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
CI-CFR-AT-01 INTERMEDIATE ATTACHMENT
CI-CFR-EL-01 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-G1 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-G4 LOW EAVE STANDARD GUTTER HANGAR
CI-CFR-EV-02 HIGH EAVE
CI-CFR-RK-01 RAKE WITH HIGH PROFILE TRIM
CI-CFR-RG-01 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-02 TRANSITION STACK JOINT TO ROOF RAKE
CI-CFR-TR-03 TRANSITION CONTINUOUS WALL TO ROOK RAKE
CI-CFR-TR-04 TRANSITION WALL TO HIGH EAVE
CI-CFR-TR-05 TRANSITION STACK JOINT TO HIGH EAVE
CI-CFR-TR-06 TRANSITION CONTINUOUS WALL TO HIGH EAVE
CI-CFR-TR-07 TRANSITION MASONRY WALL TO HIGH EAVE
CI-CFR-TR-08 TRANSITION MASONRY WALL TO RAKE
CI-CFR-VL-01 VALLEY ASSEMBLY
CI-CFR-VL-02 VALLEY ROOF PLAN
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
PURLIN
(Not by Metl-Span)

1/4" HWH FASTENERS

PANEL CLIP BASE

BUTYL SEALANT

CONTINUOUS BUTYL TAPE SEALANT

OVER PANEL AND UNDER CLIP
EXTEND PAST EACH SIDE OF CLIP

ENLARGED PANEL JOINT FOR CLARITY

DIRECTION OF INSTALLATION

COMMERCIAL & INDUSTRIAL

CI-CFR-JT-01

DATE: 10-10-2018
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

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).

CI-CFR-JT-03
DATE: 10-10-2018
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
CLIP SEALANT
CFR PANEL CLIP
@ EACH PANEL SIDELAP
1/4" HWH FASTENERS

ROOF PURLINS
(NOT BY PANEL MANUFACTURER)

MINIMUM PANEL BEARING SURFACE
2 1/2"

CONTINUOUS BUTYL TAPE SEALANT
ENDLAP ATTACHMENT
COMMERCIAL & INDUSTRIAL
3" ENDLAP

JOINT TO BE CENTERED ON STRUCTURAL SUPPORT

MAX 1/8" ALLOWABLE "GAP" BETWEEN PANELS

CONTINUOUS BUTYL TAPE SEALANT

FACTORY SWAGE OVERLAP PANEL END

BUTYL TAPE SEALANT

CFR PANEL CLIP @ EACH PANEL SIDELAP

1/4" HWH FASTENERS

FASTENERS (NOT BY PANEL MANUFACTURER)

ENDLAP SUPPORT (NOT BY PANEL MANUFACTURER)

LL 1/4-14 X 1 1/4" HWH TYPE 2 SELF DRILLING SCREW W/1.125" BONDED WASHER @ EACH BACKUP PLATE

2

1 1/2"

2 1/2"
ENDLAP SUPPORT STRUCTURAL SECTION

CONTINUOUS BUTYL SEALANT

ENDLAP SUPPORT ANGLE

ENDLAP SUPPORT STRUCTURAL (SHOWN AS ROOF SUPPORT STRUCTURAL WITH SUPPORT ANGLE)

PERIMETER BUTYL SEALANT

MARRY CAULK AT INTERSECTION

RAKE ANGLE

ROOF STRUCTURAL (TYP.)

STRUCTURAL BUTT-JOINT (TYP.)

CONTINUOUS BUTYL TAPE SEALANT

CONTINUOUS BUTYL SEALANT

PANEL ALIGNMENT MARK (TYP.)

ENDLAP SUPPORT STRUCTURAL
FACTORY NOTCH
ALIGN END OF PANEL WITH CENTER OF ENDLAP SUPPORT STRUCTURAL
CONTINUOUS BUTYL TAPE SEALANT
DO NOT INSTALL PANEL CLIP AT THIS LOCATION UNTIL AFTER UPSLOPE PANEL IS INSTALLED

FACTORY NOTCH
ALIGN END OF PANEL WITH CENTER OF ENDLAP SUPPORT STRUCTURAL
CONTINUOUS BUTYL TAPE SEALANT

BUTYL TAPE SEALANT
CONTINUOUS BUTYL TAPE SEALANT

DOWN SLOPE ROOF PANEL

PANEL ALIGNMENT MARK (TYP.)

