DATE: 04-01-97

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# INDEX

# ZEE-LOCK PANEL

Berridge Manufacturing Company
Roofs of Distinction

A. BERRIDGE ZEE–LOCK PANEL: 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 ZEE–LOCK SIDE LAPS ARE MECHANICALLY SEAMED IN THE FIELD WITH THE BERRIDGE POWER DRIVEN ZEE–LOCK SEAMER MACHINE).

B. MINIMUM SLOPE: THE ZEE–LOCK PANEL IS RECOMMENDED FOR ROOF SLOPES OF 1 ON 12 OR GREATER. FOR SLOPES LOWER THAN 1 ON 12, CONTACT BERRIDGE. BERRIDGE MANUFACTURING COMPANY RECOMMENDS THE USE OF THE VINYL WEATHERSEAL (US PATENT NO. 5,134,825) FOR ALL OPEN FRAMING APPLICATIONS.

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 1/2" PITCH BY 11/16" 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. (# 30 FELT UNDERLAYMENT OR EQUAL MUST BE USED OVER ANY 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 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.

G. INSTALLATION OVER OPEN FRAMING: REFER TO LOAD TABLES ON PAGES ZI–6 AND ZI–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 RECOMMENDS THE USE OF THE VINYL WEATHERSEAL (US PATENT NO. 5,134,825) FOR ALL OPEN FRAME APPLICATIONS.

**H. OPEN FRAMING INSPECTION:**

1. 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" 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 Z-73, Z-87 AND Z-88.
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. 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 ZEE-LOCK TYPICAL DETAILS.

GRACE ICE AND WATERSHIELD MAY BE REQUIRED ON LOW SLOPED ROOFS OR AT CERTAIN FLASHING CONDITIONS.

**K. 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 1 1/4" LONG WITH BERRIDGE GALVANIZED FELT CAPS.
4. INSTALL VALLEY FELT FIRST.
5. INSTALL FELT PARALLEL TO THE EAVE, (2 LAYERS REQUIRED AT EAVE) STARTING AT EAVE AND USING MINIMUM 6" LAPS. USE 2 LAYERS OF FELT ON ENTIRE ROOF DECK IF ROOF SLOPE IS 3 ON 12 OR LESS. 2 LAYERS REQUIRED AT EAVE REGARDLESS OF SLOPE.
6. REFER TO FELTING DETAILS WHEN VALLEYS OR ROOF PENETRATIONS ARE INVOLVED ON OPEN FRAMING CONDITIONS.
7. INSULATE BETWEEN WOOD BLOCKING AND METAL WITH FELT OR GRACE ICE AND WATERSHIELD

**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 ZI-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

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 Z-6.

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 EITHER THE CONTINUOUS ZEE-RIB OR ZEE-LOCK CLIPS ALONG THE LEADING MALE LEG OF EACH PANEL AS PER BERRIDGE TYPICAL DETAILS AND RIB AND CLIP 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 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 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 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. THE MACHINE SEAMING OF THE ZEE-LOCK PANEL IS DONE IMMEDIATELY AFTER THE INSTALLATION OF EACH PANEL.
7. REFER TO OPERATIONS MANUAL FOR IN-DEPTH INSTRUCTIONS AND MAINTENANCE PROCEDURES.

T. ZEE-LOCK CLIP INSTALLATION:

1. INSTALL CLIPS AS PER BERRIDGE TYPICAL ZEE-LOCK PANEL DETAILS.
2. CLIP SPACING ON SOLID SHEATHING TYPICALLY 36" ON CENTER. *

U. CONTINUOUS ZEE-RIB:

1. INSTALL ZEE-RIB AS PER BERRIDGE TYPICAL 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 Z-6.

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

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V. **VINYL WEATHERSEAL (US PATENT NO. 5,134,825):** THE OPTIONAL 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 RECOMMENDS VINYL WEATHERSEAL FOR ALL OPEN FRAME APPLICATIONS.

W. **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 CLIP AND/OR FLASHINGS TO BUCKLE OR BECOME RECESSED BELOW THE ELEVATION OF THE SUBSTRATE.

X. **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 Z-90, Z-91, Z-92 AND Z-93. CONSTRUCTION NUMBER 335 REFER TO DETAILS Z-94 AND Z-95, AND CONSTRUCTION NUMBER 403 REFER TO DETAILS Z-101 AND Z-102. REFER TO DETAILS Z-96, Z-97 AND Z-98 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.

| SECTION PROPERTIES BASED ON 24 GAUGE 40 K.S.I. | | | |
|---|---|---|---|
| ZEE-LOCK PANEL | $dI_x$ ($In^4$/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 (FEET) | NET VERTICAL LIVE LOAD | | | NET VERTICAL WIND UPLIFT | | |
| | 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" | | | | | | |
| 7'-0" | | | | | | |

NOTES

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

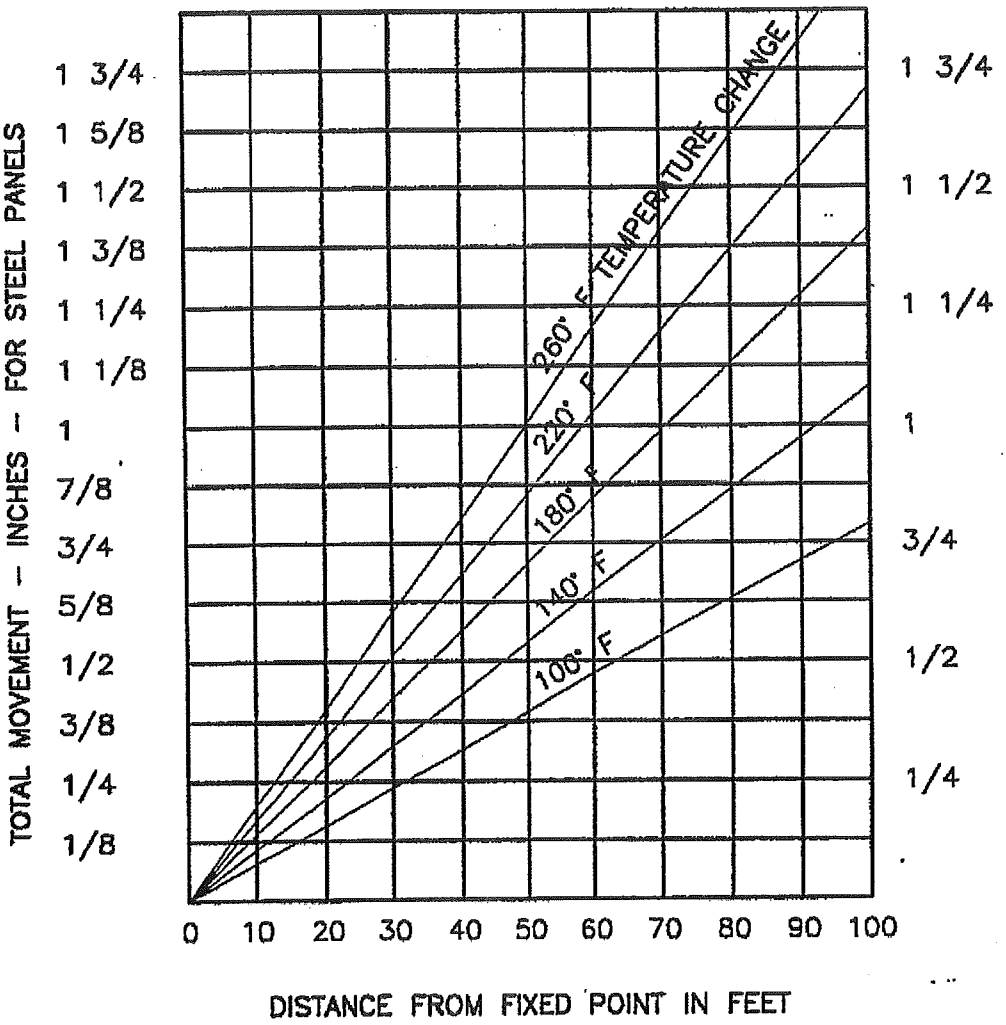
| SECTION PROPERTIES BASED ON 24 GAUGE 40 K.S.I. | | | |
|---|---|---|---|
| ZEE-LOCK PANEL WITH CONTINUOUS 24-GAUGE ZEE-RIB | $dI_x (In^4/ft)$ | $M_A$(Ft-lbs/Ft) | $V_A$(Lbs) |
| POSITIVE BENDING | 0.1525 | 184.65 | 990 |
| NEGATIVE BENDING | 0.1030 | 161.33 | 990 |

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 (FEET) | NET VERTICAL LIVE LOAD | | | NET VERTICAL WIND UPLIFT | | |
| | 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.




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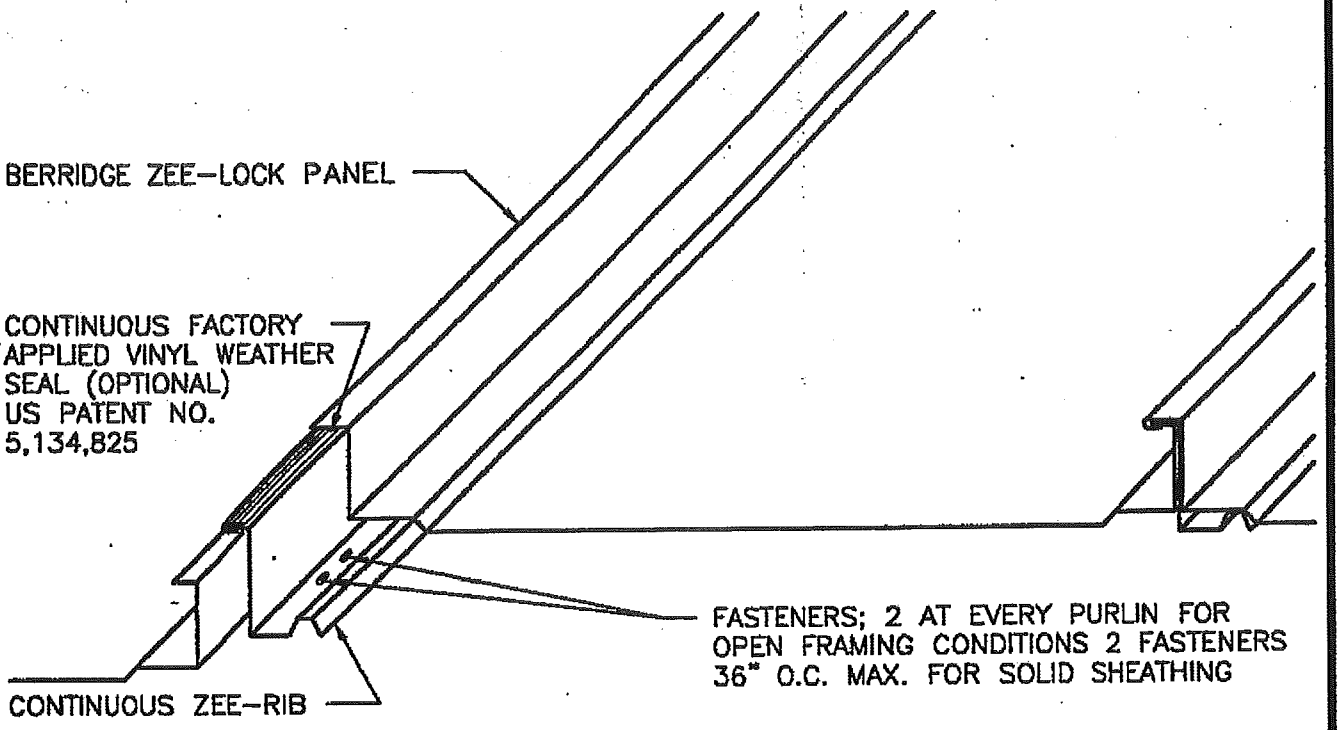
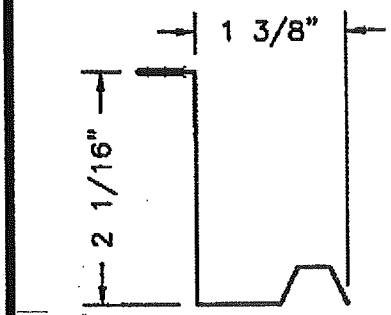
THE DETAILS CONTAINED IN THE FOLLOWING PAGES ARE MERELY RECOMMENDATIONS AS TO HOW BERRIDGE MANUFACTURING MATERIALS SHOULD BE INSTALLED. THEY MAY REQUIRE ADAPTATIONS OR MODIFICATIONS FOR A SPECIFIC PROJECT AS CONDITIONS VARY IN BOTH BUILDING DESIGN AND LOCAL WEATHER PECULIARITIES.

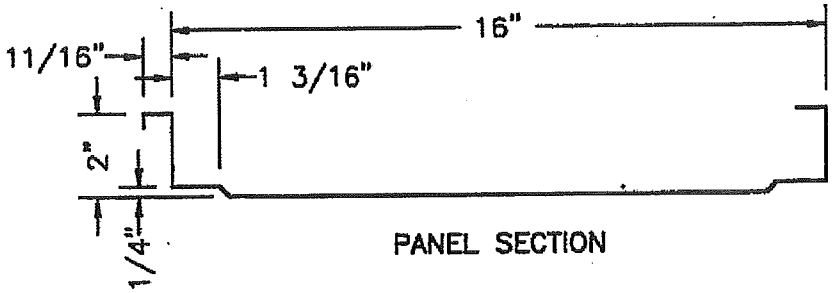
BERRIDGE MANUFACTURING COMPANY SHALL BE HELD HARMLESS FROM ANY AND ALL CLAIMS ARISING FROM LACK OF WATERTIGHTNESS AS A RESULT OF FOLLOWING THESE RECOMMENDED DETAILS. ENSURING WATERTIGHTNESS ON ANY GIVEN PROJECT IS THE FUNCTION OF THE INSTALLER. THE ARCHITECT/GENERAL CONTRACTOR/INSTALLER MUST ACCEPT THE 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 JOINTS ADEQUATELY CAULKED, AND PROFESSIONAL WORKMANSHIP EMPLOYED.

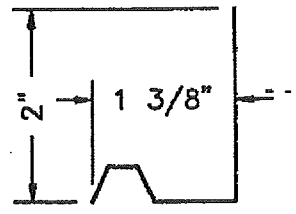


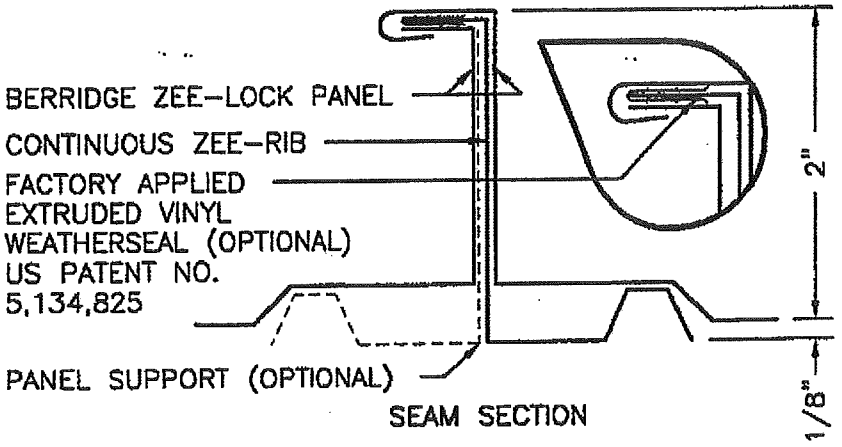

CONTINUOUS ZEE-RIB WITH FACTORY APPLIED VINYL WEATHER SEAL




PANEL SECTION




PANEL SUPPORT




SEAM SECTION

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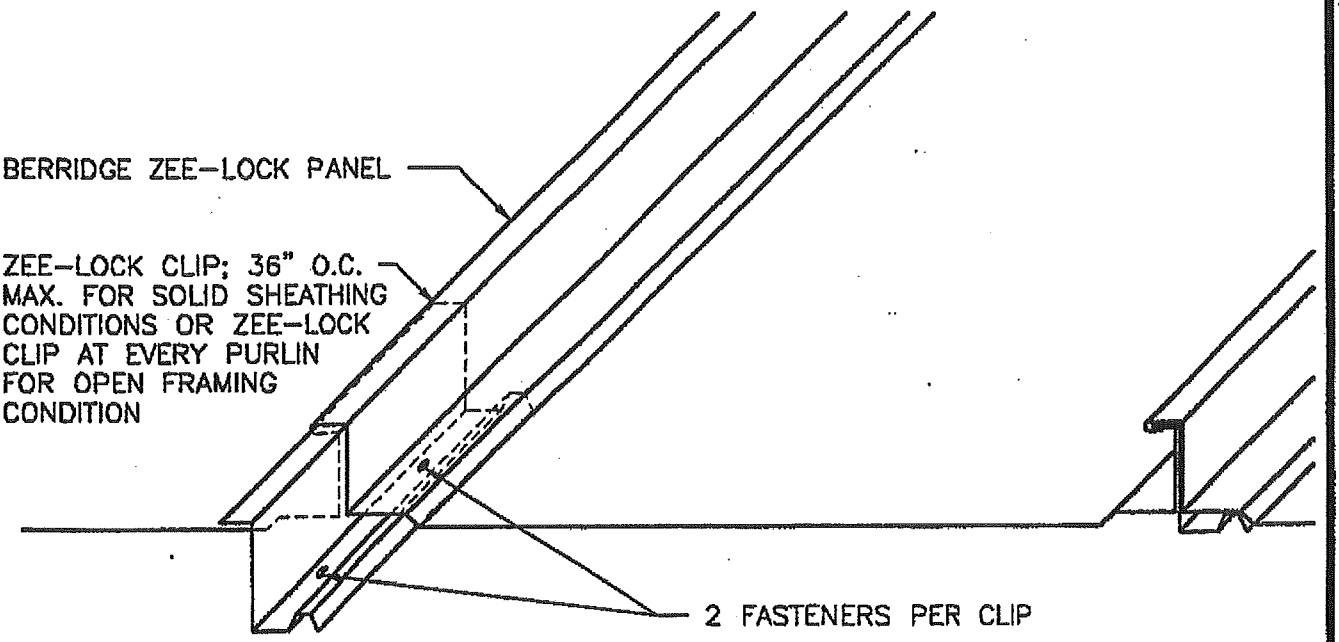
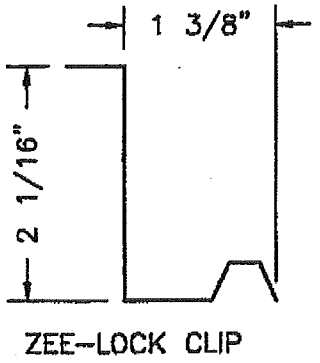
OVERVIEW
CONTINUOUS ZEE-RIB
WITH VINYL WEATHERSEAL

# ZEE-LOCK PANEL

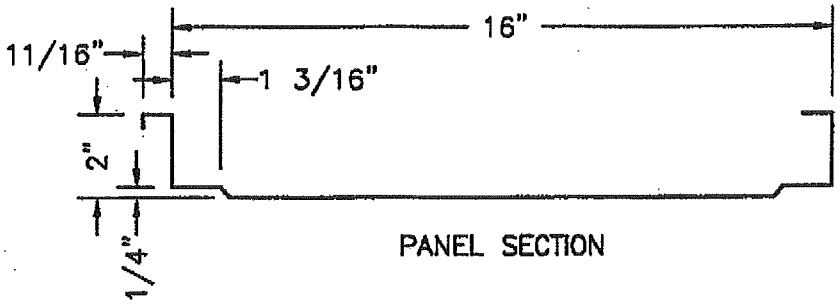
Berridge Manufacturing Company

*Roofs of Distinction*

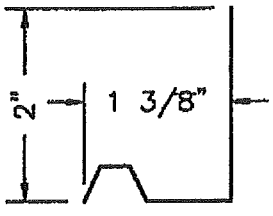


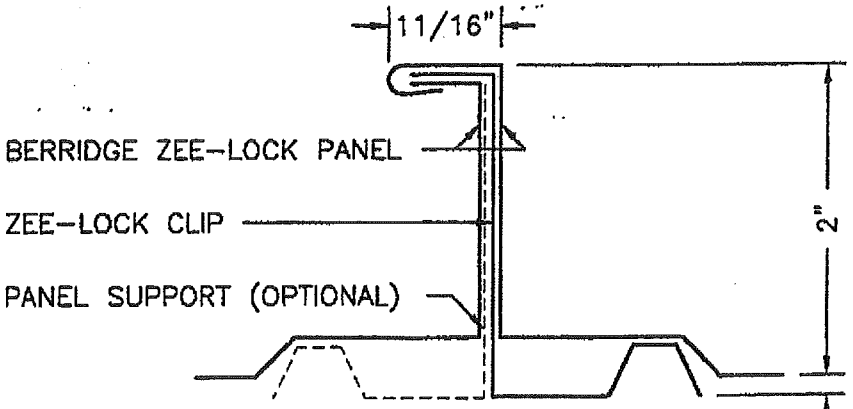

ZEE-LOCK CLIP




PANEL SECTION




PANEL SUPPORT




SEAM ASSEMBLY USING ZEE-LOCK CLIPS. FOR ASSEMBLY USING CONTINUOUS RIB SEE DETAIL Z-4

Berridge Manufacturing Company

*Roofs of Distinction*

OVERVIEW
ZEE-LOCK CLIP

# ZEE-LOCK PANEL

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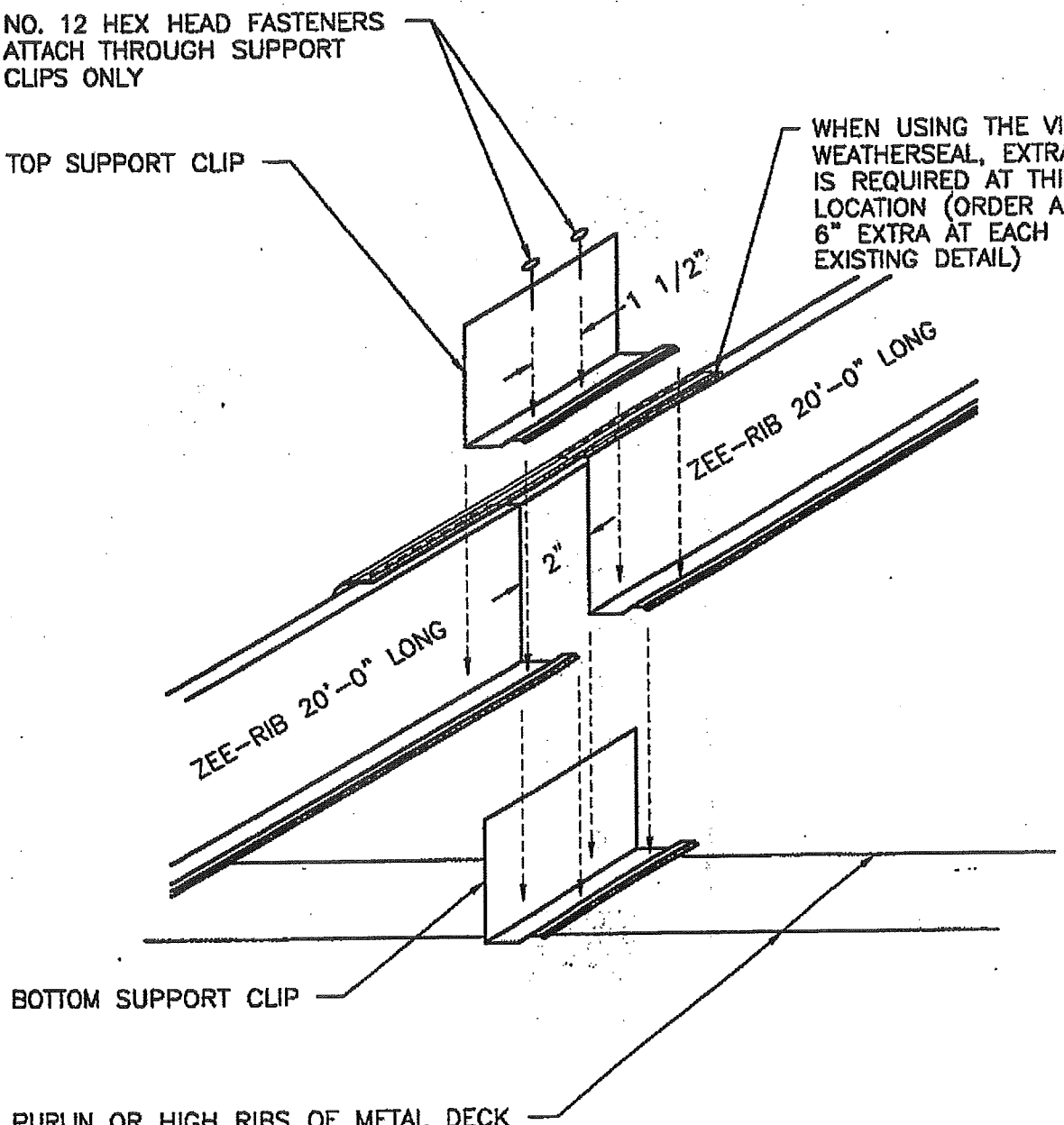



NOT TO SCALE

DATE: 04-01-97

PAGE\FILE

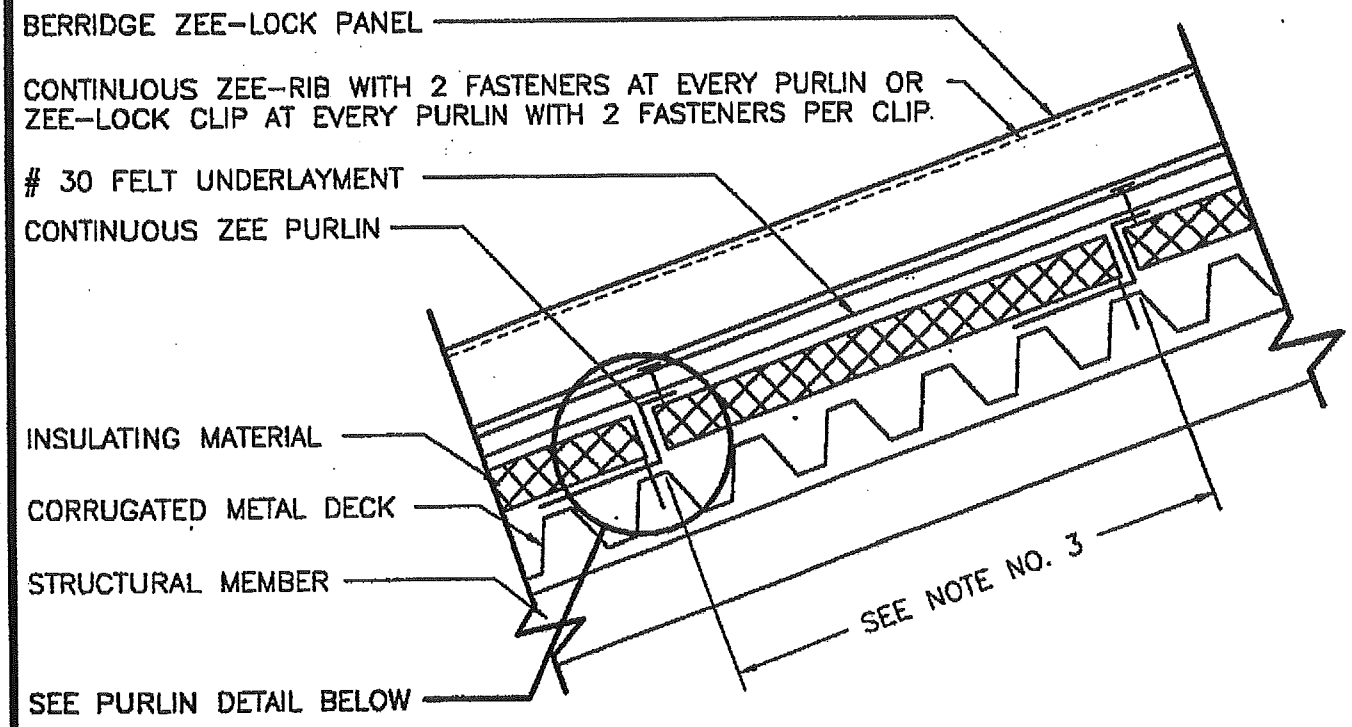
Z-6

# EXPANSION JOINT DETAIL

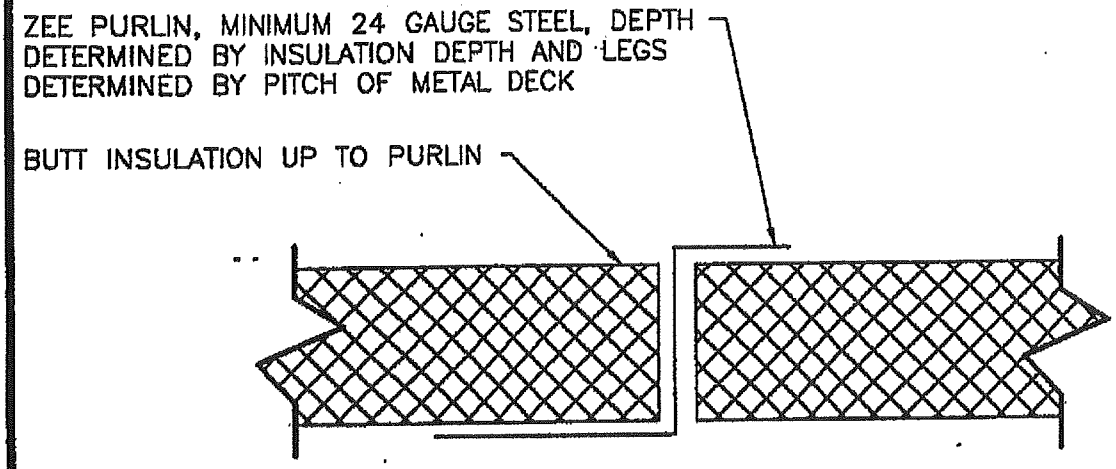
# ZEE-LOCK PANEL

Berridge Manufacturing Company

*Roofs of Distinction*




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



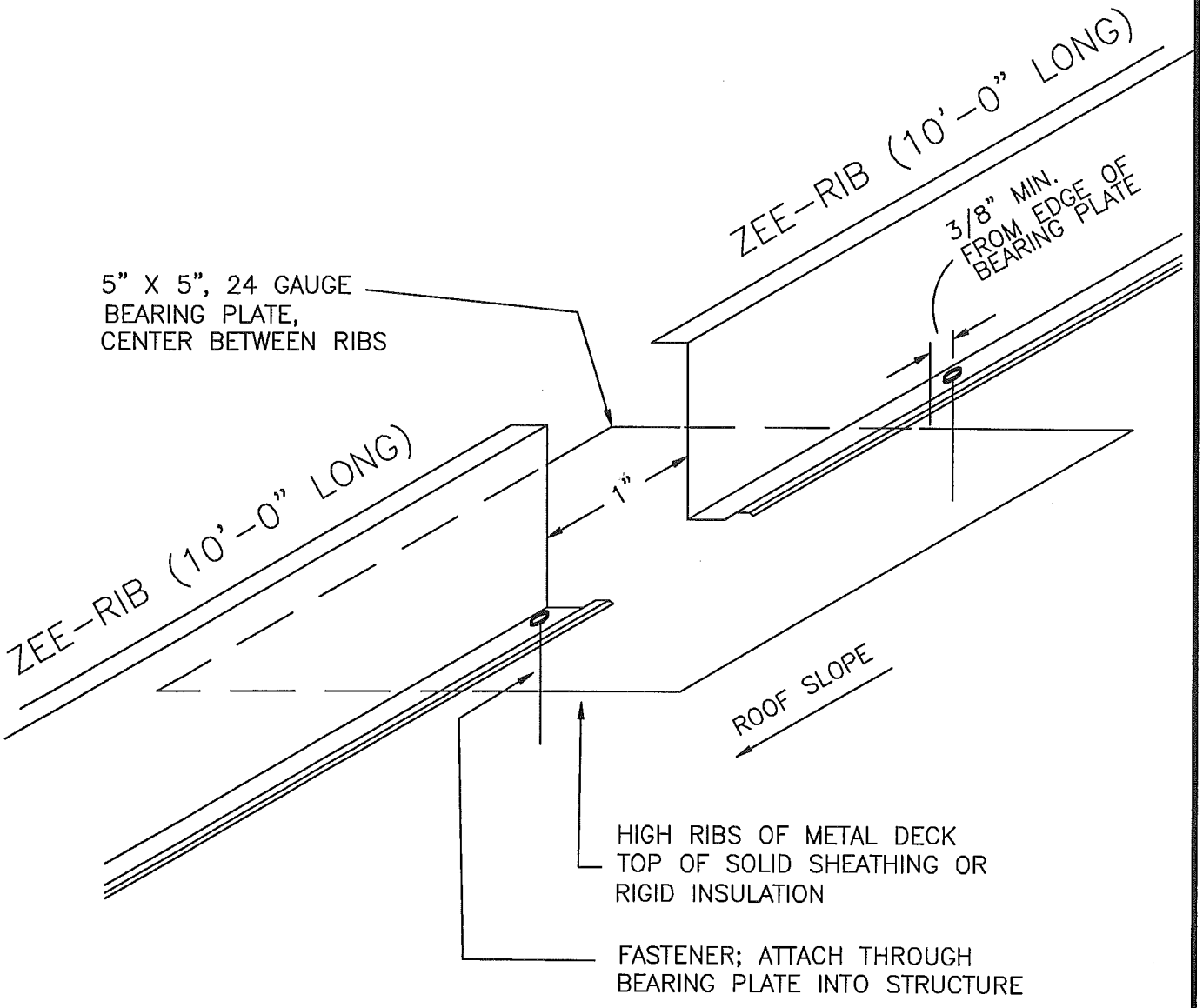

Berridge Manufacturing Company
*Roofs of Distinction*

# INSULATED DECK DETAIL

DATE: 04-01-97

# ZEE-LOCK PANEL

PAGE\FILE
Z-7



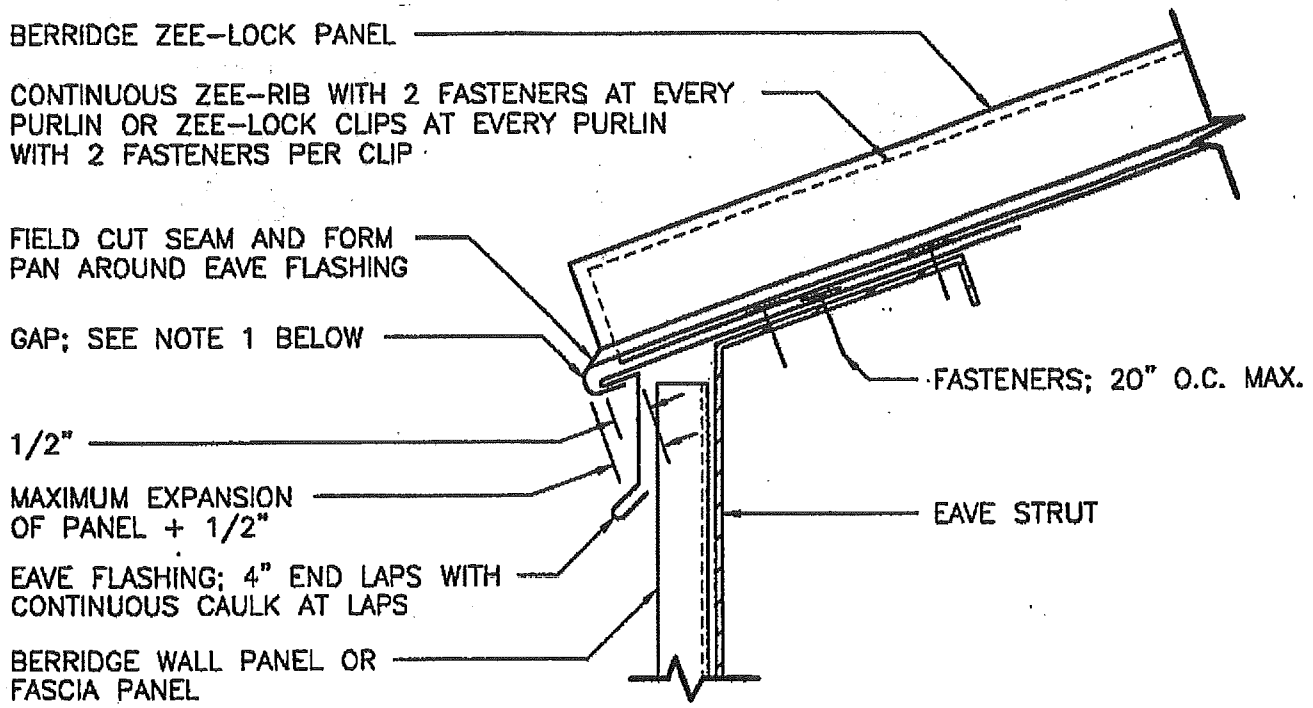

1. ONLY FOR USE WITH 10'–0" ZEE RIB, SEE ALTERNATE DETAIL Z–6 FOR ZEE RIB LONGER THAN 10 FEET.

2. DETAIL USED FOR ZEE–LOCK PANEL WITH OUT VINYL WEATHERSEAL, NOT FOR USE ON PROJECTS REQUIRING A WATERTIGHTNESS WARRANTY.

