CURVED ZEE-LOCK PANEL TYPICAL INSTALLATION DETAILS



Roofs of Distinction

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A. BERRIDGE CURVED ZEE-LOCK PANEL: THE PANEL IS FIELD CURVED FROM STRAIGHT ZEE-LOCK PANELS USING THE BERRIDGE ZC-21 PORTABLE CURVER.

THE BERRIDGE ZEE-LOCK PANEL IS FACTORY FABRICATED AND OR FIELD FABRICATED (USING THE BERRIDGE SP-21 PORTABLE ROLL FORMER) TO A CONSTANT PAN WIDTH OF 16" AND A CONSTANT SEAM HEIGHT OF 2". THE CURVED ZEE-LOCK PANEL SIDE LAPS ARE MECHANICALLY SEAMED IN THE FIELD WITH THE BERRIDGE POWER DRIVEN ZEE-LOCK SEAMER MACHINE.

- B. MINIMUM/MAXIMUM RADIUS:
 - 1. MINIMUM RADIUS FOR THE BERRIDGE CURVED ZEE-LOCK PANEL IS 20'-0".
 - 2. THERE IS NO RESTRICTIONS ON THE MAXIMUM RADIUS OTHER THAN THE REQUIREMENT FOR ADEQUATE SLOPE TO PROVIDE DRAINAGE AND TO AVOID PONDING OF WATER, OR BUILD UP OF SNOW OR ICE.
- C. MATERIAL STORAGE: CAUTION MUST BE EXERCISED IN STORAGE OF MATERIAL 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. IF THIS SHOULD OCCUR THE PAINT WARRANTY WILL BE VOID.

- D. STRIPPABLE FILM: THE STRIPPABLE PLASTIC FILM WHICH IS APPLIED OVER MOST BERRIDGE PREFINISHED PRODUCTS, PANELS, FLASHINGS, COILS AND FLAT SHEETS PROVIDES PROTECTION OF THE FINISH DURING FABRICATION AND TRANSIT. THIS FILM MUST BE REMOVED PRIOR TO INSTALLATION.
- E. SOLID SHEATHING REQUIREMENTS: BERRIDGE MANUFACTURING COMPANY RECOMMENDS THE USE OF EITHER BERRIDGE 24 GA. CORRUGATED SHEATHING (NOMINAL 2.67" PITCH BY 7/8" DEPTH) OR A MINIMUM OF 1/2" PLYWOOD SHEATHING TO PROVIDE SUFFICIENT HOLDING POWER FOR FASTENERS. CONTACT BERRIDGE MANUFACTURING'S ENGINEERING DEPARTMENT FOR USE OF ANY OTHER TYPE OF SOLID SHEATHING.

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 OF "H" CLIPS SHOULD BE USED 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 THE 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.



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CURVED ZEE-LOCK PANEL

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G. INSTALLATION OVER OPEN FRAMING: REFER TO LOAD TABLES ON PAGES CZI-6 AND CZI-7 FOR STRUCTURAL PROPERTIES AND ALLOWABLE LOAD SPANS OF THE BERRIDGE ZEE-LOCK PANEL.

DIAPHRAGM CAPABILITIES AND PURLING STABILITY ARE MINIMAL AS PROVIDED BY THE BERRIDGE ZEE-LOCK PANEL SYSTEM, THEREFORE OTHER BRACING MAY BE REQUIRED TO CONFORM TO AISC OR AISI SPECIFICATIONS.

BERRIDGE MANUFACTURING COMPANY REQUIRES THE USE OF THE VINYL WEATHERSEAL (US PATENT NO. 5,134,825) FOR ALL CURVED APPLICATIONS.

- H. OPEN FRAMING INSPECTION:
 - PURLINS SHOULD BE ALIGNED WITH TOP FLANGES IN THE SAME PLANE TO A
 TOLERANCE OF 1/4" IN 20'-0". UNEVENNESS IN THE TOP PLANE OF THE PURLINS
 WILL RESULT IN ABNORMAL "OIL CANNING" OF PANELS. PURLINS SHALL BE ADEQUATELY
 BRACED.
 - 2. BERRIDGE MANUFACTURING COMPANY RECOMMENDS SOLID SHEATHING IN VALLEY AND AROUND ROOF PENETRATIONS. DO NOT APPLY PANELS ON OPEN FRAMING AT VALLEYS OR ROOF PENETRATIONS WITHOUT REFERING TO DETAILS CZ-73, CZ-85 AND CZ-86.
 - 3. FOOT TRAFFIC ON THE PANELS MUST BE KEPT TO A MINIMUM. ARCHITECTURAL PANEL ARE DESIGNED FOR AESTHETICS AND CAN BE EASILY DAMAGED OR DEFORMED IF EXTREME CARE IS NOT USED.
- I. 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 SHEATHING.
- J. UNDERLAYMENT: A SINGLE LAYER OF BERRIDGE ICE & WATERGUARD OR EQUAL MUST BE APPLIED OVER SOLID SHEATHING AS SHOWN IN THE BERRIDGE MANUFACTURING COMPANY UNDERLAYMENT DETAILS, AND ADDITIONAL LAYERS AS DEPICTED IN THE CURVED ZEE-LOCK PANEL DETAILS.
- K. UNDERLAYMENT INSTALLATION:
 - 1. DO NOT USE RED ROSIN PAPER UNDER METAL ROOFING PANELS.
 - 2. SWEEP ROOF AREA CLEAN.
 - 3. INSTALL VALLEY ICE & WATERGUARD FIRST.
 - INSTALL ICE & WATERGUARD PARALLEL TO THE EAVE, (2 LAYERS REQUIRED AT EAVE) STARTING AT EAVE AND USING MINIMUM 6" LAPS.
 - 5. REFER TO DETAILS WHEN VALLEYS OR ROOF PENETRATIONS ARE INVOLVED ON OPEN FRAMING CONDITIONS.
 - 6. INSULATE BETWEEN WOOD BLOCKING AND METAL WITH ICE & WATERGUARD.
- L. THERMAL MOVEMENT: EXPANSION AND CONTRACTION OF METAL PANELS WHICH EXCEED THIRTY FEET IN LENGTH CAN BE A FACTOR IN THE DESIGN AND INSTALLATION OF FLASHING. PLEASE REFER TO THE CHART ON PAGE CZI—8 TO DETERMINE ANTICIPATED THERMAL MOVEMENT OF THE PANELS. IMPROPERLY DESIGNED FLASHING CAN ALLOW PANELS TO DISENGAGE FROM THE FLASHING, ALLOW OIL—CANNING IN THE PANEL

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CURVED ZEE-LOCK PANEL



Berridge Manufacturing Company

PAGE\FILE

CZI-2

AND/OR CAUSE FLASHING TO WORK LOOSE FORM ITS ANCHORAGE.

PANELS OVER 30'-0" LONG REQUIRE EXPANSION CLIPS WHEN USED WITH CONTINUOUS ZEE-RIB. REFER TO DETAIL CZ-5.

- M. ELECTROLYSIS: AVOID ALLOWING FLASHINGS AND PANELS TO COME INTO CONTACT WITH EITHER LEAD OR COPPER, AND PREVENT EXPOSURE TO WATER RUNDOWN FROM COPPER AND/OR LEAD.
- N. SEALANT RECOMMENDATIONS: TREMCO, INC. SPECTREM 1 SILICONE SEALANT. DO NOT USE CLEAR CAULK.
- O. FLASHING: IF BERRIDGE MANUFACTURING COMPANY IS TO SUPPLY FLASHINGS, ALL FLASHINGS WILL BE FABRICATED IN 10'-0" LENGTHS WITH SQUARE END CUTS ONLY. THE PURCHASER MUST PROVIDE ALL DIMENSIONS AND DEGREE OF ANGLES.

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.
- P. PANELS: BERRIDGE MANUFACTURING COMPANY WILL PROVIDE SQUARE END CUTS ONLY ON ALL ZEE-LOCK PANELS. COMPUTATION OF ALL QUANTITIES AND DIMENSIONS ARE THE RESPONSIBILITY OF THE PURCHASER.
- Q. PANEL INSTALLATION:
 - 1. REMOVE STRIPPABLE PLASTIC FILM FROM EACH PANEL PRIOR TO INSTALLATION.
 - 2. START AT ONE GABLE END WITH THE FEMALE LEG OF THE PANEL AND WORK TOWARD THE OTHER GABLE.
 - 3. INSTALL THE CONTINUOUS ZEE-RIB WITH VINYL WEATHERSEAL ALONG THE LEADING MALE LEG OF EACH PANEL AS PER BERRIDGE TYPICAL DETAILS AND RIB AND INSTALLATION NOTES.
 - 4. USE BERRIDGE ZEE-LOCK SEAMER AT PANEL SIDE LAPS. REFER TO PANEL SEAM NOTES.
 - 5. 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.
 - 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 TEN OR TWELVE PANELS IN ONE ELEVATION AND THEN FOLLOW WITH A LIKE NUMBER OF PANELS ON THE OTHER ELEVATION. WHEN INSTALLING PANELS IN THIS MANNER, ADJUSTMENTS CAN BE MADE TO INSURE SEAMS MATCHING.



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CZI-3

- 7. COPPER-COTE, CHAMPAGNE, LEAD-COTE, ZINC-COTE AND PREWEATHERED GALVALUME PANEL INSTALLATION: NOTE THE SERIES OF ARROWS PAINTED ON THE UNDERSIDE OF THE PANEL. ALL PANELS MUST BE INSTALLED IN 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, FORM 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.
- R. PANEL SEAM: THE BERRIDGE CURVED ZEE-LOCK PANEL IS A MECHANICALLY SEAMED PANEL BY USE OF THE BERRIDGE ZEE-LOCK SEAMER MACHINE.
- S. SEAMER INSTRUCTIONS:
 - 1. PREPARE THE SIDE LAP SEAM FOR MACHINE SEAMING BY CRIMPING THE STARTING END OF THE SIDE LAP USING THE BERRIDGE HAND CRIMPER TOOL. THIS CREATES A SEAMED AREA WHERE THE ZEE-LOCK SEAMER MACHINE WILL BE POSITIONED TO COMMENCE SEAMING THE SIDE LAP.
 - 2. POSITION SEAMER ON PANEL SIDE LAP. WHEN CORRECTLY POSITIONED SEAMER WILL REST AT A 30° ANGLE, WITH BOTH ROLLER WHEELS RESTING ON PANEL FLATS.
 - 3. HAND SEAM TERMINATING END OF SIDE LAP IF OBSTRUCTION PREVENTS SEAMING MACHINE FROM SEAMING SIDE LAP ALL THE WAY TO THE END.
 - 4. DO NOT LET SEAMER TRAVEL OFF END OF PANEL AND OVER EDGE OF EAVE. SEAMER DOES NOT AUTOMATICALLY SHUT OFF AT END OF SEAM.
 - 5. ROOF SLOPES WITH A RISE OF MORE THAN 6" ON 12" SHOULD BE SEAMED IN A DOWNHILL DIRECTION. ATTEMPTING TO RUN SEAMER UP HILL ON STEEP SLOPE ROOFS MAY CAUSE ROLLER DIES TO SLIP AND RUB PAINT OFF PANEL LEGS.
 - 6. REFER TO OPERATIONS MANUAL FOR IN-DEPTH INSTRUCTIONS AND MAINTENANCE PROCEDURES.
- T. CONTINUOUS ZEE-RIB WITH VINYL WEATHERSEAL: IS TO BE FIELD CURVED WITH THE BERRIDGE ZC-21 PORTABLE CURVER.
 - 1. INSTALL ZEE-RIB AS PER BERRIDGE TYPICAL CURVED ZEE-LOCK PANEL DETAILS.
 - 2. THE ZEE-RIB IS TO RUN CONTINUOUS ALONG THE ENTIRE LENGTH OF THE PANELS. IF PANEL LENGTH IS OVER 30'-0" LONG OR EXPANSION AND CONTRACTION OF PANELS IS A DESIGN FACTOR, REFER TO DETAIL CZ-5.
 - U. VINYL WEATHERSEAL (US PATENT NO. 5,134,825): THE VINYL WEATHERSEAL IS FACTORY APPLIED TO THE CONTINUOUS ZEE-RIB. THIS ALLOWS THE ARCHITECT TO SPECIFY A VINYL WEATHERSEAL WITHOUT INCURRING ANY ADDITIONAL FIELD LABOR. BERRIDGE MANUFACTURING COMPANY REQUIRES VINYL WEATHERSEAL FOR ALL CURVED APPLICATIONS.

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PAGE\FILE

CZ1-4

CURVED ZEE-LOCK PANEL



V. FASTENERS: INSTALL FASTENERS AS PER TYPICAL DETAILS. USE #10 HEX HEAD ZINC PLATED FASTENERS WHEN FASTENING TO WOOD. USE #12 HEX HEAD ZINC PLATED FASTENERS WHEN FASTENING 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 RIB AND/OR FLASHINGS TO BUCKLE OR BECOME RECESSED BELOW THE ELEVATION OF THE SUBSTRATE.

W. UNDERWRITERS LABORATORIES RATINGS: THE BERRIDGE ZEE-LOCK PANEL COMPLIES WITH UL TEST PROCEDURE NO. 580 "TEST FOR WIND UPLIFT RESISTANCE OF ROOF ASSEMBLIES" CLASS UL 90 CONSTRUCTION NUMBER 312 REFER TO DETAILS CZ-90, CZ-91, CZ-96 AND CZ-97. CONSTRUCTION NUMBER 335 REFER TO DETAILS CZ-92, CZ-93, CZ-94, AND CZ-95. REFER TO DETAILS, CZ-100, CZ-101 AND CZ-102. FOR UL FIRE RESISTANCE DESIGN ASSEMBLIES.

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, OR IN THE CASE OF OPEN FRAMING, UNEVENNESS OF THE TOP PLANE OF THE PURLINS 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 ZEE-LOCK PANEL SYSTEM.

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

*CONSULT BERRIDGE MANUFACTURING'S ENGINEERING DEPARTMENT REGARDING FASTENER SPACING TO MEET DESIGN CRITERIA, AND THE USE OF ANY OTHER TYPE OF FASTENER.



INSTALLATION INSTRUCTIONS

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CZ1-5

SECTION PROPERTIES BASED ON 24 GAUGE 40 K.S.I.			
ZEE-LOCK dl _x (In ⁴ /ft)		M _A (Ft-lbs/Ft)	V _A (Lbs)
POSITIVE BENDING	0.11779	132.35	662
NEGATIVE BENDING	0.06645	104.53	662

PROPERTIES ARE EFFECTIVE AND ARE PER FOOT OF PANEL COVERAGE. BASED ON 1986 AISI COLDFORM STEEL DESIGN MANUAL, MARCH 1987, AND RATIONAL ANALYSIS. DESIGN THICKNESS = 0.0215 IN.

