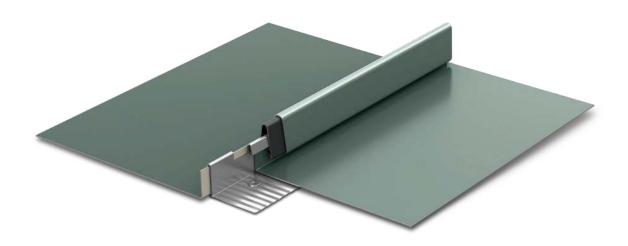
TEE-PANEL INSTALLATION DETAILS





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A. BERRIDGE TEE PANEL: AVAILABLE WITH A PAN WIDTH OF 12-3/4" OR 19-3/4" AND USED WITH THE BERRIDGE PATENTED SNAP-ON SEAM (US PATENT NO. 4,641,475) TO PROVIDE A CONSTANT SEAM HEIGHT OF 1".

THE 12-3/4" PAN WIDTH CAN EITHER BE FACTORY FABRICATED OR FIELD FABRICATED USING THE BERRIDGE MODEL SS-14 PORTABLE ROLL FORMER. THE 19-3/4" PAN WIDTH IS FACTORY FABRICATED ONLY.

PLEASE CONTACT BERRIDGE MANUFACTURING COMPANY FOR FURTHER INFORMATION REGARDING THE BERRIDGE SS-14 PORTABLE ROLL FORMER.

B. MINIMUM SLOPE: THE TEE-PANEL IS RECOMMENDED FOR SLOPES OF 1:12 AND GREATER IN MOST AREAS OF THE COUNTRY. IN HEAVY SNOW AREAS OR 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 IS RECOMMENDED FOR ALL APPLICATIONS WHERE THE ROOF SLOPE IS 3:12 OR LESS.

C. MATERIAL STORAGE: CAUTION MUST BE EXERCISED IN STORAGE OF MATERIALS PRIOR TO INSTALLATION. KEEP ALL BERRIDGE PREFINISHED MATERIAL IN A DRY LOCATION WITH ADEQUATE VENTILATION AND 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.

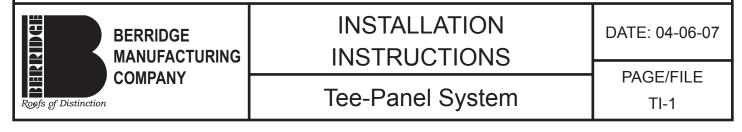
- D. STRIPPABLE FILM: THE STRIPPABLE PLASTIC FILM WHICH IS APPLIED OVER MOST BERRIDGE PREFINISHED PRODUCTS, PANELS, FLASHINGS, COILS AND FLAT SHEETS PROTECTS THE FINISH DURING FABRICATION AND TRANSIT. THIS FILM MUST BE REMOVED PRIOR TO INSTALLATION.
- E. SOLID SHEATHING REQUIREMENTS: BERRIDGE MANUFACTURING COMPANY RECOMMENDS THE USES OF EITHER BERRIDGE 24 GA. CORRUGATED METAL (NOMINAL 2-1/2" PITCH x 11/16" DEPTH) OR A MINIMUM OF 1/2" SOLID WOOD SHEATHING TO PROVIDE SUFFICIENT HOLDING POWER FOR FASTENERS. CONTACT BERRIDGE MANUFACTURING'S 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 GRACE ICE AND WATERSHIELD OR EQUAL TO BE USED AS AN UNDERLAYMENT FOR ALL CORRUGATED DECKS.

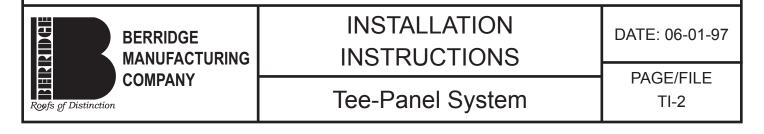
NOTE: FOR PROJECTS REQUIRING UL 90 ASSEMBLY, REFER TO UL 90 DETAILS.

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" IN 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:
 - 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 FELTING 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 TEE-PANEL TYPICAL DETAILS. GRACE ICE AND WATER SHIELD MAYBE 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 IS 3:12 OR LESS. 2 LAYERS REQUIRED AT EAVE REGARDLESS OF SLOPE.
 - INSULATE BETWEEN WOOD BLOCKING AND METAL WITH FELT OR ICE AND WATER SHIELD.
- J. THERMAL MOVEMENT: EXPANSION AND CONTRACTION OF PANELS WHICH EXCEED THIRTY FEET IN LENGTH CAN BE A FACTOR IN THE DESIGN AND INSTALLATION OF FLASHING AND PANELS. PLEASE REFER TO THE CHART ON PAGE TI-6 TO DETERMINE ANTICIPATED THERMAL MOVEMENT OF THE PANELS. IMPROPERLY DESIGNED FLASHING CAN ALLOW PANELS TO DISENGAGE FROM THE FLASHING, ALLOW OIL-CANNING IN PANEL AND/OR CAUSE FLASHING TO WORK LOOSE FROM ITS ANCHORAGE.
- K. ELECTROLYSIS: AVOID ALLOWING FLASHING AND PANELS TO COME INTO CONTACT WITH EITHER LEAD OR COPPER, AND PREVENT EXPOSURE TO WATER RUNDOWN FROM COPPER AND/OR LEAD.
- L. FLASHING: IF BERRIDGE MANUFACTURING COMPANY IS TO SUPPLY FLASHING, ALL FLASHINGS WILL 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 ONE FLASHING IS INSTALLED OVER OTHER FLASHINGS.
- 3. INSTALL ALL FLASHINGS AS PER BERRIDGE TYPICAL DETAILS.
- 4. ALL FLASHINGS ARE TO BE DESIGNED AND INSTALLED TO NOT TRAP WATER.
- N. PANELS: BERRIDGE MANUFACTURING COMPANY WILL PROVIDE SQUARE END CUTS ONLY ON ALL TEE-PANELS. COMPUTATION OF ALL QUANTITIES AND DIMENSIONS ARE THE RESPONSIBILITY OF THE PURCHASER.

O. 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 THE EAVE. AT VALLEY AREAS, MAKE SURE PANELS ARE INSTALLED SO THAT DRAINAGE HAS FREE FLOW AND IS NOT OBSTRUCTED BY PANEL SEAMS.
- 3. INSTALL 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 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



INSTALLATION INSTRUCTIONS

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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:

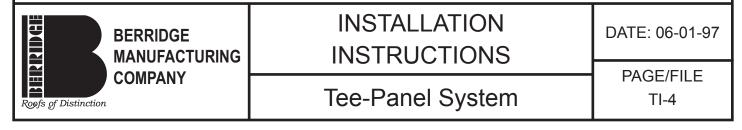
- 1. INSTALL SEAMS WITH HAND PRESSURE ONLY. DO NOT POUND OR HAMMER SEAMS INTO PLACE; THIS WILL DAMAGE THE SEAM AND VINYL, PERMITTING WATER INFILTRATION.
- 2. INSPECT EACH SEAM AS YOU INSTALL IT TO MAKE SURE THE VINYL IS PROPERLY SEATED IN THE METAL CAP AND IS SNUGLY FITTED NEXT TO THE PANEL LEGS.
- 3. 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 USE #10 PANCAKE HEAD TEKS FASTENERS (ZINC-PLATED SCREW WITH PHILLIPS INSERT, AS MADE BY CONSTRUCTION FASTENERS CO.) FOR INSTALLATION TO METAL.** WHEN USING POP RIVETS ON FLASHING, STAINLESS STEEL RIVETS ARE RECOMMENDED TO AVOID RUST 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.

- T. UNDERWRITERS LABORATORIES RATINGS: THE BERRIDGE TEE-PANEL COMPLIES WITH THE FOLLOWING UL RATINGS:
 - 1. NO. 580 "TEST FOR WIND UPLIFT RESISTANCE OF ROOF ASSEMBLIES" CLASS UL 90 CONSTRUCTION NUMBER 296. (REFER TO BERRIDGE TYPICAL DETAIL T-90)
 - 2. UL FIRE-RESISTANT ROOF ASSEMBLIES: UL DESIGN NUMBERS P-224, 225, 227, 230, 237, 508, 510, 512, 701, 711, 713, 715, 717, 803, 814, 815, 819, 821. REFER TO BERRIDGE TYPICAL DETAILS T-91, T-92, AND T-93.
- U. 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 BERRIDGE MANUFACTURING'S 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.

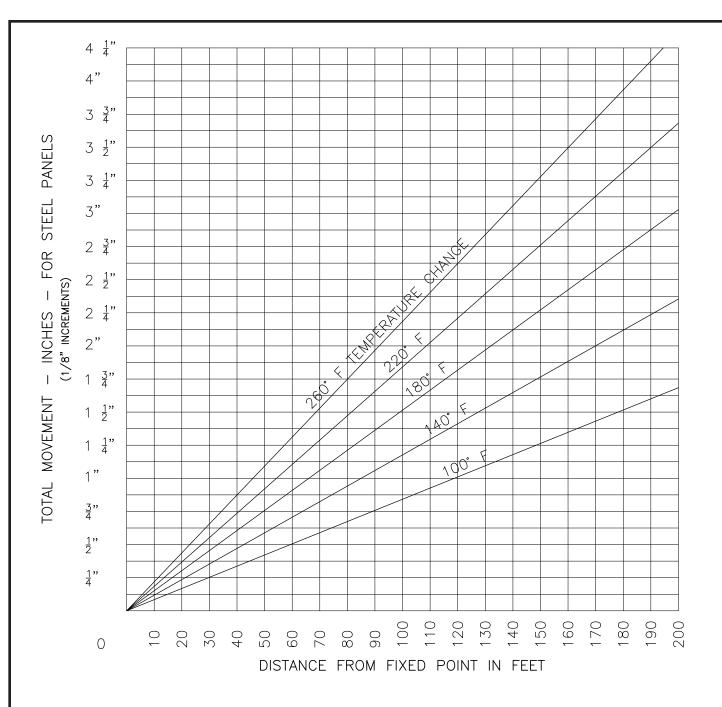
NOTE: ALL PRODUCTS, SPECIFICATIONS, DETAILS, AND INSTRUCTIONS SUBJECT TO CHANGE WITHOUT NOTICE. FOR SPECIFIC PROJECT DETAILS, CONTACT BERRIDGE.



INSTALLATION INSTRUCTIONS

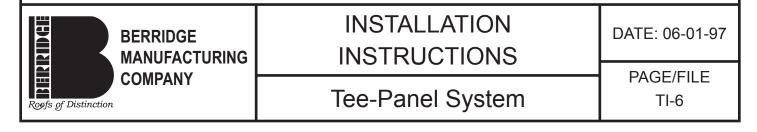
Tee-Panel System

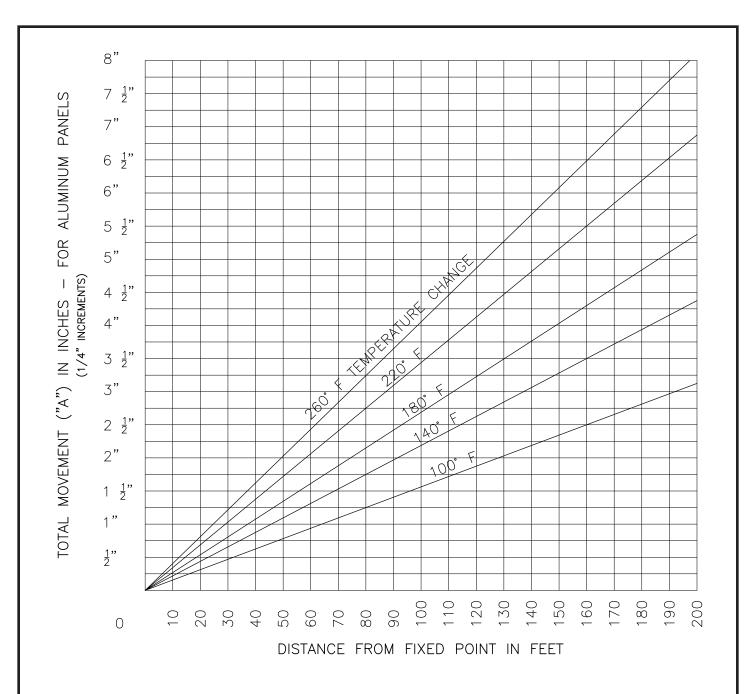
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EXPANSION AND CONTRACTION OF METAL PANELS DUE TO LONGITUDINAL THERMAL MOVEMENT MUST BE CONSIDERED IN BOTH DESIGN AND INSTALLATION. THE ABOVE CHART EMPHASIZES THE NEED TO PROVIDE AMPLE CLEARANCES FROM GUTTERS, RIDGES, ENDWALL, ETC.

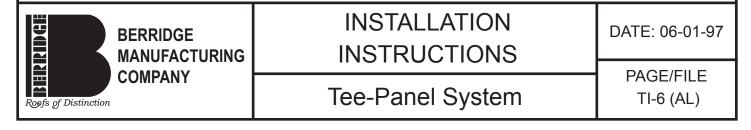
MAXIMUM TEMPERATURE SHOULD BE NO LOWER THAN 140°F FOR WHITE PANELS, UP TO 180° FOR DARK PAINTED PANELS, REGARDLESS OF AMBIENT MAXIMUM, MINIMUM SHOULD BE FIGURED WELL BELOW AMBIENT MINIMUM TO ALLOW FOR RADIATION TO NIGHT SKY. IN ANY CASE, A MINIMUM OF 100°F DIFFERENTIAL IS RECOMMENDED.





