



Ministry of Housing,
Communities &
Local Government

A Construction Library: Building the evidence base

Research report

February 2026



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Ministry of Housing, Communities & Local Government
Fry Building
2 Marsham Street
London
SW1P 4DF
Telephone: 030 3444 0000

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Foreword

This report presents the findings of a rapid review of the role a publicly accessible construction product library could play in the construction sector. The Grenfell Tower Inquiry highlighted significant failings in the construction products regime and recommended the creation of a construction library to improve access to critical information for designers and industry professionals.

The Ministry of Housing, Communities and Local Government (MHCLG) commissioned this research to explore the feasibility, benefits, and challenges of such a resource. This report forms part of MHCLG's wider efforts to strengthen the construction products regime, as outlined in the Construction Products Reform Green Paper (2025).

I would like to thank the Chief Scientific Officer for funding this project that synthesises expert insights to enhance our understanding of how a centralised construction library could serve as a trusted and reliable source of information. By providing an overview of expert views, this research contributes to the department's evidence base and informs future policy thinking on the role of building safety information and product data in improving construction safety and efficiency.

I would like to extend my gratitude to colleagues from the Open Innovation Team and the experts from academia, government, and the third sector who contributed their time and expertise to this research. Special thanks go to the team from the University of Queensland, Australia for providing insights into their Cladding Materials Library, which served as a key example in this study.

Stephen Aldridge
Director for Analysis and Data, and Chief Economist
Ministry of Housing, Communities and Local Government

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1. Executive summary

Introduction

- 1.1. The [Grenfell Tower Inquiry](#) uncovered significant failings in the construction products regime and called for comprehensive reform to improve safety and accountability within the sector. The Inquiry highlighted the role that a centralised digital resource could play in ensuring that designers have better access to information. One of the Inquiry's specific recommendations was the establishment of a publicly accessible construction library to enhance access to critical information for designers.
- 1.2. In response to this recommendation, the Ministry of Housing, Communities and Local Government (MHCLG) commissioned the Open Innovation Team (OIT) to conduct a rapid review exploring the potential role and possible impact of a new construction product library. This review supports MHCLG's [Construction Products Reform Green Paper](#) (2025) that sets out proposals for reform of the construction products regime.

Those who design buildings, particularly higher-risk and complex buildings, would benefit from having access to a body of information, such as data from tests on products and materials, reports on serious fires and academic papers. In Chapter 112 we have referred to the Cladding Materials Library set up by the University of Queensland, which could form the basis of a valuable source of information for designers of buildings in general. We recommend that the construction regulator sponsor the development of a similar library, perhaps as part of a joint project with the University of Queensland, to provide a continuing resource for designers.

Grenfell Tower Inquiry Recommendation 113.39

- 1.3. The Inquiry provided some high-level details on the proposed library's scope and functionality, citing the [University of Queensland's Cladding Materials Library](#) in Australia as an example of an initiative that could inform the design of a similar resource in the UK. However, further research is required to assess the feasibility, potential benefits, and design considerations for such a library. This research provides additional evidence to inform the approach, by drawing on expert insights and synthesising their perspectives on the practical challenges, opportunities and key factors that must be considered to ensure the successful implementation of a publicly accessible construction library.

Research objectives and design

- 1.4. This report was designed to answer several key research questions related to the establishment of a construction product library. Specifically, the review aims to address five overarching research questions:
 1. How is data and information currently used by stakeholders in the construction products sector?
 2. What are the challenges and limitations faced by stakeholders in accessing reliable data and information?
 3. How do existing and emerging initiatives seek to improve information and data accessibility in the sector?
 4. What can MHCLG learn from other libraries or databases from across government?
 5. What are the key considerations for government in designing and implementing a centralised construction library?
- 1.5. To address these questions, the research team employed a mixed method approach combining qualitative interviews, an expert-led workshop, and a literature review. The team interviewed 19 experts, representing perspectives from academia, government, and the third sector. Where quotes from experts are included in this report, experts have provided their consent.
- 1.6. Expert interviews provided valuable insights into the current information landscape within the construction industry and the practical challenges that professionals face in accessing and utilising construction data. By engaging experts from diverse disciplines, including architecture, building and fire safety, digital information management and materials science, the project benefited from a breadth of perspectives on the key considerations and challenges for government in establishing such a resource.
- 1.7. Experts with direct industry experience provided insights into real-world challenges, while academic researchers shared their knowledge on the possible benefits of making information and data publicly available for the industry. Additionally, third-sector representatives offered perspectives on current initiatives to improve data standardisation and possible benefits and limitations of a library to the industry. This multidisciplinary approach enriched the analysis by ensuring that findings reflected both technical feasibility and practical implementation challenges for the sector.
- 1.8. In addition to the interviews, the team ran an expert-led workshop in February 2025 with 10 experts from academia and the third sector. This workshop was held prior to the publication of MHCLG's Construction Products Reform Green

Paper (2025). This session facilitated a more in-depth discussion on the complexities of designing and implementing a construction product library. This included considerations related to data standardisation, users' needs and possible engagement to encourage uptake of the library from the sector.