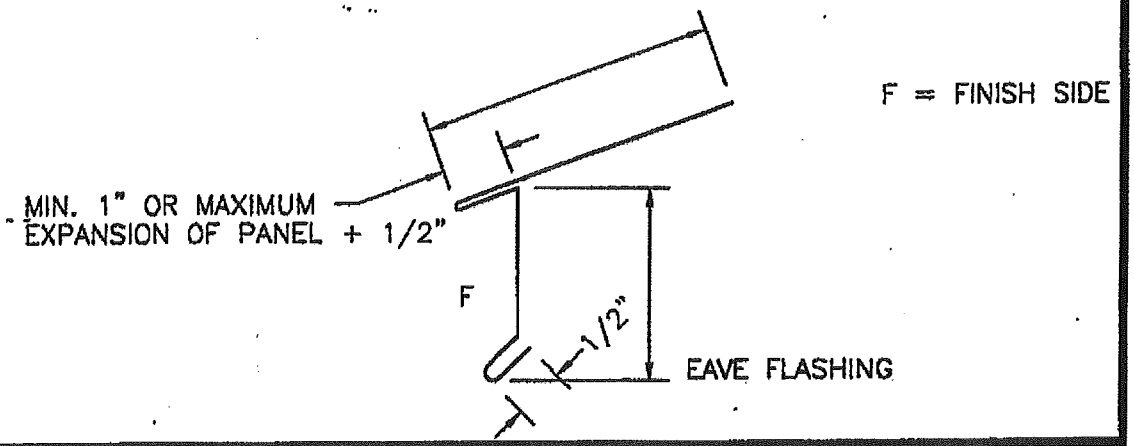
3. CONSULT BERRIDGE MANUFACTURING FOR FASTENER SPACING.

NOT TO SCALE

| | | |
|---|---|---|
| DATE: 11–6–09 | 10'–0" ZEE–RIB SPLICE BEARING PLATE DETAIL | Berridge Manufacturing Company<br>Roofs of Distinction |
| PAGE\FILE<br>Z-8 | ZEE-LOCK PANEL | |




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 ZI-8.
2. GAP BETWEEN EAVE FLASHING AND PANEL MUST BE ADJUSTED TO SUIT TEMPERATURE DURING INSTALLATION.
3. SEE ALSO EXPANSION JOINT DETAIL Z-6.



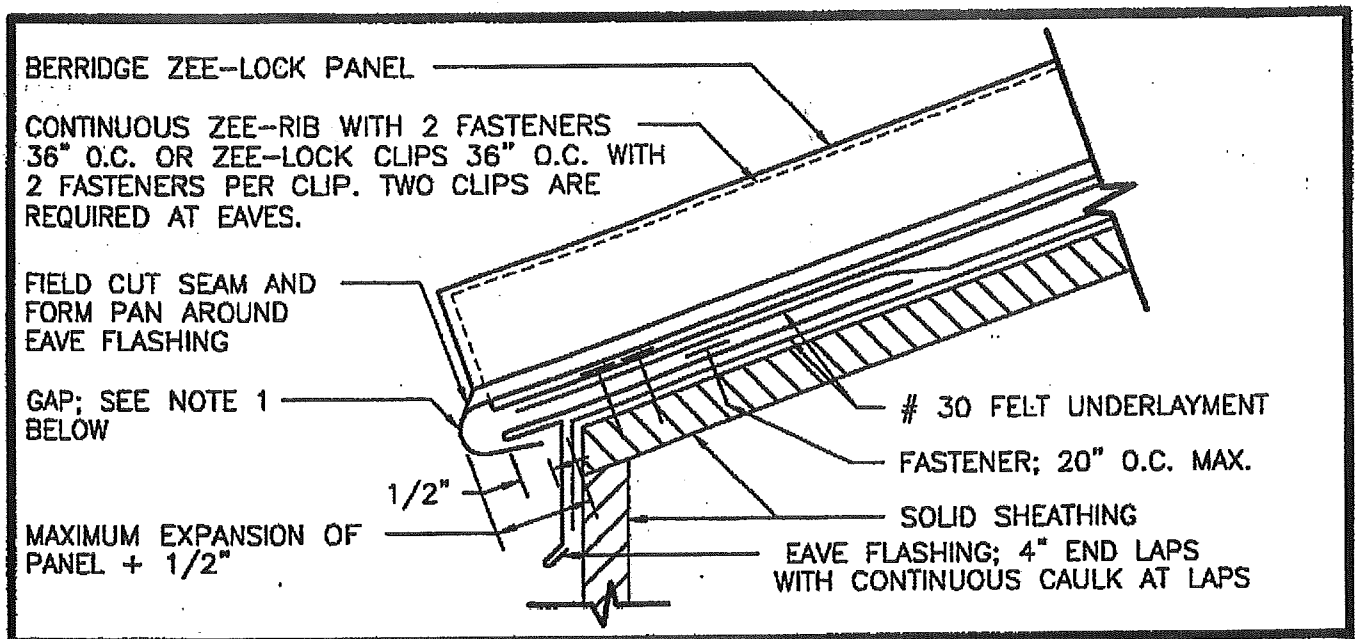

Berridge Manufacturing Company
Roofs of Distinction

EAVE DETAIL
PANEL TURNDOWN; OPEN FRAMING

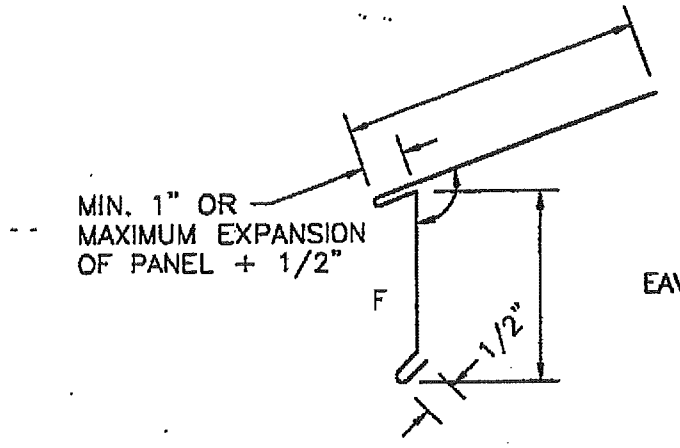
DATE: 04-01-97

# ZEE-LOCK PANEL

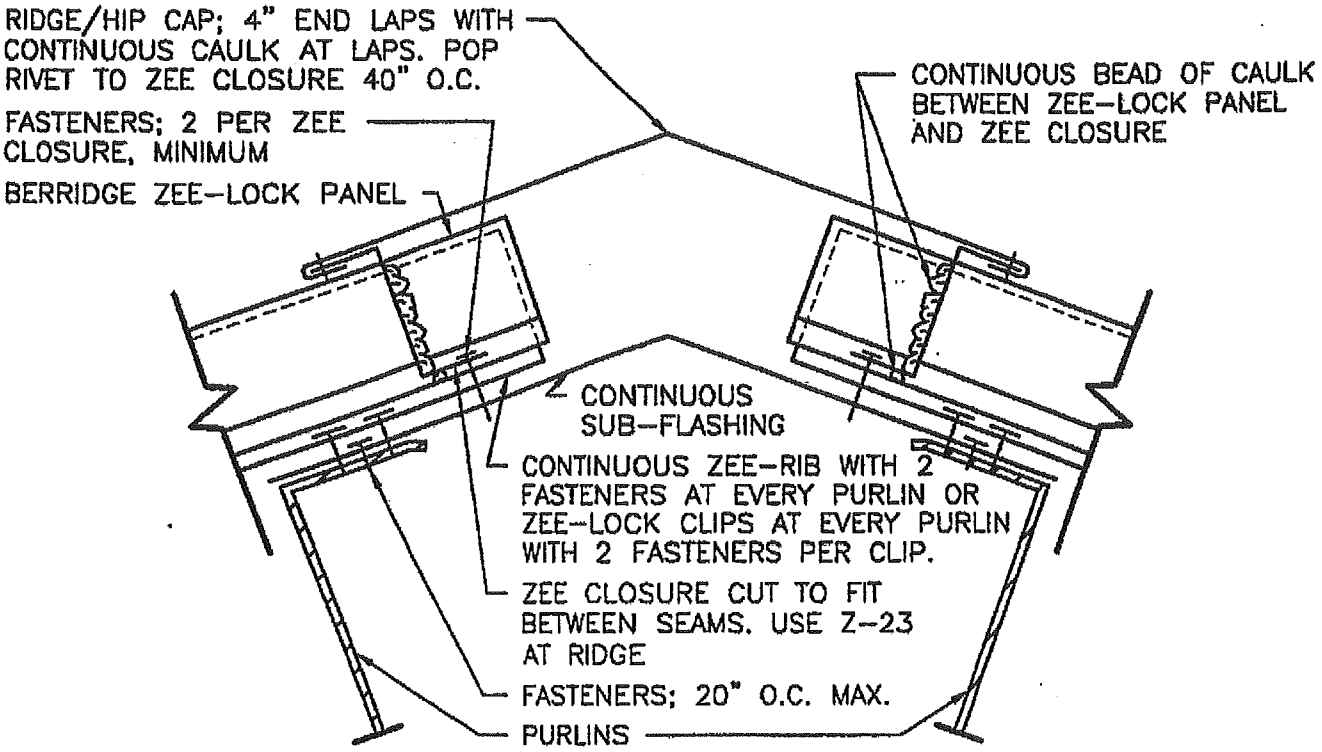
PAGE\FILE
Z-10



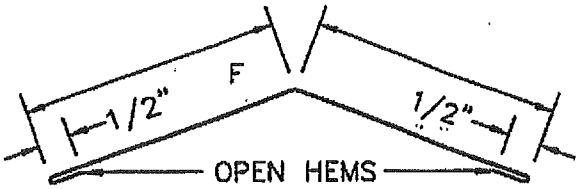

1. THE "GAP" BETWEEN EAVE FLASHING AND PANEL (SEE DETAIL ABOVE) CAN BE INCREASED TO ALLOW FOR LINEAR EXPANSION AND CONTRACTION OF PANELS. NOTE 1/2" OF PAN MUST BE ENGAGED WITH EAVE FLASHING WHEN PANEL HAS EXPANDED TO ITS MAXIMUM LENGTH REFER TO NOMINAL LINEAR EXPANSION CHART PAGE ZI-8.
2. GAP BETWEEN 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 FELT 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 Z-6.




| | | |
|---|---|---|
| DATE: 04-01-97 | EAVE DETAIL<br>PANEL TURNDOWN; SOLID SUBSTRATE | Berridge Manufacturing Company<br>*Roofs of Distinction* |
| PAGE\FILE<br>Z-11 | **ZEE-LOCK PANEL** | |

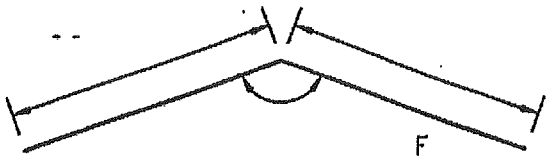



1. FIELD CUT ZEE CLOSURE TO FIT BETWEEN PANEL SEAMS AT HIPS. SEE DETAIL Z-23 FOR RIDGE.
2. ALL CAULKING AND FASTENERS ARE ITEMS TO BE FURNISHED AND INSTALLED BY THE ROOFING INSTALLER AT THE DISCRETION OF THE ARCHITECT.

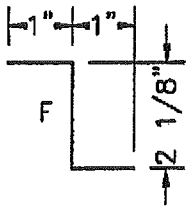



RIDGE/HIP CAP

F = FINISH SIDE




SUB-FLASHING




ZEE CLOSURE

Berridge Manufacturing Company

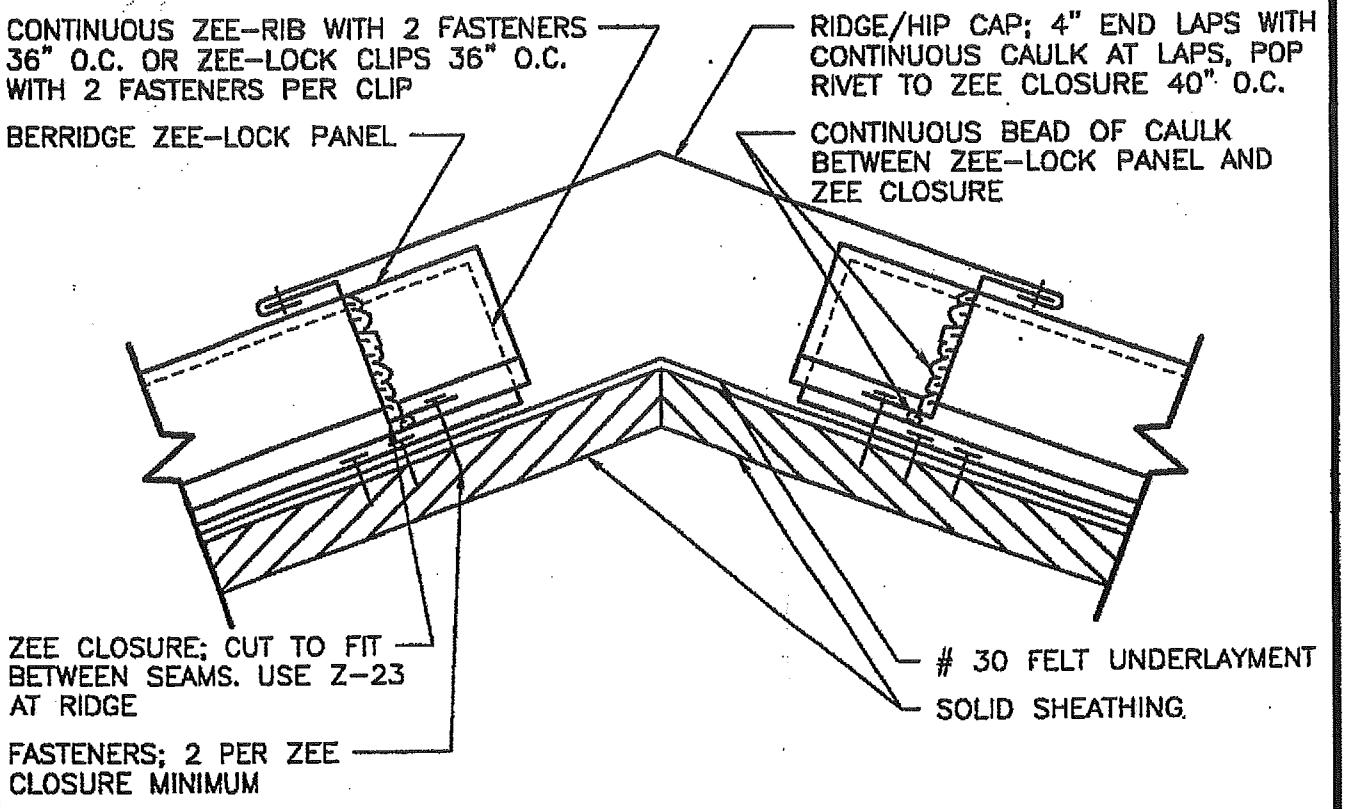
*Roofs of Distinction*

# RIDGE/HIP DETAIL OPEN FRAME CONDITION

DATE: 04-01-97

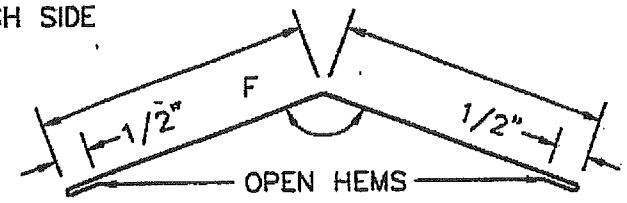
# ZEE-LOCK PANEL

PAGE\FILE Z-20

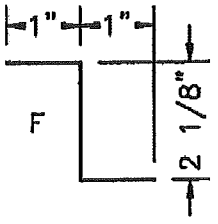



1. FIELD CUT ZEE CLOSURE TO FIT BETWEEN PANEL SEAMS AT HIPS. SEE DETAIL Z-23 FOR RIDGE.
2. SOLID SHEATHING (BY OTHERS) TO BE MINIMUM 1/2" PLYWOOD OR EQUIVALENT IN STRENGTH FOR HOLDING POWER OF FASTENERS.
3. ALL FELT UNDERLAYMENT, CAULKING, AND FASTENERS, ARE ITEMS TO BE FURNISHED AND INSTALLED BY THE ROOFING INSTALLER AT THE DISCRETION OF THE ARCHITECT.

F = FINISH SIDE




RIDGE/HIP CAP




ZEE CLOSURE

DATE: 04-01-97

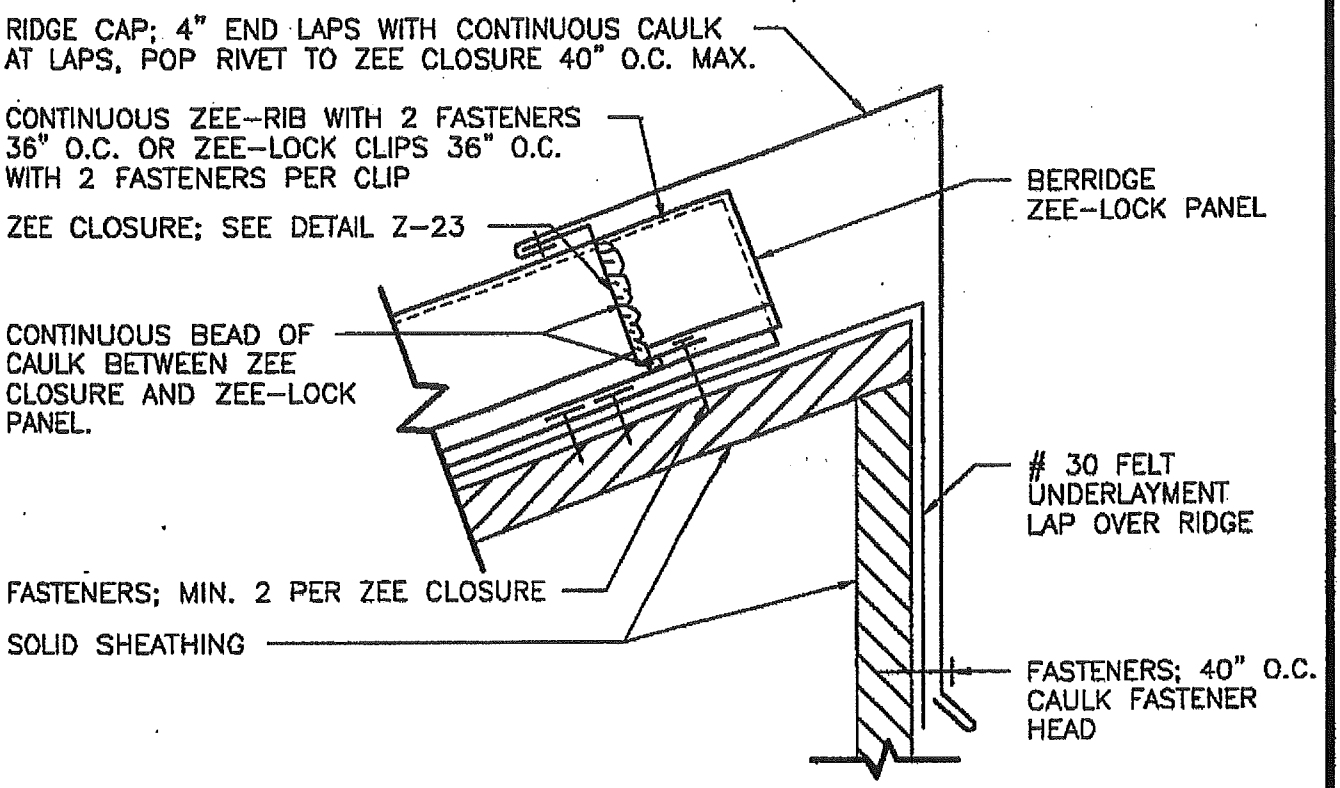
PAGE\FILE
Z-21

# RIDGE/HIP DETAIL SOLID SUBSTRATE

# ZEE-LOCK PANEL

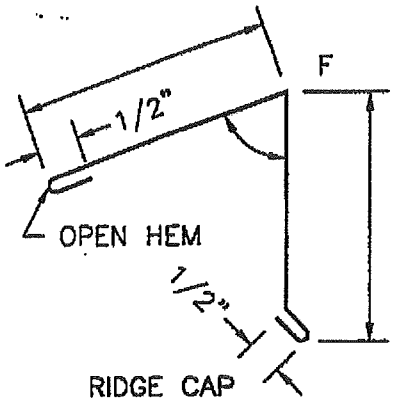
Berridge Manufacturing Company

*Roofs of Distinction*




1. SEE DETAIL Z-23 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 FELT UNDERLAYMENT, CAULKING, AND FASTENERS, ARE ITEMS TO BE FURNISHED AND INSTALLED BY THE ROOFING INSTALLER AT THE DISCRETION OF THE ARCHITECT.

