# HQM ONE: Summary of Changes

Introduction

This document details the changes that have been made from the HQM beta (England) scheme to the HQM ONE scheme. These changes reflect learning from the operation of the HQM beta (England) scheme, feedback from the HQM consultation and ongoing wider industry engagement. For details of the feedback received and the justifications for the changes made, please refer to the **HQM ONE: External Feedback and Outcomes.**
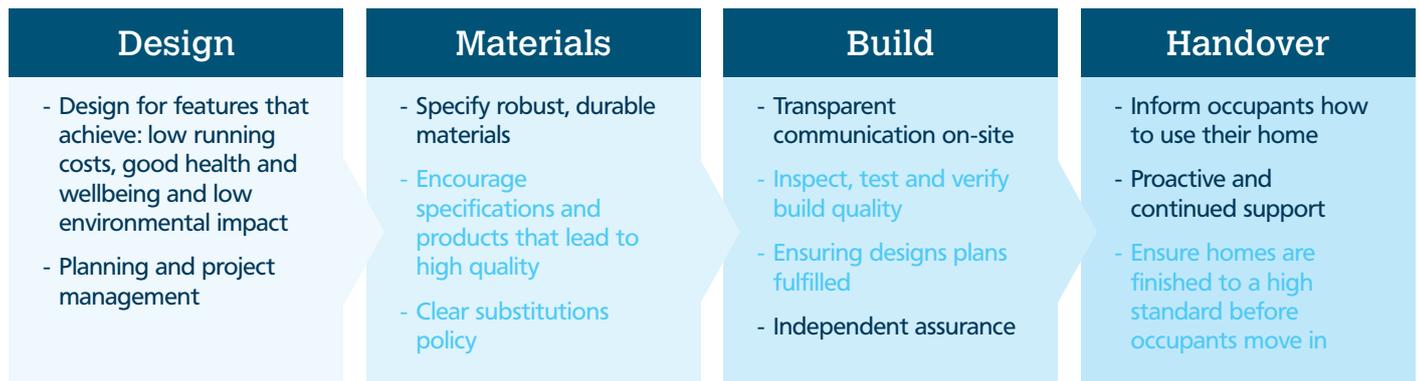
Introduction of Scotland and Wales manuals

HQM ONE introduces the HQM standard to Scotland and Wales. Each country (England, Scotland and Wales) has a country specific manual (detailing only the criteria relevant to that country) in addition to the master manual that covers the criteria content for all three countries.

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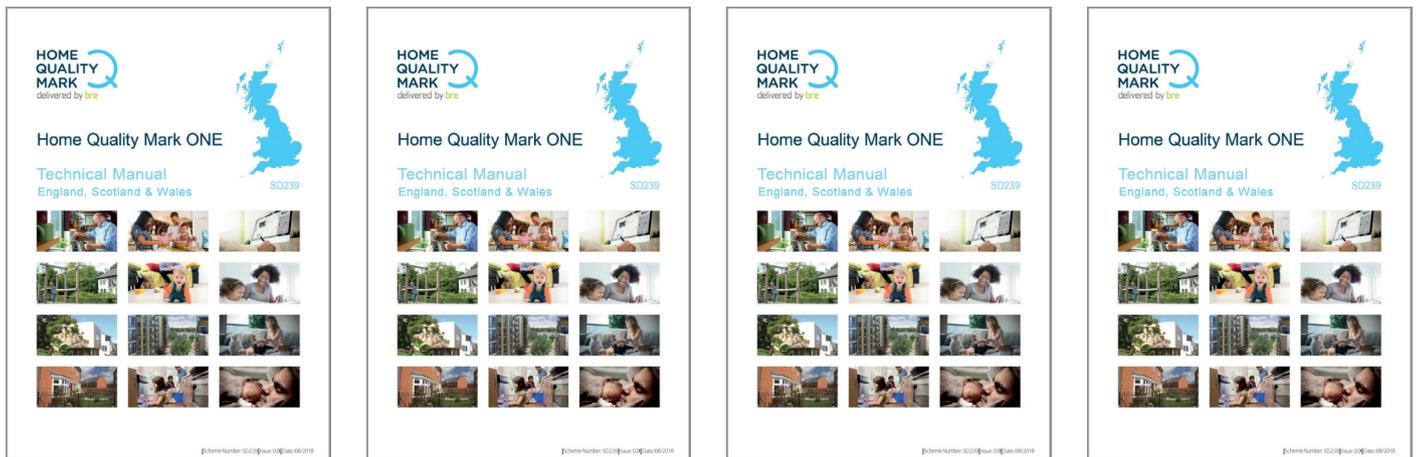
Improving the way HQM delivers quality

There have been major improvements and additions to better recognise the quality of homes certified to HQM ONE. These can be used to acknowledge and lead the way towards better outcomes for householders. They include significant improvements and new additions relating to: designing for better outcomes, high-performing materials, high standards of build quality and workmanship, and comprehensive handover to ensure occupants get a positive experience when they move in and during the early stages of occupation. The diagram below depicts the criteria changes and additions made in HQM ONE for each of these:

Design	Materials	Build	Handover
- Design for features that achieve: low running costs, good health and wellbeing and low environmental impact - Planning and project management	- Specify robust, durable materials - Encourage specifications and products that lead to high quality - Clear substitutions policy	- Transparent communication on-site - Inspect, test and verify build quality - Ensuring designs plans fulfilled - Independent assurance	- Inform occupants how to use their home - Proactive and continued support - Ensure homes are finished to a high standard before occupants move in

