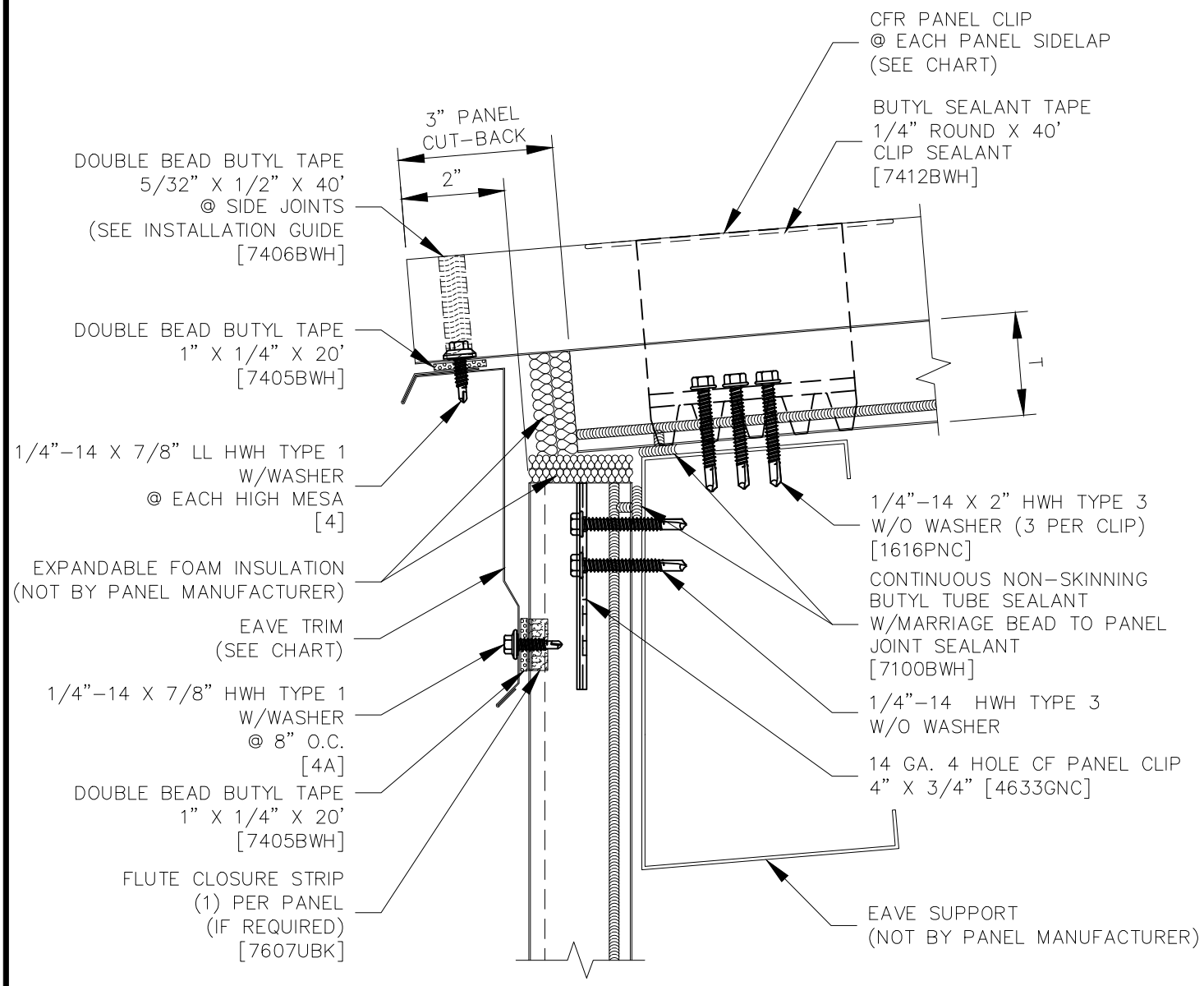
ENDLAP CONDITIONS

CI–CFR–EL–08

DATE: Aug '19



COMMERCIAL & INDUSTRIAL	LOW EAVE WITH TRIM	CI-CFR-EV-01 DATE: Aug '19



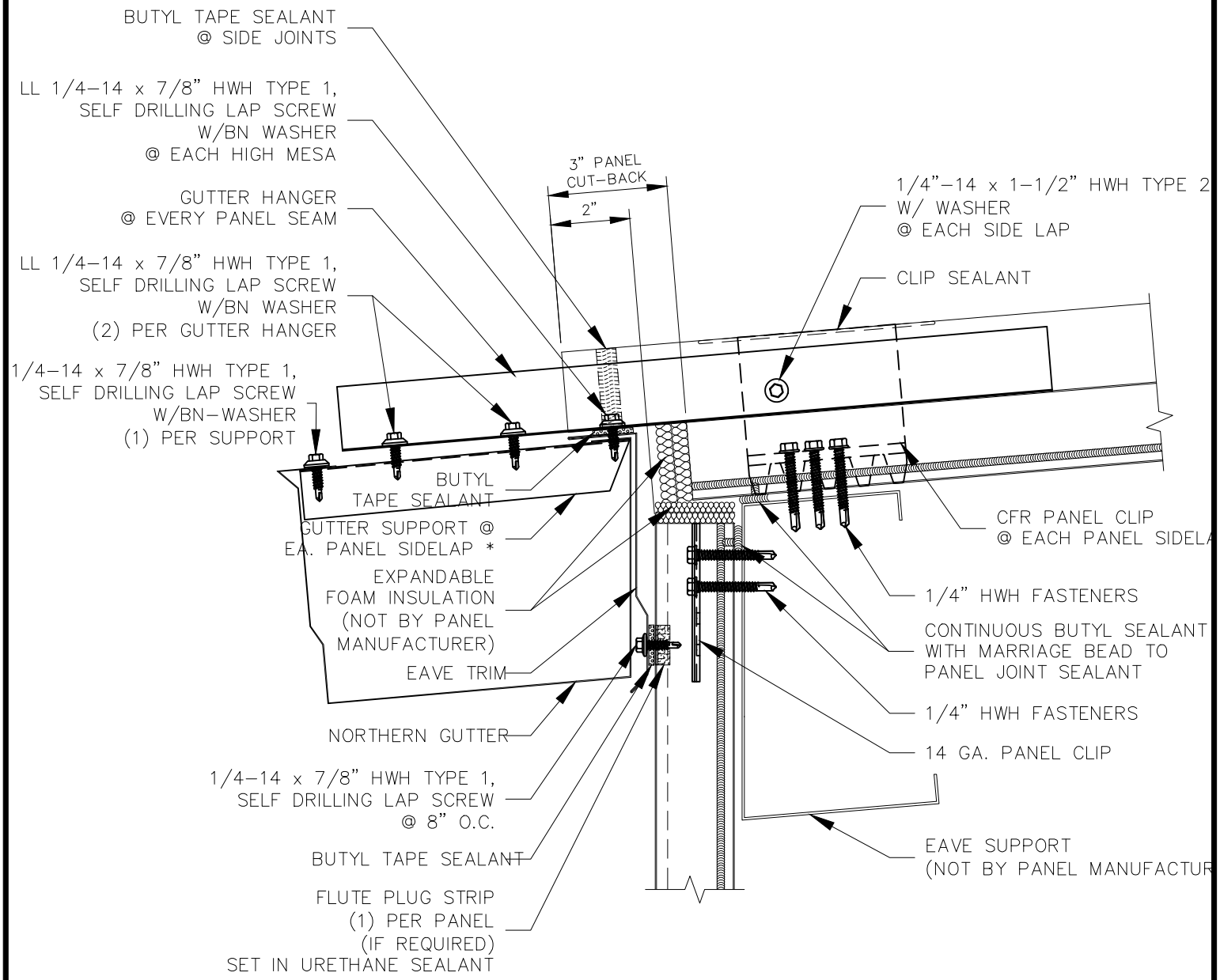
T	PANEL CLIP	EAVE TRIM		
2"	4102GNC	F3415		
2.5"	4125GNC	F3415		
3"	4103GNC	F3415		
4"	4104GNC	F3416		
5"	4105GNC	F3416		
6"	4106GNC	F3417		

COMMERCIAL & INDUSTRIAL

LOW EAVE WITH TRIM

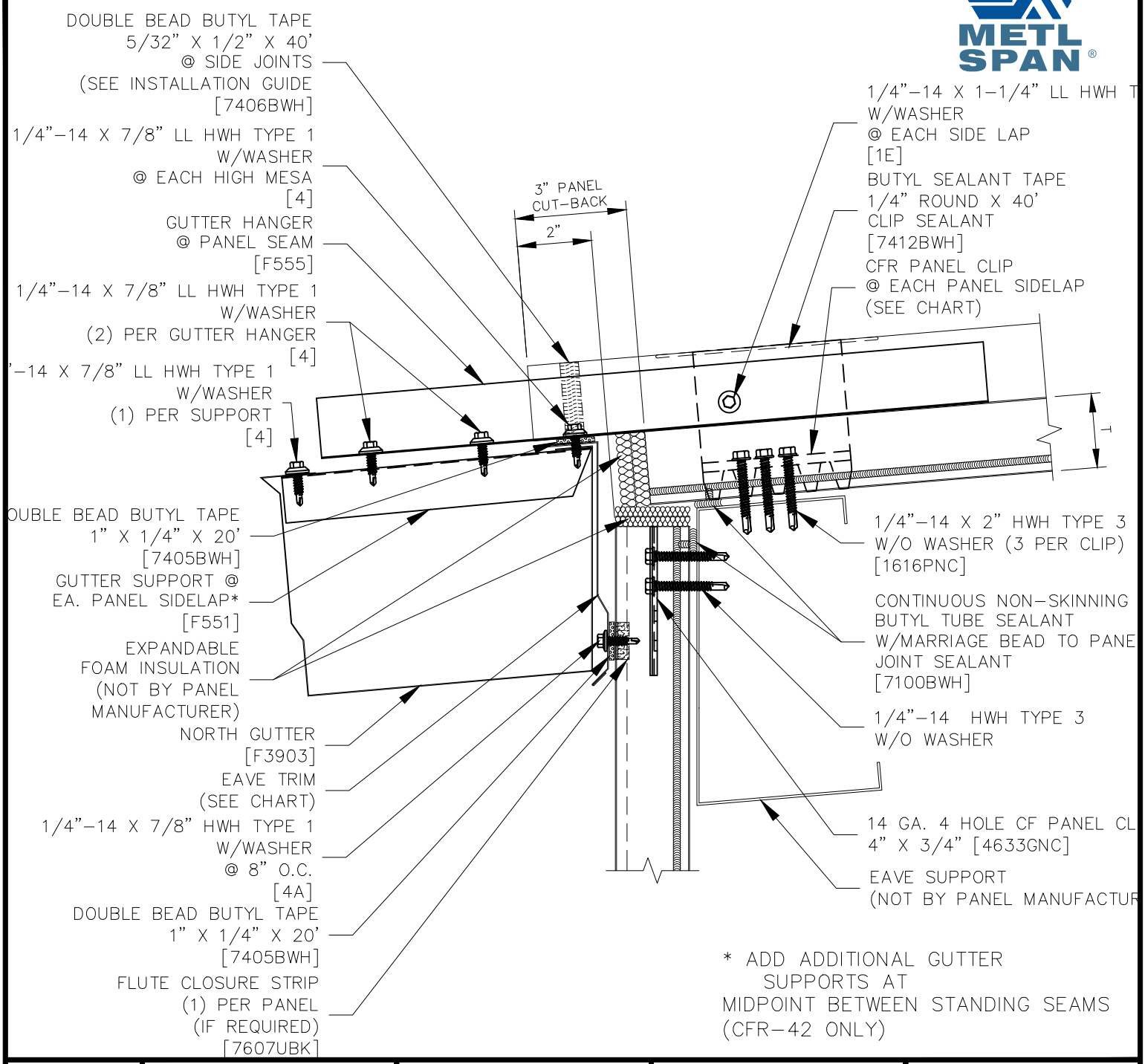
CI-CFR-EV-01-A

DATE: Aug '19



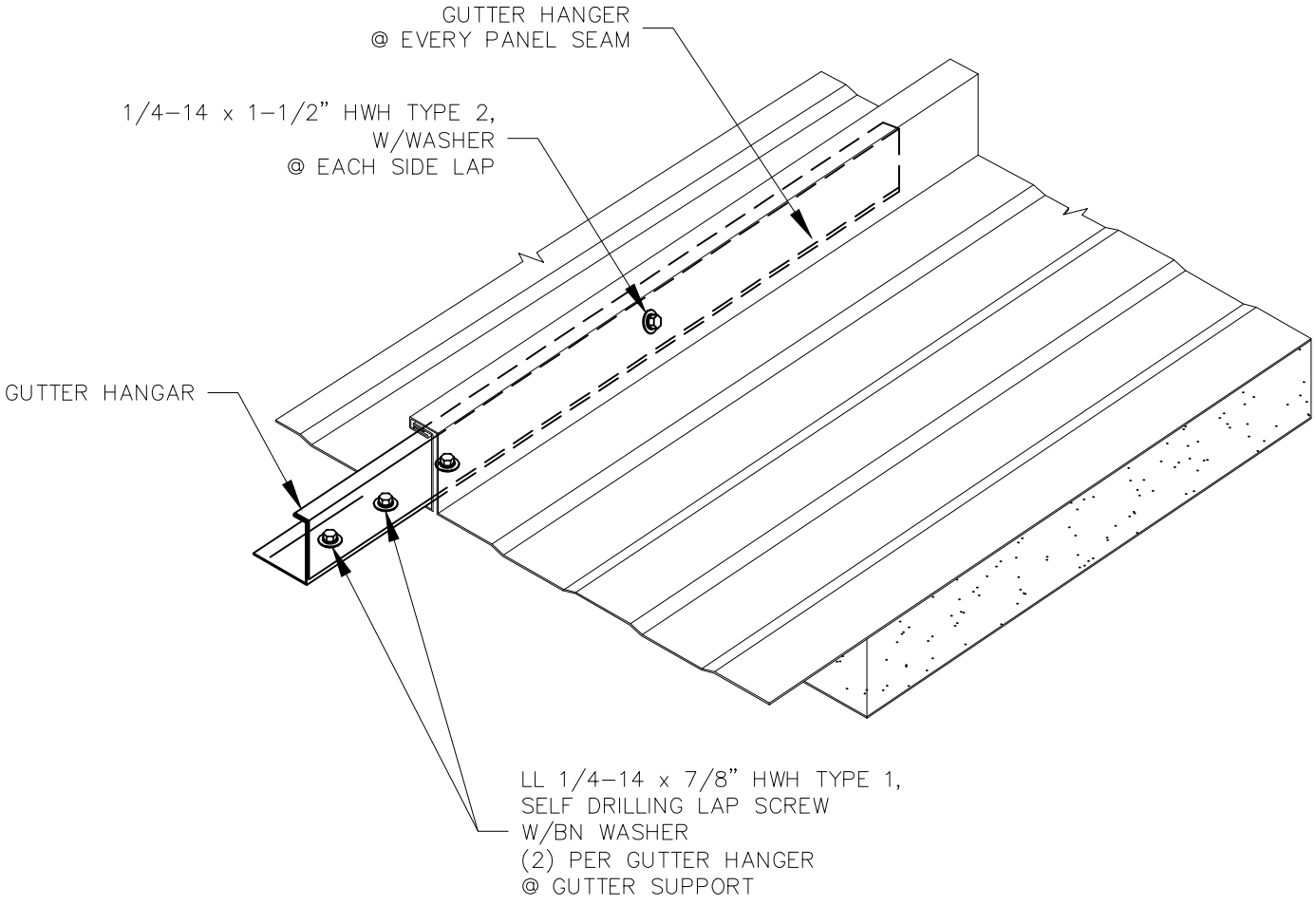
* ADD ADDITIONAL GUTTER
SUPPORTS AT
MIDPOINT BETWEEN STANDING SEAMS
(CFR–42 ONLY)

COMMERCIAL & INDUSTRIAL	LOW EAVE WITH NORTHERN GUTTER	CI–CFR–EV–G1
		DATE: Aug '19

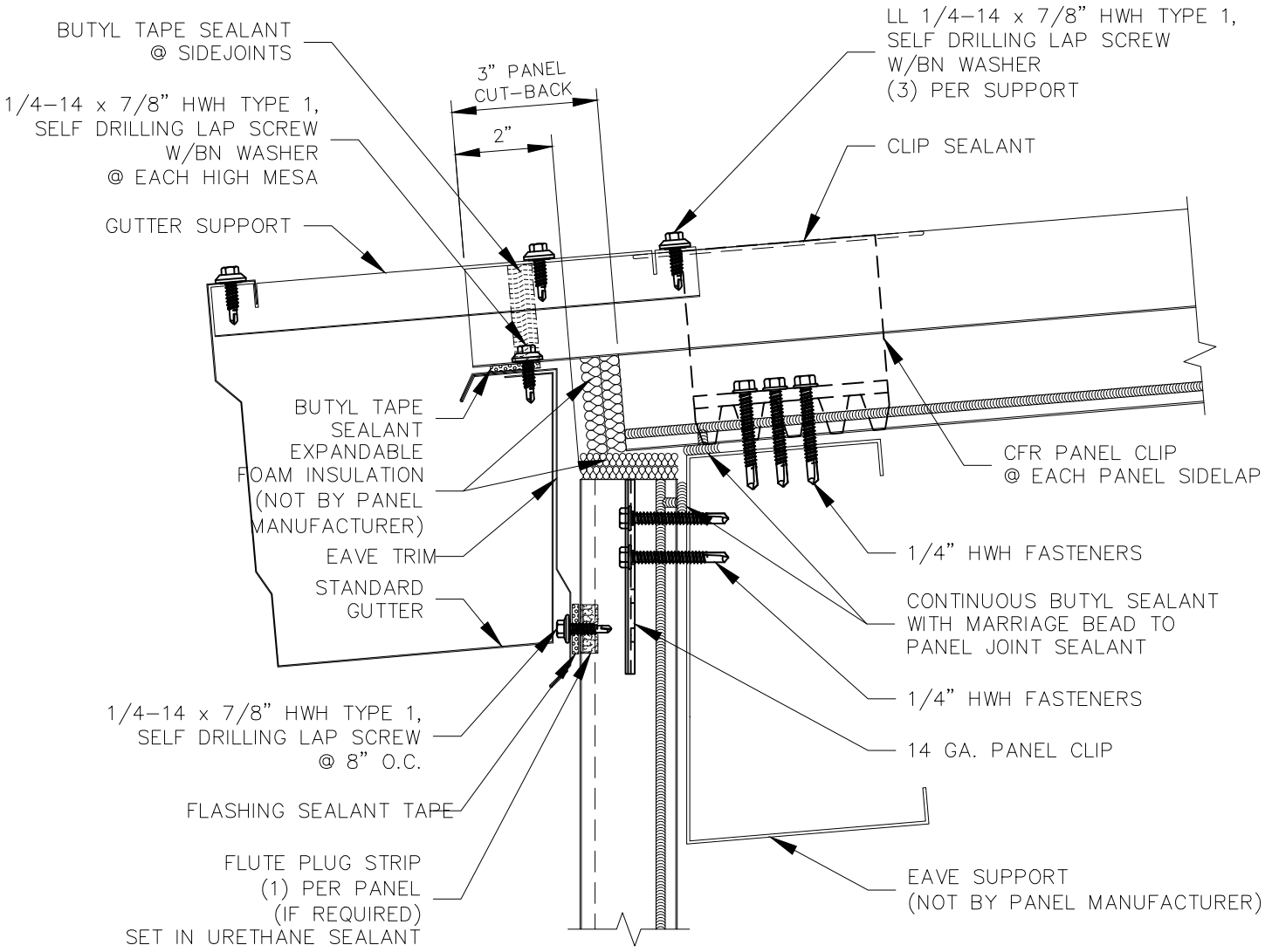


T	PANEL CLIP	EAVE TRIM		
2"	4102GNC	F3415		
2.5"	4125GNC	F3415		
3"	4103GNC	F3415		
4"	4104GNC	F3416		
5"	4105GNC	F3416		
6"	4106GNC	F3417		

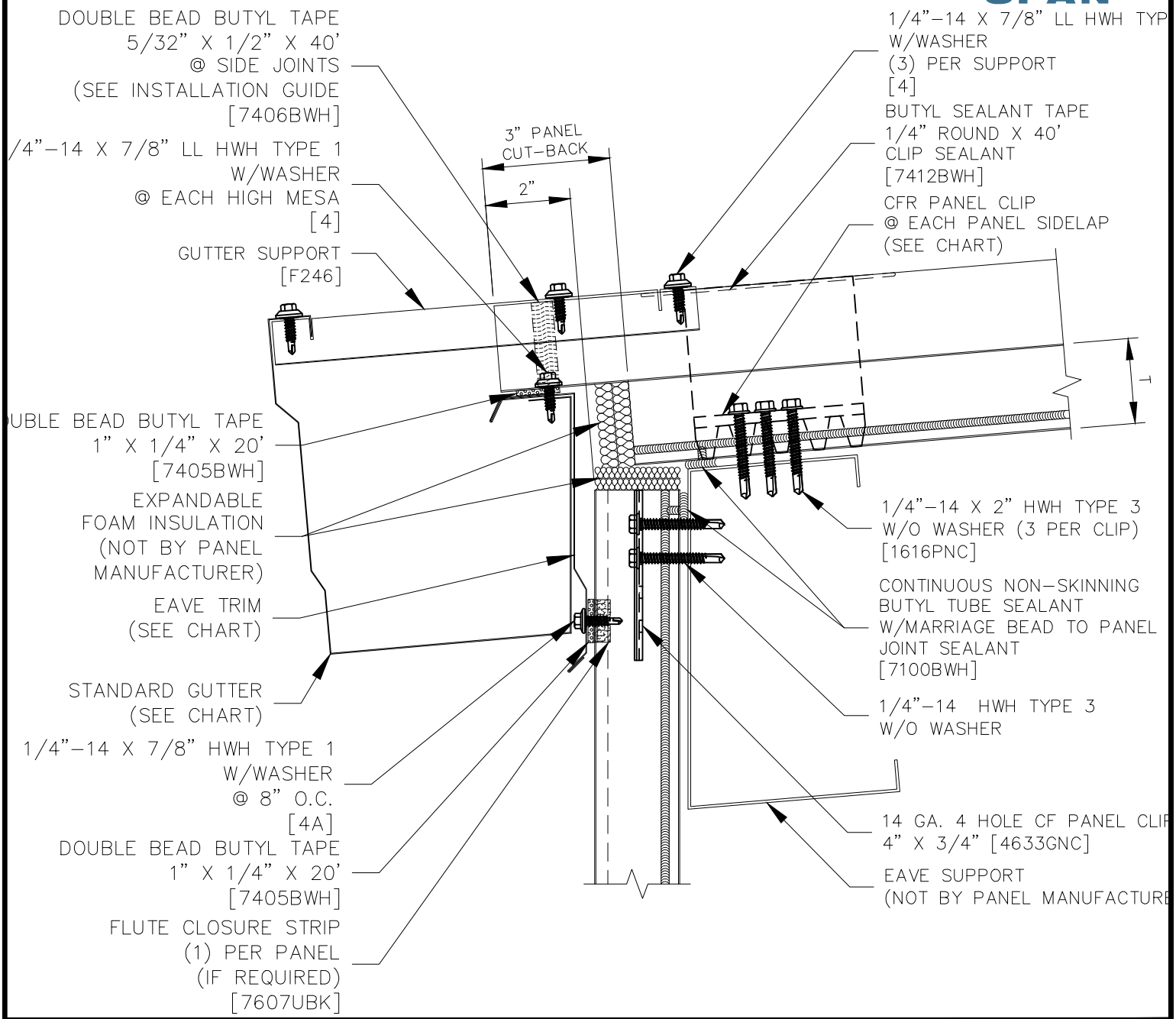
COMMERCIAL & INDUSTRIAL	LOW EAVE WITH NORTHERN GUTTER	CI-CFR-EV-G1-A
		DATE: Aug '19