F = FINISH SIDE



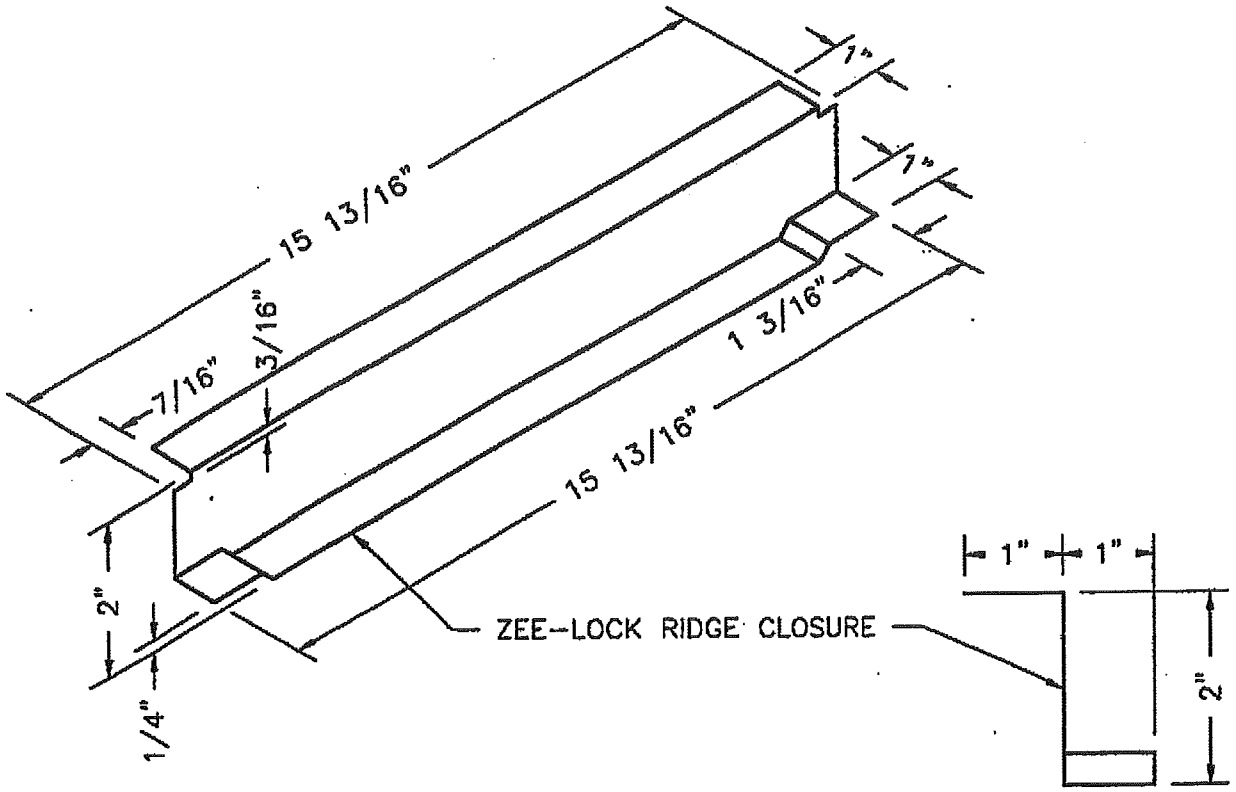

Berridge Manufacturing Company
*Roofs of Distinction*

# SHED ROOF RIDGE CAP SOLID SUBSTRATE

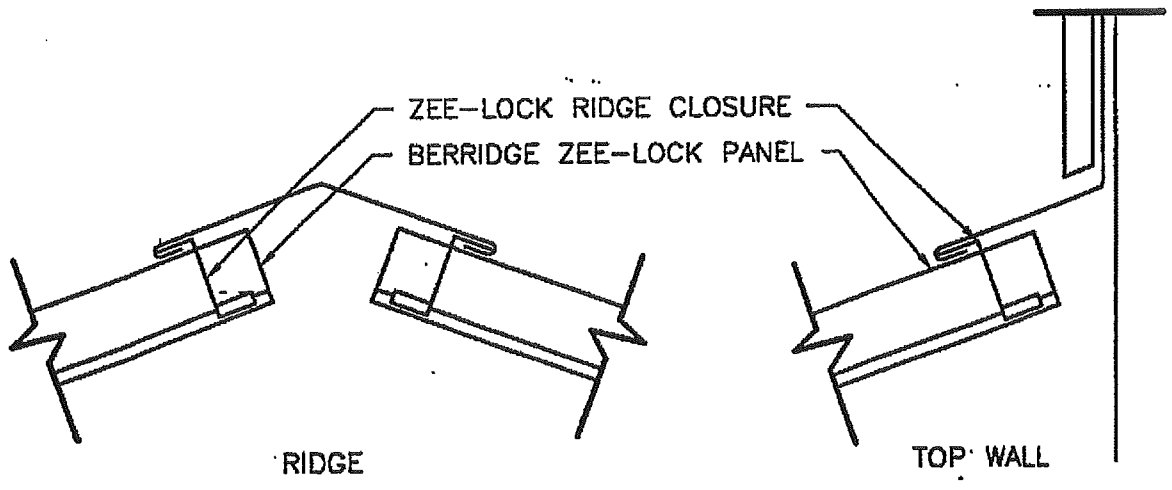
# ZEE-LOCK PANEL

DATE: 04-01-97

PAGE\FILE
Z-22




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




DATE: 04-01-97

PAGE\FILE
Z-23

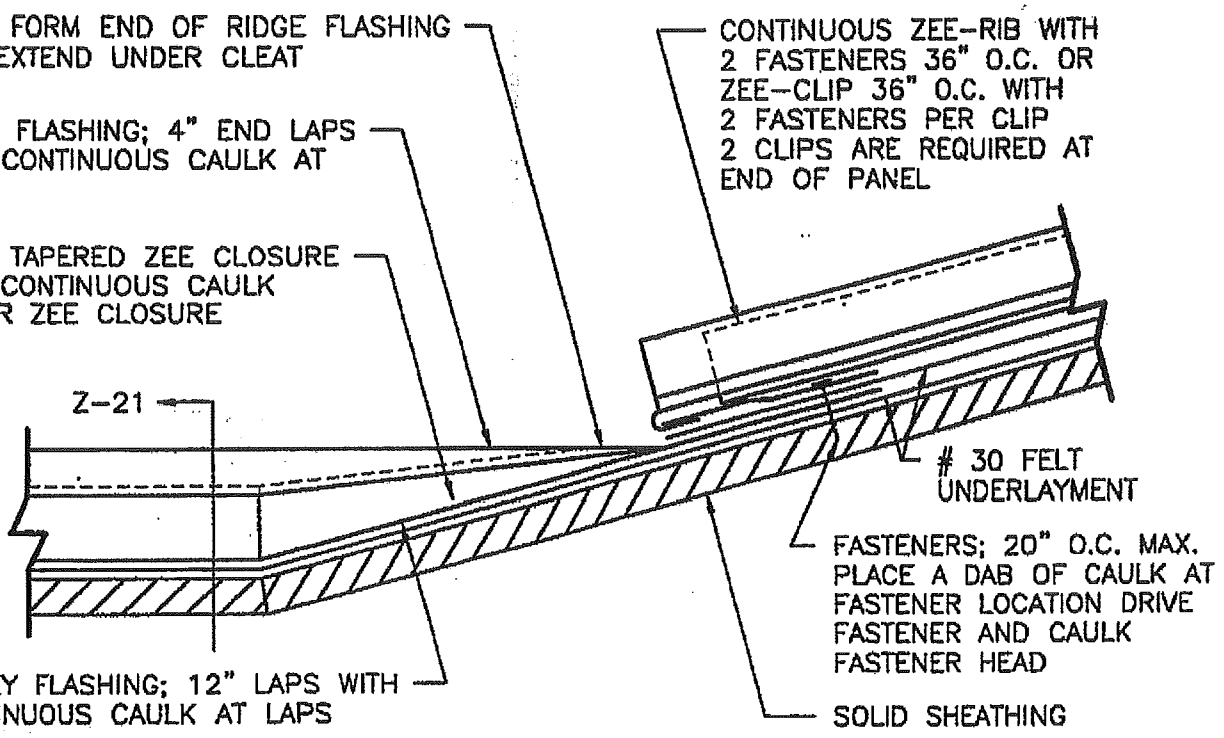
# ZEE-LOCK RIDGE CLOSURE

# ZEE-LOCK PANEL

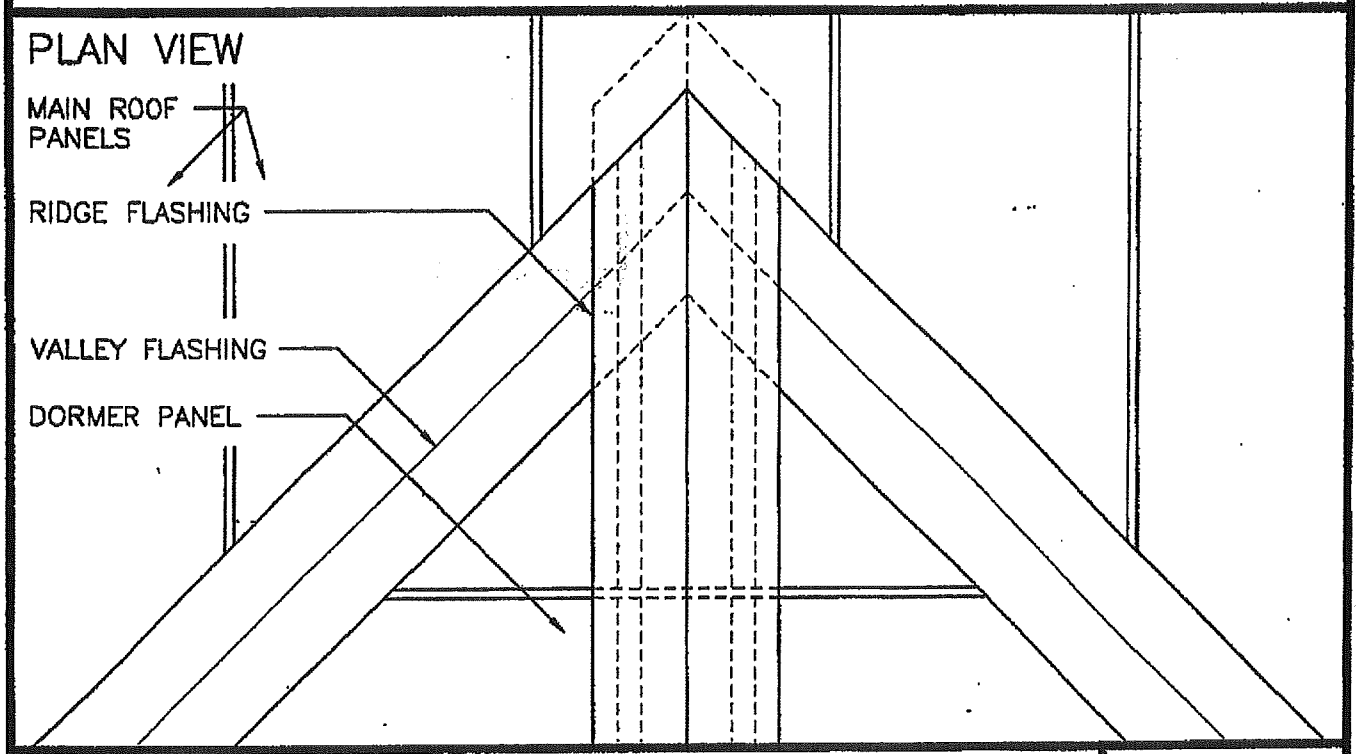
Berridge Manufacturing Company

*Roofs of Distinction*

## SECTION VIEW




## PLAN VIEW




Berridge Manufacturing Company

*Roofs of Distinction*

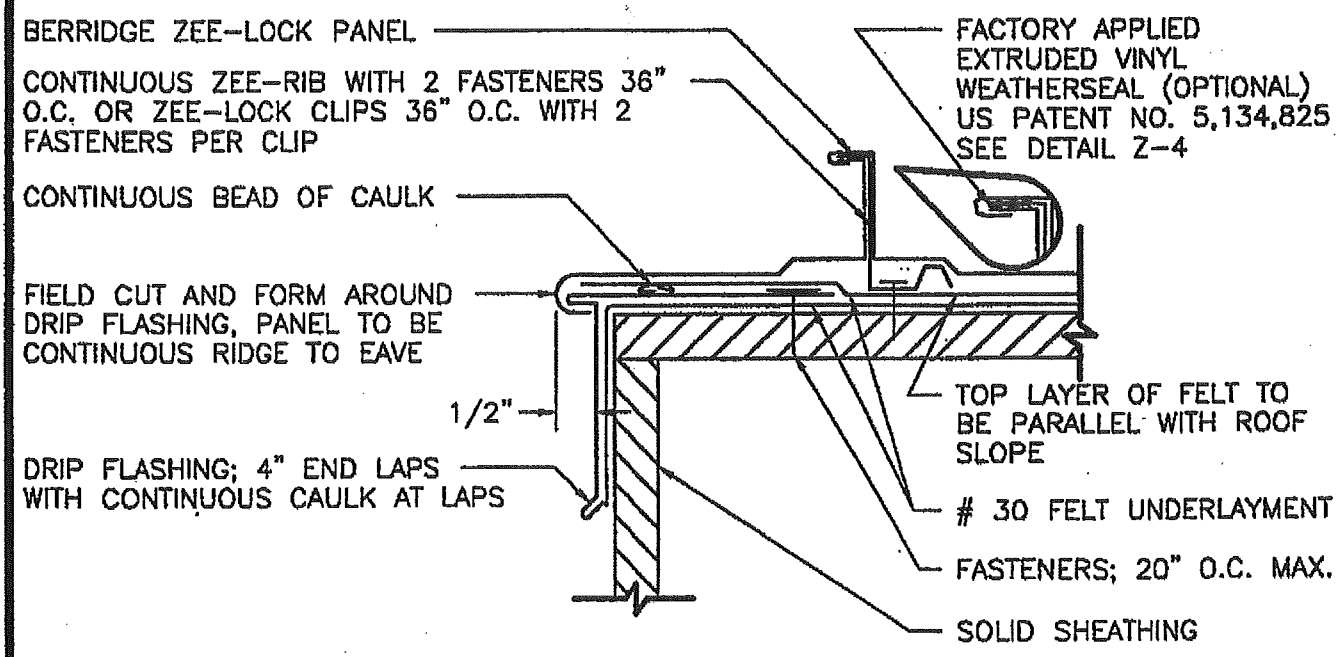
# RIDGE TERMINATION AT DORMER VALLEY

# ZEE-LOCK PANEL

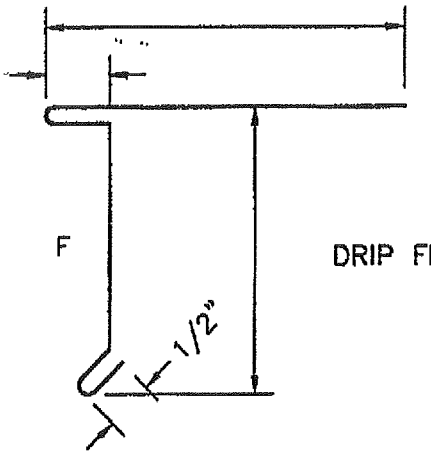
DATE: 04-01-97

PAGE\FILE

Z-24




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




F = FINISH SIDE

DRIP FLASHING

Berridge Manufacturing Company

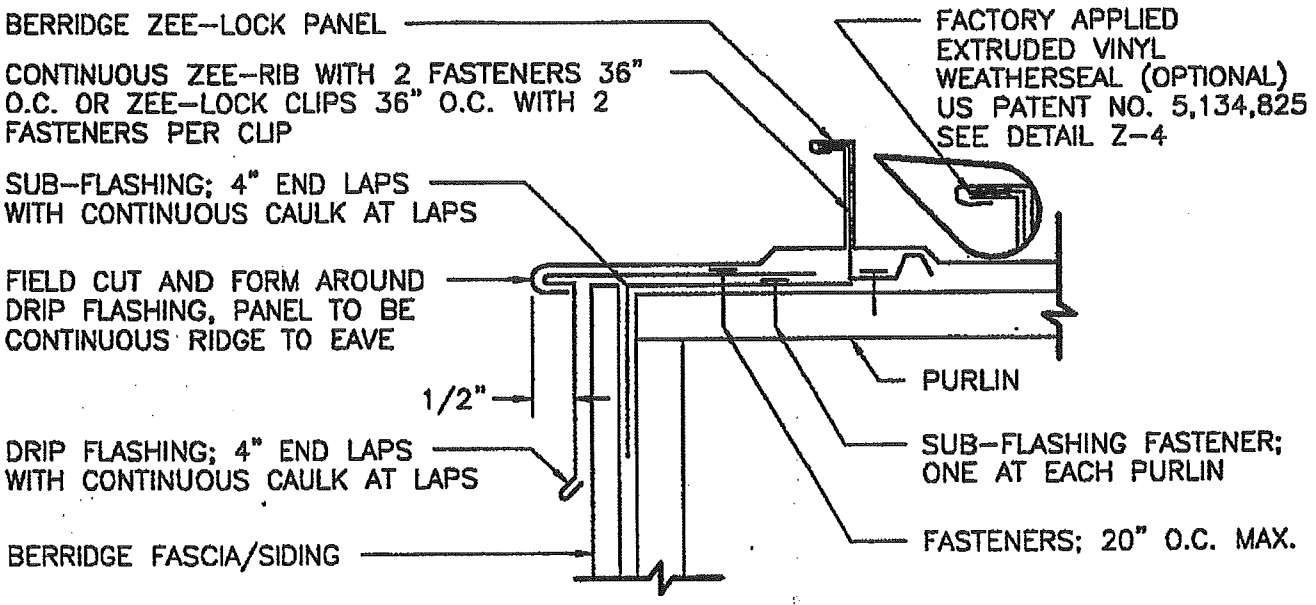
*Roofs of Distinction*

GABLE DETAIL
PANEL TURNDOWN
SOLID SUBSTRATE

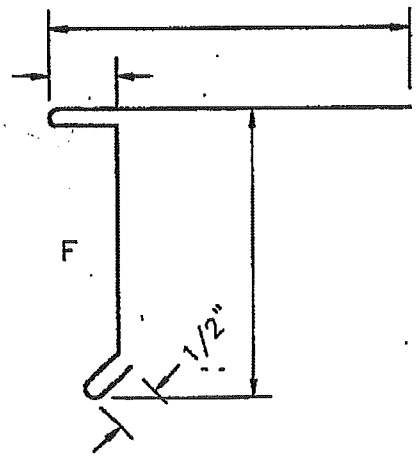
DATE: 04-01-97

# ZEE-LOCK PANEL

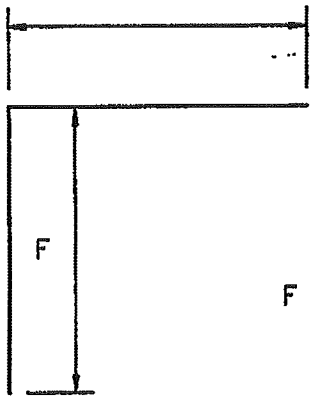
PAGE\FILE
Z-30




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




DRIP FLASHING




F = FINISH SIDE

SUB–FLASHING

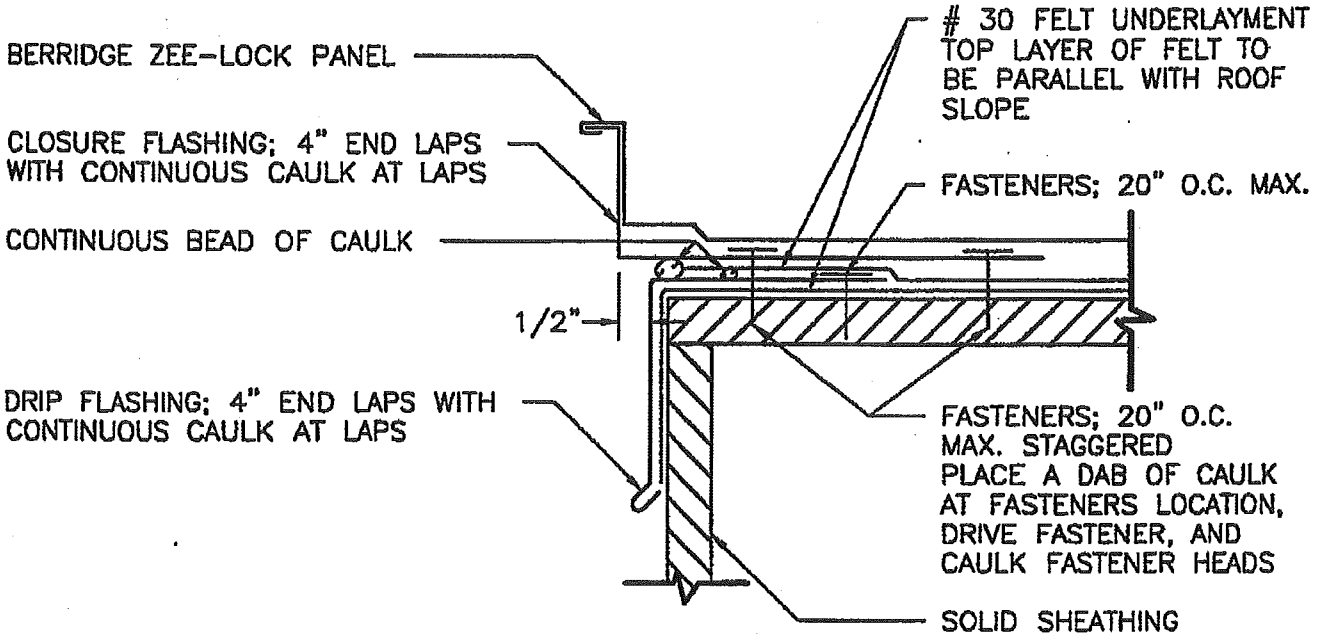
DATE: 04–01–97

PAGE\FILE
Z–31

# GABLE DETAIL
# PANEL TURNDOWN
# OPEN FRAMING

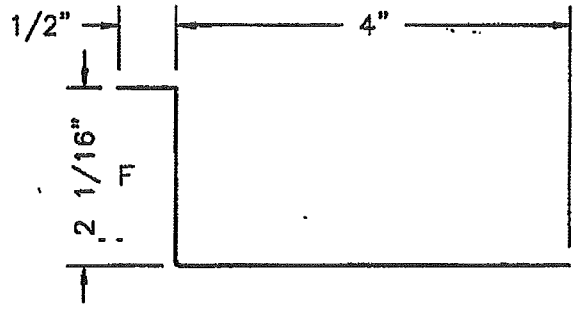
# ZEE–LOCK PANEL

Berridge Manufacturing Company
*Roofs of Distinction*

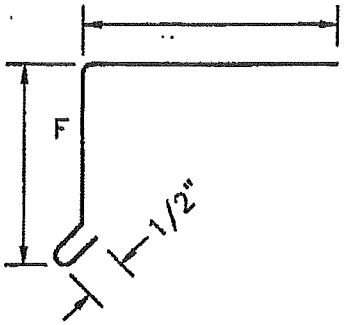



1. SOLID SHEATHING (BY OTHERS) TO BE MINIMUM 1/2" PLYWOOD OR EQUIVALENT IN STRENGTH FOR HOLDING POWER OF FASTENERS.
2. ALL FELT UNDERLAYMENT, CAULKING, AND FASTENERS, ARE ITEMS TO BE FURNISHED AND INSTALLED BY THE ROOFING INSTALLER AT THE DISCRETION OF THE ARCHITECT.

F = FINISH SIDE




CLOSURE FLASHING




DRIP FLASHING

Berridge Manufacturing Company

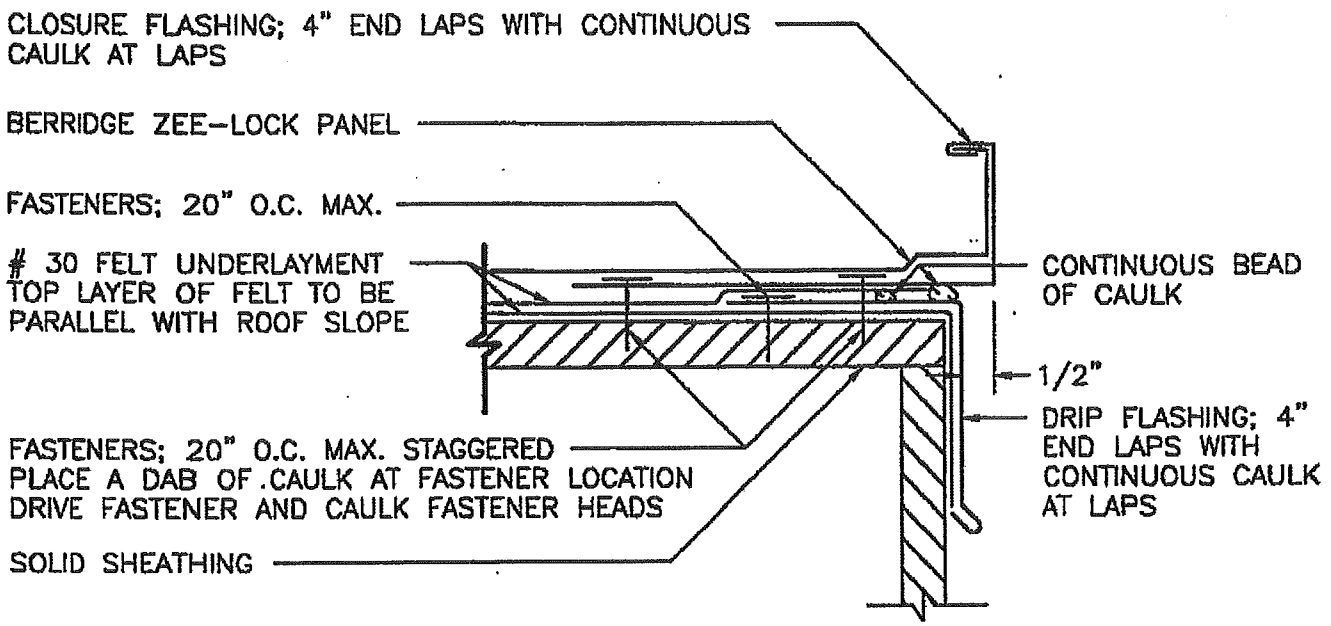
*Roofs of Distinction*

GABLE DETAIL
LEFT SIDE; CLOSURE FLASHING; SOLID SUBSTRATE

DATE: 04-01-97

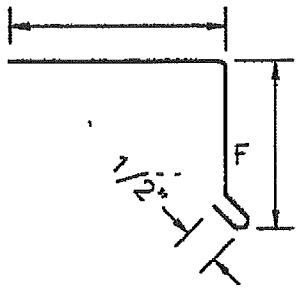
# ZEE-LOCK PANEL

PAGE\FILE
Z-32

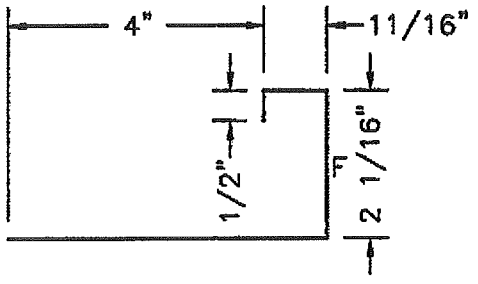



1. SOLID SHEATHING (BY OTHERS) TO BE MINIMUM 1/2" PLYWOOD OR EQUIVALENT IN STRENGTH FOR HOLDING POWER OF FASTENERS.
2. ALL FELT UNDERLAYMENT, CAULKING, AND FASTENERS, ARE ITEMS TO BE FURNISHED AND INSTALLED BY THE ROOFING INSTALLER AT THE DISCRETION OF THE ARCHITECT.

F = FINISH SIDE

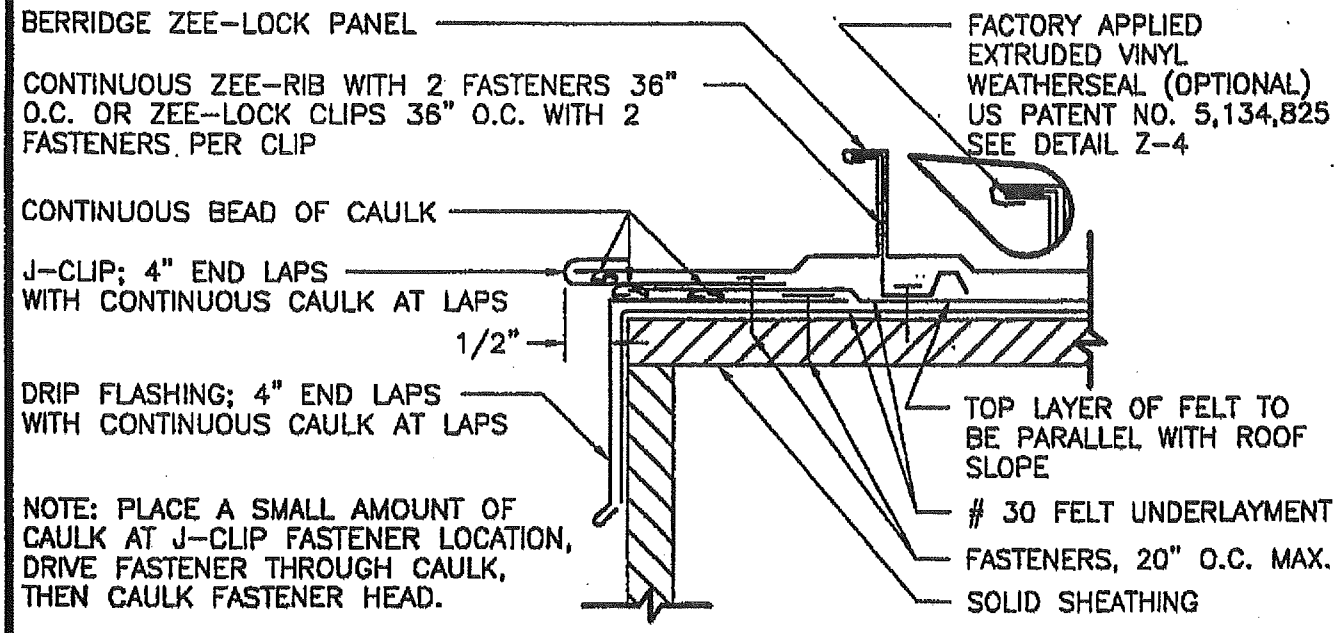



DRIP FLASHING



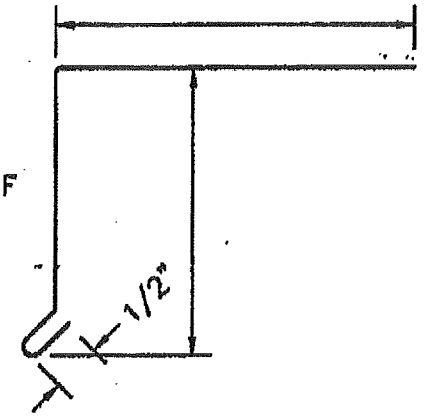

CLOSURE FLASHING

| | | |
|---|---|---|
| DATE: 04-01-97 | GABLE DETAIL<br>RIGHT SIDE; CLOSURE FLASHING;<br>SOLID SUBSTRATE | Berridge Manufacturing Company<br>Roofs of Distinction |
| PAGE\FILE<br>Z-33 | ZEE-LOCK PANEL | |

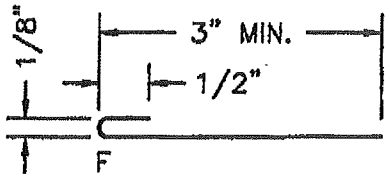



1. FIELD CUT LAST PANEL AND SLIP INTO J-CLIP. PANEL MUST BE CONTINUOUS FROM RIDGE TO EAVE WHEN USING THIS DETAIL.
2. SOLID SHEATHING (BY OTHERS) TO BE MINIMUM 1/2" PLYWOOD OR EQUIVALENT IN STRENGTH FOR HOLDING POWER OF FASTENERS.
3. ALL FELT UNDERLAYMENT, CAULKING, AND FASTENERS, ARE ITEMS TO BE FURNISHED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

F = FINISH SIDE




DRIP FLASHING




J-CLIP

Berridge Manufacturing Company

*Roofs of Distinction*

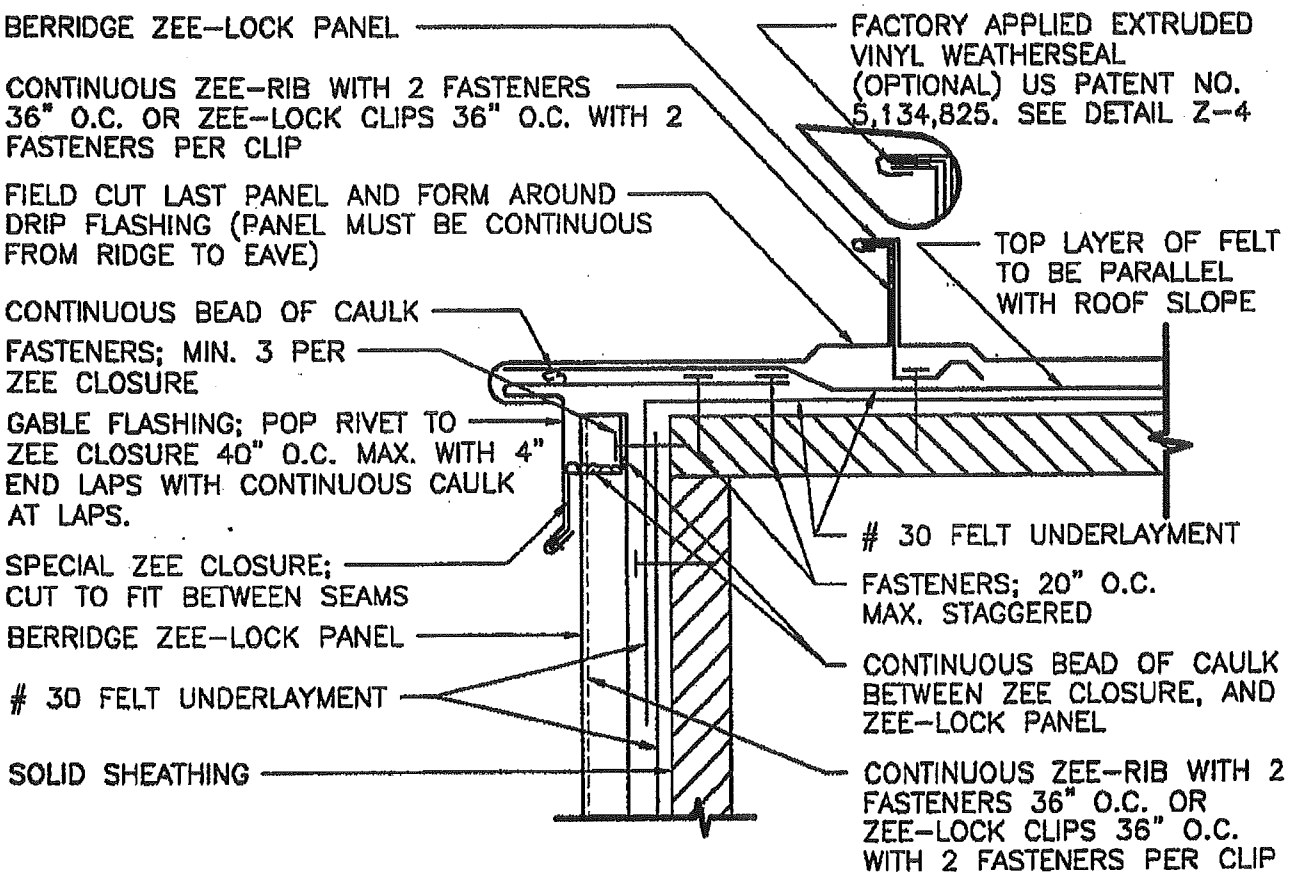
# GABLE DETAIL J-CLIP; SOLID SUBSTRATE

DATE: 04-01-97

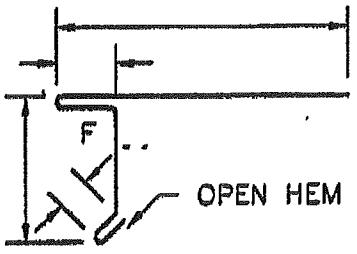
PAGE\FILE

Z-34

# ZEE-LOCK PANEL

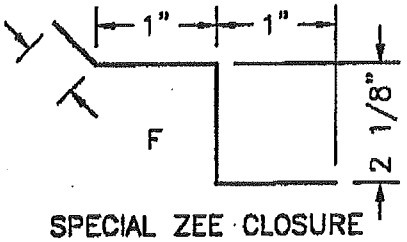



1. FIELD CUT AND FORM LAST PANEL AROUND GABLE FLASHING PANEL MUST BE CONTINUOUS FROM RIDGE TO EAVE.
2. SOLID SHEATHING (BY OTHERS) TO BE MINIMUM 1/2" PLYWOOD OR EQUIVALENT IN STRENGTH FOR HOLDING POWER OF FASTENERS.
3. ALL FELT UNDERLAYMENT, CAULKING, AND FASTENERS, ARE ITEMS TO BE FURNISHED AND INSTALLED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




GABLE FLASHING

F = FINISH SIDE




SPECIAL ZEE CLOSURE

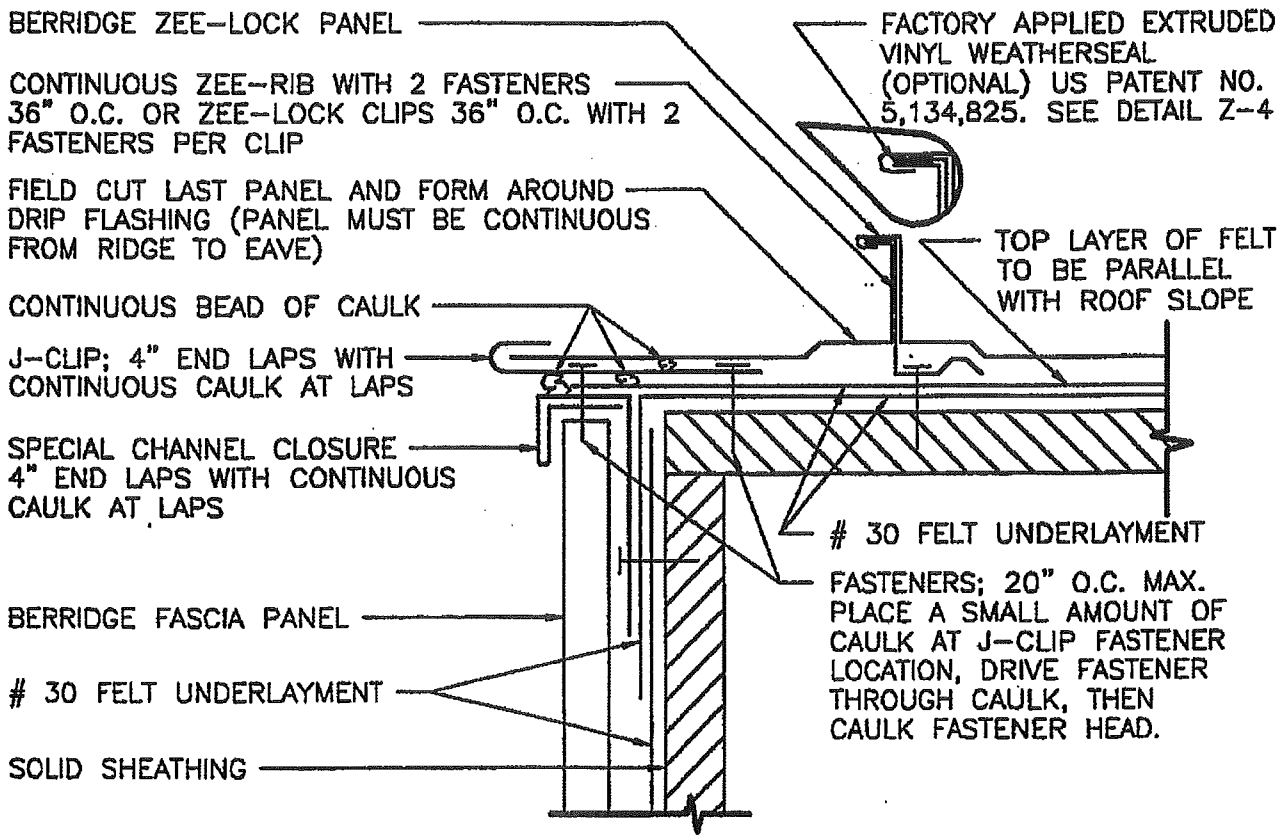
DATE: 04-01-97

PAGE\FILE
Z-35

# GABLE DETAIL

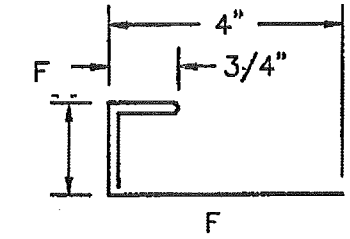
# ZEE-LOCK PANEL

Berridge Manufacturing Company
*Roofs of Distinction*

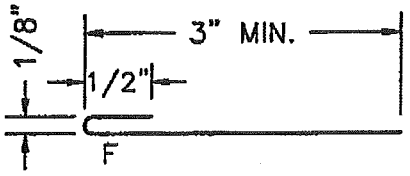



1. FIELD CUT LAST PANEL AND SLIP INTO J-CLIP. PANEL MUST BE CONTINUOUS FROM RIDGE TO EAVE.
2. SOLID SHEATHING (BY OTHERS) TO BE MINIMUM 1/2" PLYWOOD OR EQUIVALENT IN STRENGTH FOR HOLDING POWER OF FASTENERS.
3. ALL FELT UNDERLAYMENT, CAULKING, AND FASTENERS, ARE ITEMS TO BE FURNISHED AND INSTALLED BY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

