



Terreal North America Clay Products

Roofing Tiles

MATERIALS

1. Tiles

- a. Cover roofs so indicated on plans with Terreal North America Clay Barrel Roof tile, Specify Color
- b. Ridge tiles shall be Terreal cover tile color as specified above. Point-up mortar shall be kept neat and colored to match the base color of the tiles. Hip starters shall be barrel tile neatly pointed up with mortar.
- c. Tiles shall be installed with as a Mortar-set at the following exposures: 16" length at 10.5" o.c.
- d. All field tiles at hips and valleys shall be cut to the correct angle on the job.
- e. At eave, fill barrel voids with Terreal eave bird stops.

2. Nails or Screws

- a. Nails for tiles (when needed) and cleats shall be copper, 11 gauge, large headed, length to give proper penetration. Screws shall be stainless or brass, #8 with minimum 3/8" diameter head.

3. Underlayment

- a. Cover all decks with a base sheet of #30 asphalt impregnated felt (ASTM D226-89), tin-tagged in accordance with local Codes.
- b. All eave, valley and flashing metal shall be 16 oz. Copper.

4. Wood Strips

- a. Apply on hips and ridges minimum 1" thick wood stringers of proper height to carry hip and ridge tiles.

5. Flashing

- a. Line all valleys with 16 oz. Copper at least 18" wide. Lap joints 6" (more where required) but do not solder.

- b. At sides of dormers, chimneys and other walls extend flashing at least 6" up the vertical surface and counterflash. Extend flashing under tile no less than 4" and turn up edge 1 1/2".
 - c. At lower side of dormers, chimneys, and other walls extend flashing at least 3" up wall, 4" over tile and counterflash.
 - d. All counterflashing to be plugged, pointed and, made secure.
6. Mortar, Flashing Cement, Sealant
- a. Mortar for filling the openings of cut valley tile, at eave and to point up hip and ridge shall comprise 1 part Portland Cement Mortar type N (ASTM Spec C-270) and 4 parts sand.
 - b. Flashing Cement for gable rakes, hip rolls, ridges, stringers, and other conditions shall be non-running, heavy body asphalt roofing cement composed of mineral ingredients to meet the requirements of ASTM D-4586.

APPLICATION OF TILE - MORTAR SET

NOTE: Clay tile shall be wet when applied under the Mortar-set system.

- 1. Minimum slope for Terreal roof tile shall be 2 1/2" on 12" with built-up underlayments under tiles.
- 2. Roof deck shall be clean, smooth and dry when roof tiles are applied.
- 3. Snap vertical chalk lines at 10.5" centers. Horizontal lines shall be staggered (butt ends of tile). The method of staggering to be determined by roofing contractor and confirmed by architect. Minimum 3" headlap.
- 4. Cements - Choose one of the following:
 - a. Blended cement - Mortar shall be tested and approved bagged premixed unit consisting of ASTM type "M" masonry cement, or equivalent, in combination with ASTM C332 lightweight aggregate or ASTM C144 sand.
 - b. Portland cement - conforming to ASTM C150, Type 1.
 - c. Masonry cement - conforming to ASTM C91, Type M

NOTE: Sand, if added to the mixture, shall conform to ASTM C144, uniformly graded, clean and free from organic materials.
- 5. Make certain all tile overhangs eaves drip edge evenly along the entire first course. Install mortar along the eave edge, applying enough mortar to elevate the eave end of the tile to be on profile with the subsequent field tiles. Point and smooth finish flush to eave line. Apply a minimum 3/8" weep hole

- flush with the underlayment at the spacing of one weep hole per tile.
6. Apply a 10" mason's trowel of mortar vertically over the chalk line and under the center of each pan tile with narrow end facing down roof.
 7. Place a bed of mortar along the inside edges of pans and set covers with wide end facing down roof. Neatly point up the sides of the covers to achieve a clean, straight-edge finish insuring contact along edges.
 8. Lay succeeding courses of field tile in the same manner. Bed of mortar should make contact with head of lower course of tile and underside of tile being set.
 9. Cut field tile to form straight edge at center of hip/ridge.

APPLICATION OF TILE - NAIL ON

1. Minimum slope for Terreal roof tile shall be 2 1/2" on 12" with built-up underlayments under tiles.
2. Roof deck shall be clean, smooth and dry when roof tiles are applied.
3. Snap vertical chalk lines at 10.5" centers. Average 5" headlap. Horizontal lines shall be staggered (butt ends of tile). Method of staggering to be determined by roofing contractor and confirmed by architect. Minimum 3" headlap.
4. Make certain all tile overhangs eaves drip edge evenly along the entire first course. Install mortar along the eave edge, applying enough mortar to elevate the eave end of the tile to be on profile with the subsequent field tiles. Point and smooth finish flush to eave line. Apply a minimum 3/8" weep hole flush with the underlayment at the spacing of one weep hole per tile.
5. Secure tile with fasteners.
6. Lay succeeding courses of field tile in the same manner. Bed of mortar should make contact with head of lower course of tile and underside of tile being set.
7. Cut field tile to form straight edge at center of hip/ridge.

