



higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

MARKING GUIDELINE

NATIONAL CERTIFICATE
APRIL EXAMINATION
BRICKLAYING AND PLASTERING THEORY N2
25 MARCH 2013

This marking guideline consists of 5 pages.

QUESTION 1

- 1.1
- Face bricks
 - Precast concrete
 - Dressed stone
 - Plaster bricks
- (4 × 2) (8)
- 1.2
- Wood is cut into specified sizes and lengths
 - The cut timber then passes through a shaving machine
 - The long shaving thus produced is known as wood wool
 - The wood wool is then bonded together with cement
- (4 × 1) (4)
- 1.3 Pumice blocks are made from building rubble (2)
- 1.4 Calcium silicate bricks are manufactured from the following:
- High grade sand or crushed stone
 - Lime
 - Water
 - Pigment (Colouring)
- (4 × 1) (4)
- 1.5 The boards should be stacked in the area where they are to be used. (2)
- [20]**

QUESTION 2

- 2.1 Terrazzo finishes offers good resistance to abrasion, and provides a decorative surface which is specially suitable for entrance halls, stairways, et cetera. (2)
- 2.2
- The cement slurry is brushed over the area of the cleaned floor slab.
 - The cement mortar screed is then spread and compacted to within at least 16 mm of the finished floor level.
 - Dividing strips if not fixed previously, are set into the mortar to the required level and depth.
 - While the mortar screed is still plastic, the terrazzo mix is spread in the bays, to a level slightly above that of the dividing strips and compacted by lightly tamping, or rolled using a solid roller.
 - Trowelling may be necessary to produce a true surface.
- (5 × 2) (10)
- 2.3 The following material is used to manufacture fire bricks:
- silica
 - alumina
 - iron oxides
- (Any 2 × 1) (2)

- 2.4
- Refractoriness
 - Resistance to attack by corrosive materials such as glasses, metals, slag and salts
 - High strength at ordinary temperatures
 - Resistance to spalling
 - Ability to withstand abrasion
 - Thermal conductivity suitable for the conditions of use
- (6 × 1) (6)
[20]

QUESTION 3

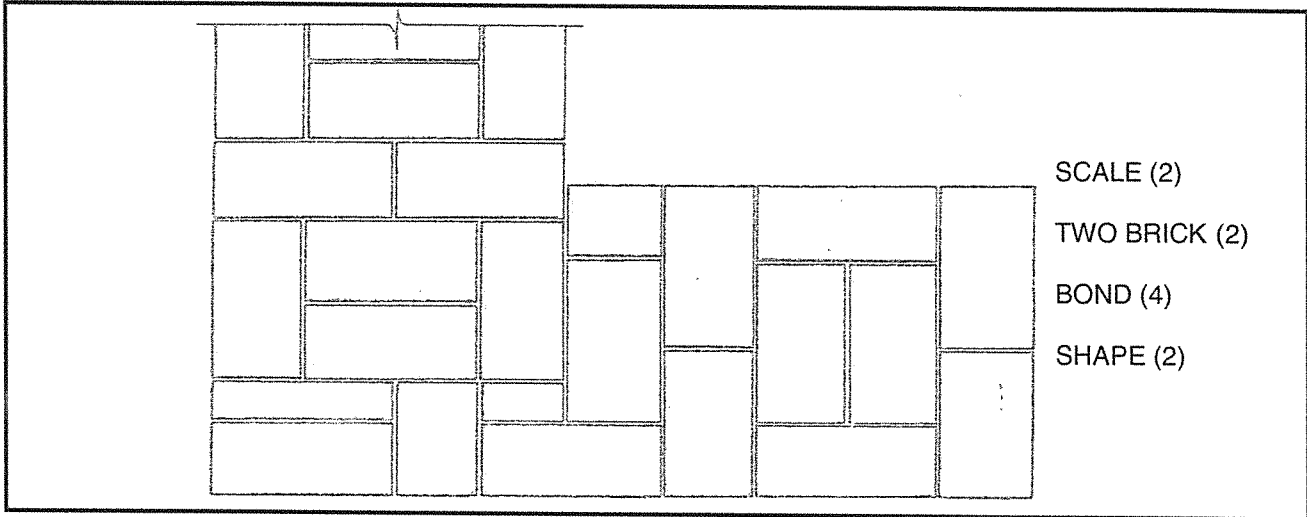
- 3.1 3.1.1 **Base plate:** A plate for distributing the load from a standard or raker over the bearing surface.
- 3.1.2 **Sole plate:** A spreader made of timber used to distribute the load from a scaffold onto the ground.
- 3.1.3 **Guard rail:** A rail preventing persons from falling of the scaffolding.
- 3.1.4 **Ledger:** A longitudinal horizontal member fixed to the standards to support putlogs or transoms.
- 3.1.5 **Brace coupler:** A coupler used to secure two tubes at right angles to each other.
- 3.1.6 **Trestle:** A self supporting stand for supporting working platform boards.
- (6 × 2) (12)
- 3.2
- Basket weave
 - Herringbone
 - Stretcher
 - Stack
- (Any 2 × 1) (2)
- 3.3
- Precast concrete kerbs
 - Haunched concrete
 - Cast in-situ concrete
- (3 × 2) (6)
[20]

