DEEP-DECK PANEL INSTALLATION DETAILS
<table>
<thead>
<tr>
<th>INDEX</th>
<th>DD-0</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDEX</td>
<td>DD-1</td>
</tr>
<tr>
<td>INSTALLATION INSTRUCTIONS</td>
<td>DD-I-1</td>
</tr>
<tr>
<td>INSTALLATION INSTRUCTIONS</td>
<td>DD-I-2</td>
</tr>
<tr>
<td>INSTALLATION INSTRUCTIONS</td>
<td>DD-I-3</td>
</tr>
<tr>
<td>INSTALLATION INSTRUCTIONS</td>
<td>DD-I-4</td>
</tr>
<tr>
<td>INTRODUCTION TO TYPICAL DETAILS</td>
<td>DD-2</td>
</tr>
<tr>
<td>OVERVIEW DD PANEL</td>
<td>DD-3</td>
</tr>
<tr>
<td>FASTENER LOCATIONS</td>
<td>DD-4</td>
</tr>
<tr>
<td>FOAM CLOSURE DETAILS</td>
<td>DD-5</td>
</tr>
<tr>
<td>EAVE DETAIL; SOLID SHEATHING</td>
<td>DD-10</td>
</tr>
<tr>
<td>EAVE DETAIL; OPEN FRAMING</td>
<td>DD-11</td>
</tr>
<tr>
<td>EAVE DETAIL; W/WALL PANEL; OPEN FRAMING</td>
<td>DD-12</td>
</tr>
<tr>
<td>HIP RIDGE; SOLID SHEATHING</td>
<td>DD-20</td>
</tr>
<tr>
<td>SHED ROOF RIDGE</td>
<td>DD-21</td>
</tr>
<tr>
<td>HIP RIDGE; OPEN FRAMING</td>
<td>DD-22</td>
</tr>
<tr>
<td>SHED RIDGE DETAIL</td>
<td>DD-23</td>
</tr>
<tr>
<td>RIDGE TERMINATION AT DORMER VALLEY</td>
<td>DD-24</td>
</tr>
<tr>
<td>GABLE;</td>
<td>DD-30</td>
</tr>
<tr>
<td>GABLE; WITH WALL PANEL; OPEN FRAMING</td>
<td>DD-31</td>
</tr>
<tr>
<td>HEAD WALL; WITH PARAPET</td>
<td>DD-40</td>
</tr>
<tr>
<td>HEAD WALL; WITH WALL PANEL</td>
<td>DD-41</td>
</tr>
<tr>
<td>HEAD WALL; WITH REGLET</td>
<td>DD-42</td>
</tr>
<tr>
<td>RAKE WALL; WITH WALL PANEL</td>
<td>DD-50</td>
</tr>
<tr>
<td>RAKE WALL; WITH WALL PANEL</td>
<td>DD-51</td>
</tr>
<tr>
<td>RAKE WALL; WITH REGLET</td>
<td>DD-52</td>
</tr>
<tr>
<td>SLOPE TRANSITION WITH FLASHING</td>
<td>DD-60</td>
</tr>
<tr>
<td>VALLEY</td>
<td>DD-70</td>
</tr>
<tr>
<td>VALLEY; OPEN FRAMING</td>
<td>DD-71</td>
</tr>
<tr>
<td>Description</td>
<td>Page</td>
</tr>
<tr>
<td>-----------------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>ROOF PENETRATION; PIPE PENETRATION</td>
<td>DD-80</td>
</tr>
<tr>
<td>ROOF PENETRATION; SQUARE (PLAN VIEW)</td>
<td>DD-81</td>
</tr>
<tr>
<td>ROOF PENETRATION; SIDE A</td>
<td>DD-82</td>
</tr>
<tr>
<td>ROOF PENETRATION; SIDE B</td>
<td>DD-83</td>
</tr>
<tr>
<td>ROOF PENETRATION; SIDE C</td>
<td>DD-84</td>
</tr>
<tr>
<td>ROOF PENETRATION; LARGER THAN 4&quot;; OPEN FRAMING</td>
<td>DD-85</td>
</tr>
<tr>
<td>GRADE DETAIL; OPEN FRAMING</td>
<td>DD-100</td>
</tr>
<tr>
<td>GRADE DETAIL</td>
<td>DD-101</td>
</tr>
<tr>
<td>OUTSIDE CORNER; OPEN FRAMING</td>
<td>DD-102</td>
</tr>
<tr>
<td>OUTSIDE CORNER; SOLID SHEATHING</td>
<td>DD-103</td>
</tr>
<tr>
<td>INSIDE CORNER; OPEN FRAMING</td>
<td>DD-104</td>
</tr>
<tr>
<td>INSIDE CORNER; SOLID SHEATHING</td>
<td>DD-105</td>
</tr>
<tr>
<td>HEAD DETAIL; OPEN FRAMING</td>
<td>DD-106</td>
</tr>
<tr>
<td>HEAD DETAIL; SOLID SHEATHING</td>
<td>DD-107</td>
</tr>
<tr>
<td>JAMB DETAIL; OPEN FRAMING</td>
<td>DD-108</td>
</tr>
<tr>
<td>JAMB DETAIL; SOLID SHEATHING</td>
<td>DD-109</td>
</tr>
<tr>
<td>SILL DETAIL; OPEN FRAMING</td>
<td>DD-110</td>
</tr>
</tbody>
</table>
A. BERRIDGE DEEP-DECK PANEL: PANEL IS FACTORY FABRICATED TO A CONSTANT CORRUGATION DEPTH OF 1-1/2" PANEL COVERAGE OF A NOMINAL 36"

