

# IETTL

# End-Point Assessment

## Level 2 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.

EPAs are carried out under strict examination conditions, mobile devices must be stored in secure lockers at all times. EPA candidates must not leave the site during the EPA, this includes lunchtime. Lunch is provided to all candidates.

The published assessment plan for the Level 2 Thermal Insulation Operative can be downloaded from the Institute of Apprenticeships and Technical Education website <https://www.instituteforapprenticeships.org/apprenticeship-standards/commercial-thermal-insulation-operative/>

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, Carol Jordan, [cjordan@iettl.co.uk](mailto:cjordan@iettl.co.uk). 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***

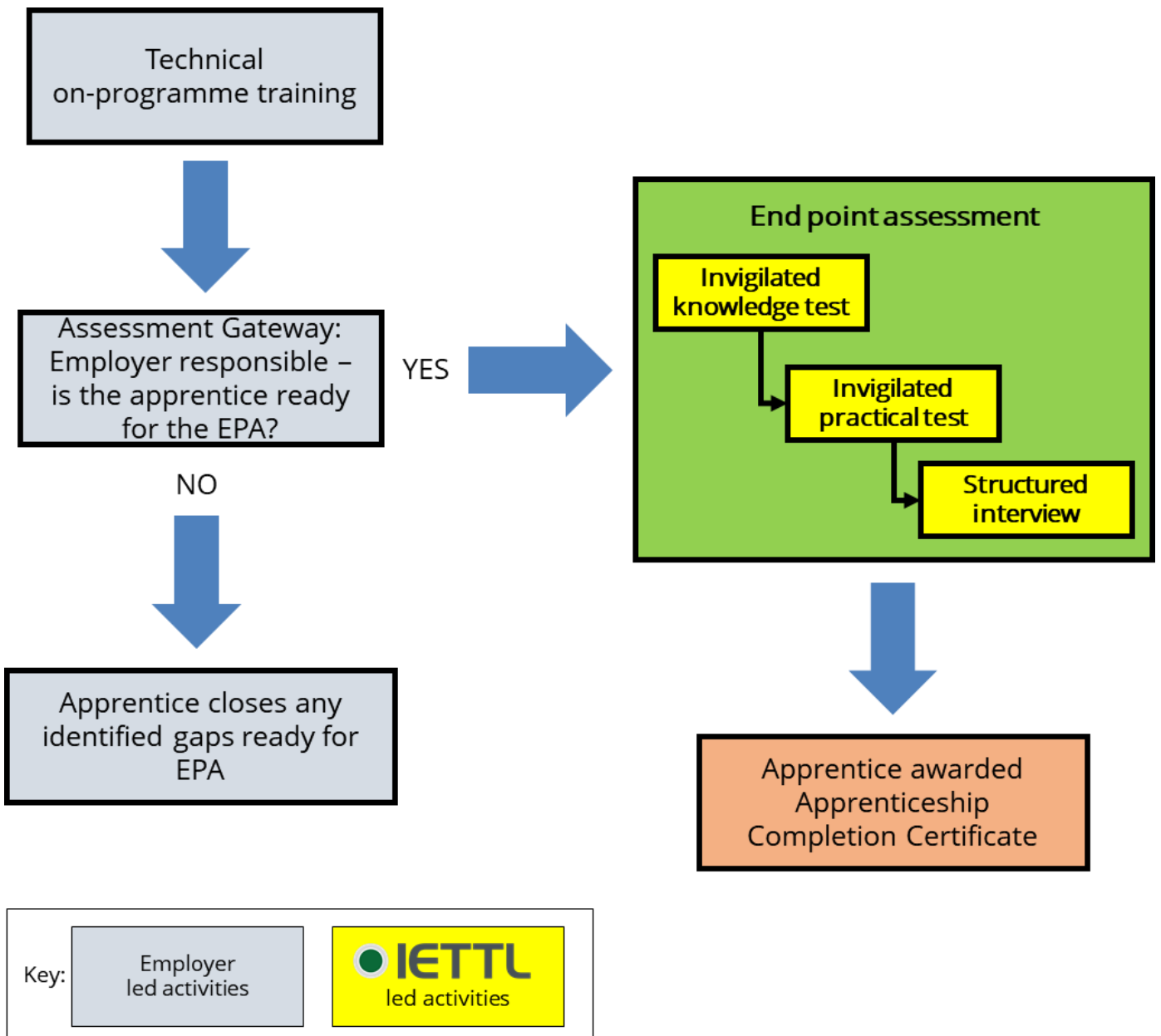
## Contents

Introduction .....	2
Overview of Level 2 Thermal Insulation Operative End-Point Assessment.....	4
On-programme .....	5
Gateway .....	5
End-Point Assessment.....	7
Target timings for end-point assessment.....	9
End-Point Assessment Process and Methods .....	10
Task One: Knowledge Test.....	11
Task Two – Practical Skills Test .....	13
Task Three – Structured interview (30-45 minutes).....	23
What Happens After Assessment?.....	24
Grading and certification.....	24
Resits .....	25
Retake.....	26
Enquiries, Appeals and Complaints .....	27
Enquiry .....	27
Appeal .....	27
Complaint.....	28
Quality Assurance.....	28

**Overview of Level 2 Thermal Insulation Operative End-Point Assessment**

A group of industry-leading employers created the Level 2 Thermal Insulation Operative 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 2 Thermal Insulation Operative**



## 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. The employer, apprentice and training provider agree that the apprentice is ready for assessment.

This is confirmed when the employer 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”*.

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 1 English and maths

3. The **Gateway Statement** confirms that:

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

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

4. The **Gateway Statement** and the **Gateway evidence** are submitted to the IETTL EPA team for checking and validation.
  
5. The IETTL EPA team will book all EPAs using the ACE360 system, the training provider, employer and apprentice will receive notification of the date and location of the EPA.

**End-Point Assessment**

End-Point Assessment includes three tasks:

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

To achieve an overall Distinction Grade candidates must achieve a Pass grade for the Knowledge Test and a Distinction Grade for the Structured Interview and a Distinction grade for the Practical Test.

The three tasks will be undertaken on consecutive days.

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

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

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 2 Thermal Insulation Operative.

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**

<b>Before end-point assessment</b>	
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
2-4 weeks before assessment	Gateway evidence ready and sent from the employer to IETTL EPA team
2-4 weeks before assessment	Gateway Statement approved and re-circulated. Assessment locations and dates are confirmed.
<b>End-point assessment</b>	
<b>After end-point assessment</b>	
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. All candidates must be punctual and will not be permitted entry to any part of the EPA Assessment area if later than 10 minutes after the scheduled start time.
- 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

## 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
<b>20 Simple Questions</b> Each question has ONE correct answer from a choice of FIVE options	20 minutes	20 Marks	10 Marks
<b>10 Complex Questions</b> Each question has MORE THAN ONE correct answer from a choice of FIVE options		20 Marks	10 Marks
<b>Total</b>	20 minutes	40 Marks	20 Marks

### Part B Written Questions

Assessment	Time Allowed	Maximum Marks	Pass Mark
<b>2 Written Questions</b> 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)
<b>Total</b>	60 minutes	20 Marks	12 Marks

<b>Total Knowledge Test</b>	80 Minutes	60 Marks	32 Marks
-----------------------------	------------	----------	----------

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 Describe the various weather conditions that can be experienced when working on site.

Explain how this can affect the working environment and working conditions of all workers on the site.

Question 2 What are the basic risks in a refurbishment environment?

*In particular, describe the risks associated with the handling of asbestos.*

Question 3 Describe the various ways in which workers on sites can become more risk aware.

How can risks be reduced by checking available risk information?

Question 4 Describe a range of organisational security, safety arrangements and procedures on site.

How should **you** ensure that all workers are complying with these requirements?

