



**higher education
& training**

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

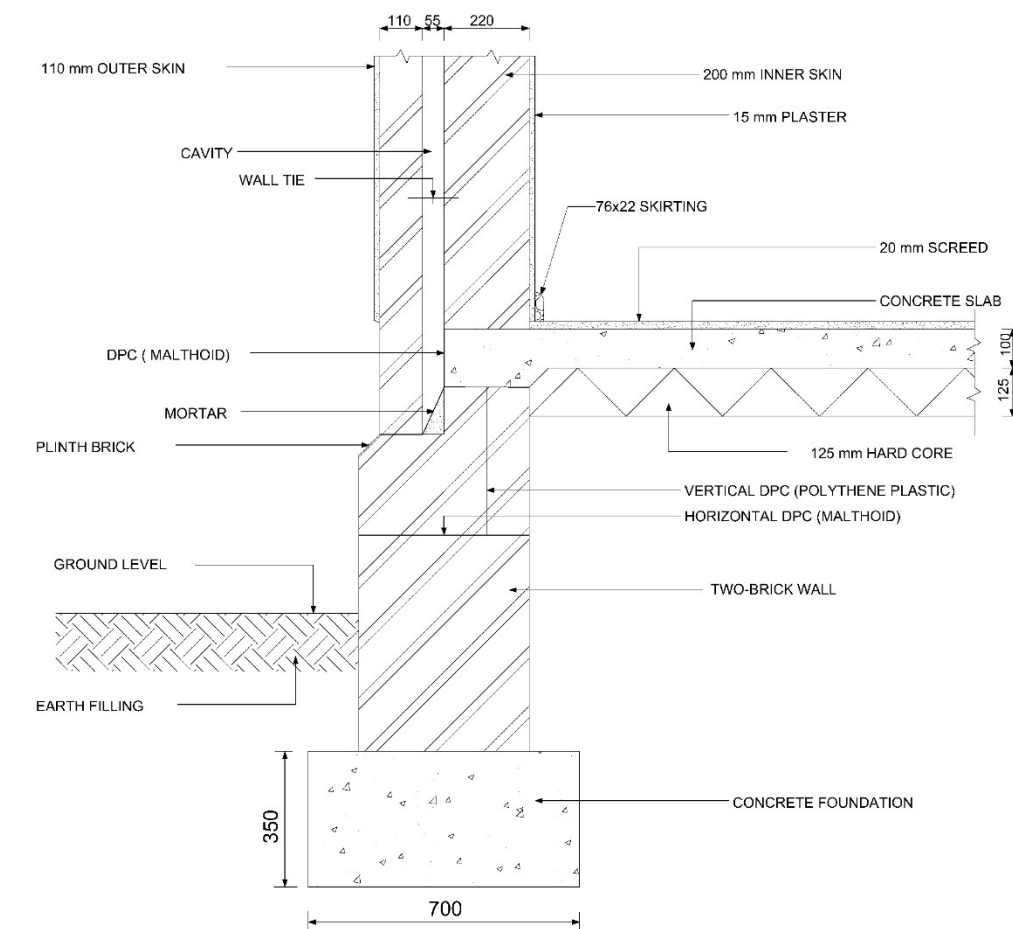
MARKING GUIDELINE

NATIONAL CERTIFICATE

BUILDING AND STRUCTURAL CONSTRUCTION N4

14 August 2023

This marking guideline consists of 10 pages.

