



Part of the
Enginuity Group

EPA Apprentice Guidance

End-Point Assessment Apprentice Guidance for: **Level 3 Metal Fabricator**

Standard Reference: ST0607

End-point Assessment Plan: ST0607/AP02

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About EAL

Since 1964, EAL (Excellence, Achievement and Learning) has been awarding vocational qualifications and apprenticeship components for engineering, building services and related sectors.

EAL has been at the heart of new apprenticeship standards development, supporting employer trailblazer development groups for key industry occupations since 2013, when the reforms began. With our long-standing tradition of being closer to industry and designing qualifications that reflect this close partnership, EAL is perfectly positioned to guide the employer development groups' work. Our expertise, knowledge and support ensures the new standards meet the needs of all employers, from SMEs to multinationals, and provide learners with the best possible start to their careers.

EAL is an end-point assessment organisation (EPAO) and is listed on the Register of End-Point Assessment Organisations (RoEPAO).

Equal Opportunities and Diversity

EAL expects all employers to enable you to have equal access to training and assessment for end-point assessment (EPA) in line with the Equality Act 2010 and protected characteristics. Further details can be found in the EAL Equal Opportunities and Diversity Policy: <http://www.eal.org.uk/centre-support/centre-support/policies-and-important-documents>

Customer Service and Feedback

Customer service is a fundamental part of EAL's commitment to you. EAL aims to ensure that all customers receive a high quality efficient service. We are always interested in feedback and if you have any comments or feedback on our qualifications, products or services, please contact the Customer Services Team:

EAL Customer Services
Tel: +44 (0)1923 652 400
Email: customercare@eal.org.uk

Document Purpose

Informs **you**, your **employer** and **training provider** (where appropriate) as to how EAL as the End-point Assessment Organisation (EPAO) approaches the End-point Assessment (**EPA**) for the Level 3 Metal Fabricator apprenticeship standard.

This document, and its contents, should be used as a **guide** on the outcome of the assessment decisions.

It supports the **Assessment Recording Document (ARD)**, which has been developed to record the outcome of the observation, professional discussion and overall grade. The **ARD** is an auditable record of the **End-point Assessment (EPA)** activity completed by the EPAO/end-point assessors.

This document should be used in conjunction with EAL's End-point Assessment Policies and Procedures Handbook.

Overview

The EPA is designed to enable you to demonstrate that you are fully conversant in the knowledge, skills, and behaviours (KSBs) expected of individuals working at this level. It is designed to provide independent assessors with a holistic view of you, and to allow them to assess to what extent you meet, or exceed, the Level 3 Metal Fabricator apprenticeship standard. The EPA may only be completed after a minimum of 12 months training has taken place and at a time that accommodates work scheduling and cost effective planning of resources; the End-point assessment must commence within 3 months from confirmation that you have met the gateway requirements.

The **Apprenticeship Standard** and **End-point Assessment Plan** defines when, what, who and how the EPA is assessed. All those participating and delivering this EPA, which includes you, end-point assessors and your employer, **must** refer to the following principle documents for the full details of the EPA requirements:

Metal Fabricator

- Apprenticeship Standard – ST0607, approved for 18 January 2019
- End-point Assessment Plan – ST0607/AP02

Both of which are currently available here:

<https://www.instituteforapprenticeships.org/apprenticeship-standards/lean-manufacturing-operative/>

Whilst elements of the Apprenticeship Standard and End-point Assessment Plan have been reproduced within this document under the following licence: <http://www.nationalarchives.gov.uk/doc/open-government-licence/version/3/>, it is the responsibility of the independent assessors to ensure you are being assessed against the correct version of the Apprenticeship Standard and End-point Assessment Plan.

End-point Assessment Gateway

Your employer must satisfy themselves that you are ready for your end-point assessment, which is evidenced by you consistently working at or above the level set out in the occupational standard.

In addition to your employer's confirmation that you are working at or above the level in the occupational standard, the following gateway requirements must be met prior to you starting the EPA:

- You have satisfactorily completed training to develop the relevant skills, knowledge and behaviours as described in the standard.
- You have achieved the mandatory qualification: Level 3 Diploma in Advanced Manufacturing Engineering (Development Knowledge)
- You have achieved English and mathematics at level 2 or for those with an education, health and care plan or a legacy statement the apprenticeships English and Maths minimum requirement is Entry Level 3 and British Sign Language qualification are an alternative to English qualifications for whom this is their primary language
- You have submitted sufficient evidence in the form of a portfolio to allow you to consistently demonstrate the knowledge, skills and behaviours as described in the standard. Guidance on what should be included in the reflective portfolio can be found within the professional discussion section.

