RETROFIT ACADEMY CIC

CONTRACTING FOR PAS 2035 COMPLIANT RETROFIT

GUIDANCE FOR LOCAL AUTHORITIES

local energy north west hub

Contents

Contracting for PAS 2035 Compliant Retrofit: Guidance for Local Authorities

The Local Energy North West Hub commissioned The Retrofit Academy CIC to provide Guidance to Local Authorities on complying with Publicly Available Specification 2035 (PAS 2035) and on engaging the services of Retrofit Coordinators (RCs) and Retrofit Assessors (RAs).

PAS 2035 is a new, comprehensive domestic retrofit standard developed following the Each Home Counts Review. All retrofit work funded via the Green Home Grant Local Authority Delivery Scheme (LADS) is required by BEIS to comply with the process specified by PAS 2035. The Local Energy North West Hub is administering LADS Phase 2 and wanted to consider factors relevant to procurement and contracting of Retrofit Assessors and Retrofit Coordinators, including:

- The Role of the Retrofit Coordinator
- Contracting Retrofit Coordination and Retrofit Assessment
- Retrofit Coordinators' Design and Construction Liability
- Independence and Due Diligence
- Indemnity and Insurance
- Participating in Local Authority Delivery Schemes

*The **Local Energy North West Hub** is funded by the Department of Business Energy and Industrial Strategy to support public sector organisations to develop energy projects in collaboration with businesses and community, and to respond to the energy agenda. This report was funded by Government as part of the Local Authority Delivery Scheme. A full version of the brief is provided in **Annex 2.** It should be noted the project accommodated the needs of those who participated and so the primary focus of work is around delivery models.*

Background

Two information sharing sessions were organised:

- Session 1 was held with Local Authority (LA) representatives from the North West
- Session 2 was held with a national audience of Energy Hubs and Local Authorities to which Retrofit Coordinators and other interested parties were invited.

Specialists from the fields of law, procurement and insurance were also invited to take part in the discussions. These sessions gave a background to the development of PAS2035 and provided a simple summary of the role of the Retrofit Coordinator, highlighting the interventions that the Retrofit Coordinator makes throughout the process. The sessions also explored questions around legal structures, liabilities and indemnity issues as well as providing information about procurement options. From the discussions within these sessions, seven key issues were identified, and these have been used to structure this report (see below).

A third and final session was used to present the findings and responses to the issues raised. These findings form the content of this report.

A further phase of work has also been commissioned by the Energy Hub. This work will pilot a live LADS2 scheme in the North West. This is intended to test the contractual relationships and practical delivery using the preferred option recommended in this report. The outcomes will be reported separately.

*A copy of the Session 2 presentation is provided in **Annex 3A.** A copy of the session 3 presentation is provided in **Annex 3B.***

Report Structure & Key Issues

This report has been structured to present Retrofit Academy CIC's response to the key issues raised through engagement with Local Authorities.

The following key issues emerged from the stakeholder sessions:

Issue 1: Retrofit Delivery Model Options

- What options are available to contract RCs into projects to ensure that their role of oversight and client protection is best achieved?

Issue 2: Reconciling Funding Cost Caps and Medium-Term Improvement Plans (MTIP)

- How can programmes funded for specific measures with cost caps be reconciled with measures identified in PAS 2035 Medium-Term Improvement Plans?

Issue 3: Supply Chain Development

- How do we develop the supply chain of RCs and RAs to scale up for the delivery of mass retrofit?

Issue 4: Contracting

- What are the best forms of contract for Energy Hubs and LAs to use when letting compliant retrofit contracts?

Issue 5: Monitoring and Promoting Evaluation

- How should Evaluation be designed into large-scale programmes to ensure lessons are learnt for future delivery?

Issue 6: Resident Protection

- What steps can be taken to ensure that residents' needs are considered throughout the process, to mitigate a poor retrofit experience and later, property condition issues?

Issue 7: Extent of RC Liability

- Can we identify the liabilities that RC's need to insure against?

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Annex 1 – List of Acronyms

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Annex 3B – Session 3 Presentation

Annex 4 – Essentials Checklist

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Issue 1: Retrofit Delivery Model Options

What options are available to contract RCs into projects to ensure that their role of oversight and client protection is best achieved?

Four models for retrofit delivery have been considered. These models have been designed to highlight different options for contracting and should be understood in terms of their advantages and disadvantages. The four models are identified as:

- **Managed Assessment Coordination and Evaluation Model (MACE)**
  In this model, the funding body (e.g., BEIS, Energy Hub or LA) contracts the Assessment, Coordinator and Evaluation parts of the process to one organisation. This ensures that the RC function, primarily a client and resident protection role, is divorced from the Design and Install.

- **Local Assessment, Corodination and Evaluation (LACE)**
  In this model, the original client and funding body retain the RC function as the overarching protection for client and resident.

- **Managing Agent with Contractor Design and Installation (MACDI)**
  In this model, the funding body (e.g., BEIS, Energy Hub or LA) contracts ALL parts of the process from Resident Advice to Evaluation to one organisation, who usually then go on to sub-contract design and install.

- **Contractor Led Turnkey Retrofit (CLTR)**
  In this model, the funding body (e.g., BEIS, Energy Hub or LA) contracts ALL parts of the process from Resident Advice to Evaluation to one installer-led organisation.

A fifth, alternative model has also been included: **Specialist Contractor Led Turnkey Retrofit (SCLTR)**.

