

6090 Refrigeration Air Conditioning and Heat Pump Engineering Technician

September 2018

Apprentice Development Journal

Version and date	Change detail	Section

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Introduction

What is the Apprentice Development Journal?

The Apprentice Development Journal is a collection of evidence that demonstrates the development of an apprentice's knowledge, skills and behaviours whilst on the job, across the duration of the 'on-programme' segment of the apprenticeship.

Apprentices will present a synopsis of this journal, consisting of three jobs, for discussion as part of the Professional Interview within the end-point assessment.

Each synopsis must consist of three jobs that cover the range of tasks given below:

1. Jointing and System Testing
2. Evacuation and Dehydration - Commission and Charge (Critical and/or Non-critical Charge)
3. Reactive Maintenance
4. Breakdown Investigation
5. Rectification (Electrical)
6. Routine Maintenance
7. Refrigerant Recovery and Disposal

It is not expected that each job will cover all seven of the tasks; however across the three jobs presented, all seven tasks must be evidenced. Apprentices may complete a single job that demonstrates and provides evidence for a number of different tasks. To build up a sufficient journal to select from, it is recommended that apprentices should carry out each task at least once a year, totalling at least three examples over the course of the apprenticeship.

When selecting evidence, apprentices are encouraged to select a range of evidence which demonstrates the range of their capability. Throughout this document there are tracking tools which apprentices/employers/centres should use to ensure they produce a synopsis that is sufficient to support the Professional Interview.

This document aims to provide guidance and templates to support the collation of this evidence to ensure that it is valid and sufficient and provides apprentices with a range of examples to choose from when finalising their synopsis for submission.

This journal will not be a summative assessment in relation to the RACHP apprenticeship; its purpose is to create a body of evidence that can be used to support the professional interview. During end-point assessment, Independent End-point Assessors will not be making a judgement against the evidence submitted in the journal synopsis; instead, they will be making their judgement against the oral responses given during the Professional Interview. Apprentices should use the evidence within their journal to support and structure their responses to these questions.

Centres/Employers must however ensure that any evidence collected is valid and appropriate in relation to industry standards. They must ensure the evidence is an authentic account of the work the apprentice has carried out in the workplace, consistent with their typical performance and accurately reflecting their capability.

Centres/Employers may wish to use the journal to inform performance reviews that are carried out throughout the apprenticeship. The evidence within an apprentice's journal can also be used when considering if an apprentice is ready to progress through the gateway onto end-point assessment.

In addition, the Apprentice Development Journal has been designed to support an application to the Engineering Council for registration as an Engineering Technician (EngTech). Registration with the Engineering Council distinguishes individuals as professional technicians with a commitment to engineering standards and their continued professional development.

Additional conditions of use

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 - They must provide access, on request, to City & Guilds to the system(s) on which the Assessment Materials appear.

Using an e-portfolio

It is strongly encouraged that apprentices collate this evidence electronically, especially as the synopsis will need to be submitted to City & Guilds electronically prior to end-point assessment. This is to allow the Independent End-point Assessor to review the evidence and prepare for the Professional Interview.

City & Guilds provide an e-portfolio solution called Learning Assistant. If you wish to consider using Learning Assistant to support the collation of this Journal please contact learningassistantsupport@cityandguilds.com.

General Guidance

Types of Evidence

This document provides guidance for each task and templates which can be used to manage the collation of the journal of evidence.

Evidence can be presented through various means, for example:

- observations - carried out by personnel from the employer, such as a supervisor, or by a centre representative. The apprentice will be observed in the workplace carrying out a naturally occurring activity. This observation will be a statement of what has been seen and can be written or recorded. Confidentiality and data protection requirements must be adhered to.
- work products such as job sheets with supporting documentation - these must include:
 - what was involved in the job;
 - details of the date, job location and the client serviced;
 - who the apprentice worked with;
 - how the apprentice planned the works;
 - reference materials used;
 - the quality of work produced;
 - relevant legislative documentation used;
 - commissioning test records, handover documents.
- reflective accounts - allow the apprentice to consider what they have carried out in the workplace and how well they have done it. The apprentice can reflect on the tasks they have carried out, including how and why they approached a piece of work as they did.
- witness testimony - can be in many forms. It can be in writing or a recording; again confidentiality and data protection requirements must be adhered to. A witness will provide an account of what the apprentice has done in their job role. It is likely to confirm the authenticity of the evidence or reflective account presented by the apprentice in the synopsis. A witness can range from an employer representative to a customer; it is recommended that expert witnesses are used. Expert witnesses are individuals who are qualified/experienced to a minimum of a Level 3.