RECOMMENDED LOAD IN POUNDS PER SQUARE FOOT (PANEL WEIGHT = 1.3 PSF)						
SPAN	NET VERTICAL LIVE LOAD			NET VERTICAL WIND UPLIFT		
(FEET)	1-SPAN	2-SPAN	3-SPAN	1-SPAN	2-SPAN	3-SPAN
2'-0"	40	70	70	90	90	90
2'-6"	35	70	70	90	90	90
3'-0"	30	60	70	90	90	90
3'-6"	25	50	60	70	85	90
4'-0"	20	40	45	55	65	80
4'-6"	15	30	35	44	55	60
5'-0"		25	30	><	45	50
6'-0"		$>\!\!<$	><	><	$> \leq$	
7'-0"						><

NOTES

- 1. ALL LOADS MEET L/240 DEFLECTION CRITERIA UNLESS OTHERWISE NOTED.
- 2. WIND LOAD ALLOWABLES INCREASED BY 33 PERCENT.

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INSTALLATION INSTRUCTIONS STRUCTURAL PROPERTIES

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CURVED ZEE-LOCK PANEL



SECTION PROPERTIES BASED ON 24 GAUGE 40 K.S.I.				
ZEE-LOCK PANEL WITH CONTINUOUS 24-GAUGE ZEE-RIB	H CONTINUOUS dlx(lnT/ft)		V _A (Lbs)	
POSITIVE BENDING	0.1525	184.65	990	
NEGATIVE BENDING	0.1030	161.33	990	

PROPERTIES ARE EFFECTIVE AND ARE PER FOOT OF PANEL COVERAGE. BASED ON 1986 AISI COLDFORM STEEL DESIGN MANUAL, MARCH 1987, AND RATIONAL ANALYSIS. DESIGN THICKNESS = 0.0215 IN.

RECOMMENDED LOAD IN POUNDS PER SQUARE FOOT						
(PANEL WEIGHT = 1.3 PSF)						
SPAN	NET VE	RTICAL LIVE	LOAD	NET VERTICAL WIND UPLIFT		
(FEET)	1-SPAN	2-SPAN	3-SPAN	1-SPAN	2-SPAN	3-SPAN
2'-0"	50	70	70	90	90	90
2'-6"	45	70	70	90	90	90
3'-0"	40	70	70	90	90	90
3'-6"	35	70	70	90	90	90
4'-0"	30	60	70	85	80*	80*
4'-6"	25	50	55	65	70*	70*
5'-0"	20	40	45	55	60	65*
6'-0"		25	35		40	50
7'-0"		20	25		30	35

NOTES:

- 1. ALL LOADS MEET L/240 DEFLECTION CRITERIA UNLESS OTHERWISE NOTED.
- 2. WIND LOAD ALLOWABLES INCREASED BY 33 PERCENT.
- 3. * DENOTES LOADS CONTROLLED BY STANDARD UL-90 CONNECTION.



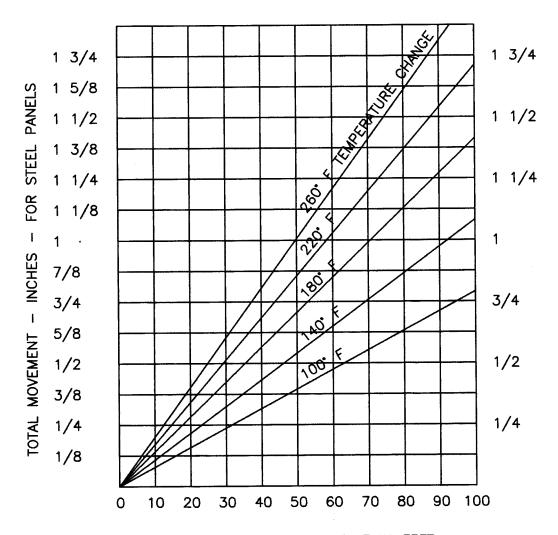
INSTALLATION INSTRUCTIONS STRUCTURAL PROPERTIES

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CZI-7



DISTANCE FROM FIXED POINT IN FEET

EXPANSION AND CONTRACTION OF METAL PANELS OVER 30 FEET IN LENGTH, DUE TO LONGITUDINAL THERMAL MOVEMENT, MUST BE CONSIDERED IN BOTH DESIGN AND INSTALLATION, THE ABOVE CHART EMPHASIZES THE NEED TO PROVIDE AMPLE CLEARANCES FOR GUTTERS, RIDGES, ENDWALL, ETC.

MAXIMUM TEMPERATURE SHOULD BE NO LOWER THAN 140° F FOR WHITE PANELS, UP TO 180° F 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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CZI-8

CURVED ZEE-LOCK PANEL



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 ASURE 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.

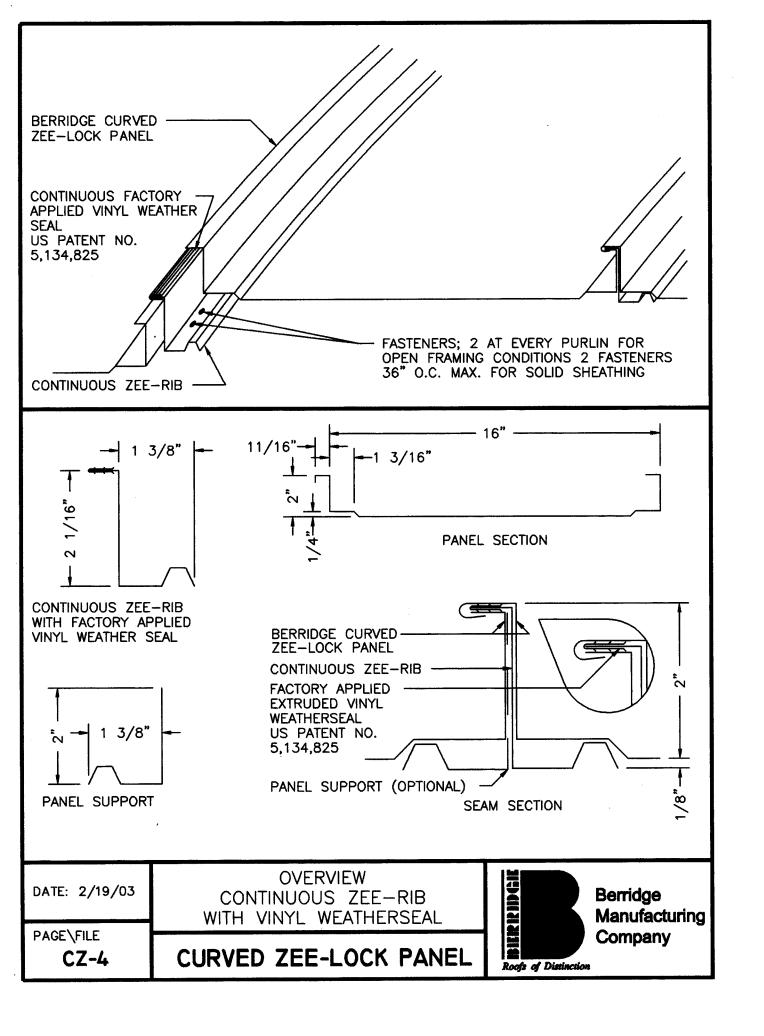


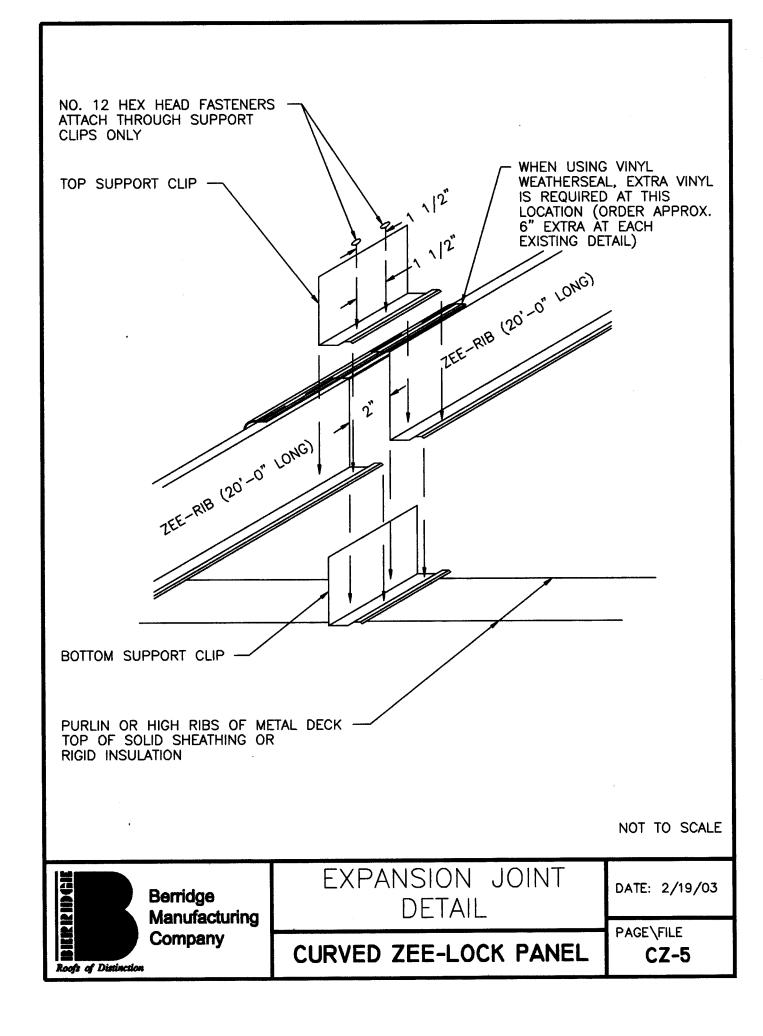
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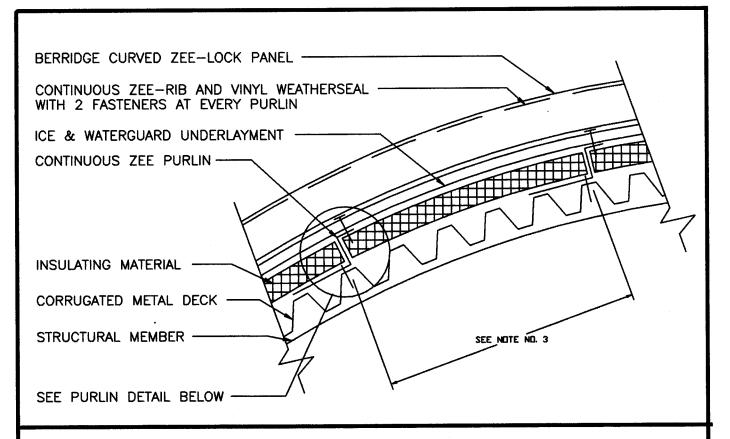
CURVED ZEE-LOCK PANEL

DATE: 2/19/03

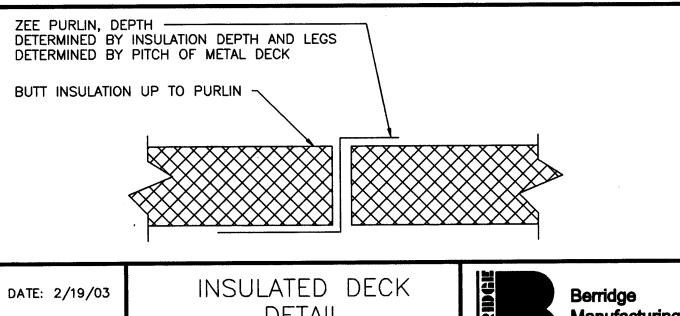
PAGE\FILE







- 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 SAME DEPTH AS INSULATION.
- 3. PURLIN GAUGE, SPACING, AND FASTENER TYPE WILL BE DEPENDENT ON GOVERNING CODE AND SPECIFICATION REQUIREMENTS.



PAGE\FILE

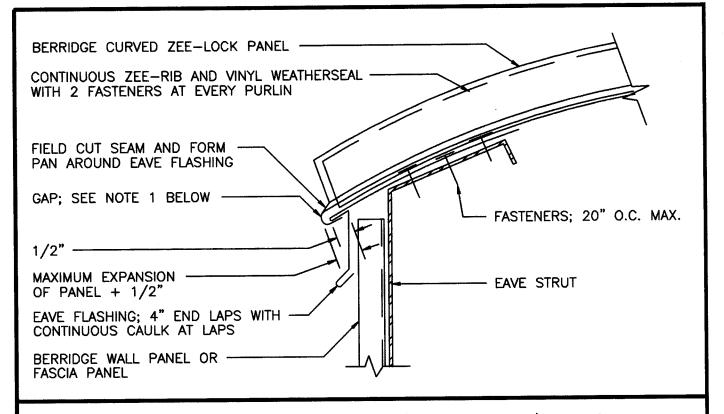
CZ-6

DETAIL

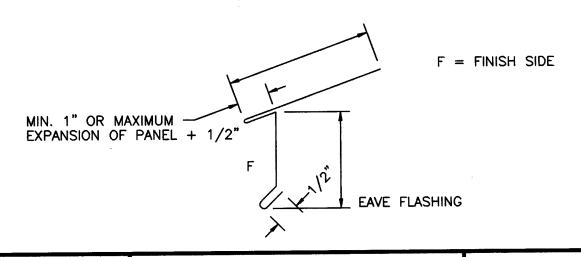
CURVED ZEE-LOCK PANEL



Manufacturing Company



- 1. 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 NOMINAL LINEAR EXPANSION CHART, PAGE CZI-8.
- 2. GAP BETWEEN EAVE FLASHING AND PANEL MUST BE ADJUSTED TO SUIT TEMPERATURE DURING INSTALLATION.
- 3. SEE ALSO EXPANSION JOINT DETAIL CZ-5.