COMMERCIAL & INDUSTRIAL	LOW EAVE NORTHERN GUTTER HANGAR	CI–CFR–EV–G2
		DATE: Aug '19

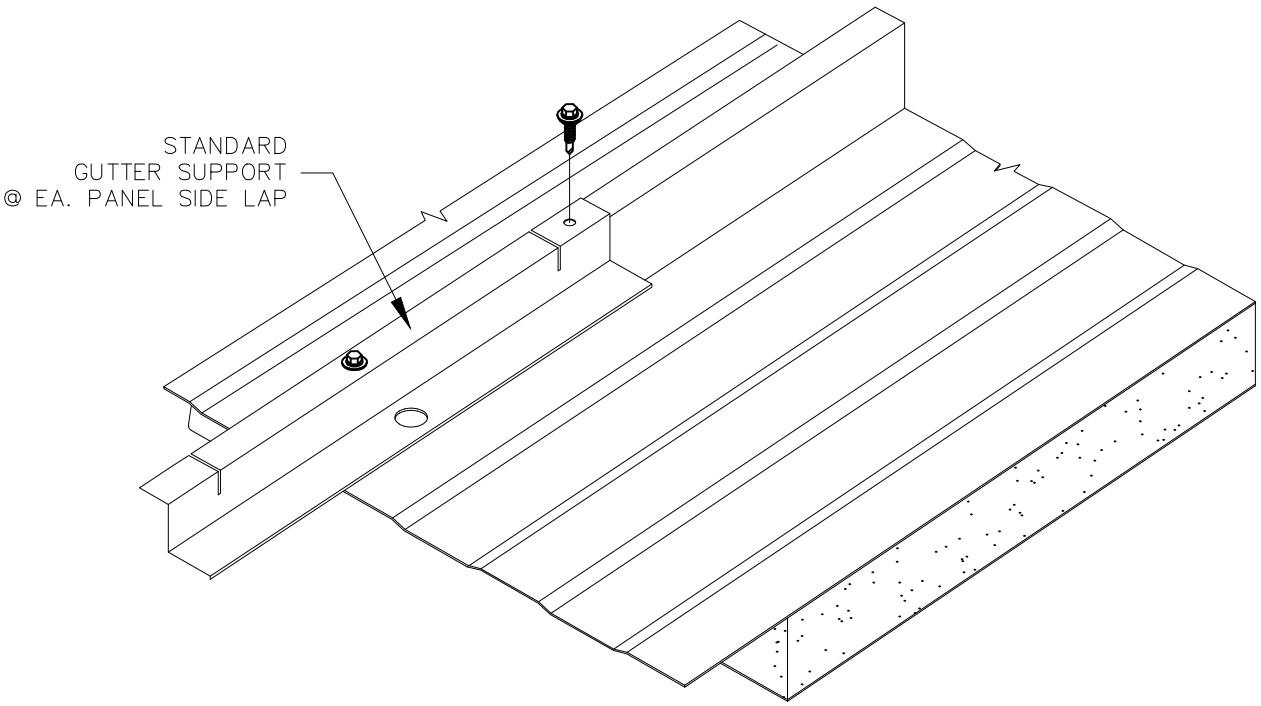


COMMERCIAL & INDUSTRIAL	LOW EAVE WITH STANDARD GUTTER	CI–CFR–EV–G3
		DATE: Aug '19

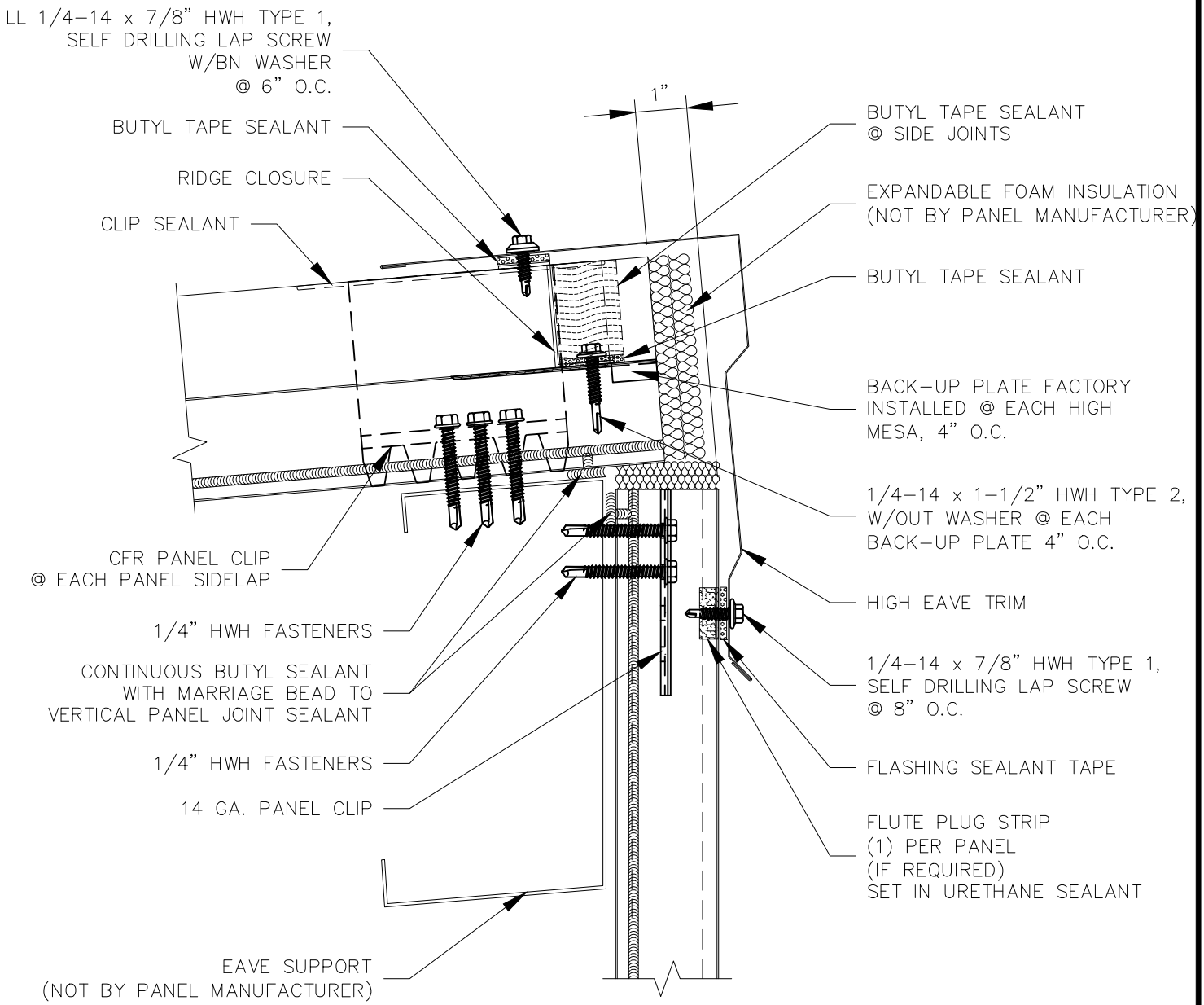


T	PANEL CLIP	EAVE TRIM	STANDARD GUTTER	
2"	4102GNC	F3415	F3420	
2.5"	4125GNC	F3415	F3420	
3"	4103GNC	F3415	F3420	
4"	4104GNC	F3416	F3421	
5"	4105GNC	F3416	F3421	
6"	4106GNC	F3417	F3422	

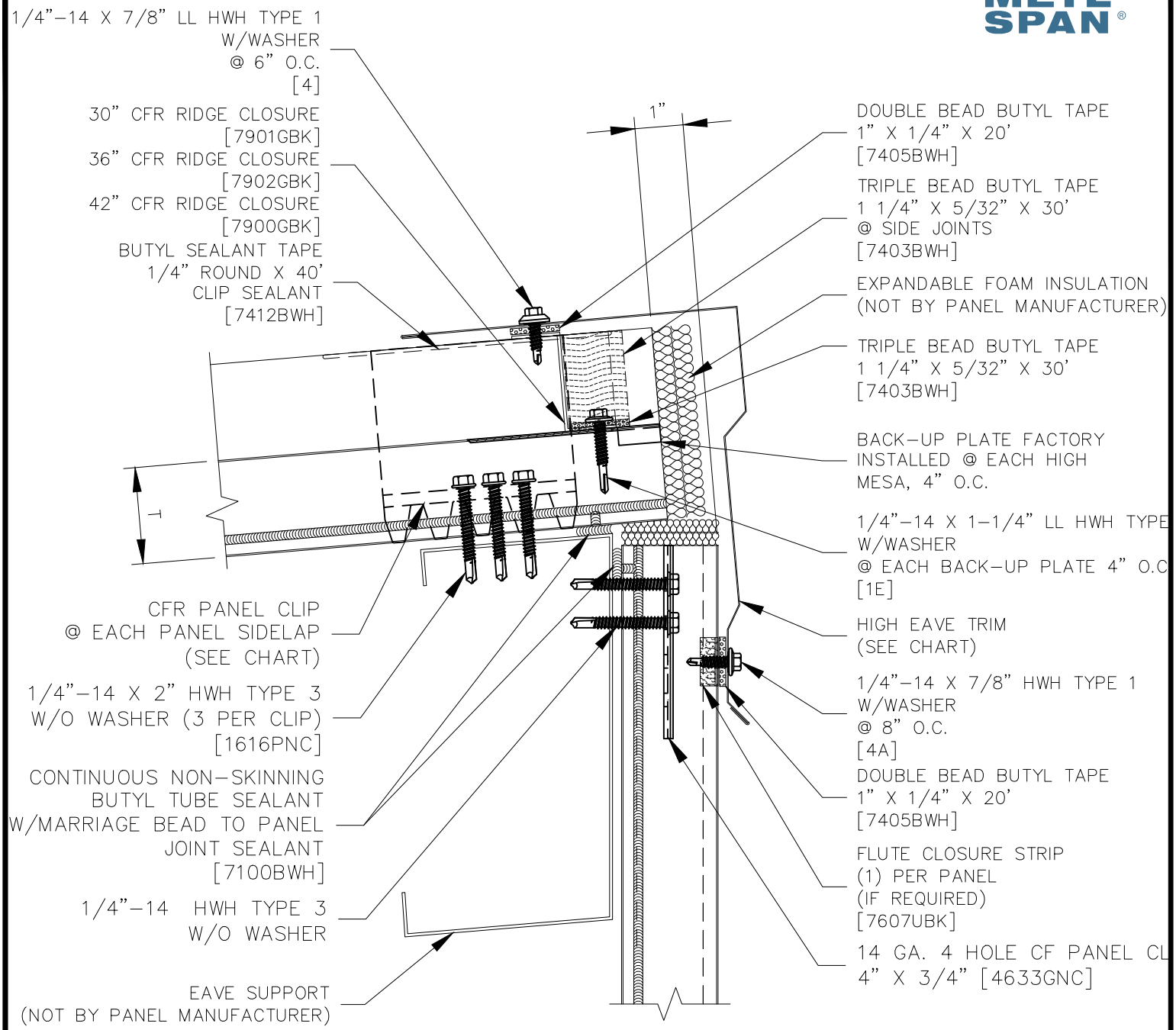
COMMERCIAL & INDUSTRIAL	LOW EAVE WITH STANDARD GUTTER	CI–CFR–EV–G3–A
		DATE: Aug '19



COMMERCIAL & INDUSTRIAL	LOW EAVE STANDARD GUTTER HANGAR	CI–CFR–EV–G4
		DATE: Aug '19

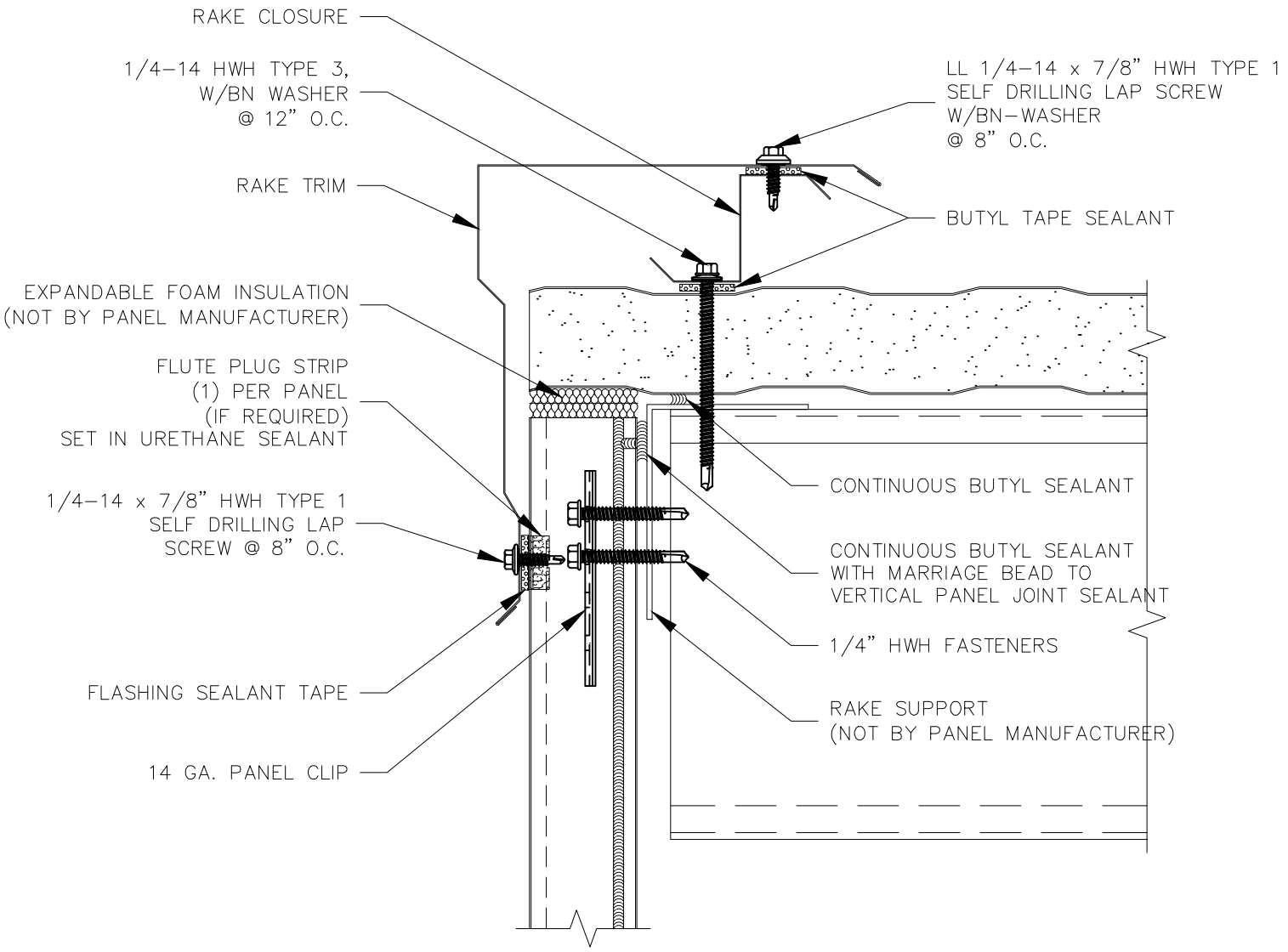


COMMERCIAL & INDUSTRIAL	HIGH EAVE	CI–CFR–EV–02 DATE: Aug '19

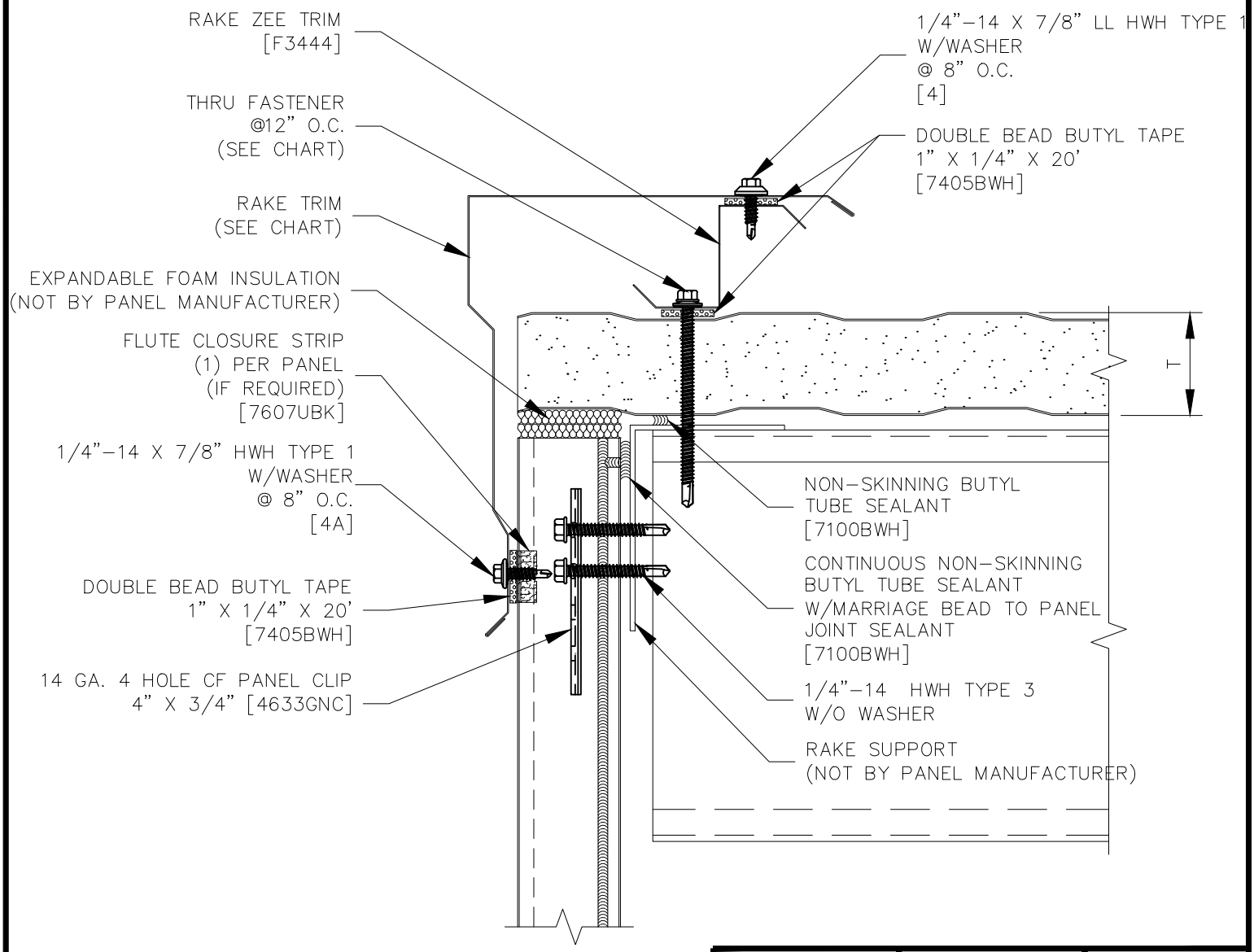


T	PANEL CLIP	HIGH EAVE TRIM	
2"	4102GNC	F3340	
2.5"	4125GNC	F3340	
3"	4103GNC	F3340	
4"	4104GNC	F3341	
5"	4105GNC	F3341	
6"	4106GNC	F3342	

COMMERCIAL & INDUSTRIAL	HIGH EAVE	CI–CFR–EV–02–A DATE: Aug '19



COMMERCIAL & INDUSTRIAL	RAKE WITH HIGH PROFILE TRIM	CI–CFR–RK–01
		DATE: Aug '19



T	THRU PANEL FASTENER
2"	1132P
2.5"	1132P
3"	1140P
4"	1148P
5"	1156P
6"	1164P

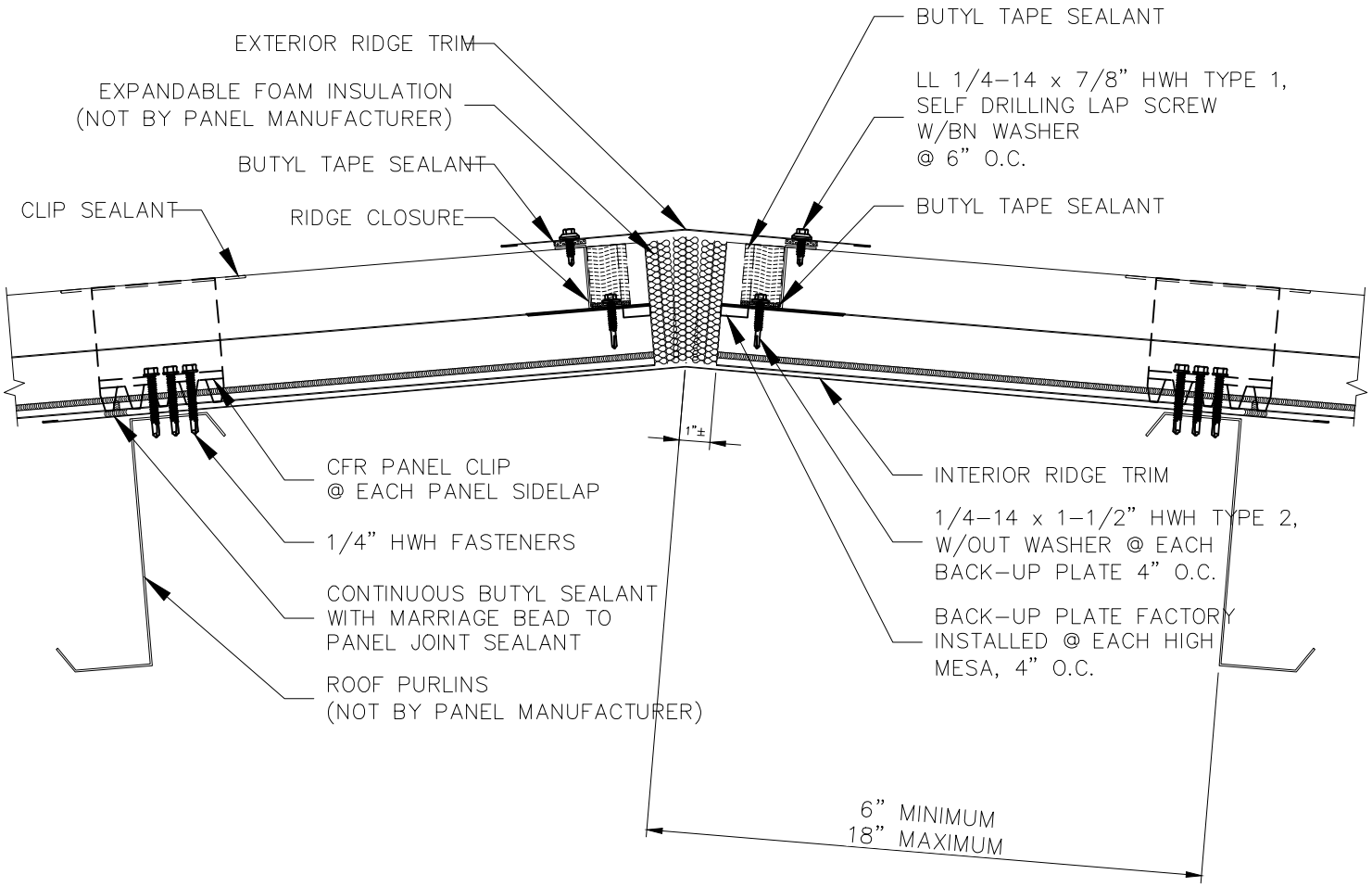
WALL PANEL THICKNESS	ROOF PANEL THICKNESS	RAKE TRIM
2", 2.5", 3"	2", 2.5", 3"	F3430
2", 2.5", 3"	4", 5"	F3431
2", 2.5", 3"	6"	F3432
4", 5"	2", 2.5", 3"	F3433
4", 5"	4", 5"	F3434
4", 5"	6"	F3435
6"	2", 2.5", 3"	F3330
6"	4", 5"	F3331
6"	6"	F3332

