

PAS 8671:2022

Built environment – Framework for competence of individual Principal Designers – Specification

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Department for Levelling Up,
Housing & Communities

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Foreword

This PAS was sponsored by the Department for Levelling Up, Housing and Communities (DLUHC). Its development was facilitated by BSI Standards Limited and it was published under licence from The British Standards Institution. It came into effect on 31 July 2022.

Acknowledgement is given to Matt Thompson of Matt Thompson Communications, as the technical author, and the following organizations that were involved in the development of this PAS as members of the steering group:

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- Institution of Occupational Safety and Health
- Institution of Structural Engineers
- Local Authority Building Control
- L&Q group
- National Fire Chiefs Council
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- Royal Institute of British Architects
- Royal Institution of Chartered Surveyors
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Acknowledgement is also given to the members of a wider review panel who were consulted in the development of this PAS.

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The PAS process enables a specification to be rapidly developed in order to fulfil an immediate need in industry. A PAS can be considered for further development as a British Standard, or constitute part of the UK input into the development of a European or International Standard.

Relationship with other publications

This PAS is based upon the recommendations regarding competence (i.e. skills, knowledge, experience and behaviours) and assessment given in the report *Setting the bar: a new competence regime for building a safer future*¹ [1] in light of events following the Grenfell Tower fire.

This PAS forms part of a comprehensive suite of documents relating to competence in the built environment. The suite comprises:

- BSI Flex 8670, *Built environment – Core criteria for building safety in competence frameworks – Code of practice*²;
- PAS 8671, *Built environment – Framework for competence of individual Principal Designers – Specification*;
- PAS 8672, *Built environment – Framework for competence of individual Principal Contractors – Specification*; and
- PAS 8673, *Built environment – Competence requirements for the management of safety in residential buildings – Specification*.

Information about this document

This PAS responds to the Building Safety Act 2022 (BSA) [2] and subsequent secondary legislation which requires a client to appoint a designer with control over the design work as the Principal Designer. Under secondary legislation, the client is also required to take all reasonable steps to satisfy themselves that their chosen Principal Designer is able to fulfil their legal duties and is adequately competent.

¹ Recommendations were first set out in *Raising the bar: Interim report*, available at <https://www.cic.org.uk/news/construction-and-fire-industries-set-out-sweeping-proposals>.

² Downloadable from <https://www.bsigroup.com/en-GB/industries-and-sectors/construction-and-the-built-environment/built-environment-competence-standards/>.

Where the person in the Principal Designer dutyholder role is an organization, it is required to designate an individual under the organization's control to manage its dutyholder functions as the Principal Designer. Otherwise, the Principal Designer is an individual responsible for undertaking both the dutyholder role and the dutyholder functions. In this PAS, the meaning of "Principal Designer" includes individuals of either kind.

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Where websites and webpages have been cited, they are provided for ease of reference and are correct at the time of publication. The location of a webpage or website, or its contents, cannot be guaranteed.

Relationship of this PAS to domain-specific competence frameworks

This PAS sets the thresholds of competence that individuals operating as Principal Designers are expected to meet. It can inform the creation of domain-specific competence frameworks but is not one itself.

It is left to organizations developing domain-specific competence frameworks to agree the learning pathways, validation methods (including the required standards of evidence to support validation), and terms and conditions of certification and revalidation that are suitable for their particular cohorts.

For the purposes of demonstrating their competence to work as Principal Designers, individual designers are advised to consider obtaining accredited independent assessment and certification that is aligned to this PAS to verify their competence.

Relationship of this PAS to the Principal Designer dutyholder role under the Construction (Design and Management) Regulations 2015

This PAS does not cover the duties of Principal Designers under the Construction (Design and Management) Regulations 2015 (CDM) [3].

Whereas the primary objective of the Principal Designer under CDM [3] is to plan, manage, monitor and coordinate health and safety in the pre-construction phase by identifying, eliminating or controlling foreseeable risks, the primary objective of the Principal Designer under the BSA is to plan, manage, monitor and coordinate design work compliance (see **3.1.10**).

Use of this document

It has been assumed in the preparation of this PAS that the execution of its provisions will be entrusted to appropriately qualified and experienced people, for whose use it has been produced.

