

IETTL

End-Point Assessment

Level 3 Assessment Handbook

For apprentices, trainers and employers

Introduction

The team at IETTL are looking forward to helping you, your training provider and your apprentice through end-point assessment.

We know that this can be a challenging time for apprentices and hope this guide equips you to help them through their end-point assessment.

The guide contains practical information about the IETTL assessment process, from the very first time that you speak to us, until the day an apprenticeship certificate is issued.

The guide's sections include practical advice, requirements and checklists to help you to prepare your apprentices for assessment.

The published assessment plan for the Level 3 Thermal Insulation Technician can be downloaded from the Institute of Apprenticeships and Technical Education website

https://www.instituteforapprenticeships.org/media/1623/st0521_thermal_insulation_technician_level_3_ap_for_publication_090218.pdf

We also recommend that you look at our policies for assessment including those relating to equality and diversity, safeguarding, quality assurance and fairness of assessment. These documents are available from the IETTL website.

IETTL has a dedicated end-point assessment team (IETTL EPA Team) who will always be your first point of contact. Our team can assist you with all aspects of the assessment such as, arranging and booking the time and place, setting up a service agreement and contracts, providing information about the assessor, the process and end-point assessment.

We look forward to working with you, your apprentice and your training provider.

The very best of luck to you all!

The IETTL EPA Team

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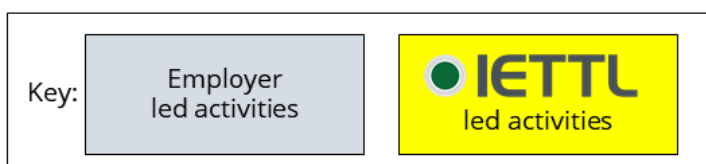
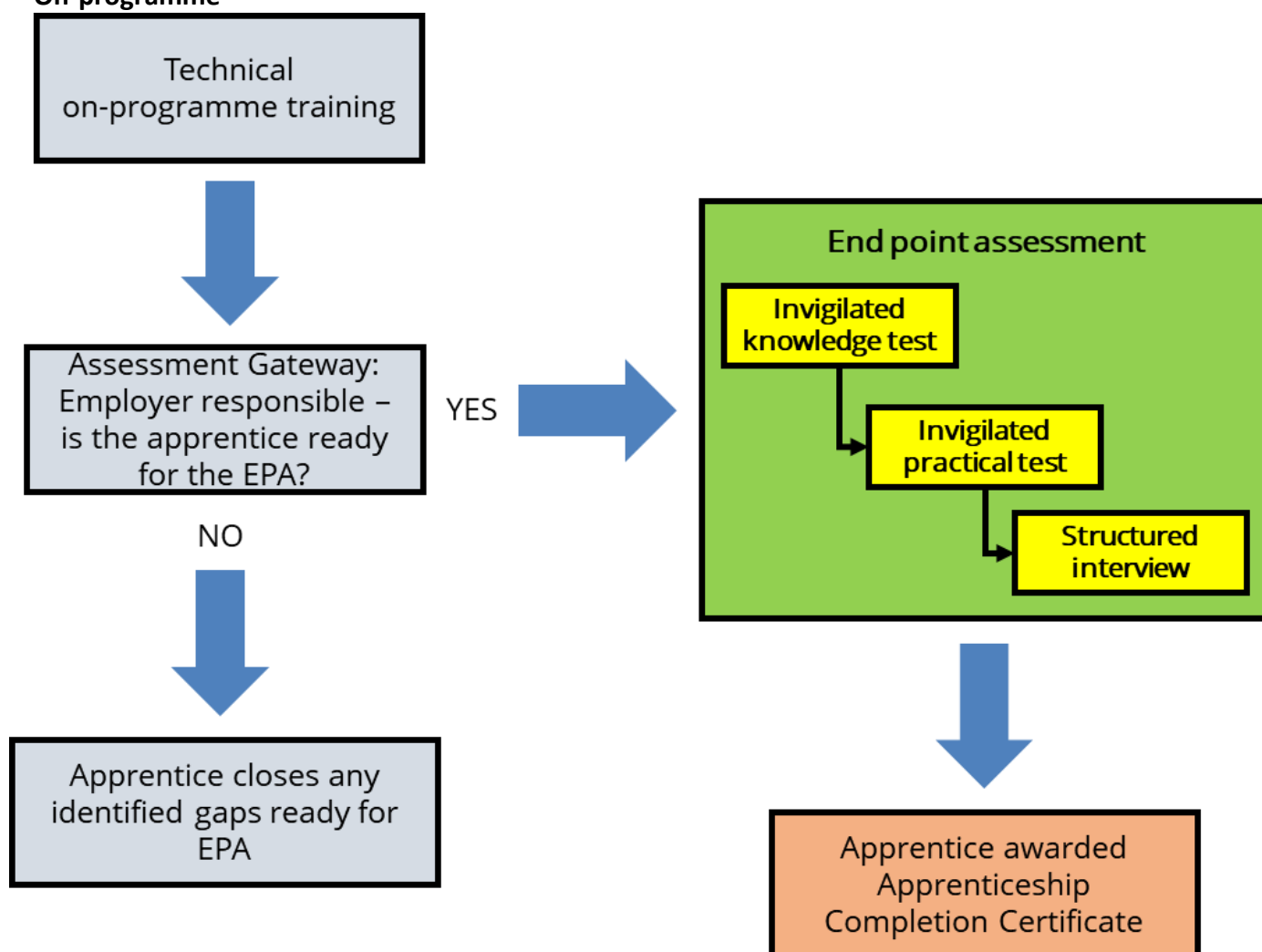
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Overview of Level 3 Thermal Insulation Technician End-Point Assessment