To assist you in demonstrating the requirements of the EPA gateway have been met, please refer to the **Portfolio Matrix Recording Sheet (Appendix 1)** which details the apprenticeship standard competencies for which you will need to present evidence. This should be placed at the front of your portfolio along with a completed **End-point Assessment Gateway Checklist** document (**Appendix 2**) signed by your employer.

Assessment Methods

The end-point assessment is made up of the two elements below:

1. Practical Observation
2. Professional Discussion

The EPA satisfies the requirements for the Metal Fabricator standard. The practical observation will be carried out by an end-point assessor, approved by the EPAO and will take place within your workplace where possible. Where your workplace is not used, the EPAO is responsible for ensuring the alternative environment is representative of your workplace and can facilitate the EPA to assess the application of your skills in line with the job role requirements. The portfolio of evidence will be reviewed by an end-point assessor, approved by the EPAO and will be used to inform the professional discussion. The professional discussion may be a panel consisting of 2 members; an employer representative (if requested to do so by the EPAO) and the end-point assessor (acting as Chair) appointed by the EPAO, who will make the final decision based on this process. The employer representative must be occupationally competent and will provide technical support, advice and guidance such as confirming company policies, procedures, processes, providing context on technical information or on emerging technologies. Any information provided by the employer technical expert must only be at the request of the end-point assessor who has the final say over the assessment and grade awarded. The employer technical expert must not provide evidence on your behalf. Your performance during the EPA will determine your grade of fail, pass, or distinction. Best practice would be for the practical observation to be completed and assessed before the professional discussion.

Assessment Method 1: Practical Observation

The purpose to the practical observation is to assess the knowledge, skills and behaviours in a practical way that closely relates to your daily duties and responsibilities. The observation should be carried out at your place of work; or at an approved EPAO centre. Simulation is allowed in exceptional circumstances (for example, where for cost, workplace availability, or health and safety reasons it is not appropriate to use your workplace). The practical observation must be carried out by an end-point assessor, approved by the EPAO. Observations must be conducted in a realistic work situation under normal conditions. During the process you will be expected to demonstrate to the assessor the application of the core knowledge, skills and behaviours of the specific job as outlined within Annex 1 of the End-point Assessment Plan for this Standard.

This assessment method **must** include direct observation of:

- Working safely, efficiently and effectively at all times ensuring that all appropriate legislation, regulation and environmental compliance has been adhered to in-line with company policies, procedures and practice
- Identification and use of appropriate documentation e.g. job instructions, drawings, quality control documentation
- Fabrication activities in-line with the correct processes, procedures and equipment
- Cutting and forming of metal for the production of fabricated parts
- Assembly of metal products to required specification and quality requirements
- Joining of materials using approved welding procedures and quality requirements (where appropriate).

You will be observed and will be assessed against the knowledge, skills and behaviours (KSBs) as identified within the standard. Typically this will include adherence to standardised work, use of equipment, tooling etc. This must be covered with **two** tasks that captures the combination of skills, i.e.; shaping to specifications (drawing); manual and machine profiling/shaping techniques; mechanical and thermal jointing techniques; hot/cold manipulation of metal. The end-point assessor should provide you with both written and verbal instructions on the tasks that you are expected to undertake, including timescales.

The EPAO/end-point assessor should converse with your employer and training provider to ascertain where you will undertake your EPA. Where it is agreed that this is not within the workplace, **two** tasks will be selected by the EPAO from a 'bank of tasks' that has been created. Your employer should liaise with the EPAO to contribute a sufficient number of options for tasks (**a minimum of two pairs**) to be added to the bank to avoid predictability. The EPAO/end-point assessor should further liaise with your employer to ensure that the options for tasks are suitable to your role. Your employer should refer to the **Practical Observation Task Specification** which has been provided within **Appendix 3** and submit **Options for Tasks** using the form within **Appendix 4** no less than **10 days** in advance of the planned practical observation activity. Your employer should receive timely feedback from the EPAO/end-point assessor on the options for tasks they have submitted and liaise further as necessary. The options for tasks should clearly **link to** the **occupational duties** and **map** to the **competencies** (skills and knowledge).