F = FINISH SIDE




SPECIAL CHANNEL CLOSURE




J-CLIP

Berridge Manufacturing Company

*Roofs of Distinction*

# GABLE DETAIL

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# ZEE-LOCK PANEL

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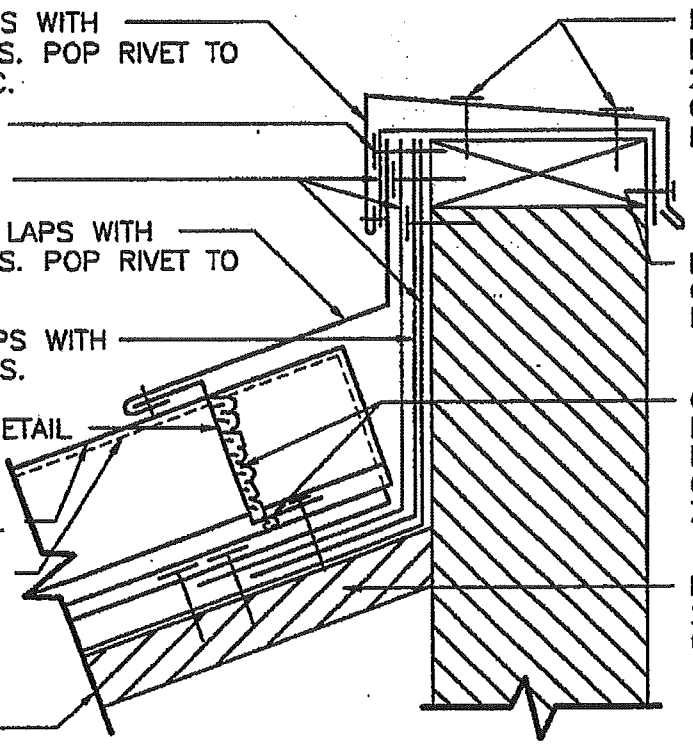
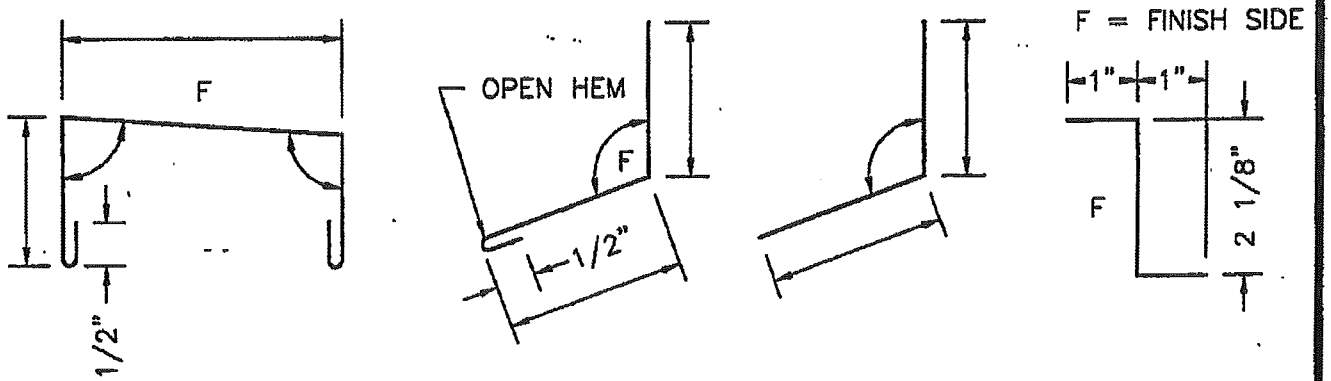



1. FIELD CUT ZEE CLOSURE TO FIT BETWEEN PANEL SEAMS IF PANEL SEAMS ARE NOT PERPENDICULAR TO WALL.
2. SOLID SHEATHING (BY OTHERS) TO BE MINIMUM 1/2" PLYWOOD OR EQUIVALENT IN STRENGTH FOR HOLDING POWER OF FASTENERS.
3. ALL FELT UNDERLAYMENT, CAULKING, AND FASTENERS, ARE ITEMS TO BE FURNISHED AND INSTALLED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




Berridge Manufacturing Company

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# PARAPET DETAIL SOLID SUBSTRATE

# ZEE-LOCK PANEL

DATE: 04-01-97

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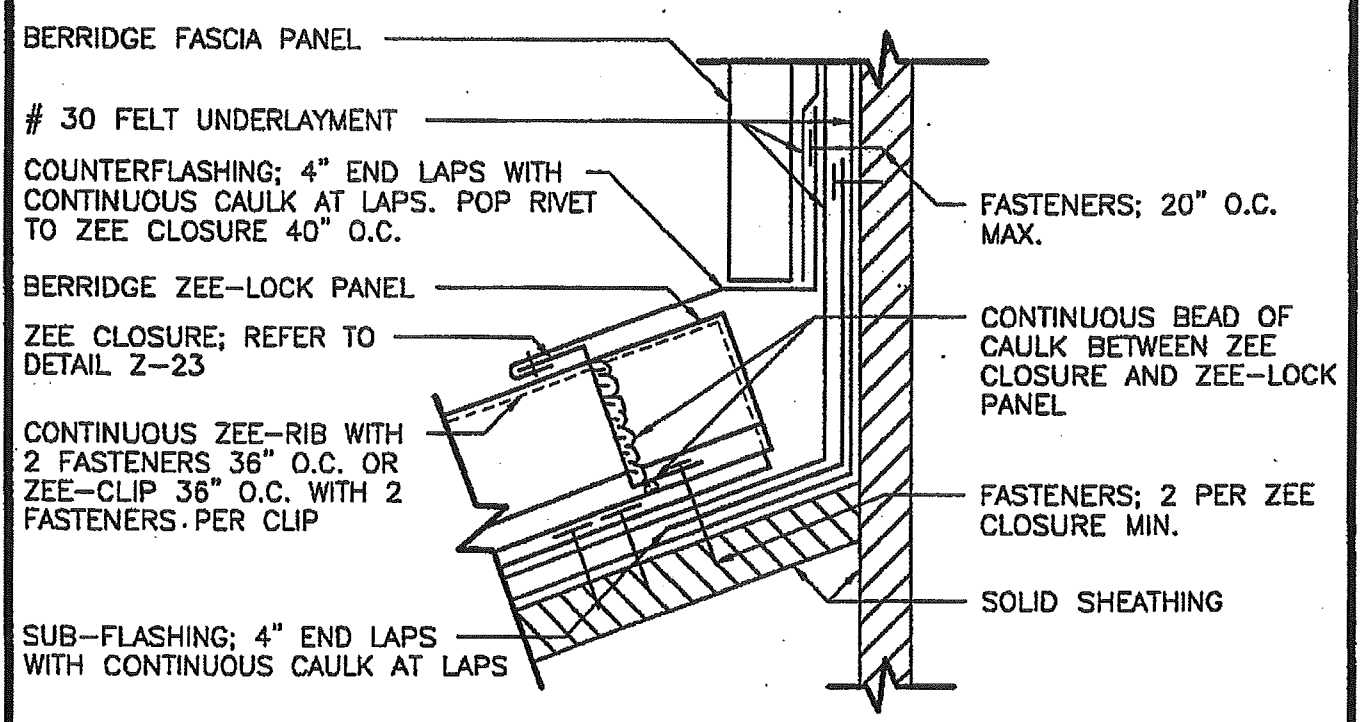
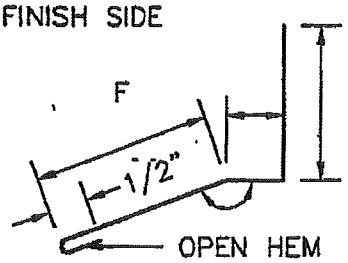
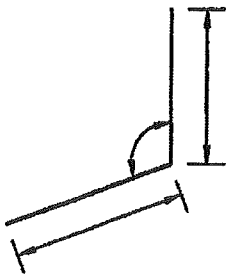



1. FIELD CUT ZEE CLOSURE TO FIT BETWEEN PANEL SEAMS IF PANEL SEAMS ARE NOT PERPENDICULAR TO WALL.
2. SOLID SHEATHING (BY OTHERS) TO BE MINIMUM 1/2" PLYWOOD OR EQUIVALENT IN STRENGTH FOR HOLDING POWER OF FASTENERS.
3. ALL FELT UNDERLAYMENT, CAULKING, AND FASTENERS, ARE ITEMS TO BE FURNISHED AND INSTALLED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

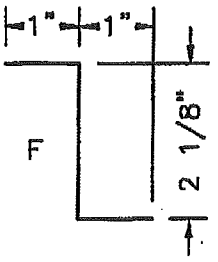
F = FINISH SIDE




COUNTERFLASHING



SUB-FLASHING




ZEE CLOSURE

Berridge Manufacturing Company

*Roofs of Distinction*

# HEAD WALL DETAIL SOLID SUBSTRATE

# ZEE-LOCK PANEL

DATE: 04-01-97

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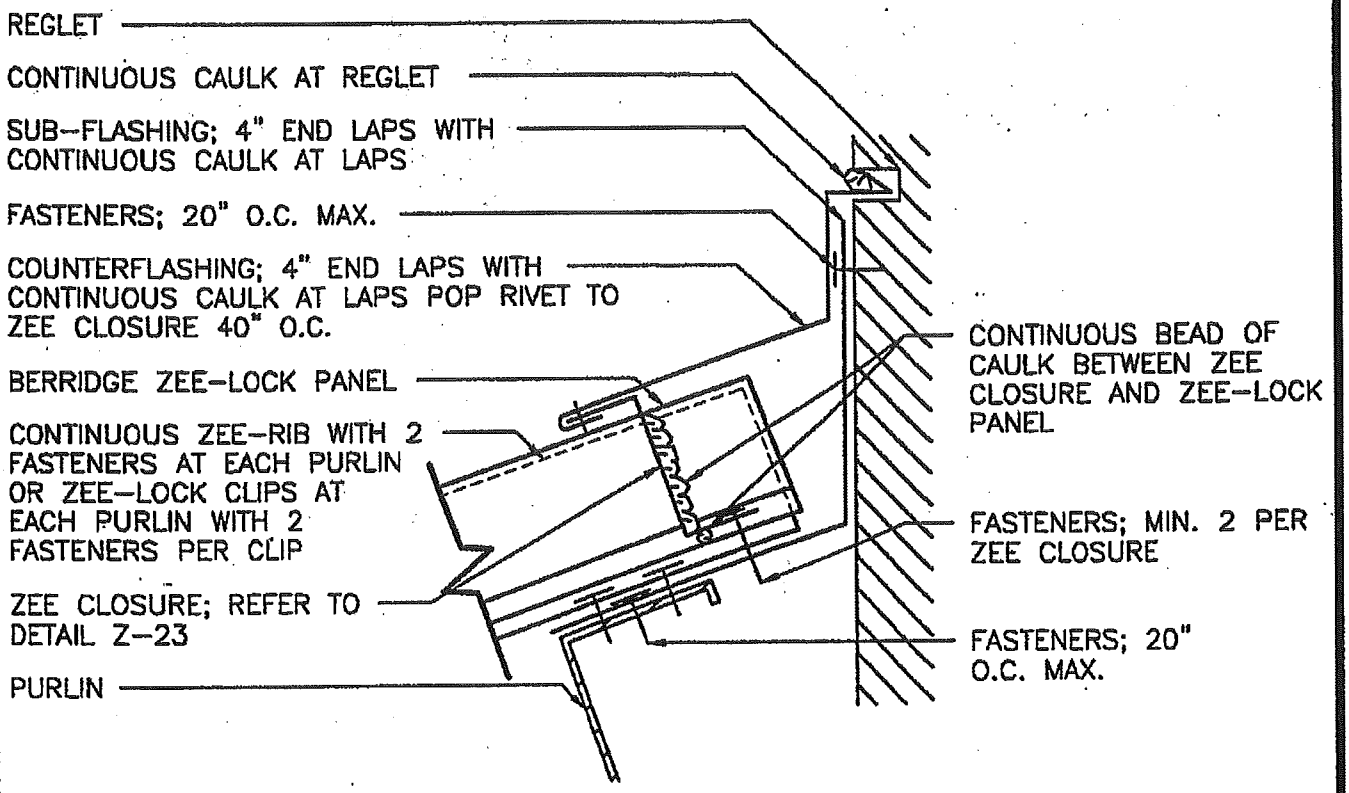
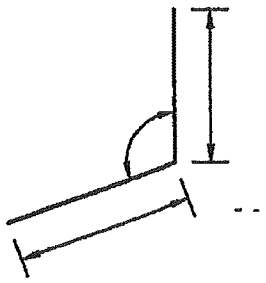
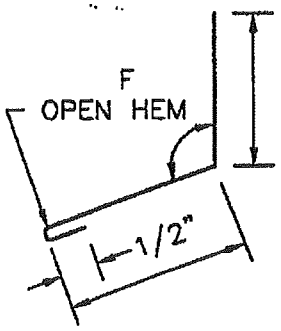



1. FIELD CUT ZEE CLOSURE TO FIT BETWEEN PANEL SEAMS IF PANEL SEAMS ARE NOT PERPENDICULAR TO WALL.
2. SOLID SHEATHING (BY OTHERS) TO BE MINIMUM 1/2" PLYWOOD OR EQUIVALENT IN STRENGTH FOR HOLDING POWER OF FASTENERS.
3. ALL CAULKING AND FASTENERS ARE ITEMS TO BE FURNISHED AND INSTALLED BY THE ROOFING INSTALLER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

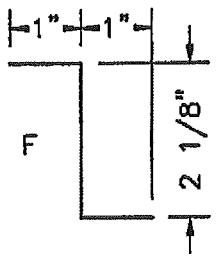


SUB-FLASHING




COUNTERFLASHING

F = FINISH SIDE




ZEE CLOSURE

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# HEAD WALL DETAIL
# OPEN FRAMING
# ZEE-LOCK PANEL

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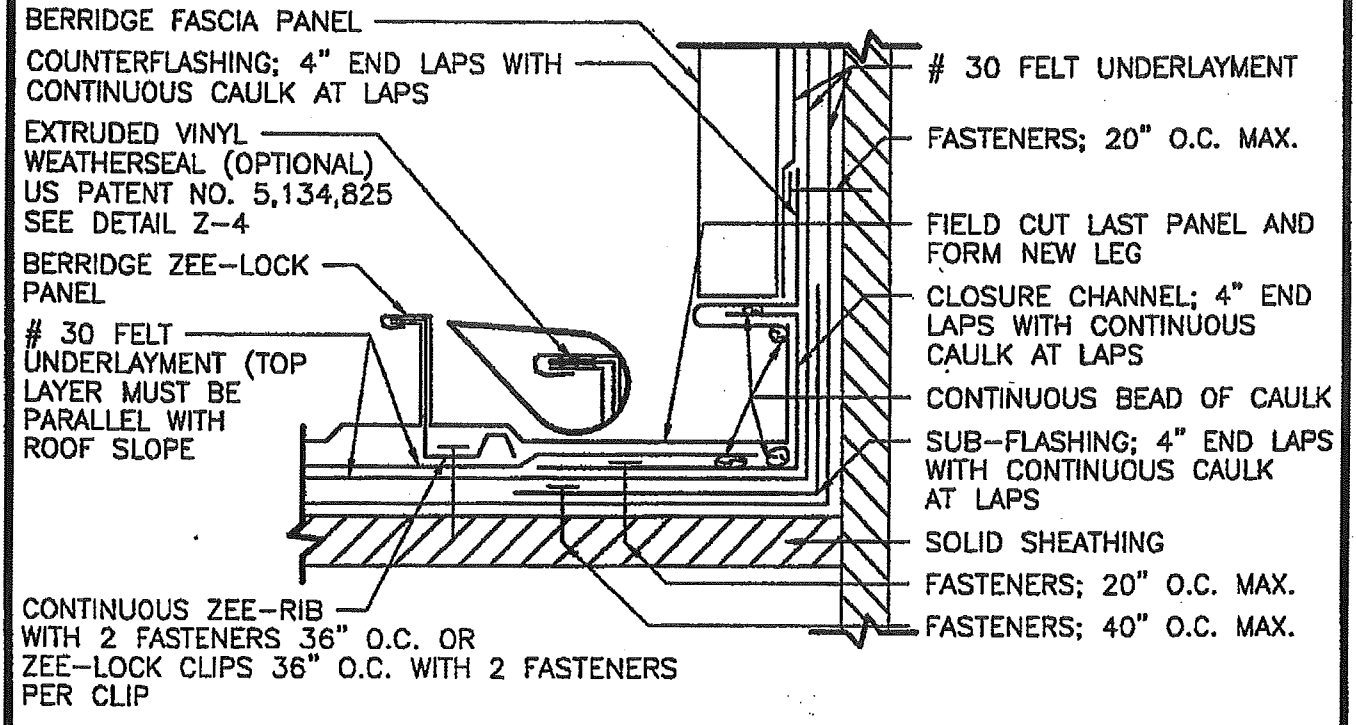
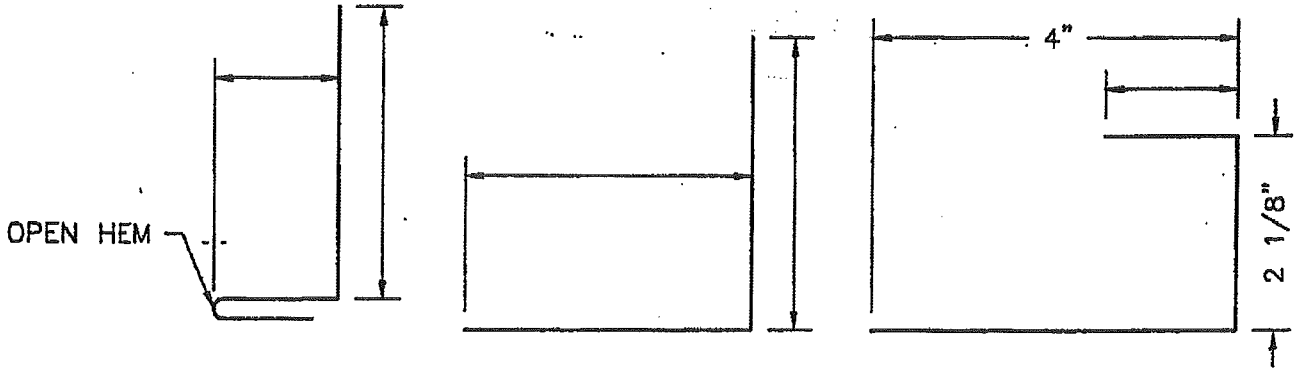
*Roofs of Distinction*




1. FIELD CUT AND FORM LAST PANEL. PANEL TO BE CONTINUOUS FROM RIDGE TO EAVE. SEE DETAIL Z-54 FOR CONDITION AT EAVE.
2. SOLID SHEATHING (BY OTHERS) TO BE MINIMUM 1/2" PLYWOOD OR EQUIVALENT IN STRENGTH FOR HOLDING POWER OF FASTENERS.
3. ALL FELT UNDERLAYMENT, CAULKING, AND FASTENERS, ARE ITEMS TO BE FURNISHED AND INSTALLED BY THE ROOFING INSTALLER AT THE DISCRETION OF THE ARCHITECT.

F = FINISH SIDE




Berridge Manufacturing Company
*Roofs of Distinction*

RAKE WALL DETAIL
COUNTERFLASHING
SOLID SUBSTRATE

# ZEE-LOCK PANEL

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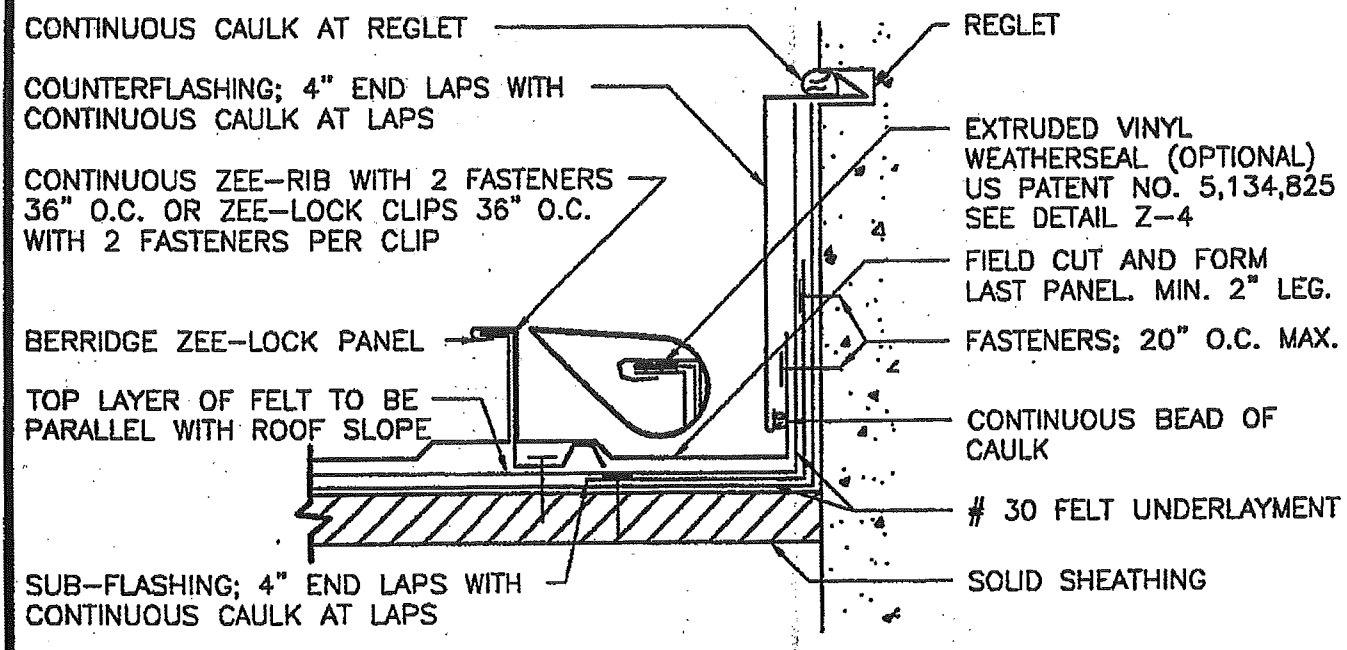
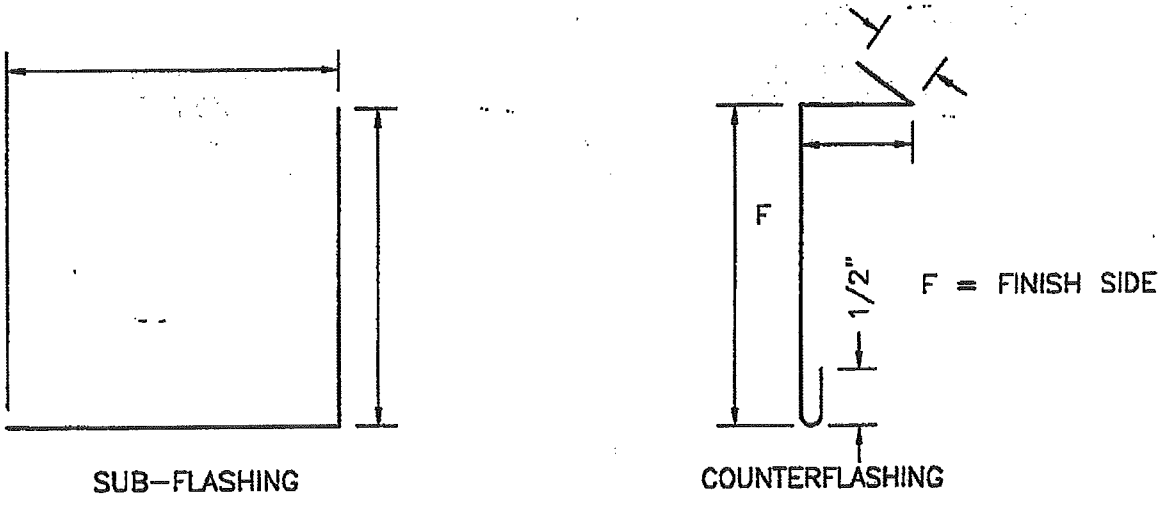
Z-52




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

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Z-53

RAKE WALL DETAIL
REGLET
SOLID SUBSTRATE

# ZEE-LOCK PANEL

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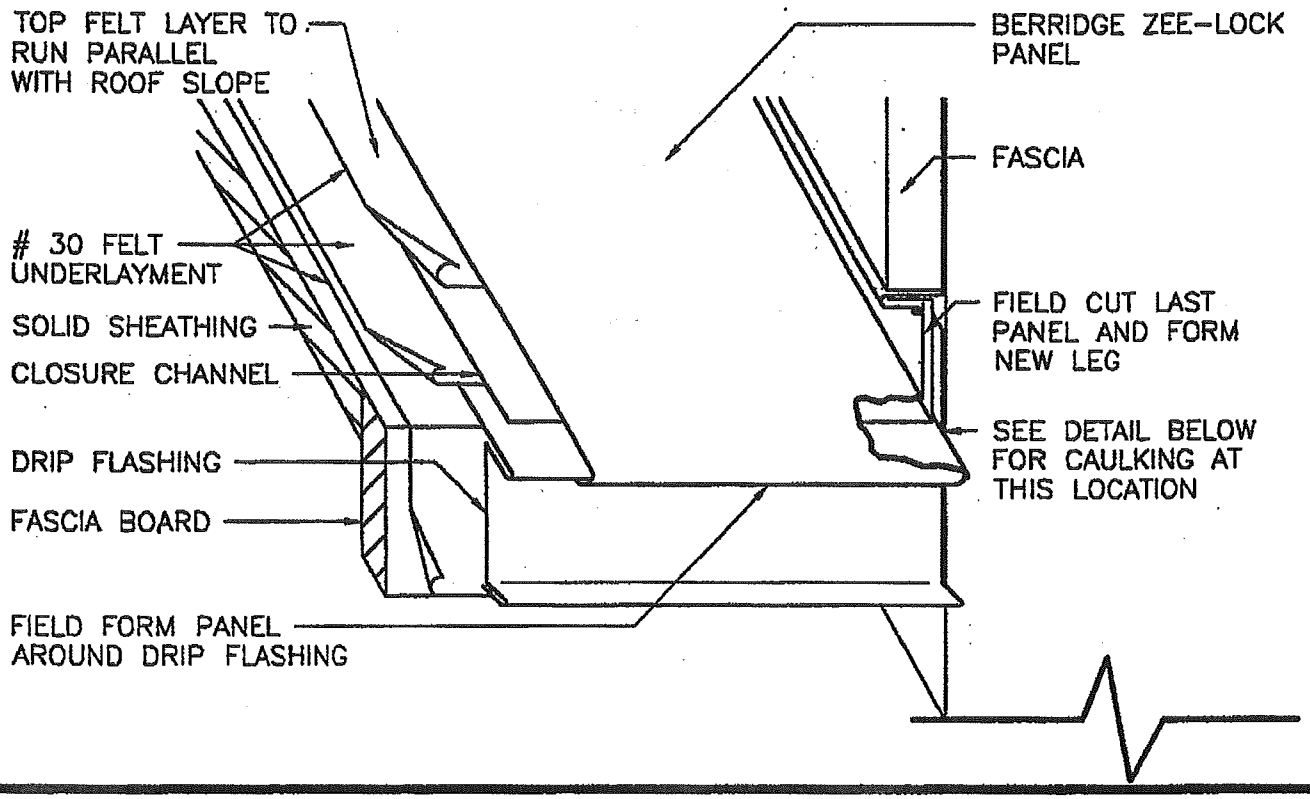
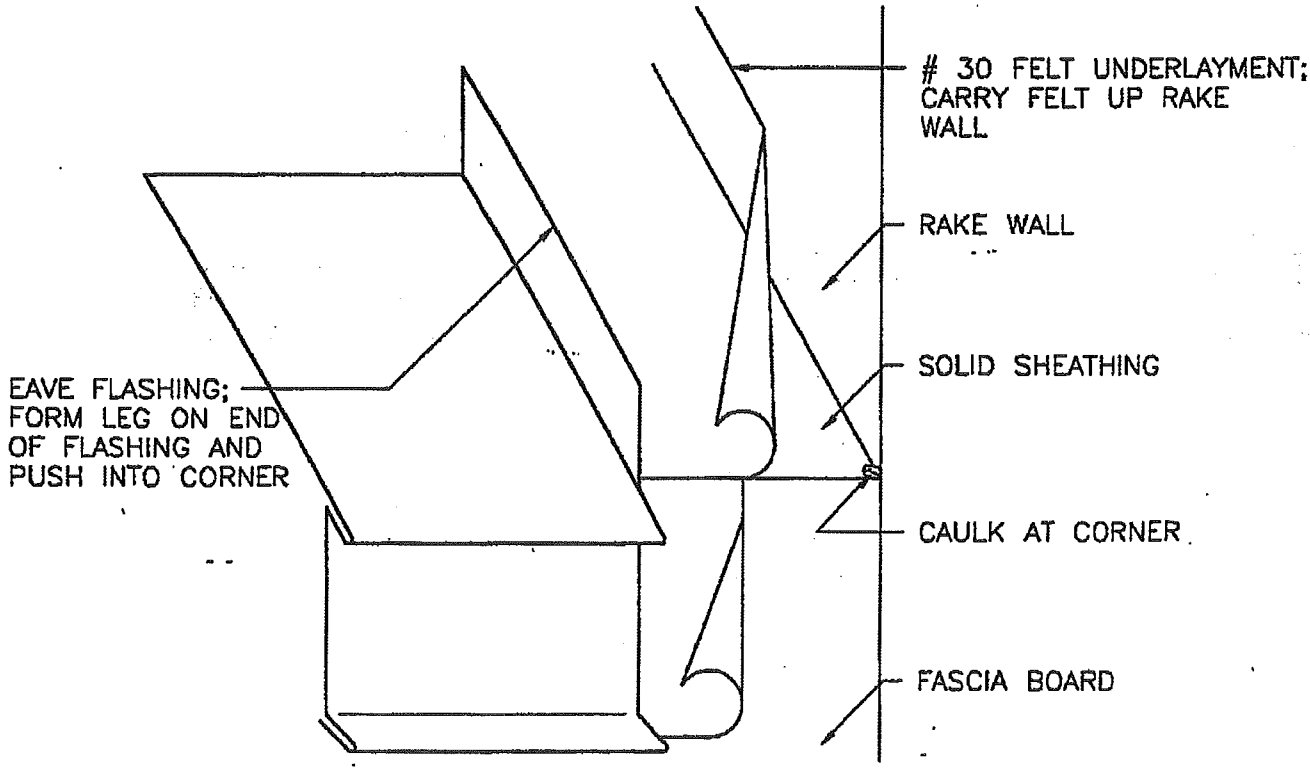
*Roofs of Distinction*




Berridge Manufacturing Company

*Roofs of Distinction*

# RAKE AT EAVE

USE THIS DETAIL AT RAKE DETAILS, Z-52 AND Z-53

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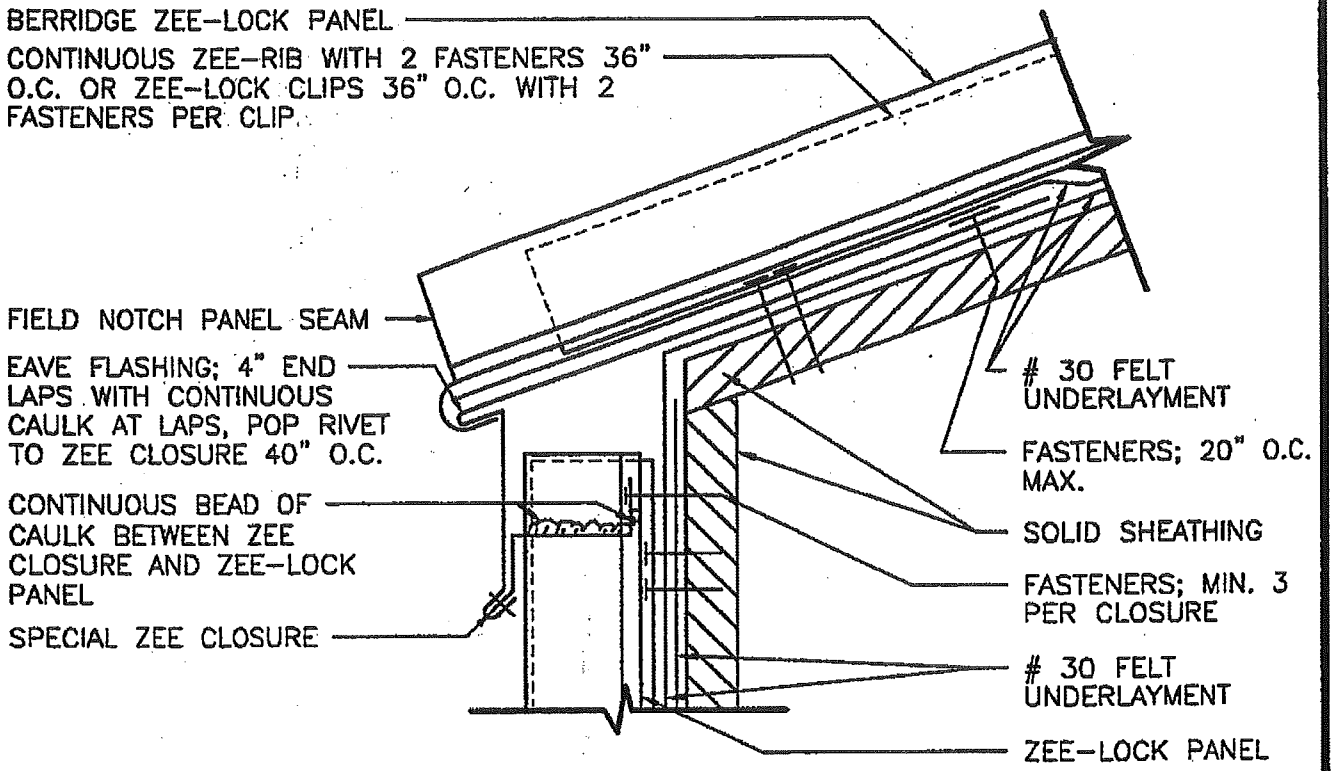
# ZEE-LOCK PANEL