COMMERCIAL & INDUSTRIAL

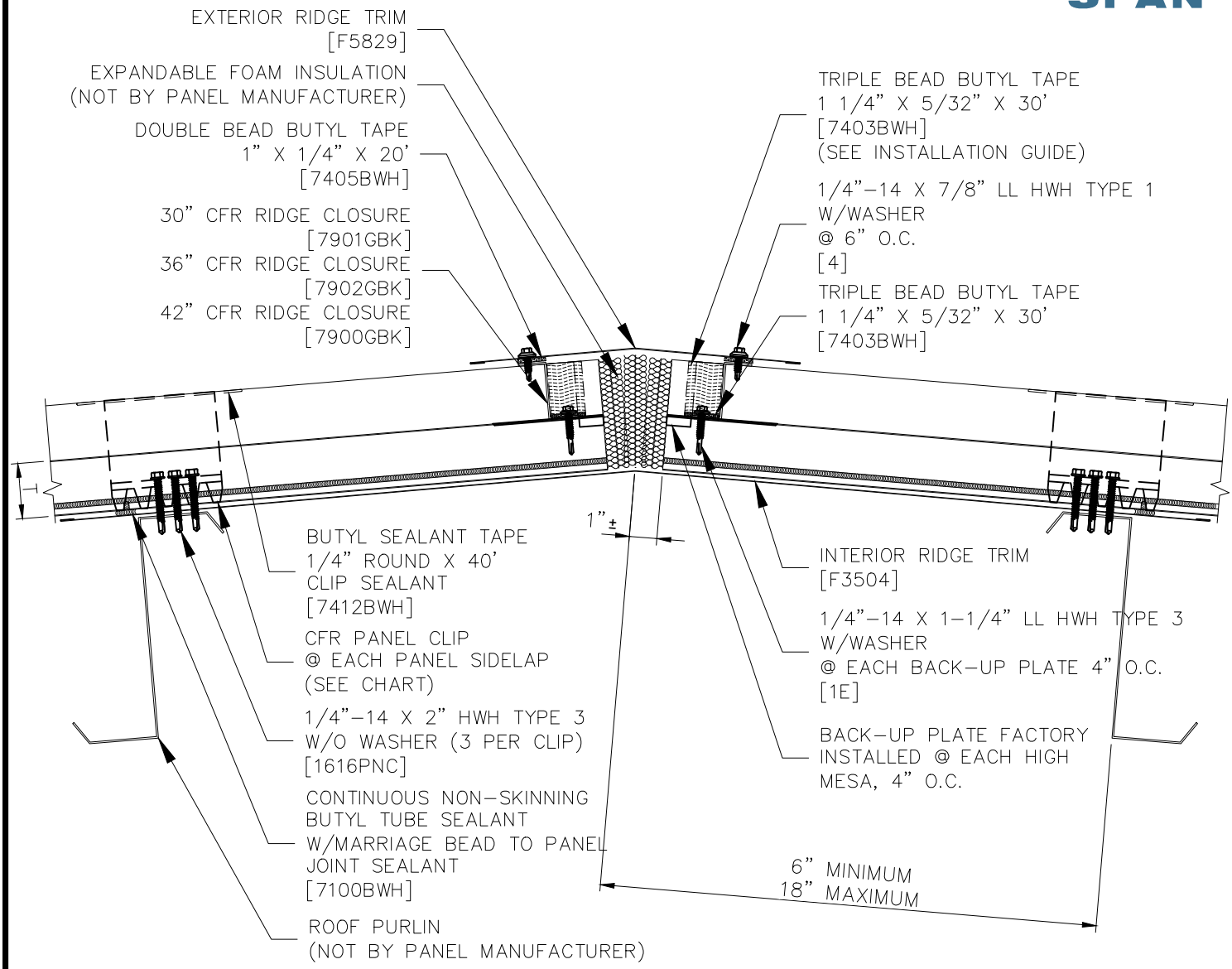
RAKE WITH HIGH PROFILE TRIM

CI-CFR-RK-01-A

DATE: Aug '19

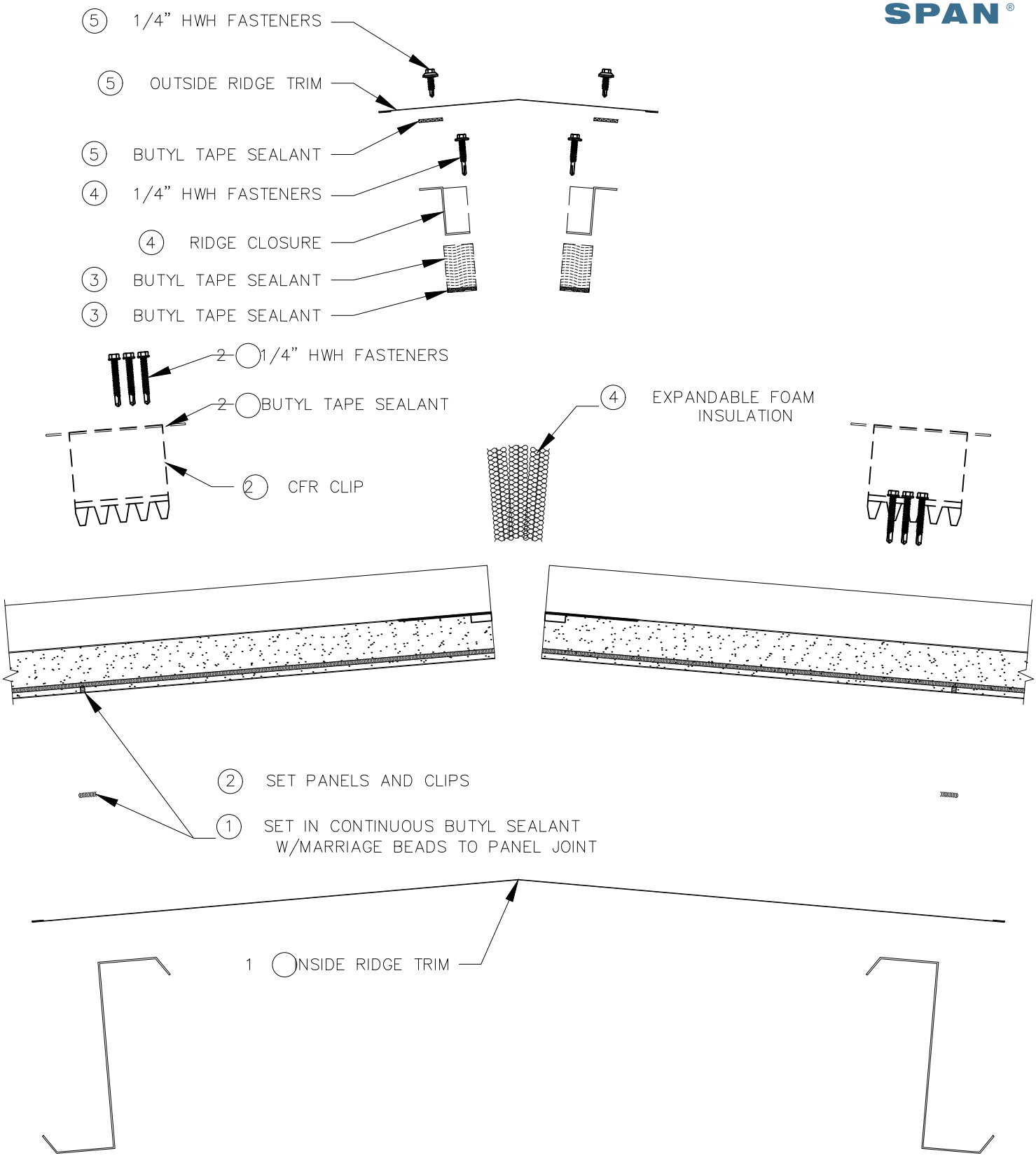


COMMERCIAL & INDUSTRIAL	RIDGE	CI–CFR–RG–01 DATE: Aug '19



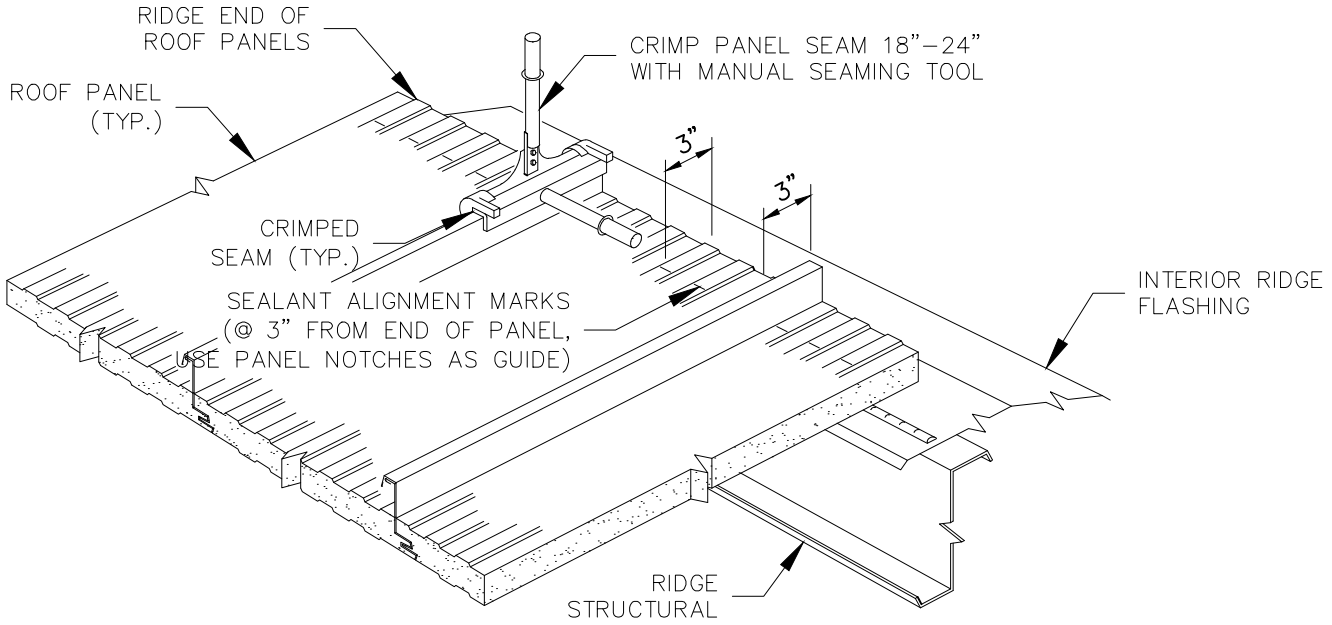
T	PANEL CLIP			
2"	4102GNC			
2.5"	4125GNC			
3"	4103GNC			
4"	4104GNC			
5"	4105GNC			
6"	4106GNC			

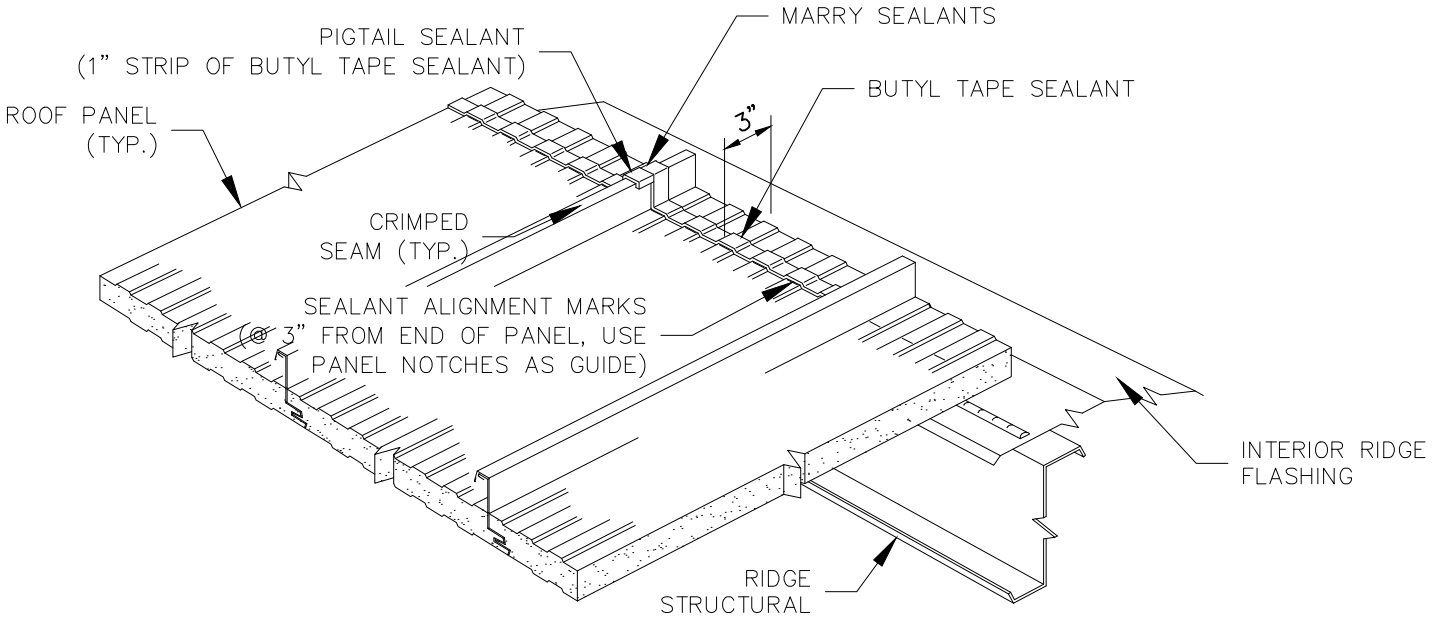
COMMERCIAL & INDUSTRIAL	RIDGE	CI-CFR-RG-01-A DATE: Aug '19



