



# ROMAN PAN TILE

THE LEADER IN THE CLAY ROOF TILE INDUSTRY IN THE U.S.A.







CB399 Agoura Hills Blend (Tops: 2F19, 30%, B330-R 30%, 2F45 20%, F40 20%, Pans: 2F45 60%, F40 40%) Agoura Hills, CA

Roman Pan Tile is truly an architectural legacy of Ancient Roman and Greek artistic design. Re-creating this traditional flat Roman Pan and pairing it with high-crown Classic Tapered Mission Tops, MCA captures this timeless architecture for both commercial and custom residential projects.

Available in a variety of textures, including popular Sand Cast and Vintage, MCA Roman Pan Tile adds an inviting Tuscan look to any building. Choose from our Designer's Blends, or create your own custom blend.

MCA Roman Pan Tile is made in the USA and is ASTM C1167 Grade 1, the highest quality clay product available.

Competitively priced, this product is also backed by a 50-year limited warranty.

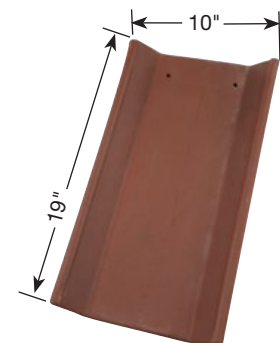
For more information, please contact MCA sales office at 1-800-736-6221 or sales@mca-tile.com

## CC/CODES, CERTIFICATIONS

- IAPMO UES ER-356\*
- TDI Approval RC-21
- Florida Building Code, FL22539.9
- Miami-Dade County, FL NOA No. 17.0329.14 (Exp. 02/16/22)
- Class A, E108 (UL790)
- ASTM C1167 Grade 1
- Made in USA



\*IAPMO UES Evaluation Report covers City of Los Angeles and is in lieu of ICC-ES



## TILE SPECIFICATIONS:

Actual Size:	19" x 10"
Exposed Size:	16" x 12" O.C.
Weight per Square:	1050 lbs.
Weight per Piece Pan:	8 lbs.
Weight per Piece Top:	6 lbs.
No. of Pieces per Square:	150

## METRIC TILE SPECIFICATIONS:

Actual Size:	483mm x 254mm
Exposed Size:	406mm x 305mm
Weight per Square:	476.27 kg
Weight per Piece Pan:	3.63 kg
Weight per Piece Top:	2.72 kg
No. of Pieces per Square:	150

Metric conversion of lumber is actual dimensions of lumber; use lumber of the closest dimensions available.

\*Dimension of the head of the tile.



Teja Bianco  
**CB383M**



Veneto Diores  
**CB372M**



Tuscan Gold  
**CB382M**



Cinnamon  
**2F18**



Natural Red  
**F40**



Brick Red  
**2F43**



Canyon Red  
**2F23**



Cafe Rustic  
**CC136M**



Antique Kiln Flash  
**CB397**



Old Santa Barbara  
**CC16M**



Mahogany  
**2F72**



Burnt Sienna  
**2F22**



Tobacco  
**2F45**



Carbon  
**2F28**



Taupe Smoke  
**CC134M**



Ironwood  
**2F19**

NOTE: Some tiles may have slight variations in color due to the inherent nature of clay tile and the limitations of the lithographic printing process.



# Designer's Selections



Teja Bianco Blend  
**CB383-R**  
*Light, Medium, and Dark Variations*



Veneto Diores Blend  
**F46-MSC**  
*Light, Medium, and Dark Variations*



Tuscan Gold Blend  
**F4645-MSC**  
*Light, Medium, and Dark Variations*



Solare Blend  
**CB387-SC**  
*Light, Medium, and Dark Variations*



Natural Red  
**F40**



Brick Red  
**2F43**



Old Santa Barbara  
Medium  
**CC16M-R**



Rosso Antico Blend  
**2F43-S**



Café Mocca Blend  
**CB360-SC**  
*Light, Medium, and Dark Variations*



Vintage Carmel Blend  
**CB364-R**  
*Light, Medium, and Dark Variations*



Villa Rosso Blend  
**2F43-MSC**  
*Light, Medium, and Dark Variations*



Tierra Brown Blend  
**2F45-MSC**  
*Light, Medium, and Dark Variations*



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**B331-R** Zorro Blend



**CB361-SC** Montage Blend



**CB397** Antique Kiln Flash Blend



**CB393** Firestone Flash Blend



**B308** Canyon Red Blend



**B340-R** Vintage Red Blend



**B330-R** Old Santa Barbara Blend



**CB228** Shady Canyon Blend



**CB399** Agoura Hills Blend

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## 1. GENERAL

(use the standard Part1 of your office)

## 2. PRODUCTS

### 2.1. ROOFING TILE:

- Where indicated on the Drawings, provide Roman Pan with Classic Tapered Mission™ Style roofing tile manufactured by M.C.A. Clay Roof Tile, Inc., 1985 Sampson Avenue, Corona, CA 92879, phone 800-736-6221, FAX (951) 736-6052, in color \_\_\_\_\_, and with birdstop at eaves.
- Comply with pertinent provisions of ASTM C1167 (Grade 1), and IAPMO UES ER-356, and with the Tile Roof Institute Manual.

