Application form for MCIAT Professional Assessment

To apply for Chartered Membership you must meet one of the following criteria. Please specify:

- ❑ CIAT Accredited Honours and/or Masters degree and sufficient relevant evidence
- ❑ Related honours degree or equivalent and sufficient relevant evidence
- ✓ Other relevant academic qualifications or professional qualifications (e.g. Chartered Membership or equivalent of a related professional Institute) and/or sufficient relevant evidence

Each application will be considered on an individual basis. Please contact membership@ciat.global for further guidance in relation to your circumstances.

Sufficient relevant evidence is defined as: professional experience that demonstrates the ability to function in your field of expertise, using the ***2025 Professional Standards Competency Framework (PSCF)*** and related skills, knowledge, experience and behaviours (SKEB) stated in the Candidate Guidance notes against the core competencies; Designing, Managing, Practising and Developing (self).

Sufficient relevant evidence will be determined by a CIAT Member Assessment Panel, which will review and assess your application. The CIAT Member Assessment Panel is moderated by appointed Moderators to ensure quality and consistency.

You are required to:

- complete all sections of this application form;
- address all PSCF competencies;
- read the *Code of Conduct*;
- provide copies of academic and professional qualification/s;
- submit supporting evidence to corroborate your application; and
- submit payment of £375

Before completing the application form, please ensure that you have read the ***2025 PSCF*** and *Candidate Guidance Notes for Professional Assessment*, which include the related SKEB statements. Failure to complete all sections of the form, address the competencies and/or to provide sufficient supporting information will result in a delay in the processing of your application. All applicants must comply with the *Code of Conduct* before any assessments can be undertaken.

Once your application has been assessed and has passed Stages 1 – Educational Standards and 2 – Practice Standards, the Institute will contact you via email in relation to the scheduling of your Stage 3 – Professional Standards Assessment Interview.

Section A: Personal details

Surname	[redacted]
Forename(s)	[redacted]
Date of birth	[redacted]
Membership class or status and registration number	Affiliate [redacted]
Home address	[redacted]
Email address	[redacted]
Telephone number/s including mobile	[redacted]

Section B: Progression mechanism

It is important that you select your **primary** area of practice/experience:			
✓	Design	❑	Specialist
❑	Academic	❑	Research
❑	Other (please detail)		

Section C: Current employment/practice status

Job title and employment commencement date	Retrofit Coordinator & Designer – 2021 to Present
Description of current role, responsibilities and functions (listed as concise bullet points)	Overseeing domestic retrofit projects from inception to completion in accordance with PAS 2035, including: • liaising with owners, occupants, and the principal contractor throughout each project • oversee the assessment of dwellings • identify and schedule Energy Efficiency Measures (EEM), with an overall scope for improvement up to 2050 • obtain/assist with statutory approvals when required • inspect works during and post construction to confirm compliance with PAS 2035 and building regulations • undertake post-completion evaluation Overseeing/preparing designs and specifications for EEM(s), including: • specifying products, materials, processes and required standards. • produce technical drawings for the corners, junctions and edges of all affected building elements • produce 2D & 3D fRsi calculations to ensure the internal surface temperature is above the critical temperature factor thresholds • undertake hygrothermal risk assessments (WUFI) • identify the location and severity of any existing construction defects and produce a remediation strategy • produce a specification for upgrading the ventilation in accordance with Part F when necessary. • undertake toolbox talks with site supervisors at the start of the construction phase • review third-party designs from specialist designers
Employer/practice name	[redacted]
Employer/practice address	[redacted]
Work telephone number	[redacted]
Work email address	[redacted]

Section D: Previous professional experience

Please provide details of **relevant** roles, responsibilities and functions performed in previous employment (list as concise bullet points)	**From**	**To**
Energy Assessor (Part Time) *Company:* [redacted] Surveying conventional and traditional properties for energy efficiency measures, including heat pumps, cavity wall, solid wall insulation and loft Insulation.	2017	2021
Project Manager *Company:* [redacted] Project management of new builds <u>Key Responsibilities</u> • Oversee designs to meet thermal targets and ventilation requirements • Ensuring projects meet all relevant building standards • Source all materials and ensure projects are within budget • Monitor progress and provide regular reports on the status of each build • Conduct briefs with subcontractors for understanding of project specifications and schedules • Resolve issues during construction and commissioning • Maintain a safe working environment	2015	2020

Section E: Qualifications

Academic qualification/s, professional qualification/s or memberships and Continuing Professional Development (CPD) records. Your evidence of CPD should relate to section G/Stage 2 - ***Developing (self).***	Year of attainment

Academic Qualifications

Level 5 Diploma in Retrofit Coordination and Risk Management	2021
Level 4 Award in Domestic Retrofit Assessment	2022
Level 3 On Construction Energy Assessor	2024
Level 3 Award in Energy Efficiency Measures for Older and Traditional Buildings	2021
Level 3 Certificate in Surveying and Calculation of Building Heat Loss	2023
Level 3 Award in Understanding Electrical Obligations for Heat Pump Installations	2023
Level 3 Certificate in Domestic Energy Assessment	2021
Level 3 Computer Aided Draughting and Design	2002
Level 2 Two-Dimensional Computer Aided Design	2002
Level 7 Certificate in Hygrothermal Risk Assessment (TU Dublin)	2025
Level 7 Certificate in Thermal Bridge Calculation (TU Dublin)	2025
MSc E-Commerce Technology (With Distinction) - *Won 'The Shroder Prize' award for best overall performance*	*2005*
BSc (Hons) Combined Studies Integrated Studies (First Class Honours)	*2004*