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.



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 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.

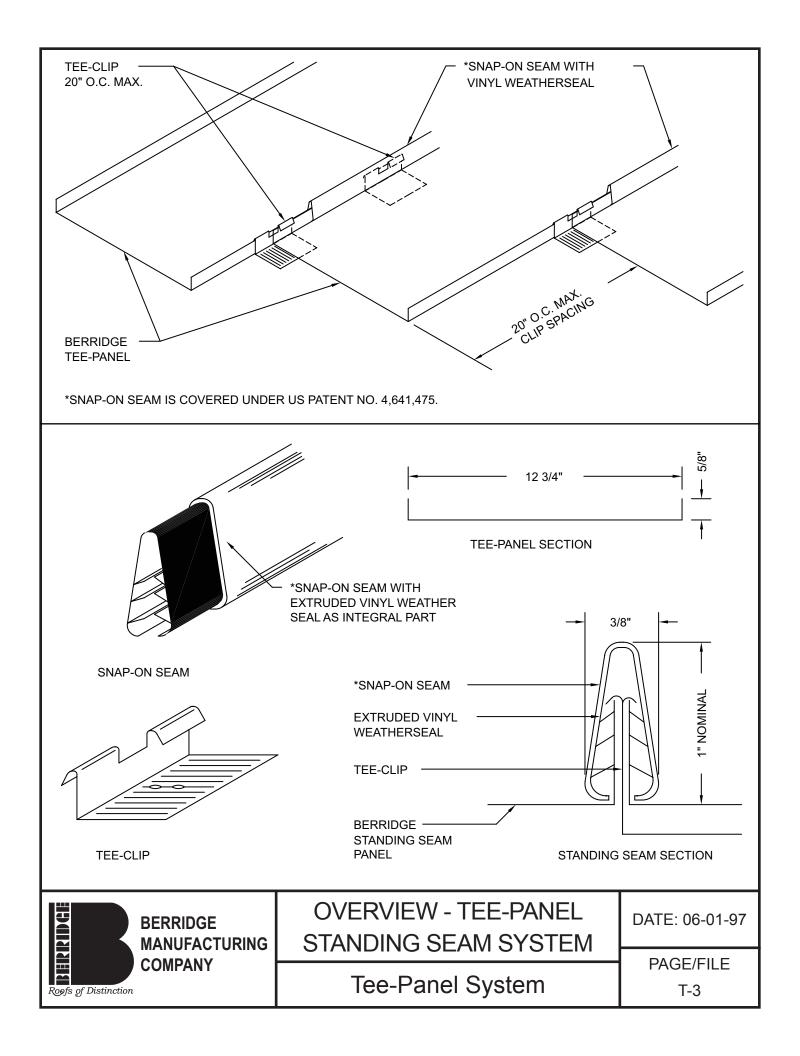
THE INSTALLER CAN VIRTUALLY ASSURE WATERTIGHTNESS IF THESE FLASHING DETAILS HAVE BEEN PROPERLY ADAPTED, ADEQUATE LAPS HAVE BEEN PROVIDED, CORRECT TYPE OF SEALANT USED, ALL JOINT ADEQUATELY CAULKED AND PROFESSIONAL WORKMANSHIP EMPLOYED.

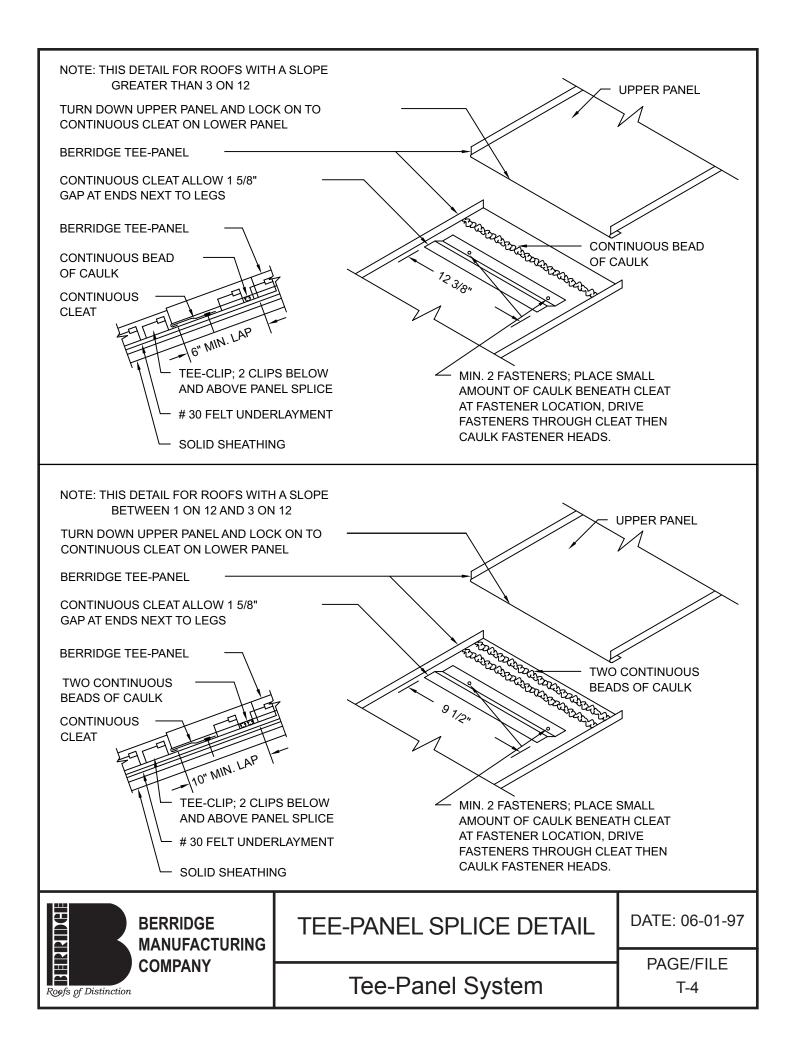


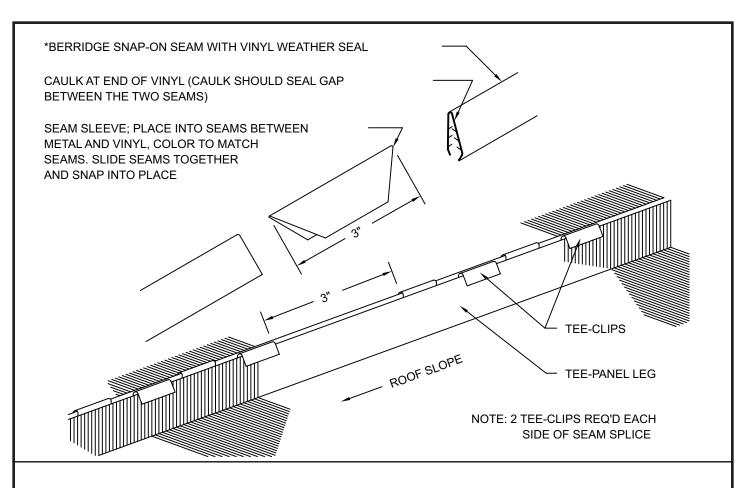
INTRODUCTION TO TYPICAL DETAILS

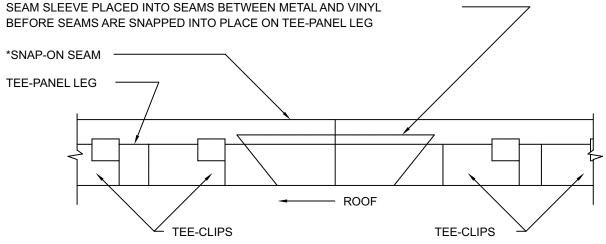
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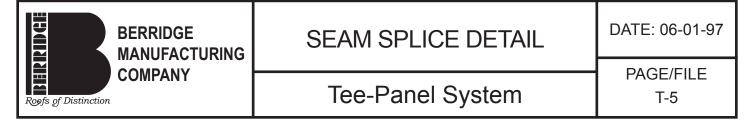


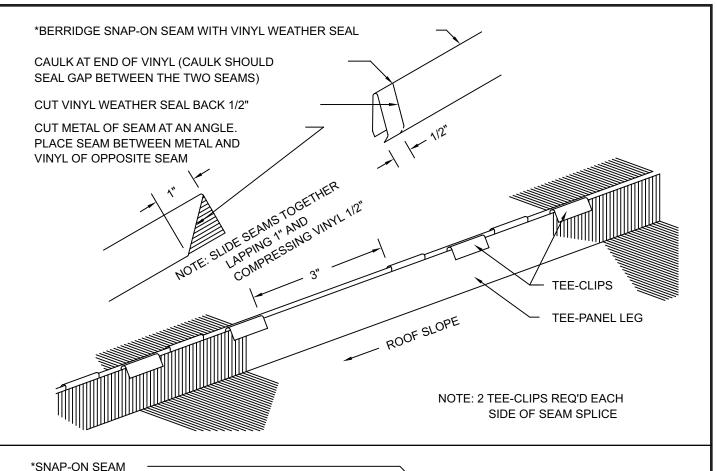
NOTE: 1) SPLICES IN SEAMS AND PANELS SHOULD BE STAGGERED.

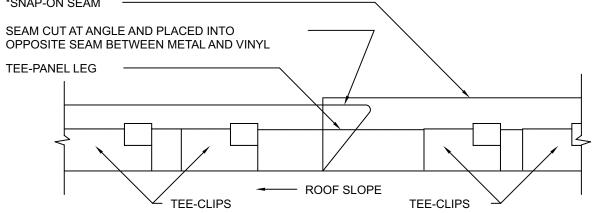
NEVER SPLICE A PANEL AND A SEAM AT THE SAME LOCATION.

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

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







NOTE: 1) SPLICES IN SEAMS AND PANELS SHOULD BE STAGGERED.

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

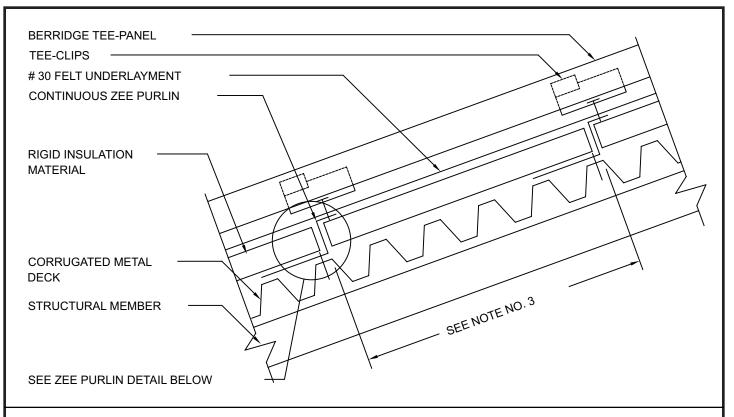
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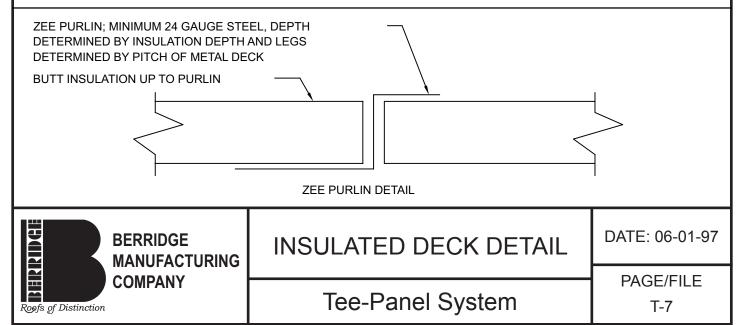
ALTERNATE SEAM SLICE DETAIL

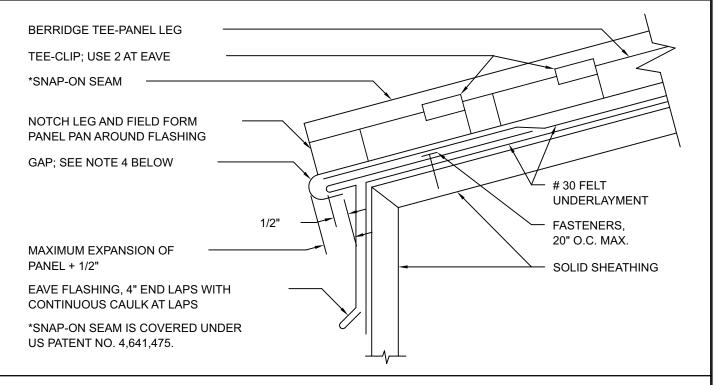
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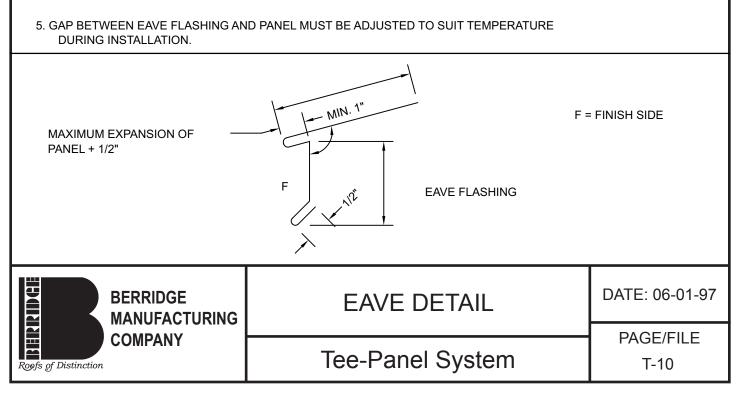