PANELS ARE FABRICATED TO A MINIMUM LENGTH OF 5'-0" AND A MAXIMUM LENGTH OF 40'-0".

B. MINIMUM SLOPE: THE DEEP-DECK PANELS ARE RECOMMENDED FOR ROOF SLOPES OF 3 ON 12 OR GREATER. SLOPES LESS CONSULT BERRIDGE MANUFACTURING COMPANY.

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 7/8" DEPTH) OR A MINIMUM OF 1/2" PLYWOOD SHEATHING TO PROVIDE SUFFICIENT HOLDING POWER FOR FASTENERS. CONTACT BERRIDGE MANUFACTURINGS 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 FELT 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.

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 OF 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" ON 20'-0".
5. ALL CUTS AT PENETRATIONS SHOULD BE TIGHT, WITHOUT GAPS.
6. USE WOOD FRAMED CRICKETS AT LARGE PENETRATIONS.
7. MAKE SURE SUBSTRATE JOINTS ARE TIGHT AT ALL HIPS, VALLEYS AND RIDGES.

G. INSTALLATION OVER OPEN FRAMING: FOR DIAPHRAGM CAPABILITIES OF DEEP-DECK PANEL CONSULT BERRIDGE TECHNICAL DEPT. PURLIN OR OTHER STRUCTURAL BRACING IS THE RESPONSIBILITY OF OTHERS,
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" 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 REFERRING TO DETAILS DD-71 AND DD-85.
   3. FOOT TRAFFIC ON THE PANELS MUST BE KEPT TO A MINIMUM. ARCHITECTURAL PANELS 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 AT CERTAIN OTHER FLASHING CONDITIONS AS DEPICTED IN THE DEEP-
   DECK PANEL 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.
   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.
   8. VERIFY CORRECT METHOD OF INSTALLING ICE AND WATERSHIELD WITH ICE AND
      WATERSHIELD MANUFACTURE.

ELECTROLYSIS: AVOID ALLOWING FLASHINGS AND PANELS TO COME INTO CONTACT WITH
L. EITHER LEAD, COPPER OR OTHER DISSIMILAR METALS AND PREVENT EXPOSURE TO WATER
   RUNDOWN FROM COPPER AND/OR LEAD.

M. SEALANT RECOMMENDATIONS: TREMCO, INC. SPECTREM 1 SILICONE SEALANT.
   DO NOT USE CLEAR CAULK.
N. FLASHING: IF BERRIDGE MANUFACTURING COMPANY IS TO SUPPLY FLASHING, ALL FLASHINGS WILL BE FABRICATED IN 10'-0" LENGTHS WITH SQUARE END CUTS ONLY. THE PURCHASER MUST PROVIDE ALL DIMENSIONS AND DEGREES OF ANGLE.

