

# All categories

## Technical Test and On Site Assessment – Guidance Notes

### Part 1 - Technical Tests (excluding category A61)

#### Introduction

The CPCS Technical Test:

- is a core element of the scheme, which applies across all categories of plant and all routes of entry
- is designed to enable a Candidate to demonstrate their operating ability and underpinning knowledge, through both a CPCS Theory and a CPCS Practical Test
- is supported by a training syllabus which outlines the technical skills that an operator is expected to demonstrate to prove their operating ability. The syllabus has been developed to ensure that the operator has met the CPCS learning outcomes.

The learning outcomes are based on analysis of required work skills for the occupation and derived from the Plant Operations (Construction) National Occupational Standards (NOS). NOS are devised and approved by employers representing the sectors of industry that use plant and equipment.

If a Candidate has prior training and/or experience on a category, their skills can be measured against the learning outcomes and syllabus to determine whether they are fully prepared for the test. Refresher training and/or activity-specific practice is highly recommended by CPCS for all individuals prior to attempting the Technical Test. This is particularly crucial in the case of experienced operators, as bad habits gained through experience may mean the individual being unsuccessful on the test.

Achieving the Technical Test does not necessarily indicate competence, only that an assured level of skill and knowledge has been demonstrated. Applying that skill and knowledge in a wide variety of situations in the workplace and meeting industrial productivity timescales would prove the individual's competence, which the achievement of competence qualifications such as an NVQ or SVQ authenticates.

**All new and existing testers must use and make reference to the procedures and working instructions contained within this document when undertaking a Technical Test.**

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## Technical Test and On Site Assessment – Guidance Notes

### The Technical Test Overview

#### Standard & Advanced Technical Tests

The Technical Test standards are based on the core function of the machine, manufacturers' requirements, industry best practice and safe operating techniques.

The Technical Test is in two parts:

- a CPCS Theory Test
- a CPCS Practical Test.

The CPCS Theory element is required to be taken and achieved prior to an attempt on the CPCS Practical Test. This is to ensure that the Candidate has demonstrated a fundamental knowledge of the category for safety reasons.

The only exception is the CPCS Advanced Theory Test, whereby the individual must record a minimum of 80% on the CPCS Advanced Theory Test for the category before the CPCS Advanced Practical Test is attempted (with the exception of Appointed Persons). The CPCS Advanced & Standard Theory Test result is valid for six months from date of achievement for the purpose of progression onto the CPCS Practical Test.

Individuals undertaking the Advanced Practical Test are required to achieve 100% to pass the CPCS Theory Test and meet the requirements for applying for a CPCS Tester and/or Trainer card. This is critical to ensure that those training and testing future operators fully understand the content and are able to articulate the answers.

Prior to the start of the Technical tests, candidates and testers should turn off mobile phones, and should only be used in the case of an emergency.

### The CPCS Theory Test

The CPCS Theory Test ensures supporting knowledge of practical skills and understanding of outcomes not covered within the CPCS Practical Test. The CPCS Theory Test is to be answered verbally and may also be used independently to ensure currency of knowledge by experienced operators.

The CPCS Theory Test incorporates questions relating to:

- specific category and environment related health and safety
- operator's rights and responsibilities
- pre-start checks
- use of the operator's manual
- category specific preparation, operating and shut down requirements.

There is a CPCS Theory Test for each category. For categories with endorsements, the CPCS Theory Test is applicable to all endorsements.

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In response to Test Centre concerns of marking and candidates memorising questions sequencing, an electronic question and answer document has been devised. There are five sets of questions papers per category. Although there is the same number of questions, the sequence or order of questions varies between each paper. This means that a candidate will not be aware of the sequence of questions they will attempt prior to the theory test.

Given marks to questions may be input electronically e.g. using a laptop directly on the answer sheet which provides automatic totalling without the need for printing off a separate marking sheet. However, the questions only section can be printed off should a candidate request a copy at the start of the test. Answer papers using a computer may be stored electronically.

### The CPCS Practical Test

The CPCS Practical Test:

- ensures practical ability through a series of practical activities, based on core operating skills
- needs to be completed within specified time limits.

The time limits have been set:

- to ensure that a Candidate has sufficient work skills to be productive in current and future employment
- at a level that allows even newly trained operators to prove a sufficient measure of productivity when mapped against industry timescales. A Technical Test achievement will then allow them to gain a foothold within the workplace and increase their productivity through experience.

There is a CPCS Practical Test for each category, but for categories with endorsements the endorsement must be specified and the test taken on the appropriate machine for each endorsement.