- 1.9. The research team also reviewed academic literature, reports from trade associations and third-sector organisations to complement the findings from interviews and the workshop. This included an analysis of any relevant research studies, trade publications, and consultancy reports examining digital information management in the construction industry.
- 1.10. The evidence gathered provides a foundation for understanding the opportunities and challenges associated with establishing a construction library. The findings and recommendations presented in this report aim to support officials in their policy development process when considering the Inquiry's recommendation.

An overview of key findings

- 1.11. Experts broadly agreed with the Grenfell Tower Inquiry recommendation that a construction library could benefit the construction sector. By providing better access to construction product data for designers, there may be improvements in building safety, decreases in business costs and improvements in the efficiency with which buildings are built, maintained and demolished.
- 1.12. However, experts emphasised several significant barriers that could make these benefits difficult to achieve in practice. These include industry barriers, such as the high number of small and medium-sized businesses, and data issues, including a lack of standardisation, inconsistent product categorisation and difficulty accessing product information.
- 1.13. Unless issues with data quality and standardisation are addressed, the positive impact of a new construction library could be severely limited. Experts stressed that without acknowledging and addressing these issues, a construction library may offer only limited benefit over currently available alternatives, such as subscription services and databases.
- 1.14. Experts emphasised that ongoing initiatives are attempting to address these issues but require further support. There are multiple initiatives that are attempting to promote standardised product data templates, enhanced codes of practice and collaborative approaches to naming standards. These initiatives may improve the quality and consistency of construction product data.

1.15. Before reaching a final decision on creating a library, MHCLG might consider undertaking the following policy development process:

1. **Improve underlying data standardisation issues:** MHCLG should take action to improve the availability and quality of data before collating data into a new library.
2. **Fill knowledge gaps on cladding assemblies:** MHCLG should support work to address the current lack of data on how cladding products interact when combined with other products. This could be achieved by directly commissioning testing of commonly used cladding assemblies, or by supporting academic initiatives, like the Queensland Cladding Materials Library.
3. **Support and build on existing initiatives:** MHCLG should consider how a new library would interact with existing databases and services. This would not only help reduce the duplication of work, but it could also help to identify useful data linkages and share knowledge between different resources.

2. How is building safety and product information accessed and used?

Who is a designer and what information do they need?

- 2.1. The [Construction \(Design and Management\) Regulations 2015](#) establishes a broad definition of a designer. Under these regulations, a designer is defined as any organisation or individual who, either prepares or modifies designs for construction projects, or arranges for, or instructs others to do so. This means that anyone providing key information in constructing a building can be considered a designer. This information can inform the production of drawings, design details, specifications and design calculations.
- 2.2. Common professions that fall within this category are architects, consulting engineers, quantity surveyors and interior designers. If a construction professional specifies and alters designs as part of their work, they are considered a designer. Designers need access to a wide range of detailed, reliable information to help produce their designs. Common types of information that they may require include product specifications, material testing certificates, academic research, building regulations, incident reports, technical notes and case studies.

How do they access the information they need?

- 2.3. Despite the critical nature of these kinds of information for a designer, no publicly accessible, centralised resource of this information exists. Instead, there are four main sources designers use to access this information.
- 2.4. This first source is directly from manufacturers. Designers can obtain product specifications, including material performance data, fire safety certifications, and other technical documentation directly from manufacturers. This information may accompany a selected product. However, the format and depth of this information may vary between companies. This makes it difficult for designers to directly compare products or verify the reliability of the data they have been given.
- 2.5. The second is from online subscription services where designers pay for access to databases of product information.

- 2.6. The third is from government, regulatory agencies, professional bodies and standards institutions which publish regulations and guidance that designers must consult.
- 2.7. Finally, designers will access academic journals to find more detailed information into the performance of materials and case studies of incidents.

Who else needs access?

- 2.8. Experts interviewed by OIT argued that professionals beyond designers would benefit from access to a construction library. Experts recommended identifying professionals based on a building's entire lifecycle needs. This includes not just the initial phase of a building's construction, but also its maintenance, refurbishment and demolition. Like designers, professionals at these stages also need access to reliable, up-to-date building safety information and product data.
- 2.9. While the Grenfell Tower Inquiry recommendation specifically mentions designers as likely beneficiaries of a construction library, our research however suggests expanding this list of professionals. The following list outlines some of those extra beneficiaries and the reasons why they may benefit from access to a library:
- **Builders and Contractors:** As they make refurbishments to a building, they need information about the products used in its construction and any new materials they may be adding;
 - **Fire safety assessors, engineers and fire and rescue services:** To make decisions about the fire risk of a building, they need data on the fire performance of construction products and the materials they contain;
 - **Building owners and facility managers:** When maintenance is carried out on a building, owners require information on the materials they are replacing and product data sheets detailing how to safely install new products;
 - **Academics and researchers:** Historic product data sets, case studies of building faults and sustainability reports allow experts to deepen the industry's understanding of a product's performance.