O. 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 AVOID TRAPPING WATER.

P. PANELS: BERRIDGE MANUFACTURING COMPANY WILL PROVIDE SQUARE END CUTS ONLY ON ALL DEEP-DECK 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 OF THE ROOF AND WORK TOWARDS THE OTHER GABLE.
3. EACH PANEL IS TO BE KEPT TIGHT AGAINST THE ADJOINING PANEL. NEVER PERMIT A GAP BETWEEN VERTICAL LAP. ANY CRIMPS OR BENDS MUST BE STRAIGHTENED PRIOR TO INSTALLATION.
4. KEEP PANELS ALIGNED TO THAT RIBS MATCH AT HIPS, VALLEYS AND WHERE VERTICAL PANELS ADJOIN ROOF PANELS. DO NOT INSTALL LONG CONTINUOUS RUNS OF PANELS ALL AT ONE TIME WHERE RIB LINES MUST MATCH. INSTALL EN 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 RIB MATCHING.
5. COPPER-COTE™, CHAMPAGNE, LEAD-COTE™ AND PREWEATHERED GALVALUME® PANEL INSTALLATION: NOTE THE SERIES OF ARROWS PAINTED ON THE UNDERSIDE OF THE PANEL. ALL PANELS MUST BE INSTALLED IN A CONSISTENT MANNER, MEANING THAT THE ARROWS ON EVERY PANEL ARE ALL POINTING IN THE SAME DIRECTION. IF A PANEL IS REVERSED (ARROWS POINTING OPPOSITE IF THOSE ON OTHER PANELS) IT WILL APPEAR, FROM A DISTANCE, A DIFFERENT SHADE DUE TO THE GRANULAR EFFECTS OF THE PIGMENTS ON THE FINISH. METALLIC FINISHES ARE MATCH-LOT FINISHES. DO NOT MIX LOTS.

R. FASTENERS: INSTALL FASTENERS AS PER TYPICAL DETAILS. USE #10 HEX HEAD ZINC PLATED FASTENER WITH METAL BACKED NEOPRENE FASTENER WHEN FASTENING TO WOOD. USE #12 HEX HEAD ZINC PLATED FASTENER WITH A METAL BACKED NEOPRENE WASHER 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 OVER DRIVE FASTENERS AS THIS WILL CAUSE THE CLIP AND/OR FLASHINGS TO BUCKLE OR BECOME RECESSED BELOW THE ELEVATION OF THE SUBSTRATE.

* CONSULT BERRIDGE MANUFACTURING'S ENGINEERING DEPARTMENT REGARDING FASTENER SPACING TO MEET DESIGN CRITERIA AND THE USE OF ANY OTHER TYPE OF FASTENER.
BERRIDGE MANUFACTURING COMPANY STRIVES TO PROVIDE ITS CUSTOMERS WITH THE HIGHEST QUALITY STRETCHER LEVELED STEEL AVAILABLE. THE LATEST TECHNOLOGY IS ALSO INCORPORATED IN BERRIDGE’S HIGH-PRECISION COIL HANDLING AND ROLL FORMING EQUIPMENT TO MINIMIZE THE STRESS ON METAL DURING PRODUCTION. FURTHERMORE, BERRIDGE UTILIZES HEAVIER 24 GAUGE METAL RATHER THAN 26 GAUGE STEEL TO 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 DEEP-DECK PANEL SYSTEM.

NOTE: ALL PRODUCT SPECIFICATIONS, DETAIL AND INSTALLATION INSTRUCTIONS SUBJECT TO CHANGE WITHOUT NOTICE. FOR SPECIFIC PROJECT DETAILS, CONTACT BERRIDGE.
## Deep Deck Panel Properties

<table>
<thead>
<tr>
<th>GA.</th>
<th>Tkns/INCH</th>
<th>WT PSF</th>
<th>FY KSI</th>
</tr>
</thead>
<tbody>
<tr>
<td>24</td>
<td>0.0240</td>
<td>1.21</td>
<td>40</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TOP IN COMPRESSION</th>
<th>BOTTOM IN COMPRESSION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ix ( \text{In}^4/\text{ft} )</td>
<td>Sx ( \text{In}^3/\text{ft} )</td>
</tr>
<tr>
<td>0.1073</td>
<td>0.1218</td>
</tr>
</tbody>
</table>

