MANAGING COMPETENCE FOR INSTALLATION OF FIRE PROTECTION TO BUILDING STRUCTURES

Consultation

Industry Competence Steering Group
Sector Led Group 10 - Installation & Maintenance (10.5 Structures)
Protection to Building Structures Competence Group (PBSCG)

ICSG the Industry Competence Steering Group

Image courtesy of Structural Fireproofing Systems Ltd.

Executive summary

In the wake of the Grenfell Tower fire, a comprehensive review of building regulations and legislation was carried out to deliver the recommendations made in Dame Judith Hackitt's report 'Building a Safer Future'. This triggered change in both primary and secondary legislation which further embedded the requirement for demonstration of individual competence and organisational capability for those carrying out work in the built environment. The Industry Competence Steering Group, a formal sub-committee of the Building Safety Regulator's statutory Industry Competence Committee, is tasked with supporting employers to define and address approaches to demonstrating competence within their areas. Within this structure, the Fire Protection to Building Structures Competence Group (PBSCG) was formed to lead the development and implementation of individual competence frameworks related to application of intumescent coatings, non-reactive coatings and dry cladding to provide fire protection to different structural materials. This document sets out an intended future sate for individual competence in this area. This work is intended to apply throughout the UK.

PBSCG discussed existing challenges in defining and measuring competence within fire protection to building structures, setting out the current state and making recommendations for further actions that would help to close identified gaps. These included identifying issues with coverage, structure and existing qualifications and opportunities for alignment between qualification based and training & assessment based routes. During the development of this document, PBSCG also contributed to updating of National Occupational Standard (NOS).

A functional map and framework of competencies has been set out to create a clear benchmark. This breaks down the work conducted into discrete activities, each assigned a level depending on their complexity. Each activity is them broken down into statements of skills, knowledge, experience and behaviour, aligned to the requirements of BS 8670-1. These have also been fully aligned with relevant NOS (as revised in 2026).

It is proposed that individuals prepare to demonstrate competence through engaging in training, either informally within their organisation, through third party training providers, or a combination of the two. Evidence of competence should then be gathered through achieving an appropriate qualification or undertaking assessment which maps to the skills and knowledge requirements from the framework, in activities relevant to the individual's role scope. Evidence of experience and behaviour should be collated in conjunction with the employer. It is recommended that a third party check is carried out that all evidence of competence against the framework is in place.

Revalidation of competence is proposed to ensure currency of competence through ongoing demonstration of experience and behaviour, knowledge refresher assessment, updates as industry requirements change, and continuing manufacturers' training.

It is acknowledged that additional activity will be required in order to move towards this future state. Proposed actions include working with the relevant awarding organisation to update qualifications and approaches to assessment and determining requirements for refresher assessment.

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Introduction

i.1 Drivers for change

In 2017, the Grenfell Tower fire created shockwaves throughout the built environment sector and generated a great deal of focus on deficiencies in both construction practices and the capability of the construction workforce.

It was recognised in the report of Dame Judith Hackitt, 'Building a Safer Future: Independent Review of Building Regulations and Fire Safety' (also known as the Hackitt Report) that a simple, more effective regulatory framework would be required to deliver change. This included moving to an 'outcomes-based' model, rather than a prescriptive rules-based model reliant on complex and detailed guidance. To achieve this, competent people who are capable of understanding their responsibilities for safety & integrity and thinking for themselves are required.

The Building Safety Act 2022 (the Act) has introduced a new regulatory regime which puts a legal requirement to demonstrate competence front and centre, to directly address this issue. The Act, together with supporting secondary legislation including the Building Regulations (as amended in 2023) and the Higher Risk Buildings (Management of Safety Risks etc.) (England) Regulations (2023), sets a general requirement for competence at both individual and organisational levels:

- Organisational capability – Organisations must have the organisational capability to perform their functions. Organisational capability is defined within Building Regulations as having the appropriate management, policies, procedures, systems and resources in place to ensure that individuals under the control of the organisation comply with relevant regulations and that those in development are appropriately supervised
- Individual competence – Any person carrying out building or design work must possess the skills, knowledge, experience and behaviours (SKEB) necessary

i.2 Addressing organisational capability

Approaches to setting out requirements for, and implementing approaches to, demonstrating organisational capability are currently under consideration in collaboration with the wider built environment sector. This work is on-going and is not directly addressed within this document or any competence outputs created.

i.3 Addressing individual competence

The Industry Competence Steering Group (ICSG) is a formal, cross-sector working group of the Industry Competence Committee (ICC), a statutory committee of the Building Safety Regulator (BSR). ICSG provides a vehicle for industry collaboration in development and implementation of competence frameworks in the built environment.

ICSG is made up of multiple sector led groups (SLGs), each leading work in a specific area. Within this, SLG 10 is focussed on competence frameworks for installation and maintenance. The structure of SLG 10 is split into 5 super sectors, each focussed on different aspects of the installer landscape. SLG 10.5 covers roles and activities associated with structures, including fire protection to the structural frame of buildings.

In addition, SLG 12 is representing the wider picture of passive fire protection. As such, SLG 12 also has an interest in supporting work on competence in this area.

i.4 The Protection to Building Structures Competence Group (PBSCG)

The PBSCG was formed to take forward the development of a sector-based approach to competence on behalf of SLG 10, linking into the wider work of SLG 12. It is formed from industry specialists and employer / sector body representatives in line with the principles underpinning the work of ICSG.

The following organisations have contributed to the work of PBSCG and been instrumental in the production of this document:

- Association for Specialist Fire Protection (ASFP)
- Avesta Scotland Limited
- Corrodere Academy / Train the Painter
- Kilnbridge
- Saint-Gobain
- Sharpfibre
- Sherwin-Williams
- Structural Fireproofing Systems Ltd.
- William Hare Group

PBSCG would also like to thank Milford & Marah Ltd. for facilitating this work.