## Task Two – Practical Skills Test

All apprentices will usually 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 seven hours practical time to undertake eight separate tests. Day 2 will be five 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 usually 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 7 hours on day 2 of the EPA and 5 hours on day 3 of the EPA.*
- *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 terminations must be sealed.*
- *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.*
- *Candidates must move, handle and store safely and securely, all materials used during the practical assessment.*



**Test 1 – Vessel with mineral wool:****Insulation:**

- 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.

**Finish:**

- The finish required for this task is B.C.O foil tape.
- Secure and seal the mineral wool in place with B.C.O foil tape.

**Test 2 – Pipework with 60mm o/d & 114mm o/d cellular glass and PIB:****Insulation:**

- The insulation required for this task is cellular glass pipe section.
- Measure, develop and fit two radius bends for the 60mm and 114mm pipework.
- Measure, develop and fit one t-piece for the 60mm pipework.
- The insulation must fully cover the reducer.
- Secure the cellular glass in place with PCL tape.

**Finish:**

- The finish required for this task is PIB.
- Fishtails, strips or bandages can be used for the two bends.
- Any patterns required must be developed by the candidate.
- White spirits to be used for the adhesive.
- Termination to be sealed with PIB.

**Test 3 – Pipework with tubing and/or flat sheet nitrile rubber:****Insulation:**

- The insulation required for this task is nitrile rubber.
- The candidate can choose to use either flat sheet or pipe section insulation.
- Manufacturer cutting templates can be provided for the pipe section.
- Measure, develop and fit insulation to the 60mm pipework.
- Measure, develop and fit one radius bend.
- Measure, develop and fit two offset bends.
- Nitrile rubber glue will be used for the adhesive.
- 

**Finish:**

- No finish is required.

**Test 4 – Pipework with 60mm o/d phenolic and Self-Adhesive Jacketing:****Insulation:**

- The insulation required for this task is phenolic pipe section.
- Measure, develop and fit insulation to the 60mm pipework.
- The section must pass the two leg supports on the rig.
- Secure and seal the seams with B.C.O foil tape.

**Finish:**

- The finish required for this task is Self-Adhesive Jacketing.
- All seams and laps must be a minimum of 75mm.



**Test 5 – Pipework with 60mm o/d & 114mm o/d phenolic and metal:****Insulation:**

- The insulation required for this task is phenolic pipe section.
- Measure, develop and fit two radius bends for the 60mm and 114mm pipework.
- Measure, develop and fit one t-piece for the 60mm pipework.
- Measure, develop and fit one reducer going from 114mm to 60mm pipework.
- Secure and seal the seams with B.C.O foil tape.

**Finish:**

- The finish required for this task is metal.
- Fit 60mm and 114mm metal bends over the insulation.
- Fit one metal t-piece and reducer.
- Metal casing will be required - this will need to be lapped sufficiently.
- Fit to the pipework and secure in place with bands, rivets and/or screws.

**Test 6 – Pipework with 60mm o/d mineral wool and metal:****Insulation:**

- The insulation required for this task is mineral wool pipe section.
- Measure, develop and fit one elbow bend.
- Secure and seal the seams with B.C.O foil tape.

**Finish:**

- The finish required for this task is metal.
- Fit one elbow bend.
- Casing will be required, this will need to be lapped sufficiently.
- Fit to the pipework and secure in place with bands, rivets and/or screws.

**Test 7 – Pipework with 60mm o/d mineral wool and Isogenopak:****Insulation:**

- The insulation required for this task is mineral wool pipe section.
- Measure, develop and fit two segmented offset bends.
- Secure and seal the seams with B.C.O foil tape.

**Finish:**

- The finish required for this task is Isogenopak.
- Fit two preformed segmented offset bend fittings.
- Isogenopak casing will be required, this will need to be lapped sufficiently.
- Fit to the pipework and secure in place with bands, rivets or tape.