Where the EPA activity is to be undertaken within the work setting, the EPAO/end-point assessor should liaise with your employer to determine your normal duties and responsibilities so that suitable **workplace tasks** can be set by the EPAO. The overall decision as to task and activity to be observed lies with the EPAO. The tasks set should present sufficient opportunity for you to demonstrate your application of knowledge, skills and behaviours for the job role being assessed. Your employer should refer to the **Practical Observation Task Specification** which has been provided within **Appendix 3** to assist their understanding of the tasks' requirements for discussion with the EPAO/end-point assessor.

The end-point assessor should brief you as to the tasks you must complete including timescales prior to the start of the practical observation. The practical observations should be carried out over an assessment time period of 6 hours (+10% at the end-point assessor's discretion). There may be breaks during the observation to allow you to move from one location to another. The end-point assessor should record a factual account of the practical observation using the end-point Assessor **Practical Observation Record** contained within the **Apprentice Recording Document (ARD)**. The EPAO has also provided a practical observation: specification sheet, checklist and a grading criteria scorecard within the **ARD** for the end-point assessor to identify, record and grade the elements of the standard being assessed by this assessment method.

The practical skills observation will be graded either **Pass** or **Fail**, to achieve a pass for the practical skills observation you must achieve all of the pass criteria that is laid out within the grading matrix which can be found on **page 23** of the End-point Assessment Plan for this Standard.

Questioning Component

At the end of the observation the end-point assessor will ask a minimum of 10 open questions to assess the related underpinning knowledge and assess the skills that did not naturally occur during the observation. The end-point assessor may ask follow-up questions where clarification is required. Questioning must be completed within the total time allowed for the observation. All questions together with your responses should be recorded and attached where applicable to the assessment recording document (**ARD**).

The questioning component should be conducted on a one-to-one basis, under controlled conditions free from influence. A quiet room free from distraction should be made available to you if you wish to use it. However, due to the nature of the questions, you may choose to demonstrate part or all of your understanding whilst within the working area (e.g. by providing a narrative response during a walk through if appropriate).

Assessment Method 2: Professional Discussion

The professional discussion should be appropriately structured to enable you to showcase to the end-point assessor how you carry out the role of a Metal Fabricator, integrating the knowledge, skills and behaviours expected and for the review panel to be assured you have achieved the requirements of the Standard. The end-point assessor is to conduct and assess the professional discussion. The professional discussion must be completed during a 40-minute period (+ 2 minutes at the assessor's discretion). Further time may be granted should you have appropriate needs in line with the EPAO's Reasonable Adjustment Policy. During this method, the end-point assessor should ask a minimum of 10 open questions based on the KSBs assigned to this assessment method and may combine questions from the EPAO's question bank and those generated by themselves. Follow up questions may be asked where clarification is required. All questioning must be included within the total time permitted for the professional discussion. Prior to the assessment you should be given suitable notice, not less than **5 working days**, to provide preparation time (for example to make travel arrangements if necessary).

Prior to the professional discussion, the end-point assessor should review your portfolio of evidence and prepared **10 questions**. Questions must seek to assess KSBs and can be informed by information within the portfolio of evidence, assessing performance against the pass and distinction criteria and enable the review panel to explore areas they consider warrants further investigation in order to assure themselves that you have the competence to work as a Metal Fabricator. You will have access to and may refer to your portfolio of evidence during the professional discussion if required.

The professional discussion must be conducted in a suitable venue agreed with the EPAO. To help ensure that the professional discussion is practicable and cost effective, it can be carried out at a suitable venue selected by the EPAO e.g. employer or training provider's premises. The professional discussion should take place in a quiet room, free from distraction and influence. Video conferencing can be used to conduct the professional discussion; if a video link is used, then appropriate measures (processes) must be in place to ensure the EPAO and end-point assessor is able to verify your identity and ensure you are providing your response unaided e.g. use of a 360 degree camera to allow the end-point assessor to look around the room during the interview.

The purpose of the professional discussion is to:

- Demonstrate you can apply the broad range of knowledge, skills and behaviours within Annex 1 of the End-point Assessment Plan for this Standard
- Clarify any questions the end-point assessor has from their review of the portfolio of evidence submitted
- Explore aspects of your work, including how it was carried out, in more detail
- Enable the end-point assessor to draw a conclusion on the holistic EPA and the final grade awarded on the aggregated achievement of your assessment using the grading criteria in Annex 2 of the End-point Assessment Plan for this Standard.