Professional Qualifications

Chartered Construction Manager - MCIOB	2024

Memberships/Certifications

2D & 3D Psi Value Modeller Competency Scheme Member	2024-2026
U Value Competency Scheme Member	2024-2026
Certified Passive House Designer	2024-2029
NICEIC Domestic Ventilation	2022-2027

Continuing Professional Development (CPD)

RIBA Principal Designer Course (CDM Regulations & Building Regulations)	2025
CABE - Certificate in Building Control	2025
Passivhaus Retrofit Delivery Course	2025
CIOB - Championing Circular Economy in Construction	2025
CIOB - Building from the Ground Up	2025
CIOB - Building Safety Act General Update	2025
External Wall Insulation (EWI) Best Practice	2025
PAS2023 Overview including Design and Site Visits	2025
What Retrofit Coordinators Need to Know About Retrofit Design	2025
WUFI Pro: Heat & Moisture Simulation Workshop	2025
BSRIA - Mould in Buildings	2025
BRE Academy - BIM ISO 19650 Foundations	2024

Psi Value Competency Training	2024
BSI - An instruction to BS40104, Retrofit Assessment for domestic dwellings	2024
CABE - The Art of Structural Defects	2024
CIOB - Design & Development for Sustainable Architecture	2024
CIOB - Assessing External Wall Insulation on Non-Traditional Buildings	2024
CIOB - Driving Sustainability in Construction	2024
CIOB - The Role of Technology in Sustainability	2024
CIOB - Carbon Challenges in the Built Environment	2024
RdSAP 10 Update Training	2024
New Build Defects and Changes to Regulatory Environments	2024
Using WUFI for Assessing Moisture Risk in Retrofit	2024
Introduction to THERM course	2023
Fire and Smoke Access Solutions	2023
Improving Design and Building Efficiencies	2023
Insulating Flat Roof and Balconies	2023
NHBC Groundworks Webinar	2023
RICS Residential Property Defects	2023

How to do a Damp Inspection Properly	2023
An Introduction to Professional Ethics	2023
Building Survey Masterclass – Grade II Listed	2023
Common Building Defects and Decay	2023
How to Write a Good Survey Report	2023
Heat Loss & Hydronics	2022
Retrofit Assessor Training Course	2021
Heat Loss Calculation & Heat Pump Surveys	2021

Section F: - Stage 1 - Educational Standards

The educational experience and underpinning knowledge are based upon CIAT Accredited Honours and Masters Degrees and as such holders of these awards are exempt from this section as having achieved the necessary standard through study. However, applicants who do not possess an Accredited award must demonstrate how their educational awards and/or experience satisfy the Educational Standards (Stage 1) listed within the **2025 PSCF.**

The summary should specifically relate to the discipline of Architectural Technology and should consist of 3000- 5000 words (+/- 10%) in total and provide references to any relevant supporting evidence that demonstrates your knowledge (N.B. This does not normally include project/work-based evidence).

If you have a CIAT Accredited Honours or Masters degree you are exempt from this section.

E.1 - Local, social, technological, environmental, historical, contemporary, economic, political, legal and ethical factors that inform and influence the discipline and practice of Architectural Technology.

I have gained knowledge and understanding of factors that influence the discipline and practice of Architectural Technology primarily through work-based experience, with historical and local factors through training courses, including (Appendix Q1), and CPD events from conversation experts, such as (Appendix C1). Both taught me how local factors had a heavy influence on construction methods and styles historically, due to the availability of materials, and how methods have changed over the years.

My full-time move into Retrofit was due to political, legal and environmental factors from government policies, such as the Clean Growth Strategy and Net Zero Strategy. The subsequent funding made available to decarbonise homes caused many people to move and retrain in this specialism, like myself.

From the very start of this journey, I found that social factors following the Grenfell Tower Disaster caused huge resistance in the use of flammable materials, even in dwellings. This is now influencing the materials I specify in the design of projects, particularly with external wall insulation, to reduce the resistance from occupants and clients. And coupled with the unease from insurance companies and ethical factors such as sustainability and social responsibility, more sustainable A1-rated materials are all my clients will install.

I have also found that economic factors, through fuel price increases, are driving my social housing clients to drastically reduce running costs for their most vulnerable occupants, through the use of renewable technologies, and well above their legal obligations.

Although I have only been practising Architectural Technology full-time for the past few years, I have noticed a huge difference in the technological advancements/adoption of technology since design classes at school and a work-based placement with a local architect many years ago. Today, I use software to analyse the building performance, including 2D/3D numerical modelling and hygrothermal numerical simulation to ensure the building performs efficiently and there are no moisture-related risks in a proposed detail/construction makeup; something not widely adopted in the early 90's.

E.2 - Client, user and stakeholder needs through the analysis and interpretation of the nature of a project, including the evaluation of context to determine a project scope.

Having worked as a project manager earlier in my career, I gained experience in understanding the needs of the client to determining the scope of a project. My experience has taught me that a project scope needs clear boundaries and objectives, outlining the goals of the project, what it features, what needs to be delivered, a budget and a deadline. It must also define what is not included in the project. With this understanding, a project scope statement can be created, approved by all stakeholders, and

then made available to everyone. This statement ensures everyone has a common understanding of the work to be done and what success will look like.

I have demonstrated my knowledge in this area when I completed my professional assessment with CIOB to become a Chartered Construction Manager (Appendix M1).

In my current role, I was taught from the Retrofit Coordinator course (Appendix Q2), that the scope of a retrofit project needs to be determined in line with the requirements outlined in PAS 2035.

