Construction Skills Certification Scheme

Candidate Pack for– CSCS 360º Excavator

Please read this document carefully. Further information and clarification may be obtained from the CSCS Operations Unit, phone 01 533 2500

Guidance Notes for Candidates

The following documents are also attached:

- Part 1 – Skills Self-Analysis
- Part 2 – Applicant Details
- Part 3 – Endorsement of Operating Competence
- Part 4 – Practical Test Criteria

Aim of Programme

The CSCS plant training and assessment programme enables trained construction plant operators to gain recognition for their achievements by the way of certification and provide an opportunity for participants to demonstrate their skills, knowledge and attitudes associated with plant operations, which provides suitable certification.

Candidate Profile

Candidates for this programme must:

- Have at least six months full time experience operating as a trainee 360^0 excavator operator in construction in accordance with the 5^{th} Schedule – of the Safety, Health and Welfare at Work (Construction) Regulations 2013 – S.I. No. 291 of 2013. The six months experience must be within the last two years.
- Possess a valid, physical 'Safe Pass' registration card or recognised equivalent
- Be at least 18 years of age

Note: The above items must be verified by the current or previous employer (Part 3 of this pack)

Application Requirements

- Approved Training organisations must send the Candidate Pack and Course Notes to the Candidate at least five days prior to the course date.
- Sections A B and C of Part 2 need to be completed by the applicant with Part 3 completed by the employer.
- Section C of part 2 must list at least six months full time experience operating as a trainee 360º excavator operator.

Part 1 Skills Self-analysis, Part 2 - Applicant Details, and Part 3 - Endorsement of Operating Competence must be completed and submitted to the chosen Approved Training Organisation at least one-day prior to attending the one-day training and assessment programme. Failure to do so will result in the candidate being unable to complete the programme.

Candidates must bring with them on the day: - a current/recent passport sized photograph containing no headwear, their valid, physical Safepass card plus safety helmet, safety boots, reflective 'Hi-Viz' jacket and gloves.

One Day Programme Content

Induction

Registration and induction will be undertaken at the start of the day. Candidates **must** present their Safe Pass card and photograph to the assessor. Parts 1, 2 and 3 must be already submitted to the Training Organisation.

Skills Validation Session

Candidates will undertake a minimum of a 3-hour Skills Validation Session with the course instructor. The Skills Validation Session cannot give skills and knowledge not held but allow strained operators to eliminate 'bad habits' gained on site.
Please note that the instructor has the right to refuse the candidate access to the test if they have demonstrated dangerous operating skills that contravene any part of the Safety, Health and Welfare Regulations.

Theory Test

On completion of the Skills Validation Session, candidates are allowed 45 minutes to undertake a multi-choice question paper. Questions will be based on the following:

- Legislation and regulations
- Employer and employee responsibilities
- Safe working practices
- Machine components and functions
- Correct operating techniques
- Pre-use checks and basic maintenance
- Road travel (where relevant)
- Types and characteristics of materials and loads
- Site safety
- Shut down and securing procedures

Subjects that the questions will be based on will be covered during the Skills Validation Session.

To be successful on the theory test, candidates must achieve a minimum of 70% of the total available marks. Candidates who achieve a minimum of 85% will be awarded a credit.

Practical Test

On the test the candidate will demonstrate tasks with the excavator. The tasks to be undertaken, equipment required and a sample grading sheet is contained in Part 4 of this pack – Practical Test criteria. Part 4 of this pack details the equipment and resources needed for the test and the tasks the candidate will be expected to carry out with a 360^0 excavator.
The grading sheet is divided into essential items and scored marks. Scored marks allow a limited number of minor errors to be made. To succeed, the candidate must achieve all essential items and not exceed the maximum score. Candidates who score no penalty marks as well as all the essential marks will be awarded a credit. The practical test has a maximum time of 1 hour and 15 minutes in which all tasks must be completed.