A group of industry-leading employers created the Level 3 Thermal Insulation Technician apprenticeship standard. They aimed to define what a fully-competent apprentice will be able to do in the workplace. Alongside the apprenticeship standard, they created an assessment plan to judge that competence. This employer guide offers detailed and practical guidance for how you can support your apprentices through their end-point assessment.

Process for Level 3 Thermal Insulation Technician

On-programme



During the training part of the apprenticeship (called the on-programme phase), apprentices collect their experiences, achievements and reflections in a portfolio.

During the training programme and supported by your training provider, we encourage you to practice the tasks involved in the end-point assessment. There is a section on each task in this guide to help you set up practice assessments. IETTL will provide sample assessments and updates to the assessment process.

In the final twelve weeks of the on-programme training period, we recommend that you and the training provider begin to judge readiness for assessment by asking the key question posed in the assessment plan:

“Are you confident that the apprentice is consistently working at or above the level set out in the apprenticeship standard?”

Gateway

During the Gateway phase:

1. You, apprentice and training provider agree that the apprentice is ready for assessment.

This is confirmed when you and the apprentice sign a **Gateway Statement** which includes a declaration that confirms that *“the apprentice is consistently working at or above the knowledge, skills and behaviours requirements as outlined in the [apprenticeship] standard”*.

You can download a blank *Gateway Statement* at any time.

2. The apprentice also needs to have English and maths **Gateway evidence**.

By the end of the on-programme phase, the apprentice needs to meet the following conditions:

- Certification for Level 2 English and maths

3. You should then submit the **Gateway Statement** and the **Gateway evidence** to the IETTL EPA team for checking and validation.

4. IETTL EPA team will then ask the end-point assessor to arrange a Gateway Meeting.

5. The **Gateway Meeting** is held to confirm that:

- the apprentice is occupationally ready
- process arrangements for the end-point assessment are in place.

At the meeting the assessor counter-signs the **Gateway Statement** and sends it to the IETTL EPA team.

6. The IETTL EPA team will approve and re-circulate the **Gateway Statement** with confirmation of the date and location of the end-point assessment.