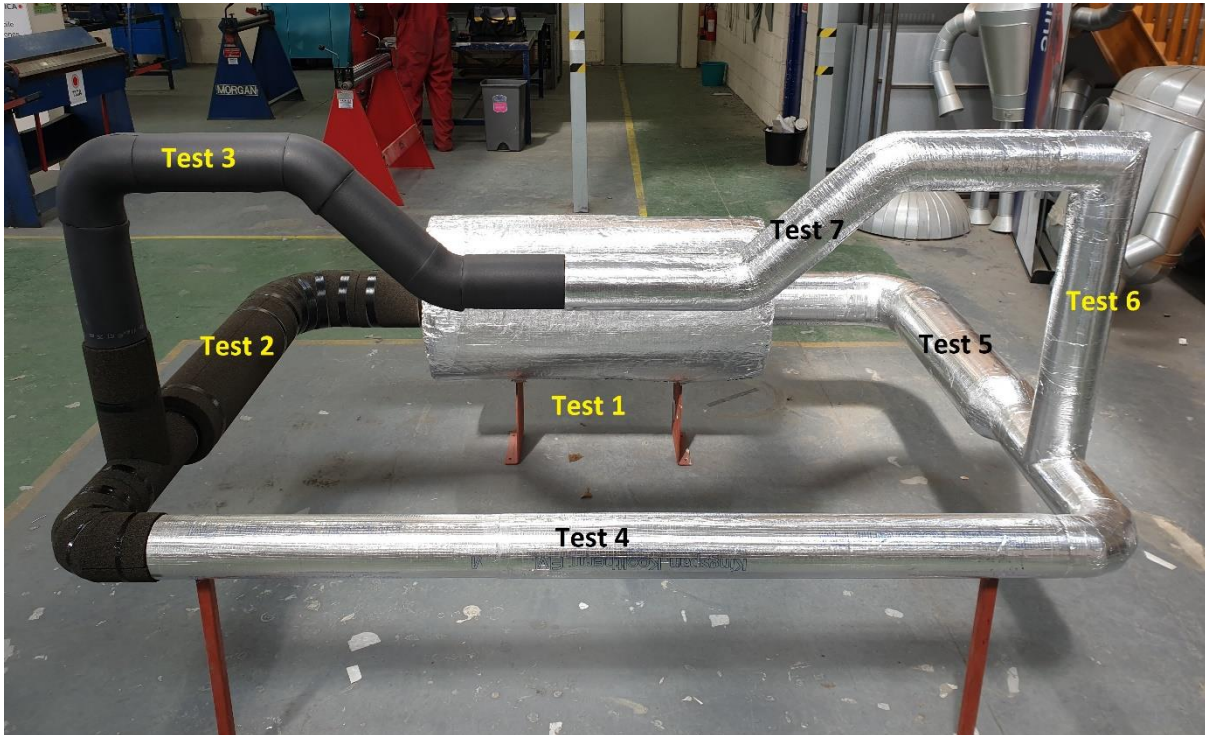
**Test 8 – Valve box with mineral wool:****Insulation:**

- The insulation required for this task is mineral wool duct wrap or slab.
- The box must be fully lined with insulation.

**Finish:**

- Measure, mark and fit a metal box over the pipework.
- The box must be fitted around the t-piece as shown in the completed photo.
- Secure in place with screws and/or rivets.
- **The box can only be fitted once the other 7 tests are signed off by the End Point Assessor.**

Photographs of completed tests 1-7.

