



Province of the
EASTERN CAPE
EDUCATION

Iphondo leMpuma Kapa: Isebe leMfundo
Provinsie van die Oos Kaap: Departement van Onderwys
Porafensie Ya Kapa Botjahabela: Lefapha la Thuto

NATIONAL SENIOR CERTIFICATE

GRADE 12

SEPTEMBER 2026

CIVIL TECHNOLOGY: WOODWORKING MARKING GUIDELINE

MARKS: 200

TIME: 3 hours

This marking guideline consists of 21 pages including 8 answer sheets

QUESTION 1: OHSA, MATERIALS, TOOLS, EQUIPMENT (GENERIC)

- 1.1 1.1.1 G (1)
- 1.1.2 D (1)
- 1.1.3 F (1)
- 1.1.4 H (1)
- 1.1.5 C (1)
- 1.1.6 B (1)
- 1.1.7 E (1)
- 1.2 Any TWO below:
- A qualified person must operate the device.
 - The device must never be overloaded.
 - Gates must be shut when the device is being used.
 - Emergency brake mechanism must be installed.
 - Safety measures must be displayed inside the cage.
 - Inspection and maintenance must be carried out regularly.
 - Overhead protection must be provided.
 - Materials and equipment must be stacked firmly and secured properly.
 - The hoist must be inspected weekly by a qualified person
 - Gates and wire components must be at least 1 980 mm high. (2)
- 1.3 Any ONE below:
- Protect metal, wood and other material against corrosion and decay
 - Provides a decorative appearance
 - Protects surface from moisture penetration
 - Protects surface from rust (2)
- 1.4 It increases the strength of concrete. (1)
- 1.5 3 m (1)
- 1.6 Any TWO below:
- Inspect the scaffolding to ensure that it is stable in all directions
 - Able to carry the mass of the load
 - Free of any defects (2 x 1) (2)
- 1.7 • To ensure stability of the ladder when in use (1)

1.8 Any ONE below:

- Painting
 - Galvanising
 - Powder coating
 - Electro-plating
- (1 x 1) (1)

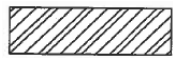
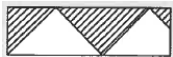
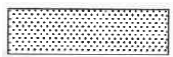
1.9 1.9.1 Multi-detector (1)

1.9.2 Allow it to adjust to the surrounding temperature before switching it on. (1)

1.9.3 Any ONE below:

- Prevent batteries from running flat
 - Prevent acid leaks from batteries damaging the tool
- (1)
[20]

QUESTION 2: GRAPHICS AND JOINING (GENERIC)

- 2.1 2.1.1 NGL (1)
- 2.1.2 FFL (1)
- 2.1.3 DPC (1)
- 2.1.4 WC (1)
- 2.1.5 B (1)
- 2.2 2.2.1 Earth (1)
- 2.2.2 Socket outlet (1)
- 2.2.3 Electricity meter (1)
- 2.2.4 Fluorescent light (1)
- 2.2.5 Distribution board (1)
- 2.3 2.3.1  (2)
- 2.3.2  (2)
- 2.3.3  (2)
- 2.3.4  (2)
- 2.3.5  (2)
- 2.4 Any FIVE details that appear in a site plan.
- The boundaries of the property.
 - The numbers of the adjacent plots (lots).
 - Services to the site, e.g. water, sewerage and power cables.
 - The name of the roads.
 - Description of driveways.
 - Contours
 - Service connections
 - Building lines
 - Building position
 - Drainpipes
 - Storm-water pipes
 - The north point.
 - The scale that is used.
- ANY FIVE OF THE ABOVE** (5 x 1) (5)

- 2.5 A – hexagon
B – Hex flange
C – Square shoulder screw (3)
- 2.6 FOUR details to be mentioned when purchasing bolts.
- Length of shaft
- Diameter
- Type of thread
- Head size (4 x 1) (4)
- 2.7 The sheath (1) of the bolt expands (1) when the bolt is tightened (1). (3)
- 2.8 2.8.1 The hole of accessory A is too large (1) and the rawl bolt can be pulled through the hole when tightened (1). (2)
- 2.8.2 Nut (1)
- 2.8.3 Any TWO good mechanical properties of rawl bolts.
- Good tensile strength
- Good tensile stress
- Good load-bearing capacity (2 x 1) (2)
- [40]**