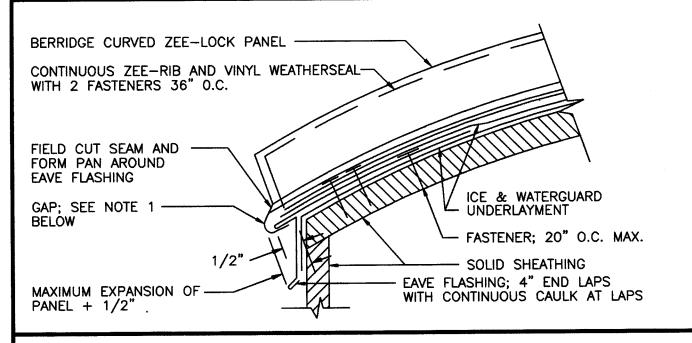
Roofs of Distinction

Berridge Manufacturing Company EAVE DETAIL PANEL TURNDOWN; OPEN FRAMING

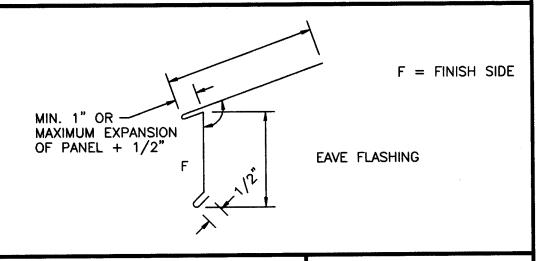
CURVED ZEE-LOCK PANEL

DATE: 2/19/03

PAGE\FILE



- 1. 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 PAN MUST BE ENGAGED WITH EAVE FLASHING WHEN PANEL HAS EXPANDED TO ITS MAXIMUM LENGTH REFER TO NOMINAL LINEAR EXPANSION CHART PAGE CZI—8.
- 2. GAP BETWEEN EAVE FLASHING AND PANEL MUST BE ADJUSTED TO SUIT TEMPERATURE DURING INSTALLATION.
- 3. SOLID SHEATHING (BY OTHERS) TO BE MINIMUM 1/2" PLYWOOD OR EQUIVALENT IN STRENGTH FOR HOLDING POWER OF FASTENERS.
- 4. ALL UNDERLAYMENT, CAULKING, AND FASTENERS, ARE ITEMS TO BE FURNISHED AND INSTALLED BY THE ROOFING INSTALLER AT THE DISCRETION OF THE ARCHITECT.
- 5. SEE ALSO EXPANSION JOINT DETAIL CZ-5.



DATE: 2/19/03

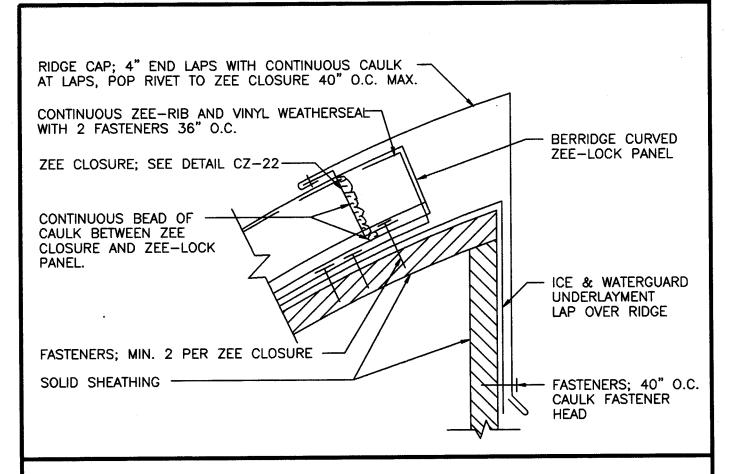
EAVE DETAIL PANEL TURNDOWN; SOLID SUBSTRATE

PAGE\FILE

CZ-II

CURVED ZEE-LOCK PANEL





- 1. SEE DETAIL CZ-22 FOR ZEE CLOSURE AT RIDGE.
- 2. SOLID SHEATHING (BY OTHERS) TO BE MINIMUM 1/2" PLYWOOD OR EQUIVALENT IN STRENGTH FOR HOLDING POWER OF FASTENERS.
- 3. ALL UNDERLAYMENT, CAULKING, AND FASTENERS, ARE ITEMS TO BE FURNISHED AND INSTALLED BY THE ROOFING INSTALLER AT THE DISCRETION OF THE ARCHITECT.

OPEN HEM

F = FINISH SIDE



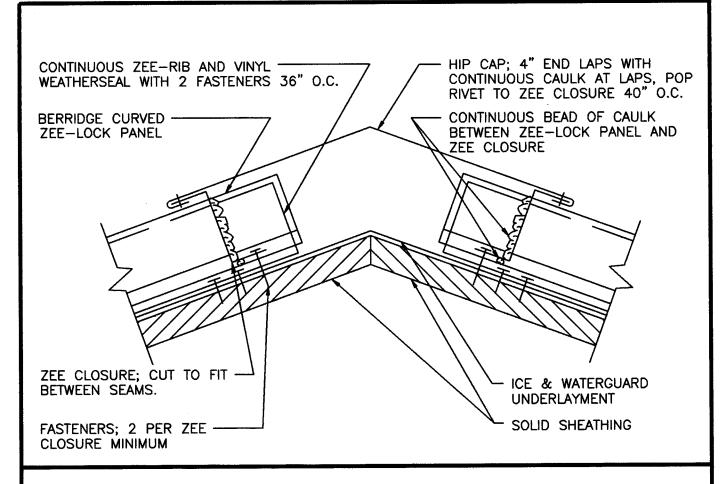
Roofs of Distinction

SHED ROOF RIDGE CAP SOLID SUBSTRATE

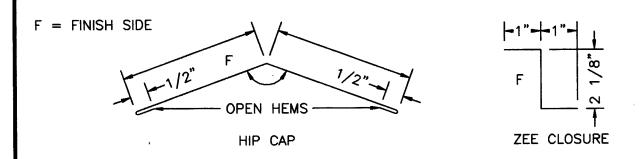
CURVED ZEE-LOCK PANEL

DATE: 2/19/03

PAGE\FILE



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



DATE: 2/19/03

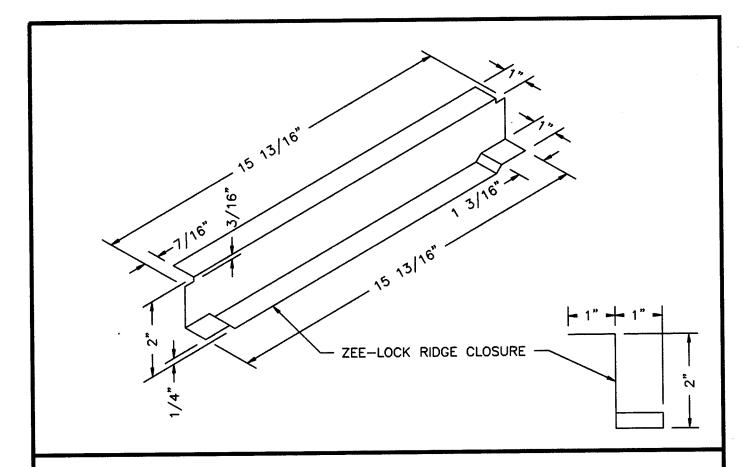
HIP DETAIL SOLID SUBSTRATE

PAGE\FILE

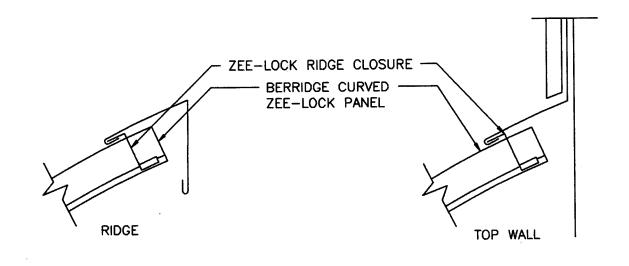
CZ-21

CURVED ZEE-LOCK PANEL





1. ZEE CLOSURE IS DIE FORMED TO FIT PERPENDICULARLY BETWEEN PANEL SEAMS.



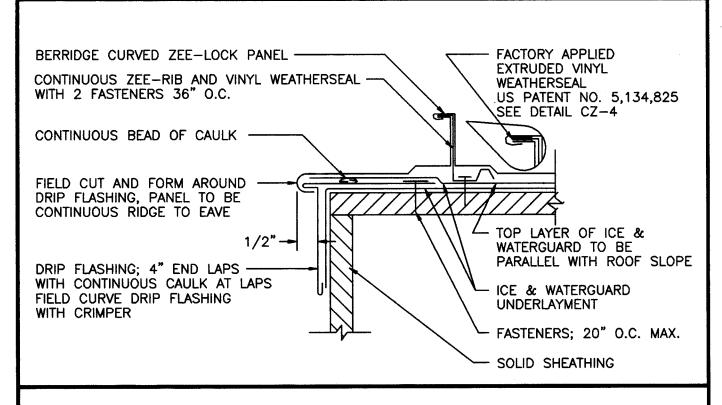


ZEE-LOCK DIE FORMED CLOSURE

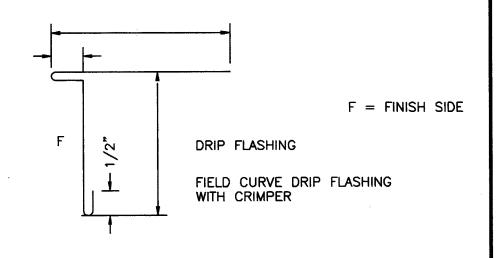
CURVED ZEE-LOCK PANEL

DATE: 2/19/03

PAGE\FILE CZ-22



- 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 UNDERLAYMENT, CAULKING, AND FASTENERS, ARE ITEMS TO BE FURNISHED AND INSTALLED BY THE ROOFING INSTALLER AT THE DISCRETION OF THE ARCHITECT.



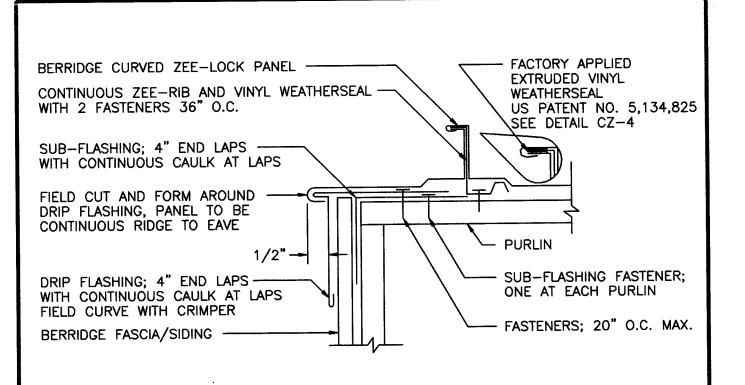


GABLE DETAIL
PANEL TURNDOWN
SOLID SUBSTRATE

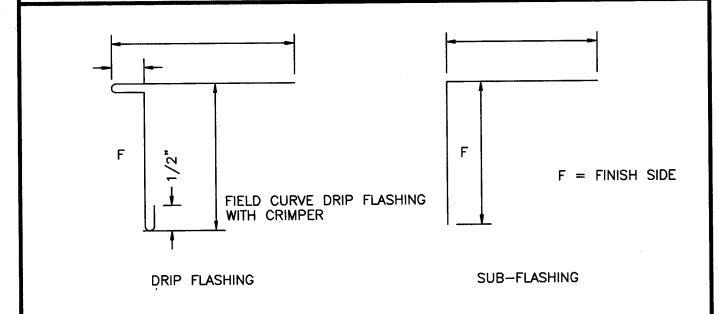
CURVED ZEE-LOCK PANEL

DATE: 2/19/03

PAGE\FILE



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



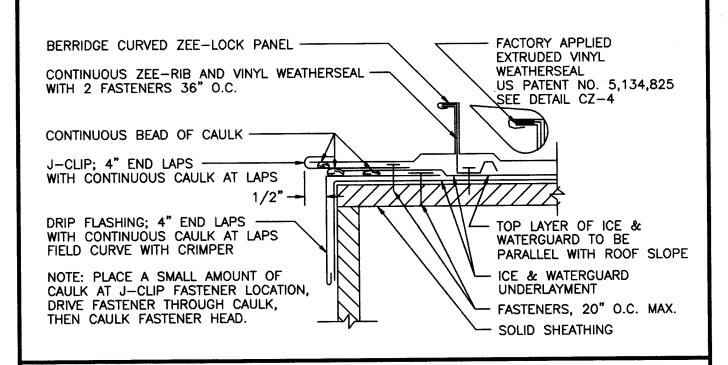
GABLE DETAIL
PANEL TURNDOWN
OPEN FRAMING

CZ-31

CURVED ZEE-LOCK PANEL
Roofs of Distinction

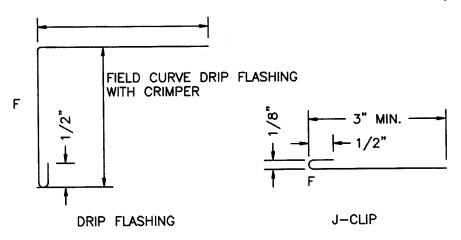
CABLE DETAIL
PANEL TURNDOWN
OPEN FRAMING

Company
Roofs of Distinction



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

F = FINISH SIDE



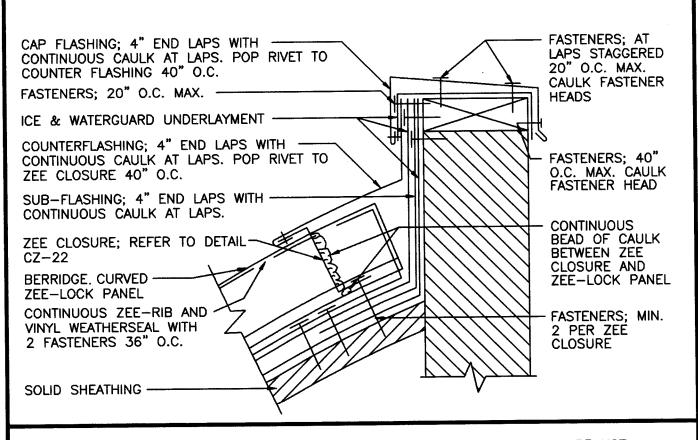


GABLE DETAIL J-CLIP; SOLID SUBSTRATE

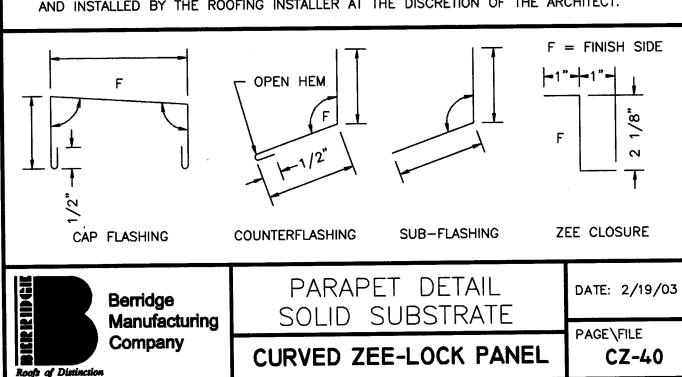
CURVED ZEE-LOCK PANEL

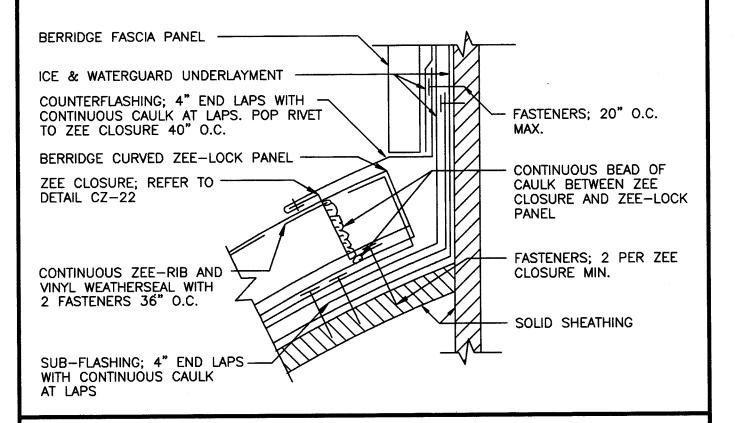
DATE: 2/19/03

PAGE\FILE CZ-32

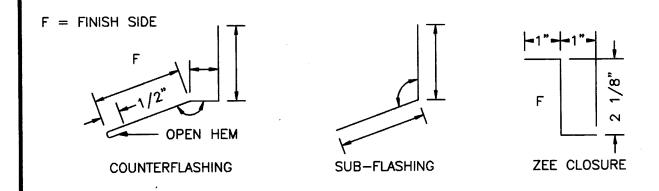


- 1. FIELD CUT ZEE CLOSURE TO FIT BETWEEN PANEL SEAMS IF PANEL SEAMS ARE NOT PERPENDICULAR TO WALL.
- 2. SOLID SHEATHING (BY OTHERS) TO BE MINIMUM 1/2" PLYWOOD OR EQUIVALENT IN STRENGTH FOR HOLDING POWER OF FASTENERS.
- 3. ALL UNDERLAYMENT, CAULKING, AND FASTENERS, ARE ITEMS TO BE FURNISHED AND INSTALLED BY THE ROOFING INSTALLER AT THE DISCRETION OF THE ARCHITECT.