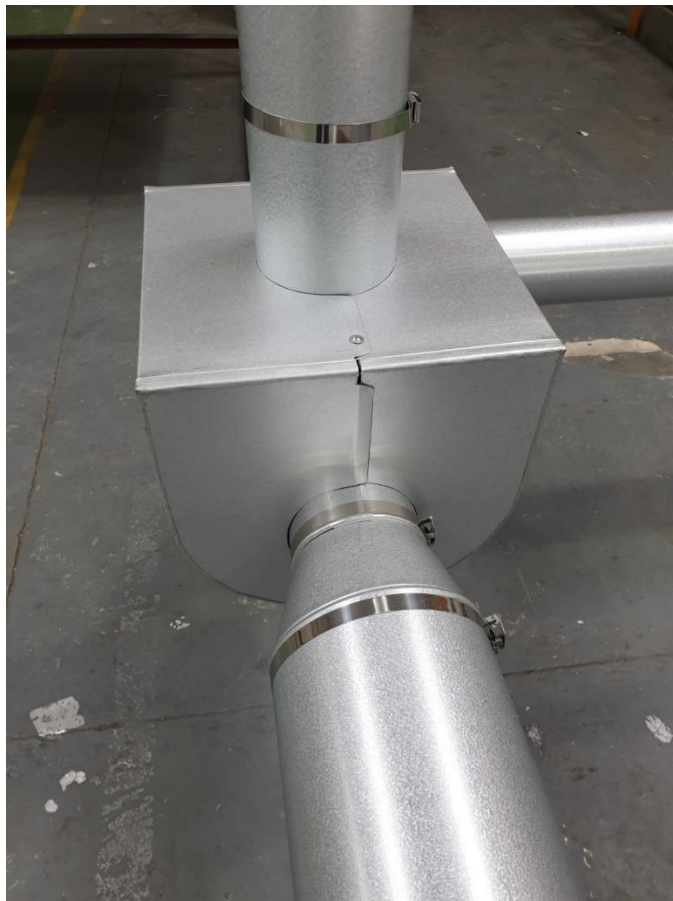


**Photographs of completed test 8**

**Front view**



**Back view**



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 1 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:

1. Working with hazards
2. The application of cladding
3. The different types of insulation material
4. Health and Safety
5. Different types of fixings
6. The effects of external influences
7. PPE
8. Team working
9. Work samples in their portfolio
10. Working as a thermal insulation operative

The assessor may ask additional questions for clarification. The apprentice should be encouraged to prepare for all ten topics. The apprentice is advised to bring materials into 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 should take place **within 49 days of the first attempt.**

The sections below provide guidance on resits.

IETTL will post copies of certificates to candidates within 5 working days of receipt from ESFA.

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 in the Practical Test and/or Structured Interview 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

The results of the Knowledge Test is given to the apprentice on the day of assessment.

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 further attempts, up to the maximum permitted within 35 days (Attempts 3 and 4). The apprentice cannot proceed to the Practical Test if a Pass is not achieved.

### 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 49 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.

### Practical Test

The Practical Test can only be attempted if the apprentice has achieved a Pass in 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 49 days of the first attempt. There will be no charge for a resit in this circumstance.

An apprentice who 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 2 or 3 will be a Pass. A charge will be made for Attempt 3.

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. The Complaints Policy and Procedure can be found at

<https://iettl.co.uk/policiesprocedures/>

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 and will be responded to within 10 working days. 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 or apprentice must submit reasons as to why they feel a grade should be reconsidered. Appeals will be dealt with under Stage 2 of the Complaints Policy and Procedure and should be addressed in writing (email) to the email address listed in Stage 1 of the Complaints Procedure. Appeals must be submitted within 10 working days of the receipt of the End Point Assessment grade. Appeals submitted outside of this timescale will only be considered under exceptional circumstances, with the support of evidence to explain a late appeal submission.

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.

If you feel that IETTL did not correctly follow the appeal process, you can request a review from Ofqual. This request must be submitted within 21 days of you receiving an appeal decision from IETTL. Further information can be found at [www.gov.uk/guidance/exam-procedures-review-service](http://www.gov.uk/guidance/exam-procedures-review-service)

## ***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.

Where the complaint specifically relates to End Point Assessment, the complaint must be made within 10 working days of the final apprenticeship assessment.

## ***Feedback***

Following the completion of the End Point Assessment you will be asked to complete a feedback questionnaire. IETTL welcomes all feedback, both positive and negative, as we view this as an opportunity to inform and shape service delivery.

## 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 2 Thermal Insulation Operative 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.