1. **Scope:**

This application standard covers the procedures for installation of mechanically fastened roof tile systems on direct deck or counter battens only. This standard shall be used in conjunction with the tile manufacturer NOA, RAS 127 and RAS 128.

2. **Definitions:**

For definitions of terms used in this application standard, refer to ASTM 1079 and the *Florida Building Code, Building.*

**NOTE #1:** The following table provides the contractor with the choices available for underlay systems. These systems can only be used on pitches designated in the table below:

<table>
<thead>
<tr>
<th>Roof Pitch</th>
<th>Battens or Direct Deck</th>
<th>Choice of Underlayment</th>
<th>Plastic or Compatible Roof Cement at Nails Penetrating Underlayment</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>4:12&quot; or greater</td>
<td>Either</td>
<td>1. ASTM D 226 Type II #30 or ASTM D 2626#43 organic base nailed to deck, min #74 ASTM D 249 organic cap sheet in type IV hot asphalt.</td>
<td>Required</td>
<td>3.01 A</td>
</tr>
<tr>
<td></td>
<td>Either</td>
<td>2. Any NOA Approved underlayment system with a mechanically fastened base sheet, and cap sheet see hot, cold, or self adhered.</td>
<td>Per NOA</td>
<td>3.01 B, C, or D</td>
</tr>
<tr>
<td></td>
<td>Either</td>
<td>3. NOA Listed Approved nail-on single ply underlayment.</td>
<td>Per NOA</td>
<td>3.01 E</td>
</tr>
</tbody>
</table>
NOTE #2: All approved Tiles with integral batten-lugs, installed on battens may be installed on slopes greater than 7:12.

This roofing application standard covers Flat, Low and High Profile Roof tile, using a minimum 3 in. tile headlap, or design limited headlap on minimum \(15/32\) in. solid decking nailed in compliance with Chapter 23 (High Velocity Hurricane Zones) of the Florida Building Code, Building.

**PART I-GENERAL**

1.01

A. Tiles shall not be installed over wet underlayment where moisture prohibits adhesion of mastic, mortar, or adhesive.

**PART II - MATERIALS**

2.01 Fasteners:

A. Tile Fasteners:

1. All roof tile nails or fasteners, except those made of copper, monel, aluminum, or stainless steel, shall be tested for corrosion in compliance with TAS 114 Appendix E, Section 2 (ASTM G85), for salt spray for 1000 hr. Tile fasteners used in coastal building zones, as define in Chapter 16 (High Velocity Hurricane Zones), shall be copper, monel, aluminum, or stainless steel.

2. All roof tile fasteners shall be of sufficient length to penetrate a minimum \(1/2\) in. through thickness of the deck or batten, whichever is less, or to penetrate into a 1 in., or greater, thickness of lumber not less than 1 in.

3. Storm clips and storm clip fasteners - refer to NOA with fastener penetration as above.

B. Underlayment Fasteners:

1. Fasteners shall be in compliance with this Section 1523 of the Florida Building Code, Building (Herein referred to as “Approved Fasteners”)

   (aa) Nails shall be minimum 12 gage, annular ring shank nails having not less than 20 rings per inch; heads not less than \(3/8\) in. in diameter; and lengths sufficient to penetrate through the plywood panel or wood plank decking not less than \(3/16\) in., or to penetrate into a 1 in., or greater, thickness of lumber not less than 1 in.. Nails shall be hot dipped; electro or mechanically galvanized to a thickness sufficient to resist corrosion in compliance with Appendix “E” of TAS 114. All nails shall be Product Control Listed. All nail cartons or carbon labels shall be labeled to note compliance with corrosion resistance requirements. No roof material shall be fully or partially adhered (not to include mechanically attached) directly to a nailable deck.

   (bb) Such fasteners shall be applied through “tin caps” not less than 1 \(5/8\) in. and not more than 2 in. in diameter and of not less than 32 gage (0.010 in.) sheet metal. “Cap Nails”
2.02 Metal Flashing:

A. Flashing materials shall comply with the requirements set forth in Chapter 15 (High Velocity Hurricane Zones) of the Florida Building Code, Building.

1. Metal accessories for roofs shall be not less than 26 gage galvanized or stainless steel, 16 ounce copper, 0.025 in. thick aluminum, lead sheet with a minimum 2.5 lb/sf or equivalent non-corrosive lead metal alloys or composite materials manufactured for use as roof termination. All composite and nonmetallic flashing materials shall have an NOA.