KEY   *NEW content   Significant improvements of existing requirements

Further changes to reinforce the above include:
- *NEW minimum requirements (see 'Minimum requirements' below)
- *NEW indicator backstops (see 'Indicator backstops' below)
- *NEW 'Inspections and Completion' issue
- Additional credits for quality led criteria (see 'Specific structure changes' below)

HQM ONE scoring

Rating System

Significant changes have been made to the HQM ONE rating system after careful consideration of the range of feedback received during the operation of the beta scheme, and through the HQM ONE consultation. The changes are summarised in the diagram below. Key differences include:

- 3 star to be broadly equivalent to a well-designed and built CSH level 3 home

- 1 star to recognise performance against the baseline minimum requirements (see 'Minimum requirements' below)

- 3 – 5 star ratings and indicator levels to represent current 'good' to 'best' industry practice

- Inclusion of half star ratings (extending the star rating options to 9 levels)

Full details of the changes made and the reasons for these changes can be found here.

HQM beta

		Score required	Percentage required	Indicator levels
★	Better	150	30%	1
★★★	Good	225	45%	2
★★★	Very Good	275	55%	3
★★★★	Excellent	375	75%	4
★★★★★	Outstanding	400	80%	5

HQM ONE

		Score required	Percentage required	Indicator levels
★		minimum requirements only		
★★⌐		90	18%	1
★★		100	20%	2
★★★⌐		120	24%	
★★★	Good	150	30%	3
★★★★⌐	Good	190	38%	
★★★★	Very Good	240	48%	4
★★★★★⌐	Excellent	300	60%	
★★★★★	Outstanding	400	80%	5

Minimum requirements

Minimum requirements have also been introduced into HQM ONE. These set out minimum performance levels in several key areas and establish a baseline that consumers can expect from all homes with an HQM ONE certificate. All minimum requirements must be met to achieve any HQM ONE certificate.

Minimum requirements have been added as follows:

Issue	Criteria	Summary of minimum requirement
3.1 Flood Risk	For England and Scotland: 01 Flood Risk Assessment: crit 1 – crit 2 For Wales: 01 Flood Consequence Assessment: crit 3 – crit 4	- Carry out an assessment of the site's risk of flooding
3.3 Security	For Wales: 02 Approved Document Q compliance: crit 2	-The home meets Approved Document Q
4.5 Temperature	02 Temperature analysis: crit 2	- Thermal analysis has been carried out - The results of the analysis are included in the home information with guidance on how to manage high temperatures
4.6 Ventilation	01 Information sign: crit 1	- A securely fixed sign providing information on the location, design intent, operation and maintenance of all ventilation systems and controls has been installed in the home
	03 Ventilation rates: crit 4	- The home achieves the minimum ventilation rates set for systems 3 and 4
	04 Maintenance and controls: crit 8	- Ventilation systems have the ability to boost the air change rate during instances of increased humidity
9.1 Project Preparation	02 Project delivery plan: crit 3 – crit 4	- A project delivery plan is in place, which sets out roles, responsibilities, target, requirements for handing over the home to the occupier after construction is complete, strategy to manage quality, carry out commissioning and testing
	03 Product procurement and substitution policy: crit 5	- The project has a product procurement and substitution policy in place to ensure that performance and quality requirements are maintained.
	04 Dissemination of information: crit 6	- Processes are in place to communicate project requirements and key considerations to all trades and site workers
9.2 Commissioning and Testing	01 Commissioning building services and control systems: crit 1 – crit 3	- Commissioning of building systems is carried out according to best practice guidance, by people who were not involved in their installation
9.3 Inspections and Completion	01 Visual defects inspection: crit 2	- A visual defects inspection is carried out for the assessed home before handover to make sure that any defects identified are put right and that the home is finished and habitable (suitable to live in) in line with the specifications-
	02 Construction inspections: crit 3	- Inspection details are agreed and carried out at key stages to ensure that the home complies with required performance characteristics and design variations or material substitutions are appropriately managed and approved to maintain performance and quality
	03 Construction record: crit 4 – crit 5	- Throughout the construction stage, a record is kept of all the quality assurance measures carried out
11.1 Aftercare	01 Building Warranty: crit 1	- The home is covered by a building warranty, recognised by the Consumer Code for Home Builders or the Trading Standards Institute
	02 Handover visit: crit 2	- The developer has committed to provide demonstrations to occupants when they move in to make sure they know how to operate and maintain their home
11.2 Home Information	01 Home information: crit 1	- The developer gives occupants key information in an accessible way, to help them get the most from their home

Indicator backstops

Backstop requirements have been introduced to each of the three key indicators. These set a baseline that consumers can expect from homes with an indicator level 3, 4 or 5. In addition to achieving the score required, all relevant indicator backstops must be achieved.