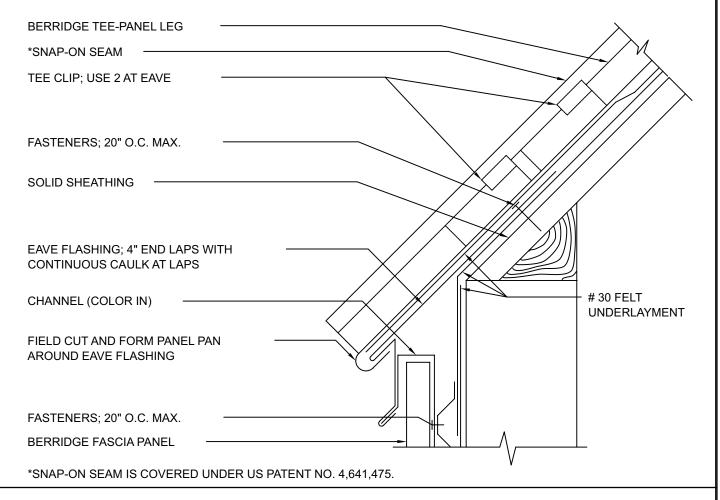
- 1. ALL FELT UNDERLAYMENT, STRUCTURAL MEMBERS, CORRUGATED DECK, AND INSULATING MATERIAL, ARE ITEMS TO BE FURNISHED AND INSTALLED BY OTHERS AT THE DISCRETION OF THE ARCHITECT.
- 2. CONTINUOUS WOOD BLOCKING (BY OTHERS) MAY BE USED IN LIEU OF ZEE PURLINS. BLOCKING MUST BE EXACT SAME DEPTH AS INSULATION.
- 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.



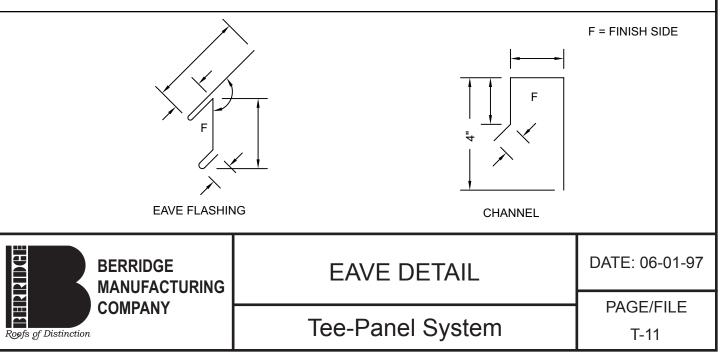


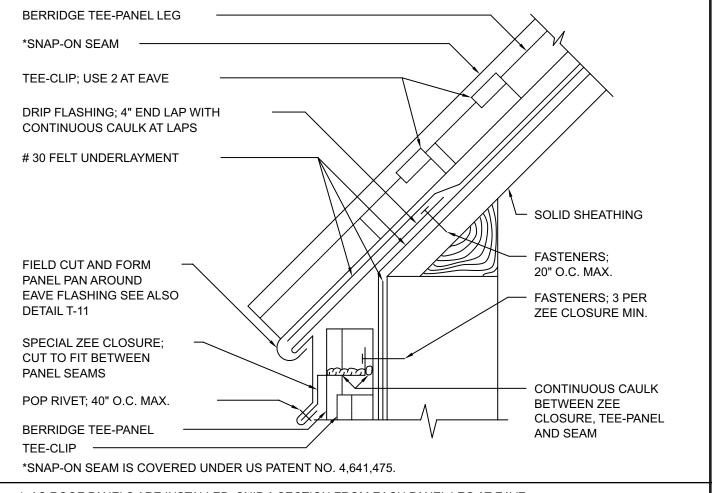
- 1. THIS DETAIL IS RECOMMENDED FOR AREAS WITH HEAVY SNOW LOADS OR WHERE EXPANSION AND CONTRACTION OF PANELS IS A DESIGN FACTOR.
- 2. SOLID SHEATHING (BY OTHERS) TO BE MINIMUM 1/2" PLYWOOD OR EQUIVALENT IN STRENGTH FOR HOLDING POWER OF FASTENERS.
- 3. ALL FELT UNDERLAYMENT, CAULKING AND FASTENERS ARE 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 TI-6.



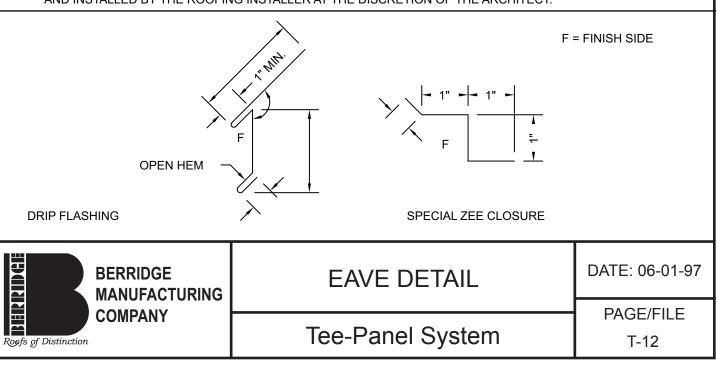


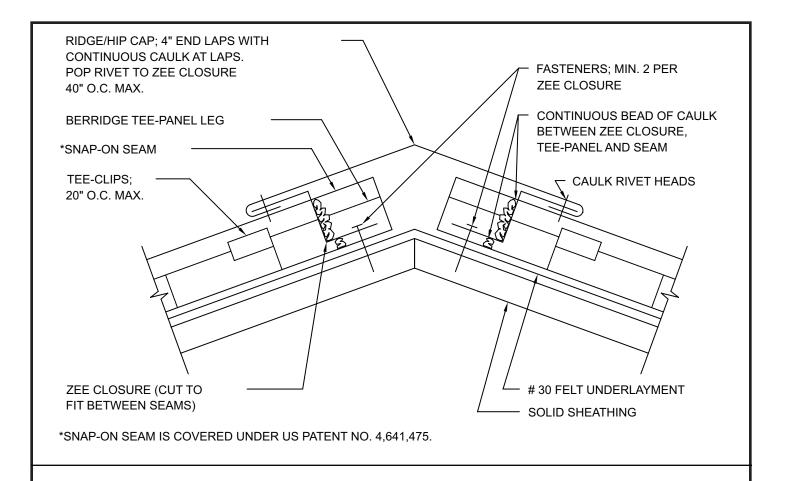
- 1. AS ROOF PANELS ARE INSTALLED, SNIP APPROXIMATELY 3/8" SECTION FROM EACH PANEL LEG AT EAVE, AND FORM PANEL PAN AROUND EAVE FLASHING.
- 2. SOLID SHEATHING (BY OTHERS) TO BE MINIMUM 1/2" PLYWOOD OR EQUIVALENT IN STRENGTH FOR HOLDING POWER OF FASTENERS.
- 3. ALL FELT UNDERLAYMENT, CAULKING, AND FASTENERS,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





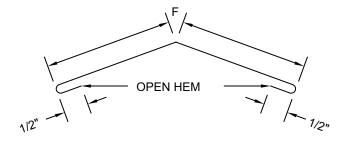
- 1. AS ROOF PANELS ARE INSTALLED, SNIP A SECTION FROM EACH PANEL LEG AT EAVE AND FORM THE PAN AROUND THE DRIP FLASHING.
- 2. SOLID SHEATHING (BY OTHERS) TO BE MINIMUM 1/2" PLYWOOD OR EQUIVALENT IN STRENGTH FOR HOLDING POWER OF FASTENERS.
- 3. ALL FELT UNDERLAYMENT, CAULKING, AND FASTENERS, ARE ITEMS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

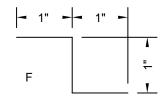




- 1. FIELD CUT ZEE CLOSURES TO FIT BETWEEN SEAMS.
- 2. SOLID SHEATHING (BY OTHERS) TO BE MINIMUM 1/2" PLYWOOD OR EQUIVALENT IN STRENGTH FOR HOLDING POWER OF FASTENERS.
- 3. ALL FELTING UNDERLAYMENT, CAULKING, AND FASTENERS, ARE ITEMS TO BE FURNISHED AND INSTALLED BY THE ROOFING INSTALLER AT THE DISCRETION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







RIDGE/HIP CAP

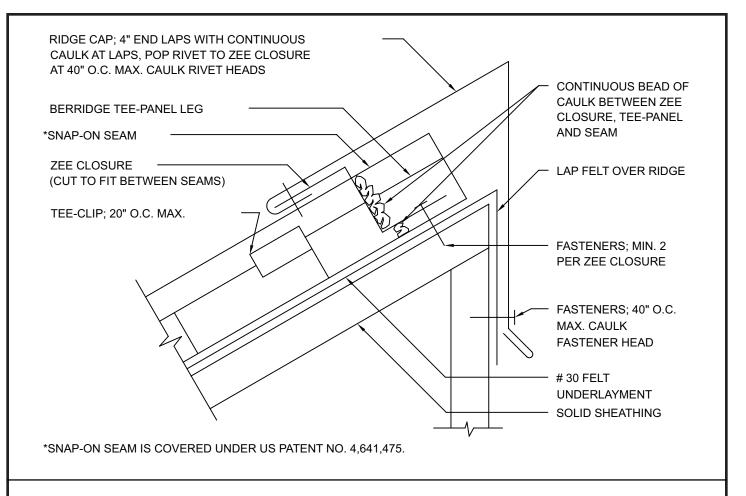
ZEE CLOSURE



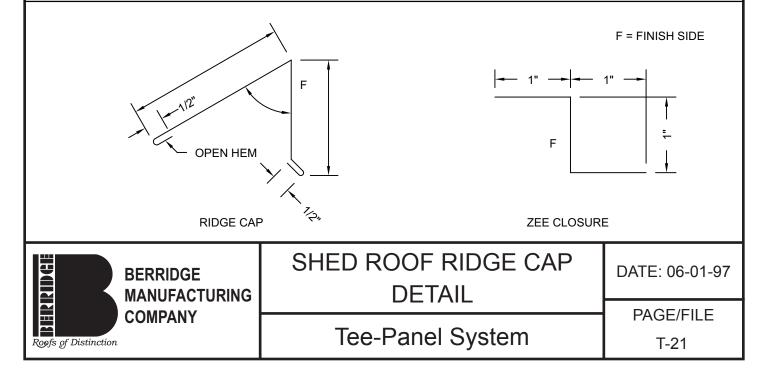
RIDGE AND HIP DETAIL

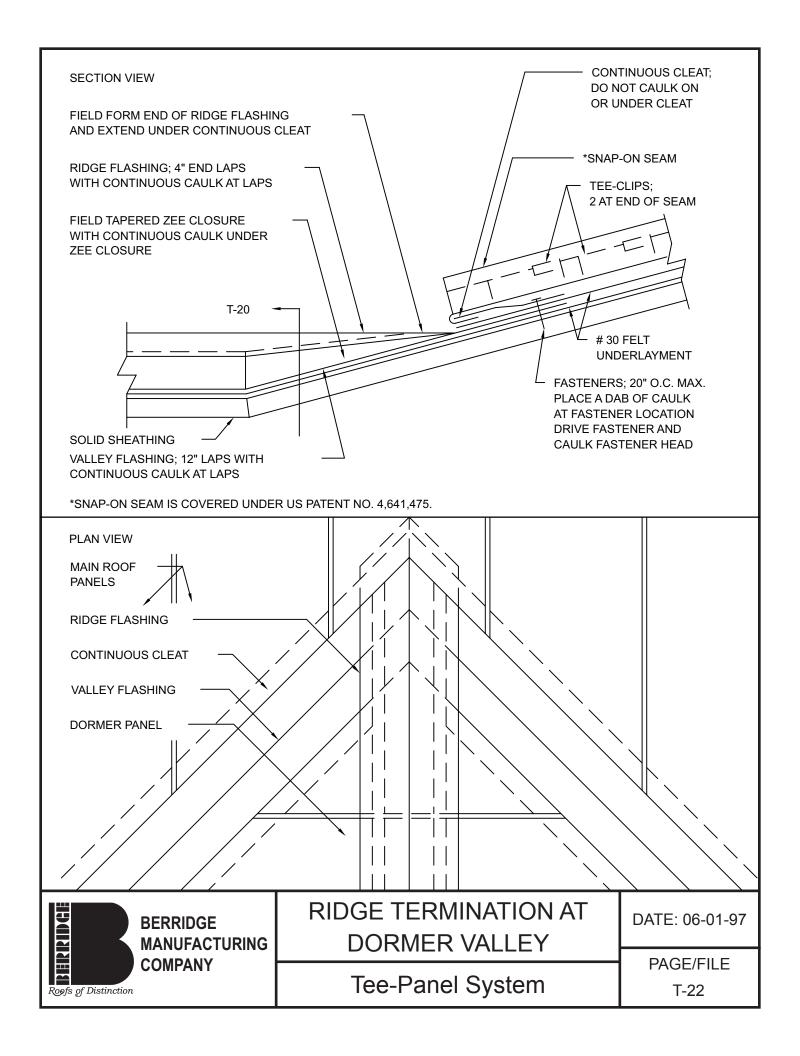
Tee-Panel System

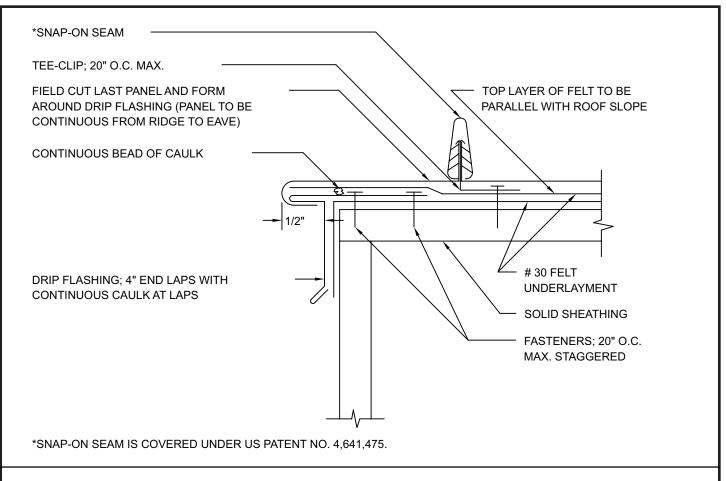
DATE: 06-01-97



- 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.