- 1. FIELD CUT ZEE CLOSURE TO FIT BETWEEN PANEL SEAMS IF PANEL SEAMS ARE NOT PERPENDICULAR TO WALL.
- 2. SOLID SHEATHING (BY OTHERS) TO BE MINIMUM 1/2" PLYWOOD OR EQUIVALENT IN STRENGTH FOR HOLDING POWÉR OF FASTENERS.
- 3. ALL UNDERLAYMENT, CAULKING, AND FASTENERS, ARE ITEMS TO BE FURNISHED AND INSTALLED BY THE ROOFING INSTALLER AT THE DISCRETION OF THE ARCHITECT.



DATE: 2/19/03

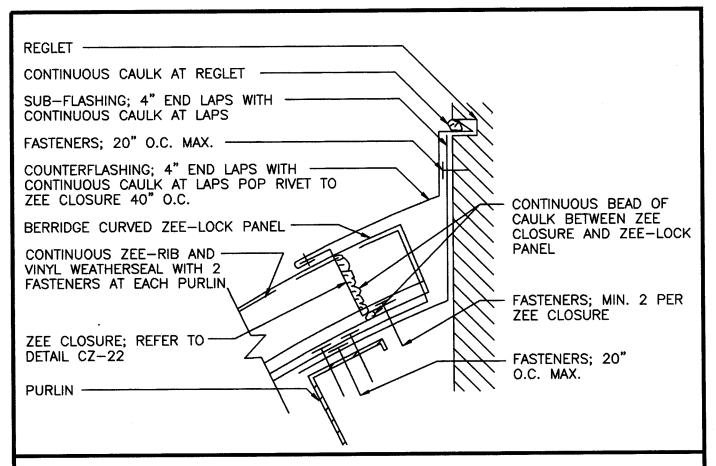
HEAD WALL DETAIL SUBSTRATE

PAGE\FILE

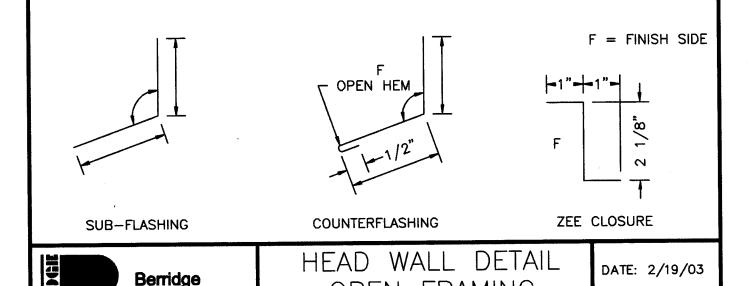
CZ-41

CURVED ZEE-LOCK PANEL





- 1. FIELD CUT ZEE CLOSURE TO FIT BETWEEN PANEL SEAMS IF PANEL SEAMS ARE NOT PERPENDICULAR TO WALL.
- 2. SOLID SHEATHING (BY OTHERS) TO BE MINIMUM 1/2" PLYWOOD OR EQUIVALENT IN STRENGTH FOR HOLDING POWER OF FASTENERS.
- 3. ALL CAULKING AND FASTENERS ARE ITEMS TO BE FURNISHED AND INSTALLED BY THE ROOFING INSTALLER AT THE DISCRETION OF THE ARCHITECT.



Manufacturing

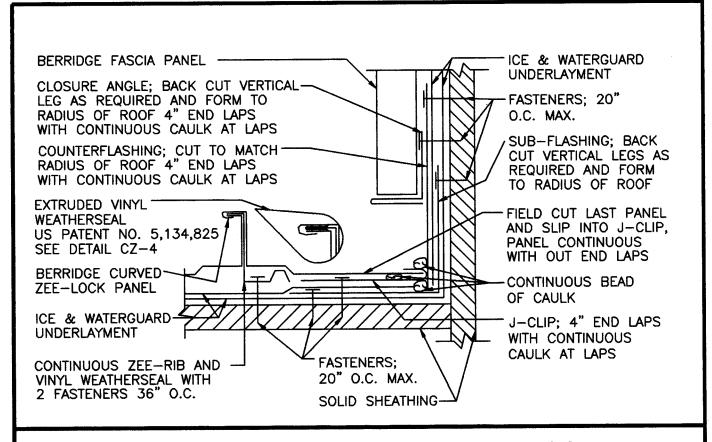
Company

Roofs of Distinction

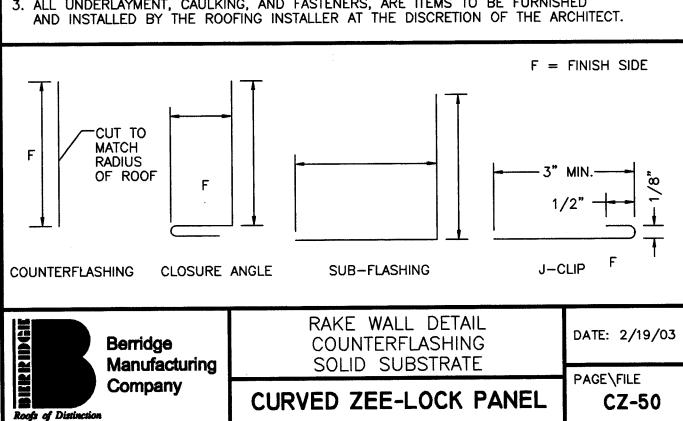
OPEN FRAMING

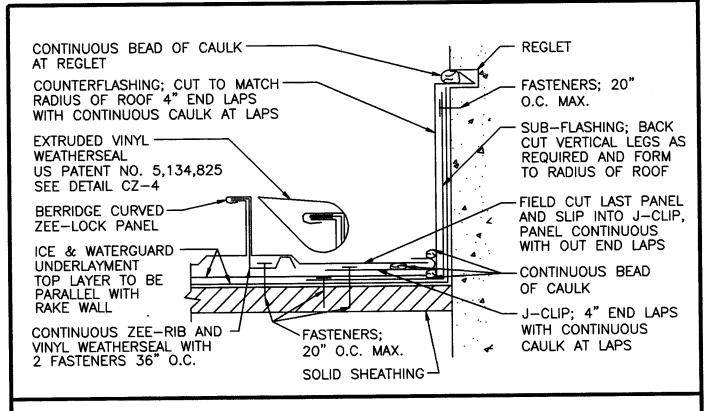
CURVED ZEE-LOCK PANEL

PAGE\FILE

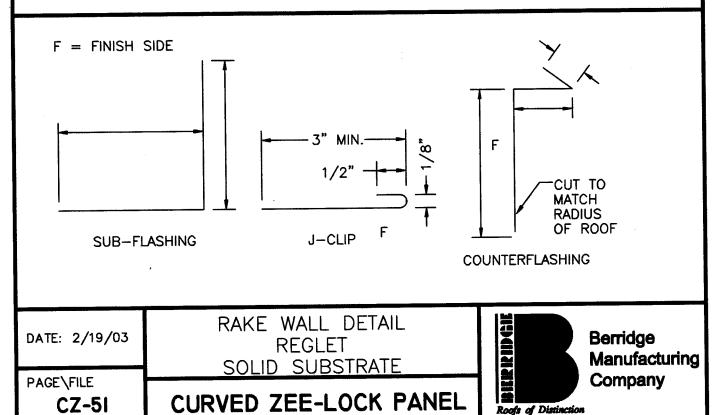


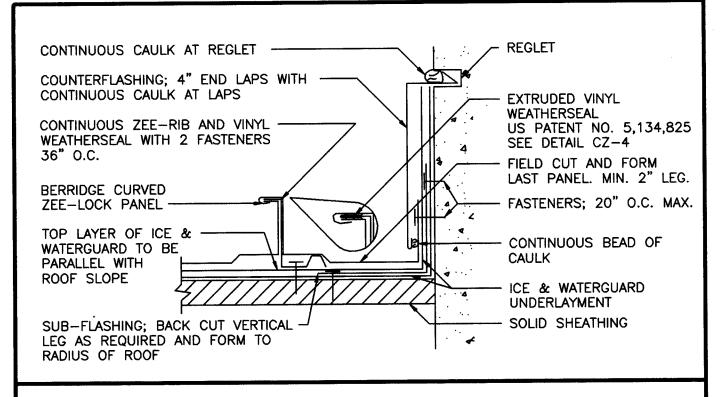
- 1. FIELD CUT LAST PANEL AND SLIP INTO J-CLIP. PANEL TO BE CONTINUOUS FROM RIDGE TO EAVE.
- 2. SOLID SHEATHING (BY OTHERS) TO BE MINIMUM 1/2" PLYWOOD OR EQUIVALENT IN STRENGTH FOR HOLDING POWER OF FASTENERS.
- 3. ALL UNDERLAYMENT, CAULKING, AND FASTENERS, ARE ITEMS TO BE FURNISHED



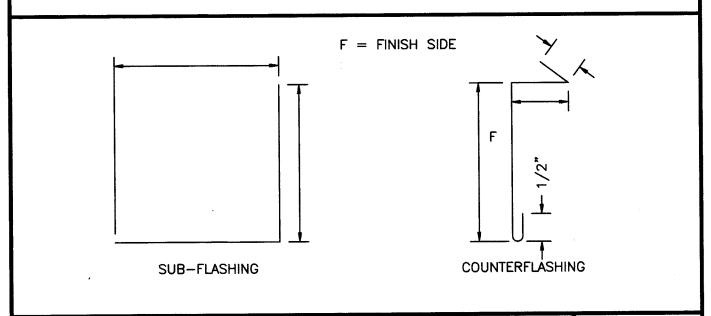


- 1. FIELD CUT LAST PANEL AND SLIP INTO J-CLIP. PANEL TO BE CONTINUOUS FROM RIDGE TO EAVE.
- 2. SOLID SHEATHING (BY OTHERS) TO BE MINIMUM 1/2" PLYWOOD OR EQUIVALENT IN STRENGTH FOR HOLDING POWER OF FASTENERS.
- 3. ALL UNDERLAYMENT, CAULKING, AND FASTENERS, ARE ITEMS TO BE FURNISHED AND INSTALLED BY THE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





- 1. FIELD CUT LAST PANEL AND FORM NEW LEG. PANEL TO 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 UNDERLAYMENT, CAULKING, AND FASTENERS, ARE ITEMS TO BE FURNISHED AND INSTALLED BY THE ROOFING INSTALLER AT THE DISCRETION OF THE ARCHITECT.



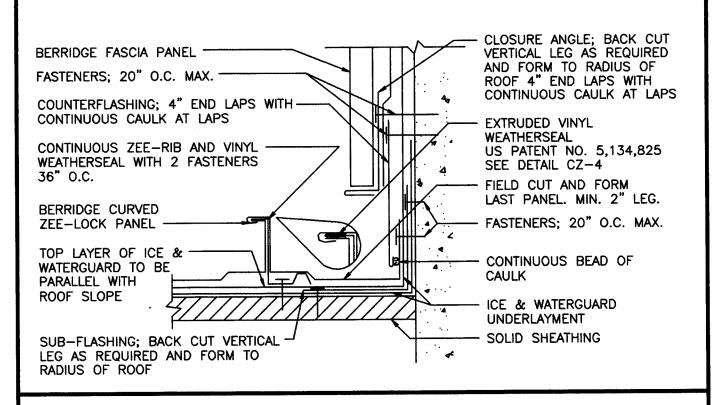


RAKE WALL DETAIL REGLET SOLID SUBSTRATE

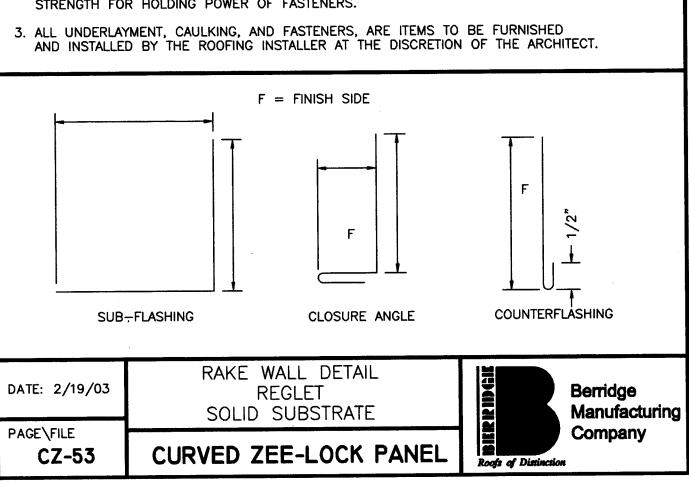
CURVED ZEE-LOCK PANEL

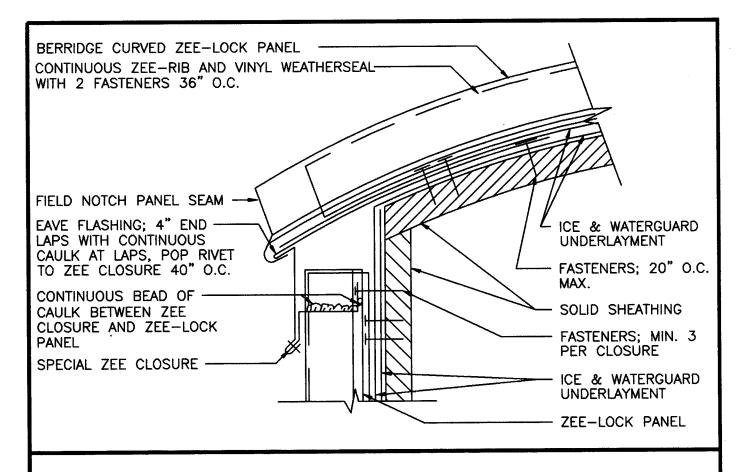
DATE: 2/19/03

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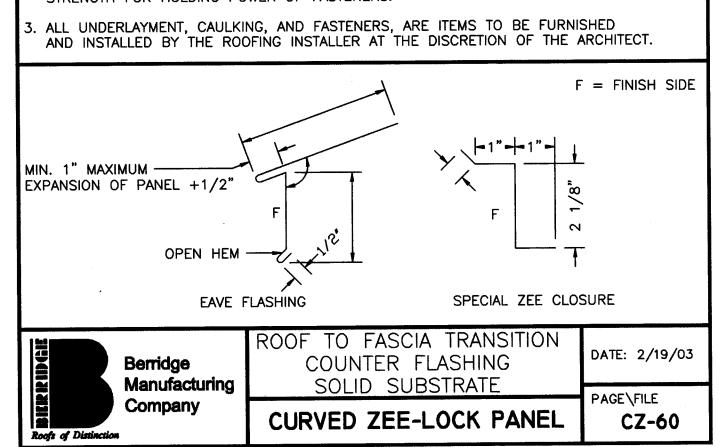


