SPANISH TILE
INSTALLATION DETAILS
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A. BERRIDGE SPANISH TILE: IS COMPOSED OF INTERLOCKING BARREL TILES ON DEEP VEE PANELS WITH RIB SPACING AT 9" O.C.

B. MINIMUM SLOPE: THE BERRIDGE SPANISH TILE SYSTEM IS RECOMMENDED FOR SLOPES OF 2 ON 12 AND GREATER.

C. A DOUBLE LAYER OF NUMBER THIRTY FELT UNDERLAYMENT OR EQUAL IS RECOMMENDED FOR ALL APPLICATION WHERE THE ROOF SLOPE IS 3 ON 12 OR LESS.

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

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 GAUGE CORRUGATED SHEATHING (NOMINAL 2 1/2" PITCH 11/16" DEPTH) OR A MINIMUM OF 1/2" SOLID WOOD SHEATHING TO PROVIDE SUFFICIENT HOLDING POWER FOR FASTENERS. CONTACT BERRIDGE MANUFACTURING'S ENGINEERING DEPARTMENT FOR USE OF ANY OTHER TYPE OF SOLID SHEATHING.

DUE TO NUMBER THIRTY FELT TENANCY 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 OR "H" CLIPS SHOULD BE USED OF JOINTS DO NOT REMAIN FLAT UNDER THE WEIGHT OF WORKMEN.
4. USE SHIMS TO JEEP ENTIRE SUBSTRATE EVEN. UNEVEN SUBSTRATE WILL RESULT IN "OIL-CANNING" IN PANELS. SUBSTRATE SHOULD BE LEVEL TO 1/4" IN 20'-0".
5. ALL CUTS AT PENETRATIONS SHOULD BE TIGHT, WITHOUT GAPS.
6. USE WOOD-FRAMED CRICKETS AT LARGE PENETRATIONS.
7. MAKE SURE SUBSTRATE JOINTS ARE TIGHT AT ALL HIPS, VALLEYS AND RIDGES.

G. INSTALLATION OVER OPEN FRAMING:
1. PURLIN SPACING MUST COMPLY WITH LOAD CHART SHOWN ON PAGE STI-5 AND ALL APPLICABLE CODES AND SPECIFICATION REQUIREMENTS.
2. DIAPHRAGM CAPABILITIES AND PURLIN STABILITY ARE MINIMAL AS PROVIDED BY THE SPANISH TILE SYSTEM. THEREFORE, OTHER BRACING MAY BE REQUIRED TO CONFORM TO A.I.S.C. SPECIFICATIONS.
H. OPEN FRAMING INSPECTION:
1. PURLINS SHOULD BE ALIGNED WITH TOP FLANGES IN THE SAME PLANE TO A TOLERANCE OF 1/4" ON 20'-0". UNEVENNESS IN THE TIP PLANE OF THE PURLINS WILL RESULT IN ABNORMAL "OIL-CANNING" OF PANELS.
2. DO NOT APPLY ON OPEN FRAMING AT VALLEYS OR ROOF PENETRATIONS WITHOUT REFERRING TO DETAILS ON PAGES ST-72 AND ST-87.
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 DETAIL. 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 SPANISH TILE 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. USED 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 VALLEY OR ROOF PENETRATIONS ARE INVOLVED ON OPEN FRAMING CONDITIONS.
7. INSULATE BETWEEN WOOD BLOCKING AND METAL WITH FELT OR GRACE ICE AND WATERSHIELD.

L. ELECTROLYSIS: AVOID ALLOWING FLASHINGS AND PANELS TO COME INTO CONTACT WITH EITHER LEAD OR COPPER AND PREVENT EXPOSURE TO WATER RUNDOWM 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 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.

O. PANELS: BERRIDGE MANUFACTURING COMPANY WILL PROVIDE SQUARE END CUTS ONLY
ON ALL DEEP VEE PANELS. COMPUTATION OF ALL QUANTITIES AND DIMENSIONS ARE THE
RESPONSIBILITY OF THE PURCHASER.

