



**basic education**

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Department:  
Basic Education  
**REPUBLIC OF SOUTH AFRICA**

# **CIVIL TECHNOLOGY (CONSTRUCTION)**

## **GUIDELINES FOR PRACTICAL ASSESSMENT TASKS**

**GRADE 12**

**2025**

**These guidelines consist of 16 pages.**

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## SECTION 1

### 1. INTRODUCTION

The 18 Curriculum and Assessment Policy Statement subjects which consist of practical components all include a practical assessment task (PAT). These subjects are:

- **AGRICULTURE:** Agricultural Management Practices, Agricultural Technology
- **ARTS:** Dance Studies, Design, Dramatic Arts, Music, Visual Arts
- **SCIENCES:** Computer Applications Technology, Information Technology, Technical Sciences, Technical Mathematics
- **SERVICES:** Consumer Studies, Hospitality Studies, Tourism
- **TECHNOLOGY:** Civil Technology, Electrical Technology, Mechanical Technology, Engineering Graphics and Design

A practical assessment task (PAT) mark is a compulsory component of the final promotion mark for all candidates offering subjects that have a practical component and counts 25% (100 marks) of the end-of-year examination mark. The PAT is implemented across the first three terms of the school year. This is broken down into different phases or a series of smaller activities that make up the PAT. The PAT allows for learners to be assessed regularly during the school year and it also allows for the assessment of skills that cannot be assessed in a written format, e.g. test or examination. It is therefore important that schools ensure that all learners complete the practical assessment tasks within the stipulated period to ensure that learners are resulted at the end of the school year. The planning and execution of the PAT differ from subject to subject.

## SECTION 2

### 2. GUIDELINES FOR THE TEACHER

(These guidelines must be explained clearly to the learners.)

#### 2.1 The structure of the PAT for Civil Technology

The PAT accounts for the skills the learner has mastered. The PAT is assessed at intervals and requires the learner to engage in multiple practical sessions. During these weekly sessions, skills such as simulation, experimentation, hand skills, tool skills, machine skills and workshop practice are honed and perfected to the point where the learner may engage in the tasks set out for that term. The PAT accounts for 25% of the learner's promotion mark.

#### 2.2 Management of the PAT

The PAT should commence in Term 1, as this is a lengthy and drawn-out process and CANNOT be left to the last minute. The model should be done over THREE terms starting in Term 1 and Phase 1 should be done concurrently with the model in Term 1.

- (a) Phase 1 must be completed, marked, and internally moderated by the end of Term 1.
- (b) Phase 2 must be completed, marked, and internally moderated by **1 September 2025** to allow sufficient time for external moderation.
- (c) The provincial education departments should conduct provincial moderation in September to ensure readiness for the national external moderation in October.
- (d) All the phases of the PAT are to be kept safe until the moderation process is completed at all levels (both provincial and national moderation).
- (e) **The internal moderator/departmental head must conduct moderation of the PAT throughout the year.**
- (f) It is imperative that the criteria are adhered to from the beginning, as this will form the basis for assessment.
- (g) Teachers cannot penalise learners on areas that are not included in the initial criteria.
- (h) When learners are selected during moderation (face moderation), they may be required to showcase their practical or drawing skills and knowledge of the content captured in the practical assessment task.

All **teachers** must **design a pacesetter** in line with the time frames specified in the PAT to indicate the completion dates for the different phases of the PAT. The teacher must manage this process to avoid crisis management and unnecessary stress closer to the completion date of the PAT.

The submission dates for the different phases of the PAT, as indicated in the pacesetter, should be given to the learners in writing. By adhering to these guidelines, the assessment and moderation process should be smooth and fair, ensuring that all learners are evaluated consistently and accurately.

### 2.3 Administration of the PAT

The PAT should be based on real-life situations and should be administered and completed under controlled conditions.

After studying the guidelines teachers must fully explain the requirements of the different phases of the PAT, inclusive of the criteria as indicated in the assessment tools and mark schedules, to the learners. This will ensure that learners and teachers have a common understanding of the assessment tools and what is expected of the learners.

Teachers are requested to make copies of **SECTIONS 3 to 5** of this document and hand it to the learners not later than the **first week after the opening of schools in January 2025**.

**The products/models should not leave the classroom/workshop and must always be kept in a safe place when learners are not working on them.**

### 2.4 Assessment and moderation of the PAT

The PAT for Grade 12 is externally set and moderated, but internally assessed by the teacher and moderated by the internal moderator/departmental head.

### 2.5 Assessment

Frequent developmental feedback is needed to guide and support the learner to ensure that the learner is on the right track.

Both formal and informal assessments should be conducted at the different phases of the PAT. Informal assessment may be conducted by the learner himself or herself, by a peer group, or by the teacher. Formal assessment should always be conducted by the teacher and the results will be recorded.