This process first requires an evaluation of the existing property, with the Coordinator identifying measures that can be installed. A document called 'Improvement Options Evaluation' must then be created. This document should simply outline appropriate measures with the estimated capital cost, fuel cost savings, payback period and the carbon cost effectiveness defined. The coordinator must then review this with the client, to make the benefits of each measure understandable.

The designer must be given access to this document pre-design phase, and the principal contractor/PAS 2030 installer, pre-construction phase. The evaluation of the project determines if the agreed-upon intended outcomes have been achieved.

E.3 - Holistic building design in a range of typologies informed by current practice within the discipline to generate resilient, sustainable and inclusive design solutions.

During my Retrofit Coordinator course (Appendix Q2), the modules covering Building Physics provided me with an awareness of the unintended consequences caused when a design only focused on single-measure retrofit installation, such as mould, condensation and damp, and performance gaps. This made me aware that a holistic approach, as mandated by PAS 2035, will help prevent these issues by considering the entire building's physics and how measures interact with others.

I was taught that this approach in retrofit must start with a Whole-House Assessment, which fully evaluates the condition of the property, its construction type and its existing ventilation, to establish a baseline. A comprehensive design can then be developed, which is long-term, and considers how all energy efficiency measures (including insulation, heat pumps, ventilation, airtightness, windows, etc) work together. Furthermore, how risks can be mitigated when retrofits are staged over many years, and which measures should be installed together to prevent unintended consequences.

Following this course, working on real projects has provided me with further understanding and awareness. The goal is not just about energy reduction; it is about creating warm, healthy, and comfortable homes whilst managing moisture control effectively.

Whilst I have only been involved in domestic properties throughout my career, I have experienced many different construction methods and systems. Most recently, I worked on Airey and British Iron and Steel Federation (BISF) houses, which included external wall insulation (EWI) and replacement doors & windows at Stage 1 in the retrofit program. Working on these projects taught me there are considerable differences to standard construction types, and you may not be able to follow standard practices when creating a resilient design solution.

One of the most commonly used best practice EWI details for the floor-wall junction would have resulted in moisture risks both before floor insulation was installed as well as after, resulting in a failure to comply with BRE IP 1/06. More extensive works were required on this project to eliminate this risk.

(I sought advice from a professional with experience in non-traditional building during this project)

E.4 - Architectural and technological principles of structure, fabric and service systems to create concepts and develop design solutions in complex contexts when working independently or as part of a team.

During my Retrofit Coordinator course (Appendix Q2), the modules covering Building Fabric and Building Services taught me fabric and services principles in my current specialism. I've also been taught similar principles for low-energy buildings through the Passive House Designer Course (Appendix M2), which focused on new-build residential dwellings, but also covered some complex passive house buildings my tutor was involved in. These included principles applied to the Erne Campus, a passive house university in Ireland and The House at Cornell Tech, the tallest passive house building at the time of construction, based in New York.

By undertaking the Certificate in Building Control course (Appendix C2), I reinforced my knowledge from work-based experience in structural principles by learning the functional requirements relating to structure in the Building Regulations 2010 and an in-depth look at the guidance in Approved Document A.

Through work-based experience on new building properties, I've gained experience with some more complex structural situations where I've had to obtain engineered solutions from specialist designers, such as lintels for spans greater than 3 meters (Appendix D1) and wind posts to provide lateral stability for walls exceeding 12 meters in length. On a more recent project involving EWI, I came across finlock gutters and requested the client obtain a structural engineer's reports pre-design, to determine if these could be cut/removed (Appendix D2).

The Passive House Designer Course (Appendix M2) also taught me how to improve the performance of structural elements of a building, from simply reducing the chi-values from conventional wall ties by using a basalt wall tie, to stress-bearing structural breaks, such as steel-to-steel and steel-to-concrete connections in balconies.

E.5 - Science and engineering of construction and environmental performance, including building physics, fire engineering and pathology relating to the analysis, evaluation and application of appropriate methodologies when designing or working on new and existing buildings. The latter can include conservation, maintenance, retrofit, renovation and/or change of use projects.

Building science is a particular interest of mine and an important subject in my current role. I have focused much of my CPD over the past 4 years on developing my knowledge in this area. I started out learning about building pathology in the RICS Residential Property Defects series (Appendix C3), the module 'Assessing the Condition of Dwellings and Recording Defects' (Appendix Q4) and the building pathology sections in the Older and Traditional Building course (Appendix Q1) to understand why buildings deteriorate, fail, or underperform. I've also attended some masterclasses, such as Grade II Listed in Long Thurlow (Appendix C1), where an intrusive investigation was undertaken to see the deterioration caused to a timber frame building with wrongly installed cement-based render.

Undertaking numerical modelling to assess the risk of mould and condensation with design details was initially self-taught. However, I've completed a number of courses to expand my knowledge and to demonstrate competency in this area, including the PSI value competency course (Appendix C4) covering 2D and 3D modelling with TRISCO and a level 7 Thermal Bridge Calculation module (Appendix Q4) from TU Dublin.

I have further completed test cases to join the 2D and 3D Psi Value Competency Scheme (Appendices M3 & M4), so I can undertake linear thermal transmittance calculation when required for new build EPC certificates using the full SAP methodology. This also allows me to undertake temperature factor

calculation for thermal bridge analysis and evaluation in retrofit projects, following BR 497 conventions in accordance with IP 1/06.

I've also obtained further knowledge by completing the level 7 Hygrothermal Risk Assessment course (Appendix Q4) from TU Dublin, which looks at the transient analyses of heat, air, and moisture flow in buildings using WUFI. I use this knowledge to predict if there will be any moisture-related damage, like mould, rot, or corrosion, with the materials I specify in a construction, by simulating temperature, relative humidity, and water content over time.