Presentational conventions

The provisions of this PAS are presented in roman (i.e. upright) type. Its requirements are expressed in sentences in which the principal auxiliary verb is "shall".

Commentary, explanation and general informative material is presented in smaller italic type and does not constitute a normative element.

Where words have alternative spellings, the preferred spelling of the Shorter Oxford English Dictionary is used (e.g. "organization", not "organisation").

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Compliance with a PAS cannot confer immunity from legal obligations.

Particular attention is drawn to the Building Safety Act 2022 (BSA) [2].

0 Introduction

0.1 Background

The focus of the Principal Designer dutyholder role is on design work compliance. It is part of a drive to secure the safety of people in and about buildings and to improve the standard of buildings. This drive was galvanized by the Grenfell Tower fire on 14 June 2017, which prompted a review of the system for regulating high-rise residential buildings. Led by Dame Judith Hackitt, the review concluded (among other findings) that the roles and responsibilities of those procuring, designing, constructing and maintaining all buildings (i.e. not just high-rise residential buildings) were unclear, and that competence across the system is variable.

The Government accepted the recommendations of Dame Judith's review, *Building a safer future, independent review of building regulations and fire safety: Final report* [4], and, after consultation and due parliamentary process, introduced the BSA [2].

This PAS addresses the competence thresholds that individuals are to meet when managing the dutyholder functions of the new Principal Designer dutyholder role introduced under secondary legislation related to the BSA [2]. The primary objective of introducing the Principal Designer dutyholder role is to improve design work compliance.

NOTE 1 See Clause 3 for definitions of “design work compliance”, “dutyholder function” and “dutyholder role”.

NOTE 2 The Principal Designer dutyholder role under the BSA [2] is not to be confused with the Principal Designer dutyholder role under the CDM [3], which in this PAS is referred to as the “CDM Principal Designer”. The PAS does not address competence thresholds for CDM Principal Designers.

0.2 About the Principal Designer dutyholder role

The person responsible for carrying out the Principal Designer dutyholder role can be a designer organization or an individual designer.

Where the person responsible is a designer organization, they are referred to in this PAS as an “Organization Principal Designer”. They are expected to:

- a) have sufficient organizational capability to fulfil the dutyholder role; and
- b) designate a competent individual under their control to manage their dutyholder functions.

Where the person responsible is an individual, they are referred to in this PAS as an “Individual Principal Designer”. They are expected to be competent to fulfil the dutyholder role and manage the dutyholder functions.

In this PAS, the individual managing the dutyholder functions (i.e. either a designated individual or an Individual Principal Designer) is referred to as a Principal Designer.

0.3 Competences for Principal Designers

Acceptable levels of Principal Designer competence are modulated by two factors.

- a) The organizational capability of the Organization Principal Designer: if the Organization Principal Designer is, for example, large and encompasses many designer disciplines, its designated individual might be able to work on a wider range of projects than an Individual Principal Designer, even though the two individuals' competences are equivalent. This is because, in managing the dutyholder functions, the designated individual might have more organizational capability to call on than the Individual Principal Designer.

- b) The specific demands of a project: some projects might require a higher level of competence than others because of their size, type, scope and/or complexity.

Regardless of organizational capability or the specific demands of a project, Principal Designers are nonetheless expected to have reached a minimum threshold of competence for all projects and, since higher-risk buildings (HRBs) are subject to a more stringent regulatory regime, a threshold that accounts for the additional competences needed to work on HRBs.

NOTE *Competence can be developed and managed through formal and/or experiential learning, and/or by adhering to the terms and conditions of ongoing Principal Designer competence certification of any awarding body, certification body or register aligned to this PAS.*

0.4 The Building Safety Act 2022

The BSA [2] sets out how the Government intends to deliver the principles and recommendations of Dame Judith Hackitt's report [4]. It aims for greater accountability and responsibility for safety issues throughout the life cycle of buildings. It establishes a new regulatory regime for building safety and introduces more stringent building control requirements for HRBs. It also sets the scene for instituting a culture change and motivating compliance in the industry.