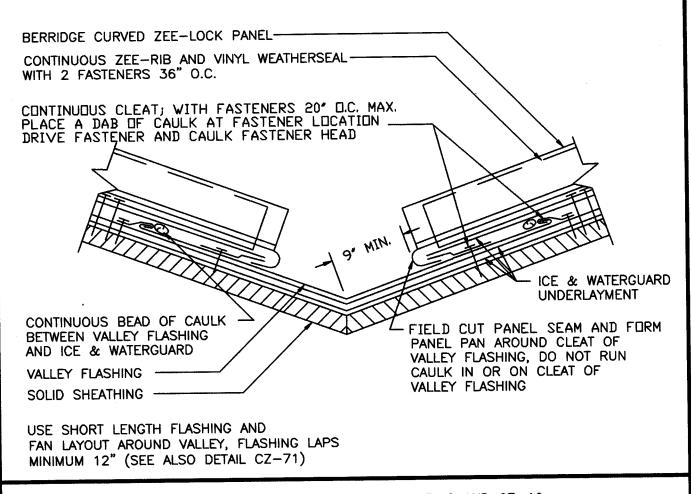
- 1. FIELD CUT LAST PANEL AND FORM NEW LEG. PANEL TO BE CONTINUOUS FROM RIDGE TO EAVE.
- 2. SOLID SHEATHING (BY OTHERS) TO BE MINIMUM 1/2" PLYWOOD OR EQUIVALENT IN STRENGTH FOR HOLDING POWER OF FASTENERS.





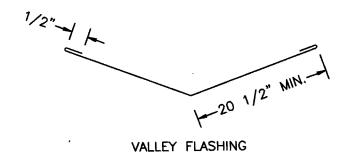
- 1. FIELD CUT ZEE CLOSURE TO FIT BETWEEN SEAMS.
- 2. SOLID SHEATHING (BY OTHERS) TO BE MINIMUM 1/2" PLYWOOD OR EQUIVALENT IN STRENGTH FOR HOLDING POWER OF FASTENERS.

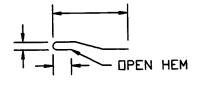




- 1. FOR EXPANSION AND CONTRACTION OF PANELS, SEE CZI-8 AND CZ-10.
- 2. SOLID SHEATHING (BY OTHERS) TO BE A MINIMUM OF 1/2" PLYWOOD OR EQUIVALENT IN STRENGTH FOR HOLDING POWER OF FASTENERS.
- 3. ALL UNDERLAYMENT, CAULKING, AND FASTENERS, ARE ITEMS TO BE FURNISHED AND INSTALLED BY THE ROOFING INSTALLER AT THE DISCRETION OF THE ARCHITECT.

F = FINISH SIDE





CONTINUOUS CLEAT

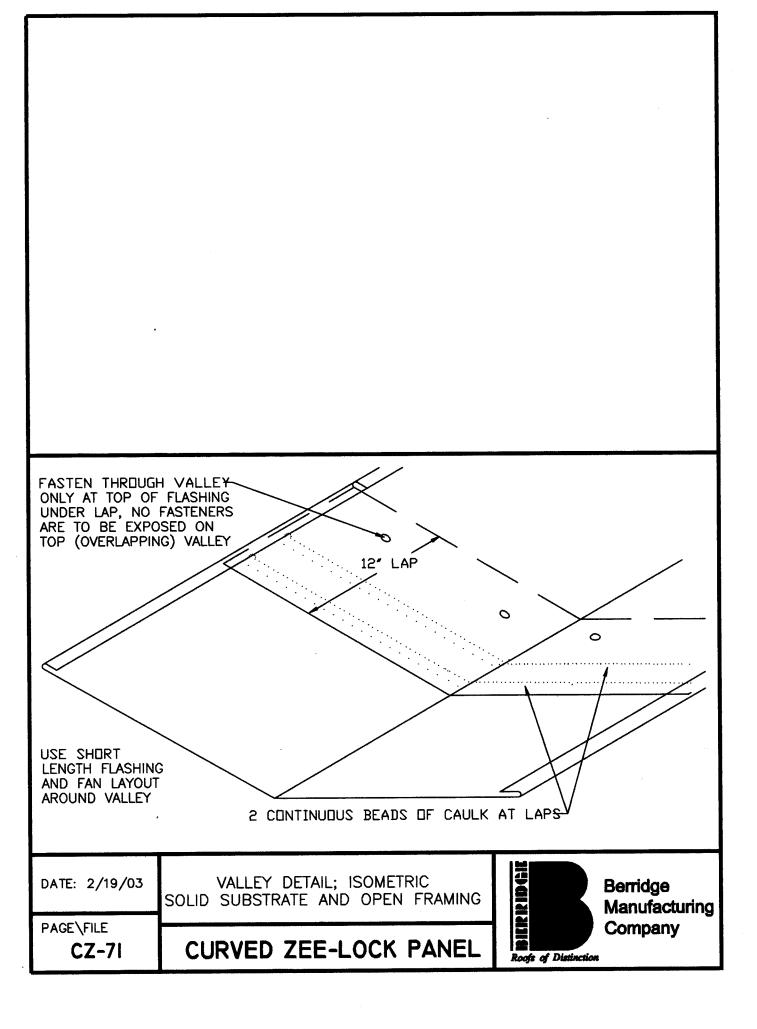


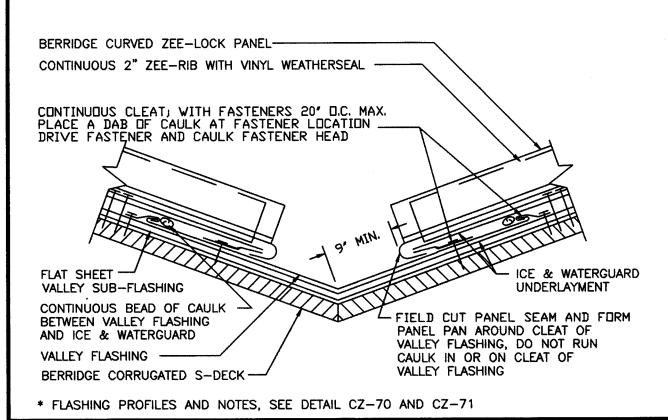
Berridge Manufacturing Company VALLEY DETAIL SOLID SUBSTRATE

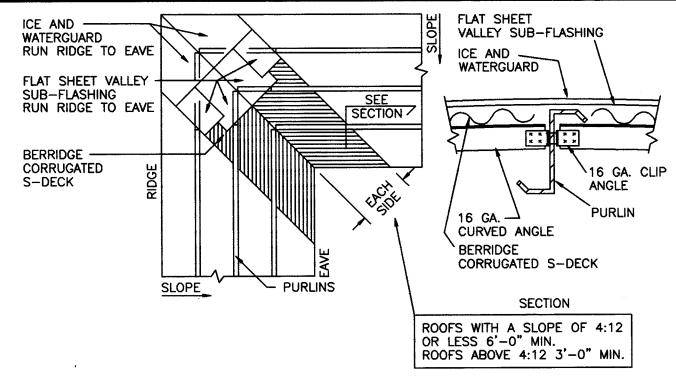
CURVED ZEE-LOCK PANEL

DATE: 2/19/03

PAGE\FILE







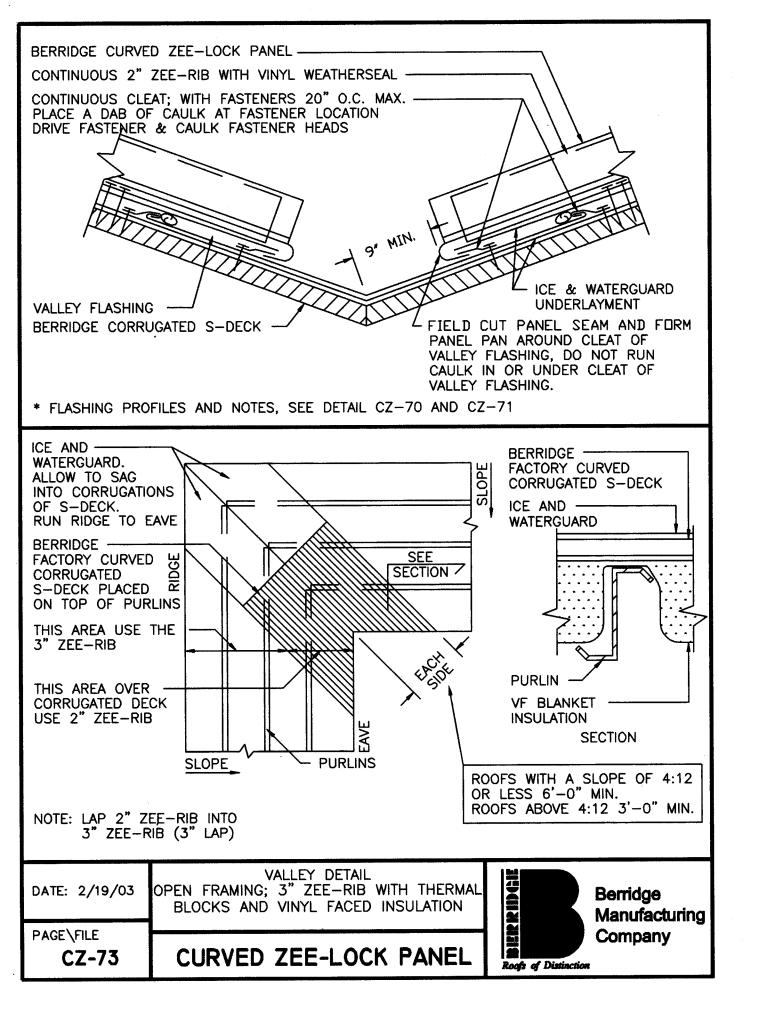


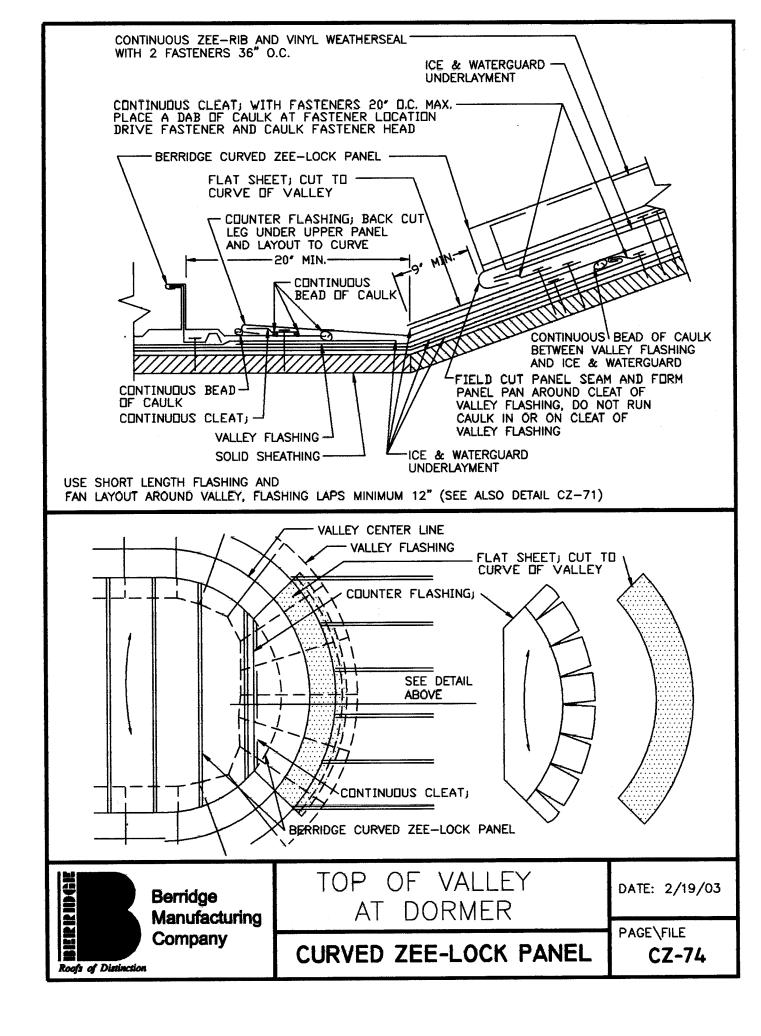
VALLEY DETAIL OPEN FRAMING; 2" ZEE-RIB

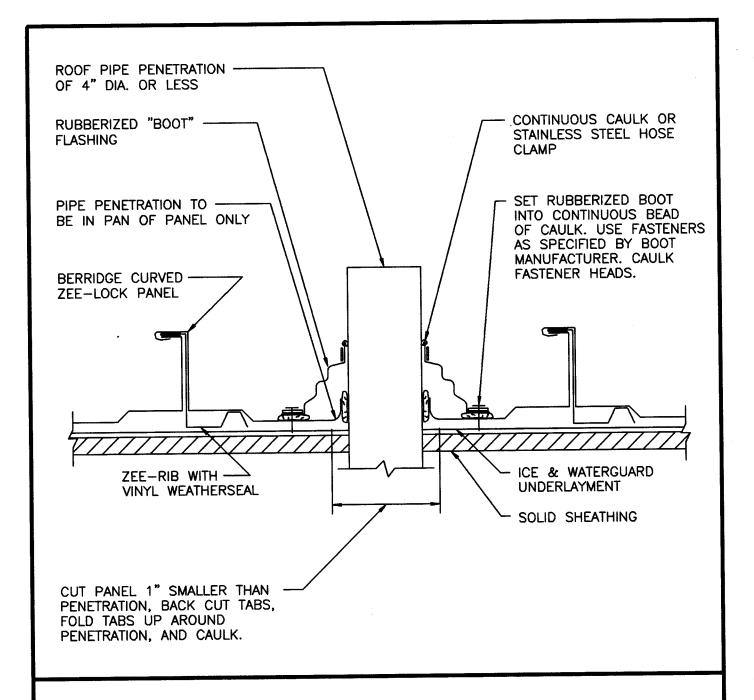
CURVED ZEE-LOCK PANEL

DATE: 2/19/03

PAGE\FILE CZ-72







- 1. CUT HOLE TO ALLOW FOR THERMAL MOVEMENT IF PANELS ARE 30'-0" OR LONGER.
- 2. IF PIPE IS MADE OF METAL, IT MUST BE PAINTED TO PREVENT RUST RUN-OFF FROM STAINING PANELS.
- 3. POSITION SQUARE BASED BOOTS IN A DIAMOND ORIENTATION WHERE POSSIBLE TO AID IN DIVERTING WATER.