2. Metal accessories may be of a manufactured, shop fabricated or field fabricated type, providing the materials and fasteners are in compliance with the minimum requirement of this Code and shall be installed in compliance with methods set forth in TAS 111.

2.03 Asphaltic Adhesive:

A. Asphalt plastic roof cement - conforming to ASTM D 4586, type II, non-asbestos, non-running, heavy body material composed of asphalt and other mineral ingredients.

B. Cold process modified bitumen roofing mastic - conforming to ASTM D 3019, type III.

C. Asphalt - conforming to ASTM D 312, type IV.

2.04 Adhesive/Sealant:

A. Structural bonding adhesive - conforming to ASTM 3498.

2.05 Mortar:

A. Materials:

1. Roof tile mortar shall either be a pre-mixed unit having an NOA and tested in compliance with TAS 123 or a job site mix approved by the building official and in compliance with RAS 113.

B. Mixes:

1. Sand/cement mixes, job mixed or premixed, shall meet ASTM C 270 requirement for Type M mortar (2.25 to 2.5:1 sand to cement ratio).

2. Lightweight aggregate/cement mortar must be premixed and bagged.

2.06 Eave Closure. CHOOSE ONE of the following:

A. Prefabricated EPDM synthetic rubber conforming to ASTM D 1056.

B. Prefabricated metal eave closure must contain minimum 3/8 in. diameter weepholes, spaced not more than 12 in. apart, flush with the underlayment.

C. Prefabricated concrete or clay eave closure.

D. Mortar (color optional) on granular surface underlayments only.

E. Anti-ponding drip edge.

2.07 Sheathing Material shall conform to APA rated sheathing, in compliance with Chapter 23 (High Velocity Hurricane Zones) of the Florida Building Code, Building.
A. Battens -material to be decay resistant species or pressure treated in compliance with AWPA LP-2 or better.

1. Battens shall not be bowed or twisted.

2. Vertical battens shall be a minimum of nominal 1 in. x 4 in., horizontal battens shall be a minimum of nominal 1 in. x 2 in.

**PART III EXECUTION**

3.01 Underlayment Applications CHOOSE ONE of the following:

**NOTE #3:** Anchor/base sheet shall a minimum of two plies in the valleys. A No. 30 or No. 43 can be used as a dry in prior to installing the underlayment with this system.

**A.** Hot Mop 30/90, Hot Mop 43/90 (See Drawing 1). A No. 30 or No 43 anchor/base sheet ASTM D 226, type II, or ASTM D 2626 Shall be mechanically attached to the wood deck with approved fasteners spaced in a 12 in. grid staggered in two rows in the field, and 6 in. on center at the laps. Extend anchor/base sheet a minimum of 4 in. up vertical surfaces. Anchor/base sheet end laps shall be a minimum of 6 in. and head laps shall be a minimum of 4 in. Over installed anchor/base sheet, apply one layer of mineral surfaced cap sheet ASTM D 249 in full 25 lb./sq. ± 15% mopping of asphalt. Asphalt shall be applied uniformly so that felts do not touch felts. End laps shall be a minimum of 6 in.; head laps shall be a minimum of 3 in. and backnailed 12 in. on center with approved nails through tincaps.

**B.** Hot applied NOA approved underlayment system (see Drawing 1). An anchor/base sheet shall be mechanically attached to the wood deck (unless directed otherwise by NOA) with approved fasteners spaced in a 12 in. grid staggered in two rows in the field, and 6 in. on center at the laps. Anchor/base sheet end laps shall be a minimum of 6 in. and head laps shall be a minimum of 4 in. Over installed anchor/base sheet, apply one layer of cap sheet in a full 25#/sq. ± 15% mopping of asphalt. Asphalt shall be applied uniformly so that felts do not touch felts. End laps shall be a minimum of 6 in.; head laps shall be a minimum of 3 in. and backnailed 12 in. on center through tincaps.