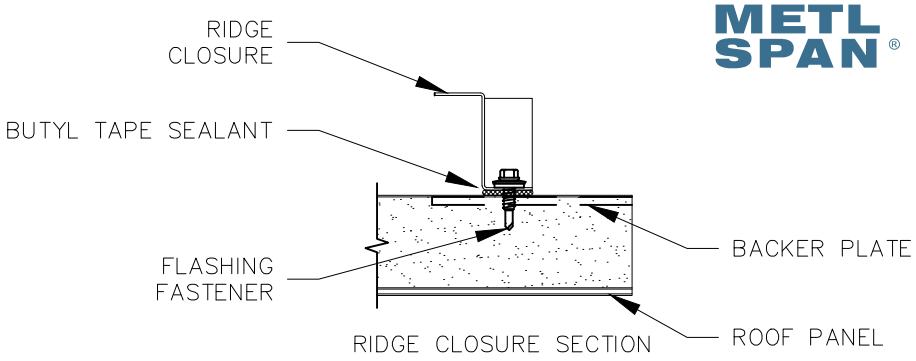
* NUMBERS REFER TO SEQUENCE OF INSTALLATION

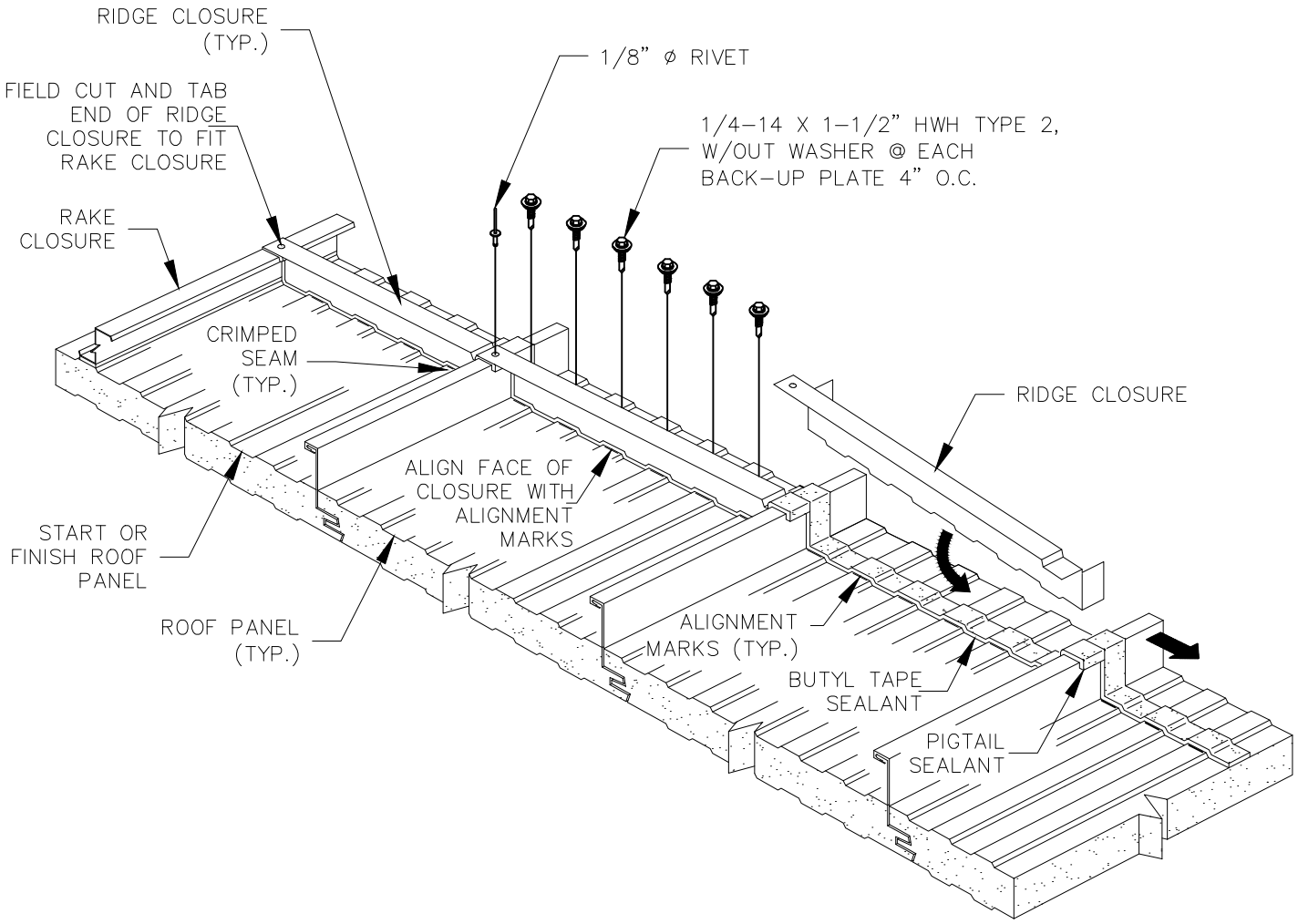
COMMERCIAL & INDUSTRIAL	RIDGE EXPLODED VIEW	CI–CFR–RG–02
		DATE: Aug '19



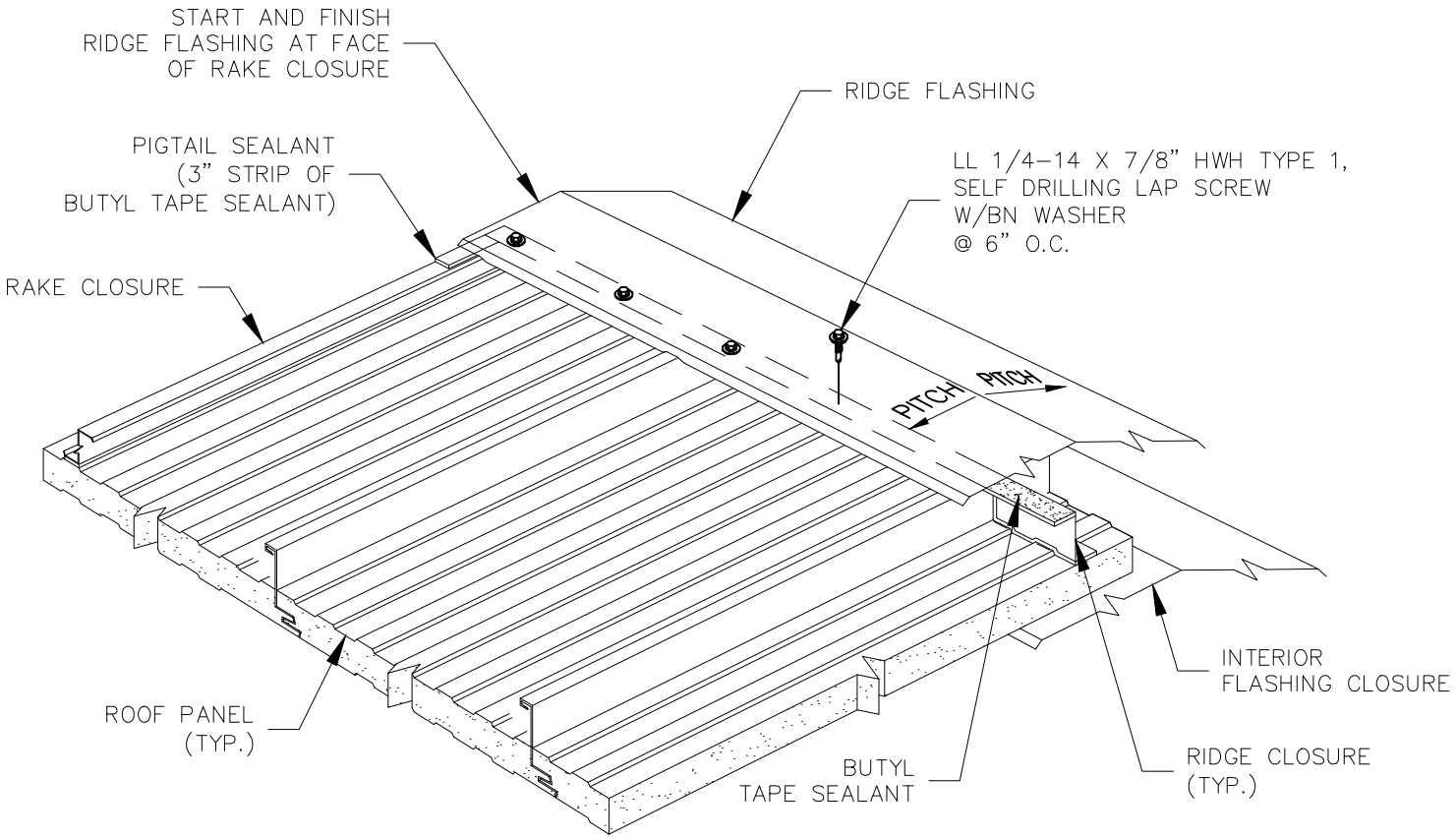


COMMERCIAL & INDUSTRIAL	RIDGE CLOSURE ASSEMBLY (1 OF 2)	CI–CFR–RG–03
		DATE: Aug '19

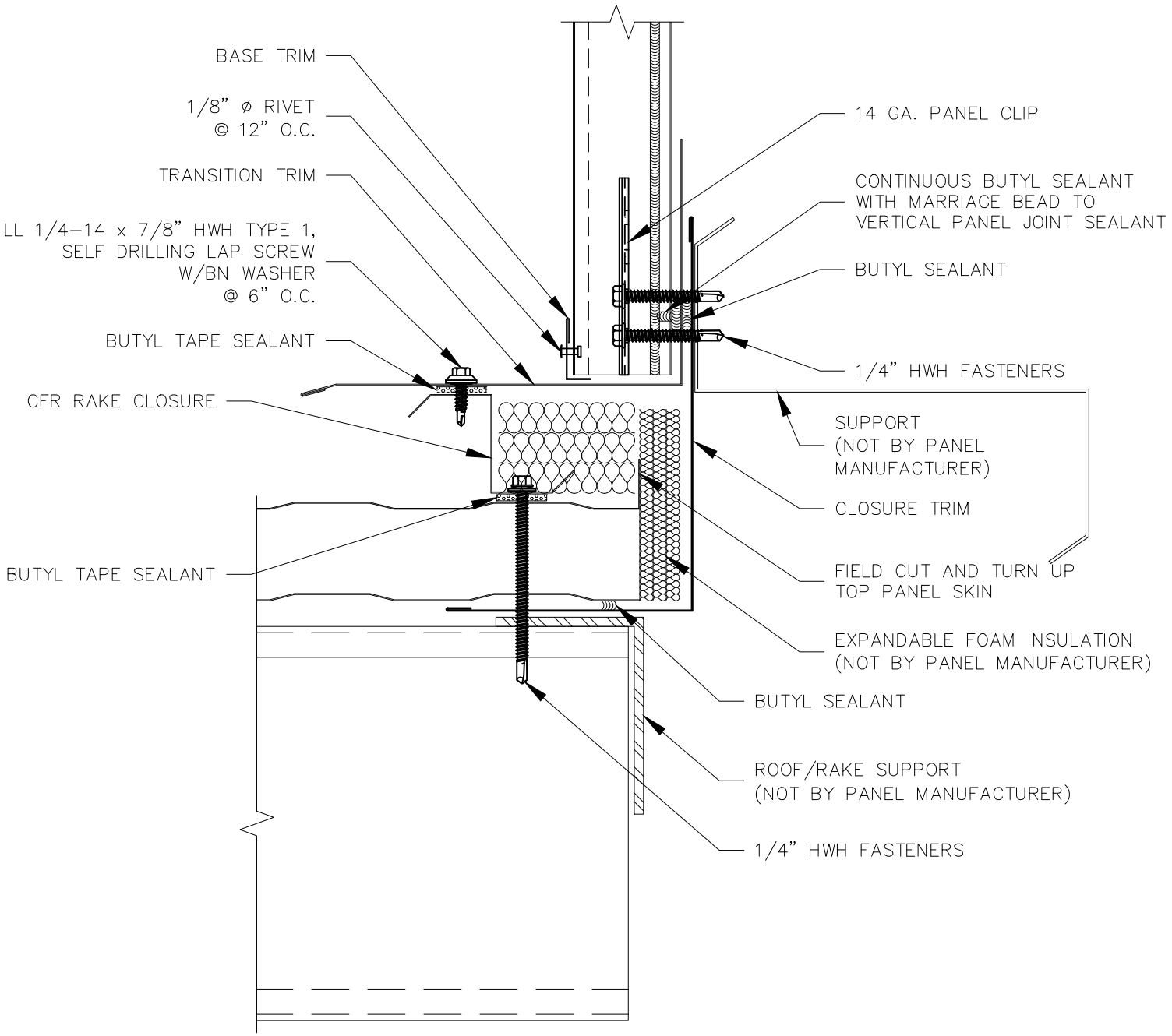




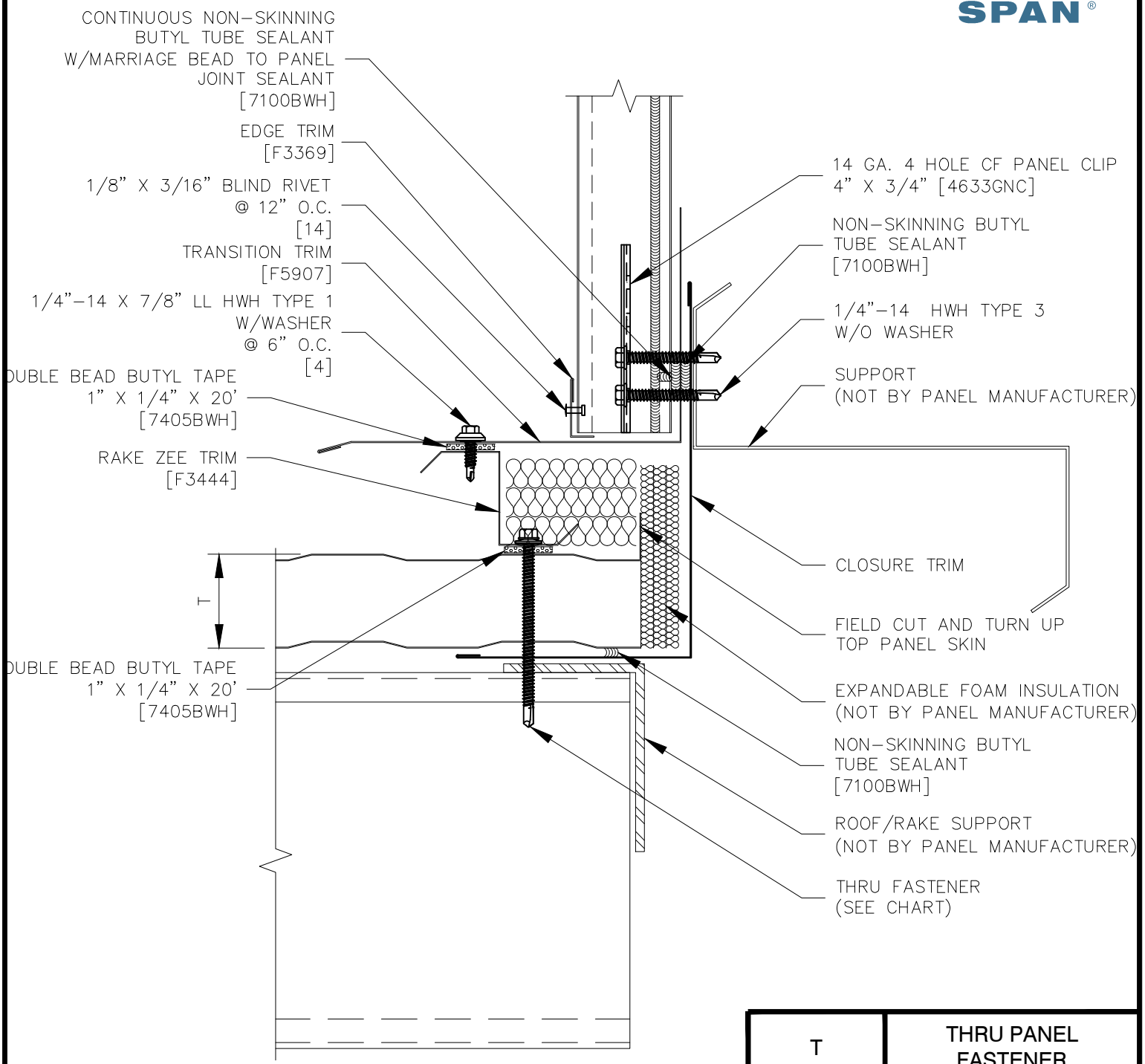
COMMERCIAL & INDUSTRIAL	RIDGE CLOSURE ASSEMBLY (2 OF 2)	CI-CFR-RG-04
		DATE: Aug '19



COMMERCIAL & INDUSTRIAL	RIDGE FLASHING ASSEMBLY	CI-CFR-RG-05
		DATE: Aug '19

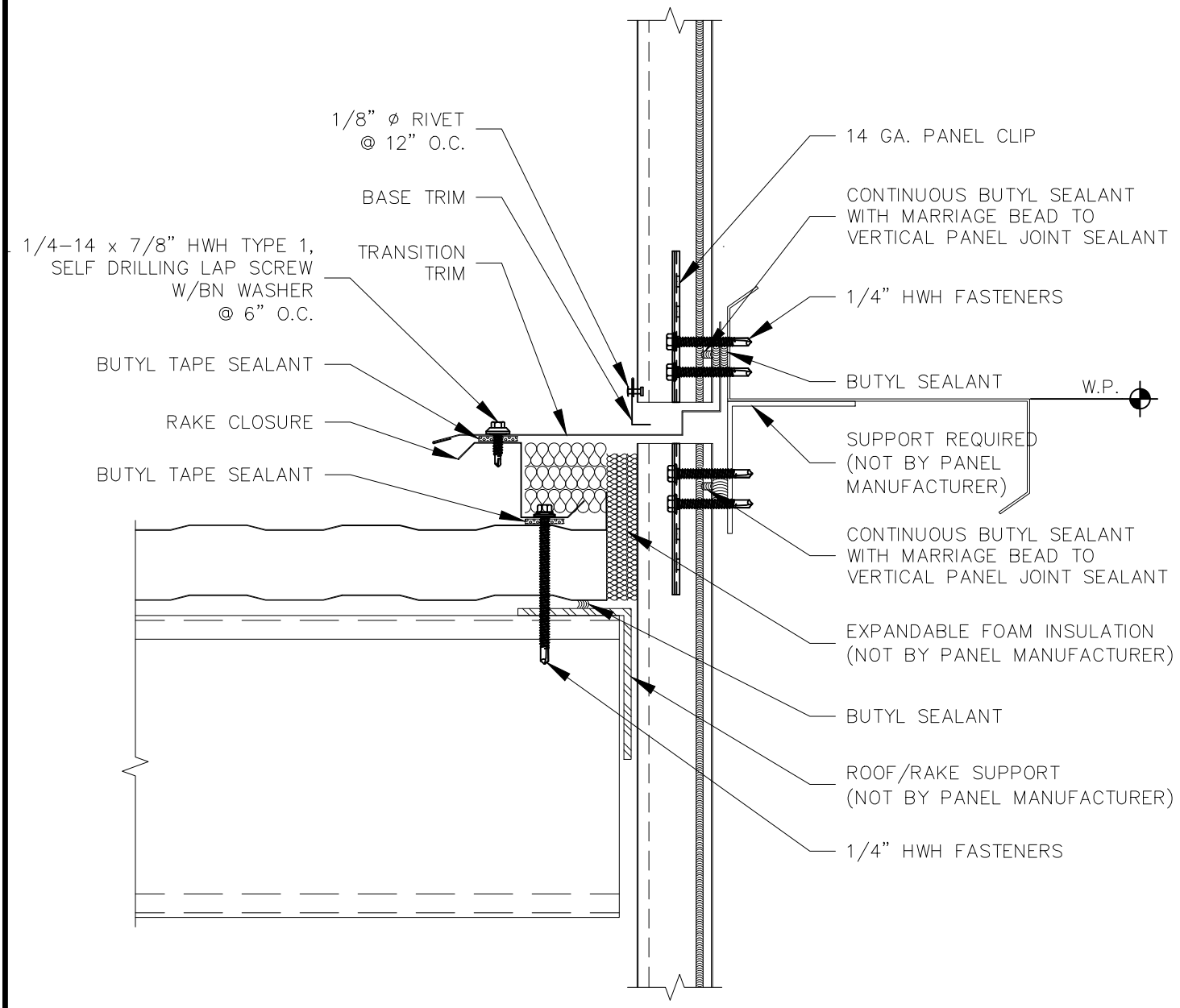


COMMERCIAL & INDUSTRIAL	TRANSITION WALL TO ROOF RAKE	CI–CFR–TR–01
		DATE: Aug '19

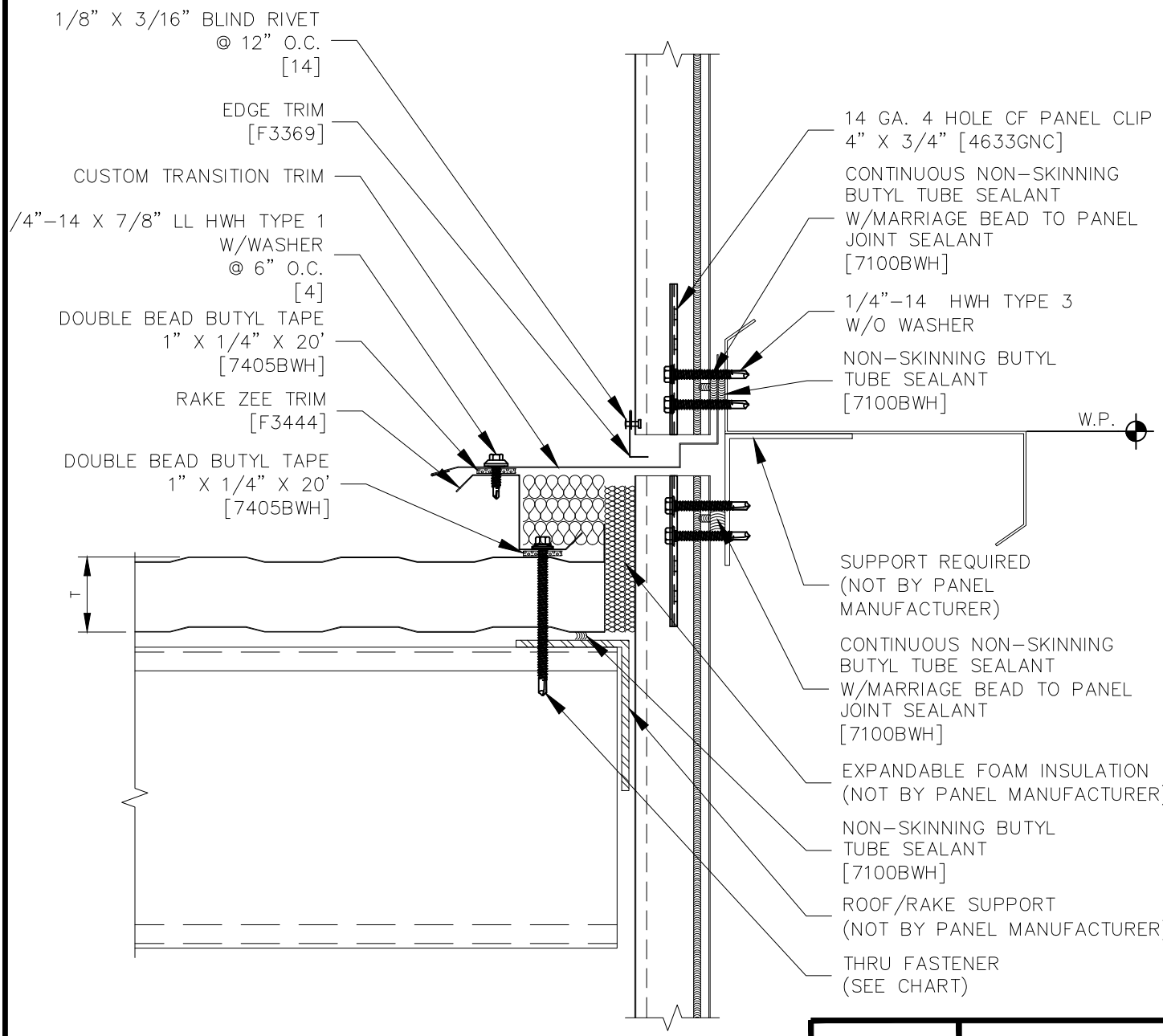


T	THRU PANEL FASTENER
2"	1132P
2.5"	1132P
3"	1140P
4"	1148P
5"	1156P
6"	1164P

COMMERCIAL & INDUSTRIAL	TRANSITION WALL TO ROOF RAKE	CI-CFR-TR-01-A
		DATE: Aug '19



COMMERCIAL & INDUSTRIAL	TRANSITION STACK JOINT TO ROOF RAKE	CI–CFR–TR–02 DATE: Aug '19



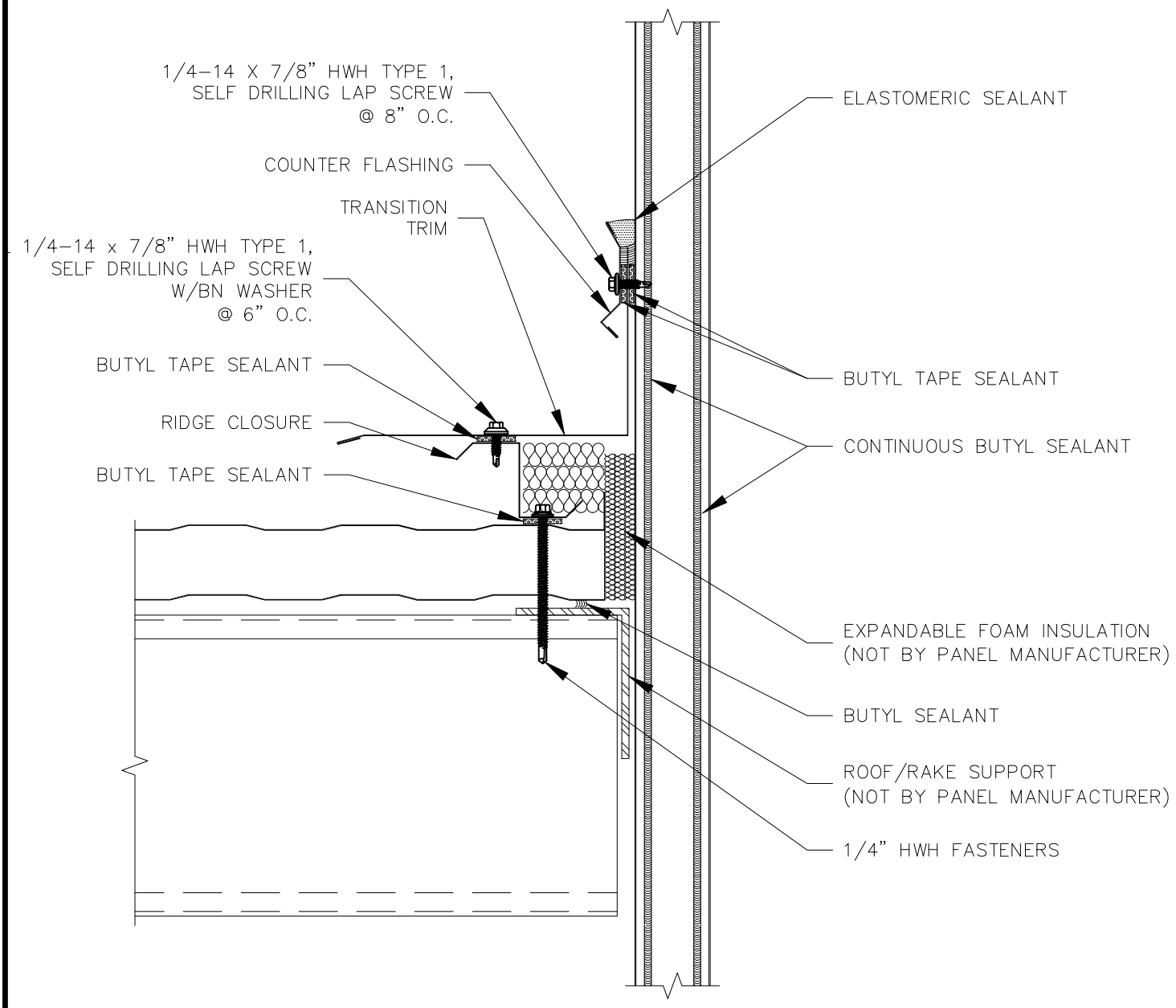
T	THRU PANEL FASTENER
2"	1132P
2.5"	1132P
3"	1140P
4"	1148P
5"	1156P
6"	1164P