The tables below identify the indicator backstops:

My Cost Indicator Backstops

Issue	Level 1	Level 2	Level 3	Level 4	Level 5
Score required	47.25	52.5	78.75	126	210
Flood Risk			17 credits		
Security				4 credits	9 credits
Temperature				Foundation route: 7 credits OR Comprehensive route: 11 credits	
Ventilation				4 credits (Maintenance & controls)	
Energy and Cost				7 credits (Cost)	11 credits (Cost)
Water Efficiency			8 credits	11 credits	

My Wellbeing Indicator Backstops

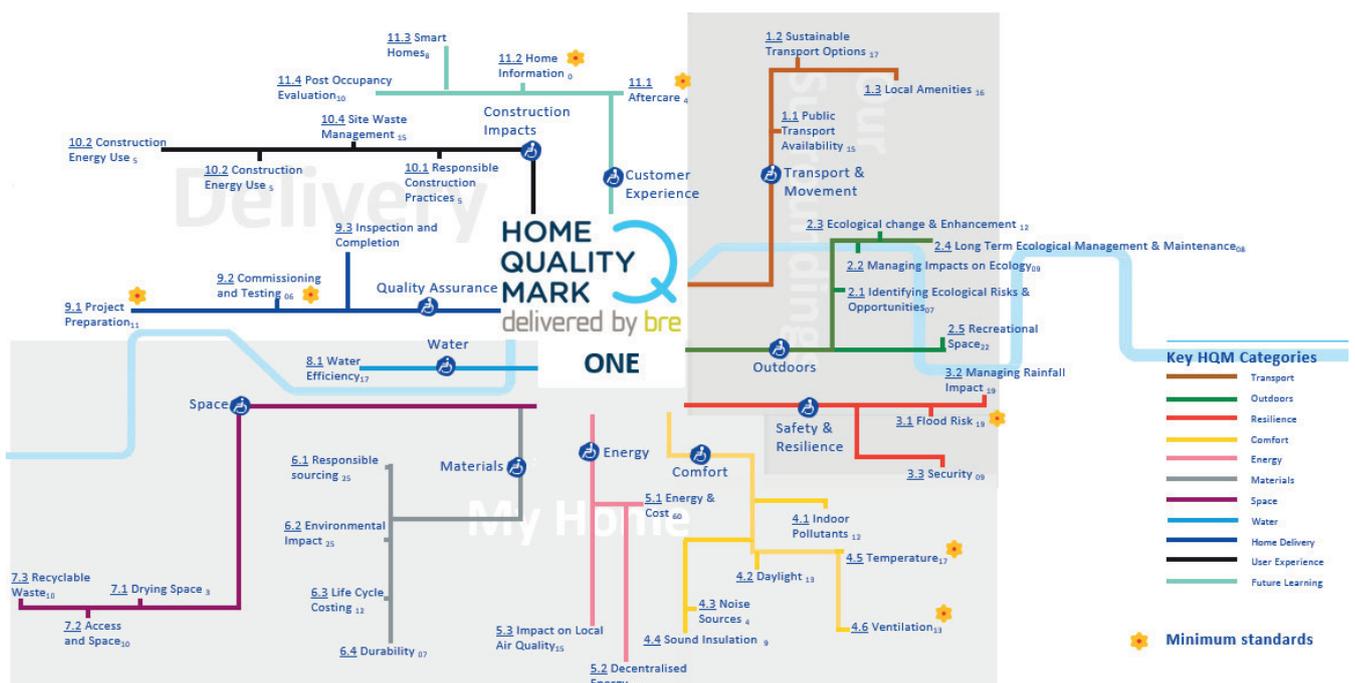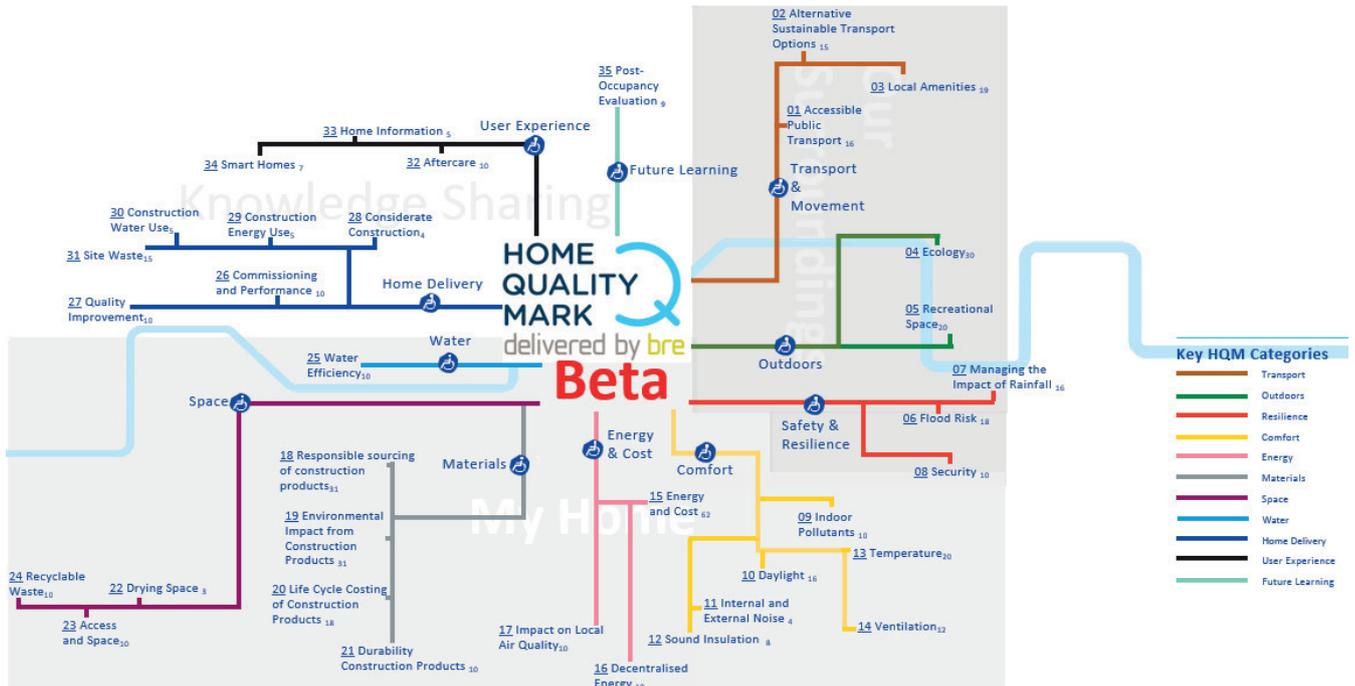| Issue	Level 1	Level 2	Level 3	Level 4	Level 5
Score required	51.25	56.75	85.25	136.25	227
Recreational Space			3 credits	5 credits	7 credits
Security					9 credits
Indoor Pollutants			1 credit	2 credits	4 credits
Daylight			3 credits	5 credits	8 credits
Noise Sources					2 credits
Sound Insulation			1 credit (Sound insulation between homes)	3 credits (Sound insulation between homes)	5 credits (Sound insulation between homes)
Temperature			Foundation route: 7 credits OR Comprehensive route: 11 credits		
Ventilation			5 credits (Ventilation rates)	5 credits (Ventilation rates) AND 4 credits (Ventilation air intakes)	
Access and Space			5 credits (Nationally described space standards)		11 credits