E.6 - Health and safety requirements when generating design solutions to ensure welfare, safety and security of all stakeholders during the life cycles of buildings, including legal requirements.

Having completed the Certificate in Building Control course (Appendix C2), I learned many of the legal requirements and guidance to make buildings safe to use. All of which need to be followed when generating design solutions.

Through my continued professional development, I have learned about health and safety requirements during the construction phase, including the recent RIBA Principal Designer Course (Appendix C5), which focused on the CDM PD and BR PD roles within the construction industry. This course covered the identification of risks and hazards, but what I realised most is that a designer's solution fundamentally affects the health and safety of those who will construct it. Furthermore, the designer's solution affects health and safety through the entire life cycle of the building, encompassing ongoing maintenance, repair, refurbishment, use, and demolition of the structure at the end of its life.

In my specialism, there is a large focus on the health and safety for in-occupation use of buildings and how poor design solutions don't just have an impact on potential damage to building finishes, fabric, and structure, but can also cause serious health risks to its occupants.

Through several courses, especially the 'Building Physics – Managing Moisture Risks' module (Appendix Q2) and Hygrothermal Risk Assessment course (Appendix Q4), I've learned that occupants' comfort, health, and safety depend on control and management of the flows of heat, moisture and air through buildings, so design solutions must ensure dynamic thermal and moisture equilibriums are maintained. I learned it is important to achieve good internal air quality for the occupant's well-being, with indoor relative humidity ideally maintained between 30% and 60%. Furthermore, I understood design solution must achieve a dynamic thermal and moisture equilibrium, to protect the building fabric against moisture accumulation, rot and decay.

E.7 - Compliance with legal and regulatory requirements such as health and safety, including fire safety, as well as the use of advances in construction and sustainable technologies to design holistically from first principles, for production, sustainability, performance, quality of life and social wellbeing.

In 2024, I undertook self-development by completing the Passive House Designer course (Appendix M2) and the On Construction Energy Assessor course (Appendix Q5). I completed these courses primarily for the design of my own home, to model its energy performance, using SAP for Part L compliance and PHPP to undertake advanced modelling.

With this knowledge of PHPP, I learned how to optimise designs to test different design variations, material selections, and system specifications, to find the most cost-effective and efficient solutions for a given climate. This knowledge can further be used to innovate/experiment with new ideas, designing from first principles rather than just iterating on existing designs/techniques, and accurately predict how a building will perform holistically.

Within the Passive House Designer course, there were some problem-solving exercises. Part of one problem involved meeting a targeted u-values for a wall construction. My solution involved the use of Structural Insulated Panels (SIPs), with the use of fire-rated plasterboard internally. This met the required u-value for the task, but also the requirements of Part B for fire safety. This approach was also more sustainable than using a conventional construction, as SIPs have lower construction waste by using pre-cut, precisely manufactured panels, and responsible SIPs manufacturers use recycled insulation. Another task involved the design of an MVHR system in flats, and I specified a centralised system with fire dampers and actuators where the ducting passed through a fire compartment.

Being able to accurately predict how a building will perform can eliminate the performance gap often seen in construction, and with the use of PHPP, overheating risks can be accurately modelled for a given climate. This ensures a design promotes well-being and boosts the quality of life of its occupants.

E.8 - Designing building elements and components, the use of materials, methods and their assembly, used in the construction and adaptation of different building typologies to critically and correctly detail and specify effectively and efficiently functioning buildings in accordance with applicable regulatory and technical standards.

Correctly evaluating materials used in the building assembly in my specialism is of importance, especially with the installation of internal wall insulation on solid brick buildings, due to the inherent risk of interstitial condensation or joist end rot with this method.

To ensure designs are functional and safe, I undertook a Hygrothermal Risk Assessment course (Appendix Q4), focused on transient simulations using WUFI in accordance with BS EN 15026, but also steady state analysis in accordance with BS EN ISO 13788. This course taught me how to critically evaluate the build-up of the wall, in its context and condition, using different materials, for realistic simulations of heat and moisture transfer in the construction.

From this course, I can now evaluate risks and make informed decisions when specifying materials for all building types, and comply with BS 5250:2021 when prescriptive guidance is not acceptable.

For Part L compliance, in meeting the minimum fabric standards, I undertook a U Value competency training course and completed test cases to become a U Value Competency Scheme Member (Appendix M5). This allows me to accurately specify materials and thicknesses that meet the minimum standard in Part L, in accordance with BR 443.

Furthermore, I have undertaken several training courses to accurately model thermal bridges (Appendix Q6), (Appendix C4) and (Appendix C6), following the conventions set out in BR 497, to ensure construction details I produce are compliant with IP 1/06 and exceed the critical temperature factor at all corners, edges and junctions within a building to avoid mould growth. I have joined a competency scheme for both 2D and 3D modelling (Appendices M3 & M4), undertaking annual test cases to remain a member.

E.9 - Current technological practices to make data-driven decisions in a collaborative working environment based on and through the application of processes and technologies for modelling, production, management and communication of information.

My work-based experience has taught me that the use of a Common Data Environment (CDE) is fundamental in how we design, construct and maintain buildings. Creating and sharing digital information models and documents about projects, through the broader term of Building Information Modelling, encourages secure and collaborative working between everyone involved, including the design and construction teams, and those who maintain and use the building in occupation.

Through my work, I've experienced that the communication of information is critical. Providing information in a single environment, which is accessible to stakeholders, in a suitable format and at the right time, helps make better decisions and avoid errors. By using a suitable format, stakeholders can better understand the design and construction sequence, leading to more informed decisions regarding design options, material ordering, and scheduling.