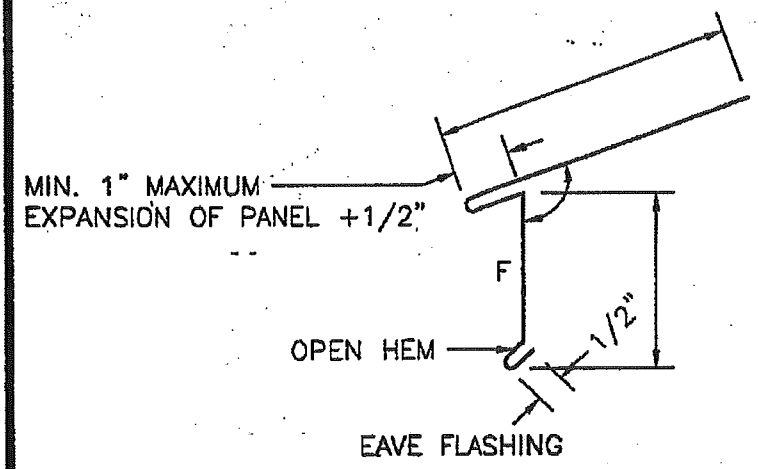
PAGE\FILE

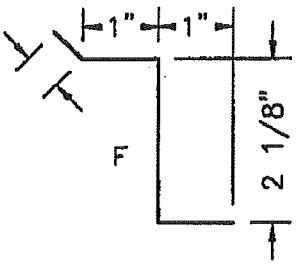
Z-54




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

F = FINISH SIDE




Berridge Manufacturing Company

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# ROOF TO FASCIA TRANSITION COUNTER FLASHING SOLID SUBSTRATE

# ZEE-LOCK PANEL

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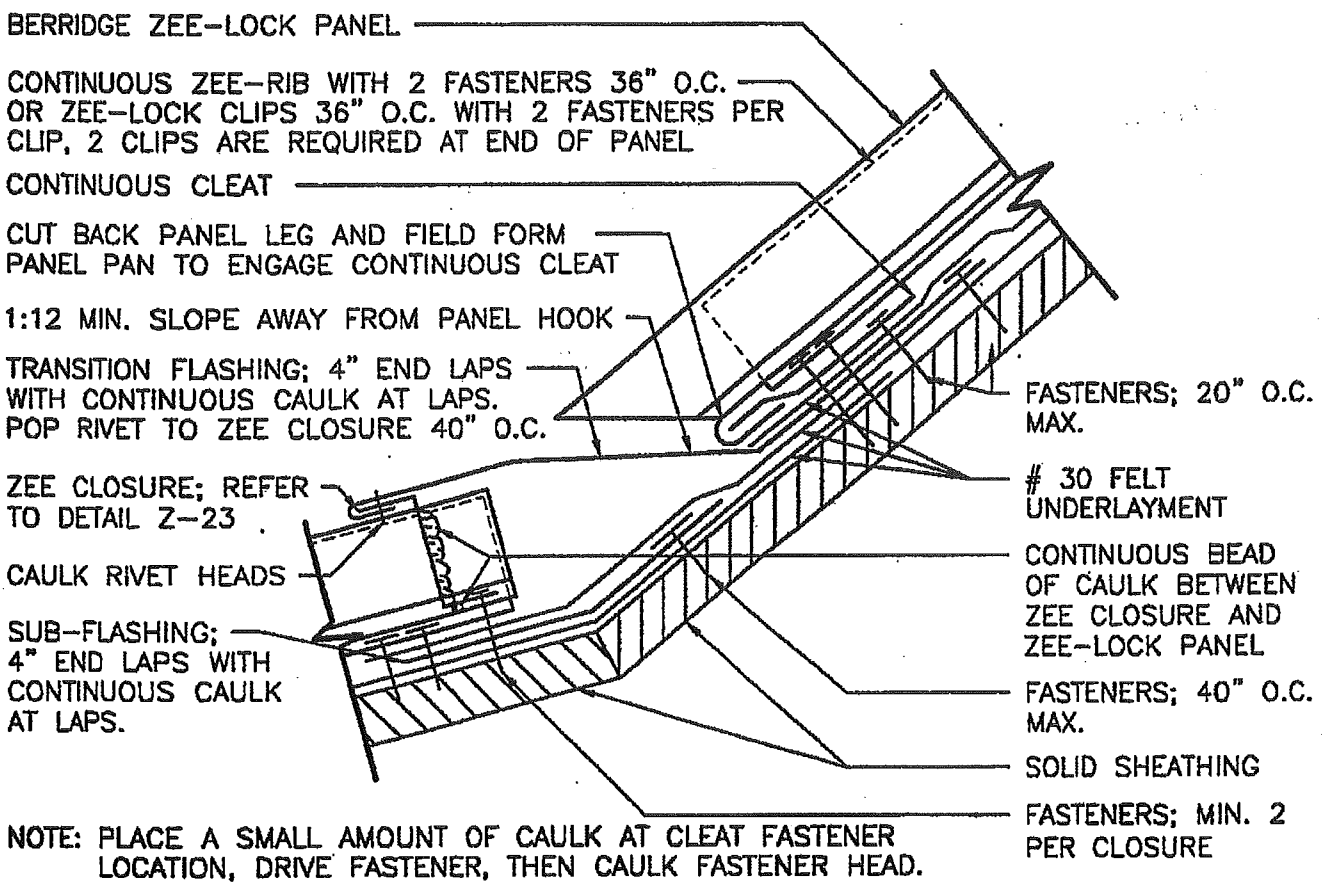
Z-60

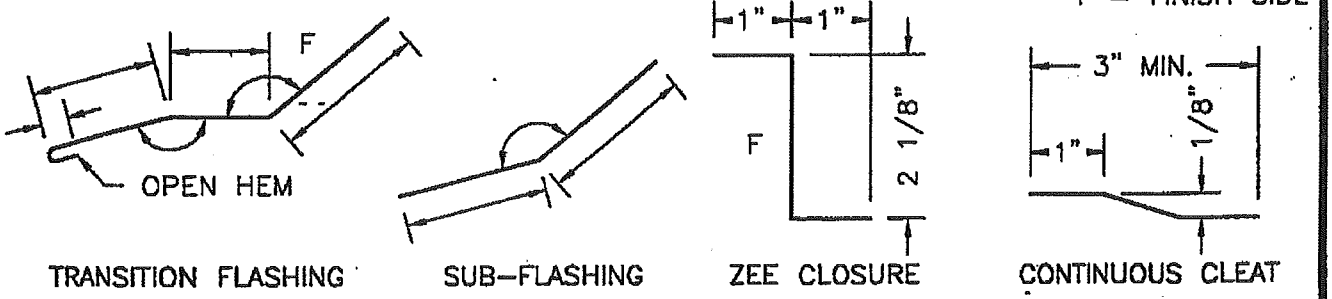



NOTE: PLACE A SMALL AMOUNT OF CAULK AT CLEAT FASTENER LOCATION, DRIVE FASTENER, THEN CAULK FASTENER HEAD.

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

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

F = FINISH SIDE




TRANSITION FLASHING | SUB-FLASHING | ZEE CLOSURE | CONTINUOUS CLEAT

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Z-61

# SLOPE TRANSITION DETAIL SOLID SUBSTRATE

# ZEE-LOCK PANEL

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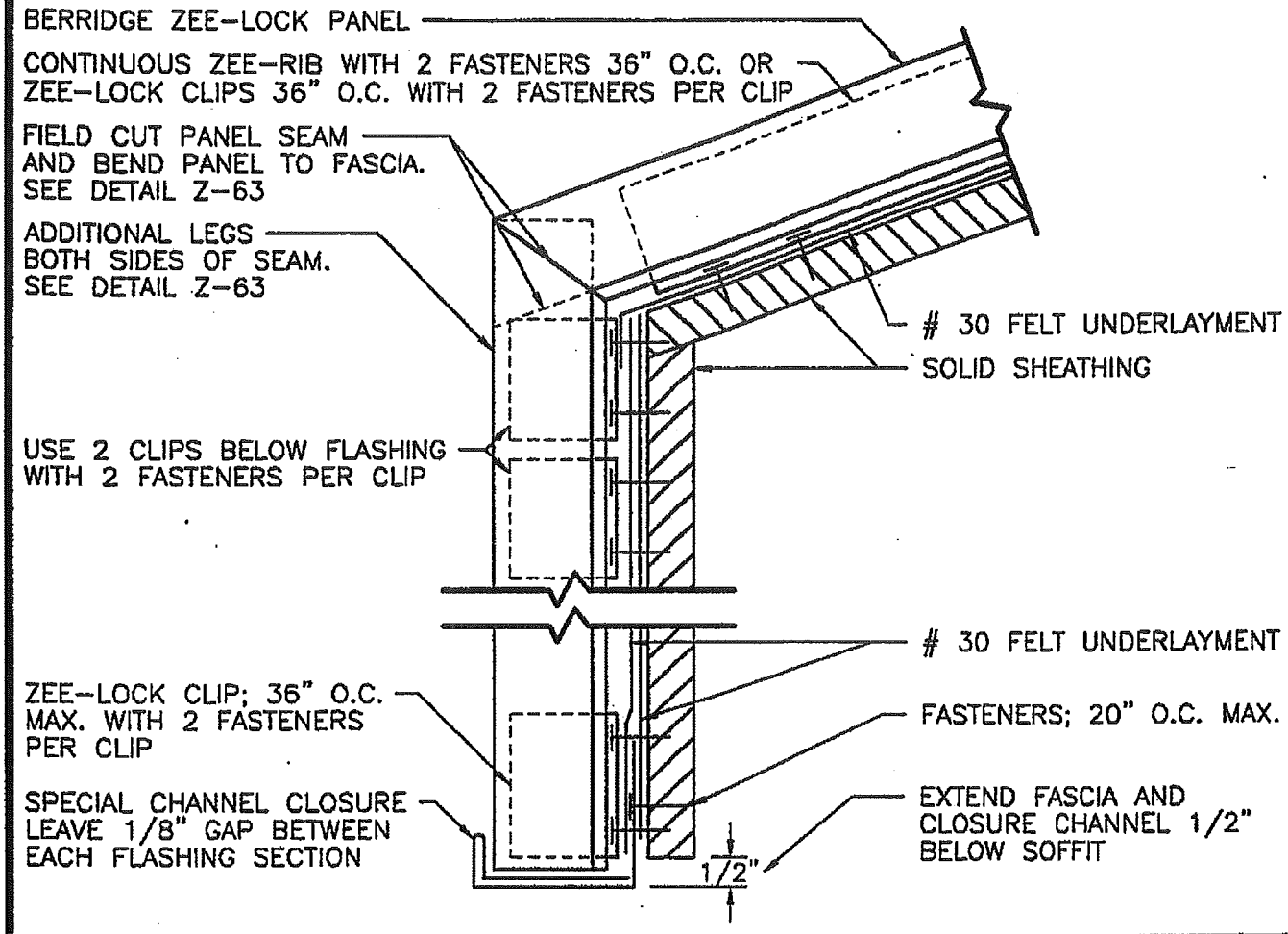
*Roofs of Distinction*




1. FIELD CUT SEAM AND BREAK PANEL TO DESIRED ANGLE OF ROOF TO FASCIA.
2. PLACE PANELS ON ROOF, USE THE CONTINUOUS ZEE-RIB OR ZEE-LOCK CLIP ON ROOF USE ONLY ZEE-LOCK CLIPS ON FASCIA.
3. ONLY ONE SLOPE TRANSITION PER PANEL IS RECOMMENDED. MAXIMUM FASCIA SPAN FOR OPEN FRAMING IS 3'-0".
4. USE HAND SEAM CRIMPER ON ROOF PANELS AS REQUIRED TO KEEP PANELS IN PLACE.
5. CAULK JOINT BETWEEN PANEL LEGS; SEE DETAIL Z-63.
6. INSTALL ADDITIONAL MALE AND FEMALE LEGS AS SHOWN ON DETAIL Z-63. (THE ADDITIONAL LEGS CAN BE FIELD FABRICATED OR PURCHASED FROM THE FACTORY).
7. USE HAND SEAM CRIMPER TO SEAM PANEL ON FASCIA THEN MACHINE SEAM ROOF PANELS.
8. CAULK BETWEEN ROOF PANEL LEGS AND ADDITIONAL LEGS. SEE DETAIL Z-63.

Berridge Manufacturing Company

*Roofs of Distinction*

ROOF TO FASCIA TRANSITION
PANEL TURNDOWN
SOLID SUBSTRATE

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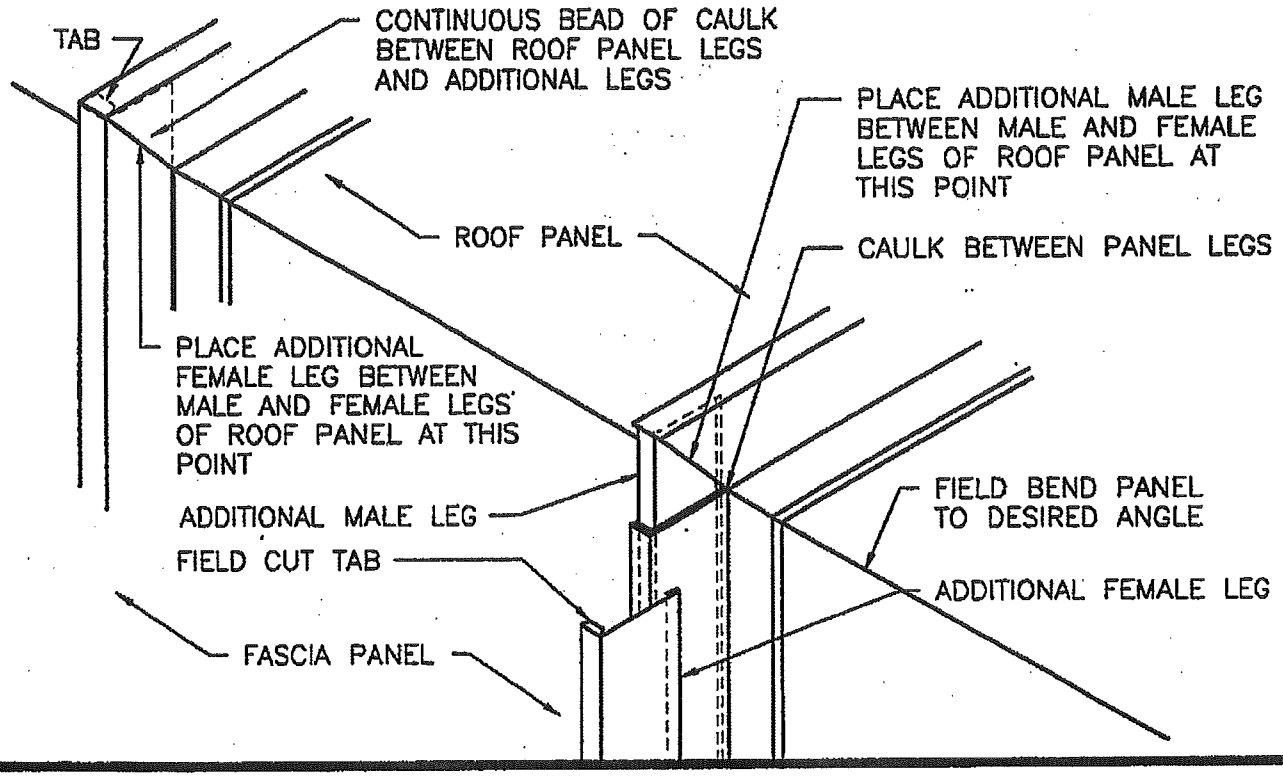
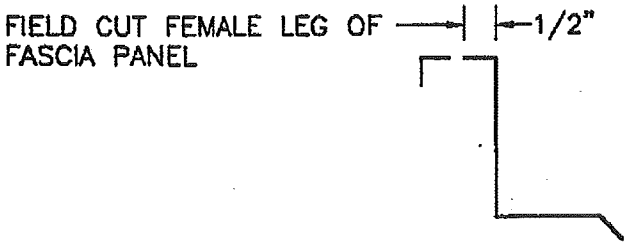
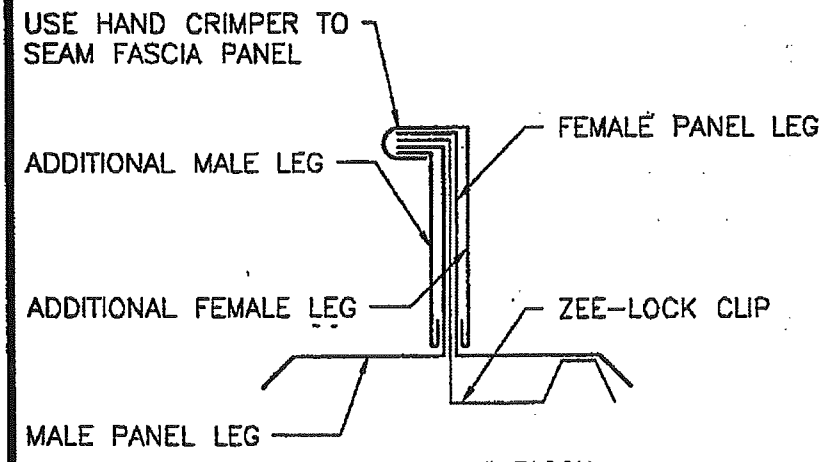
# ZEE-LOCK PANEL

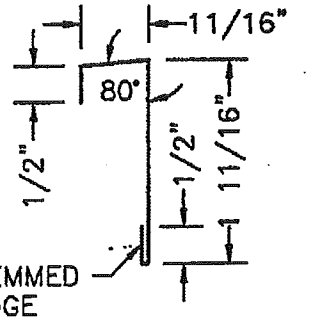
PAGE\FILE
Z-62



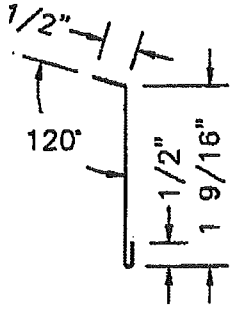




SEAM SECTION AT FASCIA




ADDITIONAL FEMALE LEG




ADDITIONAL MALE LEG

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Z-63

# ROOF TO FASCIA TRANSITION PANEL TURNDOWN INSTRUCTIONS

# ZEE-LOCK PANEL

Berridge Manufacturing Company

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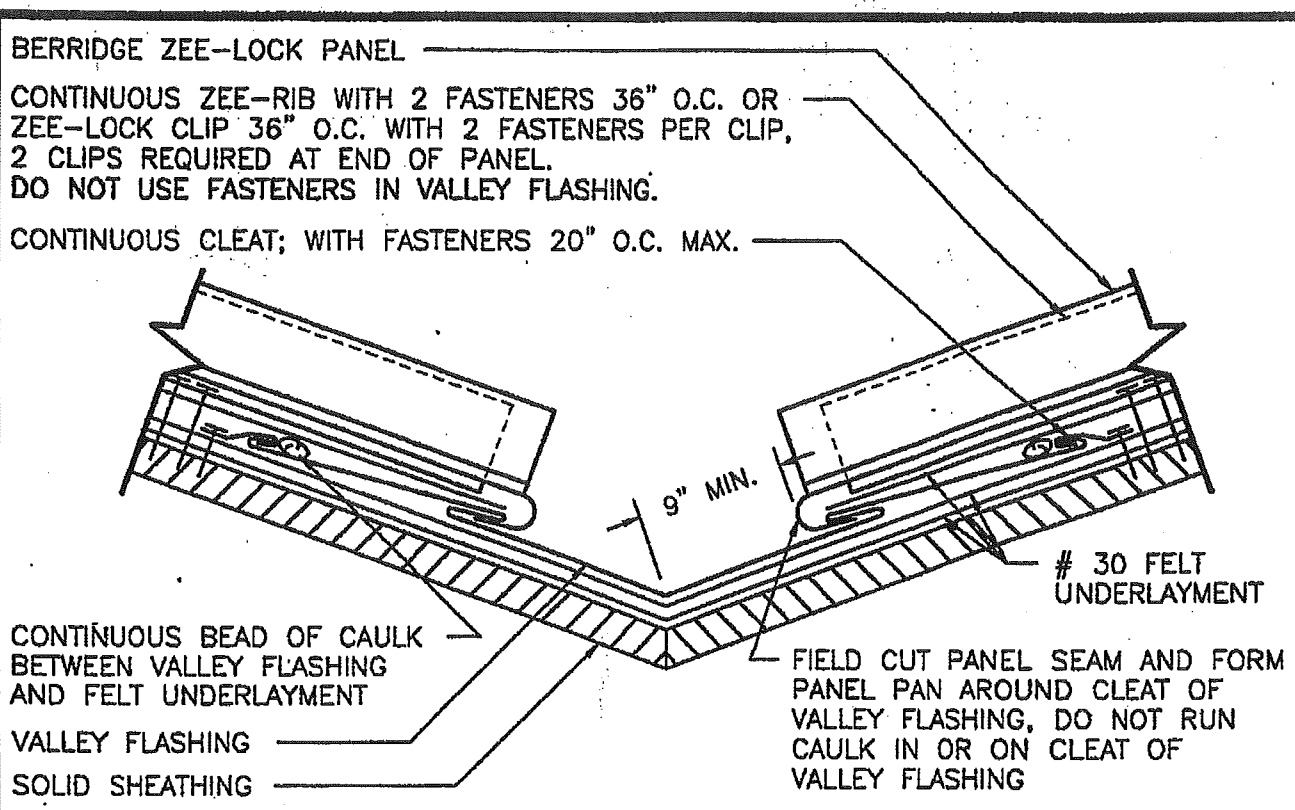
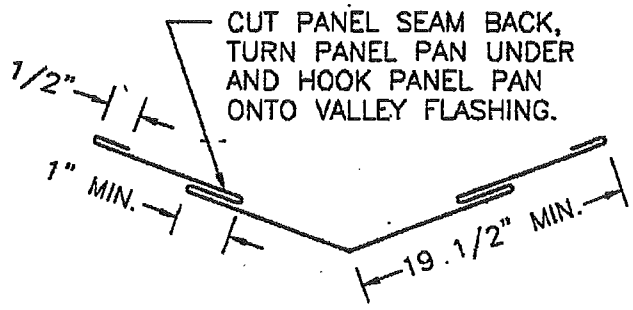


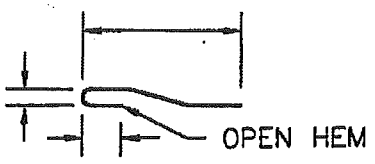

SEE DETAIL Z-71 FOR VALLEY FLASHING LAPPING

1. FOR EXPANSION AND CONTRACTION OF PANELS, SEE ZI-8 AND Z-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 FELT UNDERLAYMENT, CAULKING, AND FASTENERS, ARE ITEMS TO BE FURNISHED AND INSTALLED BY THE ROOFING INSTALLER AT THE DISCRETION OF THE ARCHITECT.

F = FINISH SIDE




VALLEY FLASHING




CONTINUOUS CLEAT

Berridge Manufacturing Company

*Roofs of Distinction*

# VALLEY DETAIL SOLID SUBSTRATE

# ZEE-LOCK PANEL

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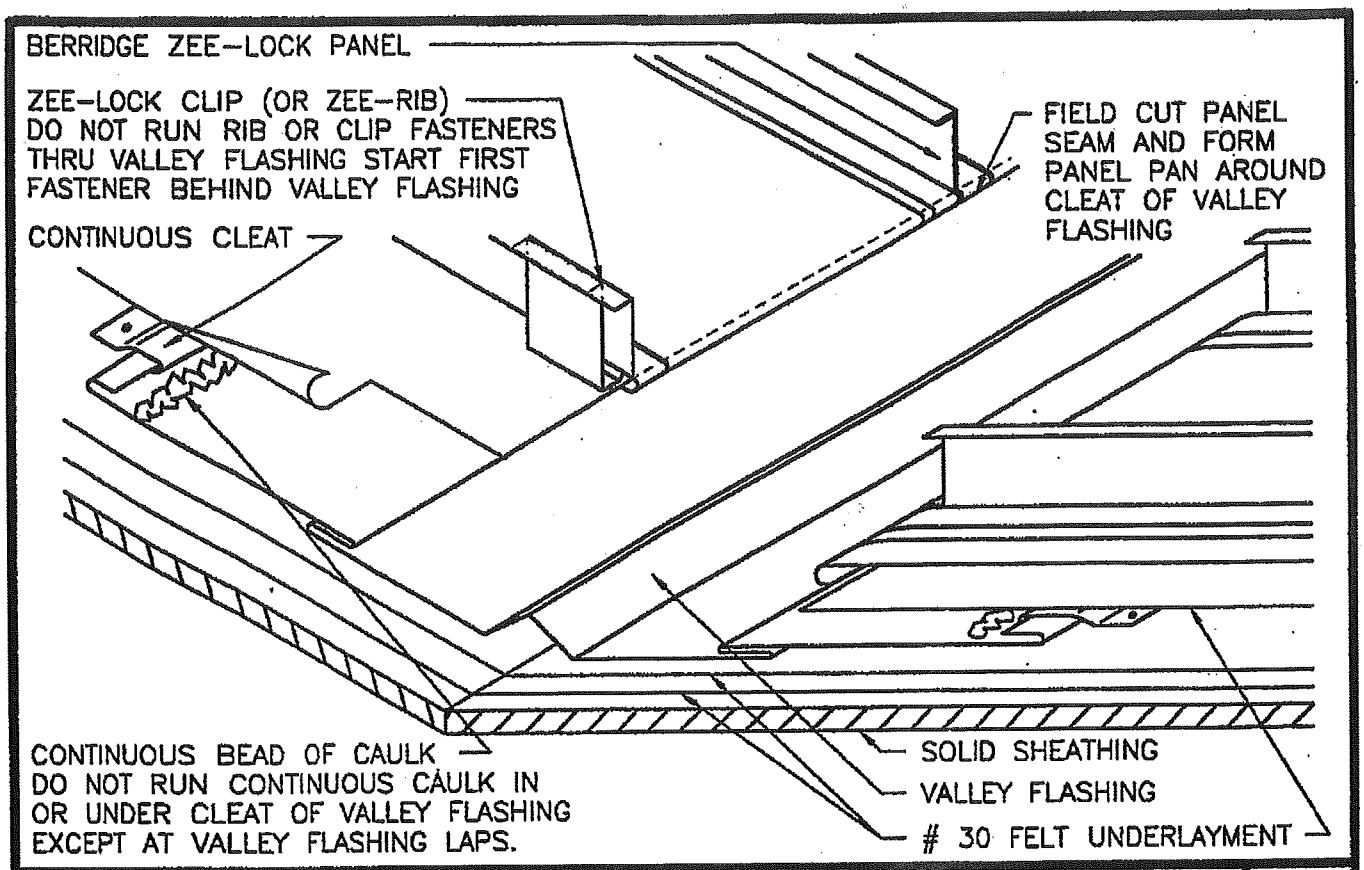
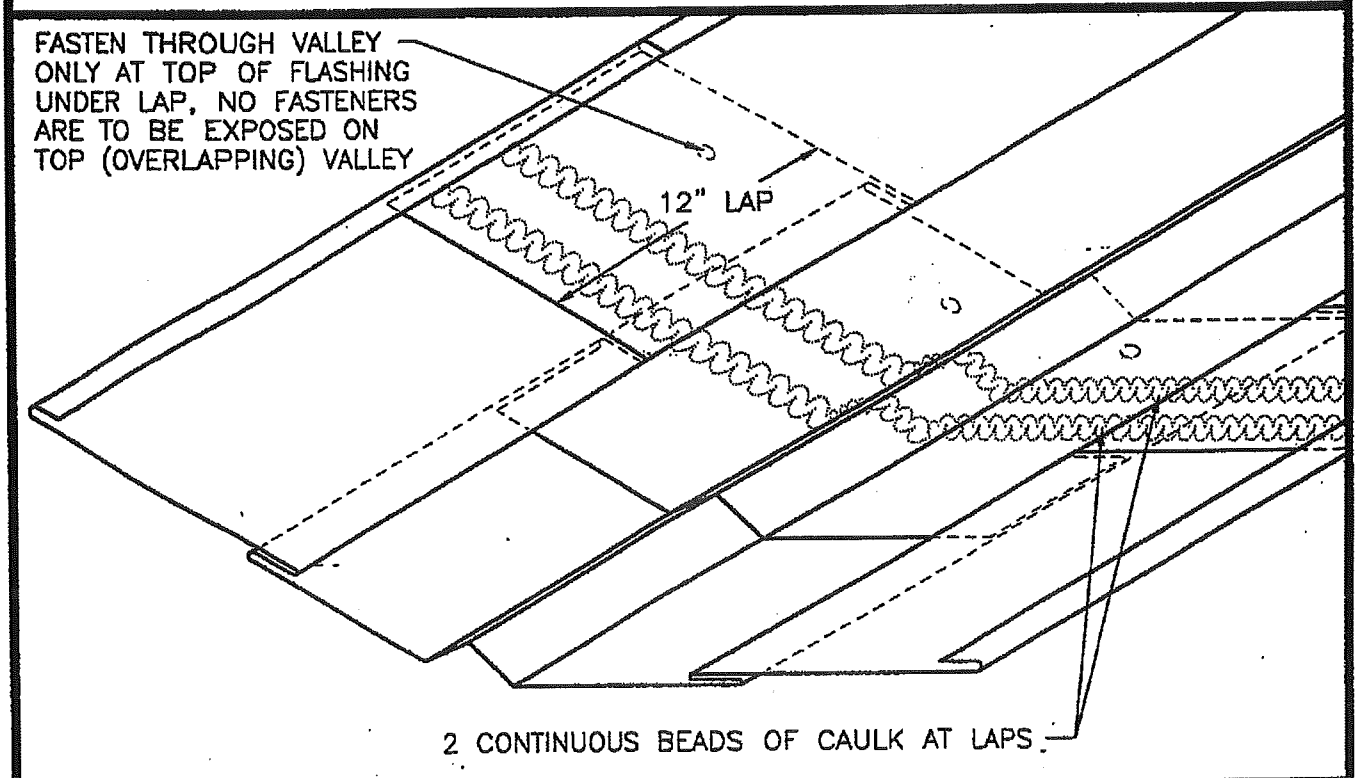
Z-70

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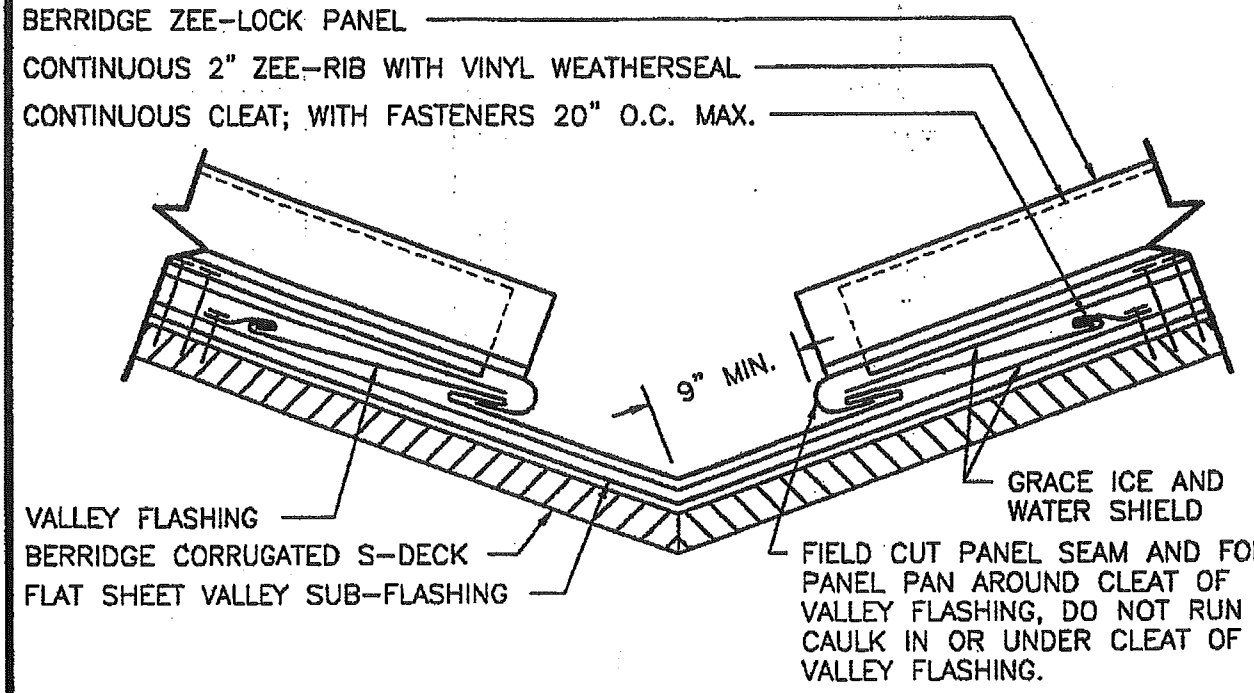
PAGE\FILE
Z-71

