



**Richard Smith**

Head of Standards, Innovation and Research





## History

- Established in 2006

## Purpose

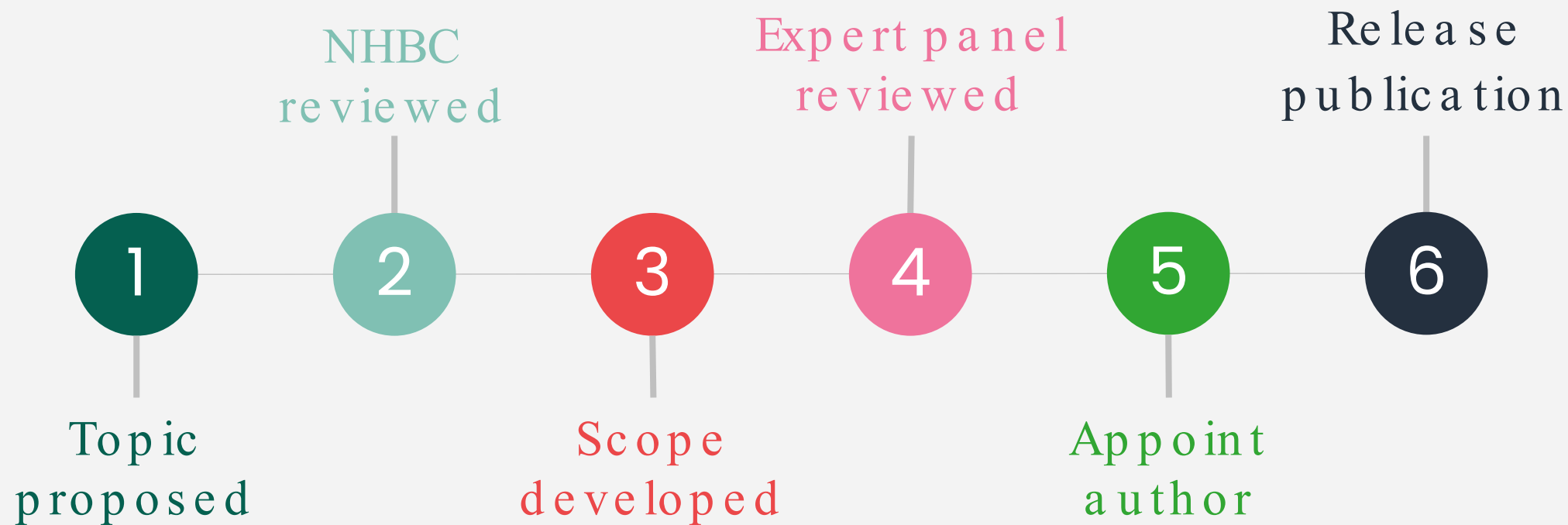
- To deliver high-quality research and practical guidance
- Help the industry address the challenges of delivering twenty-first century homes



## Objectives

- Improved understanding of new homes performance
- Produce effective advice for homeowners and occupants
- Clarification of technical options and solutions for designers and house builders
- Informing the debate and action to address the national housing supply

# Publication process



# Where do research ideas come from?

- 1 **NHBC**
- 2 **Expert panel**
- 3 **Industry suggestions**

**Send us your suggestions**

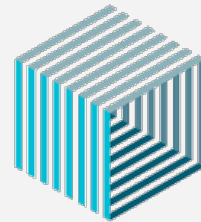
- <https://www.nhbc.co.uk/insights-and-media/foundation/about>