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My Footprint Indicator Backstops

Issue	Level 1	Level 2	Level 3	Level 4	Level 5
Score required	**72.25**	**80.25**	**120.25**	**192.50**	**320.75**
Managing Impacts on Ecology			6 credits		
Ecological Change and Enhancement				Foundation route: 2 credits OR Comprehensive route: 4 credits	Comprehensive route: 6 credits
Long Term Ecological Management and Maintenance			4 credits (Landscape and ecology management plan)		
Energy and Cost			9 credits (Energy performance)	28 credits (Energy performance)	40 credits (Energy performance)
Responsible Sourcing			2 credits (Product procurement policy) AND	2 credits (Product procurement policy) AND	2 credits (Product procurement policy) AND
			5 credits (Responsible sourcing of construction products)	7 credits (Responsible sourcing of construction products)	9 credits (Responsible sourcing of construction products)
Environmental Impact of Materials			2 credits (Product procurement policy) AND 2 credits (Product environmental information)	2 credits (Product procurement policy) AND 2 credits (Product environmental information) AND 3 credits (Building life cycle assessment)	2 credits (Product procurement policy) AND 2 credits (Product environmental information) AND 10 credits (Building life cycle assessment)
Water Efficiency			8 credits		11 credits
Site Waste			5 credits	7 credits	11 credits

HOME QUALITY MARK
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HQM ONE scheme structure

Overarching structure changes

A number of changes have been made to the structure of the HQM ONE scheme. These reflect the enhanced focus on the quality of homes certified to HQM ONE. The images below illustrate the structure of HQM Beta and HQM One. A comparison indicates where these changes have taken place.

HQM Beta diagram

- 35 Post-Occupancy Evaluation 9
- Future Learning
- 33 Home Information 5
- 34 Smart Homes 7
- 32 Aftercare 10
- User Experience
- 30 Construction Water Use 5
- 29 Construction Energy Use 5
- 28 Considerate Construction 4
- 31 Site Waste 15
- 26 Commissioning and Performance 10
- Home Delivery
- 27 Quality Improvement 10
- 25 Water Efficiency 10
- Water
- Space
- 18 Responsible sourcing of construction products 31
- Materials
- 19 Environmental Impact from Construction Products 31
- Energy & Cost
- Comfort
- 15 Energy and Cost 62
- 24 Recyclable Waste 10
- 22 Drying Space 3
- 20 Life Cycle Costing of Construction Products 18
- 09 Indoor Pollutants 10
- 13 Temperature 20
- 23 Access and Space 10
- 21 Durability Construction Products 10
- 17 Impact on Local Air Quality 10
- 10 Daylight 16
- 11 Internal and External Noise 4
- 14 Ventilation 12
- 16 Decentralised Energy 10
- 12 Sound Insulation 8
- 02 Alternative Sustainable Transport Options 15
- 03 Local Amenities 19
- 01 Accessible Public Transport 16
- Transport & Movement
- 04 Ecology 30
- 05 Recreational Space 30
- Outdoors
- 07 Managing the Impact of Rainfall 16
- 06 Flood Risk 18
- Safety & Resilience
- 08 Security 10

Key HQM Categories
- Transport
- Outdoors
- Resilience
- Comfort
- Energy
- Materials
- Space
- Water
- Home Delivery
- User Experience
- Future Learning