TOTAL SECTION A: 60

**QUESTION 3: CASEMENT, CUPBOARDS, WALL-PANELLING AND
QUANTITIES (SPECIFIC)**

3.1	3.1.1	Fanlight	(1)
	3.1.2	Glazing bar	(1)
	3.1.3	Wood/Wooden (glazing) bead/Quadrant/Quarter round	(1)
	3.1.4	Sill	(1)
3.2	3.2.1	Cutting list	(1)
	3.2.2	Mullion	(1)
	3.2.3	Wall plugs	(1)
	3.2.4	Free-standing cupboard	(1)
	3.2.5	Rail	(1)
3.3	3.3.1	4 980	(1)
	3.3.2	570	(1)
	3.3.3	1 068	(1)
	3.3.4	1 710	(1)
	3.3.5	80	(1)
	3.3.6	3,2	(1)
3.4	See ANSWER SHEET 3.4		(9)
3.5	See ANSWER SHEET 3.5		(6)
			[30]

**QUESTION 4: ROOFS, CEILINGS, TOOLS AND EQUIPMENT AND MATERIALS
(SPECIFIC)**

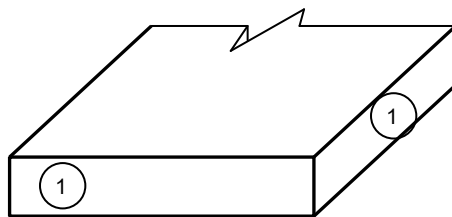
- 4.1 4.1.1 C (1)
- 4.1.2 B (1)
- 4.1.3 A (1)
- 4.1.4 D (1)
- 4.1.5 B (1)
- 4.2 4.2.1 Drill press (1)
- 4.2.2 To drill holes in cylindrical parts (1)
- 4.2.3 To prevent the tip of the drill from making contact with the metal part of the table (1)
- 4.2.4 Any THREE below:
- Jig saw
 - Router
 - Orbital sander
 - Belt sander
 - Electric plane (3)
- 4.2.5 Any TWO below:
- Store where it cannot be damaged by dirt or dust
 - Store in a safe dry place
 - Store in a wooden or plastic box away from moisture (2)
- 4.3 4.3.1 King post (1)
- 4.3.2 Eaves/overhang (1)
- 4.3.3 Purlins (1)
- 4.3.4 Special aluminium foil (1)
- 4.3.5 Gang nail/nail plate/ gang nail connector plate (1)

4.4 Any TWO below:

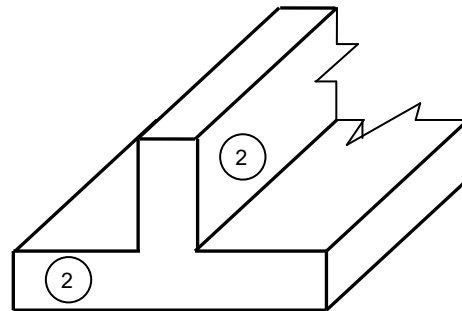
- Sturdy enough to carry roof covering safely
- Able to withstand wind and other forces that act on them
- Provide adequate height in any room immediately below the roof and ceiling assembly
- Should not allow accumulation of rain water upon the roof surface
- Neat and solid to enhance the appearance of the building

(2)

4.5



COVER STRIP



METAL T-STRIP

CORRECT TITLES: (3)

NO.	ASSESSMENT CRITERIA	MARK
1	Cover strip correctly drawn	2
2	Metal T-strip correctly drawn	2
3	Correct titles	1
	TOTAL:	5

(5)

4.6 4.6.1 Ridge capping/ridge/ridge plate

(1)

4.6.2 Any ONE below:

- To cover the opening between two galvanised roof sheets at the ridge
- To prevent rain, dust and insects to enter the roof.

(1)

4.6.3 Purlin / 50 mm x 76 mm /

(2)

4.6.4 38 mm x 38 mm

(1)

4.6.5 IBR or corrugated roof sheeting/ metal sheet

(1)

4.6.6 1 200 mm

(1)

4.7 Any TWO below:

- Cool in summer and warm in winter
- Ideally suitable for roofs that have irregular profiles and compilations or appear more organic
- Requires less timber for roof structure
- Does not need ceiling

(2)

4.8 See attached ANSWER SHEET 4.8

(7)

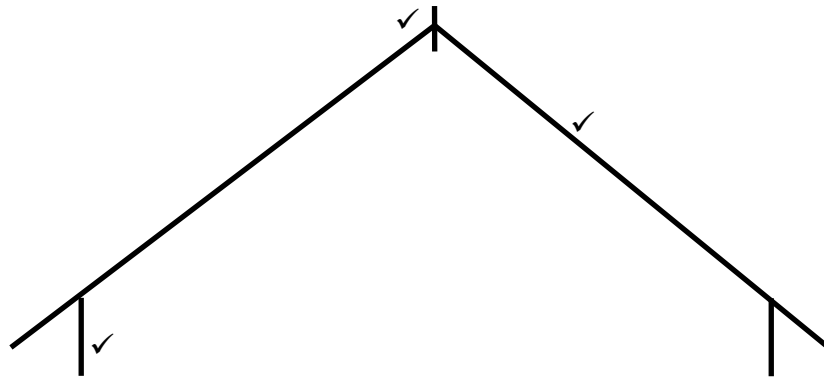
[40]