P. PANEL INSTALLATION:
1. REMOVE STRIPPABLE PLASTIC FILM FROM EACH DEEP VEE PANEL PRIOR TO
INSTALLATION.
2. DETERMINE CENTER LINE OF ROOF AREA AND START PANEL INSTALLATION AT THE
CENTER OF THE ROOF, WORKING TOWARD THE GABLE ENDS. MAKE SURE PANELS ARE
PERPENDICULAR TO THE EAVE. AT VALLEY AREAS, MAKE SURE PANELS ARE INSTALLED SO
THAT WATER HAS FREE FLOW AND IS NOT OBSTRUCTED BY PANEL RIBS.
3. COPPER-COTE™, ZINC-COTE™, PREWEATHERED GALVALUME® AND CHAMPAGNE PANEL
INSTALLATION: NOTE THE SERIES OF ARROWS PAINTED ON THE UNDER SIDE OF THE
PANEL. ALL PANELS MUST BE INSTALLED IN A CONSISTENT MANNER, MEANING THAT THE
ARROWS ON EVERY PANEL ARE ALL POINTING IN THE SAME DIRECTION. IF A PANEL IS
REVERSED (ARROWS POINTING OPPOSITE OF THOSE ON OTHER PANELS) IT WILL APPEAR,
FROM A DISTANCE, A DIFFERENT SHADE TO THE GRANULAR EFFECT OF THE PIGMENT IN
THE FINISH. METALLIC FINISHED ARE MATCH-LOT FINISHED. DO NOT MIX LOTS.

Q. SPANISH TILES: ARE FACTORY FABRICATED 17" LONG AND 8" WIDE INTERLOCKING BARREL
TILES.

R. SPANISH TILE INSTALLATION:
1. REMOVE STRIPPABLE PLASTIC FILM FROM EACH TILE PRIOR TO INSTALLATION.
2. IN MOST CASES, TILES MAY BE INSTALLED AFTER ALL PANELS ARE INSTALLED.
3. WHEN THE PANELS ARE INSTALLED OVER OPEN FRAMING AND OR STEEP ROOF SLOPES, IT
IS RECOMMENDED THAT THE TILES BE INSTALLED AT THE SAME TIME AS THE PANELS.
4. EACH TILE INTERLOCKS WITH THE TILE BELOW IT AS YOU WORK UP THE ROOF. THE TILE
LAPS AT INTERLOCK IS ADJUSTABLE FROM A MINIMUM OF 1" TO A MAXIMUM OF 4".
ALL
TILE LAPS MUST BE THE SAME THOUGHT OF THE INSTALLATION FOR AN AESTHETICALLY
PLEASING INSTALLATION.

S. FASTENERS: INSTALL FASTENERS AS PER TYPICAL DETAILS. USE A 3 1/2" LONG GALVANIZED
RING SHANK NAIL FOR INSTALLATION OF DEEP VEE PANEL OVER WOOD SHEATHING AND USE
# 10 - 16 X 3" SMS FOR INSTALLATION OF DEEP VEE PANEL TO METAL.
OPTIONAL ATTACHMENT OF DEEP VEE PANEL. USE A HEX HEAD FASTENER WITH A METAL BACKED NEOPRENE WASHER, SHEET METAL OR WOOD SCREW (1) EACH SIDE OF PANEL RIB THROUGH PANEL PAN. FASTENERS TO BE SIZED TO MEET LOAD REQUIREMENTS.

INTERLOCKING SPANISH TILES SHALL BE ATTACHED TO THE TOP OF THE RIB ON THE DEEP VEE PANEL WITH #8 TEK SCREWS.

WHEN SURE ALL FASTENERS ARE DRIVEN STRAIGHT AND SET FLAT. DO NOT OVERRIVE FASTENERS, AS THIS WILL CAUSE THE DEEP VEE PANEL, SPANISH TILE AND/OR FLASHINGS TO BUCKLE OR BECOME RECESSED BELOW THE ELEVATION OF THE SUBSTRATE.

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

CONSULT BERRIDGE MANUFACTURING’S ENGINEERING DEPARTMENT REGARDING THE USE OF ANY OTHER TYPE OF FASTENER.

BERRIDGE MANUFACTURING COMPANY STRIVES TO PROVIDE ITS CUSTOMERS WITH THE HIGHEST QUALITY STRETCHER LEVELLED 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 SPANISH TILE SYSTEM.