### 2.2. Other materials:

#### A. Membrane:

- Under all Roman Pan with Classic Tapered Mission™ Style roofing tile on roof pitches greater than 3:12, except where heavier membrane is required by governmental agencies having jurisdiction, provide not less than two layers of 30 lb (14 kg) asphalt-saturated felt placed at right angles to roof pitch, mopped solidly between layers with 25 lbs (10 kg) of hot asphalt and mopped solidly on top of layers with hot asphalt.
- At roof pitches of 3:12 and steeper, provide a minimum of one layer of membrane complying with ASTM D26, Type II, or one layer of membrane complying with ASTM D4869, Type IV or upgrade material placed with minimum 2" (51 mm) headlap and 6" (152 mm) sidelap.
- Provide in strict accordance with pertinent requirements of governmental and/or other agencies having jurisdiction.

#### B. Nailers:

- Where indicated on the Drawings or otherwise required for proper nailing, provide:
  - 2" x 6" (36 mm x 152 mm) nailing board at all hips and ridges;
  - 2" x 3" (36 mm x 60 mm) nailing board under first row of cover tile after gable roll, with adjacent 2" x 2" (36 mm x 36 mm) nailing board along rake side;
  - 2" x 4" (36mm x 102mm) nailing board full length from ridge to eave for all top tile where architect specifies 2" x 4" nailing system.

#### C. Flashing:

- Flash at roof valleys in strict accordance with IBC or required by local governmental agencies having jurisdiction:
  - For valley flashing use not less than 0.019" (G90) (No. 26 gage) (.48 mm thick) corrosion resistant metal, extending at least 11" (279 mm) away from the centerline of the valley each way;
  - Provide a splash diverter rib not less than 1" (25 mm) high at the flow line, formed as part of the flashing;
  - Provide flashing overlap of not less than 4" (102 mm).
- For other flashing use not less than 0.019" (G90) (No. 26 gage) (.48 mm thick) corrosion resistant metal; at sides of dormers, chimneys, and other walls, extend flashing at least 6" (152 mm) up the vertical surface.
  - Thoroughly counterflash.
  - Extend flashing under tile at least 4" (102 mm), and turn the edge up 1-1/2" (38 mm).
- At lower side of dormers, chimneys, and other walls, extend flashing at least 3" (76 mm) up the wall and 4" (102 mm) over the tile, and then thoroughly counterflash.
- At wood saddles and returns, line with not less than 0.019" (G90) (No. 26 gage) (.48mm thick) corrosion resistant metal or 16 oz (454 g) copper extending up sloping roofs not less than 12" (305 mm), and more where necessary, and up vertical walls not less than 6" (152 mm), thoroughly counterflashed.
- Make all counterflashing plugged, pointed, and secure.

- Extend gutter metal up the roof to a point higher than the outer edge of the gutter.

#### D. Mortar, plastic cement, and sealant:

- Provide Type M cement mortar complying with ASTM C-270 at all ridges and hips to completely seal the area under the ridge and hip tiles.
- At gable, hip, ridges, and other conditions, provide a non-running, heavy body, plastic cement composed of asphalt and other mineral ingredients complying with ASTM D4586 and Fed Spec SSC-153 Type 1.
- When using sealant in lieu of the plastic cement, provide a silicone sealant complying with ASTM D1002 or ASTM E42.

#### E. Fasteners:

- Fasteners shall comply with IRC section R905.3.6 and IBC section 1507.3.6 and UBC Section 1507.3. Corrosion resistant meeting ASTM A641 Class I or approved equal, number 11 gauge diameter and of sufficient length to properly penetrate 3/4" into or through the thickness of the deck or batten, whichever is less. The head of the nail used for tile fastening shall not be less than 5/16 inches and shall comply with ASTM F1667 for dimensional tolerances. Other fastening systems such as screws, wire, or adhesive based systems as approved by code, or local building officials will be allowed.
- In areas designated by the building official as being subject to high winds that exceed 80 mph, or where roof height exceeds 40 ft (12m) above grade, attach all tiles in strict accordance with Chapter 15 of IBC, Table 15-D-1, Footnote 2 or as required by local governmental agencies having jurisdiction.
  - Nail the heads of all tiles;
  - Fasten the noses of all eave course tiles with approved clips;
  - Nail rake tiles with two nails;
  - Set the noses of all ridge, hip, and rake tiles in a bead of approved mastic.
- On slopes over 24:12, securely fasten the nose end of all tiles.
- Provide "Wind Locks" where directed by the Architect.
- Tile tie systems of stainless steel or galvanized wire may be used where approved by governmental agencies having jurisdiction:
- At snow areas use "Wind Locks" with straw nails. In lieu of straw nails, install vertical 2x4 nailer boards full length from ridge to eave for all top tiles.

