

Application form for Principal Designer Registration



The Principal Designer (PD) Register is open to Chartered Architectural Technologists practising in industry who undertake the role of PD under the Building Safety Act 2022.

To apply please confirm your eligibility:

- ✓ I am a Chartered Architectural Technologist

Please confirm which registration you are applying for:

- Principal Designer for non-HRBs.
- ✓ Principal Designer for HRBs.

In doing so, I agree to fulfil the **Institute's PD Competency Framework** requirements for registration as selected above.

Application

Applicants are required to:

- complete all sections of this form;
- include relevant and focused information and supporting project based evidence demonstrating experience in line with the Institute's PD Competency Framework; and
- pay the relevant fee.

Assessment

A Panel will review and assess each application and has three options:

1. **Pass:** the candidate is accepted onto CIAT's PD Register/s and will be listed on a publicly available Register as being competent to either work on non-HRBs or HRBs. CIAT reserves the right to invite any applicant to interview for non-HRB registration. All applications for HRB registration will require an assessment interview.
2. **Defer:** the application does not satisfy the criteria or provide sufficient information for the Panel to make an informed decision. Should the first submission be deferred, the candidate will have the opportunity to make two further submissions for the written/portfolio at no additional charge.
3. **Refer:** the application does not satisfy the criteria following three submissions or after Assessment Interview. Guidance on remedial actions and a timeframe outlining eligibility to re-apply will be provided. All subsequent submissions will require a new application and the appropriate fee .

The decision of the Panel will be communicated accordingly and is final with no right of appeal.

Section A: Personal details

Full name	
Membership number	
Email address	
Telephone number/s	

I understand that if I wish to change which registers I appear within (i.e. non-HRB to HRB) at a later date that, a new application must be made.

Section B: Supporting statement 3000 words (+/- 10%) per application for registration – non-HRB and/or HRB

The supporting statement must include:

- **Context:** Information about you and a brief overview of your experience working on non-HRB and/or HRB projects.
- **Summary of how the applicant meets the performance criteria** as outlined in PAS 8671 and The Building Regulations etc. (Amendment) (England) Regulations 2023 (or any subsequent amendments/updates). **Evidence must be provided to support this summary and clearly labelled. Please refer to the Applicant Guidance document for a full outline of the requirements.**

The application for the PD Register should be a concise, honest and insightful written account of your current experience of working on either non-HRBs or HRBs and how you satisfy the Institute's PD competency framework.

Acceptance onto the Register is based on the applicant successfully meeting the performance criteria as set out in PAS 8671 by providing suitable evidence of them meeting these through their own portfolio of similar project types (i.e. non-HRB or HRB buildings). **The purpose of providing evidence is to add value to your statement. Therefore, supporting documentation is mandatory and should be carefully considered to ensure it is relevant to the application and type of PD competence you wish to be assessed against.**

Where relevant, you can include links to websites or make reference to other documents within the written statement. **All additional documentation, references or links must be relevant, focused and succinct.**

Introduce your role and function as a PD to date

Professional experience as PD

I have been working towards technical excellence and proactively pursue specific knowledge and experience to act as a PD for almost 20 years. I started off delivering university projects as an in-house architectural technician, creating concept, planning and tender documents. I then moved to the healthcare delivering health centres & hospitals as technical focused designer.

I switched my focus to the residential sector to gain a different range of knowledge & experience. I develop information release schedule and identified critical details for tender and construction packages on multiple non-HRB and HRB residential projects, compliance review on tender and construction details company-wide and QA review sub-contractor design.

I later switched to super prime residential sector, my key role was to ensure construction details produced company-wide was of high quality, buildable and fine detailed. All the projects I worked on used traditional contract which allowed me to work closely with clients, appointed consultants, main contractor as client representative, managing both design team and construction team on daily basis. This project managing PD role was a very valuable experience that led me to my next role as a technical lead managing compliance of tender and construction packages with design team members and in-house teams, creating prototypes and provide office wide technical design guidance. However, this was a Design & Build contract-based PD role which did not give as much exposure as the PD role from the traditional contract.

I later joined a developer [REDACTED] and continued a career that has direct influence on decision making over every aspect of a project such as design, technical, build, cost, programme and sales. I have to manage and collaborate with a much bigger network of teams and individuals, notably more involvement with authorities such as planners, building control and SBD case officer. This unique job role requires me to function as PD for the best interest of the investor; Joint Venture clients, end users and Principal Contractor while fully managing the appointment, performance and conformance of design team and sub-contractors.