"Just focussing on designers is a narrow view. Contractors, manufacturers, facility managers and others could all benefit from a construction library."

David Churcher MBE, Hitherwood Consulting

What problems do they face when accessing information?

- 2.10. The decentralisation of product data and building safety information in the construction industry creates several challenges for designers and others accessing the information they need. These fall into two categories: data quality, standardisation and accessibility; and knowledge gaps and missing data.

Issues with data quality, standardisation and accessibility

- 2.11. As there are no sufficiently detailed, widely accepted data taxonomies that are used across the sector, categorising data on products is extremely challenging. This was the most common issue raised by experts. Construction product data is also frequently not shared and is of variable quality. While companies routinely share product data with customers, other stakeholders often struggle to access this information. In addition, experts noted even when shared, manufacturers often provide inaccurate or incomplete product data. This issue was also raised by the Grenfell Tower Inquiry.
- 2.12. Non-product specific information is also split across multiple platforms. This includes technical guidance, building standards, and regulations. Providers of this information often require users to pay for subscriptions to access it. The range of platforms can make it difficult for designers to identify and navigate the information they need. Furthermore, while manufacturers provide technical documentation, including specifications, certificates, and safety data sheets, their testing protocols often lack consistency. This can make direct comparisons between products difficult.

Knowledge gaps and missing data

“Companies often use customised testing regimes, which can be different for specific manufacturers or projects. This means test data may not be directly comparable.”

Professor Jacqui Glass, University College London

- 2.13. There are also issues with the completeness of building safety data. Manufacturers typically only provide current product information, making historic data difficult to obtain for building renovations and refurbishments. This is a particular issue for older buildings, where companies involved in their construction may no longer exist.

- 2.14. Moreover, there is limited data on cladding materials and cladding interactions. This is due to manufacturers tending not to collect and share data on how materials in buildings function when combined with other products, particularly in external facades where multiple products may be present.

What is the impact of these problems?

“There is little consensus when performing assessments. This can lead to dangerous buildings remaining occupied, or millions of pounds spent on unnecessary refurbishments.”

Dr Angus Law, University of Edinburgh

- 2.15. These data and information challenges have several negative effects across the construction industry. Firstly, designers, engineers and assessors often reach different judgements on the fire risk posed by a specific building, due to missing or low-quality data. These inconsistent assessments can result in dangerous buildings remaining occupied or trigger costly, potentially unnecessary, refurbishments.
- 2.16. Furthermore, designers and other professionals must pay for multiple subscriptions to access information they need. Although larger firms may be able to absorb these costs, these costs are more challenging for small and medium-sized businesses. These data-related challenges also create inefficient processes for companies of all sizes. New build projects will often commission their own surveys or new data collection, rather than use existing building safety data due to its unreliability. This leads to the duplication of work and an inefficient use of resources. This can also delay project timelines and increase costs.
- 2.17. The decentralised system of information for the sector can also make it difficult for designers, and others, to find the most relevant, up-to-date guidance. This can lead to increased legal risk, fines and project delays. The fragmentation of data in the sector also creates knowledge silos that impede innovation. The lack of open access to reliable design information and product data reduces knowledge transfer within the industry and between academia and other sectors.¹

¹ White, KM. & Clarkson, P.J., ‘Exploring the barriers to innovation adoption in the UK construction industry’, Proceedings of the Design Society (2024).

3. Construction industry initiatives

- 3.1. There have been multiple attempts to improve the quality and accessibility of data across the construction industry. Within the UK, these date back several decades and include initiatives like the [Unified Classification for the Construction Industry \(UNICLASS\)](#), a voluntary classification system that aims to organise construction project information. Recent initiatives have expanded on previous efforts. For example, the [UK BIM Framework](#), designed to support implementation of Building Information Modelling, or the [BUILD UP](#) skills initiative, set up in 2011, to boost training in the construction sector and support the adoption of digital tools.²
- 3.2. This chapter outlines some of the most prominent initiatives currently under development or already introduced. These range from attempts to create construction product databases to efforts to standardise data templates and codes of practice.

The Queensland Cladding Materials Library

- 3.3. In June 2017, the Queensland Government in Australia established a taskforce to review the types of cladding and other combustible products on buildings across the state. Set up in response to the Grenfell Tower and other fires, the taskforce partnered with the University of Queensland to create the Queensland Cladding Materials Library (QCML), a publicly accessible database for fire safety engineers.