At every stage, the PBSCG has endeavoured to consult with or include the work of other relevant bodies or working groups to ensure a joined-up approach to competence with allied sectors.

i.5 The structure of this document

This document has been created to set out an intended 'future state' for individual competence for those installing fire protection to building structures, in accordance with the definition in section 1.1. This is set out in five sections:

Section 1 – Scope
This section provides information on the applicability of this document. This includes the purpose and scope of the work carried out in terms of occupation, building types and geographical area.

Section 2 – Background & context
The section provides contextual information around current competence arrangements within fire protection to building structures, including strengths, weaknesses, challenges and opportunities, which has informed the development of subsequent sections. Throughout this section, recommendations for improvement have been embedded, which are reflected in the proposed framework, standard for competence and/or implementation plan. These recommendations are summarised in Appendix 2 – Consolidated list of recommendations.

Section 3 – Functional map and framework of competencies
This section sets out the activities carried out within the agreed scope of installation, and the benchmark for competence within them in terms of skills, knowledge, experience, and behaviour (SKEB).

Section 4 – Standard for competence
This section includes details of how competence can be validated and revalidated against that standard to ensure both initial competence and currency of competence.

Section 5 – Implementing the standard

This section sets out expected actions required to turn the future state into a reality, including revision of standards and associated qualifications, and actions to ensure consistency across the training and assessment landscape.

Additional information is set out within the appendices, including terms and definitions (appendix 3) and a bibliography of wider reading referenced in or related to this document (appendix 4).

i.6 The consultation and adoption process

This document is intended to provide a mechanism for consultation with the wider sector. Following closure of the consultation all comments will be reviewed by PBSCG and, where required, amendments may be made to the functional map and framework of competencies, the standard for competence, and/or the implementation plan.

Final proposals post-consultation will also be submitted to SLG 12 for formal adoption into the wider passive fire framework.

Implementation will be continued in accordance with the implementation plan, overseen by PBSCG and facilitated by ASFP in collaboration with other stakeholders as appropriate.

1 Scope

1.1 Occupational area

The following definition has been used to underpin the developments outlined in this document:

> *Installation and maintenance of tested and certified passive fire protection to the structural frame (whether timber, concrete or steel) in order to preserve structural stability in the event of a fire. This is activity takes place during construction of new buildings, during refurbishment or during ongoing maintenance and may be carried out either on-site or off-site depending on the structural material and protection method used. This includes protection to internal load bearing walls.*
>
> *This applies to buildings, as covered by Building Regulations and statutory guidance (e.g. approved document B (B3-1: the building shall be designed and constructed so that, in the event of a fire, its stability will be maintained for a reasonable period), or regional equivalents.*

There are no readily applicable, specific SOC code(s) available. It is possible that individuals are categorised under 5319/99 – construction and building trades not elsewhere classified (n.e.c.), on 8159/99 – construction operatives (n.e.c)[1].

Similarly, specific SIC codes are unavailable. It is possible that businesses in the sector are categorised under one of several codes:

- 43341 – Protective coatings application work
- 43999 – Specialised construction activities (other than scaffold erection) n.e.c.
- 43390 – Other building completion and finishing

1.2 Purpose

The purpose of this work is to set out an industry approach to developing, measuring, and validating the competence of those undertaking activities associated within installation of fire protection to the structural frame of buildings against the scope set out in section 1.1. This will ensure that defined arrangements are in place by which competence can be objectively measured and confirmed, increasing safety.

This document and its underpinning details are designed for use for a variety of purposes, including:

- Development of industry wide tools for measuring and validating competence
- Development of organisational approaches to evidencing workforce competence
- Alignment and/or recognition of existing training, assessment, qualifications
- Development of new training, assessment, qualifications, and occupational standards
- Strengthening arrangements for organisational capability through third party certification schemes

No specific sector-based legal requirements for validation or revalidation of competence in installation of fire protection to the structural frame currently exist, however the Building Safety

[1] Work is being carried out to create more granularity within SOC codes in relation to passive fire.

Act (2022) and associated legislation place an onus on individuals and employers to prove competence to work in critical activities in construction and the built environment.

1.3 Occupational relevance

This approach to competence has been designed for those carrying out installation activities as set out in the definition in section 1.1. This includes activities which may apply to those with the following role titles (this list is not exhaustive):

- Fire Safety Technician
- Fire Protection Operative
- Paint Sprayer
- Firestopper
- Cementitious Sprayer
- Boarder
- Coating Applicator

1.4 Limitations and exclusions

This work is specific to applications in buildings, as covered by Building Regulations and statutory guidance (e.g. approved document B (B3-1: the building shall be designed and constructed so that, in the event of a fire, its stability will be maintained for a reasonable period), or regional equivalents). Application of coatings for offshore purposes is specifically excluded.

1.5 Building types

The requirements set out in this document apply equally to higher-risk buildings (HRBs) and other building types.

Although design and specification of fire protection for HRBs may differ from that required for non-HRBs, the installation of the products and systems selected is consistent no matter the building type. As a result it is expected that the competence requirements set out here would apply to all installers, regardless of the type of building being worked on.

1.6 Geographical scope

The proposals set out have been designed to apply to the whole of the UK to create a consistent standard for competence. Further discussion with bodies in devolved nations may be required to implement these proposals outside England.

2 Background & context

2.1 Scope and criticality

Application of fire protection to the building structure, is critical for preservation of building structures in the event of fire.

The scope of structural materials comprises timber, concrete and steel. A range of relevant protection types is available which may be used on one or more structural materials (as set out below). Although thick film intumescents are often used in offshore projects, they are also applied in some civil construction projects (e.g. in the construction of The Shard).

	Timber	Steel	Concrete
Application of thin film reactive coatings (cellulosic)	✓	✓	✓
Application of thick film reactive coatings (hydrocarbon, e.g. epoxy)		✓	✓
Installation of dry cladding (mineral wool batt & boarding)	✓	✓	✓
Application of non-reactive spray coatings (cementitious, gypsum based, vermiculite		✓	✓

This range and alignment of protection types needs to be considered to ensure that appropriate routes to competence are in place.

