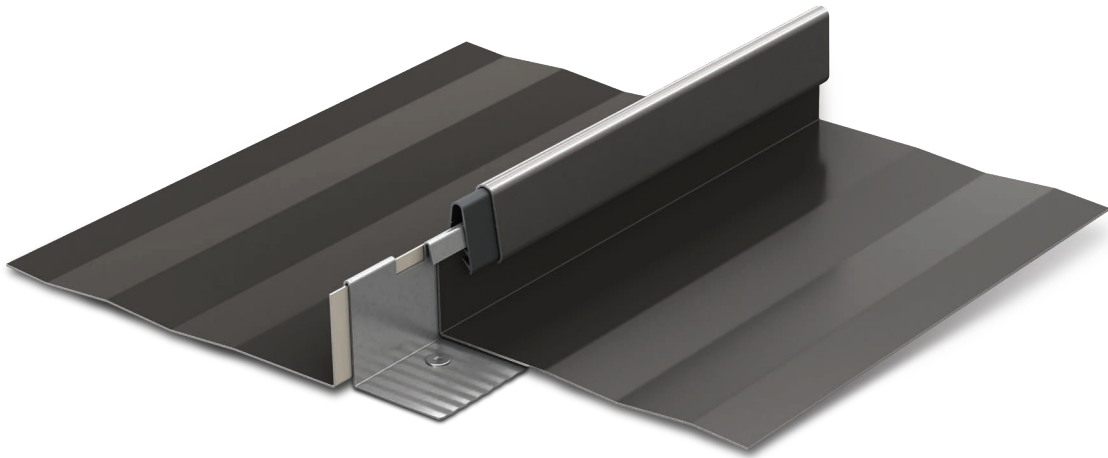


# HIGH SEAM TEE-PANEL INSTALLATION DETAILS



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- A. BERRIDGE HIGH SEAM TEE-PANEL IS AVAILABLE IN A PAN WIDTH OF 18 1/4" AND A SEAM HEIGHT OF 1" OR 1 1/2".

PANELS ARE FACTORY FABRICATED AND/OR FIELD FABRICATED USING THE BERRIDGE MODEL SS-1421 PORTABLE ROLL FORMER.

WHEN SPECIFYING COIL OR FIELD FORMED PANELS, PLEASE NOTE EACH SEAM HEIGHT REQUIRES A DIFFERENT WIDTH COIL.

PANELS MUST BE CURVED ON THE FIELD WITH THE BERRIDGE SS-1421 PORTABLE ROLL FORMER. THE MINIMUM RADIUS FOR THE 1 1/2" SEAM HEIGHT IS 8'-0" AND FOR THE 1" SEAM HEIGHT THE MINIMUM RADIUS IS 5'-0". CURVED PANELS CAN BE EITHER SMITH OR STRIATED.

FOR MULTIPLE RADIUSSES THE 1" SEAM HEIGHT CAN BE FIELD ADJUSTED REFERENCE OPERATIONS MANUAL; THE 1 1/2" SEAM HEIGHT REQUIRES PRIOR TRAINING OF FIELD PERSONAL OR FACTORY ADJUSTMENT BY BERRIDGE.

A FOLDING TEE-CLIP IS AVAILABLE FOR CURVED APPLICATIONS OF THE 1" PANEL AND 1 1/2" PANEL SEAM, REVIEW DETAIL HT-65 FOR INSTALLATION INSTRUCTIONS.

PLEASE CONTACT BERRIDGE MANUFACTURING COMPANY FOR FURTHER INFORMATION REGARDING THE BERRIDGE PORTABLE ROLL FORMER.

- B. MINIMUM SLOPE: THE HIGH SEAM TEE-PANEL IS RECOMMENDED FOR SLOPES OF 1:12 AND GREATER ON MOST AREAS OF THE COUNTRY. IN HEAVY SNOW AREAS OF AREAS WHERE FREEZE-THAW CYCLES ARE PREVALENT, A MINIMUM ROOF SLOPE OF 3:12 IS RECOMMENDED.

A DOUBLE LAYER OF NUMBER THIRTY FELT UNDERLAYMENT OR EQUAL COVERING THE ENTIRE SUBSTRATE O RECOMMENDED FOR ALL APPLICATIONS WHERE THE ROOF SLOPE IS BETWEEN 3:12 AND 1:12.

W.R. GRACE 40 MIL ICE AND WATERSHIELD OR EQUAL IS REQUIRED ON ALL CURVED INSTALLATIONS.

- C. MATERIAL STORAGE: CAUTION MUST EXERCISED IN STORAGE OF MATERIALS PRIOR TO INSTALLATION. KEEP ALL BERRIDGE PREFINISHED MATERIAL IN A DRY LOCATION WITH ADEQUATE VENTILATION AN OUT OF DIRECT SUNLIGHT.

EXPOSURE TO DIRECT SUNLIGHT AND/OR MOISTURE MAY CAUSE THE FACTORY APPLIED STRIPPABLE PLASTIC FILM TO ADHERE TO THE METAL PERMANENTLY AND DISCOLOR THE FINISH.

- D. STRIPPABLE FILM: THE STRIPPABLE PLASTIC FILM WHICH IS APPLIED OVER MOST BERRIDGE PREFINISHED PRODUCTS, PANELS, FLASHINGS, COIL AND FLAT SHEETS PROTECTS THE FINISH DURING FABRICATION AND TRANSIT. THIS FILM MUST BE REMOVED PRIOR TO INSTALLATION.



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- E. SOLID SHEATHING REQUIREMENTS: BERRIDGE MANUFACTURING COMPANY RECOMMENDS THE USES OF EITHER BERRIDGE 24 GA. CORRUGATED METAL (NOMINAL 2.67" PITCH X 7/8" DEPTH) OR A MINIMUM OF 1/2" SOLID WOOD SHEATHING TO PROVIDE SUFFICIENT HOLDING POWER FOR FASTENERS. CONTACT BERRIDGE MANUFACTURINGS' ENGINEERING DEPARTMENT FOR USE OF ANY OTHER TYPE OF SOLID SHEATHING.

DUE TO # 30 FELTS TENDENCY TO TEAR WHEN USED OVER CORRUGATED DECKING, BERRIDGE MANUFACTURING RECOMMENDS 40 MIL GRACE ICE AND WATERSHIELD OR EQUAL TO BE USED AS AN UNDERLAYMENT FOR ALL CORRUGATED DECKS.

NOTE: FOR PROJECTS REQUIRING UL 90 ASSEMBLY, REFER TO UL 90 DETAILS.

F. SHEATHING INSPECTION:

1. SHEATHING END JOINTS SHOULD BE STAGGERED.
2. ALL END JOINTS SHOULD MEET AT EITHER A JOIST OR RAFTER.
3. BLOCKING OR "H" CLIPS SHOULD BE USED ON PLYWOOD IF JOINTS DO NOT REMAIN FLAT UNDER THE WEIGHT OF WORKMEN.
4. USE SHIMS TO KEEP ENTIRE SUBSTRATE EVEN. UNEVEN SUBSTRATE WILL RESULT IN "OIL-CANNING" IN PANELS. SUBSTRATE SHOULD BE LEVEL TO 1/4" ON 20'-0".
5. ALL CUTS AT PENETRATIONS SHOULD BE TIGHT, WITHOUT GAPS.
6. USE WOOD FRAMED CRICKETS AT LARGE PENETRATIONS.
7. MAKE SURE SUBSTRATE JOINTS ARE TIGHT AT ALL HIPS, VALLEYS AND RIDGES.

G. FASCIA/RAKE INSPECTION:

1. STRIKE A LINE THE FULL LENGTH OF THE FASCIA OR RAKE. IF NOT STRAIGHT, CORRECT WITH SHIMS.
2. MAKE SURE FASCIA/RAKE IS FLUSH WITH ROOF SUBSTRATE SHEATHING.

- H. FELT UNDERLAYMENT: A SINGLE LAYER OF NUMBER THIRTY FELT UNDERLAYMENT (OR EQUAL) MUST BE APPLIED OVER SOLID SHEATHING AS SHOWN IN THE BERRIDGE MANUFACTURING COMPANY TYPICAL UNDERLAYMENT DETAILS. THE USE OF ADDITIONAL LAYERS OF NUMBER THIRTY FELT IS RECOMMENDED ON LOW-SLOPED ROOFS, AT ALL VALLEY CONDITIONS, AT ROOF PENETRATIONS AND CERTAIN OTHER FLASHING CONDITIONS AS DEPICTED IN THE HIGH SEAM TEE-PANEL TYPICAL DETAILS, GRACE ICE AND WATERSHIELD MAY BE REQUIRED ON LOW SLOPED ROOFS OR AT CERTAIN FLASHING CONDITIONS.

I. FELTING INSTALLATION:

1. DO NOT USE RED ROSIN PAPER UNDER METAL ROOFING PANELS.
2. SWEEP ROOF AREA CLEAN.
3. USE FLAT HEAD GALVANIZED ROOFING NAILS X 1-1/4" LONG WITH BERRIDGE GALVANIZED FELT CAPS.
4. INSTALL VALLEY FELT FIRST.
5. INSTALL FELT PARALLEL TO EAVE (2 LAYERS REQUIRED AT EAVE), STARTING AT EAVE AND USING MINIMUM 6" LAPS. USE TWO LAYERS OF FELT ON ENTIRE ROOF DECK IF ROOF SLOPE BETWEEN 1:12 AND 3:12. 2 LAYERS REQUIRED AT EAVE REGARDLESS OF SLOPE.
6. INSULATE BETWEEN WOOD BLOCKING AND METAL WITH FELT OR ICE AND WATER SHIELD.



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## INSTALLATION INSTRUCTIONS

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7. VERIFY CORRECT METHOD OF INSTALLING ICE AND WATERSHIELD WITH ICE AND WATERSHIELD MANUFACTURER.

- J. THERMAL MOVEMENT: EXPANSION AND CONTRACTION OF PANELS WHICH EXCEEDS THIRTY FEET IN LENGTH CAN BE A FACTOR IN THE DESIGN AND INSTALLATION OF FLASHINGS AND PANELS. PLEASE REFER TO EXPANSION CHART ON PAGE HTI-6 TO DETERMINE ANTICIPATED THERMAL MOVEMENT OF PANELS. IMPROPERLY DESIGNED FLASHING MAY CAUSE PANELS TO DISENGAGE FROM FLASHING, ALLOWING OIL-CANNING IN PANEL AND/OR CAUSE FLASHING TO WORK LOOSE FROM ITS ANCHORAGE.
- K. ELECTROLYSIS: PREVENT EXPOSURE TO WATER RUNDOWN FROM COPPER AND/OR LEAD. AVOID ALLOWING FLASHING AND PANELS TO COME INTO CONTACT WITH EITHER LEAD OR COPPER.
- L. FLASHING: IF BERRIDGE MANUFACTURING COMPANY IS TO SUPPLY FLASHINGS, ALL FLASHINGS SHALL BE FABRICATED IN 10'-0" LENGTHS WITH SQUARE END CUTS ONLY. THE PURCHASER MUST PROVIDE ALL DIMENSIONS AND DEGREE OF ANGLES.
- M. FLASHING INSTALLATION:
1. REMOVE STRIPPABLE PLASTIC FILM FROM ALL FLASHINGS PRIOR TO INSTALLATION.
  2. ALWAYS STAGGER JOINTS WHEN TWO ROWS OF FLASHING OCCUR.
  3. INSTALL ALL FLASHINGS AS PER BERRIDGE TYPICAL DETAILS
  4. ALL FLASHINGS ARE TO BE DESIGNED AND INSTALLED NOT TO TRAP WATER.

PANELS: BERRIDGE MANUFACTURING COMPANY WILL PROVIDE SQUARE END CUTS ONLY ON ALL HIGH SEAM TEE-PANELS. COMPUTATION OF ALL QUANTITIES AND DIMENSIONS ARE RESPONSIBILITY OF THE PURCHASER.

PANEL INSTALLATION:

1. REMOVE STRIPPABLE PLASTIC FILM FROM EACH PANEL PRIOR TO INSTALLATION.
2. DETERMINE CENTER LINE OF ROOF AREA AND START PANEL INSTALLATION AT THE CENTER OF THE ROOF, WORKING TOWARD THE GABLE ENDS. MAKE SURE PANELS ARE PERPENDICULAR TO EAVE. AT VALLEY AREAS, MAKE SURE PANELS ARE INSTALLED SO THAT DRAINAGE HAS FREE FLOW AND IS NOT OBSTRUCTED BY PANEL SEAMS.
3. INSTALL HIGH SEAM TEE-PANEL CLIPS AS PER BERRIDGE TYPICAL DETAILS AND TEE-CLIP INSTALLATION NOTES.
4. EACH PANEL IS TO BE KEPT TIGHT AGAINST THE LEG OF THE ADJOINING PANEL. NEVER PERMIT A GAP BETWEEN VERTICAL LEGS. ANY CRIMPS IN VERTICAL LEGS MUST BE STRAIGHTENED (TOTALLY STRAIGHT WITHOUT ANY BENDS, CRIMPS, CREASES, ETC.) PRIOR TO SEAM INSTALLATION.
5. ALWAYS INSTALL SEAM AS YOU INSTALL EACH PANEL. DO NOT INSTALL PANELS FIRST AND THEN FOLLOW LATER WITH SEAM INSTALLATION.
6. KEEP PANELS ALIGNED SO THAT SEAMS MATCH AT HIPS, VALLEYS AND WHERE VERTICAL PANELS ADJOIN ROOF PANELS. DO NOT INSTALL LONG CONTINUOUS RUNS OF PANELS ALL AT ONE TIME WHERE SEAM LINES MUST MATCH. INSTALL 10 OR 12 PANELS IN ONE ELEVATION AND THEN FOLLOW WITH A LIKE NUMBER OF PANELS ON THE OTHER



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ELEVATION. WHEN YOU INSTALL PANELS IN THIS MANNER, YOU WILL BE ABLE TO MAKE ANY ADJUSTMENTS REQUIRED TO INSURE SEAM MATCHING.

7. COPPER-COTE™, CHAMPAGNE, LEAD-COTE™ AND PREWEATHERED GALVALUME®

PANEL INSTALLATION: NOTE THE SERIES OF ARROWS PAINTED ON THE UNDERSIDE OF THE PANEL. ALL PANELS MUST BE INSTALLED IN A CONSISTENT MANNER, MEANING THAT THE ARROWS ON EVERY PANEL ARE ALL POINTING IN THE SAME DIRECTION. IF A PANEL IS REVERSED (ARROWS POINTING OPPOSITE OF THOSE ON OTHER PANELS) IT WILL APPEAR, FROM A DISTANCE, A DIFFERENT SHADE DUE TO THE GRANULAR EFFECT OF THE PIGMENTS IN THE FINISH. METALLIC FINISHES ARE MATCH - LOT FINISHES. DO NOT MIX LOTS.

P. SNAP-ON SEAM: BERRIDGE PATENTED SNAP-ON SEAMS HAVE BEEN LABORATORY TESTED ON BOTH SOLID WOOD SUBSTRATE AND METAL FRAMING, BOTH ASSEMBLIES SHOWED NO SIGNIFICANT LEAKAGE IN ACCORDANCE WITH THE ASTM E 283-84 AND ASTM E 331-86 AIR AND WATER INFILTRATION TESTS. TEST REPORTS ARE AVAILABLE UPON REQUEST.

Q. SNAP-ON SEAM INSTALLATION:

1. INSTALL SEAMS WITH HAND PRESSURE ONLY. DO NOT POUND OR HAMMER SEAMS INTO PLACE; THIS WILL DAMAGE THE SEAM AND VINYL, PERMITTING WATER INFILTRATION.
2. INSPECT EACH SEAM AS YOU INSTALL IT TO MAKE SURE THE VINYL IS PROPERLY SEATED IN THE METAL CAP AND IS SNUGLY FITTED NEXT TO THE PANEL LEGS.
3. USE TWO (2) WORKERS (OR MORE, DEPENDING ON SEAM LENGTH) TO INSTALL SEAMS; ONE WORKER (OR WORKERS) HOLDING ONE END OF THE SEAM AT AN ANGLE OFF THE ROOF SURFACE AND THE OTHER WORKER INSERTING THE SEAM OVER THE PANEL LEGS.

R. TEE-CLIP INSTALLATION:

1. THE CLIPS ARE TO BE INSTALLED AS SHOWN IN THE BERRIDGE TEE-PANEL DETAILS.
2. CLIP SPACING IS TYPICALLY TWENTY (20) INCHES ON CENTER.

S. FASTENERS: INSTALL FASTENERS AS PER TYPICAL DETAILS. USE 11\* GAUGE 1-1/4" GALVANIZED ROOFING NAILS FOR INSTALLATION OVER WOOD SHEATHING AND US #10 PANCAKE HEAD TEKS FASTENERS (ZINC-PLANTED SCREW WITH PHILLIPS INSERT, AS MADE BY CONSTRUCTION FASTENER CO.) FOR INSTALLATION TO METAL\*\* WHEN USING POP RIVETS ON FLASHING, STAINLESS STEEL RIVETS ARE RECOMMENDED TO AVOID RUST STAINS.

MAKE SURE ALL FASTENERS ARE DRIVEN STRAIGHT AND SET FLAT. DO NOT OVERDRIVE FASTENERS, AS THIS WILL CAUSE THE CLIP AND/OR FLASHINGS TO BUCKLE OR BECOME RECESSED BELOW THE ELEVATION OF THE SUBSTRATE.

\* NOTE: IF LOCAL CODES OR OTHER REGULATIONS DICTATE SPECIFIC WIND UPLIFT REQUIREMENTS, CONSULT THE BERRIDGE ENGINEERING DEPARTMENT, AS IT MAY BE NECESSARY TO USE DIFFERENT CLIP SPACING OR FASTENER.

\*\* CONSULT BERRIDGE MANUFACTURING'S ENGINEERING DEPARTMENT REGARDING THE USE OF ANY OTHER TYPE OF FASTENER.



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## INSTALLATION INSTRUCTIONS

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T. UNERWRITERS LABORATORIES RATINGS:

THE FOLLOWING UL RATINGS: THE BERRIDGE HIGH SEAM TEE-PANEL COMPLIES WITH

1. NO. 580 "TEST FOR WIND UPLIFT RESISTANCE OF ROOF ASSEMBLIES" CLASS UL 90 (REFER TO BERRIDGE TYPICAL DETAIL HT-90.91 & 92)
2. UL FIRE-RESISTANT ROOF ASSEMBLIES: UL DESIGN NUMBERS P224, P225, P227, P230, P237, P250, P259, P508, P510, P512, P514, P518, P701, P711, P713, P717, P719, P720, P722, P723, P724, P726, P731, P734, P736, P801, P803, P814, P815, P818, P819, P823 AND P824. REFER TO BERRIDGE TYPICAL DETAILS HT-92, HT-93 AND HT-94.

SEALANT RECOMMENDATIONS: TREMCO INC. SPECTREM 1 OR EQUAL  
DO NOT USE CLEAR CAULK.

\* NOTE: IF LOCAL CODES OR OTHER REGULATIONS DICTATE SPECIFIC WIND UPLIFT REQUIREMENTS, CONSULT THE BERRIDGE ENGINEERING DEPARTMENT, AS IT MAY BE NECESSARY TO USE A DIFFERENT CLIP SPACING OR FASTENER.

\*\* CONSULT THE BERRIDGE MANUFACTURING ENGINEERING DEPARTMENT REGARDING THE USE OF ANY OTHER TYPE OF FASTENER.

BERRIDGE MANUFACTURING COMPANY STRIVES TO PROVIDE ITS CUSTOMERS WITH THE HIGHEST QUALITY STRETCHER LEVELED STEEL AVAILABLE. THE LATEST TECHNOLOGY IS ALSO INCORPORATED IN BERRIDGE'S HIGH-PRECISION COIL HANDLING AND ROLL FORMING EQUIPMENT TO MINIMIZE THE STRESS ON METAL DURING PRODUCTION. FURTHERMORE, BERRIDGE UTILIZES HEAVIER 24 GAUGE METAL RATHER THAN 26 GAUGE STEEL OR LIGHT GAUGE ALUMINUM AS OFFERED BY MANY COMPETITORS. ALL THESE MEASURES HAVE BEEN TAKEN TO MINIMIZE THE AMOUNT OF "OIL-CANNING" (WAVINESS) WHICH IS NATURALLY INHERENT IN FLAT SHEET METAL. MANY TIMES, HOWEVER, THE CAUSE OF WAVINESS OR "OIL-CANNING" CAN BE TRACED TO UNEVEN SHEATHING, IMPROPER FELT INSTALLATION, IMPROPER HANDLING, OR FOOT TRAFFIC ON THE PANELS.

ALL ARCHITECTURAL PANELS REQUIRE CARE IN HANDLING AND INSTALLATION TO AVOID DAMAGING OR DEFORMING THE PANELS.

THESE INSTALLATION INSTRUCTIONS AND THE FOLLOWING TYPICAL DETAILS ARE INTENDED TO PROVIDE OUR CUSTOMERS WITH THE INFORMATION REQUIRED FOR AN AESTHETICALLY PLEASING AND FUNCTIONAL INSTALLATION OF THE BERRIDGE TEE-PANEL SYSTEM.

NOTE: ALL PRODUCTS, SPECIFICATIONS, DETAILS AND INSTRUCTIONS SUBJECT TO CHANGE WITHOUT NOTICE. FOR SPECIFIC PROJECT DETAILS, CONTACT BERRIDGE



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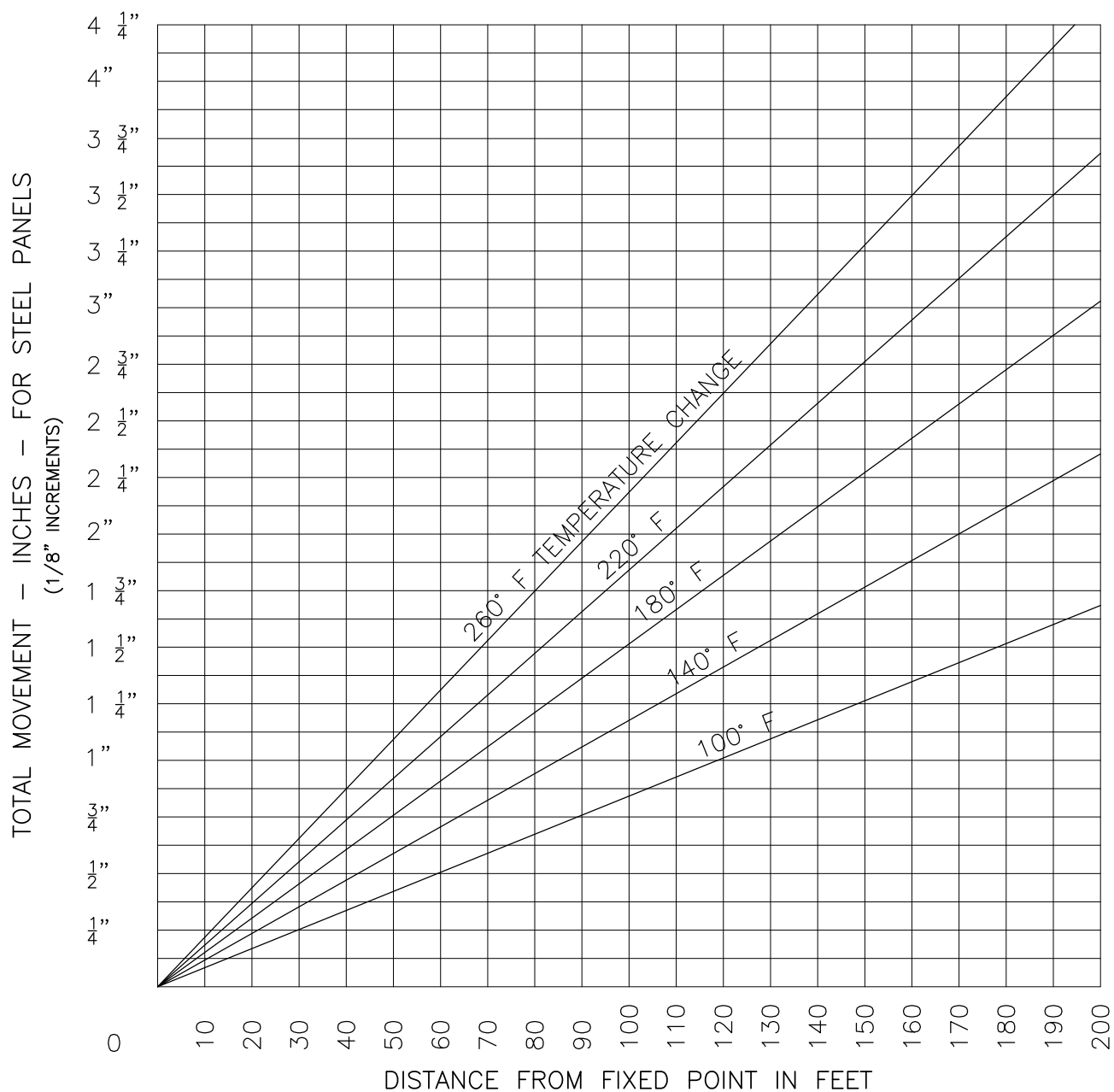
## INSTALLATION INSTRUCTIONS

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EXPANSION AND CONTRACTION OF METAL PANELS DUE TO LONGITUDINAL THERMAL MOVEMENT MUST BE CONSIDERED IN BOTH DESIGN AND INSTALLATION. THE ABOVE CHART EMPHASIZES THE NEED TO PROVIDE AMPLE CLEARANCES FROM GUTTERS, RIDGES, ENDWALL, ETC.