“In Chapter 112 we have referred to the Cladding Materials Library set up by the University of Queensland, which could form the basis of a valuable source of information for designers of buildings in general.”

Grenfell Tower Inquiry, Recommendation 113.39

- 3.4. Named by the Grenfell Tower Inquiry as an innovative response to the problem of combustible cladding on public buildings, this section reviews its approach and applicability to the UK.

² Sacks, R. et al, ‘BIM Handbook: A guide to Building Information Modelling for owners, designers, engineers, contractors, and facility managers, 4th edition’, Wiley (2025).

The Queensland Cladding Materials Library approach

- 3.5. In 2017 a team of academics conducted fire testing of cladding materials in university laboratories. This provided data for a digital library, containing two categories of information: material composition and flammability data. Material identification tests allowed fire safety engineers to identify products without relying on inconsistent manufacturer information and product naming and fire performance data was collected using peer reviewed testing protocols.
- 3.6. Within 12 months, the team published data on the fire performance of cladding materials specifically designed to help fire engineers assess the hazards posed by certain materials. This data was published publicly but was targeted to fire safety engineers. The library's owners also provided training for fire safety engineers. This helped Queensland assess c.18,000 buildings. Of these buildings, 75% were deemed to need no further action, with the remaining 25% requiring additional assessment. Of this remaining 25%, c.100-200 publicly owned buildings were estimated to need remediation works.
- 3.7. The library helped the Queensland Government fully audit all their public buildings at a lower cost than neighbouring states. However, shortly after academics published the data, the government prohibited the use of flammable cladding products on buildings. This reduced demand for the data provided by the QCML. The library is not currently maintained, due to resourcing constraints. Despite the library's short operational lifespan, its ability to collect reliable data for fire safety engineers demonstrated the feasibility of this approach.

Applicability to the UK

- 3.8. To replicate this approach, MHCLG would need to partner with a university to test the material composition and fire performance of cladding materials. Adopting this approach could improve the quality of data on cladding materials in the UK. The Queensland Cladding Materials Library's approach to publishing flammability data and offering training to fire safety assessors could help improve fire safety assessments in the UK.
- 3.9. While the data this approach produces provides valuable insights, it does not provide information for a comprehensive assessment of fire safety data. Firstly, the database only contains c.100 product entries, which is only a small fraction of the total number of cladding materials in use. This small number of tests therefore provides only a partial assessment of cladding materials on buildings. Secondly, the performance data produced only considers cladding in isolation, while in practice, cladding materials are mostly used in combination with other products influencing their performance.

3.10. It's therefore unlikely that this approach will solve the sector's wider data problems. While a library like the Queensland Cladding Materials Library may address specific data gaps and quality issues with cladding materials, it will not improve wider data standardisation issues across the sector. Further details on the Queensland Cladding Materials Library are provided in Annex 2.

Other initiatives

3.11. Although not directly referenced by the Grenfell Tower Inquiry, there are many other initiatives that could inform the creation of a construction library. Table 3.1 provides a summary of the key features of prominent initiatives across the construction sector. The analysis below explains how they may help or negatively impact the creation of a new library. These examples are also referenced later in this report.

Table 3.1 Summary of prominent construction data management initiatives in the UK and EU

Initiative	Manufacturers information hub	Digital Product Passports	LEXICON Project	Code for Construction Product Information & CPI Ltd	NBS Source	Edinburgh Cladding Assembly Library
Launch date	Expected late 2025	2024 (with wider launch from 2026)	2016	Post-Grenfell Tower fire	2020	Expected late 2025
Focus	Data centralisation	Data quality & standardisation	Data standardisation	Data quality	Data centralisation	Data quality
Aims	Point to access manufacturer's product information across Europe	Enhance supply chain visibility and provide a digital record of product information	Improve practices in data management	Cultural change by promoting accurate product information	Provide access to product information	Provide testing results of cladding assemblies
Types of data	Links to manufacturer's data	Product identifier (QR code), compliance documentation etc.	Product data templates (PDTs)	Clauses for manufacturer and distributor responsibility	Manufacturer product information, BIM objects, third-party certifications	Testing results, materials to support fire assessors
Key features	Signpost links to individual manufacturers websites and product data	Will be required for products on the EU market, will not be limited to the construction sector	Free-to-access software platform to support the 'Golden Thread' of information	Code of practice, organisation assessments and product information audits	Online database containing data on over 28,000 products	Build on QCML with test results for material mixes

How could these initiatives interface with a construction library?