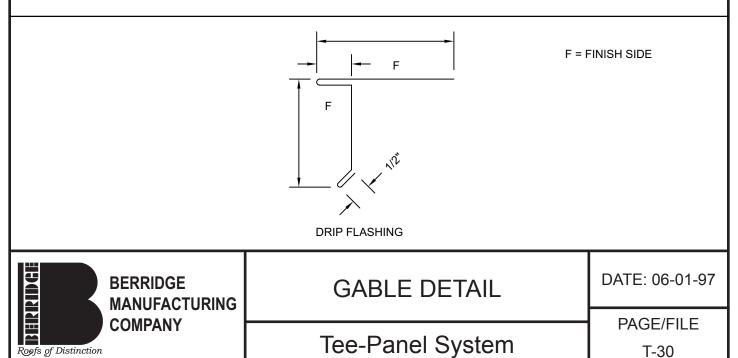


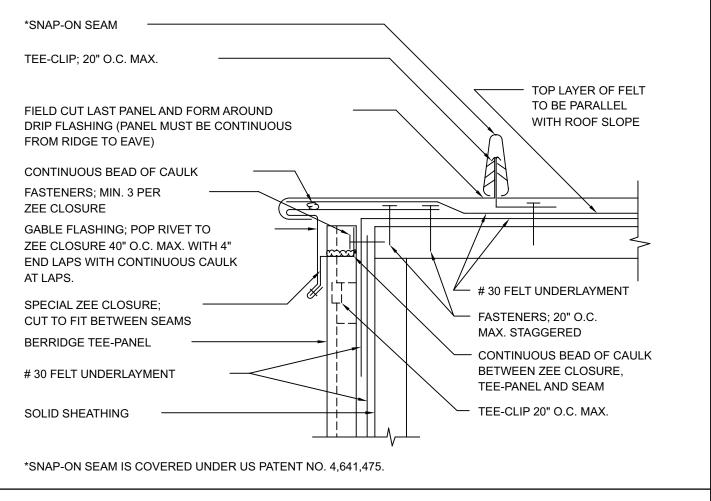


1. FIELD CUT AND FORM LAST PANEL AROUND DRIP FLASHING. PANEL MUST BE CONTINUOUS FROM RIDGE TO EAVE.

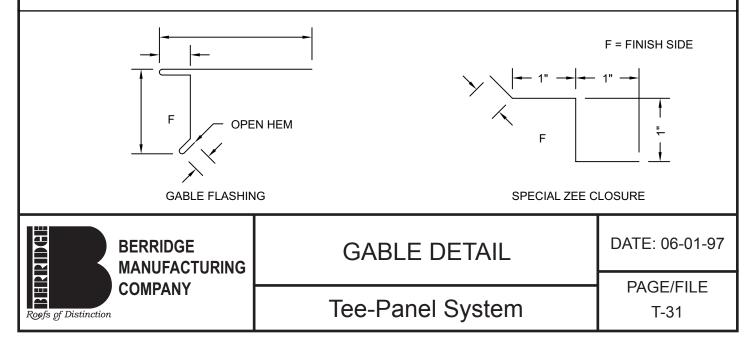
Roofs of Distinction

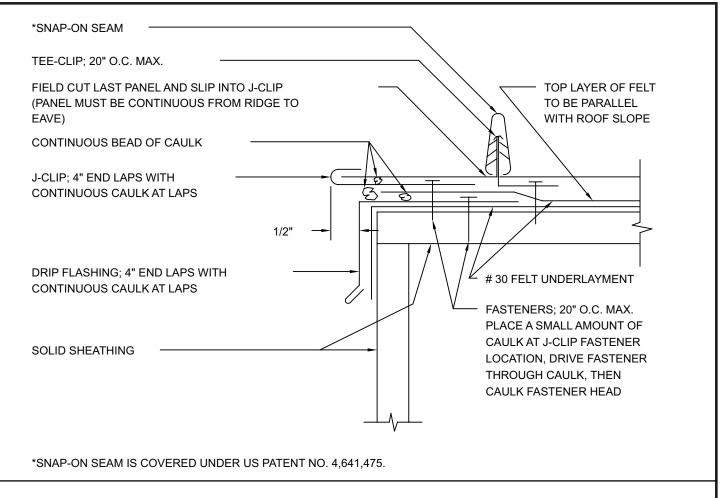
- 2. SOLID SHEATHING (BY OTHERS) TO BE MINIMUM 1/2" PLYWOOD OR EQUIVALENT IN STRENGTH FOR HOLDING POWER OF FASTENERS.
- 3. ALL FELT UNDERLAYMENT, CAULKING, AND FASTENERS, ARE ITEMS TO BE FURNISHED AND INSTALLED BY THE ROOFING INSTALLER AT THE DISCRETION OF THE ARCHITECT.



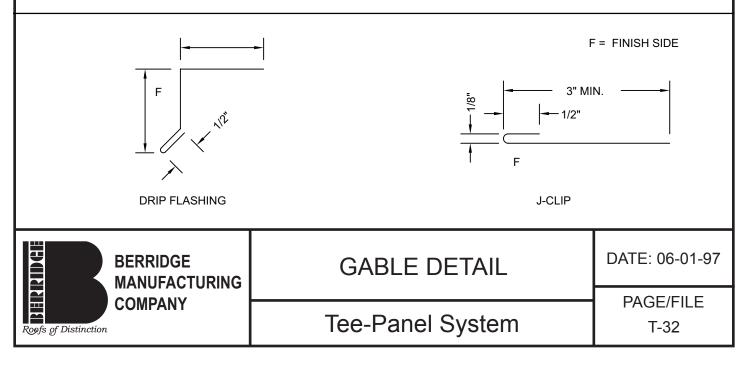


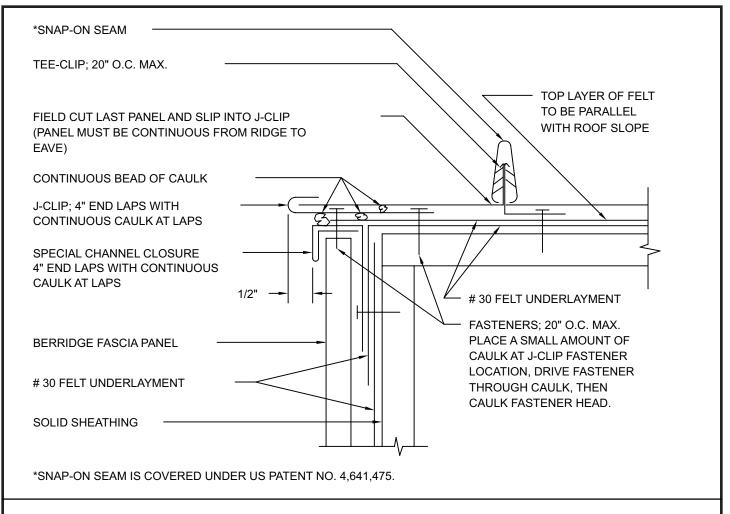
- 1. FIELD CUT AND FORM LAST PANEL AROUND GABLE FLASHING PANEL MUST BE CONTINUOUS RIDGE TO EAVE.
- 2. SOLID SHEATHING (BY OTHERS) TO BE MINIMUM 1/2" PLYWOOD OR EQUIVALENT IN STRENGTH FOR HOLDING POWER OF FASTENERS.
- 3. ALL FELT UNDERLAYMENT, CAULKING, AND FASTENERS, ARE ITEMS TO BE FURNISHED AND INSTALLED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



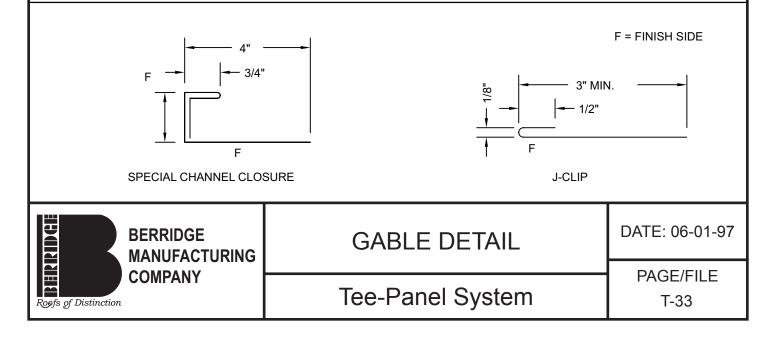


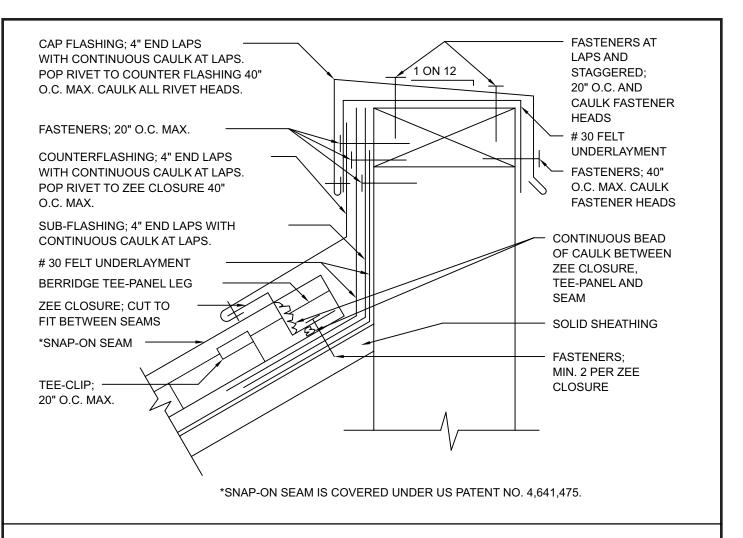
- 1. FIELD CUT LAST PANEL AND SLIP INTO J-CLIP. PANEL MUST BE CONTINUOUS RIDGE TO EAVE.
- 2. SOLID SHEATHING (BY OTHERS) TO BE MINIMUM 1/2" PLYWOOD OR EQUIVALENT IN STRENGTH FOR HOLDING POWER OF FASTENERS.
- 3. ALL FELT UNDERLAYMENT, CAULKING, AND FASTENERS, ARE ITEMS TO BE FURNISHED AND INSTALLED BY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