VALLEY DETAIL; ISOMETRIC
SOLID SUBSTRATE AND OPEN FRAMING

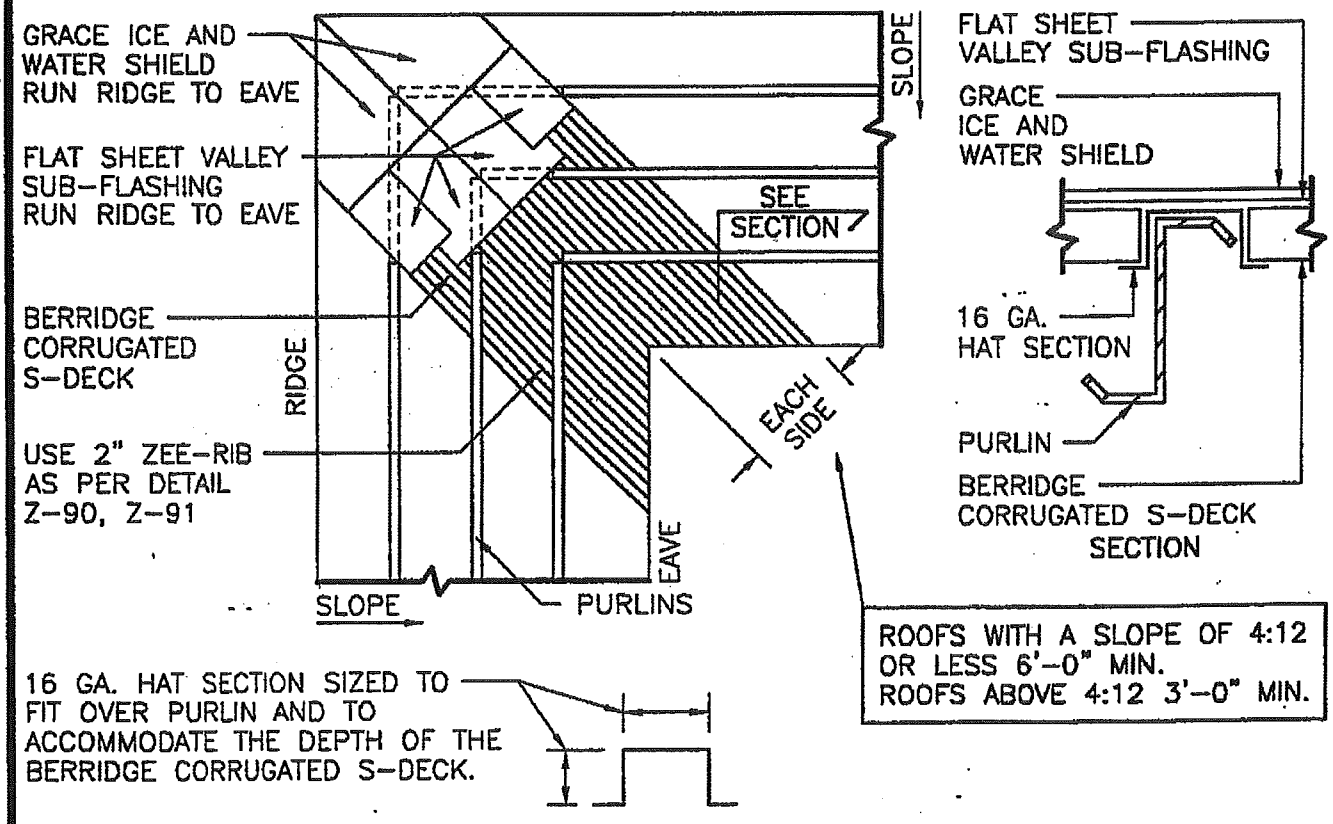
# ZEE-LOCK PANEL

Berridge Manufacturing Company

*Roofs of Distinction*




* FLASHING PROFILES AND NOTES, SEE DETAIL Z-70 AND Z-71




Berridge Manufacturing Company

*Roofs of Distinction*

# VALLEY DETAIL
# OPEN FRAMING; 2" ZEE-RIB

# ZEE-LOCK PANEL

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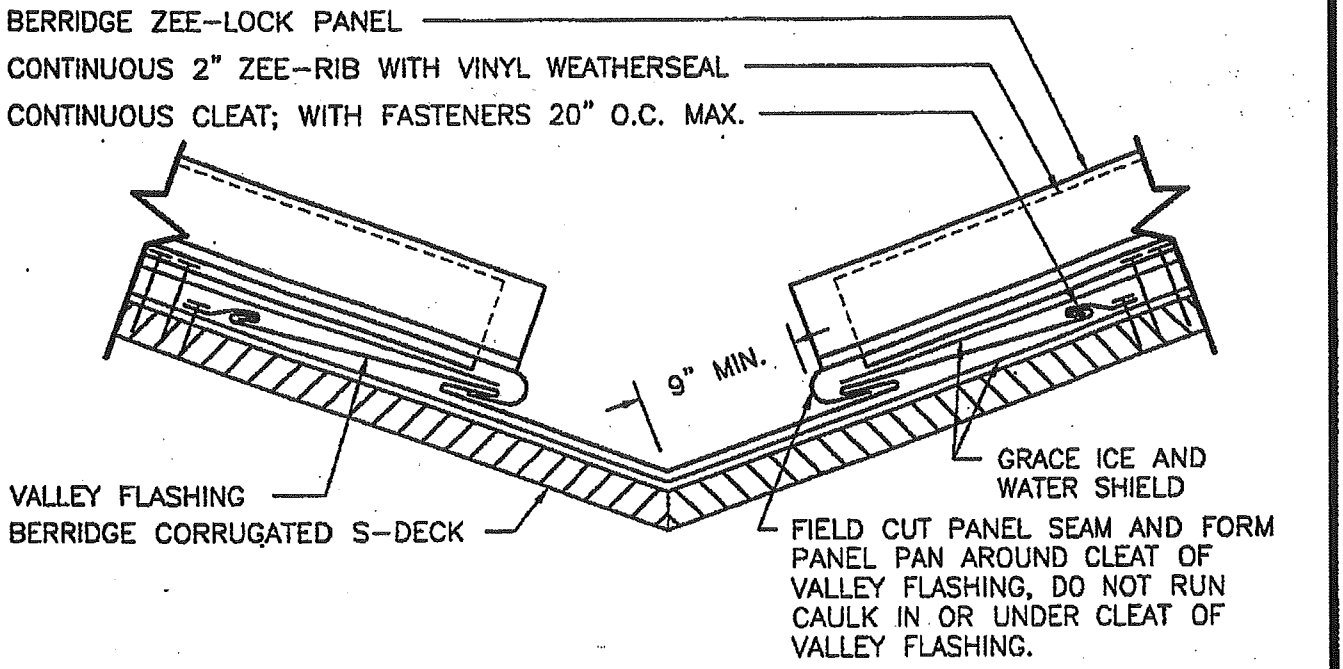
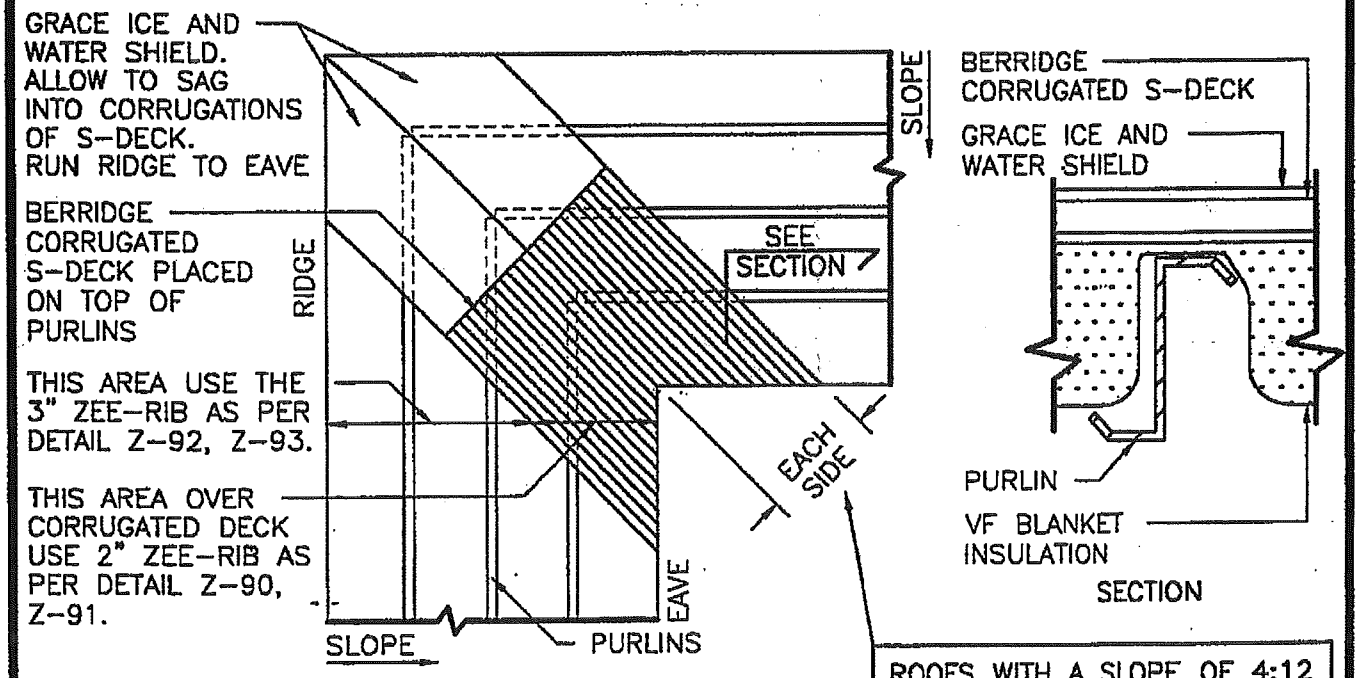
Z-72




* FLASHING PROFILES AND NOTES, SEE DETAIL Z-70 AND Z-71




NOTE: LAP 2" ZEE-RIB INTO 3" ZEE-RIB (3" LAP)

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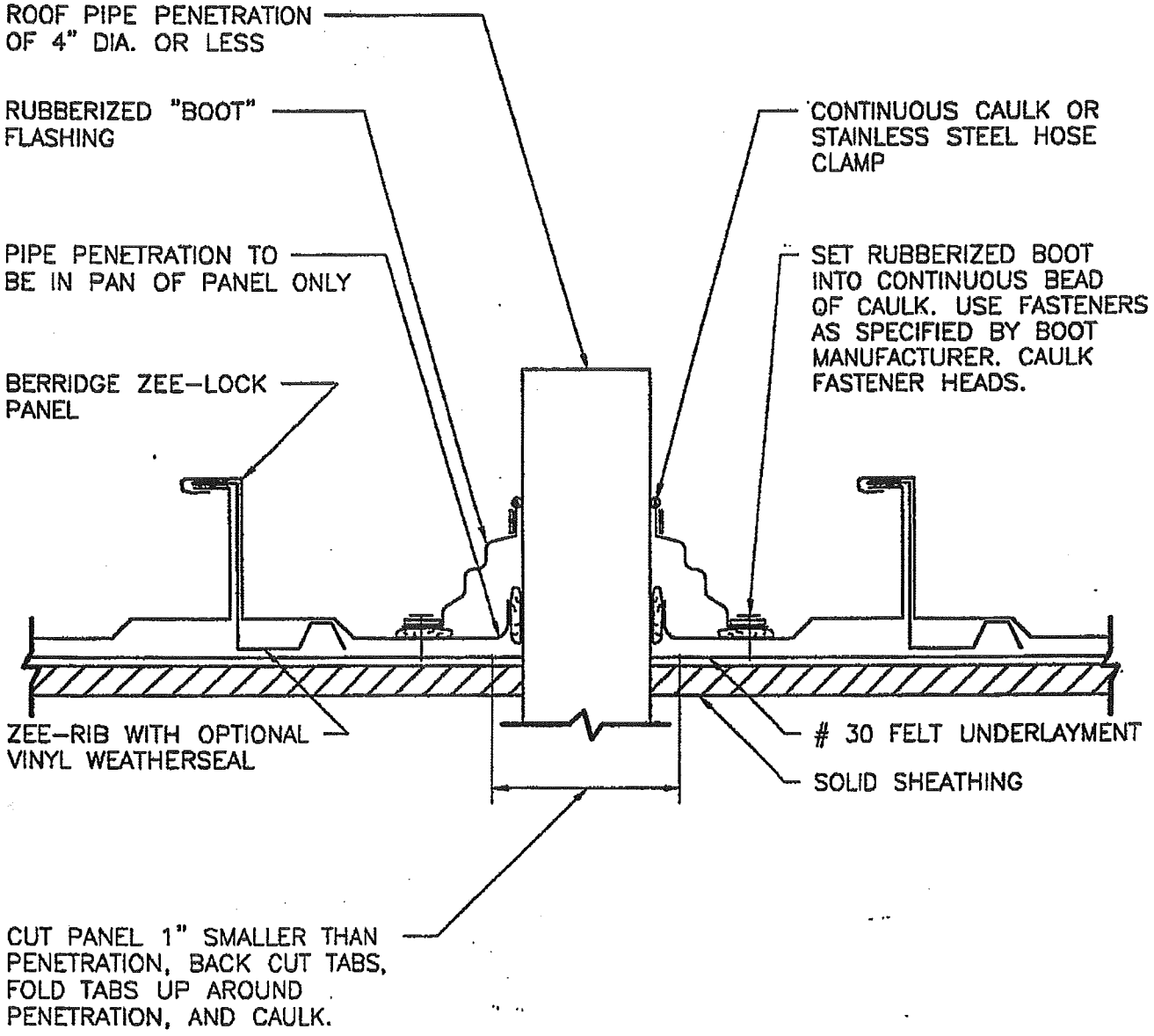
Z-73

VALLEY DETAIL
OPEN FRAMING; 3" ZEE-RIB WITH THERMAL BLOCKS AND VINYL FACED INSULATION

# ZEE-LOCK PANEL

BERRIDGE
Roofs of Distinction

Berridge Manufacturing Company




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.

Berridge Manufacturing Company

*Roofs of Distinction*

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

# ZEE-LOCK PANEL

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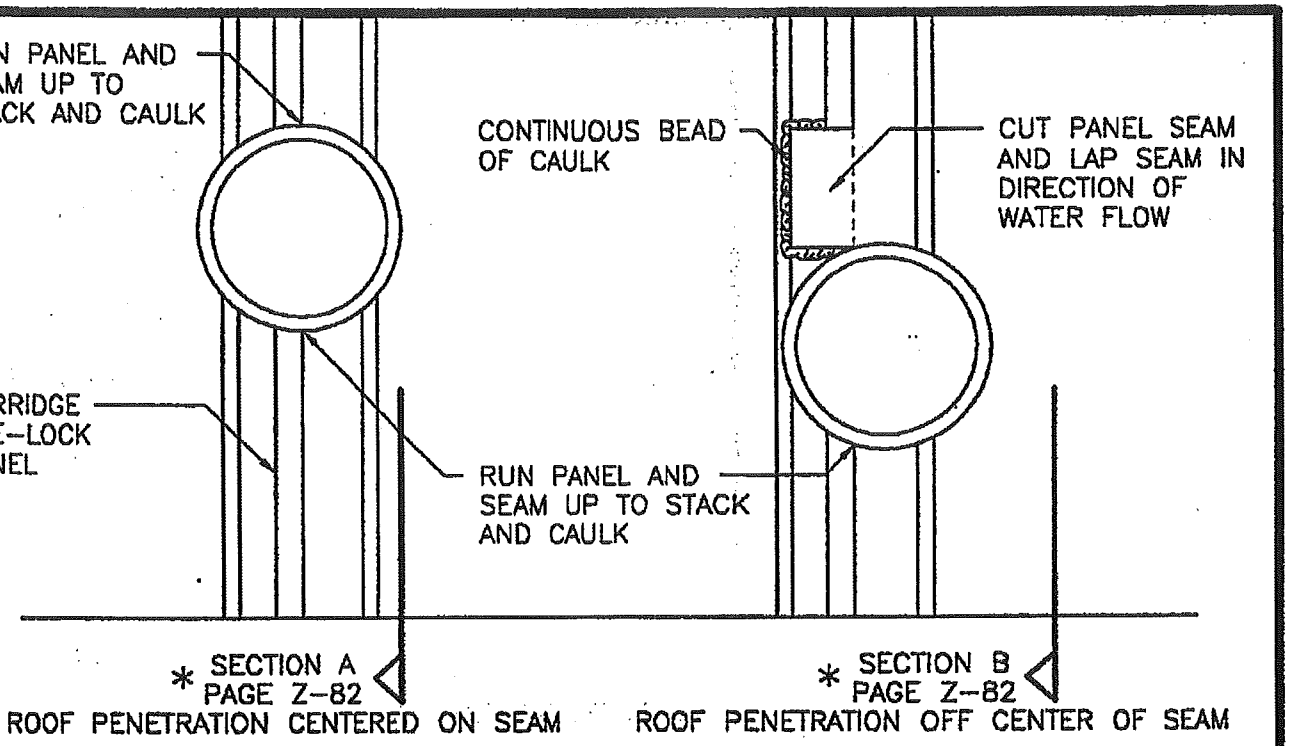
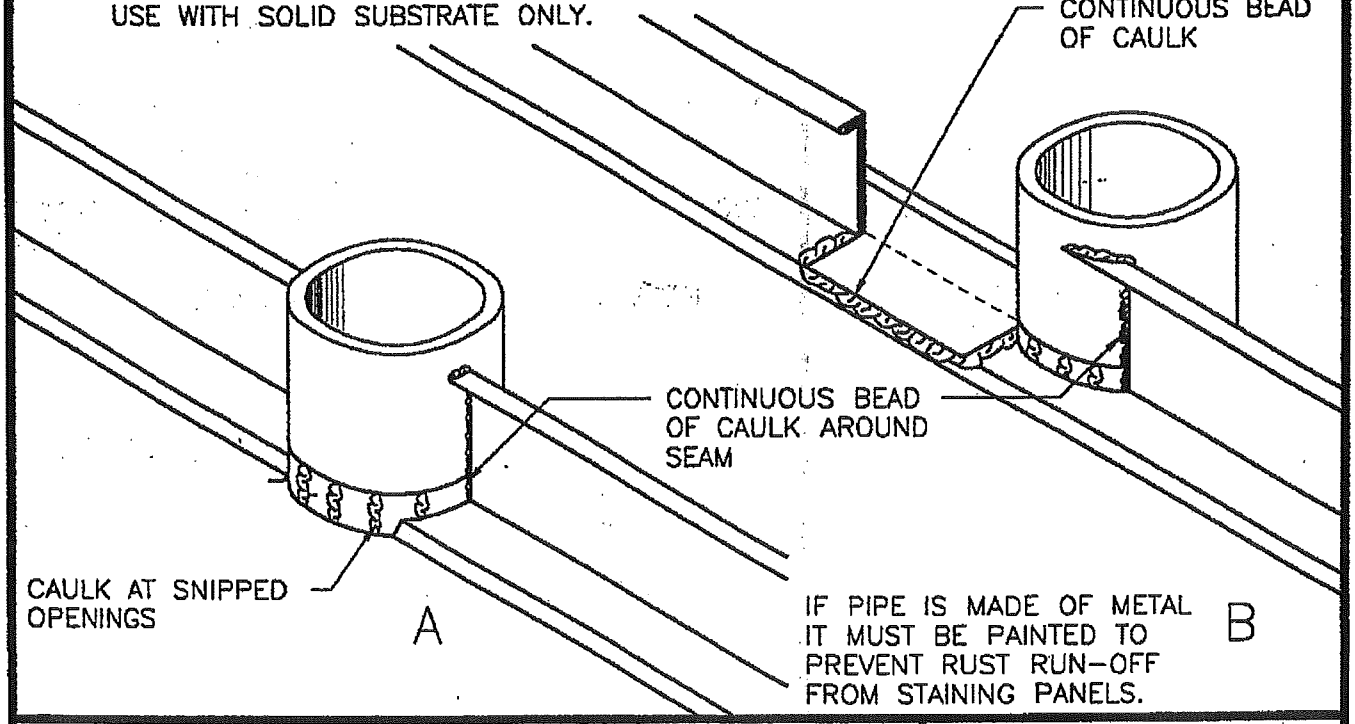
Z-80




*CALL BMC BEFORE USING THIS DETAIL

NOTE: CALL BMC BEFORE USING DETAILS ON THIS PAGE.
USE ONLY IF PENETRATION OCCURS ON SEAM OR WITHIN AREA OF PAN THAT WILL NOT ACCOMMODATE BOOT.
USE WITH SOLID SUBSTRATE ONLY.