The end-point assessor should review the portfolio of evidence and decide how the professional discussion will be conducted and relevant key questions to ask you to confirm the broad range of knowledge, skills and behaviours that have been achieved. At the end of the professional discussion, the End-point assessor (acting as Chair) will make the final judgement on Distinction, Pass, or Fail for this assessment method.

The professional discussion may be observed by a technical expert who will play the following role:

- Provide technical support, advice and guidance such as confirming company policies, procedures, processes, providing context on technical information or on emerging technologies.

Any information provided by the employers' technical expert must only be at the request of the end-point assessor. The end-point assessor has the final say over the assessment and grade awarded. The employers' technical expert must not provide evidence on your behalf or influence you in any way. The technical expert must not amplify or clarify points made by you.

The end-point assessor will make all grading decisions. The professional discussion will be graded either **Pass, Distinction or Fail** with the outcome contributing to the overall grade; to achieve a pass you must achieve all of the pass criteria. To achieve a distinction you must achieve **all** of the **pass criteria** and **all** of the **distinction criteria**, both of which is laid out within the in the grading matrix which can be found on **pages 25-28** of the End-point Assessment Plan for this Standard.

The End-point Assessor will:

- Plan the professional discussion (supported by the reflective portfolio of evidence) prior to it taking place and ensure that it is relevant to the standard
- Ensure that you understand the process, the possible outcomes and how it is graded.
- Ensure they take steps to put you at ease
- Ensure that he/she has the grading criteria and relevant documentation to hand before commencing the professional discussion
- Complete the relevant documentation prepared by EAL as the EPAO, taking notes of what is said using the assessment recording document
- Ensure that the outcome of assessment is notified to EAL as the EPAO within the timescale set

- Ensure any special needs highlighted by the employer and training provider are taken into consideration in line with EAL's Reasonable Adjustments policy.

Portfolio of Evidence Requirements

Your portfolio of evidence should be submitted to your employer for review as part of the **employer gateway review**. Once the portfolio has been reviewed and accepted as being fit for purpose by your employer, it should be submitted to the EPAO/end-point assessor who must have at least **14 days** to review the portfolio prior to the professional discussion. The portfolio submitted should contain evidence setting out examples of work you have undertaken. The portfolio of evidence should be used to inform the professional discussion through which you will demonstrate competence of the broad range of knowledge, skills and behaviours set out in the standard. Your employer is required to confirm that the portfolio of evidence provides an accurate representation of work you have carried out and has not been embellished. The portfolio will not be assessed as part of the EPA but will be used to determine the questions for use during the graded professional discussion, so that the end-point assessor can probe further into your depth of understanding.

The portfolio of evidence will be reviewed by an end-point assessor, approved by the EPAO. The portfolio of evidence must include samples of work you have carried out; demonstration of work carried out over a period of time to include evidence of work carried out within the last three months of the on programme period, and to include a minimum of 2 and no more than 3 activities carried out by you that demonstrates the knowledge, skills and behaviours of the standard. Where practicable this should include photographs, images, diagrams, together with on the job observations and witness evidence/testimony. This should also include situations that have been difficult or challenging, outlining how these have been overcome e.g. equipment breakdown which has resulted in a change in working practice while still adhering to company procedures. Any employer contributions must focus on direct observation of evidence (e.g. reviews/witness statements) of competence rather than opinions. The portfolio must not include any methods of self-assessment or self-appraisal. It is expected that each piece of evidence will provide evidence for multiple KSBs and this evidence should be mapped to the KSBs assigned to the professional discussion.

Employers/training providers are free to devise their own version of the portfolio of evidence, but it is recommended that the portfolio of evidence typically contains the following information:

- Your name
- Details about your workplace
- Evidence to support the knowledge, skills and behaviours of the apprenticeship standard that are mapped to the professional discussion assessment method. Each of these **knowledge, skills and behaviour** (KSB) statements must be sufficiently evidenced (evidence can be provided through a range of sources, for example work reviews, department feedback) and mapped to the relevant KSBs. Each piece of evidence may cover multiple KSBs.
- Confirmation from the employer that the tasks evidenced in the portfolio were completed to the required standard of the organisation
- Documented **off-the-job training** amounting to at least **20%** of your employed time
- Evidence confirming you meet the gateway requirements as prescribed by the End-point Assessment Plan for this Standard.
- Your **employer** must sign-off the **portfolio** of evidence, thereby confirming the demonstration of competence against the KSBs assigned to this assessment component and authenticating its contents.