# Who are the expert panel?

**Rt Hon. the Lord Barwell**



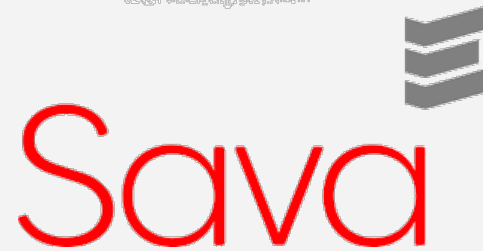
**Jacobs**



**CLARION**  
HOUSING GROUP



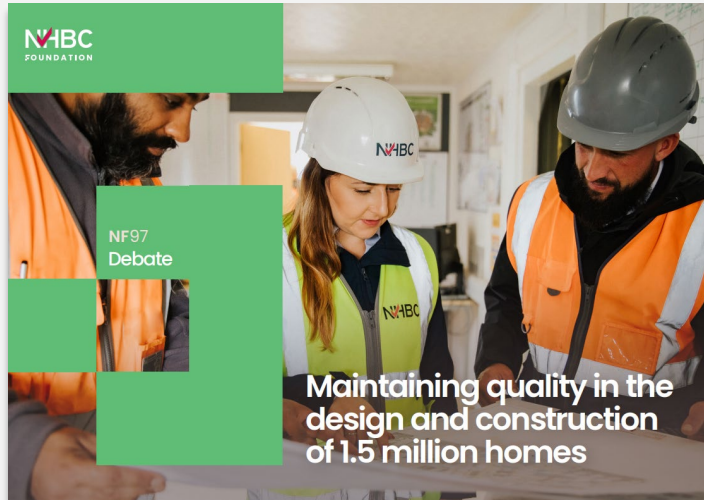
# Previous partners and authors





# Publications

110 publications currently available





# Foundation overview

Website overview – 1 Jan 2024 to 1 Aug 2025

Active users  
36,840

New users  
19,180

Sessions  
51,284

Engagement  
64.38%

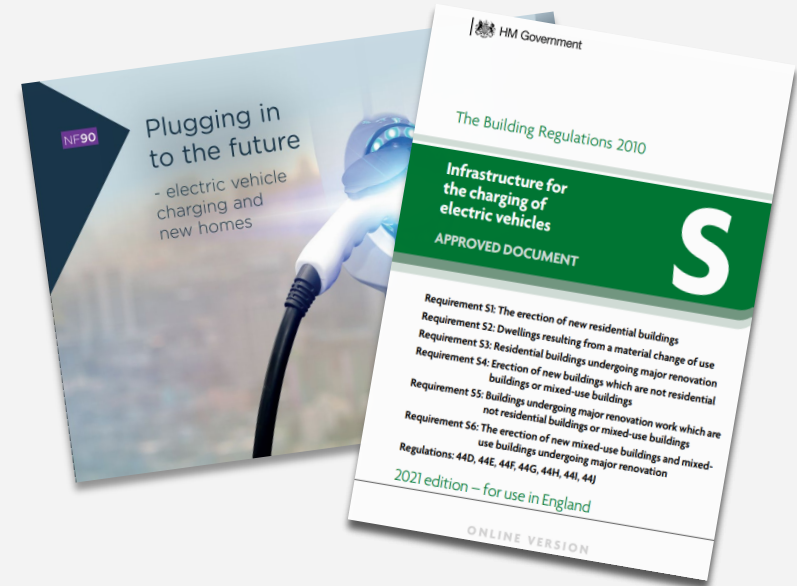
LinkedIn overview – 1 Jan 2024 to 1 Aug 2025

Impressions  
13.13k

Click through  
2.74%

Engagement  
3.78%

# Approved Documents



# Maintaining quality

Design and construction of 1.5 million homes



Homes  
England



# Maintaining quality

Design and construction of the 1.5 million homes

## 24 recommendations relating to:

- supporting SMEs and micro builders with technical assessments
- regulatory change
- development of skills and workforce
- Modern Methods of Construction (MMC) training requirements
- standardisation
- supply chains and materials
- quality assurance
- culture
- performance gap.