NOTE: ALL PRODUCT SPECIFICATIONS, DETAIL AND INSTALLATION INSTRUCTIONS SUBJECT TO CHANGE WITHOUT NOTICE. FOR SPECIFIC PROJECT DETAILS, CONTACT BERRIDGE MANUFACTURING COMPANY.
### SECTION PROPERTIES BASED ON 24 GAUGE 40 KSI

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<tr>
<th>SPANISH TILE</th>
<th>$d_{l_y}$ (In$^3$/ft)</th>
<th>$M_A$ (Ft-lbs/Ft)</th>
<th>$V_A$ (LBS)</th>
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<tr>
<td>POSITIVE BENDING</td>
<td>0.1097</td>
<td>217.7</td>
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<td>NEGATIVE BENDING</td>
<td>0.0703</td>
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<td>1100</td>
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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)

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<tr>
<th>SPAN (FT)</th>
<th>NET VERTICAL LIVE LOAD</th>
<th>NET VERTICAL WIND UPLIFT</th>
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<tr>
<td></td>
<td>1-SPAN</td>
<td>2-SPAN</td>
</tr>
<tr>
<td>2'-0&quot;</td>
<td>70</td>
<td>70</td>
</tr>
<tr>
<td>2'-6&quot;</td>
<td>70</td>
<td>70</td>
</tr>
<tr>
<td>3'-0&quot;</td>
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<td>50</td>
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<tr>
<td>6'-0&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7'-0&quot;</td>
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1. ALL LOADS MEET L/240 DEFLECTION CRITERIA
2. WIND LOAD ALLOWABLE STRESSES INCREASED BY 33%
THE DETAILS CONTAINED IN THE FOLLOWING PAGES ARE MERELY RECOMMENDATIONS AS TO HOW BERRIDGE MANUFACTURING MATERIALS SHOULD BE INSTALLED. THEY MAY REQUIRE ADAPTATIONS OR MODIFICATIONS FOR A SPECIFIC PROJECT AS CONDITIONS VARY IN BOTH BUILDING DESIGN AND LOCAL WEATHER PECULIARITIES.

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

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

EAVE CLOSURE

FASTEN TILE TO RIB
OF DEEP VEE PANEL

DEEP VEE PANEL

OPTIONAL FASTENER LOCATION IN PAN OF
PANEL (1) FASTENERS EACH SIDE OF RIB.
FASTENERS TO HAVE A METAL BACKED
NEOPRENE WASHER.

BERRIDGE SPANISH TILE

DEEP VEE PANEL SECTION

16" 1/2"

BERRIDGE SPANISH TILE

DEEP VEE PANEL

EAVE CLOSURE

PANEL ASSEMBLY SECTION

17"

EAVE CLOSURE

SPANISH TILE SECTION

8" 1"

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Step 1: Install first tile at eave and fasten to rib of Deep Vee Panel

Step 2: Elevate second tile over first and engage one side on to flange of first tile, keep end of tile below tile ribs. Remember to remove strippable plastic film from Deep Vee panel and Spanish Tile prior to installation.

Step 3: Keeping palm of one hand as shown and lower other side of tile

Step 4: With second hand push down to engage this tile on to the first tiles flange, some force will be required to POP this tile into place

Tile installed properly will fit tight on to lower tiles, do not trim off edges of tile flange.
BERRIDGE DEEP VEE PANEL

UPPER PANEL

NEST UPPER PANEL INTO LOWER PANEL

LOWER PANEL

(2) CONTINUOUS BEADS OF CAULK

BERRIDGE DEEP VEE PANEL

FASTENER AT PANEL RIB

(2) CONTINUOUS BEADS OF CAULK

10" MIN. LAP

# 30 FELT UNDERLayment

SOLID SHEATHING

BERRIDGE DEEP VEE PANEL

SPANISH TILE

PANEL LAP DETAIL

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PAGE/FILE

ST-3
BERRIDGE DEEP VEE PANEL

UPPER PANEL

(2) CONTINUOUS BEADS OF CAULK

NEST UPPER PANEL INTO LOWER PANEL

LOWER PANEL

BERRIDGE DEEP VEE PANEL

FASTENER AT PANEL RIB

10" MIN. LAP

ALL PANEL LAPS TO BE MADE AT PURLINS

BERRIDGE DEEP VEE PANEL

PURLIN

SPANISH TILE
1. All felt underlayment, structural members, corrugated metal 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.

Zee purlin minimum 24 gauge, depth determined by insulation thickness and legs determined by pitch of metal deck.

