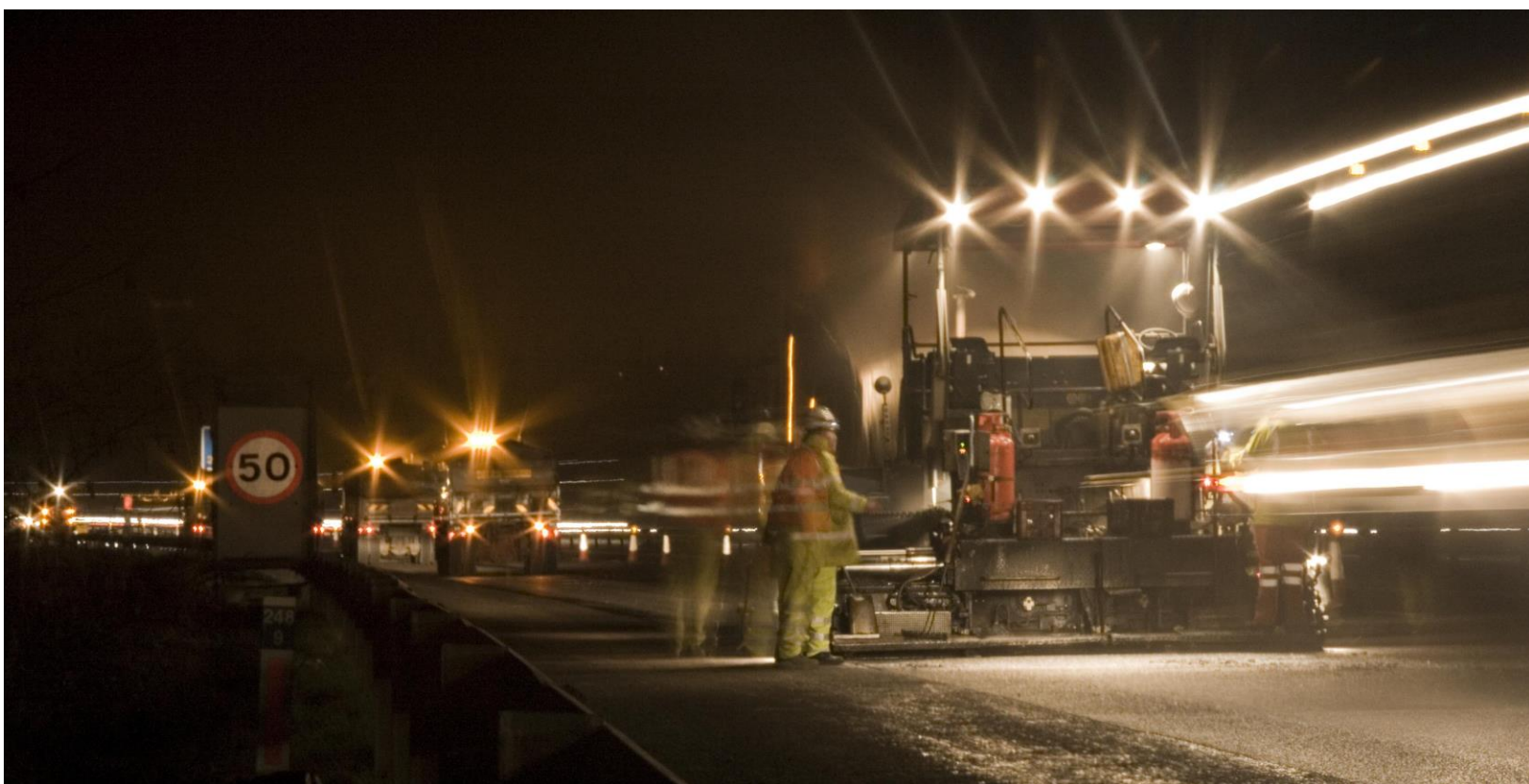


# Road Surfacing Operative Assessment Plan Level 2



## Introduction

This document sets out the requirements for end-point assessment (EPA) for the Road Surfacing Operative (RSO) apprenticeship standard. It is written for end-point assessment organisations (EPAO) who need to know how the EPA must be delivered. It will also be of interest to RSO apprentices, their employers and training providers.

Full time apprentices will typically spend 15-18 months on-programme working towards the apprenticeship standard, (minimum duration 12 months) with a minimum of 20% off-the-job training.

The EPA should only start once the employer is satisfied that the gateway requirements for EPA have been met and can be evidenced to the EPAO; and that the apprentice is consistently working at or above the level set out in the standard. The EPA organisation must be on the Education and Skills Funding Agency (ESFA) Register of End Point Assessment Organisations.