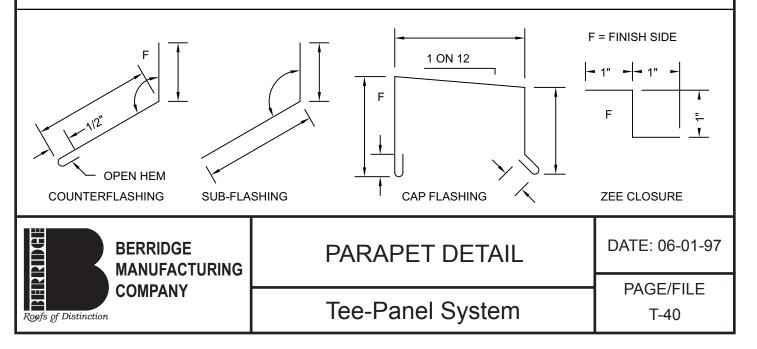


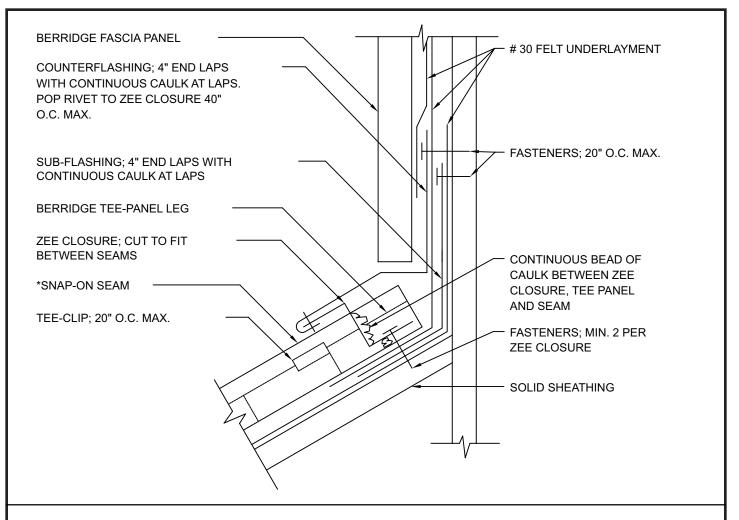
- 1. FIELD CUT LAST PANEL AND SLIP INTO J-CLIP. PANEL MUST BE CONTINUOUS RIDGE TO EAVE.
- 2. SOLID SHEATHING (BY OTHERS) TO BE MINIMUM 1/2" PLYWOOD OR EQUIVALENT IN STRENGTH FOR HOLDING POWER OF FASTENERS.
- 3. ALL FELT UNDERLAYMENT, CAULKING, AND FASTENERS, ARE ITEMS TO BE FURNISHED AND INSTALLED BY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



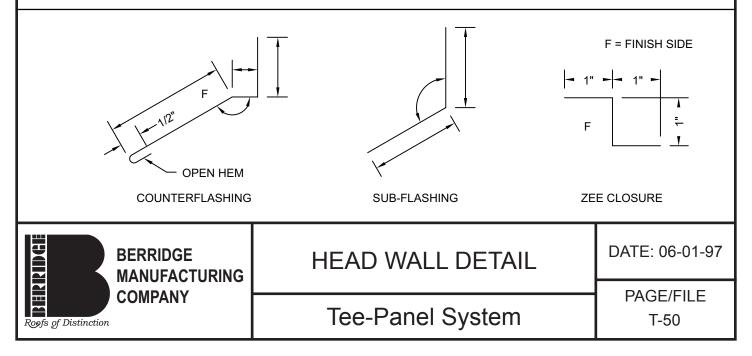


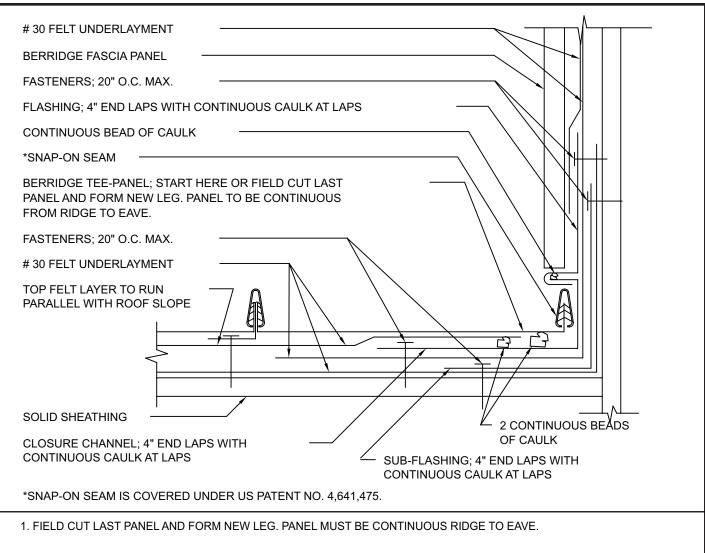
- 1. FIELD CUT ZEE CLOSURES TO FIT BETWEEN SEAMS.
- 2. SOLID SHEATHING (BY OTHERS) TO BE MINIMUM 1/2" PLYWOOD OR EQUIVALENT IN STRENGTH FOR HOLDING POWER OF FASTENERS.
- 3. ALL FELT UNDERLAYMENT, CAULKING, AND FASTENERS, ARE ITEMS TO BE FURNISHED AND INSTALLED BY THE ROOFING INSTALLER AT THE DISCRETION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



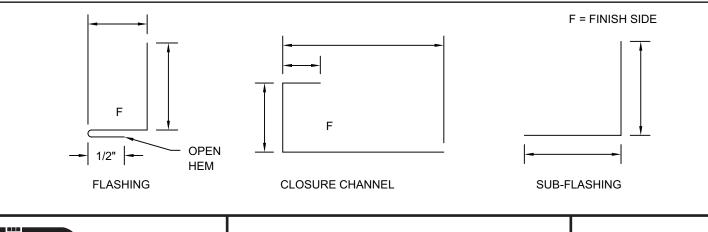


- 1. FIELD CUT ZEE CLOSURES TO FIT BETWEEN SEAMS.
- 2. SOLID SHEATHING (BY OTHERS) TO BE MINIMUM 1/2" PLYWOOD OR EQUIVALENT IN STRENGTH FOR HOLDING POWER OF FASTENERS.
- 3. ALL FELT UNDERLAYMENT, CAULKING, AND FASTENERS, ARE ITEMS TO BE FURNISHED AND INSTALLED BY THE ROOFING INSTALLER AT THE DISCRETION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





- 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.



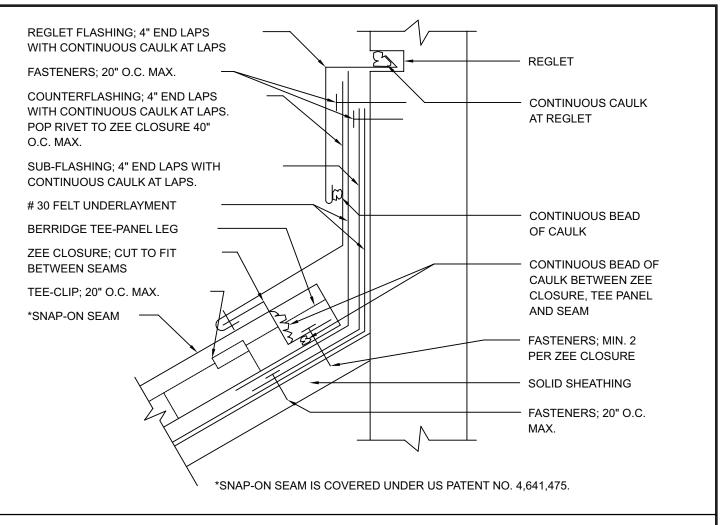


BERRIDGE MANUFACTURING COMPANY

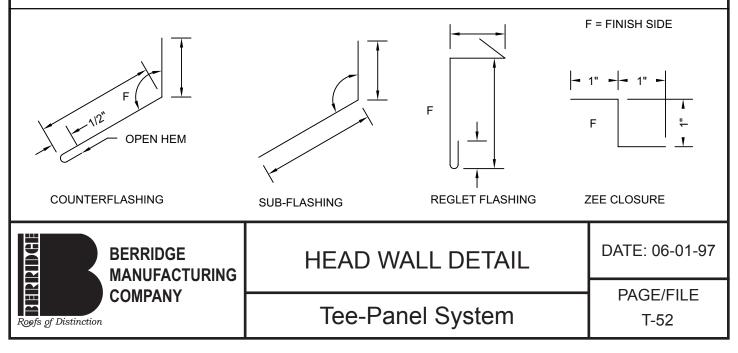
RAKE WALL DETAIL

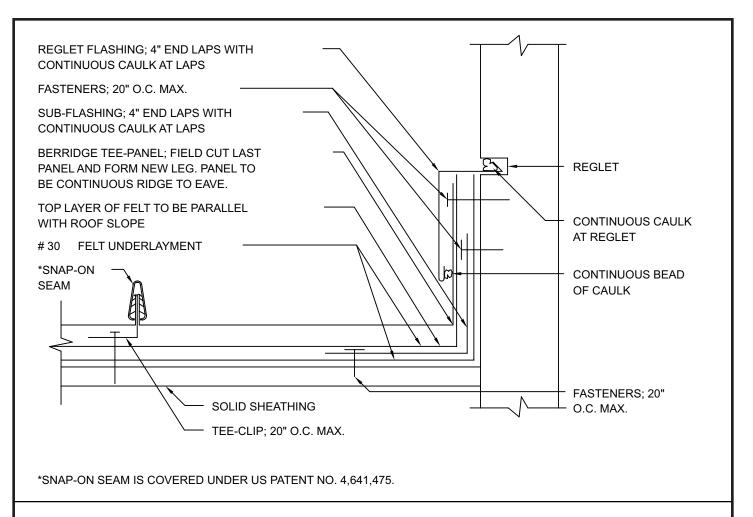
Tee-Panel System

DATE: 06-01-97

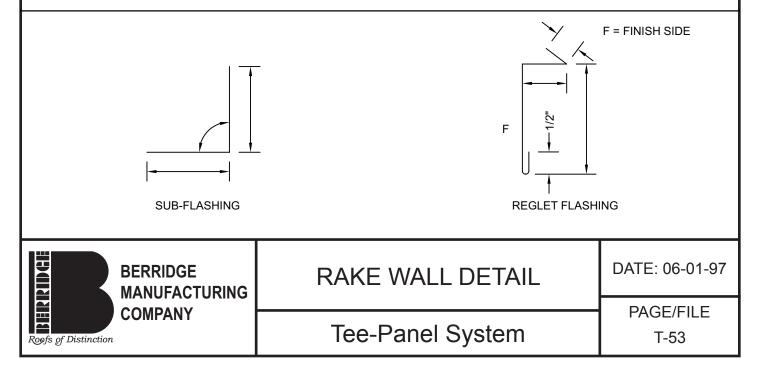


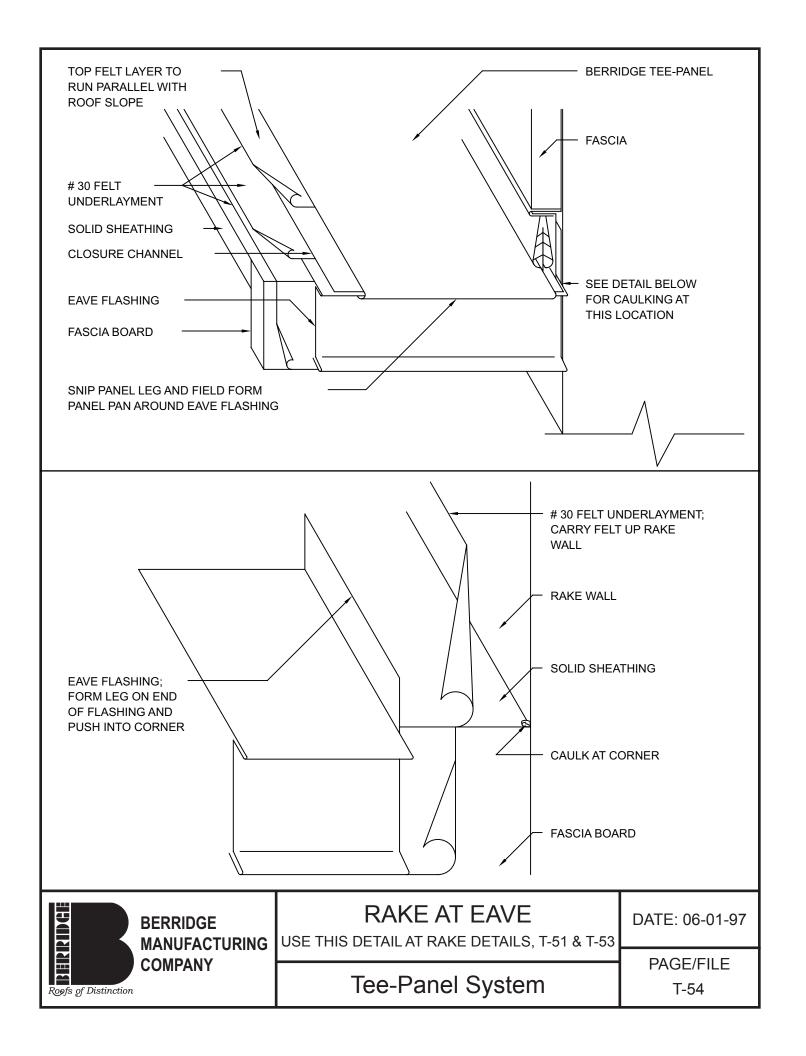
- 1. FIELD CUT ZEE CLOSURES TO FIT BETWEEN SEAMS.
- 2. SOLID SHEATHING (BY OTHERS) TO BE MINIMUM 1/2" PLYWOOD OR EQUIVALENT IN STRENGTH FOR HOLDING POWER OF FASTENERS.
- 3. ALL FELT UNDERLAYMENT, CAULKING, AND FASTENERS, ARE ITEMS TO BE FURNISHED AND INSTALLED BY THE ROOFING INSTALLER AT THE DISCRETION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

