L3 EPA Engineering Construction Pipefitter

EPA Specification Section 5.3 – The Technical Interview

- Preparing the evidence portfolio
- Preparing for the Technical Interview
- Criteria and Grading

Contacts

This specification has been designed to provide all the advice and guidance you need to prepare yourself and your apprentices for endpoint assessment. However, if you have any further questions please contact the EUIAS Help Desk using one of the following:

Help Desk email: enquiries@euias.co.uk
Help Desk telephone: 0121 713 8310

Introduction

The Structed Professional Review is the final stage of the end-point assessment. It is assessed via a discussion with a review panel which will consist of at least two Independent Assessors. Representatives from the apprentice's employer or training provider are **not allowed** to be present in the room whilst the review is being conducted.

The discussion will focus on each of the elements of the standard listed below. It is important that the apprentice is completely familiar with each of them.

- Knowledge (K1, K2, K3)
- All Skills (S1, S2, S3, S4, S5, S6, S7, S8, S9, S10, S11)
- All Behaviours (B1, B2, B3, B4, B5, B6, B7, B8, B9)

See Section 4 for the references to the standard.

In advance of the review the apprentice will receive information about how the review will work and a template for the Evidence Report to be completed in advance of the review. The apprentice should use the Evidence Report template to detail examples of evidence of application of skills, knowledge and behaviours typically drawn from at least 3 examples of completed pipefitting tasks.

The apprentice must be given **2 months** to complete the Evidence Report, and the completed report must be submitted to EUIAS a **minimum of 10 working days** before the review.

The review will last approximately 90 minutes.

The Structured Professional Review will:

- take place after successful completion of the Knowledge Test and Practical Assessment
- be face to face (remote interviews may be applicable pending on Covid-19)
- be recorded on a review record
- be fully audio recorded for the purpose of audit and quality assurance
- evidence the above KSBs
- allow the apprentice to evidence where they have satisfied the requirements against the 5 UKSPEC areas of competence to register as Eng Tech

The apprentice can achieve a pass, merit or distinction. If the apprentice fails, this element the apprentice must with immediate effect be withdrawn from the EPA process. Further information can be found in Section 5 'Retake and Resit Information'.

Grading the Structured Practical Review

The Structured Practical Review is marked out of 100. The grading criteria are described in the following pages.

All pass criteria must be achieved in order to achieve a pass.

The merit and distinction grade for the Structured Practical Review are determined by the level and number of criteria achieved

Structured Professional Review Grading

The Structured Professional Review is graded by the Independent Assessors appointed by EUIAS. The following tables explain the criteria that are applied in order to achieve each grade for the Structured Professional Review.

To achieve a **PASS** for the Structured Professional Review, a Pass is required in **ALL** relevant criteria:

KSB	K1	K2	K3	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	B1	B2	B3	B4	B5	B6	B7	B8	B9
All Pass criteria must be achieved	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Achieving all these elements represents a total percentage score of 60 marks in the Structured Professional Review.

A higher score is achieved by attaining Merit and Distinction criteria as described below. Each of the Merit criteria gains the apprentice a further 3 marks and each Distinction criteria gains the apprentice a further 2 marks towards their total score for the Structured Professional Review.

To achieve a **Merit** for the Structured Professional Review, all Pass criteria must be achieved PLUS a **minimum of five** of the Merit criteria.

To achieve a **Distinction** for the Structured Professional Review**,** the apprentice must achieve a Merit PLUS a **minimum of five** of the Distinction criteria.

Structured Professional Review Grade	Minimum Criteria Achieved	Minimum marks achieved
Pass	All Pass criteria	60 marks
Merit	Pass PLUS a minimum of 5 Merit criteria	75 marks
Distinction	Merit Plus a minimum of 5 Distinction criteria	85 marks

Note. It is possible to score more than 75 marks and NOT achieve a Merit because a minimum of five Merit criteria have not been achieved. Similarly, it is possible to score more than 85 marks and not achieve a Distinction because a minimum of five Merit and five Distinction criteria have not been achieved.

The Structured Professional Review carries a weighting of 10% when calculating the final grade.

Indicative 'pass' criteria for the Structured Professional Review

The following criteria are indicative of the criteria the assessor will be looking for when the apprentice takes part in the Structured Professional Review.