The EPA consists of 2 distinct assessment methods:

- Workplace observation
- Professional discussion

## Assessment Gateway

The EPA should only start once the employer is satisfied that requirements for EPA have been met and can be evidenced to an EPAO; and that the apprentice is consistently working at or above the level set out in the standard. Employers may wish to take advice from the training provider regarding the level of capability though the decision will rest with the employer. Gateway requirements are as follows:

- Completed portfolio containing as a minimum:

Performance Review Records: completed by the Employer quarterly throughout the apprenticeship.

Direct observations: By the Employer of the apprentice applying their knowledge, skills and behaviours (KSBs) carrying out a range work tasks and functions expected of the job role over the period of the apprenticeship programme. As the portfolio will feed into the professional discussion the KSBs mapped to this assessment as per annex A should be covered, and should make explicit reference to the ability of the apprentice using a planer and/or paver machine.

- Apprentices must have achieved level 1 English and Mathematics and have taken the test for level 2. For those with an education, health and care plan or a legacy statement the apprenticeship English and maths minimum requirement is Entry Level 3 and British Sign Language qualification as an alternative to English qualifications for whom this is their primary language.

## Assessment Methods

It is recommended that the EPA is completed over two consecutive days but as a maximum within the same calendar week, and within three months of the apprentice meeting the EPA gateway requirements. This includes any re-sits and re-takes.

### Workplace Observation (Duration: 6 hours +/- 10% at the discretion of the assessor)

Apprentices must be observed in the workplace over the course of a normal working day, under typical working conditions within their team including breaks as per the Working Time Directive. The independent assessor must select the date in conjunction with the apprentice's manager or supervisor to allow opportunity for for all the required KSBs to be assessed. The apprentice must be observed acting as a member of a team or gang, by the independent assessor who will remain passive, removing an old road surface and laying and compacting a new road surface as part of their team. As part of this process the apprentice is required to demonstrate use of plant machinery. The independent assessor should select one machine from column A below, based on the apprentice's ability and experience, and any three machines from column B:

Column A	Column B
<ul style="list-style-type: none"> <li>• Planer</li> <li>• Paver</li> </ul>	<ul style="list-style-type: none"> <li>• Roller</li> <li>• Chipper</li> <li>• Loading shovel</li> <li>• Disc cutter</li> <li>• Breaker</li> <li>• Floor-saw</li> <li>• Compactor plate</li> </ul>

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It is expected that the apprentice will perform their duties working within their team and their team-working abilities will be assessed. However, they must be observed operating the above machinery independently in order to demonstrate full command of their use. If the observation breaks down for reasons beyond the apprentice's control, the observation can be restarted or rearranged at the discretion of the independent assessor.

Following the assessment the assessor must ask 8 open questions to assess background knowledge relating to the tasks carried out, with an emphasis on health and safety and associated regulations. 30 minutes will be allocated to this questioning upon completion of the observation. Follow-up questions may be asked if clarification is required. Knowledge, skills & behaviours observed and answers to questions must be documented by the assessor. The independent assessor must pre-select the questions from a bank maintained by the EPAO. EPAOs must develop question banks of sufficient size to prevent predictability and review them regularly (and at least once a year) to ensure they, and the specifications they contain, are fit for purpose.

Assessors can observe up to a maximum of three apprentices at any one time to allow for cost-effective use of resources whilst maintaining quality and rigour. However, if more than one apprentice is being assessed they must be operating on the same site and within the same team.

### Professional Discussion

The assessor will conduct a competency-based professional discussion with the apprentice. This must be conducted on a 1:1 basis in a controlled environment free from distraction or influence. To aid manageability and affordability, this can be conducted using video conferencing. The discussion will be recorded. A portfolio of evidence will be used by the apprentice to provide evidence to support the discussion, though is not itself assessed. The portfolio must be provided to the EPAO two weeks prior to the professional discussion taking place. The independent assessor will pre-select the questions to be asked, from the EPAO question bank, based on the review of the portfolio.

The professional discussion will last one hour (+ 10 minutes at the discretion of the independent assessor), during which the apprentice will be asked 10 standardised questions, with follow-up questions to probe further if required or to seek clarification.

EPAOs must develop question banks of sufficient size to prevent predictability and review them regularly (and at least once a year) to ensure they, and the specifications they contain, are current and fit for purpose. Questions must be pre-selected to ensure sufficient coverage of all the KSBs assigned to this method in annex A.

### **Grading Criteria**

Pass and distinction grading criteria as follows. If the pass criteria are not met for an assessment method, that method will be marked as a fail.