The use of a CDE then allows for management of information throughout the lifecycle of the building, as long as the data is accurate and consistent. Using an adequate CDE, future tasks can be automated, such as ongoing maintenance requirements of building services, which can result in cost savings and cost avoidance from potential downtime of unmaintained services.

E.10 - Procurement methods and contract administration, architectural practice, design leadership, management roles and functions (including, principal/lead designer, design management, project management, information management, compliance plan management, etc.) and professional behaviours, conduct and ethics.

In 2014, I demonstrated my knowledge of construction management by becoming a Charter Construction Manager (Appendix M1). Through this process, I had to demonstrate my knowledge of leadership and management of projects.

This process included demonstrating knowledge of commercial, contractual and legal issues, including procurement methods. I discussed public tender processes I have been involved in, with fixed price procurement contracts.

When asked about Managing Quality, through the use of quality assurance processes and procedures, I demonstrated my knowledge by discussing the inspection processes I use to ensure all work undertaken is compliant before the 'sign-off,' or detail remedial actions that are required.

In a question on Managing Information, I discussed the use of a Common Data Environment one client was using, its shortcomings, and steps implemented for improvements.

The final two questions involved Professional Judgement and Responsibility, and Commitment to abide by the Rules and Regulations of Professional Competence and Conduct. For these, I discussed incidents I was involved in, how they didn't follow professional behaviours, conduct and ethics, nor CIOB rules, and what I did to resolve them. I have to commit to following these rules for professional behaviour to remain a member.

In addition to this, I have undertaken continued professional development in ethics (Appendix C7), and I have to complete mandatory CPD in ethical practice each year to enhance my knowledge and to remain a member of the CIOB.

By undertaking the RIBA Principal Designer Course (Appendix M2), I reinforced my knowledge of management roles and functions and learned more about the new BR Principal Designer role and responsibilities.

E.11 - Continual learning to maintain currency and awareness with existing and emerging topics, technologies and practices that inform the discipline. This includes specialisation relating to new and emerging professional and industry trends and continuing professional development, in a range of roles and functions, to maintain competency.

I've learned from experience the benefits continuing professional development has. It allows me to maintain and develop my skills and gain new skills in evolving trends and technologies within my

profession. I realised this keeps my knowledge and competencies current, as academic qualifications have a limited shelf life.

Under clause A7a of the CIAT code of Conduct, Associate and Chartered Members (B7a for Affiliates), shall "*keep themselves informed of current practices and developments appropriate to the type and level of their responsibilities*". To achieve this, the Institute requires that a minimum of 35 hours of CPD be undertaken every year.

Over the last 4 years, I have completed in excess of 500 hours of CPD, in addition to academic qualifications. Some of this I considered necessary after self-reflection, to remain competent within areas I practise, whilst others were to gain new skills in more specialised areas of my practice, to offer new services and demonstrate competency to clients.

One of the most evolving topics recently is around safety, since the 2017 Grenfell Tower Disaster, with the introduction of the Building Safety Act 2022. This aims to enhance accountability, transparency, and safety throughout the lifecycle of buildings and has impacted the work of everyone in the construction sector, and not just HRBs. To keep informed on this topic, I have completed CPD such as Building Safety Act General Update (Appendix C2) and RIBA Principal Designer Course (CDM Regulations & Building Regulations) (Appendix C5).

I realise I still have shortcomings in this and other areas, but I understand that creating a development plan through self-reflection is a good way to overcome these. My plan for 2026 includes undertaking the Level 6 Certificate in Fire Safety to gain a qualification and competency relating to fire safety.

Section G – Stage 2: Practice Standards - Practice Assessment

The Practice Assessment process assesses the performance of practitioners that work across a range of functions and allows candidates applying for Chartered Membership to outline/describe their SKEBs in their chosen field/s to demonstrate their capabilities.

Applicants must demonstrate their practice experience and directly correlate this to the four core competency areas listed in the Practice Standards (Stage 2) within the 2025 PSCF.

Please provide a summary of your practice experience, past or present, which specifically relates to the discipline of Architectural Technology and which consists of 2500-3500 (+/- 10%) words in total (i.e. 150-200 words per Practice Standard).

You must describe how your experience within your sphere/s of practice in Architectural Technology demonstrates a comprehensive application in each area. Your evidence must corroborate the information provided and **demonstrate your professional experience. This evidence will be assessed prior to your Professional Assessment Interview by a Member Assessment Panel.**

Designing	**D.1 - Analysing and interpreting instructions/briefs to determine the project scope for design deliverables, including all stakeholder requirements.** Understanding stakeholder requirements is essential on all projects. A new project I'm involved in as the Retrofit Designer involves the improvement of 12 blocks of flats for [redacted]. They are looking to install External Wall Insulation through SHF Wave 3 funding. On this project, a site inspection was arranged with me, the clients, the Principal Contractor and the Agent, to determine the project scope (Appendix D3). I listened to the client's brief and then walked around, and inside, each block. I discussed certain areas that would affect the design and obtained feedback from the client to determine if these were in the scope of the project. Some areas were in the scope, such as replacing windows; others were initially not, such as removing/cutting finlock gutters, but they had extra budget available to cover this, and it was agreed that this work would be included. This inspection at a preliminary stage allowed me to understand the client's instructions, the budget, and analyse the project first-hand. It allowed me to get an immediate response/thought to missing information, it allowed the client to understand the works involved and the Principal Contract to plan and cost more accurately. **D.2 - Creating design solutions for project(s) based upon architectural and technological design principles through the design, integration and co-ordination of structure, fabric and services.** Within my current role, I often deal with improvements to a property that affect the structure, fabric and services using multiple contractors involving specialist designers. I coordinate with all designers to ensure designs work together. With this designer (Appendix D6.1), I alerted them of the additional fabric measures that were planned for the property, as this would have an effect on the functionality of the service measure being installed. With the same project, both contractors needed to understand how the pipe penetrations through the structure worked with the EWI system. Sealing of the EWI system must be completed "by personnel who have been trained by PPG or to PPG's requirements", therefore, the contractor installing the service measure could not install and seal the system after the EWI was completed. I completed a simple design (Appendix D6.2) showing materials and installation instructions, with the responsibilities of both contractors. This was further discussed at a weekly meeting.