PANEL CLIP

ROOF STRUCTURAL (TYP.)

2016 Metl-Span, an NCI Building Systems company. All rights reserved.
LEADING EDGE SECTION

BUTYL TAPE SEALANT
PUSH SEALANT COMPLETELY INTO CORNERS
END OF BUTYL TAPE SEALANT (FOLD OVER PANEL EDGE)

ENDLAP BUTYL TAPE SEALANT
PUSH SEALANT COMPLETELY INTO THE CORNERS

TRAILING EDGE SECTION

BUTYL TAPE SEALANT
(ALIGN ENDLAP SEALANT WITH MARKS AND PANEL NOTCHES)

LEADING EDGE OF ROOF PANEL
NOTCH
ALIGNMENT MARK (TYP.)

TRAILING EDGE OF ROOF PANEL
NOTCH
SIDE LAP BUTYL TAPE SEALANT
PUSH SEALANT COMPLETELY INTO THE CORNERS

COMMERCIAL & INDUSTRIAL

ENDLAP LOWER PANEL
BUTYL TAPE SEALANT (2 OF 2)

CI-CFR-EL-06
DATE:
10-10-2018
ROTATE PANEL INTO POSITION

HOOK RIB OF PANEL OVER PREVIOUSLY INSTALLED PANEL

BUTT PANEL END AGAINST DOWNSLOPE PANEL NOTCH

DOWNSLOPE ROOF PANEL

BUTYL TAPE SEALANT

SPRING PANEL RIB OUTWARD TO CLEAR UPSLOPE PANEL

ENDLAP SUPPORT STRUCTURAL

ROOF STRUCTURAL (TYP.)
SINGLE ROOF PANEL LAYOUT WITH NO ENDLAPS

TWO PANEL LAYOUT WITH ENDLAPS

THREE PANEL LAYOUT WITH ENDLAPS

(*) ADD WALL PANEL THICKNESS TO PANEL LENGTH
BUTYL TAPE SEALANT @ SIDE JOINTS
LL 1/4-14 x 7/8" HWH TYPE 1, SELF DRILLING LAP SCREW W/BN WASHER @ EACH HIGH MESA

GUTTER HANGER @ EVERY PANEL SEAM
LL 1/4-14 x 7/8" HWH TYPE 1, SELF DRILLING LAP SCREW W/BN WASHER (2) PER GUTTER HANGER

LL 1/4-14 x 7/8" HWH TYPE 1, SELF DRILLING LAP SCREW W/BN WASHER (1) PER SUPPORT

1/4"-14 x 1-1/2" HWH TYPE 2, W/ WASHER @ EACH SIDE LAP

1/4" HWH FASTENERS
CONTINUOUS BUTYL SEALANT WITH MARRIAGE BEAD TO PANEL JOINT SEALANT
1/4" HWH FASTENERS
14 GA. PANEL CLIP
EAVE SUPPORT (NOT BY PANEL MANUFACTURER)

GUTTER HANGER @ EVERY PANEL SEAM
LL 1/4-14 x 7/8" HWH TYPE 1, SELF DRILLING LAP SCREW W/BN WASHER (1) PER SUPPORT

1/4"-14 x 1-1/2" HWH TYPE 2, W/ WASHER @ EACH SIDE LAP

1/4" HWH FASTENERS
CONTINUOUS BUTYL SEALANT WITH MARRIAGE BEAD TO PANEL JOINT SEALANT
1/4" HWH FASTENERS
14 GA. PANEL CLIP
EAVE SUPPORT (NOT BY PANEL MANUFACTURER)

* ADDITIONAL GUTTER SUPPORTS AT MIDPOINT BETWEEN STANDING SEAMS (CFR-42 ONLY)
GUTTER HANGER @ EVERY PANEL SEAM

1/4-14 x 1-1/2" HWH TYPE 2, W/WASHER
@ EACH SIDE LAP

GUTTER HANGER

LL 1/4-14 x 7/8" HWH TYPE 1,
SELF DRILLING LAP SCREW
W/BN WASHER
(2) PER GUTTER HANGER
@ GUTTER SUPPORT

DATE: 10-10-2018
LL 1/4-14 x 7/8" HWH TYPE 1, SELF DRILLING LAP SCREW W/BN WASHER @ 6" O.C.