0.5 Dutyholders and the Building Regulations 2010

The BSA's strategy for driving change includes, through secondary legislation, the creation of new dutyholder roles to improve compliance with building regulations, including that of Principal Designer.

The expected duties of and the competence requirements for the Principal Designer dutyholder role are to be set out in secondary legislation under the BSA.

0.6 New competence system and BSI FLEX 8670

Complementary work by the Competence Steering Group for Building a Safer Future (CSG) explored the competences needed for safety-critical disciplines working on HRBs. The final report, *Setting the bar* [1], recommended that, as one of the critical roles with oversight of building safety at each stage of a building's lifecycle, the Principal Designer dutyholder role would require enhanced competences, in addition to any discipline-specific competence. The CSG noted that individuals in the role need an overarching understanding of all aspects of building safety and the competence to appraise design, challenge bad practice, identify safety risks, and minimize safety risks to occupiers of the completed asset.

Setting the bar paved the way for a new system for harmonizing and standardizing the competences needed to determine compliant building safety outcomes in the UK's built environment industry as a whole, not just in HRBs.

The new system of competences is underpinned by BSI Flex 8670 which establishes the overarching framework for behavioural and functional competences needed to improve both building safety outcomes and the dominant culture at work in the built environment sector. It also defines the scope and common terms of reference that domain-specific (i.e. sector-, discipline- or role-specific) competence frameworks can conform to, aiming for consistency, reliability, and comparability regardless of the domains involved.

NOTE *This PAS 8671 is aligned to BSI Flex 8670.*

Setting the bar also reported on the production of three new PASs, including this PAS 8671, setting out the "enhanced competence requirements" that market providers can use to assess individuals. The report describes this work as "a bridge" enabling independent assessment and third-party accreditation of individual schemes offered by qualifying bodies and industry associations, recommending that the PAS ought not to be used for self-certification of competence by individuals.

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1 Scope

This PAS specifies competence thresholds that individuals are expected to meet when delivering or managing the dutyholder functions of the Principal Designer dutyholder role in alignment with BSI Flex 8670.

This PAS specifies the Principal Designer dutyholder's areas of competence as:

- a) behavioural competence;
- b) legislative and regulatory framework for compliance;
- c) management of design work compliance; and
- d) technical framework for compliance.

This PAS also specifies:

- 1) the minimum competence thresholds needed by Principal Designers to manage Principal Designer dutyholder functions; and
- 2) the additional competence thresholds needed to work on HRBs.

This PAS is for use by anyone interested in understanding the competence thresholds for managing the dutyholder functions of the Principal Designer dutyholder role. This includes people in the UK's legislatures with devolved powers and, indeed, in countries outside of the UK.

This PAS is for use by persons assessing Principal Designer competence, including awarding bodies, professional institutions, education and training providers, and certification bodies. It is intended to help them to create or adapt relevant domain-specific (i.e. sector-, discipline- or role-specific) competence frameworks in a way that matches the needs of their particular cohorts.

This PAS can also be used by built environment designer organizations to evaluate staff members and by individual designers to understand their own competence to work as a Principal Designer.

This PAS can also be used by those connected to the delivery and governance of the built environment, including clients and other dutyholders, the Building Safety Regulator and other enforcing authorities, relevant accreditation bodies, relevant government departments, and insurers.

Annex A includes information and guidance for competence assessors and awarding bodies, and for reviewing existing competence.

Annex B sets out how the PAS maps to BSI Flex 8670.

This PAS does not cover:

- i) guidance about how to comply with or interpret legislation related to the Principal Designer dutyholder role;
- ii) the competence thresholds for the CDM Principal Designer dutyholder role;
- iii) requirements for the organizational capability that allows Organization Principal Designers to fulfil the Principal Designer dutyholder role;
- iv) learning pathways for individuals to meet the minimum competence thresholds;
- v) systems for assessing competence; or
- vi) individuals' required prior learning, or eligibility criteria in the form of qualifications.

2 Normative references

The following documents are referred to in the text in such a way that some or all of its content constitutes provisions of this PAS³⁾. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

BSI Flex 8670, *Built environment – Core criteria for building safety in competence frameworks – Code of practice*⁴⁾

³⁾ Documents that are referred to solely in an informative manner are listed in the Bibliography.