D.3 - Developing design solutions that are inclusive, safe, resilient, robust and sustainable.

I ensure designs are inclusive by specifying all materials and products individually for each detail (Appendix D4.2), or at a project level.

I create safe designs by cross-referencing regulations and best practices. In this detail for a gas delivery pipe (Appendix D4.1 & D4.2), I cross-referenced the INCA specification for the safety and operation of fuel-burning appliances in EWI systems (Appendix D4.5). I obtained the minimum spacing around gas pipes for future maintenance, and the minimum ventilation free area, so there would be no significant buildup of flammable gases in the event of a leak.

For resilience and robustness, I consider the materials, their installation methods and maintenance requirements, with reference to their designed life span. In this detail (Appendix D5), I followed best practices to ensure there is adequate sealing around windows to reduce the risk of water penetration, with the use of hydrophobic sealing tape (up to 30-year life span) and a mastic sealant (5-10 year lifespan). In the event of the mastic sealant degrading, the sealing tape will help to prevent water ingress until the mastic sealant is replaced through regular maintenance.

For sustainability, I specify more sustainable materials and promote recycling when possible. In my current role, this is challenging, as warranties are based on following a system supplier's specification, and cannot be deviated from.

D.4 - Designing and specifying critically evaluated systems, components, materials and methods used within a project to satisfy both production and building performance parameters.

In the detail for the gas delivery pipe (Appendix D4.2), my design was to detail around the pipe. This was partly for cost, as it's around £[redacted] to be moved by the gas distribution network, but also production, as it's normally 4 weeks+, for these to be moved.

Before I did this, I first evaluated its performance by creating a 3D numerical model (Appendix D4.3). By following BR 497 conventions, I calculated the temperature factor to ensure it met or exceeded the critical temperature factor of 0.75, in line with BRE IP 1/06, and calculated the point thermal transmittance to see the total heat loss this detail would cause.

My initial design (without a vented cover) passed, but only just, and on evaluating this, I decided to specify a cover to improve the performance (sheltered surface resistance and lower conductivity brickwork). I did this as real-life installations are not ‘perfect’ like the model, so there is some allowance in the design. The client was happy with the additional cost as it was minimal (£[redacted]), and it improved aesthetics (Appendix D4.4).

In this design, there is an aluminium track. I do not like specifying materials like this due to their poor thermal conductivity; however, this is part of the system supplier's specification. To help improve its performance, I created a thermal break by specifying sealing tape at the back of all aluminium tracks to interrupt the path of heat flow.

	D.5 - Ensuring that the design solutions comply with contractual, regulatory and legal requirements for each stage of the project. I ensure my design work complies with Building Regulations 2010 by following the appropriate Approved Document guidance for the project. This includes Part L to ensure the limiting u-values for existing elements in existing dwellings are met (Table 4.3) (Appendix D6.3) and Part F to ensure there are adequate ventilation provisions (Appendix D6.4). I further undertake modelling (Appendix D4.3) to ensure design details comply with BRE IP 1/06 guidance and PAS 2035 requirements. To maintain best practice, I refer to guides for Retrofit, such as the Weathering Guide for EWI (Appendix D6.5), and when reviewing designs from specialist designers, such as heat loss calculations, I ensure they follow CIBSE Domestic heating design guide or request changes (Appendix D6.6). My designs are audited as part of quality and compliance checking by my scheme provider for PAS2035 retrofit projects (Appendix D6.7), as well as being audited by TrustMarks Quality Assurance process for government-funded schemes. Before installation commences, the contractor/principal contractor confirms that the design I provide "is complete, conforms to this PAS, can be fulfilled at the location specified and that the proposed installation does not result in noncompliance with statutory requirements and/or generally accepted industry good practice" Fortnightly meetings are held to ensure contractual requirements are being met (Appendix D6.8). At RIBA stage 2, I generate and appraise design concepts to ensure the stage 1 retrofit process will meet my contractual requirements and the owners' legal requirements by 2030 (Appendix D6.8).
Managing	**M.1 Leading or managing design projects independently and as part of a team within the scope of their responsibilities.** Within my projects, I work independently and as part of a team, but due to the nature of the projects, I often work independently through the design stage when no other disciplines are involved, as projects are small. Working independently requires self-governance and discipline with clear planning (Appendix N2.1). I use tools to organise and track tasks, breaking down tasks into smaller steps (Appendix N1.1), and focus on high-impact tasks before moving to smaller items. I also document everything, keeping clear records of decisions made, and track progress and stages of projects within a CRM I developed (Appendix N1.3). When working as part of a team, I understand my own responsibilities when managing design projects, but I also understand the roles of others. I define standards for quality, and ensure everyone understands them, empower people by giving members responsibility to make decisions (Appendix N1.2), understand mistakes by providing guidance when necessary, and acknowledge good work to boost morale. This all helps in creating a successful project. **M.2 Managing and controlling project contract deliverables in accordance with planning and programming requirements.**