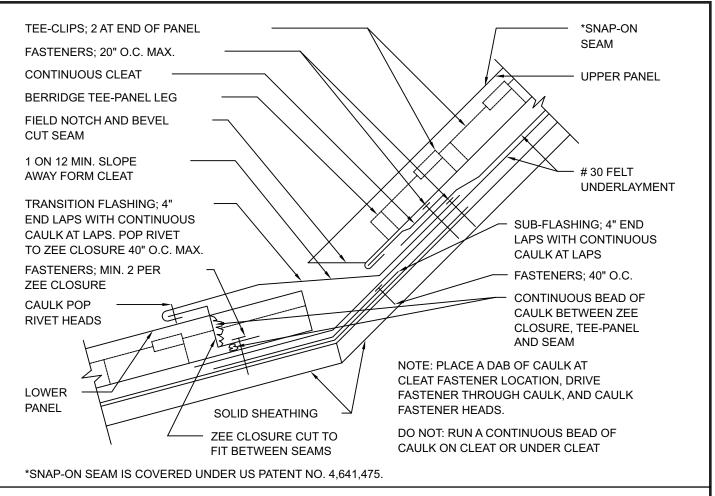




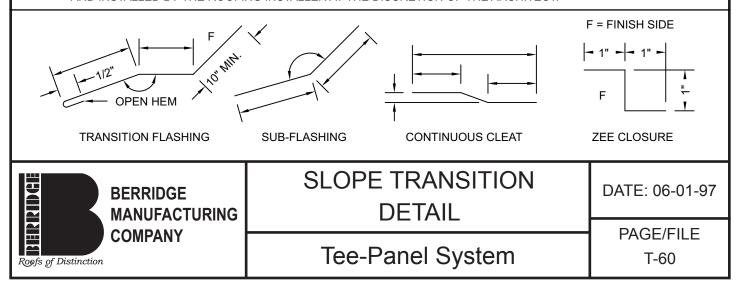
- 1. FIELD CUT LAST PANEL AND FORM NEW LEG. PANEL MUST BE CONTINUOUS RIDGE TO EAVE.
- 2. SOLID SHEATHING (BY OTHERS) TO BE MINIMUM 1/2" PLYWOOD OR EQUIVALENT IN STRENGTH FOR HOLDING POWER OF FASTENERS.
- 3. ALL FELT UNDERLAYMENT, CAULKING, AND FASTENERS, ARE ITEMS TO BE FURNISHED AND INSTALLED BY THE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

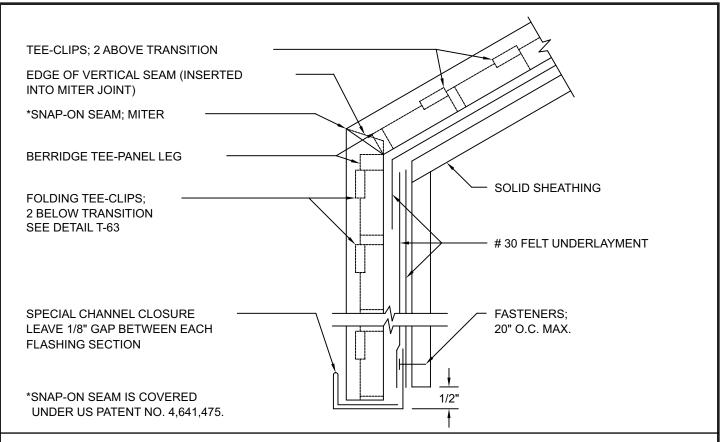




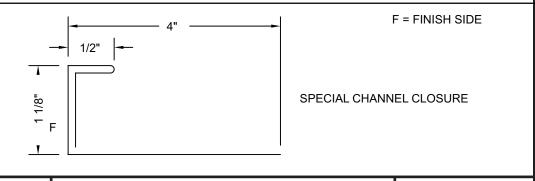


- 1. FIELD CUT ZEE CLOSURE TO FIT BETWEEN SEAMS.
- 2. AS ROOF PANELS ARE INSTALLED, SNIP APPROXIMATELY 3/8" SECTION FROM EACH PANEL LEG AT UPPER PANEL.
- 3. AS SEAMS ARE INSTALLED ON UPPER ROOF PANELS, FIELD NOTCH AND BEVEL CUT EACH SEAM.
- 4. SOLID SHEATHING (BY OTHERS) TO BE MINIMUM 1/2" PLYWOOD OR 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.





- 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 T-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.

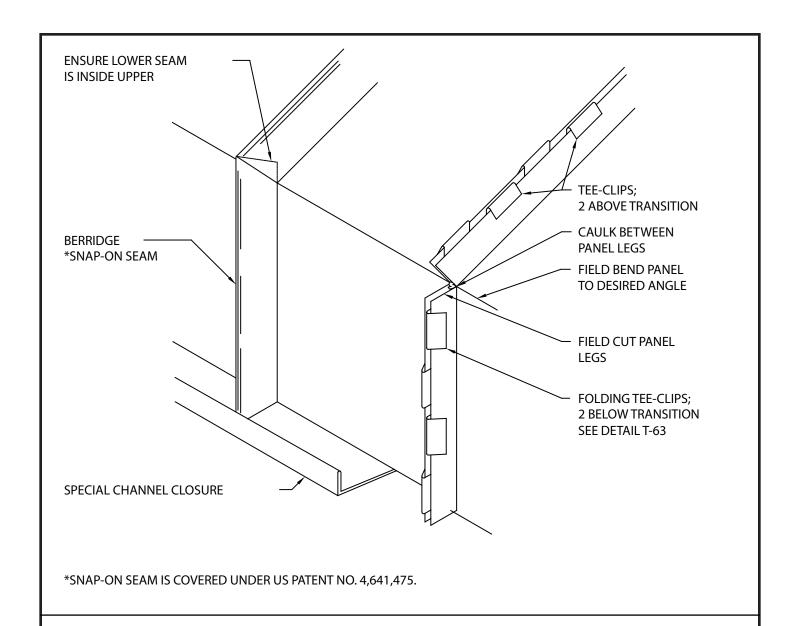


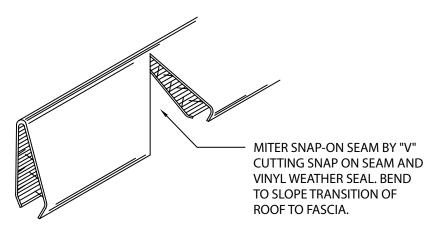


SLOPE TRANSITION DETAIL ROOF TO FASCIA - A

Tee-Panel System

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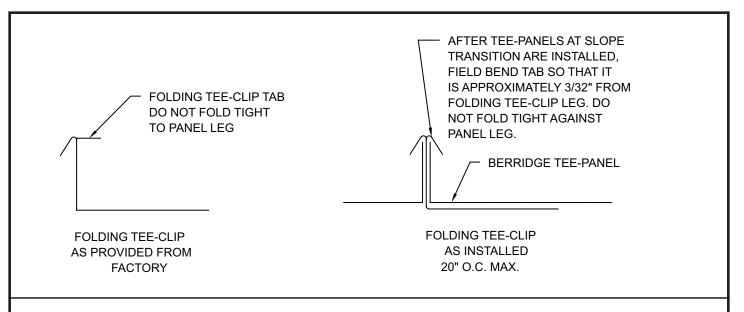




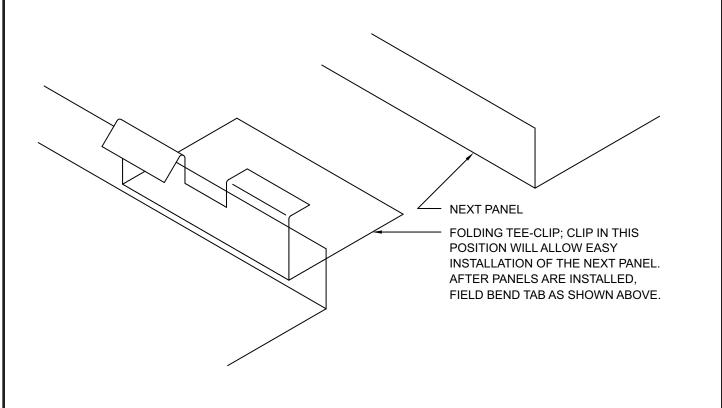
SLOPE TRANSITION DETAIL ROOF TO FASCIA - B

Tee-Panel System

DATE: 06-01-97



- 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 T-61 AND T-62). USE STANDARD TEE-CLIP THROUGHOUT REST OF STANDARD TEE PANEL SYSTEM.