Recommendation 1: The full range of structural materials and protection types should be considered within the framework and routes to competence

2.2 Existing competence standards and routes to competence

Two existing standards and routes are in place, with various levels of coverage of protection types dependent on audience and current level of development.

The existing qualification based pathway (see Appendix 1 – Existing routes to competence, vocational qualification route for pictorial representation) is based on National Occupational Standards. These have historically provided descriptions of skills and knowledge for *some* types of protection (boarding / cladding, thin film reactive coatings, non-reactive coatings) to *some* types of substrate. They do not include explicit benchmarks for experience or behaviour.

NOS are based on an industry consultation process managed by CITB, with approval mechanisms through the four nations regulators. During 2026, PBSCG has worked with CITB to update relevant NOS and ensure that these reflect the full range of protection types and substrates highlighted within the scope of this framework. These are due to be published towards the end of 2026.

The Train the Painter Scheme (see Appendix 1 – Existing routes to competence, training and assessment route for a pictorial representation) is based on an established industrial coatings applicator training programme delivered by Corrodere Academy. These certifications are widely specified and recognised throughout the UK and internationally by organisations such as the UK Ministry of Defence, Network Rail and National Highways. Examination of the learning objectives show that the programmes cover broadly the same areas as the NOS as they relate to protection of structural steel.

It is clear that both of these standards and pathways are important to industry, but the relationship between these standards and commonality of the benchmarks set within them needs to be determined. Development of a consistent competence standard which overarches but reflects the inclusions in the standards underpinning the three differing routes would help to clarify their relative position and drive consistency. Where standards of experience and behaviour are not embedded within these standards, any central standard may set additional requirements which apply to activities within the scope of the BSA, or amendment may be required to achieve a common position.

Recommendation 2: A single, central benchmark for competence should be set which overarches the existing schemes, setting out requirements across skills, knowledge, experience and behaviour

2.3 Existing routes to competence

2.3.1 Nationally recognised qualifications

Regulated qualifications, overseen by Ofqual, are in place (it does not appear that specific regional qualifications exist within the devolved nations). The scope of these is aligned to the NOS and, as such, not all elements are covered by existing qualification structures. There does not appear to be sufficient granularity within the qualification structures, units and unit endorsements to make it clear what someone does have (or does not have) the skills and knowledge to be able to do. Experience and behaviour are not explicitly included.

Recommendation 3: The scope of available qualifications should reflect the range of substrate and protection types

Revisiting the qualification structures and any unit endorsements applied would allow additional granularity and drive understanding of capability.

Recommendation 4: Development of an activity-based framework will allow for flexibility in use of the standards created

Existing qualification structures require that individuals undertake two optional units in addition to the mandatory health and safety based units included. This may prohibit some individuals from gaining a qualification, where they only undertake application of one product / system type (e.g. off-site application within a workshop). Revisiting and amending these qualification structures would allow greater access. This also has an impact on the wider picture of passive fire protection qualifications (see section 2.7).

Recommendation 5: Qualifications should be restructured to ensure accessibility for those who only undertake application / installation of one passive fire product / system

There is also significant concern that the assessment processes used within these qualifications is not sufficiently robust. The current assessment strategy is for on-site assessment only. Employers feel that this does not adequately assess the skills and knowledge of individuals. In addition, concerns have been expressed regarding the occupational competence of assessors and their ability to adequately make judgements in this area.

It should be noted that CITB is in the process of updating and adding to assessment strategy information within the sector. This provides scope of additional assessment requirements to be appended directly to qualification units and for specific requirements to be added to the assessment strategy for particular qualifications or subject areas. This provides scope for

additional guidance to be added through PBSCG. Representatives from multiple passive fire protection trades (including PBSCG) are in the process of working together to determine appropriate assessment guidance.

Revisiting the assessment strategy and incorporating additional assessment requirements e.g. through portfolio building, specific evidence requirements and additional quantity of assessment may help to drive employer trust. Revisiting requirements for assessors, strengthening the requirements for occupational competence, and incorporating the need for additional CPD may also be beneficial.

Recommendation 6: Robustness of qualification assessment should be improved to provide additional confidence

2.3.2 Alternative training and assessment routes

The Train the Painter route is based on training and assessment through Corrodere Academy and does not incorporate regulated qualifications. Originally developed for the surface preparation and protective treatment of steel structures, the programme's core certifications include Protective Coatings Applicator, Abrasive Blast Cleaner and Spray Painter. Additional specialist modules of training and assessment have been developed to support competence in applying intumescent coatings and passive fire protection systems. The training programme is suitable for apprentices, new entrants to the industry, and experienced personnel who do not hold a formal qualification. Candidates are required to complete both theoretical and practical assessments to achieve certification. Successful candidates receive a CSCS Skills Card, providing recognised evidence of completion for access to construction and industrial sites. Certification is renewed every five years to ensure skills and knowledge remain current (see Appendix 1 – Existing routes to competence, training and assessment route for a pictorial representation).

Independent certification is also available through the QCA programme, which incorporates formal assessment and independent testing to verify competency.

Corrodere Academy is an approved training provider for Lloyd's Register and the Association for Specialist Fire Protection (ASFP). Training courses and certifications are approved by Lloyd's Register, and training materials are also approved by the Royal Society for the Prevention of Accidents.

Lloyd's Register conduct annual audits are on quality assurance procedures, alongside review of training materials.

Experience has been integrated into these routes, either as a benchmark for hours obtained (either before or after training) or a period of mentoring following training.

2.4 Training provision

2.4.1 Basic fire safety awareness training

No standard fire safety training is currently mandated within this part of the built environment.

CITB has developed a basic e-learning package to ensure awareness of the basic principle of fire safety, including compartmentation. This is split into three modules covering the Building Safety Act 2022 and holistic fire safety, fire prevention and fire protection, and competence and workmanship. This is available as a SCORM package that can be integrated into other e-learning systems. The content of this is also being integrated into ASFP's introduction to passive fire

protection which might provide a more nuanced approach, better contextualised for this environment.