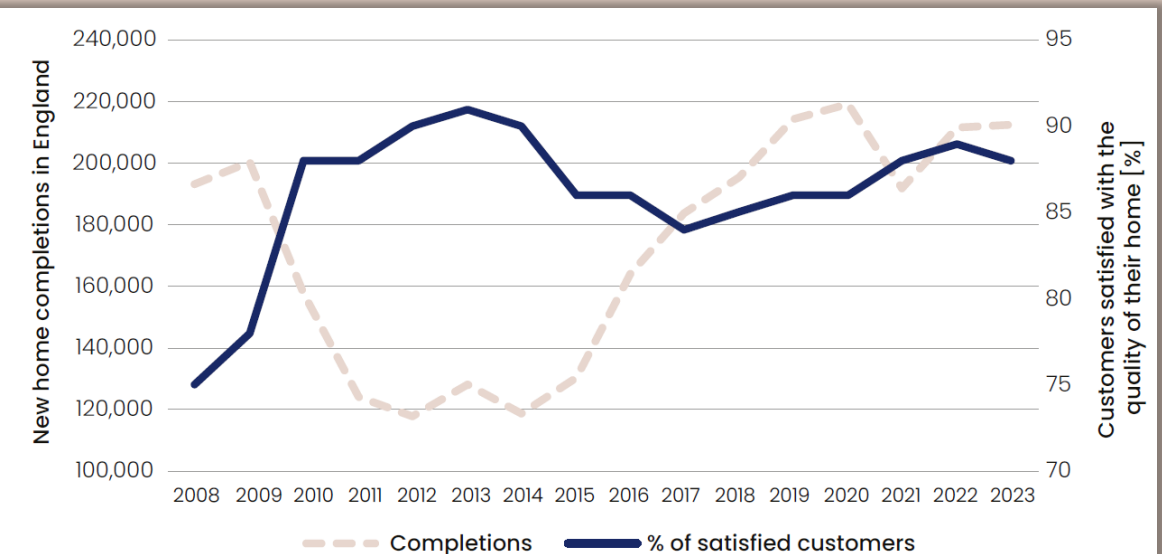


Figure 1 New home completions vs NNHS results (2008-2023)

# Hazardous ground gas

## An essential guide for housebuilders



Timber frame sole plate fixed through gas membrane. Sole plate located on strip of double sided self adhesive tape. Note the use of double sided tape and acceptable fixing through it should be included as an item in the verification plan. Verification is required.

Timber frame sole plate is not to be trimmed after installation over the gas membrane