COMMERCIAL & INDUSTRIAL

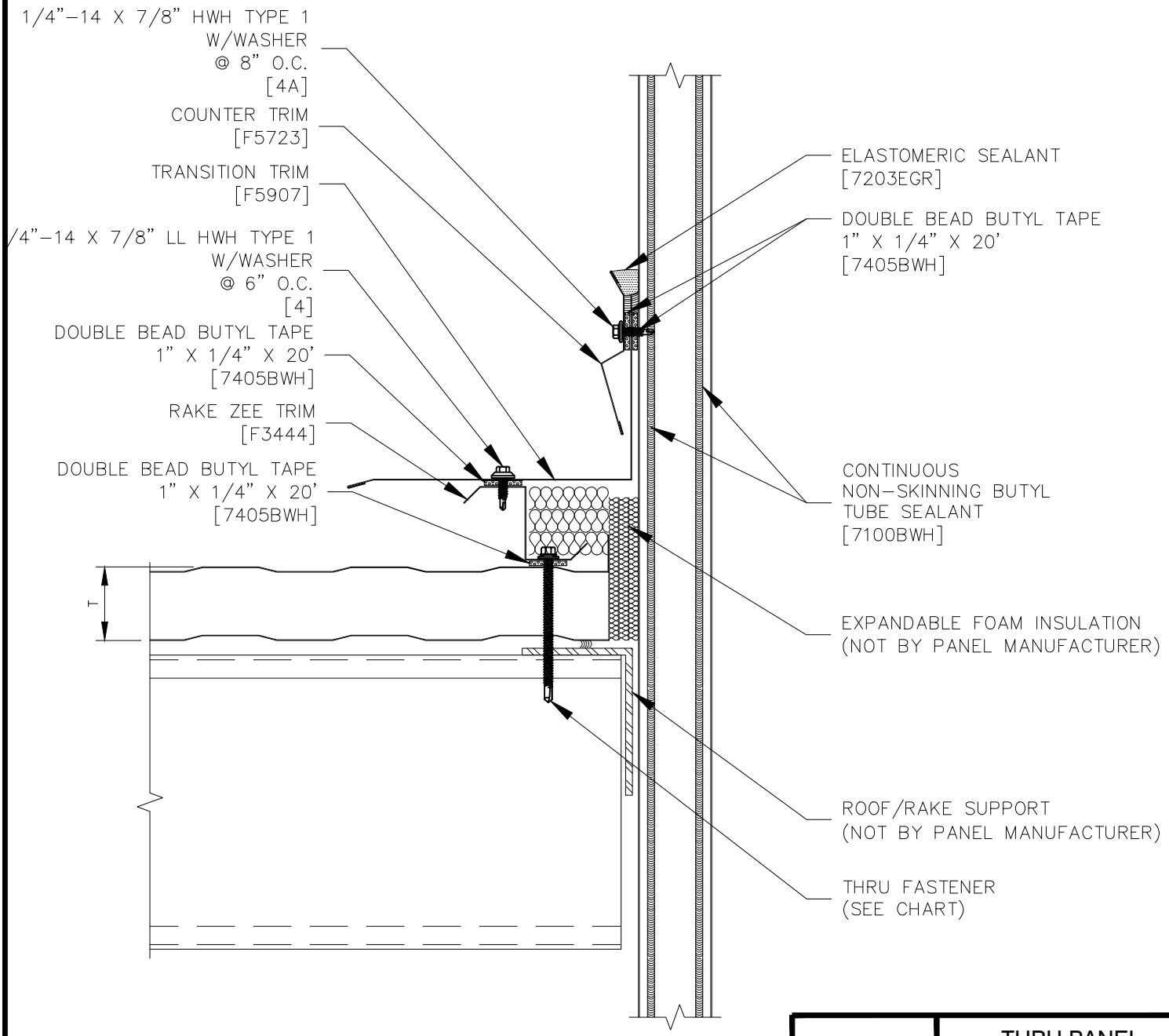
TRANSITION
STACK JOINT TO ROOF RAKE

CI-CFR-TR-02-A

DATE: Aug '19



COMMERCIAL & INDUSTRIAL	TRANSITION CONTINUOUS WALL TO ROOF RAKE	CI–CFR–TR–03
		DATE: Aug '19



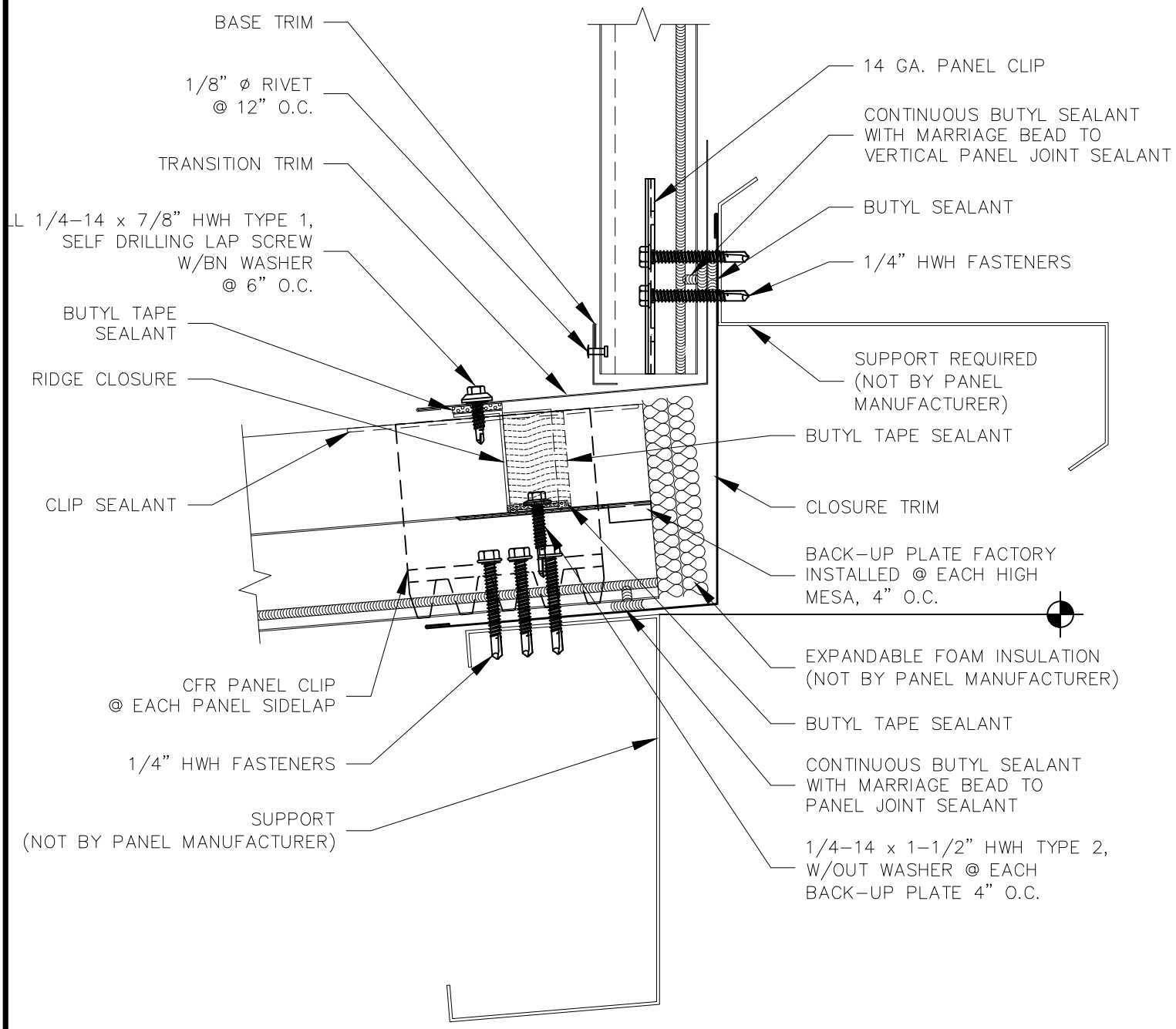
T	THRU PANEL FASTENER
2"	1132P
2.5"	1132P
3"	1140P
4"	1148P
5"	1156P
6"	1164P

COMMERCIAL & INDUSTRIAL

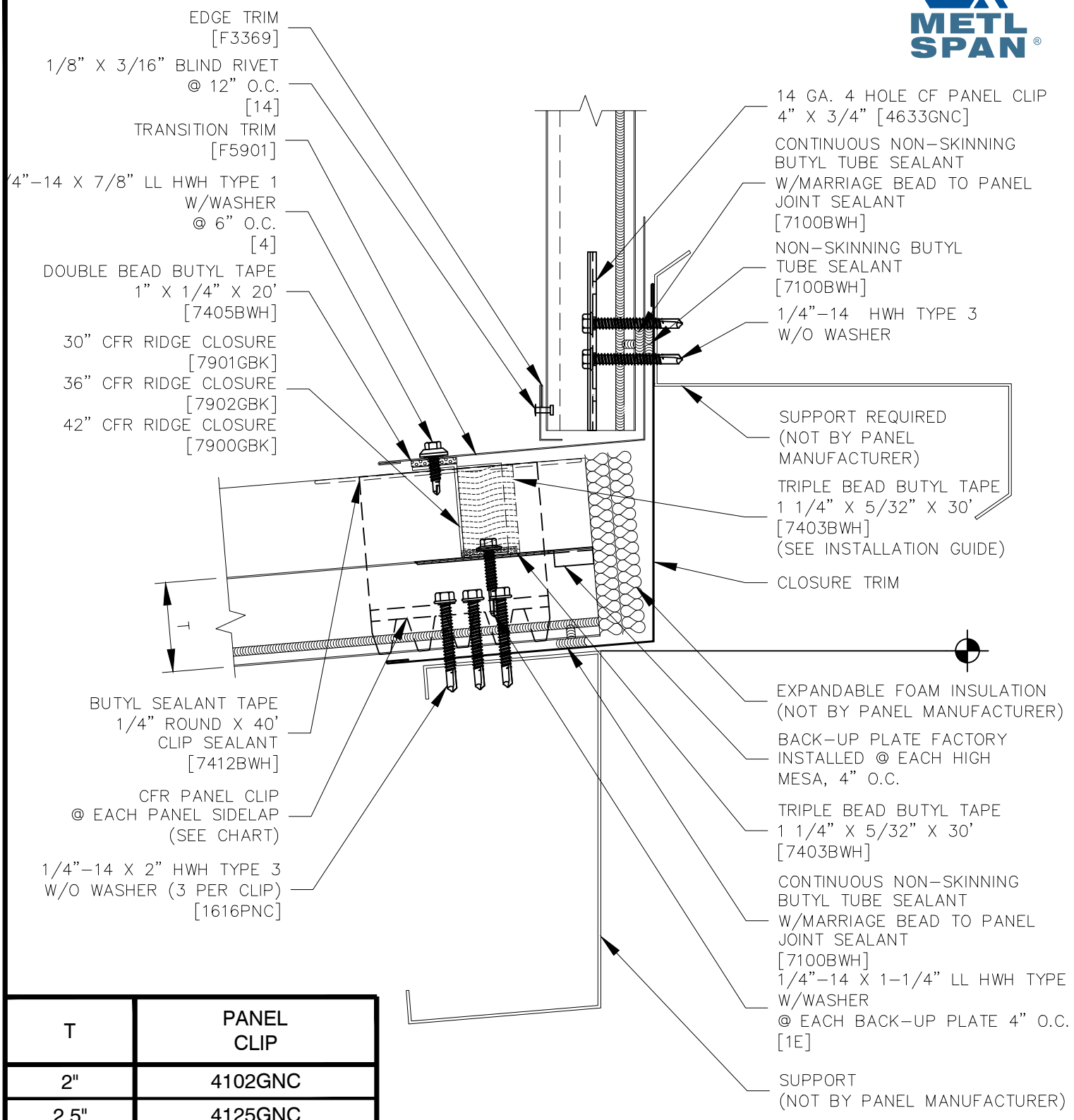
TRANSITION CONTINUOUS WALL TO ROOF RAKE

CI–CFR–TR–03–A

DATE: Aug '19



COMMERCIAL & INDUSTRIAL	TRANSITION WALL TO HIGH EAVE	CI–CFR–TR–04
		DATE: Aug '19



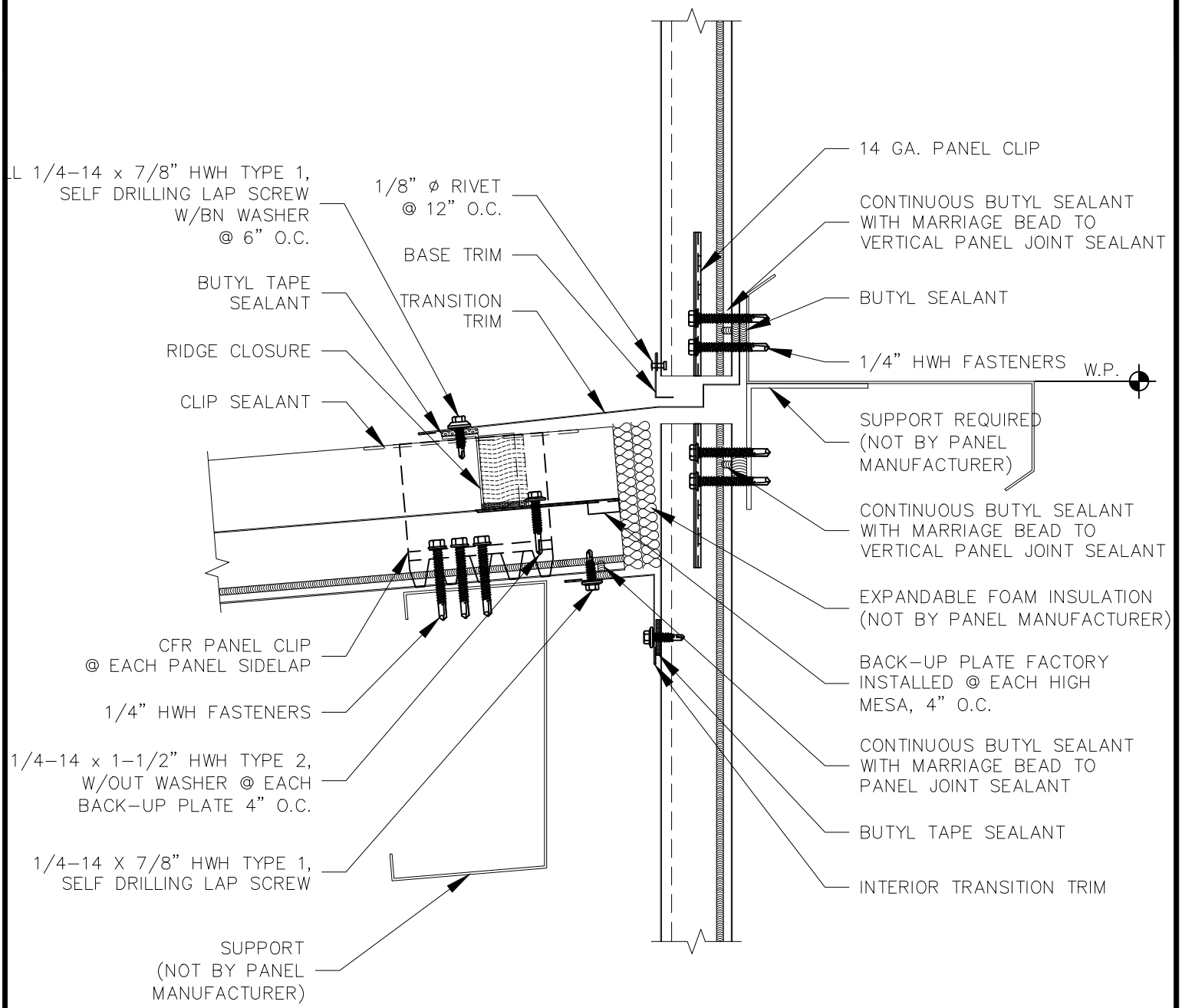
T	PANEL CLIP
2"	4102GNC
2.5"	4125GNC
3"	4103GNC
4"	4104GNC
5"	4105GNC
6"	4106GNC

COMMERCIAL & INDUSTRIAL

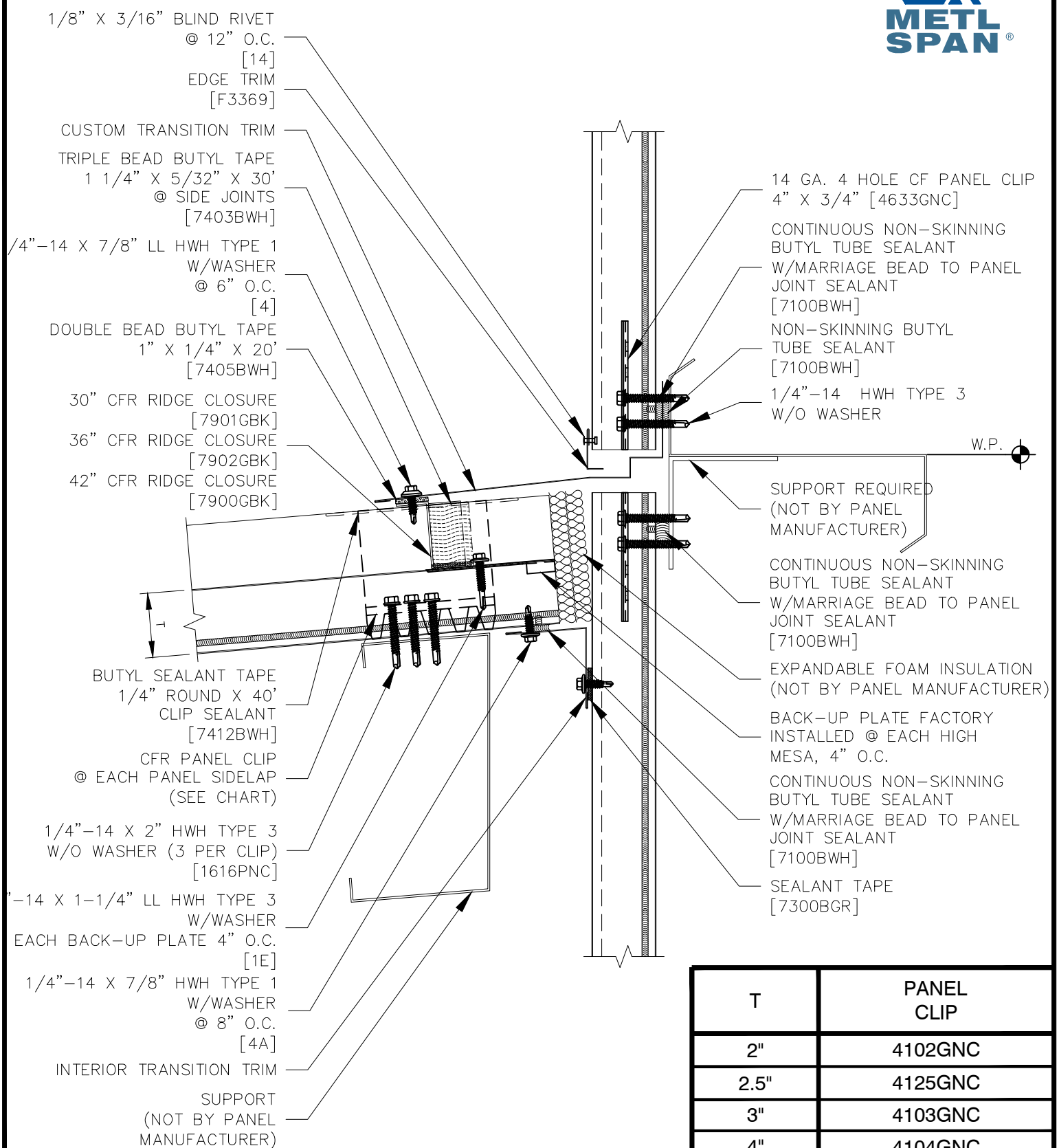
TRANSITION WALL TO HIGH EAVE

CI-CFR-TR-04-A

DATE: Aug '19



COMMERCIAL & INDUSTRIAL	TRANSITION STACK JOINT TO HIGH EAVE	CI–CFR–TR–05
		DATE: Aug '19



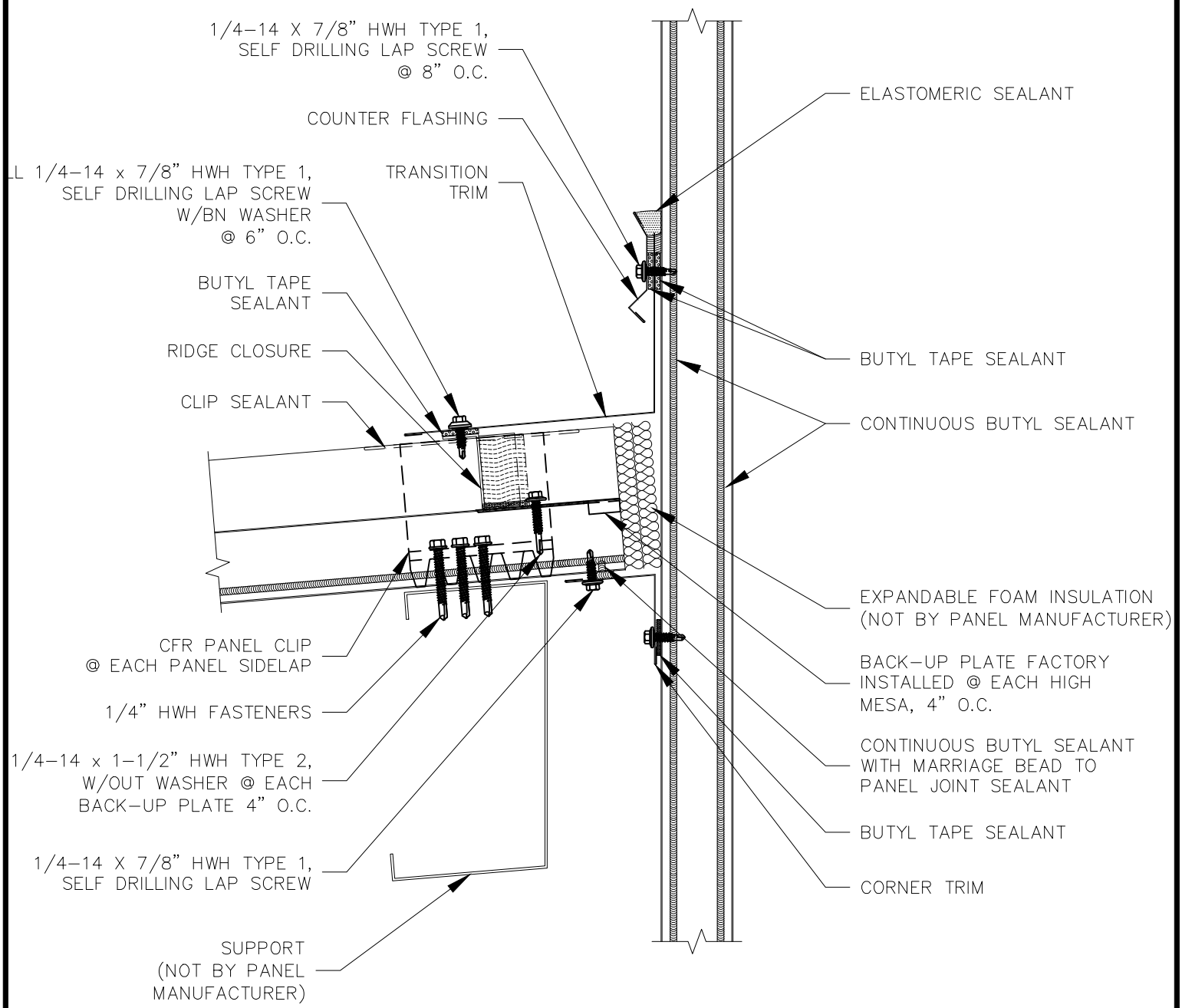
T	PANEL CLIP
2"	4102GNC
2.5"	4125GNC
3"	4103GNC
4"	4104GNC
5"	4105GNC
6"	4106GNC