Familiarity with the broader world of PFP can be driven through ASFP's introduction to passive fire protection. This could be integrated into routes to competence to meet both the requirement for basic fire safety training and provide an industry specific starting point for new entrants.

Recommendation 7: Basic fire safety training / sector specific fire safety training should be built into routes to competence

2.4.2 Manufacturers' training

In addition to generic, baseline competence, installers should complete manufacturers' training. This is an important component of familiarising installers with the products / components / systems used during the installation process and providing confidence in navigating manufacturers' specific instructions. Although aligned, this is considered separate to the validation of initial competence. Routes to competence should, however, set an expectation that manufacturers' training relevant to the products and systems used should be completed on an ongoing basis to facilitate safe and effective installation

Recommendation 8: The relationship between baseline competence and manufacturers' training should be make clear within the routes to competence created

2.5 Capacity and capability for training / qualification / assessment delivery

Availability of appropriately qualified and experienced trainers and assessors is a consistent problem across the wider footprint of passive fire. Methods of increasing the pool of available assessors will need to be considered.

The National Specialist Assessment Centre (NSAC), an NOCN centre set up by CITB, is able to help support assessor qualification.

Recommendation 9: Opportunities to widen the pool of available assessors should be explored

2.6 Validation of competence

2.6.1 Initial validation

Existing card schemes are currently used as a proxy for validating competence. Depending on the scheme employed these are either restricted to demonstration of skills and knowledge through qualifications, or incorporate demonstration of skills, knowledge and experience through training, assessment and a number of hours or a time period served.

The relative merits of each of these schemes in relation to competence as defined by the BSA is required to position them effectively for employers.

It is acknowledged by the group that these are not a substitute for wider demonstration of competence across the full scope of SKEB. ASFP is currently creating a validation and registration mechanism which builds on existing routes to give members an opportunity to evidence the competence of their employees.

Recommendation 10: Any standard created should incorporate the need for third-party validation of competence across the full scope of skills, knowledge, experience & behaviour

Consideration should be given to what additional requirements might be put in place to support re-registration with CSCS e.g. maintenance of knowledge and skills over time.

Recommendation 11: The relationship between any competence requirements set out and registration / re-registration with CSCS should be considered

2.6.2 Currency of competence and ongoing validation

As with initial validation, card schemes have been used as a proxy for ongoing validation of competence every 5 years. Currently the evidence required for revalidation depends on the scheme utilised:

- Qualification based schemes only require re-completion of the relevant HS&E test. No re-demonstration of skills and knowledge is required
- For the Train the Painter Route, re-validation is made through CV / declaration submission, plus re-completion of the HS&E test where appropriate (the relevant renewal and recertification process

This creates a scenario where no direct evidence of SKEB is required for demonstration of continuing competence. Any competence requirements and routes to competence developed should set benchmarks for continuing competence across the whole scope of SKEB.

Recommendation 12: The standard of evidence required for revalidation across the full scope of SKEB should be set out within the routes to competence & framework of competencies

Concerns were raised that, although skills are evidenced through completion of work on a regular basis, knowledge (particularly of why installation is carried out in a particular manner) drops off over time. In addition knowledge requirements may change as the legislative or working environment alters. Adding a requirement for a knowledge refresher assessment to the requirements for ongoing evidence of competence, alongside a requirement to continuously collect evidence of experience, skills and behaviour would provide additional objective evidence that individual continue to understand why they are carrying work out, as well as that they are doing it correctly.

Recommendation 13: A knowledge refresher assessment should be incorporated into the evidence requirements for validation of on-going competence

The group acknowledged that it would be possible for multiple refresher assessment mechanisms to be put in place over time. Methods of determining the sufficiency and equivalence of these would be required in order to support industry in selecting appropriate products. Creating a clear specification and associated assessment strategy for the refresher assessments and any aligned training would help with this. Creating an industry partnership which can signpost employers and individuals towards products which meet the needs of the competence framework would help them to navigate a marketplace which contains training and assessment products of differing value.

Recommendation 14: A specification for refresher assessment should be created

Recommendation 15: Consideration should be given to how an industry partnership to support determination of relationship of training / assessment products to the wider framework for passive fire and to provide advice and guidance to employers / individuals should be made

Concerns were raised around setting a formal revalidation timescale for competence. As competence should be current, it was felt that evidence of competence should be collected regularly and maintained throughout any validation window. Any routes to competence should make the requirement for ongoing collation of evidence clear.

Recommendation 16: Routes to competence should make clear the need to collate evidence of competence on a continual basis

Timescales for formal revalidation of evidence were discussed. The group felt that, although adopted by other areas of industry, a 5 year period was too long for this critical and changing area. Creating a shorter revalidation period would create a more robust system with more regular checks on competence.

Recommendation 17: Formal revalidation of competence should take place every 3 years

2.7 Alignment to other trades and activities

Installation of fire protection to the building structure is part of a wider landscape of installation / application of passive fire protection measures. The national occupational standards in this area are part of a wider suite which is in the process of redevelopment in support of other areas of competence. Cross-sector working may be required on some elements of competence or industry guidance to ensure a joined up approach.

Recommendation 18: PBSCG should work with other competence groups dealing with the installation of passive fire measures to ensure a joined up landscape

The extent of activities carried out by those installing fire protection to structural materials may depend on how work packages are slit out at site. Installers may be required to apply primer and top seal in addition to the fire protection product itself or may only apply the coating. For example, steel fabricators may apply primers during manufacturing or painters may apply top seals as part of finishing work. This should be taken into consideration during standards development and as part of wider competence framework work.