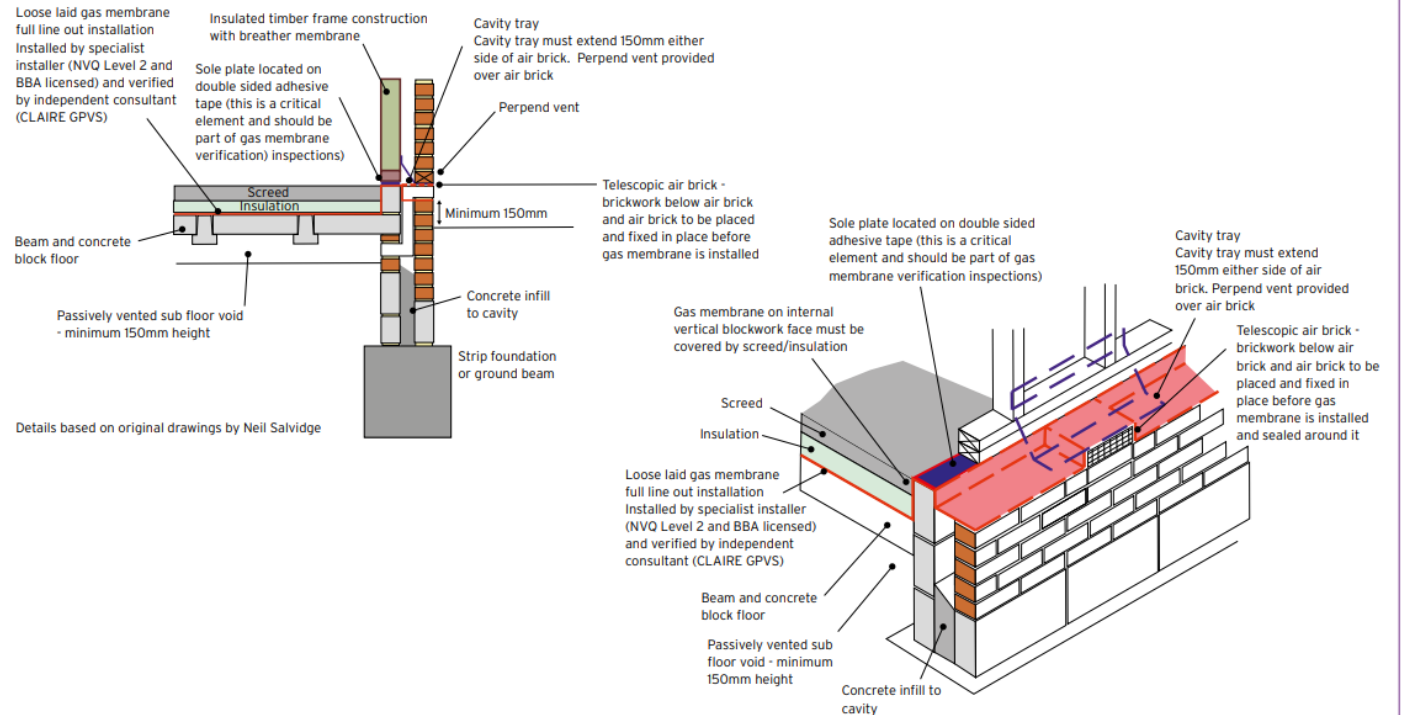


Figure C17 Timber frame - Block & beam floor



# Future Homes Standard (FHS)

Avoiding unintended consequences



## Report Chapters

1. Fabric First



3. Regulating Heat



5. Controls and energy management



7. Overheating



9. Noisy Systems



11. Interstitial Condensation



13. Thermostats and controls



15. Zoning System Controls



17. Space



19. Building Regulations England Part L (BREL) Report



21. Water Efficiency



2. Cost Implications



4. Energy from renewables



6. Draughts



8. Complex Systems



10. Condensation



12. Future Standards



14. Heat Networks



16. Design for people (not standards)



18. Biodiversity Net Gain (BNG)

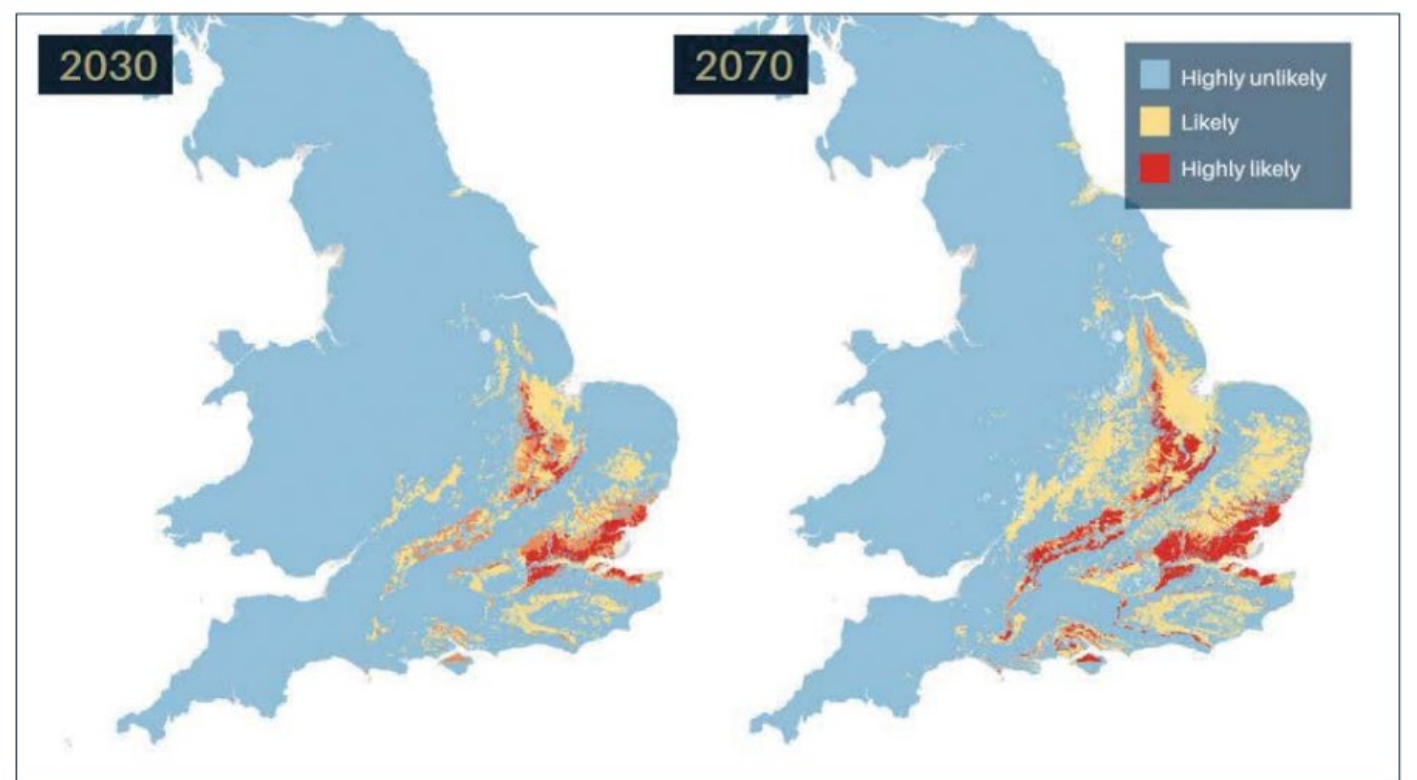
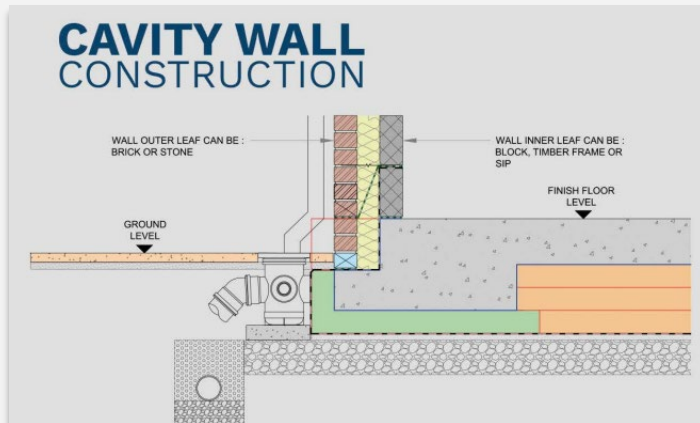


20. Transition to Electric Heating



# Foundation solutions

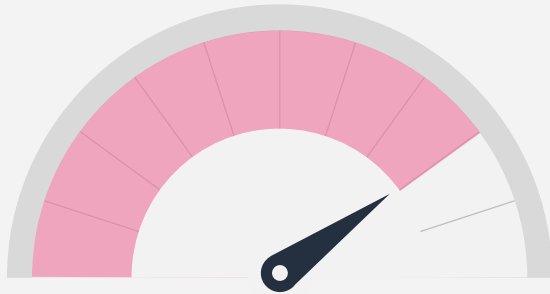
## Future proofing against climate change



**Figure 3** GeoClimate UKCP18 Open coverage map and comparison of 2030 and 2070 projections (Source: BGS)

# Future publications

## In development



1. Water efficiency
2. Managing construction in a changing climate
3. Skills in construction
4. Unintended consequences
5. Digitisation
6. Digital passports
7. Tree planting
8. Timber in construction

## Identifying author



1. MMC in practice
2. Wind driven rain
3. Traditional roofing
4. FHS technology – risks and mitigation

## Initial proposal



1. Repair, adapt and maintain
2. Preventing in-built moisture (in construction)
3. Low carbon materials – testing, planning requirements and transitions plans

# Getting involved

**Do you have specific research capabilities in the planning, design, construction, occupation or performance of homes?**

**Do you know of research that is needed in a particular area?**

## Get involved

<https://www.nhbc.co.uk/insights-and-media/foundation/about>

# Thank you

 NHBC