Tool - Gateway requirements checklist

Gateway Task ID	Task	Completed
Before Gateway	Apprentice registered for assessment with IETTL	
Before Gateway	Assessor, location and dates provisionally agreed	
1	Gateway Meeting arranged for _____(date)	
2	Gateway Statement signed by apprentice	
3	Gateway Statement signed by employer	
4	Copies of Level 2 Certificates for English and maths in place	
6	Gateway Statement and Gateway Evidence submitted to IETTL	
7	End-point assessor arranges Gateway Meeting.	
8	Gateway Meeting completed	
9	Countersigned Gateway Statement returned from IETTL	
10	Date and location of the end-point assessment confirmed	

End-Point Assessment

End-Point Assessment includes three tasks:

Assessment method	Focus of assessment	Assessed by	Grading
Knowledge Test	Knowledge, skills and behaviours as detailed in Annex 1	End Point Assessment Organisation**	Fail Pass
Practical Test	Knowledge, skills and behaviours as detailed in Annex 1	End Point Assessment Organisation**	Fail Pass Distinction
Structured interview	Skills, Knowledge and Behaviours as detailed in Annex 1	End Point Assessment Organisation **	Fail Pass Distinction

The three tasks will be undertaken on consecutive days.

Monday Day 1	Knowledge Test (Multiple Choice and Written Assessment) Practical Skills Test briefing	12:00 Lunch 13:00 Written Assessment (60 minutes) 14:15 Multiple Choice Questions 16:15 Practical Assessment Briefing 16:30 Leave Training Centre
Tuesday Day 2	Practical Skills Test Tasks 1-8	08:45 Safety and process briefing (all candidates) 09:30 Session 1 12:30 Lunch 13:30 Session 2 16:30 Assessment Ends
Wednesday Day 3	Practical Skills Test Tasks 1-8 (continued)	09:00 Session 1 12:00 Lunch 13:00 Session 2 16:00 Assessment Ends
Thursday Day 4	Structured Interview	

These three tasks are assessed individually and collectively to reach a final grade for the apprentice.

The apprentice must achieve a grade of Pass in the Knowledge Test in order to progress to the Day 2 Practical Test.

Successful apprentices overall will be awarded a Pass. Exceptional apprentices can also achieve the grade of Distinction in some assessment methods. The grading criteria for assessments can be found in the assessment plan.

Assessments are usually done in the IETTL workshop. It is important that you are aware of how the assessment will work and how you can help your apprentice and the assessor to complete the end-point assessment.

IETTL will appoint the assessor. Their job will be to confirm that the apprentice is competent to fulfil the role of a Level 3 Thermal Insulation Technician.

The sooner IETTL are made aware of an upcoming assessment the better. Typically, if we know about a planned assessment three months before the end of the on-programme training period, we can schedule an assessment as soon as all parties have signed the Gateway Statement.

Target timings for end-point assessment

Before end-point assessment	
At least 3 months before assessment, in the future this will be at the same time as registration for the apprenticeship	Apprentice registered for assessment
2 months before assessment	Assessor, assessment locations and dates are provisionally confirmed
1 week before Gateway meeting	Gateway evidence ready and sent from the employer to IETTL EPA team
2-4 weeks before assessment	Gateway meeting
Within 72 hours of Gateway meeting	Gateway Statement approved and re-circulated. Assessment locations and dates are confirmed.
End-point assessment	
After end-point assessment	
Within 15 working days of assessment	Assessments internally moderated
Within 20 working days of assessment	Feedback/Grade provided to Apprentice and Employer
Within 20 days of first assessment	Resits or retakes booked (if needed)
Within 15 days of first assessment	Final assessment results released
Monthly	Completions are uploaded to ESFA
Subject to ESFA process	Certificate is issued to the employer to pass to their apprentice

End-Point Assessment Process and Methods

The assessor will make sure that all assessments are planned within the permitted time frame.

The apprentice will need to have all the resources needed for each task in place on the day of the task.

How can you support your apprentice?

- Confirm that the apprentice is aware of the times, dates and arrangements for assessments
- Make sure that all required resources will be available when they are needed on the day of assessment.
- Ensure that they have completed suitable practice assessments, including the assessment exemplars produced by IETTL
- Ensure that their practical skills are at the level required to achieve the final practical assessment tasks – which are available from IETTL
- Ensure that your apprentices are familiar with the written questions as published in the apprentice briefs.

Make sure that you have read the assessment briefs available from IETTL.

Task One: Knowledge Test

The apprentice will sit a timed multiple-choice / written assessment. The total time for the assessment will be 80 minutes.