BUTYL TAPE SEALANT

RIDGE CLOSURE

CLIP SEALANT

1/4" HWH FASTENERS

CONTINUOUS BUTYL SEALANT WITH MARRIAGE BEAD TO VERTICAL PANEL JOINT SEALANT

1/4" HWH FASTENERS

14 GA. PANEL CLIP

EAVE SUPPORT (NOT BY PANEL MANUFACTURER)

BUTYL TAPE SEALANT @ SIDE JOINTS

EXPANDABLE FOAM INSULATION (NOT BY PANEL MANUFACTURER)

BUTYL TAPE SEALANT

BACK-UP PLATE FACTORY INSTALLED @ EACH HIGH MESA, 4" O.C.

1/4-14 x 1-1/2" HWH TYPE 2, W/O WASHER @ EACH BACK-UP PLATE 4" O.C.

HIGH EAVE TRIM

1/4-14 x 7/8" HWH TYPE 1, SELF DRILLING LAP SCREW @ 8" O.C.

FLASHING SEALANT TAPE

FLUTE PLUG STRIP (1) PER PANEL (IF REQUIRED) SET IN URETHANE SEALANT

CORR PANEL CLIP @ EACH PANEL SIDELAP

DATE: 10-10-2018
RAKE CLOSURE

1/4-14 HWH TYPE 3, W/BN WASHER @ 12” O.C.

RAKE TRIM

BUTYL TAPE SEALANT

EXPANDABLE FOAM INSULATION (NOT BY PANEL MANUFACTURER)

FLUTE PLUG STRIP (1) PER PANEL (IF REQUIRED)
SET IN URETHANE SEALANT

1/4-14 x 7/8” HWH TYPE 1 SELF DRILLING LAP SCREW @ 8” O.C.

FLASHING SEALANT TAPE

14 GA. PANEL CLIP

CONTINUOUS BUTYL SEALANT

CONTINUOUS BUTYL SEALANT WITH MARRIAGE BEAD TO VERTICAL PANEL JOINT SEALANT

1/4” HWH FASTENERS

RAKE SUPPORT (NOT BY PANEL MANUFACTURER)

DATE: 10-10-2018
6" MINIMUM
18" MAXIMUM

EXPANDABLE FOAM INSULATION
(NOT BY PANEL MANUFACTURER)

CFR PANEL CLIP
@ EACH PANEL SIDELAP

1/4" HWH FASTENERS

CONTINUOUS BUTYL SEALANT
WITH MARRIAGE BEAD TO
PANEL JOINT SEALANT

ROOF PURLINS
(NOT BY PANEL MANUFACTURER)

BUTYL TAPE SEALANT

RIDGE CLOSURE

BUTYL TAPE SEALANT

LL 1/4-14 x 7/8" HWH TYPE 1,
SELF DRILLING LAP SCREW
W/BN WASHER
@ 6" O.C.

INTERIOR RIDGE TRIM
1/4-14 x 1-1/2" HWH TYPE 2,
W/OUT WASHER @ EACH
BACK-UP PLATE 4" O.C.

BACK-UP PLATE FACTORY
INSTALLED @ EACH HIGH
MESA, 4" O.C.

COMMERCIAL &
INDUSTRIAL

RIDGE

CI-CFR-RG-01
DATE:
10-10-2018
1. Set in continuous butyl sealant w/marriage beads to panel joint.

2. Set panels and clips.

3. Butyl tape sealant.

4. Butyl tape sealant.

5. Outside ridge trim.

6. 1/4" HWH fasteners.

7. Ridge closure.

8. Expandable foam insulation.

9. CFR clip.

10. 1/4" HWH fasteners.

11. Butyl tape sealant.

12. Inside ridge trim.

* Numbers refer to sequence of installation.
RIDGE END OF ROOF PANELS

CRIMP PANEL SEAM 18”-24” WITH MANUAL SEAMING TOOL

ROOF PANEL (TYP.)

CRIMPED SEAM (TYP.)