Recommendations

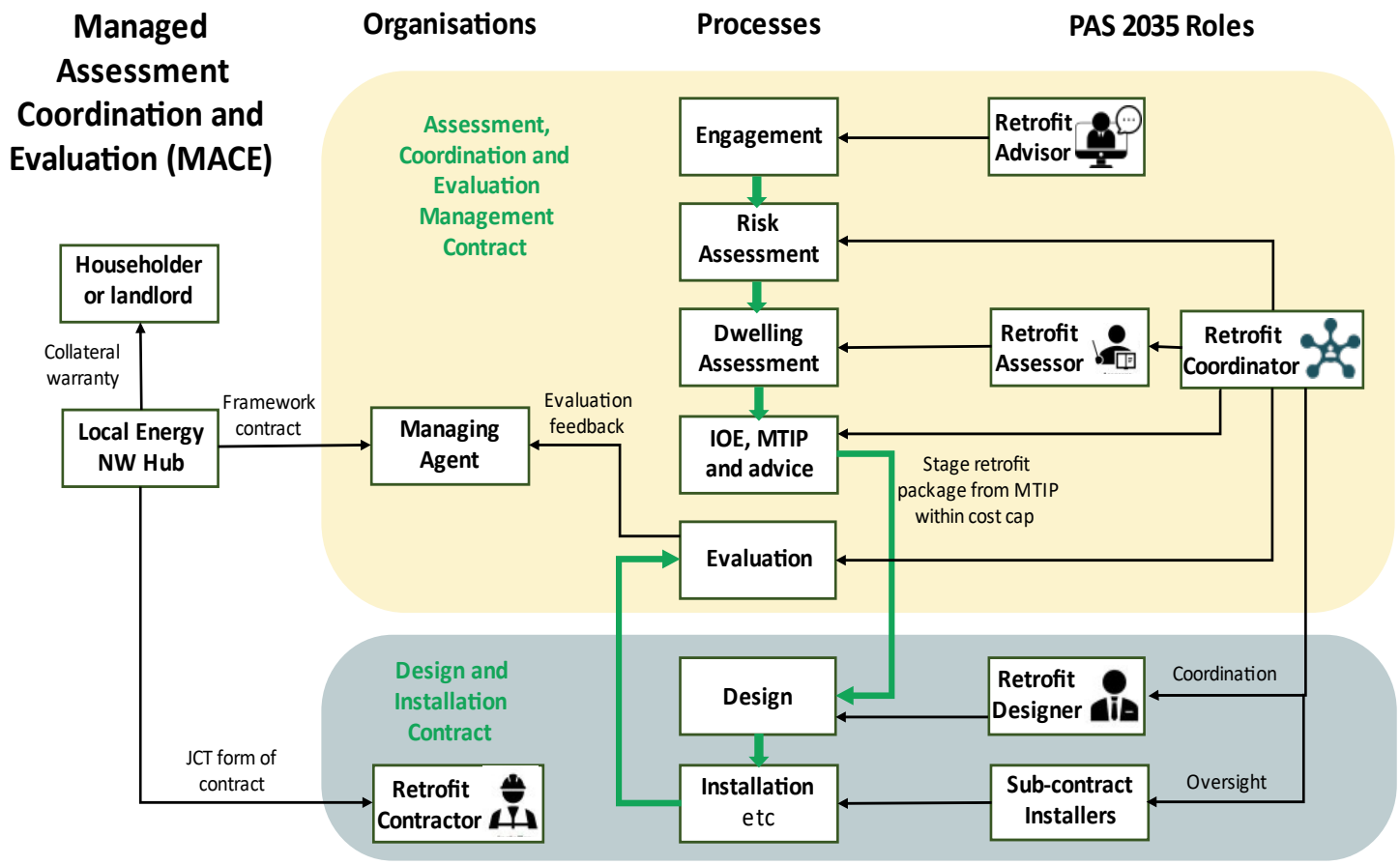
In the following pages, each model has been described in detail, including identifying Pros and Cons which may be used to guide the selection of the most appropriate model for delivery. Within each option, considerations are identified to ensure that residents and the client are protected. In determining the delivery model for a particular programme, please consider the following:

- The first two models presented (MACE and LACE) offer a simpler separation of the client's and contractor's interests than the other models presented.
- The other models (MACDI, CLTR & SCLTR) can still work, but the client body needs to pay more attention at each stage to ensure their interests and those of the householder are properly protected, and not unduly influenced by other members of the supply chain.
- If there is a pressing need to devolve all programme management, then MACDI & CLTR/SCLRT may suit the client's needs.

A simple Essentials Checklist can be found in Annex 4, which may assist in the development of the programme.

Managed Assessment Coordination and Evaluation Model (MACE)

In this model, the funding body (e.g., BEIS, Energy Hub or LA) contracts the Assessment, Coordinator and Evaluation parts of the process to one organisation. This ensures that the RC function, primarily a client and resident protection role, is divorced from the Design and Install.



- The **Management** for Assessment, Coordination and Evaluation sits with the MACE body.
- The **Funding** sits with the client body.
- The **Accountability** sits with the MACE body overall, to ensure all parts of the process and all parties to it are suitably appointed and qualified to take on their roles.
- The **Liability** for RA and RC activities sits with the MACE body IF they employ them directly.
- The **Evaluation** can be done by the MACE body, but only to basic level. Where there are issues, an escalated Evaluation must be done by a different RC.

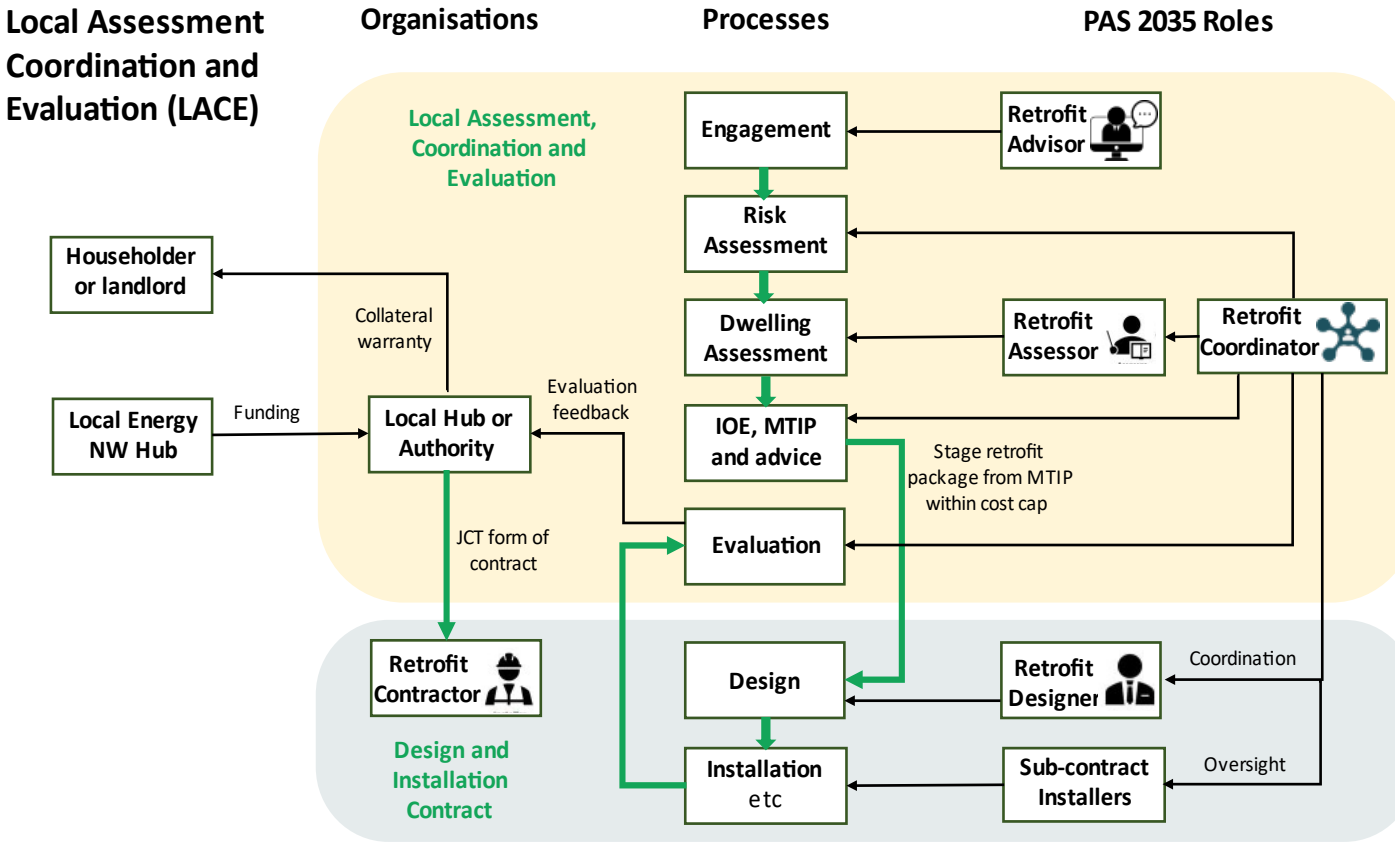
Under this model, early engagement and advice can be done by the LA or their appointed body and liability sits with them for that area. The Retrofit Designer (RD) and Retrofit Installer (RI) are packaged together to provide a dynamic and expert response to customer needs and site conditions. The RD must always be competent and qualified for the specific measures and carries accountability for the design unless they are also employed directly by the RI. The RI carries liability for installation to the RD's specification and the client body's timescales and other standards.