HQM ONE diagram

- 11.3 Smart Homes 8
- 11.2 Home Information 0
- 11.4 Post Occupancy Evaluation 10
- 11.1 Aftercare 4
- Construction Impacts
- 10.2 Construction Energy Use 5
- 10.4 Site Waste Management 15
- 10.2 Construction Energy Use 5
- 10.1 Responsible Construction Practices 5
- Customer Experience
- 9.3 Inspection and Completion
- 9.2 Commissioning and Testing 06
- Quality Assurance
- 9.1 Project Preparation 11
- 8.1 Water Efficiency 17
- Water
- Space
- 6.1 Responsible sourcing 25
- Materials
- 6.2 Environmental Impact 25
- Energy
- Comfort
- 5.1 Energy & Cost 60
- 7.3 Recyclable Waste 10
- 7.1 Drying Space 3
- 6.3 Life Cycle Costing 12
- 4.1 Indoor Pollutants 12
- 4.5 Temperature 17
- 7.2 Access and Space 10
- 6.4 Durability 07
- 5.3 Impact on Local Air Quality 15
- 4.2 Daylight 13
- 4.3 Noise Sources 4
- 4.6 Ventilation 13
- 5.2 Decentralised Energy 08
- 4.4 Sound Insulation 9
- 1.2 Sustainable Transport Options 17
- 1.3 Local Amenities 16
- 1.1 Public Transport Availability 15
- Transport & Movement
- 2.3 Ecological change & Enhancement 12
- 2.4 Long Term Ecological Management & Maintenance 08
- 2.2 Managing Impacts on Ecology 09
- 2.1 Identifying Ecological Risks & Opportunities 07
- 2.5 Recreational Space 22
- Outdoors
- 3.2 Managing Rainfall Impact 19
- 3.1 Flood Risk 18
- Safety & Resilience
- 3.3 Security 09

Key HQM Categories
- Transport
- Outdoors
- Resilience
- Comfort
- Energy
- Materials
- Space
- Water
- Home Delivery
- User Experience
- Future Learning

Minimum standards

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Specific structure changes

The below table details the structural changes that have occurred in relation to the assessment issues and the credits within them. Changes include the following:

- Introduction of additional issues – to reflect the enhanced focus on construction quality control processes employed on HQM ONE certified homes, and aligns with wider BREEAM work (Strategic Ecology Framework etc.)

- Re-structured 'Delivery' section – to better recognise the actions taken to manage the construction quality of HQM ONE certified homes

- Credit allocations – these were reviewed for HQM ONE to account for new issues, the introduction of minimum requirements, and to more appropriately recognise the degree of control that developers have over compliance

- Issue names – these were amended as part of our ongoing work to make the wording in the manual more accessible and understandable to the range of stakeholders that HQM serves

HQM Beta			
Section	Category	Issue name	Credits
Our Surroundings	Transport and Movement	01 Accessible Public Transport	16
		02 Alternative Sustainable Transport Options	15
		03 Local Amenities	19
	Outdoors	04 Ecology	30
		05 Recreational Space	20
	Safety and Resilience	06 Flood Risk	18
		07 Managing the Impact of Rainfall	16
		08 Security	10
My Home	Comfort	09 Indoor Pollutants	10
		10 Daylight	16
		11 Internal and External Noise	4
		12 Sound Insulation	8
		13 Temperature	20
		14 Ventilation	12
	Energy and Cost	15 Energy and cost	62
		16 Decentralised Energy	10
		17 Impact on Local Air Quality	11
	Materials	18 Responsible Sourcing of Construction Products	31
		19 Environmental Impact from Construction Products	31
		20 Life Cycle Costing of Construction Products	18
		21 Durability of Construction Products	10

HQM ONE			
Section	Category	Issue name	Credits
Our Surroundings	1 Transport and Movement	1.1 Public Transport Availability	15
		1.2 Sustainable Transport Options	17
		1.3 Local Amenities	16
	2 Outdoors	2.1 Identifying Ecological Risks and Opportunities	7
		2.2 Managing Impacts on Ecology	9
		2.3 Ecological Change and Enhancement	12
		2.4 Long Term Ecological Management and Maintenance	8
		2.5 Recreational Space	22
	3 Safety and Resilience	3.1 Flood Risk	19
		3.2 Managing Rainfall Impacts	19
		3.3 Security	9
My Home	4 Comfort	4.1 Indoor Pollutants	12
		4.2 Daylight	13
		4.3 Noise Sources	4
		4.4 Sound Insulation	9
		4.5 Temperature	17
		4.6 Ventilation	13
	5 Energy	5.1 Energy and Cost	60
		5.2 Decentralised Energy	8
		5.3 Impact on Local Air Quality	15

HQM Beta			
Section	**Category**	**Issue name**	**Credits**
My Home	Space	22 Drying Space	3
		23 Access and Space	10
		24 Recyclable Waste	10
	Water	25 Water Efficiency	10
Knowledge Sharing	Home Delivery	26 Commissioning and Performance	10
		27 Quality Improvement	10
		28 Considerate Construction	4
		29 Construction Energy Use	5
		30 Construction Energy Use	5
		31 Site Waste	15
	User Experience	32 Aftercare	10
		33 Home Information	5
		34 Smart Homes	7
	Future Learning	35 Post-Occupancy Evaluation	9

Notes:
Red text – highlights issue containing mandatory requirements

HQM ONE			
Section	**Category**	**Issue name**	**Credits**
My Home	6 Materials	6.1 Responsible Sourcing	25
		6.2 Environmental Impact of Materials	25
		6.3 Life Cycle Costing	12
		6.4 Durability	7
	7 Space	7.1 Drying Space	3
		7.2 Access and Space	11
		7.3 Recyclable Waste	10
	8 Water	8.1 Water Efficiency	7
Delivery	9 Quality Assurance	9.1 Project Preparation	6
		9.2 Commissioning and Testing	11
		9.3 Inspections and Completion	16
	10 Construction Impacts	10.1 Responsible Construction Practices	5
		10.2 Construction Energy Use	5
		10.3 Construction Water Use	5
		10.4 Site Waste Management	15
	11 Customer Experience	11.1 Aftercare	4
		11.2 Home Information	0
		11.3 Smart Homes	8
		11.4 Post Occupancy Evaluation	10