- 3.12. A construction library could benefit from these existing initiatives. For example, it could support and build-on the progress of several initiatives that are helping to standardise and improve the quality of construction product data. Although more work still needs to be done, initiatives like LEXiCON and Digital Product Passports are attempting to promote data templates that can be used to standardise product data. A construction library could adopt these templates, benefiting from accessing a consistent body of product data from the sector.
- 3.13. Other initiatives, such as the Edinburgh Cladding Assembly Library, could help plug some knowledge gaps on safety-critical products. The Edinburgh Cladding Assembly Library is collecting new data on the fire performance of cladding systems. This means there is an obvious synergy between this initiative and a construction library, which could be used to store and share this new flammability data. In addition, The CCPI and CPI Ltd provide a valuable example of how new product codes and regulations can be independently assessed and verified. A construction library could work with similar initiatives, or use the CCPI precedent, when designing its own data verification process.

“The sector has access to many different resources, all held in different places. We need to carefully consider how a construction library would sit among these existing services

Representative from Royal Institute of British Architects

- 3.14. However, MHCLG should also be aware of the risks these initiatives present. The number of initiatives currently in progress may mean stakeholders struggle to engage with a new library. Experts emphasised that many stakeholders, especially SMEs, may struggle to keep up to date with relevant data management initiatives. Therefore, careful consideration is needed to determine how a library could best add value in relation to these existing initiatives.
- 3.15. Also, as previous initiatives to standardise and improve the quality of construction product data have failed the construction industry may be reluctant to invest in new initiatives. This increases the risk of a construction library failing if it is too reliant on other initiatives, which may themselves fail. Finally, as some of these initiatives overlap in scope or address the same issue, a new construction library will need to avoid producing contradictory advice or drawing limited resources away from other valuable initiatives.

4. Insights from across government

- 4.1. There are also databases created and administered by government across other sectors that provide insights into the challenges and opportunities of providing a centralised source of information. This chapter focuses on two examples: the [Product Safety Database](#) (PSD) and [Submit Cosmetic Product Notifications](#) (SCPN), both created and administered by the Office for Product Safety and Standards (OPSS).

UK Government product databases

- 4.2. Both the PSD and SCPN were created in late 2019 following the UK's exit from the European Union. While they collect information and data on different products from different sources, they both allow government to identify products with possible safety issues. A comparison of the key points for each database is given in Table 4.1. Further details on the PSD and SCPN are given in Annex 2.

Table 4.1 Summary table for the Product Safety Database and Submit Cosmetic Product Notifications.

Database	Product Safety Database	Submit Cosmetic Product Notifications
Scope	Database of all products for sale in the UK (excluding food, vehicles and medicines)	Database of cosmetic products on sale in the UK
Access	OPSS publishes information which is publicly available on Product Safety Alerts, Reports & Recalls if the information (referred to as a 'notification') meets the following criteria: the notification risk level is set as either 'Serious' or 'High'; or the corrective action 'Recall of the product from end users' has been carried out. Only registered users from market surveillance agencies can submit data (c.2,500 users)	Not publicly available, only available to market surveillance agencies to search for data, and cosmetic companies to raise new notifications
Aims	Allow market surveillance officials to submit information about unsafe or non-compliant products. Enable officials to track and monitor safety issues with consumer products. Enable government to take fast action when safety issues are identified	Allow cosmetic manufacturers to submit information on products. Enable officials to maintain oversight of materials in cosmetic products being sold. Enable government to take fast action when safety issues are identified
Types of data and information	Product name, product status (e.g. unsafe/non-compliant), risk rating (e.g. high, medium or low), hazard type (e.g. fire, injury, etc.), additional comments, businesses and their role in association with a product, any corrective actions applied to the product The PSD contains c.140 entries relating to construction products. However, this data is sparse and provides little information on these products. This information is of limited use to the wider construction sector	Product name, product category (e.g. hair or skin product), product ingredients, details of the responsible person

What can MHCLG learn from these examples when designing a construction library?

- 4.3. These databases present MHCLG with valuable lessons when designing a construction library. Firstly, they show that any data in a library needs to be trusted by the users. The SCPN gathers its data directly from cosmetic companies. This is relatively straightforward for them as the cosmetics industry has a strong culture of transparency and accuracy with data and information. However, this is more difficult in the construction industry where products are often combined in complex systems, which has an impact on the information needed for their use. Experts also referenced cases of companies providing misleading or inaccurate product information. As such, they recommended caution when relying on manufacturer-provided product data.
- 4.4. Secondly, MHCLG could consider using the PSD as a source of data for identifying unsafe construction products. The PSD currently has c.140 entries relating to construction products. These are products that have been identified as non-compliant or unsafe. A construction library could link to the PSD to capture any further alerts related to construction products.
- 4.5. However, the approaches of both databases to the accessibility of information are unlikely to provide examples to help construction professionals access data and information in a new library. This is because the PSD only allows government officials to submit data and only publishes data on defective or unsafe products, limiting its use. Furthermore, the SCPN only provides information to market surveillance officials not the entire sector. While their approaches enable officials to monitor the safety of products, adopting a similar approach for a construction library will not address wider data accessibility issues. Limiting public access to the library may make manufacturers more comfortable with sharing their data. Although, this would not improve accessibility for designers and others.
- 4.6. While these databases were created quickly, it is unlikely a construction library could be built as fast. Government officials built the SCPN and PSD at pace due to the UK's exit from the European Union. This was facilitated by the prior existence of equivalent EU databases, which performed the same function. With the lack of standardised product data in the construction sector, a similar library may not be delivered as quickly.

