Unit 111: Roofing occupations

# Worksheet 4: Single-lap tiles (tutor)

1. Research and draw three different single lap tiles.  
   Answers will vary.
2. Given the information provided below, calculate the batten gauge:

Size of tile: 420mm x 334mm Head lap: 75mm (Length – headlap)

420 – 75 = 345mm

1. Identify the required overhang at the eaves when applying double Roman tiles, explain and give reasons why it is important.

50mm to allow the rainwater to run into gutters/not down brickwork.

1. Explain the purpose of an interlocking tile nib.

To prevent the tile slipping down the roof in case of nail failure.

1. Given the information below, calculate the variable gauge required to ensure the tiles are at an equal gauge. Show all your working out.

Tile size: 420mm x 334mm Headlap – 75mm

2855mm

Note: Don’t forget to take off 50mm at the ridge tree

420 – 75 = 345 2855 – 50 = 2805 divide by 345 = 8.13 round up to 9

2805 divide by 9 = 311mm

Variable gauge =

311 mm

1. Identify the minimum and maximum overhang when applying fibre cement strips at the verge.

38mm minimum to 50mm maximum

30mm minimum to 60mm maximum for interlocking tiles

1. Identify the recommended batten size, required when applying interlocking tiles to pitched roof surfaces.

25–50mm

1. List **four** things that must be observed prior to loading a roof in interlocking tiles.

* Condition of timbers.
* Is it load bearing?
* Weather conditions.
* Perp lines struck.
* Felt and battened.

1. Identify the name of the machinery used in the drawing below and list three benefits of using this method.

A picture containing weapon, gun

Description automatically generated

Tile hoist.

Benefits:

* saves labour
* quicker to load roof
* safer/less dangerous.

1. Explain the term **shunt** when applying interlocking tiles to common roof surfaces.

Opening or closing of the tiles to allow the tiles to span the width of the roof to have the necessary overhang at either verge.

1. Identify the recommended ratio of mortar mix when back bedding a verge prior to the application of interlocking tiles.

3 sand / 1 cement / potable water

1. Explain the advantages of dry roofing systems (ridge, verge etc.) against more traditional methods of mortar.

New dry systems are low maintenance and more securely fixed.

1. Identify the minimum recommended lap a ridge should cover the top course of tiles.

75mm = 3 inches