ADVANTAGES	DISADVANTAGES
• Client-side view for RC role - no conflict of interest. • MACE teams will probably carry multiple RCs who can peer review and also evaluate. • Continuity of RC for the occupant. • Design and Install sit well together. • Retrofit advice and early engagement can be delivered by the Client or incorporated in the MACE team's process. • Evaluation free from conflict of interest.	• Ease of management for the Client - minimum of two contracts. • There may be additional time needed to ensure all data and delivery plans are acceptable leading delays in delivery. • Disputes between MACE and RD/RI could lead to delays and additional cost claims.

Local Assessment, Corodination and Evaluation (LACE)

In this model, the original client and funding body retain the RC function as the overarching protection for client and resident.

The funding and accountable body, such as a LA or Social Housing provider, undertakes the resident engagement and advice, retrofit coordination and retrofit evaluation in house. They may also undertake RA, but this can be contracted out (but ideally not to the RI).

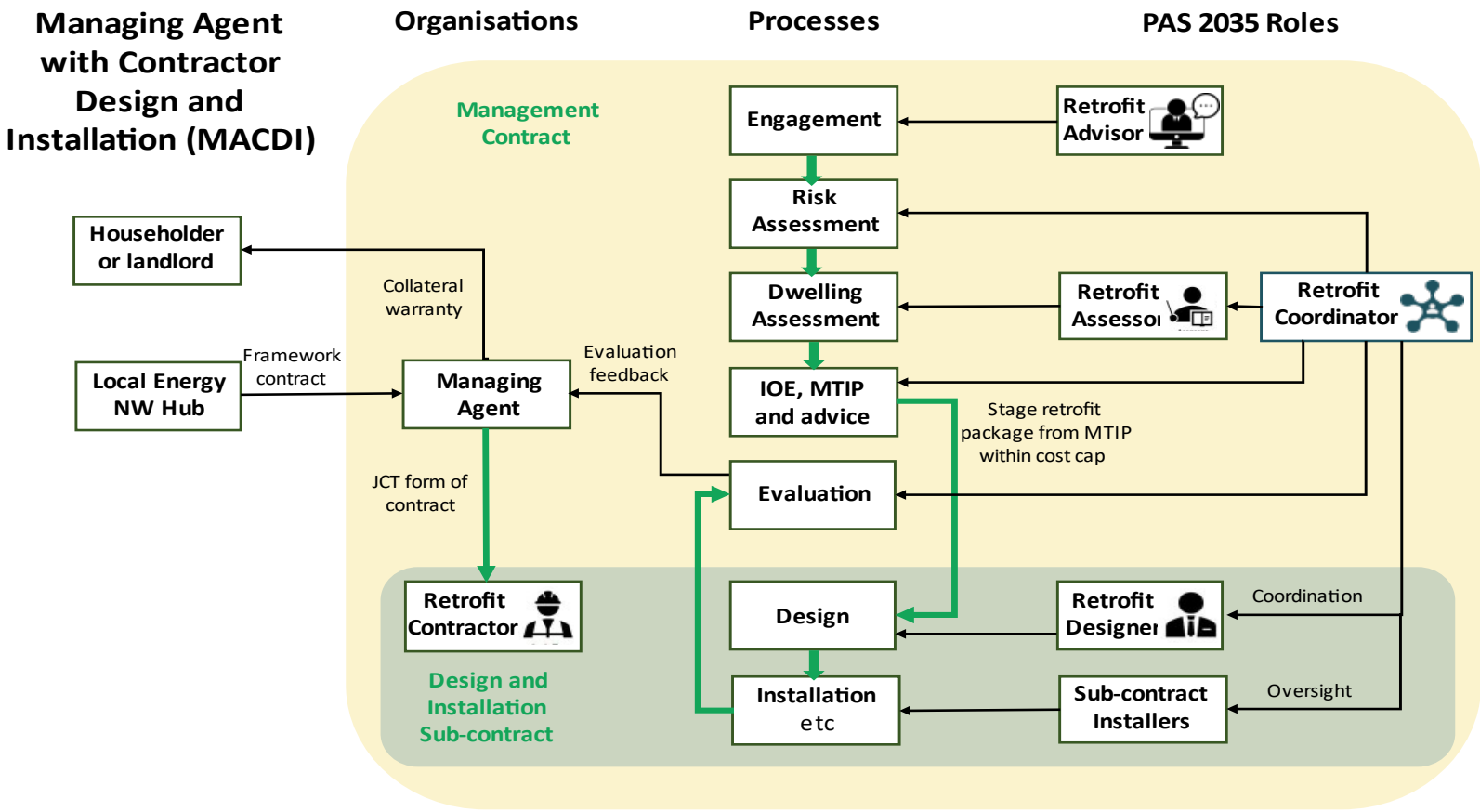


- The **Management** for Coordination and Evaluation functions sits with the LACE body.
- The **Funding** sits with the Intelligent Client body.
- The **Accountability** sits with the Intelligent Client body overall, to ensure that all parts of the process and all parties to it are suitably appointed and qualified to take on their roles.
- The **Liability** for RA and RC activities sits with the LACE body only IF they employ them directly. The RD must always be competent and qualified for the specific measures and will carry accountability for the design unless they are also employed directly. The RI carries liability for installation to the RDs specification and the RCs timescales and other standards.
- The **Evaluation** can also be done by the LACE body, but only to basic level. Where there are issues, an escalated Evaluation must be done by a different RC.

ADVANTAGES	DISADVANTAGES
• Client-side view for the assessment and evaluation - no conflict of interest. • LACE teams will probably carry multiple RA and RCs who can peer review. • Design and Install sit well together. • Lower indemnity levels will be required because the Client will already have insurance more than that carried by an independent RC. • Similar to most improvement works delivery processes. • Relationships with residents is already in place in many instances. • Property information is captured and recorded in-house. • Evaluation free from conflict of interest.	• Ease of management for the Client - minimum of two contracts. • Potential lack of continuity of RC for occupant. • There may be additional time needed to ensure all data and delivery plans are acceptable leading delays in delivery. • Potential for differences of opinion if there are separate RCs.

Managing Agent with Contractor Design and Installation (MACDI)

In this model, the funding body (e.g., BEIS, Energy Hub or LA) contracts ALL parts of the process from Resident Advice to Evaluation to one organisation, who usually then go on to sub-contract design and install.