The teacher must consider the requirements of the assessment of all the phases of the PAT and therefore plan the assessment programme of the PAT accordingly.

### 2.6 Moderation

During moderation of the PAT, all phases of the PAT must be presented to the internal moderator as well as the external moderator.

Where required, the moderator should be able to call the learner to explain the function and working principles and request the learner to exhibit the skills acquired during practical sessions for moderation purposes.

**SECTION 3****3. GUIDELINES FOR THE LEARNERS: CONSTRUCTION TASKS**

Learner's name: \_\_\_\_\_

**Time Allowed: Term 1 to Term 3****The practical assessment task (PAT) consists of TWO phases to be completed over THREE terms.****The PAT should be done over THREE terms starting in Term 1 with Phase 1 and Phase 2.****TIME SCHEDULE FOR THE COMPLETION OF THE PAT:****It is recommended that learners and teachers use this time schedule to finish the PAT in the allocated time.**

<b>TERM</b>	<b>WORK TO BE DONE</b>	
Term 1	Phase 1	Building of a cavity wall in stretcher bond
Term 1	Phase 2 (Part 1)	Research, drawings and cutting list
Term 2	Phase 2 (Part 2)	Making of formwork for concrete frame top OR base, timber frame and sheet metal cladding
Term 3	Phase 2 (Part 3)	Casting of concrete, striking of formwork, joining and finishing

**3.1 Instructions to the learner**

- This practical assessment task (PAT) counts 25% of your final promotion mark.
- All the work you produce must be your own effort.
- Use your discretion where dimensions and/or information have been excluded or omitted.
- Where available you may use electronic equipment, e.g. cellphones, cameras and digital cameras to document your progress.
- **The product/model should NOT leave the classroom/workshop and must be kept in a safe place at all times when you are not working on it.**

**3.2 Phase 1: Building a cavity wall in stretcher bond**

**Term:** 1  
**Duration of phase:** 5 hours per learner  
**Mark allocation:** 20 marks

**TASK:**

Build a corner of a cavity wall in stretcher bond, connecting the inner and outer leaves with wall ties. The wall should be built with lime and sand.

**SPECIFICATIONS:**

- Profiles must be used when building the cavity wall.
- The corner of the cavity wall should be 4 bricks long to each side and five courses high with a stopped end on the one side.
- Place TWO wall ties between the second and third courses and TWO between the fourth and fifth courses. Wall ties must be equally spaced.
- Place TWO weep holes in the second course.
- Place the damp-proof course in the correct position.

**3.3 Marking guidelines for Phase 1**

<b>ASSESSMENT CRITERIA FOR BUILDING A CAVITY WALL IN STRETCHER BOND</b>				
<b>LEARNER'S NAME AND SURNAME:</b> _____				
<b>ASSESSMENT CRITERIA</b>	<b>GOOD/ EXCELLENT</b>	<b>AVERAGE</b>	<b>POOR/NOT ATTEMPTED</b>	<b>MODERATED MARK</b>
	<b>8–10</b>	<b>4–7</b>	<b>0–3</b>	<b>0–10</b>
Measuring and marking out the layout of the cavity wall				
Setting up and using profiles for the building of the cavity wall				
Building of a corner of a cavity wall using the correct bond				
Correct closing of the cavity at the stopped end				
Placing the FOUR wall ties in the correct position				
Placing the damp-proof course in the correct position				
Correct placement of the weep holes				
Quality of craftsmanship and plumbness of the corner of the cavity wall				
<b>TOTAL OUT OF 80</b>				
<b>CONVERTED TOTAL OUT OF 20</b> <i>(Total ÷ 4)</i>				

*It is mandatory to record video clips and photos of the learner performing the task and keep these video clips and photos electronically on a disc or memory stick (backup) at the school, which should then be provided as evidence during moderation.*



### 3.4 Phase 2: Raised garden bed

**Terms:** 1,2 and 3

**Duration of phase:** 20 hours

#### **TASK:**

You are required to design and make a raised garden bed with a timber frame, corrugated iron sheet sides and a freshly cast reinforced concrete frame top OR solid concrete base. The corrugated iron sheets and the timber should be joined by using appropriate joining methods.

#### **INSTRUCTIONS:**

- Research different types of designs of raised garden beds focusing on the following:
  - Reinforced concrete frame tops OR concrete bases for raised garden beds.
  - Sheet metal cladding
  - Appropriate joining methods used to join timber to sheet metal.
- Draw (freehand or with instruments) at least THREE different designs of a raised garden bed with a reinforced concrete frame top OR a solid concrete base.
- Select the preferred design and draw a scale drawing of the front, top and left views (first-angle orthographic working drawings) of the raised garden bed that you are going to make. Show ALL measurements/dimensions and joining methods on your drawing.
- List ALL material needed to complete the raised garden bed.
- Compile a cutting list for the formwork of the concrete base/top and timber used for the frame of the raised garden bed.
- Calculate the volume of concrete needed for the frame top OR base of the raised garden bed using dimension paper.
- Compile a detailed schedule to show the stages and time frames for making the raised garden bed.