Butt insulation up to purlin.
1. IF SOLID SHEATHING (BY OTHERS) IS USED, SHEATHING MUST 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.

F = FINISH SIDE

DRIP FLASHING

1 7/8" F

2 1/8"
1. PURLIN SPACING TO BE DETERMINED BY OTHERS, MAXIMUM SPACING 5'-0".

2. ALL CAULKING AND FASTENERS ARE ITEMS TO BE FURNISHED AND INSTALLED BY THE ROOFING INSTALLER AT THE DISCRETION OF THE ARCHITECT.
SPANISH TILE (RIDGE CAP)

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

ZEE CLOSURE CUT TO FIT BETWEEN
DEEP VEE PANEL RIBS

CONTINUOUS BEAD OF CAULK BETWEEN
ZEE CLOSURE AND DEEP VEE PANEL

FASTENERS; MINIMUM 2 PER ZEE CLOSURE

1. FIELD CUT ZEE CLOSURE TO FIT BETWEEN PANEL RIBS.

2. IF SOLID SHEATHING (BY OTHERS) IS USED SHEATHING MUST BE MIN. 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 DETAIL
Spanish Tile
SPANISH TILE (RIDGE CAP)

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

BERRIDGE DEEP VEE PANEL

BERRIDGE SPANISH TILE
FASTENERS; 20" O.C. MAX.

ZEE CLOSURE CUT TO FIT BETWEEN
DEEP VEE PANEL RIBS

CONTINUOUS BEAD OF CAULK BETWEEN
ZEE CLOSURE AND DEEP VEE PANEL

FASTENERS; MINIMUM 2 PER ZEE CLOSURE

1. FIELD CUT ZEE CLOSURE TO FIT BETWEEN PANEL RIBS.

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

F = FINISH SIDE

FLASHING ANGLE

OPEN HEM
RIDGE FLASHING

Spanish Tile
BERRIDGE SPANISH TILE (RIDGE CAP) SNAP LOCK ONTO RIDGE END CLOSURE

CONTINUOUS BEAD OF CAULK

RIDGE END CLOSURE FIELD FABRICATE

CONTINUOUS BEAD OF CAULK BETWEEN RIDGE END CLOSURE AND ZEE CLOSURE

FIELD CUT LAST PANEL AND FORM AROUND Drip FLASHING. PANEL TO BE CONTINUOUS FROM RIDGE TO EAVE

Drip FLASHING AT GABLE SEE DETAIL ST-30

FASTENERS: 2 EACH SIDE OF RIDGE

# 30 FELT UNDERLAYMENT

1. FIELD FABRICATE RIDGE END CLOSURE SEE BELOW.

2. IF SOLID SHEATHING (BY OTHERS) IS USED SHEATHING MUST BE A 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.

USE EAVE CLOSURE FOR TEMPLATE OF CURVE

FIELD FABRICATED RIDGE END CLOSURE

Spanish Tile
1. Field cut Zee closure to fit between ribs of Deep Vee panel.

2. If solid sheathing (by others) is used sheathing must be minimum 1/2" plywood or equivalent in strength for holding power of fasteners.

3. All felt underlayment, caulkking and fasteners are items to be furnished and installed by the roofing installer at the discretion of the architect.
1. LAST DEEP VEE PANEL IN RUN TO BE FIELD CUT AND FORMED AROUND DRIP FLASHING. PANEL MUST BE CONTINUOUS RIDGE TO EAVE.

2. IF SOLID SHEATHING (BY OTHERS) IS USED SHEATHING MUST BE MINIMUM 1/2" PLYWOOD OR EQUIVALENT IN STRENGTH FOR HOLDING POWER OF FASTENERS.

3. ALL FELT UNDERLAYMENT, CAULKING AND FASTENERS ARE ITEMS TO BE FURNISHED AND INSTALLED BY THE ROOFING INSTALLER AT THE DISCRETION OF THE ARCHITECT.
1. FIELD CUT SPANISH TILE AS REQUIRED.

2. IF SOLID SHEATHING (BY OTHERS) IS USED SHEATHING MUST BE MINIMUM 1/2" PLYWOOD OR EQUIVALENT IN STRENGTH FOR HOLDING POWER OF FASTENERS.