⁴⁾ This PAS also gives an informative reference to BSI Flex 8670 v3.0:2021-04.

3 Terms, definitions and abbreviated terms

3.1 Terms and definitions

For the purposes of this PAS, the terms and definitions given in BSI Flex 8670 and the following apply.

3.1.1 accreditation

formal recognition by a regulated body that an organization engaged in assessment and certification activities is operating according to a prescribed standard

3.1.2 building safety risk

risk to the safety of persons in or about a building arising from fire, structural failure, and any other prescribed matter

3.1.3 building work

erection, extension, material alteration and installation of controlled fittings and services to a building

NOTE Attention is drawn to the Building Regulations 2010 [5] for a full definition of building work.

3.1.4 candidate

individual undergoing competence assessment to become a Principal Designer

3.1.5 competency (competencies)

skill, knowledge, experience, and appropriate behaviour required to achieve a defined outcome

NOTE This definition differs from that given in BSI Flex 8670, which is expected to be updated in the British Standard that supersedes it.

3.1.6 compliance

fact of being in accordance with relevant requirements

3.1.7 designer

person who, in the course of a business, carries out any design work or arranges for, or instructs, any person under their control to do so

3.1.8 design phase

period of time during which design work is carried out for a project, which can continue during the construction phase

3.1.9 design work

design of any building work

3.1.10 design work compliance

characteristic of design work which determines that, if built, the design work would conform to relevant requirements

NOTE Attention is drawn to the Building Regulations 2010 [5] in respect of design work.

3.1.11 duty

legally prescribed responsibility imposed on a person

3.1.12 dutyholder function

set of activities that a person in a dutyholder role performs to fulfil its duties

3.1.13 dutyholder role

regulated, named position occupied by a person that entails one or more dutyholder functions

3.1.14 relevant requirements

regulatory requirements relevant to the design or building work in question

NOTE Attention is drawn to the Building Regulations 2010 [5] in respect of building work and design work.

3.1.15 safety occurrence

either an aspect of the design relating to the structural integrity or fire safety of a HRB that, if built, would present a risk of a significant number of deaths, or serious injury to a significant number of people, or an incident or situation relating to structural integrity or fire safety of a HRB that would present an equivalent risk

3.2 Abbreviated terms

For the purposes of this PAS, the following abbreviations apply.

BSA	Building Safety Act 2022
CDM	Construction (Design and Management) Regulations 2015
CDM PD	Principal Designer under the Construction (Design and Management) Regulations 2015
CPD	continuing professional development
HRB	higher-risk building (as intended by the BSA and secondary legislation ⁵⁾)

⁵⁾ The legal definition of HRBs in this PAS is set out in the BSA [2] and secondary legislation. The BSA enables the definition of HRB to be reviewed and amended over time.

4 Minimum competences for the Principal Designer dutyholder role

COMMENTARY ON CLAUSE 4

Principal Designers are required to plan, manage, monitor, and coordinate the design work for design work compliance – i.e. compliance with relevant requirements.

It is not sufficient, however, for fulfilling the Principal Designer dutyholder role to be a box-ticking exercise to record designers' claims of compliance. Instead, Principal Designers should appraise and challenge design work in a way that helps designers to reach consensus on compliance. Principal Designers should have a sufficient breadth of knowledge to critically assess relevant requirements so that they can make informed decisions, ask intelligent questions, understand when they need to bring in expert help, and coordinate overall action based on their findings.

In managing the process of design work compliance and liaising with the Principal Contractor (i.e. the new Principal Contractor dutyholder role introduced by secondary legislation under the BSA), Principal Designers should understand how consensus on compliance is reached, and how risks to compliance arise. They should have an extensive grounding in the relevant legal and technical frameworks, and understand how information about compliance should be managed.

Principal Designers should have the competence (and, if relevant, Organization Principal Designers should have the organizational capability) to address any project-specific gaps in their own ability or capacity to manage the dutyholder functions, and to call in help when needed.