## Deep-Deck Panel Load Profiles

### Dead + Live Loading (PSF)

<table>
<thead>
<tr>
<th>SPAN (FEET)</th>
<th>1-SPAN</th>
<th>2-SPAN</th>
<th>3-SPAN</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>STRESS</td>
<td>DEFL L/240</td>
<td>STRESS</td>
</tr>
<tr>
<td>4'-0&quot;</td>
<td>120</td>
<td>110</td>
<td>120</td>
</tr>
<tr>
<td>5'-0&quot;</td>
<td>77</td>
<td>56</td>
<td>77</td>
</tr>
<tr>
<td>6'-0&quot;</td>
<td>53</td>
<td>33</td>
<td>53</td>
</tr>
<tr>
<td>7'-0&quot;</td>
<td>39</td>
<td>20</td>
<td>39</td>
</tr>
</tbody>
</table>

### Deep-Deck Wind Uplift Loading (PSF)

<table>
<thead>
<tr>
<th>SPAN (FEET)</th>
<th>1-SPAN</th>
<th>2-SPAN</th>
<th>3-SPAN</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>STRESS</td>
<td>DEFL L/240</td>
<td>STRESS</td>
</tr>
<tr>
<td>4'-0&quot;</td>
<td>123</td>
<td>110</td>
<td>123</td>
</tr>
<tr>
<td>5'-0&quot;</td>
<td>79</td>
<td>56</td>
<td>79</td>
</tr>
<tr>
<td>6'-0&quot;</td>
<td>55</td>
<td>33</td>
<td>55</td>
</tr>
<tr>
<td>7'-0&quot;</td>
<td>41</td>
<td>20</td>
<td>41</td>
</tr>
</tbody>
</table>

**NOTES:**

1. THE PANEL WEIGHT HAS BEEN DEDUCTED FROM THE ALLOWABLE STRESS VALUES.
2. THE PROPERTIES AND LOAD TABLES ARE FOR THE PANEL ALONE: THE PANEL PROFILE HAS BEEN ASSUMED TO REMAIN CONSTANT UNDER LOADING. THE CAPACITY OF FASTENERS IS NOT INCLUDED.
3. THE PANEL SECTION PROPERTIES HAVE BEEN CALCULATED IN ACCORDANCE WITH THE 2001 AISI SPECIFICATION.
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.
OVERVIEW DEEP-DECK PANEL

SIDE LAP DETAIL (TYPICAL)
Deep-Deck Panel

FASTENER LOCATIONS

DATE: 12-05-02

PAGE/FILE
DD-4

FASTENERS SPACING AT END LAP DEEP-DECK PANEL
SCREW WITH STEEL AND NEOPRENE WASHER

1" TAPE SEALER CONTINUOUS

PANEL END LAP

INTERMEDIATE FASTENER SPACING DEEP-DECK PANEL
SCREW WITH STEEL AND NEOPRENE WASHER

SIDE LAP DETAIL (TYPICAL)

FASTENERS SPACING AT EAVE DEEP-DECK PANEL
SCREW WITH STEEL AND NEOPRENE WASHER

FASTENERS AT RIB 6" O.C. FOR FIRST 5'-0" UP ROOF

5 FASTENERS LOCATED AS SHOWN

6"

1" TAPE SEALER CONTINUOUS

36"

10 FASTENERS LOCATED AS SHOWN

36"
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.
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.
1. Caulking and fasteners are items to be furnished and installed by the roofing installer at the discretion of the architect.

F = Finish Side

Eave Flashing, 4" end laps with continuous caulk at laps

Inside foam closure with tape sealer top and bottom

Panel fastener with metal backed neoprene washer

Fasteners, 20" O.C. max.

Eave strut
1. **SOLID SHEATHING (BY OTHERS)** TO BE MINIMUM 1/2" PLYWOOD OR EQUIVALENT IN STRENGTH FOR HOLDING POWER OF FASTENERS.