Notes:
Red text – highlights issue containing mandatory requirements

Compliance Notes

The 'Compliance Notes' section within each issue has been reviewed. Where it was felt to be more appropriate, the content of some compliance notes have been added into the 'Methodology' or 'Definitions' sections. The 'Compliance Notes' section itself now directs the assessor to the **BREEAM Knowledge Base** (see image below), where all compliance notes going forward will be stored. This will improve the ability of HQM to take account of feedback and respond to changes in technology, process and practice

Technical Changes

The remainder of this document summarises the key technical differences and changes between HQM Beta and HQM ONE schemes. Whilst it does not outline in detail every change, it aims to signpost the areas of the manual that have been updated. It does not elaborate on or explain the change in detail. For full details please see the HQM ONE scheme manual.

A significant objective for the HQM ONE update was to clarify and improve the accessibility of the text within the manual. All areas of the manual have been reviewed with this in mind, and a significant number of changes have been made as a result. We have applied the 'Plain English Campaign' principles to all 'Aim', 'Benefit' and 'Context' sections of the technical issues. These wording changes have not been detailed below unless they resulted in a technical change within the requirements of the scheme. The table does not list issues where no changes have been made to the technical requirements of the scheme

Key

▉	Issue contains extensive new content and must be reviewed in full	£ icon	Issue contains a 'My Cost' indicator backstop
▉	Technical change that will affect the way the issue is assessed	wellbeing icon	Issue contains a 'My Wellbeing' indicator backstop
▉	Technical change that might affect the way the issue is assessed	footprint icon	Issue contains a 'My Footprint' indicator backstop

Issue	Issue change	Credits		*NEW Indicator backstop	*NEW Minimum Requirements	Issue pre-requisite	Key changes to issue
		Beta	ONE	ONE	ONE	ONE	
1.1 Public Transport Availability		16	15		None	None	**Criteria:** 1. Amended credits for achievement of AI scores 2. *NEW requirement added for home information for local transport networks or nodes 3. Amended requirements added for off-peak hour services 4. *NEW credits available for sites that have worked with transport companies to improve local services **Definitions:** 5. *NEW 'Urban' 6. *NEW 'Rural' 7. Amended 'Safe Pedestrian Routes' 8. *NEW 'Transport Companies'
1.2 Sustainable Transport Options		15	17		None	Home information	**Criteria:** 1. *NEW issue pre-requisite added for home information 2. Additional credits available for 'Cycle networks' 3. Amended requirement for design team to consult with local authority to improve local cycling networks 4. Amended requirements for electric vehicle charging points to take account of charging speed, and provision of supporting infrastructure 5. Amended 'Car clubs' criteria 6. *NEW credit available for 'Car clubs' with 60% hybrid or electric vehicles **Methodology:** 7. *NEW 'Communal EVC Score' 8. *NEW 'Disabled persons' parking' **Definitions:** 9. *NEW 'Car Club' 10. Amended 'Cycle route' 11. *NEW 'Communal Parking' 12. *NEW 'Fast Charging Infrastructure' 13. *NEW 'Private Parking' 14. Amended 'Safe Pedestrian Routes' REMOVED: CN4 Communal car charging point

Issue	Issue change	Credits		*NEW Indicator backstop	*NEW Minimum Requirements	Issue pre-requisite	Key changes to issue
		Beta	ONE	ONE	ONE	ONE	
1.3 Local Amenities		19	16		None	None	**Criteria:** 1. Reduced credit for 'Key local amenities' 2. Reduced credits for 'Beneficial local amenities' 3. Amended 'Key local amenities' and 'Beneficial local amenities' lists 4. Amended 'Beneficial local amenities' walking distance **Definitions:** 5. Amended 'Safe Pedestrian Routes' 6. Amended 'Walking distance' 7. *NEW 'Walking distance – rural' REMOVED: Definition: 'Assumed walking speed'

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Issue	Issue change	Credits		*NEW Indicator backstop	*NEW Minimum Requirements	Issue pre-requisite	Key changes to issue
		Beta	ONE	ONE	ONE	ONE	
2.1. Identifying Ecological Risks and Opportunities		30	7		None	Assessment route selection Foundation route: Project team member	**New issues.** HQM's ecology issues have been developed as part of the BREEAM-wide strategic ecology framework (SEF). The new issues here fully replace the Ecology issue in HQM Beta. HQM ONE incorporates the finalised core content developed from the SEF, which has been developed with ecologists to recognise current good-practice that compliments and builds upon existing processes and standards.
2.2. Managing Impacts on Ecology			9		None	Ecological risks and opportunities for the project	**Key differences between ONE and Beta:** 1. Ecology issue content split into 4 distinct issues covering the key parts of protecting and enhancing ecology
2.3. Ecological Change and Enhancement			12		None	Ecological risks and opportunities for the project	2. Total credits available have increased from 30 to 36 3. Scoring is scaled to recognise graded effort and levels of performance towards best practice 4. The new foundation route (using a non-ecologist) provides capped credits for sites with low risk of ecological impact, in a more accessible way compared to HQM Beta 5. Compliments existing processes and improved standards towards ecological enhancement (e.g. DEFRA metric and biodiversity net-gain)
2.4. Long Term Ecological Management and Maintenance			8		None	Roles & responsibilities, implementation, statutory obligations Home information Liaison, review and management	6. Makes it easier to demonstrate compliance on sites where ecologists are required through planning or other drivers and will avoid duplication of effort 7. Makes it easier to demonstrate compliance for sites of low ecological value 8. Alignment with BREEAM means the same methods and evidence can be used to demonstrate criteria are met for mixed-use developments using both HQM and BREEAM 9. The underlying principles in HQM ONE are similar to Beta but the technical requirements and methodologies are significantly different More details can be found here: http://www.breeam.com/strategic-ecology-framework