3. ALL FELT UNDERLAYMENT, CAULKING AND FASTENERS ARE ITEMS TO BE FURNISHED AND INSTALLED BY THE ROOFING INSTALLER AT THE DISCRETION OF THE ARCHITECT.
1. LAST DEEP VEE PANEL IN RUN TO BE FIELD CUT AND FORMED AROUND DRIP FLASHING. PANEL MUST BE CONTINUOUS RIDGE TO EAVE.

F = FINISH SIDE

DRIP FLASHING

SUB-FLASHING
FASTENERS AT LAPS AND STAGGERED 20" O.C. CAULK FASTENER HEADS

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

FASTENERS; 20" O.C. MAX.

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

ZEE CLOSURE CUT TO FIT BETWEEN PANEL RIBS

BERRIDGE SPANISH TILE

BERRIDGE DEEP VEE PANEL

FASTENERS; 20" O.C. MAX.

SOLID SHEATHING

# 30 FELT UNDERLAYMENT

1. FIELD CUT ZEE CLOSURE TO FIT BETWEEN RIBS OF DEEP VEE PANEL.

2. IF SOLID SHEATHING (BY OTHERS) IS USED SHEATHING MUST 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

OPEN HEM

SLOPE

1/2"

COUNTER FLASHING

CAP FLASHING

SUB-FLASHING

ZEE CLOSURE

F 1 1/8"

1" 1/4"

1/2"

1 1/8"

1/2"
1. Field cut ZEE closure to fit between ribs of Deep VEE panel.

2. If solid sheathing (by others) is used, sheathing must 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
1. FIELD CUT AND FORM FLASHING LEG ON LAST PANEL IN RUN.

2. IF SOLID SHEATHING (BY OTHERS) IS USED SHEATHING MUST BE MINIMUM 1/2" PLYWOOD OR EQUIVALENT IN STRENGTH FOR HOLDING POWER OF FASTENERS.

3. ALL FELT UNDERLAYMENT, CAULKING AND FASTENERS ARE ITEMS TO BE FURNISHED AND INSTALLED BY THE ROOFING INSTALLER AT THE DISCRETION OF THE ARCHITECT.
1. Field cut ZEE closure to fit between ribs of Deep Vee panel.

2. If solid sheathing (by others) is used, sheathing must 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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**CONTINUOUS BEAD OF CAULK**

**FASTENERS; MIN. 2 PER ZEE CLOSURE**

**20" O.C. MAX.**

**# 30 FELT UNDERLayment**

**FASTENERS; 20" O.C. MAX.**

**CONTINUOUS CAULK BETWEEN ZEE CLOSURE AND DEEP VEE PANEL**

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**HEAD WALL DETAIL**

Spanish Tile

BERRIDGE MANUFACTURING COMPANY

DATE: 11-01-98

PAGE/FILE

ST-52
1. FIELD CUT AND FORM FLASHING LEG ON LAST PANEL IN RUN.

2. IF SOLID SHEATHING (BY OTHERS) IS USED SHEATHING MUST BE MINIMUM 1/2" PLYWOOD OR EQUIVALENT IN STRENGTH FOR HOLDING POWER OF FASTENERS.

3. ALL FELT UNDERLAYMENT, CAULKING AND FASTENERS ARE ITEMS TO BE FURNISHED AND INSTALLED BY THE ROOFING INSTALLER AT THE DISCRETION OF THE ARCHITECT.
1. FIELD CUT ZEE CLOSURE TO FIT BETWEEN PANEL RIBS.

2. IF SOLID SHEATHING (BY OTHERS) IS USED, SHEATHING MUST BE MINIMUM 1/2" PLYWOOD OR EQUIVALENT IN STRENGTH FOR HOLDING POWER OF FASTENERS.

3. ALL FELT UNDERLAYMENT, CAULKING AND FASTENERS ARE ITEMS TO BE FURNISHED AND INSTALLED BY THE ROOFING INSTALLER AT THE DISCRETION OF THE ARCHITECT.
1. SOLID SHEATHING IS REQUIRED AT THIS CONDITION, WHEN SPANISH TILE IS USED OVER OPEN FRAMING SEE DETAIL ST-72.

2. SOLID SHEATHING (BY OTHERS) TO BE MINIMUM 1/2" PLYWOOD OR EQUIVALENT IN STRENGTH FOR HOLDING POWER OF FASTENERS (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.
BERRIDGE SPANISH TILE
BERRIDGE DEEP VEE PANEL
SOLID SHEATHING

# 30 FELT UNDERLAYMENT
# 30 FELT UNDERLAYMENT PARALLEL TO VALLEY
CONTINUOUS BEAD OF CAULK
VALLEY FLASHING

4" MIN.