Candidate Pack for– CSCS 360^0 Excavator

Feedback and Certification

If a candidate meets the required standard, the approved training organisation will send the relevant assessment documentation to SOLAS for certification and registration. The CSCS card is printed and posted to the training provider for distribution. A QQI certificate will also be awarded as a result of a pass on the one-day programme.
Candidates who achieve a credit in the theory test **and** practical test will be awarded an overall credit.

Candidates who are referred will receive written feedback from the assessor and may be advised to undertake further training and/or site experience.
If a candidate is successful in the theory but not the practical part of the test, then they may re-attempt just the practical part. If the candidate has not been successful in the theory test, then they may not attempt the practical test.

This concession may only occur if the candidate returns to the same approved trainer and training organisation within 9 months. If they choose to go to a different organisation, they will have to do both the practical and theory parts again.

For learners who do not reach the required standard, a period of 5 days must elapse before they can retake the test.

Registration Card Duration

CSCS registration cards are valid for five years and can be renewed up to six months before the expiry date

Cancellation of Certificates and Cards

Where it is discovered that the information provided by the Candidate was incorrect or the programme was not delivered in accordance with SOLAS specifications the Certification and registration card may be withdrawn and the relevant authorities notified
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DATA PROTECTION NOTICE

PARTICIPANT AND EMPLOYER DATA PROTECTION NOTICE

1. PERSONAL DATA COLLECTED AND OBTAINED

This Data Protection Notice ("**Notice**") sets out the basis on which SOLAS ("**SOLAS**", "**we**", "**our**" or "**us**") of Block 1, Castleforbes House, Castleforbes Road, Dublin 1 will use the personal details ("Personal Data") provided when completing the application form (the "**Form**") to be registered as a CSCS/QSCS cardholder. This Notice also details how SOLAS will process this Personal Data for the purpose of assessing the Form and, if successful, issuing a CSCS/QSCS card to you ("**Card**"). The Personal Data we obtain from you will be held by SOLAS as a controller. SOLAS will collect and process the Personal Data that you provide in the Form.

IMPORTANT: where you provide Personal Data about other individuals (e.g. your existing/previous employer or endorsers), you agree that you are responsible for ensuring that such individuals know their Personal Data will be used by SOLAS accordance with this Notice.

2. HOW AND WHY WE PROCESS YOUR PERSONAL DATA

This section details how ("**legal basis**") and why ("**purposes**") we process your Personal Data:

Legal basis: it is necessary to process your Personal Data to enter into and perform our contract with you including for the following purposes: (a) to process your Form; (b) to issue you with a Card; (c) to verify your Card on an ongoing basis; (d) to renew your Card where you ask us to do so; and (e) to respond to you when we receive any correspondence from you. **IMPORTANT**: If you do not provide us with your Personal Data so that we can process it for the above purposes, we will not be able to assess or process your Form, issue you with or renew your Card and/or communicate with you as necessary in relation to your Form and/or your Card.

Legal basis: it is also necessary to process your Personal Data for the purpose of complying with legal obligations to which we are subject including to fulfil our statutory functions.

3. DISCLOSURE OF YOUR PERSONAL DATA

We may disclose some or all of your Personal Data to the following parties: SOLAS business units, SOLAS agents or service providers including CSCS/QSCS trainers, your existing or potential employers, government and state authorities including in particular the Construction Industry Federation (CIF), Credit Card Systems Ireland Ltd and Quality and Qualifications Ireland. We may also disclose your Personal Data to third parties if we are under a legal duty to disclose or share your Personal Data in order to comply with any legal or regulatory obligation or request or to perform a public function.

4. KEEPING YOUR PERSONAL DATA

We will keep your Personal Data for the period for which your Card is valid and/or renewed and for a period of 7.5 years from when your Card expires and/or is not

renewed. In some cases, we will need to retain your Personal Data for longer periods for compliance with legal obligations imposed on us or where we are a party to legal proceedings with you, and to ensure you a continued client service. Such Personal Data will be securely retained in line with the SOLAS records retention and disposal Procedure.