Photographic or video evidence to support the written entries is **encouraged and recommended**.

For all evidence produced the apprentice will be required to:

- sign a declaration that the work is their own;
- reference all sources.

The centre and/or employer can also aid authentication by:

- carrying out supplementary (oral) questioning to gauge familiarity with the topic;
- looking out for any changes to the apprentice's usual writing style, unusual sources/examples or the use of US spellings or phrases that might indicate cutting and pasting from the internet;
- requiring access to evidence of steps in the process e.g. drafts, notes, planning.

For further information on authenticating work, see: **[ofqual.gov.uk/plagiarism-teachers](https://www.ofqual.gov.uk/plagiarism-teachers)**.

Declaration of authenticity forms to be completed are found within this pack. These should be completed and signed by both the employer and the apprentice.

Health and safety / Codes of practice

The importance of safe working practices, the demands of the Health and Safety at Work Act and the Codes of Practice associated with the industry must always be adhered to.

The requirement to follow safe working practices is an integral part of all City & Guilds products, and it is the responsibility of the host of the venue and the employer to ensure that all relevant health and safety requirements are in place before the apprentice begins any practical tasks.

Recognition of Prior Learning (RPL)

RPL cannot be used as evidence that is submitted as part of the journal synopsis. Only evidence that has been generated during the period of the apprenticeship can be submitted.

Simulation of Evidence

It is a requirement that all the evidence submitted within the synopsis is reflective of the work the apprentice has carried out in the workplace. Evidence must be from on-site, real working environments with authentication. Simulated activities will not be accepted.

Working towards competence

It is recommended that apprentices, employers and/or centres should meet on a regular basis throughout the apprenticeship to review progress so far and ensure the apprentice is being given adequate opportunities to carry out all of the seven tasks defined within this document.

Apprentices, employers and/or centres should work together to identify and plan which upcoming jobs will provide appropriate evidence to add to the journal.

Guidance on submitting a synopsis of evidence from the journal

The synopsis is a collection of evidence that supports the Professional Interview. As the Professional Interview is graded, it is important that, as well as showing that they have met the requirements, the apprentice presents their best work.

This guidance covers the process of selecting and submitting evidence within the synopsis for end-point assessment.

The synopsis will contain the apprentice's best work, with a variety of evidence to support the apprentice's responses within the interview and demonstrate that the apprentice has met the pass criteria, and possibly the distinction.

Selecting evidence

Before selecting the evidence to form the synopsis, the apprentice should review the requirements of the Professional Interview set out in this pack. This includes the knowledge, skills and behaviours being assessed, the tasks that must be completed and the grading criteria they will be assessed against.

To assemble their synopsis, the apprentice should consider all the evidence they have available that shows they have met the requirements being assessed. From this, they should select the evidence that best meets those requirements. There are two questions that an apprentice should consider when selecting work to form their synopsis:

1. Does the work show that I have met all of the requirements of the assessment?
2. Is this the best evidence I have showing that I have met all of the requirements?

The evidence must meet the following requirements:

1. A maximum of three jobs can be submitted for review
2. From these three jobs, the apprentice must have at least one piece of evidence of each of the seven tasks

Selecting best evidence

As the Professional Interview will be graded, where an apprentice has multiple pieces of evidence available covering the same criteria, the apprentice should consider these and select their best piece of evidence for inclusion in the synopsis. While there may be some overlap, multiple pieces of evidence covering the same criteria should not be submitted for end-point assessment, although some criteria may have more than one piece of evidence, e.g. a product backed by a witness testimony.

To inform this selection, the apprentice should review the evidence and the grade descriptors and choose the evidence best matching the requirements for higher grades. It is expected that most, if not all, evidence collated for a synopsis will be sourced from the final part of the apprenticeship. Altogether, the evidence selected for the synopsis should cover all of the relevant criteria.