The full details of the professional discussion requirements can be found in the End-point Assessment Plan for this standard here: <https://www.instituteforapprenticeships.org/apprenticeship-standards/metal-fabricator>

Behaviours Assessment

Your portfolio must evidence the required behaviours that have been displayed during the apprenticeship. All behaviour statements **must** be sufficiently evidenced. You are expected to continue to demonstrate the behaviours as detailed within the assessment plan for the standard throughout the end-point assessment.

The independent assessor will assess the behaviours during the observation and professional discussion. The required behaviours are detailed within **Annex 1** of the End-point Assessment Plan for this standard here: <https://www.instituteforapprenticeships.org/apprenticeship-standards/metal-fabricator>

Grading

The end-point assessor will combine the grades of the two assessment methods to determine the EPA grade. To achieve an EPA pass, you must achieve a minimum of a pass in both assessment methods. Due to the importance of the professional discussion, to achieve an EPA distinction, you must achieve a distinction in the professional discussion (with a pass in the practical observation assessment method). Please refer to the grading combinations in the table below. Where more than one end-point assessor has been involved, the assessor responsible for the assessment method completed last will be responsible for combining the grades. A fail in one or more of the assessment methods will result in a fail in the EPA. Evidence from the portfolio of evidence will be used to inform the professional discussion but will not be assessed.

| EPA Assessment Method | Assessment Grade | Assessment Grade | Assessment Grade | Assessment Grade |
|-------------------------------------|------------------|---------------------|------------------|--------------------|
| Practical Observation | Pass | Fail | Pass | Pass |
| Professional Discussion | Fail | Pass or Distinction | Pass | Distinction |
| Apprenticeship Grade Awarded | Fail | Fail | Pass | Distinction |

End-point assessors' decisions will be subject to **moderation** by the EPAO. Decisions **should not** be confirmed until after moderation.

The full details of the grading requirements can be found within the End-point Assessment Plan for this Standard here: <https://www.instituteforapprenticeships.org/apprenticeship-standards/metal-fabricator>

Re-sits and Re-takes

Should you fail one or more EPA method, then you should be offered the opportunity to take a re-sit/retake. Re-sits/re-takes will not be offered to those wishing to move from pass to distinction. A re-sit does not require further learning, whereas a re-take does. Your employer will need to agree that a re-sit/re-take is an appropriate course of action. You should be provided with a supportive action plan to prepare for any re-sit/re-take.

The timescales for a resit/retake of the entire EPA would be agreed between your employer and the EPAO. A resit is typically taken within 2 months of the EPA outcome notification. The timescale for a retake is dependent on how much re-training is required and is typically taken within 6 months of the EPA outcome notification.

The maximum grade awarded to a re-sit/re-take for the practical observation will be graded pass/fail and a re-sit/re-take of the professional discussion will be graded pass/fail/distinction and combined to determine the EPA grade. The EPAO would need to ensure that you are observed doing different activities within the practical observation when taking a re-sit/re-take. If you are unsuccessful, your employer will decide when you should re-apply for the EPA once additional training has taken place.

For the practical observation, if only one of the two tasks resulted in a fail, then only the failed task needs to be resat/retaken.

Roles and Responsibilities

There are six possible roles involved in this end-point assessment process: apprentice, employer, EAL as the EPAO, end-point assessor, training provider and employer technical expert. An explanation of the main role responsibilities can be found within the End-point Assessment Plan for this standard.

Appendix 1: Portfolio Matrix Recording Sheet



For use by you and your employer; please complete and place at the front of your portfolio

| | |
|---|----------------------------------|
| I confirm the information and evidence contained within this portfolio is my own work, relates to my performance and it is current and sufficient against the knowledge, skills and behaviours contained in the L3 Metal Fabricator Apprenticeship Standard. | |
| I can confirm that I authorise EAL as the EPAO to make the application for my apprenticeship certificate following successful outcome of End-Point Assessment. | |
| Apprentice Name: | Click or tap here to enter text. |
| Apprentice Signature: | Click or tap here to enter text. |
| Date: | Click or tap to enter a date. |
| Employer details: | |
| I confirm that the information and evidence contained in this portfolio is the work of the apprentice, named above <input type="checkbox"/> (tick) | |
| Employer Name: | Click or tap here to enter text. |
| Employer Job Title: | Click or tap here to enter text. |
| Relationship to Apprentice: | Click or tap here to enter text. |
| Employer Signature: | Click or tap here to enter text. |
| Date: | Click or tap to enter a date. |