Recommendation 19: Consideration should be given to alignment with other trades that may apply primers / topcoats before / after intumescent application

2.8 Devolved nations consistency

In developing requirements for the development, measurement and validation of competence, consideration of the best methods of ensuring consistency between England and the devolved nations is required. This is particularly important where parts of the workforce on national borders may operate in more than one nation. It is essential that a consistent bar for competence is set and adhered to throughout the UK.

Recommendation 20: Ongoing discussion with devolved nations regulators will be required to drive consistency in the devolved nations

2.9 Client understanding of competence

A lack of client understanding of their roles and responsibilities in relation to competence was identified. Concerns were raised that this was likely to lead to difficulties appointing competent contractors. Additional activity may be required to raise client understanding.

ICC has recently consulted on guidance for informed clients, setting out their responsibility for driving competence throughout the supply chain. This may help to address concerns in this area.

3 Functional map and framework of competencies

3.1 Development background

A functional map has been created which breaks down the work carried out within the scope of installation (as defined in section 1.1) into discrete activities. These activities reflect the roles, responsibilities and types of work that are undertaken and include differences by product type (but not by specific manufacturer or product range).

Activities within the functional map have been designated as 'mandatory' where all installers are expected to demonstrate competence, or 'optional' where installers may be required to demonstrate competence in one or more specific areas. It is expected that individuals and employers will choose the relevant activities from the functional map when determining the competence to be demonstrated within an individual's particular role scope.

Each activity has then been broken down into competency statements outlining the skills, knowledge, experience, and behaviour (SKEB) required to perform that activity competently. The most recent versions of National Occupational Standards (NOS) have been used as the basis for skills and knowledge statements, where available (as redrafted during 2026, but not yet published in the NOS directory). Statements for experience and behaviour have been added to create fit for purpose competence standards.

Together, the functional map and SKEB statements set out the benchmark for competence in each activity. These are designed to be used in conjunction with the expectations of the pathways for competence set out in section 4. The routes to competence defined have been designed to demonstrate competence against this framework.

3.2 The functional map and framework of competencies

The detailed functional map and SKEB statements can be found in the passive fire framework, available here.

Relevant activities can be found in the 'Install' domain under 'fire protection to the structural frame':

- Install dry cladding to protect building structure (timber, concrete & steel) (PBS001)
- Apply thin film reactive coatings to protect building structure (timber, concrete & steel) (PBS002)
- Apply thick film reactive coatings to protect building structure (concrete & steel) (PBS003)
- Apply non-reactive spray coatings to protect building structure (concrete & steel) (PBS004)

3.3 Mapping to other standards and frameworks

The SKEB statements developed have been mapped against BS 8670-1:2024 and the relevant CITB NOS. Details of that mapping are available upon request.

Emerging requirements for construction products competence as outlined in the WG12 whitepaper and currently being turned into a British Standard (BS 8670-2). Further mapping to this standard will be carried out once it is available. Consideration has also been given to the contents of the whitepaper by the Joint Competence Initiative for the Building Envelope Sector (JCI), published in June 2023.

4 The standard for competence

4.1 Target audiences

This standard for competence is intended to address the needs of the following:

- New entrant / unqualified experienced worker (4.6.1)
- Experienced worker (qualified) (4.6.2)

Individuals will need to meet the requirements set out in the framework of competencies (section 3) for activities relevant to their specific job role. The routes to competence described in section 4.6 set out how this can be achieved.

As the type and scope of an employer's work changes it is possible that employees will need to extend their job role scope to cover more activities. A method for adding additional activities is therefore provided (see section 4.6.3).

4.2 Preparing to evidence competence

Individuals may use a combination of formal and informal learning to prepare to demonstrate competence.

Training alone (without embedded summative assessment) does not provide evidence of competence, but it is a useful enabler to prepare individuals to create the evidence of skills and knowledge required. Training may be carried out in house or through third-party training providers. When purchasing training, individuals and employers should check that this meets the requirements of the framework and will have value to them.

In addition to aiding development of knowledge and skills, informal learning in the workplace will also help to develop experience and behaviour.

4.3 Collecting evidence of competence

Individuals (in conjunction with their employer where appropriate) should select relevant activities from the functional map according to role scope. This should include all mandatory activities, and any relevant optional activities. Determination of competence should then be made through gathering evidence that the SKEB statements set out for relevant activities have been met in accordance with one of the routes to competence outlined in section 4.6.

- Evidence of skills and knowledge should be obtained through achievement of a qualification or programme of assessment meeting the competence standard in relevant activities
- Experience (continuing application of skills and knowledge) can be demonstrated through collecting and storing evidence of work carried out in accordance with the benchmarks for experience set out within the selected activities
- Evidence of behaviour may be gained through performance management systems, including formal appraisals or reviews, or supervisor / team-leader feedback

Individuals who have yet to meet the required standard of competence for a particular activity should be supervised by an appropriate individual until competence has been demonstrated.

Where individuals are required to work at height, they should also hold the relevant qualifications / accreditations for the type(s) of access equipment / work types being employed.

Guidance on appropriate programmes of learning and assessment is available through the Access Industry Forum (https://accessindustryforum.org.uk/). Where the individuals are not personally installing or using the equipment but are protected by it, the equipment should be installed /used by individuals holding the relevant qualifications.

4.4 Validating competence

Individuals and their employers should validate that evidence of competence is in place across the full scope of relevant standards, as set out in the SKEB statements within the framework, and in accordance with the routes to competence.

A third-party system should be utilised, to provide an objective check on competence. For example, this may be through a specific third-party installer certification scheme, a certificated quality management system incorporating management of individual competence, or a trade association membership scheme. Widening of the current industry registration scheme to incorporate full requirements for competence may also support industry in validating competence.

Where use of third-party validation is inappropriate, structured mechanisms for collating and checking evidence should be in place.

4.5 Revalidation of competence

Continuing demonstration of competence and revalidation of that competence are a key component of any assurance scheme. Competence should be revalidated every three years. As with initial validation, it is recommended that a third-party system is utilised, to provide an objective check.

Evidence contributing to revalidation should be collected according to the routes to competence set out in section 4.6.4 and the requirements of the framework of competencies.