5. YOUR RIGHTS

The following are your rights to address any concerns or queries regarding the processing of your Personal Data. You can exercise any of these rights by submitting a request to the Data Protection Officer, SOLAS, Block 1, Castleforbes House, Dublin 1. We will provide you with information on any action taken upon your request in relation to any of these rights without undue delay and at the latest within one month of receiving your request. We may extend this by up to 2 months if necessary, however we will inform you if this arises. You have the right to lodge a complaint with the Data Protection Commission with regards to our processing of your Personal Data. The Right to Access The Right to Rectification

- The Right to Erasure
- The Right to Restriction of Processing
- The Right to Object to Processing
- The Right to Withdraw Consent
- The Right to Data Portability
- The Right to Object Automated Decision Making

6. CHANGES TO THIS NOTICE

We may amend this Notice from time to time, in whole or part, at our sole discretion. Any changes to this notice will be posted on the SOLAS CSCS/QSCS website at http://www.solas.ie/Pages/CSCS.aspx

If at any time we decide to use your Personal Data in a manner significantly different from that stated in this Notice, or otherwise disclosed to you at the time it was collected, we will notify you by e-mail, and you will have a choice as to whether or not we use your information in the new manner.

7. CONTACT US

If you have questions or concerns about this Notice, please contact the SOLAS Data Protection Officer at SOLAS Data Protection Officer, SOLAS, Castleforbes House, Dublin 1

Construction Skills Certification Scheme

Part 1 - Skills Self-Analysis CSCS 360^0 Excavator

Introduction

The aim of this form is to allow applicants to measure their knowledge and experience on the safe use of 360º Excavators against the questions below. This is to ensure that all those attending the one-day experienced Operator Programme have sufficient skills and knowledge to comfortably meet the required standards. This section **must** be completed and returned to the chosen Approved Training Organisation prior to attending the one-day training and assessment programme.

Instructions to the Applicant

Please take your time and answer all questions honestly, as dishonest answers mean that you may be un-successful on the course programme. On completion, add up the total number of questions you have scored as 'yes' and refer to the Assessment Grading which will analyse your knowledge and experience

Assessment Questions Please answer all questions as indicated:	**Yes**	**No**
1. Can you identify and use all the controls and machine modes correctly?	☐	☐
2. Can you extract information from the operator's handbook?	☐	☐
3. Do you correctly carry out all pre-use and running checks?	☐	☐
4. Can you correctly configure the excavator for site and road travel (if applicable)?	☐	☐
5. Have you travelled over differing types of terrain including rough and undulating ground?	☐	☐
6. Can you travel up & down steep substantial slopes correctly?	☐	☐
7. Can you set the excavator correctly to dig below at/or level ground, and/or load vehicles?	☐	☐
8. Do you know the minimum distance spoil should be kept from the sides of a trench and why?	☐	☐
9. Do you know what the recommended minimum distance is when working near power lines and how to access overhead powerlines information?	☐	☐
10. Can you explain the purpose of the stabilisers (wheeled machines) and when they should be used?	☐	☐
11. Can you excavate and grade materials to site tolerances?	☐	☐
12. Have you loaded vehicles correctly and without delay?	☐	☐
13. Have you changed buckets using correct methods?	☐	☐
14. Do you know the correct procedure when placing or unloading the excavator onto or from a vehicle bed or trailer?	☐	☐
15. Do you know the correct procedure when placing and lifting loads with this lifting appliance?	☐	☐
16. Can you shut down and secure the excavator correctly after work?	☐	☐

Yes total ___

Candidate Name: …… Date: ……

Assessment Grading

If you have scored 11 – 16

You appear to have a good understanding of 360º excavator operations to comfortably participate on the experienced operator course programme..

If you have scored 8 – 10

Your understanding of 360º excavator operations is limited and we advise that you acquire further knowledge before attending the trained operator course programme. Remedial training and further site experience is advised..

Less than 8

Your supposed understanding of 360º excavator operations is very limited and we strongly advise you not to attend the course until you have undertaken remedial or full training.

Assessment Requirements

Should a candidate have any particular assessment requirements i.e. need a translator or reader/writer or any other form of special needs, the approved training organisation **must** be informed well in advance of attending the one-day programme so that the appropriate help may be sourced.