MAXIMUM TEMPERATURE SHOULD BE NO LOWER THAN 140°F FOR WHITE PANELS, UP TO 180° FOR DARK PAINTED PANELS, REGARDLESS OF AMBIENT MAXIMUM, MINIMUM SHOULD BE FIGURED WELL BELOW AMBIENT MINIMUM TO ALLOW FOR RADIATION TO NIGHT SKY. IN ANY CASE, A MINIMUM OF 100°F DIFFERENTIAL IS RECOMMENDED.



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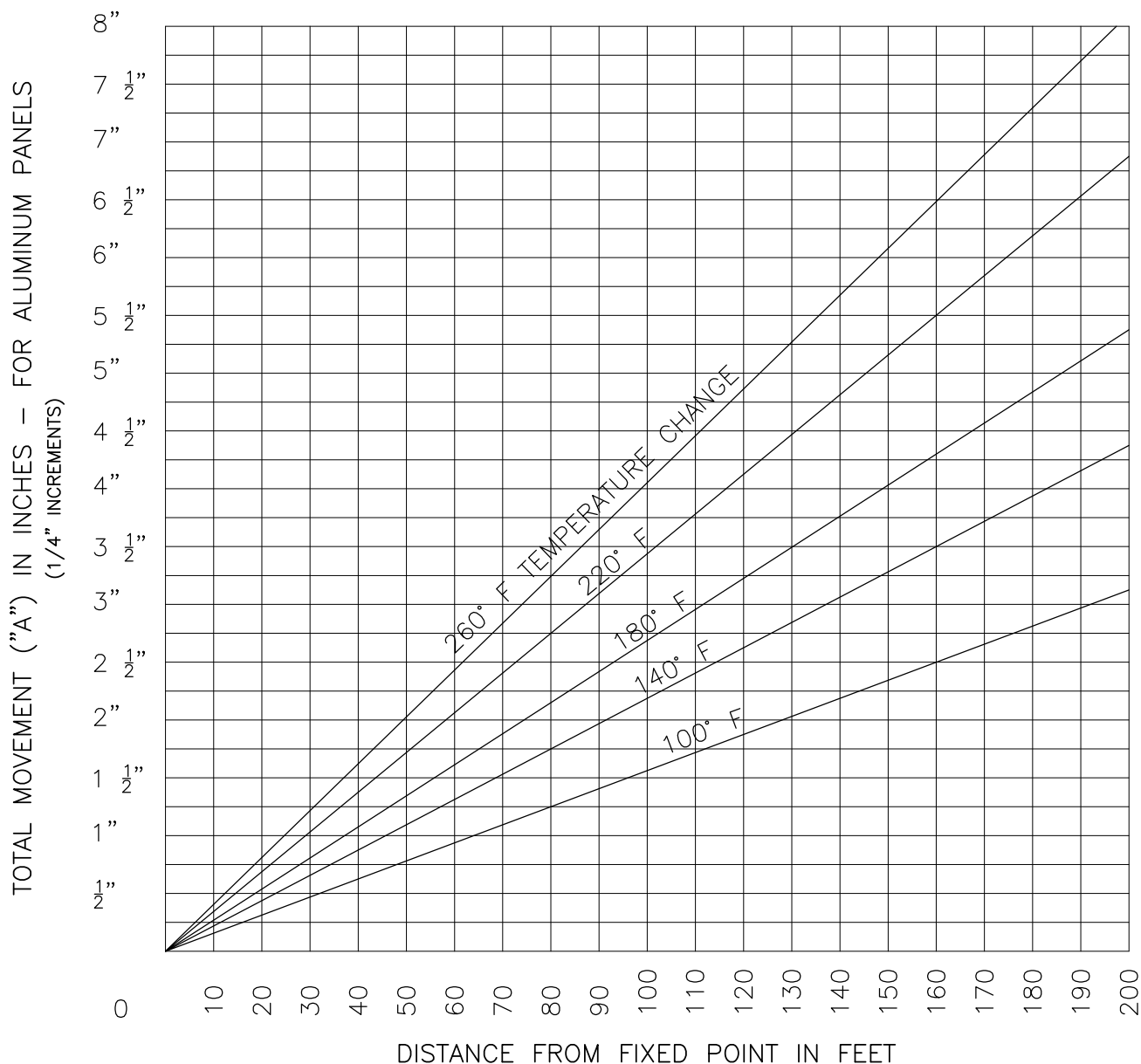
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## INSTALLATION INSTRUCTIONS NOMINAL LINEAR EXPANSION

### High Seam Tee-Panel

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EXPANSION AND CONTRACTION OF ALUMINUM PANELS DUE TO LONGITUDINAL THERMAL MOVEMENT MUST BE CONSIDERED IN BOTH DESIGN AND INSTALLATION. THE ABOVE CHART EMPHASIZES THE NEED TO PROVIDE AMPLE CLEARANCES FROM GUTTERS, RIDGES, ENDWALL, ETC.

MAXIMUM TEMPERATURE SHOULD BE NO LOWER THAN 140°F FOR WHITE PANELS, UP TO 180° FOR DARK PAINTED PANELS, REGARDLESS OF AMBIENT MAXIMUM, MINIMUM SHOULD BE FIGURED WELL BELOW AMBIENT MINIMUM TO ALLOW FOR RADIATION TO NIGHT SKY. IN ANY CASE, A MINIMUM OF 100°F DIFFERENTIAL IS RECOMMENDED.



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## INSTALLATION INSTRUCTIONS NOMINAL LINEAR EXPANSION

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THE DETAILS CONTAINED IN THE FOLLOWING PAGES ARE MERELY RECOMMENDATIONS AS TO HOW BERRIDGE MANUFACTURING MATERIALS SHOULD BE INSTALLED. THEY MAY REQUIRE ADAPTATIONS OR MODIFICATIONS FOR A SPECIFIC PROJECT AS CONDITIONS VARY IN BOTH BUILDING DESIGN AND LOCAL WEATHER PECULIARITIES.

BERRIDGE MANUFACTURING COMPANY SHALL BE HELD HARMLESS FROM ANY AND ALL CLAIMS ARISING FROM A LACK OF WATERTIGHTNESS AS A RESULT OF FOLLOWING THESE RECOMMENDED DETAILS. ENSURING WATERTIGHTNESS ON ANY GIVEN PROJECT IS THE FUNCTION OF THE INSTALLER. THE ARCHITECT/GENERAL CONTRACTOR/INSTALLER MUST ACCEPT THE RESPONSIBILITY TO ADAPT THESE DETAILS TO MEET PARTICULAR BUILDING REQUIREMENTS AND TO ASSURE ADEQUATE WATERTIGHTNESS.

THE INSTALLER CAN VIRTUALLY ASSURE WATERTIGHTNESS IF THESE FLASHING DETAILS HAVE BEEN PROPERLY ADAPTED, ADEQUATE LAPS HAVE BEEN PROVIDED, CORRECT TYPE OF SEALANT USED, ALL JOINTS ADEQUATELY CAULKED AND PROFESSIONAL WORKMANSHIP EMPLOYED.



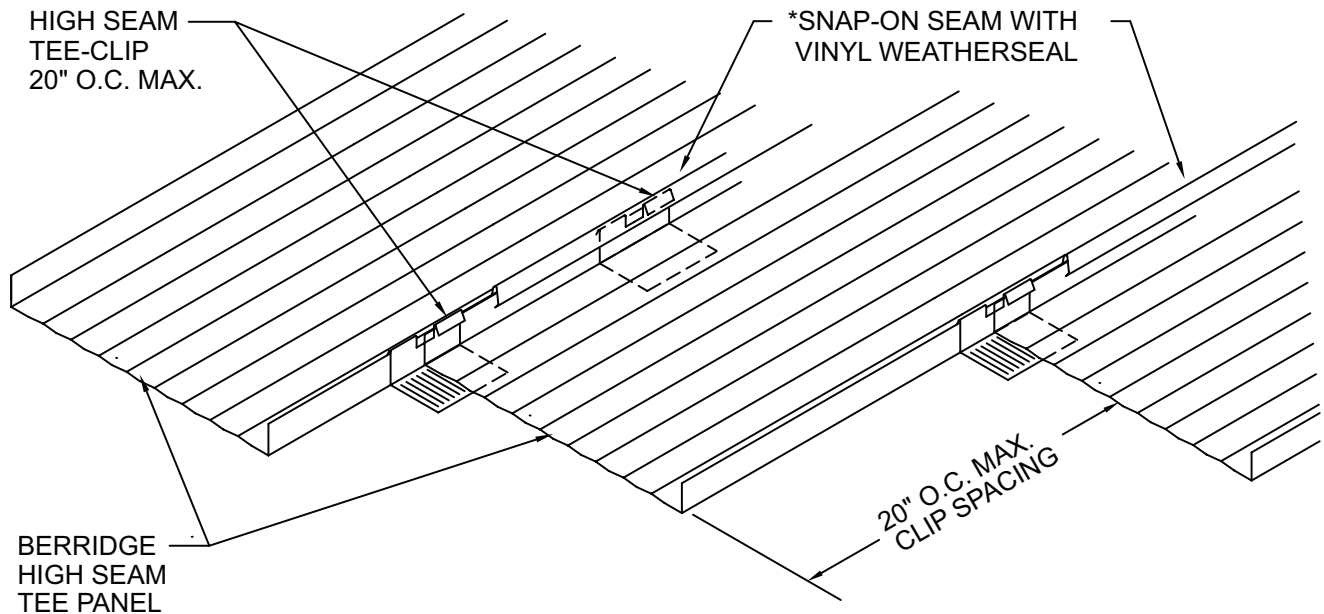
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## INTRODUCTION TO TYPICAL DETAILS

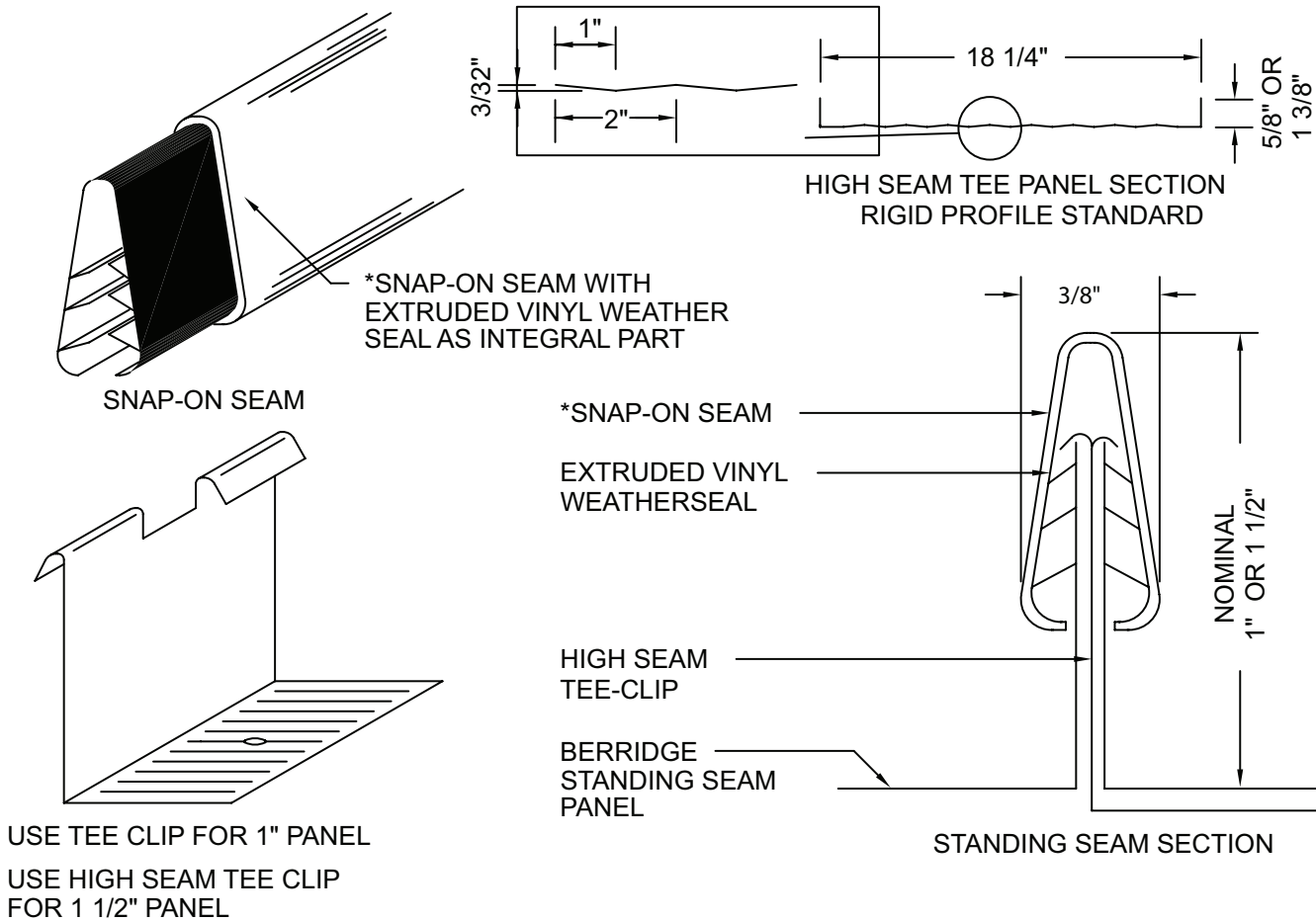
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\*SNAP-ON SEAM IS COVERED UNDER US PATENT NO. 4,641,475.



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## OVERVIEW

HIGH SEAM TEE-PANEL  
STANDING SEAM SYSTEM

# High Seam Tee-Panel

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NOTE: THIS DETAIL FOR ROOFS WITH A SLOPE  
GREATER THAN 3 ON 12

TURN DOWN UPPER PANEL AND LOCK ON TO  
CONTINUOUS CLEAT ON LOWER PANEL

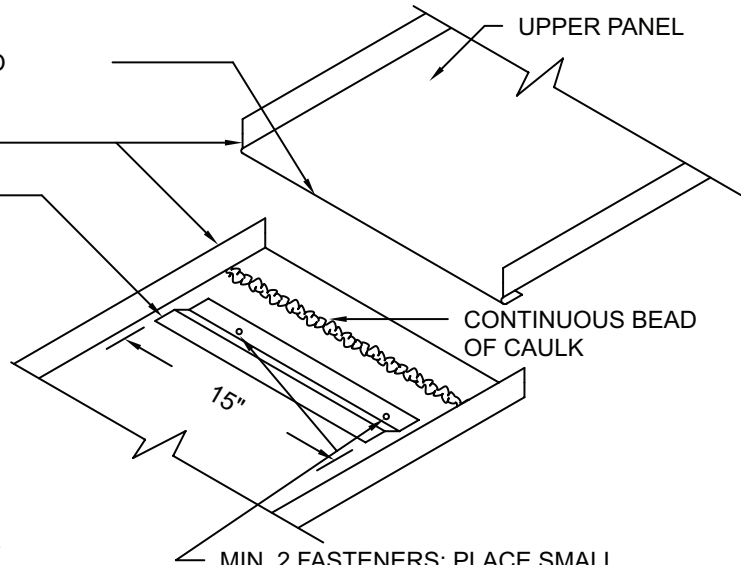
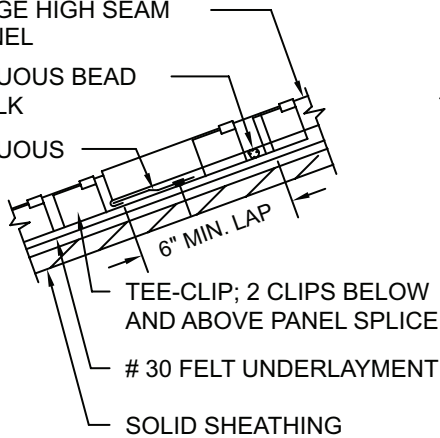
BERRIDGE HIGH SEAM TEE PANEL

CONTINUOUS CLEAT ALLOW 1 5/8"   
GAP AT ENDS NEXT TO LEGS

BERRIDGE HIGH SEAM  
TEE PANEL

CONTINUOUS BEAD  
OF CAULK

CONTINUOUS  
CLEAT



MIN. 2 FASTENERS; PLACE SMALL  
AMOUNT OF CAULK BENEATH CLEAT  
AT FASTENER LOCATION, DRIVE  
FASTENERS THROUGH CLEAT THEN  
CAULK FASTENER HEADS.

NOTE: THIS DETAIL FOR ROOFS WITH A SLOPE  
BETWEEN 1 ON 12 AND 3 ON 12

TURN DOWN UPPER PANEL AND LOCK ON TO  
CONTINUOUS CLEAT ON LOWER PANEL

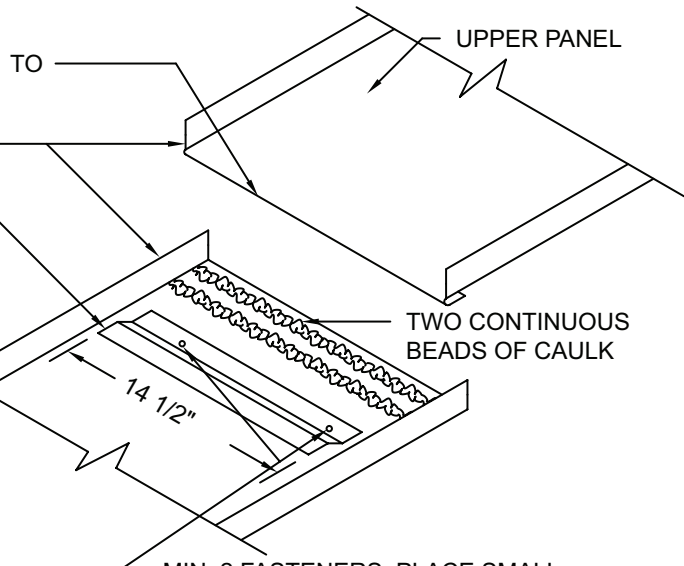
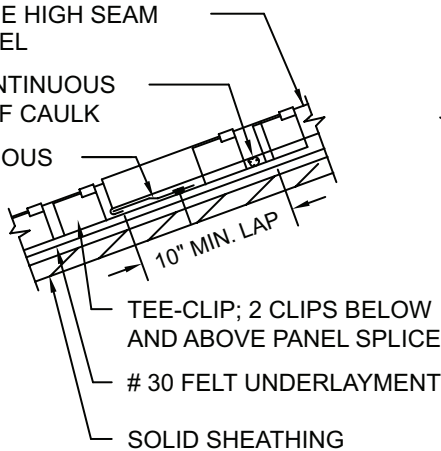
BERRIDGE HIGH SEAM TEE PANEL

CONTINUOUS CLEAT ALLOW 1 3/4"   
GAP AT ENDS NEXT TO LEGS

BERRIDGE HIGH SEAM  
TEE PANEL

TWO CONTINUOUS  
BEADS OF CAULK

CONTINUOUS  
CLEAT



MIN. 2 FASTENERS; PLACE SMALL  
AMOUNT OF CAULK BENEATH CLEAT  
AT FASTENER LOCATION, DRIVE  
FASTENERS THROUGH CLEAT THEN  
CAULK FASTENER HEADS.



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## HIGH SEAM TEE-PANEL SPLICE DETAIL

High Seam Tee-Panel

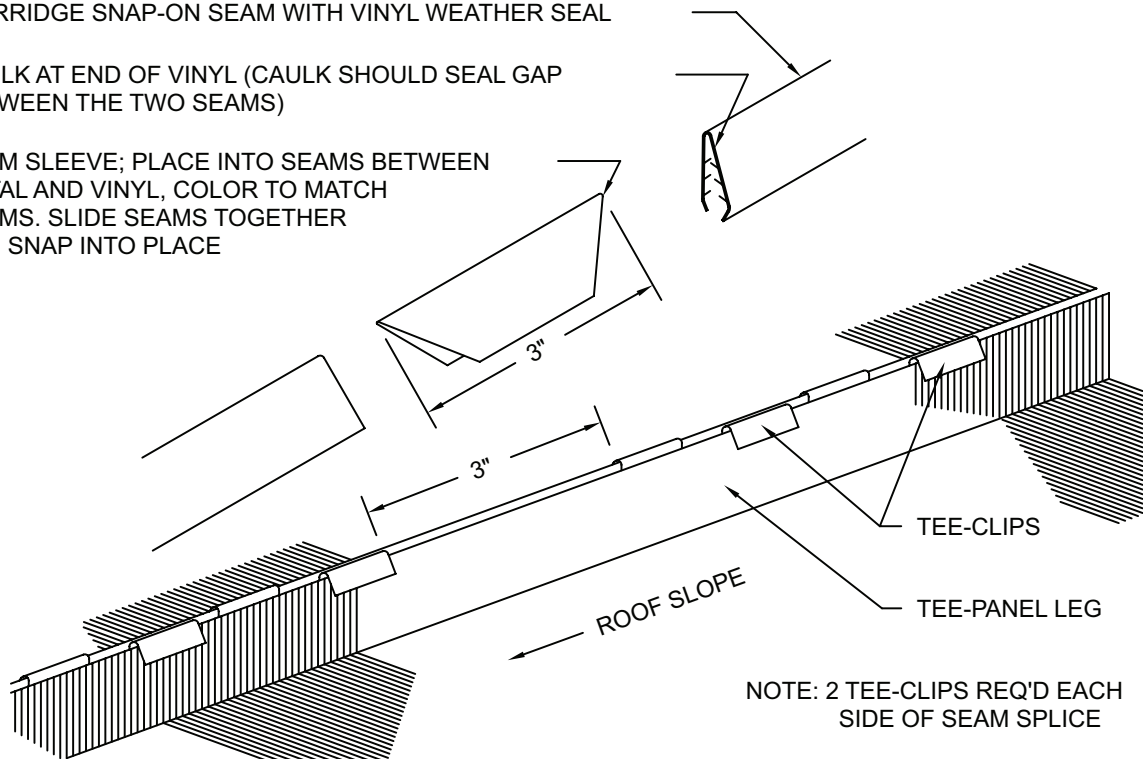
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\*BERRIDGE SNAP-ON SEAM WITH VINYL WEATHER SEAL

CAULK AT END OF VINYL (CAULK SHOULD SEAL GAP BETWEEN THE TWO SEAMS)

SEAM SLEEVE; PLACE INTO SEAMS BETWEEN METAL AND VINYL, COLOR TO MATCH SEAMS. SLIDE SEAMS TOGETHER AND SNAP INTO PLACE

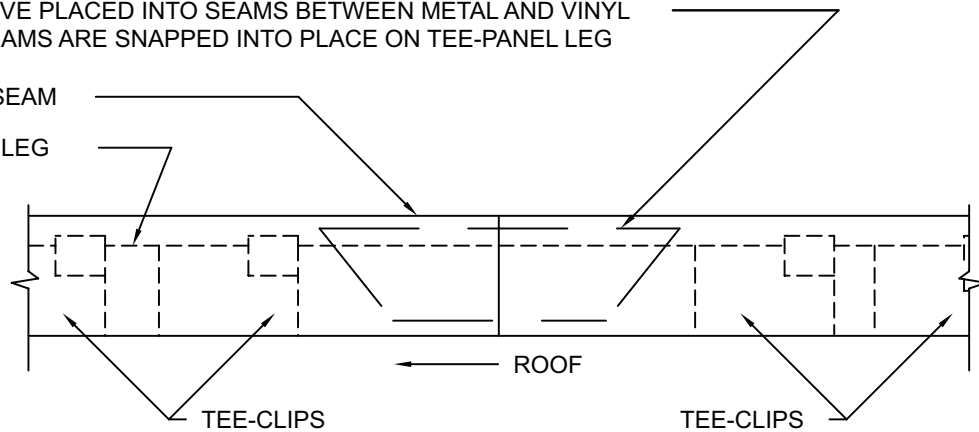


NOTE: 2 TEE-CLIPS REQ'D EACH SIDE OF SEAM SPLICE

SEAM SLEEVE PLACED INTO SEAMS BETWEEN METAL AND VINYL BEFORE SEAMS ARE SNAPPED INTO PLACE ON TEE-PANEL LEG

\*SNAP-ON SEAM

TEE-PANEL LEG



- NOTE:
- 1) SPLICES IN SEAMS AND PANELS SHOULD BE STAGGERED. NEVER SPLICE A PANEL AND A SEAM AT THE SAME LOCATION.
  - 2) TWO TEE-CLIPS REQUIRED AT EACH SIDE OF SEAM SPLICE.