Project Case Study

The case studies will base on the HRBs that I have worked on since Grenfell fire in June 2017, as following:

Project 1

This is the project I was working on when Grenfell fire happened, we the project team analysed the footage on the news and construction news articles, based on the desire of doing the right thing, we reviewed the external wall construction from the video footage of Grenfell fire, which we identified droplets flew off the I tower from the cladding that were melting, charred cavity insulation, fire cavity barrier design and its performance criteria. After our emergency meeting we came to the below conclusion and advised our client to enforce the following in immediate effect:

- 1) Combustibility of cavity insulation needs more attention – the project team assumed on Grenfell PIR / Phenolic cavity insulation were installed, and for our project we installed Phenolic insulation which is Class C-s2,d0 i.e. limited contribution to fire and through research understood that when it burns it emits Pyrolysis gas which is combustible. Therefore we removed all the installed Phenolic insulation behind our rainscreen cladding and replaced them with Rockwool Euroclass A1 non-combustible RW3 stone wool insulation. See drawing and site photos¹ that captured this change, in May 2017 we installed Phenolic cavity insulation and by October 2017 we have progressively taken the rainscreen cladding down and replaced it with Rockwool RW3.
- 2) Combustibility of rainscreen cladding needs more attention – We believed Grenfell the rainscreen cladding failed to stay intact and stop the fire spread through compartmentation, therefore I believe it needs to be non-combustible which provides the surface for the fire cavity barrier to expand and press against in the event of fire and not to cause melted droplets fly off from the façade. In this instance we reviewed our 4mm thick Anodised Aluminium rainscreen cladding and it can achieve A2-s1,d0 to fulfil this.
- 3) Quality of workmanship on fire cavity barrier (FCB) needs more attention – We increased the QA inspection area on its installation to ensure it is installed to manufacturer guidance. For example, the horizontal FCB should fit within each rainscreen cassette panel and not behind, therefore the intumescent strip can expand and fully fill gap in a uniformed way.

Applicable competency: A3, B5HRB, C5, C7, D7HRB & D8HRB.

Project 2-

During my time working at [REDACTED] residential and school project I have started to highly involve with consultant and sub-contractor appointments, define scope of works, role responsibility and co-ordination steps required for each design package. One of my objectives was to establish a design responsibility matrix² which clarifies everyone involvement in the project to eliminate scope gap. While it is a good cost control document in the contract that defines design responsibility, the primary function is to establish everyone's duty concisely and remind all parties on what they are required to contribute and whether the work they are about to carry out is covered under their Professional Indemnity, this tool often stimulates discussion with designer during appointment stage such as their involvement in specialist design and as a result it ensures all required designer / specialist with project specific competence are identified and appointed in a timely manner.

¹ See evidence folder "Evidence 1_2016_[REDACTED]"

² See evidence folder "Evidence 2_2018_[REDACTED]"

Applicable competency: A1, A4, C1 & C6.

Project 3 -

The highlight of this project that shows my competence as PD was to develop the concept design of the school hall ceiling towards handover. This ceiling design faced many hurdles due to the fact of having a highly bespoke ceiling design in a school building.

At the start of RIBA Stage 3 [REDACTED] Architect has been appointed to develop stage 3 design³ and this is one of proposed key design features, [REDACTED] ceiling geometry which takes form in multi-directional ceiling planes and was happily accepted by School head teacher and the local council. However when I inherited the design at RIBA stage 4 I evaluated the technical design constraints and identified the ceiling system specification is non-compliant to the acoustic requirement and has quality of workmanship issue based on the choice of ceiling system (i.e. GB Rigitone 8-15-20) because of its perforated feature making it difficult to achieve the geometry without cutting into the random sized holes or increase a lot of material wastage and additional suspended ceiling components to keep perforated holes off the edges.

To overcome the above issue a new proposal was done in Stage 4 design by appointed Stage 4 architect [REDACTED], it was a bespoke 15mm thick MDF perforated panel design, a closed joint design on bespoke ceiling support system. With the new proposal developed I instructed the appointed Acoustician [REDACTED] to carry out performance analysis in their 3D modelling and the calculation has found that it achieved Class B acoustic rating at best which is a non-compliant design again, together with other concerns listed in the ceiling design presentation the design seems non-conclusive and not in favour of end users. Being a fully bespoke design also pose risk of failing pre-completion acoustic test plus without a reliable source for product warranty which I advised my client and school head teacher not to take on board (hence the reason of producing this presentation file).

To be honest I would have let the stage 4 bespoke design carry on as is and it may somehow passed the acoustic pre-completion test but I feel it is morally wrong to let this happen knowing this school is with a tight annual budget and this bespoke design will cost them a fortune to maintain post-handover.

With both client and school agreed the need to look for an alternative solution I challenged [REDACTED] architect to offer an alternative design, however due to their lack of expertise to do so I have to subsequently take on the lead designer role on the redesign by contacting possible supplier and installer for technical design and cost advice.