Confirming the selected evidence

When the apprentice has selected the evidence to form their synopsis, the employer/training provider should review this to ensure:

- all required KSBs and tasks have been met;
- this is in line with any guidance given in this document;
- there is no unnecessary duplication of evidence against the same criteria;
- the work selected represents the best evidence available in relation to grading requirements. This may also require the employer/centre to consider the wider evidence from which the apprentice has made their selection. Where there is a difference in opinion about this between the apprentice and the employer, this should be discussed in order to reach agreement about the final selection of evidence to submit for end-point assessment.

Once the selection of evidence has been agreed and finalised, the employer/training provider should sign and date the declaration of authenticity form provided by City & Guilds. This is to confirm that the employer/training provider has reviewed the synopsis to ensure minimum requirements have been met, and that the evidence represents the apprentice's own work.

Preparing evidence for submission

Before submitting the synopsis for end-point assessment, the employer/training provider must check to ensure that it has been presented in the following ways:

- Evidence must be presented with a header containing the name and signature of the apprentice together with the date the evidence was created/generated/recorded.
- Each piece of evidence must be referenced to the criteria it is being submitted against, either on a reference matrix (made available by City & Guilds) or within the header.

As well as the evidence, the synopsis must include the signed declaration of authenticity form. The synopsis can be produced in paper and/or electronic form but is required to be submitted electronically to City & Guilds for end-point assessment. The synopsis must be submitted a minimum of four weeks prior to the Professional Interview.

Guidance on Tasks

Task 1 – Jointing and System Testing

What is this?

- Installation of pipework and/or components into systems.
- Jointing or fabrication of materials for various systems.
- Testing of systems.

Journal should consist of a variety of:

Pipework materials (copper, steel, brass, plastic, aluminium) and insulation.

Joining of electrical cables, refrigerant pipework, and water pipework.

- Pipework: similar and dissimilar materials covering permanent/non-permanent mechanical joints, adhesive joints and brazed joints
- Cables: soldering, crimp terminals, category 5 and category 6 data cables, junction boxes, terminal strips, power and control

Testing

- Refrigeration Circuit: BS EN 378(2016), strength test, tightness test.
- Electrical: Continuity, polarity, insulation resistance.

Systems

- New installation.
- Repair work.
- Modification to existing systems.

Task 2.1 – Evacuation and Dehydration/Commission and Charge (Critical Charge)

What is this?

The preparation of new installations through evacuation, dehydration, refrigerant charging and commissioning any type of system. Any system which requires a specific refrigerant weight (capillary line, orifice plate, high side float) with evacuation to BS EN 378 standard or similar.

The journal should consist of evidence of the apprentice:

- completing the relevant commissioning data in addition to other supporting evidence.

and/or

Task 2.2 – Evacuation and Dehydration/Commission and Charge (Non-critical Charge)

What is this?

The preparation of new installations through evacuation, dehydration, refrigerant charging and commissioning any type of system. Any system that does not have a specified charge weight (liquid receiver) with evacuation to BS EN 378 standard or similar.

The journal should consist of evidence of the apprentice:

- completing the relevant commissioning data in addition to other supporting evidence.

Task 3 – Reactive Maintenance

What is this?

Repairs carried out following breakdown, restoring a system to its usual operation.

Journal should consist of a variety of:

- replacing refrigerants;
- repairing leakages;
- replacing components;
- cleaning heat exchangers;
- calibrating controls.

The journal should consist of evidence of the apprentice:

- completing the relevant statutory documentation in addition to other supporting evidence.

Task 4 – Breakdown Investigation

What is this?

An investigation into faulty systems and/or components. This must include the fault diagnostics and rectification procedure for any RACHP system.

Journal should consist of evidence of the apprentice:

- using the correct diagnostic tools and equipment to correctly identify faults and rectification, in addition to other supporting evidence.

Task 5 – Fault Finding and Rectification (Electrical)

What is this?

A safe investigation into faulty systems and/or components and correcting identified faults. This includes single and three phase electrical motors and single phase control circuits.