QUESTION 5: CENTERING, FORMWORK, SHORING, AND GRAPHICS AS MEANS OF COMMUNICATION (SPECIFIC)

5.1 5.1.1 Support the weight of the wall, floor or roof. (1)

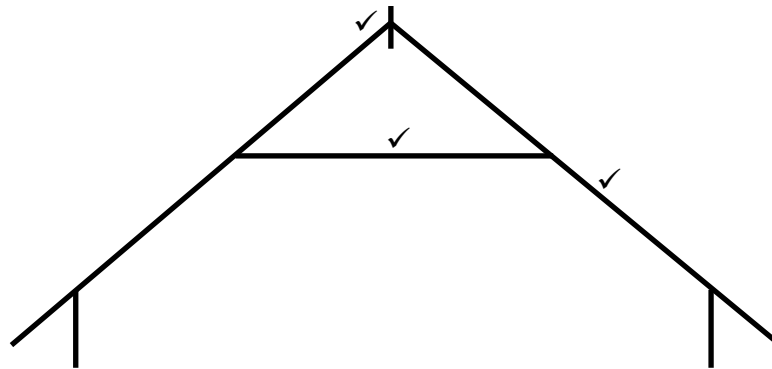
5.1.2 Spread weight transferred by the props over a wider area. (1)

5.2



COUPLE ROOF TRUSS

ASSESSMENT CRITERIA – COUPLE ROOF		MARK
Walls		1
Rafters		1
Ridge beam		1
Correctness of drawing		1
TOTAL:		4

**COLLAR-TIE ROOF TRUSS**

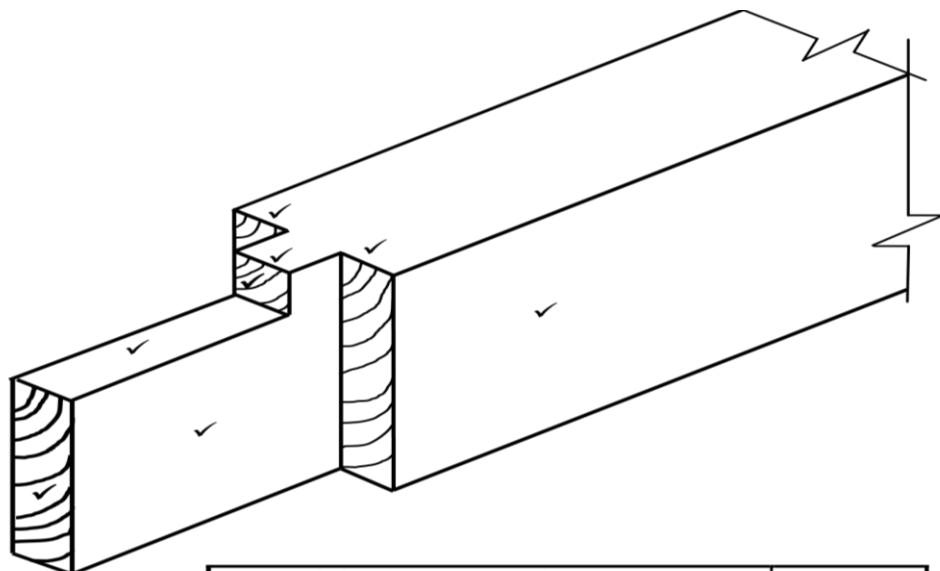
ASSESSMENT CRITERIA – COLLAR-TIE ROOF		MARK
Rafters		1
Collar beam		1
Ridge beam		1
Correctness of drawing		1
TOTAL:		4

5.3 See attached ANSWER SHEET 5.3 (11)

5.4 See attached ANSWER SHEET 5.4 (9)
[30]

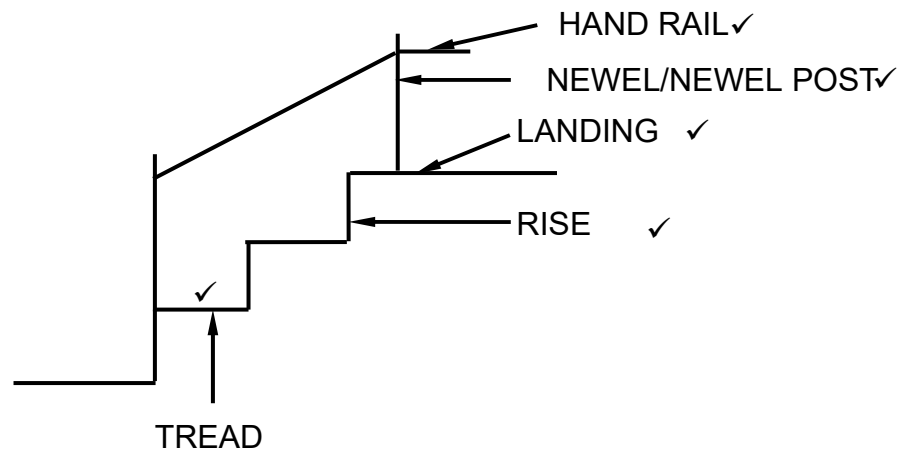
QUESTION 6: SUSPENDED TIMBER FLOORS, STAIRCASES, IRONMONGERY, DOORS AND JOINING (SPECIFIC)

