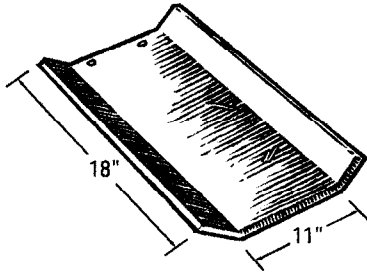




ROMAN PAN ROOF TILE

I.C.B.O. # 3416 / 162 per square – Bella tops

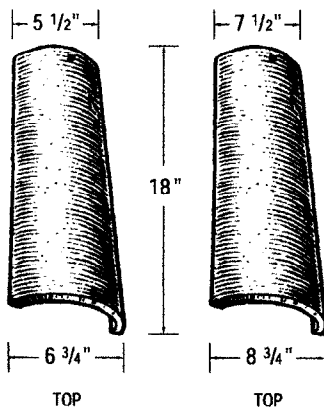
I.C.B.O. # 3416 / 144 per square – Mission tops



ROMAN PAN TILE

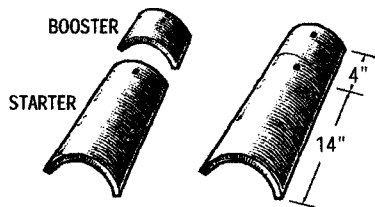
162 Pieces (with Bella tile) = 1 Square / Approximately 1200 pounds per Square / Spaced on 12 1/2" centers, Maximum 15" exposure, 81 Bella tops, 81 Roman Pans

144 Pieces (with 2pc. Mission) = 1 Square / Approximately 1200 pounds per square / Spaced on 14" centers, Maximum 15" exposure, 72 Mission tops, 72 Roman Pans

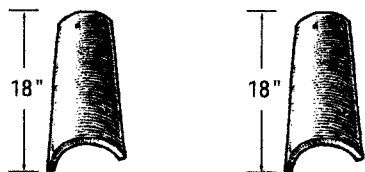


BELLA
TWO-PIECE TILE

MISSION
TWO-PIECE TILE



STARTER AND BOOSTER



GABLE RAKE TILE
Left and Right available
(Mission or Bella Tile)

RIDGE
(Mission or Bella Tile)

SPECIFICATIONS

1. Dimensions – One Roman Pan Tile is 18" long and 11" wide.
2. Weight – Approximately 1,200 lbs. per square, dry. Moisture absorption not more than 11%.
3. Fire Rating – Non-combustible.
4. Specify Color Throughbody – Red, Buff.
5. Specify Flash – Custom color spray flashes and kiln flashes (Firestone, Buffstone, Rosestone).

UNDERTILE PREPARATION

1. Solid sheathing I.C.B.O. approved minimum 15/32".
2. Sweep roof surface broom clean. Cover knotholes with metal flashing.
3. For pitches up to 3/12: Comply with code of the building official having jurisdiction.
4. For pitches 3/12 to 21/12:
 - a. Nail one layer of the Uniform Building Code required (minimum #30 felt complying ASTM-D-224) #30 or heavier felt. Lay with a 4" head lap and a 6" side lap. Nail securely in place as code requires.
 - b. Blind nail at laps.

TILE FASTENERS – All tiles shall be mechanically fastened per job site requirements and local building codes (which ever is more stringent).

1. Specify fasteners:
 - a. Galvanized nails (complying with the federal nail specification).
 - b. Manufactured fastening systems, per manufacturer's fastening specifications.

APPLICATION OF TILE

Starting along the eave, pan tiles are layered in vertical rows a maximum of 12 1/2" on center (Bella tile) and 14" on center (2pc. Mission tile). A booster tile is set and fastened over the lower edge of each pan tile. A starter tile is then fastened over the booster tile and intervening space, completing the eave course. Random laying of the cover or 'top' tile is provided by varying the vertical exposure from 11 inches to not more than 15 inches to the weather.

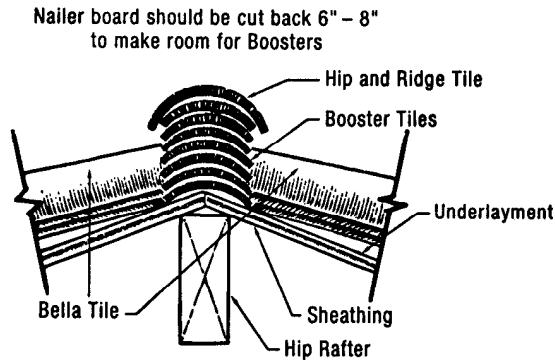
1. Lay clay roofing tiles with vertical rows spaced a maximum of 12 1/2" on centers (Bella tile) and 14" on centers (2pc. Mission tile).
2. On eaves use eave closure or 1" x 2" wood strip to raise or boost first horizontal course 3/4" - 1" above sheathing with anti-ponding drip edge metal. Subsequent courses are laid with a minimum 3" head lap.
3. On eaves use booster and starter tile for first course to start first course of tile.
4. Fasten each tile to sheathing with one No. 11 gauge corrosion resistant nail with length sufficient to penetrate 3/4" into the sheathing or through the sheathing thickness. Approved ties may be used as an alternative to nailing (see local building code).
5. Standard exposure – All cover tiles shall be laid with a maximum exposure of 15" to the weather or Random exposure – Cover tiles may be laid from 11" to 15" exposure, thus breaking all horizontal lines.
6. Fasten field cover tile. The laps of all cover tiles should be embedded in cement mortar (after immersing in water 2 minutes) or roofing mastic.
7. Mechanically fasten and set all gable, hip and ridge tile in cement mortar and mastic all laps.