Journal should consist of evidence of the apprentice:

- using the correct diagnostic tools and equipment to correctly identify faults;
- applying safe working practices, specifically safe isolation methods;
- using correct rectification procedures to correctly identify faults.

Task 6 – Routine Maintenance

What is this?

Planned preventative maintenance activities and adherence to maintenance checklists.

Journal should consist of evidence of the apprentice:

- recording relevant information in appropriate formats such as checklists: manufacturers, industry, client.

Task 7 – Refrigerant Recovery and Disposal

What is this?

Removal of refrigerant for either permanent or temporary purposes. This must also include the disposal of refrigerant and procedures for decommissioning a system.

Journal should consist of evidence of the apprentice:

- using the correct tools and equipment to recover refrigerant;
- removing refrigerant from site for reclamation or disposal;
- completing statutory documentation.

Tasks mapped to RACHP Standard

The below mapping has been developed to support apprentices in mapping their evidence back to the apprenticeship standard and the professional interview. This mapping is not definitive and some apprentices may complete tasks which provide evidence of competence in other knowledge, skills and behaviours (KSBs) than those listed below.

Task		Area in Standard
Task 1: Jointing and system testing	Skills	<ul style="list-style-type: none"> • Mechanical Operations • Safe Working Practices
	Knowledge	<ul style="list-style-type: none"> • Legislation, Regulations and Standards • Underpinning Principles
	Behaviours	<ul style="list-style-type: none"> • All
Task 2: Evacuation and dehydration/commission and charge (Critical and Non-Critical)	Skills	<ul style="list-style-type: none"> • Safe Working Practices • Sustainable System Operation • Control Circuit Application
	Knowledge	<ul style="list-style-type: none"> • Legislation, Regulations and Standards • Underpinning Principles • System Fundamentals • Sustainability
	Behaviours	<ul style="list-style-type: none"> • All
Task 3: Reactive maintenance	Skills	<ul style="list-style-type: none"> • Safe Working Practices • Control Circuit Application • Mechanical Operation • Sustainable System Operation
	Knowledge	<ul style="list-style-type: none"> • Legislation, Regulations and Standards • Underpinning Principles • System Fundamentals • Sustainability
	Behaviours	<ul style="list-style-type: none"> • All
Task 4: Breakdown investigation	Skills	<ul style="list-style-type: none"> • Safe Working Practices • Control Circuit Application • Mechanical Operation • Sustainable System Operation
	Knowledge	<ul style="list-style-type: none"> • Legislation, Regulations and Standards • Underpinning Principles • System Fundamentals • Sustainability
	Behaviours	<ul style="list-style-type: none"> • All

Task		Area in Standard
Task 5: Fault finding and rectification (Electrical)	Skills	<ul style="list-style-type: none"> • Safe Working Practices • Control Circuit Application • Mechanical Operation • Sustainable System Operation
	Knowledge	<ul style="list-style-type: none"> • Legislation, Regulations and Standards • Underpinning Principles • System Fundamentals • Sustainability
	Behaviours	<ul style="list-style-type: none"> • All
Task 6: Routine maintenance	Skills	<ul style="list-style-type: none"> • Safe Working Practices • Control Circuit Application • Mechanical Operation • Sustainable System Operation • Application of Mathematical Principles
	Knowledge	<ul style="list-style-type: none"> • Legislation, Regulations and Standards • Underpinning Principles • System Fundamentals • Sustainability
	Behaviours	<ul style="list-style-type: none"> • All
Task 7: Refrigerant Recovery and Disposal	Skills	<ul style="list-style-type: none"> • Safe Working Practices • Sustainable System Operation
	Knowledge	<ul style="list-style-type: none"> • Legislation, Regulations and Standards • System Fundamentals • Sustainability
	Behaviours	<ul style="list-style-type: none"> • All

Knowledge, Skills and Behaviours covered in Professional Interview

Within the professional interview the apprentice will need to discuss and evidence, through their synopsis, that they are competent in the criteria below, which are set out in the standard.

