

A HOUSING DESIGN AUDIT FOR ENGLAND



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'Nationally, the picture is largely of new housing development that is overwhelmingly mediocre or poor (three quarters of projects) with good or very good schemes constituting just a quarter (37 out of 142) of the developments'.

Performance gap exacerbates design failings

BREEAM®

Building Research Establishment

Active since 1921

 Largest UK charity for research and education in the built environment

•Profits go to the trust and further research.





Key products and service brands

BREEAM® LPCB BRE ACADEMY®







BRE SMARTWASTE







BREEAM®

BREEAM overview

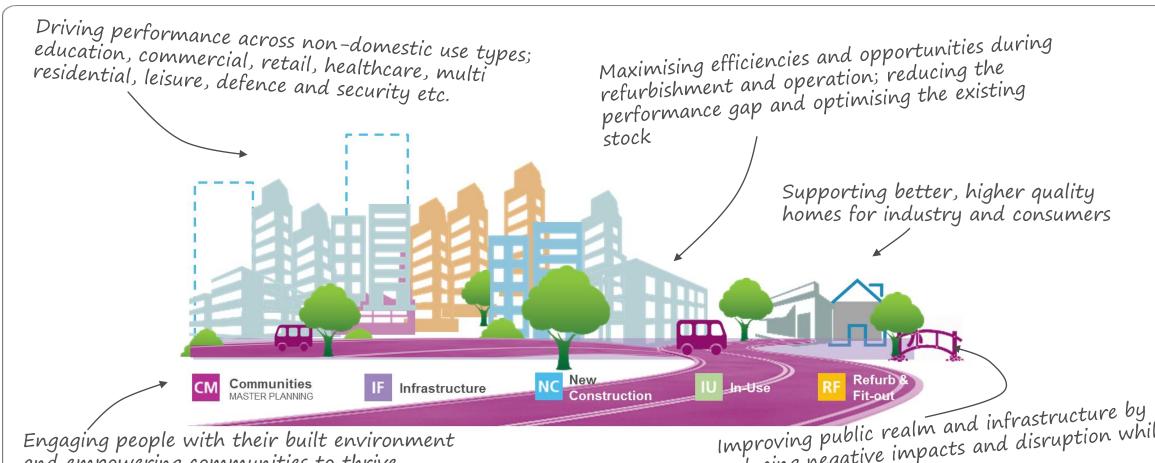
- Longest established and most widely used sustainability assessment method for buildings; launched 1990
- Drives innovation and standards above the regulatory minimum
- Third party certification
- 1000's of licensed assessors worldwide
- Robust, evidence based criteria that is process and outcome focussed

BREEAM certifies quality and sustainability in the built environment including their running costs, health and wellbeing and environmental impact.'



BREEAM®

Sustainability across the whole built environment



Engaging people with their built environment and empowering communities to thrive

reducing negative impacts and disruption whilst recognising good practice.











Home Quality Mark (HQM) The principles

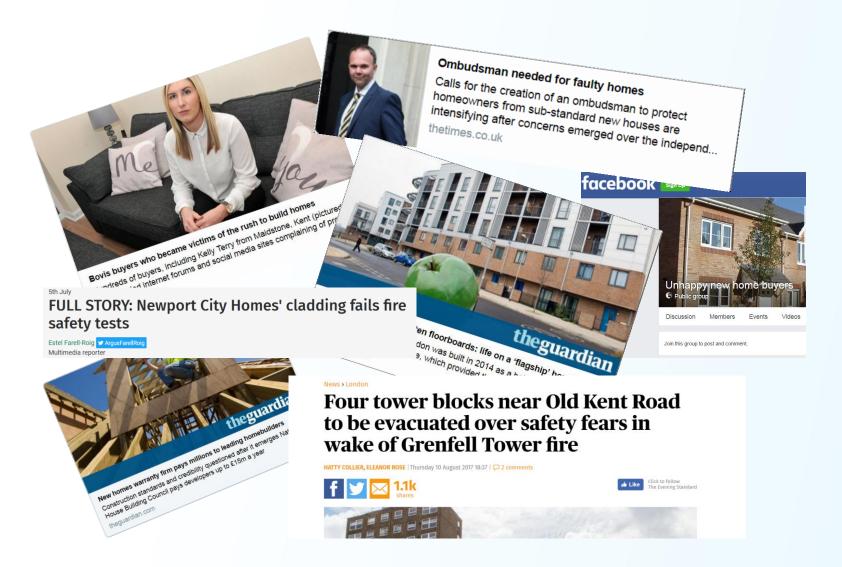


'HQM certifies quality and sustainable new homes including their running costs, health and wellbeing and environmental footprint.'