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

---

**Diagram Notes:**
- **RIDGE/hip CAP:** 4" END LAPS WITH CONTINUOUS CAULK AT LAPS. POP RIVET AT LAPS AND CAULK RIVET HEADS.
- **BERRIDGE DEEP-DECK PANEL**
- **PANEL FASTENER WITH METAL BACKED NEOPRENE WASHER**
- **FASTENERS WITH METAL BACKED NEOPRENE WASHER 20" O.C.**
- **OUTSIDE FOAM CLOSURE WITH TAPE SEALER TOP AND BOTTOM. USE EXPANDABLE FOAM CLOSURE WITH TAPE SEALER TOP AND BOTTOM AT HIPS.**
- **# 30 FELT UNDERLAYMENT**
- **SOLID SHEATHING**

**Legend:**

- F = FINISH SIDE

---

**Diagram:**

- RIDGE/hip CAP
- #30 felt underlayment
- Solid sheathing
- Outside foam closure with tape sealer top and bottom.
- Use expandable foam closure with tape sealer top and bottom at hips.
- Panel fastener with metal backed neoprene washer
- Fasteners with metal backed neoprene washer 20" O.C.
- Berridge Deep-Deck Panel
- Ridge and Hip Detail

---

**Berridge Manufacturing Company**

**RIDGE AND HIP DETAIL**

**Deep-Deck Panel**

**Date:** 12-05-02

**Page/file**

**DD-20**
1. SOLID SHEATHING (BY OTHERS) TO BE MINIMUM 1/2" PLYWOOD OR EQUIVALENT IN STRENGTH FOR HOLDING POWER OF FASTENERS.

2. ALL FELTING UNDERLAYMENT, CAULK, AND FASTENERS, ARE ITEMS TO BE FURNISHED AND INSTALLED BY THE ROOFING INSTALLER AT THE DISCRETION OF THE ARCHITECT.

F = FINISH SIDE

RIDGE CAP; 4" END LAPS WITH CONTINUOUS CAULK AT LAPS. POP RIVET AT LAPS AND CAULK RIVET HEADS.

BERRIDGE DEEP-DECK PANEL

FASTENERS WITH METAL BACKED NEOPRENE WASHER 20" O.C.

OUTSIDE FOAM CLOSURE WITH TAPE SEALER TOP AND BOTTOM

PANEL FASTENER WITH METAL BACKED NEOPRENE WASHER

FASTENER WITH METAL BACKED NEOPRENE WASHER. 40" O.C. MAX

# 30 FELT UNDERLAYMENT LAP FELT OVER RIDGE

SOLID SHEATHING
1. All caulkings, and fasteners, are items to be furnished and installed by the roofing installer at the discretion of the architect.

F = Finish Side

Berridge Deep-Deck Panel
Outside foam closure with tape sealer top and bottom. Use expandable foam closure with tape sealer top and bottom at hips.

Ridge/hip cap; 4" end laps with continuous caulk at laps.

Purlins

Sub flashing 4" end laps with continuous caulk at laps.

Panel fastener with metal backed neoprene washer

Fasteners with metal backed neoprene washer 20" o.c.
1. Caulking and fasteners are items to be furnished and installed by the roofing installer at the discretion of the architect.

**BERRIDGE DEEP-DECK PANEL**

Panel fastener with metal backed neoprene washer 20" O.C.

Fasteners with metal backed neoprene washer 20" O.C.

Continuous caulk at laps.

Sub flashing 4" end laps with continuous caulk at laps.

Deep-Deck Panel

Outside foam closure with tape sealer top and bottom.

Fastener 20" O.C.

1/2" panel fastener with metal backed neoprene washer.
SECTION VIEW

FIELD FORM END OF RIDGE FLASHING AND EXTEND UNDER UPPER PANEL

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

FIELD TAPERED OUTSIDE CLOSURE

BERRIDGE DEEP-DECK PANEL

EXPANDABLE FOAM CLOSURE WITH TAPE SEALER TOP AND BOTTOM

# 30 FELT UNDERLAYMENT

PANEL FASTENER WITH METAL BACKED NEOPRENE WASHER

SOLID SHEATHING

VALLEY FLASHING; 12" LAPS WITH CONTINUOUS CAULK AT LAPS

PLAN VIEW

MAIN ROOF PANELS

RIDGE FLASHING

INSIDE FOAM CLOSURE

VALLEY FLASHING

DORMER PANEL
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.
1. Caulking and fasteners are items to be furnished and installed by the roofing installer at the discretion of the architect.