5. Designing and implementing a construction library

- 5.1. A construction library would need to overcome the construction sector's fragmented structure, resistance towards data sharing and slow digitisation.³ The process of designing and maintaining a digital resource also presents practical challenges, such as ensuring data accuracy and integration with existing information systems. This chapter outlines some of these key challenges, as well as some possible options for encouraging uptake.

MHCLG would need to overcome systemic issues in the sector

- 5.2. Although experts noted a construction library's value, they highlighted several barriers that would need to be overcome during its design and implementation. These can be grouped into two themes.

Industry composition and pressures

- 5.3. As there is a high proportion of small and medium-sized businesses in the sector, experts noted these smaller companies often lack the resources (time, money and expertise) to actively participate in new initiatives. [The Department for Business and Trade](#) estimate there are 883,000 small and medium-sized businesses operating in the construction sector, as of the start of 2023. It's likely many of these will find it challenging to engage with a new construction library.
- 5.4. There are also some commercial barriers for stakeholders across the sector that may limit their willingness to engage with a new library. Current data services, such as private companies that provide paid subscription services, may see a new publicly accessible construction library as a direct threat to their business model. Manufacturers may also be reluctant to share data on new products, as it may expose commercially sensitive information or intellectual property to competitors.
- 5.5. To encourage stakeholders to share data and information, it may be necessary to restrict the regulator's access to certain details and/or for the regulator to limit the specific data it publishes on the library. An additional assessment is needed to determine which types of data could be appropriately restricted. This assessment should balance the benefit of increased stakeholder participation against the potential drawbacks of limiting access for other users. Nonetheless,

³ Royal Institute of Chartered Surveyors, 'Digitalisation in construction report 2024' (2024).

in principle, selectively restricting some information should not prevent the creation of a library that remains a valuable public resource.

- 5.6. The competing interests from different stakeholders may pose a barrier to the design of a construction library. For instance, those who input data (e.g. manufacturers) and those who use it (e.g. designers) often have different needs regarding the types of information they share and how it is organised. This may make it difficult to reach a consensus on the contents and structure of a construction library.

Cultural challenges

- 5.7. Experts noted the risk-averse attitude of construction firms, particularly when there may be a legal risk with sharing product information. Therefore, a construction library would need to clarify who has final legal responsibility for the information it shares.
- 5.8. The lack of digitisation across the sector may also present a barrier to the sector's use of a library. It's common for data on some products not to be stored in a digital format that can be easily shared with a centralised construction library. This is especially the case for products created by small and medium-sized businesses. Further work would be needed to support the digitisation of information across the sector.
- 5.9. Experts also emphasised the findings of the Grenfell Tower Inquiry, which criticised the practice of self-certification within the industry and highlighted the shortcomings of the [Building Research Establishment](#) (BRE). A potential new construction library would need to demonstrate to the sector that it is independent and not unduly influenced by the commercial interests of companies.

MHCLG would also need to overcome practical barriers

- 5.10. Alongside these systemic issues, there are several practical barriers that will need to be overcome if a construction library is to be created. The most significant of these barriers relate to collecting data and ensuring its standardised.
- 5.11. A construction library would need to decide how it will collect data for a library. There are likely two main sources this data could be found: government-commissioned testing and/or existing data providers. If the government were to commission data, it would likely need to adopt a similar approach Queensland Material Cladding Library. This would allow the government to plug knowledge gaps on the material composition and fire performance of some cladding

materials. However, as discussed in chapter 3, there are limitations to this approach.

- 5.12. The government could also work with manufacturers and/or product databases to source large amounts of data, in a similar way to the Manufacturers Information Hub. If government aims to collect data, it will be necessary to develop standard data templates, to ensure consistency in how information is collected and shared. This could build on work already done by initiatives like LEXiCON.
- 5.13. Robust mechanisms will also be needed to verify the accuracy and completeness of any information before it is added to a library. These mechanisms could draw on the assessment model used by CPI Ltd to verify adherence to the CCPI. Methods for maintaining and cleaning the data contained in a construction library will also be needed. These could be used to ensure that all entries are added consistently (to help collect further analysis and summary statistics) and confirm whether the information remains up to date.