**C.** Cold applied NOA approved underlayment system (see Drawing 1). An anchor /base sheet shall be mechani-
cally attached to the wood deck with approved fasteners spaced in a 12 in. grid staggered in two rows in the field and 6 in. on center at the laps or as specified in the underlayment manufacturers NOA. Anchor/base sheet end laps shall be a minimum of 6 in. and head laps shall be a minimum of 4 in. Over anchor/base sheet, apply one layer of cap sheet in a continuous layer of cold process adhesive at the rate of 1.5 gal/sq. or at the rate if so stated in the NOA. Adhesive shall be applied uniformly with a squeegee or knotted brush so that felts do not touch felts. Cap sheet side laps shall be a minimum of 6 in.; head laps shall be a minimum of 3 in. and backnailed 12 in. on center.

D. NOA Approved Anchor/Base Sheet/Self-Adhered Underlayment system. The roof cover is terminated at approved metal flashings. Any approved anchor/base sheet as listed in the NOA shall be mechanically attached to the wood deck with approved fasteners spaced in a 12 in. grid staggered in two rows in the field and 6 in. on center at the laps or as specified in the underlayment manufacturers NOA. Anchor/base sheet end laps shall be a minimum of 6 in. and head laps shall be a minimum of 4 in. Over anchor/base sheet, apply one layer of cap sheet in compliance with the self-adhered underlayment manufacturers’ Approval/Requirements.

E. Self-Adhered Underlayment (single ply). A single ply underlayment system utilizing any NOA approved self-adhered underlayment. The roof cover is terminated at approved metal flashings. Apply one layer of any NOA approved, self-adhered underlayment in compliance with the self-adhered underlayment manufacturers’ Approval/Requirements.

3.02 Drip Edge Metal CHOOSE ONE of the following:

NOTE #5: All exposed planes of drip edge to receive asphalt shall be primed with ASTM D41 Asphalt primer.

A. 2-ply underlayment systems.

1. Drip edge metal shall be installed over anchor/base sheet, fastened 4 in. on center with approved 1\(\frac{1}{4}\) in. roofing nails or approved fasteners. All joints shall be lapped a minimum of 4 in. and sealed with plastic roof cement.

2. The cap sheet shall be bonded to the metal with asphaltic adhesive.

B. When drip edge metal shall be installed at eaves and gables over a two ply underlayment system: The metal profile shall be placed in a minimum 3/16 in. bead of continuous ASTM D 4586 plastic roof cement and fastened 4 in. o.c. with approved 1\(\frac{1}{4}\) in. roofing nails or approved fasteners. All bonding surfaces shall be fully primed with ASTM D41 primer. All metal joints shall be lapped a minimum of 4 in. in a 1/8 in. bed of approved plastic roof cement. The metal profile and cap sheet shall be joined with a two ply application of cotton or fiberglass fabric reinforcement, both set in a full bed of approved plastic roof cement. As an alternate, the metal may be stripped in with a 6 in. strip of torch, hot asphalt or cold
adhesive polyester reinforced modified bitumen. Joints shall be feathered with cold adhesive, hot asphalt or a torch to enhance water flow across the “backlap”.

C. Single ply underlayment systems:

1. Drip edge metal shall be installed at the eave, over the underlayment. The metal shall be fastened 4 in. on center with approved 1 3/4 in roofing nails or approved fasteners of compatible metals. All joints shall be lapped a minimum of 4 in. All metal laps shall be sealed with plastic roof cement.

2. Strip-in metal with minimum 6 in. strip of the single ply underlayment, using primer and/or approved compatible mastic if so directed by single ply manufacturer requirements.

3.03 Valleys CHOOSE ONE of the following:

NOTE #6: All metal surfaces to receive hot asphalt shall be primed with ASTM D 41 asphalt primer.

A. Single Ply System (See Below)

1. Pre-formed metal without returns 16 in. wide shall be placed in the valley and shall be installed and fastened 6 in. on center with 12 ga., corrosion resistant roof nails, or other approved fasteners of compatible metals near the outside edge of the valley metal. All joints shall be lapped a minimum of 6 in. and apply plastic roof cement between laps. The underlayment shall be joined with a bed of plastic roof cement and a 4 in. strip of asphalt saturated cotton or fiber glass fabric. The fabric shall be fully embedded in the plastic roof cement. An optional #90 sweat sheet 36 in. may be applied prior to the installation of the valley metal and cap sheet.

2. Standard roll metal 16 in. wide shall be placed over the anchor or cap sheet in the valley and shall be fastened 6” on center within 1 in. of outside edge with approved 12 ga. corrosion resistant roof nails, or other approved fasteners of compatible metals near the outside edge of the valley metal. All joints shall be lapped a minimum of 6 in. in a bed of plastic roof cement. The underlayment shall be bonded to the metal with asphaltic adhesive (See Drawing 5).