Ref	KSB	Ref	Description
K4	Underpinning Principles	K4.1	Sound understanding of principles of thermodynamics, gas laws, psychrometrics, fluid flow, electricity, properties of refrigerant fluids and lubricants.
K7	Sustainability	K7.1	Understanding of environmental impact of refrigerants, maximising efficient system performance and mitigation of direct and indirect carbon emissions.
		K7.2	Understanding of environmental technologies employed in the sector such as heat recovery, low GWP refrigerants, and other equipment which can be used to reduce heat gain, cooling load or energy use.
S1	Safe working practices	S1.1	Installation, commissioning, testing, fault diagnostics, rectification of systems, component/refrigerant suitability and selection
		S1.2	Working with pressure systems and electrical circuits and systems
		S1.3	Evaluating and mitigating risks of refrigerants including toxicity, flammability and other potential risks or hazards to self and the general public.
		S1.4	Decommissioning, safe recovery and disposal of equipment and hazardous waste transfer
S5	Sustainable system operation	S5.1	Using system operating parameters for efficient performance to achieve measurable and sustained reductions in carbon emissions.
		S5.2	Routine and reactive service and maintenance, testing, fault finding, reporting and rectification.
		S5.3	Retrofitting and refilling of existing equipment to lower GWP refrigerants including safety, reliability and environmental considerations.
B1	Safety approach	B1.1	Disciplined approach to assessing, managing, mitigating and avoiding risk in a variety of situations to themselves, colleagues, the public and the environment.
B2	Strong work ethic	B2.1	Positive ethical attitude and behaviours including reliability, willingness to take responsibility. Commitment to completing tasks and ability to work as part of a multi-disciplined team.

B3	Logical problem solver	B3.1	Employs logical thinking, and determined attitude to problem solving and technical challenges.
B4	Focus on quality	B4.1	Attention to detail, following procedures, planning and preparation, verifying compliance.
B5	Personal responsibility	B5.1	Takes responsibility for work and interactions with colleagues, customers, suppliers or subcontractors.
B6	Communicates well	B6.1	Uses a range of communications methods effectively, positively and in timely fashion.
B7	Adaptable	B7.1	Able to adapt to changes in conditions, technologies, situations and a wide variety of different working environments.
B8	Self-motivated	B8.1	Willingness to learn and commitment to professional development and to applying principles of sound engineering and sustainability of engineering systems.

Professional Interview Grading criteria

Scope of Question	KSB	Pass Criteria An apprentice who...	Distinction Criteria An apprentice who...
Apprentice solves technical problems, explains their role and how they select the appropriate techniques, procedures and/or methods.	Safety Approach B1) Behaviour)	Follows safe working practice behaviours related to the tasks carried out	Achieves the pass criteria and in addition: Applies safety behaviours proactively and flexibly to a range of work environments, demonstrating ability to respond to changing circumstances Influences safety policy, for example by bringing to the attention of others changes required related to a task or project, or in their employers' policies.
Apprentice has taken action to prevent harm to people, equipment or data.	Safe working practices S1) (Skills)	Develops and works to risk assessments and safe working procedures	Achieves the pass criteria and in addition: Continually reassesses, monitors and communicates to others risks throughout the job being carried out and is able to contribute to the management of others in the work environment in order to mitigate risk and ensure the safe working practices of a variety of roles and tasks in a variety of work situations
Apprentice has taken action to evaluate and minimise environmental impacts.	Sustainable system operation S5) (Skills)	Uses data to ascertain system performance and implement modifications to reduce direct and indirect system emissions and takes into account overall environmental impact	Achieves the pass criteria and in addition: Works to reduce environmental impact across a range of new and existing systems consistently. Evaluates the potential to implement sustainable technology changes into existing systems, contributes to developing new ways of apply such technologies and influences the behaviour of others.