COMMERCIAL & INDUSTRIAL

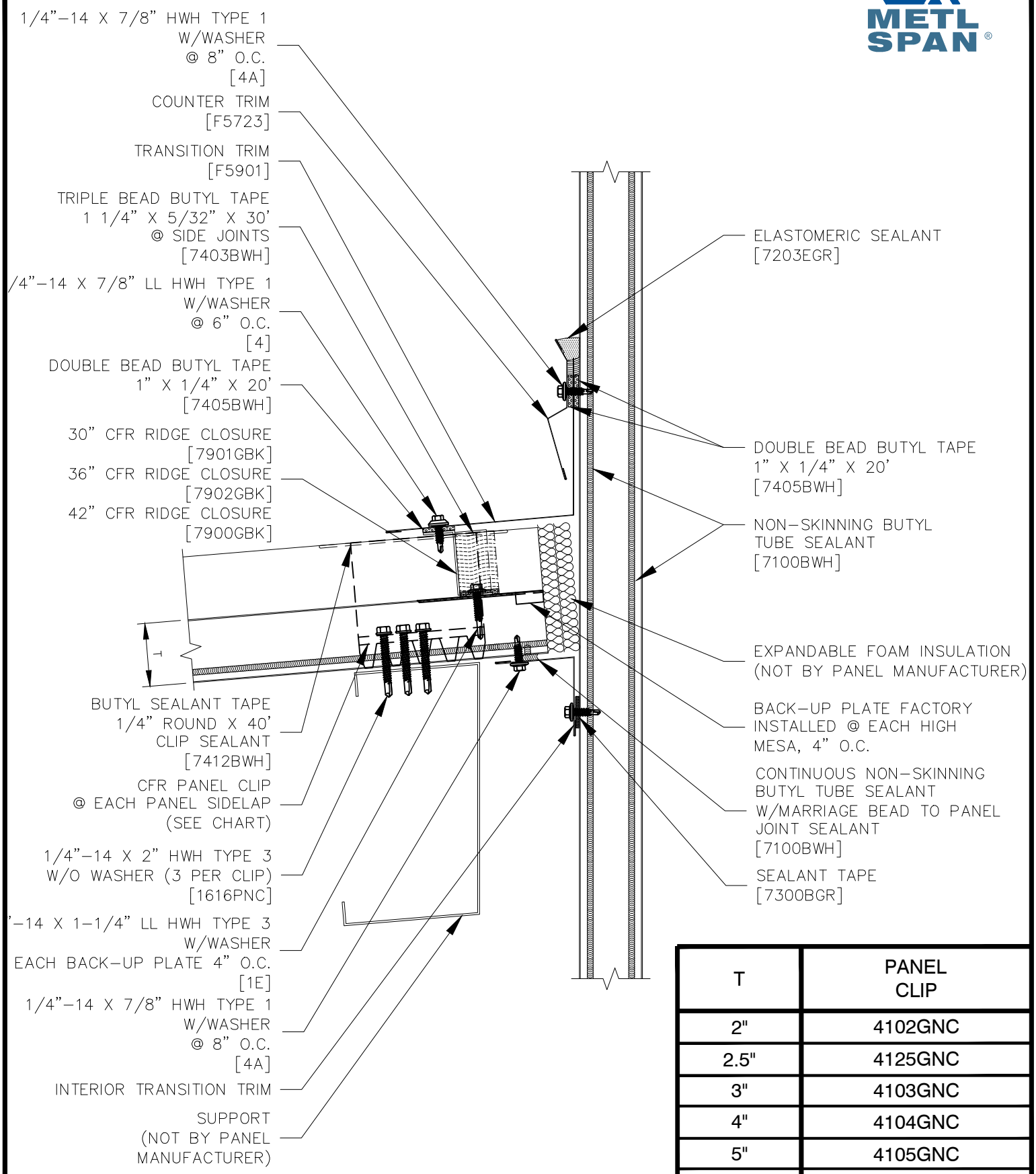
TRANSITION
STACK JOINT TO HIGH EAVE

CI-CFR-TR-05-A

DATE: Aug '19



COMMERCIAL & INDUSTRIAL	TRANSITION CONTINUOUS WALL TO HIGH EAVE	CI–CFR–TR–06 DATE: Aug '19



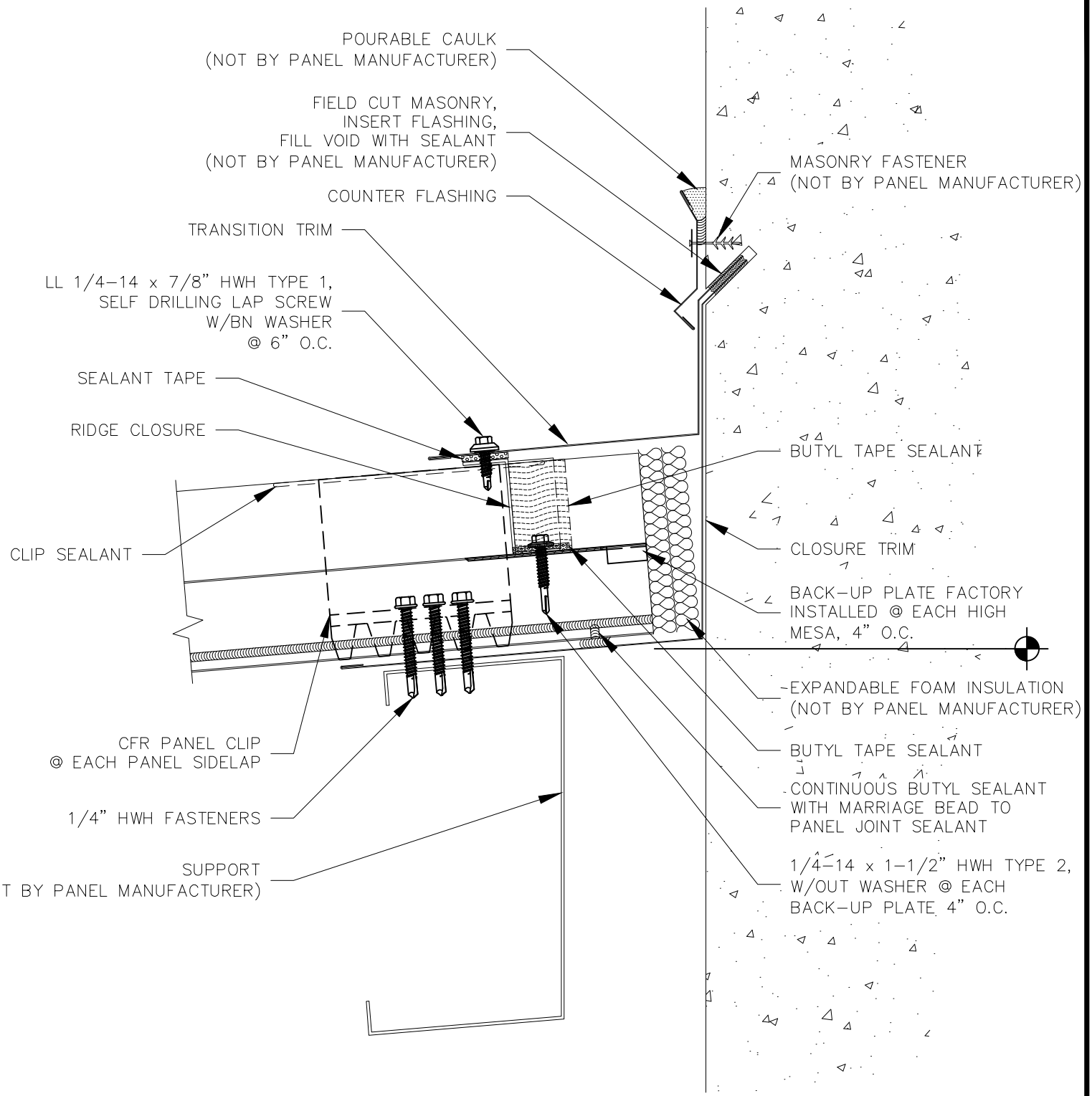
T	PANEL CLIP
2"	4102GNC
2.5"	4125GNC
3"	4103GNC
4"	4104GNC
5"	4105GNC
6"	4106GNC

COMMERCIAL & INDUSTRIAL

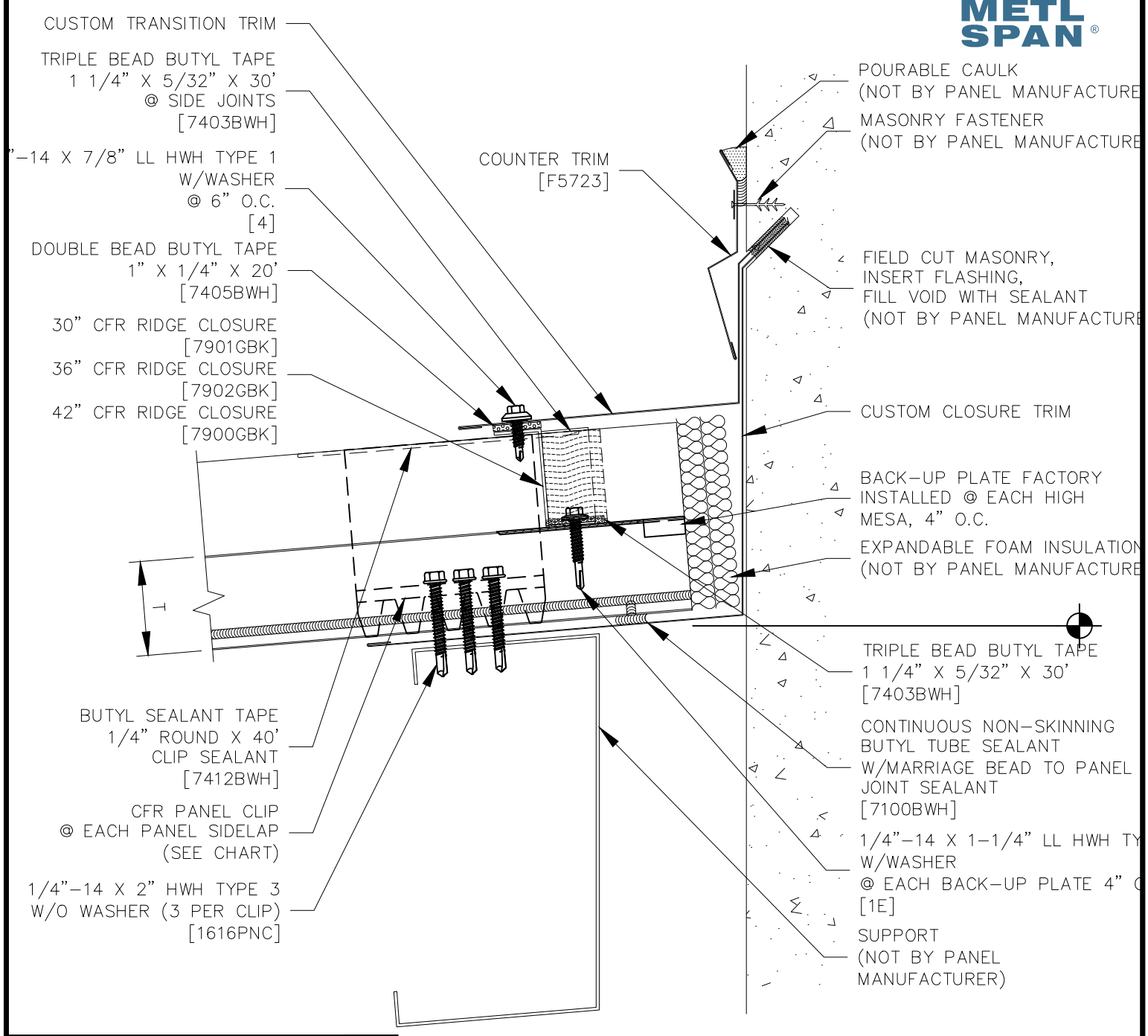
TRANSITION
CONTINUOUS WALL TO HIGH EAVE

CI–CFR–TR–06–A

DATE: Aug '19

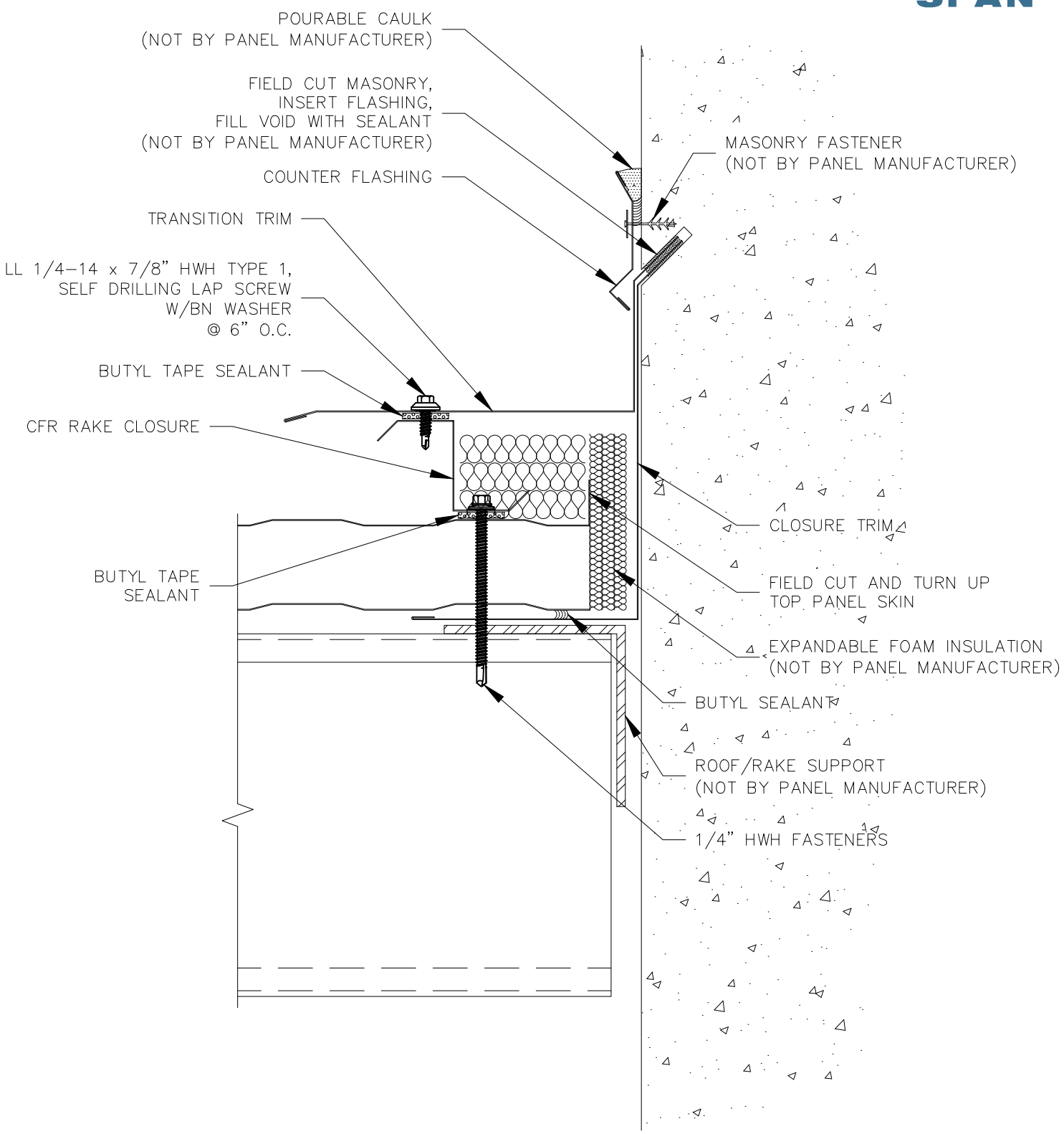


COMMERCIAL & INDUSTRIAL	TRANSITION MASONRY WALL TO HIGH EAVE	CI–CFR–TR–07 DATE: Aug '19

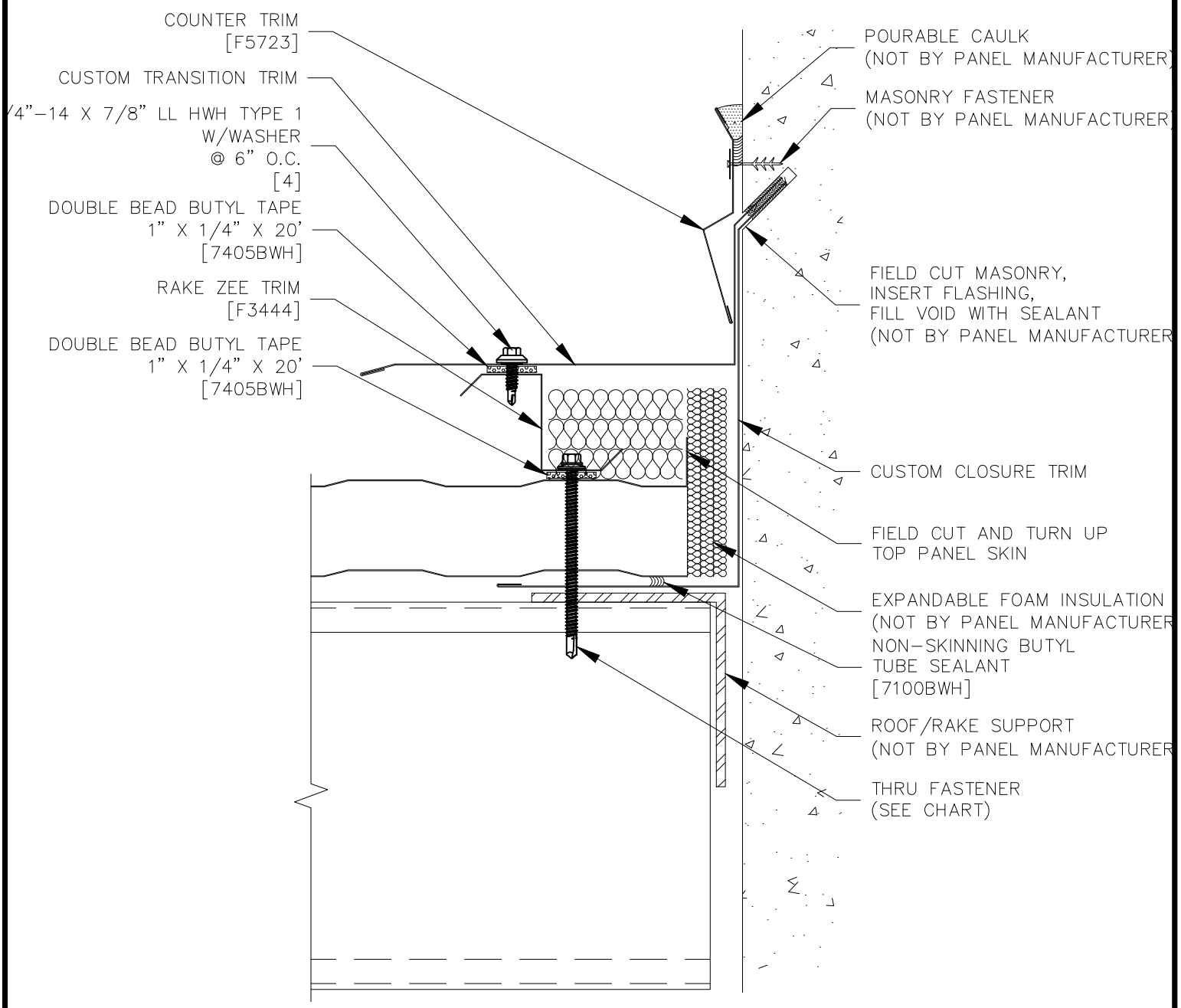


T	PANEL CLIP
2"	4102GNC
2.5"	4125GNC
3"	4103GNC
4"	4104GNC
5"	4105GNC
6"	4106GNC

COMMERCIAL & INDUSTRIAL	TRANSITION MASONRY WALL TO HIGH EAVE	CI-CFR-TR-07-A DATE: Aug '19



COMMERCIAL & INDUSTRIAL	TRANSITION MASONRY WALL TO RAKE	CI–CFR–TR–08
		DATE: Aug '19



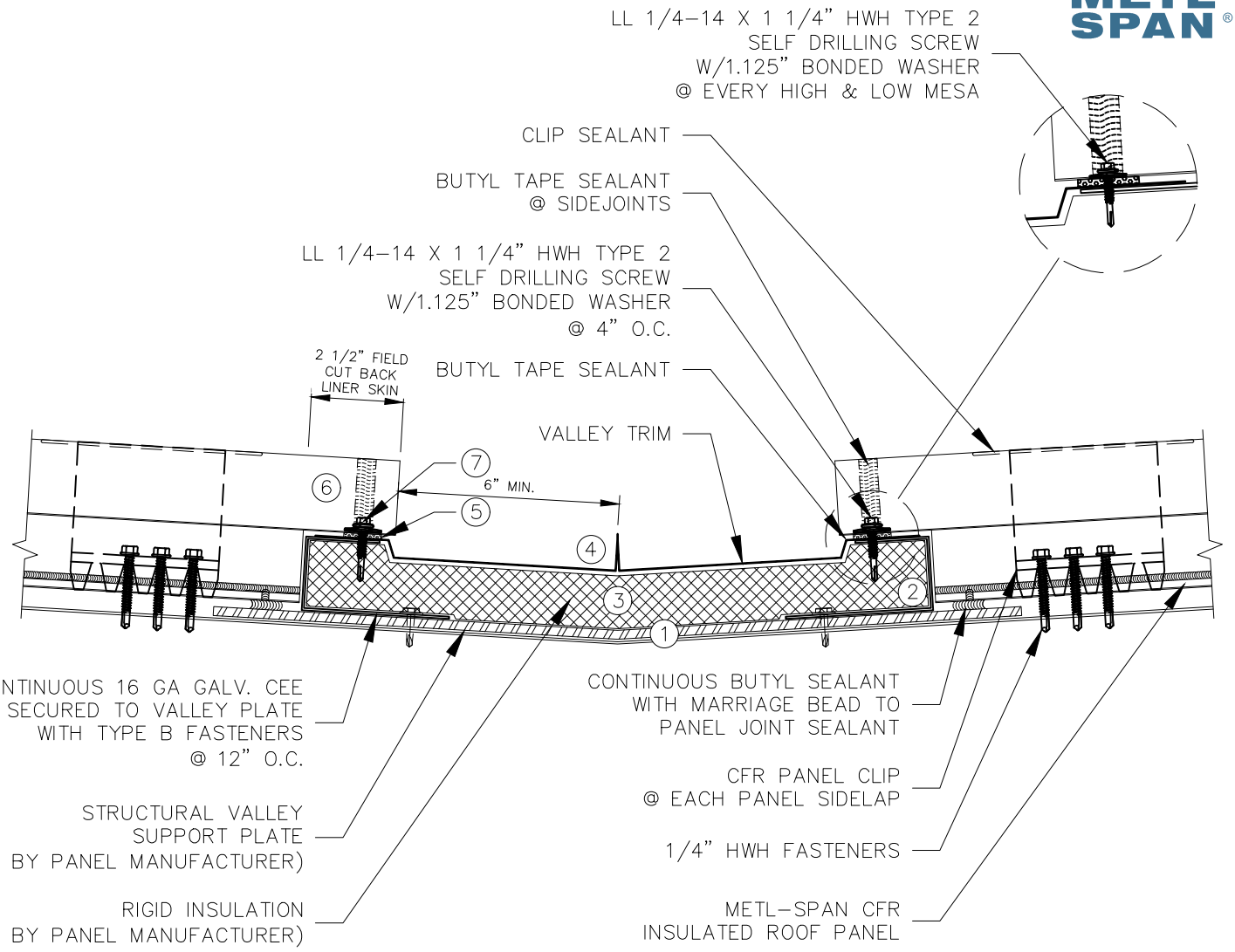
T	THRU PANEL FASTENER
2"	1132P
2.5"	1132P
3"	1140P
4"	1148P
5"	1156P
6"	1164P

COMMERCIAL & INDUSTRIAL

TRANSITION
MASONRY WALL TO RAKE

CI–CFR–TR–08–A

DATE: Aug '19

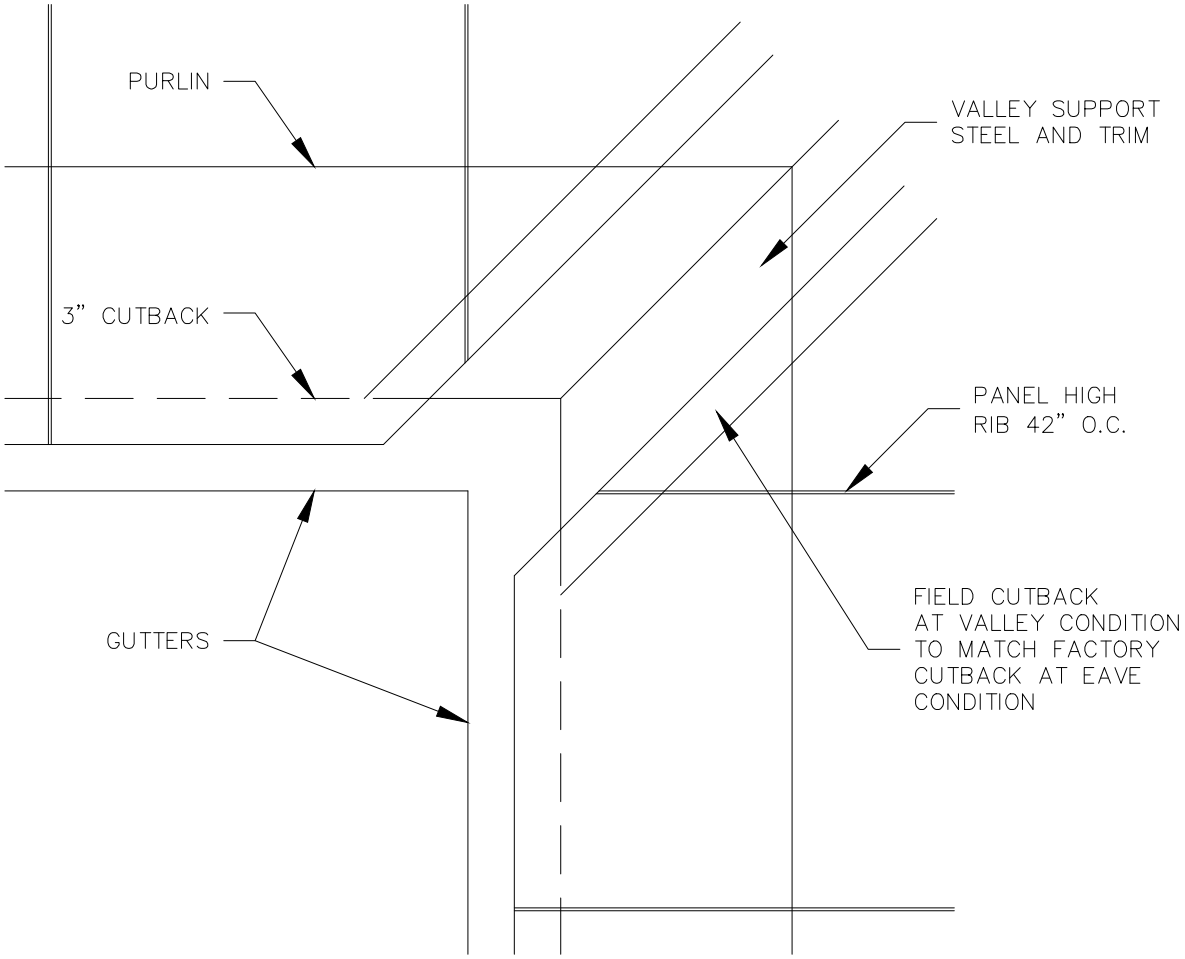


SEQUENCE OF INSTALLATION:

1. STRUCTURAL VALLEY SUPPORT PLATE
2. CEE SHAPED SECURED TO VALLEY PLATE
3. FILL VOID W/RIGID INSULATION
4. INSTALL VALLEY TRIM
5. APPLY SEALANT TAPE
6. FIELD CUT ROOF PANELS. REMOVE CUT BACK
7. FASTEN ASSEMBLY

NOTE: NOT FOR DORMER CONDITIONS –
CONTACT METL–SPAN FOR MORE INFORMATION

COMMERCIAL & INDUSTRIAL	VALLEY ASSEMBLY	CI–CFR–VL–01
		DATE: Aug '19

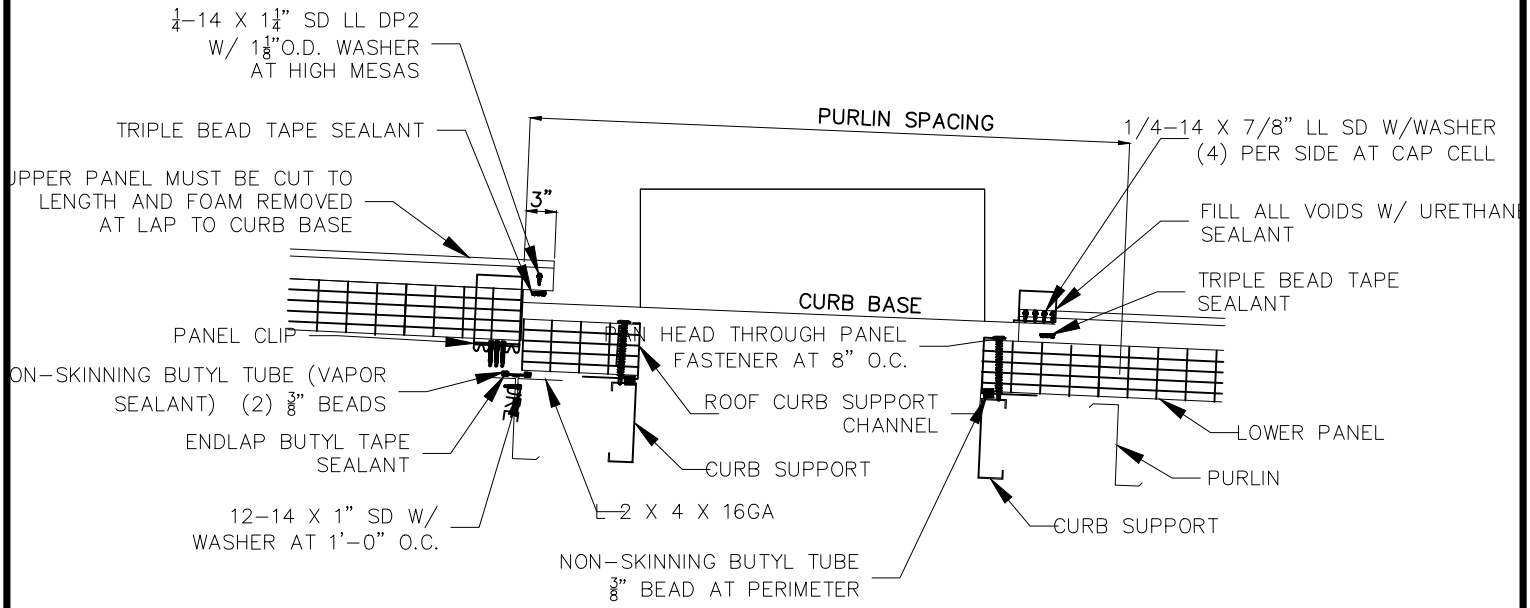


COMMERCIAL & INDUSTRIAL

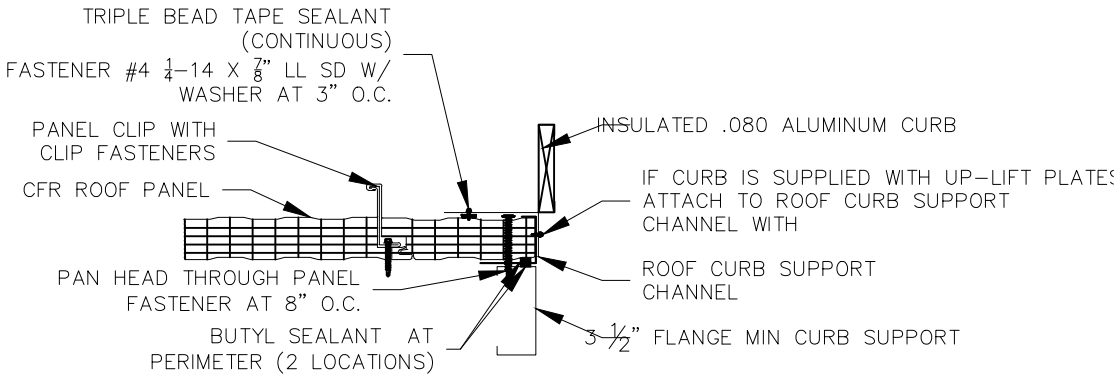
VALLEY ROOF PLAN

CI–CFR–VL–02

DATE: Aug '19

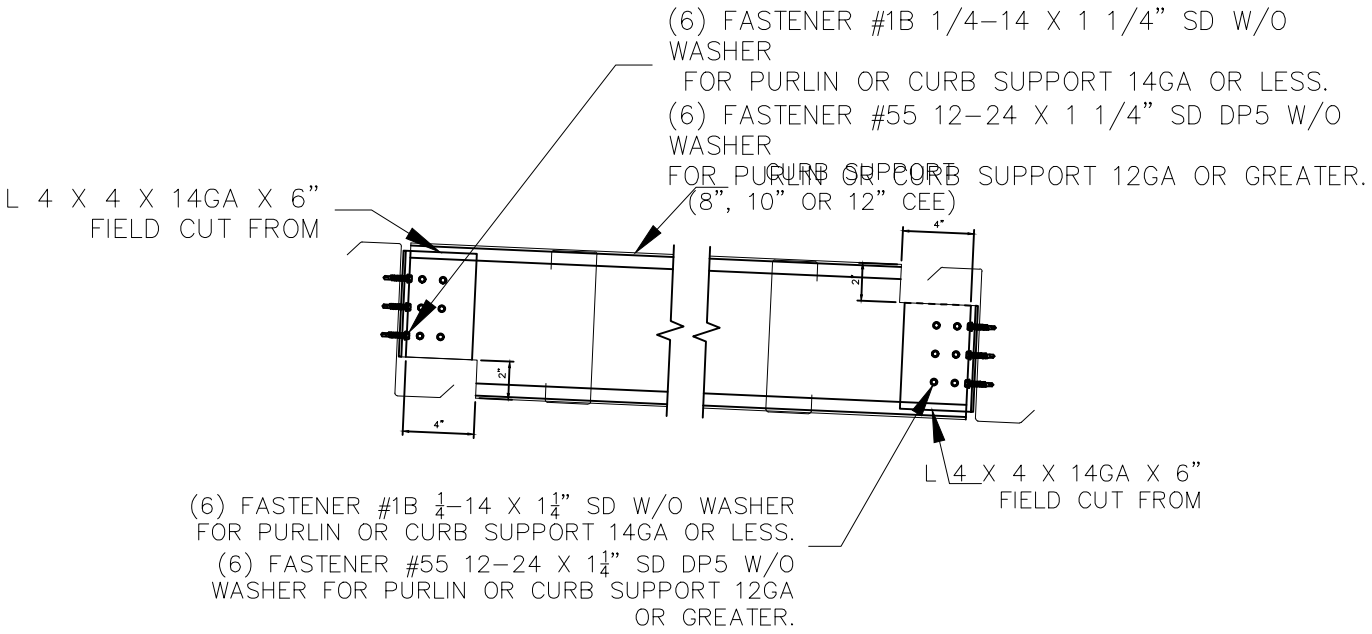


INSTALLED CURB SECTION
FLOATING CURB CROSS SECTION

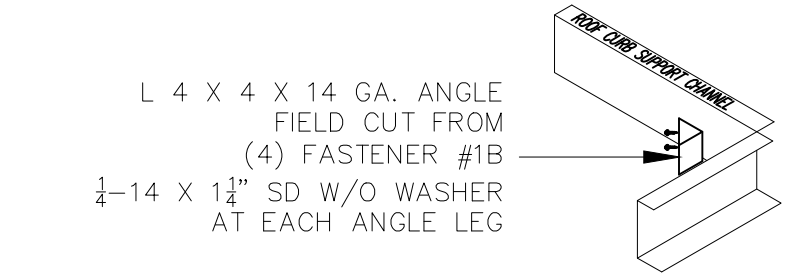


CURB SECTION

COMMERCIAL & INDUSTRIAL	CURB SECTIONS	CI–CFR–RC–01
		DATE: Aug '19



SUB–FRAMING SUPPORT



ROOF CURB SUPPORT CHANNEL

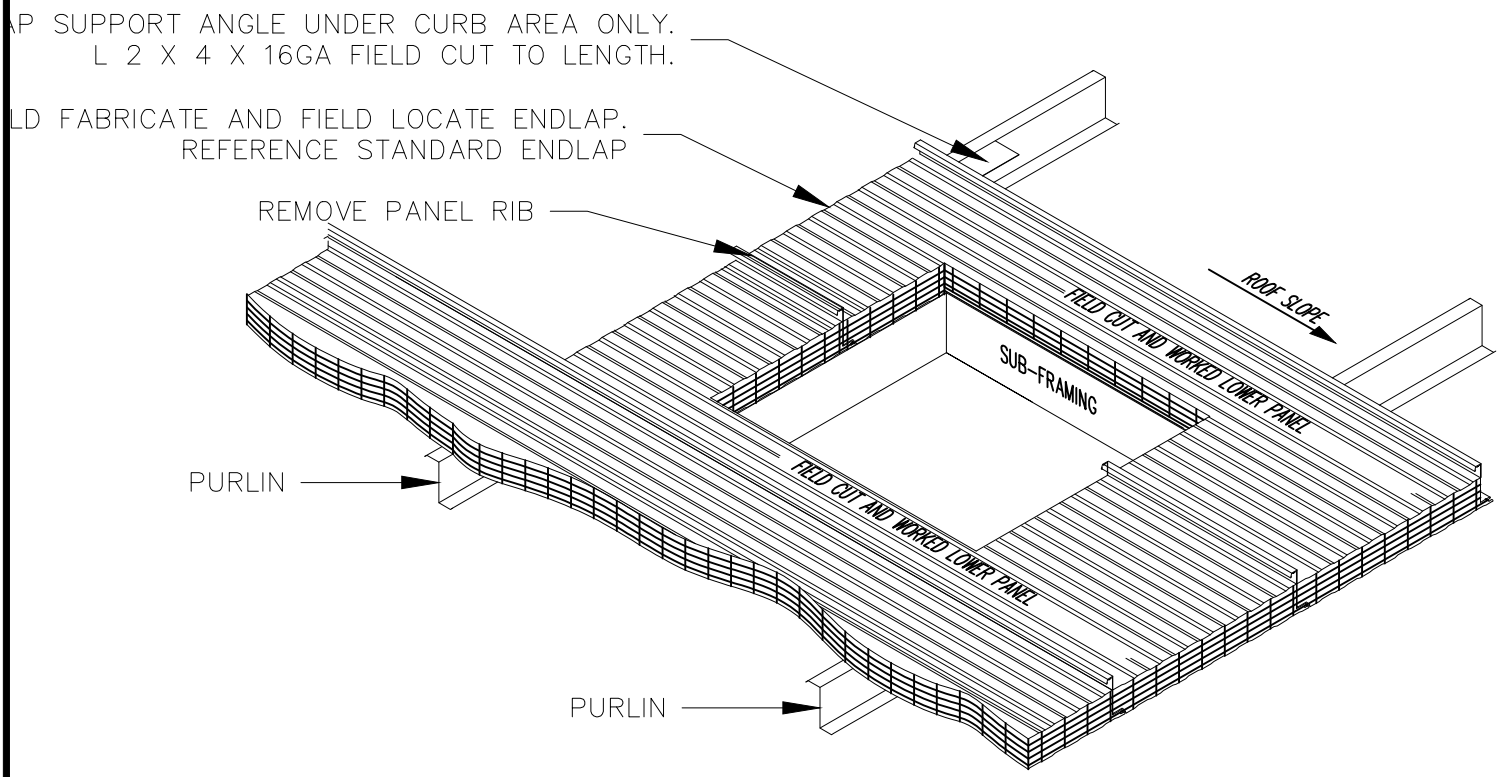
FACTORY LOCATED CURBS WITH A SINGLE PANEL RUNNING EAVE TO RIDGE: PANELS ARE TO BE DETAILED WITH AN ENDLAP AT THE UPSLOPE CURB LOCATION ONLY.

FIELD LOCATED CURBS WITH A SINGLE PANEL RUNNING EAVE TO RIDGE: PANELS AT CURB LOCATION MUST BE A MINIMUM OF 3" LONGER TO PERMIT FIELD CUTTING AND NOTCHING / REMOVAL OF FOAM AT UPSLOPE SPLICE LOCATION OF CURB.

FACTORY LOCATED CURBS ON MULTIPLE PANELS RUNNING EAVE TO RIDGE: PANELS MUST BE DETAILED FOR AN ENDLAP AT THE UPSLOPE CURB LOCATION.

FIELD LOCATED CURBS ON MULTIPLE PANELS RUNNING EAVE TO RIDGE: PANELS UPSLOPE OF CURB LOCATION MUST BE A MINIMUM OF 3" LONGER TO PERMIT FIELD CUTTING AND NOTCHING / REMOVAL OF FOAM AT UPSLOPE SPLICE LOCATION OF CURB.

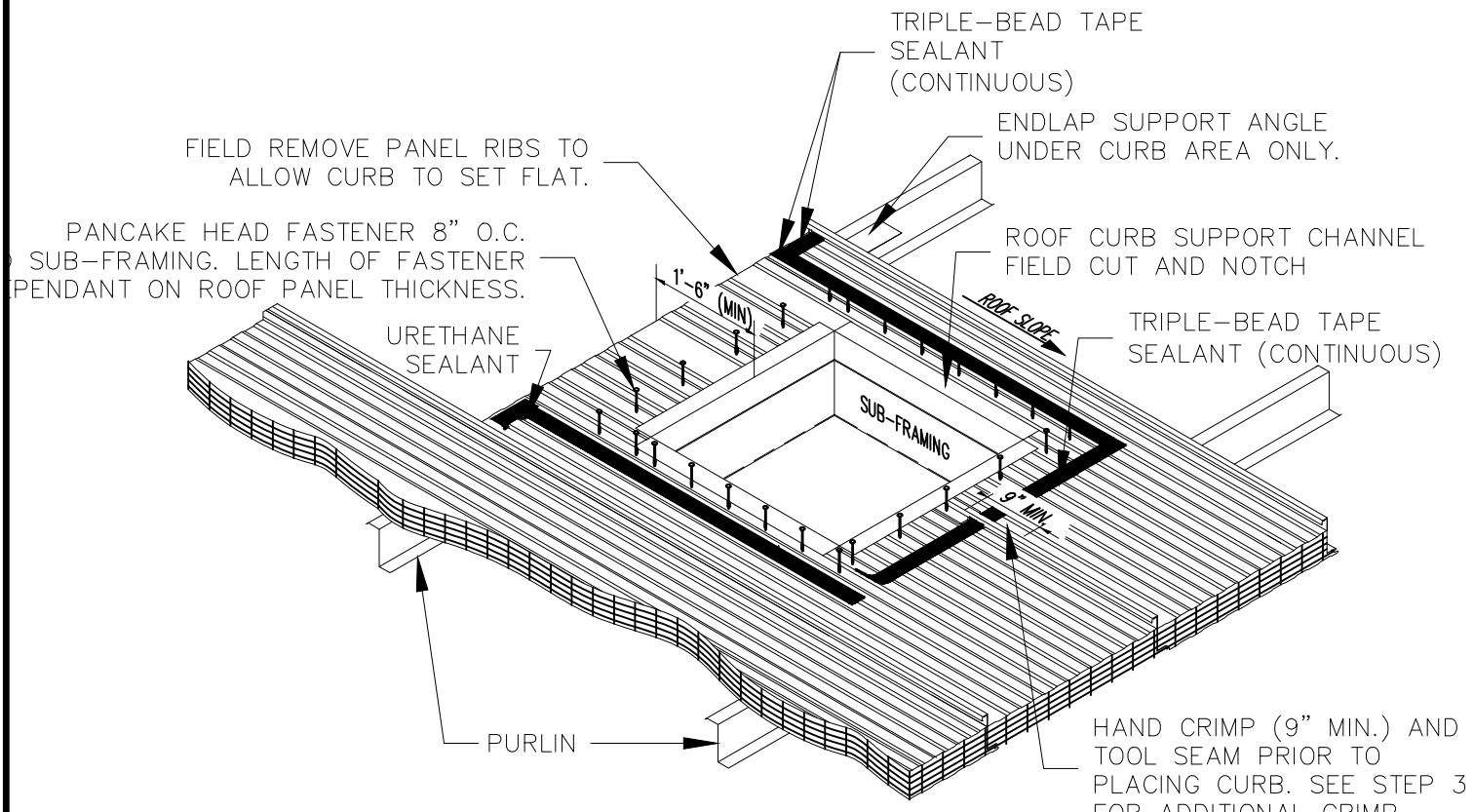
ROOF ERECTION SEQUENCE IS LEFT TO RIGHT ON EACH PLANE



STEP 1

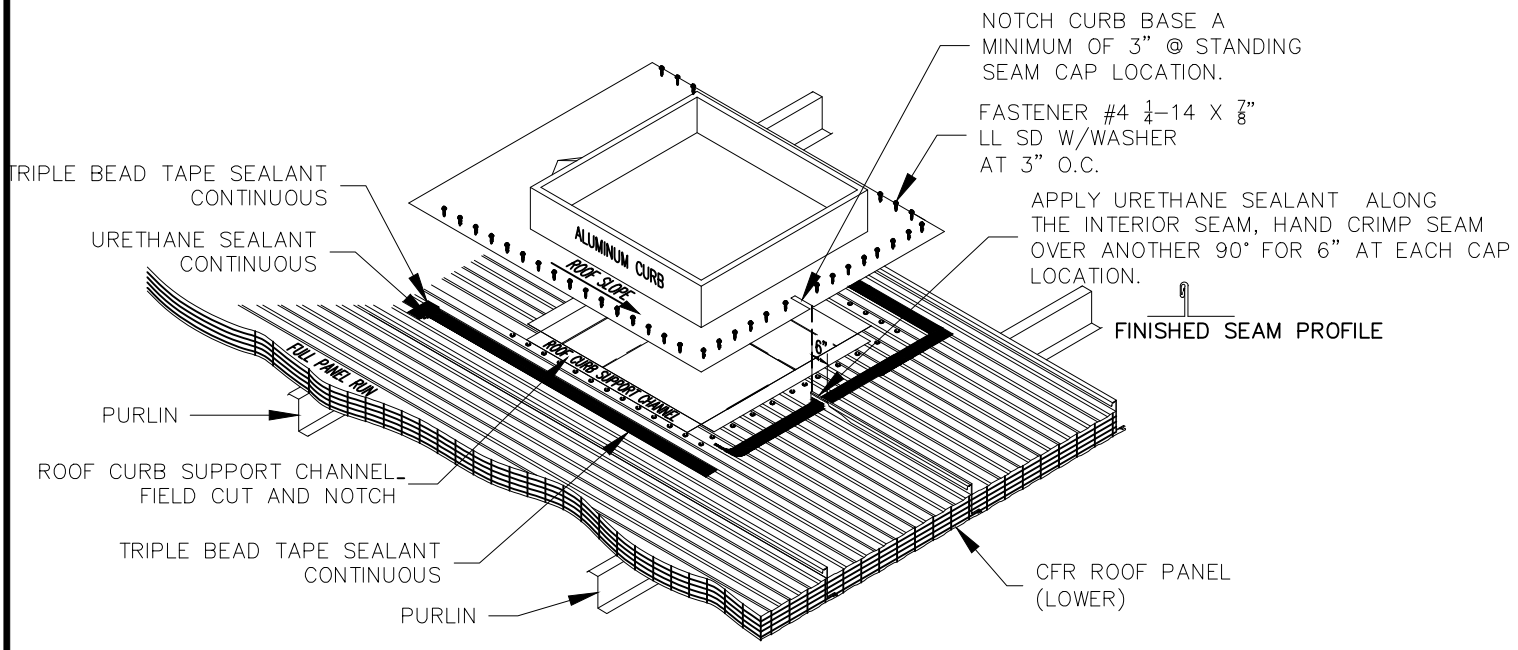
ROOF CURBS MUST BE INSTALLED AS THE ROOF PANELS ARE INSTALLED

THESE DRAWINGS ARE FOR CONCEPTUAL PURPOSES ONLY. INDIVIDUAL DETAILS MAY VARY. REFERENCE SHOP DRAWINGS AND/OR DESIGN INSTALLATIONS MANUAL.