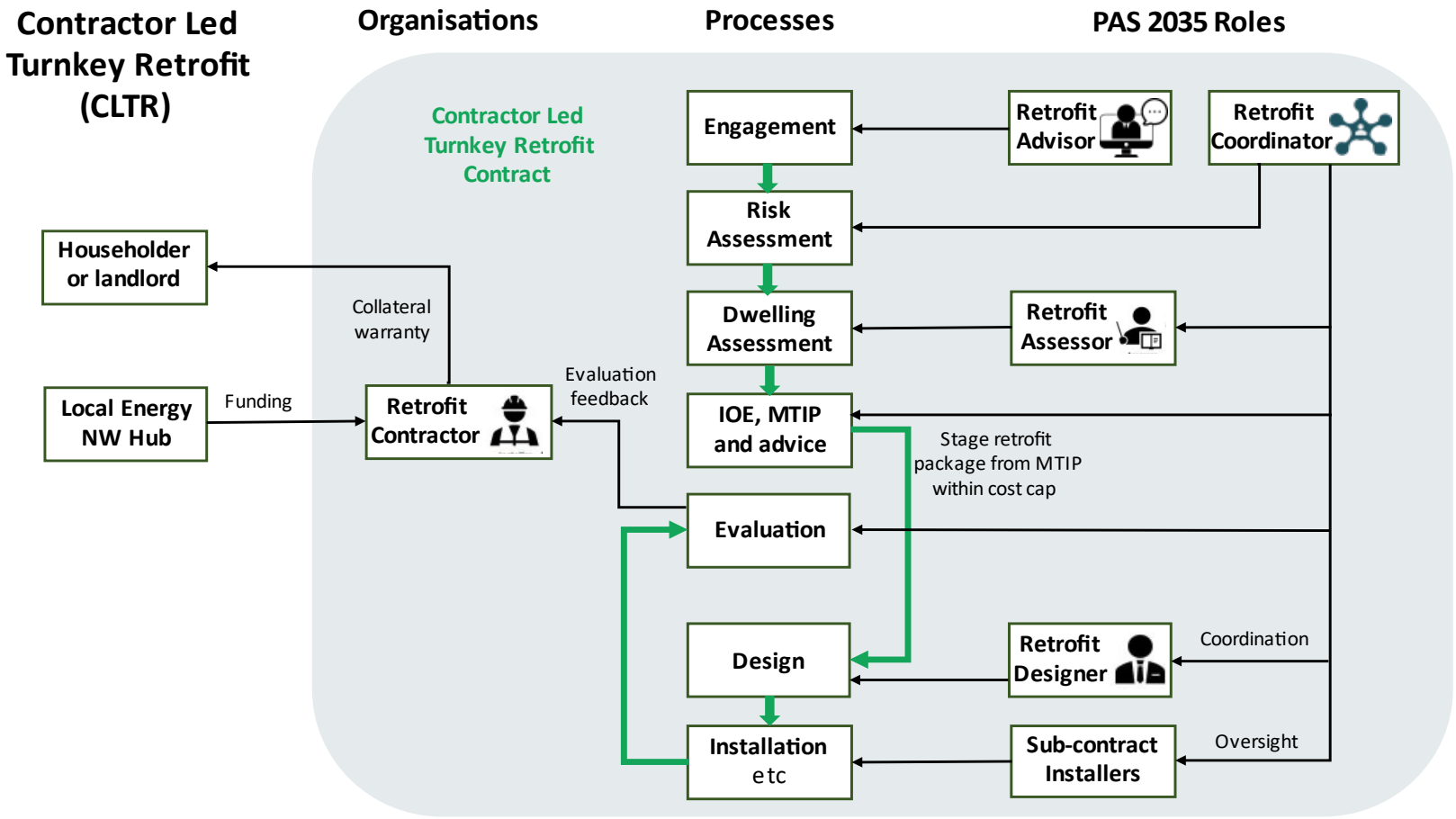


- The **Management** for all functions sits with the MACDI body.
- The **Funding** sits with the client body.
- The **Accountability** sits with the appointed MACDI body overall, to ensure that all parts of the process and all parties to it are suitably appointed and qualified to take on their roles.
- The **Liability** for RAd, RA and RC activities sits with the MACDI only IF they employ them directly. The RD must always be competent and qualified for the specific measures and will carry accountability for the design unless they are also employed directly by the Installer. The RI carries liability for installation to the RDs specification and the Client's timescales and other standards.
- The **Evaluation** can also be done by the MACDI but only to basic level. Where there are issues, an escalated Evaluation must be done by a different RC.

ADVANTAGES	DISADVANTAGES
• Ease of management for the Funding body. • Continuity for occupant. • Design and Install sit well together for dynamic response to site conditions and changes. • RC separation from RD / RI avoids conflict of interest for the RC. • Greater opportunity for local contractor supply chain. • Evaluation free from conflict of interest.	• There may be additional time needed to ensure all data and delivery plans are acceptable leading delays in delivery. • Disputes between RC and RD/RI could lead to delays and additional cost claims. • Multiple points of liability.

Contractor Led Turnkey Retrofit (CLTR)

In this model, the funding body (e.g., BEIS, Energy Hub or LA) contracts ALL parts of the process from Resident Advice to Evaluation to one installer-led organisation.



- The **Management** for all functions sits with the CLTR body.
- The **Funding** sits with the client body.
- The **Accountability** sits with the appointed CLTR body overall, to ensure that all parts of the process and all parties to it are suitably appointed and qualified to take on their roles.
- The **Liability** for all roles within the PAS2035 process such as RAd, RA and RC activities sits with the CLTR only IF they employ them directly. The RD must always be competent and qualified for the specific measures and will carry accountability for the design unless they are also employed directly by the Installer. The RI carries liability for installation to the RDs specification and the Client's timescales and other standards.
- The **Evaluation** can also be done by the CLTR but only to basic level. Where there are issues an escalated Evaluation must be done by a different RC.

ADVANTAGES	DISADVANTAGES
• Ease of management for the Funding Body. • Continuity for occupant. • Design and Install sit well together for dynamic response to site conditions and changes. • Single point of works-related liability.	• Potential conflict of interest for the RC, appointed by the RMA who is also the RD/RI. • There may be additional time needed to ensure all data and delivery plans are acceptable leading delays in delivery. • Regular checks for conflict of interest may lead to additional demands on the Client body. • Multiple points of liability. • Potentially less opportunity for local supply chain.

This model assumes that the Contractor takes full responsibility for all the of the PAS2035 roles and responsibilities (shown by the shading). At the current time in a developing market, one or more of the activities / roles will be subcontracted. A derivative of this model is possible, and a small number of organisations will offer it – where all roles are directly employed by the main contractor with no subcontracting of the main PAS2035 roles. This would be a Specialist Contractor Led Turnkey Retrofit (SCLTR) where ALL roles would be employed directly by the SCLTR.

Specialist Contractor Led Turnkey Retrofit (SCLTR)

ADVANTAGES	DISADVANTAGES
• Ease of management for the Funding Body. • Continuity for occupant. • Design and Install sit well together for dynamic response to site conditions and changes. • No disputes between RC and RD/RI. • Single point of liability. • Less liability issues.	• Potential conflict of interest for the RC, employed by the SCLTR who is also the RD/RI. • Potentially less opportunity for local supply chain.