Alongside ongoing collation of evidence to demonstrate baseline competence, individuals should also complete and collate evidence of relevant manufacturers' training for the products / systems they are using.

4.6 Proposed routes to competence

The following are routes to competence for each entry point. It is expected that an employer or individual will define the job role relevant to their scope of activities (as set out in section 4.3), aligned to the relevant occupation, and that individuals will be developed to that level using the appropriate route.

It should be noted that further development will be required to put those routes to competence in place, specifically to ensure that appropriate products are in place for individuals and their employers to access. Until the point where new routes to competence are available, existing competence guidance should be followed.

4.6.1 New entrant / unqualified experienced worker

Individuals must provide the following evidence of competence:

- Completion of sector specific introductory training (incorporating basic understanding of fire safety)

- Completion of skills & knowledge assessment that meets the requirements of the competence framework (qualification or alternative assessment route), in all mandatory and relevant optional activities
- Collated evidence of experience in line with the requirements of the competence framework, in all mandatory and relevant optional activities
- Collated evidence of behaviour in line with the requirements of the competence framework, in mandatory activities

Where individuals are required to work at height, they should also hold the relevant qualifications / accreditations for the type(s) of access equipment / work types being employed. Guidance on appropriate programmes of learning and assessment is available through the Access Industry Forum (https://accessindustryforum.org.uk/). Where the individuals are not personally installing or using the equipment but are protected by it, the equipment should be installed /used by individuals holding the relevant qualifications.

Individuals should also complete relevant manufacturers training in the specific products and systems that they are applying.

Individuals will be eligible for a blue, skilled worker CSCS card on completion of the first two items, and the relevant Health, Safety and Environment (HS&E) test).

Individuals may then go on to develop their competence further and provide evidence in additional activities

4.6.2 Evidencing competence – experienced worker (qualified)

Where experienced workers hold existing qualifications, additional assessment may be required to confirm that the skills and knowledge requirements have been met.

Individuals must provide the following evidence of competence:

- Completion of sector specific introductory training (incorporating basic understanding of fire safety)
- Evidence of an existing, relevant qualification
- Completion of a bridging knowledge / skills assessment against relevant activities
- Collated evidence of experience in line with the requirements of the competence framework, in all mandatory and relevant optional activities
- Collated evidence of behaviour in line with the requirements of the competence framework, in mandatory activities

Where individuals are required to work at height, they should also hold the relevant qualifications / accreditations for the type(s) of access equipment / work types being employed. Guidance on appropriate programmes of learning and assessment is available through the Access Industry Forum (https://accessindustryforum.org.uk/). Where the individuals are not personally installing or using the equipment but are protected by it, the equipment should be installed /used by individuals holding the relevant qualifications.

Individuals will then be able to renew their blue, skilled worker CSCS card in relevant activities, subject to re-completion of the relevant HS&E test.

4.6.3 Addition of further competencies

Individuals may need to add competence in installation of further product / system types as they progress through their career.

Individuals will continue to develop their competence in the workplace, supported by appropriate in house and/or third-party training where required. Evidence in line with that set out in section 4.6.1 should be collected for relevant additional activities.

Individuals will be eligible for additional categories on their blue, skilled worker CSCS card in relevant activities, subject to completion of the relevant HS&E test.

4.6.4 Evidencing currency of competence

Evidence of currency of competence should be collected regularly throughout the three-year validation period, in order to support revalidation. Individuals must provide the following evidence of ongoing competence:

- Completion of any relevant skills / knowledge updates (CPD) (e.g. legislative updates, technological changes)
- Completion of a formal knowledge refresher assessment, in line with a specification set and agreed by industry
- Ongoing evidence of experience (continuing application of skills and knowledge over time) meeting the requirements of activities in the framework for which competence needs to be maintained
- Ongoing evidence of behaviour meeting the requirements of activities in the framework for which competence needs to be maintained
- Completing the relevant HS&E test where ongoing CSCS registration is required

Individuals should also have completed manufacturer training relevant to their scope of work and the products / systems being installed.

Where individuals are required to work at height, they should also hold the relevant qualifications / accreditations for the type(s) of access equipment / work types being employed. Guidance on appropriate programmes of learning and assessment is available through the Access Industry Forum (https://accessindustryforum.org.uk/). Where the individuals are not personally installing or using the equipment but are protected by it, the equipment should be installed /used by individuals holding the relevant qualifications.

4.7 Relationship to organisational capability

Alongside demonstrating the competence of individuals within their workforce, companies also need to demonstrate organisational capability.

Work has been carried out by the Building Safety Regulator's statutory Industry Competence Committee (ICC) and an Industry Task and Finish Group (ITFG) to develop guidance on organisational management of competence – a key component of organisational capability. Intended to provide high level principles and practical ways to apply these respectively, this guidance provides key prompts and case studies to support organisations in developing a

proportionate approach to managing the competence of their staff and supply chain. The guidance can be found on the BSI's Built Environment Competence Hub.

4.8 Ongoing monitoring and maintenance

This standard and the functional map / framework of competencies will be managed and maintained by PBSCG, with practical support and facilitation provided by ASFP. Documentation will be reviewed, at a minimum, every three years. Minor amendments to the framework, including the addition of clarification text to existing statements, may be made by PBSCG during this period. Resolving typographical errors and formatting changes to ensure the framework is up to date may be made by ASFP on a continuous basis.

5 Implementing the standard

It has been acknowledged that further development work will be required to put in place the proposed routes to competence for the sector. The following table sets out the next steps required to fully implement the competence requirements set out within this paper. It should be noted that this list is not necessarily exhaustive, and further actions might be identified as work progresses.