While this suggests that persons in the Principal Designer dutyholder role should understand buildings as systems and have control of the design work, there are likely to be instances where it is reasonable for other types of designers to fulfil the dutyholder role. The application of the thresholds in this PAS are therefore non-exclusive. Provided the Principal Designer's competence and, if relevant, the Organization Principal Designer's organizational capability, satisfies the client, any designer organization or individual designer can take on the dutyholder role, and any kind of designer can act as Principal Designer regardless of their prior learning, qualifications, and domain-specific (i.e., sector-, discipline- or role-specific) skills, knowledge, and experience.

Principal Designers should have a high level of personal integrity and responsibility, and be able to communicate openly and effectively, which is why appropriate behaviour features as a category of competence, and why the associated thresholds for Principal Designers are equivalent to those required by professional codes of conduct.

The competences in this PAS are separated into subject categories – Behavioural competence, Legislative and regulatory framework for compliance, Management of design work compliance, and Technical framework for compliance – for ease of communication. In practice, however, the competences and their separate categories overlap to a considerable extent and so are expected to be applied evenly and concurrently.

4.1 General

Principal Designers shall be able to demonstrate competence to work on design work other than for HRBs by applying the competences at the minimum thresholds (including the specific minimum thresholds) set out in 4.2 to 4.5 concurrently.

Principal Designers shall be able to demonstrate competence to work on design work including for HRBs by applying the competences at the minimum thresholds (including the specific minimum thresholds) and the additional thresholds set out in 4.2 to 4.5 concurrently.

NOTE *The target level of understanding in each of the competence thresholds listed in Clause 4 are determined by the choice of verb – see Annex A, A.4.*

4.2 Behavioural competence

4.2.1 Minimum competence

Principal Designers shall be able to demonstrate behaviour in accordance with legal duties and the “behavioural competences” set out in BSI Flex 8670, or any code of professional conduct aligned to BSI Flex 8670.

NOTE *For more information, refer to BSI Flex 8670 v3.0:2021-04 Clause 5, Table 1.*

4.2.2 Specific competencies

Principal Designers shall be able to:

- a) evaluate the limits of their own competence and, if relevant, their own organizational capability sufficient:
 - 1) not to take on a specific Principal Designer dutyholder role when the needs of the project in question are beyond the Principal Designer's competence and, if relevant, organizational capability; and
 - 2) to ask for help from other appropriately competent persons when needs emerge during a project that can no longer be met by the Principal Designer's competence or, if relevant, organizational capability;
 - b) demonstrate the integrity to refuse to accept design work for building work that cannot conform to relevant requirements and to voluntarily report safety occurrences;
 - c) evaluate how to cooperate with all dutyholders in a way that achieves design work compliance, including by:
 - i) assisting clients to provide information to dutyholders; and
 - ii) liaising with Principal Contractors to share relevant information, and having regard for the Principal Contractor's comments in relation to compliance; and
- NOTE 1** *The information that Principal Designers should share with Principal Contractors is related to the planning, management, and monitoring of design work compliance, including when design work is coordinated with building work.*
- d) apply interpersonal communication skills to:
 - i) encourage designers to perform their own duties, including to cooperate with other dutyholders;
 - ii) challenge designers to rework designs if evidence of design work compliance is insufficient; and
 - iii) challenge the Principal Contractor's comments if they compromise design work compliance.

NOTE 2 *There are no additional competencies for working on HRBs in this subclause.*

4.3 Legislative and regulatory framework for compliance

4.3.1 Minimum competence

Principal Designers shall be able to apply the legislative and regulatory framework related to how designers and design work meet legal requirements.

NOTE *Attention is drawn to the following legislation and regulations:*

- a) *Building Act 1984 [6];*
- b) *Building Regulations 2010 [5];*
- c) *Building Safety Act 2022 [2]; and*
- d) *Construction (Design and Management) Regulations 2015 [3].*

4.3.2 Specific competencies

Principal Designers shall be able to:

- a) apply understanding of the duties and behaviours required of Principal Designers;
- b) apply understanding of the purpose, structure and scope of the legislative and regulatory framework to appraising and challenging evidence of design work compliance; and
- c) understand how to find and apply information in the legislative and regulatory framework governing:
 - i) how design work, including HRB design work, if built, is expected to comply with relevant requirements; and
 - ii) how Principal Designers and other dutyholders are expected to perform their duties, follow prescribed procedures, and comply with legislation, including when working on HRB design work.