\*SNAP-ON SEAM IS COVERED UNDER US PATENT NO. 4,641,475.



**BERRIDGE  
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## SEAM SPLICE DETAIL

High Seam Tee-Panel

DATE: 12-11-01

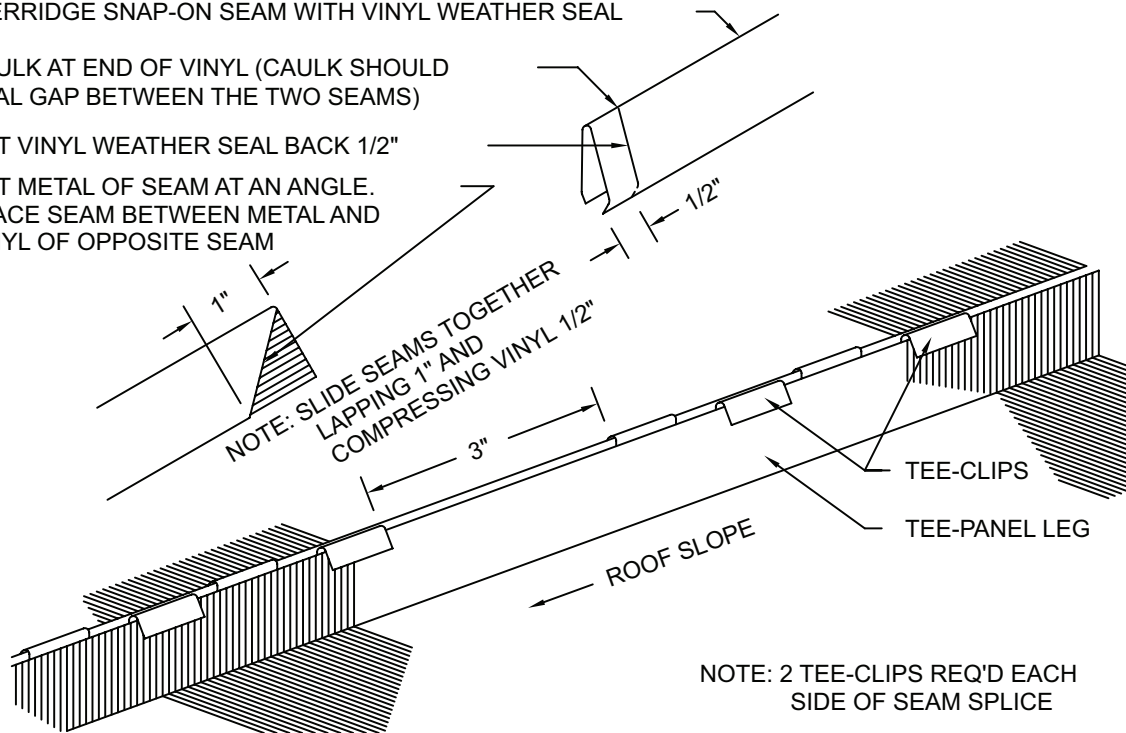
PAGE/FILE  
HT-6

**\*BERRIDGE SNAP-ON SEAM WITH VINYL WEATHER SEAL**

CAULK AT END OF VINYL (CAULK SHOULD SEAL GAP BETWEEN THE TWO SEAMS)

CUT VINYL WEATHER SEAL BACK 1/2"

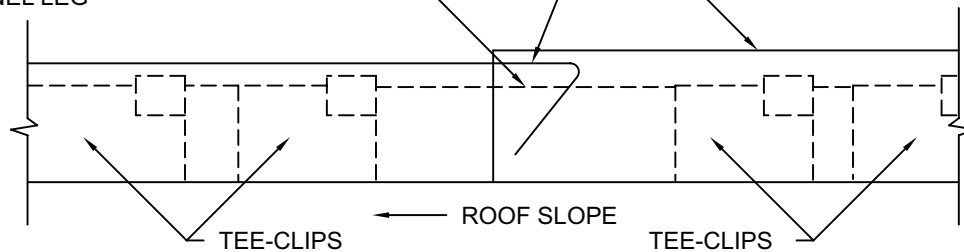
CUT METAL OF SEAM AT AN ANGLE.  
PLACE SEAM BETWEEN METAL AND VINYL OF OPPOSITE SEAM



**\*SNAP-ON SEAM**

SEAM CUT AT ANGLE AND PLACED INTO OPPOSITE SEAM BETWEEN METAL AND VINYL

TEE-PANEL LEG



NOTE: 1) SPLICES IN SEAMS AND PANELS SHOULD BE STAGGERED.  
NEVER SPLICE A PANEL AND A SEAM AT THE SAME LOCATION.

2) TWO TEE-CLIPS REQUIRED AT EACH SIDE OF SEAM SPLICE.

\*SNAP-ON SEAM IS COVERED UNDER US PATENT NO. 4,641,475.



**BERRIDGE  
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## ALTERNATE SEAM SPLICE DETAIL

High Seam Tee-Panel

DATE: 12-11-01

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HT-7

BERRIDGE HIGH SEAM TEE-PANEL

TEE-CLIPS

30# FELT UNDERLAYMENT

CONTINUOUS ZEE PURLIN

RIGID INSULATION  
MATERIAL

CORRUGATED METAL  
DECK

STRUCTURAL MEMBER

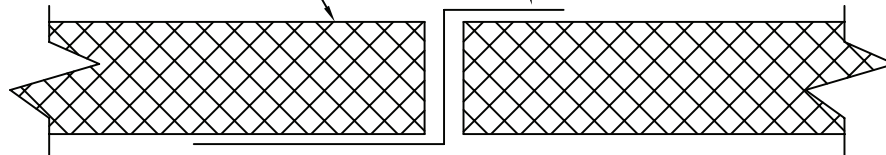
SEE ZEE PURLIN DETAIL BELOW

SEE NOTE NO. 3

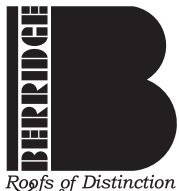
1. ALL UNDERLAYMENT, STRUCTURAL MEMBERS, CORRUGATED DECK, AND INSULATING MATERIAL, ARE ITEMS TO BE FURNISHED AND INSTALLED BY OTHERS AT THE DISCRETION OF THE ARCHITECT.
2. CONTINUOUS WOOD BLOCKING (BY OTHERS) MAY BE USED IN LIEU OF ZEE PURLINS. BLOCKING MUST BE EXACT SAME DEPTH AS INSULATION.
3. PURLIN SPACING AND FASTENER TYPE WILL BE DEPENDENT ON GOVERNING CODE AND SPECIFICATION REQUIREMENTS. CONTACT BERRIDGE FOR SPECIFIC INFORMATION.
4. RIGID INSULATION MUST HAVE ADEQUATE COMPRESSIVE STRENGTH TO SUPPORT THE WEIGHT OF A 300 POUND MAN WITHOUT CAUSING ANY DEFORMATION IN THE PANEL.
5. DEPTH OF ZEE PURLINS MUST BE GOVERNED BY INSULATION THICKNESS. ANY DEVIATION COULD BE CAUSE FOR DAMAGE TO PANELS OR LEAKS.

ZEE PURLIN; MINIMUM 24 GAUGE STEEL, DEPTH  
DETERMINED BY INSULATION DEPTH AND LEGS  
DETERMINED BY PITCH OF METAL DECK

BUTT INSULATION UP TO PURLIN



ZEE PURLIN DETAIL



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## INSULATED DECK DETAIL

### High Seam Tee-Panel

DATE: 12-11-01

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HT-8



BERRIDGE HIGH SEAM TEE PANEL LEG

TEE-CLIP; USE 2 AT EAVE

\*SNAP-ON SEAM

NOTCH LEG AND FIELD FORM  
PANEL PAN AROUND FLASHING  
GAP; SEE NOTE 4 BELOW

MAXIMUM EXPANSION OF  
PANEL + 1/2"

EAVE FLASHING, 4" END LAPS WITH  
CONTINUOUS CAULK AT LAPS

\*SNAP-ON SEAM IS COVERED UNDER  
US PATENT NO. 4,641,475.

1/2"

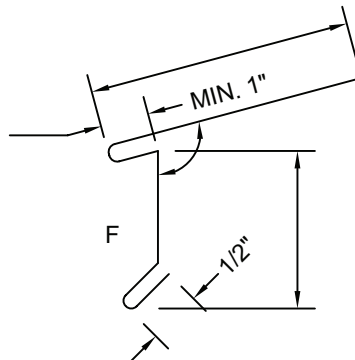
# 30 FELT  
UNDERLAYMENT

FASTENERS,  
20" O.C. MAX.

SOLID SHEATHING

1. THIS DETAIL IS RECOMMENDED FOR AREAS WITH HEAVY SNOW LOADS OR WHERE EXPANSION AND CONTRACTION OF PANELS IS A DESIGN FACTOR.
2. SOLID SHEATHING (BY OTHERS) TO BE MINIMUM 1/2" PLYWOOD OR EQUIVALENT IN STRENGTH FOR HOLDING POWER OF FASTENERS.
3. ALL FELT UNDERLAYMENT, CAULKING AND FASTENERS ARE ITEMS TO BE FURNISHED AND INSTALLED BY THE ROOFING INSTALLER AT THE DISCRETION OF THE ARCHITECT.
4. THE "GAP" BETWEEN EAVE FLASHING AND PANEL (SEE DETAIL ABOVE) CAN BE INCREASED TO ALLOW FOR LINEAR EXPANSION AND CONTRACTION OF PANELS. NOTE 1/2" OF PANEL PAN MUST BE ENGAGED WITH EAVE FLASHING WHEN PANEL HAS EXPANDED TO ITS MAXIMUM LENGTH. REFER TO DETAIL HTI-6.
5. GAP BETWEEN EAVE FLASHING AND PANEL MUST BE ADJUSTED TO SUIT TEMPERATURE DURING INSTALLATION.

MAXIMUM EXPANSION OF  
PANEL + 1/2"



F = FINISH SIDE

EAVE FLASHING



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## EAVE DETAIL

High Seam Tee-Panel

DATE: 12-11-01

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HT-10

BERRIDGE HIGH SEAM TEE PANEL LEG

\*SNAP-ON SEAM

TEE CLIP; USE 2 AT EAVE

FASTENERS; 20" O.C. MAX.

SOLID SHEATHING

EAVE FLASHING; 4" END LAPS WITH  
CONTINUOUS CAULK AT LAPS

CHANNEL (COLOR IN)

FIELD CUT AND FORM PANEL PAN  
AROUND EAVE FLASHING

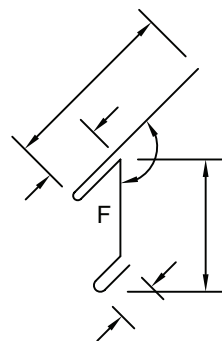
FASTENERS; 20" O.C. MAX.

BERRIDGE FASCIA PANEL

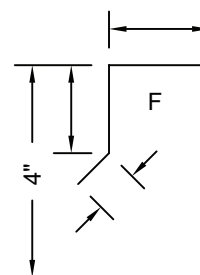
# 30 FELT  
UNDERLAYMENT

\*SNAP-ON SEAM IS COVERED UNDER US PATENT NO. 4,641,475.

1. AS ROOF PANELS ARE INSTALLED, SNIP APPROXIMATELY 3/8" SECTION FROM EACH PANEL LEG AT EAVE, AND FORM PANEL PAN AROUND EAVE FLASHING.
2. SOLID SHEATHING (BY OTHERS) TO BE MINIMUM 1/2" PLYWOOD OR EQUIVALENT IN STRENGTH FOR HOLDING POWER OF FASTENERS.
3. ALL FELT UNDERLAYMENT, CAULKING, AND FASTENERS, ARE ITEMS TO BE FURNISHED AND INSTALLED BY THE ROOFING INSTALLER AT THE DISCRETION OF THE ARCHITECT.



EAVE FLASHING



CHANNEL

F = FINISH SIDE



**BERRIDGE  
MANUFACTURING  
COMPANY**

## EAVE DETAIL

High Seam Tee-Panel

DATE: 12-11-01

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HT-11

BERRIDGE HIGH SEAM TEE PANEL LEG

\*SNAP-ON SEAM

TEE-CLIP; USE 2 AT EAVE

DRIP FLASHING; 4" END LAP WITH  
CONTINUOUS CAULK AT LAPS

# 30 FELT UNDERLAYMENT

FIELD CUT AND FORM  
PANEL PAN AROUND  
EAVE FLASHING SEE ALSO  
DETAIL HT-11

SPECIAL ZEE CLOSURE;  
CUT TO FIT BETWEEN  
PANEL SEAMS

POP RIVET; 40" O.C. MAX.

BERRIDGE HIGH SEAM TEE PANEL  
TEE-CLIP

SOLID SHEATHING

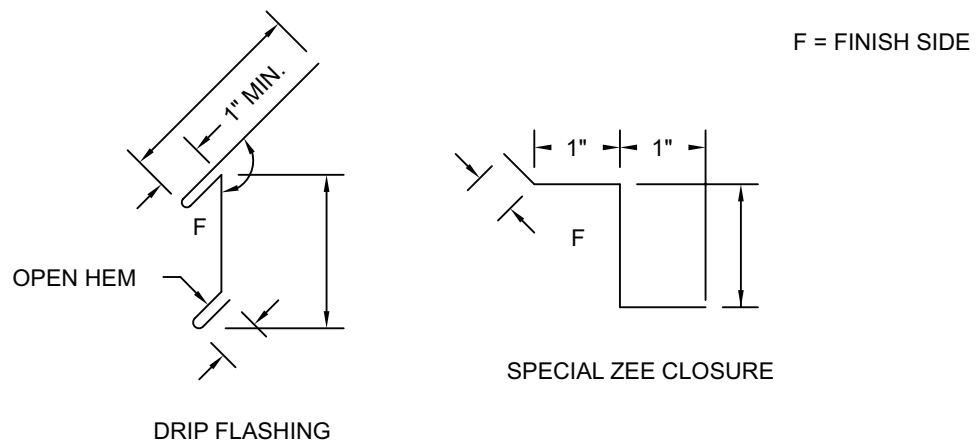
FASTENERS;  
20" O.C. MAX.

FASTENERS; 3 PER  
ZEE CLOSURE MIN.

CONTINUOUS CAULK  
BETWEEN ZEE  
CLOSURE, TEE-PANEL  
AND SEAM

\*SNAP-ON SEAM IS COVERED UNDER US PATENT NO. 4,641,475.

1. AS ROOF PANELS ARE INSTALLED, SNIP A SECTION FROM EACH PANEL LEG AT EAVE AND FORM THE PAN AROUND THE DRIP FLASHING.
2. SOLID SHEATHING (BY OTHERS) TO BE MINIMUM 1/2" PLYWOOD OR EQUIVALENT IN STRENGTH FOR HOLDING POWER OF FASTENERS.
3. ALL FELT UNDERLAYMENT, CAULKING, AND FASTENERS, ARE ITEMS TO BE FURNISHED AND INSTALLED BY THE ROOFING INSTALLER AT THE DISCRETION OF THE ARCHITECT.



**BERRIDGE  
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COMPANY**

## EAVE DETAIL

High Seam Tee-Panel

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HT-12

RIDGE/HIP CAP; 4" END LAPS WITH  
CONTINUOUS CAULK AT LAPS.  
POP RIVET TO ZEE CLOSURE  
40" O.C. MAX.

BERRIDGE HIGH SEAM TEE PANEL LEG

\*SNAP-ON SEAM

TEE-CLIPS;  
20" O.C. MAX.

ZEE CLOSURE (CUT TO  
FIT BETWEEN SEAMS)

FASTENERS; MIN. 3 PER  
ZEE CLOSURE

CONTINUOUS BEAD OF CAULK  
BETWEEN ZEE CLOSURE,  
TEE-PANEL AND SEAM

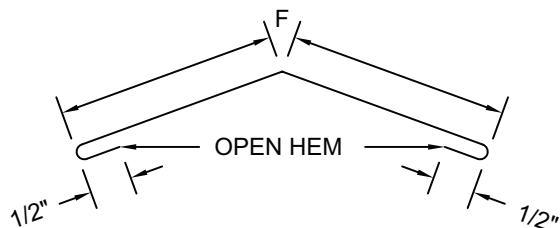
CAULK RIVET HEADS

# 30 FELT UNDERLAYMENT  
SOLID SHEATHING

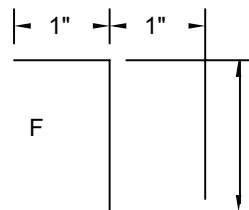
\*SNAP-ON SEAM IS COVERED UNDER US PATENT NO. 4,641,475.

1. FIELD CUT ZEE CLOSURES TO FIT BETWEEN SEAMS.
2. SOLID SHEATHING (BY OTHERS) TO BE MINIMUM 1/2" PLYWOOD OR EQUIVALENT IN STRENGTH FOR HOLDING POWER OF FASTENERS.
3. ALL FELTING UNDERLAYMENT, CAULKING, AND FASTENERS, ARE ITEMS TO BE FURNISHED AND INSTALLED BY THE ROOFING INSTALLER AT THE DISCRETION OF THE ARCHITECT.

F = FINISH SIDE



RIDGE/HIP CAP



ZEE CLOSURE



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## RIDGE AND HIP DETAIL

### High Seam Tee-Panel

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HT-20

RIDGE CAP; 4" END LAPS WITH CONTINUOUS CAULK AT LAPS, POP RIVET TO ZEE CLOSURE AT 40" O.C. MAX. CAULK RIVET HEADS

BERRIDGE HIGH SEAM TEE PANEL LEG

\*SNAP-ON SEAM

ZEE CLOSURE  
(CUT TO FIT BETWEEN SEAMS)

TEE-CLIP; 20" O.C. MAX.

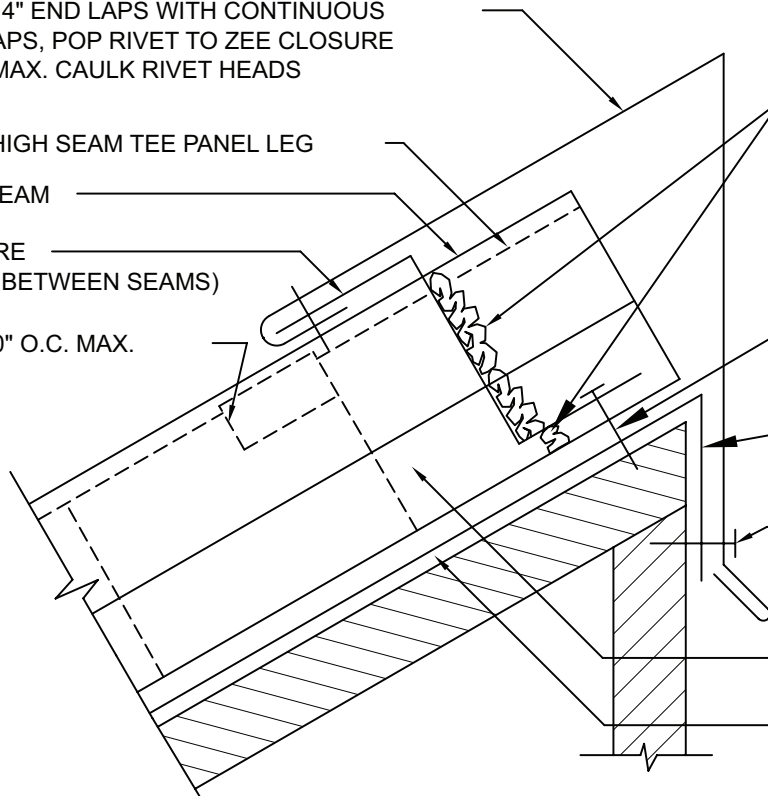
CONTINUOUS BEAD OF CAULK BETWEEN ZEE CLOSURE, TEE-PANEL AND SEAM

FASTENERS; MIN. 3 PER ZEE CLOSURE

LAP FELT OVER RIDGE

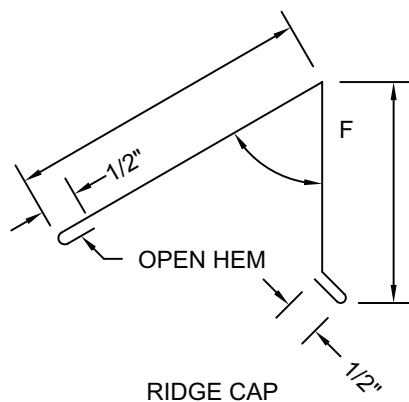
FASTENERS; 20" O.C. MAX. CAULK FASTENER HEAD

# 30 FELT UNDERLAYMENT  
SOLID SHEATHING

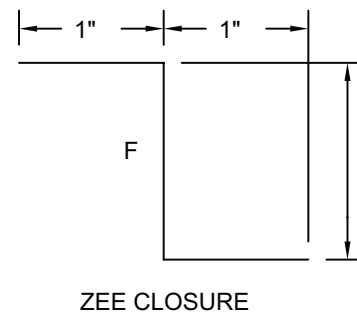


\*SNAP-ON SEAM IS COVERED UNDER US PATENT NO. 4,641,475.

1. FIELD CUT ZEE CLOSURE TO FIT BETWEEN SEAMS.
2. SOLID SHEATHING (BY OTHERS) TO BE MINIMUM 1/2" PLYWOOD OR EQUIVALENT IN STRENGTH FOR HOLDING POWER OF FASTENERS.
3. ALL FELT UNDERLAYMENT, CAULKING, AND FASTENERS, ARE ITEMS TO BE FURNISHED AND INSTALLED BY THE ROOFING INSTALLER AT THE DISCRETION OF THE ARCHITECT.



F = FINISH SIDE



ZEE CLOSURE



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## SHED ROOF RIDGE CAP DETAIL

High Seam Tee-Panel

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HT-21

## SECTION VIEW

FIELD FORM END OF RIDGE FLASHING  
AND EXTEND UNDER CONTINUOUS CLEAT

RIDGE FLASHING; 4" END LAPS  
WITH CONTINUOUS CAULK AT LAPS

FIELD TAPERED ZEE CLOSURE  
WITH CONTINUOUS CAULK UNDER  
ZEE CLOSURE

HT-20

SOLID SHEATHING

VALLEY FLASHING; 12" LAPS WITH  
CONTINUOUS CAULK AT LAPS

CONTINUOUS CLEAT;  
DO NOT CAULK ON  
OR UNDER CLEAT

\*SNAP-ON SEAM

TEE-CLIPS;  
2 AT END OF SEAM

# 30 FELT  
UNDERLAYMENT

FASTENERS; 20" O.C. MAX.  
PLACE A DAB OF CAULK  
AT FASTENER LOCATION  
DRIVE FASTENER AND  
CAULK FASTENER HEAD

\*SNAP-ON SEAM IS COVERED UNDER US PATENT NO. 4,641,475.

## PLAN VIEW

MAIN ROOF  
PANELS

RIDGE FLASHING

CONTINUOUS CLEAT

VALLEY FLASHING

DORMER PANEL



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**RIDGE TERMINATION AT  
DORMER VALLEY**

**High Seam Tee-Panel**

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HT-22

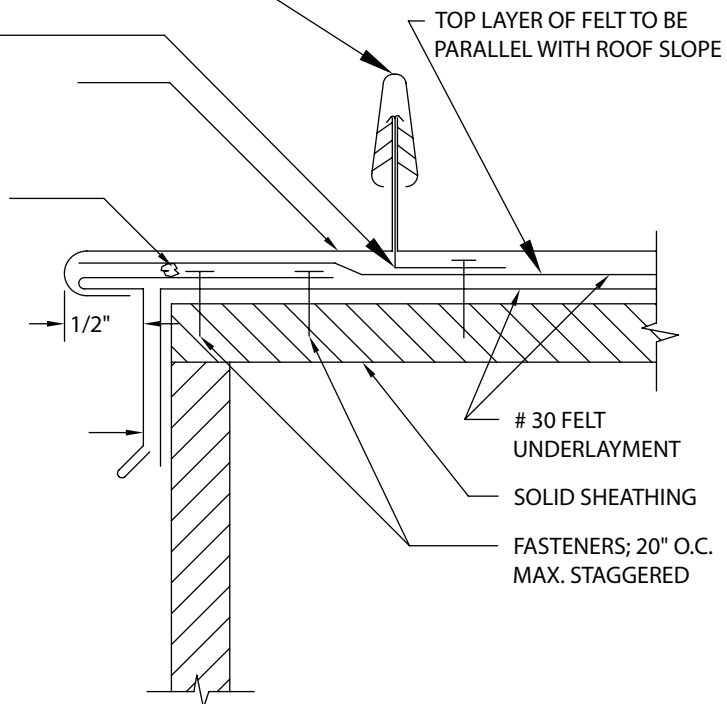
\*SNAP-ON SEAM

TEE-CLIP; 20" O.C. MAX.