- Provide other materials, not specifically described but required for a complete and proper installation, as selected by the Contractor subject to the approval of the Architect.

### 2.3.FOR METAL OR POURED CONCRETE ROOF DECKS:

- Where design indicates concrete roof deck or metal roof deck, Twisted Tile-Tie system or Polypro AH160 roof tile adhesive may be used where approved by the governmental agencies having jurisdiction.
  - If Twisted Tile-Tie system is used, follow MCA Tile-Tie system detail.
    - At coastal areas use only stainless steel;
    - At high wind and snow areas use "Wind Locks";
    - Twisted Wire anchor span is no more than 4 feet
  - If Polypro AH160 roof tile adhesive is used, apply large paddy placement (see Polyform application detail)

## 3. EXECUTION

### 3.1 SURFACE CONDITIONS:

- Examine the areas and conditions under which work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the work. Do not proceed until unsatisfactory conditions have been corrected.

## 3.2 INSTALLATION GENERAL:

### A. Membrane:

- Verify that deck surfaces are clean and dry prior to installation of membrane.
- Remove all foreign particles from substrate to assure proper seating and to prevent water damage.
- Install the specified membrane in strict accordance with pertinent requirements of governmental agencies having jurisdiction.

- On vertical applications, and on extremely steep pitches where wind currents may cause lift, set the butt of each tile in a bead of the specified plastic cement or sealant, or provide stainless steel "Wind Locks" at intervals. Use plastic cement and sealant carefully, and avoid smearing the exposed tile surface.

### C. Chalk lines:

- Chalk horizontal and vertical guide lines on the membrane to assure water tightness and proper appearance.
- Space the chalk lines by measuring the delivered tiles for average length and width exposures.
- Do not exceed an exposure length 1/4" (6 mm) beyond the average.

### 3.3 INSTALLING ROMAN PAN WITH CLASSIC TAPERED MISSION™ STYLE ROOFING TILES:

#### 1. Birdstops and booster starters:

- Install the specified clay birdstops full length of all eaves.
- Install first row of pans 13" (330 mm) from the eave, leaving a 3" (76 mm) overhang. If rain gutter is involved, use 1 1/2" (38mm) overhang.
- Install booster above birdstops.
- Install starter tiles directly above booster tiles; length exposure shall not exceed 13" (330 mm) centers, and width exposure shall not exceed 12" (304.8 mm) centers.
- Install the specified nailers at ridges, rakes, and gables.

#### 2. Install the tile in rows from left or right, beginning at the lowest portion of the roof.

- Install each tile successively, fastening each tile with the specified fasteners.
- Length of exposure on field tile shall not exceed 16" (406 mm) on centers, and width exposure on field tiles shall not exceed 12" (304.8 mm) on centers.
- Install ridge, hip, and valley tiles in accordance with pertinent requirements of governmental agencies having jurisdiction.
  - Provide cement mortar Type M complying with ASTM C270 at all ridges and hips to completely seal the area under ridge and hip tiles.
  - Install a thin coat of rich cement mortar (1 part Type I portland cement complying with ASTM C150 to 3 parts sand complying with ASTM C144) along exposed edges of all ridge and hip tiles.
  - Completely and neatly fill and point up all voids.

#### 3. To avoid color patterning, checker boarding, spotting, and stair stepping:

- After the installation of each 80 roofing tiles, make a visual inspection from the ground level and at a distance from the building of about 40 feet (12m);
- Verify that tile courses follow straight and true lines;
- Verify that color range is smooth with no abrupt changes.
- Make necessary corrections before proceeding with further installation.

### 3.4 CLEANING UP:

- Upon completion of the work of this Section, and as a condition of its acceptance, completely remove from the job site all tools, equipment, debris, and surplus materials pertaining to this portion of the work.

## OM/OPERATION, MAINTENANCE

Over 100 years of product knowledge has enabled us to create a roof tile that is highly resistant to chipping, wearing and fading. We stand behind our product 100%. To install M.C.A. Tile, use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements

and the methods needed for proper performance of the work. M.C.A. Clay Roofing Tile may have color variations due to the inherent natural characteristics of the material used. To avoid color patterning, checkerboarding, spotting and stairstepping, the installer should periodically (after installing 80 pieces of roof tile) check the roof color from the ground level at approximately 40 feet (12m) from the building for a color "range." By following

this procedure, patterning or spotting should be avoided by blending the tiles over the entire deck. If this procedure is not followed, M.C.A. can not be held liable or responsible in any way once the tiles have been installed. All claims should be made in writing before installation of the tiles. No claims will be recognized after the tiles have been installed. Once M.C.A. Roof Tiles are installed, no maintenance is required.

Metric conversion of lumber is actual dimensions of lumber; use lumber of the closest dimensions available.