MHCLG could use several levers to encourage engagement

- 5.14. It is not yet determined what functions the library will address. Depending on purpose, establishing a library may not guarantee widespread engagement across the sector, as evidenced by other initiatives. However, there are measures that could be taken to further incentivise participation and engagement if it is created.
- 5.15. MHCLG could work with professional bodies to incentivise the use of a library. For example, organisations such as the [Royal Institution of Chartered Surveyors](#) (RICS) and the [Institution of Civil Engineers](#) (ICE) could recognise members who provide data and use the library through continued professional development initiatives. The library could also offer training that educates professionals on its use, while contributing towards the Continued Professional Development requirements for their professional registration status.
- 5.16. MHCLG could also consider developing certification schemes, for example certifications of accreditation could be awarded to manufacturers who share data. This could be similar to the certifications offered by the Fair Trade or B Corp schemes. Companies that are awarded these certificates can then use them on their marketing materials, to gain a competitive advantage through increased brand awareness and customer confidence.

- 5.17. Due to the administrative constraints of small and medium-sized businesses, extra support could be offered to engage with a new construction library. Due to the large number of small and medium-sized companies in the construction sector this will be a complex problem, and further analysis will be needed on how best to implement this support.
- 5.18. As a final resort, MHCLG could create a new regulatory requirement for stakeholders to share their data with a construction library. This could be similar to the SCPN, which requires notifications of all new cosmetic products brought to the UK market.

6. Recommendations

- 6.1. Before reaching a final decision on creating a library, MHCLG might consider undertaking the following policy development process:

Improve underlying data standardisation issues

- 6.2. The lack of standardised data is a major issue within the construction sector. This current lack of transparency and inconsistency will limit the positive impact of a library.
- 6.3. MHCLG could take action to improve the availability and quality of data before collating this information into a new library. This process could involve reviewing the quality of currently available data, championing the adoption of standardised data templates and encouraging the uptake of these agreed standards across the construction industry.

Fill knowledge gaps on cladding assemblies

- 6.4. Cladding products are rarely used in isolation and the way they are combined can have a major impact on their performance and behaviour. Despite this, current data on these interactions and the impact they have on building fire safety is limited.
- 6.5. MHCLG could support work to address this current lack of data. This research could be through directly commissioning testing of commonly used cladding assemblies or supporting academic initiatives, similar to the Queensland Cladding Library that was referenced by the Grenfell Tower Inquiry.

Support and build on existing initiatives

- 6.6. There are several existing initiatives that are attempting to address the issues highlighted above. Rather than duplicating this work, MHCLG could consider supporting these initiatives where possible and taking advantage of any synergies between initiatives that arise. The department could consider how quickly these initiatives are likely to resolve issues with data standards and whether there are other outstanding issues that are not being sufficiently addressed.
- 6.7. MHCLG could also consider how a new library would interface with existing databases and services. This would not only help reduce the duplication of work, but it could also help to identify useful data linkages and share knowledge between different resources.

Annex 1: Contributing experts

During this project, OIT has consulted with 19 experts from academia and the third sector, selected for their expertise in construction, building safety and data management. These individuals were chosen to ensure a well-rounded perspective, incorporating real-world industry challenges, academic insights on open data, and third-sector views on data standardisation and accessibility.

To gather rich qualitative data, OIT conducted individual interviews and hosted a workshop in February 2025. Interviews allowed for in-depth exploration of expert perspectives, while the workshop facilitated interactive discussions on the practicalities of designing and implementing a construction library. This approach enabled us to capture both technical feasibility and broader policy considerations. Additionally, OIT interviewed three officials from the Office for Product Safety and Standards to gain insights into government database management and its relevance to a potential construction library.

1. Amanda Long, **Code for Construction Product Information**
2. Ana Costa, **Lancaster University**
3. Angus Law, **University of Edinburgh**
4. Barry Gledson, **Northumbria University**
5. Ben Oram, **Buckley Gray Yeoman**
6. Chris Gorse, **Loughborough University**
7. David Churcher, **Hitherwood Consulting**
8. Emma Hooper, **RLB Digital**
9. Jacqui Glass, **University College London**
10. Kell Jones, **University College London**
11. Martyn McLaggan, **University of Sheffield**
12. Mohammed Dulaimi, **Leeds Beckett University**
13. Neal Butterworth, **Design Fire Consultants**
14. Representative, **Royal Institute of British Architects**
15. Representative, **Royal Institute of British Architects**
16. Ryan Hilditch, **Halliwell Global**
17. Sarah Davidson, **University of Nottingham**
18. Stuart Green, **University of Reading**
19. Ted Simmons, **University of Queensland**

Annex 2: Case studies

Below are further details on the case studies discussed in this report.