FIELD CUT LAST PANEL AND FORM  
AROUND DRIP FLASHING (PANEL TO BE  
CONTINUOUS FROM RIDGE TO EAVE)

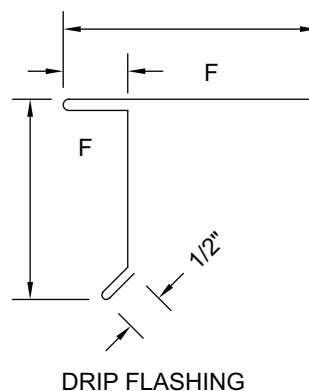
CONTINUOUS BEAD OF CAULK

DRIP FLASHING; 4" END LAPS WITH  
CONTINUOUS CAULK AT LAPS



\*SNAP-ON SEAM IS COVERED UNDER US PATENT NO. 4,641,475.

1. FIELD CUT AND FORM LAST PANEL AROUND DRIP FLASHING. PANEL MUST BE CONTINUOUS FROM RIDGE TO EAVE.
2. SOLID SHEATHING (BY OTHERS) TO BE MINIMUM 1/2" PLYWOOD OR EQUIVALENT IN STRENGTH FOR HOLDING POWER OF FASTENERS.
3. ALL FELT UNDERLAYMENT, CAULKING, AND FASTENERS, ARE ITEMS TO BE FURNISHED AND INSTALLED BY THE ROOFING INSTALLER AT THE DISCRETION OF THE ARCHITECT.



F = FINISH SIDE



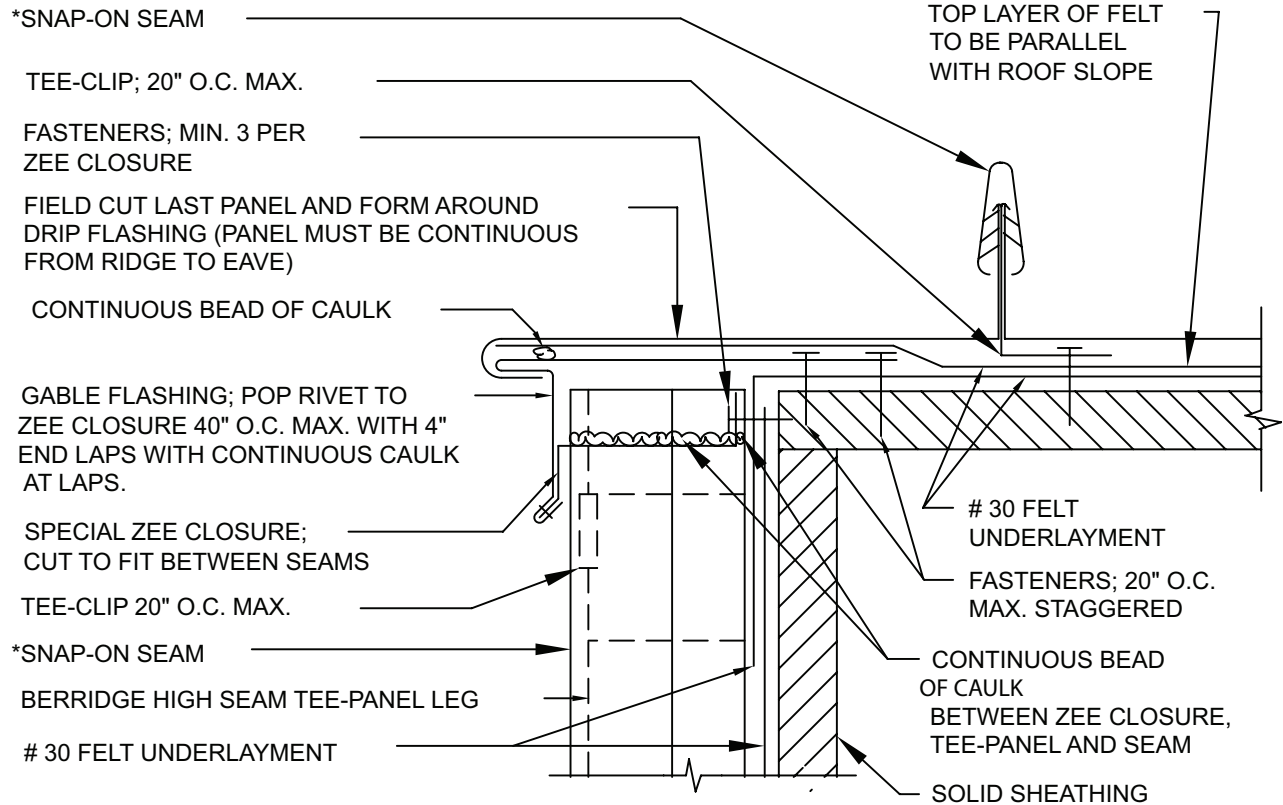
**BERRIDGE  
MANUFACTURING  
COMPANY**

## GABLE DETAIL

High Seam Tee-Panel

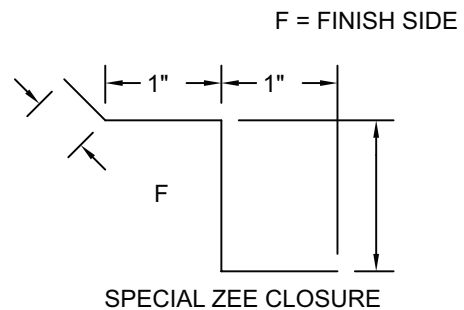
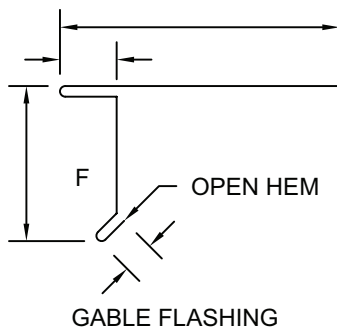
DATE: 12-11-01

PAGE/FILE  
HT-30



\*SNAP-ON SEAM IS COVERED UNDER US PATENT NO. 4,641,475.

1. FIELD CUT AND FORM LAST PANEL AROUND GABLE FLASHING PANEL MUST BE CONTINUOUS RIDGE TO EAVE.
2. SOLID SHEATHING (BY OTHERS) TO BE MINIMUM 1/2" PLYWOOD OR EQUIVALENT IN STRENGTH FOR HOLDING POWER OF FASTENERS.
3. ALL FELT UNDERLAYMENT, CAULKING, AND FASTENERS, ARE ITEMS TO BE FURNISHED AND INSTALLED BY THE ROOFING INSTALLER AT THE DISCRETION OF THE ARCHITECT.



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## GABLE DETAIL

### High Seam Tee-Panel

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HT-31



\*SNAP-ON SEAM

TEE-CLIP; 20" O.C. MAX.

FIELD CUT LAST PANEL AND SLIP INTO J-CLIP  
(PANEL MUST BE CONTINUOUS FROM RIDGE TO  
EAVE)

CONTINUOUS BEAD OF CAULK

J-CLIP; 4" END LAPS WITH  
CONTINUOUS CAULK AT LAPS

DRIP FLASHING; 4" END LAPS WITH  
CONTINUOUS CAULK AT LAPS

SOLID SHEATHING

TOP LAYER OF FELT  
TO BE PARALLEL  
WITH ROOF SLOPE

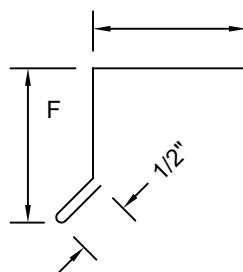
1/2"

# 30 FELT UNDERLAYMENT

FASTENERS; 20" O.C. MAX.  
PLACE A SMALL AMOUNT OF  
CAULK AT J-CLIP FASTENER  
LOCATION, DRIVE FASTENER  
THROUGH CAULK, THEN  
CAULK FASTENER HEAD

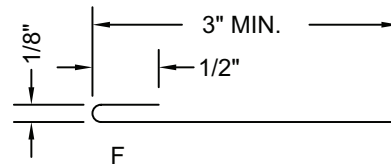
\*SNAP-ON SEAM IS COVERED UNDER US PATENT NO. 4,641,475.

1. FIELD CUT LAST PANEL AND SLIP INTO J-CLIP. PANEL MUST BE CONTINUOUS RIDGE TO EAVE.
2. SOLID SHEATHING (BY OTHERS) TO BE MINIMUM 1/2" PLYWOOD OR EQUIVALENT IN STRENGTH FOR HOLDING POWER OF FASTENERS.
3. ALL FELT UNDERLAYMENT, CAULKING, AND FASTENERS, ARE ITEMS TO BE FURNISHED AND INSTALLED BY THE ROOFING INSTALLER AT THE DISCRETION OF THE ARCHITECT.



DRIP FLASHING

F = FINISH SIDE



J-CLIP



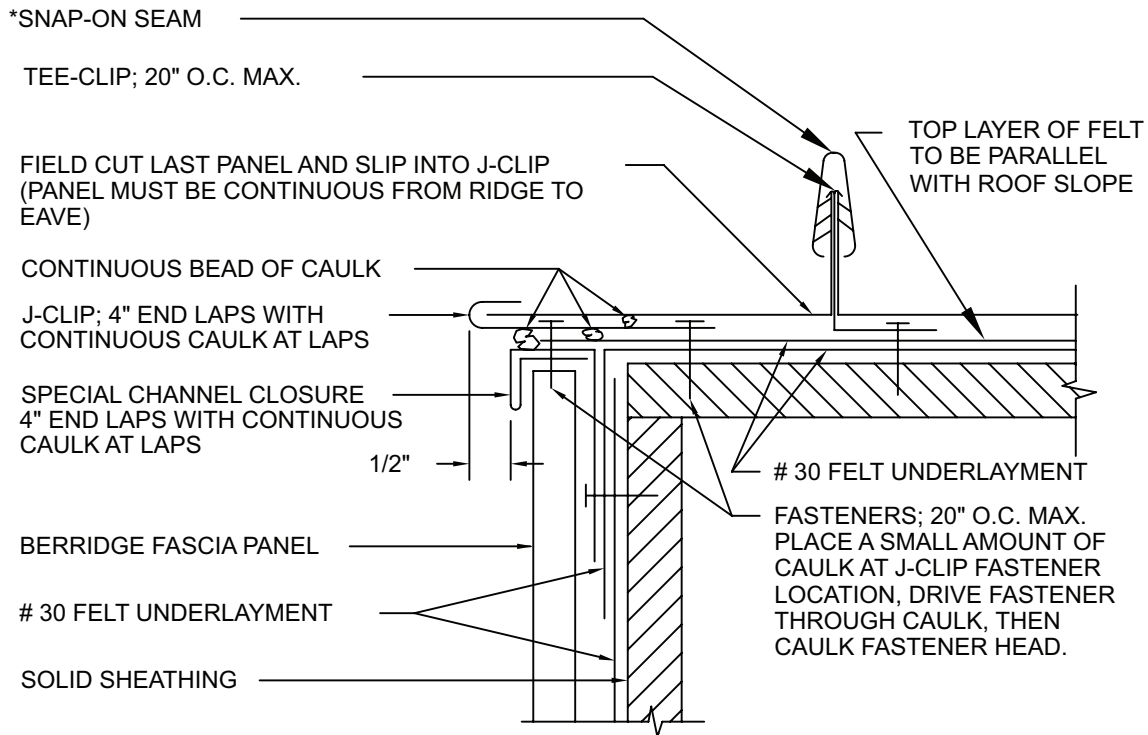
**BERRIDGE  
MANUFACTURING  
COMPANY**

## GABLE DETAIL

High Seam Tee-Panel

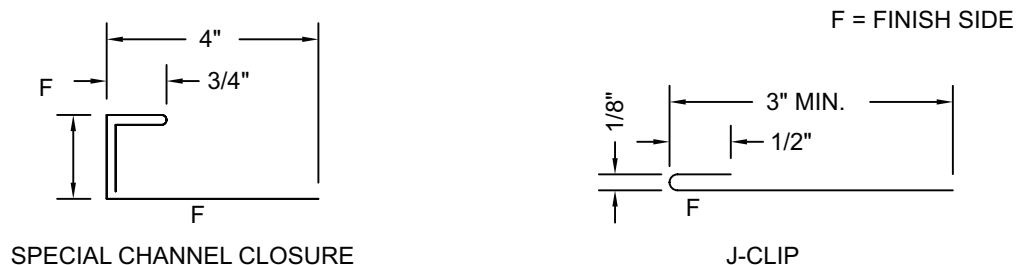
DATE: 12-11-01

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HT-32



\*SNAP-ON SEAM IS COVERED UNDER US PATENT NO. 4,641,475.

1. FIELD CUT LAST PANEL AND SLIP INTO J-CLIP. PANEL MUST BE CONTINUOUS RIDGE TO EAVE.
2. SOLID SHEATHING (BY OTHERS) TO BE MINIMUM 1/2" PLYWOOD OR EQUIVALENT IN STRENGTH FOR HOLDING POWER OF FASTENERS.
3. ALL FELT UNDERLAYMENT, CAULKING, AND FASTENERS, ARE ITEMS TO BE FURNISHED AND INSTALLED BY THE ROOFING INSTALLER AT THE DISCRETION OF THE ARCHITECT.



**BERRIDGE  
MANUFACTURING  
COMPANY**

## GABLE DETAIL

High Seam Tee-Panel

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HT-33

CAP FLASHING; 4" END LAPS WITH CONTINUOUS CAULK AT LAPS. POP RIVET TO COUNTER FLASHING 40" O.C. MAX. CAULK ALL RIVET HEADS.

FASTENERS; 20" O.C. MAX.

COUNTERFLASHING; 4" END LAPS WITH CONTINUOUS CAULK AT LAPS. POP RIVET TO ZEE CLOSURE 40" O.C. MAX.

SUB-FLASHING; 4" END LAPS WITH CONTINUOUS CAULK AT LAPS.

# 30 FELT UNDERLAYMENT

BERRIDGE HIGH SEAM TEE PANEL LEG

ZEE CLOSURE; CUT TO FIT BETWEEN SEAMS

\*SNAP-ON SEAM

TEE-CLIP; 20" O.C. MAX.

1 ON 12

FASTENERS AT LAPS AND STAGGERED; 20" O.C. AND CAULK FASTENER HEADS

# 30 FELT UNDERLAYMENT

FASTENERS; 40" O.C. MAX. CAULK FASTENER HEADS

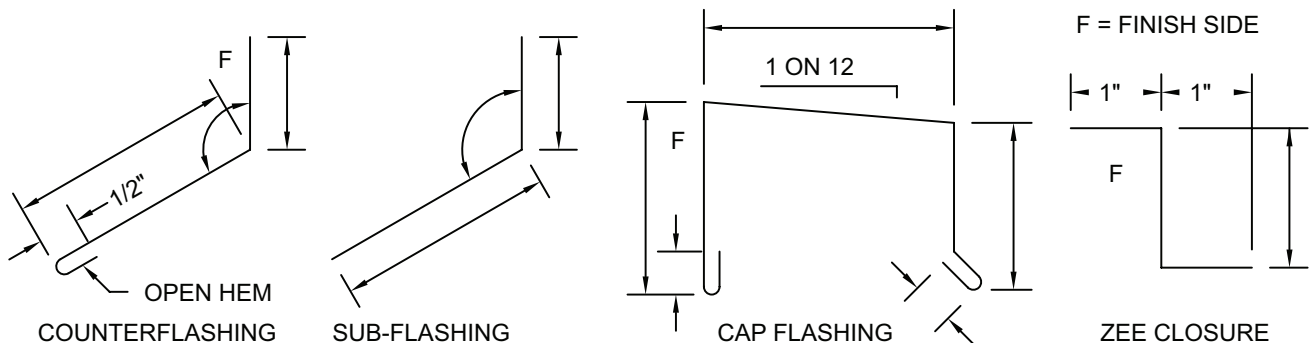
CONTINUOUS BEAD OF CAULK BETWEEN ZEE CLOSURE, TEE-PANEL AND SEAM

SOLID SHEATHING

FASTENERS; MIN. 3 PER ZEE CLOSURE

\*SNAP-ON SEAM IS COVERED UNDER US PATENT NO. 4,641,475.

1. FIELD CUT ZEE CLOSURES TO FIT BETWEEN SEAMS.
2. SOLID SHEATHING (BY OTHERS) TO BE MINIMUM 1/2" PLYWOOD OR EQUIVALENT IN STRENGTH FOR HOLDING POWER OF FASTENERS.
3. ALL FELT UNDERLAYMENT, CAULKING, AND FASTENERS, ARE ITEMS TO BE FURNISHED AND INSTALLED BY THE ROOFING INSTALLER AT THE DISCRETION OF THE ARCHITECT.



**BERRIDGE  
MANUFACTURING  
COMPANY**

## PARAPET DETAIL

High Seam Tee-Panel

DATE: 12-11-01

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HT-40

BERRIDGE FASCIA PANEL

COUNTERFLASHING; 4" END LAPS  
WITH CONTINUOUS CAULK AT LAPS.  
POP RIVET TO ZEE CLOSURE 40"  
O.C. MAX.

SUB-FLASHING; 4" END LAPS WITH  
CONTINUOUS CAULK AT LAPS

BERRIDGE HIGH SEAM TEE PANEL LEG

ZEE CLOSURE; CUT TO FIT  
BETWEEN SEAMS

\*SNAP-ON SEAM

TEE-CLIP; 20" O.C. MAX.

# 30 FELT UNDERLAYMENT

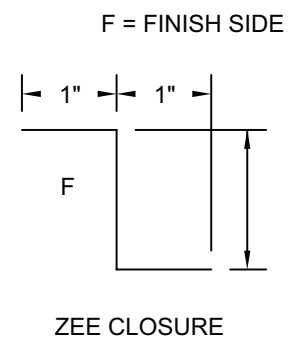
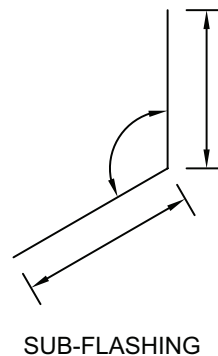
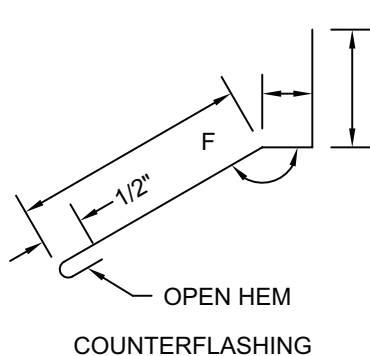
FASTENERS; 20" O.C. MAX.

CONTINUOUS BEAD OF  
CAULK BETWEEN ZEE  
CLOSURE, TEE PANEL  
AND SEAM

FASTENERS; MIN. 3 PER  
ZEE CLOSURE

SOLID SHEATHING

1. FIELD CUT ZEE CLOSURES TO FIT BETWEEN SEAMS.
2. SOLID SHEATHING (BY OTHERS) TO BE MINIMUM 1/2" PLYWOOD OR EQUIVALENT IN STRENGTH FOR HOLDING POWER OF FASTENERS.
3. ALL FELT UNDERLAYMENT, CAULKING, AND FASTENERS, ARE ITEMS TO BE FURNISHED AND INSTALLED BY THE ROOFING INSTALLER AT THE DISCRETION OF THE ARCHITECT.



**BERRIDGE  
MANUFACTURING  
COMPANY**

**HEAD WALL DETAIL**

**High Seam Tee-Panel**

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HT-50

# 30 FELT UNDERLAYMENT

BERRIDGE FASCIA PANEL

FASTENERS; 20" O.C. MAX.

FLASHING; 4" END LAPS WITH CONTINUOUS CAULK AT LAPS

CONTINUOUS BEAD OF CAULK

\*SNAP-ON SEAM

BERRIDGE HIGH SEAM TEE PANEL; START HERE  
OR FIELD CUT LAST PANEL AND FORM NEW LEG.  
PANEL TO BE CONTINUOUS FROM RIDGE TO EAVE.

FASTENERS; 20" O.C. MAX.

# 30 FELT UNDERLAYMENT

TOP FELT LAYER TO RUN  
PARALLEL WITH ROOF SLOPE

SOLID SHEATHING

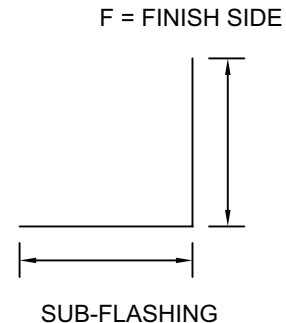
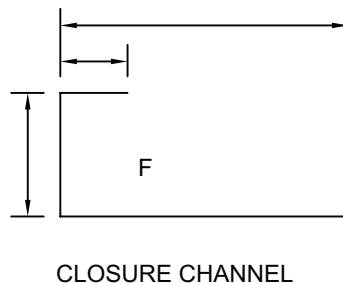
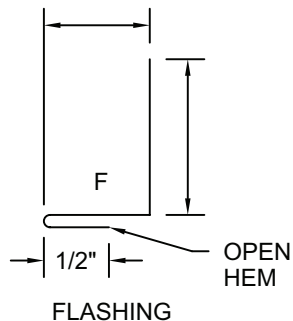
CLOSURE CHANNEL; 4" END LAPS WITH  
CONTINUOUS CAULK AT LAPS

SUB-FLASHING; 4" END LAPS WITH  
CONTINUOUS CAULK AT LAPS

2 CONTINUOUS BEADS  
OF CAULK

\*SNAP-ON SEAM IS COVERED UNDER US PATENT NO. 4,641,475.

1. FIELD CUT LAST PANEL AND FORM NEW LEG. PANEL MUST BE CONTINUOUS RIDGE TO EAVE.
2. SOLID SHEATHING (BY OTHERS) TO BE MINIMUM 1/2" PLYWOOD OR EQUIVALENT IN STRENGTH FOR HOLDING POWER OF FASTENERS.
3. ALL FELT UNDERLAYMENT, CAULKING, AND FASTENERS, ARE ITEMS TO BE FURNISHED AND INSTALLED BY THE ROOFING INSTALLER AT THE DISCRETION OF THE ARCHITECT.



**BERRIDGE  
MANUFACTURING  
COMPANY**

## RAKE WALL DETAIL

### High Seam Tee-Panel

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REGLET FLASHING; 4" END LAPS  
WITH CONTINUOUS CAULK AT LAPS

FASTENERS; 20" O.C. MAX.

COUNTERFLASHING; 4" END LAPS  
WITH CONTINUOUS CAULK AT LAPS.  
POP RIVET TO ZEE CLOSURE 40"  
O.C. MAX.

SUB-FLASHING; 4" END LAPS WITH  
CONTINUOUS CAULK AT LAPS.

# 30 FELT UNDERLAYMENT

BERRIDGE HIGH SEAM  
TEE PANEL LEG

ZEE CLOSURE; CUT TO FIT  
BETWEEN SEAMS

TEE-CLIP; 20" O.C. MAX.

\*SNAP-ON SEAM

REGLET

CONTINUOUS CAULK  
AT REGLET

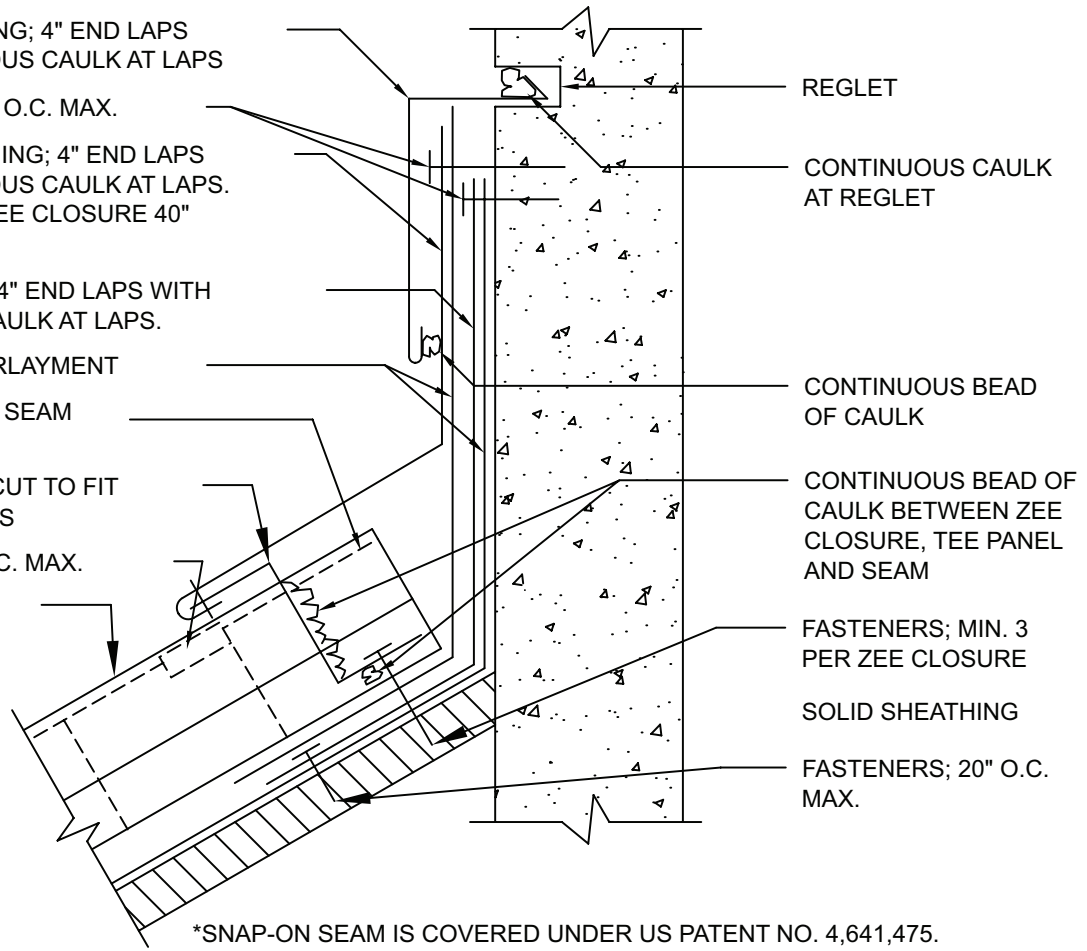
CONTINUOUS BEAD  
OF CAULK

CONTINUOUS BEAD OF  
CAULK BETWEEN ZEE  
CLOSURE, TEE PANEL  
AND SEAM

FASTENERS; MIN. 3  
PER ZEE CLOSURE

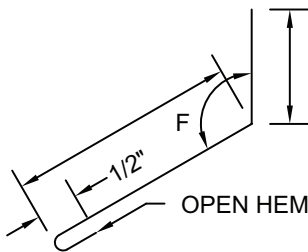
SOLID SHEATHING

FASTENERS; 20" O.C.  
MAX.