#### **Use the following specifications:**

- The raised garden bed should consist of the following:
  - A reinforced concrete frame top OR solid concrete base
  - A timber frame
  - Sheet metal cladding sides
- Formwork must be made for the casting of the reinforced frame top OR the base.
- Reinforcement for the concrete frame top OR base must be added for strength.
- Any suitable timber can be used for the frame.
- The sheet metal cladding should be joined to the frame using an appropriate joining method.
- Learners should be innovative and creative when making the raised garden bed.

**NOTE:** Evidence of research, drawings, cutting list, calculations, templates, stages of making and striking of formwork as well as the model should be available for moderation.

**3.5 Marking guidelines for Phase 2**

<b>ASSESSMENT OF THE RAISED GARDEN BED</b>				
<b>LEARNER'S NAME AND SURNAME:</b> _____				
<b>ASSESSMENT CRITERIA</b>	<b>GOOD/EXCELLENT</b>	<b>AVERAGE</b>	<b>POOR/NOT ATTEMPTED</b>	<b>MODERATED MARK</b>
<b>PLANNING</b>	<b>8–10</b>	<b>5–7</b>	<b>0–4</b>	<b>0–10</b>
Research different types of designs of raised garden beds focusing on the following: (Minimum 2 x A4 pages on each criterion with a summary of information compiled in the research) <ul style="list-style-type: none"> <li>○ Reinforced concrete frame tops OR concrete bases for raised garden beds</li> <li>○ Sheet metal cladding</li> <li>○ Appropriate joining methods used to join timber to sheet metal</li> </ul>				
THREE freehand/instrument drawings of different designs of raised garden beds with a concrete frame top OR base, timber frame and sheet metal cladding				
	<b>4–5</b>	<b>2–3</b>	<b>0–1</b>	<b>0–5</b>
A list of all materials needed to complete the raised garden bed				
Compiling a cutting list for the formwork and timber frame				
Calculating the volume of concrete for the frame top OR base on dimension paper				
Compiling a schedule of stages and time frames for the making of the raised garden bed				
<b>TOTAL: 40</b>				
<b>SCALE DRAWINGS OF PREFERRED DESIGN</b>	<b>4–5</b>	<b>2–3</b>	<b>0–1</b>	<b>0–5</b>
Correctness of front view (including hidden detail)				
Correctness of top view (including hidden detail)				
Correctness of left view (including hidden detail)				
Dimensions correctly indicated on ALL views				
<b>TOTAL: 20</b>				

ASSESSMENT CRITERIA	GOOD/EXCELLENT	AVERAGE	POOR/NOT ATTEMPTED	MODERATED MARK
<b>FORMWORK</b>	8–10	4–7	0–3	0–10
Marking and cutting of formwork for the concrete frame top OR base				
Marking, drilling holes for screws and joining of formwork members				
Sealing of formwork				
<b>TOTAL: 30</b>				
<b>TIMBER FRAME AND CLADDING</b>	8–10	4–7	0–3	0–10
Marking, cutting, drilling and aligning the members of the frame for the raised garden bed				
Marking and cutting out the sheet metal cladding				
Joining the sheet metal cladding to the frame				
Placement of the concrete frame top OR base in correlation to the frame				
<b>TOTAL: 40</b>				
<b>REINFORCEMENT</b>	8–10	4–7	0–3	0–10
Placing of reinforcement				
<b>TOTAL: 10</b>				

ASSESSMENT CRITERIA	GOOD/EXCELLENT	AVERAGE	POOR/NOT ATTEMPTED	MODERATED MARK
<b>CONCRETE</b>	8–10	5–7	0–4	0–10
Mixing and placing of concrete				
<b>TOTAL: 10</b>				
<b>STRIKING OF FORMWORK</b>	4–5	2–3	0–1	0–5
Striking of formwork members without damage to the concrete frame OR base				
<b>TOTAL: 5</b>				
<b>FINISHING OF PRODUCT</b>	4–5	2–3	0–1	0–5
Finishing of external surface of the concrete frame OR base				
Finishing the frame and sheet metal cladding				
<b>TOTAL: 10</b>				
<b>FINAL PRODUCT</b>	4–5	2–3	0–1	0–5
Neatness, appearance and functionality of the final product				
<b>TOTAL: 5</b>				
<b>INNOVATION AND CREATIVITY</b>	4–5	2–3	0–1	0–5
The learner enhances his/her chosen design by adding features to improve the appearance and functionality of the raised garden bed				
<b>TOTAL: 5</b>				
<b>GENERAL ASPECTS</b>	4–5	2–3	0–1	0–5
Adherence to deadlines				
<b>TOTAL: 5</b>				
<b>TOTAL OUT OF 180</b>				
<b>CONVERTED TOTAL OUT OF 80</b> <i>(Total ÷ 2.25)</i>				