Part A Multiple Choice Questions

Assessment	Time Allowed	Maximum Marks	Pass Mark
20 Simple Questions Each question has ONE correct answer from a choice of FIVE options	20 minutes	20 Marks	10 Marks
10 Complex Questions Each question has MORE THAN ONE correct answer from a choice of FIVE options		20 Marks	10 Marks
Total	20 minutes	40 Marks	20 Marks

Part B Written Questions

Assessment	Time Allowed	Maximum Marks	Pass Mark
2 Written Questions You will complete TWO questions from FOUR possible questions	60 minutes	10 Marks per question	12 Marks (must score a minimum of 6 Marks for each question)
Total	60 minutes	20 Marks	12 Marks

Total Knowledge Test	80 Minutes	60 Marks	32 Marks
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The assessment will be undertaken online using a PC or tablet. Paper versions of all assessment papers will be available for candidates if preferred. All assessments will be invigilated and completed under normal examination conditions.

Part B Written Questions (20 marks)

Each apprentice must choose TWO from the list of four questions below. The total time to complete the written questions is 60 minutes. It is recommended to spend no more than 30 minutes on each question. Answers should include workplace examples to support the response.

Question 1

- **Explain how you would accurately interpret relevant product information and design specifications in line with changing external environmental weather conditions**

Answers should consider at least four different types of weather conditions. Answers should include reference to safe working practice and any relevant legislation.

Question 2

- **Explain your understanding of the specific project procurement processes**

Question 3

- **Explain your understanding of hazard recognition and how to mitigate any potential risks**

Question 4

- **Describe how to supervise, coach and mentor a team of thermal insulation operatives**

Task Two – Practical Skills Test

All apprentices will attend the IETTL assessment centre in Darlington to undertake the assessment. The practical skills test will take place on consecutive days. Day 1 will contain an initial briefing and followed by a maximum of six hours practical time to undertake eight separate tests. Day 2 will be six hours of practical time to complete all tasks.

Candidates declaring that they have completed the test prior to the end time will be permitted to leave but **will not** be permitted to return to their work. All candidates leaving before the end time on Day 2 will sign a declaration of completion that is time-stamped by the supervising assessor.

The session will take place in the IETTL facility, with **all resources provided by IETTL**. Apprentices must submit an estimate of materials to be used prior to the start of the assessment on Day 2.

How can you support your apprentice?

- Ensure the apprentice has practiced the tasks required for the practical skills test
- Ensure the apprentice has the required PPE
- Ensure the apprentice understands the time limitations of the practical test

Specification and End Point Assessment requirements:

- *The tasks required detailing the specification are all listed on the following pages.*
- *The time allocated to complete the 8 tests is 12 hours over two days, this is 6 hours per day.*
- *Mandatory PPE must be worn correctly throughout the test; this includes:*
 - *Overalls.*
 - *Boots.*
 - *Gloves (cut 5 resistance).*
 - *Safety glasses.*

Required PPE must be provided by the candidate. Any PPE that has been modified or damaged must be replaced before the candidate can start their test.

Specialist PPE can be provided if required by the candidate – plastic gloves, dust masks, Kevlar sleeves and hearing protection.

- *All work to be completed as BS 5970:2012 Thermal Insulation of pipework, ductwork, associated equipment and other industrial installations in the temperature range of -100°C to +870°C.*
- *All templates required must be developed by the candidate.*
- *All insulation work must be checked and notification from the End Point Assessor must be given before the candidate can tape and seal any seams or start applying any finishes.*
- *O/D = outside diameter of pipe*