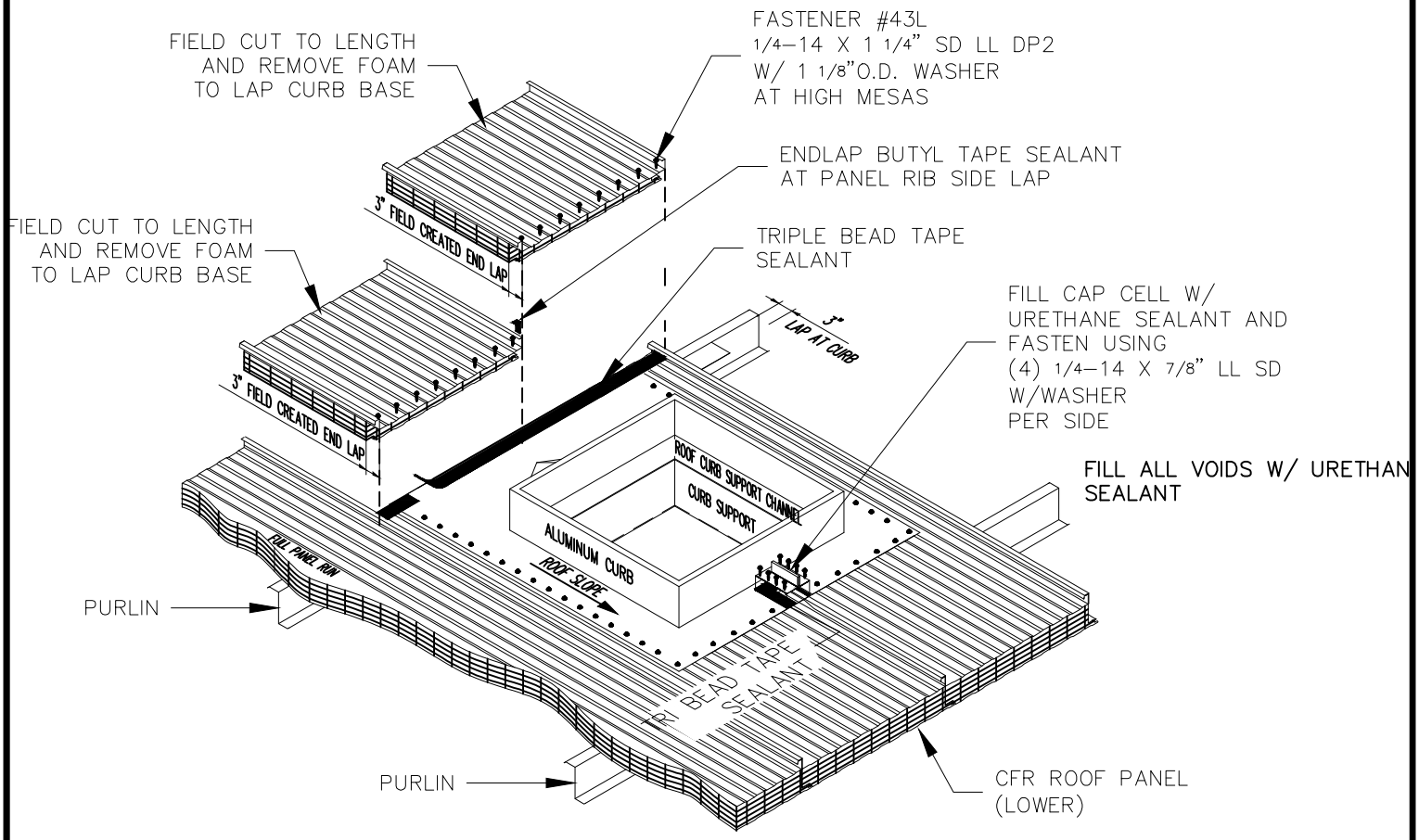
STEP 2

COMMERCIAL & INDUSTRIAL	ROOF CURB INSTALLATION 01 – 2 OF 5	CI–CFR–RC–04 DATE: Aug '19



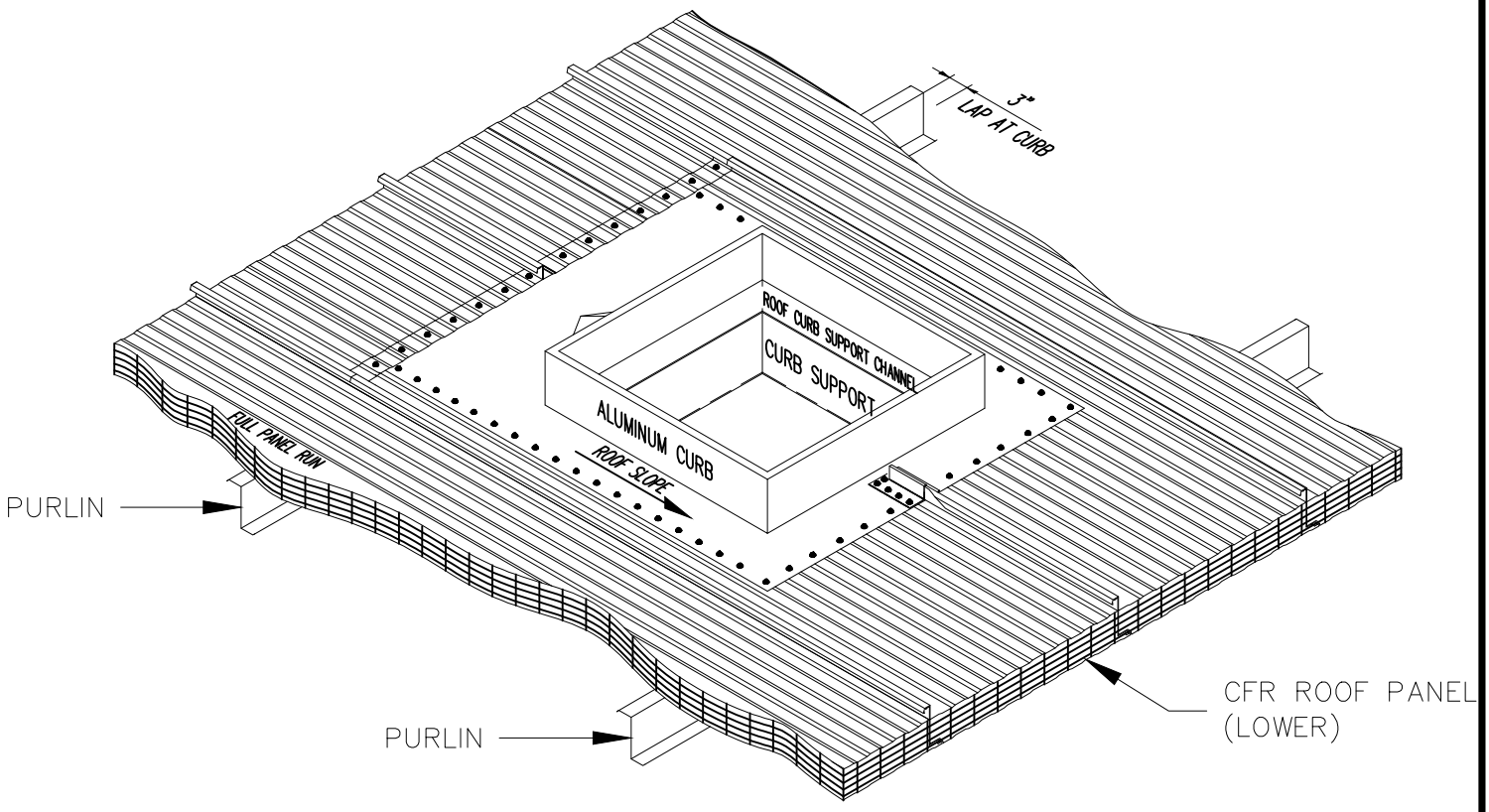
STEP 3

COMMERCIAL & INDUSTRIAL	ROOF CURB INSTALLATION 01 – 3 OF 5	CI–CFR–RC–05 DATE: Aug '19



STEP 4

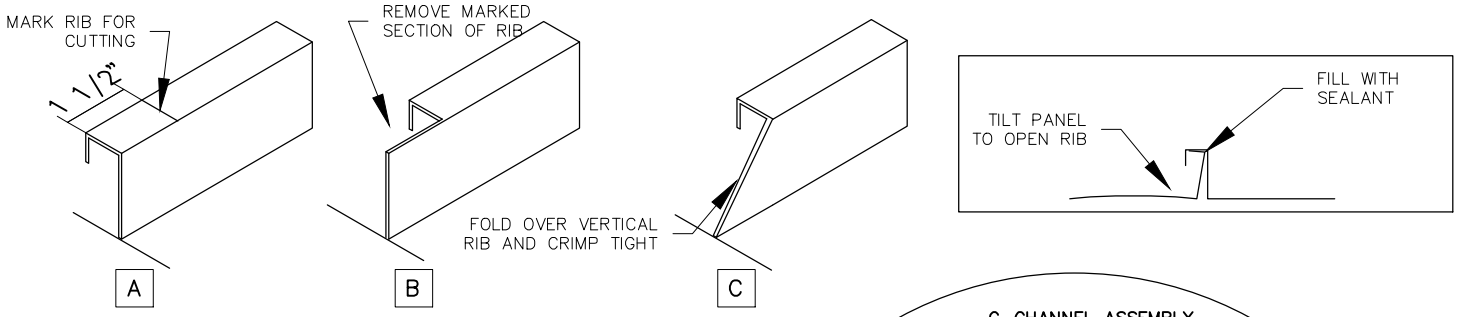
COMMERCIAL & INDUSTRIAL	ROOF CURB INSTALLATION 01 – 4 OF 5	CI–CFR–RC–06 DATE: Aug '19

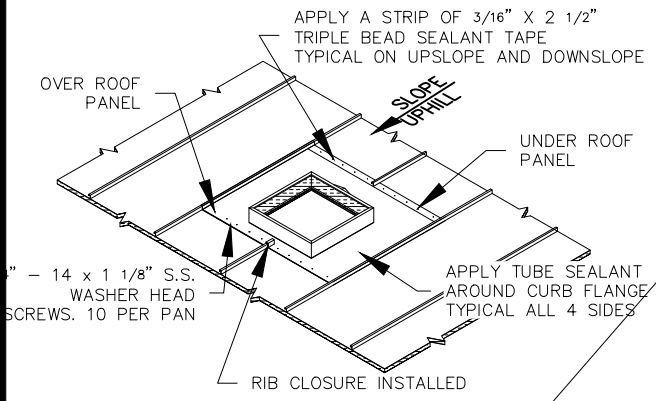


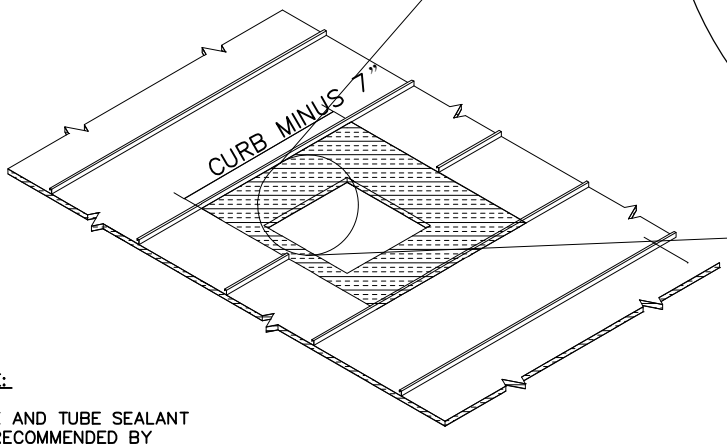
STEP 5

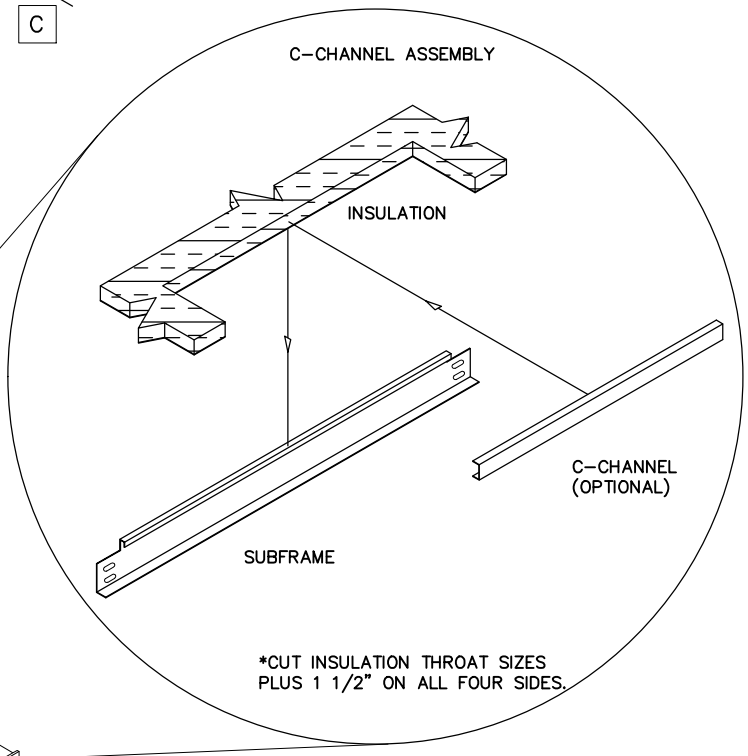
COMMERCIAL & INDUSTRIAL	ROOF CURB INSTALLATION 01 – 5 OF 5	CI–CFR–RC–07 DATE: Aug '19

ROOF CURB INSTALLATION PROCEDURES FOR STANDING SEAM ROOF PANEL







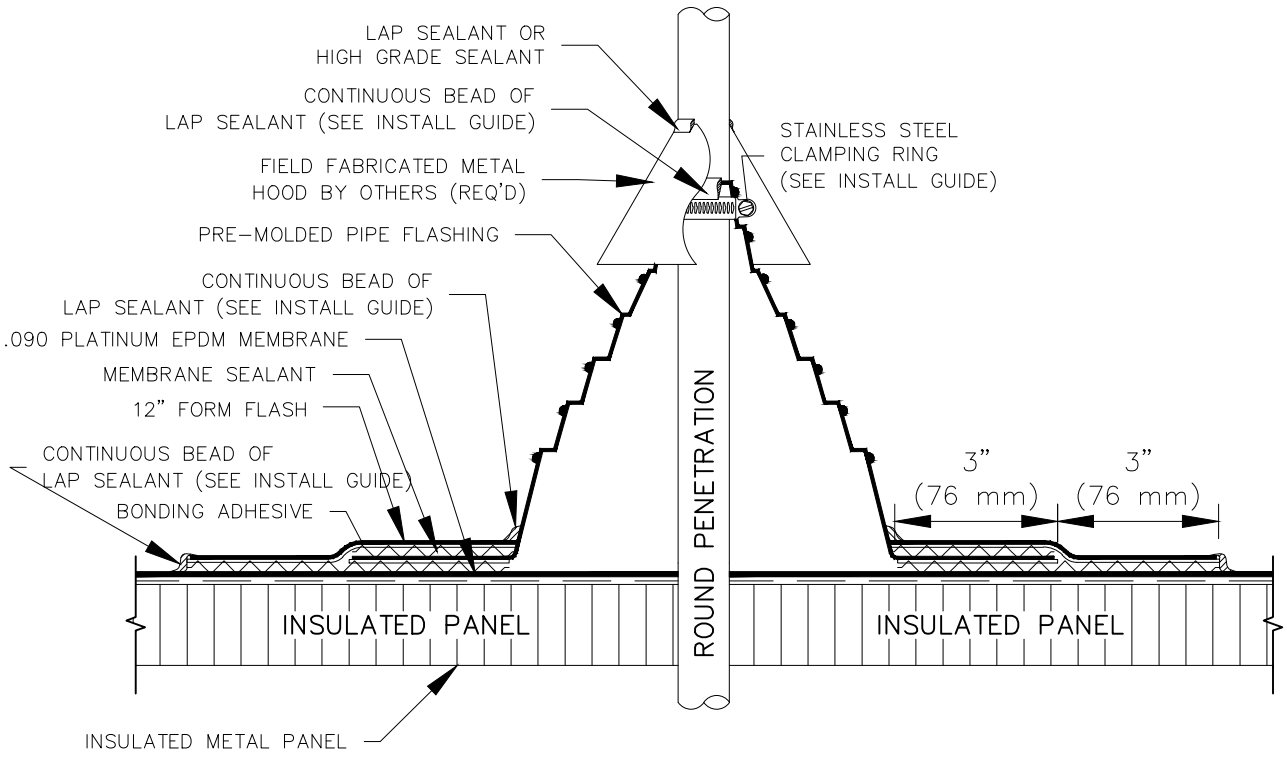


NOTE:

TAPE AND TUBE SEALANT AS RECOMMENDED BY BUILDING MANUFACTURER

ROOF CURB INSTALLATION INSTRUCTIONS:

1. ON FULLY SHEETED ROOF, SET CURB IN PLACE. CURB BASE FLANGE WILL GO TO NEAREST HIGH AT A SEAM (MINIMUM 6" CLEARANCE).
2. MARK BASE FLANGE LOCATIONS AND THROAT AREA. DO NOT USE LEAD PENCIL.
3. LOCATE AND MARK ROOF OPENING CUT LINE. ALLOW FOR 3" PANEL LAP ON UPSLOPE. ALLOW FOR 4" RIB CLOSURE DOWNSLOPE (LENGTH OF CURB MINUS 7").
4. IF C–CHANNEL SUPPORT IS REQUIRED, SEE DETAIL OF C–CHANNEL ASSEMBLY. POSITION UNDER VERTICAL PART OF CURB, EDGE OF SUB–FRAME, AND C–CHANNEL.
5. LAYOUT THROAT OPENING CUT LINE AND CUT THROUGH EXTERIOR PANEL, INSULATION AND INTERIOR PANEL AND ACCORDING TO BUILDING MANUFACTURER'S RECOMMENDATIONS.
6. LAYOUT ROOF PANEL CUT LINE AND CUT THROUGH EXTERIOR PANEL ONLY. REMOVE EXTERIOR PANEL LEAVING THE INSULATION FACE SHOWING.
7. REMOVE CUT PANELS FROM ROOF OPENING AND CLEAN UP ALL METAL SHAVINGS AND DEBRIS.
8. NO SCREWS REQUIRED IN THE C–CHANNEL. IT WILL BE SECURED WHEN CURB IS FASTENED DOWN.
9. APPLY A STRIP OF SEALANT TAPE ON UPPER SIDE OF UPHILL BASE FLANGE. ON DOWNHILL BASE FLANGE, APPLY SEALANT TAPE TO BOTTOM (UNDERNEATH) SIDE OF BASE FLANGE.
10. GENEROUSLY CAULK SEAM WHERE CURB BASE BUTTS TO ROOF PANEL.

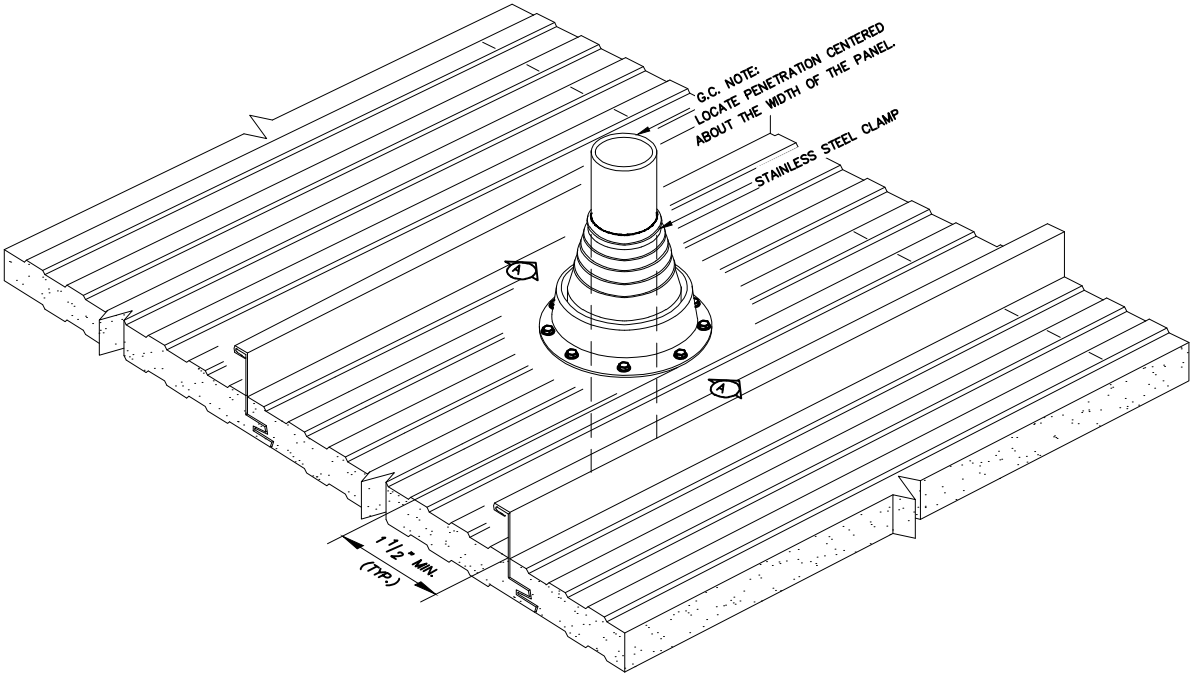


) RECOMMENDED SCREWS PER PANEL, UPHILL AND DOWNHILL IN CURB BASE FLANGE.
CLEAN UP INSTALLATION DEBRIS BEFORE LEAVING AREA.

COMMERCIAL & INDUSTRIAL	ROOF PENETRATION– PIPE BOOT DETAIL	CI–CFR–PB–01
		DATE: Aug '19

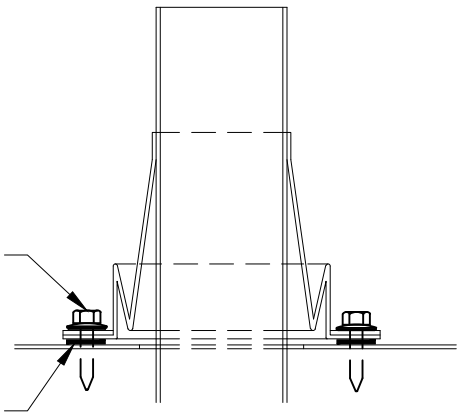
NOTE:

FOR ROOF PITCHES GREATER THAN 4:12
CONSIDER USING NEXT LARGER SIZE BOOT.
(DO NOT INSTALL OVER PANEL RIBS)



STEPS FOR INSTALLING PIPE BOOT FLASHING:

1.) CUT PIPE BOOT TO PIPE DIAMETER MARKED ON THE CONE (INCHES AND MILLIMETERS). ALLOW 1/2" [13] STRAIGHT COLLAR AGAINST THE PIPE FOR MAXIMUM SEALING.
2.) CLEAN AREA FLASHING IS TO BE INSTALLED AGAINST THE PANEL THOROUGHLY.
3.) SLIDE BOOT OVER PIPE TO BE FLASHED.
4.) APPLY A 3/8"[10]ø BEAD OF POLYURETHANE TO THE UNDER SIDE OF THE RIBBED ALUMINUM BASE.
5.) PRESS FLASHING TO CONTOURS OF ROOF PANEL. A BLUNT TOOL MAY BE USED TO PRESS BOOT INTO PLACE IN SHARPLY ANGLED AREAS.
6.) FASTEN FLASHING AS DESCRIBED IN DETAIL. WHILE FASTENING INSPECT BASE FOR GAPS BETWEEN THE PIPE BOOT BASE AND ROOF PANEL. TOOL EXCESS POLYURETHANE SEALANT INTO THE EDGE OF THE BOOT BASE.



SECTION AA

COMMERCIAL & INDUSTRIAL	ROOF PENETRATION– PIPE BOOT	CI–CFR–PB–02
		DATE: Aug '19