- 6.1 6.1.1 B (1)
- 6.1.2 D (1)
- 6.1.3 C (1)
- 6.1.4 A (1)
- 6.1.5 A (1)
- 6.2 See attached ANSWER SHEET 6.2 (6)
- 6.3 6.3.1 Night latch (1)
- 6.3.2 Mounted onto the internal surface of the door stile (1)
- 6.3.3 The door locks automatically when it is closed making them efficient in securing external doors (1)
- 6.3.4 Key hole is the hole in which the key is inserted to operate the lock (1)
- Lock is a device operated, usually but not always, by a key (1)
- 6.4 See attached ANSWER SHEET 6.4 (6)
- 6.5 Floor joists may be affected by dampness and it can spread to members of the floor. (1)
- 6.6



ASSESSMENT CRITERIA	MARK
Correctness of drawing:	
Rail	1
Haunch	4
Tenon	3
TOTAL:	8

6.7



(5)

6.8 To rest
To change direction

(2)

6.9

6.9.1 16

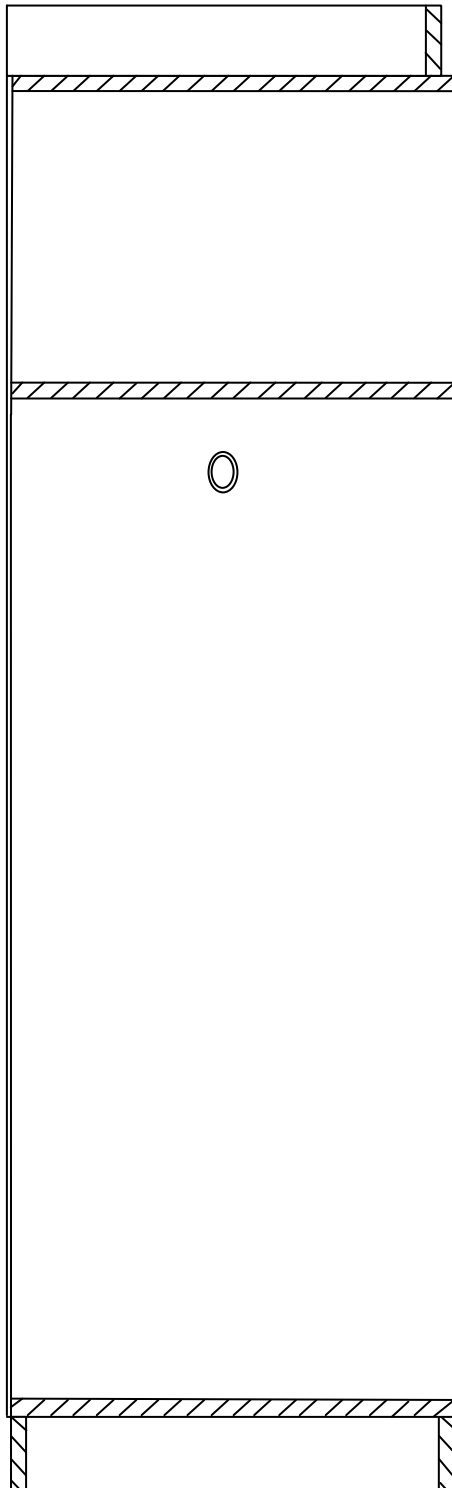
(1)

6.9.2 250 mm

(1)