As expected the [REDACTED] architect's proposal wouldn't find an installer willing to give product warranty and being [REDACTED] over budget, one of the suppliers I contacted named [REDACTED] has offered a few feasible design options, through [REDACTED] workshops they were able to develop my idea and satisfied most of the project requirements, such as creating a modular design on the acoustic ceiling panel therefore replacement cost is significantly less than a close jointed ceiling repair. Acoustician were reviewing my design with [REDACTED] specialist's input along the way and agreed to change from the closed joint design to open joint design based on the upgrade of panel performance from Class B acoustic rating to Class A, this change allowed me to integrate sprinkler head positions into the air gap between acoustic panels and made entire ceiling demountable to carry out routine M&E maintenance and repairs, in turn it frees up design flexibility on M&E access point such as valve, damper and LCM(DALI) locations.

While [REDACTED] ceiling panels worked out to be compliant, its suspension system also designed to fully integrate with MEP services in the ceiling void. Prototype installation⁴ was carried out and served as QA benchmark for the rest of installation in the school hall so to reduce error on site and pick up any tweaks

³Refer to evidence folder "Evidence 3_2019 [REDACTED] / 1_challenge designer"- presentation file "[REDACTED] Main Hall acoustic ceiling design 190715"

⁴Refer to evidence folder "Evidence 3_ [REDACTED] / 6_prototype testing"

required, at the end it is slightly over budget but we delivered an end product that is fully compliant, with product warranty, has user friendly as built record and tailored to suit end user's need.

Should this design package developed as a project under BSR, as early as RIBA stage 3 the workflow should include specialist designer's input for early engagement, therefore the design developed for Gateway 2 submission are highly buildable and compliant to avoid BSR's lengthy change control assessment (6 weeks per major change with their MDT involved).

Applicable competency: A1 to A4, B1, B2, B3, B4HRB, C3, C6, C7, C8, D1, D3 & D4.

Project 4 -

During my time at this project, the most noticeable adaptation the construction industry has done in preparation towards the commencement of secondary legislation / BSR was the design works involves fire safety. Two key documents now became the essential designs which are the external wall fire safety report / FRAEW and the fire strategy report⁵.

External wall fire safety report was stemmed from mortgage lender requesting EWS1 Post-Grenfell on apartment / leasehold property and created a huge shortage of fire engineering service on EWS1 back then, subsequently all fire consultant has started to produce this report in assist of building control sign off to obtain building warranty at completion and as submission documentation to EWS1 assessor for evaluation. Using this project as example, full break down of fire rating on each building material was evaluated and determined to meet statutory requirements. Specific location of possible weak point was highlighted e.g. plenum box profile to the Louvre section and its connection ductwork for the MVHR ventilation were discussed and set to Class A2-s1, d0 or A1, with specific detail⁶ developed to illustrate how we intended to comply with regulations.

This type of design work and the report usually carried out in RIBA Stage 4 under the existing BCB framework however for new HRB project under BSR I would recommend to establish it during RIBA Stage 3 because this forms part of the fundamental façade design and is ought to set design principle with both client and Building Safety Regulator, i.e. it is best to be submitted as part of the BSR initial review at the start of Gateway 2.

Fire strategy report has been evolved over the last few years with a major shift of focus such as the use of staircases (which led to double staircases), lift specification, fire escape distance in conjunction with smoke ventilation strategy, ancillary area fire escape design, fire fighting access route and temporary arrangement for phased development etc. See revision note in page 2 of developed fire strategy report will give you a good overview on this shift of focus.

It is very important to make this report explicit because HRB projects in London tends to be mixed use whilst BS9991 and BS9999 has not caught up to speed with the latest fire safety preference, therefore it is down to the fire consultant's assessment to determine what the best arrangement is and this often cause disagreement or being misinterpreted by Building Control [REDACTED], not to mention the slow response rate from LFB i.e. key decision maker on firefighting design (approx 6-9 months wait) while your BC in my case [REDACTED] may not have someone being competent enough to advice correctly on behalf of LFB. I had number of meetings with Building Control who was reviewing on behalf of LFB and debated over a number of design items for months, notably the fire fighting access route in Core [REDACTED] because Building Control were insisted that our designed travel distance for fire-fighter access and smoke ventilation proposal will not be accepted by LFB and refused to issue building warranty for CML of our Core [REDACTED] floor apartments, however when the LFB response finally arrived it clarified that they have no issue with our proposal whatsoever but it is the firefighting access route that needs to be a suitable protected route. However, the project has since constructed so much under Building Control's inaccurate guidance that we

⁵Refer to evidence folder "Evidence 4 [REDACTED]"

⁶Refer to evidence folder "Evidence 4 [REDACTED] / file 9000-DRG-2-09-DE210-T2"

no longer can offer the best arrangement and it has cost my investors dearly with the retrofit solution plus the lost revenue of not achieving completion to those [REDACTED] apartments on time.