Consumers are concerned



- 98% of new home owners reported snags and defect in 2017 (HBF, 2017)
- Over 90% prefer a home with an independent mark
- 1-5 willing to pay more (75% >£750 more)



What the assessment covers



Our Surroundings

Transport & Movement

Outdoors

Safety & Resilience



My Home

Comfort

Energy

Materials

Space

Water



Delivery

Quality Assurance

Construction Impacts

Customer Satisfaction



- Minimum requirements
 - Flood risk
 - Security (Wales)
 - Temperature
 - Ventilation
 - Project management
 - Commissioning
 - Defect inspection/record keeping
- Back stop's for indicators

HQM sections, cated	HQM sections, category, assessment issues and available credits			
Section	Category	Assessment Issue	No. Credits Available	
_	Transport and Movement	01 Accessible Public Transport	15	
亚)		02 Alternative Sustainable Transport	17	
		Options		
		03 Local Amenities	16	
Our surroundings	Outdoors	04 Ecology	36	
		05 Recreational Space	22	
	Safety and Resilience	06 Flood Risk	19	
		07 Managing the Impact of Rainfall	19	
		08 Security	09	
My Home	Comfort	09 Indoor Pollutants	12	
		10 Daylight	13	
		11 Internal and External Noise	04	
		12 Sound Insulation	09	
		13 Temperature	17	
		14 Ventilation	13	
	Energy and Cost	15 Energy and cost	60	
		16 Decentralised Energy	08	
		17 Impact on Local Air Quality	15	
	Materials	18 Responsible sourcing of	25	
		construction products		
		19 Environmental Impact from	25	
		Construction Products		
		20 Life Cycle Costing of Construction	12	
		Products		
		21 Durability of Construction	07	
		Products		
	Space	22 Drying Space	03	
		23 Access and Space	11	
		24 Recyclable Waste	10	
	Water	25 Water Efficiency	17	
~?)	Quality Assurance	26 Project Preparation	06	
		27 Commissioning and Testing	11	
		28 Inspections and	16	
		completion		
Delivery	Construction impacts	29 Responsible Construction	05	
		Management		
		30 Construction Energy Use	05	
		31 Construction Water Use	05	
		32 Site Waste Management	15	
	Customer Experience	33 Aftercare	04	
		34 Home Information	00	
		35 Smart Homes	08	
		36 Post Occupancy Evaluation	10	



- Star rating + Indicator scores
- Indicator scores allows project to measure impact on costs, wellbeing and environmental footprint.





What 'My footprint' is based on

- Ecology
- Flood risk
- Energy forecast and cost
- Responsible sourcing of materials
- Environmental Impact form construction products
- Site waste



Robust, independent and rigorous method



Feedback

Feedback from industry, assessors and consumers feeds back into future updates of the scheme



Certification

After successful submission, a certificate is awarded

Quality assurance

 Assessment and evidence submitted to BRE QA team for auditing

- BRE and industry research
- Technical development
- Stakeholder engagement
- Consultations
- Pilot schemes

development

Assessor training

 Assessors become qualified and licensed to carry out assessments through BRE training

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Assessment

Research &

Developers appoint licensed assessors to assess their projects (ideally early in design) against BREEAM technical standards, with a provisional score