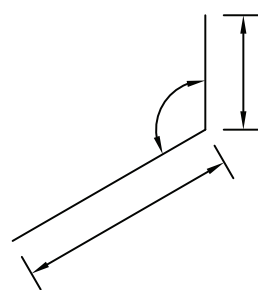


1. FIELD CUT ZEE CLOSURES TO FIT BETWEEN SEAMS.
2. SOLID SHEATHING (BY OTHERS) TO BE MINIMUM 1/2" PLYWOOD OR EQUIVALENT IN STRENGTH FOR HOLDING POWER OF FASTENERS.
3. ALL FELT UNDERLAYMENT, CAULKING, AND FASTENERS, ARE ITEMS TO BE FURNISHED AND INSTALLED BY THE ROOFING INSTALLER AT THE DISCRETION OF THE ARCHITECT.

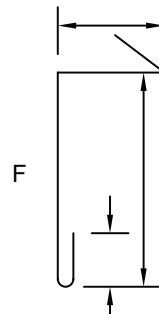
F = FINISH SIDE



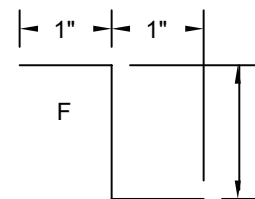
COUNTERFLASHING



SUB-FLASHING



REGLET FLASHING



ZEE CLOSURE



**BERRIDGE  
MANUFACTURING  
COMPANY**

## HEAD WALL DETAIL

### High Seam Tee-Panel

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HT-52

REGLET FLASHING; 4" END LAPS WITH  
CONTINUOUS CAULK AT LAPS

FASTENERS; 20" O.C. MAX.

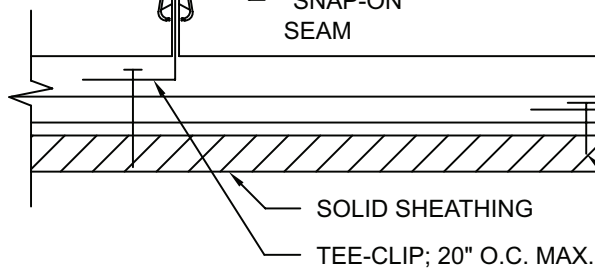
SUB-FLASHING; 4" END LAPS WITH  
CONTINUOUS CAULK AT LAPS

BERRIDGE HIGH SEAM TEE PANEL;  
FIELD CUT LAST PANEL  
AND FORM NEW LEG. PANEL TO  
BE CONTINUOUS RIDGE TO EAVE.

TOP LAYER OF FELT TO BE PARALLEL  
WITH ROOF SLOPE

# 30 FELT  
UNDERLAYMENT

\*SNAP-ON  
SEAM



REGLET

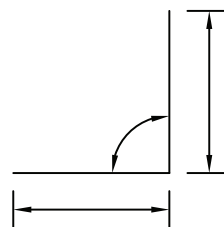
CONTINUOUS CAULK  
AT REGLET

CONTINUOUS BEAD  
OF CAULK

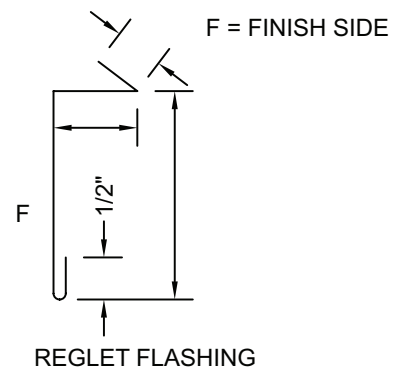
FASTENERS; 20"  
O.C. MAX.

\*SNAP-ON SEAM IS COVERED UNDER US PATENT NO. 4,641,475.

1. FIELD CUT LAST PANEL AND FORM NEW LEG. PANEL MUST BE CONTINUOUS RIDGE TO EAVE.
2. SOLID SHEATHING (BY OTHERS) TO BE MINIMUM 1/2" PLYWOOD OR EQUIVALENT IN STRENGTH FOR HOLDING POWER OF FASTENERS.
3. ALL FELT UNDERLAYMENT, CAULKING, AND FASTENERS, ARE ITEMS TO BE FURNISHED AND INSTALLED BY THE ROOFING INSTALLER AT THE DISCRETION OF THE ARCHITECT.



SUB-FLASHING



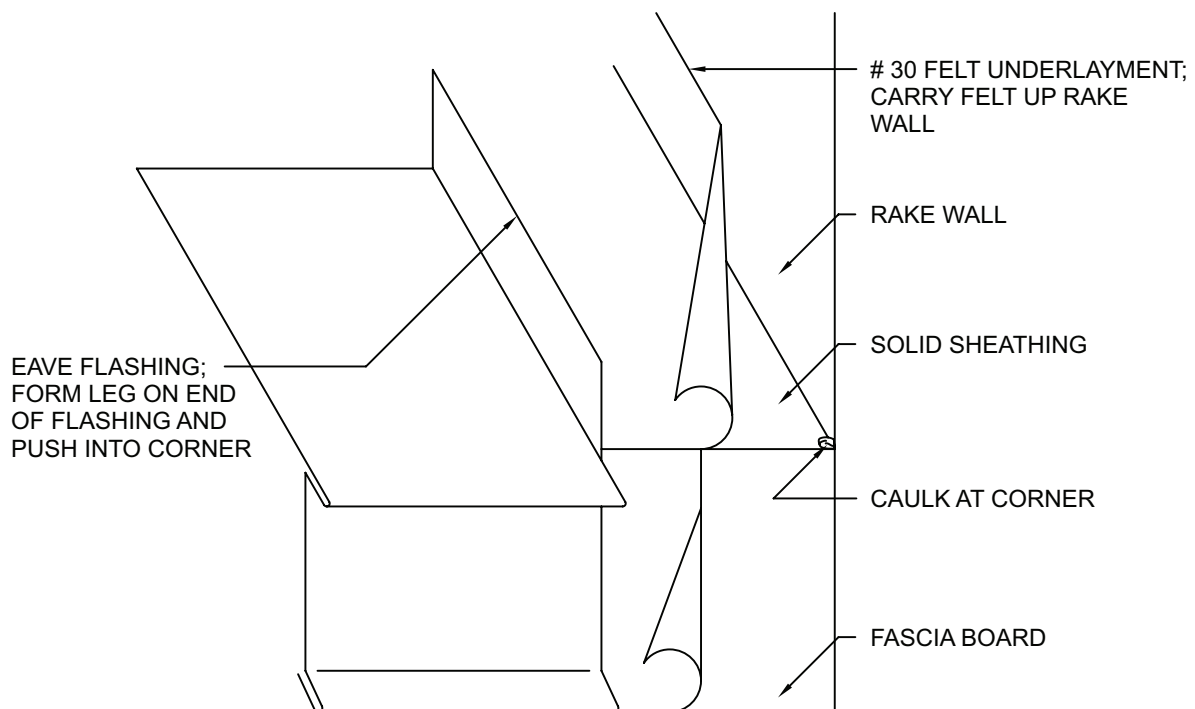
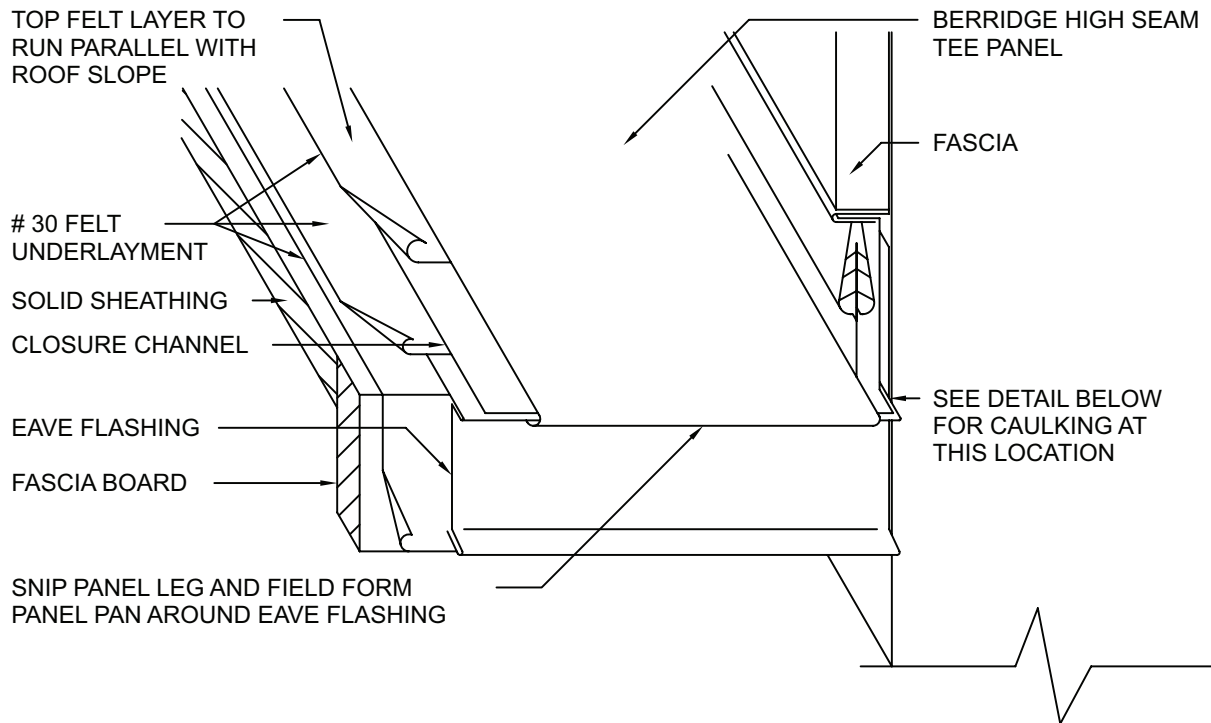
**BERRIDGE  
MANUFACTURING  
COMPANY**

**RAKE WALL DETAIL**

**High Seam Tee-Panel**

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HT-53



**BERRIDGE  
MANUFACTURING  
COMPANY**

## RAKE AT EAVE

USE THIS DETAIL AT RAKE DETAILS, HT-51 & HT-53

**High Seam Tee-Panel**

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HT-54



TEE-CLIPS; 2 AT END OF PANEL

FASTENERS; 20" O.C. MAX.

CONTINUOUS CLEAT

BERRIDGE HIGH SEAM TEE PANEL LEG

FIELD NOTCH AND BEVEL  
CUT SEAM

1 ON 12 MIN. SLOPE  
AWAY FORM CLEAT

TRANSITION FLASHING; 4"  
END LAPS WITH CONTINUOUS  
CAULK AT LAPS. POP RIVET  
TO ZEE CLOSURE 40" O.C. MAX.

FASTENERS; MIN. 3 PER  
ZEE CLOSURE

CAULK POP  
RIVET HEADS

LOWER  
PANEL

SOLID SHEATHING

ZEE CLOSURE CUT TO  
FIT BETWEEN SEAMS

\*SNAP-ON  
SEAM

UPPER PANEL

# 30 FELT  
UNDERLAYMENT

SUB-FLASHING; 4" END  
LAPS WITH CONTINUOUS  
CAULK AT LAPS

FASTENERS; 40" O.C.

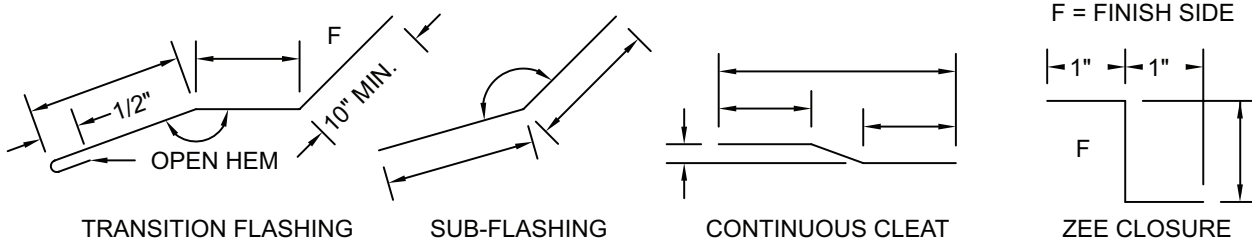
CONTINUOUS BEAD OF  
CAULK BETWEEN ZEE  
CLOSURE, TEE-PANEL  
AND SEAM

NOTE: PLACE A DAB OF CAULK AT  
CLEAT FASTENER LOCATION, DRIVE  
FASTENER THROUGH CAULK, AND CAULK  
FASTENER HEADS.

DO NOT: RUN A CONTINUOUS BEAD OF  
CAULK ON CLEAT OR UNDER CLEAT

\*SNAP-ON SEAM IS COVERED UNDER US PATENT NO. 4,641,475.

1. FIELD CUT ZEE CLOSURE TO FIT BETWEEN SEAMS.
2. AS ROOF PANELS ARE INSTALLED, SNIP APPROXIMATELY 3/8" SECTION FROM EACH PANEL LEG AT UPPER PANEL.
3. AS SEAMS ARE INSTALLED ON UPPER ROOF PANELS, FIELD NOTCH AND BEVEL CUT EACH SEAM.
4. SOLID SHEATHING (BY OTHERS) TO BE MINIMUM 1/2" PLYWOOD OR EQUIVALENT IN STRENGTH FOR HOLDING POWER OF FASTENERS.
5. ALL FELT UNDERLAYMENT, CAULKING, AND FASTENERS, ARE ITEMS TO BE FURNISHED AND INSTALLED BY THE ROOFING INSTALLER AT THE DISCRETION OF THE ARCHITECT.



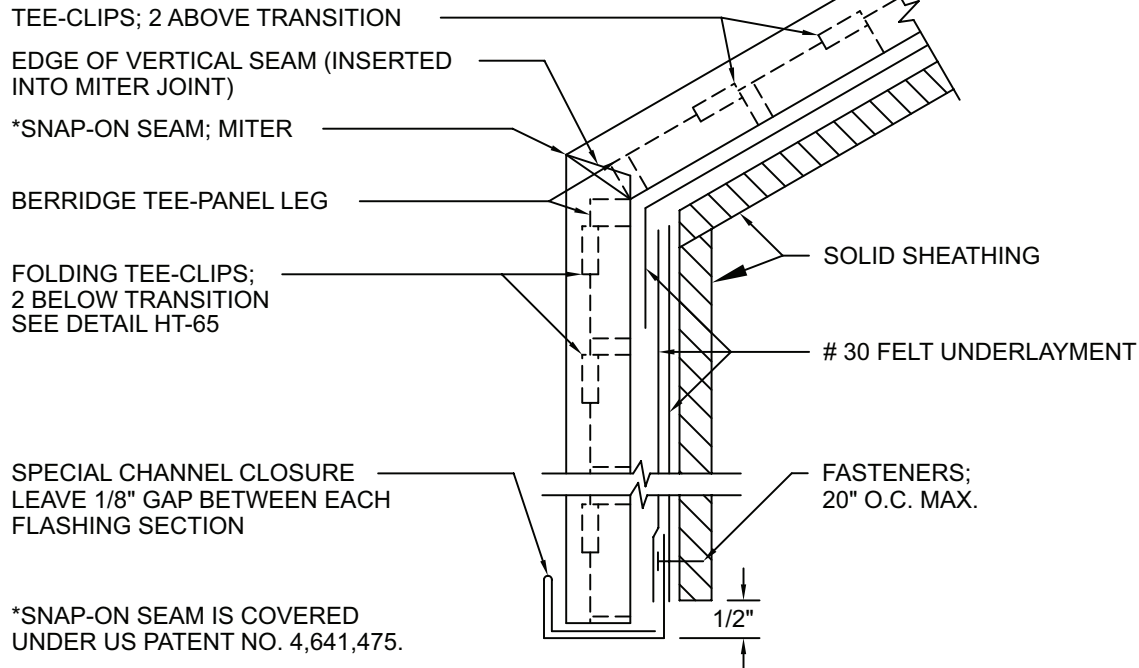
**BERRIDGE  
MANUFACTURING  
COMPANY**

## SLOPE TRANSITION DETAIL

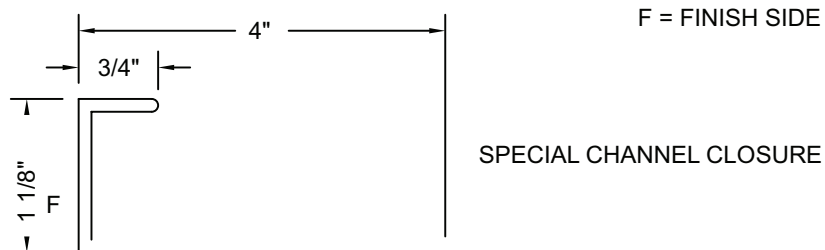
### High Seam Tee-Panel

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PAGE/FILE  
HT-60



1. FIELD CUT PANEL LEG AND BEND PANEL AS REQUIRED FOR CHANGE IN SLOPE FROM ROOF TO FASCIA.
2. FIELD MITER SNAP-ON SEAM TO SLOPE CHANGE.
3. ONLY ONE SLOPE TRANSITION PER PANEL IS RECOMMENDED.
4. SEE SLOPE TRANSITION ISOMETRIC FOR ROOF TO FASCIA FOR CAULK AND SNAP-ON SEAM MITER DETAIL. (DETAIL HT-62)
5. SOLID SHEATHING (BY OTHERS) TO BE MINIMUM 1/2" PLYWOOD OR EQUIVALENT IN STRENGTH FOR HOLDING POWER OF FASTENERS.
6. ALL FELT UNDERLAYMENT, CAULKING, AND FASTENERS, ARE ITEMS TO BE FURNISHED AND INSTALLED BY THE ROOFING INSTALLER AT THE DISCRETION OF THE ARCHITECT.



**BERRIDGE  
MANUFACTURING  
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**SLOPE TRANSITION DETAIL  
ROOF TO FASCIA - A  
FOR 1" SEAM HEIGHT ONLY**

**High Seam Tee-Panel**

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**PAGE/FILE  
HT-61**

ENSURE LOWER SEAM  
IS INSIDE UPPER

BERRIDGE  
\*SNAP-ON SEAM

SPECIAL CHANNEL CLOSURE

TEE-CLIPS;  
2 ABOVE TRANSITION

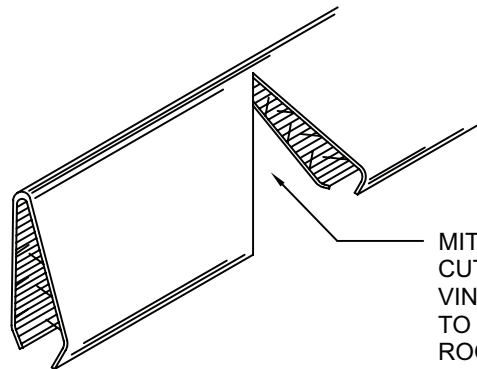
CAULK BETWEEN  
PANEL LEGS

FIELD BEND PANEL  
TO DESIRED ANGLE

FIELD CUT PANEL  
LEGS

FOLDING TEE-CLIPS;  
2 BELOW TRANSITION  
SEE DETAIL HT-65

\*SNAP-ON SEAM IS COVERED UNDER US PATENT NO. 4,641,475.



MITER SNAP-ON SEAM BY "V"  
CUTTING SNAP ON SEAM AND  
VINYL WEATHER SEAL. BEND  
TO SLOPE TRANSITION OF  
ROOF TO FASCIA.



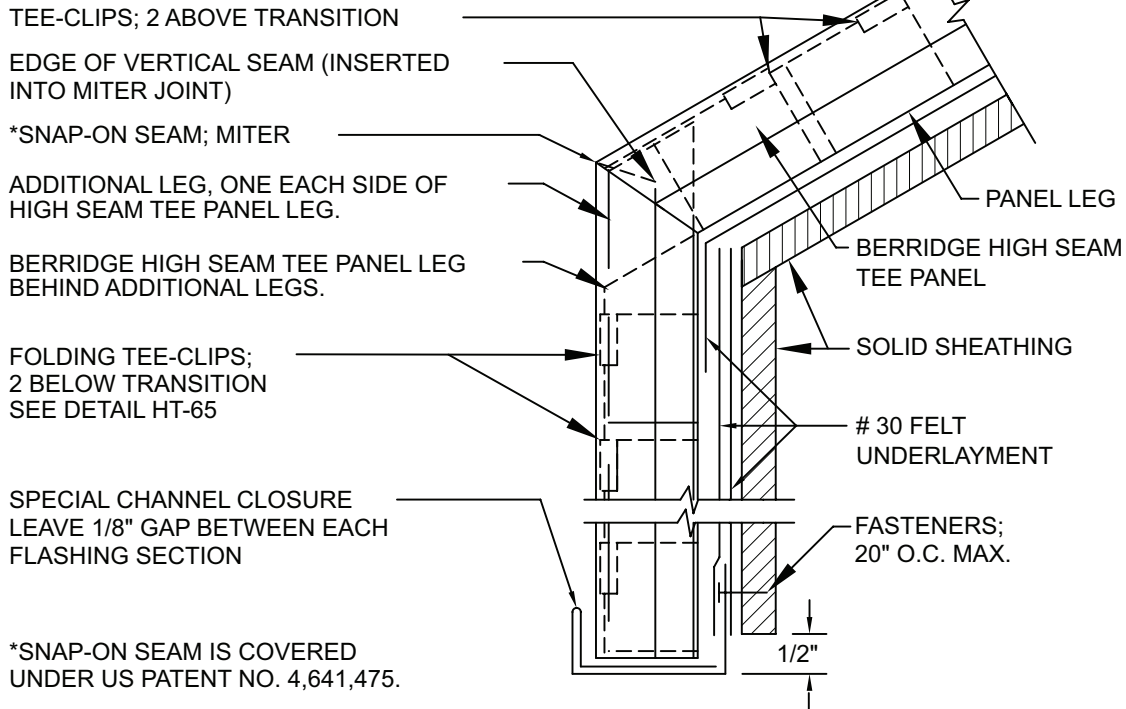
**BERRIDGE  
MANUFACTURING  
COMPANY**

**SLOPE TRANSITION DETAIL  
ROOF TO FASCIA - B  
FOR 1" SEAM HEIGHT ONLY**

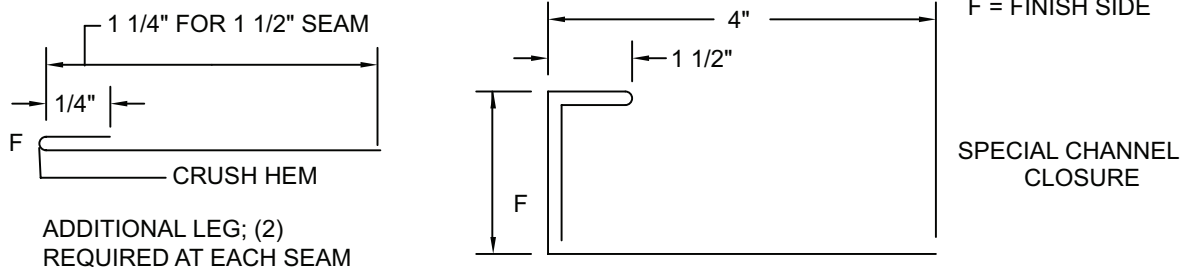
**High Seam Tee-Panel**

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PAGE/FILE  
HT-62



1. FIELD CUT PANEL LEG AND BEND PANEL AS REQUIRED FOR CHANGE IN SLOPE FROM ROOF TO FASCIA.
2. ADDITIONAL LEGS HELD IN PLACE WITH CLIPS AND SEAM AT FASCIA.
3. FIELD MITER SNAP-ON SEAM TO SLOPE CHANGE.
4. ONLY ONE SLOPE TRANSITION PER PANEL IS RECOMMENDED.
5. SEE SLOPE TRANSITION ISOMETRIC FOR ROOF TO FASCIA FOR CAULK AND SNAP-ON SEAM MITER DETAIL. (DETAIL HT-64)
6. SOLID SHEATHING (BY OTHERS) TO BE MINIMUM 1/2" PLYWOOD OR EQUIVALENT IN STRENGTH FOR HOLDING POWER OF FASTENERS.
7. ALL FELT UNDERLAYMENT, CAULKING, AND FASTENERS, ARE ITEMS TO BE FURNISHED AND INSTALLED BY THE ROOFING INSTALLER AT THE DISCRETION OF THE ARCHITECT.