<p>Vessel with 50mm thick mineral wool and metal finish:</p> <p>Test 1 Insulation:</p> <ul style="list-style-type: none"> • The insulation required for the body of the vessel is mineral wool duct wrap. • The insulation required for the vessel ends is mineral wool duct slab. • Measure, develop and fit insulation to vessel ends and body to take support leg. • Seal insulation with BCO foil tape <p>Test 2 Finish:</p> <ul style="list-style-type: none"> • The finish required for this task is metal • Measure vessel for metal finish to take in support leg • Fabricate metal to the required dimensions • Fit metal to vessel and secure using 4 toggles
<p>Pipework with 60mm o/d & 114mm o/d cellular glass pipe sections and metal finish:</p> <p>Test 3 Insulation:</p> <ul style="list-style-type: none"> • The insulation required for this task is cellular glass pipe section. • Measure, develop and fit radius bend insulation for the 114mm o/d pipework. • The insulation must fully cover the reducer. • Secure the cellular glass in place with PCL tape • Staggered seams must be used <p>Test 4 Finish:</p> <ul style="list-style-type: none"> • The finish required for this task is metal. • Develop, fabricate and fit radius bend, reducer and casing • Any patterns required must be developed by the candidate • Finish with metal casing and secure with equally spaced banding
<p>Pipework with 60mm o/d mineral wool pipe sections and metal finish:</p> <p>Test 5 Insulation:</p> <ul style="list-style-type: none"> • The insulation required for this task is mineral wool pipe section. • Measure, develop and fit elbow, t piece, offset and straight insulation for the 60mm o/d pipework. • Secure the mineral wool in place with BCO foil tape. <p>Test 6 Finish:</p> <ul style="list-style-type: none"> • The finish required for this task is metal. • Develop, fabricate and fit elbow, t piece, cap ends and casing • Any patterns required must be developed by the candidate. • Finish with metal casing and secure with equally spaced rivets

Pipework with 60mm o/d Phenolic foam and metal finish:

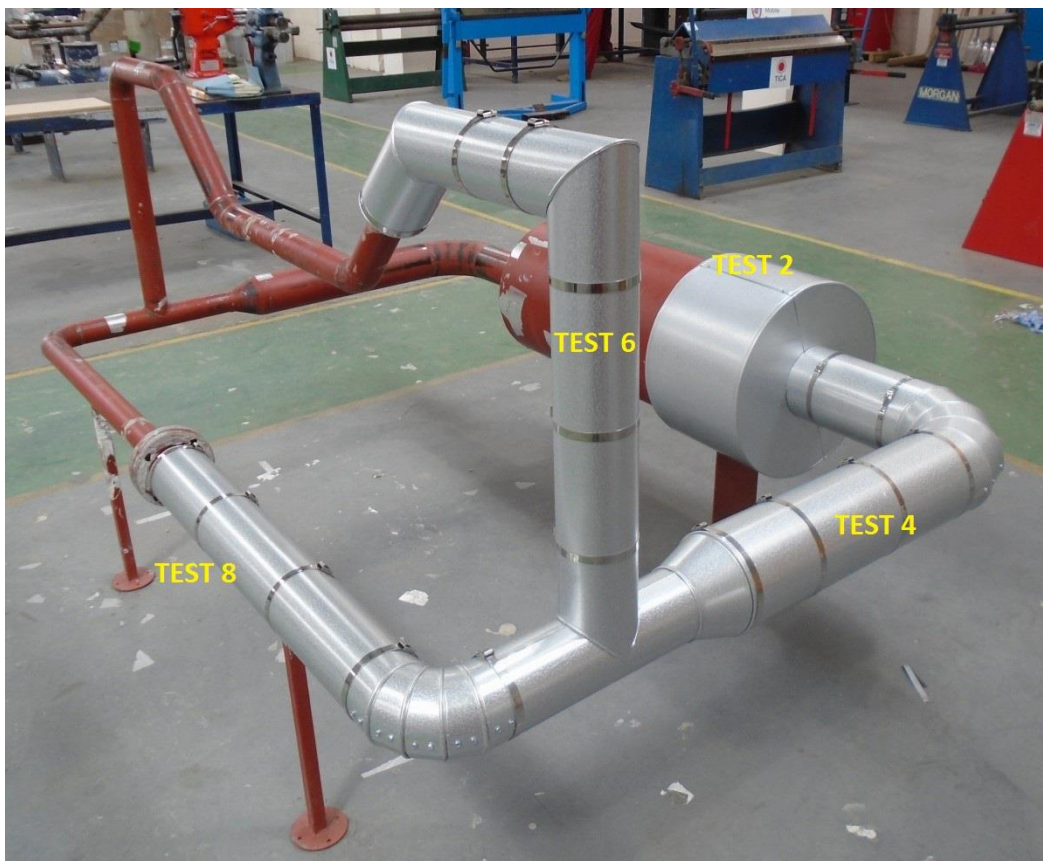
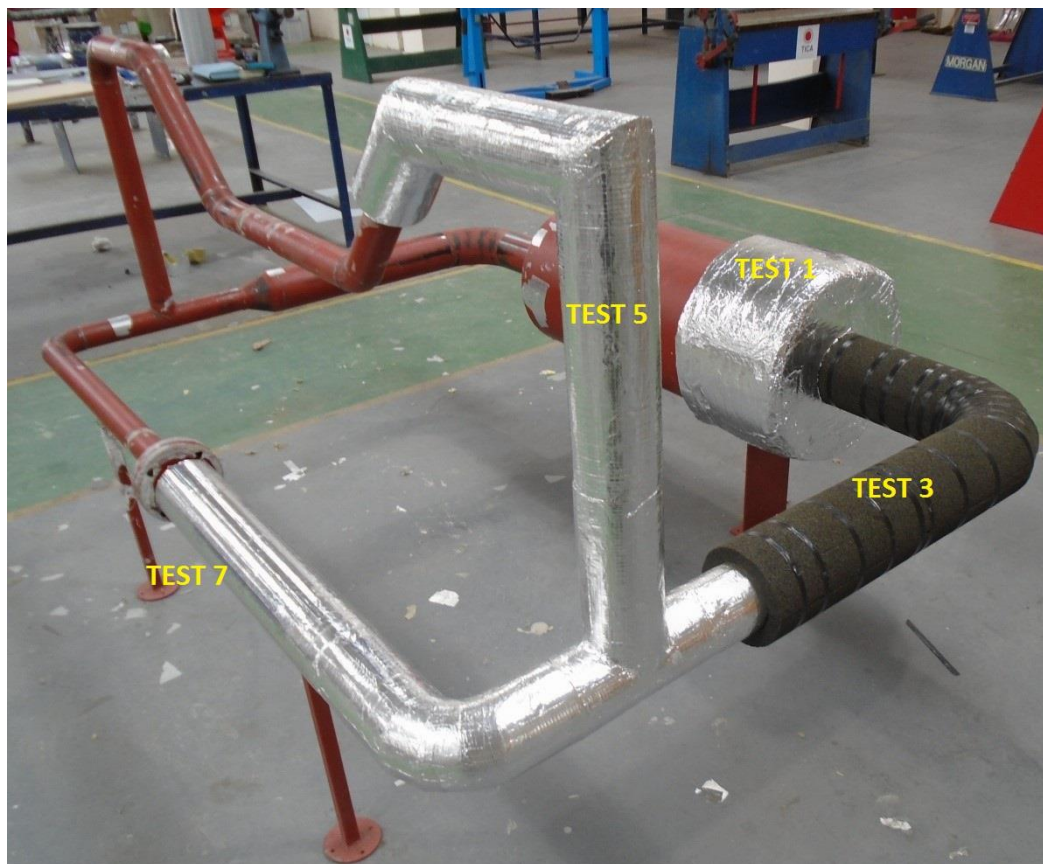
Test 7 Insulation:

- The insulation required for this task is phenolic foam pipe section.
- Measure, develop and fit radius bend and straight for the 60mm o/d pipework.
- Secure the phenolic foam in place with BCO foil tape.

Test 8 Finish:

- The finish required for this task is metal.
- Develop, fabricate and fit radius bend, cap end and casing (Min 700mm past support leg)
- Any patterns required must be developed by the candidate.
- Finish with metal casing and secure with equally spaced screws

Photograph of completed tests 1-8



Estimate Project Quantities

Test Number	Insulation type and size	Quantity
Test 1		
Test 2		
Test 3		
Test4		
Test 5		
Test 6		
Test 7		
Test 8		

Hazard Spotting

Hazard Number	Hazard	Action plan to remove and or mitigate hazards
1		
2		
3		
4		
5		

Task Three – Structured interview (30-45 minutes)

The interview will take place on Day 4 and will be between the apprentice and the end-point assessor.