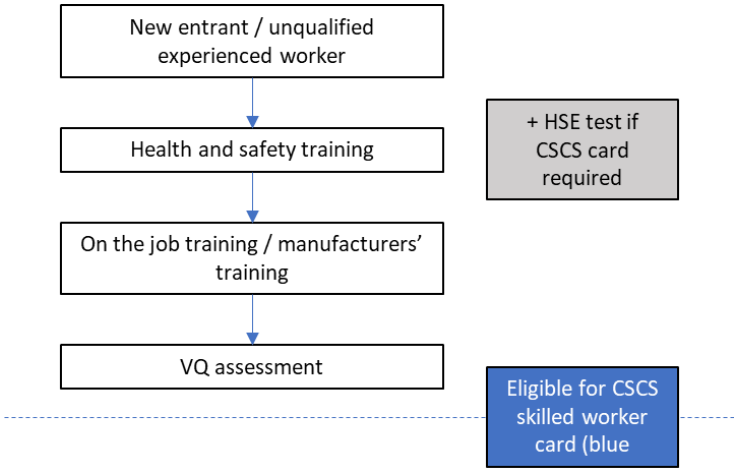
Where specific product development is required, estimated time required for that development to take place has been factored into the timescale outlined. This may be subject to change as more detailed requirements emerge

Activity required	Purpose	Owner	Timescale
Update relevant National Occupational Standards and qualification structures	To ensure alignment between the competence framework and qualifications products	CITB (with PBSCG support)	TBD (in progress)
Create additional assessment guidance	To support consistent and valid assessment To ensure that assessors are appropriately experienced and qualified	CITB, PBSCG & ASFP	TBD (in progress)
Explore ways to increase the pool of appropriate assessors	To ensure sufficient numbers of assessors are in place to cope with demand	CITB & PBSCG	Ongoing
Ensure alignment of existing short duration training standards	To ensure that all CITB products align to competence requirements, and to open up opportunities for evidencing additional skills and knowledge post initial qualification	CITB & PBSCG	Q2 2027
Carry out gap analysis and create specification for bridging assessment	To provide a pathway for experienced workers with older qualifications to demonstrate competence	PBSCG	Q2 2027
Agree changes to registration requirements & create carding journeys	To ensure registration reflects sufficient granularity to make it clear what people have the skills and knowledge to do	PBSCG & CSCS	Q2 2027

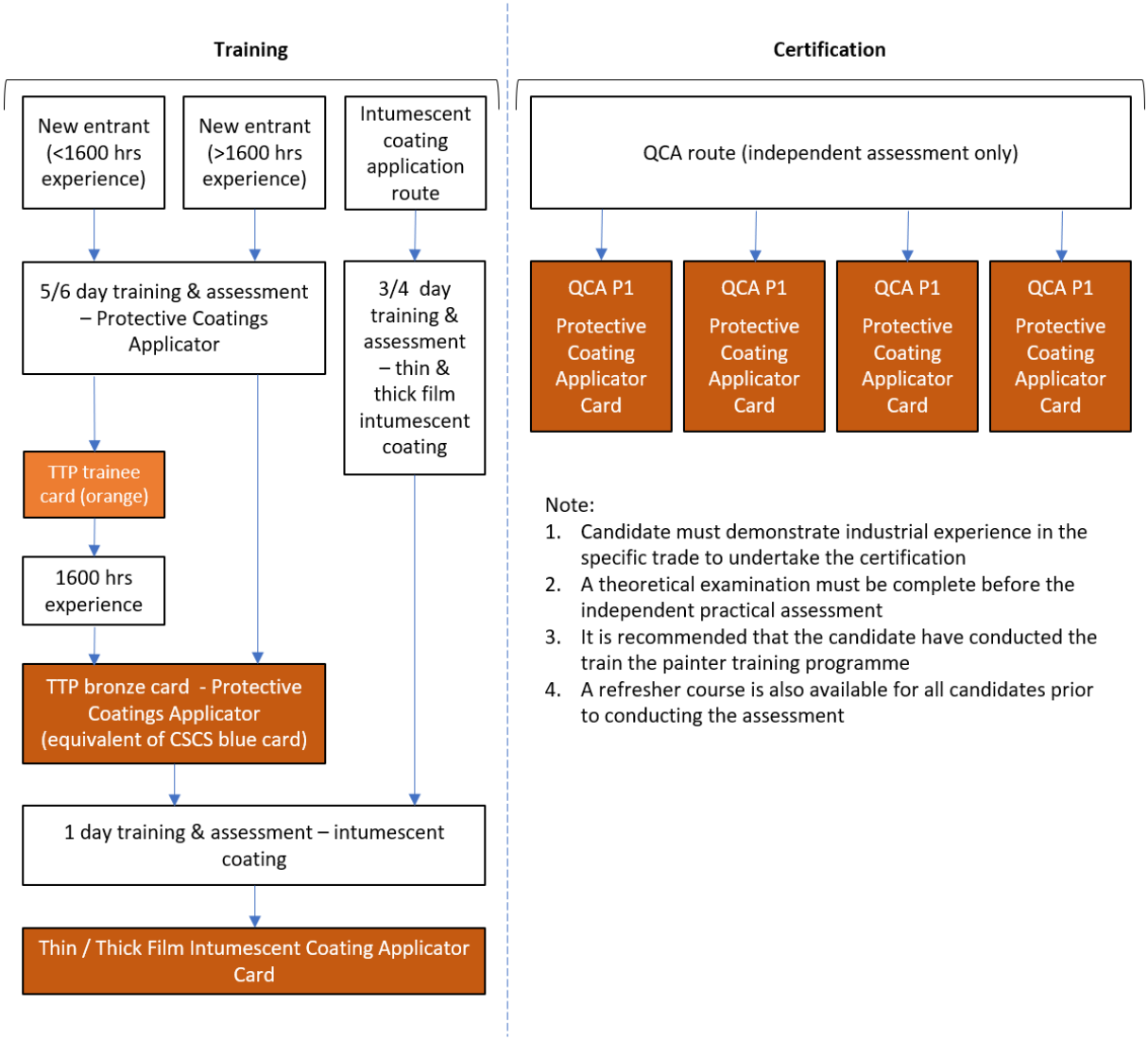
Activity required	Purpose	Owner	Timescale
Develop supporting tools for evidencing experience & behaviour	To support employers to evidence experience and behaviour	ASFP	Q4 2026
Create specification for refresher assessment	To set out the requirements for refresher of skills and/or knowledge as part of demonstration of currency of competence	PBSCG	Q2 2027
Consider creation of a passive fire partnership	To provide a vehicle to review and promote tools / programmes / assessments etc. which help to evidence competence	SLG 12	Q4 2026
Carry out updates to ASFP register & pilot registrations	To create a mechanism for validation of competence	ASFP	TBD
Communicate new requirements and changes regarding competence to industry	To drive update of new pathways and ensure that individuals and employers understand how they can evidence competence	PBSCG / ASFP	Ongoing

