



TRI Alliance Manual Certification Pre-work

The following materials should be reviewed before the class begins. 10 points on the test will be related to this pre-work.

I. Introduction to Tile Roofing Industry Alliance

Directions - Watch a 5 minute Intro to TRI Alliance video: <https://youtu.be/Q9oCK2lwXJM>

Review Questions

1. Are producers of synthetic tiles part of the TRI Alliance?
2. Does the TRI Concrete and Clay Installation Manual provide best practices for tile roofing or minimum code requirements?

II. Material Checklist and Roof Tile Classification Profiles

Tools: Installation Manual, highlighter, 5 minute Video link below

Directions

1. Turn to **page 3** of your Concrete and Clay Roof Tile Installation Manual.
2. Read the top half of page 3, which provides the minimum standards for decking, underlayment, flashing, fasteners and ventilation. If the specific requirement is not listed, pg. 3 tells you where to find the specific information.
3. The bottom half of the page describes the 3 classifications (Low, Medium, High) for roof tiles based on their profile dimensions.

Suggested Highlights - Material Checklist: 15/32- inch thick plywood, ASTM D226 Type II, ASTM D4869 Type IV, ASTM D1970 (self adhering), Nominal 1"x2", Deck and Tile flashing is required, Fasteners See pg. 6 and Table 1A/1B.

4. Watch the video on Roof Tile Profiles:

<https://www.youtube.com/watch?v=U0aKvHu77vY&t=9s>

Additional Suggested Highlights on page 3 - Low Profile Tile, top surface rise of ½" or less, Medium Profile Tile, rise to width ratio equal to or less than 1:5, High Profile Tile, rise to width ratio greater than 1:5.

Review Questions

1. What is the minimum thickness for plywood on a tile roofing installation?
2. How many flashings are required at a plumbing pipe penetration?
3. Where would you find the minimum requirements for fastening tile?
4. Does a tile have to be smooth to be considered a "Low Profile Tile"?
5. Is a typical concrete "S" tile a High Profile Tile, or a Medium Profile Tile?



TRI Alliance Manual Certification Pre-work

III. Above Sheathing Ventilation

Tools: Installation Manual, highlighter, Benefits of Above Sheathing Ventilation article (link below).

Directions

1. Read the Benefits of Above Sheathing Ventilation article at <http://www.roofingmagazine.com/benefits-sheathing-ventilation/>
2. Turn to page 13 of your Concrete and Clay Installation Manual. Note that in the vertical column labeled Standard Requirements, Counter Batten System is required when the slope of the rood is less than a 3/12 pitch. Under the vertical column labeled Optional Upgrades, Counter Battens are listed with a reference to Page 6 where you will find a description.
3. Read the description on Page 6.
4. Return to Page 13. Look to the bottom left corner and reads the bolded paragraph. This says standard battens are not allowed in Cool/humid climate zones indicated by the shaded area with diagonal lines. Raised battens are required in this area.

Suggested Highlights on Page 13 - Less than 3/12, Counter Batten System required, bold paragraph at page bottom.

Review Questions

1. What benefits would Above Sheathing Ventilation provide in the climate you work in most of the time? (Reduced energy cost, reduced ice damming, more consistent underlayment temperature, reduced condensation in a cool humid zone?)

IV. Roof Layout

Tools: Installation Manual, highlighter, Article: "Swing Tape & Layout Methods Make Tile Layout Easy" (link below), 9 minute Video (link below)

Directions

1. Turn to pg. 26 & 27 of your Concrete and Clay Roof Tile Installation Manual.
2. Read the article on Swing Tape & Layout Methods at <http://www.roofingmagazine.com/swing-tape-layout-methods-make-tile-layout-easy/>
3. Watch the video on Roof Layout: <https://www.youtube.com/watch?v=1aDwVe3Nmo8&t=168s>
4. Return to the article and review the 5 Steps at the end of the article.
5. On page 26, read steps 1-9 below Roof Layout drawing MC-08.



TRI Alliance Manual Certification Pre-work

Suggested Highlights on Page 26

1. Using a full tile determine desired overhang...
2. Snap a horizontal chalk line at the top of the roof...
3. With measuring tape marked at maximum "exposed length" of tile being installed...

Review Questions

1. What method do you use for layout of your horizontal rows?
2. Can you layout tile with less than the manufacturer minimum standard of 3"?