The apprentice will be asked ten questions, drawn from a bank of standard questions asked of all apprentices. The topic areas will be one question drawn from each of the following:

- The fabrication of cladding
- The development of patterns
- The application of cladding
- Different types of insulation material
- Health and Safety
- Types of fixings, eg screws, nuts, rivets
- Supervising and mentoring
- Project schedules

The assessor may ask additional questions for clarification. The apprentice should be encouraged to prepare for all ten topics. The apprentice may bring materials in to the interview, such as printed portfolio work or other reference documents.

How can you support your apprentice?

- Work with your training provider to set up practice panel question sessions in the final weeks before assessment, around the ten topic areas for questions.
- Hold small interview sessions to make sure that the themes are fresh in the apprentice's mind.
- Practice small timed discussions to help the apprentice practice succinct, evidence-rich responses in a short time.
- Use the example questions provided by IETTL as the basis of your practice interviews.

What Happens After Assessment?

Grading and certification

During the assessment, the assessor administers the three tasks, completes the evidence records and submits these to the IETTL EPA team. This will include their audio recording of the structured interview. The assessor will not discuss grading with the apprentice, the employer or the training provider.

Within twenty working days of the assessment:

- the final grade is given to the apprentice, generally by email
or
- a resit is booked if needed.

Resits must take place **within 35 days of the first attempt**.

The sections below provide guidance on resits.

Subject to ESFA process timings – the apprenticeship certificate is issued to you to pass to your apprentice.

IETTL will retain all assessment materials in case of an enquiry for a period of one year or until the external quality assurance process has approved the outcome of the assessment.

Resits

A resit is where an apprentice fails one or two tasks.

The reasons for failure will be given to the apprentice through a feedback form that accompanies a fail grade being issued.

A fail is applicable where either:

- An apprentice has not demonstrated competence in one or more elements of the apprenticeship standard that were assessed on the day(s) of assessment.
- The conduct of the assessment was unacceptable, and the reasons were due to the actions of the apprentice solely (such as lateness or not being prepared to undertake assessment without prior notification).

In the case of failure of one or two tasks, the apprentice must resit the tasks according to the following schedule:

Knowledge Test

Part A and Part B of the Knowledge Test are taken together at the same time. The results of Part A and Part B are given to the apprentice on Day 1.

Day 1 Part A – Multiple Choice

The test may be taken again immediately (Attempt 2). If this resit is graded as a fail, the assessment ends and the apprentice will need to undertake Part A within 35 days (Attempt 3). The apprentice cannot proceed to Day 2 if a Pass is not achieved in Attempts 1-3 of Part A.

Part B – Written Questions

The test may be taken again immediately (Attempt 2). If this resit is graded as a fail, the assessment ends and the apprentice will need to undertake Part B within 35 days (Attempt 3). The apprentice cannot proceed to Day 2 if a Pass is not achieved in Attempts 1-3 of Part B.

Failure of Attempt 3 in either or both of Part A or Part B in the Knowledge Test will result in the withdrawal of the apprentice from the end point assessment process. An apprentice may be permitted to undertake a repeat Knowledge Test (Attempt 4) in the future only in exceptional circumstances. An additional charge will be applicable. Failure of Attempt 4 is final and no further assessment will be permissible. There is no additional charge for Attempts 2-3 in the Knowledge Test.

Day 2 and 3 Practical Test

The Practical Test can only be attempted if the apprentice has achieved a Pass in both Part A and Part B of the Knowledge Test. If the apprentice is awarded a Fail in the practical assessment, the apprentice will be eligible to resit the Practical Test (Attempt 2) within 35 days of the first attempt. There will be a charge for a resit in this circumstance.

An apprentice that receives the grade of Fail in Attempt 2 of the Practical Test will be withdrawn from the end-point assessment process. Only in very exceptional circumstances can an apprentice be offered an Attempt 3 in the Practical Test. The maximum grade permissible in Attempt 3 will be a Pass. A charge will be made for Attempt 3.