F = Finish Side
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.
1. Caulking and fasteners are items to be furnished and installed by the roofing installer at the discretion of the architect.

**Counterflushing:**
- 4" end laps with continuous caulk at laps.
- Fasteners; 20" O.C. max.
- Panel fasteners; with metal backed neoprene washer.

**Sub-Flashing:**
- 4" end laps with continuous caulk at laps.
- Inside foam closure with tape sealer top and bottom.
- Outside foam closure with tape sealer top and bottom.
- Fasteners; with metal backed neoprene washer. 20" O.C.

**Berridge Deep-Deck Panel**

F = Finish Side

1/2"
BERRIDGE DEEP-DECK PANEL

CONTINUOUS CAULK AT LAPS

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

COUNTERFLASHING; 4" END LAPS WITH CONTINUOUS CAULK AT LAPS.

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

BERRIDGE DEEP-DECK PANEL

OUTSIDE FOAM CLOSURE WITH TAPE SEALER TOP AND BOTTOM.

CONTINUOUS BEAD OF CAULK

PANEL FASTENERS WITH METAL BACKED NEOPRENE WASHER.

FASTENERS WITH METAL BACKED NEOPRENE WASHER. 20" O.C.

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

F = FINISH SIDE

COUNTERFLASHING

SUB-FLASHING

REGLET FLASHING
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.
1. Caulking and fasteners are items to be furnished and installed by the roofing installer at the discretion of the architect.

- Sub flashing: 4" end laps with continuous caulk at laps
- Panel fastener with metal backed neoprene washer
- Fasteners 20" o.c. max
- Berridge deep-deck panel
- Insine foam closure with tape sealer top and bottom
- Counter flashing: 4" end laps with continuous caulk at laps
- Fastener with metal backed neoprene washer 20" o.c.
- Continuous bead of caulk
- Berridge deep-deck panel

**Notes:**
- F = Finish side
- Sub flashing
- Counter flashing
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.
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.
1. SOLID SHEATHING (BY OTHERS) TO BE A MINIMUM OF 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

VALLEY DETAIL

Deep-Deck Panel

DATE: 12-05-02

PAGE/FILE
DD-70
BERRIDGE DEEP-DECK PANEL
CONTINUOUS BEAD OF CAULK BETWEEN VALLEY FLASHING AND FELT UNDERLAYMENT

EXPANDABLE FOAM CLOSURE WITH TAPE SEALER TOP AND BOTTOM

FASTENERS 20" O.C. MAX.

GRACE ICE AND WATERSHIELD

VALLEY FLASHING
12" END LAPS WITH (2) CONTINUOUS BEADS CAULK AT LAPS

FLAT SHEET VALLEY SUB-FLASHING
BERRIDGE CORRUGATED S-DECK

EACH SIDE

BERRIDGE DEEP-DECK PANEL
CONTINUOUS BEAD OF CAULK BETWEEN VALLEY FLASHING AND FELT UNDERLAYMENT

EXPANDABLE FOAM CLOSURE WITH TAPE SEALER TOP AND BOTTOM

FASTENERS 20" O.C. MAX.

GRACE ICE AND WATERSHIELD

VALLEY FLASHING
12" END LAPS WITH (2) CONTINUOUS BEADS CAULK AT LAPS

FLAT SHEET VALLEY SUB-FLASHING
BERRIDGE CORRUGATED S-DECK

FLAT SHEET VALLEY SUB-FLASHING
GRACE ICE AND WATER SHIELD

SEE SECTION

SLOPE

FLAT SHEET VALLEY SUB-FLASHING
GRACE ICE AND WATER SHIELD

16 GA. HAT SECTION

PURLIN

BERRIDGE CORRUGATED S-DECK SECTION

16 GA. HAT SECTION SIZED TO FIT OVER PURLIN AND TO ACCOMMODATE THE DEPTH OF THE BERRIDGE CORRUGATED S-DECK.

16 GA. HAT SECTION SIZED TO FIT OVER PURLIN AND TO ACCOMMODATE THE DEPTH OF THE BERRIDGE CORRUGATED S-DECK.

16 GA. HAT SECTION SIZED TO FIT OVER PURLIN AND TO ACCOMMODATE THE DEPTH OF THE BERRIDGE CORRUGATED S-DECK.
Deep-Deck Panel