Information regarding a candidate's particular requirements will be treated with the strictest confidence by the approved training organisation.

REMINDER
Candidates must bring with them on the day:

- **A recent Passport sized photograph** …… ☐
- **A valid, physical Safe Pass card** ☐
- **Safety helmet** …… ☐
- **Safety boots** …… ☐
- **Reflective 'Hi-Viz' jacket** …… ☐
- **Gloves** …… ☐
-
- **Have viewed the video, read and understood the lifting operation**…… ☐

Further information and clarification may be obtained from the CSCS Unit Office or phone 015332500

Part 2 - Application Details CSCS 360^0 Excavator

Section A Applicant Details

Surname …….

Forenames……..……..……

Address……

……

Date of Birth: ……..

Tel: ……...……

PPS Number ……Safe Pass Expiry Date:……

Candidate Profile

Candidates for this programme must:

- Have at least six months full time experience operating as a trainee 360º excavator operator in construction in accordance with the 5th Schedule – of the Safety, Health and Welfare at Work (Construction) Regulations 2013 – S.I. No. 291 of 2013. The six months experience must be within the last two years.
- Possess a valid physical 'Safe Pass' registration card.
- Be at least 18 years of age.

Section B Applicant Declaration

I confirm that the information detailed in this application, and any submitted information is valid, genuine and correct.

- I have as least six months full time experience operating as a trainee 360º Excavator operator in construction within the last two years
- I am in possession of a valid physical 'Safe Pass' registration card
- I am at least 18 years of age
- I have viewed and understood the video on the SOLAS website – see links at CSCS | Solas | Learning Works or https://youtu.be/v0qT201XJMA

Please sign ☐

Date ……

Part 2 - Application Details CSCS 360^0 Excavator

Section C Applicant Experience

Please briefly list work carried out with a 360^0 excavator for at least six months, including dates and location of work.

Dates from/to	Machine make & model	Location and brief details of work done
Example *9 Jan 14– 22 May 2015*	*Case 130*	*Barron Homebuilds, Kilty Street, Dublin. Excavating foundations, drains, and general landscaping*
		(continue on a separate sheet if needed)

Part 3 - Endorsement of Operating Competence - 360^0 Excavator

Applicant name …… ……

This endorsement of operating competence must be completed by an existing or previous employer. This part can only be completed by a supervisor or line manager of the employer.

The endorsing individual should only initial the statements where they can confirm that the applicant can carry out the work. Some endorsements may require the initials of more than one endorser.
Copies of this form may be made if there are more than two endorsers signing.

Each statement must be initialled by the endorser. The applicant can only be considered competent providing **all** statements are signed by one or more endorsers in the Endorsers details section.

Declaration

We/I the employer confirm that:

- the applicant has as least six months full time experience operating as a trainee 360º excavator operator in construction within the last two years.
- the applicant is in possession of a valid 'Safe Pass' registration card.

the information detailed in this application, and any submitted information is valid, genuine, and correct.

+	*Initial s*
1. Check, inspect and maintain a 360º excavator for efficient and safe use under construction site conditions	
2. Remove and segregate top and subsoils, and carry out re-instatements	
3. Load a variety of vehicles i.e. dumpers, dump trucks, tippers etc with a 360º excavator	
4. Set and excavate to line and level for a variety of 360º excavations	
5. Lift and place loads in relation to site works with the 360º excavator	
6. Park, shut down, secure and leave the 360º excavator in a safe condition	
7. Follow given instructions and manufacturers requirements when working with the 360º excavator	

Endorsers Details

Full Name: ……..…

Company name and address:

……

……

Position: ..... Contact Tel no:

Relationship to Applicant……...
The named individual signing this section must be in a supervisory or managerial position, nominated by the employer organisation.

Signature …….. Date:…….

Part 4 - Practical Test Specifications 360º Excavator

Equipment and Resources

- Serviceable 360º excavator that meets current legislation of at least 10 tonnes operating weight, fitted with a quick hitch, a standard excavating bucket and grading bucket with the manufacturer's operator's manual.