### CPCS Theory Test Procedures

- Prior to commencing the Theory Test, testers are required to confirm the identity of the Candidate, and that the Candidate has passed the relevant Health & Safety Test within the last two years.
- Prior to the delivery of the CPCS Theory Test the CPCS Tester must first carry out checks on the audio equipment to ensure that is serviceable and in good working order and then at the end of the CPCS Theory Test (before the candidate leaves the premises) the CPCS Tester must check that the audio equipment has recorded correctly.
- The CPCS Theory Test must be taken on a one-to-one basis between the Candidate and the CPCS Tester and conducted in the designated segregated area (which for on-Centre categories has been accredited through the CPCS Test Site compliance visit) and away from other Candidates or individuals.
- The Candidate must not take any notes into the CPCS Theory Test Area unless specifically listed in the Test specification and under no circumstances must the CPCS Tester supply the candidate with a copy of the answers. A copy of the questions may be made available for the candidate should they request them, (this should be declared at the beginning of the test).

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- Candidate shall be given one of the five available questions sets. The tester shall determine which question paper will be used for the test. Testers must alternate the question papers, particularly where candidates work for the same employer.
- If using the electronic version of the answer paper, the file must be saved from the template and allocated to the relevant candidate using a filing code approved by the Test Centre, allowing the individual marks for the candidate to be retrieved at a later date for auditing purposes.
- There are a set number of questions for each category.
- The Candidate must attempt all questions.
- The answers given by the Candidate are to be given verbally to the CPCS Tester.
- There is a specific mark available for each question, and an overall pass mark to achieve the CPCS Theory Test. The achievement mark for each category is shown on the relevant answer paper. The mark for each question is indicated at the end of the question.
- Each category specific CPCS Theory Test is supported by:
  - an Answer Paper containing the marking system
  - an operators manual (provided by the Test Centre)

### Answers

Typical answers to all questions are shown on an Answer document. The Candidate must attempt all questions.

Answers that end with **etc.** mean that there may be numerous answers that are relevant but may not be listed. The CPCS Tester may accept other answers they consider correct using their experience and knowledge

- Answers that have words in ***italics*** mean that the answer or answers (mainly safety orientated) is/are not absolute. For example, it is widely believed that the wearing of a seatbelt eliminates injury. This is not true – the wearing of a seatbelt may reduce injuries compared to not wearing a seatbelt. CPCS Testers should question the Candidate further during the questioning to ensure they understand the issues as to why
- Answers that have words which are **CAPITALISED** mean particular words are key and need to be part of the Candidate's answer (or an equivalent word e.g. significant or major) to achieve the full mark, irrespective of how they describe the answer or the various possible answers. Further guidance is given in the Verbal Questioning Techniques section.

The question writers have used language that is technically correct. However, they are acutely aware that some questions can be interpreted in another way, and that terminology can differ within industry and even amongst the manufacturers of plant. For example, analysis has shown that the chart or document that indicates the load capacity relative to different operating heights and reaches for telescopic handlers can be referred to as a load envelope chart, duties chart, load rating chart, lift performance chart etc. **CPCS Testers may re-phrase questions to aid comprehension and to replace terminology that is applicable to the type of machine or industry.**

Some questions use abbreviations of common words such as ROPS, FOPS, PUWER, LOLER, BS etc. This is intentional however as this is how they are frequently referred to within various sectors of industry. However, testers must use the full description when asking the question.

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Answers to questions relating to the driving or use of plant on the public highway, including the type of driving licence required, have been taken from official publications such as the DVLA issued INF 52 (Information for Drivers of Large Vehicles).

The Department of Transport's Information Sheet – Works Trucks advises on works truck classification whilst further information regarding vehicles on the highway can be sought from websites such as <http://www.direct.gov.uk/en/Motoring/DriverLicensing/index.htm> Testers need to be fully acquainted with the mentioned documents and information sources.

Answers to questions relating to driving on the highway have been sourced from the above documents as well as consultation with the DVLA, Plant-focussed Associations and Police forces. However it is acknowledged by all that depending on the exact circumstances of operation and use, actual criteria could vary. However, answers supplied by CPCS are regarded as typical of normal plant operations.

Tester must understand that the intent of asking these questions is to ensure that candidates know that they have responsibilities when driving and using plant on the road, and acknowledge to candidates that this is a complex area which only the employer can determine exactly how the law is to be complied with.

Some questions do identify malpractice such as the slewing of loads at high speeds. These questions are being asked in order to make the candidate consider the consequences or effects of such actions. Testers must make candidates aware of what is not considered as best practice.

As part of Testers continual professional development if, whilst updating themselves on current/new Legislation, they become aware there has been a change of, for example; legislation, ACOP or best practice etc, the tester must obtain the up-to-date answer from the candidate and not the given typical answer as shown on the answer sheet.

### Electronic Answer Document

The CPCS Tester must record the actual marks awarded to the Candidate on the answer document in the score column. This column allows electronic inputting and has an automatic totalling function. The automatic totalling function also informs the tester if the candidate has **NOT** met or exceeded the required achievement mark.

The answer document provides a grid with the maximum possible score available for each question adjacent to the question number.