[40]**TOTAL: 200**

ANSWER SHEET (3.4)	A	CIVIL TECHNOLOGY (SPECIFIC)	NAME AND SURNAME:	
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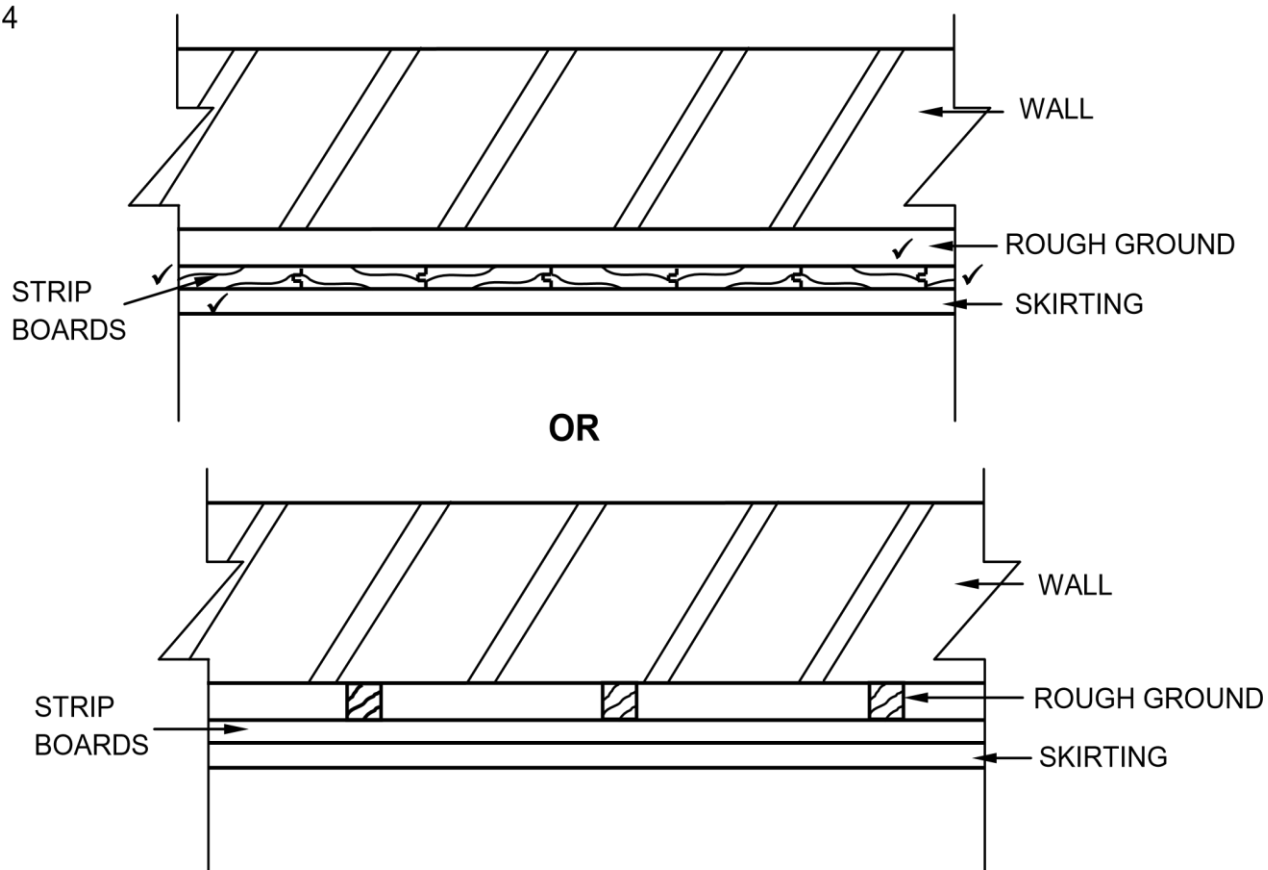


SCALE: √

ASSESSMENT CRITERIA	MARK	LM
Front rail	1	
Top shelf	1	
Middle shelf	1	
Bottom shelf	1	
Hanging rail	1	
Kick plate	1	
Back of base	1	
Back of cupboard	1	
TOTAL:	9	

ANSWER SHEET (3.5)	B	CIVIL TECHNOLOGY (SPECIFIC)	NAME AND SURNAME:	
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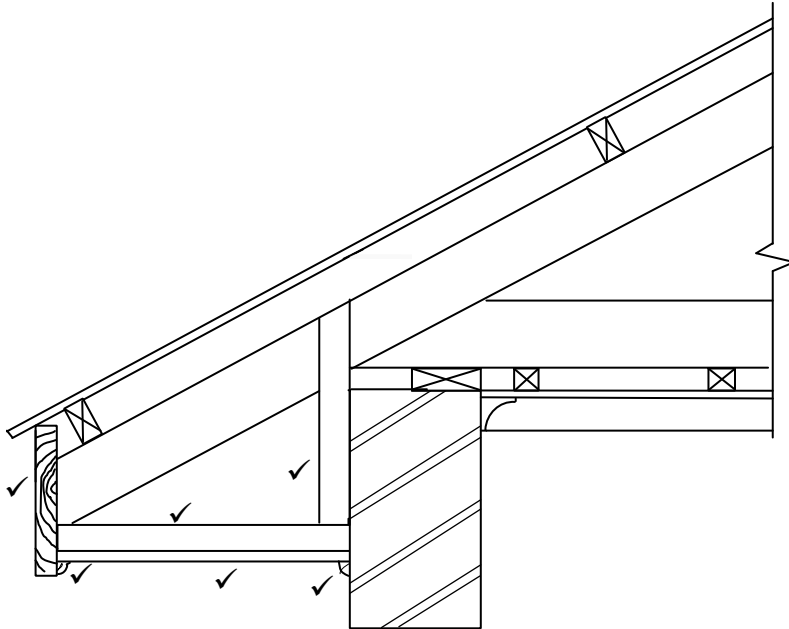
3.4