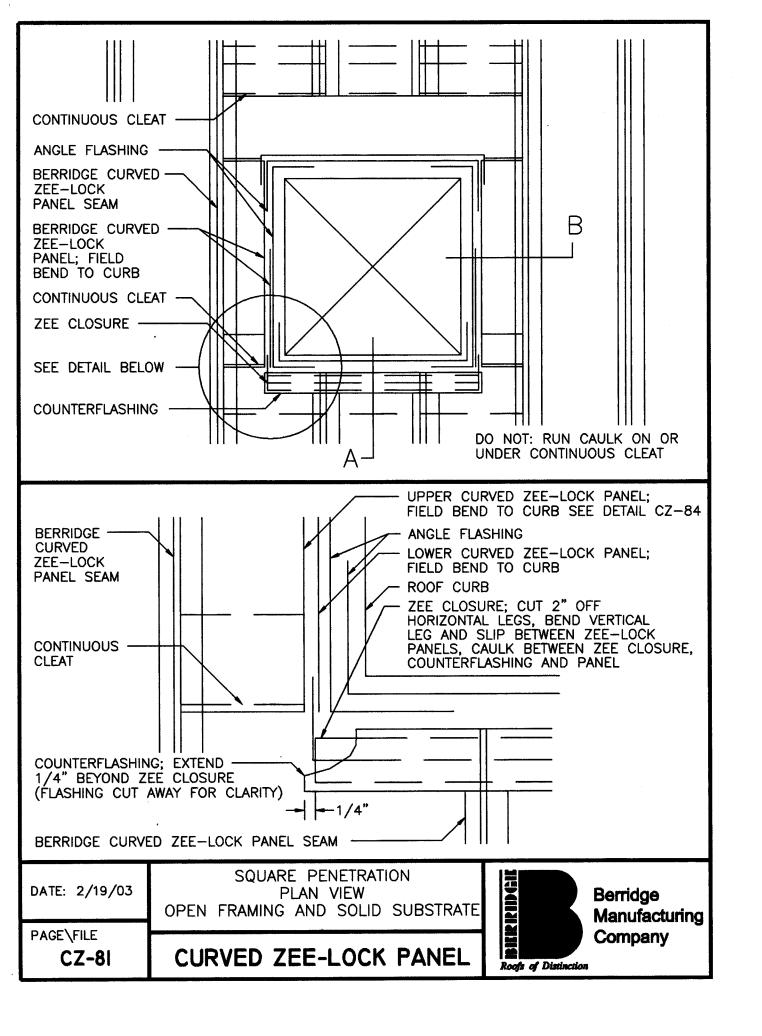


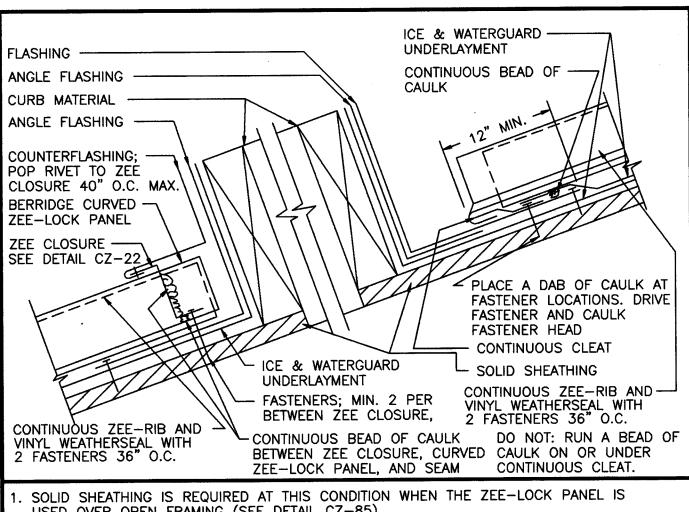
PIPE PENETRATION
(PREFERRED METHOD)
IN PAN OF PANEL ONLY
OPEN FRAMING AND SOLID SUBSTRATE

CURVED ZEE-LOCK PANEL

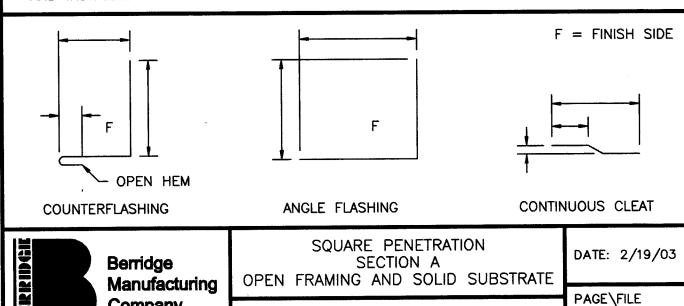
DATE: 2/19/03

PAGE\FILE





- USED OVER OPEN FRAMING (SEE DETAIL CZ-85).
- 2. SOLID SHEATHING (BY OTHERS) TO BE MINIMUM 1/2" PLYWOOD OR EQUIVALENT IN STRENGTH FOR HOLDING POWER OF FASTENERS. (24 GA. METAL CORRUGATED SHEATHING MAY BE USED IN LIEU OF PLYWOOD).
- 3. ALL UNDERLAYMENT, CAULKING, AND FASTENERS, ARE ITEMS TO BE FURNISHED AND INSTALLED BY THE ROOFING INSTALLER AT THE DISCRETION OF THE ARCHITECT.

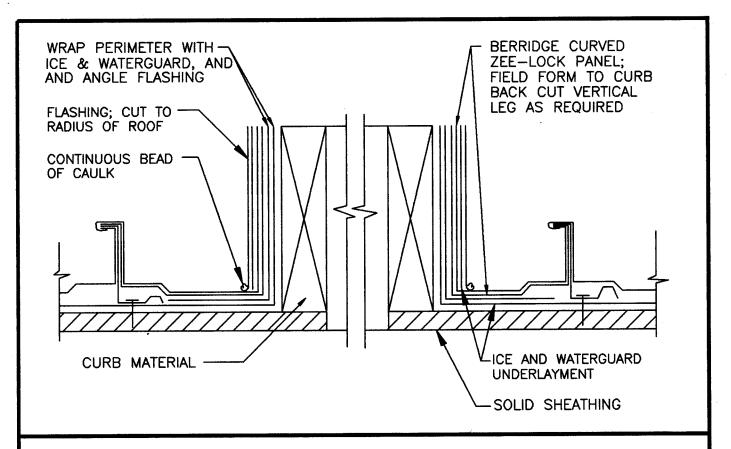


CURVED ZEE-LOCK PANEL

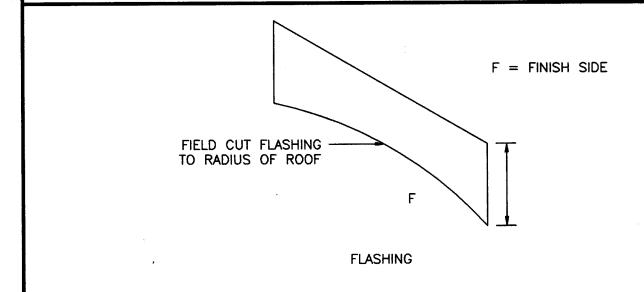
CZ-82

Company

Roofs of Distinction



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



DATE: 2/19/03

SQUARE PENETRATION
SECTION B
OPEN FRAMING AND SOLID SUBSTRATE

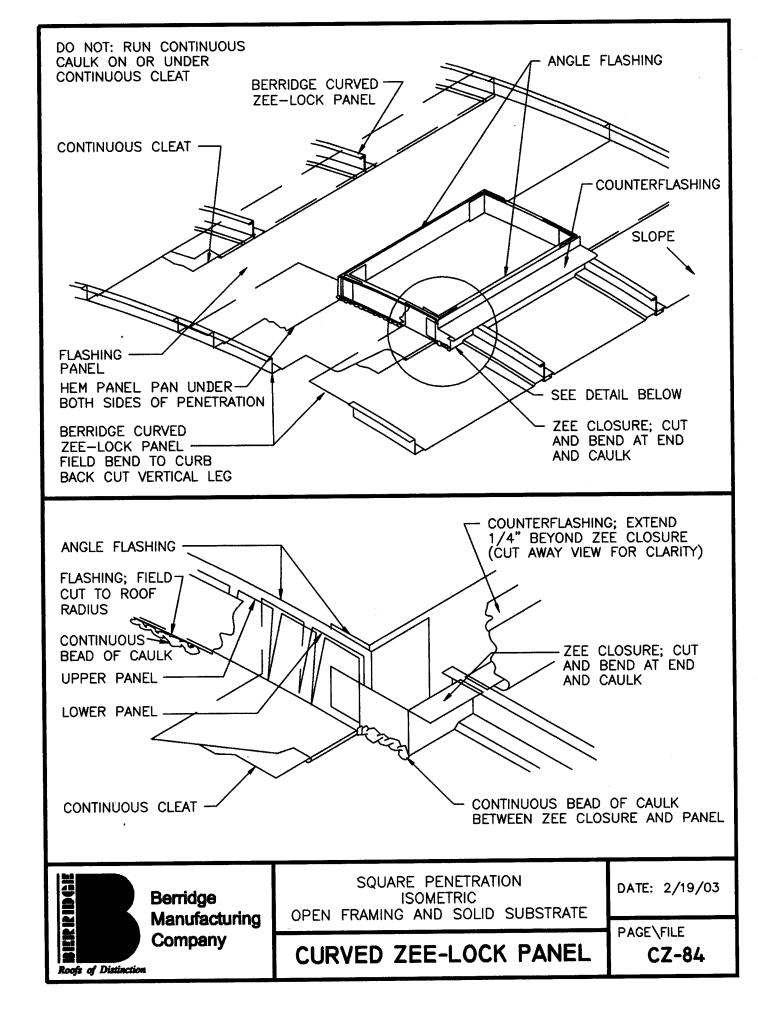
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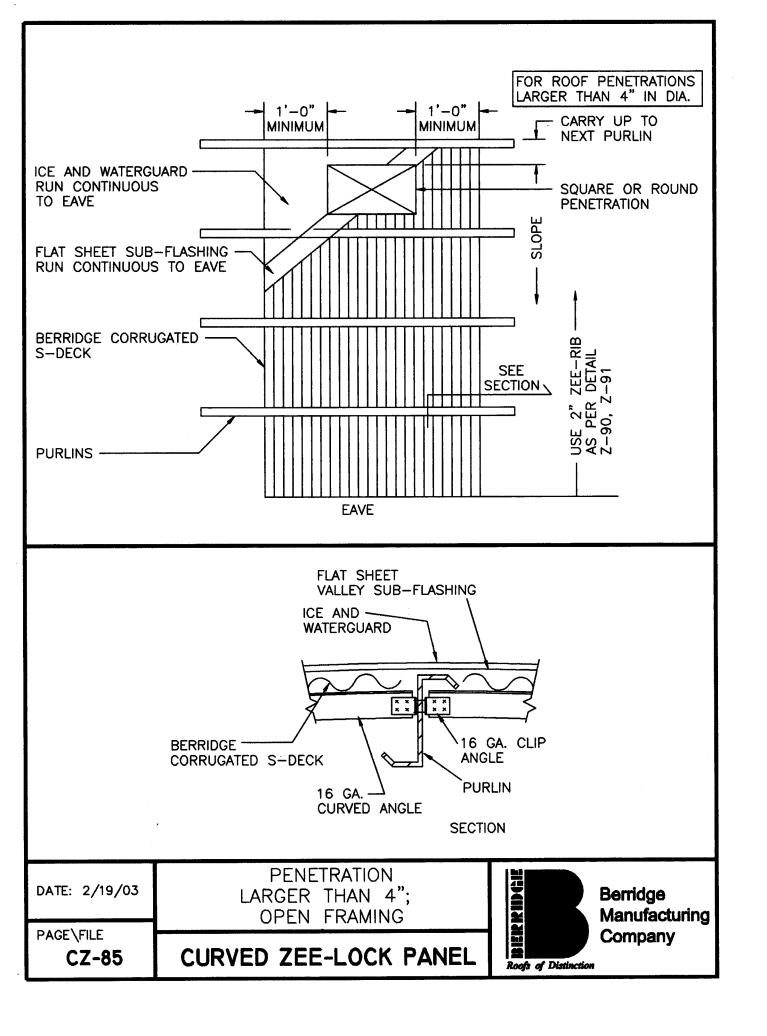
CZ-83