FOR VALLEY EAVE CLOSURE ONLY
POP RIVET EAVE CLOSURE TO RIB OF PANEL THROUGH TAB ONLY

STAGGERED PATTERN OF TILE AND DEEP VEE PANEL AT VALLEY

VALLEY FLASHING MIN. 20 1/2" EACH SIDE OF VALLEY CENTER LINE
CENTER LINE OF VALLEY
DEEP VEE PANEL RIB
SPANISH TILE

4" MIN.

ROOF PLAN VIEW

SPANISH TILE EAVE CLOSURE

SPANISH TILE EAVE CLOSURE

DEEP VEE PANEL RIB
FIELD CUT TAB IN EAVE CLOSURE

SPANISH TILE EAVE CLOSURE

FOR VALLEY EAVE CLOSURE ONLY
POP RIVET EAVE CLOSURE TO RIB OF PANEL THROUGH TAB ONLY

STAGGERED PATTERN OF TILE AND DEEP VEE PANEL AT VALLEY

VALLEY FLASHING MIN. 20 1/2" EACH SIDE OF VALLEY CENTER LINE
CENTER LINE OF VALLEY
DEEP VEE PANEL RIB
SPANISH TILE

4" MIN.

ROOF PLAN VIEW
Spanish Tile

SOLID SHEATHING

USE 2" ZEE-RIB AS PER DETAIL Z-90, Z-91

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

GRACE ICE AND WATER SHIELD

SLOPE

BERRIDGE SPANISH TILE

EAVE CLOSURE SEE DETAIL ST-71

SEE DETAIL ST-71 FOR TILE PATTERN

GRACE ICE AND WATER SHIELD

BERRIDGE DEEP VEE PANEL

FASTENERS; 20" O.C. MAX.

ROOFS WITH A SLOPE OF 4:12 OR LESS 6'-0" MIN.

ROOFS ABOVE 4:12 3'-0" MIN.

OPEN FRAMING; 2" ZEE-RIB

VALLEY DETAIL

DATE: 11-01-98

BERRIDGE MANUFACTURING COMPANY

PAGE/FILE ST-72

Spanish Tile
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.

ROOF PIPE PENETRATION OF 4" DIA. OR LESS

RUBBERIZED "BOOT" FLASHING

PIPE PENETRATION TO BE IN PAN OF PANEL ONLY

BERRIDGE SPANISH TILE

BERRIDGE DEEP VEE PANEL

CONTINUOUS CAULK OR STAINLESS STEEL HOSE CLAMP

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

FIELD CUT TILE TO FIT AROUND BOOT

# 30 FELT UNDERLAYMENT

SOLID SHEATHING
** CALL BMC BEFORE USING THIS DETAIL

IF PIPE IS MADE OF METAL IT MUST BE PAINTED TO PREVENT RUST RUNOFF FROM STAINING PANELS

CONTINUOUS BEAD OF CAULK
RUN RIB UP TO STACK

RIB CLOSURE; SEE BELOW

FIELD CUT TILE AS REQUIRED

RIB CLOSURE; FIELD CUT AND FORM TO FIT INSIDE PANEL RIBS

THUMB TAB

1/2"