SHADE BLENDING

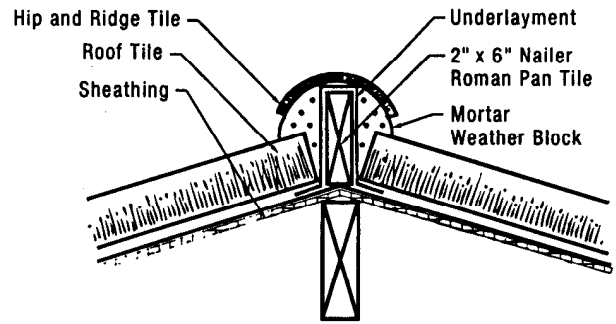
After about 75 to 100 tiles are installed, examine the application at a distance from ground level for straight, true lines and good color blend. This should be done at regular intervals during installation to ensure an attractive and acceptable roof. Blending of shade is particularly important to avoid streaks or "hot spots". Acceptable blending can only be done as the tile is installed.

FOR ALL APPLICATIONS

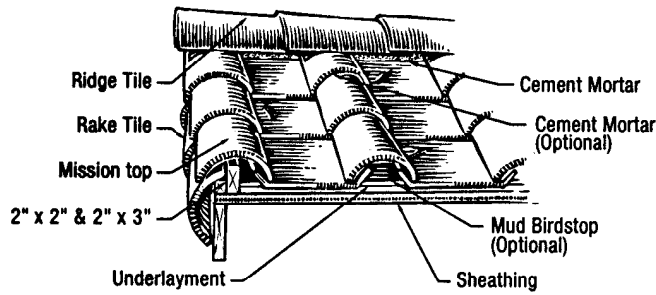
First row of tops after gable roll shall be set in cement mortar or roofing mastic. Mechanically fasten a booster tile set in cement mortar or roofing mastic, flush with and under a starter tile where a double eave effect is desired. Where tile joins hips and ridges, any voids shall be filled with cement mortar. Cap hips and ridges with cover tiles and point neatly with cement mortar. Mechanically fasten and set all gable rake tile in cement mortar or roofing mastic. Mechanically fasten and set all hip and ridge tile in cement mortar. All tile in contact with mortar shall be immersed in water for a minimum of 2 minutes before installing. Mortar must be used on all hips and ridges.



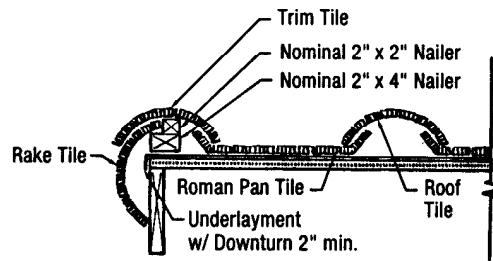
HIP AND RIDGE BOOSTER BELLA DETAIL
Typical Cross-Section



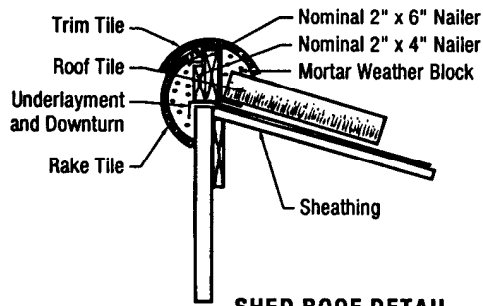
HIP AND RIDGE NAILER ROMAN PAN TILE DETAIL
Typical Cross-Section



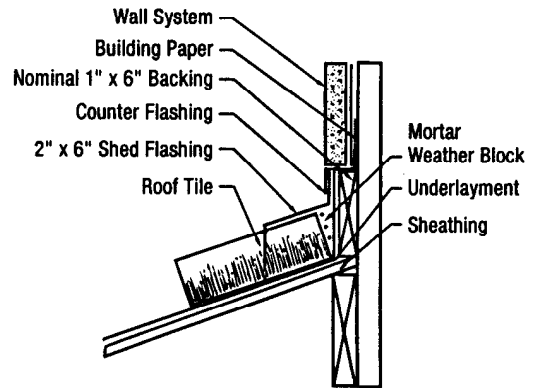
EAVE AND LEFT RAKE DETAIL
ROMAN PAN TILE



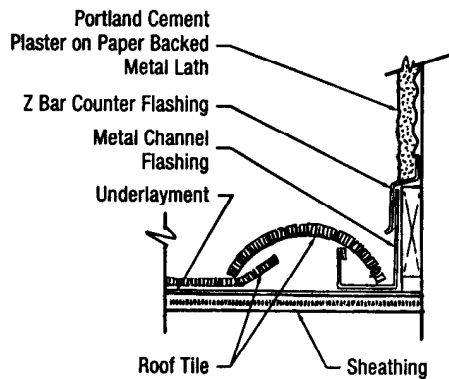
LEFT RAKE ROMAN PAN TILE



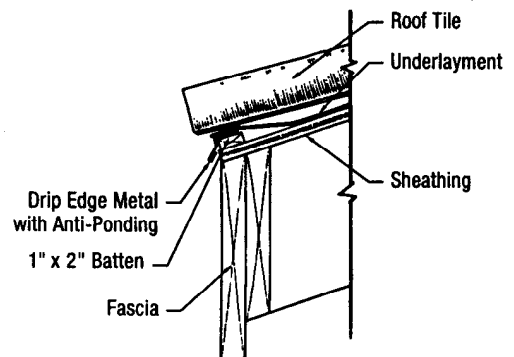
SHED ROOF DETAIL



ROOF TO WALL FLASHING AND COUNTER FLASHING



ROOF TO WALL PAN FLASHING WITH Z-BAR COUNTER FLASHING SHOWN WITH 2 PIECE BELLA TILE



EAVE AND FASCIA DETAIL