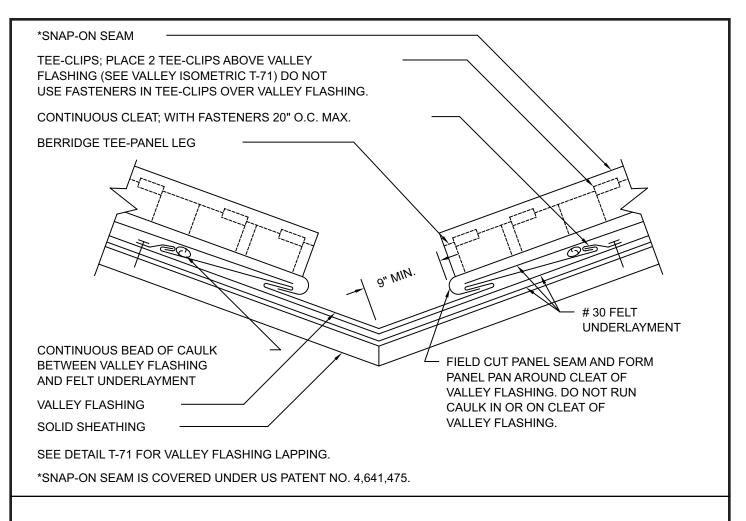




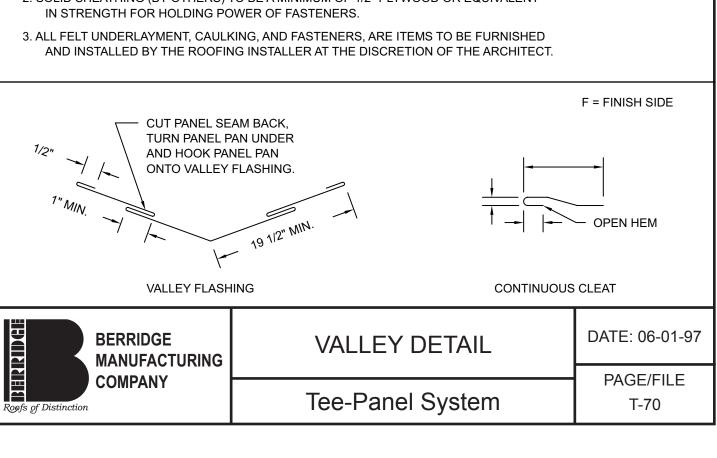
FOLDING TEE-CLIP INSTALLATION

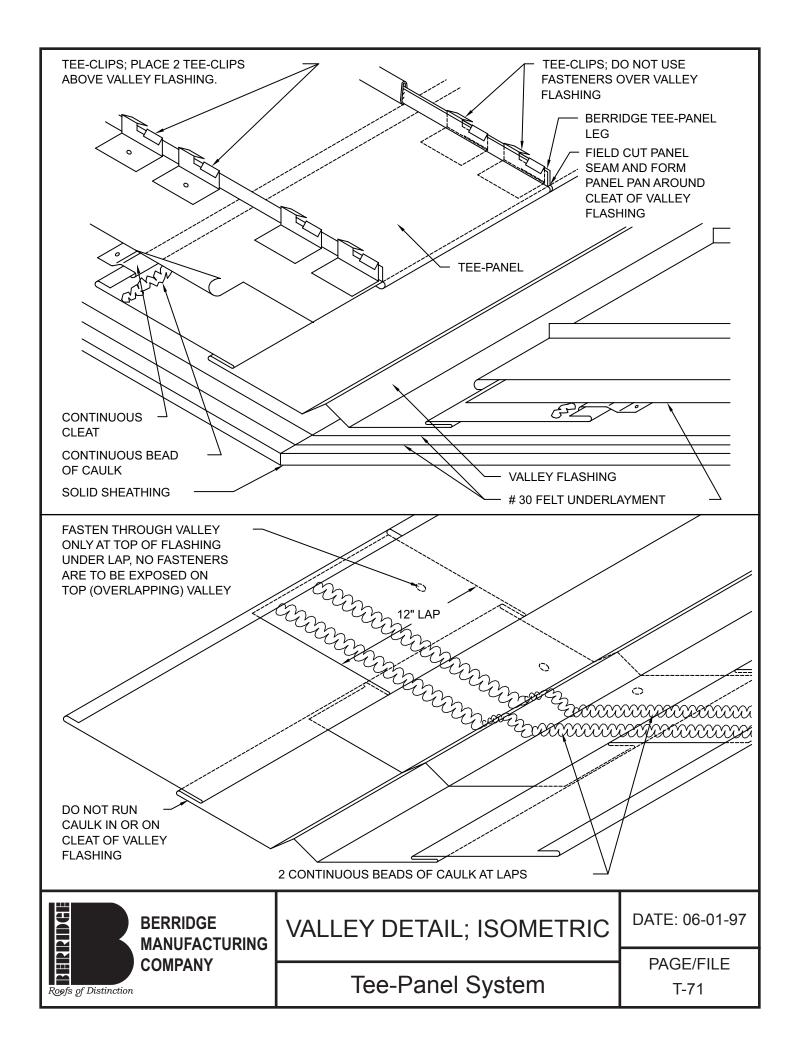
Tee-Panel System

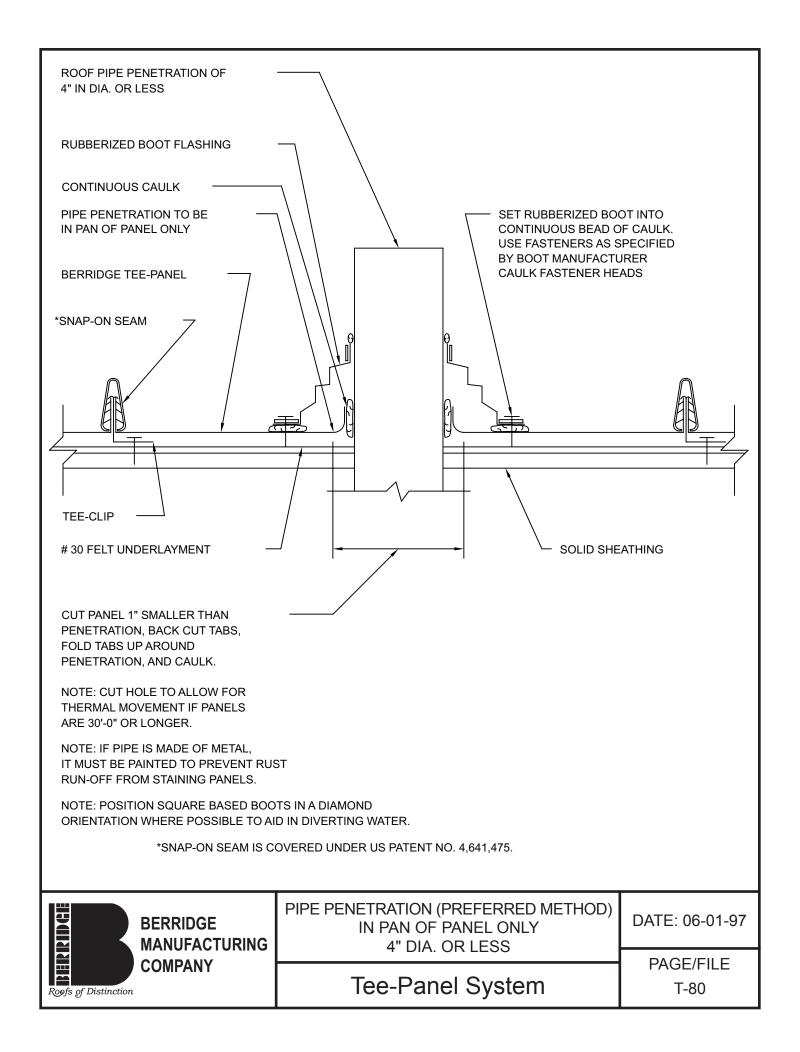
DATE: 06-01-97

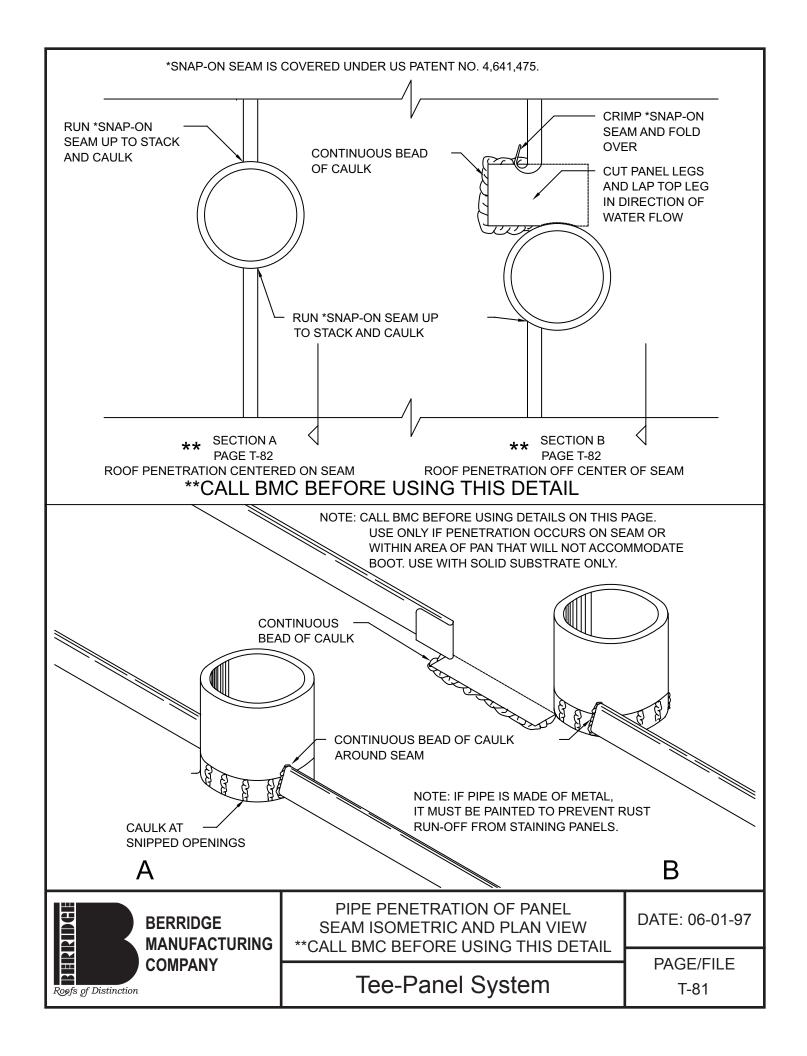


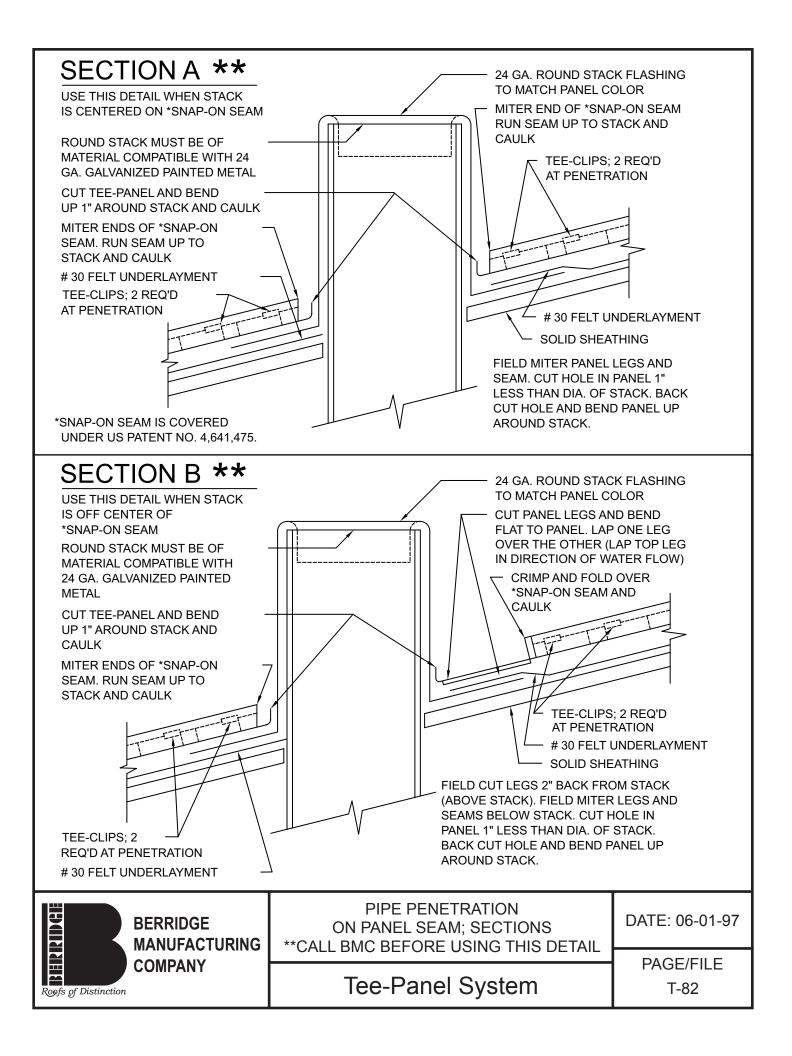
- 1. FOR EXPANSION AND CONTRACTION OF PANELS, SEE TI-6 AND T-11.
- 2. SOLID SHEATHING (BY OTHERS) TO BE A MINIMUM OF 1/2" PLYWOOD OR EQUIVALENT IN STRENGTH FOR HOLDING POWER OF FASTENERS.

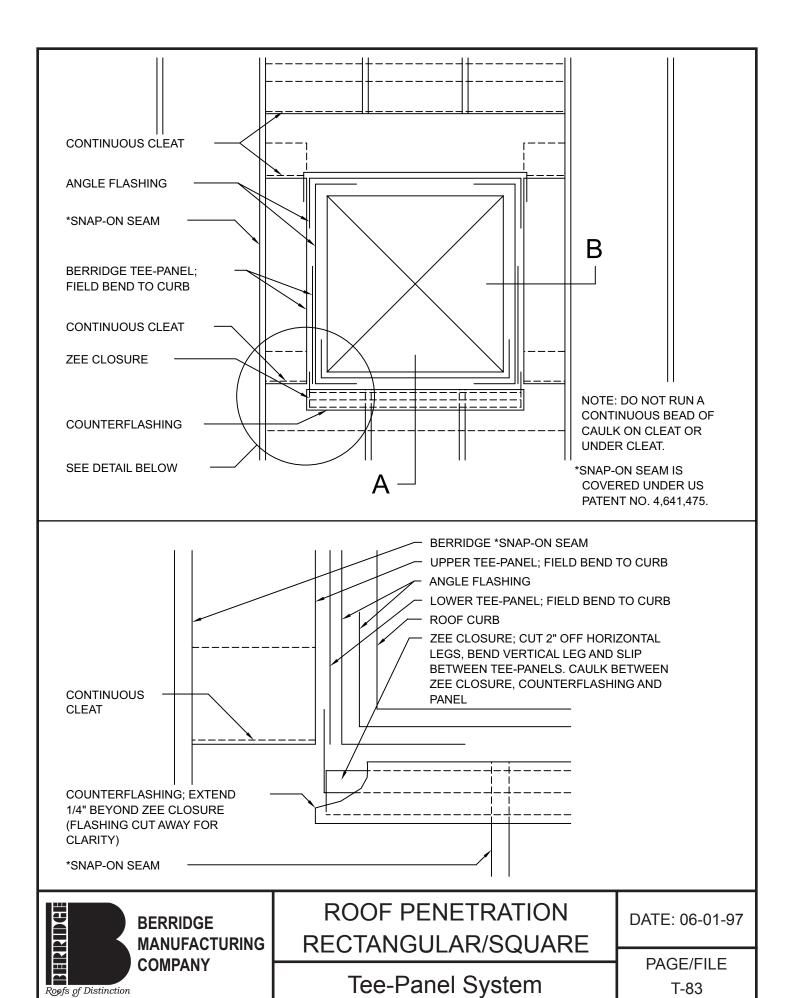


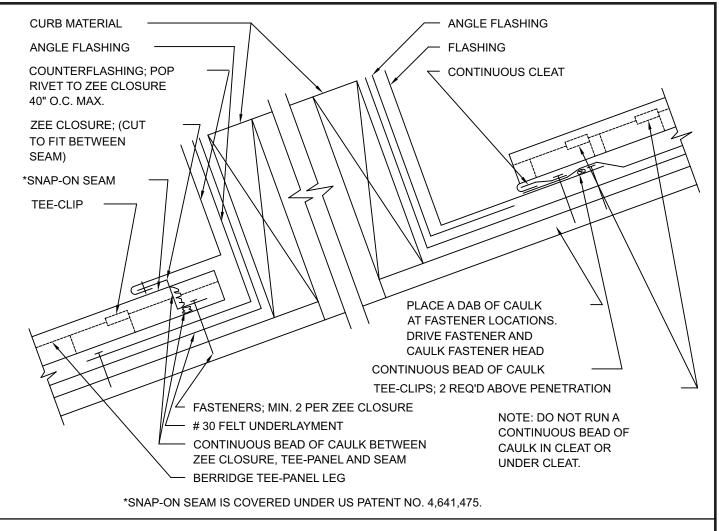




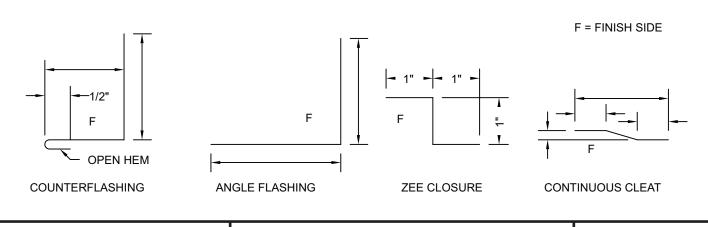








- 1. SOLID SHEATHING (BY OTHERS) TO BE MINIMUM 1/2" PLYWOOD OR EQUIVALENT IN STRENGTH FOR HOLDING POWER OF FASTENERS.
- 2. ALL FELT UNDERLAYMENT, CAULKING, AND FASTENERS, ARE ITEMS TO BE FURNISHED AND INSTALLED BY THE ROOFING INSTALLER AT THE DISCRETION OF THE ARCHITECT.