SEALANT ALIGNMENT MARKS (@ 3” FROM END OF PANEL, USE PANEL NOTCHES AS GUIDE)

INTERIOR RIDGE FLASHING

RIDGE STRUCTURAL

PIGTAIL SEALANT (1” STRIP OF BUTYL TAPE SEALANT)

MARRY SEALANTS

BUTYL TAPE SEALANT

COMMERCIAL & INDUSTRIAL

RIDGE CLOSURE ASSEMBLY (1 OF 2)

CI-CFR-RG-03

DATE: 10-10-2018
RIDGE FLASHING

LL 1/4-14 X 7/8" HWH TYPE 1, SELF DRILLING LAP SCREW W/BN WASHER @ 6" O.C.

INTERIOR FLASHING CLOSURE

BUTYL TAPE SEALANT

ROOF PANEL (TYP.)

START AND FINISH RIDGE FLASHING AT FACE OF RAKE CLOSURE

PIGTAIL SEALANT (3" STRIP OF BUTYL TAPE SEALANT)

RAKE CLOSURE

RAKE CLOSURE

INTERIOR FLASHING CLOSURE

BUTYL TAPE SEALANT

RIDGE CLOSURE (TYP.)

DATE: 10-10-2018
TRANSITION TRIM

1/4-14 x 7/8" HWH TYPE 1,
SELF DRILLING LAP SCREW
W/BN WASHER
@ 8" O.C.

BUTYL TAPE SEALANT

CFR RAKE CLOSURE

BUTYL TAPE SEALANT

BASE TRIM

1/8" RIVET
@ 12" O.C.

TRANSITION TRIM

CONTINUOUS BUTYL SEALANT
WITH MARRIAGE BEAD TO
VERTICAL PANEL JOINT SEALANT

BUTYL SEALANT

1/4" HWH FASTENERS

CLOSURE TRIM

FIELD CUT AND TURN UP
TOP PANEL SKIN

EXPANDABLE FOAM INSULATION
(NOT BY PANEL MANUFACTURER)

BUTYL SEALANT

ROOF/RAKE SUPPORT
(NOT BY PANEL MANUFACTURER)

1/4" HWH FASTENERS

SUPPORT
(NOT BY PANEL MANUFACTURER)

DATE: 10-10-2018
14 GA. PANEL CLIP
1/4" HWH FASTENERS
BASE TRIM
1/8" RIVET @ 12" O.C.
TRANSITION TRIM
LL 1/4-14 x 7/8" HWH TYPE 1, SELF DRILLING LAP SCREW W/BN WASHER @ 6" O.C.
BUTYL TAPE SEALANT
RIDGE CLOSURE
BUTYL TAPE SEALANT
BUTYL TAPE SEALANT
14 GA. PANEL CLIP
CONTINUOUS BUTYL SEALANT WITH MARRIAGE BEAD TO VERTICAL PANEL JOINT SEALANT
1/4" HWH FASTENERS
BUTYL SEALANT
SUPPORT REQUIRED (NOT BY PANEL MANUFACTURER)
CONTINUOUS BUTYL SEALANT WITH MARRIAGE BEAD TO VERTICAL PANEL JOINT SEALANT
EXPANDABLE FOAM INSULATION (NOT BY PANEL MANUFACTURER)
BUTYL SEALANT
ROOF/RAKE SUPPORT (NOT BY PANEL MANUFACTURER)
1/4" HWH FASTENERS
TRANSITION CONTINUOUS WALL TO ROOF RAKE

1/4-14 x 7/8" HWH TYPE 1, SELF DRILLING LAP SCREW @ 8" O.C.

LL 1/4-14 x 7/8" HWH TYPE 1, SELF DRILLING LAP SCREW W/BN WASHER @ 6" O.C.

BUTYL TAPE SEALANT

RIDGE CLOSURE

BUTYL TAPE SEALANT

COUNTER FLASHING

TRANSITION TRIM

ELASTOMERIC SEALANT

BUTYL TAPE SEALANT

CONTINUOUS BUTYL SEALANT

EXPANDABLE FOAM INSULATION (NOT BY PANEL MANUFACTURER)

BUTYL SEALANT

ROOF/RAKE SUPPORT (NOT BY PANEL MANUFACTURER)

1/4" HWH FASTENERS
BASE TRIM

1/8" Ø RIVET
@ 12" O.C.