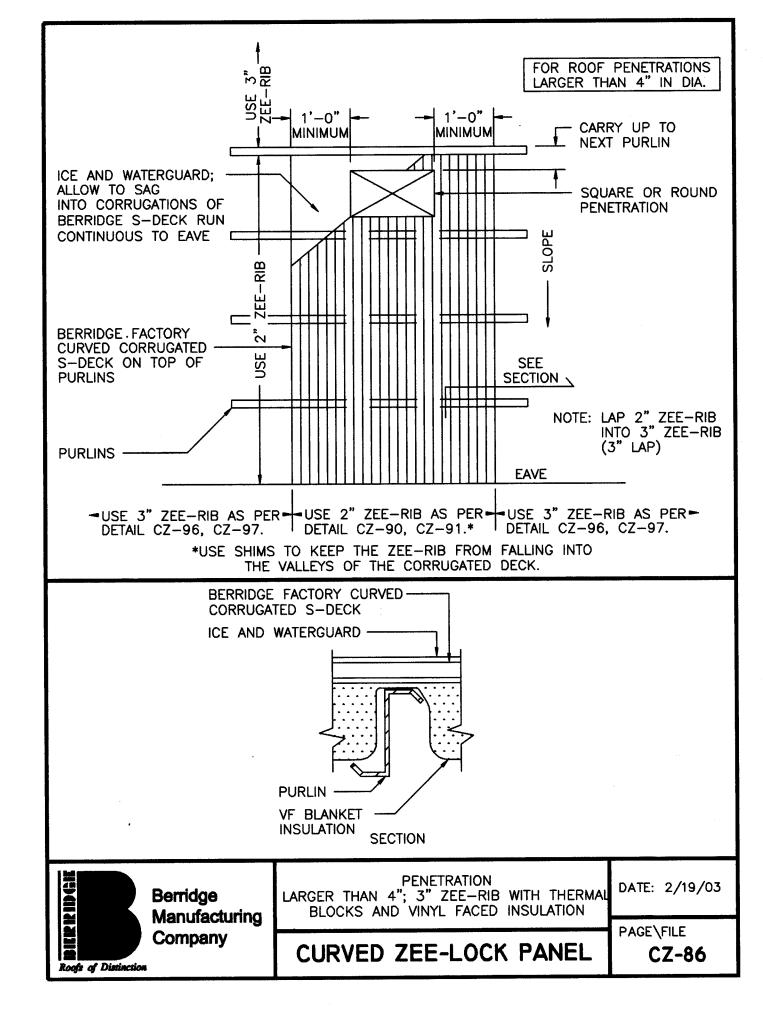
CURVED ZEE-LOCK PANEL

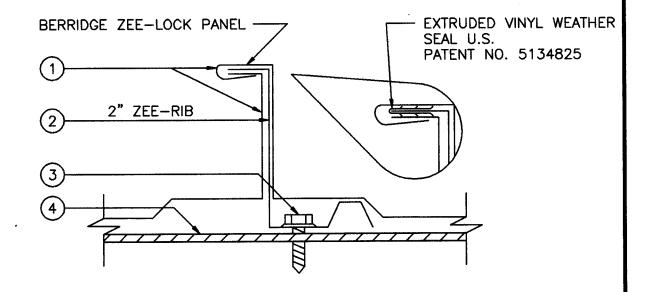


Berridge Manufacturing Company









1. METAL ROOF DECK PANELS * - NO. 24 MSG MINIMUM THICKNESS COATED STEEL. 16 IN. WIDE, 2 IN. HIGH. PANELS CONTINUOUS OVER TWO OR MORE SPANS WITHOUT END LAPS. AN EXTRUDED VINYL WEATHERSEAL (US PATENT NO. 5,134,825) IS USED AT PANEL SIDE LAPS. ADJACENT PANELS ARE SEAMED TOGETHER ALONG SIDE LAPS TO INCLUDE "ROOF DECK FASTENERS" (ITEM 2) USING AN ELECTRIC SEAMING TOOL. BERRIDGE MANUFACTURING CO. - "ZEE-LOCK PANEL"

- 2. ROOF DECK FASTENERS * (PANEL CLIPS) ONE PIECE ASSEMBLY FABRICATED FROM NO. 24 MSG COATED STEEL. CLIP LOCATED AT EACH PANEL SIDE LAP WITH CLIP BEING CONTINUOUS AND EQUAL TO LENGTH OF "METAL ROOF DECK PANELS" (ITEM 1) BERRIDGE MANUFACTURING CO. "ZEE-CLIP RIB" (2" ZEE-RIB)
- 3. FASTENERS (SCREWS) FOR ATTACHING "ZEE—CLIP RIB" (ITEM 2) TO PURLINS. USE NO. 12 x 1 IN. SELF—DRILLING, SELF—TAPPING STEEL SCREWS. TWO FASTENERS AT EACH PURLIN LOCATION.
- 4. PURLINS NO. 16 MSG MINIMUM STEEL (MIN. YIELD STRENGTH 50,000 PSI) 5'-0" MAXIMUM SPACING. BERRIDGE MANUFACTURING "CEE" OR "ZEE" PURLINS.
- 5. LATERAL BRACING (NOT SHOWN) REFER TO "GENERAL INFORMATION, ROOF DECK CONSTRUCTION" (BUILDING MATERIAL DIRECTORY) FOR ITEMS NOT EVALUATED.
- * BEARING THE UL CLASSIFICATION MARKING.

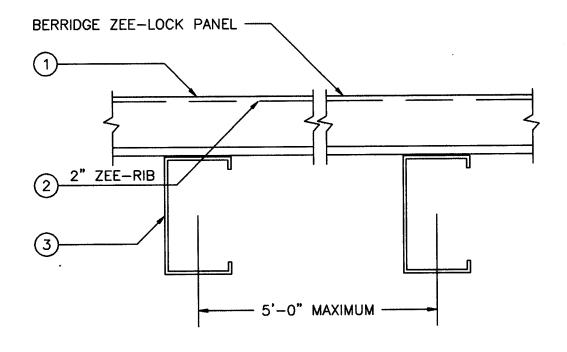


UL 90 APPROVED ASSEMBLY SEAM SECTIONS AND FASTENER SPECS CONSTRUCTION NO. 312

CURVED ZEE-LOCK PANEL

DATE: 2/19/03

PAGE\FILE



- 1. METAL ROOF DECK PANELS * NO. 24 MSG MINIMUM THICKNESS COATED STEEL, 16 IN. WIDE, 2 IN. HIGH. PANELS CONTINUOUS OVER TWO OR MORE SPANS WITHOUT END LAPS. AN EXTRUDED VINYL WEATHERSEAL (US PATENT NO. 5,134,825) IS USED AT PANEL SIDE LAPS. ADJACENT PANELS ARE SEAMED TOGETHER ALONG SIDE LAPS TO INCLUDE "ROOF DECK FASTENERS" (ITEM 2) USING AN ELECTRIC SEAMING TOOL.

 BERRIDGE MANUFACTURING CO. "ZEE-LOCK PANEL"
- 2. ROOF DECK FASTENERS * (PANEL CLIPS) ONE PIECE ASSEMBLY FABRICATED FROM NO. 24 MSG COATED STEEL. CLIP LOCATED AT EACH PANEL SIDE LAP WITH CLIP BEING CONTINUOUS AND EQUAL TO LENGTH OF "METAL ROOF DECK PANELS" (ITEM 1) BERRIDGE MANUFACTURING CO. "ZEE-CLIP RIB" (2" ZEE-RIB)
- 3. PURLINS NO. 16 MSG MINIMUM STEEL (MIN. YIELD STRENGTH 50,000 PSI) 5'-0" MAXIMUM SPACING. BERRIDGE MANUFACTURING "CEE" OR "ZEE" PURLINS.
- * BEARING THE UL CLASSIFICATION MARKING.

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UL 90 APPROVED ASSEMBLY
PURLING SPACING
CONSTRUCTION NO. 312

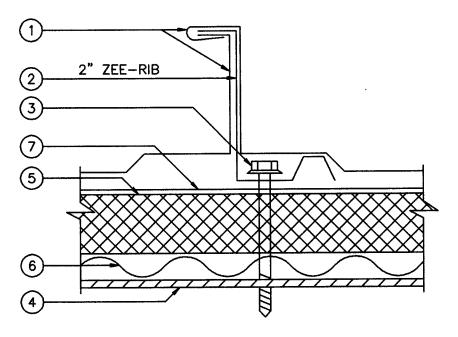
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CZ-91

CURVED ZEE-LOCK PANEL



Berridge Manufacturing Company



BERRIDGE MANUFACTURING CO. - "ZEE-LOCK PANEL"

- 2. BERRIDGE ZEE-RIB (CONTINUOUS) * ONE PIECE ASSEMBLY FABRICATED FROM NO. 24 MSG COATED STEEL. (MIN. YIELD STRENGTH 40,000 PSI) ZEE-RIB LOCATED AT EACH PANEL SIDE LAP BEING CONTINUOUS AND EQUAL TO LENGTH OF "METAL ROOF DECK PANELS" (ITEM 1) (2" ZEE-RIB)
- 3. FASTENERS (SCREWS) —
 A. FOR ATTACHING "ZEE-RIB" (ITEM 2) TO PURLINS. USE NO. 12 SELF-DRILLING, SELF-TAPPING STEEL SCREWS. ONE FASTENER AT EACH PURLIN LOCATION.
 B. ALTERNATE IF ATTACHING TO DECK ONLY USE ONE NO. 12 @ 24" O.C.
- 4. PURLINS NO. 16 MSG MINIMUM STEEL (MIN. YIELD STRENGTH 50,000 PSI) 5'-0" MAXIMUM SPACING. BERRIDGE MANUFACTURING "CEE" OR "ZEE" PURLINS.
- 5. INSULATION 4" RIGID INSULATION BOARD.
- 6. BERRIDGE S-DECK METAL STRUCTURAL SHEATHING NO. 24 MSG STEEL (MIN. YIELD STRENGTH 40,000 PSI), CORRUGATED DECK.
- 7. ICE AND WATERGUARD.
- 8. LATERAL BRACING (NOT SHOWN) REFER TO "GENERAL INFORMATION, ROOF DECK CONSTRUCTION" (BUILDING MATERIAL DIRECTORY), FOR ITEMS NOT EVALUATED.
- * BEARING THE UL CLASSIFICATION MARKING.



UL 90 APPROVED ASSEMBLY

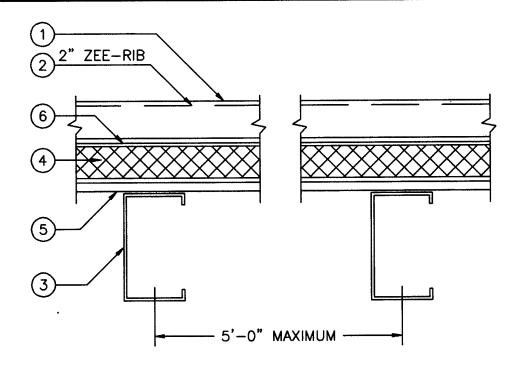
ZEE-LOCK PANEL WITH CONTINUOUS ZEE-RIB AND 4" RIGID INSULATION BOARD OVER BERRIDGE 24 GA. CORRUGATED S-DECK, AND 16 GA. PURLINS © 5'-0" O.C. MAX.

UL CONSTRUCTION NUMBER 335

CURVED ZEE-LOCK PANEL

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BERRIDGE MANUFACTURING CO. - "ZEE-LOCK PANEL"

- 2. BERRIDGE ZEE-RIB (CONTINUOUS) * ONE PIECE ASSEMBLY FABRICATED FROM NO. 24 MSG COATED STEEL. (MIN. YIELD STRENGTH 40,000 PSI) ZEE-RIB LOCATED AT EACH PANEL SIDE LAP BEING CONTINUOUS AND EQUAL TO LENGTH OF "METAL ROOF DECK PANELS". (ITEM 1) (2" ZEE-RIB)
- 3. PURLINS NO. 16 MSG MINIMUM STEEL (MIN. YIELD STRENGTH 50,000 PSI) 5'-0" MAXIMUM SPACING.
- 4. INSULATION 4" RIGID INSULATION BOARD.
- 5. BERRIDGE S-DECK METAL STRUCTURAL SHEATHING NO. 24 MSG STEEL (MIN. YIELD STRENGTH 40,000 PSI), CORRUGATED DECK.
- 6. ICE AND WATERGUARD.
- 7. LATERAL BRACING (NOT SHOWN) REFER TO "GENERAL INFORMATION, ROOF DECK CONSTRUCTION" (BUILDING MATERIAL DIRECTORY), FOR ITEMS NOT EVALUATED.
- * BEARING THE UL CLASSIFICATION MARKING.

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ZEE-LOCK PANEL WITH CONTINUOUS ZEE-RIB AND 4" RIGID INSULATION BOARD OVER BERRIDGE 24 GA. CORRUGATED S-DECK, AND 16 GA. PURLINS AT 5'-0" O.C. MAX. UL CONSTRUCTION NUMBER 335

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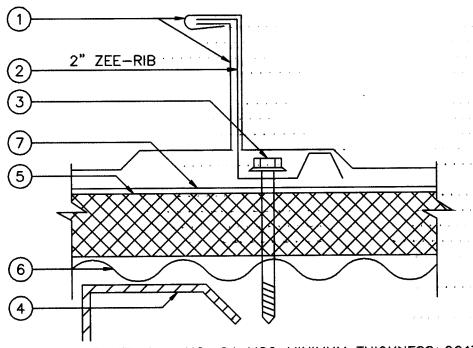
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Berridge Manufacturing Company

Roofs of Distinction

CZ-93

CURVED ZEE-LOCK PANEL



BERRIDGE MANUFACTURING CO. - "ZEE-LOCK PANEL"

- 2. BERRIDGE ZEE-RIB (CONTINUOUS) * ONE PIECE ASSEMBLY FABRICATED FROM NO. 24 MSG COATED STEEL. (MIN. YIELD STRENGTH 40,000 PSI) ZEE-RIB LOCATED AT EACH PANEL SIDE LAP BEING CONTINUOUS AND EQUAL TO LENGTH OF "METAL" ROOF DECK PANELS" (ITEM 1) (2" ZEE-RIB)
- 3. FASTENERS (SCREWS) FOR ATTACHING "ZEE-RIB" (ITEM 2) TO S-DECK (ITEM 6). USE NO. 12 SELF-DRILLING, SELF-TAPPING STEEL SCREWS. ONE FASTENER AT 24" O.C.
- 4. PURLINS NO. 16 MSG MINIMUM STEEL (MIN. YIELD STRENGTH 50,000 PSI) 5'-0" MAXIMUM SPACING. BERRIDGE MANUFACTURING "CEE" OR "ZEE" PURLINS.
- 5. INSULATION 4" RIGID INSULATION BOARD.
- 6. BERRIDGE S-DECK METAL STRUCTURAL SHEATHING NO. 24 MSG STEEL (MIN. YIELD STRENGTH 40,000 PSI), CORRUGATED DECK.
- 7. ICE AND WATERGUARD.
- 8. LATERAL BRACING (NOT SHOWN) REFER TO "GENERAL INFORMATION, ROOF DECK CONSTRUCTION" (BUILDING MATERIAL DIRECTORY), FOR ITEMS NOT EVALUATED.
- * BEARING THE UL CLASSIFICATION MARKING.