QUESTION 1: FOUNDATION AND CAVITY WALL**VERTICAL SECTION THROUGH CAVITY WALL WITH HIGH FOUNDATION****SCALE 1:10**

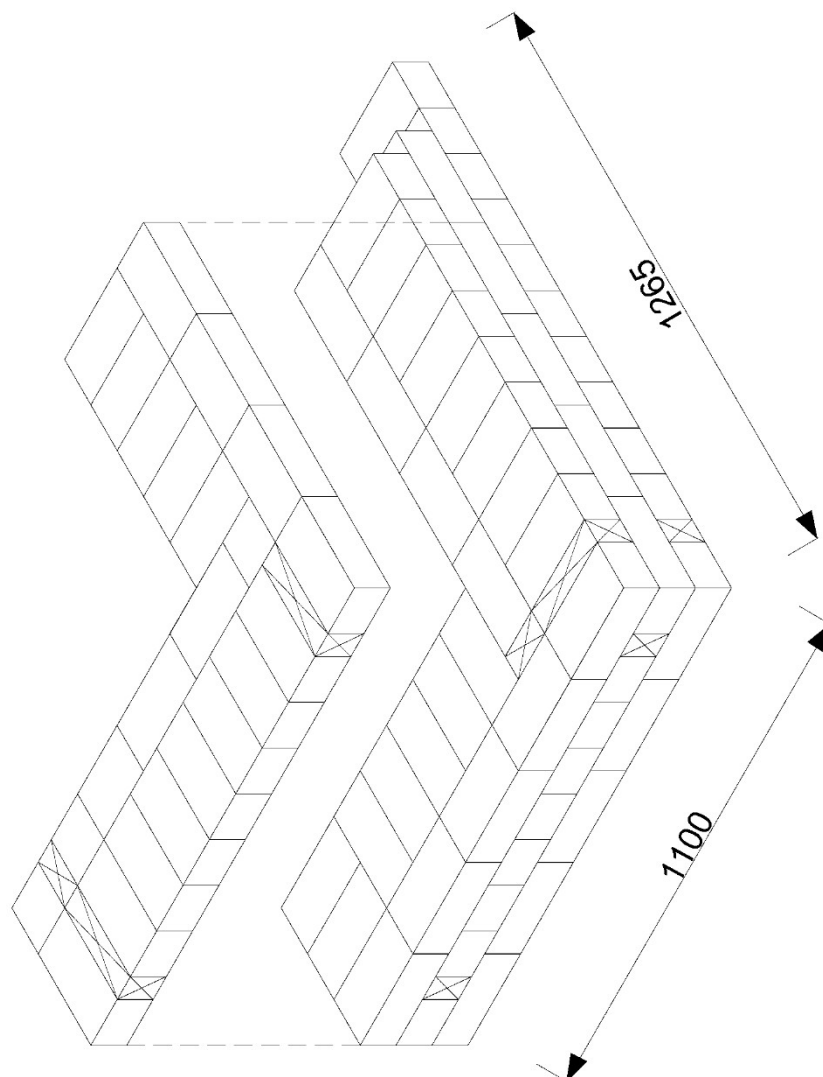
REBRIC FOR DRAWING QUESTION 1 : FOUNDATION AND CAVITY WALLS			
PART OF THE DRAWING	MARKING CRITERIA	POSSIBLE MARK	REMARKS
Concrete foundation, foundation wall, hard core, concrete floor	Correct position	4	
	Hatching	4	
	Labelling	4	
Cavity wall, plaster, screed, skirting, cavity, wall tie, mortar, plinth brick	Correct position	8	
	Hatching	5	Wall × 1 only
	Labelling	9	Inner wall × 1, outer wall × 1
DPC and ground level, earth fill	Correct position	5	DPC × 3
	Hatching	1	
	Labelling	5	
	Dimensions	5	Cavity wall × 1 Slab and hard core × 1
	Subtotal	50	
	Divide by	5	
	Overall impression	10	
	Accuracy	4	
	Line work	4	
	Balanced layout and neatness	2	
	TOTAL	20	

NOTE: NO marks should be allocated for any part of the drawing that is incorrect position, but marks should be allocated for hatching of that component.

Marks should be allocated for neatness, correct title, and scale if the drawing is completely incorrect.