	I manage project contract deliverables by aligning my schedule (Appendix N2.1) with project programs and milestones. This allows me to resource my time correctly so that services promised are delivered on or before deadlines and to the expected quality. By aligning my schedule this way, I'm able to coordinate between multiple projects for multiple clients, ensuring projects do not exceed my own capacity. With each contract, I have fortnightly meetings to discuss progress, issues and future projects. After or during these meetings, I allocate time accordingly for future work and rearrange my schedule if project milestones change. Each day, I allow 1 to 2 hours for urgent work that may arise (Appendix N2.2). This ensures my ongoing program is not affected and I can deliver a response/service within a short timeframe. **M.3 Identifying and assessing design risks to mitigate impact on the project brief, people, climate and natural environment.** During the early stages of a project, I identify design risks within my responsibilities. These include risks that can have an impact on the project costs or cause project delays. I document these and then engage with the stakeholders. (Appendix N3.1) is a snippet from an early-stage assessment from a shared document I populate. On this occasion, a meeting was conducted with the Principal Contractor. Each property was discussed one by one to analyse the risks and determine how the risks can be mitigated. A strategy was formulated, and the document was updated, turning from red to green when the project can proceed to design or installation. Some risks on this project could not be mitigated, such as birds nesting in the eaves. The design was completed, but the installation was paused until the chicks fledged. This affected the order of the program, as the adjacent property was also paused to reduce the impact of noise on neighbours. **M.4 Effectively and efficiently managing the planning and execution of design and work, addressing conflicts and resolving issues that may arise.** By efficient planning, I address and resolve issues early, so they are easily resolved and not repeated. (Appendix N4.1) details a project with a new contractor. I was able to resolve a design conflict where a designer incorrectly calculated the heat loss through the ground floor. I supplied guidance from the MCS Design Standard (Appendix N4.2) and a calculation showing the effect this would have. This highlighted my knowledge and skills. The contractor on this occasion completed a new design themselves, and they found the results matched my comments and calculations. This potentially avoided costly future alterations with undersized emitters, affecting the welfare of the occupant. With installations, I undertake a site inspection within the first 3-5 days of commencement. This allows enough time for works to start, but not to progress too far, so issues can be resolved. On a recent project, the design specification changed partway through the project, with the site supervisor having the original

	specification. This affected the quantity of mechanical fixings to be used. A site inspection (Appendix N4.3) identified this, and it was easily resolved. More concerning, one design aspect was not followed (insulating door reveals), and there appeared to be no intention of doing this. I discussed this with the supervisor, highlighting its importance, and evidence was provided the following week (Appendix N4.2). No repeat issues occurred after. **M.5 Managing risk, compliance and approvals with the statutory and regulatory processes and procedures.** To manage compliance with statutory and regulatory requirements, I undertake site inspections on high-risk projects fortnightly (Appendix N2.1) and on a risk-based approach for lower risk projects, appropriate to the complexity and size of the project. I create reports for each inspection (Appendix N5.1) and take photographic evidence to record progress and demonstrate that work is being carried out in compliance with Building Regulations and the design. I also document non-compliances of work and report this to the Main Contractor/Retrofit Installer, and the client, in line with my regulatory requirements. I often undertake these site inspections with a second person, independent of the installer, to help spot potential problems. At an early-stage evaluation, I compile a list of works that affect the risk, compliance and approval of a project (Appendix N5.2). These are discussed at regular meetings, with the input of several individuals, to determine how risks can be mitigated and compliance achieved, so the project can progress.
Practising	**P.1 Applying and using current and emerging technologies in building design, ensuring that buildings and/or assets perform efficiently, effectively, safely and sustainably.** Within my current role, I produce architectural drawings using AutoCAD and use building physics software for modelling, analysing and optimising the building envelope, including WUFI 7 and Trisco 16. Using these technologies helps me promote efficiency during the design process, and ensure the building design will perform efficiently, effectively and safely in use. (Appendix P1.1) is a report I created to assist another professional in analysing the building envelope using WUFI 7. This was to determine if there is a risk of mould growth forming behind an IWI system, using the materials they specified. When developing whole-house strategies for retrofit, I have sustainability targets to achieve. In the short term, these are just to achieve a minimum EPC C rating, but in the longer term, to be carbon neutral by 2050. I evaluate a range of technologies in this process, including the installation of many low-carbon/renewable technologies such as heat pumps, waste water heat recovery and solar photovoltaics systems. I develop a plan (Appendix P1.2) with these technologies installed at the most appropriate stage in the retrofit process, to promote sustainable technologies and meet clients' environmental objectives and legal obligations.