Issue 2: Reconciling Funding Cost Caps and Medium-Term Improvement Plans (MTIP)

How can programmes funded for specific measures with cost caps be reconciled with measures identified in PAS 2035 Medium-Term Improvement Plans?

The Local Authority Delivery Scheme 2 (LADS2) is based on the installation of a range of improvement measures proposed by energy hubs when submitting delivery strategies to BEIS. Future government funding schemes may be similar in requiring local authorities and social landlords to profile measures in advance of being awarded funding.

Funding often comes with cost caps. However, any pre-determination of measures for particular properties does not comply with PAS 2035, which requires appropriate measures to be identified following a whole-dwelling assessment and an Improvement Option Evaluation (IOE), and their installation to be prioritised in stages via a Medium-Term Improvement Plan (MTIP) for the dwelling. The measures to be installed must also be agreed with the Client, which is defined by PAS 2035 as the occupants, the landlord or the funding body, or a combination of the three.

The requirements of PAS 2035 were introduced in order to stop the installation of inappropriate measures, or inappropriate combinations of measures, which has often resulted in unintended consequences with implications for the integrity of the buildings and the health of occupants. Sometimes the installation of effective measures has been blocked by other measures installed earlier, in the wrong order. IOE is a way of addressing these issues and identifying an appropriate set of retrofit measures for every dwelling or dwelling type. An IOE tells us which measures should be installed. An MTIP accepts that most householders and landlords cannot afford to install all the necessary measures at once (even with grant funding), so it prioritises measures in stages,

bearing in mind the interactions between them and the need for appropriate sequencing. An MTIP establishes a staged sequence for the installation of measures.

Both the IOE and the MTIP are requirements of PAS 2035 for projects following risk Paths B or C. The Retrofit Coordinator is required to review the report of the IOE, the recommended improvement measures and the MTIP with the Client for the project (whether householder, landlord or funding body) and agree the scope of the project, the intended outcomes, appropriate energy performance target(s), and the budget.

It is recommended that Energy Hubs and Local Authorities use LAD funding to establish MTIPs and implement the first stages, prioritising measures within any average cost caps (in LADS2 for example between £10,000 and £15,000 per dwelling). Subsequent stages of the MTIPs can be funded separately (e.g., by LADS3, other programmes or landlord contributions). In most cases, within the average cost cap, it will be possible to fund insulation of the building (exposed floors, walls and roofs) and ventilation upgrades, *or* installation of heat pumps, *but not both*. PAS 2035 requires ventilation upgrades with insulation[1], and heat pumps require insulation to ensure satisfactory performance in extended cold snaps and to prevent occupants' fuel costs from rising. Therefore, in most cases the logical sequence of improvement will be 'fabric first' (i.e., insulation plus ventilation followed by improvements to heating efficiency, including decarbonisation)[2] as recommended by PAS 2035.

[1] *Ventilation upgrades required by PAS 2035 cannot be deferred to a later stage of the MTIP - they must be installed at the same time as the insulation measures.*

[2] *Installing heat pumps will not deliver decarbonisation of heat until the electricity grid is decarbonised, which will take more than twenty-five years. This is beyond the life of any heat pump installed now. Because electricity is more expensive than mains gas, in the absence of tariff reform converting dwellings from gas-fired heating to electric heat pumps without first insulating will lead to higher fuel costs and increased fuel poverty.*

Issue 3: Supply Chain Development

How do we develop the supply chain of independent RCs and RAs to scale up for the delivery of mass retrofit?

There are three stages of development for both Retrofit Assessors and Retrofit Coordinators:

- Qualification
- Accreditation
- Practice

Retrofit Coordinators

Qualification

PAS 2035 states that all Retrofit Coordinators must hold the Level 5 Diploma in Retrofit Coordination and Risk Management.

There are 442 graduates from The Retrofit Academy CIC's Level 5 Diploma course at present. Since this is the only course of its kind currently available, this also represents the total number of RCs in the UK.

Accreditation

Once qualified, graduates can join one of the TrustMark Accredited Schemes. There are currently six of these in operation, currently run by the IAA, Elmhurst, Stroma, Retrofit Works, Quidos and ECMK. Once accredited, Retrofit Coordinators are able to practice.

Retrofit Academy research indicates that only about 50% of RCs who have graduated have joined an Accreditation Scheme. There are a range of reasons for this, the most common of which is a belief that there will not be sufficient payback on their investment in both accreditation and insurance.

As retrofit coordination is a new role, some new RCs lack confidence in their ability to practice effectively. They are sometimes deterred by the amount of liability they believe they are exposed to (although our view is that this is fairly limited in reality). Around 200 of the Retrofit Coordinator graduates have become members of The Retrofit Academy Centre of Excellence (CoE), which provides them with technical support, CPD, tools, resources and network access. The CoE is also open to organisations, including local authorities.

What can Local Authorities Do?

- Work with The Retrofit Academy to identify high quality Retrofit Coordinators in their area with capacity (email andy@retrofitacademy.org to enquire about this free service).
- Ensure they are aware of work opportunities by inviting them to join frameworks or respond to tenders.
- Use available funding to cover their costs of joining Accreditation Schemes, or part-fund their insurance costs if business support funding is available.
- Develop funding bids to invest in the supply chain. The Green Skills Taskforce Report outlines several ways in which this can be done. The UK Shared Prosperity Fund, expected to be launched next year, is a significant opportunity.

Issue 4: Contracting

What are the best forms of contract for Hubs and LAs to use when letting compliant retrofit contracts?

The recommended contract for use with the contractor is the Joint Contracts Tribunal (JCT) Measure Terms Contract as it is a well-recognised form of contract widely used throughout the construction industry. It also provides a framework that can be adapted to the recommended delivery models, incorporating subcontractors where necessary.

The JCT Measured Terms Contract will not, however, provide a one-size-fits-all solution, and will still need to be amended to be fit for purpose. Extensive legal input will be required for this by legal firms carrying significant Professional Indemnity Cover. It is also recommended that the Collateral Warranty (see Issue 6) be incorporated within the JCT Measured Terms Contract.

It is unlikely that any standard form of contract (whether JCT or otherwise) would provide a complete contractual solution. Therefore, we have suggested a form of contract which is suitable as a starting point. Other forms of standard contract may provide a similar starting point to the JCT Measured Terms Contract but would also require amendment and adaption to be fit for purpose.

Issue 5: Monitoring and Promoting Evaluation

How should Evaluation be designed into large scale programmes to ensure lessons are learnt for future delivery?

Given that it is agreed and accepted that Evaluation is an essential element of projects, the enforcement of the Evaluation process, with financial implications to support any outcomes, is also deemed key.

A retention clause could be incorporated into the contracts, allowing for a percentage of project funds to be retained subject to satisfactory Evaluation. This would provide a financial incentive for satisfactory work levels and for effective Evaluation to be carried out.

Evaluation and monitoring time periods range from 3 months to 2 years after handover and retention for these periods of time may be prohibitive, particularly if retention percentages are large. It may be possible to have a sliding scale of retention percentages over time, with those who have a better Evaluation track record being offered lower retention percentages.