Berridge Manufacturing Company

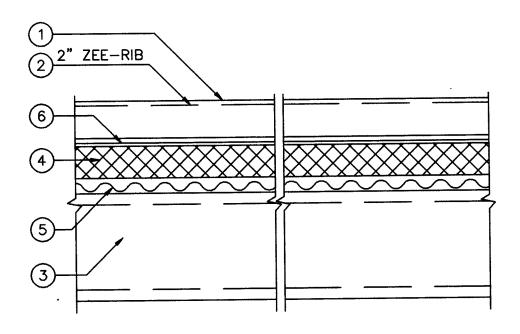
ZEE-LOCK PANEL WITH CONTINUOUS ZEE-RIB AND 4" RIGID INSULATION BOARD OVER BERRIDGE 22 GA. CORRUGATED S-DECK, AND 16 GA. PURLINS 9 5'-0" O.C. MAX. MODIFICATION OF UL CONSTRUCTION NUMBER 335

CURVED ZEE-LOCK PANEL

UL 90 APPROVED ASSEMBLY

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BERRIDGE MANUFACTURING CO. - "ZEE-LOCK PANEL"

- 2. BERRIDGE ZEE-RIB (CONTINUOUS) * ONE PIECE ASSEMBLY FABRICATED FROM NO. 24 MSG COATED STEEL. (MIN. YIELD STRENGTH 40,000 PSI) ZEE-RIB LOCATED AT EACH PANEL SIDE LAP BEING CONTINUOUS AND EQUAL TO LENGTH OF "METAL ROOF DECK PANELS". (ITEM 1) (2" ZEE-RIB)
- 3. PURLINS NO. 16 MSG MINIMUM STEEL (MIN. YIELD STRENGTH 50,000 PSI) 5'-0" MAXIMUM SPACING. BERRIDGE MANUFACTURING "CEE" OR "ZEE" PURLINS.
- 4. INSULATION 4" RIGID INSULATION BOARD.
- 5. BERRIDGE S-DECK METAL STRUCTURAL SHEATHING NO. 24 MSG STEEL (MIN. YIELD STRENGTH 40,000 PSI), CORRUGATED DECK.
- 6. ICE AND WATERGUARD.
- 7. LATERAL BRACING (NOT SHOWN) REFER TO "GENERAL INFORMATION, ROOF DECK CONSTRUCTION" (BUILDING MATERIAL DIRECTORY), FOR ITEMS NOT EVALUATED.
- * BEARING THE UL CLASSIFICATION MARKING.

DATE: 2/19/03

UL 90 APPROVED ASSEMBLY

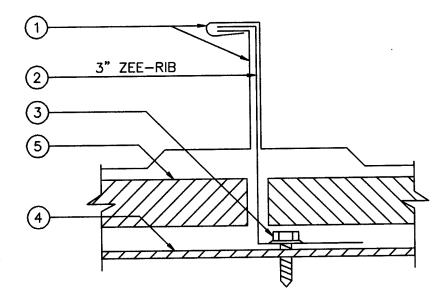
ZEE-LOCK PANEL WITH CONTINUOUS ZEE-RIB AND 4" RIGID INSULATION BOARD OVER BERRIDGE 22 GA. CORRUGATED S-DECK, AND 16 GA. PURLINS AT 5'-0" O.C. MAX. MODIFICATION OF UL CONSTRUCTION NUMBER 335

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CZ-95

CURVED ZEE-LOCK PANEL

Roofs of Distinction



BERRIDGE MANUFACTURING CO. - "ZEE-LOCK PANEL"

- 2. BERRIDGE ZEE-RIB (CONTINUOUS) * ONE PIECE ASSEMBLY FABRICATED FROM 24 MSG COATED STEEL. (MIN. YIELD STRENGTH 40,000 PSI) ZEE-RIB LOCATED AT EACH PANEL SIDE LAP BEING CONTINUOUS AND EQUAL TO LENGTH OF "METAL ROOF DECK PANELS" (ITEM 1) (3" ZEE-RIB)
- 3. FASTENERS (SCREWS) FOR ATTACHING "ZEE—RIB" (ITEM 2) TO PURLINS. USE NO. 12 x 1 IN. SELF—DRILLING, SELF—TAPPING STEEL SCREWS. TWO FASTENERS AT EACH PURLIN LOCATION.
- 4. PURLINS NO. 16 MSG MINIMUM STEEL (MIN. YIELD STRENGTH 50,000 PSI) 5'-0" MAXIMUM SPACING. BERRIDGE MANUFACTURING "CEE" OR "ZEE" PURLINS.
- 5. THERMAL BLOCK 3" BY 16" BY 1" EXTRUDED POLYSTYRENE. (OPTIONAL)
- 6. INSULATION (NOT SHOWN) 6 IN. VINYL FACED COMPRESSIBLE INSULATION. REFER TO DETAIL Z-93.
- 7. LATERAL BRACING (NOT SHOWN) REFER TO "GENERAL INFORMATION, ROOF DECK CONSTRUCTION" (BUILDING MATERIAL DIRECTORY), FOR ITEMS NOT EVALUATED.
- * BEARING THE UL CLASSIFICATION MARKING.



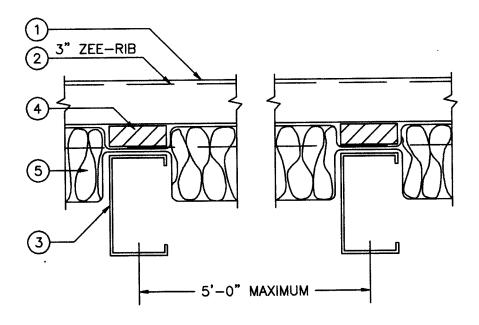
Berridge Manufacturing Company ZEE-LOCK PANEL WITH CONTINUOUS ZEE-RIB AND BLANKET INSULATION AND 1" THERMAL BLOCK AND 16 GA. PURLINS AT 5'-0" O.C. MAX. UL CONSTRUCTION NO. 312

CURVED ZEE-LOCK PANEL

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- 1. BERRIDGE ZEE-LOCK PANEL * NO. 24 MSG MINIMUM THICKNESS COATED STEEL, (MIN. YIELD STRENGTH 40,000 PSI) 16 IN. WIDE, 2 IN. HIGH. PANELS CONTINUOUS OVER TWO OR MORE SPANS WITHOUT END LAPS. AN EXTRUDED VINYL WEATHERSEAL (US PATENT NO. 5,134,825) IS USED AT PANEL SIDE LAPS. ADJACENT PANELS ARE SEAMED TOGETHER ALONG SIDE LAPS USING AN ELECTRIC SEAMING TOOL.
 - BERRIDGE MANUFACTURING CO. "ZEE-LOCK PANEL"
- 2. BERRIDGE ZEE-RIB (CONTINUOUS) * ONE PIECE ASSEMBLY FABRICATED FROM NO. 24 MSG COATED STEEL. (MIN. YIELD STRENGTH 40,000 PSI) ZEE-RIB LOCATED AT EACH PANEL SIDE LAP BEING CONTINUOUS AND EQUAL TO LENGTH OF "METAL ROOF DECK PANELS" (ITEM 1) (3" ZEE-RIB)
- 3. PURLINS NO. 16 MSG MINIMUM STEEL (MIN. YIELD STRENGTH 50,000 PSI) 5'-0" MAXIMUM SPACING.
- 4. THERMAL BLOCK 3" BY 16" BY 1" EXTRUDED POLYSTYRENE. (OPTIONAL)
- 5. INSULATION 6 IN. VINYL FACED COMPRESSIBLE INSULATION.
- 6. LATERAL BRACING (NOT SHOWN) REFER TO "GENERAL INFORMATION, ROOF DECK CONSTRUCTION" (BUILDING MATERIAL DIRECTORY), FOR ITEMS NOT EVALUATED.
- * BEARING THE UL CLASSIFICATION MARKING.

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UL 90 APPROVED ASSEMBLY
ZEE-LOCK PANEL WITH CONTINUOUS ZEE-RIB
AND 6" BLANKET INSULATION AND 1" THERMAL
BLOCK AND 16 GA. PURLINS AT 5'-0" O.C. MAX.
UL CONSTRUCTION NUMBER 312

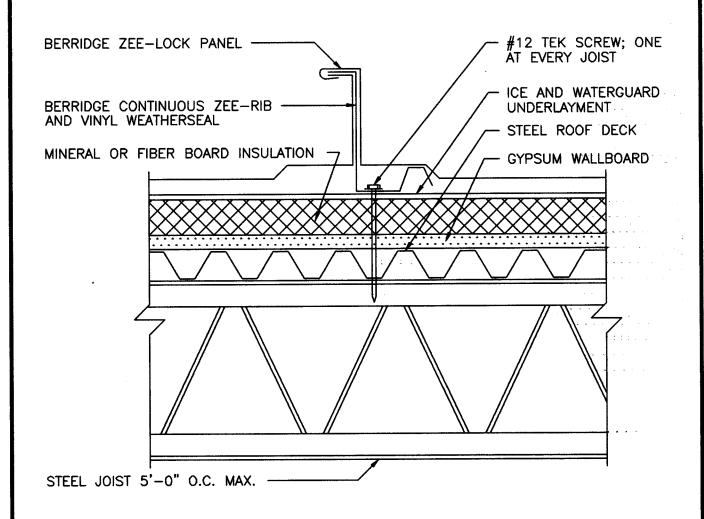
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CZ-97

CURVED ZEE-LOCK PANEL



Berridge Manufacturing Company



- 1. IN ORDER TO QUALIFY FOR A FIRE-RESISTANT RATING, THE ROOF SYSTEM CANNOT MAKE A PENETRATION IN THE INSULATION SYSTEM. THE ZEE-LOCK PANEL IN ORDER TO MAKE A POSITIVE ATTACHMENT, MUST BE ATTACHED TO THE STEEL DECK. (IF THE INSULATION SYSTEM HAS NO NAILABLE SURFACE).
- 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.

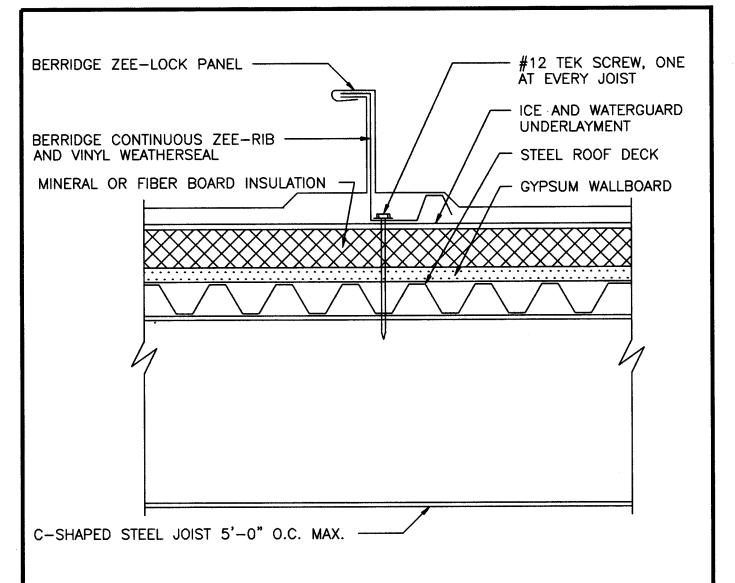


UL FIRE RESISTANCE ROOF ASSEMBLY OPEN WEB STEEL JOIST

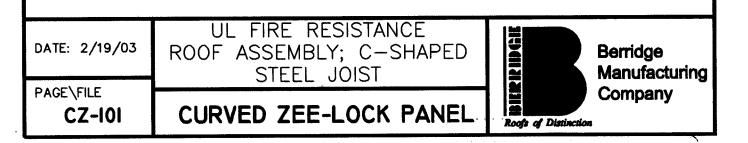
CURVED ZEE-LOCK PANEL

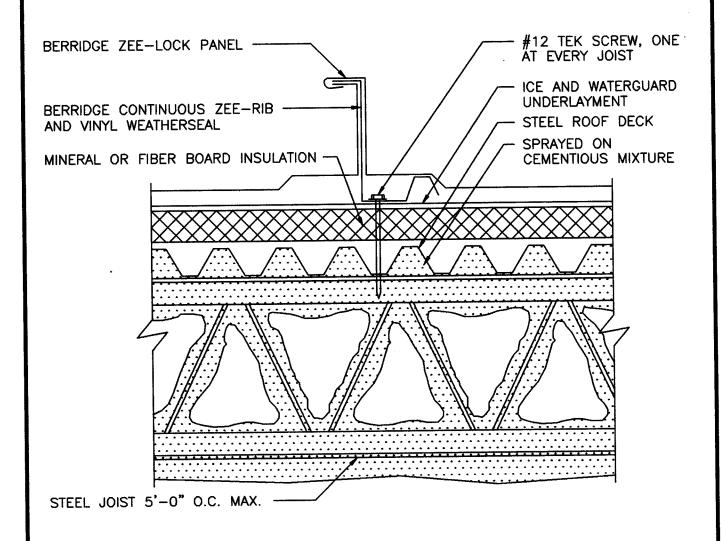
DATE: 2/19/03

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- 1. IN ORDER TO QUALIFY FOR A FIRE-RESISTANT RATING, THE ROOF SYSTEM CANNOT MAKE A PENETRATION IN THE INSULATION SYSTEM. THE ZEE-LOCK PANEL IN ORDER TO MAKE A POSITIVE ATTACHMENT, MAST BE ATTACHED TO THE STEEL DECK. (IF THE INSULATION SYSTEM HAS NO NAILABLE SURFACE).
- 2. THIS ASSEMBLY QUALIFIES FOR THE FOLLOWING UL FIRE-RESISTANT ROOF ASSEMBLIES: UL DESIGN NO. 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 ZEE-LOCK PANEL IN ORDER TO MAKE A POSITIVE ATTACHMENT, MUST BE ATTACHED TO THE STEEL DECK. (IF THE INSULATION SYSTEM HAS NO NAILABLE SURFACE).
- 2. THIS ASSEMBLY QUALIFIES FOR THE FOLLOWING UL FIRE—RESISTANT ROOF ASSEMBLIES: UL DESIGN NO. P701, P711, AND P803, USING SPRAYED ON FIBER IN LIEU OF CEMENTIOUS MIXTURE.
- 3. ADDITIONAL INFORMATION REGARDING THIS ASSEMBLY IS AVAILABLE IN THE UL FIRE RESISTANCE DIRECTORY.



UL 90 FIRE RESISTANCE ROOF ASSEMBLY OPEN WEB STEEL JOIST WITH CEMENTIOUS THERMAL BARRIER

CURVED ZEE-LOCK PANEL

DATE: 2/19/03

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