QUESTION 4

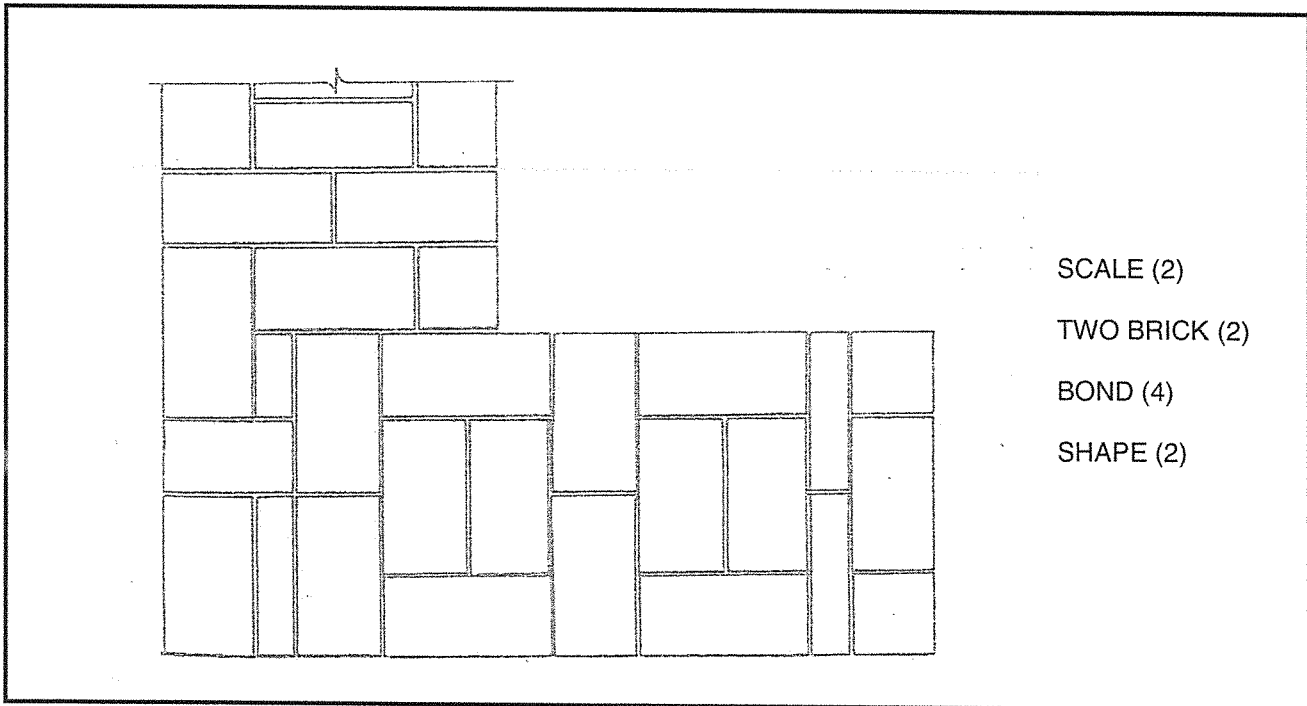
Alternate plan courses of a two-brick corner in Flemish bond.