Issue	Issue change	Credits		*NEW Indicator backstop	*NEW Minimum Requirements	Issue pre-requisite	Key changes to issue
		Beta	ONE	ONE	ONE	ONE	
2.5 Recreational Space		20	22		None	Home information	**Criteria:** 1. *NEW issue pre-requisite for home information 2. Amended 'Private space' criteria benchmarks to account for differing needs for houses and apartments 3. Additional credits available for 'Communal space' 4. Amended 'Communal space' criteria benchmarks to account for differing needs for houses and apartments, in urban or rural locations 5. Amended 'Communal space' criteria to include requirements for suitable management and maintenance arrangements 6. Additional credit available for 'Growing space' 7. Amended 'Growing space' criteria benchmarks to account for private or communal growing space, for houses and apartments, in urban or rural locations 8. Additional credit available for 'Expert input' in terms of growing space design and maintenance 9. Amended 'Expert input' criteria to include planting of low maintenance species **Methodology:** 10. Amended 'Expert input' 11. Amended 'Growing space' 12. *NEW 'Private external space' **Definitions:** 13. *NEW 'Gross Development Area (GDA)' 14. Amended 'Low maintenance' 15. Amended 'Safe pedestrian routes' REMOVED: Evidence: 'BF1678 – Guidance for relating an ecology survey to the Home Quality Mark' Definitions: 'Intensive green roofs'

Issue	Issue change	Credits		*NEW Indicator backstop	*NEW Minimum Requirements	Issue pre-requisite	Key changes to issue
		Beta	ONE	ONE	ONE	ONE	
3.1 Flood Risk		18	19	£	For England and Scotland: Flood risk assessment For Wales: Flood consequence assessment	For medium or high risk: Home information	**Criteria:** 1. *NEW minimum requirement added for England and Scotland requiring a 'Flood Risk Assessment' 2. *NEW minimum requirement added for Wales requiring a 'Flood Consequence Assessment' 3. Additional credit available for 'Low risk' 4. Additional credit available for 'Medium to high risk' 5. Clarification added for scenarios where the Environment Agency set more onerous recommendations that the 600mm threshold requirement 6. Amended crit 8.b. reference from 'section 5 of BS8533:2011' to 'BS 85500:2015' **Methodology:** 7. Amended 'Third party defences' 8. Amended 'Level of detail required in the FRA for smaller sites' 9. Amended 'Existing community flood resilience measure' **Evidence** 10. *NEW 'Communication of flood risk' evidence requirement REMOVED: CN5 Credits have been achieved in SE03 Flood Risk Assessment in BREEAM Communities
3.2 Managing Rainfall Impacts		16	19		None	Home information	**Criteria:** 1. *NEW Scotland, England and Wales specific criteria added 2. Additional credits available for 'Volume of run-off' 3. Additional credit available for 'Water quality' 4. Amended 'Water quality' criteria **Methodology:** 5. Amended 'Highways that form part of development site' (point 2) 6. *NEW 'Managing Rainfall Impact template (BF1844))' **Evidence** 7. *NEW 'Managing Rainfall Impact template (BF1844))' **Definitions:** 8. *NEW '100 year event' 9. Amended 'Surface water run-off' 10. *NEW 'Impermeable area'

Issue	Issue change	Credits		*NEW Indicator backstop	*NEW Minimum Requirements	Issue pre-requisite	Key changes to issue
		Beta	ONE	ONE	ONE	ONE	
3.3 Security		10	9		For Wales: Approved document Q compliance	Home information Security needs assessment	**Criteria:** 1. *NEW prerequisite 'Home Information' 2. *NEW minimum requirement added for Wales requiring compliance with Approved Document Q 3. Reduced credit available for 'Security Features' 4. *NEW sliding credit scale available for 'Security Features' **Methodology:** 5. *NEW 'Recommendations made by a SQSS' **Definitions:** 6. *NEW 'Approved Document Q'
4.1 Indoor Pollutants		10	12		None	Home information Minimising emissions from space and water heating	The changes made to this issue align it with other BREEAM schemes. **Criteria:** 1. *NEW prerequisite 'Home Information' 2. *NEW prerequisite 'Minimising emissions from space and water heating' 3. *NEW criteria 'Minimising the effects of cooking' 4. *NEW criteria requiring formaldehyde and TVOC levels to be within the prescribed limited to achieve credits for 'Minimising airborne formaldehyde from all sources' and 'Minimising airborne TVOCs (total volatile organic compounds) from all sources' 5. Amended 'Minimising emissions from building product types' criteria with regards to 'wood-based products' 6. Amended TVOC limit for 'Minimising airborne TVOCs (total volatile organic compounds) from 0.3 mg/m3 to 0.5 mg/m3 **Methodology:** 7. *NEW 'Self-declaration of emission levels from building products' 8. *NEW 'Furnishings' 9. Amended 'Testing requirements for emission limits' 10. Amended 'Minimising airborne formaldehyde, and airborne TVOCs, from all sources – calculation method' regarding sampling tubes **Checklists, Tables & Illustrations:** 11. Amended 'Emission criteria by building product type' table - 'flooring adhesives' added to 'Interior adhesives & sealants' 12. *NEW notes added to 'Emission criteria by building product type' table 13. *NEW 'Table 18 Maximum TVOC content for paints and coatings' **Definitions:** 14. Amended 'TVOC' 15. *NEW 'R-value'