DEEP VEE PANEL RIBS

FASTENER

** CALL BMC BEFORE USING THIS DETAIL

SECTION A

ST-82

SECTION B

ST-82

CAULK AT SNIPPED OPENING

FIELD CUT TILE AS REQUIRED

SPANISH TILE SYSTEM
DEEP VEE PANEL; FIELD CUT RIBS AND LAP, LAP IN DIRECTION OF WATER FLOW

CALL BMC BEFORE USING THIS DETAIL

SPANISH TILE SYSTEM
DEEP VEE PANEL; FIELD CUT RIBS AND LAP, LAP IN DIRECTION OF WATER FLOW

CALL BMC BEFORE USING THIS DETAIL

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

SPANISH TILE

DATE: 11-01-98

PAGE/FILE

ST-81
**CALL BMC BEFORE USING THIS DETAIL

**SECTION A**
USE THIS DETAIL WHEN STACK IS AT PANEL RIB

ROUND STACK

RIB CLOSURE SEE DETAIL ST-81

CUT DEEP VEE PANEL AND BEND UP 1" AROUND STACK AND CAULK

1. SOLID SHEATHING IS REQUIRED AT THIS CONDITION, WHEN SPANISH TILE SYSTEM IS USED OVER OPEN FRAMING (SEE DETAIL ST-87)

2. FIELD CUT HOLE IN PANEL 1" LESS THAN DIA. OF STACK, BACK CUT HOLE AND BEND PANEL UP AROUND STACK

**SECTION B**
USE THIS DETAIL WHEN STACK IS AT PANEL PAN

ROUND STACK

CUT DEEP VEE PANEL AND BEND UP 1" AROUND STACK AND CAULK

FIELCUT TILE AS REQUIRED

# 30 FELT UNDERLAMENT

SOLID SHEATHING

1. SOLID SHEATHING IS REQUIRED AT THIS CONDITION, WHEN SPANISH TILE SYSTEM IS USED OVER OPEN FRAMING (SEE DETAIL ST-87)

2. FIELD CUT HOLE IN PANEL 1" LESS THAN DIA. OF STACK, BACK CUT HOLE AND BEND PANEL UP AROUND STACK

**CALL BMC BEFORE USING THIS DETAIL**
BERRIDGE SPANISH TILE
DEEP VEE PANEL

CLEFT; TURN FLASHING PAN UNDER AND HOOK ON TO CLEFT

ANGLE FLASHING

FLASHING FIELD FORM

ZEE CLOSURE

CLEFT; TURN FLASHING PAN UNDER AND HOOK ON TO CLEFT

COUNTER FLASHING

SEE BELOW

SECTION A

SECTION B

BERRIDGE SPANISH TILE

LOWER PANEL, FIELD BEND UP AT CURB

FLASHING FIELD FORM

ANGLE FLASHING

ZEE CLOSURE; CUT 2" OFF HORIZONTAL LEG, BEND VERTICAL LEG AND SLIP BETWEEN DEEP VEE PANELS. CAULK BETWEEN ZEE CLOSURE, COUNTER FLASHING AND DEEP VEE PANEL

CLEFT: TURN FLASHING PAN UNDER AND HOOK ON TO CLEFT

COUNTER FLASHING EXTEND 1/4" BEYOND ZEE (FLASHING CUT AWAY FOR CLARITY)

BERRIDGE SPANISH TILE

1/4"
1. SOLID SHEATHING IS REQUIRED AT THIS CONDITION, WHEN BERRIDGE SPANISH TILE IS USED OVER OPEN FRAMING (SEE DETAIL ST-87).

2. SOLID SHEATHING (BY OTHERS) TO BE MINIMUM 1/2" PLYWOOD OR EQUIVALENT IN STRENGTH FOR HOLDING POWER OF FASTENERS (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.
1. SOLID SHEATHING IS REQUIRED AT THIS CONDITION, WHEN BERRIDGE SPANISH TILE IS USED OVER OPEN FRAMING (SEE DETAIL ST-87)

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

CURB SIZE 4" x 8"

CURB HEIGHT 4"

ANGLE FLASHING

WRAP PERIMETER WITH FELT AND ANGLE FLASHING

BERRIDGE DEEP VEE PANEL; BEND TO CURB

BERRIDGE SPANISH TILE

SOLID SHEATHING

CURB MATERIAL

# 30 FELT UNDERLAYMENT
Notch the Spanish tile for cleat.

Spanish tile;

Corner cleat; field cut and bend at end and caulk.

Deep Vee Panel; field cut and form.

See detail below.
Spanish Tile

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

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

SQUARE OR ROUND PENETRATION

1'-0" MINIMUM

SEE SECTION

1'-0"

SLOPE

FLAT SHEET VALLEY FLASHING
GRACE ICE AND WATER SHIELD

16 GA. HAT SECTION

PURLIN

BERRIDGE CORRUGATED S-DECK

SECTION

EAVE

GRACE ICE AND WATER SHIELD RUN CONTINUOUS TO EAVE

FLAT SHEET SUB-FLASHING RUN CONTINUOUS TO EAVE

BERRIDGE CORRUGATED S-DECK

PURLINS

S-DECK FLAT SHEET

VALLEY FLASHING
GRACE ICE AND WATER

SLOPE

SEE SECTION

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