Before completing the matrix below, please ensure you have read and understood the portfolio of evidence requirements which are outlined on page 8 within the EPA Apprentice Guidance document.

| Completed (✓) | Evidence reference | Ref | Skills to be assessed |
|--------------------------|--------------------|------------|---|
| <input type="checkbox"/> | enter text. | S1 | Work safely at all times, comply with health & safety legislation, regulations and organisational requirements |
| <input type="checkbox"/> | enter text. | S2 | Comply with environmental legislation, regulations and organisational requirements |
| <input type="checkbox"/> | enter text. | S3 | Obtain, check and use the appropriate documentation (such as job instructions, drawings, quality control documentation) |
| <input type="checkbox"/> | enter text. | S4 | Carry out relevant planning and preparation activities before commencing work activity |
| <input type="checkbox"/> | enter text. | S5 | Undertake the work activity using the correct processes, procedures and equipment |
| <input type="checkbox"/> | enter text. | S6 | Carry out the required checks (such as quality, compliance or testing) using the correct procedures, processes and/or equipment |
| <input type="checkbox"/> | enter text. | S7 | Deal promptly and effectively with problems within the limits of their responsibility using approved diagnostic methods and techniques and report those which cannot be resolved to the appropriate personnel |
| <input type="checkbox"/> | enter text. | S8 | Complete any required documentation using the defined recording systems at the appropriate stages of the work activity |
| <input type="checkbox"/> | enter text. | S9 | Restore the work area on completion of the activity and where applicable return any resources and consumables to the appropriate location |
| <input type="checkbox"/> | enter text. | S10 | Identify and follow correct Metal work instructions, specifications, drawing etc. |
| <input type="checkbox"/> | enter text. | S11 | Mark out using appropriate tools and techniques |
| <input type="checkbox"/> | enter text. | S12 | Cut and form Metal for the production of fabricated products |
| <input type="checkbox"/> | enter text. | S13 | Produce and assemble Metal products to required specification and quality requirements |
| <input type="checkbox"/> | enter text. | S14 | Identify and follow correct joining instructions, specifications, drawing etc. |
| <input type="checkbox"/> | enter text. | S15 | Carry out the relevant preparation before starting the joining fabrication activity |
| <input type="checkbox"/> | enter text. | S16 | Set up, check, adjust and use joining and related equipment |

| Completed (✓) | Evidence reference | Ref | Knowledge to be assessed |
|--------------------------|--------------------|-----------|--|
| <input type="checkbox"/> | enter text. | K1 | The importance of complying with statutory, quality, organisational and health and safety regulations |
| <input type="checkbox"/> | enter text. | K2 | General engineering mathematical and scientific principles, methods, techniques, graphical expressions, symbols formulae and calculations |
| <input type="checkbox"/> | enter text. | K3 | The structure, properties and characteristics of common materials |
| <input type="checkbox"/> | enter text. | K4 | The typical problems that may arise within their normal work activities/environment |
| <input type="checkbox"/> | enter text. | K5 | Approved diagnostic methods and techniques used to help solve engineering problems |
| <input type="checkbox"/> | enter text. | K6 | The importance of only using current approved processes, procedures, documentation and the potential implications if they are not adhered to |

| | | | |
|--------------------------|-------------|------------|--|
| <input type="checkbox"/> | enter text. | K7 | The different roles and functions in the organisation and how they interact |
| <input type="checkbox"/> | enter text. | K8 | Why it is important to continually review fabrication and general engineering processes and procedures |
| <input type="checkbox"/> | enter text. | K9 | The correct methods of moving and handling materials |
| <input type="checkbox"/> | enter text. | K10 | Processes for preparing materials to be marked out |
| <input type="checkbox"/> | enter text. | K11 | The tools and techniques available for cutting, shaping, assembling and finishing materials. |
| <input type="checkbox"/> | enter text. | K12 | Allowances for cutting, notching, bending, rolling and forming materials |
| <input type="checkbox"/> | enter text. | K13 | Describe pattern development processes, tooling and equipment |
| <input type="checkbox"/> | enter text. | K14 | Describe cutting and forming techniques, tooling and equipment |
| <input type="checkbox"/> | enter text. | K15 | Describe assembly and finishing processes, tooling and equipment |
| <input type="checkbox"/> | enter text. | K16 | Inspection techniques that can be applied to check shape and dimensional accuracy |
| <input type="checkbox"/> | enter text. | K17 | Factors influencing selection of forming process |
| <input type="checkbox"/> | enter text. | K18 | Principles, procedures and testing of different joining techniques (Mechanised or Manual) |
| <input type="checkbox"/> | enter text. | K19 | Equipment associated with Manual or Mechanised joining techniques including maintaining equipment in a reliable and safe condition |
| <input type="checkbox"/> | enter text. | K20 | Consumables used in Manual or Mechanised joining |
| <input type="checkbox"/> | enter text. | K21 | Effects of heating and cooling metals |

