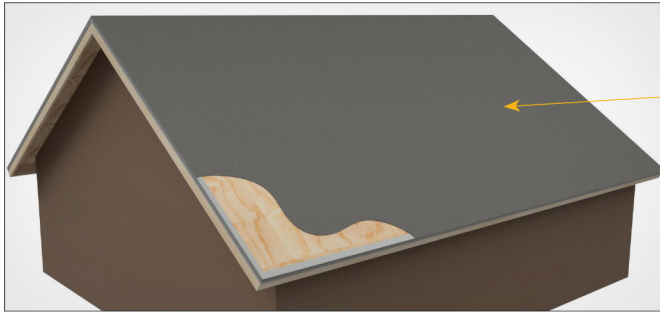


MC-04

LAYOUT OPTIONS - BATTENS

FOR TILES WITH PROTRUDING ANCHOR LUGS
(Do not mix batten options on a roof)



DIRECT DECK - NO BATTENS USED IN DIRECT DECK APPLICATIONS. CAN BE EITHER STYLE OF TILE



OPTIONAL METHODS:
BATTENS WITH SHIMS
BATTENS WITHOUT SHIMS

4 FT MAX. LENGTH WITH 1/2" SEPARATION THAT MAY BE VERTICALLY ALIGNED OR OFFSET

DISTANCE DETERMINED FOR MINIMUM 3" HEADLAP BASED ON TILE LENGTH

OPTIONAL PORTED BATTEN: MIN 1/2" WIDE X 1/4" DEEP WITH DRAINAGE PORTS MIN 2 FT. ON CENTER. OPTIONAL RAISED OR ELEVATED BATTEN SYSTEMS WITH CODE APPROVAL ARE ALLOWED.

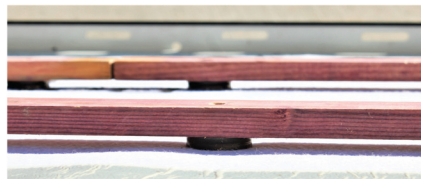
NOTE:

Using a full tile, determine desired overhang at eave and snap a horizontal chalk line across roof at the head of a tile or top of batten. Consider tile dimensions, eave closure and eave/gutter detail to determine desired overhang. First row chalkline must adjust for direct to deck or batten installation.

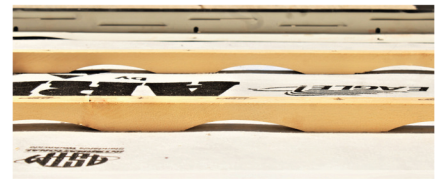
NOT TO SCALE, FOR VISUAL PURPOSES ONLY. SEE MANUFACTURER OF BATTENS FOR ADDITIONAL INFORMATION



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



OPTIONAL BATTENS WITH SHIMS, RAISED PADS



OPTIONAL BATTENS WITH SCALLOP OR OTHER DRAINAGE DESIGNS

NOTES:

1. For recommended underlayment and fastening, see Page 13, Table 1A, 1B & 1C.
2. Battens shall not be less than nominal inch by inch or other code approved products.
3. Battens shall be no longer than 48" and separated with 1/2" minimum gaps at ends to allow for drainage. An alternative method permits the use of longer batten strips with shims of minimum 1/4" thick decay resistant material (e.g. asphalt shingle, woods strips or cap sheet) at fastener to provide drainage, or other methods as approved by local building official.
4. 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 gauge corrosion-resistant allowing for a 3/4" penetration into roof deck or protrude min 1/4" through sheathing which ever is less or 24" centers if fastening directly to structural framing. 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 vertical battens.
5. 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.