ASSESSMENT CREITERIA	MARK
Rough ground	1
Strip boards	2
Skirting	1
TOTAL:	4

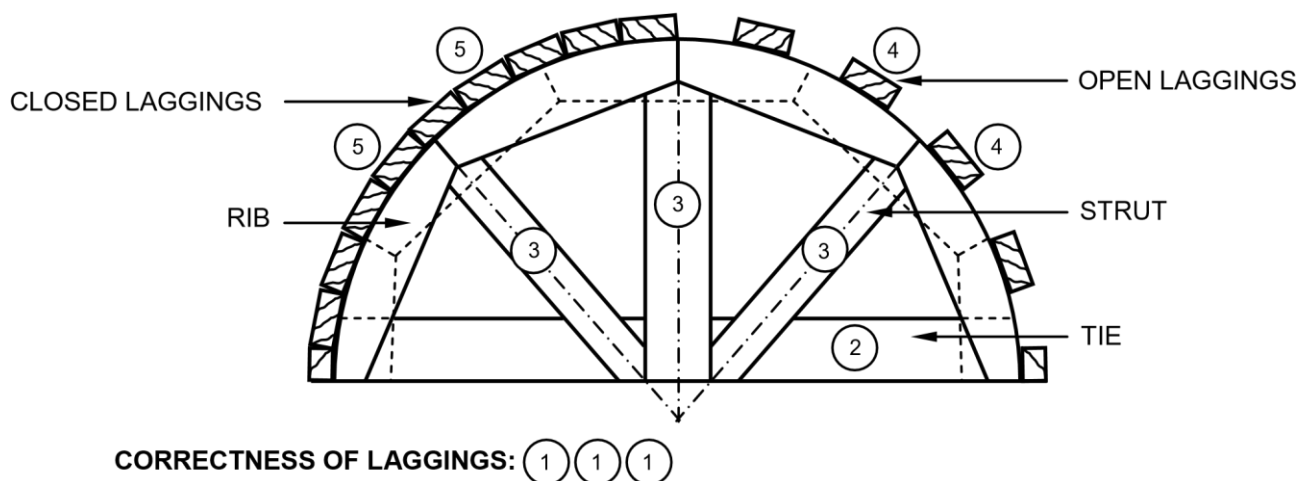
(4)

ANSWER SHEET (4.8)	C	CIVIL TECHNOLOGY SPECIFIC	NAME AND SURNAME:	
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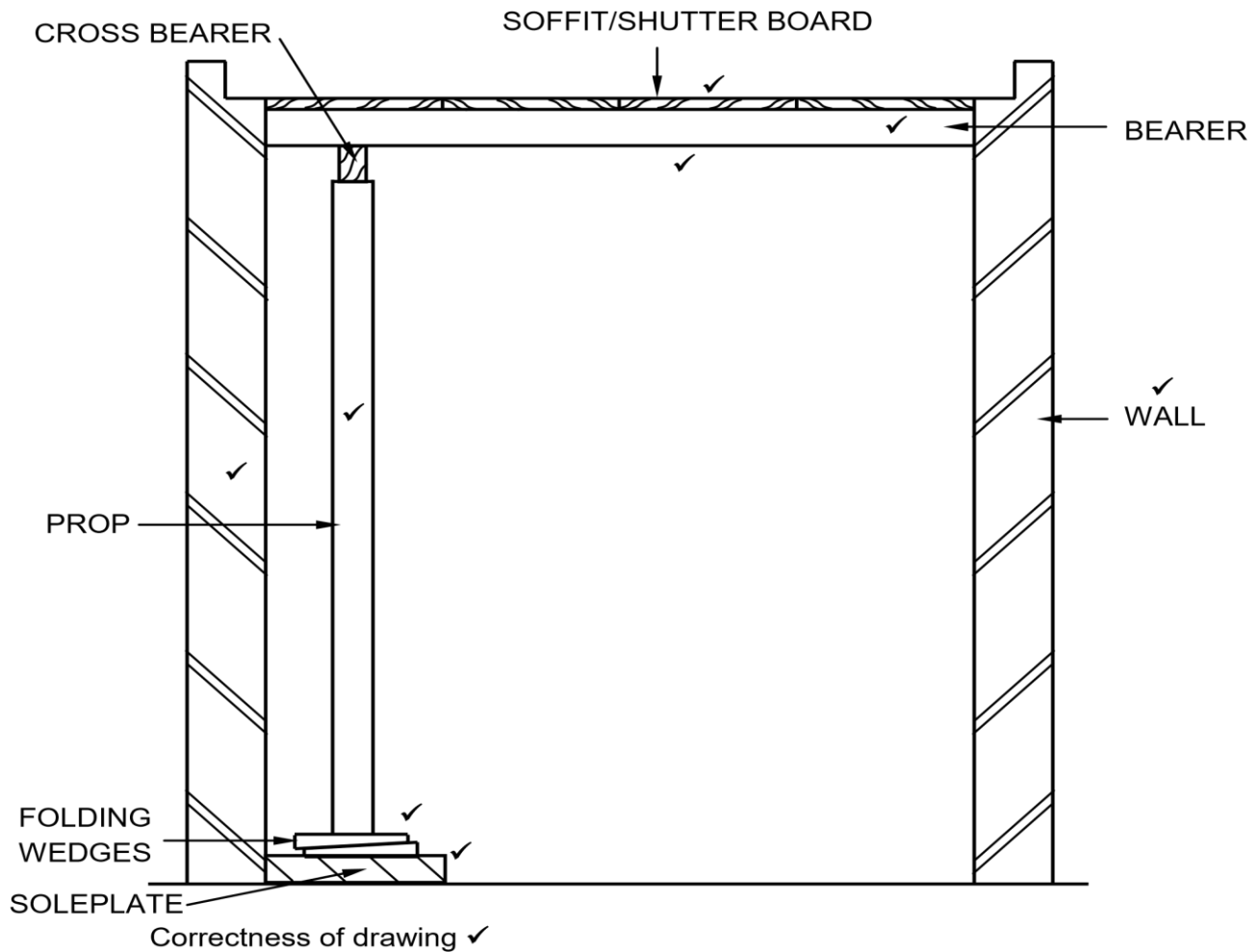
ASSESSMENT CRITERIA	MARK
Fascia board: 230 mm x 38 mm	1
Hanger: 38 mm x 38 mm	1
Bearer: 38 mm x 38 mm	1
6 mm fibre-cement board on closed eaves	1
Quarter round mouldings below fibre-cement board	2
Application of scale More than 3 wrong no marks.	1
TOTAL:	7