The suggestion from attendees at the online sessions was that contractors would be used to building any retention into their pricing structure. If this is correct, then this could potentially mitigate a negative reaction to retention clauses by contractors.

An alternative to a retention clause could be a 'claw-back provision' within the contract; however, this would need to be backed up with appropriate insurances and would therefore be more time consuming and costly to enforce.

One consideration is for clients to maintain a contingency fund to cover any shortfalls or outcomes arising from Evaluation, particularly on projects likely to progress beyond basic Evaluation.

Issue 6: Protecting Residents

What steps can be taken to ensure that the residents' needs are considered throughout the process to mitigate a poor retrofit experience and later property condition issues?

There are layers of protection built in for the resident throughout the process, from requiring compliance with PAS 2035 to the Evaluation process.

In the event an issue falls through the safeguards in place and a defect or issue does arise, the resident can be allowed to have a right of claim against the parties. Because of the nature of the contractual relationships, the most effective means to achieve this is via the incorporation of a Collateral Warranty in favour of the resident.

In principle, there is very little difference between a Collateral Warranty and a Third Party Right, however residents may feel better assured of a specific warranty rather than simply a right of action. It may also be easier to explain to residents in practical terms, which could assist in achieving higher take up rates.

For this reason, it is recommended that Collateral Warranties in favour of the resident are incorporated within the JCT Measured Terms Contract and any Framework Contract.

The Retrofit Coordinator's primary purpose is to protect the interests of the Client and the Resident. This therefore is a strong line of defence in addition to the legal measures in place.

Issue 7: Extent of Retrofit Coordinator Liability

Can we identify the liabilities that RCs need to insure against?

There is an inverse relationship between a local authority or Hub seeking to divorce itself from a relationship with the RC and the level of risk in the process. The closer the relationship between the Client and the RC, the fewer risks there are likely to be in the delivery of retrofit. It also means householders and landlords are more protected. As a result, our preference is for the contractual models that keep the RC on the client's (or client's agent's) side of the fence.

- The RC only has responsibility for coordination and compliance.
- Liability for the assessment rests with the RA.
- Liability for the design rests with the RD.
- Liability for the installation rests with the Retrofit Contractor or Retrofit Installer.

All roles should carry Professional Indemnity and Public Liability insurance, with appropriate levels of cover. Insurance may be arranged individually or provided by employers.

Professional Indemnity insurance provides cover where you have been negligent in your role (i.e., giving negligent advice leading to a customer suffering financial loss as a result). It is a long-term investment as cover across all professional indemnity policies applies on a 'claims made' basis – you still require cover even after you cease trading. It is vital to have an adequate limit of indemnity as an individual. For example, if you carry out work on multiple flats and the same error is made on all of them, insurers may deem this as one claim which could quickly exhaust a low limit of indemnity. The role you undertake in the process determines the exposure and affects the limit of indemnity. Care is needed on how professional indemnity is covered by your insurer. Any one

claim basis (costs in addition) is the widest cover. Also take care with your retroactive date, as insurers will not provide cover for any work carried out or advice given before this date. Cover of £1m is commonly held by technical professionals and generally considered adequate, except for the Retrofit Designer who carries a greater liability than anyone else and so carries £2m.

Public Liability insurance provides cover for any damage you may cause while on a customer's premises, either third-party property damage or third-party bodily injury. An example of third-party property damage would be your ladders falling and causing damage to the customer's home. An example of third-party bodily injury would be where a customer is injured from tripping over equipment you have left in their way. Commercial insurance may provide this cover for public liability. Businesses commonly carry £5m plus

The Property Energy Professionals Association (PEPA) requires that RCs observe the following:

- Self-insurance is not allowed; only insurance through a regulated insurer is acceptable. A defined minimum level of cover is £250k Professional Indemnity & Public Liability per property, or as required by the client.
- RCs are to notify their Scheme Provider of any changes in insurance circumstances.
- Full details of insurance cover will be recorded as a part of the audit process.

For those undertaking the PAS 2035 individual roles as well as the client body or managing body role, the important dates to note with Public Liability is the 'Date of Occurrence', and with Professional Liability it is 'Date of Claim'. For both, there is a need to notify as early as possible. A complaint that becomes notifiable as a failure may be uninsured if not disclosed.

As there is no definitive answer to the levels of cover required for RCs, The Retrofit Academy CIC conducted a survey in July 2021. Further details are in Annex 6. In total, 45 RCs responded to the survey, demonstrating the following:

- 63% of RCs held personal Professional Indemnity cover with 17% carrying over £1million.
- 63% RCs held Public Liability personal cover with 42% carrying over £1million.

Summary

- Any of the organisational and contractual options could be adopted, but they have different implications: cost, complexity, speed and especially risk. The Client should choose options that reinforce the Retrofit Coordinator's role rather than compromising it via conflicts of interest. Models 1 and 2 are the ones where the RC is structurally most independent and not likely to face a conflict of interest.

- Make the most of your Retrofit Coordinators' skills - they are there to protect customers' homes and health. They understand retrofit risks and how to manage them and they are trained to know what good looks like, at each stage of the process.

- Promote cooperative working between Retrofit Advisors, Retrofit Assessors, Retrofit Coordinators and Designers.

- Do not allow Managers, Contractors or Installers to override Retrofit Coordinators.

- Use IOE and MTIP to identify and prioritise 'fabric first' measures. Note that pre-determined measures are not PAS 2035 compliant, so be willing to change the plan, using the IOE and MTIP as evidence.

- Refer to the Essentials Checklist to make sure you maximise protections of the customer.

Annex 1 – List of Acronyms

- RAd - Retrofit Advisor
- RA – Retrofit Assessor
- RC – Retrofit Coordinator
- RD – Retrofit Designer
- RI – Retrofit Installer
- RE – Retrofit Evaluator
- PAS2035 – Publicly Available Standard – 2035 is the set of standards for the whole retrofit process
- LA – Local Authority
- LADS 2– Local Authority Delivery Scheme; current funding for decarbonisation of private homes routed through Local Authorities
- MACE – Managed Assessment, Coordination and Evaluation
- LACE – Local Assessment, Coordination and Evaluation
- MACDI - Managing Agent with Contracted Design and Install
- CTLR – Contractor Led Turnkey Retrofit
- SCTLR - Specialist Contractor Led Turnkey Retrofit
- JCT – Joint Contracts Tribunal; governing body for UK build contracts
- PII – Public Indemnity Insurance
- PLI – Public Liability Insurance
- DEA – Domestic Energy Assessor
- PEPA – The Property Energy Professionals Association; a trade body representing companies engaged in the provision of Energy Performance Certificates (EPCs), Display Energy Certificates (DECs) and Air Conditioning Inspection Reports (ACIRs)

Annex 2 – The Brief

Scope of Work

The Local Energy North West Hub wishes to commission Retrofit Academy to provide at least 3 briefings to the Energy Hubs, BEIS and key stakeholders, and produce a plain language report and summary presentation - ***Guidance to Local Authorities on engaging the services of Retrofit Coordinators (RC) and Retrofit Assessors (RA).***

The report will consider factors relevant to procurement of retrofit coordinators. Including:

Role of the Retrofit Coordinator

- A simple summary of the role of the RC as set out in PAS 2035, highlighting the interventions that the RC makes throughout the customer journey.
- What are the typical costs for a RC, and how does project complexity vary costs and the number of house visits that may be necessary?
- How should the RC be contracted in keeping with public procurement regulations? Retrofit Coordinators may act as RAs, but in what ways do the roles overlap and how should they be kept separated? What additional assessment skills might be obtained when contracting a Retrofit Coordinator?