See evidence 4 folder – LFB response letter in Feb 2023, section 1.

I believe this report perfectly captured the new wave of focus for fire safety that is influenced by the BSR regime and showcased my knowledge and experience on latest fire safety design of HRBs, please feel free to discuss anything with me in further details.

Applicable competency: B3, B5HRB, D4 & D8HRB.

Correspondence records

The following records are selected to highlight my competence as PD for HRBs:

Evidence 5 – Handover training records, this is the tracker and meeting minutes that captured my work to carry out handover training to client as a part of the BREEAM MAN04 condition and the handover of O&M information which forms part of KBI nowadays.

Applicable competency: A3, B1, B3, C1, C3, C4, C9HRB & D8HRB.

Evidence 6 – Due Diligence site visit and report, for [REDACTED] report I have done site visit to all the window supplier to ensure their product meets performance requirements, quality of workmanship and has sufficient factory and design capacity to take on the job. See attached [REDACTED] window DD report as example.

Applicable competency: A1 to A4, B4HRB, B5HRB, C4, C5, C10HRB, D2, D3, D4 & D5.

Evidence 7 – Email correspondence with Building Control Body regarding transitional arrangement, in Aug 2023 when secondary legislation initially released, I quickly grasped the requirements and asked our existing BCB i.e. [REDACTED] to confirm their stance on their intent to become RBCA and confirm [REDACTED] project status for the best interest of my client. Subsequently I have done the same for my next project [REDACTED].

Applicable competency: A3, B1, B3, B4HRB & B5HRB.

Evidence 8 – QA benchmark record, as PD working for developer / client directly I set out a list of GA Benchmarks for construction stage and invite interested parties to view on site for approval / acceptance (Planners / clients / BCB etc), it forms a good track record on what is acceptable standard on workmanship and installation method for sub-contractors to follow and become part of the golden thread information.

Applicable competency: C10HRB, D1 to D9HRB. Further evidence available for reference and further discussion is welcome to showcase my in-depth knowledge and experience for Competency D.

Evidence 9 – Know how to declare compliance, attached email records showcased my knowledge of knowing what is required by BCB / RBCA and request designers and supplier to provide relevant information upfront.

Applicable competency: A3, A4, B1, C4, C5, C9HRB, D1, D8HRB & D9HRBa.

Evidence 10 – establish protocol / workflow for Golden Thread, attached email regarding [REDACTED] lifts as example to illustrate how to create a collaborative team environment and set required workflow.

Applicable competency: A3, A4, B2, B3, B5HRB, C9HRB, D5, D9HRBa & D9HRBb.

Evidence 11 – Encourage designers to perform their own duties, see attached email example. This kind of occurrence is happening more this year due to the activation of BSA regime, and it is in PD's role to ensure each designer's role responsibility are reviewed regularly and remove misunderstanding right away when it happens.

Applicable competency: A4, B2, B3, B5HRB, C9HRB, D5, D9HRBa & D9HRBb.

Number of words (n.b. references are not to be counted and should only further support your statement and experience):

Section C: Declaration of applicant

I submit this form as an accurate record in support of my application for the specific purpose of assessing my eligibility to be on the publicly available PD Register of the Chartered Institute of Architectural Technologists. I am aware that falsifying information in this application may result in investigation under the [Code of Conduct](#) and possible referral to the Conduct Committee.

I agree to accept the decision of the Institute regarding my eligibility for the PD Register and I am aware that the application and assessment fees are non-refundable.

If successfully on the PD Register, I will continue to abide by the rules and regulations specified in the [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 Registration.

Signature of applicant: _____ Date: _____

Disclosure - Data Protection Act 2018

All personal data will be held in accordance with the Data Protection Act 2018. If you have any queries or requests, please contact membership@ciat.global or refer to the Institute's Privacy Statement at <https://architecturaltechnology.com/privacy-policy.html>

N.B. You cannot elect to be excluded from CIAT related mailings (via post or email).

The decision of the Panel will be confirmed in writing (via email) within 28-days and **you will be added onto the publicly available PD Register** to confirm your competence as a PD for non-HRB or HRB projects. You will be able to use the descriptor and logo as a CIAT Certified Principal Designer, which you should use in conjunction with the protected descriptor and logo as a 'Chartered Architectural Technologist'. You are encouraged to use these whenever possible and appropriate.

Checklist for applicants:

- all sections of the application form are complete;
- application contains relevant supporting information/documentation to corroborate your suitability as detailed in Section B;
- pay the relevant fee electronically at architecturaltechnology.com.