**3.6 Composite mark sheet for Construction PAT**

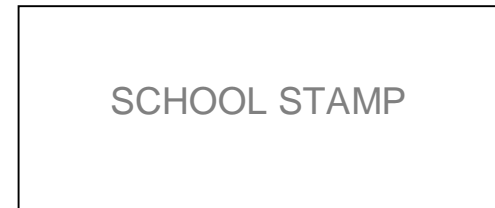
SCHOOL NAME AND LOGO		PHASE 1		PHASE 2 (MODEL)											TOTAL					
		TERM 1		PART 1 TERM 1		PART 2 TERM 2			PART 3 TERM 3											
		BUILDING OF A CAVITY WALL IN STRETCHER BOND	MODERATED MARK	PLANNING	SCALE DRAWINGS OF PREFERRED DESIGN	FORMWORK	FRAME AND CLADDING	REINFORCEMENT	CONCRETE	STRIKING OF FORMWORK	FINISHING OF PRODUCT	FINAL PRODUCT	INNOVATION AND CREATIVITY	GENERAL ASPECTS	TOTAL PHASE 2	MODERATED MARK	CONVERTED MARK	MODERATED MARK	TOTAL: (PHASE 1 + PHASE 2)	MODERATED MARK
NO	SURNAME AND NAME OF LEARNER	20	20	40	20	30	40	10	10	5	10	5	5	5	180	180	80	80	100	100
1																				
2																				
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				
<b>TOTAL</b>																				
<b>TOTAL</b>																				

\_\_\_\_\_  
Signature of (Teacher)

\_\_\_\_\_  
Date (dd/mm/yy)

\_\_\_\_\_  
Signature of (Moderator)

\_\_\_\_\_  
Date (dd/mm/yy)



## SECTION 4

### 4. OTHER RELEVANT INFORMATION

#### 4.1 Absence/Non-submission of task (What are the consequences?)

The absence of a PAT will be dealt with in accordance with the regulations as stipulated in the *National Policy on Protocol for Assessment Grades R–12*, page 6, Chapter 3, paragraphs 7 and 8.

The *National Protocol for Assessment Grades R–12*, Chapter 3, paragraph 8, subsection (4) clearly states that the absence of a practical assessment task mark will result in the candidate, registered for that particular subject, receiving an incomplete result.

#### 4.2 Requirements for presentation

The following must be presented by the candidate for assessment and moderation:

- Phase 1: Mark sheet with evidence
- Phase 2: Evidence of planning and scale drawings of the model
- Phase 2: Mark sheet with completed model
- The candidate's name and class must be clearly indicated on all components of the PAT
- Completed Declaration of Authenticity with school stamp

The following document must be presented by the teacher for moderation:

- A composite mark sheet (ONE composite mark sheet comprising all candidates' names and marks for all phases)

#### 4.3 Recommended time frames for the completion of the PAT

##### Term 1:

- Phase 1 and Phase 2 (Part 1)

##### Term 2:

- Phase 2 (Part 2)

##### Term 3:

- Phase 2 (Part 3)

**The product/model should be manufactured in the workshop under the teacher's supervision.**

**NOTE:** The teacher should plan properly and manage the available resources so that all learners will be kept busy with some part of the tasks throughout the year. **PAT tasks must be completed, marked, and internally moderated by 1 September 2025.**

**4.4 Declaration of authenticity**

NAME OF THE SCHOOL: .....

NAME OF LEARNER:.....

NAME OF TEACHER: .....



**I hereby declare that the practical assessment task submitted for assessment is my own, original work and it has not been submitted for moderation previously.**

\_\_\_\_\_  
**SIGNATURE OF LEARNER**

\_\_\_\_\_  
**DATE (dd/mm/yy) (SUBMITTED)**

**As far as I know, the above declaration by the candidate is true and I accept that the work offered is his/her own.**

\_\_\_\_\_  
**SIGNATURE OF TEACHER**

\_\_\_\_\_  
**DATE (dd/mm/yy)**

**SECTION 5****5. CONCLUSION**

On completion of the practical assessment task learners should be able to demonstrate their understanding of the built environment/industry, enhance their knowledge, skills, values and reasoning abilities as well as establish connections to life outside the classroom and address real world challenges. The PAT furthermore develops learner's life skills and provides opportunities for learners to engage in their own learning.