NOTE *It is possible for projects that start off as non-HRBs to become HRBs and so it is important for all Principal Designers to understand the prescribed procedures for HRBs.*

4.3.3 Additional competencies for working on HRBs

Principal Designers shall be able to:

- a) analyse their understanding of the legislative and regulatory framework related to designing HRBs, including in relation to prescribed procedures and information; and
- b) evaluate duties of other dutyholders in the context of HRB projects for the ways they could affect the Principal Designer's duties and design work compliance.

4.4 Management of design work compliance

4.4.1 Minimum competence

Principal Designers shall be able to apply general principles of management to plan design work compliance, and to manage, monitor, and coordinate designers and design work in relation to compliance during the design phase.

NOTE "Management" here means applying available resources to:

- a) set the plan for achieving design work compliance;
- b) control changes to the plan and monitor risks to design work compliance;
- c) coordinate designers' work related to achieving the plan;
- d) liaise with Principal Contractors about design work compliance; and
- e) monitor progress against the plan through to the end of the design phase.

4.4.2 Specific competencies

Principal Designers shall be able to:

- a) demonstrate understanding of how clients' project briefs, key performance indicators, programmes, designers' competence requirements, and, if relevant, their own organizational capability can affect design work compliance;
- b) demonstrate understanding of how the scope of relevant insurances, the limitations of relevant warranties, the terms and conditions of appointments, and the allocation of risk in appointments and contracts can impact on design work compliance;
- c) create strategies for managing design work compliance;
- d) apply understanding of how to manage the recording, maintenance and approval of evidence of design work compliance;
- e) understand the effect of designers' duties and, in the context of a specific project, their contracted responsibilities;
- f) analyse ways to identify and manage gaps in designers' competences, capabilities, or capacities sufficient to coordinate design work compliance;

- g) analyse how to monitor identified risks to compliance and control changes affecting design work compliance; and
- h) evaluate how to manage the process for achieving consensus from designers that coordinated design work is compliant.

4.4.3 Additional competencies for working on HRBs

Principal Designers shall be able to:

- a) evaluate the system of regulated procedures and information related to working on HRBs and their implications for the performance of the Principal Designer's duties, including contributing to the golden thread⁶⁾ of information, reporting safety occurrences to the Building Safety Regulator, and making competence and compliance declarations;
- b) evaluate ways to establish and maintain throughout the construction phase a system for inspecting HRB design work for safety occurrences and promptly reporting safety occurrences; and
- c) create ways to instruct reporting persons about the system for mandatory safety occurrence reporting related to working on HRBs.

4.5 Technical framework for compliance

4.5.1 Minimum competence

Principal Designers shall be able to understand general principles of building design, general principles of construction, and the "core criteria for building safety" set out in BSI Flex 8670 sufficient to:

- a) appraise designers' evidence of design work compliance;
- b) manage the process for designers to achieve consensus that coordinated design work complies with relevant requirements; and
- c) appraise Principal Contractors' comments affecting design work compliance.

NOTE The "core criteria for building safety" in BSI Flex 8670 are set out under the following headings:

- a) fire safety, structural safety, and public safety;
- b) managing building safety;
- c) knowledge management and communication; and
- d) buildings as systems, building systems, and construction products and materials.

⁶⁾ The principles of the golden thread are set out in the Building Regulations Advisory Committee (BRAC) golden thread working group report, which can be found at <https://www.gov.uk/government/publications/building-regulations-advisory-committee-golden-thread-report/building-regulations-advisory-committee-golden-thread-report>.