Queensland Cladding Materials Library

Background

In response to the Grenfell Tower and other notable fires, such as the Lacrosse fire in 2014, the Queensland Government established a Non-Conforming Building Products Audit Taskforce, in June 2017. This taskforce was responsible for investigating buildings and their use of Aluminium Composite Panel (ACP) cladding or other potentially combustible products. The taskforce included representatives from the Department of Housing and Public Works, Queensland Fire and Emergency Services and the Queensland Building and Construction Commission.⁴

Within Queensland approximately 18,000 buildings were assessed as part of this audit to determine their cladding flammability and response to fire. Of these buildings, 75% were deemed to need no further action, with the remaining 25% requiring additional assessment. Of this remaining 25%, c.100-200 publicly owned buildings were estimated to need remediating works.⁵

While undertaking this audit, the taskforce also partnered with the University of Queensland to develop the Cladding Materials Library (CML). The CML was designed to contain detailed flammability and material information for commonly used cladding materials. This created a tool that could be used to support the qualified engineers who were responsible for performing fire hazard analyses.

Contents

The database contains two main categories of information for commonly used cladding materials:

- Material composition – this can be used for material identification and reduces the reliance on inconsistent brand names;

⁴ Department of Housing and Public Works, 'Building and Plumbing Newsflash 568: New Queensland Development Code art 2.5 – Use of external cladding (effective 18 October 2019)' (2019).

⁵ McLaggan, M., 'We made a flammable cladding database to help boost fire safety in our buildings', The Conversation (2019).

- Flammability data – this data was collected using peer-reviewed protocols.⁶ It should be noted that much of this testing was performed at small-scale.

Sample collection and testing was completed over c.9-12 months. This involved screening of 1,095 samples and detailed testing of 20 samples. In total 9,221 individual tests were performed. The initial iteration of the QCML included screening data on c.80-100 common materials and detailed flammability data for 20. The detailed flammability testing has now expanded to c.30 entries and testing has been performed (but not published) for a further c.30 entries.⁷

The QCML is free and open-access to all users, but requires registering for an account. This registration process is currently administered by the University of Queensland.

Product Safety Database

The Safety Gate Rapid Alert System is used by the European Union to alert market surveillance agencies to the presence of dangerous products. This is supported by the Information and Communication System for Market Surveillance (ICSMS), which allows the exchange of this information among the relevant authorities. The Product Safety Database (PSD) was created to replace the Safety Gate Rapid Alert System and ICSMS systems with a [single database](#), in readiness for the UK leaving the EU.

The Product Safety Database (PSD) acts as a portal for market surveillance agencies to report unsafe or non-compliant products to the secretary of state. The PSD was initially introduced in 2019, followed by a transition period until 31st December 2020, which allowed for changeover from the Safety Gate Rapid Alert System /ICSMS systems following the UK exiting the EU. The PSD is now owned by the Office for Product Safety and Standards (OPSS), part of the Department for Business and Trade (DBT).

As of 2024, the PSD has a total of 17,848 entries. These cover all products, except for food, medicines and vehicles – all of which have their own reporting processes.

OPSS has a duty to publish details about a PSD notification on the publicly available [Product Safety Alerts, Reports & Recalls](#) site if a notification meets the following criteria: The notification risk level is set as either 'Serious' or 'High'; or the corrective action 'Recall of the product from end users' has been carried out

⁶ McLaggan, M. et al, 'Protocols for the Material Library of Cladding Materials - Part II: Sample preparation and testing methodologies'. The University of Queensland (2019).

⁷ McLaggan, M. et al, 'Towards a better understanding of fire performance assessment of façade systems: Current situation and a proposed new assessment framework', Construction and Building Materials (2021).

There is currently c.2,500 registered users that have access to the database. Entries can be added by registered users through completion of a standard form, which has a mixture of drop-down menus and open-text boxes.

Data is added to the PSD by market surveillance agencies and OPSS teams on an ongoing basis. All entries undergo a quality assurance process, which is proportional to the level of impact and importance that each decision may have. Data used for official reporting is then verified following the quality assurance process published by the [Office for Statistics Regulation \(OSR\) in 2015](#).

Submit Cosmetic Product Notifications

As with the Product Safety Database, Submit Cosmetic Product Notifications (SCPN) was implemented to replace the EU equivalent database upon the UK leaving the EU.

SCPN notifications consist of several categories of information: the product name, product category (e.g. hair product, skin product, etc.), product ingredients and details of the responsible person (the company or individual responsible for ensuring regulatory compliance).

Industry buy-in to the SCPN was immediate and far-reaching. Before launching, companies across the industry were open to sharing information on their products and engaging with the SCPN. This was likely due to the precedent set by the EU notification database and the general nature of the sector and an attempt to be transparent.

The SCPN experienced some issues caused by staff turnover from the discovery to the delivery phase of the project.

The SCPN is updated on an ongoing basis, with users able to create notifications for new products whenever needed. Some products need to be notified in specified timeframes, for example products containing nanomaterials, which must be notified 6 months in advance of entering the UK market.

The SCPN take measures to protect the security of the data it holds. The cosmetics industry has previously been targeted by malicious attacks and protests; therefore, it was important to ensure the correct security checks were implemented during development of the SCPN.