Contracting Retrofit Coordination and Retrofit Assessment

- Public procurement approaches for retrofit services may be tendered based on flat rates per property, day rates or by other means.

- Given the extent of assessment for a particular property is not known before the retrofit coordination process is underway, what approaches can be taken to setting out the costs of a retrofit assessment process for multiple properties?
- Should services to provide EPCs be included or excluded? What qualitative criteria might retrofit services providers be assessed on outside of rates?

Retrofit Coordinator - Design and Construction Liability

- A survey of the role of the RC in respect of their role in decision making. The RC is responsible for ensuring that retrofit assessment, design and installation takes place.
- In doing so, could they become responsible for approving any solutions or signing off on designs that could place upon them design or construction liability?
- How should the role of the RC as set out in PAS 2035 be brought into services and construction contracts which clearly define their roles and responsibilities?

Independence and Due Diligence

- The RC has responsibilities to the homeowner, funder and contractors. They may be contracted directly by a LA or work as a subcontractor to a main supplier.
- How are the RC's duties to the householder to create a holistic Medium-Term Improvement Plan impacted by responsibilities to participate in a LA funded programme for energy measures; and to make recommendations when a product or approach has been pre-selected as part of a larger procurement process?
- How can an RC working for a LA as an employee, or as an independent contractor to the LA, or as an employee or contractor to a construction firm, play a due-diligence role sampling the assessments, designs and installations of third-party contractors working to PAS2035?

Indemnity and Insurance

- A review of the options open to RCs to sufficiently indemnify and insure themselves to be part of retrofit projects (particularly large-scale projects.
- What types and levels of insurance should individuals acting as independent RCs seek?
- When working for a larger organisation, what coverage is typical? And does the RC need professional indemnity over and above the PI held by their employer? Are there any gaps in the market for insurance to the sector and standard contract terms?

Participating in Local Authority Delivery Schemes

- Working with the local Energy Hubs to understand the scope of Local Authority Delivery Schemes and recognising a potential shortfall in the number of RCs and Ras in the near term.
- Working with the Energy Hubs to review Trustmark and other data on the numbers of RCs and RAs in various areas.
- Recommending approaches to bring independent contractors into projects to fill capacity gaps.

Annex 3A – Presentations from Session 2

Video link

Annex 3B – Presentations from Session 3

Video link

Annex 4 – Essentials Checklist

All contracts should refer to Trustmark's Code of Conduct and Customer Charter to set out standards required:

Code Of Conduct for Businesses

https://www.trustmark.org.uk/docs/default-source/scheme-documents/trustmark-code-of-conduct_version-1_4oct2018.pdf?sfvrsn=56659307_4

Customer Charter

https://www.trustmark.org.uk/docs/default-source/scheme-documents/trustmark-customer-charter_version-1_4oct2018.pdf?sfvrsn=72629307_8

- All models need to be clear about the points at which information and responsibilities are handed over (e.g., customer data, budget changes, etc.).
- All models require a clear customer journey agreed prior to works starting.
- Consider the use of a contingency sum for use in case of evaluation above a basic level.
- Consider and agree the GDPR protocol prior to tender for all models.

Annex 5 – Additional Questions Raised in Sessions

What are the typical costs for a Retrofit Coordinator (RC) and how does project complexity vary costs and the number of house visits that may be necessary?

Remember, the role of the RC as defined in PAS 2035, is to protect the public and the client's interests to coordinate a project from start to finish, and to ensure compliance with PAS 2035. Failing to engage a RC to fulfil this role is a failure to comply with PAS 2035.

For freelancers known to provide this service appropriately, research with RCs indicates an average day rate of £350 ex VAT. This is at the lower end of the spectrum an organisation would usually pay to employ a contractor in a junior management or professional capacity, which we feel aligns well with most competent RCs. There is a large range from £100 per day to over £600 per day. Typically, the lower end is populated by Domestic Energy Assessors who have upskilled to become RCs. The higher end is populated by architects, surveyors and other construction professionals who would typically command those fees in their general practice.

There are many examples of RC services being offered for around £100 or less per property or project. We advise extreme caution when engaging with this type of service. There are many examples of 'gaming' the PAS 2035 system, which results in compliant submissions, but which do not follow a compliant process. In short, it is box ticking exercise to enable grant funding. Reporting practices include:

- Retrofit Coordinators being introduced after the assessment has been carried out, rather than in the cradle-to-grave capacity required by the PAS.

- Assessments being conducted in line with pre-PAS 2035 ‘EPC’ style surveys.
- Coordinators being forced to sign off on projects that are non-compliant to access funding.
- Failure to declare any form of conflicts of interest.

What additional assessment skills might be obtained when contracting a RC?

The RC cannot do assessment work unless he/she is also a qualified Retrofit Assessor (RA) or the project is in risk Path A. The two roles are separate, PAS 2035 allows for the Assessor and Coordinator to be the same person provided they are suitably qualified and accredited to do so.

Many RAs are Domestic Energy Assessors (DEA) by background and have undergone a short (usually two-day) upskilling course with one of the accreditation schemes. To become DEAs in the first instance, people with no previous experience can complete a course within a couple of weeks or less. These people are not highly skilled and often do not have any experience of retrofit. However, energy assessors are a broad church and mixed in amongst them are some truly brilliant professionals, so it is important not to tar them all with the same brush.

PAS 2035 manages this known risk to retrofit by limiting the RAs role to that of data collection only, delivering that to the specification laid out by PAS 2035.

Domestic Energy Assessors who have also gained the RC Diploma are certainly well positioned in terms of their knowledge of retrofit and what sorts of defects to watch out for. There are certainly RAs who, having done the RC course, say that they now feel capable of carrying out retrofit assessments. Some are nervous of practicing as RCs themselves, and this should be respected. It is a vital job and many of these people take great pride in what they do.

What approaches can be taken to setting out the costs of a retrofit assessment process for multiple properties?

The cost of a PAS 2035 assessment varies according to how many dwellings are involved, how scattered they are geographically, and how similar they are. For a one-off assessment of a single dwelling (or dwelling type), an appropriate budget would be £350, plus perhaps £75 each for assessing variations within a block or street. However, these figures will be lower if assessments are undertaken at scale, or the dwellings are all contiguous.

A sensible approach to projects involving many similar dwellings in a specific region is to undertake a small number of in-depth assessments, building energy models and using these as the basis of creating design plans. These assessments will cost significantly more, and all dwellings to be improved will need to be assessed. However, it is certainly reasonable to expect later assessments within a well-understood architype to be much quicker and therefore less expensive. By the time you have conducted dozens of surveys of a similar architype, it is mostly a case of checking for differences and defects, and testing the services, rather than in-depth structural surveying.