DATE: 04-01-97

PIPE PENETRATION; ON PANEL SEAM
ISOMETRIC AND PLAN VIEW;
*CALL BMC BEFORE USING THIS DETAIL

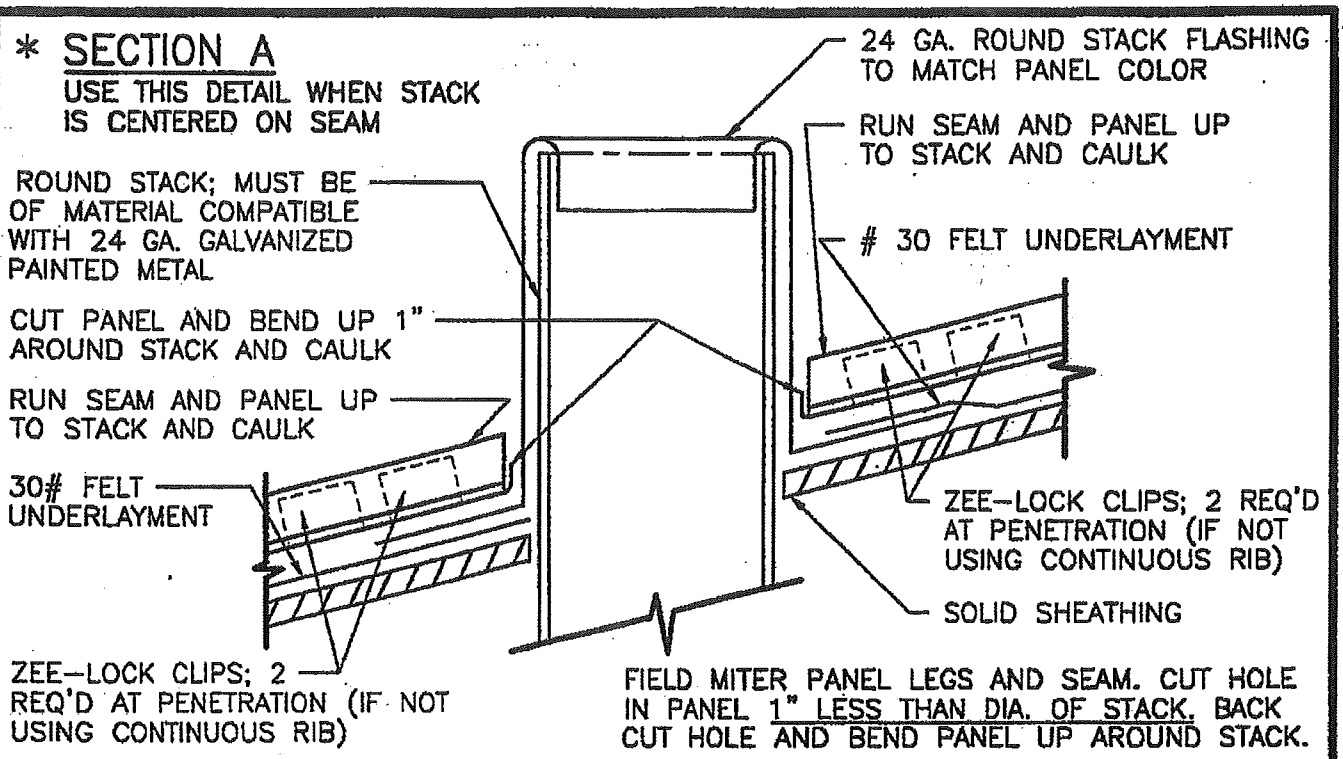
PAGE\FILE
Z-81

# ZEE-LOCK PANEL

Berridge Manufacturing Company
Roofs of Distinction

## * SECTION A

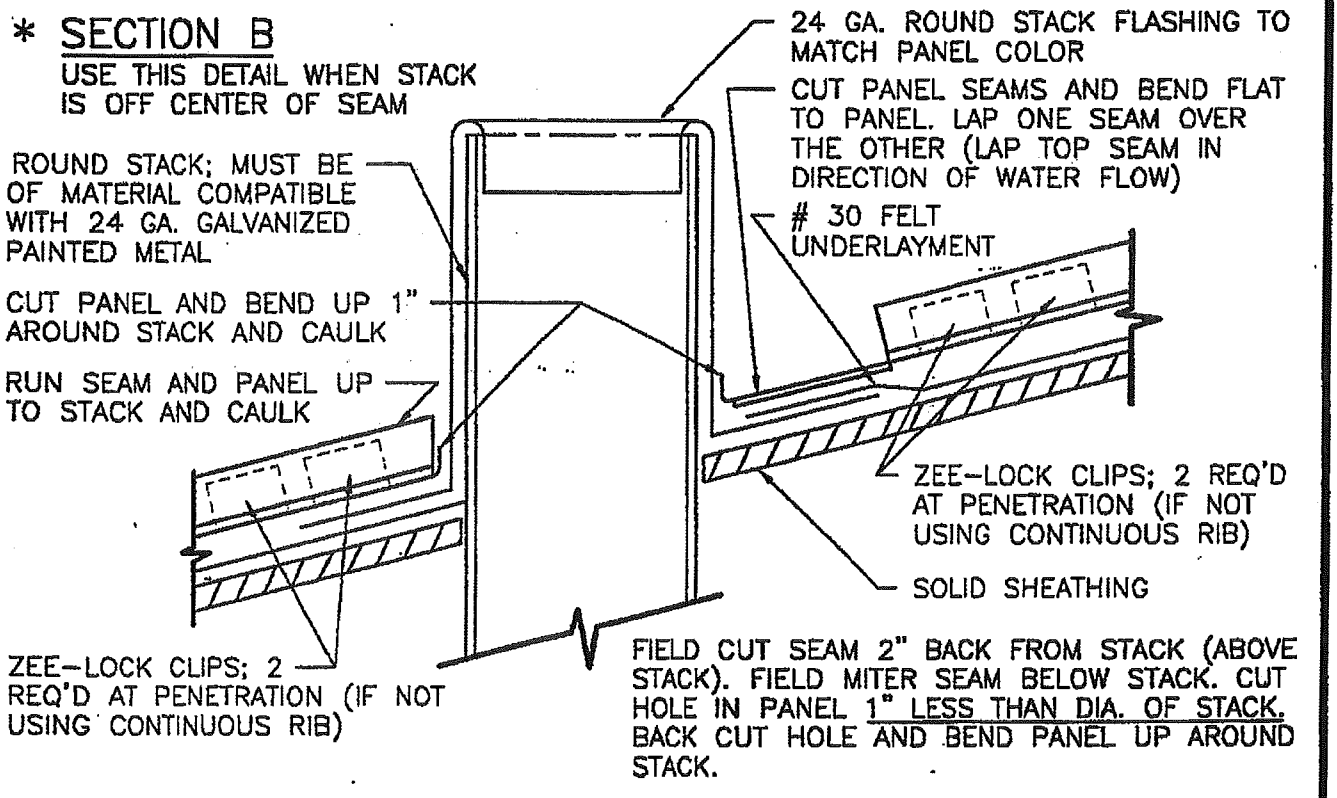
USE THIS DETAIL WHEN STACK IS CENTERED ON SEAM




*CALL BMC BEFORE USING THIS DETAIL

## * SECTION B

USE THIS DETAIL WHEN STACK IS OFF CENTER OF SEAM




Berridge Manufacturing Company

*Roofs of Distinction*

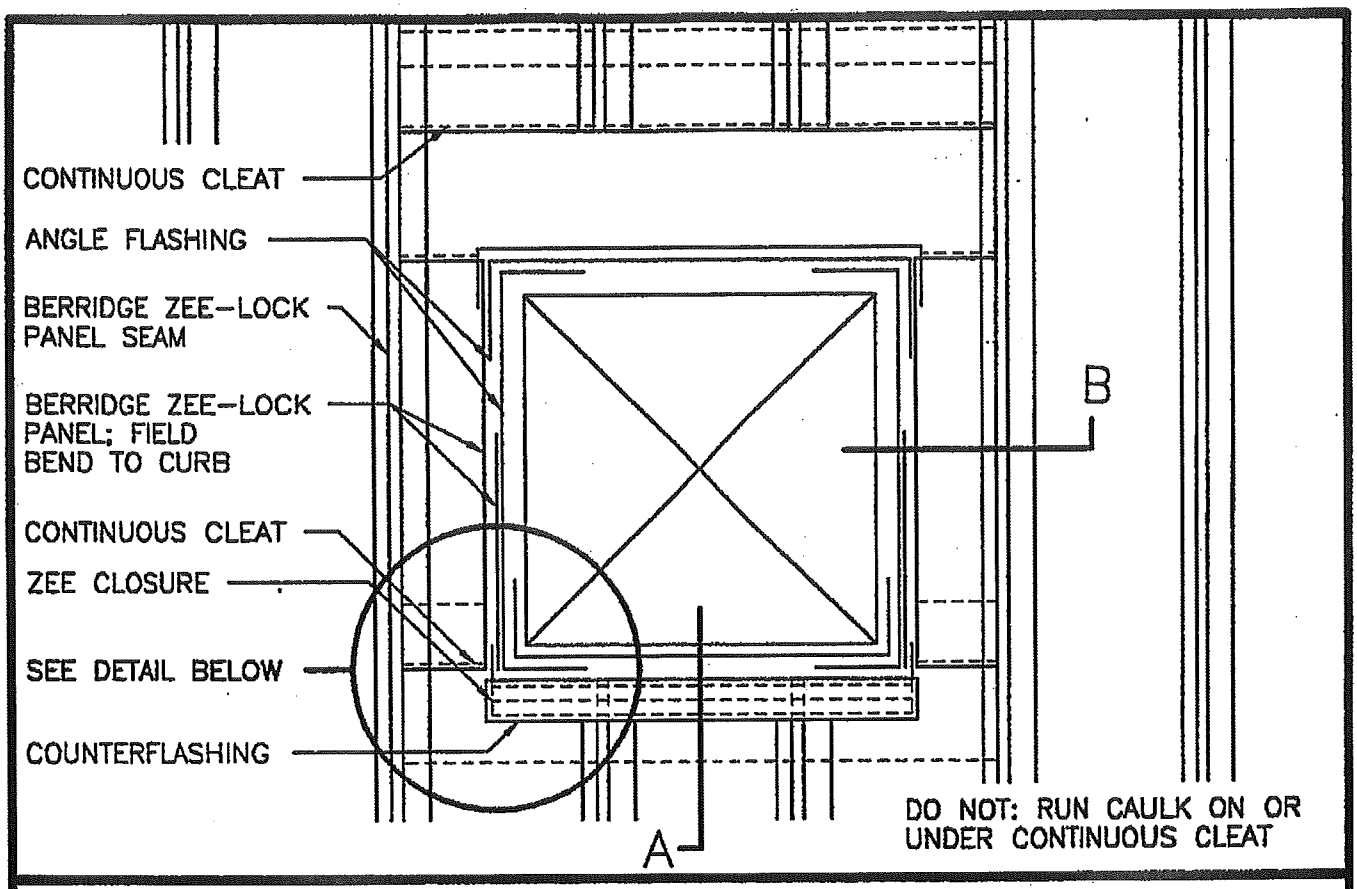
PIPE PENETRATION
ON PANEL SEAM; SECTIONS
*CALL BMC BEFORE USING THIS DETAIL

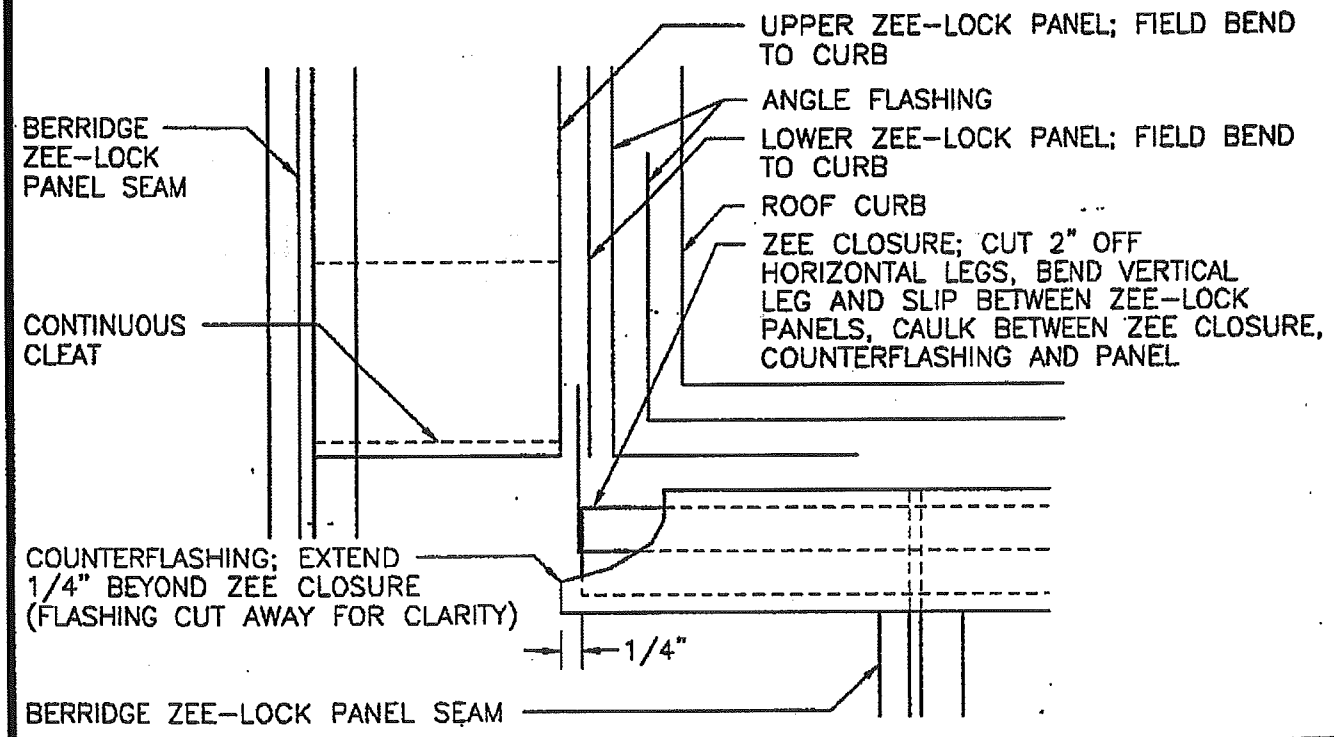
DATE: 04-01-97

PAGE\FILE

Z-82

# ZEE-LOCK PANEL



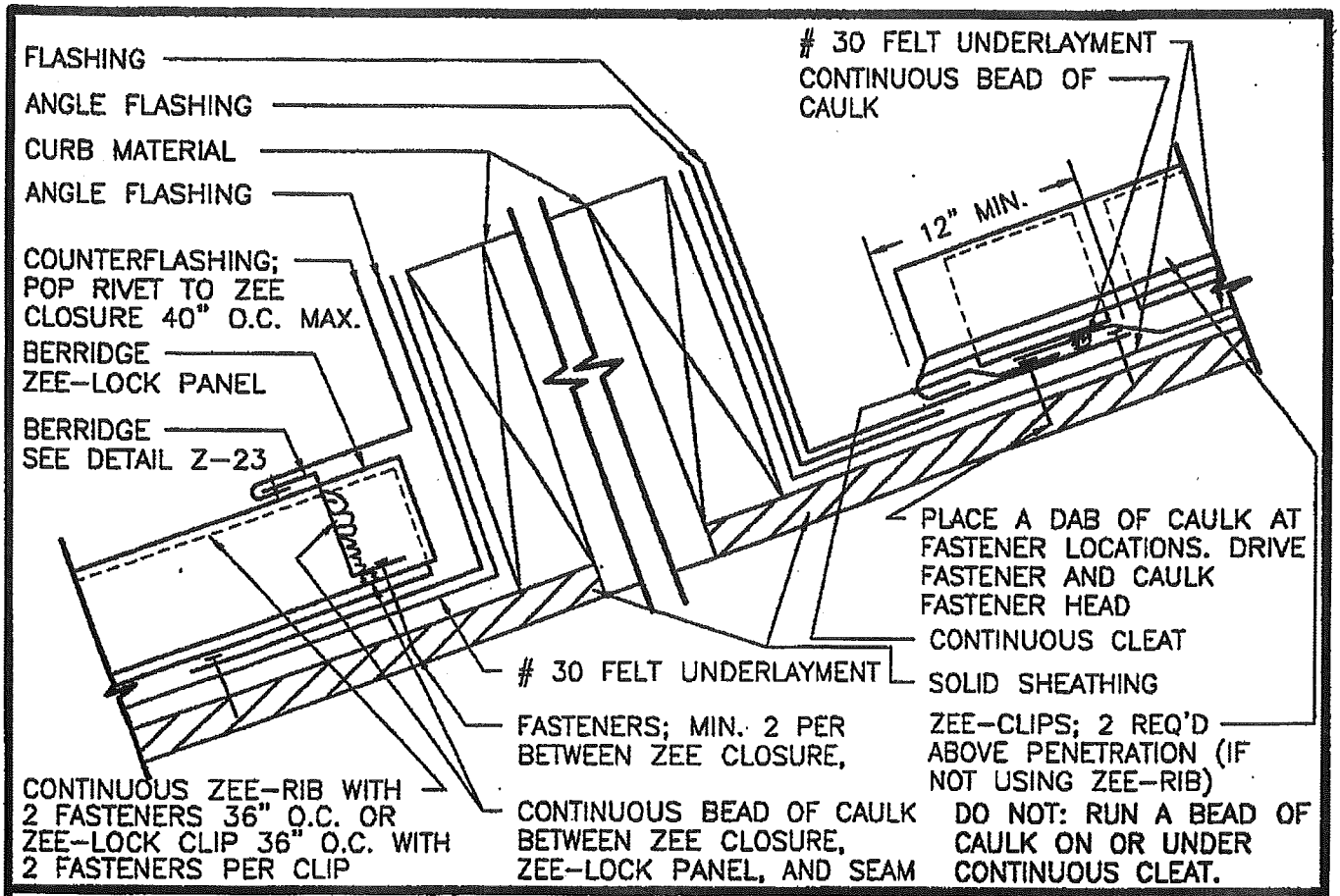

DATE: 04-01-97

PAGE\FILE
Z-83

SQUARE PENETRATION
PLAN, VIEW
OPEN FRAMING AND SOLID SUBSTRATE

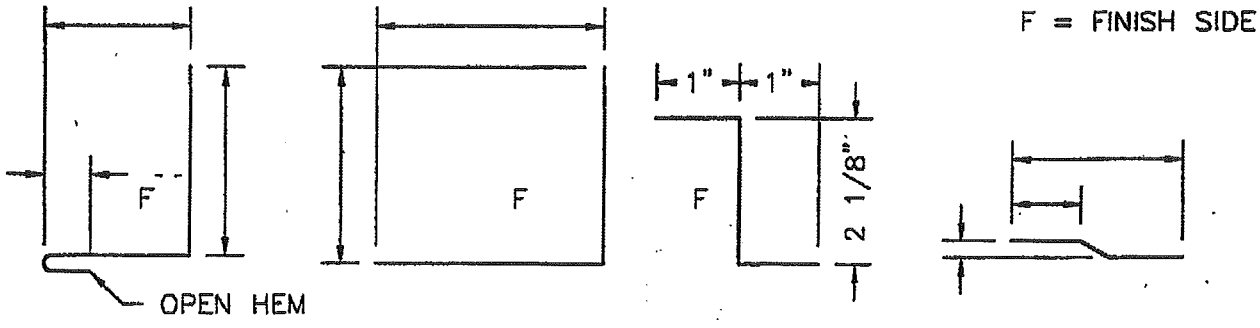
# ZEE-LOCK PANEL

Berridge Manufacturing Company
*Roofs of Distinction*




1. SOLID SHEATHING IS REQUIRED AT THIS CONDITION WHEN THE ZEE-LOCK PANEL IS USED OVER OPEN FRAMING (SEE DETAILS Z-87 AND Z-88).
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 FELT UNDERLAYMENT, CAULKING, AND FASTENERS, ARE ITEMS TO BE FURNISHED AND INSTALLED BY THE ROOFING INSTALLER AT THE DISCRETION OF THE ARCHITECT.

F = FINISH SIDE




COUNTERFLASHING | ANGLE FLASHING | ZEE CLOSURE | CONTINUOUS CLEAT

Berridge Manufacturing Company

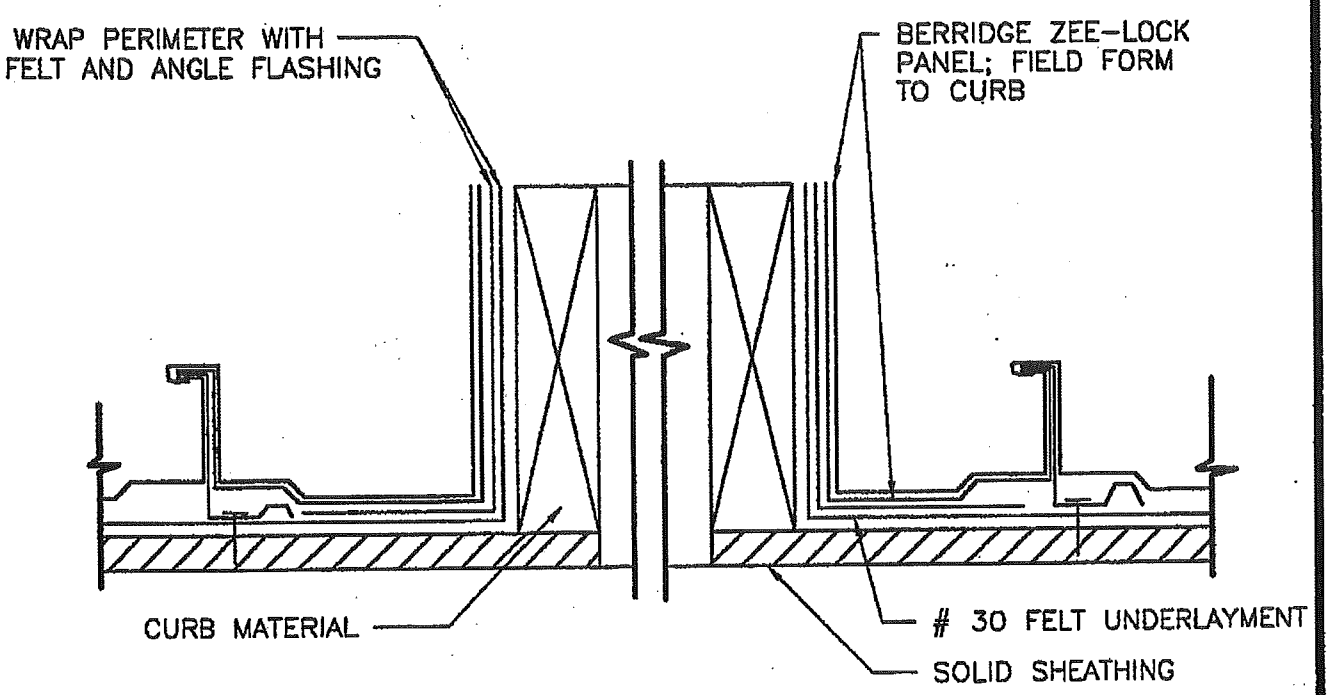
*Roofs of Distinction*

SQUARE PENETRATION
SECTION A
OPEN FRAMING AND SOLID SUBSTRATE

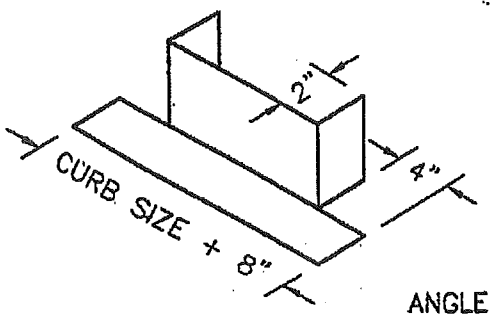
# ZEE-LOCK PANEL

DATE: 04-01-97

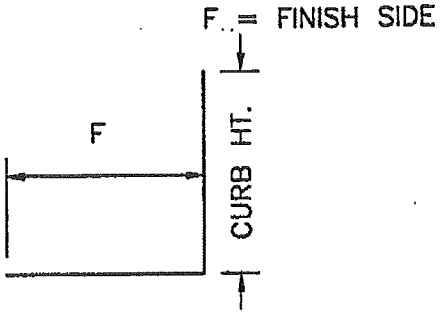
PAGE\FILE
Z-84



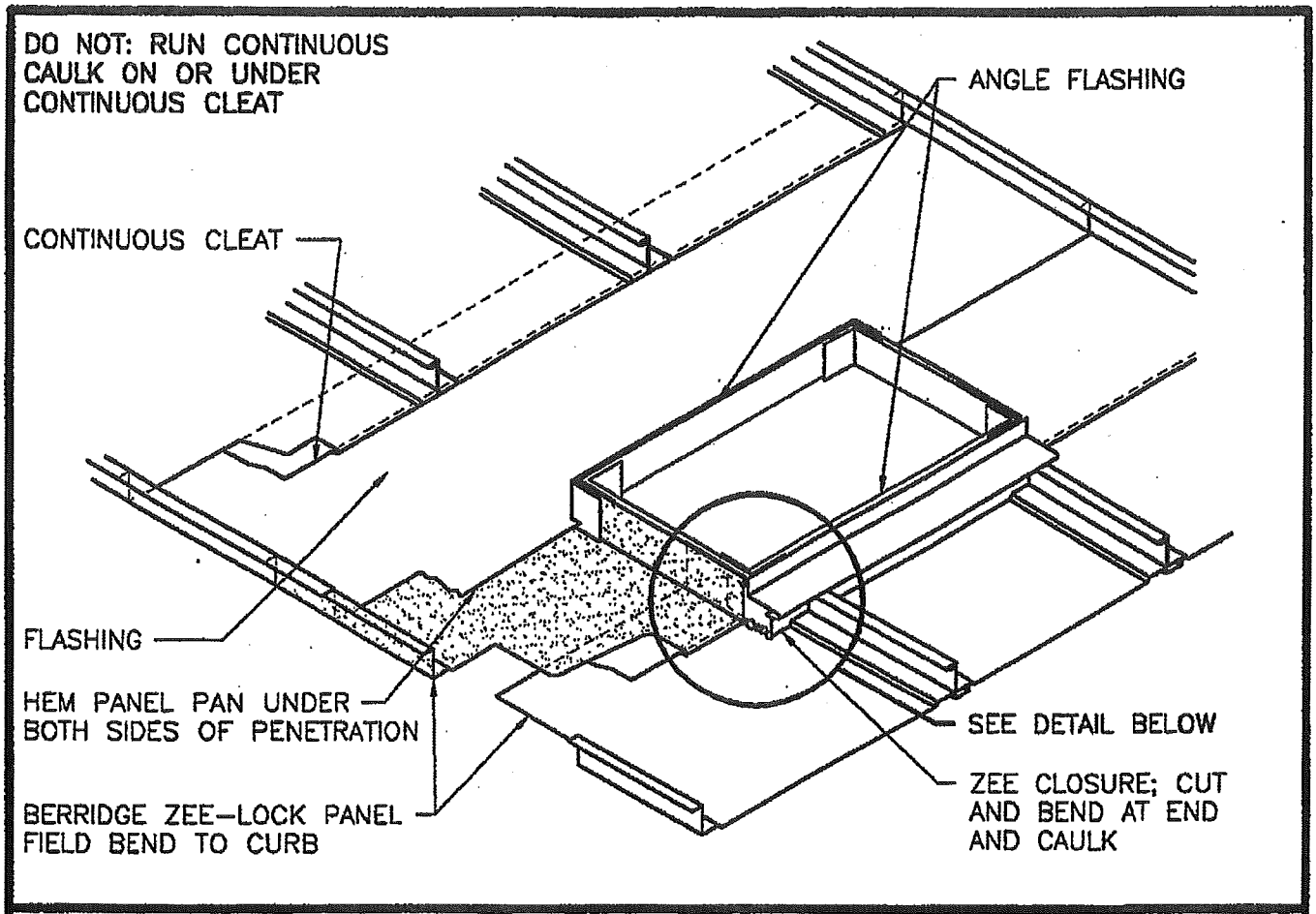

1. SOLID SHEATHING IS REQUIRED AT THIS CONDITION WHEN THE ZEE-LOCK PANEL IS USED OVER OPEN FRAMING (SEE DETAILS Z-87 AND Z-88).
2. SOLID SHEATHING (BY OTHERS) TO BE MINIMUM 1/2" PLYWOOD OR EQUIVALENT IN STRENGTH FOR HOLDING POWER OF FASTENERS. (METAL CORRUGATED SHEATHING, MIN. 24 GA. MAY BE USED IN LIEU OF PLYWOOD).
3. ALL FELT UNDERLAYMENT, CAULKING, AND FASTENERS, ARE ITEMS TO BE FURNISHED AND INSTALLED BY THE ROOFING INSTALLER AT THE DISCRETION OF THE ARCHITECT.

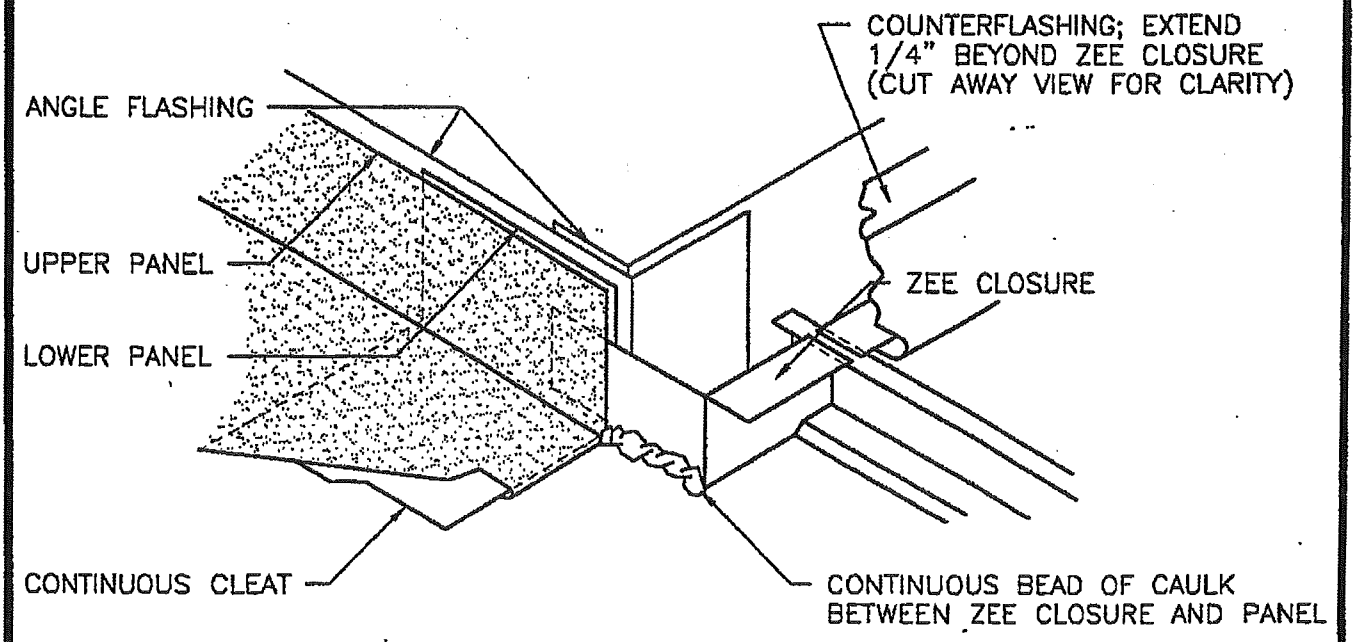



ANGLE FLASHING




| | | |
|---|---|---|
| DATE: 04-01-97 | SQUARE PENETRATION<br>SECTION B<br>OPEN FRAMING AND SOLID SUBSTRATE | Berridge Manufacturing Company<br>Roofs of Distinction |
| PAGE\FILE<br>Z-85 | ZEE-LOCK PANEL | |




Berridge Manufacturing Company

*Roofs of Distinction*

SQUARE PENETRATION
ISOMETRIC
OPEN FRAMING AND SOLID SUBSTRATE

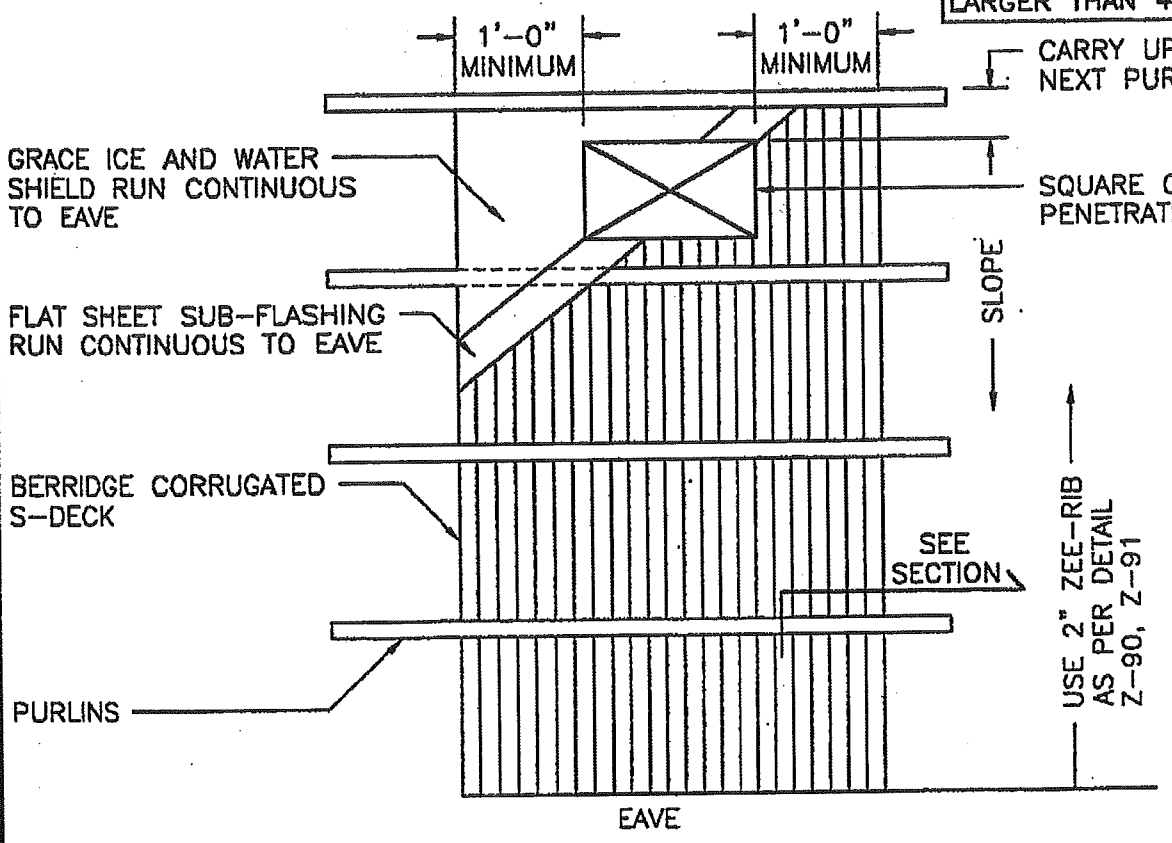
# ZEE-LOCK PANEL

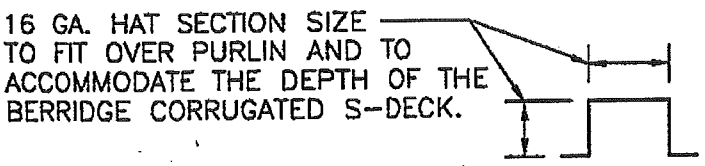
DATE: 04-01-97

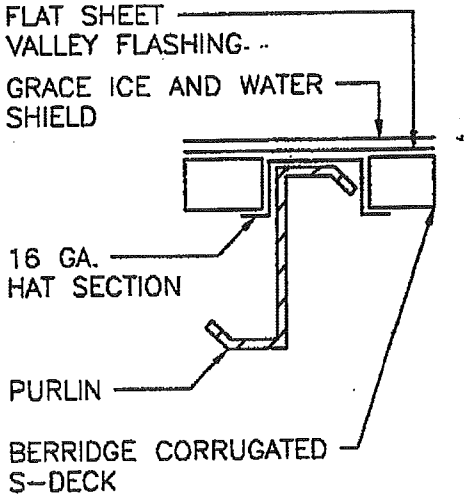
PAGE\FILE

Z-86

FOR ROOF PENETRATIONS LARGER THAN 4" IN DIA.




SECTION

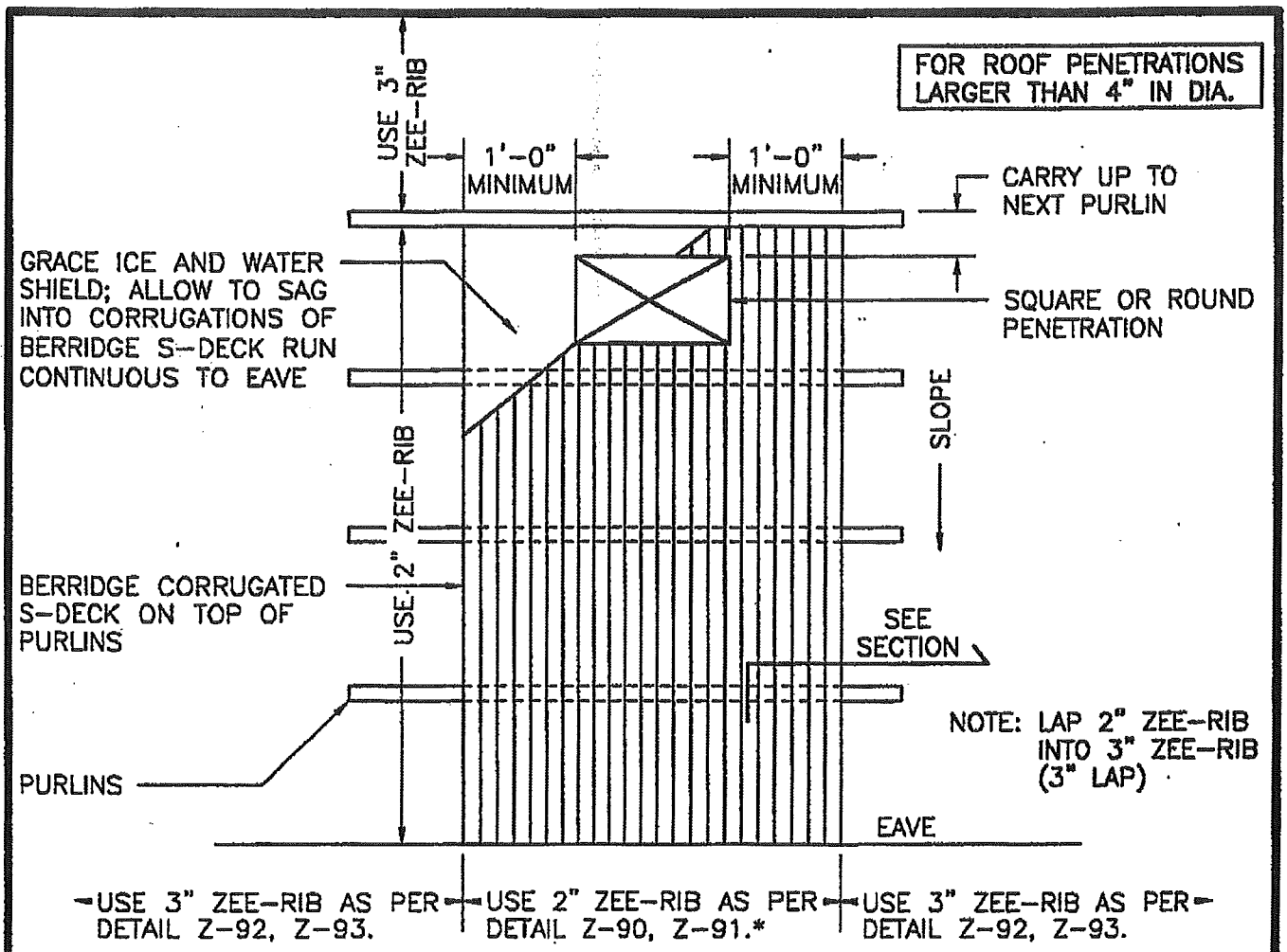
DATE: 04-01-97

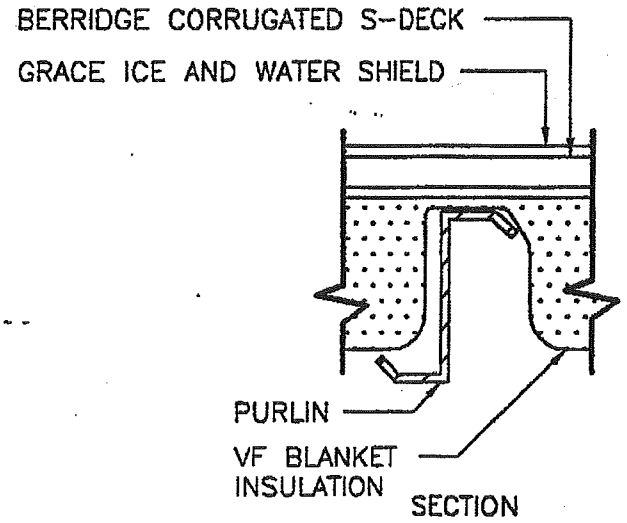
PENETRATION
LARGER THAN 4"; 2" ZEE-RIB
OPEN FRAMING

PAGE\FILE
Z-87

# ZEE-LOCK PANEL

Berridge Manufacturing Company
Roofs of Distinction




Berridge Manufacturing Company

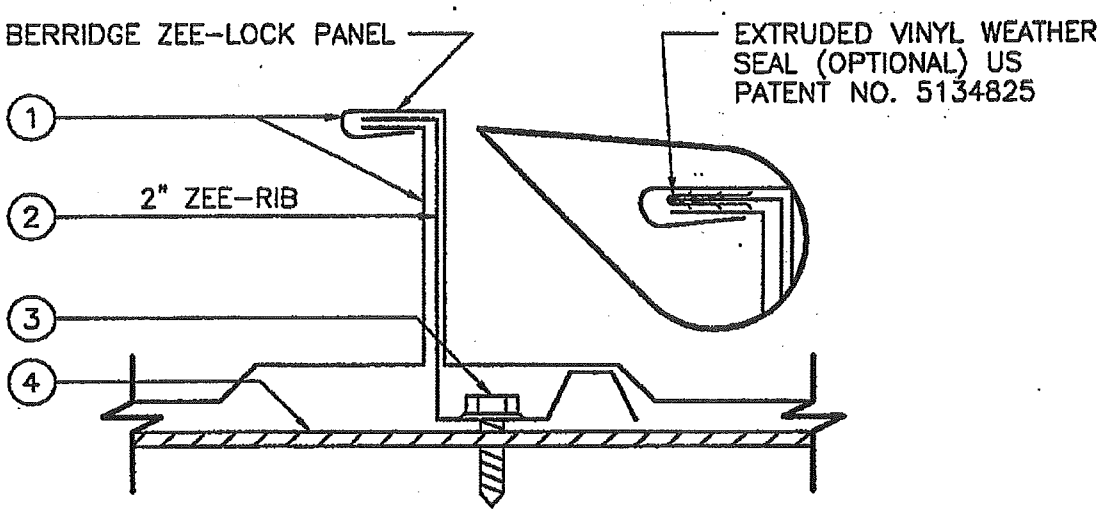
*Roofs of Distinction*

PENETRATION
LARGER THAN 4"; 3" ZEE-RIB WITH THERMAL BLOCKS AND VINYL FACED INSULATION

DATE: 04-01-97

# ZEE-LOCK PANEL

PAGE\FILE
Z-88




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 OPTIONAL EXTRUDED VINYL WEATHERSEAL (US PATENT NO. 5,134,825) MAY BE 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)

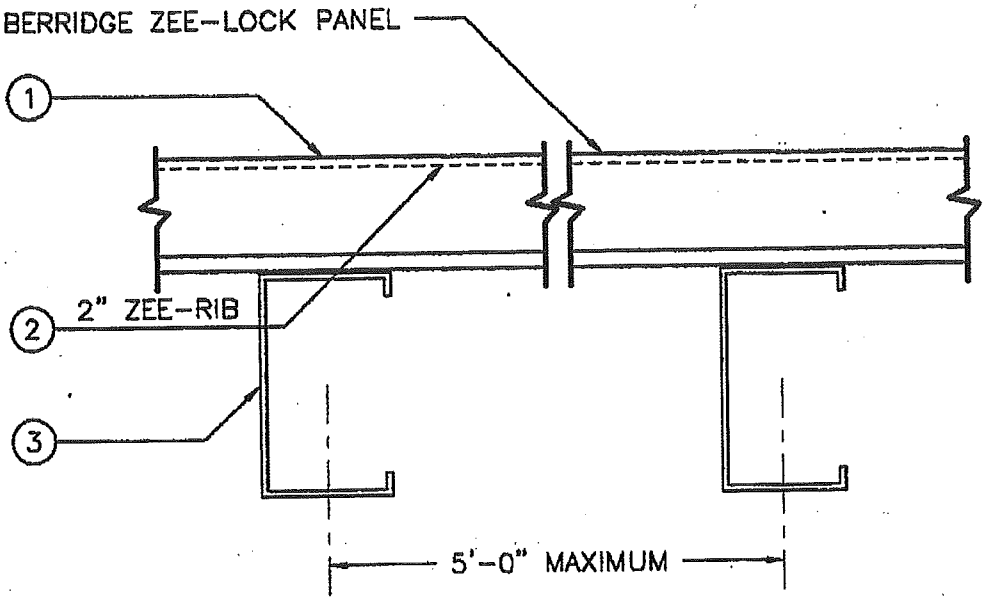
3. FASTENERS (SCREWS) – FOR ATTACHING "ZEE-CLIP RIB" (ITEM 2) TO PURLINS. USE NO. 12 x 1 IN. SELF-DRILLING, SELF-TAPPING STEEL SCREWS. TWO FASTENERS AT EACH PURLIN LOCATION.