The answer sheet may be printed off and completed manually. However testers must ensure that totalled marks are correct. If printing off the question and answer paper, the document automatically defaults to a non achieved state. If the candidate is successful, testers need to delete the word 'not' to read 'achieved'

No.	Question:	Answer	Mark	Score
1	Give TWO examples of where The Work at Height Regulations may apply to 360 excavator operations.	<i>Answer relevant to this question</i>	2	1
2	What information does the 'dig-envelope' (also known as 'working range') chart give? (Candidates may be shown a copy of a chart)	<i>Answer relevant to this question</i>	1	1

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### Verbal Test Procedures

- The full CPCS Theory Test, including: basic details, questions delivered by the CPCS Tester and responses made by the Candidate, must be verbally recorded using electronic means, with no interruptions from start to finish and retrievable at a later date for auditing purposes.
- There is a guideline time limit of 1 hour for the completion of the verbal question session. The CPCS Tester has the flexibility to allow the session to extend beyond this time if they are confident that the Candidate will be able to complete the test.
- Due to the extended number of the questions, for Categories A49 and A50, or for the combined question paper for A25/26 and A42/43, the guideline time limit is 1 hour and 15 minutes

### Basic details

At the beginning of a verbal CPCS Theory Test session, items below **MUST** be verbally recorded on the electronic medium.

#### To be read out by the CPCS Tester

1. My full name is...
2. My CPCS Tester registration number is...
3. The date is... the time is ...am / pm, and this test is being conducted at... (name of Test Centre or Test site location)
4. The Candidate's name is...
5. The Test reference number is...
6. The category of plant is... (and the CPCS code including the endorsement if relevant)
7. A copy of the questions has been requested and given to the candidate (if applicable)

#### To be read out by the Candidate

1. My full name is...
  2. My CPCS registration / H & S number is...
  3. The CPCS Tester's name is...
- The CPCS Tester must select one of the five possible question and answer papers and ensure that the candidate's question paper, if requested, matches the testers.
  - The CPCS Tester must state the question number being attempted and initially read the questions as supplied by CPCS. (Pages 4 and 8 contain further guidance)
  - Should the Candidate require clarification, or the tester wish to clarify aspects of the question, the CPCS Tester may re-phrase the question but without leading the Candidate.
  - The Candidate must provide their answer to each question.
  - Once the Candidate has given their final answer on each question, the CPCS Tester will announce the possible mark and the mark awarded.

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- The CPCS Tester will record the mark for each question onto the answer sheet.
- If the Candidate does not attempt to answer and wishes to pass a question during the CPCS Theory Test, the CPCS Tester should record it as 'not attempted' for the recording. It is possible for the Candidate to return to any such questions if they have sufficient time remaining at the end of the test. This must form part of the continuous digital audio recording.
- Reasons for not awarding any or full marks to particular questions should only be given to the candidate at the end of the session.

### At the end of the test

- The CPCS Tester will verbally notify to the Candidate the awarded marks and announce the result of the CPCS Theory Test. The Tester must also state how long the test has lasted.
- The CPCS Tester will inform the Candidate reasons why full marks were not awarded to the questions (if applicable).
- The CPCS Tester should encourage the Candidate to comment on the test before the recording is terminated.

### CPCS Theory Test Completion

- If the achievement mark is not reached, the Candidate will **NOT** be allowed to proceed with the CPCS Practical Test (with the exception of the CPCS Advanced Theory Test, please refer to Page 8 CPCS Technical Test Overview).
- The CPCS Tester **MUST** provide written feedback (using the comments section of the Sign-off Sheet) to the Candidate on issues arising during the test, even if the Candidate has gained or exceeded the minimum marks.
- The CPCS Tester and the Candidate **MUST** both sign the Sign-off Sheet at the end of the CPCS Theory Test.
- The Candidate must be provided with a copy (either handwritten or photocopied) of the Sign-off Sheet on completion of both parts of the test.
- If the Candidate wishes to claim a Technical Test achievement Grant from CITB-ConstructionSkills they must provide their Employer's details in the appropriate section of the Grading Sheet.
- The Candidate will need to rebook the test at a later date if unsuccessful on the questions.
- The Test Centre must ensure that all documentation and electronic files has been completed and that the recording of the questions and marks is stored safely and securely for auditing purposes.
- The Test Centre must upon request offer the Candidate a copy of the recording of the questions, particularly for NVQ or SVQ evidence purposes.