Day 4 Structured Interview

If the apprentice is awarded a Fail in the structured interview, then the assessment ends and the apprentice is eligible to resit the structured interview within 35 days (Attempt 2). A charge may be applicable for Attempt 2. If the apprentice is awarded a Fail grade in Attempt 2, then the apprentice is withdrawn from the end-point assessment process and will only be eligible to undertake an Attempt 3 under very exceptional circumstances. A charge will be applied for Attempt 3. The maximum permissible grade for Attempt 2-3 is a Pass.

Feedback on grading for the Practical Test and the Structured Interview is given after the assessment is complete no earlier than 20 working days after the assessment day. It is therefore possible to fail both the Practical Test and the Structured Interview. Where this occurs, the resit arrangements for Attempt 2 are as above and the apprentice will take the assessments on consecutive days.

The maximum grade possible in a resit Attempt 2-4 in any method is a Pass, even if the apprentice performs exceptionally well and meets the criteria for a distinction.

Retake

The assessment design means that it is not possible to undertake the practical Test or Structured Interview unless a Pass in the Knowledge Test is achieved. If both the Practical Test and Structured Interview result in a Fail, then these are treated as independent assessments and the resit process for each is applicable. There are therefore no circumstances under which an apprentice will be required to retake the entire assessment.

Enquiries, Appeals and Complaints

IETTL has a published procedure to deal with enquiries, appeals and complaints. We define each as follows:

Enquiry

An enquiry from an apprentice, training provider or employer relates to a question or query relating to the processes and procedures of an end-point assessment. Situations may arise where an apprentice wishes to clarify an outcome of assessment or a process applied to the end-point assessment. Enquiries are managed informally, or if necessary, escalated within the remit of the complaints procedure. An enquiry should be addressed in writing (by email) to IETTL. The email address is given under Stage 1 of the Complaints Procedure.

Appeal

An appeal is where an apprentice or their employer wishes to revisit the grade awarded for assessment. The employer must submit reasons as to why they feel a grade should be reconsidered. An appeal must meet one or more of the following criteria:

- The apprentice or employer considers that the process was not correctly followed by the assessor or IETTL resulting in a material disadvantage to the apprentice. The appeal must specifically reference the end point assessment process that was not followed.
- The apprentice or employer believes that the evidence presented has not been correctly considered by the assessor or IQA at IETTL.
- The apprentice or employer considers that assessor to have breached to code of conduct, legislative or regulatory requirements of the assessment, including any agreed reasonable adjustments or special considerations.
- The apprentice or employer considers that assessor(s) have failed to undertake the assessment according to the requirements of the assessment plan and the contents of this Handbook.

An appeal cannot be considered in the following circumstances:

- The apprentice or employer considers that there was more evidence that the apprentice could have submitted after the assessment concludes.
- The apprentice or employer wishes to apply retroactive reasonable adjustments or declare any special considerations after the assessment is completed.
- The apprentice or employer merely disagrees with the final grade or uses the appeal procedure to otherwise circumvent the end-point assessment due process.

Complaint

A complaint is an expression of dissatisfaction regarding our actions, services and the application of our policies and / or on occasion, the outcome or decision we have made.

In particular, when considering complaints, we examine whether they relate to the following on our part (our complaints criteria):

- mistakes or poor service
- unreasonable delay or failure to take action
- unprofessional behaviour or conduct
- bias or unfair treatment
- failure to follow our published policies or procedures without a reasonable explanation.

There is a separate *Complaints Policy and Procedure*

Quality Assurance

The assessor will be allocated by IETTL. They will not be employed by any organisation involved in the apprentice's work and training.

Assessors are recruited to exceed the minimum requirements of the assessment plan. Their experience will be current and relevant to the assessment plan and apprenticeship requirements.

They have all received standardisation training on the assessment methods, safeguarding legislation and quality assurance in assessment.

The assessor may also hold an assessment qualification.

Every assessor has a professional development plan which is kept up to date and they are up to date with changes both in the work of Level 3 Thermal Insulation Technician and in assessment practice.

All assessment decisions are subject to moderation and sampling of assessor performance.

Ofqual will undertake external quality assurance of our apprenticeship end-point assessment services.