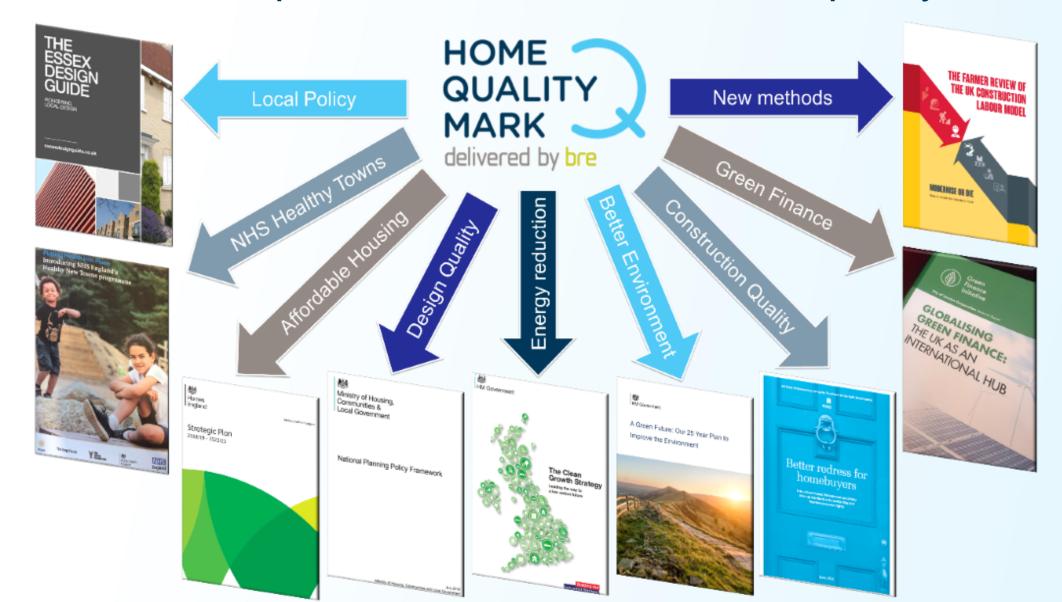




Home Quality Mark (HQM) Drivers and Uptake



HQM complements local and national policy





Legislation

According to UK planning and environmental legislation, local plans must include robust evidence-based carbon targets.

In particular, the Planning and Compulsory Purchase Act of 2004 requires that local plans include policies "designed to secure" that the development and use of land contributes to the mitigation of, and adaptation to, climate change.





Drivers for higher standards in NPPF/ PPGs

- Paragraph 129 states that LPAs should ensure that they have access to tools including 'assessment frameworks'
- Paragraph 130. makes explicitly clear that LPAs should ensure quality of approved development is not materially diminished between permission and completion.
- PPG on Design: process and tools





The evolving picture on energy efficiency standards

- PPG on Climate Change(2019)
 makes it clear that LPA's "can set
 energy performance standards for
 new housing or the adaptation of
 buildings to provide dwellings, that
 are higher than the building
 regulations, but only up to the
 equivalent of Level 4 of the Code
 for Sustainable Homes"
- However it is not yet clear how Future
 Homes Standard will effect this
- National Design Guide supports HQM

National Design Guide

Planning practice guidance for beautiful, enduring and successful places







18,000 Homes Registered to HQM in England

- High end / luxury
- Social housing providers
- SME housebuilders
- Large and small developments
- Flats / detached homes
- Build to rent
- Across England







BPS 7014 – BRE's standard for Modular Construction

Can be used in combination with HQM





But what does it cost?

Added cost of delivering to HQM can be broken down into 3 areas:

- 1. Build cost uplift (i.e. added cost of higher build quality)
- 2. Assessor fees (paid to assessment organisation)
- 3. Certification fees (paid to BRE)

The developer will bear the burden of any additional cost



Added value through...

- Resource efficiencies one stop shop to ensure quality
- Holistic scope reducing the risk of unintended consequence.
- Transparency and robustness ensuring that objectives are actually met and delivered on site
- Accessible consumer facing scheme able to communicate to a wider stakeholder group
- Nationally recognized part of a nation wide collective increasing access to resources and inspiration



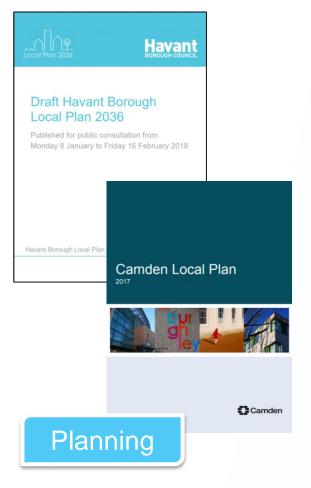




How local authorities can use HQM as a driver of quality



Engaging with HQM





CONSTRUCTION CONTRACT This Contract made and entered into on this ____ day of _between_____, hereinafter designated as the Owner, and designated as the Contractor. Land Sale That the Contractor and the Owner agree and bind and obligate themselves Contractor to provide the improvements/remodeling/reconstruction/rehability Contract in a workmanlike manner and in accordance with the plans and specifications prov attached Scope of Work exhibit, if any, to the property located at , Louisiana: Owner agrees, binds, and obligates him/herself to pay Contractor f together with any additional costs including, but not limited Date and names of parties. This contract is entered into on February 16, 2012, between Edward Cus (landowner), extra work, overages, and/or escalated costs of materials. choss mailing address is 1702 Techoon Drive, Columbia, MO, and Eachfiel Eachross, whose mailing address is 900 Farm Read 180, Whirfield, MO. Commencement of Construction. Construction will commence on Substantial completion of the work will be Section 1. Description of Routed Land and Length of Tenure However, this time period may, at Contractor's option, be extended one day for each delayed due to weather, fire, strikes, material shortages, or Acts of God, Owner delay