QUESTION 2: BONDS IN BRICKWORK

2.1



**ALTERNATIVE ISOMETRIC COURSE OF ONE-AND-A-HALF BRICK
CORNER BUILT IN ENGLISH BOND**

SCALE 1:10

Overall impression	8
Accuracy	3
Line work	3
Balanced layout and neatness	1
TOTAL:	15

(15)

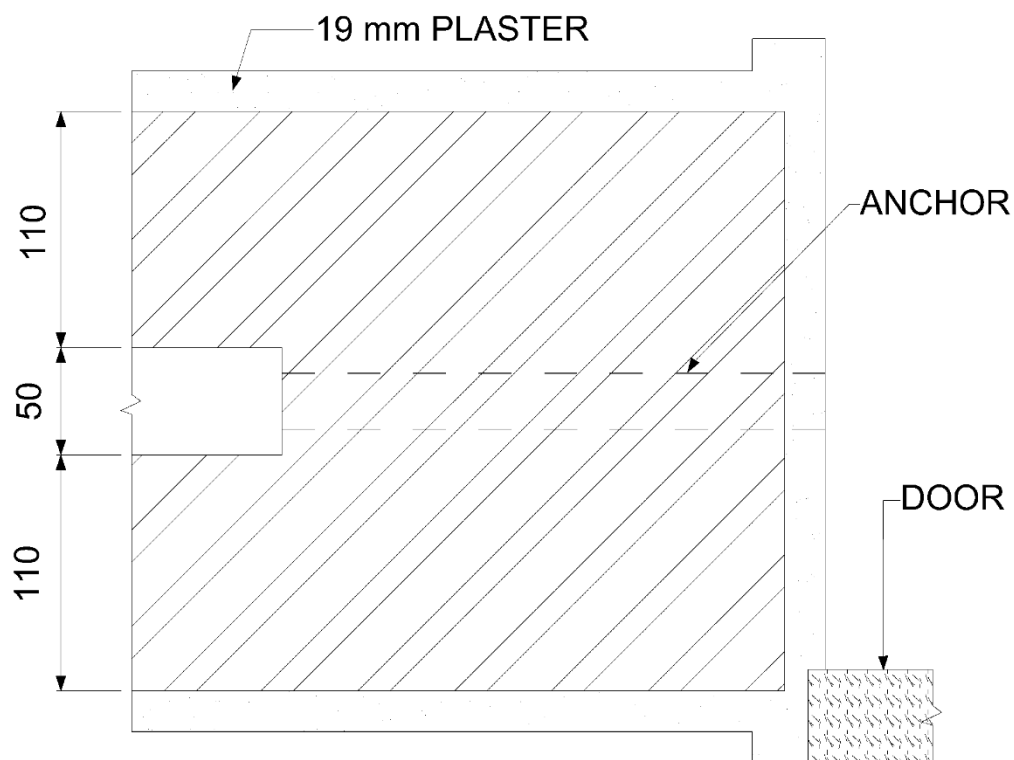
NOTE: NO marks should be allocated for any part of the drawing that is incorrect position, but marks should be allocated for hatching of that component.

Marks should be allocated for neatness, correct title, and scale if the drawing is completely incorrect.

- 2.2 2.2.1 Individual particles visible
 2.2.2 Exhibits dilatancy
 2.2.3 Gritty feel
 2.2.4 No plasticity
 2.2.5 Some particles visible
 2.2.6 Rough feel
 2.2.7 Some plasticity
 2.2.8 No dilatancy
 2.2.9 Smooth feel
 2.2.10 Plasticity

(10 × 1) (10)
[25]