FLEMISH BOND (TWO-BRICK WALLING)

COIGN (RIGHT ANGLE)

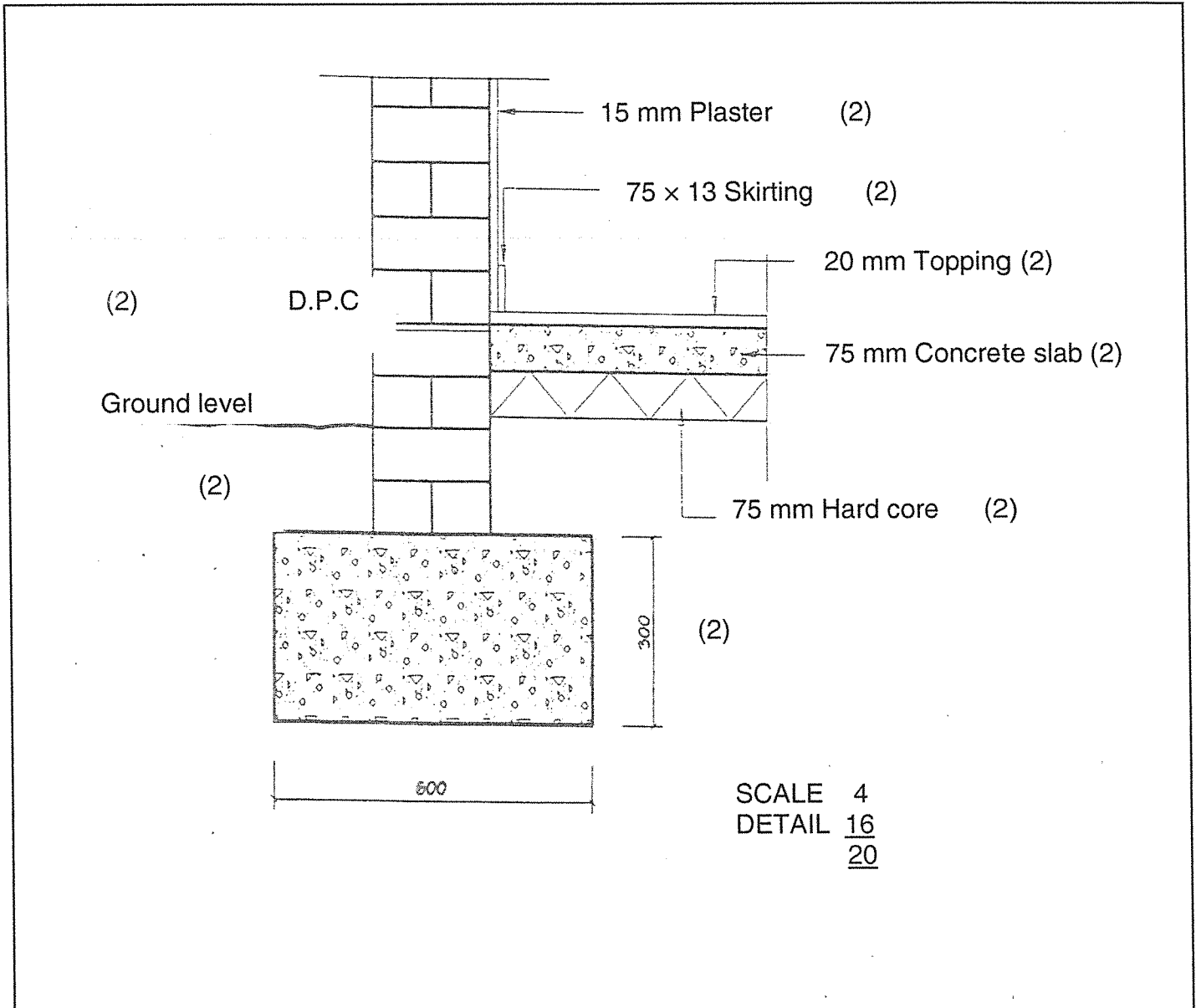


**TWO-BRICK COIGN
ALTERNATE PLAN COURSES**



[20]

QUESTION 5



[20]

TOTAL: 100