B. Two Ply System CHOOSE ONE of the following: (See Above)

NOTE #7: All metal surfaces to receive hot asphalt shall be primed with ASTM D 41 asphalt primer.

1. Standard roll metal 16 in. wide shall be placed over the anchor/base sheet in the valley and shall be fastened with 12 ga. corrosion resistant roof nails, or other approved fasteners of compatible metals near the outside edge of the valley metal. All joints shall be lapped a minimum of 6 in. in a bed of plastic roof cement. The cap sheet shall be bonded to the metal with asphaltic adhesive (See Drawing 3).
2. Preformed metal without returns 16 in. wide shall be placed over the anchor/base sheet in the valley and shall be fastened with 12 ga. corrosion resistant roof nails, or other fasteners of compatible metals near the outside edge of the valley metal. All joints shall be lapped a minimum of 6 in. in a bed of plastic roof cement. The cap sheet shall be bonded to the metal with asphaltic adhesive (See Drawing 4).

3. Preformed metal without returns 16 in. wide shall be placed in the valley and fastened 6 in. on center with 12 ga. corrosion resistant roof nails, or other approved fasteners of compatible metals near the outside edge of the valley metal. All joints shall be lapped a minimum of 6 in. and apply plastic roof cement between laps. The cap sheet shall be joined with a \( \frac{1}{8} \)" bed of plastic roof cement and a 4 in. strip of asphalt saturated cotton or fiberglass fabric. The fabric shall be fully embedded in the plastic roof cement. An optional sweat sheet may be applied prior to the installation of the valley metal and cap sheet.

C. Preformed or roll metal without returns 16 in. wide, shall be installed on top of the cap sheet, fully embedded in hot asphalt or plastic roof cement. Strips of cap sheet not less than 9 in. wide shall be lapped over the metal edge, not less than 4 in. and sealed with hot asphalt or plastic roof cement and membrane. An optional sweat sheet may be applied prior to the installation of the cap sheet and valley metal.
3.04 Flashing and Counter Flashings at Wall Abutments

NOTE#8: In no case shall top of vertical flashing be less than 2 in. above tile surface.

A. Two Ply System - Choose 1 or 2) (See Drawings 5,6,7).
   1. Install 4 in. x 5 in. “L” metal flush to base of walls with 4 in. flange on the anchor/base sheet and fasten with in 1 in. of outside edge. Lap joints 4 in. and apply approved plastic roof cement between laps. Fasten vertical flange of metal within 1 in. of outside edge a minimum of 6 in. center. The cap sheet shall be bonded to the metal with asphaltic adhesive.
2. Install 4 in. x 5 in. “L” metal on the top ply and fastened 6 in. on center with 12 ga. corrosion resistant roof nails, or other approved fasteners of compatible metals with in 1" of outside edge of the metal. All joints shall be lapped a minimum of 4 in. and apply plastic cement between laps. Cap sheet shall be joined with a bed of plastic roof cement and a 4 in. strip of asphalt saturated cotton or fiber glass fabric. The fabric shall be fully embedded in the plastic roof cement.
3. Seal along top edge within 1 in. of vertical flange, covering all fastener penetrations with approved plastic roof cement and membrane.

4. When installing optional counter flashing, lap top flange of base flashing minimum 3 in. Fasten metal within 1” of the outside edge a minimum of 6 in. on center or set into reglets (secured properly) and thoroughly caulk. Lap joints minimum 4 in. and apply approved plastic roof cement/sealant between laps.
B. Single Ply System.

1. Install 4 in. x 5 in. “L” metal flush to base of walls with 4 in. flange on single ply underlayment and fasten near the metals edge. Lap joints 4 in. and apply approved plastic roof cement between laps. Mechanically fasten vertical flange of metal within 1 in. of outside edge a minimum of 6 in. on center near the edge of the metal.

2. Seal along top edge of vertical flange, covering all fastener penetrations with approved plastic roof cement and membrane.

3. All head/apron flashing shall be installed on top of cap sheet. Ensure the deck flange conforms to the pitch of the roof and extend minimum 4 in. onto deck. Seal along edge with plastic roof cement and membrane.