Scope of Question	KSB	Pass Criteria An apprentice who...	Distinction Criteria An apprentice who...
			Regularly applies a range of sustainable technologies

Scope of Question	KSB	Pass Criteria An apprentice who...	Distinction Criteria An apprentice who...
Apprentice can explain potential impact of systems on the environment, direct and indirect emissions.	Sustainability (K7) Knowledge)	Has awareness and understanding of sustainability issues for the RACHP sector and their personal responsibility for the environmental impact of systems they work with.	<p>Achieves the pass criteria and in addition: Can justify the use of a more sustainable technology and understands what actions they should be taking in the workplace to reduce environmental impact of systems.</p> <p>Understands how to evaluate the impact of different technologies to achieve more sustainable systems and improve the sustainability of existing systems.</p> <p>Provides a documented argument to justify adopting new more sustainable technologies to others</p>
Apprentice can explain what equipment is used, why, how data is gathered and analysed and how they initiated the project to produce the desired outcome. Apprentice uses scientific, technical or engineering principles to complete their project.	Underpinning principles (K4) Knowledge)	Can discuss knowledge of underpinning principles relevant to their job role	<p>Achieves the pass criteria and in addition: Demonstrates a greater depth of knowledge of a wider range of underpinning principles beyond their own job role</p> <p>Explains advanced principles, and proactively seeks to deepen their knowledge of those principles</p>
Apprentice uses data to make reports and support recommendations on work they have carried out to their employer or other people	Communicates well (B6) Behaviour)	Gives examples of a wide range of communication methods used to communicate with peers and customers, e.g. verbal communication or written communication in the form of diagrams/charts etc.	Achieves the pass criteria and in addition: Prepares their own communications to explain complex information effectively.

involved such as clients or suppliers.

Persuades and influences stakeholders involved in projects by selecting and using the most suitable method of communication

Scope of Question	KSB	Pass Criteria An apprentice who...	Distinction Criteria An apprentice who...
Apprentice identifies, plans, and organises the resources needed to effectively complete a project, explaining how they took into consideration cost, quality, safety and environmental impact.	Focus on quality (B4) Behaviour)	Follows instructions to support the importance of getting it right first time and assesses the potential implications if attention to detail is lacking Attention to detail in planning, documenting, preparing and checking	Achieves the pass criteria and in addition: Takes responsibility for ensuring a quality assurance system across a range of projects, for both their own work but also their team/project members
Apprentice can demonstrate their role and commitment to successful completion of a project	Strong work ethic (B2) Behaviour)	Takes responsibility for completion of own projects, taking ownership for own actions and identifying and working with appropriate team members	Achieves the pass criteria and in addition: Considers and adopts multiple solutions to challenges they are responsible for Consistently takes leadership in completion of projects by working proactively with all those involved in the project (team members, management and clients) to provide ranges of solutions responding to problems which arise in a variety of situations
Apprentice exercises logical problem solving in a working environment relating to completion of a project	Logical problem solver (B3) Behaviour)	Uses of logical problem solving and solution analysis	Achieves the pass criteria and in addition: Anticipates and avoids potential problems for themselves and others in a range of projects or technical challenges
Apprentice exercises adaptability in a working environment relating to completion of a project	Adaptable (B7) Behaviour)	Responds and adapts to changes to working practices within projects	Achieves the pass criteria and in addition: Proactively implements changes to own working practice within projects Influences others to implement changes in a variety of projects

Apprentice complies with professional engineering Institutions' Code of Conduct and Ethics (as defined below)	Personal responsibility (B5) Behaviour)	<p>Acts professionally at all times</p> <p>Maintains an awareness of impact of their own behaviour on their personal reputation and that of their employer, their customers and the engineering profession</p>	<p>Achieves the pass criteria and in addition:</p> <p>Takes the initiative to influence the behaviour and professional standards of others in work situations</p>
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Scope of Question	KSB	Pass Criteria An apprentice who...	Distinction Criteria An apprentice who...
Apprentice ensures they keep up to date with developments in their technical area and continues to develop their professional competence.	Self motivated B8) Behaviour)	<p>Is aware of factors that can influence performance</p> <p>Recognises how their own working style and team dynamics impact on a project's success</p> <p>Undertakes clearly directed work independently</p> <p>Makes use of learning resources provided</p>	<p>Achieves the pass criteria and in addition: Plans own learning and identifies appropriate learning resources related to projects</p> <p>Proactively seeks feedback on personal performance</p> <p>Influences and supports colleagues and the project team members by sharing learning resources with other project team members to improve working relationships</p>

Recording Forms

The recording forms in this chapter have been developed to support apprentices, employers and centres in the collation of evidence within this Journal.

