Pre16 Vocational Construction Programme

Use of Tools and Equipment for Bricklaying

Level: 1  Credit value: 3

I confirm that all the work in this booklet is my own.

Learner name: ____________________________________________

Learner signature: ________________________________________

Completion date __________________________________________

Assessed by:

Assessor name: __________________________________________

Assessor signature: _______________________________________

Date: _________________________________________________
Use of Tools and Equipment for Bricklaying

In this unit you will learn how to:

1. **Identify commonly used materials in the workshop.**
   1.1. Identify five materials from a given range, for example, bricks (various), blocks (various), cement (masonry, port-land), hydrated lime, mortar plasticiser.

2. **Stack and store materials.**
   2.1. Handle materials correctly.
   2.2. Correctly store materials.
   2.3. Display manual handling skills.

3. **Use access equipment.**
   3.1. Identify three items of access equipment.
   3.2. Assist in positioning equipment.
   3.3. Assist in erecting equipment.
   3.4. Dismantle access equipment.

4. **Identify bricklaying tools.**
   4.1. Identify eight tools and items of equipment from a given range, for example, trowels, line & pins, corner blocks, scotch chisel, spirit level, tape measure, soft brush, shovel, bucket, wheel barrow, builders square, hawk, pocket level, straight edge, gauge lath (rod), spot board, mechanical mixer.

5. **Use a brick trowel.**
   5.1. Roll and spread the mortar.
   5.2. Prepare a mortar bed.
   5.3. Place a cross joint on a brick head.
   5.4. Cut off the surplus mortar.
   5.5. Handle the trowel safely.

6. **Re-point an area of brickwork.**
   6.1. Select and use one of the following finishes: keyed, struck, weather-struck, flush.
   6.2. Prepare the joint.
   6.3. Fill the joint.
   6.4. Cut/brush off mortar rags with a minimum of smearing to the face brickwork.

7. **Measure, cut and level bricks.**
   7.1. Use a tape measure to accurately measure brickwork.
   7.2. Use a hammer and chisel to cut a brick to a given size.
   7.3. Use a spirit level to level the brick on a mortar bed.
Question 1
Name the commonly used materials

B __________________

C___________________

S___________________

B___________________

H___________________

L___________

P___________________
Question 2
Which of these is **not** a type of brick

a) Common
b) Face
c) Aerated
d) Engineering

Question 3
Dense, medium density and aerated are all types of what?

Question 4
When is team lifting needed?
Circle the answer where you would ask for help.

- 10 litre container of paint
- Bag of cement
- 2400mm x 1200 mm x 13 mm sheet of plasterboard
- Box of wall tiles (25 in a box)

Question 5
When lifting a rectangular or square load which one of the following positions should your feet be in.

a) Feet together
b) Feet hip width apart
c) Feet one metre apart
d) Standing on one foot

Question 6
You should not lift a load above.....

a) ....waist high
b) ....chest high
c) ....the top of the head
d) ....shoulder height
Question 7
What does stock rotation mean? Circle the correct answer.

- Throwing out the old stock
- Sending old stock back to the supplier
- Using the old before the new

Question 8
In the first box below draw a picture showing how bricks should be stored on site and in the second how cement should be stored.

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Question 9
What angle should a ladder be erected at? Circle the correct answer.

- 25°
- 60°
- 75°
- 45°
Question 10

Draw a line to connect the picture of the access equipment to it's name

Stepladder

Scissor lift

Tower Scaffold

Hop Up Platform

Question 11

Which regulations must you comply with when using access equipment?
Question 12
Whose guide lines must you follow when erecting and dismantling access equipment?

a) The Health & Safety Executive
b) Don’t need to follow any
c) The Manufacturer’s
d) The College’s

Question 13
What are the dimensions of a brick? Circle the correct answer.

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>215 x 65 x</th>
<th>152 x 56 x</th>
<th>512 x 68 x</th>
<th>122 x 98 x</th>
</tr>
</thead>
<tbody>
<tr>
<td>Millimeters</td>
<td>102.5mm</td>
<td>201.5mm</td>
<td>215.5mm</td>
<td>78.5mm</td>
</tr>
</tbody>
</table>

Question 14
What is the size of bedding and perp-joints?

Question 15
Why are bricks and blocks bonded when they are laid?

a) To use less bricks
b) Makes the wall stronger
c) Easier to lay the bricks and blocks
d) Less mortar needed

Question 16
Which of the following you would wear when cutting bricks with a hammer and bolster chisel in the workshop?

a) Safety helmet
b) Sun glasses
c) Safety footwear
d) Waterproof clothing
Question 17

Put the letter from the statement in the box below the picture it corresponds to:

A  Prepare a mortar bed
B  Roll the mortar on the spot board
C  Best way to hold a brick
D  Cut a brick with a hammer and bolster
E  Place a cross joint on a brick head
F  Tap the bricks sideways to align them
G  Cut off the surplace mortar
H  Correct way to hold a trowel
I  Level the brick on the mortar bed
J  Spread the mortar
Question 18

Why is it important to use a spirit level to ensure a brick is level on the mortar bed?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Question 19

Identify the re-pointing finishes below.
Question 20

Identify the tools below and state what they are used for.

This tool is a _____________________________________________
It is used for _____________________________________________

This tool is a _____________________________________________
It is used for _____________________________________________

This tool is a _____________________________________________
It is used with ____________________________________________

This tool is a _____________________________________________
It is used for _____________________________________________
These are a

It is used for

This tool is a

It is used for

This tool is a

It is used for

This tool is a

It is used with
This is a

It is used for

This tool is a

It is used for