QUESTION 3: STEEL DOORFRAMES



HORIZONTAL SECTION THROUGH STEEL DOORFRAME BUILT INTO 270 CAVITY WALL

SCALE 1:2

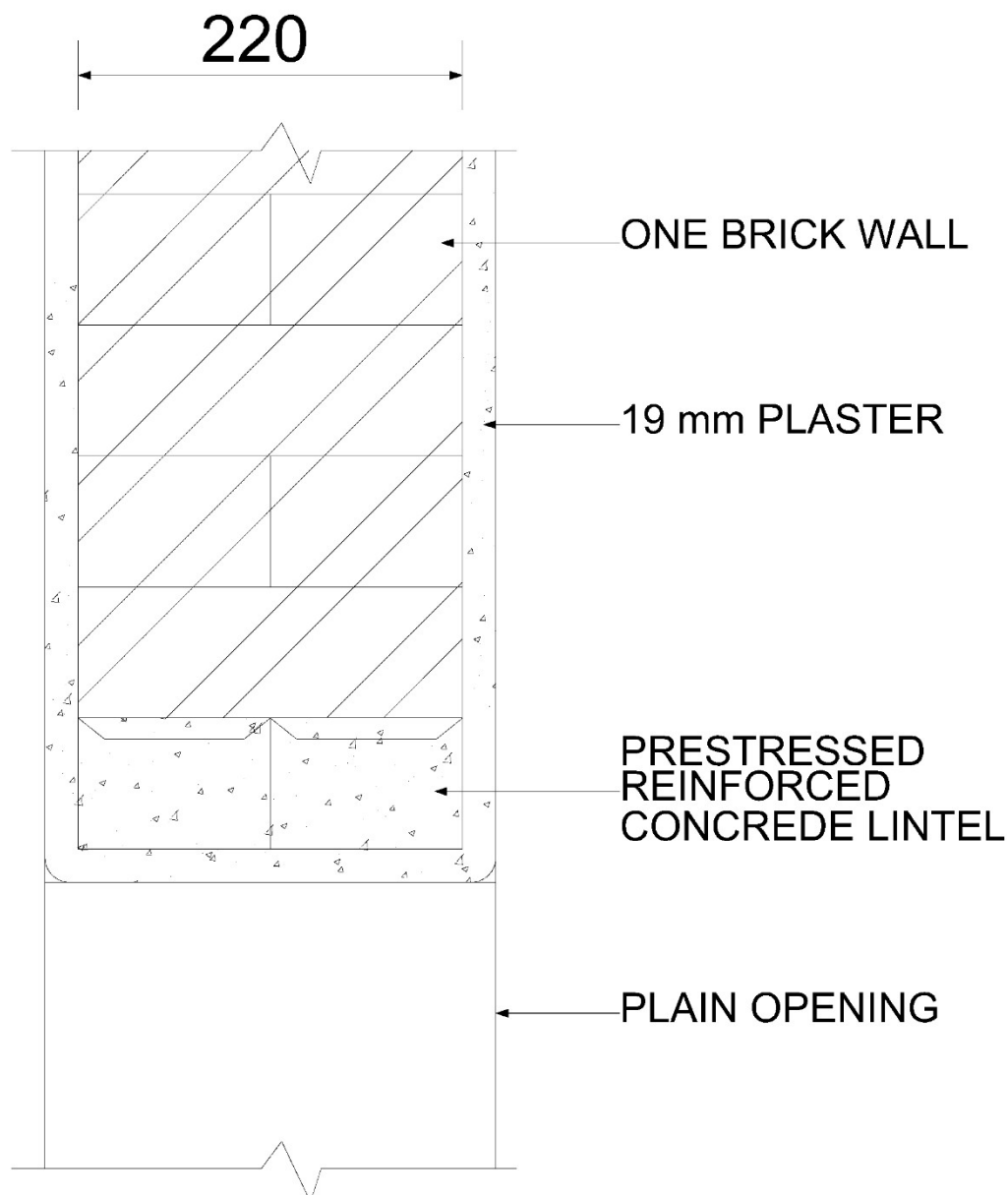
Overall impression	6
Accuracy	2
Line work	1
Balanced layout and neatness	1
TOTAL:	10

NOTE: NO marks should be allocated for any part of the drawing that is incorrect position, but marks should be allocated for hatching of that component.

Marks should be allocated for neatness, correct title, and scale if the drawing is completely incorrect.

[10]

QUESTION 4: LINTEL



HORIZONTAL SECTION THROUGH STEEL DOORFRAME BUILT INTO 270 CAVITY WALL

SCALE 1:5

Overall impression	6
Accuracy	2
Line work	1
Balanced layout and neatness	1
TOTAL:	10