4. When installing optional counter flashing, lap top flange of base flashing a minimum of 3 in. Fasten metal within 1 in. of outside edge a minimum of 6 in. on center or set metal into reglets and seal thoroughly. Lap joints a minimum of 4 in. and apply plastic roof cement or sealant between the laps.

3.05 Standard Curb Mounted Skylights, Chimneys, Etc. (See 3.04 above)

A. Curbs shall be a minimum 2 in. x 6 in., and a minimum 2 in. above upper most adjacent finished tile surface.

B. Follow instructions in 3.04 A or B in this System.

NOTE #9: For self curbing or prefabricated skylights, installation shall meet Section 3.05 above and skylight manufacturer's NOA.

3.06 Pipes, Stacks, Vents, Etc. (See Drawings 8 & 9)

A. Apply approved plastic roof cement around base of protrusion and on the bottom side of metal flanges sealing unit base flashing to deck.

B. Nail all sides within 1 in. of outside edge of base flashing 6 in. on center. Make certain base is flush to deck.

NOTE: #10: If pipes, vents and/or stacks are installed after finished cap sheet has been applied follow instructions in 3.06 A & B. Cap sheet and metal flange shall be stripped in with at least the same cap sheet felt in use on this system. Stripping must extend at least 4 in. beyond flange in all directions. For turbines and other NOA approved accessories refer to the NOA.
3.07 Counter Batten Installation:

A. Both vertical and horizontal battens are optional up to and including 7 in: 12 in. pitch. Thereafter, 4 in. horizontal battens are required unless restricted by product design (Tile without batten lugs). When utilizing horizontal battens only, preformed metal flashing with metal edge returns must be used (Refer to RAS 119).

B. Nominal 1 in. x 4 in. vertical battens shall be applied at spacing not greater than 24 in. on center. Secure at maximum spacing of 12 in. on center with screws of sufficient length to penetrate the deck sheathing by a minimum of 3/4 in. or to penetrate into a 1 in., or greater, thickness of lumber not less than 1 in. Vertical battens shall be placed over the top cord of the roof trusses. Vertical battens may vary in length. All battens shall be installed with minimum #8 diameter corrosion resistant screw fasteners.

C. Horizontal battens shall be minimum nominal 1 in. x 4 in. or 2 in. x 2 in.

D. Fasten and secure maximum 24 in. on center through vertical battens with nails screws of sufficient length to penetrate the vertical batten or sheathing a minimum of 3/16 in. or to penetrate into a 1 in., or greater, thickness of lumber not less than 1 in.

E. On counter batten system, install a batten parallel to the outside edge of the valley.

3.08 Tile Installation:

A. Eave treatment - CHOOSE ONE of the following:

1. Prefabricated EPDM synthetic rubber - Install closure strip along eave. Fasten each piece at 12 in. on center. (See Drawing 10)

2. Metal Eave Closure - Install closure strip along eave.

3. Raised Fascia/Wood Starter Strip - when using a 3/4 in. raised fascia, a nominal 2 in. x 2 in. wood starter strip must be installed behind fascia.

   (aa) Install fascia board approximately 1 1/2 in. above roof deck or a nominal 2 in. x 2 in. wood starter strip at roof edge (See Drawing 12)

   (bb) Install 8 in. tapered cant strip at eave behind fascia and/or starter strip to support metal flashing. Install a minimum 8 in. wide anti-ponding metal flashing to ensure positive drainage over fascia/starter strip. Fasten top edge of flange onto roof and fasten eave edge to raised fascia detail with approved fastener 4 in. on center.

4. Prefabricated concrete or clay eave closure - fastened per manufacturer’s specifications, such fasteners to be approved and sealed with plastic roof cement.

5. Storm Clips. Storm clips may be required based on fastening requirements. Refer to tile NOA.

NOTE #11: All fastener penetrations shall be sealed. Mortar eave closures shall only be used with granular surface underlayments.

6. Mortar Application - Install mortar to elevate eave edge.
(aa) Apply mortar along the eave edge, applying enough mortar to elevate the eave end of the tile to be on profile with the remaining roof tile.

(bb) Point and smooth finish flush to eave line.

(cc) Apply minimum \( \frac{3}{8} \) in. weep hole flush with the roof underlayment shall be formed at the spacing of not less than one weep hole per tile.