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## Technical Test and On Site Assessment – Guidance Notes

### Verbal Questioning Techniques

- Verbal questioning and responses allows flexibility of the test and the opportunity for both the CPCS Tester and Candidate to express themselves in a way that allows mutual understanding of both the question and the given answer. CPCS Testers should and will need to fully utilise skills gained during their instructor or CPCS Tester training programme and subsequently developed during their experience of carrying out assessments and tests.
- The questions have been written, in most cases, to check a Candidate's understanding and to generate an analytical or logical process of thought, not just to check the Candidate's retained knowledge or learned facts. This process can be exploited when the Candidate is initially unable to provide an answer. The skill of the CPCS Tester is to extract key words of the question, create sub-questions and pose in such a manner that gives the Candidate the chance to evaluate key words of the question and form a response that ultimately reveals the desired answer. It also allows the Candidate to justify their answer. This method can show that understanding has not only been demonstrated but can be more easily recalled in the future when needed.
- Another method of ensuring understanding, again where the Candidate is unable to initially provide the answer, is for the CPCS Tester to create a scenario with which the Candidate would be familiar, either through experience, role play or through a 'what if' scenario. This method is particularly useful where the Candidate is an experienced operator, and the CPCS Tester may use (the Candidate's) past experiences to extract parts of the required answer, which again culminates in overall understanding for the particular question. Both methods reinforce the concept of using questions as part of ongoing learning
- In all cases, the CPCS Tester must not directly lead Candidates to the answer, state the answer, imply an answer or in any way make the question so obvious that no check on understanding has occurred. CPCS Testers must use their skills and experiences to prevent this occurrence. They must also know when to stop providing additional help to a question when it is evident that the Candidate has no concept of the required answer, or where the Candidate is returning multiple answers in the hope that they may provide the required answer through elimination.

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## Technical Test and On Site Assessment – Guidance Notes

### CPCS Practical Test Procedures

Candidates will undertake the CPCS Practical Test with the desired item of plant.

#### Category and endorsement specific procedures

- If the centre is supplying the machine for the test, it is essential that the Candidate is made aware of the make and model of the machine being used for the test at least several days prior to the test taking place. The Candidate must be given an opportunity to become familiar with the machine prior to starting the CPCS Practical Test.
- The centre shall not restrict the amount of time the Candidate needs to be familiar with the machine (unless it considered by the centre that excessive and needless time is being taken by the Candidate).
- Should the CPCS Tester consider that the Candidate's skills are limited and that there is a real danger that they will be a hazard to themselves, the machine and others, prior to or during the CPCS Practical Test, the CPCS Tester has the authority to terminate the test. In the event of this action occurring, the CPCS Tester must inform the Candidate in writing, justifying the reason for the termination.
- Resources needed for the test are detailed within the resources section of the test criteria. All resources listed must be made available and any deviation must be sought from CPCS prior to the test taking place. The Candidate will undertake the activities detailed in the activities section of the test criteria and all activities must be attempted. Deviation from the activities must be sought from CPCS prior to the test taking place.
- All tests have a maximum time for all activities to be completed in. The time taken by the candidate must be recorded. Should the Candidate need additional time, CPCS Testers may allow an extension allowing candidates full opportunity to succeed but ensuring that they will be able to perform adequately in the workplace.
- Timings should only be extended where operating conditions i.e. extreme weather, uniqueness of the test area or particular machine attributes effectively slow the rate of work. Testers must not place pressure on a candidate to complete a test in order to start a subsequent one. Testers must justify in writing on the Grading Sheet the reasons for the extension. It would be very unlikely that an extension would be given over 25% of the given time.
- If the Candidate has to travel up and down a slope, it must have either one ramp with adequate manoeuvring area at the summit or two ramps with a level area of adequate size at the summit to pause the machine. If two ramps are used, the machine must be halted at the summit and the Candidate told to choose a direction for descending the ramp.
- Where the test requires a hill start, the Candidate only needs to halt and resume the motion of the machine, not the power unit/engine. The slope angle for the test is usually 18% (1:5.5) except in a few cases. However, manufacturers' data must be checked to ensure that the machine is capable of travelling on this gradient.
- Where the machine has to travel through a restriction, the figure quoted in the Activity Measurements section is the total clearance allowed i.e. the width of the machine plus the stated figure.

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## Technical Test and On Site Assessment – Guidance Notes

- To ensure a national standard and reliable judgement of the Candidate's performance, test criteria must be adhered to and the Grading Sheet marked during the test by the authorised CPCS Tester.
- The test requires the Candidate to carry out pre-use checks prior to starting the engine, and whilst the engine is running. Manufacturers' guidance must be followed and CPCS Testers must be familiar with the required checks before the test starts.
- The CPCS Tester can fulfil the role of a supporting operator (as long as certificated and competent on that category) if a risk assessment has been properly completed and they can maintain close and continuous supervision, with the exception of the following categories:
  - A40 Slinger/Signaller: CPCS Tester cannot operate the crane
  - A42 Crusher: CPCS Tester cannot operate the loading equipment
  - A49 Loader/Securer – Non-STGO: CPCS Tester cannot load and unload
  - A50 Loader/Securer – STGO: CPCS Tester cannot load and unload.
  - A10, A12, A58 and A59:

The CPCS Tester will be permitted to fulfil the supporting role of Slinger/Signaller for these categories provided they hold the CPCS Slinger/Signaller category or have passed both the CPCS Theory and Practical Technical Test for Slinger/Signaller.