4.5.2 Specific competencies

Principal Designers shall be able to:

- a) understand the purpose, structure and scope of technical guidance, and standards governing building design and construction compliance;
***NOTE 1** The large number and complexity of technical guides, codes of practice, and standards makes it unlikely that any Principal Designer could know their content in depth. However, Principal Designers should know enough about the overall system of such guidance and standards to be able to look up relevant information or to consult a specialist.*
- b) understand how to find and apply information in technical guidance, and standards sufficient to:
 - i) appraise and challenge designers' evidence of design work compliance;
 - ii) manage design work compliance when different packages of design work are coordinated and when design work is coordinated with building work; and
 - iii) contribute to identifying risks to compliance;
- c) evaluate the potential impact of identified risks on design work compliance;
- d) understand general principles of construction sufficient to appraise Principal Contractors' comments about compliance; and
- e) understand information management systems sufficient to arrange for the establishment and maintenance of ways to:
 - i) record strategies for achieving design work compliance;
 - ii) manage the strategies; and
 - iii) control changes affecting design work compliance.

***NOTE 2** In controlling changes, Principal Designers should pay attention to all considerations, including the effect of changes on interdependent design features or strategies, and systems of quality assurance for works, services, products and materials, and their limitations.*

4.5.3 Additional competencies for working on HRBs

Principal Designers shall be able to:

- a) evaluate building safety risks in connection with the regulated system of mandatory safety occurrence reporting sufficient to report events related to structural safety, fire safety and other prescribed matters in HRBs;
- b) evaluate the potential during inspections of design work throughout the construction phase for new building safety risks to emerge and for the assessed severity of potential impacts of all risks to change, including to become safety occurrences;
- c) evaluate design work compliance sufficient to follow prescribed procedures for declaring compliance; and
- d) understand information management systems sufficient to:
 - i) contribute to the collation, accurate maintenance, and accessibility of digital records in the golden thread of information; and
 - ii) arrange the establishment and maintenance of the mandatory occurrence reporting system.

Annex A (informative)

Additional information for assessors and awarding bodies

A.1 Guidance for assessors and awarding bodies

The main intended user of this PAS is the built environment industry's various domain-specific (i.e. sector-, discipline- or role-specific) competence assessors and awarding bodies (including education/training providers, licensing or certification bodies, professional institutions, CPD providers, or designer organizations).

NOTE 1 *Notwithstanding, the provisions of this PAS and BSI Flex 8670 v.3.0:2021-04 are not dependent upon any kind of third-party assessment, verification, certification or audit.*

They can use the PAS to amend existing competence frameworks, syllabuses, learning pathways, or assessment criteria, or develop new ones, so that candidates in their target cohorts can demonstrate their baseline competence to work as Principal Designers.

NOTE 2 *This work is expected to allow Principal Designers to demonstrate that they meet minimum competence thresholds, which in turn helps clients in their duty to satisfy themselves that Principal Designers can fulfil their duties.*

A.2 Conformity with PAS 8671

Competence frameworks that conform to this PAS give confidence that, no matter what the domain, candidates whose competence is assessed against them are tested for the same competences to the same minimum thresholds.

NOTE 1 *Assessments carried out against competence frameworks that conform to this PAS developed in-house (by, for example, designer organizations) or developed independently by awarding bodies, are likely to give more confidence if the assessment systems used are accredited, third-party assessed, registered, monitored through CPD, and subject to periodic revalidation.*

The levels in this PAS are not aligned to the UK's national qualifications frameworks, although, in the interests of consistency, it is highly desirable that qualifications that meet the levels through educational courses and examinations for awards that include Principal Designer competence should be so.

NOTE 2 *The relevant home nations qualifications frameworks are the Regulated Qualifications Framework (RQF) in England, the Council for the Curriculum Examinations and Assessment (CCEA) in Northern Ireland, the Credit and Qualifications Framework for Wales (CQFW), the Scottish Credit and Qualifications Framework (SCQF) in Scotland, and the Frameworks for Higher Education Qualifications of UK Degree-awarding Bodies (FHEQ) in the UK.*

Similarly, it is highly desirable that educational qualification assessors' and awarding bodies' awards are accredited and recognized by the relevant national statutory regulator, and schemes that certify the competence of people are assessed for conformity with this PAS.

NOTE 3 *The national statutory regulators are Ofqual in England and Northern Ireland, Qualifications Wales in Wales, Scottish Qualifications Authority (SQA) in Scotland, and CCEA in Northern Ireland.*

NOTE 4 *Schemes that certify the competence of individuals can be assessed for conformity to this PAS. Assessment carried out by third parties using BS EN ISO/IEC 17024 is best practice.*

A.3 Guidance for reviewing existing competence

Candidates interested in offering their services to work as Principal Designers can use this PAS to understand and review their own competence first.