Caution is urged with archetyping though and a RC must evaluate what is appropriate. The criteria for identifying 'thermally distinct' dwelling types are: age, built form, construction, heating type and heating fuel. Any variation in any of these creates a new type.

For example, one home similar in construction form in one region to another in totally different region could experience a totally different climate. Aspect and surrounding geography is also crucial in terms of heat gains from the sun, heat loss and moisture risk, for example, due to driven rain.

What qualitative criteria might retrofit services providers be assessed on outside of rates?

The following is a list of questions that help to evaluate tenders for retrofit services:

- Have you worked upon retrofit of traditionally constructed and protected buildings?
- Have you worked on large blocks or high ride buildings?
- Have you worked on scale retrofit projects with multiple homes (e.g., Social Housing)?
- Are you qualified for any other PAS2035 roles?
- What professional qualifications do you have?
- How long have you worked in the construction sector prior to training as a RC?

What types and levels of insurance should individuals acting as independent retrofit coordinators seek?

It is not possible to give a definitive answer to this question. Where the RC is in the employment of either the client body or a large main contractor, there should be extensive cover in place as part of the organisation's insurance arrangements. Where an RC is operating independently, if LAs seek too much cover, then small independents will not participate in the market. For RAs and RCs, PI cover of £1 million is a reasonable level similar to other technical professionals. Retrofit Designers require more cover, typically £2-5 million.

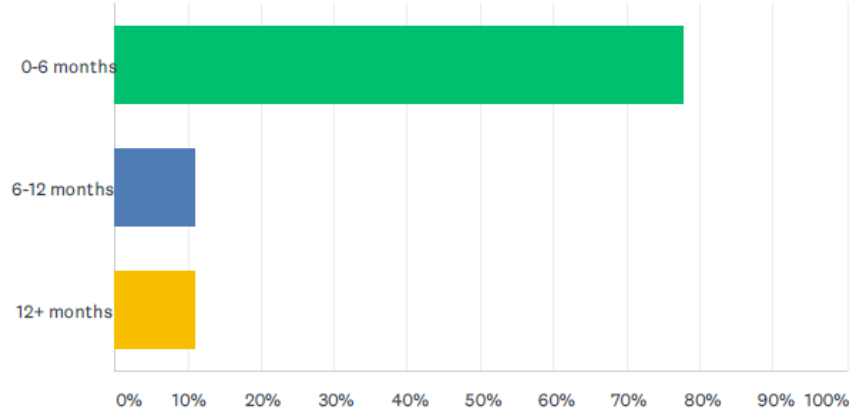
As PAS 2035 beds in, evidence of risks being mitigated and therefore the clear value of an RC should become available. Until this happens, the price a Client is prepared to pay for RCs will remain one of the questions of quality and wider social value that all Clients should consider at the point of procuring services. This current situation is a feature of a developing supply chain. If the LA client bodies request excessive levels of indemnity, the supply chain will shape as being delivered by larger contracting organisations and not necessarily inclusive to small independent and local businesses.

Annex 6 – Results of Retrofit Coordinator Insurance Survey

Retrofit Coordinator Insurance Survey

Q1 How long have you been practising as a Retrofit Coordinator?

Answered: 45 Skipped: 0

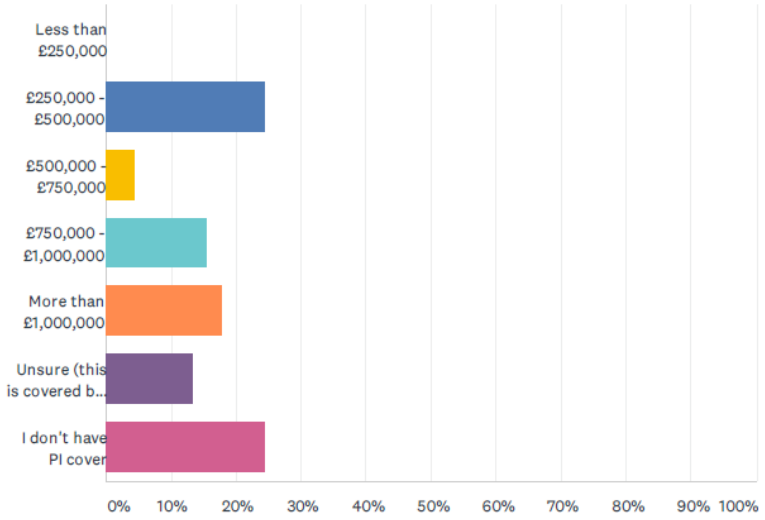


ANSWER CHOICES	RESPONSES	
0-6 months	77.78%	35
6-12 months	11.11%	5
12+ months	11.11%	5
Total Respondents: 45		

Retrofit Coordinator Insurance Survey

Q2 What level of PI cover do you have?

Answered: 45 Skipped: 0



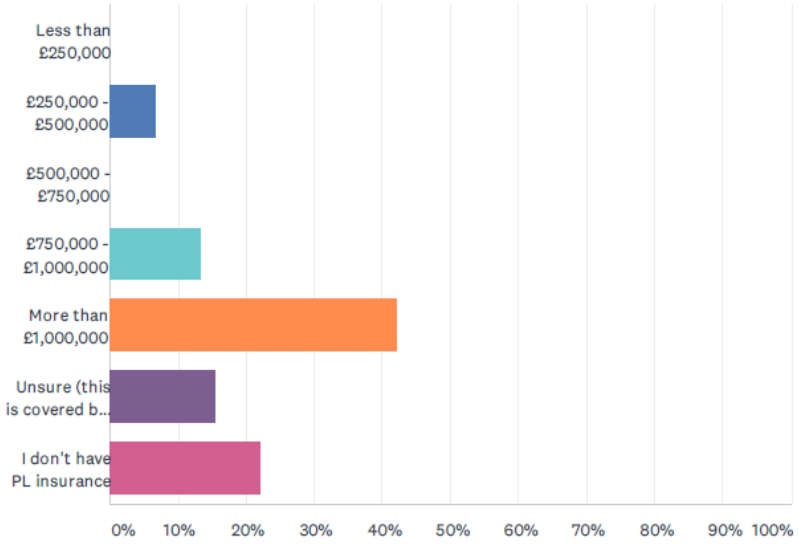
Retrofit Coordinator Insurance Survey

ANSWER CHOICES	RESPONSES	
Less than £250,000	0.00%	0
£250,000 - £500,000	24.44%	11
£500,000 - £750,000	4.44%	2
£750,000 - £1,000,000	15.56%	7
More than £1,000,000	17.78%	8
Unsure (this is covered by my employer)	13.33%	6
I don't have PI cover	24.44%	11
TOTAL		45

Retrofit Coordinator Insurance Survey

Q3 What level of PL insurance do you have?

Answered: 45 Skipped: 0



Retrofit Coordinator Insurance Survey

ANSWER CHOICES	RESPONSES	
Less than £250,000	0.00%	0
£250,000 - £500,000	6.67%	3
£500,000 - £750,000	0.00%	0
£750,000 - £1,000,000	13.33%	6
More than £1,000,000	42.22%	19
Unsure (this is covered by my employer)	15.56%	7
I don't have PL insurance	22.22%	10
TOTAL		45

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