It is appreciated that not all CPCS Testers who will be carrying out such testing currently hold this category or have passed the CPCS Technical Tests, therefore until their initial Tester card expires, a Tester will be permitted to fulfil the supporting role of Slinger/Signaller in such occurrences provided that;

- they are certificated and competent to BS7121
- are able to fulfil the role on the category being tested
- a risk assessment has been properly completed
- they can maintain close and continuous supervision.

To ensure standards are maintained, all individuals fulfilling the role of Slinger/Signaller in the CPCS Technical Tests requiring such activities to be undertaken will, from 1st August 2013, be required as a minimum, to have passed the CPCS Theory and Practical Technical Tests for Slinger/Signaller.

### Machine checks

Typical checks on most machines would include the checking and/or adjustment of the following:

#### Pre-start:

- Fluids – engine oil and coolant, transmission, brake, hydraulic, steering, windscreen;
- Tyres, rims, wheel nuts, pressures;
- Track tension, idlers, sprockets;
- Hydraulic/Pneumatic pipe/hose condition, security, leakages;
- Hydraulic/Pneumatic rams security, condition, leakages;
- All working components/attachments for leaks/damage/cracks/unserviceability etc;

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- Lights, warning and safety appliances – such as reversing devices, horn, protective guards;
- ROPS/FOPS, seat and seatbelts, operating/driving position, mirrors, glass condition and cleanliness;
- Controls, gauges, warning lights, RCIs and other types of safety devices;
- Operating area free from hazards i.e. clean floors and pedals, no loose objects etc.

### Running:

- Hot/Cold starting methods.
- Function of steering/brakes/hydraulic/pneumatic/electrical services.
- The CPCS Practical Test must not start until:
  - the machine (or equipment) complies with the test resource criteria
  - the correct operator’s instruction manual is available for the Candidate to refer to
  - the Candidate is fully aware of the requirements of the test and the tasks to be undertaken, and is given ample opportunity to be familiar with the relevant operator’s manual and the machine being used for the test
  - a documented risk assessment has been made of the CPCS Practical Test Area, and where applicable, a lift plan and method statement is made available.
  - test details have been recorded on the Grading Sheet.

### CPCS Practical Test Grading

Marking the test is divided into two sections on the Grading Sheet.

The test must be completed in full, allowing the Candidate to perform all the activities. The test must only be stopped if the CPCS Tester considers that the Candidate is endangering themselves or others.

The word ‘correctly’ as used in grading is defined as ‘following a procedure that conforms to’:

- current applicable legislation
- manufacturers’ requirements
- industrial best practice
- safe systems of work

### 1 – Mandatory

The Candidate must achieve all items to be successful in this section. If undertaken correctly, the CPCS Tester will record the letter Y (yes) against each item. If not undertaken or undertaken incorrectly, the letter N (no) will be recorded against the relevant item.

### Example

<b>MANDATORY</b>		<b>Correctly carried out during the test?</b>	<b>Y / N</b>
Preparing	All pre-start and running checks (or responses to relevant questions)		y
Travelling	Restrictions cleared		N

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	Machine set for travel	y
<b>All of these items must be awarded</b>		Achieved / Not achieved

### 2 – Faults

This section is designed to measure the Candidate’s performance by recording the number of faults against a given item which can accumulate penalties. To be successful on this section, the Candidate must not exceed 8 penalties.

#### Example

FAULTS	Candidate incorrectly carried out the following:	Fault	Mark	Penalty
Travelling	1. Full observation before moving	1	2	2
	2. Full observation whilst travelling	0	2	0
Working	3. Body fully emptied after discharging	4	1	4
	4. All loads lifted vertically	1	3	3
<b>Not exceeded 8 penalties</b>				Total penalties
				8
				Achieved / Not achieved

If, for example, the Candidate fails to empty a (dump truck’s) body fully after tipping during the test, then one fault is recorded. If the Candidate repeats this mistake again, another fault is recorded. The total number of faults for each item are multiplied against the mark and a penalty is awarded – *number of faults x mark = penalty*.

This is repeated for each item and at the end of the test faults are accumulated for total penalties. This system allows for minor faults that the Candidate makes during the test.

If no penalties are awarded then 'none' must be written in the totals box.

To be successful the Candidate must not exceed 8 penalties.