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.

| | | |
|---|---|---|
| Berridge Manufacturing Company<br>*Roofs of Distinction* | UL 90 APPROVED ASSEMBLY<br>SEAM SECTIONS AND FASTENER SPECS<br>CONSTRUCTION NO. 312 | DATE: 04-01-97 |
| | **ZEE-LOCK PANEL** | PAGE\FILE<br>**Z-90** |



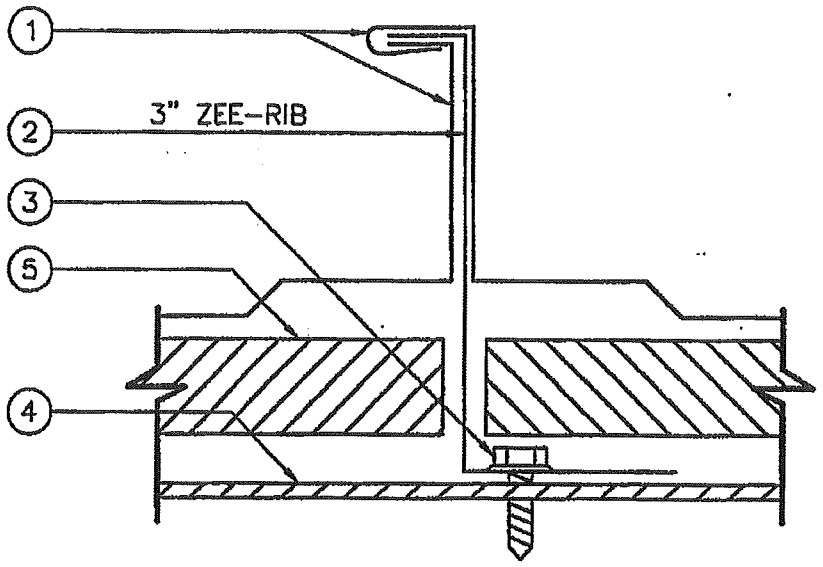

1. METAL ROOF DECK PANELS * – NO. 24 MSG MINIMUM THICKNESS COATED STEEL, 16 IN. WIDE, 2 IN. HIGH. PANELS CONTINUOUS OVER TWO OR MORE SPANS WITHOUT END LAPS. AN OPTIONAL EXTRUDED VINYL WEATHERSEAL (US PATENT NO. 5,134,825) MAY BE USED AT PANEL SIDE LAPS. ADJACENT PANELS ARE SEAMED TOGETHER ALONG SIDE 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.

| | | |
|---|---|---|
| DATE: 04-01-97 | UL 90 APPROVED ASSEMBLY<br>PURLING. SPACING<br>CONSTRUCTION NO. 312 | Berridge Manufacturing Company<br>Roofs of Distinction |
| PAGE\FILE<br>Z-91 | **ZEE-LOCK PANEL** | |




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 OPTIONAL EXTRUDED VINYL WEATHERSEAL (US PATENT NO. 5,134,825) MAY BE 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 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.

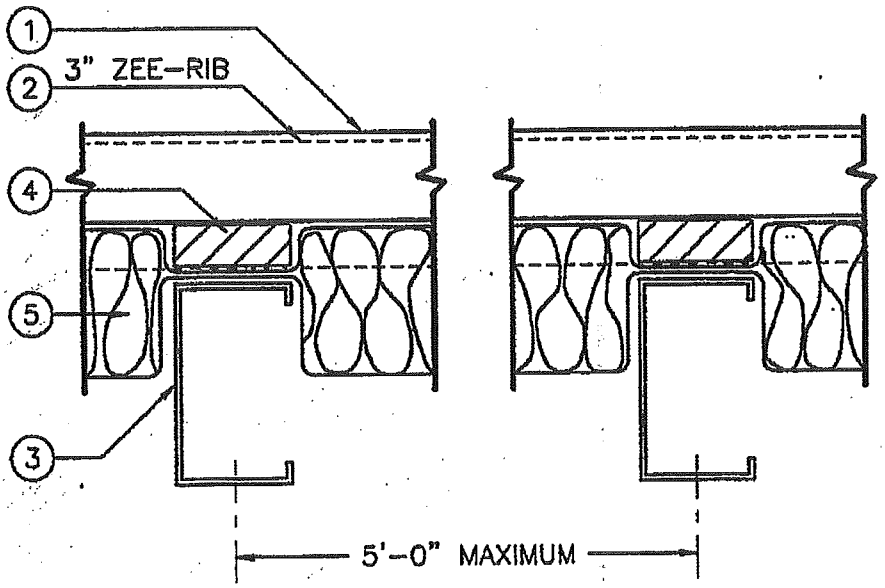
Berridge Manufacturing Company
*Roofs of Distinction*

UL 90 APPROVED ASSEMBLY
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

# ZEE-LOCK PANEL

DATE: 04-01-97

PAGE\FILE
Z-92




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 OPTIONAL EXTRUDED VINYL WEATHERSEAL (US PATENT NO. 5,134,825) MAY BE 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.

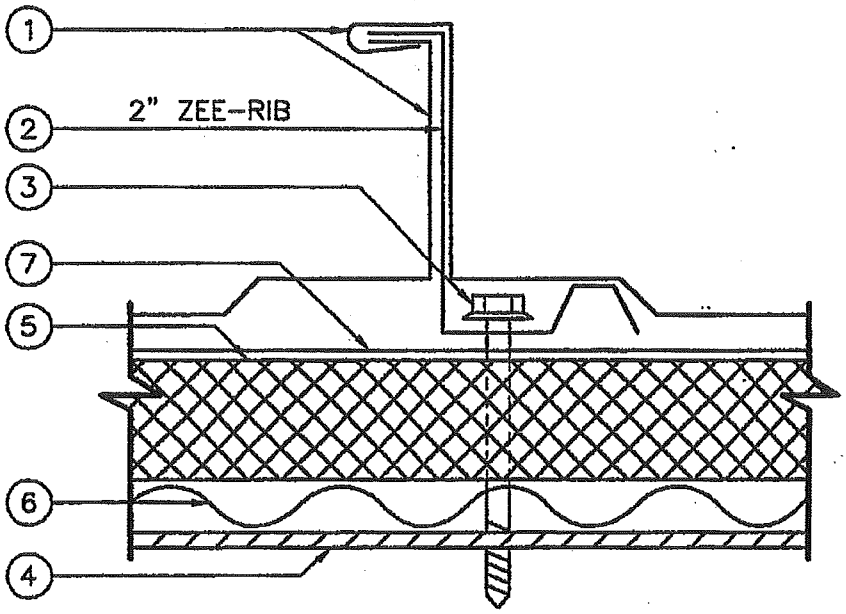
4. THERMAL BLOCK – 3" BY 16" BY 1" EXTRUDED POLYSTYRENE. (OPTIONAL)

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.

| | | |
|---|---|---|
| DATE: 04–01–97 | UL 90 APPROVED ASSEMBLY<br>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.<br>UL CONSTRUCTION NUMBER 312 | Berridge Manufacturing Company<br>*Roofs of Distinction* |
| PAGE\FILE<br>Z–93 | **ZEE–LOCK PANEL** | |




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 OPTIONAL EXTRUDED VINYL WEATHERSEAL (US PATENT NO. 5,134,825) MAY BE 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) (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.

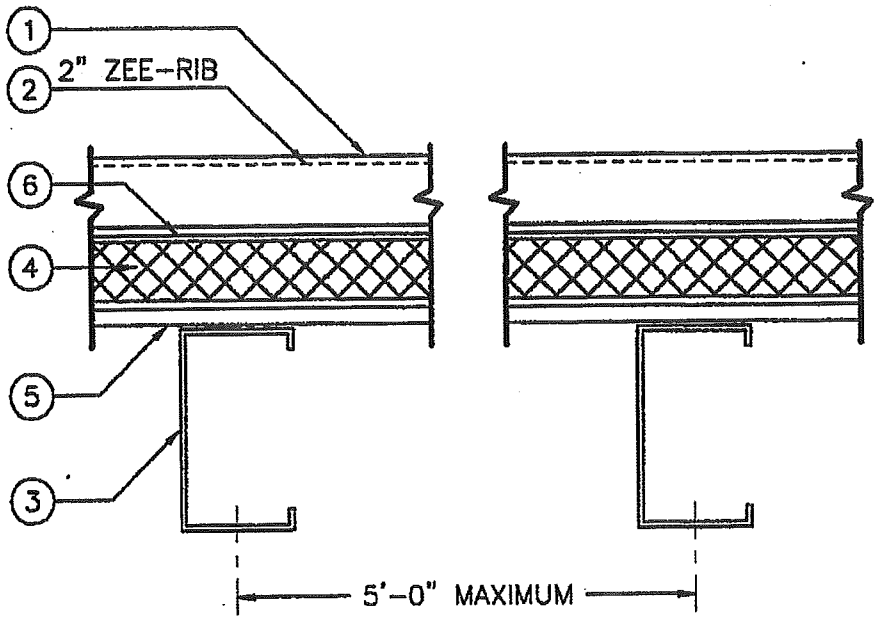
6. BERRIDGE S-DECK METAL STRUCTURAL SHEATHING – NO. 24 MSG STEEL (MIN. YIELD STRENGTH 40,000 PSI), CORRUGATED DECK.

7. # 30 FELT UNDERLAYMENT.

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 Berridge Manufacturing Company *Roofs of Distinction* | UL 90 APPROVED ASSEMBLY<br>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.<br>UL CONSTRUCTION NUMBER 335 | DATE: 04-01-97 |
| | **ZEE-LOCK PANEL** | PAGE\FILE<br>Z-94 |




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 OPTIONAL EXTRUDED VINYL WEATHERSEAL (US PATENT NO. 5,134,825) MAY BE 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) (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.

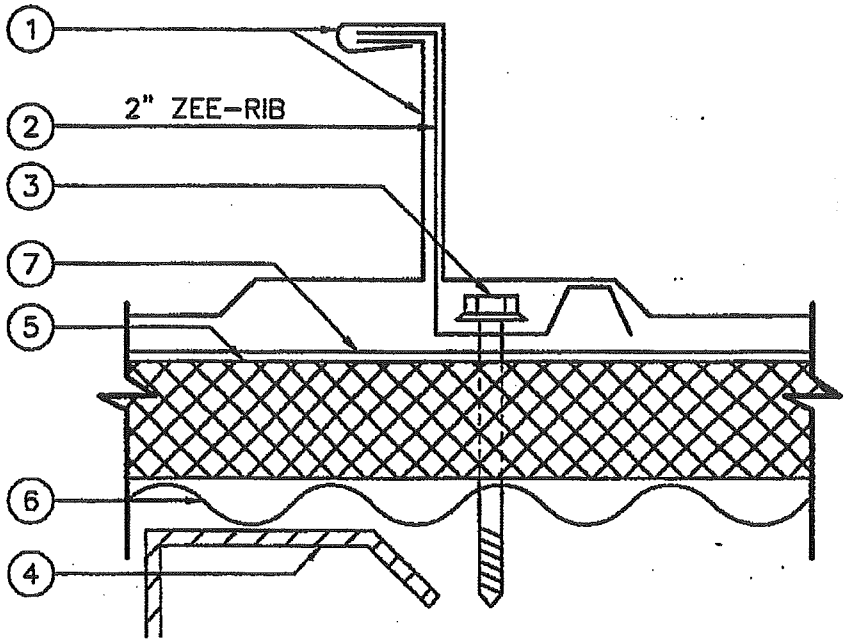
5. BERRIDGE S-DECK METAL STRUCTURAL SHEATHING – NO. 24 MSG STEEL (MIN. YIELD STRENGTH 40,000 PSI), CORRUGATED DECK.

6. # 30 FELT UNDERLAYMENT.

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: 04-01-97 | UL 90 APPROVED ASSEMBLY<br>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.<br>UL CONSTRUCTION NUMBER 335 | BERRIDGE<br>Berridge Manufacturing Company<br>*Roofs of Distinction* |
| PAGE\FILE<br>Z-95 | **ZEE-LOCK PANEL** | |




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 OPTIONAL EXTRUDED VINYL WEATHERSEAL (US PATENT NO. 5,134,825) MAY BE 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) (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.

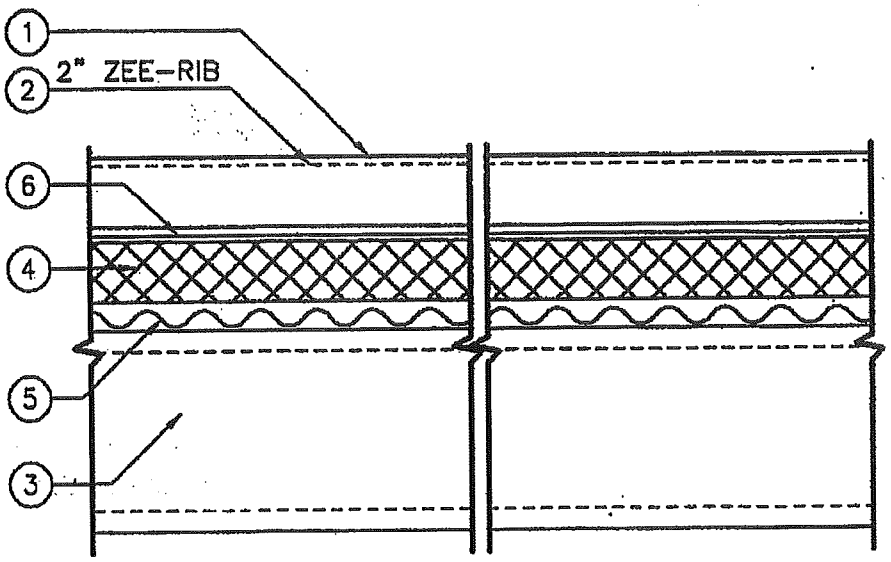
6. BERRIDGE S-DECK METAL STRUCTURAL SHEATHING – NO. 24 MSG STEEL (MIN. YIELD STRENGTH 40,000 PSI), CORRUGATED DECK.

7. # 30 FELT UNDERLAYMENT.

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<br>*Roofs of Distinction* | UL 90 APPROVED ASSEMBLY<br>ZEE-LOCK PANEL WITH CONTINUOUS ZEE-RIB AND 4" RIGID INSULATION BOARD OVER BERRIDGE 22 GA. CORRUGATED S-DECK, AND 16 GA. PURLINS @ 5'-0" O.C. MAX.<br>MODIFICATION OF UL CONSTRUCTION NUMBER 335 | DATE: 04-01-97 |
| | **ZEE-LOCK PANEL** | PAGE\FILE<br>**Z-96** |




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 OPTIONAL EXTRUDED VINYL WEATHERSEAL (US PATENT NO. 5,134,825) MAY BE 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) (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.

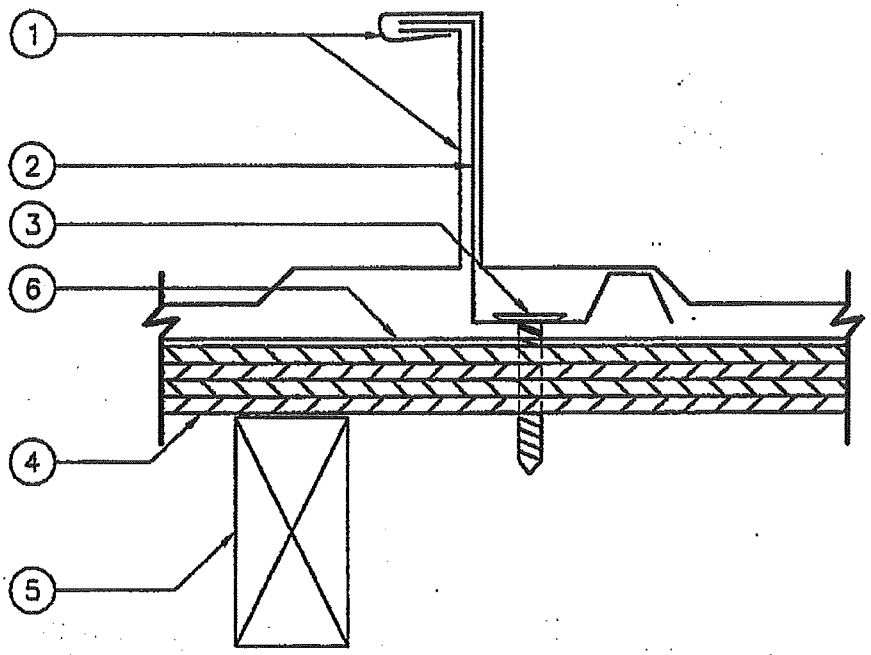
5. BERRIDGE S-DECK METAL STRUCTURAL SHEATHING – NO. 24 MSG STEEL (MIN. YIELD STRENGTH 40,000 PSI), CORRUGATED DECK.

6. # 30 FELT UNDERLAYMENT.

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: 04-01-97 | UL 90 APPROVED ASSEMBLY<br>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.<br>MODIFICATION OF UL CONSTRUCTION NUMBER 335 | BERRIDGE<br>Berridge Manufacturing Company<br>*Roofs of Distinction* |
| PAGE\FILE<br>Z-97 | # ZEE-LOCK PANEL | |




1. METAL ROOF DECK PANELS * – NO. 24 MSG MINIMUM THICKNESS COATED STEEL, (MIN. YIELD STRENGTH 40,000 PSI) 16" WIDE, 2" HIGH, WITH A NON–STRUCTURAL OPTIONAL VINYL WEATHERSEAL (US PATENT NO. 5,134,825) AT PANEL SEAMS. 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 (MIN. YIELD STRENGTH 40,000 PSI). "ZEE–CLIP" LOCATED AT EACH PANEL SIDE LAP BEING PLACED AT 3'–0" O.C. MAXIMUM.
   BERRIDGE MANUFACTURING CO. – "ZEE–CLIP"

3. FASTENERS (SCREWS) – FOR ATTACHING "ZEE–CLIP" (ITEM 2) TO 5/8" PLYWOOD USE NO. 10 PANCAKE HEAD SELF–TAPPING SCREWS, TWO FASTENERS PER "ZEE–CLIP".

4. DECK – 5/8" APA 40/20 PLYWOOD.

5. JOIST – 2" x 4" AT 2'–0" O.C. MAXIMUM WITH #12 x 2" PAN HEAD WOOD SCREW AT 12" O.C. MAX. AT PLYWOOD TO JOIST CONNECTION AND AT PLYWOOD ENDS.

6. # 30 FELT UNDERLAYMENT.

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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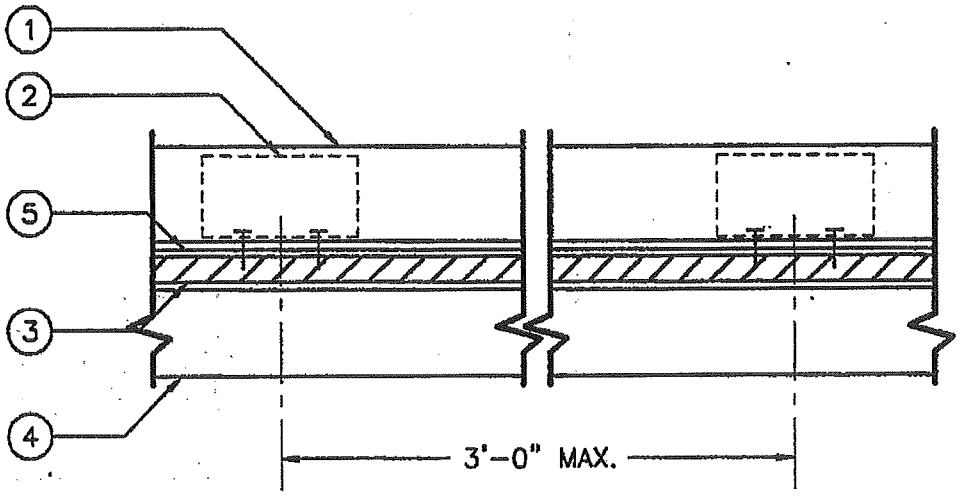
|---|---|---|
| Berridge Manufacturing Company<br>*Roofs of Distinction* | UL 90 APPROVED ASSEMBLY<br>PLYWOOD DECK; SEAM SECTION<br>UL CONSTRUCTION NO. 403 | DATE: 05–01–97 |
| | **ZEE–LOCK PANEL** | PAGE\FILE<br>**Z–98** |




1. METAL ROOF DECK PANELS * – NO. 24 MSG MINIMUM THICKNESS COATED STEEL, (MIN. YIELD STRENGTH 40,000 PSI) 16" WIDE, 2" HIGH, WITH A NON-STRUCTURAL OPTIONAL VINYL WEATHERSEAL (US PATENT NO. 5,134,825) AT PANEL SEAMS. 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 (MIN. YIELD STRENGTH 40,000 PSI). "ZEE-CLIP" LOCATED AT EACH PANEL SIDE LAP WITH CLIPS BEING PLACED AT 3'-0" O.C. MAXIMUM.
   BERRIDGE MANUFACTURING CO. – "ZEE-CLIP"

3. DECK – 5/8" APA 40/20 PLYWOOD.

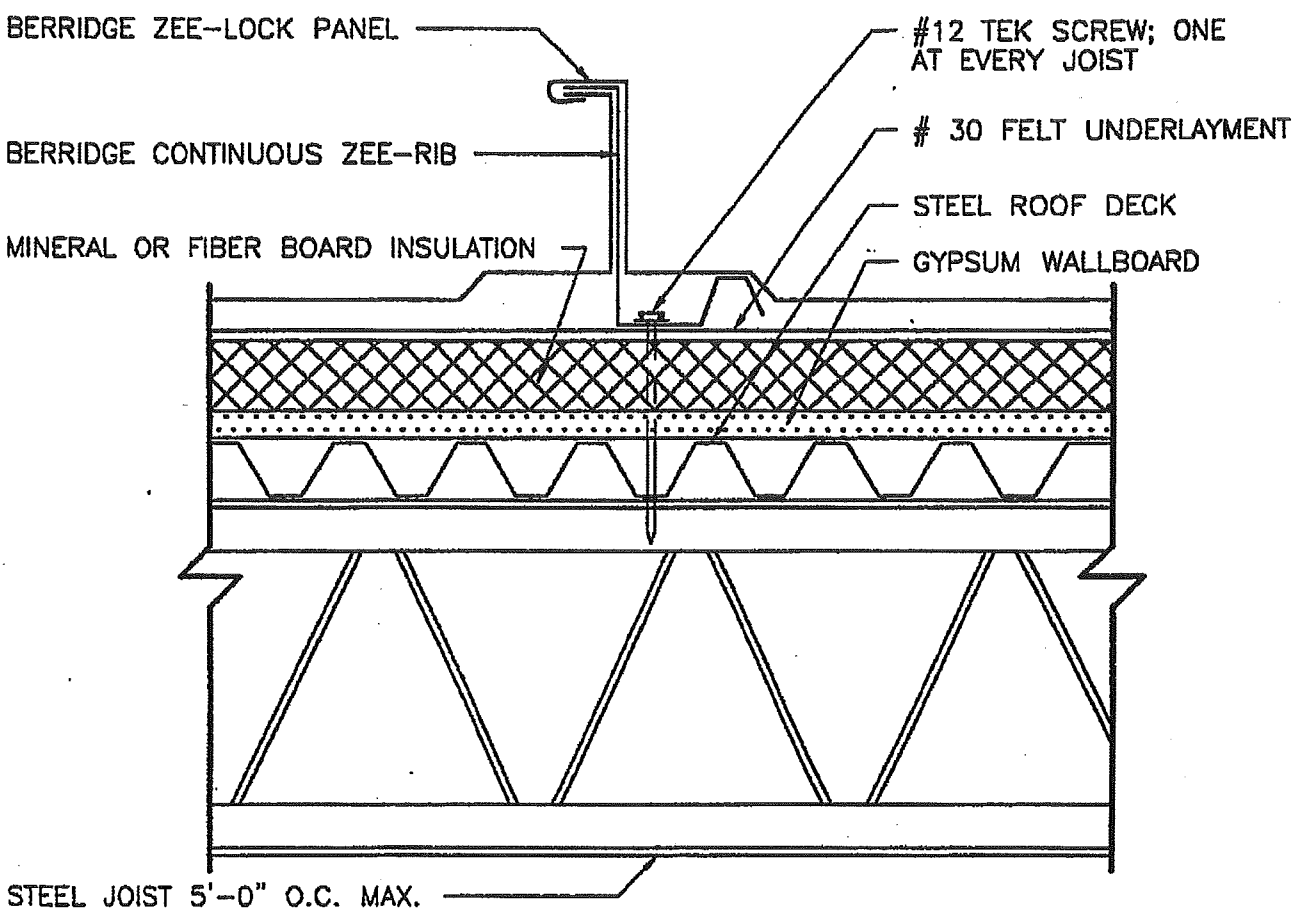
4. JOIST – 2" x 4" AT 2'-0" O.C. MAXIMUM WITH #12 x 2" PAN HEAD WOOD SCREW AT 12" O.C. MAX. AT PLYWOOD TO JOIST CONNECTION AND AT PLYWOOD ENDS.

5. # 30 FELT UNDERLAYMENT.

6. LATERAL BRACING – (NOT SHOWN) REFER TO "GENERAL INFORMATION, ROOF DECK CONSTRUCTION" (BUILDING MATERIAL DIRECTORY) FOR ITEMS NOT EVALUATED.

* BEARING THE UL CLASSIFICATION MARKING.

| | | |
|---|---|---|
| DATE: 04-01-97 | UL 90 APPROVED ASSEMBLY<br>PLYWOOD DECK; CLIP SPACING<br>UL CONSTRUCTION NO. 403 | Berridge Manufacturing Company<br>Roofs of Distinction |
| PAGE\FILE<br>Z-99 | **ZEE-LOCK PANEL** | |




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.

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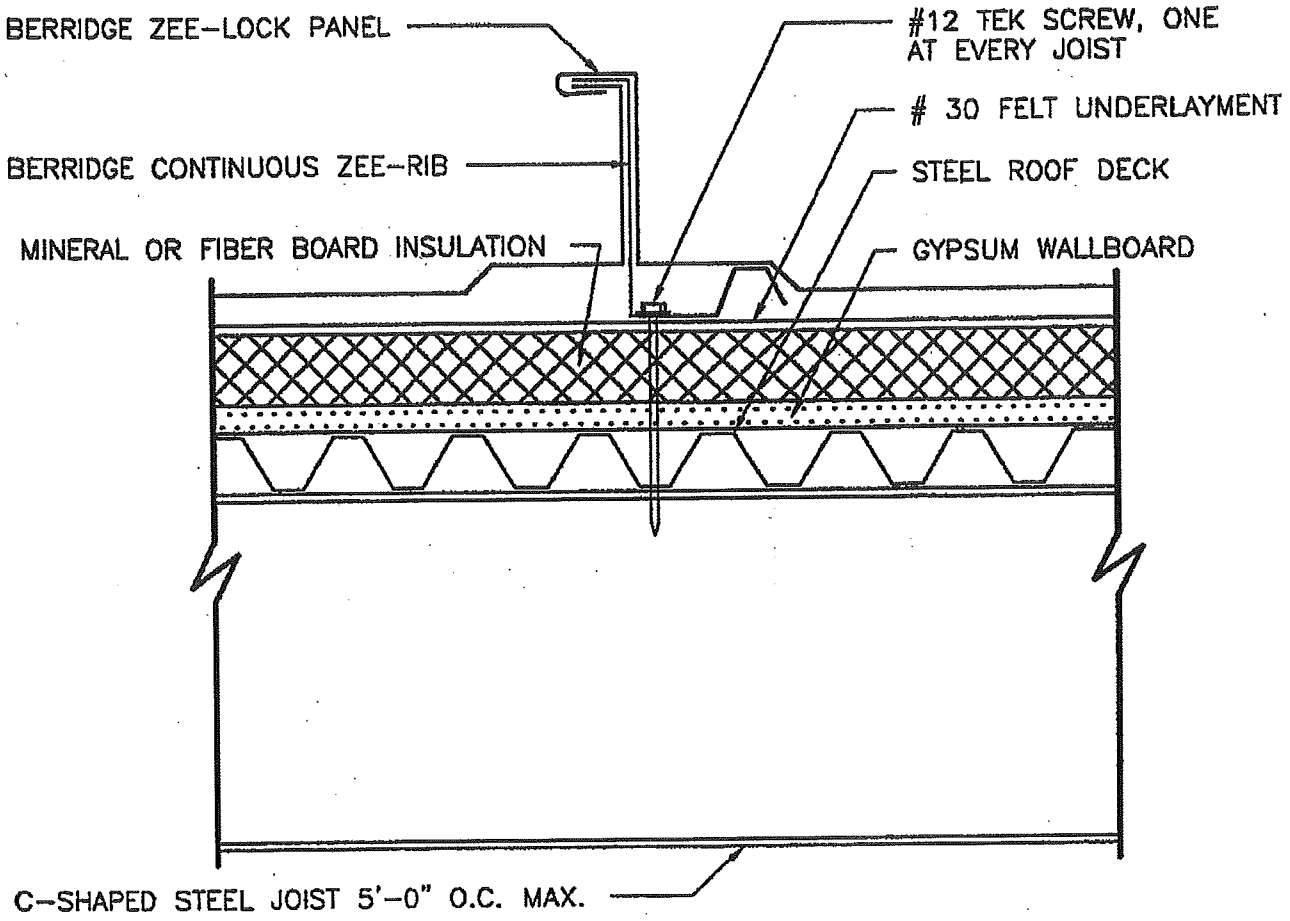
|---|---|---|
| Berridge Manufacturing Company<br>*Roofs of Distinction* | UL FIRE RESISTANCE<br>ROOF ASSEMBLY<br>OPEN WEB STEEL JOIST | DATE: 04-01-97 |
| | **ZEE-LOCK PANEL** | PAGE\FILE<br>Z-100 |




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.

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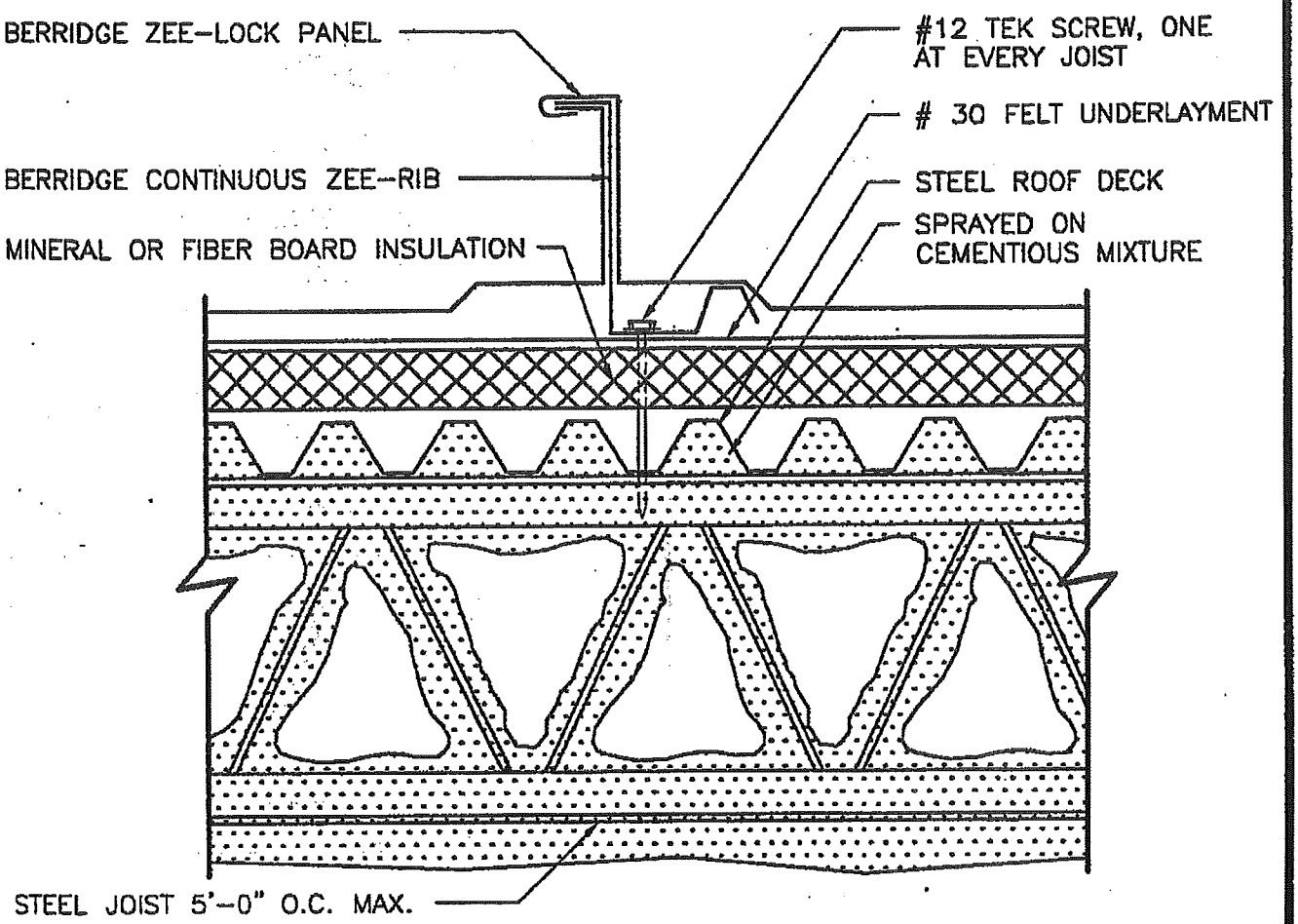
|---|---|---|
| DATE: 04-01-97 | UL FIRE RESISTANCE ROOF ASSEMBLY; C-SHAPED STEEL JOIST | Berridge Manufacturing Company<br>Roofs of Distinction |
| PAGE\FILE<br>Z-101 | ZEE-LOCK PANEL | |




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.

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|---|---|---|
| BERRIDGE Berridge Manufacturing Company *Roofs of Distinction* | UL 90 FIRE RESISTANCE ROOF ASSEMBLY OPEN WEB STEEL JOIST WITH CEMENTIOUS THERMAL BARRIER | DATE: 04-01-97 |
| | **ZEE-LOCK PANEL** | PAGE\FILE Z-102 |