ANSWER SHEET (5.3)	C	CIVIL TECHNOLOGY (SPECIFIC)	NAME AND SURNAME:	



NO	ASSESSMENT CRITERIA	MARK
1	Correctness of laggings	3
2	Tie	1
3	Struts	3
4	Open laggings (Space between laggings)	2
5	Closed laggings (No space between laggings)	2
TOTAL:		11

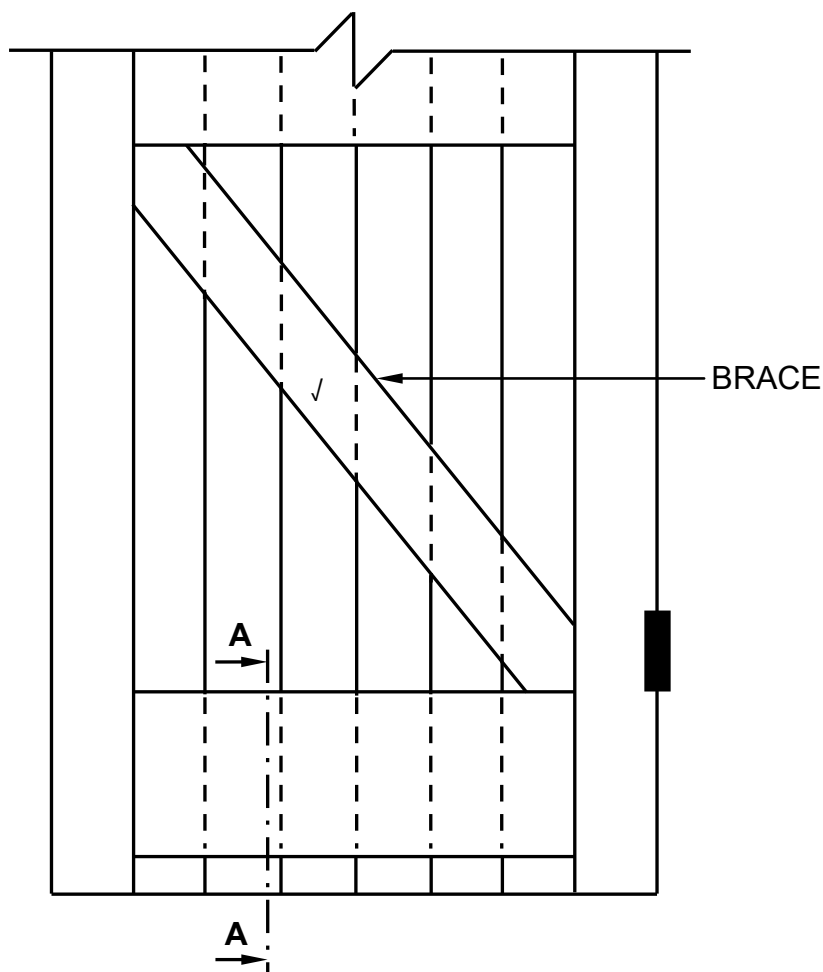
ANSWER SHEET (5.4)	E	CIVIL TECHNOLOGY (SPECIFIC)	NAME AND SURNAME:	