A. Description of Land. The Custom Operator agrees to perform custom literating operations for the owner on the following land or purcels of real estate located in the County of Webster and the State of Missouri, and described as follows:

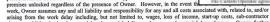
SEE APPENDIX A FOR LEGAL DESCRIPTION.

and commonly know as the Parther Crook farm and consisting of approximately 98 acres.

B. Length of tensor. The term of this contract shall be from Fobraury 16, 2012 to Fobrauty 15, 2013. Extensions must be in vertice and attached to this contract, and both parties agree that failure to execute an extension of least 3 match before the end of the current term shall be constructive notice of instein to allow the contract to expert.

Section 1. Method Of Payment

The Custom Operator agrees to submit to the Landowner an itemized written statement of work completed after



the construction process including, but not limited to, the selection, ordering, man

Owner selections. Failure of Contractor to timely complete shall not be considered completion shall be that date when the work is completed sufficiently enough to

materials, and colors required in a timely manner. Owner also agrees and obligates and/or required approvals and/or acknowledgements from any Architectural Board of

is relevant to the work. Owner further agrees to cooperate with and make every re hindering Contractor and/or the work. Owner shall allow Contractor and/or empl Contractor to have continuous access to premises upon which the work is to be per period from the hours of 7 o'clock a.m. to 5 o'clock p.m. Such access shall include,

Owner Obligations. The Owner further agrees and obligates himself

Using a simple star rating system, the Home Quality Mank (HOM) will provide more reassurance to consumers about the performance and quality of both the living spaced and community.

It will help local communities understand which proposed developments are a force for good and provide the financial sector with greater reassurances over investments.

utilize the work in the manner in which it is intended to be utilized.





Writing and positioning policy

- May be positioned in local plan or SPD
- It should be subject to examination and inspection to increase visibility, early integration and validity.
- Planning Authorities must ensure that requirements are clearly outlined within the necessary planning documents

Planning Authority	Current or Emerging	Adoption Stage	Certification policy overview
Havant	Emerging	Draft	BREEAM: New Construction, BREEAM: Communities, HQM
Luton	Current	Adopted 2017	BREEAM: New Construction
Maldon	Current	Adopted 2017	BREEAM: New Construction
New Forest	Emerging	Submitted Nov 2018	BREEAM: New Construction
<u>Newham</u>	Emerging	Submitted Feb 2018	BREEAM: New Construction, BREEAM: Domestic Refurbishment, BREEAM Refurbishment and Fit Out
North Devon and Torridge	Current	Adopted 2018	BREEAM: New Construction
Oxford	Emerging	Draft	BREEAM: New Construction, HQM
Plymouth and South West Devon Joint Local Plan	Emerging	Submitted Jul 2017	BREEAM: New Construction (Plymouth only)
Poole	Current	Adopted 2018	BREEAM: New Construction
Reading	Emerging	Submitted Mar 2018	BREEAM: New Construction
Richmond	Current	Adopted 2018	BREEAM: New Construction, BREEAM: Domestic Refurbishment
Sedgemoor	Emerging	Submitted Aug 2018	BREEAM: New Construction
South Cambridgeshire	Current	Adopted 2018	BREEAM: New Construction, BREEAM: Refurbishment Fit Out, BREEAM: Communities
Stockton	Emerging	Submitted Dec 2017	BREEAM: New Construction
Sutton	Current	Adopted 2018	BREEAM: New Construction
Tower Hamlets	Emerging	Submitted Feb 2018	BREEAM: New Construction, BREEAM: Refurbishment Fit Out, HQM

See local government guidance for full list of LPAs specifying BREEAM



If you remember nothing else...

HQM is a resource efficient way to ensure that sustainability objectives are being delivered, and communicated to a range of stakeholders (including the consumer)



Home Quality Mark ONE

Technical Manual England, Scotland & Wales





























How to get involved

- •Tools and guidance are available to drive sustainability and quality in the built environment; discover the BREEAM Local Government resource pack to get started.
- •This is going to be updated with further information in the new year so keep an eye out for updates.
- We are also looking to undertake Cost modelling of the HQM

Come and talk with us!

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