TRANSITION TRIM

LL 1/4-14 x 7/8" HWH TYPE 1,
SELF DRILLING LAP SCREW
W/BN WASHER
@ 6" O.C.

BUTYL TAPE SEALANT

RIDGE CLOSURE

CLIP SEALANT

CFR PANEL CLIP
@ EACH PANEL SIDELAP

1/4" HWH FASTENERS

SUPPORT (NOT BY PANEL MANUFACTURER)

14 GA. PANEL CLIP

CONTINUOUS BUTYL SEALANT
WITH MARRIAGE BEAD TO
VERTICAL PANEL JOINT SEALANT

BUTYL SEALANT

1/4" HWH FASTENERS

SUPPORT REQUIRED
(NOT BY PANEL MANUFACTURER)

BUTYL TAPE SEALANT

CLOSURE TRIM

BACK-UP PLATE FACTORY
INSTALLED @ EACH HIGH
MESA, 4" O.C.

EXPANDABLE FOAM INSULATION
(NOT BY PANEL MANUFACTURER)

BUTYL TAPE SEALANT

CONTINUOUS BUTYL SEALANT
WITH MARRIAGE BEAD TO
PANEL JOINT SEALANT

1/4-14 x 1-1/2" HWH TYPE 2,
W/OUT WASHER @ EACH
BACK-UP PLATE 4" O.C.
COMMERCIAL & INDUSTRIAL

TRANSITION STACK JOINT TO HIGH EAVE

CI-CFR-TR-05

DATE: 10-10-2018
1/4-14 x 7/8" HWH TYPE 1, SELF DRILLING LAP SCREW @ 8" O.C.

LL 1/4-14 x 7/8" HWH TYPE 1, TRANSITION TRIM SELF DRILLING LAP SCREW W/BN WASHER @ 6" O.C.

BUTYL TAPE SEALANT

RIDGE CLOSURE

CLIP SEALANT

CFR PANEL CLIP @ EACH PANEL SIDELAP

1/4" HWH FASTENERS

1/4-14 x 1-1/2" HWH TYPE 2, W/O WASHER @ EACH BACK-UP PLATE 4" O.C.

1/4-14 x 7/8" HWH TYPE 1, SELF DRILLING LAP SCREW

SUPPORT (NOT BY PANEL MANUFACTURER)

COUNTER FLASHING

EXPANDABLE FOAM INSULATION (NOT BY PANEL MANUFACTURER)

BACK-UP PLATE FACTORY INSTALLED @ EACH HIGH MESA, 4" O.C.

CONTINUOUS BUTYL SEALANT WITH MARRIAGE BEAD TO PANEL JOINT SEALANT

BUTYL TAPE SEALANT

CORNER TRIM

ELASTOMERIC SEALANT

CONTINUOUS BUTYL SEALANT

BUTYL TAPE SEALANT

1/4-14 X 1/4" HWH TYPE 1, SELF DRILLING LAP SCREW W/BN WASHER @ 6" O.C.
**TRANSITION TRIM**

- EXPANDABLE FOAM INSULATION (NOT BY PANEL MANUFACTURER)
- CONTINUOUS BUTYL SEALANT WITH MARRIAGE BEAD TO PANEL JOINT SEALANT
- 1/4" x 1-1/2" HWH TYPE 2, W/OUT WASHER @ EACH BACK-UP PLATE 4" O.C.
- MASONRY FASTENER (NOT BY PANEL MANUFACTURER)

**MASONRY WALL TO HIGH EAVE**

- BUTYL TAPE SEALANT
- CLOSURE TRIM
- BACK-UP PLATE FACTORY INSTALLED @ EACH HIGH MESA, 4" O.C.
- EXPANDABLE FOAM INSULATION (NOT BY PANEL MANUFACTURER)
- BUTYL TAPE SEALANT
- CONTINUOUS BUTYL SEALANT WITH MARRIAGE BEAD TO PANEL JOINT SEALANT
- 1/4" x 1-1/2" HWH TYPE 2, W/OUT WASHER @ EACH BACK-UP PLATE 4" O.C.