### CPCS Practical Test Completion

- The Candidate must achieve the required standard in both sections of the test to be deemed to have achieved the CPCS Practical Test operating standard.
- The CPCS Tester **MUST** provide written feedback (using the Tester observations section of the Grading Sheet) to the Candidate on issues arising during the test, even if the Candidate has achieved the test.
- The CPCS Tester and the Candidate **MUST** both sign the Grading Sheet at the end of the test.
- The Candidate must be provided with a copy (either handwritten or photocopied) of the Grading Sheet on completion of both parts of the test.
- If a test has been abandoned by the candidate, this must be recorded in the comments section of the marking sheet.
- The candidate if successful must be given the standard achievement letter as shown on CPCS-On.
- If the Candidate wishes to claim a CPCS Practical Test achievement Grant from ConstructionSkills they must provide their Employer’s details in the appropriate section of the Grading Sheet.

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- If a Candidate does not achieve the required operating standard in the CPCS Practical Test:
  - the CPCS Tester must, in writing, record the reasons for non-achievement and advise on future training needs
    - the Candidate may rebook to re-attempt just the CPCS Practical Test at a later date.
- The Test Centre must ensure that all documentation is completed and that any recording of the questions is stored safely and securely for auditing purposes.
- If the CPCS Practical Test has been recorded the Candidate has the right to request a copy of the recording, and the Test Centre must provide the Candidate with a copy.

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## Technical Test and On Site Assessment – Guidance Notes

### Part 2 - Technical Tests (category A61 only)

#### Introduction

The CPCS Technical Test:

- is a core element of the scheme, which applies across all categories of plant and all routes of entry
- is designed (in the case of the Appointed Person category) to enable a Candidate to demonstrate their ability and underpinning knowledge of planning lifting operations, through both a CPCS Theory and a CPCS Practical Test
- is supported by a training syllabus which outlines the technical skills and knowledge that a planner is expected to demonstrate. The syllabus has been developed to ensure that the Candidate has met the CPCS learning outcomes.

The learning outcomes are based on analysis of required work skills for the occupation and derived from the Planning and Supervising Lifting Operations National Occupational Standards (NOS). NOS are set and approved by employers representing the lifting sector of industry.

If a Candidate has prior training and/or experience on lifting operations, their skills can be measured against the learning outcomes and syllabus to determine whether they are fully prepared for the test. Refresher training and/or activity-specific practice is highly recommended by CPCS for all individuals prior to attempting the Technical test. This is particularly crucial in the case of experienced appointed persons, as changes in working practices and legislation may mean the individual being unsuccessful on the test.

Achieving the Technical Test does not necessarily indicate competence, only that an assured level of skill and knowledge has been demonstrated. Applying that skill and knowledge in a wide variety of situations in the workplace and meeting industrial productivity timescales would prove the individual's competence, which the achievement of the NVQ or SVQ authenticates.

**All new and existing testers must use and make reference to the procedures and working instructions contained within this document when undertaking a Technical Test.**

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## Technical Test and On-site Assessment – Guidance Notes

### The Technical Test Overview

#### Standard & Advanced Technical Tests

The Technical Test standard is based on Legislation, Regulations, Codes of Practice and Industry Best Practice.

The Technical Test is in two parts:

- a CPCS Theory Test of underpinning knowledge
- a CPCS Practical Test of ability
- Up to eight Candidates may be tested collectively providing sufficient resources are available.

The CPCS Theory Test can be taken before, during or after the CPCS Practical Test.

Individuals undertaking the Advanced Practical Test are required to achieve 100% to pass the CPCS Test and meet the requirements for applying for a CPCS Tester and/or Trainer card. This is critical to ensure that those training and testing future operators fully understand the content and are able to articulate the answers.

The CPCS Theory Test ensures supporting knowledge of practical skills and understanding of outcomes not covered within the CPCS Practical Test. The CPCS Theory Test requires written answers and may also be used independently to ensure currency of knowledge by experienced appointed persons.

The CPCS Theory Test incorporates questions relating to:

- Roles and responsibilities
- General and lifting operations specific Regulations and Legislation
- Codes of Practice
- Types and uses of lifting equipment
- Crane and load stability
- Pressures and loadings
- Communication types and requirements
- Lifting accessories types, functions and techniques
- Environmental issues.

The CPCS Practical Test:

- ensures ability through a practical planning activity using supplied data
- needs to be completed within specified time limits.

A time limit has been set:

- to ensure that a Candidate has sufficient planning skills to be productive in current and future employment
- at a level that allows even newly trained planners to prove a sufficient measure of productivity when mapped against industry timescales. A Technical Test achievement will then allow them to gain a foothold within the workplace and increase their productivity through experience.

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## Technical Test and On-site Assessment – Guidance Notes

Prior to comment of the Technical tests, candidates and testers should turn off mobile phones, and should only be used in the case of an emergency.