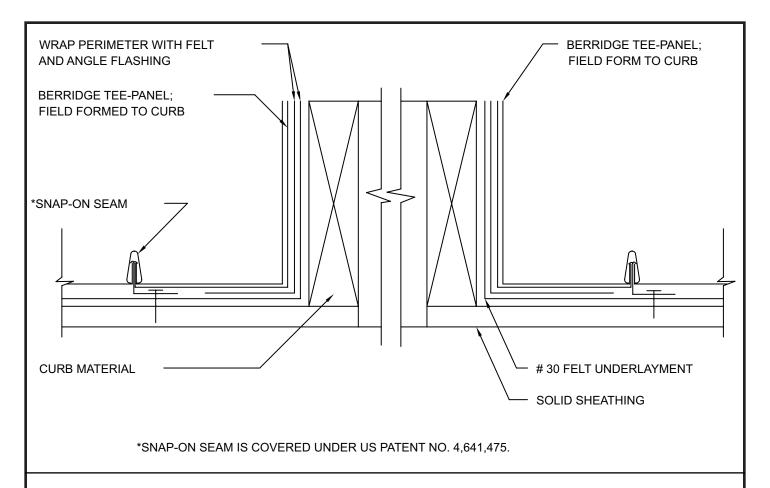




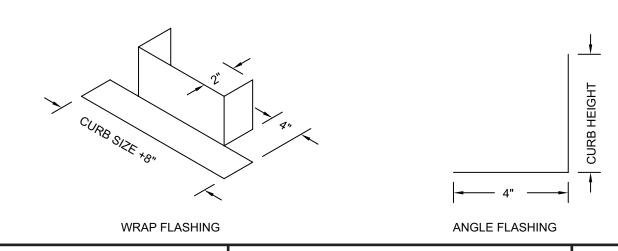
ROOF PENETRATION SECTION A

Tee-Panel System

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- 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.



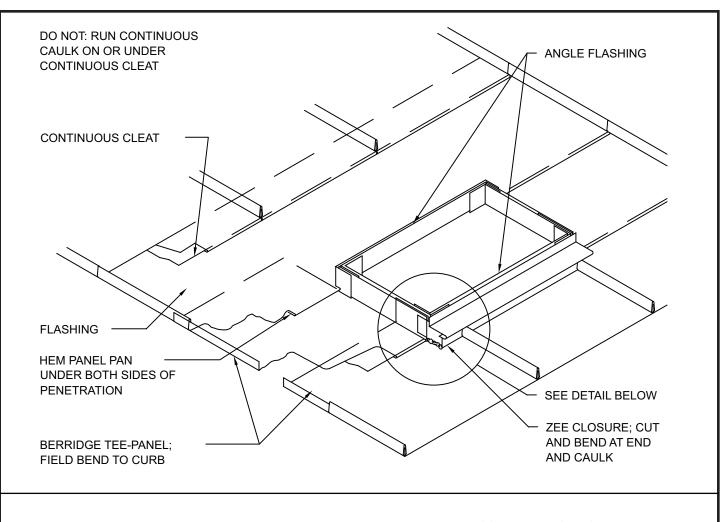
BERRIDGE MANUFACTURING COMPANY

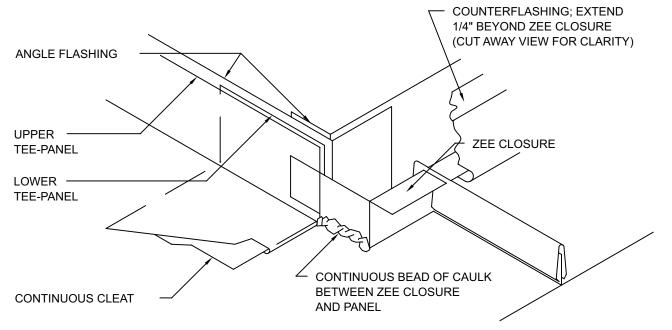
Roofs of Distinction

ROOF PENETRATION SECTION B

Tee-Panel System

DATE: 06-01-97



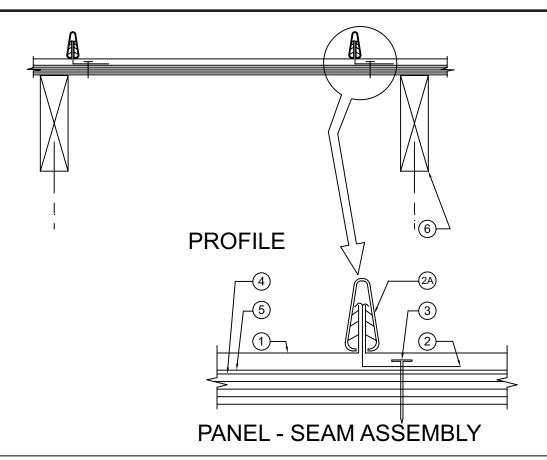




ROOF PENETRATION ISOMETRIC

Tee-Panel System

DATE: 06-01-97



UL CONSTRUCTION ASSEMBLY COMPONENTS

- METAL ROOF DECK PANELS: No. 24 MSG min. 40,000 psi yield strength coated steel. Panel widths to be 12-3/4" or 19-3/4" and rib height to be 5/8". Total seam height with snap-on seam cover in place is nominal 1". 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 Company "Tee-Panel"
- 2. ROOF DECK FASTENERS: (Panel Clips) one piece clip, 3/4" high x 1-1/2" wide x 1-5/8" long, formed from the same type and thickness material as that used to fabricate metal panels. Clips spaced maximum 24" O.C., located at panel sides with guide holes in bottom to accommodate screw fasteners.

 Berridge Manufacturing Company "Tee-Clips"
- 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.

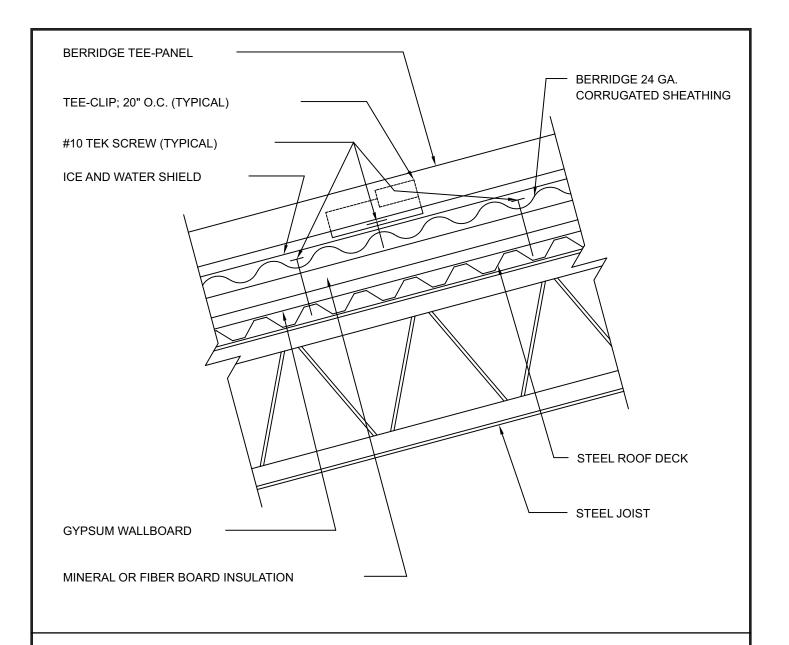
FOR ADDITIONAL INFORMATION, PLEASE REFER TO THE UNDERWRITERS LABORATORY, INC. BUILDING MATERIALS DIRECTORY.



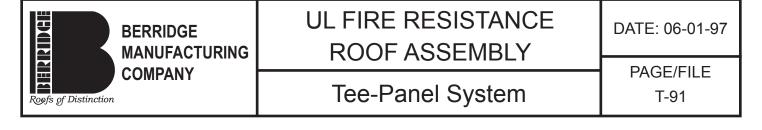
BERRIDGE MANUFACTURING COMPANY UL 90 APPROVED TEE-PANEL ASSEMBLY CONSTRUCTION NO. 296

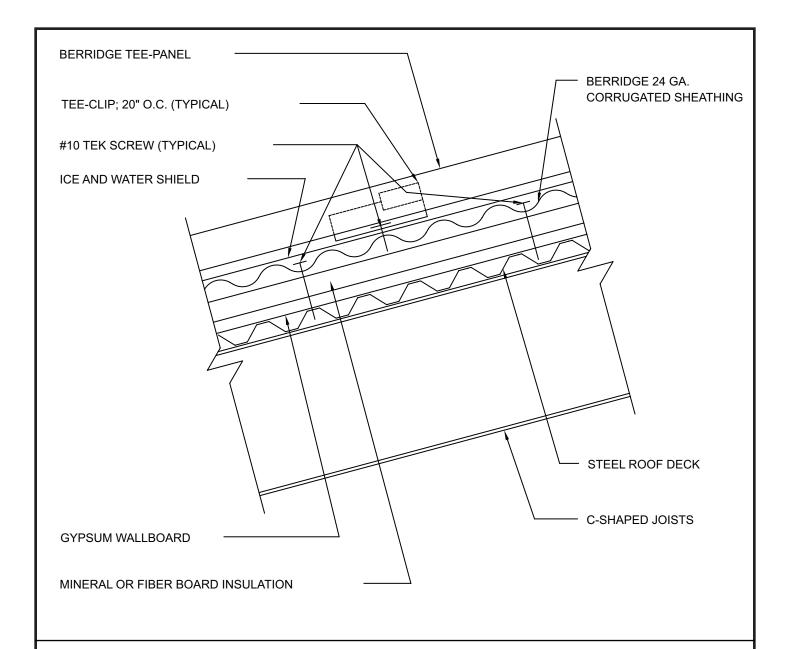
Tee-Panel System

DATE: 06-01-97

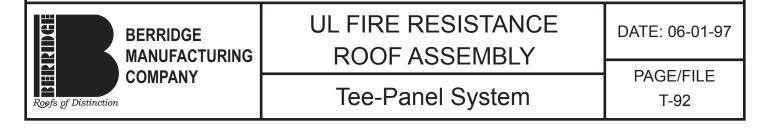


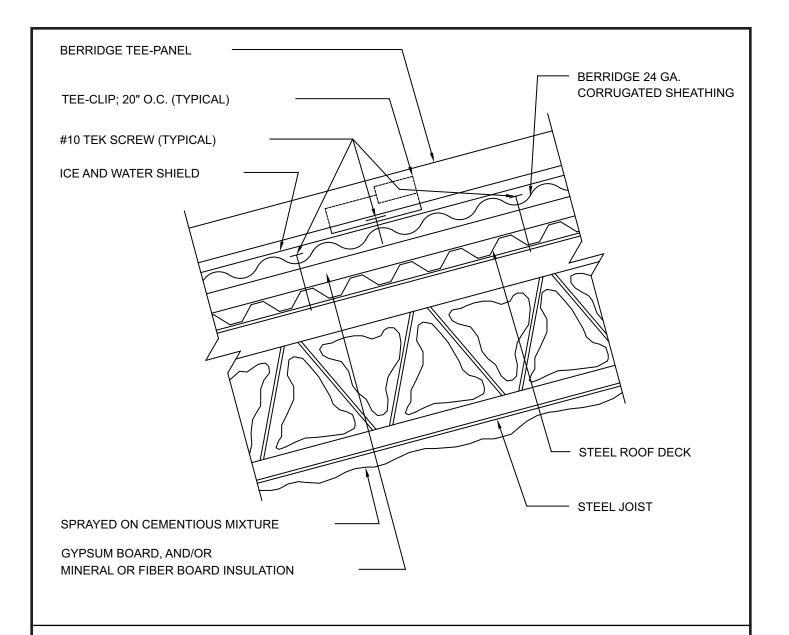
- 1. IN ORDER TO QUALIFY FOR A FIRE-RESISTANT RATING, THE ROOF SYSTEM CANNOT MAKE A PENETRATION IN THE INSULATION SYSTEM. THE TEE-PANEL, IN ORDER TO MAKE POSITIVE ATTACHMENT, MUST BE ATTACHED TO A CORRUGATED SUBSTRATUM (IF THE INSULATION SYSTEM HAS NO NAILABLE SURFACE). THE CORRUGATED SUBSTRATUM IS TO 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, P230, P237, P508, P510, AND P227 USING CELLULAR GLASS BLOCK IN LIEU OF MINERAL INSULATION BOARD.
- 3. ADDITIONAL INFORMATION REGARDING THIS ASSEMBLY IS AVAILABLE IN THE UL FIRE RESISTANCE DIRECTORY.





- 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.





- 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. P701, P711, P713, P715, P717, P814, P803, P815, P819, AND P821 ONLY USING SPAYED ON FIBER IN LIEU OF CEMENTIOUS MIXTURE.
- 3. ADDITIONAL INFORMATION REGARDING THIS ASSEMBLY IS AVAILABLE IN THE UL FIRE RESISTANCE DIRECTORY.