**FABRICATION**

- POURABLE CAULK (NOT BY PANEL MANUFACTURER)
- FIELD CUT MASONRY, INSERT FLASHING, FILL VOID WITH SEALANT (NOT BY PANEL MANUFACTURER)
- COUNTER FLASHING

**SUPPORT (NOT BY PANEL MANUFACTURER)**

- LL 1/4-14 x 7/8" HWH TYPE 1, SELF DRILLING LAP SCREW W/BN WASHER @ 6" O.C.
- SEALANT TAPE
- CLIP SEALANT
- CFR PANEL CLIP @ EACH PANEL SIDELAP

**CLIP SEALANT**

- 1/4" HWH FASTENERS
- TRANSLATION TRIM
- RIDE CLOSURE
- SEALANT TAPE
- CLIP SEALANT
- CFR PANEL CLIP @ EACH PANEL SIDELAP

**FIELD CUT MASONRY, INSERT FLASHING, FILL VOID WITH SEALANT (NOT BY PANEL MANUFACTURER)**

- MASONRY FASTENER (NOT BY PANEL MANUFACTURER)

**DATE:** 10-10-2018
TRANSITION TRIM

LL 1/4-14 x 7/8" HWH TYPE 1, SELF DRILLING LAP SCREW W/BN WASHER @ 8" O.C.

BUTYL TAPE SEALANT

CFR RAKE CLOSURE

POURABLE CAULK (NOT BY PANEL MANUFACTURER)

FIELD CUT MASONRY, INSERT FLASHING, FILL VOID WITH SEALANT (NOT BY PANEL MANUFACTURER)

COUNTER FLASHING

BUTYL TAPE SEALANT

MASONRY FASTENER (NOT BY PANEL MANUFACTURER)

CLOSED TRIM

FIELD CUT AND TURN UP TOP PANEL SKIN

EXPANDABLE FOAM INSULATION (NOT BY PANEL MANUFACTURER)

BUTYL SEALANT

ROOF/RAKE SUPPORT (NOT BY PANEL MANUFACTURER)

1/4" HWH FASTENERS
SEQUENCE OF INSTALLATION:

1. STRUCTURAL VALLEY SUPPORT PLATE
2. CEE SHAPED SECURED TO VALLEY PLATE WITH TYPE B FASTENERS @ 12” O.C.
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
PURLIN

3" CUTBACK

GUTTERS

VALLEY SUPPORT
STEEL AND TRIM

PANEL HIGH
RIB 42" O.C.

FIELD CUTBACK
AT VALLEY CONDITION
TO MATCH FACTORY
CUTBACK AT EAVE
CONDITION
(6) FASTENER #1B 1/4-14 X 1 1/4" SD W/O WASHER FOR PURLIN OR CURB SUPPORT 14GA OR LESS.
(6) FASTENER #55 12-24 X 1 1/4" SD DP5 W/O WASHER FOR PURLIN OR CURB SUPPORT 12GA OR GREATER.

L 4 X 4 X 14GA X 6"
FIELD CUT FROM
CURB SUPPORT (8", 10" OR 12" CEE)

(6) FASTENER #1B 1/4 X 1 1/4" SD W/O WASHER FOR PURLIN OR CURB SUPPORT 14GA OR LESS.
(6) FASTENER #55 12-24 X 1 1/4" SD DP5 W/O WASHER FOR PURLIN OR CURB SUPPORT 12GA OR GREATER.

L 4 X 4 X 14GA X 6"
FIELD CUT FROM

ROOF CURB SUPPORT CHANNEL

L 4 X 4 X 14 GA. ANGLE
FIELD CUT FROM
(4) FASTENER #1B 1/4 X 1 1/4" SD W/O WASHER
AT EACH ANGLE LEG

SUB-FRAMING SUPPORT
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
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.

FIELD REMOVE PANEL RIBS TO ALLOW CURB TO SET FLAT.

URETHANE SEALANT

TRIPLE-BEAD TAPE SEALANT (CONTINUOUS)

PANCAKE HEAD FASTENER 8" O.C. INTO SUB-FRAMING. LENGTH OF FASTENER DEPENDANT ON ROOF PANEL THICKNESS.