| Completed (✓) | Evidence reference | Ref | Core Behaviours |
|--------------------------|--------------------|-----------|--|
| <input type="checkbox"/> | enter text. | B1 | Personal responsibility and resilience – Comply with the health and safety guidance and procedures, be disciplined and have a responsible approach to risk, work diligently regardless of how much they are being supervised, accept responsibility for managing time and workload and stay motivated and committed when facing challenges. |
| <input type="checkbox"/> | enter text. | B2 | Work effectively in teams – Integrate with the team, support other people, consider implications of their own actions on other people and the business whilst working effectively to get the task completed. |
| <input type="checkbox"/> | enter text. | B3 | Effective communication and interpersonal skills – An open and honest communicator, communicates clearly using appropriate methods, listen well to others and have a positive and respectful attitude. |
| <input type="checkbox"/> | enter text. | B4 | Focus on quality and problem solving – Follow instructions and guidance, demonstrate attention to detail, follow a logical approach to problem solving and seek opportunities to improve quality, speed and efficiency. |
| <input type="checkbox"/> | enter text. | B5 | Continuous personal development – Reflect on skills, knowledge and behaviours and seek opportunities to develop, adapt to different situations, environments or technologies and have a positive attitude to feedback and advice. |

Appendix 2: Employer Gateway Review Checklist



For use by you, your employer and the EPAO; please complete and place at the front of your portfolio

The EPA must only start once the employer is satisfied that you are consistently working at or above the level set out in the occupational standard; that means that you have achieved occupational competence. In making this decision your employer may take advice from your training provider(s), but the decision must ultimately be made solely by your employer. In addition to your **employer's confirmation** that you are working at or above the level in the occupational standard, the following gateway requirements must be confirmed as having been met prior to the apprentice starting the EPA.

| Apprentice Name: | enter text. | Employer Name: | enter text. |
|---|----------------------------------|------------------------------------|--------------------------|
| The apprentice has: | Evidence reference | Employer/provider confirmation (☑) | EPAO confirmation (☑) |
| Satisfactorily completed training covering the skills, knowledge and behaviours as described in the standard. | Click or tap here to enter text. | <input type="checkbox"/> | <input type="checkbox"/> |
| Achieved the Level 3 Diploma in Advanced Manufacturing Engineering (Development Knowledge) | Click or tap here to enter text. | <input type="checkbox"/> | <input type="checkbox"/> |
| ¹ English and mathematics at level 2 | Click or tap here to enter text. | <input type="checkbox"/> | <input type="checkbox"/> |
| ² Submitted a completed portfolio of evidence authenticated by employer | Click or tap here to enter text. | <input type="checkbox"/> | <input type="checkbox"/> |

¹For those with an education, health and care plan or a legacy statement, the apprenticeships English and mathematics minimum requirement is Entry Level 3. British Sign Language qualifications are an alternative to English qualifications for whom this is their primary language.

²Sufficient evidence in the form of a portfolio authenticated by employer to allow the apprentice to consistently demonstrate knowledge, skills and behaviours as described in the standard. The Employer by signing below confirms that this portfolio provides an accurate representation of work carried out by the apprentice and has not been embellished. **Please refer to the portfolio of evidence requirements that have been outlined on page 8 of the EPA Apprentice Guidance document**

Employer declaration

I confirm that the evidence presented is authentic and is an output from the apprentice's own work activity and I am satisfied that they have met all gateway requirements.

Employer Signature:

Date: Click or tap to enter a date.