ROOF PIPE PENETRATION OF 4" IN DIA. OR LESS

RUBBERIZED BOOT FLASHING

CONTINUOUS CAULK

PIPE PENETRATION NOT TO BE AT PANEL SIDE LAP

BERRIDGE DEEP-DECK PANEL

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

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

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

NOTE: POSITION SQUARE BASED BOOTS IN A DIAMOND ORIENTATION WHERE POSSIBLE TO AID IN DIVERTING WATER.
FIELD CUT PANEL ALONG DOTTED LINE AND INSTALL PANEL. INSTALL FLASHING "A" FIRST ALONG WITH FOAM CLOSURE. INSTALL FLASHING "B" SECOND, CAULK ALL FLASHING LAPS. INSTALL FLASHING "C" LAST.

THIS FLASHING IS TO BE SLIPPED UNDER THE DEEP-DECK PANEL AND FELT AS SHOWN IN DETAIL DEEP-DECK-84 BEFORE THE FOAM CLOSURE OR FASTENERS ARE INSTALLED. SEE ALSO DETAILS DEEP-DECK-82 AND DEEP-DECK-83 FOR FELTING AND SUBFLASHING.
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.
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
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.
Deep-Deck Panel

PENETRATION LARGER THAN 4" IN DIA.

FOR ROOF PENETRATIONS
LARGER THAN 4" IN DIA.
CARRY UP TO NEXT PURLIN

SQUARE OR ROUND PENETRATION

GRACE ICE AND WATER
SHIELD RUN CONTINUOUS
TO EAVE

FLAT SHEET SUB-FLASHING
RUN CONTINUOUS TO EAVE

BERRIDGE CORRUGATED
S-DECK

PURLINS

EAVE

SEE SECTION

FLAT SHEET SUB FLASHING
GRACE ICE AND WATER
SHIELD

16 GA. HAT SECTION SIZE
TO FIT OVER PURLIN AND TO
ACCOMMODATE THE DEPTH OF THE
BERRIDGE CORRUGATED S-DECK.

16 GA. HAT SECTION
PURLIN
BERRIDGE CORRUGATED
S-DECK

SECTION
1. Caulking and fasteners are items to be furnished and installed by the roofing installer at the discretion of the architect.

F = Finish Side

Sill flashing: 4" end laps with continuous caulk at laps, pop rivet to girt 20" O.C.
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
1. Caulking and fasteners are items to be furnished and installed by the roofing installer at the discretion of the architect.
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.
**CALL BMC BEFORE USING THIS DETAIL**

**SECTION A**

ROOF PENETRATION CENTERED ON SEAM

**SECTION B**

ROOF PENETRATION OFF CENTER OF SEAM

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.

NOTE: IF PIPE IS MADE OF METAL, IT MUST BE PAINTED TO PREVENT RUST RUN-OFF FROM STAINING PANELS.
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.
1. Caulking and fasteners are items to be furnished and installed by the roofing installer at the discretion of the architect.
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.
1. Caulking and fasteners are items to be furnished and installed by the roofing installer at the discretion of the architect.
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.
1. Caulking and fasteners are items to be furnished and installed by the roofing installer at the discretion of the architect.

Sill flashing, 4" end laps with continuous caulk at laps

Outside foam closure with tape sealer top and bottom

Panel fastener with metal backed neoprene washer

Fastener with metal backed neoprene washer 20" o.c.

Girt

Berridge deep-deck panel

Deep-Deck Panel

DATE: 12-05-02
PAGE/FILE DD-110
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.
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

OUTSIDE CORNER FLASHING
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

HEAD FLASHING
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.
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.

SILL DETAIL

Deep-Deck Panel
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.