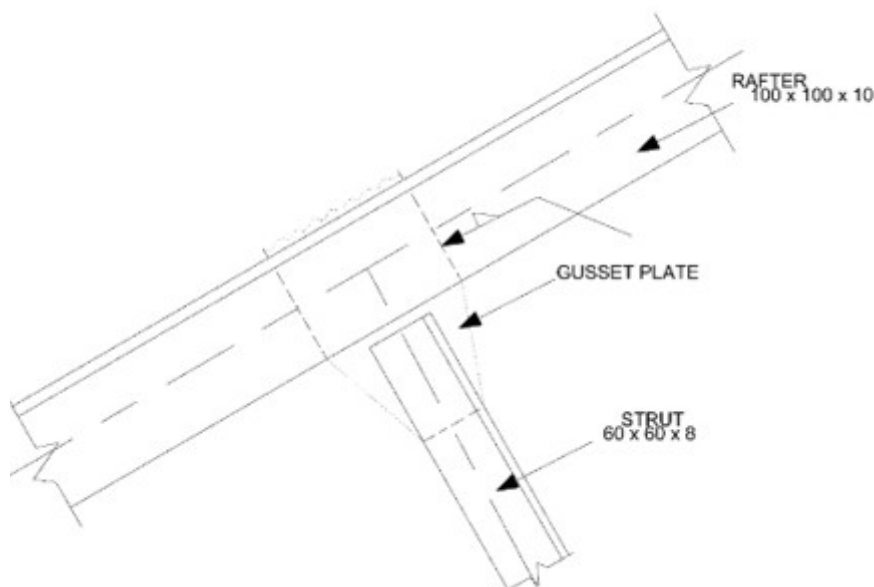
NOTE: NO marks should be allocated for any part of the drawing that is incorrect position, but marks should be allocated for hatching of that component.

Marks should be allocated for neatness, correct title, and scale if the drawing is completely incorrect.

[10]

QUESTION 5: STRUCTURAL STEELWORK

5.1



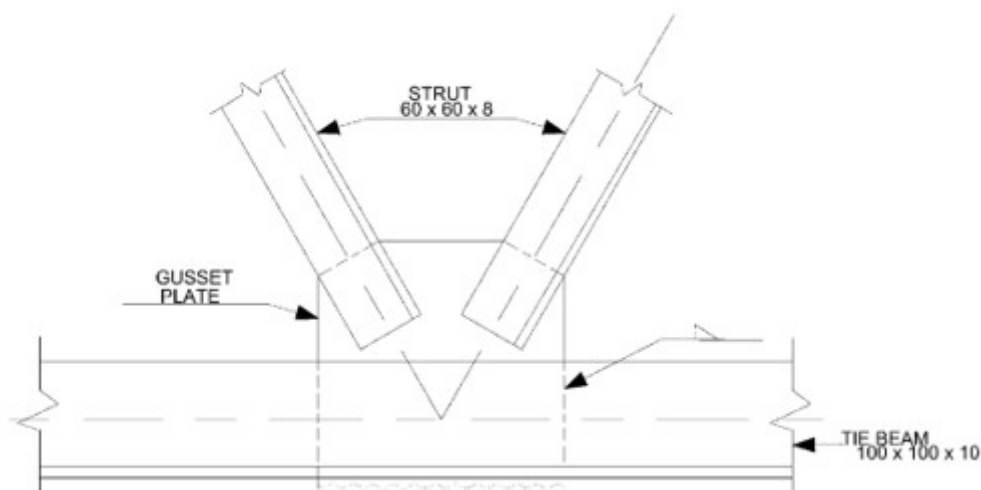
Correctness	2
Rafters and struts	2
Gusset plate/Welding symbols	2
Scale	1
TOTAL:	7

(7)

NOTE: NO marks should be allocated for any part of the drawing that is incorrect position, but marks should be allocated for hatching of that component.

Marks should be allocated for neatness, correct title, and scale if the drawing is completely incorrect.