Testers are required to confirm the identity of the candidate, and that the candidate has passed the relevant Health & Safety Test within the last two years

### CPCS Theory Test Procedures

- The CPCS Theory Test requires written answers to given questions.
- The room must meet CPCS Test Centre requirements with a table and chair for each Candidate and adequate space to separate each Candidate. The criteria are outlined within the resources section of the CPCS Practical test paper.
- Copies of BS 7121 Parts 1, 2 and 3, copies of the ACoP for PUWER 1998 and LOLER 1998 may be used for reference by the Candidate during the test. Under no circumstances may Candidates take in any notes other than those specified.
- CPCS Testers shall make certain that each Candidate has a functioning blue or black ball point pen, and hold a supply of spares.
- The total number of questions and minimum pass mark is indicated on the Candidate question paper.
- There is a specific mark available for each question.
- CPCS Testers must explain the requirements of the test and make sure that the Candidates understand what is required.
- The Candidate must attempt all questions.
- The CPCS Theory Test is supported by:
  - an Answer Paper
  - a Grading Sheet.

### Answer Paper

Typical answers to the questions are shown on the Answer Paper. The Candidate must attempt all questions.

- Answers that end with **etc.** mean that there may be numerous answers that are relevant but may not be listed. The CPCS Tester may accept other answers they consider correct using their experience and knowledge
- Answers that have words in **italics** mean that the answer or answers (mainly safety orientated) is/are not absolute.
- Answers that have words which are **CAPITALISED** mean particular words are key and need to be part of the Candidate's answer (or an equivalent word e.g. significant or major) to achieve the full mark, irrespective of how they describe the answer or the various possible answers.

The question writers have to use language that is technically correct. However, they are acutely aware that some questions can be interpreted in another way, and that terminology can differ within industry and even amongst the manufacturers of plant. For example, analysis has shown that the chart or document that indicates the load capacity relative to different operating heights and reaches for telescopic handlers can be referred to as a load envelope chart, duties chart, load rating chart, lift performance chart etc. CPCS Testers may verbally clarify questions to aid comprehension and offer alternative terminology that is applicable to the type of operation or industry.

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A CPCS Tester invigilating may clarify questions to Candidates upon request. However, the CPCS Tester must not lead Candidates to the answer, state the answer, imply an answer or in any way make the question so obvious that no check on retained knowledge has occurred. CPCS Testers must use their skills and experiences to prevent this occurrence.

Upon marking the questions, CPCS Testers may verbally question the Candidate further if they feel that clarification may be needed on certain answers or where they feel the Candidate has misread or misinterpreted the question. In all cases, answers given by the Candidate must be written on the Answer Paper accordingly.

### CPCS Practical Test Procedures

Candidates will undertake the CPCS Practical Test which involves planning a lifting operation from a given lifting scenario. Resources needed for the test are detailed within the resources section of the test criteria. All resources listed must be made available.

The Candidate will complete the Risk Assessment/Method Statement and produce two scaled drawings showing the lift details that accompanies the statement.

All boxes within the Risk Assessment/Method Statement must be completed legibly with either the required information or marked N/A.

Drawings must show plan and elevation and have an identifiable scale. Candidate's details should also be shown on each drawing.

Graph-type paper may be used for the drawing

A suitable factor of safety must be determined and applied to the load for each scenario by the candidate. The factor of safety determined must be justified and relevant to the operation.

The standards of the practical test grading sheet must be explained to the Candidates prior to starting the test. It is recommended to allow Candidates sight of the marking sheet

To be successful on the test, candidates must pay particular attention to detail. Information stated on the drawing **MUST** be replicated correspondingly in the risk assessment/method statement and vice-versa.

To ensure a national standard and reliable judgement of the Candidate's performance, test criteria must be adhered to and the Grading Sheet marked at the end of the test by the authorised CPCS Tester.

### CPCS Practical Technical Test Grading

The definition of 'testing' is the marking of the written test scripts, both theory and practical. The written tests can be invigilated by the trainer (as long as a qualified CPCS Tester for Appointed Persons registered to the Test Centre) but test documents must be passed to another CPCS Tester registered to the Test Centre for marking. Any agreed concessions or information given by an invigilator must be relayed to the tester to ensure fairness of marking.

The Grading Sheet is divided into various sections that map directly to the Risk Assessment/Method Statement. The bracketed number in the left-hand column relates to the section number in the Risk Assessment/Method Statement form.

If undertaken or recorded correctly, the CPCS Tester will enter the letter Y (yes) against each item. If not undertaken/recorded or undertaken/recorded incorrectly, the letter N (no) will be entered against the relevant item.

The Candidate must achieve all items marked with an asterisk and a minimum of eight of the remaining items to be successful on the test.