ASSESSMENT CRITERIA	MARK
Soffit/Shutter board	1
Bearer	1
Cross bearer	1
Prop	1
Folding wedges	1
Soleplate	1
Any TWO labels	2
Correctness of drawing	1
TOTAL:	9

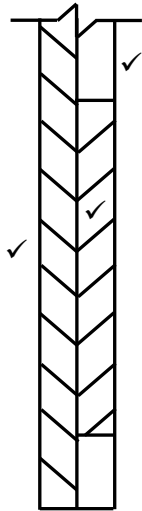
ANSWER SHEET (6.2)	E	CIVIL TECHNOLOGY (SPECIFIC)	NAME AND	
			SURNAME:	

6.2.1



ASSESSMENT CRITERIA	MARK
Brace	1
TOTAL:	1

6.2.2

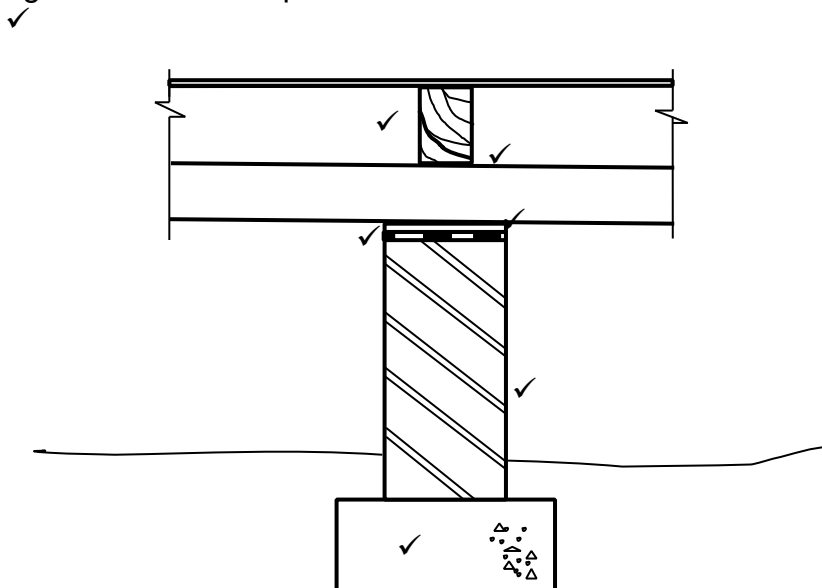


✓ Hatching

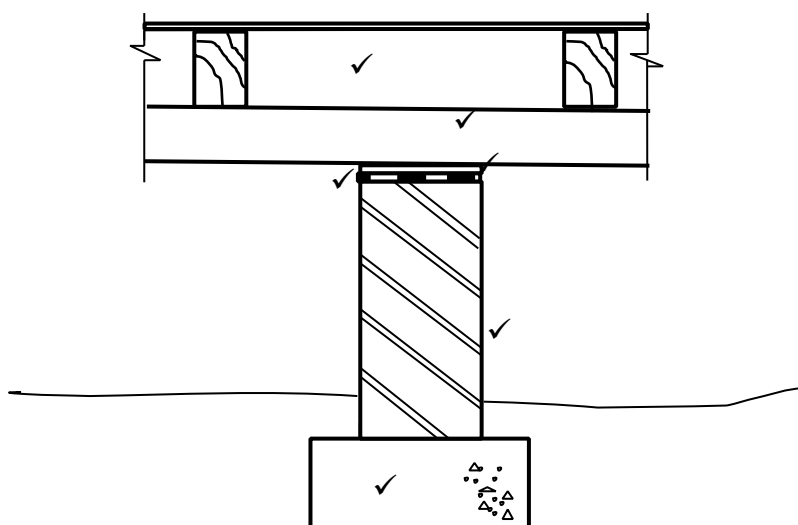
ASSESSMENT CRITERIA	MARK
V tongue and groove batten	1
Brace	1
Bottom rail	1
Hatching	1
Stile	1
TOTAL:	5

ANSWER SHEET (6.4)	E	CIVIL TECHNOLOGY (SPECIFIC)	NAME AND SURNAME:	
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6.4 Alternative drawing will also be acceptable



OR



ASSESSMENT CRITERIA	MARK	CANDIDATE'S MARK
ONE one-brick pier	1	
DPC/Proportion	1	
Ant guard	1	
Bearer	1	
Joist	1	
Floor boards	1	
TOTAL	6	

(6)