Standard	Indicative Pass Criteria
K1 Relevant health, safety and environmental legislation, regulations and company-specific requirements for safe working practises and procedures	• A working knowledge of Health and Safety legislation associated with the tasks to be undertaken and its impact on day to day operations • A working knowledge of on-site safety procedures which apply to the scope of work to be undertaken • A clear understanding of risk assessments permits and other safety documentation • A clear understanding of company specific policy procedures and can explain them • A good working knowledge of specific site evacuation procedures and safe site-specific practices
K2 Importance and benefits of recognised industry safety passport schemes	Knowledge of industry safety passport schemes, such as • CCNSG (Client Contractor National Safety Group). • CSCS (Construction Skills Certificate Scheme). • ACE Card. (Assuring Competence in Engineering). • EMSS Card (Essential Minimum Safety Standards). Understand the benefits • Ability to work safely on different sites. • Ensure competence of workers. • Accessibility to sites.

Standard	Indicative Pass Criteria
K3 How to work safely, personal site safety responsibilities and how to respond to and provide solutions to problems and emergencies	• Can explain the common types of hazards associated with the relevant pipefitting tools and equipment • Can explain what the employers and the employee's responsibilities are and how this may have an impact on the scope of work to be undertaken • Can explain the consequences of not following the site safety responsibilities and not reporting incidents • Can explain the effects of any potential hazards on people property and the environment and the effects of not wearing the correct PPE • A clear understanding of the purpose of undertaking Risk Assessments
S1 Comply with appropriate health and safety, risk and quality requirements **B6** Work safely in accordance with health, safety and environmental legislation, regulations and company-specific requirements **B7** Maintain a safe, clean and tidy work area **B8** Check for and identify potential hazards in the workplace and take collective responsibility to maintain a safe working environment **B9** Question unsafe behaviours and incorrect work practises and procedures	• A working knowledge of Health and Safety legislation associated with the tasks to be undertaken and its impact on day to day operations. • A working knowledge of on-site safety procedures which apply to the scope of work to be undertaken. • A clear understanding of risk assessments permits and other safety documentation. • Can explain and has a clear understanding of company specific policy procedures. • Has a good understanding of QA and QC systems
S2 Correctly select and safely use tools and equipment for the fabrication, assembly, installation and decommissioning of pipework	• A good working knowledge of the health and safety legislation regarding the use of tools and equipment

Standard	Indicative Pass Criteria
components and systems	• Can describe the potential hazards of using the tools and equipment associated with pipe fitting • A good understanding of the tools, equipment and techniques and how they are used to carry out operations • Can explain the importance of maintaining of all tools and equipment
S3 Plan, organise and undertake the fabrication, assembly, installation, maintenance and decommissioning of pipework components and systems	• Can explain the requirement of Health and Safety legislation in the planning of tasks • Can explain method statements or job plans that take place before any operational task • A good working knowledge of site specifications and procedures • Can explain the safe process of uninstalling pipework components and systems
S4 Read, interpret and apply engineering drawing information	• Can explain the content and use of the different types of engineering drawings and how they are applied during work activities • Can identify tolerances on pipe drawings and can comply with them • A good knowledge of welding specifications and can apply them to the preparation of pipework • Can identify pipework components from technical drawings. • Can interpret different specifications, procedures and guidance notes and can apply them to daily work activities
S5 Shape pipework components using hand and power tools to cut, drill, shape and finish components to the required tolerance, specification and standard	• Can explain the requirements of Health and Safety legislation and can describe the hazards associated with the shaping process • Can describe the relevant specifications and technical drawings

Standard	Indicative Pass Criteria
	including tolerances and weld specifications and how they apply to the shaping process • Can identify the correct tools and equipment for the shaping process and can explain how they are used • Can explain how to check how the required shaping has complied with the technical drawing • Can describe how to shape different components in preparation for the joining process
S6 Assemble and install pipework using the appropriate methods, techniques and equipment in accordance with the specification including welded, threaded, bolted and clamped jointing solutions **B2** Solve problems within their area of responsibility by applying technical skills and knowledge to define, identify, evaluate and select alternative solutions if required	• Can explain the requirements of Health and Safety legislation and can describe the hazards associated with the assembling and installation process. • Can describe the relevant specifications and technical drawings including tolerances and weld specifications and how they apply to the assembling and installation process. • Can describe the correct tools and equipment that may be used in the assembling and installation process. • Can describe the different methods of pipe fabrication and installation and the different types of joining processes. • Can describe how to check if the assembly and installation methods have complied with the relevant specification or technical drawing
S7 Ensure the integrity of joints in accordance with specifications, in line with specified quality procedures and to precise tolerances **B3** Take responsibility as an individual and team member for the quality	• Can explain the requirements of Health and Safety legislation and can describe the hazards associated with the joint integrity process • Can describe the relevant specifications and technical drawings including tolerances and weld specifications and how they apply to