- Rear tipping dump truck or tipping lorry, having a minimum capacity equivalent to 3 full bucket loads of the excavator being used for the test. Assisting operators must be competent and hold a CSCS card where applicable.

- An area of ground, clear of hazards which must include:
  - uneven, rough terrain
  - a slope(s) not less than 18% (1:5.5) incline to have sufficient manoeuvring room at the top and bottom.
  - a flat area to allow excavations up to 2.0 metres deep.
  - a stockpile of material for loading purposes.

- A replacement bucket for changing purposes.

- Lifting accessories, both serviceable and certified

- Cones/materials etc. to create restrictions for travelling and manoeuvring.

- Appropriate marking, sighting and lining equipment to ensure excavation levels and centres

- Appropriate and certified weights to be lifted

Tasks

The Candidate needs to:

1. Carry out full pre-start and running checks as required by the manufacturer.

2. Prepare the excavator for travel and travel to the excavating area. The route must include:
   - Travelling up and down the incline(s)
   - Passing through a restriction being no more than the width of the excavator plus 600mm.
   - Travelling over rough, uneven terrain.

3. Excavate a vertical trench to a depth of 750mm +/- 35mm. The trench must be straight within +/- 60mm. (see plan)
   Excavator operating weight: - 10 - 14 tonnes = 15 metres Over 14 tonnes = 20metres

4. On completion of task 3, excavate a square excavation with vertical sides, 3 x width of the bucket to a depth of 1.0 metre +/- 35mm on the end of the trench as in task 3.

5. On completion of task 4, reinstate and compact the earthworks back to the original state.

6. Load material into a vehicle

7. Remove the existing bucket and attach replacement

8. Set the excavator to lift the Load. Lift the Load and slew a minimum of 45 degrees. Once landed return the load to the original starting point and detach.

9. Travel the excavator to a park position, shut down and secure.

Time

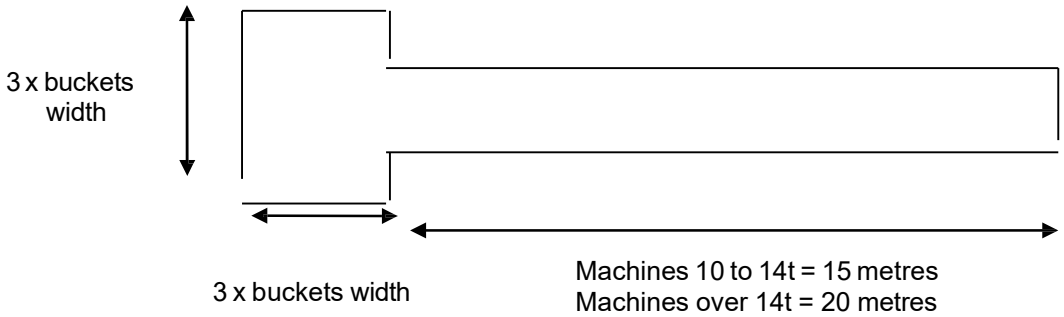
- The candidate must complete all tasks within 1 hour and 15 minutes

Notes

- Verbal questions may be used for task 1, but only on items not able to be checked due to heat of the engine, i.e. coolant, oil level etc.

- The incline must be either one ramp with sufficient manoeuvring area on top **or** two ramps with a level area at the top to halt the excavator

Excavating Plan



Example of Practical Assessment marking sheet
1. Carry out pre-start and running checks (verbal questions correctly answered if engine hot)
2. Mount and dismount correctly
3. Maintain full observation
4. Keep clear of all hazards whilst travelling
5. Set the excavator correctly for travel
6. Face the direction of travel when travelling the excavator
7. Ensure excavated trenches conforms to the stated sizes and tolerances
8. Reinstate the excavated area back to the original contours
9. Load a vehicle with material.
10. Correctly carry out lifting
11. Correctly carryout shutdown and securing procedures
12. Complete the test in the given time