They should appraise their knowledge, skills, experience and record of behaviour honestly, in reference to actual situations where they demonstrated the required competences to the required level.

If they find any gaps in their competence, they should record and target them for formal or informal learning. Formal learning can be achieved through CPD, certification, gaining qualifications, or other kinds of training. Informal learning can be achieved on the job and under appropriate supervision by volunteering for projects, functions, tasks, and activities, or shadowing an individual who is appropriately competent.

There is no requirement for candidates to undergo formal assessment to demonstrate their Principal Designer competence. Doing so however inspires confidence in clients, co-workers, and insurers that the assessment of competence is valid.

NOTE 1 *Third-party assessment that aligns to this PAS and is carried out by an accredited, recognized independent assessor is likely to inspire the most confidence.*

NOTE 2 *This PAS conforms to BSI Flex 8670, which recommends that individuals working in the built environment industry should maintain their competence through CPD and have their competence periodically revalidated.*

A.4 Levels of understanding and adoption

The competence thresholds in this PAS are phrased using verbs that map to Bloom's Taxonomy [7]. Bloom's Taxonomy is a widely adopted hierarchical model used to classify educational learning objectives into six levels of complexity and specificity. In the cognitive domain, this goes from remembering basic facts to being able to create new information. From lowest to highest, the headline verbs are:

- a) remembering;
- b) understanding;
- c) applying (and "demonstrating");
- d) analysing;
- e) evaluating; and
- f) creating.

Wherever possible, each competence listed in this PAS contains one of these verbs, which in turn indicates the level of understanding required. The verb "demonstrating" is also used, which is equivalent to the level inferred from "applying".

Using Bloom's Taxonomy in this way communicates the desired learning objectives in a consistent language that is intended to ease their translation to and adoption in existing or new competence frameworks or syllabuses.

For example, it is expected that, provided the objectives of a relevant existing qualification are defined using Bloom's Taxonomy, it will be possible to determine whether that qualification already meets the thresholds specified in this PAS and so the extent to which the qualification or certificate already indicates that the qualification or certificate holder is competent to take on the dutyholder role of Principal Designer. Analysis highlights where there are gaps, setting the agenda for how the syllabus, learning pathways, or assessment criteria needs to be amended.

Annex B (informative)

Relationship of PAS 8671 to BSI Flex 8670

COMMENTARY ON ANNEX B

BSI Flex 8670 stipulates that competence frameworks in the built environment industry are organized under its core criteria. These are:

- a) behavioural competence;
- b) fire safety, structural safety and public safety;
- c) managing building safety;
- d) knowledge management and communication; and
- e) buildings as systems, building systems and construction products and materials

The competence thresholds in this PAS map to BSI Flex 8670's core criteria as shown in Table B.1.

Table B.1 – Core criteria from BSI Flex 8670 mapped to the competence thresholds in PAS 8671

BSB PD competences	Behavioural competence	Fire safety, structural safety and public safety	Managing building safety	Knowledge management and communication	Buildings as systems, building systems and construction products and materials
4.1 Behavioural competence	✓		✓	✓	
4.2 Legislative and regulatory framework for compliance		✓	✓		✓
4.3 Management of design work compliance	✓	✓	✓	✓	✓
4.4 Technical framework for compliance		✓	✓	✓	✓

Bibliography

Standards publications

For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

PAS 8672, *Built environment – Framework for competence of individual Principal Contractors – Specification*

PAS 8673, *Built environment – Competence requirements for the management of safety in residential buildings – Specification*

BS EN ISO/IEC 17024, *Conformity assessment – General requirements for bodies operating certification of persons*

Other publications

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Further reading

The Department for Levelling Up, Housing and Communities. *Building Safety Act Explanatory Notes, 2022⁷⁾*.

⁷⁾ Available at <https://publications.parliament.uk/pa/bills/cbill/58-02/0139/en/210139en.pdf>.

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