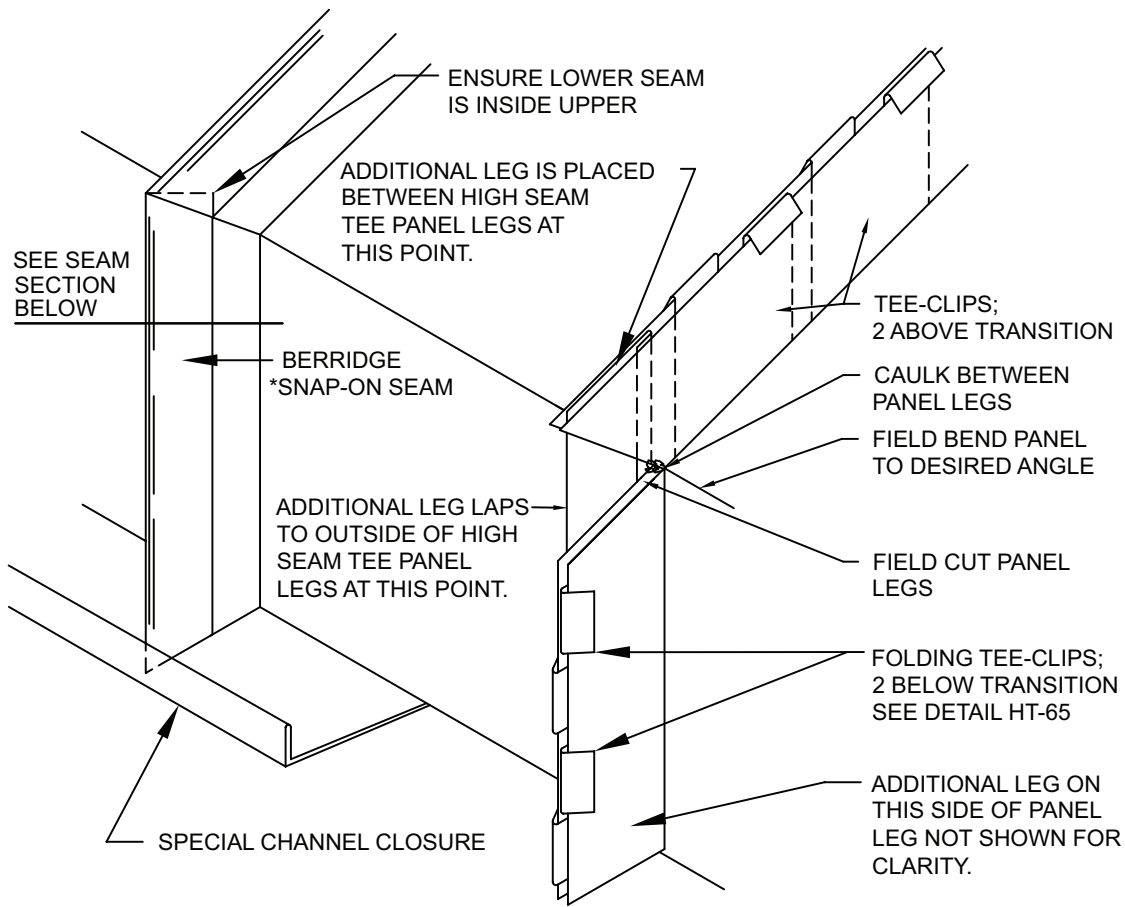
**BERRIDGE  
MANUFACTURING  
COMPANY**

**SLOPE TRANSITION DETAIL  
ROOF TO FASCIA - C  
FOR 1 1/2"**

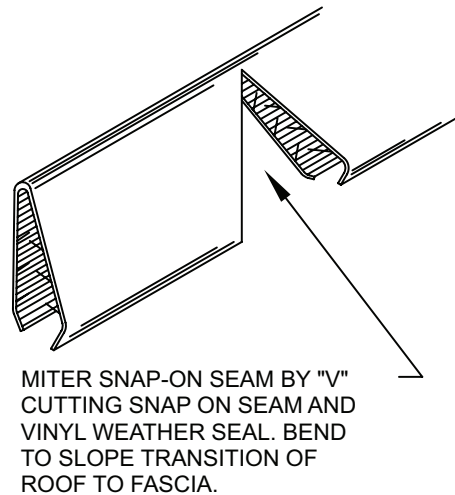
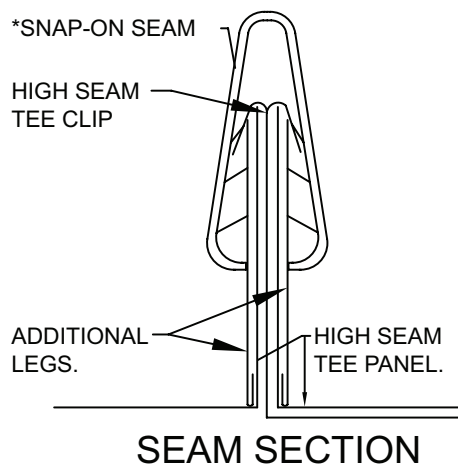
**High Seam Tee-Panel**

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**PAGE/FILE  
HT-63**



\*SNAP-ON SEAM IS COVERED UNDER US PATENT NO. 4,641,475.



**BERRIDGE  
MANUFACTURING  
COMPANY**

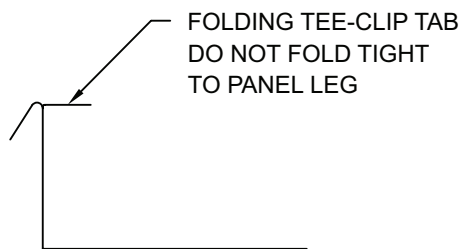
**SLOPE TRANSITION DETAIL  
ROOF TO FASCIA - D  
FOR 1 1/2"**

**High Seam Tee-Panel**

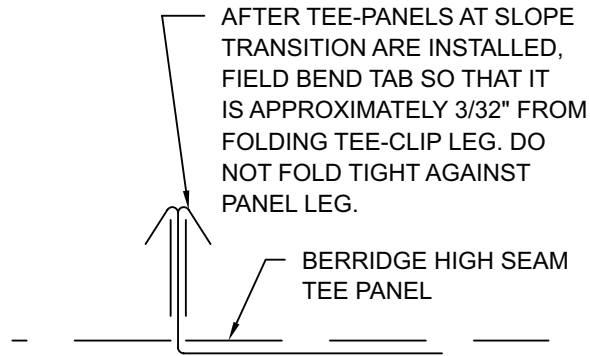
**DATE: 12-11-01**

**PAGE/FILE  
HT-64**

A FOLDING TEE-CLIP IS AVAILABLE FOR CURVED APPLICATIONS OF THE 1" PANEL. AND 1 1/2" PANEL SEAM, REVIEW INSTALLATION INSTRUCTIONS BELOW.

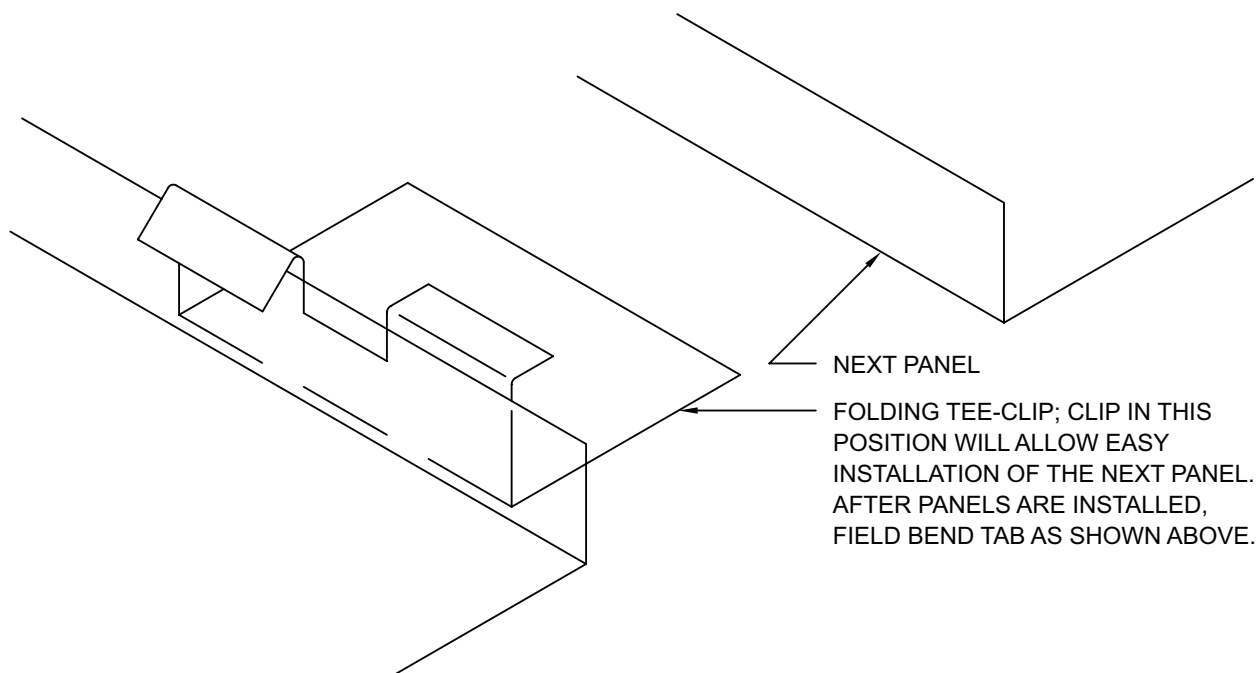


FOLDING TEE-CLIP  
AS PROVIDED FROM  
FACTORY



FOLDING TEE-CLIP  
AS INSTALLED  
20" O.C. MAX.

1. AFTER FOLDING TEE-CLIPS AND TEE-PANELS ARE INSTALLED, FIELD BEND FOLDING THE CLIP TAB SO THAT IT IS APPROXIMATELY 3/32" FROM CLIP LEG. DO NOT BEND TAB TIGHT AGAINST PANEL LEG AS VINYL INSERT IN SEAM WILL THEN NOT GRIP THE EDGE OF THE TAB.
2. USE FOLDING TEE-CLIP AT SLOPE TRANSITION (ROOF TO FASCIA, SEE DETAILS HT-61 AND HT-62). USE STANDARD TEE-CLIP THROUGHOUT REST OF STANDARD TEE PANEL SYSTEM.



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## FOLDING TEE-CLIP INSTALLATION

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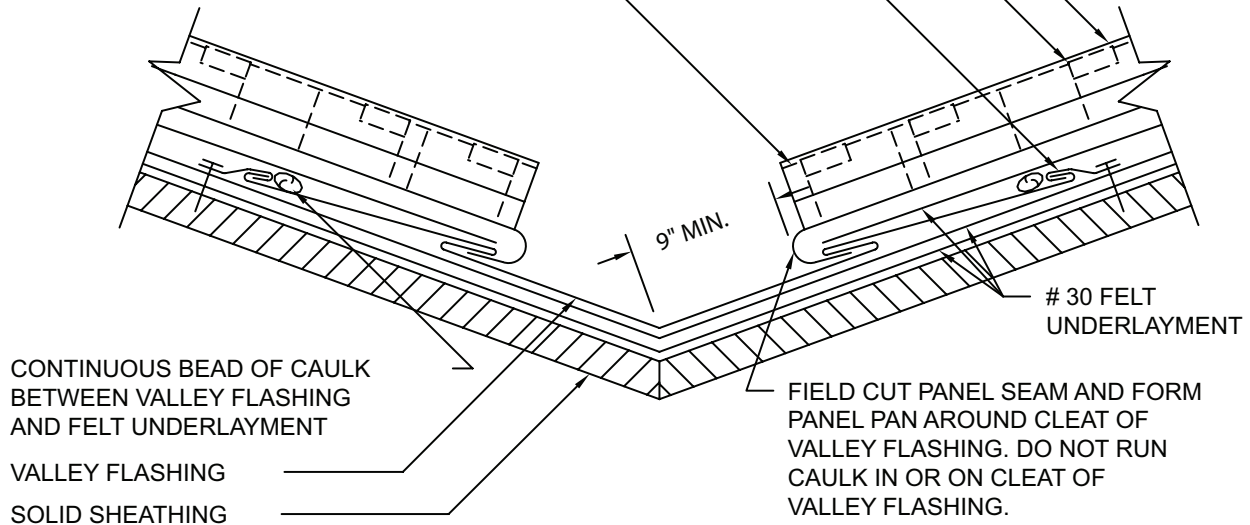
PAGE/FILE  
HT-65

\*SNAP-ON SEAM

TEE-CLIPS; PLACE 2 TEE-CLIPS ABOVE VALLEY FLASHING (SEE VALLEY ISOMETRIC HT-71) DO NOT USE FASTENERS IN TEE-CLIPS OVER VALLEY FLASHING.

CONTINUOUS CLEAT; WITH FASTENERS 20" O.C. MAX.

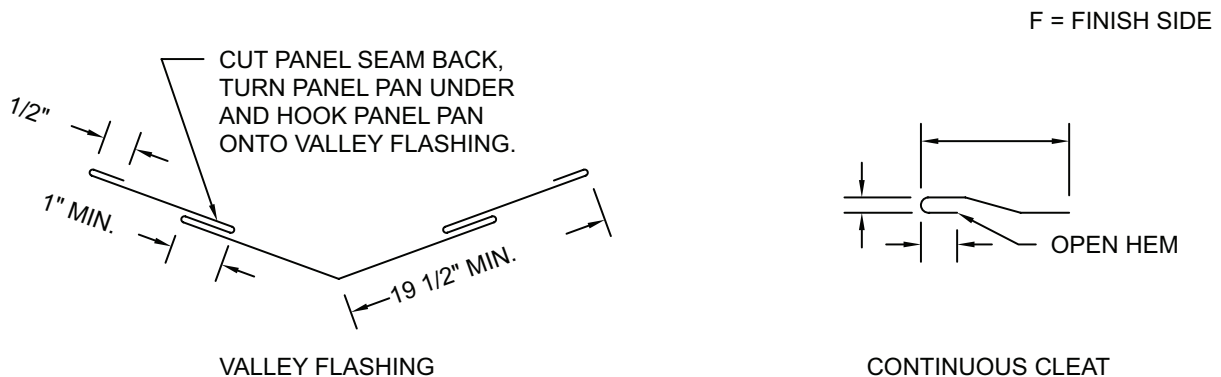
BERRIDGE HIGH SEAM TEE PANEL LEG



SEE DETAIL HT-71 FOR VALLEY FLASHING LAPPING.

\*SNAP-ON SEAM IS COVERED UNDER US PATENT NO. 4,641,475.

1. FOR EXPANSION AND CONTRACTION OF PANELS, SEE HTI-6 AND HT-11.
2. SOLID SHEATHING (BY OTHERS) TO BE A MINIMUM OF 1/2" PLYWOOD OR EQUIVALENT IN STRENGTH FOR HOLDING POWER OF FASTENERS.
3. ALL FELT UNDERLAYMENT, CAULKING, AND FASTENERS, ARE ITEMS TO BE FURNISHED AND INSTALLED BY THE ROOFING INSTALLER AT THE DISCRETION OF THE ARCHITECT.



**BERRIDGE  
MANUFACTURING  
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## VALLEY DETAIL

High Seam Tee-Panel

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HT-70

TEE-CLIPS; PLACE 2 TEE-CLIPS  
ABOVE VALLEY FLASHING.

TEE-CLIPS; DO NOT USE  
FASTENERS OVER VALLEY  
FLASHING

BERRIDGE HIGH SEAM  
TEE PANEL LEG  
FIELD CUT PANEL  
SEAM AND FORM  
PANEL PAN AROUND  
CLEAT OF VALLEY  
FLASHING

BERRIDGE HIGH  
SEAM TEE  
PANEL

CONTINUOUS  
CLEAT  
CONTINUOUS BEAD  
OF CAULK  
SOLID SHEATHING

VALLEY FLASHING  
# 30 FELT UNDERLAYMENT

FASTEN THROUGH VALLEY  
ONLY AT TOP OF FLASHING  
UNDER LAP, NO FASTENERS  
ARE TO BE EXPOSED ON  
TOP (OVERLAPPING) VALLEY

12" LAP

DO NOT RUN  
CAULK IN OR ON  
CLEAT OF VALLEY  
FLASHING

2 CONTINUOUS BEADS OF CAULK AT LAPS



**BERRIDGE  
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## VALLEY DETAIL ISOMETRIC

High Seam Tee-Panel

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HT-71



ROOF PIPE PENETRATION OF  
4" IN DIA. OR LESS

RUBBERIZED BOOT FLASHING

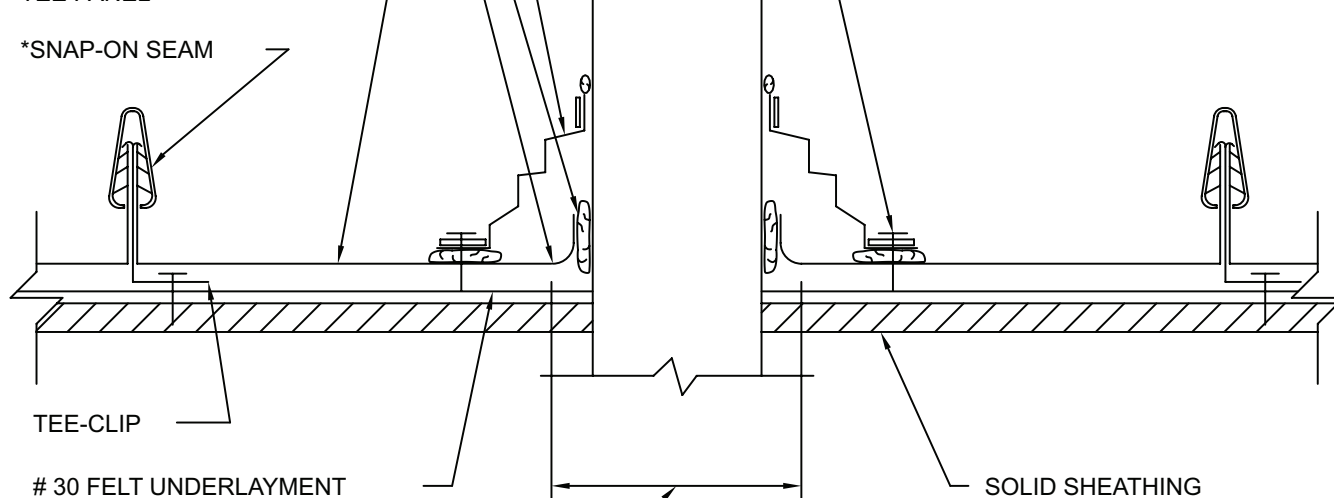
CONTINUOUS CAULK

PIPE PENETRATION TO BE  
IN PAN OF PANEL ONLY

BERRIDGE HIGH SEAM  
TEE PANEL

\*SNAP-ON SEAM

SET RUBBERIZED BOOT INTO  
CONTINUOUS BEAD OF CAULK.  
USE FASTENERS AS SPECIFIED  
BY BOOT MANUFACTURER  
CAULK FASTENER HEADS



CUT PANEL 1" SMALLER THAN  
PENETRATION, BACK CUT TABS,  
FOLD TABS UP AROUND  
PENETRATION, AND CAULK.

NOTE: CUT HOLE TO ALLOW FOR  
THERMAL MOVEMENT IF PANELS  
ARE 30'-0" OR LONGER.

NOTE: IF PIPE IS MADE OF METAL,  
IT MUST BE PAINTED TO PREVENT RUST  
RUN-OFF FROM STAINING PANELS.

NOTE: POSITION SQUARE BASED BOOTS IN A DIAMOND  
ORIENTATION WHERE POSSIBLE TO AID IN DIVERTING WATER.

\*SNAP-ON SEAM IS COVERED UNDER US PATENT NO. 4,641,475.



**BERRIDGE  
MANUFACTURING  
COMPANY**

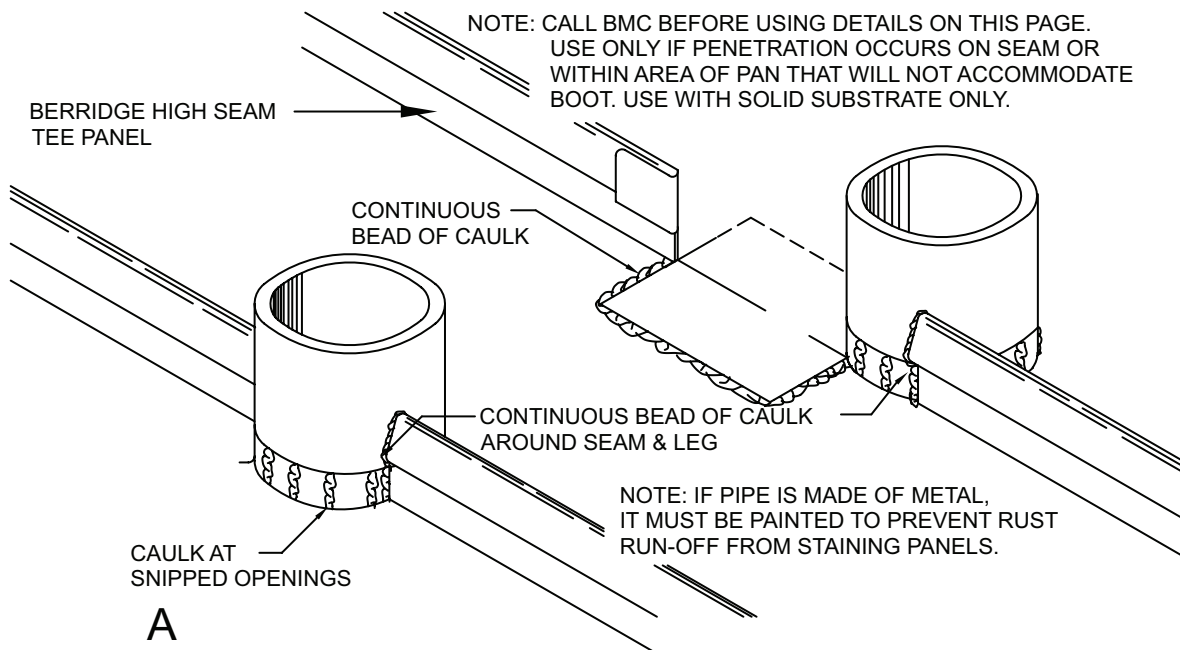
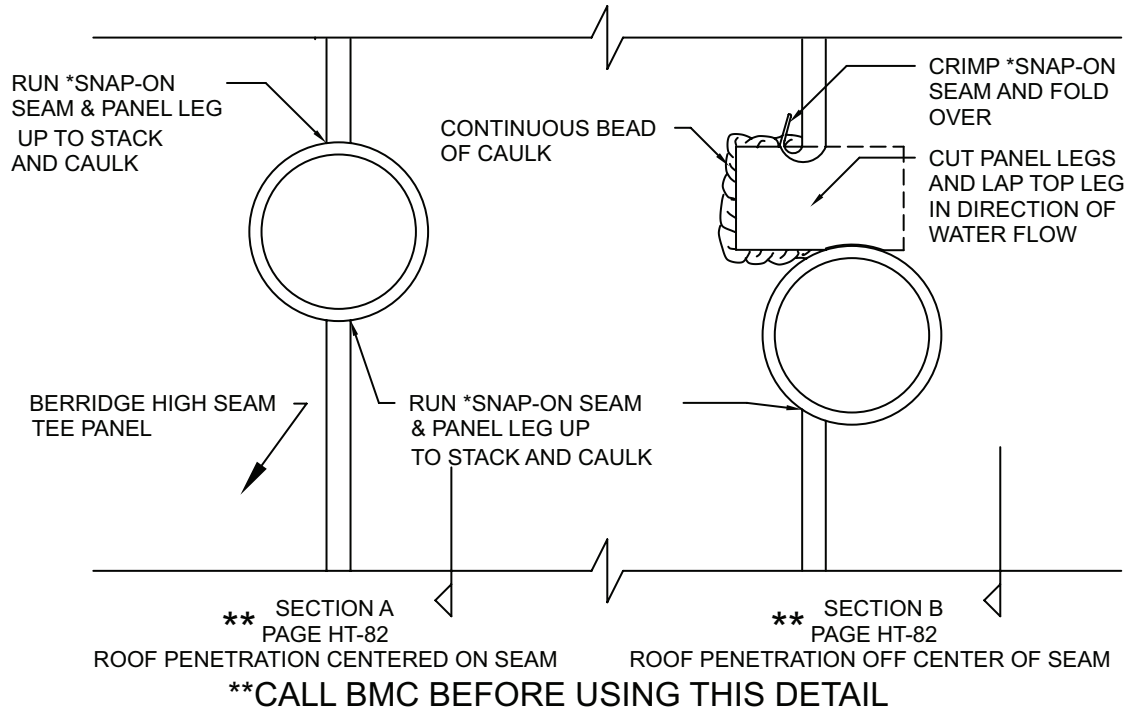
PIPE PENETRATION (PREFERRED METHOD)  
IN PAN OF PANEL ONLY  
4" DIA. OR LESS

**High Seam Tee-Panel**

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PAGE/FILE  
HT-80

\*SNAP-ON SEAM IS COVERED UNDER US PATENT NO. 4,641,475.