FIELD CUT AND NOTCH

PURLIN

PANCAKE HEAD FASTENER 8" O.C. INTO SUB-FRAMING. LENGTH OF FASTENER DEPENDANT ON ROOF PANEL THICKNESS.

ENDLAP SUPPORT ANGLE UNDER CURB AREA ONLY.

TRIPLE-BEAD TAPE SEALANT (CONTINUOUS)

ROOF CURB SUPPORT CHANNEL

HAND CRIMP (9" MIN.) AND TOOL SEAM PRIOR TO PLACING CURB. SEE STEP 3 FOR ADDITIONAL CRIMP REQUIREMENTS

STEP 2
STEP 3

ALUMINUM CURB
FULL PANEL RUN
ROOF CURB SUPPORT CHANNEL
CFR ROOF PANEL (LOWER)

FASTENER #4 1/4 X 1 1/8" LL SD W/WASHER AT 3" O.C.

APPLY URETHANE SEALANT ALONG THE INTERIOR SEAM, HAND CRIMP SEAM OVER ANOTHER 90° FOR 6" AT EACH CAP CELL LOCATION.

NOTCH CURB BASE A MINIMUM OF 3" @ STANDING SEAM CAP LOCATION.

FINISHED SEAM PROFILE

TRIPLE BEAD TAPE SEALANT CONTINUOUS
URETHANE SEALANT CONTINUOUS
PURLIN
ROOF CURB SUPPORT CHANNEL FIELD CUT AND NOTCH
TRIPLE BEAD TAPE SEALANT CONTINUOUS
PURLIN

COMMERCIAL & INDUSTRIAL
ROOF CURB INSTALLATION
O1 - 3 OF 5
CI-CFR-RC-05
DATE: 10-10-2018
STEP 4

3" ALUMINUM CURB

LAP AT CURB SUPPORT

CURB SUPPORT

ROOF SLOPE

FULL PANEL RUN

ROOF CURB SUPPORT CHANNEL

TRIPLE BEAD TAPE

SEALANT

3" FIELD CREATED END LAP

FILL CAP CELL W/ URETHANE SEALANT AND FASTEN USING (4) 1/4-14 X 7/8" LL SD W/ WASHER PER SIDE

FIELD CUT TO LENGTH AND REMOVE FOAM TO LAP CURB BASE

FIELD CUT TO LENGTH AND REMOVE FOAM TO LAP CURB BASE

FASTENER #43L 1/4-14 X 1 1/4" SD LL DP2 W/ 1 3/8" O.D. WASHER AT HIGH MESAS

ENDLAP BUTYL TAPE SEALANT AT PANEL RIB SIDE LAP

TRIPLE BEAD TAPE SEALANT

FILL ALL VOIDS W/ URETHANE SEALANT

PURLIN

PURLIN

CFR ROOF PANEL (LOWER)
ROOF CURB INSTALLATION PROCEDURES FOR STANDING SEAM ROOF PANEL

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.
11. POSITION ROOF CURB OVER ROOF OPENING AND LOWER INTO PLACE, SHIFT CURB TO ALIGN WITH THROAT OPENING AND ROOF PANELS.
LAP SEALANT OR HIGH GRADE SEALANT
CONTINUOUS BEAD OF LAP SEALANT (SEE INSTALL GUIDE)
FIELD FABRICATED METAL HOOD BY OTHERS (REQ'D)
PRE-MOLDED PIPE FLASHING
CONTINUOUS BEAD OF LAP SEALANT (SEE INSTALL GUIDE)
.090 PLATINUM EPDM MEMBRANE
MEMBRANE SEALANT
12" FORM FLASH
CONTINUOUS BEAD OF LAP SEALANT (SEE INSTALL GUIDE)
BONDING ADHESIVE

STAINLESS STEEL CLAMPING RING (SEE INSTALL GUIDE)
3" (76 mm)
3" (76 mm)

INSULATED PANEL
INSULATED PANEL

CLEAN UP INSTALLATION DEBRIS BEFORE LEAVING AREA.

DATE: 10-10-2018

2016 Metl-Span, an NCI Building Systems company. All rights reserved.
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.
7.) USE 3/16" DIA. BULB-TITE RIVETS OVER NAILBASE INSULATION