Appendix 3: Practical Observation - Task Specification

To be used as reference by your employer

You must successfully demonstrate the relevant competencies as described within Annex 1 of the apprenticeship standard. Further guidance has been provided within the practical skills observation section of this document. The tasks/activities undertaken by you must provide opportunity for you to be observed performing the **occupational duties** (numbered below) and to be assessed against the **competencies** (skills and knowledge) within the following tables.

| Occupational duties |
|--|
| 1. Work safely at all times complying with health and safety legislation, regulations, organisational and environmental requirements |
| 2. Plan and prepare for the METAL fabrication activities before commencing work |
| 3. Check materials conform to the specified grades, dimensions and thicknesses identified on detailed engineering drawings. |
| 4. Use the correct methods for the moving and handling resources and materials |
| 5. Set up, check AND adjust the equipment for use in the safe and reliable fabrication of METAL products or components and maintaining the equipment in a reliable and safe condition throughout |
| 6. Interpret technical drawings, patterns, templates and specifications to mark out, produce and assemble complex fabricated products to meet the required specification and quality requirements |
| 7. Use appropriate tools, equipment and techniques to shape and form (HOT or COLD) metal materials, demonstrating and applying knowledge of material properties and characteristics throughout. |
| 8. Monitor resources and activities throughout the fabrication of products or components, identifying areas for improving the production process where possible |
| 9. Cutting, drilling, shaping and preparing METAL materials during fabrication activities using manual and power tools, thermal and laser cutting, as required calculating dimensions and tolerances using knowledge of mathematics and instruments/equipment |
| 10. Operate appropriate tools and equipment to join metal parts using a range of mechanical fasteners and fixing techniques required by the specifications appropriate to the fabrication activity being carried out and in accordance with approved joining procedures and quality requirements |
| 11. Operate thermal joining equipment to join metal parts using a range of appropriate techniques to the standards required by the specifications for the fabrication activity being carried out |
| 12. Inspect and test joins for security against required standard |
| 13. Carry out quality checks on component parts and completed assemblies |
| 14. Deal with problems that occur within the fabrication activity in line with responsibilities of the role |
| 15. Restore the work area and equipment to a safe and reliable condition on completion of the activity |
| 16. Complete documentation at the appropriate stages of the work activity |

Continued

Whilst working in accordance with relevant procedures, policies, specifications and standards; the apprentice must be able to demonstrate that they can:

| Std Ref | Skills to be assessed |
|----------------|---|
| S1 | Work safely at all times, comply with health & safety legislation, regulations and organisational requirements |
| S2 | Comply with environmental legislation, regulations and organisational requirements |
| S3 | Obtain, check and use the appropriate documentation (such as job instructions, drawings, quality control documentation) |
| S5 | Undertake the work activity using the correct processes, procedures and equipment |
| S9 | Restore the work area on completion of the activity and where applicable return any resources and consumables to the appropriate location |
| S10 | Identify and follow correct Metal work instructions, specifications, drawing etc. |
| S12 | Cut and form Metal for the production of fabricated products |
| S13 | Produce and assemble Metal products to required specification and quality requirements |
| S14 | Identify and follow correct joining instructions, specifications, drawing etc. |
| S17 | Weld joints in accordance with approved welding procedures and quality requirements |

Whilst working in accordance with relevant procedures, policies, specifications and standards; the apprentice must be able to demonstrate knowledge of:

| Std Ref | Skills to be assessed |
|----------------|--|
| K1 | The importance of complying with statutory, quality, organisational and health and safety regulations |
| K6 | The importance of only using current approved processes, procedures, documentation and the potential implications if they are not adhered to |
| K9 | The correct methods of moving and handling materials |
| K11 | The tools and techniques available for cutting, shaping, assembling and finishing materials |
| K19 | Equipment associated with Manual or Mechanised joining techniques including maintaining equipment in a reliable and safe condition |
| K20 | Consumables used in Manual or Mechanised joining |
| K24 | How to interpret relevant engineering data and documentation |

Appendix 4: Options for Tasks (Pair) Contributed by the Employer



To be completed by your employer and submitted to the EPAO

| | | | |
|--|---|--|---|
| Employer: | Click or tap here to enter text. | | |
| Apprentice Name: | Click or tap here to enter text. | | |
| Observation Plan | | | |
| Where the observation will take place? Click or tap here to enter text. | When the observation will take place? | | |
| | Date: Click or tap to enter a date. | Start time (Est): Click or tap here to enter text. | Finish Time: (Est) Click or tap here to enter text. |
| <p>Please outline what the apprentice would be doing during the observation (e.g. jobs, task, activity etc). (Please attached relevant supporting information i.e. drawing, job specification etc)</p> <p>Click or tap here to enter text.</p> | | | |

Please submit to epaassessments@eal.org.uk at least 10 days in advance of the planned practical observation activity.

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