	P.2 Interacting and collaborating professionally with stakeholders, agencies and clients. I approach all interactions with stakeholders, agencies and clients with professionalism to build trust, establish clear communication channels, and work toward shared goals. I interact through many types of media, including email, phone calls, sms and face-to-face exchanges, and I always aim to represent myself and any businesses I represent in the best possible way. When I initiate a meeting, I send out a meeting invite and ensure there is an iCalendar file attached, so it can be added to their schedule. I add a relevant meeting title, so it is clear what the meeting is about, set an appropriate time, and only set the duration to what's needed, plus a small buffer (Appendix P2.2). At meetings, I am on time, prompt with responses, listen actively, and am transparent about processes. On occasions, I come across mistakes from agencies, but I remain with a positive attitude. Mistakes can sometimes lead to positives, as in this example (Appendix P2.1). Before rejecting a proposal, I found a solution which worked out to be best for the occupant and property. **P.3 Identifying factors affecting project evolution and delivery, including hazards and risks, by developing, implementing, and maintaining systems and records.** At the early stages of a project, I review property surveys undertaken (Appendix P3.2) and photographs provided to identify any missing information or any factors that will affect the evolution of a project. I document issues and risks on a shared register (Appendix M3.1), and depending on the scale of the matter, I either request an online meeting with the contractor/client, ask for additional information by phone or email (Appendix P3.2), or arrange a site visit with stakeholders to discuss how a project can proceed. As issues are resolved, this system is updated with the progress. On complex projects, I also undertake a pre-design site inspection with stakeholders either before or after property surveys, so I can identify first-hand factors that affect the project's evolution. I document the findings (Appendix D3) and transfer these to the shared register. **P.4 Monitoring, applying and using relevant legislation, standards, regulatory frameworks, procurement and contracts.** I apply relevant legislation throughout all projects I'm involved in to ensure compliance and best practices are followed. I follow the Approved Documents, the PAS 2035 standard, CIBSE Domestic Heating Guide and consider the safety of all stakeholders. I ensure my knowledge is up to date by monitoring changes. I do this by subscribing to updates, receiving monthly newsletters or following relevant institutions on LinkedIn, such as the British Standards Institution (BSI) (Appendix P4.2) and the Department for Energy Security and Net Zero (DESNZ) (Appendix P4.1). This keeps

	me up to date with changes as soon as they happen. I also comment on relevant PAS standards during the public consultation stages, when I believe changes should be made. To help improve standards of retrofit, I also became a member of the [redacted] (Appendix P4.3) and participated in the [redacted] Working Group, which aims to shape and share professional good practice. This also helps me to learn and apply best practices from other professionals.
Developing (self)	**SD.1 Undertaking continuing professional development (CPD) to ensure currency and relevance of the skills, knowledge, experience, and behaviors required to practice.** Whilst working in Retrofit, I have always maintained a strong discipline for continued professional development by undertaking workshops, training, and most importantly, working with senior professionals in the industry and learning from their experience. See (Appendix C1-C90). By undertaking continued professional development, I ensure my knowledge and skills are kept up to date, remain relevant, and allow me to broaden my professional skills. Joining [redacted] (Appendix P4.2) is evidence of this, as it helps me learn from other professionals, keeping currency within my field of practice. Over the last 4 years, I have completed in excess of 500 hours of CPD, in addition to academic qualifications. This reflects my commitment to the CIAT Code of Conduct under section B7a (for Affiliates) to “keep themselves informed of current practices and developments appropriate to the type and level of their responsibilities”, by exceeding the institute's minimum requirement of 35 hours of CPD every year. **SD.2 Demonstrating self-reflection and continuous improvement in understanding current and emerging topics relevant to their context and jurisdiction of practice.** In 2021, I was undertaking my first EWI project that had to follow PAS 2035. I was asked by the contractor how we had to detail a specific junction, and I didn’t know. Whilst I was up to date on the requirements of the new standard, there was no best practice for this specific junction, so I was unaware how to make it compliant. I had to seek outside help before I completed this design. It took 6 working days to get an answer. When reflecting on this, I knew it was going to be the first time of many that this occurred, so I had to upskill. I couldn’t wait 6 days to get an answer. I downloaded HTflux and started learning how to undertake thermal analysis from examples and YouTube videos (Appendix E2.1). I have had many situations like this where I have analysed past events and recognised my weaknesses/a need to upskill. It is an ongoing cycle of self-reflection to make positive changes, set new goals, and refine skills or habits. **SD.3 Identifying personal development, education, skills, experience and/or training needs and meeting them through regular action planning and monitoring to maintain fitness to practice.**

	When self-reflecting on my performance and project outcomes, I set objectives for the short and medium term. This may be a simple CPD course/webinar I need to watch, or more formal learning/qualifications. I add this to my future development plan (Appendix E3.1), either as a subject I need to learn or a specific event/qualification I have seen advertised or found through research. I don't always achieve some of the 'nice-to-haves', as some are ambitious, but I achieve those I need to maintain fitness in my practice. Outside of my personal development plan, I also continually look at events being held, such as those on the CIOB app and The Retrofit Academy, to see which will be useful for me/interest me. Some cover areas in my future development plan, so I remove them when completed. I will register for these events and add them to my schedule for my continuing professional development. I maintain a record of CPD through my accreditation scheme (Appendix E3.2).

SECTION H: Declaration of applicant

I submit this form and additional documentation as an accurate record in support of my application for Chartered Membership of the Chartered Institute of Architectural Technologists. I fully understand the requirements for Membership as set out in the *Code of Conduct*. I agree to accept the decision of the Institute regarding my eligibility for this status.

I am aware that any evidence of plagiarism will be classed as an automatic referral and any fees paid forfeited. I am aware that this could also result in my file being passed to Conduct Committee for further investigation.

If accepted for Chartered Membership, I will continue to abide by the rules and regulations specified in the Charter, Bye-laws, *Code of Conduct*, and any other directive issued by CIAT*.

I will keep CIAT informed of any change in my circumstances in writing, which may affect my membership.

I am aware that prior to assessment, if working in private practice as sole practitioner, partner, principal, director or LLP member, this includes advice/services to friends or family, paid or unpaid, full or part time, I must obtain formal registration with the Institute by completing the Affiliate Registration Form, obtaining approval of my business stationery and providing evidence of current professional indemnity insurance showing expiry date.

Only applicable to Associate members:

☐ In compliance with the *Code of Conduct* I confirm that I am not offering architectural services and/or advice.

*Available from CIAT on request or from CIAT | Code of Conduct (effective 1 January 2022) (architecturaltechnology.com)

Signature of applicant: Date: [redacted]

Disclosure

All personal data will be held in keeping with General Data Protection Regulation principles.
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