<b>Workplace Observation Pass Criteria</b>	<b>Workplace Observation Distinction Criteria – achieves pass criteria and all of the following</b>
<p>Correctly interprets and works within the specifications, drawings and/or highways information provided for the job, and works safely and in compliance with relevant legislation and codes of practice. (K2, K3, S6, S7, S8, S12, B4)</p> <p>Demonstrates safe and correct usage of a planning machine or floating screed paver. (S2)</p> <p>Lays and compacts the road surface in accordance with relevant specifications and industry best practice. (S1)</p> <p>Carries out the excavation and reinstatement of the highway. (S4)</p> <p>Demonstrates the correct preparation and use of powered units such as disc cutter, breaker, floor-saw and compacter plate. (S3, K6, K7)</p> <p>Articulates and demonstrates the process of identifying, locating and excavating around underground surfaces and related to the specific job at hand. (S5)</p> <p>Demonstrates effective communication skills and supports team members when required. (S10, S11, B1)</p> <p>Works safely within the deployed temporary traffic management. (K10, S9)</p>	<p>Evaluates health and safety procedures; can explain why specific procedures are in place and why other options are inappropriate.</p> <p>Demonstrates the ability and skill to place asphalt by hand in areas not accessible and/or appropriate for a paving machine and to use relevant tools to form asphalt joints.</p> <p>Is able to control the movement of vehicles necessary to remove arisings from site.</p> <p>Can review and comment upon the site temporary traffic management arrangements to ensure the site is safe and has suitable arrangements for the ingress and egress of all works traffic.</p>

<b>Professional Discussion Pass Criteria</b>	<b>Professional Discussion Distinction Criteria – must achieve pass criteria and all of the following:</b>
<p>Demonstrates an understanding of, and how to work within, the requirements of workplace guidance and health and safety legislation. (K2, K3, B5)</p> <p>Understands the structure of the highway and civil engineering methods including the principles of water drainage and construction technology. (K5)</p> <p>Can describe the characteristics and limitations of different road categories and types, surfacing techniques, and when to employ them. (K1, K8)</p> <p>Understands the principles of measurement and how to apply them. (K11)</p> <p>Demonstrates the correct interpretation of risk assessments, method statements and highways information. (K4, K9)</p> <p>Communicates clearly and politely. Demonstrates an understanding of the importance of equality and diversity in the workplace. (B2, B3)</p>	<p>Contribute to or Partakes in opportunities to engage with others to promote safer working or to promote best practise with health and safety initiatives.</p> <p>Has a clear understanding of the potential causes of premature failure of the road and can describe the ways in which poor construction techniques or design can contribute.</p> <p>Demonstrates an understanding of the planning process and the importance of timing of construction operations.</p> <p>Can explain the process of independently measuring and assessing the volume of materials required for a given area and demonstrate an understanding of the commercial implications of correct assessment.</p>

### Overall Grading

The apprentice cannot achieve an overall distinction grade unless a distinction is achieved in the workplace observation. A fail in either assessment method will result in a fail overall. In order to achieve a distinction overall, a distinction must be achieved in the workplace observation as a minimum, to reflect the greater weight attached to the practical application of skills and health & safety.

<b>Practical Observation</b>	Fail	Fail	Pass	Pass	Pass	Distinction	Distinction
<b>Professional Discussion</b>	Fail	Pass	Fail	Pass	Distinction	Pass	Distinction
<b>Overall Grade</b>	<b>Fail</b>	<b>Fail</b>	<b>Fail</b>	<b>Pass</b>	<b>Pass</b>	<b>Distinction</b>	<b>Distinction</b>

## Re-sits and Re-takes

Apprentices who fail one or both assessment methods will be offered the opportunity to take a re-sit/re-take. Re-sits/re-takes must not be offered to apprentices wishing to move from pass to distinction. A re-sit does not require further learning, whereas a re-take does.

The apprentice's employer will need to agree that a re-sit/re-take is an appropriate course of action. Apprentices should have a supportive action plan to prepare for the re-sit/re-take.

The apprentice will only have to re-take the specific assessment method that was failed. If a re-sit is required, or if the re-take is not successfully completed within 3 months of the original EPA, the entire EPA will have to be taken again. Re-sits and re-takes are restricted to a pass mark unless in exceptional circumstances, which can be taken into account at the discretion of the EPA organisation.

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## EPA Organisations

Employers must choose an independent EPA organisation approved to deliver the EPA for this apprenticeship from the Education & Skills Funding Agency's Register of End Point Assessment Organisations (RoEPAO).