NOTE #12: Tile shall be attached to resist the design pressures for the building. See Chapter 16 (High Velocity Hurricane Zones) and RAS 127. See Tile manufacturers NOA for attachment resistance values, which must exceed the required calculated design pressures of the structure.

3.09 Valleys CHOOSE ONE of the following:

A. Standard Roll Valley

1. Closed Valley - Miter tile to meet at center of valley.

2. Open Valley Chalk a line minimum 2 in. on both sides valley center. Place bed of mortar along outside edge of chalk lines. Miter tile to form straight border and point mortar to finish.

B. Preformed Metal Without Returns

1. Closed Valley - Miter tile to form straight border on either side of water diverter.

2. Open Valley - Miter tile to form straight border on either side of two water diverters.
C. When valley terminates onto roof plane install in accordance with standard valley flashing procedures:

1. Apply a lead soaker/skirt underneath the eave end valley to carry water off the valley back onto the field tile (See Drawing 4)

2. If lead skirt is not used, extend complete width of valley metal to carry water off the valley back onto the field tile.

3.10 Hip Starter CHOOSE ONE of the following:

A. Prefabricated hip starter.

1. Miter tile as hip starter to match eave lines.

B. Use standard hip tiles as starter.
3.11 Hip and Ridge Nailer Boards (See Drawing 13) - Details 1, 2, 3 and 4 are also accepted methods of installing Hip and Ridge Nailer Boards

A. Wood nailers shall be required and attached in compliance with Chapter 16 (High Velocity Hurricane Zones) of the Florida Building Code, Building.

B. Wood nailer boards shall be secured with galvanized steel straps of a minimum thickness of \(\frac{1}{8}\) in. by \(1\frac{1}{4}\) in. wide. The galvanized steel straps shall be installed at a maximum spacing of 12 in. o.c. along the length of the ridge nailer boards. Steel straps shall be bent to fit over the ridge nailer boards, and shall be secured to the sheathing with a minimum of six \#6-\#8 corrosion resistant screws per strap, at a maximum spacing of 4 in. o.c.

1. Install first hip or ridge tile the exposed length of first course of field tile with factory finish of rake tile towards the eave.

2. Fasten each hip or ridge tile with a minimum of two 10D nails and/or of sufficient length to penetrate the framing a minimum of \(\frac{3}{4}\) in.

3. Abut each succeeding hip or ridge tile to the nose of the field tile above and maintain a constant headlap.

C. CHOOSE ONE of the following:

1. Self-adhered Membrane:
   
   (aa) Install self-adhered membrane over nailer board and seal to tile surface per membrane manufacturers’ recommendation.

   (bb) Install hip and ridge tiles with nails or screws of sufficient length to penetrate a minimum of \(\frac{3}{4}\) in. into nailer board lapping tile a minimum of 2 in. (Approved adhesive, in lieu of nails or screws, is permitted when using Details 2 and 3.)

   (cc) Use approved adhesive or clips at overlaps.
2. Mortar

(aa) Set hip and ridge tile in a continuous bed of mortar, lapping tile a minimum 2 in. Ensure bed of mortar does not protrude in center of hip or ridge junction. Approximately 1 in. of field tile shall extend beyond bed of mortar.

(bb) Install hip and ridge tiles with 10 D nails or screws of sufficient length to penetrate a minimum of 3/4 in. into nailer board. (Approved adhesive, in lieu of nails or screws, is permitted when using Details 2 and 3.)

(cc) Point mortar and finish to match tile surface.

3.12 Rake/Gable CHOOSE ONE of the following:

A. Rake/Gable Tile:

1. Install first rake tile the exposed length of first course of field tile with factory finish of rake tile towards the eave.

2. Fasten each rake tile with a minimum of two 10D nails and/or of sufficient length to penetrate the framing a minimum of 3/4 in.

3. Abut each succeeding rake tile to the nose of the field tile above and maintain a constant headlap.

B. Mortar Finish:

1. Place mortar bed along roof edge.

2. Point smooth to a straight edge finish.

3.14 Plumbing Stacks

A. Cut tiles to fit close to plumbing stack fill void with mortar and point to finish.

NOTE #13: It may be necessary to remove the lugs from the field tile at wall flashing for proper positioning of cut field tiles. For tiles installed at headwalls, tile shall be installed with approved roof tile adhesive.

3.13 Wall Abutments

A. Cut tile to fit approximately 1/2 in. to base of walls. Fill void with mortar and point to finish.