Appendix 1 - Existing routes to competence

Vocational qualification route



Training and assessment route (Train the Painter)



Note:

1. Candidate must demonstrate industrial experience in the specific trade to undertake the certification
2. A theoretical examination must be complete before the independent practical assessment
3. It is recommended that the candidate have conducted the train the painter training programme
4. A refresher course is also available for all candidates prior to conducting the assessment

Appendix 2 – Consolidated list of recommendations

Recommendation 1: The full range of structural materials and protection types should be considered within the framework and routes to competence

Recommendation 2: A single, central benchmark for competence should be set which overarches the existing schemes, setting out requirements across skills, knowledge, experience and behaviour

Recommendation 3: The scope of qualifications should reflect the range of substrate and protection types

Recommendation 4: Development of an activity-based framework will allow for flexibility in use of the standards created

Recommendation xx: Qualifications should be restructured to ensure accessibility for those who only undertake application / installation of one passive fire product / system

Recommendation 5: Robustness of qualification assessment should be improved to provide additional confidence

Recommendation 6: Basic fire safety training / sector specific fire safety training should be built in to routes to competence

Recommendation 7: The relationship between baseline competence and manufacturers' training should be make clear within the routes to competence created

Recommendation 8: Opportunities to widen the pool of available assessors should be explored

Recommendation 9: Any standard created should incorporate the need for third-party validation of competence across the full scope of skills, knowledge, experience & behaviour

Recommendation 10: The relationship between any competence requirements set out and registration / re-registration with CSCS should be considered

Recommendation 11: The standard of evidence required for revalidation across the full scope of SKEB should be set out within the routes to competence & framework of competencies

Recommendation 12: A knowledge refresher assessment should be incorporated into the evidence requirements for validation of on-going competence

Recommendation 13: A specification for refresher assessment should be created

Recommendation 14: Consideration should be given to how an industry partnership to support determination of relationship of training / assessment products to the wider framework for passive fire and to provide advice and guidance to employers / individuals should be made

Recommendation 15: Routes to competence should make clear the need to collate evidence of competence on a continual basis

Recommendation 16: Formal revalidation of competence should take place every 3 years

Recommendation 17: PBSCG should work with other competence groups dealing with the installation of passive fire measures to ensure a joined up landscape

Recommendation 18: Consideration should be given to alignment with other trades that may apply primers / top coats before / after intumescent application

Recommendation 19: Ongoing discussion with devolved nations regulators will be required to drive consistency in the devolved nations

Appendix 3 - Terms & definitions

Behaviour

Observable traits or ways of working that should be displayed. Observable things that an individual does or does not do

Competence / individual competence

Application of skill, knowledge, experience, and behaviour consistently by an individual to achieve a specific outcome

Standard for competence

Procedures & requirements for developing, measuring, validating, and proving competence against agreed skills, knowledge, experience, and behaviours required for an individual undertaking a role, function, activity, or task in order to perform their work to predetermined standards and expectations and maintain or improve their performance over time. This is sometimes referred to as a competence framework or competence standard

Continuing professional development (CPD)

Activities undertaken by an individual to maintain and develop competence, including formal and informal learning, self-assessment, obtaining feedback and identifying areas for improvement

Firestopping

Firestopping techniques encompass those used for penetration seals for services e.g. cables and pipes, linear joint seals, cavity barriers (e.g., in voids in roof spaces, above suspended ceilings, within walls and in external walls). Firestopping is also required as part of some other passive fire protection measures, including around fire door frames, around fire resisting /smoke control ducts and dampers.

Experience

Participation in relevant activities or observation of facts and events leading to acquisition, improvement or demonstration of skills and knowledge

Formal learning

Organised and structured learning against formal learning objectives

Framework of competencies

Agreed statements of skills, knowledge, experience, and behaviour against specific activities identified in the functional map

Functional map

A map of activities included in the sub-sector, split into pre-determined levels of complexity

Individual

A single human being

Informal learning

Self-directed learning, or learning from experience

Higher-risk building (HRB)

Building subject to enhanced regulatory requirements or where risks might be considered elevated (for example as a result of the physical characteristics of the building, the way in which the building is used, or as a result of human factors)

Job role

The specific combination of activities performed in a specific role, as agreed between an employee and an employer. This may change over time, or from employer to employer, or between employees of the same employer

Knowledge

Assimilation of facts, theories, and practices in relation to a given role, function, activity, or task

Occupation

The area of work undertaken by a category of employees, each of which may have a related but different job role. This is standard across the entire industry

Organisational capability

The combination of people, practices and other resources brought together by a business to allow it to function effectively and deliver value to customers and stakeholders

Qualification

A regulated programme of assessment, sometimes with aligned training, which results in the issue of a nationally recognised award being made upon completion

Revalidation

The formal process or reassessing an individual's competence against a sector-specific framework on a periodic basis to check that competence has been maintained

Sector-specific competence framework

A competence framework relevant to a specific role, function, activity, task, trade, or discipline

Skill

The ability to perform an activity or task consistently with a specific intended outcome

Validation

The formal process of assessing an individual's competence against a sector-specific framework

Appendix 4 - Bibliography

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