As a minimum the following forms must be submitted to City & Guilds as part of the synopsis, in preparation for the Professional Interview

- Declaration of authenticity
- Evidence mapped to Professional Interview
- Evidence of three jobs, covering all seven tasks, that has been referenced and mapped to the standard's KSBs

It is not mandatory that all City & Guilds materials are used; if centres or employers have suitable alternatives they are encouraged to use these, however they must ensure they are able to clearly map evidence towards the Professional Interview.

1. Apprentice Development Journal Cover Sheet
 2. Declaration of Authenticity
 3. Evidence mapped to Professional Interview by Task
 4. Evidence mapped to Professional Interview by KSB
 5. Job sheets
 6. Witness and Expert Witness Sample Signatures
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Apprentice Development Journal Coversheet

Apprentice Details

Surname: Forename(s):

Address:

County: Postcode:

Home Tel: City & Guilds Enrolment No:

Awarding Details

Programme Title:

C&G Scheme/Complex No: Level:

Centre Details

Name: Centre No:

Address:

County: Postcode:

Telephone: Centre Contact:

Employer Details

Name: Work Based Mentor:

Address:

County: Postcode:

Telephone: Contact Name:

Evidence mapped to Professional Interview (by Task)

Task	Evidence Ref	Ref to KSB from Professional Interview
Task 1: Jointing and system testing		
Task 2: Evacuation and dehydration/commission and charge (Critical and/or Non-Critical)		
Task 3: Reactive maintenance		
Task 4: Breakdown investigation		
Task 5: Fault finding and rectification (Electrical)		
Task 6: Routine maintenance		

Task	Evidence Ref	Ref to KSB from Professional Interview
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Task 7: Refrigerant recovery and disposal

Evidence mapped to Professional Interview (by KSB)

KSB	Ref	Evidence Ref
Underpinning principles	K4.1	
Sustainability	K7.1	
	K7.2	
Safe working practices	S1.1	
	S1.2	
	S1.3	
	S1.4	
Sustainable system operation	S5.1	
	S5.2	
	S5.3	
Safety approach	B1.1	
Strong work ethic	B2.1	
Logical problem solver	B3.1	
Focus on quality	B4.1	
Personal responsibility	B5.1	
Communicates well	B6.1	
Adaptable	B7.1	
Self-motivated	B8.1	

Apprentice Progress Review

Date		Review Number	
	Name and Position	Signature	
Apprentice			
Employer Representative			
Centre Representative	If applicable	If applicable	
Last review date			
Actions carried forward from last review			
Evidence reviewed			
Evidence mapped to Professional Interview reviewed?	Y/N		
What is going well?			
Areas of development going forward			

Next Steps/Actions

Employer
representative
comments

Centre
representative
comments

Apprentice
comments

Job Sheet

Date		Time Job Completed	
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Tasks this job relates to:
Note one job may provide sufficient evidence against multiple tasks.

Task 1		Task 3		Task 5		Task 7	
Task 2		Task 4		Task 6			

Site Details (Location, Client)	
Colleagues	
Job Details	
Work Plans	

What went well?

What could be better next time?

Name

Signature



Witness Sample Signatures

Witnesses should read the statements below and sign their agreement.

I am suitably experienced and/or technically qualified as a Level 3 RACHP engineer and am able to provide evidence in the form of 'witness testimony' as evidence of this apprentice's competence.

I acknowledge that I will only countersign documentation/journal entries requested by the apprentice where to my knowledge only the apprentice has completed the work, and on the understanding that the work has been carried out to a commercially acceptable standard.

Name (Print)	Sample Signature	Phone No.	Date

Declaration of authenticity

Apprentice name	Apprentice Name	Enrolment number	
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Apprentice declaration:

I confirm that all work submitted is my own, and that I have acknowledged any sources I have used.

Apprentice	Signature	Date	DD/MM/YY
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Employer declaration:

I confirm that all work was conducted under conditions designed to assure the authenticity of the apprentice's work, and am satisfied that, to the best of my knowledge, the work produced is solely that of the apprentice.

Tutor/Assessor	Signature	Date	DD/MM/YY
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