**BERRIDGE  
MANUFACTURING  
COMPANY**

PIPE PENETRATION OF PANEL  
SEAM ISOMETRIC AND PLAN VIEW  
**\*\*CALL BMC BEFORE USING THIS DETAIL**

**High Seam Tee-Panel**

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HT-81

## SECTION A \*\*

USE THIS DETAIL WHEN STACK  
IS CENTERED ON \*SNAP-ON SEAM

ROUND STACK MUST BE OF  
MATERIAL COMPATIBLE WITH 24  
GA. GALVANIZED PAINTED METAL

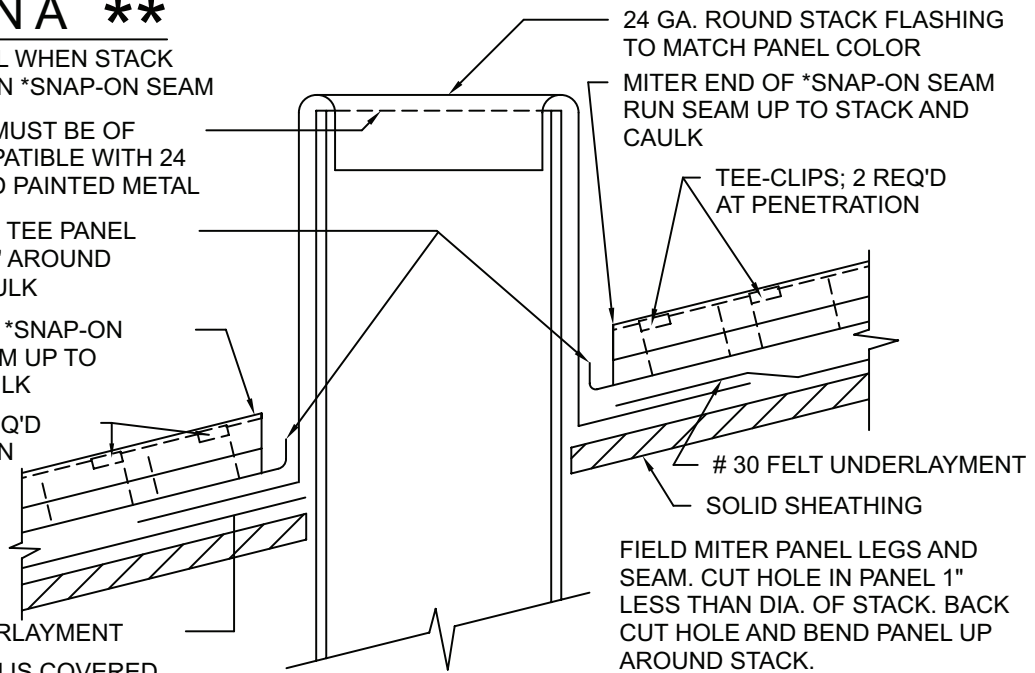
CUT HIGH SEAM TEE PANEL  
AND BEND UP 1" AROUND  
STACK AND CAULK

MITER ENDS OF \*SNAP-ON  
SEAM. RUN SEAM UP TO  
STACK AND CAULK

TEE-CLIPS; 2 REQ'D  
AT PENETRATION

# 30 FELT UNDERLAYMENT

\*SNAP-ON SEAM IS COVERED  
UNDER US PATENT NO. 4,641,475.



## SECTION B \*\*

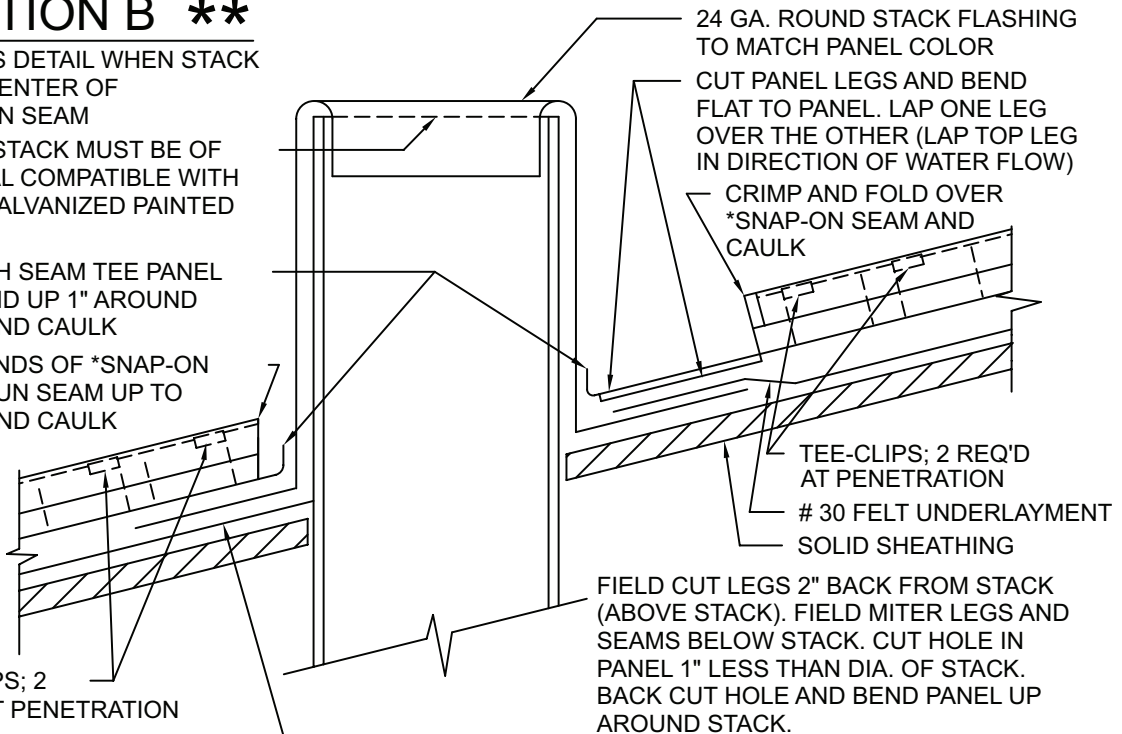
USE THIS DETAIL WHEN STACK  
IS OFF CENTER OF  
\*SNAP-ON SEAM

ROUND STACK MUST BE OF  
MATERIAL COMPATIBLE WITH  
24 GA. GALVANIZED PAINTED  
METAL

CUT HIGH SEAM TEE PANEL  
AND BEND UP 1" AROUND  
STACK AND CAULK

MITER ENDS OF \*SNAP-ON  
SEAM. RUN SEAM UP TO  
STACK AND CAULK

TEE-CLIPS; 2  
REQ'D AT PENETRATION  
# 30 FELT UNDERLAYMENT



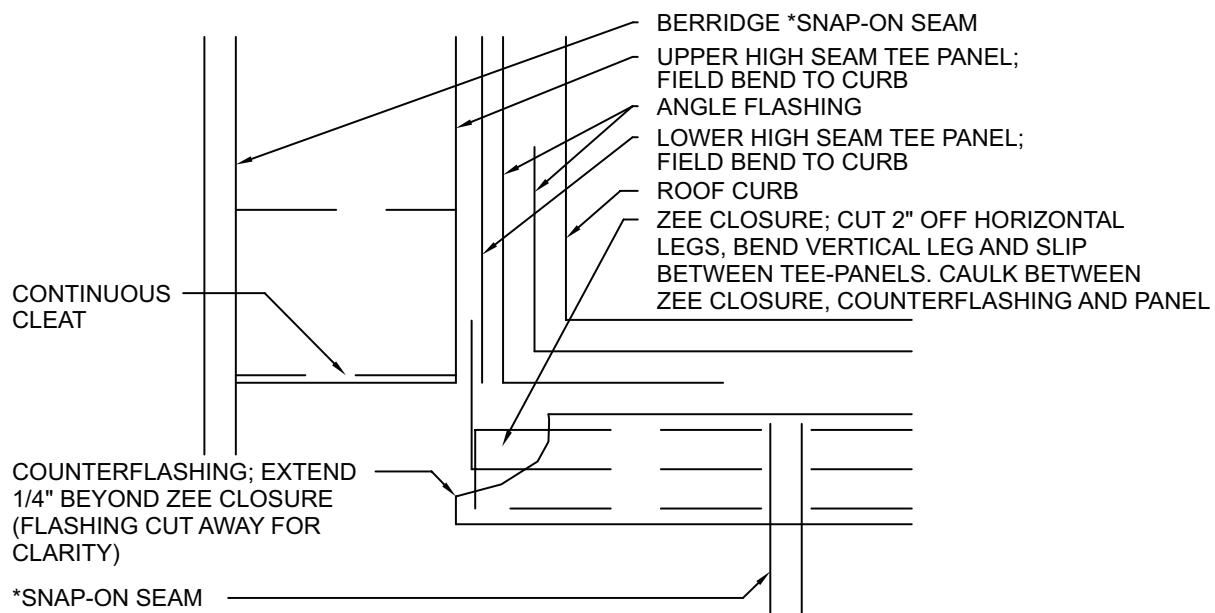
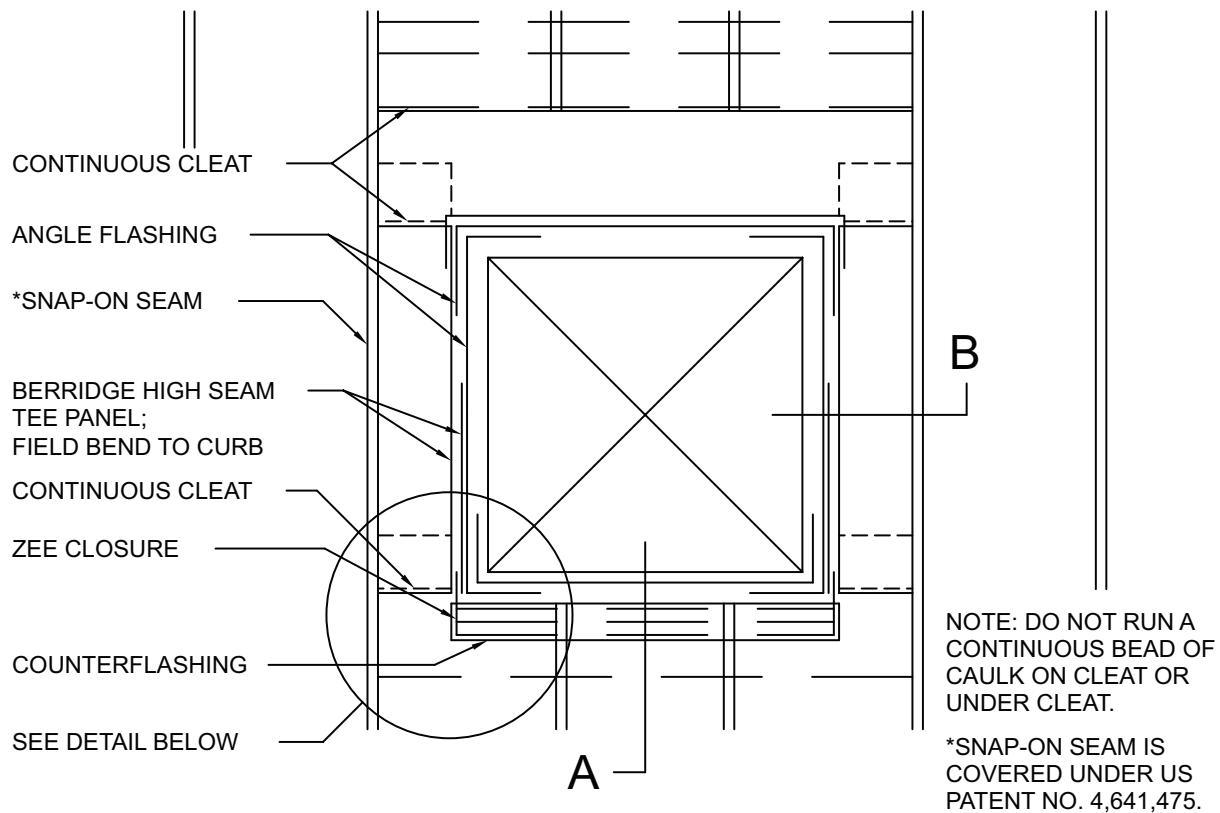
**BERRIDGE  
MANUFACTURING  
COMPANY**

PIPE PENETRATION  
ON PANEL SEAM; SECTIONS  
\*\*CALL BMC BEFORE USING THIS DETAIL

**High Seam Tee-Panel**

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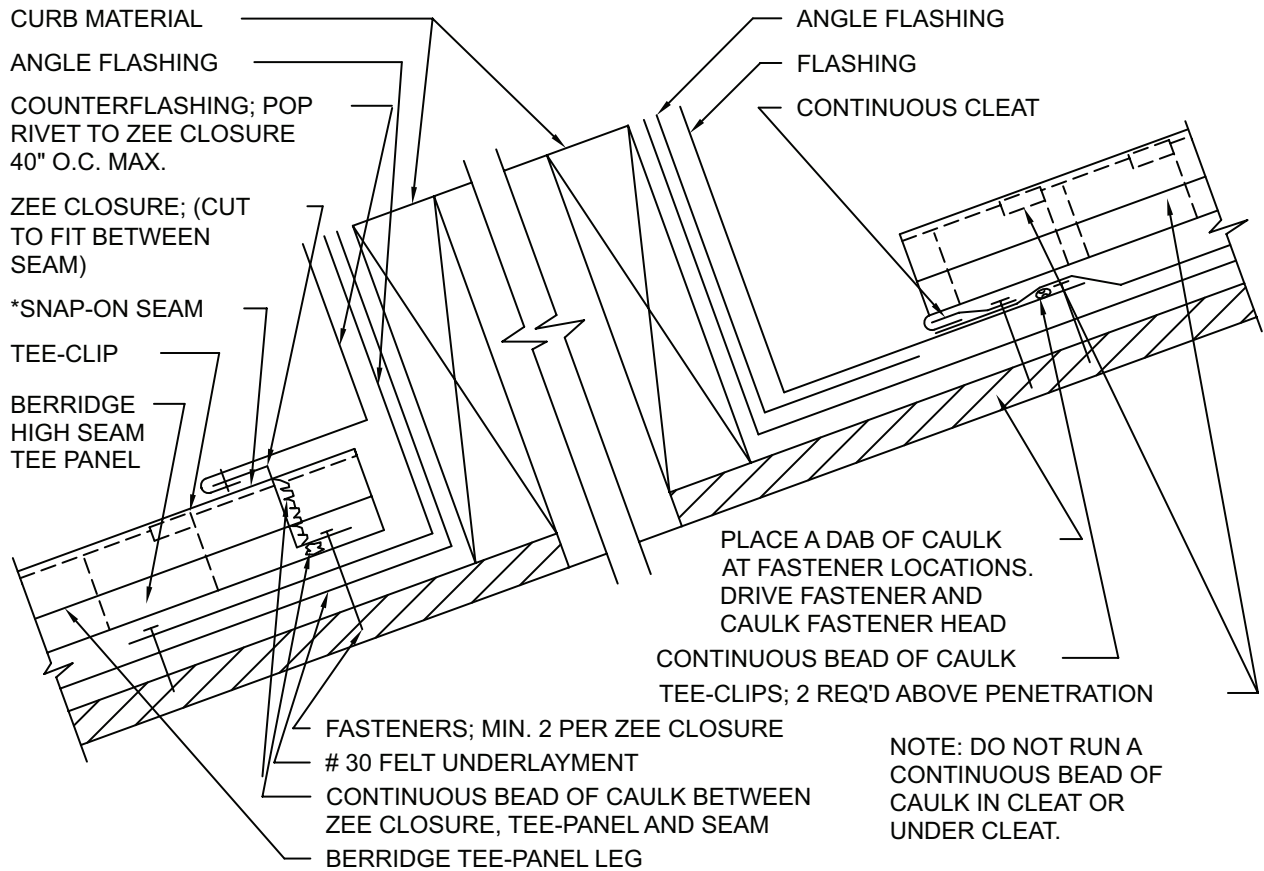


## ROOF PENETRATION RECTANGULAR/SQUARE

### High Seam Tee-Panel

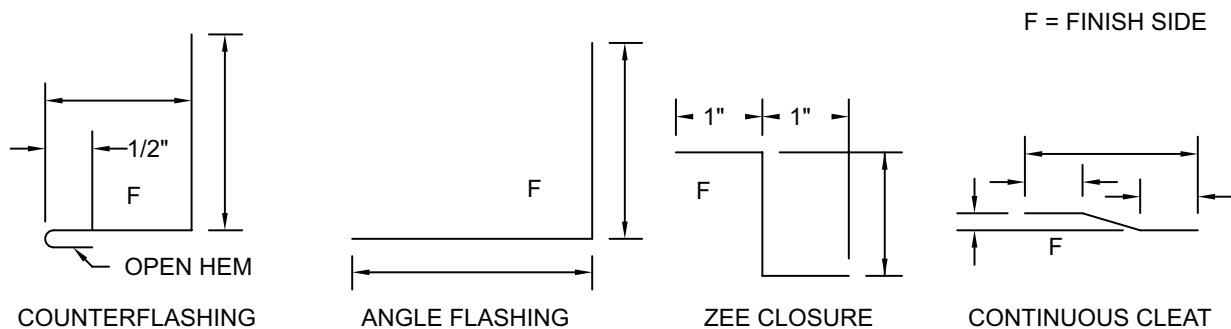
DATE: 12-11-01

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\*SNAP-ON SEAM IS COVERED UNDER US PATENT NO. 4,641,475.

1. SOLID SHEATHING (BY OTHERS) TO BE MINIMUM 1/2" PLYWOOD OR EQUIVALENT IN STRENGTH FOR HOLDING POWER OF FASTENERS.
2. ALL FELT UNDERLAYMENT, CAULKING, AND FASTENERS, ARE ITEMS TO BE FURNISHED AND INSTALLED BY THE ROOFING INSTALLER AT THE DISCRETION OF THE ARCHITECT.



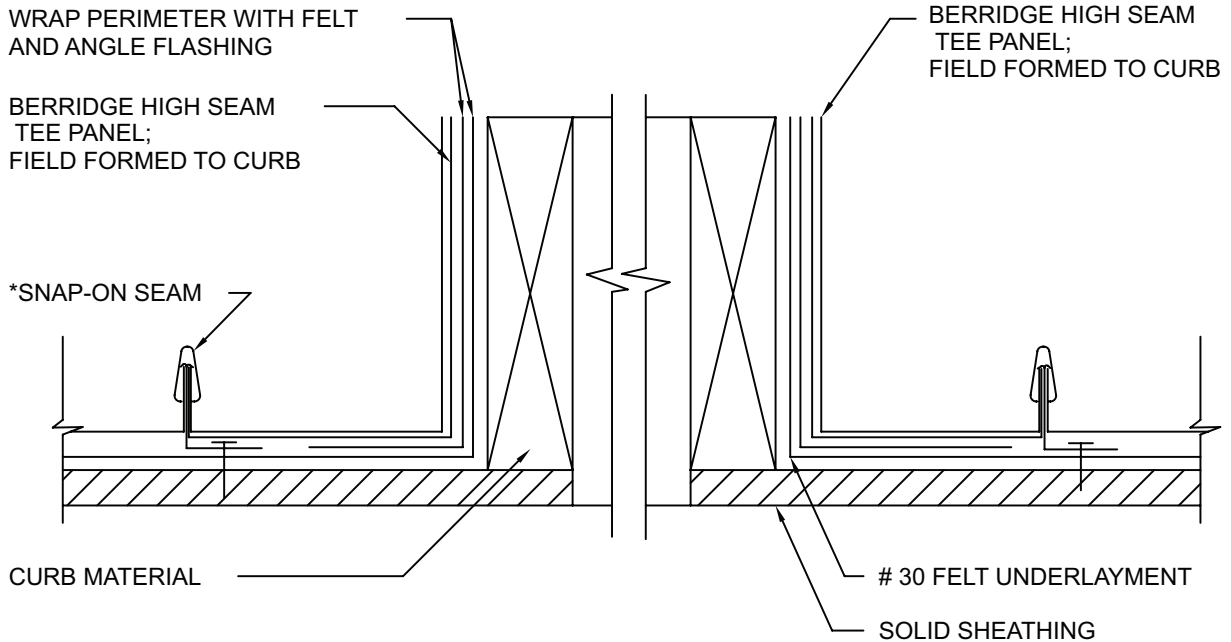
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COMPANY**

## ROOF PENETRATION SECTION A

High Seam Tee-Panel

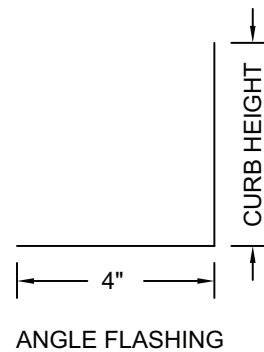
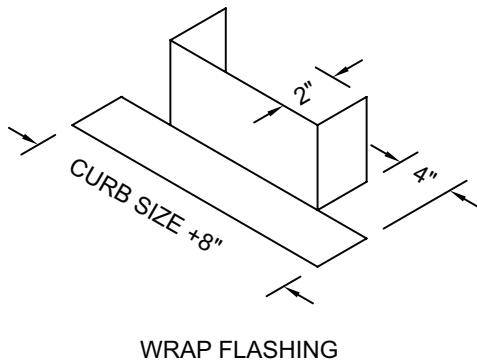
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\*SNAP-ON SEAM IS COVERED UNDER US PATENT NO. 4,641,475.

1. SOLID SHEATHING (BY OTHERS) TO BE MINIMUM 1/2" PLYWOOD OR EQUIVALENT IN STRENGTH FOR HOLDING POWER OF FASTENERS. (METAL CORRUGATED SHEATHING, MIN. 24 GA. MAY BE USED IN LIEU OF PLYWOOD).
2. ALL FELT UNDERLAYMENT, CAULKING, AND FASTENERS, ARE ITEMS TO BE FURNISHED AND INSTALLED BY THE ROOFING INSTALLER AT THE DISCRETION OF THE ARCHITECT.



