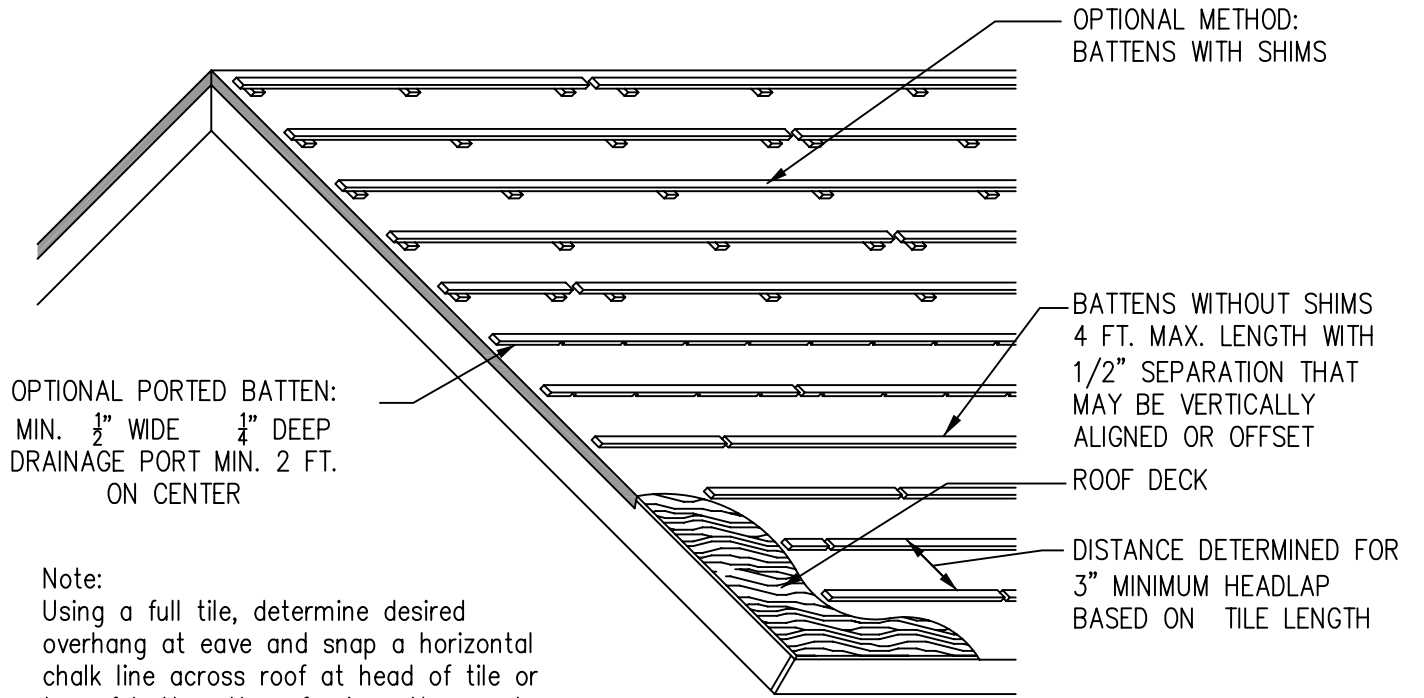


BATTEN LAYOUT OPTIONS

(FOR TILES WITH PROTRUDING ANCHOR LUGS)

MC-04



OPTIONAL PORTED BATTEN:
MIN. 1/2" WIDE 1/4" DEEP
DRAINAGE PORT MIN. 2 FT.
ON CENTER

OPTIONAL METHOD:
BATTENS WITH SHIMS

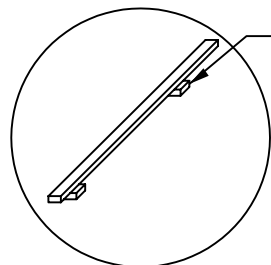
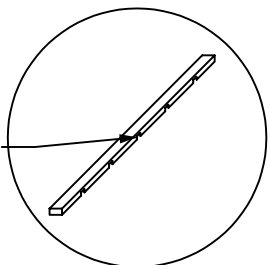
BATTENS WITHOUT SHIMS
4 FT. MAX. LENGTH WITH
1/2" SEPARATION THAT
MAY BE VERTICALLY
ALIGNED OR OFFSET

ROOF DECK

DISTANCE DETERMINED FOR
3" MINIMUM HEADLAP
BASED ON TILE LENGTH

Note:
Using a full tile, determine desired overhang at eave and snap a horizontal chalk line across roof at head of tile or top of batten. Use of rain gutters and eave closures should be considered in determining tile overhang.

OPTIONAL PORTED BATTEN:
MIN. 1/2" WIDE 1/4" DEEP
DRAINAGE PORT MIN. 2 FT. ON
CENTER



OPTIONAL METHOD:
BATTENS WITH SHIMS
SEE NOTE 5

Notes:

1. One layer of No. 30 asphalt-saturated felt complying with ASTM D-226 Type II (ASTM D4869 Type IV) as a minimum underlayment on all tile roof applications. Other underlayments as approved by local building officials will be allowed.
2. Battens shall not be less than nominal 1-inch by 2-inch or other code approved products.
3. Battens shall be no longer than 48" and be separated with 1/2" minimum gaps at ends to allow drainage. An alternate method permits use of longer batten strips with shims of minimum 1/4" thick decay-resistant material (e.g. asphalt shingle, wood strips or cap sheet) at each fastener to provide drainage, or other methods approved by local building officials.
4. Battens for tiles with protruding anchor lugs are optional for slopes between 3:12 and 7:12. Direct deck nailing attachment of tile will be per local building code.
5. Fasten battens a minimum of 24" on center with minimum 8d corrosion-resistant nails penetrating through decking or into structural framing. Batten attachment at 12" on center with staples a minimum of 1-1/2" long, 7/16" crown, No. 16 gage corrosion-resistant allowing for 3/4" penetration into roof deck or through the sheathing which ever is less or on 24" centers if fastened directly to structural framing.
6. Consideration should be given to climate and roof orientation to determine if it is beneficial to specify/use vertical battens over underlayment, with horizontal battens secured over the vertical battens.
7. See Table 2 and Table 3 for additional batten considerations.

Drawing shown depicts the application of all tile profiles. Unless otherwise noted it would apply to either concrete or clay tiles.