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### Grading Sheet example (part)

	Criteria	Standard	Y / N
Section A (1) General details	1 customer	<i>as stated in given scenario</i>	
	2 name of site contact	<i>as stated in given scenario</i>	
	3 phone number of contact	<i>as stated in given scenario</i>	

### Technical Test Completion

- The Candidate must achieve the required standard of the test to be deemed to have achieved the CPCS Practical and CPCS Theory Test standard.
- The CPCS Tester **MUST** provide written feedback (using the CPCS Tester observations section of the Grading Sheet) to the Candidate on issues arising during both parts of the test, even if the Candidate has achieved.
- The CPCS Tester and the Candidate **MUST** both sign the CPCS Theory and CPCS Practical Grading Sheet at the end of the test.
- The Candidate must be provided with a copy (either handwritten or photocopied) of the Grading Sheet on completion of both parts of the test.
- The Test Centre must ensure that all documentation is completed and that the questions and practical work are stored safely and securely for auditing purposes.
- The candidate if successful must be given the standard achievement letter as shown on CPCS-On.
- If the Candidate wishes to claim a CPCS Practical and CPCS Theory Technical Test achievement Grant from ConstructionSkills they must provide their Employer's details in the appropriate section of the Grading Sheet.
- If a Candidate does not achieve the required standard in the CPCS Practical or CPCS Theory Test:
  - the CPCS Tester must, in writing, record the reasons for non-achievement and advise on future training needs
  - the Candidate may rebook to re-attempt either part of, or the whole test at a later date.

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## Technical Test and On-site Assessment – Guidance Notes

### Part 3 – On Site Assessments

1. The On Site Assessment, set by CPCS, is an assessment of operating ability normally carried out in the workplace. It is subject to all CPCS Test Centre Scheme Rules for the delivery of CPCS Practical Tests.
2. The On Site Assessment can act as an alternative to the standard CPCS Practical Technical Test or logbook hours for a blue CPCS Competent Operator card holder when renewing their card.
3. The On Site Assessment can only be carried out by CPCS Testers registered to a CPCS Test Centre, following the requirements as described in the CPCS Test Centre Scheme Rules.
4. The On Site Assessment must be notified as a CPCS Technical Test as per the CPCS Test Centre Scheme Rules and is subject to monitoring as a CPCS Technical Test.
5. The On Site Assessment can be carried out during the Candidate's normal work activities in their work environment, or at a suitable location that ensures the activities can be completed.
6. The item of plant being used for the assessment must comply with the CPCS category and endorsement description.
7. The activities within the assessment may be undertaken in any order, but all activities must be undertaken. All activities are practical based and standards determined by observation only.
8. Each activity may, if needed, be carried out at one or more locations, and at different times or days to allow the cardholder to meet the criteria. However,
  - the same Tester must conduct each activity. Each activity being conducted at a different location, time or day must be notified with each notification will incur an additional notification fee, and
  - the time, date and location details must be recorded in the comments section, relating to the activity, on the Assessment Sheet.
9. There is a limit of 14 assessments that can be carried out in one day.  
If a Tester wishes to exceed the maximum numbers of assessments in one day, prior permission must be sought from the CPCS Monitor.
10. To ensure fairness for the Candidate, the assessment ratio is 1 Candidate : 1 Tester.
11. The Candidate must achieve the required standard in the assessment to be deemed to have achieved the On Site Assessment operating standard.
12. The Tester **MUST** provide written feedback (using the Tester observations section of the Assessment Sheet) to the Candidate on issues arising during the assessment, even if the Candidate has achieved.
13. The Tester and the Candidate **MUST** both sign the Assessment Sheet at the end of the assessment.
14. If a Candidate does not achieve the required operating standard in the assessment:
  - the Tester must, in writing on the Assessment Sheet, record the reasons for non-achievement and advise on future training needs
  - the Candidate may rebook to re-attempt the assessment at a later date.
15. The Candidate must be provided with the original copy of the Assessment Sheet on completion of the assessment.

*Cont'd*

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## Technical Test and On-site Assessment – Guidance Notes

16. The CPCS Test Centre must hold a copy of the Assessment Sheet and ensure that all documentation is completed and stored safely and securely for auditing purposes.
17. If the assessment has been video recorded (on request from CPCS) the Candidate has the right to request a copy of the recording, and the Test Centre must provide the Candidate with a copy.

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## Technical Test and On-site Assessment – Guidance Notes

REF.	HEADING	AMENDMENT
<b>RELEASE 1 JANUARY 2011</b>		
	Whole Document	Integration of guidance notes for Technical Tests, A61 Technical Test and On Site Assessments
	Whole Document	To help Identify areas that have been updated they have been highlighted in <b>Grey</b>
Page 2	Technical Test Overview	Mobile phone requirements
Page 3	CPCS Theory Test	Information on the electronic question system
Pages 3 to 7	CPCS Theory Test Procedures	Guidance on the process for question delivery including the use and storage of electronic copies Reduction of theory test to 1 hour Extending time for combined question papers and specific categories Guidance relating to driving licensing-related questions
Page 9 to 12	Practical Test Procedures	Further Information added: Additional requirements for the conducting of the test added. Clarification for documented risk assessment. Clarification for abandoned test procedures
Page 17	CPCS Practical Test Procedures (A61)	Clarification of practical test requirements
Page 17	CPCS Practical Test Grading (A61)	Clarification of testing, marking and invigilation.