5.2

**DETAIL AT THE TIE BEAM AND STRUTS****SCALE 1:10**

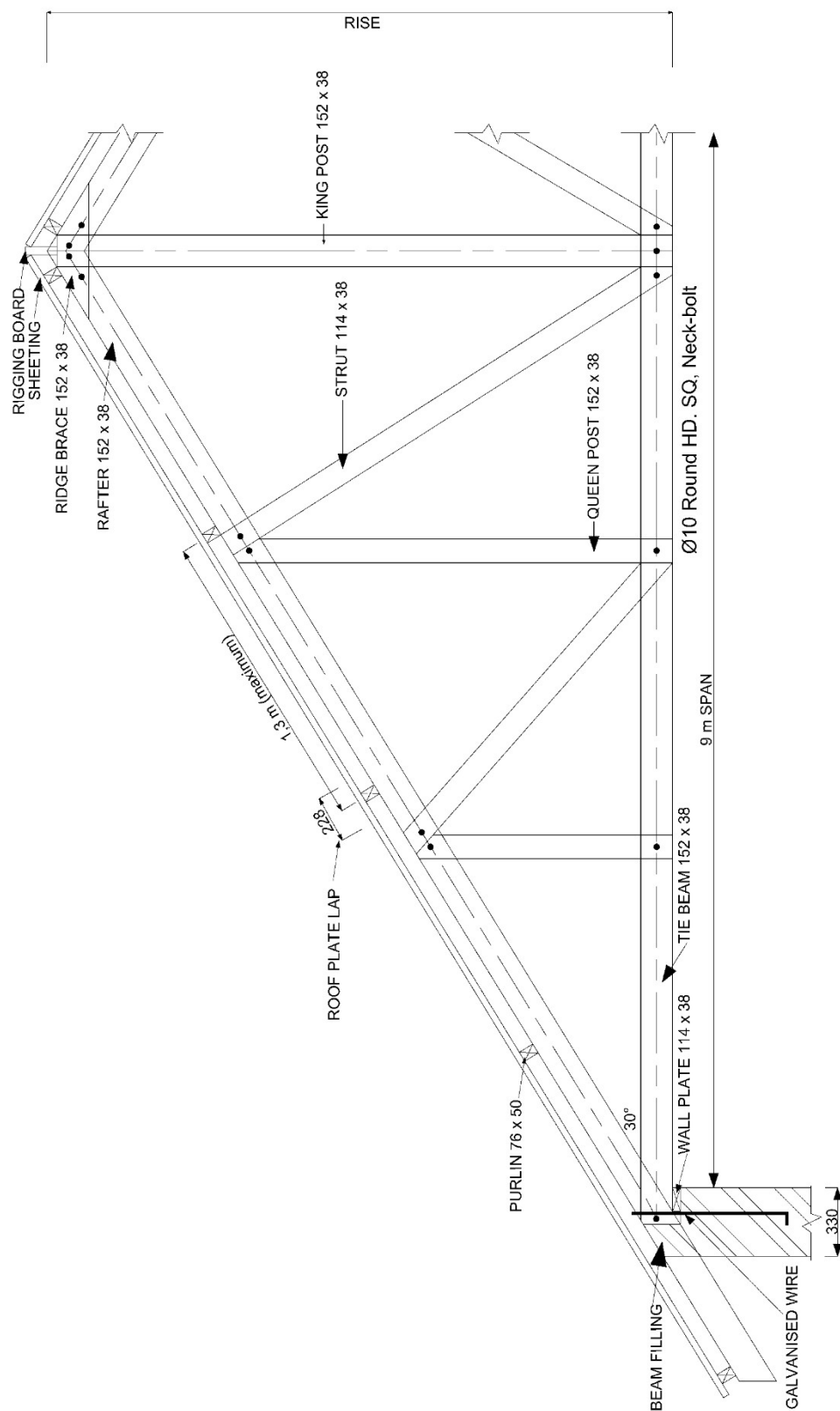
Correctness	2
Struts @ 60 °	2
Gusset plate/Welding symbols	2
Tie beam	1
Scale	1
TOTAL:	8

(7)

NOTE: NO marks should be allocated for any part of the drawing that is incorrect position, but marks should be allocated for hatching of that component.

Marks should be allocated for neatness, correct title, and scale if the drawing is completely incorrect.

[15]

QUESTION 6: ROOF AND ROOF COVERINGS

Accuracy	5
Neatness	4
Labelling	4
Correctness	5
Span	1
Pitch	1
TOTAL:	20

NOTE: NO marks should be allocated for any part of the drawing that is incorrect position, but marks should be allocated for hatching of that component.

Marks should be allocated for neatness, correct title, and scale if the drawing is completely incorrect.

[20]

TOTAL: 100