Standard	Indicative Pass Criteria
of the work	the joint integrity process • Can identify the correct tools and equipment for the joint integrity process and can explain how they are used
S8 Undertake the testing and inspection of the fabricated and or installed pipework using the appropriate techniques	• Can explain the requirements of Health and Safety legislation and can describe the hazards when undertaking testing • Can describe the relevant procedures, specifications and technical drawings used when undertaking testing • Can identify the correct tools and equipment for the testing and inspection process and can explain how they are used
S9 Work with others and contribute to effective working relationships within an Engineering Construction environment	• Describe the importance of developing good, effective and productive relationships with different people in the work environment • Can explain the appropriate type of communication such as verbal or written and how we can get clear information to others • Can describe the responsibilities you have to yourself and others within the engineering construction environment
S10 Apply techniques for the temporary or permanent removal of an engineering construction piping related system or component	• Can explain the requirements of Health and Safety legislation and can describe the hazards associated with the removal of an engineering construction piping related system or component • Can describe the relevant procedures, specifications and technical drawings and how they apply to the temporary or permanent removal of an engineering construction piping related system or component • Can identify the correct tools and equipment for the removal process and can explain how they are used. • Can describe the safe methods of on-site waste disposal

Standard	Indicative Pass Criteria
	• Can explain the importance of pipe supports in the process of the temporary or permanent removal of an engineering construction piping related system or component
S11 Communicate by keeping others informed about work plans or activities which may affect them and seek assistance from others without causing undue disruption to normal work activities	• Can explain how to approach colleagues in an appropriate way so is conducive to good working practices • Can explain the importance of a good clear concise handover • Can describe the different types of communication problems that may affect working relationships
B1 Work with others to effectively and efficiently complete the allocated tasks	
B4 Support their own learning and development and that of others through activities such as mentoring and sharing of expertise and knowledge	
B5 Act ethically, displaying maturity, honesty, integrity and responsibility	

Indicative grading criteria for Merit and Distinction for the Structured Professional Review

Each Merit criterion is worth 3 marks and each Distinction criterion is worth 2 marks towards the overall score for the Structured Professional Review.

Indicative Merit criteria (each worth 3 marks)	Indicative Distinction criteria (each worth 2 marks)	Relevant elements of the standard where the criteria may be demonstrated
M1 Can explain instances where they have raised concerns and can describe their subsequent actions	**D1** Able to show instances where they have been able to proffer or implement improvements to workplace safety and explain why these improvements have been successful	K1 K3 S1 B3 B5 B6 B8 B9
M2 Can explain the engineering first principles and techniques. Can explain the roles and responsibilities of allied trades and explains where the work of these trades will impact upon their tasks	**D2** Can explain in detail the technical specialisms of allied trades and explain where the work of these trades will impact upon their tasks and what steps need to be taken to ensure de-confliction	K1 K2 S1 S2 S3 S4 S5 S6 S8 S9 S10 S11 B1 B3
M3 Able to articulate where their work contributes to the overall commercial aims and objectives of the customer	**D3** Recognises the overall impact of them not working to the standard	K3 S1 S3 S6 S8 S9 S10 S11 B1 B2 B3 B6
M4 Can describe a range of common fault diagnosis techniques and recognises where these are best applied **M5** Can justify why the specific techniques was selected to identify and rectify faults	**D4** Contrasts the strengths and weaknesses of common fault diagnosis techniques **D5** Explains their actions and describes what other options may have been available and why these were not deemed suitable or pursued.	K1 K3 S1 S2 S3 S5 S6 S7 S8 B2 B6
M6 Provides evidence of instances where they may have been exposed to unsafe/undesirable behaviours	**D6** Recognises the impact of nonconformance on workplace behaviours and organisational culture.	K1 K3 S1 S2 B1 B3 B5 B6

Indicative Merit criteria (each worth 3 marks)	Indicative Distinction criteria (each worth 2 marks)	Relevant elements of the standard where the criteria may be demonstrated
and how they dealt with these occurrences		B8 B9
M7 Can explain in detail why engineering specifications are required and how they are applied to work-based activities	**D7** Able evidence where they have offered suggestions regarding how the specified engineering specifications could have been modified to improve the work process and quality of the end product	S2 S4 S6 S7 S8 S11 B3 B9
M8 Can explain in detail and can demonstrate where they have acted as an effective team member	**D8** Can explain how they can personally contribute to the productivity and dynamics of the team.	K1 K3 S1 S3 S9 S11 B1 B3 B4 B7 B8 B9