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## ROOF PENETRATION SECTION B

### High Seam Tee-Panel

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DO NOT: RUN CONTINUOUS  
CAULK ON OR UNDER  
CONTINUOUS CLEAT

\*SNAP ON SEAM

ANGLE FLASHING

CONTINUOUS CLEAT

FLASHING

HEM PANEL PAN  
UNDER BOTH SIDES OF  
PENETRATION

BERRIDGE HIGH SEAM  
TEE PANEL;  
FIELD BEND TO CURB

SEE DETAIL BELOW

ZEE CLOSURE; CUT  
AND BEND AT END  
AND CAULK

ANGLE FLASHING

UPPER  
BERRIDGE  
HIGH SEAM  
TEE PANEL;

LOWER  
BERRIDGE  
HIGH SEAM  
TEE PANEL;

CONTINUOUS CLEAT

COUNTERFLASHING; EXTEND  
1/4" BEYOND ZEE CLOSURE  
(CUT AWAY VIEW FOR CLARITY)

ZEE CLOSURE

CONTINUOUS BEAD OF CAULK  
BETWEEN ZEE CLOSURE  
AND PANEL



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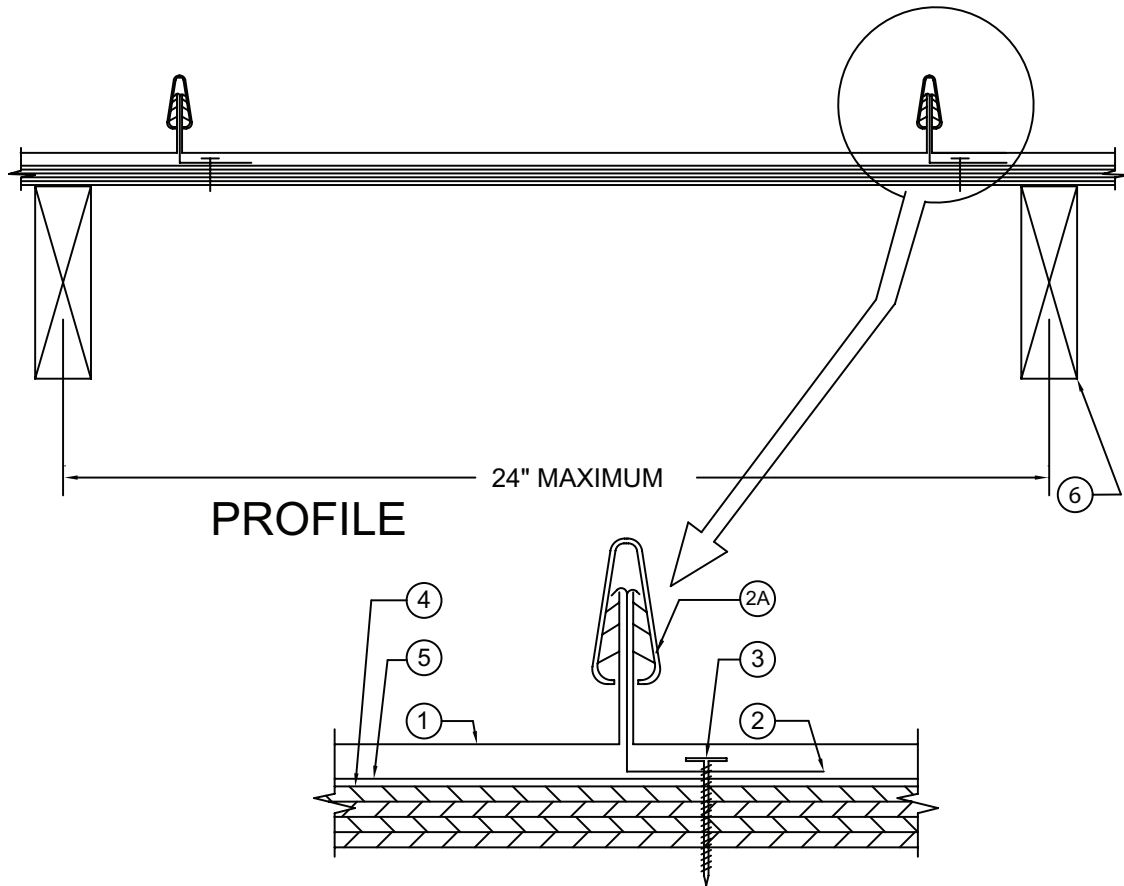
*Roofs of Distinction*

## ROOF PENETRATION ISOMETRIC

### High Seam Tee-Panel

DATE: 12-11-01

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## PANEL - SEAM ASSEMBLY

**1. METAL ROOF DECK PANELS:** No. 24 MSG min. 40,000 psi yield strength coated steel. Panel widths to be 18-1/4" and rib height to be 1 3/8". Total seam height with snap-on seam cover in place is nominal 1 1/2". Panels to be continuous length. End laps to be overlapped minimum 6". A line of sealant may be used at end and sidelaps.  
Berridge Manufacturing Co. - "High Seam Tee-Panel"

**2. ROOF DECK FASTENERS:** (Panel Clips) one piece clip, formed from the same type and thickness material as that used to fabricate metal panels. Clips spaced max. 24" O.C., located at panel sides with guide holes in bottom to accommodate screw fasteners.  
Berridge Manufacturing Co. - "High Seam Tee-Clip"

**2A. ROOF DECK FASTENERS:** (Seam Covers) Seams covering panel ribs are to be 3/8" wide and 7/8" high with vinyl insert (US Patent No. 4,641,475), formed from the same type and thickness material as that used to fabricate metal panels.  
Berridge Manufacturing Company - "Seam Covers"

**3. FASTENERS:** Screws used to attach the panel clips to plywood to be No. 10 by 1" long pancake head wood screw with a No. 2 Phillips drive. One screw per clip. Screws used to attach plywood substructure to wood trusses of joist to be deformed shank nails. When light ga. Structural Steel joists are used, screws to be No. 12 x 1-5/8" long with Phillips drive head. Spacing of screws to be 6" O.C. at plywood ends and 12" O.C. at interior joints.

**4. SUBSTRUCTURE:** (Plywood) Plywood decking to be a nominal 5/8" thick, exposure sheathing span C-D, 40/20 plywood. All butt joints are to be sealed with tape and/or caulked.

**5. FELT PAPER:** Two ply, No. 30 felt per 100 square feet.

**6. JOISTS:** Joist spaced at 2'-0" O.C. may be one of the following:

- A. Nom. 2 x 6 wood joists No. 2 or better.
- B. Nom. 2 x 4 wood when used on a top chord of a wood truss, No. 2 or better.
- C. Light gauge structural steel framing with the member against the plywood to be a minimum No. 22 MSG coated steel.

FOR ADDITIONAL INFORMATION, PLEASE REFER TO THE UNDERWRITERS LABORATORY, INC.  
BUILDING MATERIALS DIRECTORY.



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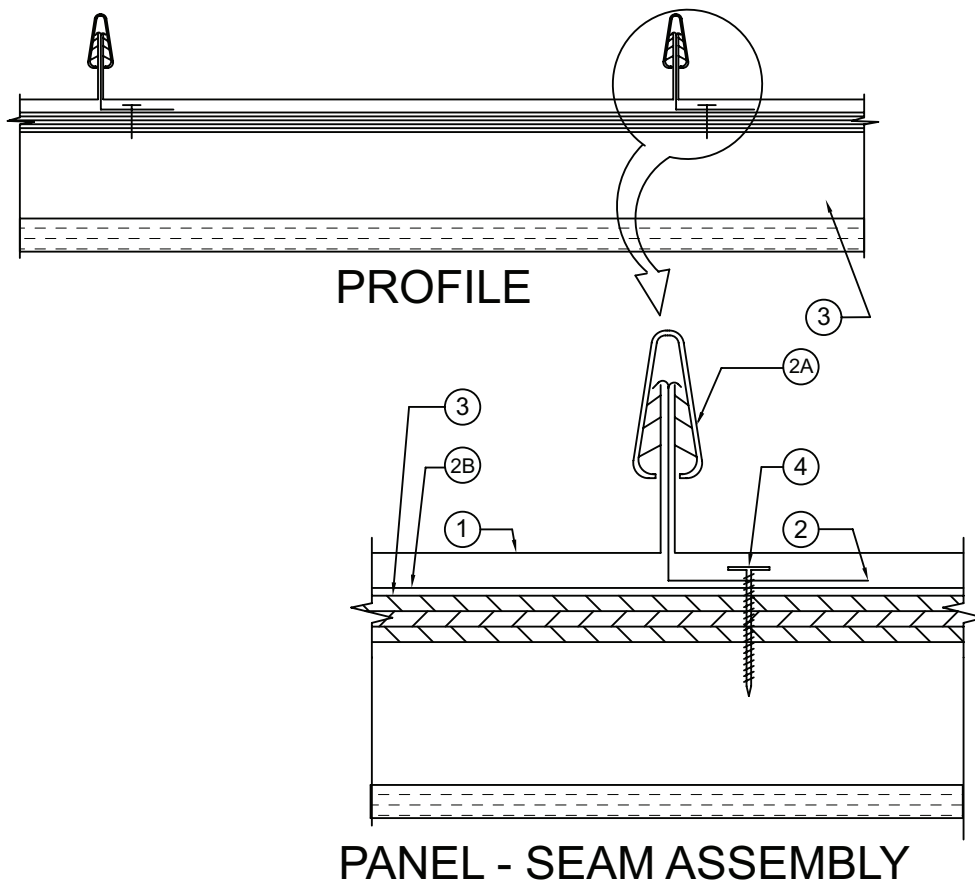
**UL 90 APPROVED HIGH SEAM  
TEE-PANEL ASSEMBLY  
CONSTRUCTION NO. 297**

**High Seam Tee-Panel**

**DATE: 12-11-01**

**PAGE/FILE  
HT-90**





**1. METAL ROOF DECK PANELS:** No. 24 MSG min. 40,000 psi yield strength coated steel. Maximum panel width 18 1/4" and rib height to be 1 3/8". Total seam height with snap-on seam cover in place is nominal 1 1/2". Panels continuous over two or more spans. End laps are to be overlapped minimum 6". A line of sealant may be used at end and sidelaps. Berridge Manufacturing Co. - "High Seam Tee-Panel"

**2. ROOF DECK FASTENERS:** (Panel Clips) one piece assembly, fabricated from 24 MSG coated steel. Clips are spaced a maximum of 12 in. OC located at panel sides with guide holes in bottom to accommodate screw fasteners. Berridge Manufacturing Co. - "High Seam Tee-Clip"

**2A. ROOF DECK FASTENERS:** (Seam Covers) Seams covering panel ribs are to be 3/8" wide and 7/8" high with vinyl insert (US Patent No. 4,641,475), formed from the same type and thickness material as that used to fabricate metal panels. Berridge Manufacturing Co. - "Snap on Seam"

**2B. FELT PAPER:**  
Two ply, No. 30 felt per 100 square feet.

**3. STRUCTURAL CEMENT-FIBER UNITS:**  
Consists of 5 in. thick composite structural cement fiber units with foamed plastic core and 7/16 in. OSB structural panel on one face. All transverse butt joints are to occur over structural support. Tectum, Inc. - "Type E or Type 3"

**4. FASTENERS:**  
(Screws) - Screw used to attach structural cement fiber units (item 3) to structural supports (item 5) to be 6 in. long minimum 14 MSG screw with a 5/8 in. diam head. Fasteners are spaced 12 in. OC. Screws used to attach roof deck fasteners (item 2) to structural cement fiber unit deck to be No. 10 pancake head self-tapping steel screws. Screws to be spaced maximum 12 in. OC. Fasteners used to attach roof deck fasteners (panel clips) (item 2) to plywood substructure to be No. 10 by 1 in. long pan head steel screws. Two screws per roof deck fastener.

**5. SUPPORT (JOIST):**  
Cee channels to be spaced maximum 7 ft. 0 in. As alternatives, structural steel components (hot rolled beams, open web joist, etc.) may be used. min gauge and yield to depend on design considerations for uplift loading.

**6. LATERAL BRACING:**  
(Not shown) As required. Refer to General Information, Roof Deck Constructions (Roofing Materials and Systems Directory) for items not evaluated.

FOR ADDITIONAL INFORMATION, PLEASE REFER TO THE UNDERWRITERS LABORATORY, INC. BUILDING MATERIALS DIRECTORY.



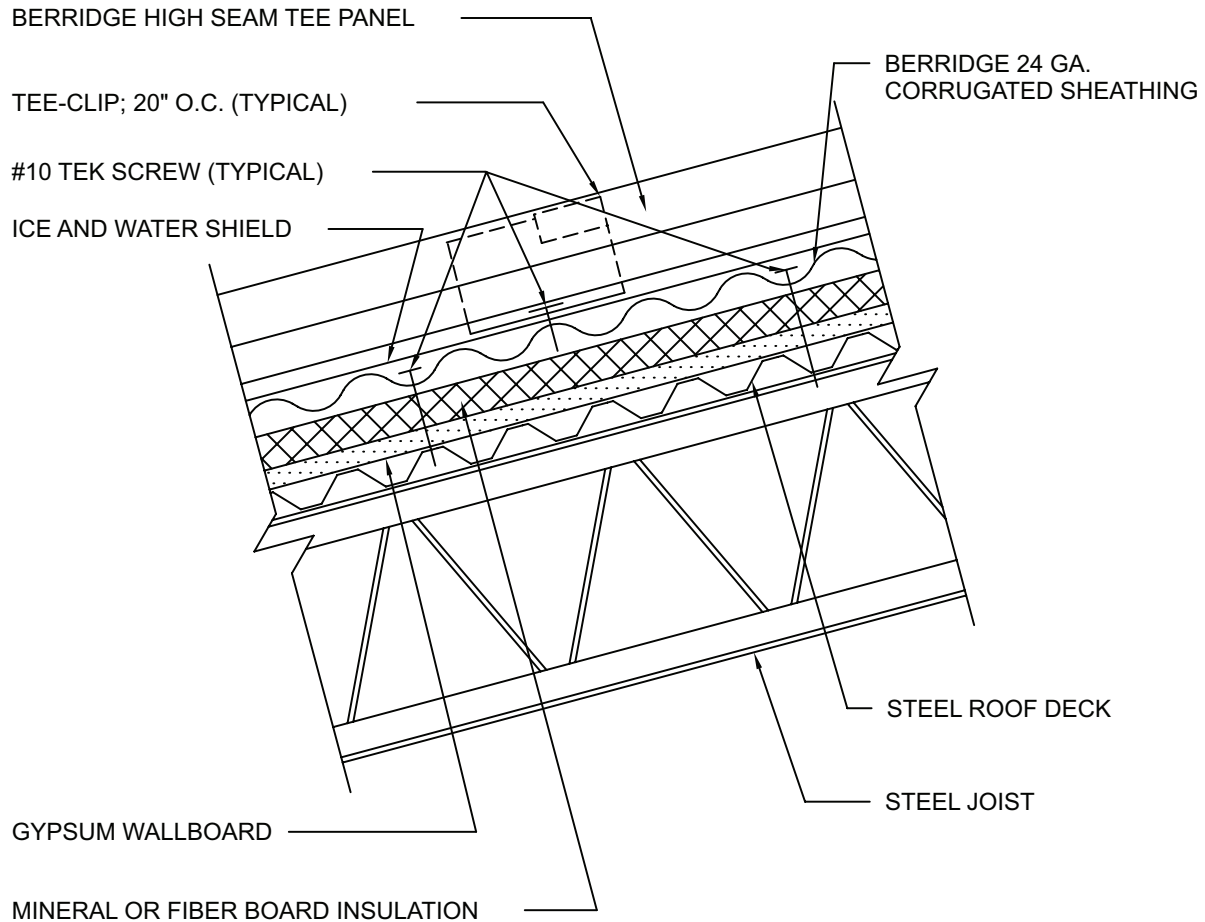
**BERRIDGE  
MANUFACTURING  
COMPANY**

**UL 90 APPROVED HIGH SEAM  
TEE-PANEL ASSEMBLY  
CONSTRUCTION NO. 475**

**High Seam Tee-Panel**

**DATE: 12-11-01**

**PAGE/FILE  
HT-91**



1. IN ORDER TO QUALIFY FOR A FIRE-RESISTANT RATING, THE ROOF SYSTEM CANNOT MAKE A PENETRATION IN THE INSULATION SYSTEM. THE TEE-PANEL, IN ORDER TO MAKE POSITIVE ATTACHMENT, MUST BE ATTACHED TO A CORRUGATED SUBSTRATUM (IF THE INSULATION SYSTEM HAS NO NAILABLE SURFACE). THE CORRUGATED SUBSTRATUM IS TO BE MOUNTED DIRECTLY TO THE INSULATION SYSTEM WITH FASTENERS FASTENED THROUGH INTO THE STRUCTURAL STEEL DECK.
  
2. THIS ASSEMBLY QUALIFIES FOR THE FOLLOWING UL FIRE-RESISTANT ROOF ASSEMBLIES:  
 UL DESIGN NO. P224, P225, P227, P230, P237, P250, P259, P508, P510, P512, P514, P518, P701, P711, P713, P717, P719, P720, P722, P723, P724, P726, P731, P734, P736, P801, P803, P814, P815, P818, P819, P823, AND P824.
  
3. ADDITIONAL INFORMATION REGARDING THIS ASSEMBLY IS AVAILABLE IN THE UL FIRE RESISTANCE DIRECTORY.



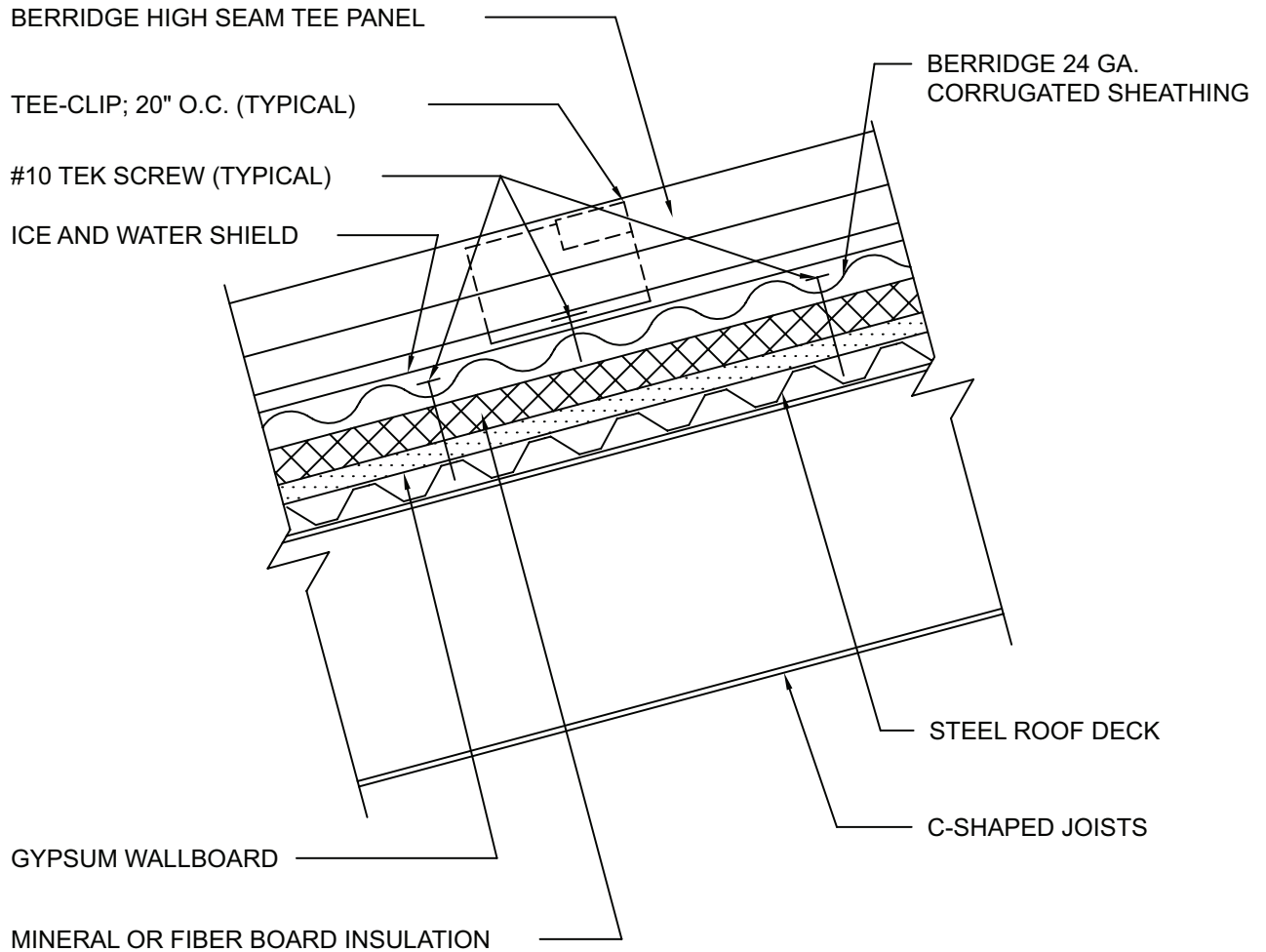
**BERRIDGE  
MANUFACTURING  
COMPANY**

## UL FIRE RESISTANCE ROOF ASSEMBLY

### High Seam Tee-Panel

DATE: 12-11-01

PAGE/FILE  
HT-100



1. IN ORDER TO QUALIFY FOR A FIRE-RESISTANT RATING, THE ROOF SYSTEM CANNOT MAKE A PENETRATION IN THE INSULATION SYSTEM. THE TEE-PANEL, IN ORDER TO MAKE POSITIVE ATTACHMENT, MUST BE ATTACHED TO A CORRUGATED SUBSTRATUM (IF THE INSULATION SYSTEM HAS NO NAILABLE SURFACE). THE CORRUGATED SUBSTRATUM IS TO BE MOUNTED DIRECTLY TO THE INSULATION SYSTEM WITH FASTENERS FASTENED THROUGH INTO THE STRUCTURAL STEEL DECK.
2. THIS ASSEMBLY QUALIFIES FOR THE UL FIRE-RESISTANT ROOF ASSEMBLY: P512.
3. ADDITIONAL INFORMATION REGARDING THIS ASSEMBLY IS AVAILABLE IN THE UL FIRE RESISTANCE DIRECTORY.



**BERRIDGE  
MANUFACTURING  
COMPANY**

## UL FIRE RESISTANCE ROOF ASSEMBLY

### High Seam Tee-Panel

DATE: 12-11-01

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BERRIDGE HIGH SEAM TEE PANEL

TEE-CLIP; 20" O.C. (TYPICAL)

#10 TEK SCREW (TYPICAL)

ICE AND WATER SHIELD

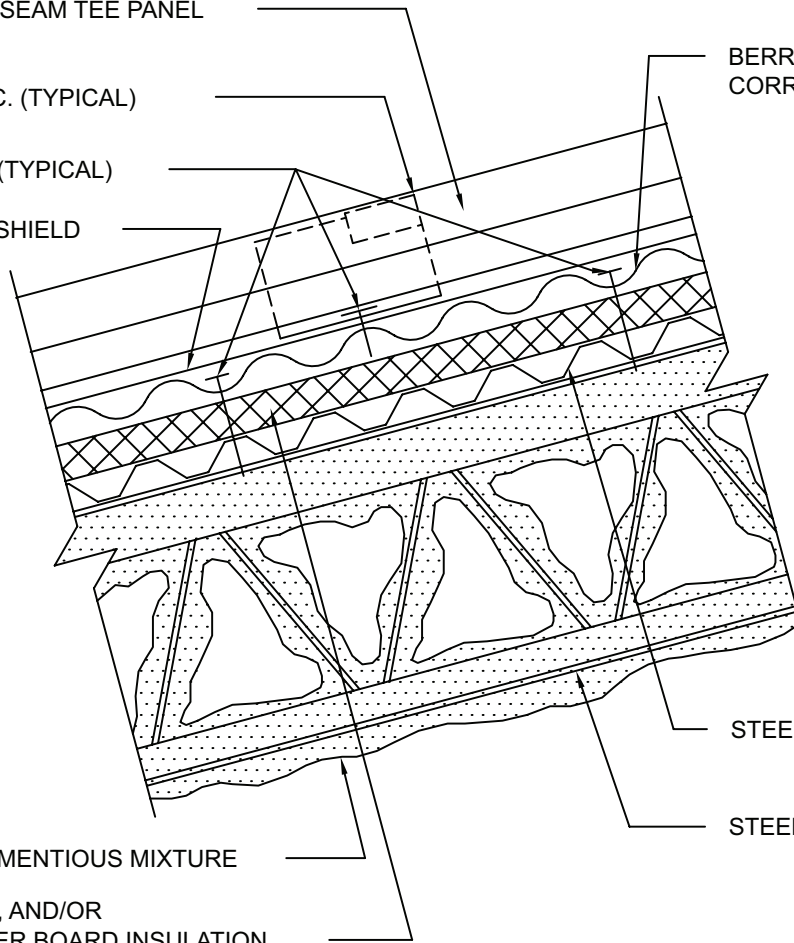
BERRIDGE 24 GA.  
CORRUGATED SHEATHING

SPRAYED ON CEMENTIOUS MIXTURE

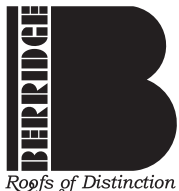
GYPSUM BOARD, AND/OR  
MINERAL OR FIBER BOARD INSULATION

STEEL ROOF DECK

STEEL JOIST



1. IN ORDER TO QUALIFY FOR A FIRE-RESISTANT RATING, THE ROOF SYSTEM CANNOT MAKE A PENETRATION IN THE INSULATION SYSTEM. THE TEE-PANEL, IN ORDER TO MAKE POSITIVE ATTACHMENT, MUST BE ATTACHED TO A CORRUGATED SUBSTRATUM (IF THE INSULATION SYSTEM HAS NO AVAILABLE SURFACE). THE CORRUGATED SUBSTRATUM IS TO BE MOUNTED DIRECTLY TO THE INSULATION SYSTEM WITH FASTENERS FASTENED THROUGH INTO THE STRUCTURAL STEEL DECK.
2. THIS ASSEMBLY QUALIFIES FOR THE FOLLOWING UL FIRE RESISTANT ROOF ASSEMBLIES:  
UL DESIGN NO. P224, P225, P227, P230, P237, P250, P259, P508, P510, P512, P514, P518, P701, P711, P713, P717, P719, P720, P722, P723, P724, P726, P731, P734, P736, P801, P803, P814, P815, P818, P819, P823, AND P824.
3. ADDITIONAL INFORMATION REGARDING THIS ASSEMBLY IS AVAILABLE IN THE UL FIRE RESISTANCE DIRECTORY.



**BERRIDGE  
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**UL FIRE RESISTANCE  
ROOF ASSEMBLY**

**High Seam Tee-Panel**

DATE: 11-15-00

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