### Requirements for Independent Assessors

EPA organisations must appoint independent assessors to oversee the practical assessment and conduct the professional discussion. They must meet the following criteria:

- Be independent of the apprentice, their employer and training provider (s); there must be no conflict of interest
- Occupationally competent in the area in which they will be assessing at, or above, level 2 vocational qualification
- Achieved level 3 assessor qualification
- Evidence and maintenance of CPD related to the subject area, typically 35 hours, or more, per annum to show ongoing competence

### Internal quality assurance

Internal quality assurance refers to the requirements that EPA organisation must have in place to ensure consistent (reliable) and accurate (valid) assessment decisions. EPA organisations for this

EPA must undertake the following:

- Appoint independent assessors that meet the requirements as detailed in this plan – see above
- Provide training for independent assessors in terms of good assessment practice, operating the assessment tools and grading
- Have quality assurance systems and procedures that support fair, reliable and consistent assessment across organisation and over time
- Operate moderation of assessment activity and decisions, through examination of documentation and observation of activity, with a minimum of 10% of each independent assessor's assessments moderated
- Operate regular standardisation events that enable assessors to attend a minimum of two events per year
- Operate an appeals process

### External Quality Assurance

External quality assurance will be provided by the Institute for Apprenticeships.

### Affordability

Affordability has been built into the plan by virtue of a workplace observation to reduce costs associated with hiring a training or assessment centre, and the option to conduct the professional discussion using video conferencing.



## APPENDIX A

<b>Knowledge</b>	<b>WO</b>	<b>PD</b>
The various road surfacing techniques including the application and use of primers, epoxy or thermoplastic resins, bituminous emulsions, and various types of aggregate including their limitations and characteristics (K1)		X
How to work in accordance with the National Highway Sector Schemes, Industry Codes of Practice, the New Roads & Street Works Act and other guidance relevant to the occupation. (K2)	X	X
Responsibilities under relevant legislation including the Health and Safety at Work Act 1974, Provision and Use of Workplace Equipment 1998 and Manual Handling Operations regulations 1992. (K3)	X	X
Risk assessments, method statements and other official guidance required in order to undertake work. (K4)		X
The structure of the highway, civil engineering methods including the principles of water drainage and construction technology. (K5)		X
Plant and machinery such as planers, floating screed pavers, rollers, chippers, loading shovels and large hydraulic breakers and their correct usage. (K6)	X	
Powered units and tools such as disc cutters, breakers, floor-saws, compactor plates, self propelled rollers and hand tools and their correct usage. (K7)	X	
Different road categories and types and construction materials appropriate to each together with relevant working methods. (K8)		X
Drawings, plans and specifications in order to identify what works are required. (K9)		X
Traffic management systems and how to work safely within them. (K10)	X	
The principles of measurement and how to apply them. (K11)		X
<b>Skills</b>	<b>WO</b>	<b>PD</b>
Lay and compact road surfaces using all forms of asphalt and ancillary products such as bond coat and bituminous jointing compounds, in accordance with relevant specifications and industry best practise. (S1)	X	
Prepare and operate large specialist resurfacing plant and machinery such as planers to remove the existing surface, floating screed pavers laying asphalt, rollers, chippers, loading shovels and large hydraulic breakers. (S2)	X	
Prepare and operate powered units and tools such as disc cutters, breakers, floor-saws and compactor plates. (S3)	X	
Carry out the excavation (planing) and reinstatement of the highway, install street ironworks. (S4)	X	
Identify, locate and excavate around underground services to avoid strikes and loss of service. (S5)	X	
Apply appropriate health, safety, environmental and ecological procedures when working on the roads, including the movement, storage, lifting and handling of resources. (S6)	X	
Plan, undertake and inspect work safely, efficiently and productively. (S7)	X	
Read, interpret and work to drawings, specifications and highways information. (S8)	X	
Work safely within temporary traffic management (utilising sterile safety zones, traffic lights, signage, cones and barriers) as required by legislation and industry standards to protect all parties whilst works are undertaken. (S9)	X	
Communicate effectively using oral and written communication methods. (S10)	X	
Work effectively within a team environment, cooperating and supporting team	X	

members when required. (S11)		
Use own time effectively in order to consistently complete work on time to agreed programmes. (S12)	<b>X</b>	
<b>Behaviours</b>	<b>WO</b>	<b>PD</b>
Promote a positive safety culture in the working environment. (B1)	<b>X</b>	
Be polite and courteous when dealing with colleagues, clients and the public. (B2)		<b>X</b>
Apply equality, diversity and inclusion in dealing with others. (B3)		<b>X</b>
Show a willingness to be adaptable, adjusting to changing work instructions. (B4)	<b>X</b>	
Display the confidence to resist pressures to work following unsafe practices. (B5)		<b>X</b>