Issue	Issue change	Credits		*NEW Indicator backstop	*NEW Minimum Requirements	Issue pre-requisite	Key changes to issue
		Beta	ONE	ONE	ONE	ONE	
4.2 Daylight		16	13	☺	None	None	**Criteria:** 1. Reduced credit for 'Average daylight factor (kitchens)' 2. Reduced credit for 'Average daylight factor (living spaces)' 3. Reduced credit for 'View of sky' **Methodology:** 1. NEW* 'No sky-line' diagram
4.3 Noise Sources				☺	None	None	**Criteria:** 1. Amended 'Table 20 Internal noise levels' to include benchmarks for 'Open plan rooms that a kitchen is part of' **Methodology:** 2. Amended 'Internal noise levels - habitable spaces and kitchens' to confirm the scope and measurement procedures, and update references 3. NEW* 'Internal noise levels—open-plan rooms that a kitchen is part of' **Definitions:** 4. Amended 'Suitably Qualified Acoustician'
4.4 Sound Insulation		8	9	☺	None	None	**Criteria:** 1. Additional credit available for 'Sound insulation between homes' 2. *NEW benchmarks for 'Sound insulation between homes' that protect against both high frequency and low frequency sound 3. Amended 'Sound insulation between homes' benchmarks for 'impact sound insulation' **Methodology:** 4. Amended 'Sound insulation between rooms' to clarify that it's applicable to all internal walls and floors within a home **Definition** 5. Amended 'Compliant test body' 6. *NEW 'Requirement 1' and 'Requirement 2'
4.5 Temperature		20	17	£ ☺	Temperature analysis	Home information	**Criteria:** 1. *NEW minimum requirement added for completion of temperature analysis 2. Additional credits available for 'Foundation route – HQM temperature tool' 3. Reduced credits for 'Comprehensive route' 4. Amended 'Comprehensive route' references from 'CIBSE AM11' and 'CIBSE TM52' to 'CIBSE TM59' **Methodology:** 5. *NEW 'Thermal modelling sampling' taken from HQM beta KBCN0892 6. *NEW 'Ventilation type' to clarify if homes should be modelled as naturally or mechanically ventilated for this issue REMOVED: CN1 Comprehensive route – Smaller and more basic building designs

Issue	Issue change	Credits		*NEW Indicator backstop	*NEW Minimum Requirements	Issue pre-requisite	Key changes to issue
		Beta	ONE	ONE	ONE	ONE	
4.6 Ventilation		12	13		Information signs Ventilation rates Maintenance and controls	None	**Criteria:** 1. *NEW Scotland, England and Wales specific criteria 2. *NEW minimum requirement requiring information sign 3. *NEW minimum requirement for ventilation rates 4. Additional credit available for 'Ventilation rates' 5. Amended ventilation rates to be achieved for credits (Table 25 & 26) 6. Amended the noise criteria to be achieved within the ventilation rates section 7. *NEW minimum requirement for humidity control 8. *NEW maintenance and controls criteria **Methodology:** 9. Amended 'Safe and accessible maintenance of systems' 10. Amended 'Minimum ventilation rate-according to the size of the home' 11. Amended 'Ventilation rates for System 1 and System 2' **Checklists, Tables & Illustrations:** 12. *NEW table 25 (Ventilation rate criteria) 13. Amended table 26 (Minimum ventilation rate – according to number of bedrooms) 14. *NEW table 27 (Boost ventilation rate) 15. *NEW table 28 (Maintenance and controls) **Definitions:** 16. Amended 'Building Regulations for ventilation' 17. *NEW 'Wet room'
5.1 Energy and Cost		62	60		None	Home information	**Criteria:** 1. Reduced credits available for 'Energy performance' **Knowledge base:** 2. *NEW 'Building assessed as part of a larger development' **Tools:** 3. Updated Carbon and Primary energy factors used in energy tool to reflect up to date data including decarbonisation of the national grid 4. *NEW tumble drier and drying space questions added in excel bolt-on tool to improve accuracy of energy calculation (please see Guidance note 28 for more information) 5. *NEW different notional dwelling benchmarks are used for Scotland and Wales scheme versions (see GN28 for more details) REMOVED: Criteria/Methodology: Foundation route Definitions removed as covered in GN28: DER, HQM energy reporting tool, notional dwelling, TER.

Issue	Issue change	Credits		*NEW Indicator backstop	*NEW Minimum Requirements	Issue pre-requisite	Key changes to issue
		Beta	ONE	ONE	ONE	ONE	
5.2 Decentralised Energy		10	8		None	Home information Feasibility study	**Criteria:** 1. Changed the existing feasibility study requirement to an issue prerequisite 2. Additional credit available for 'Infrastructure' 3. Additional credit available for 'Installation' 4. Added clarity to 'Infrastructure' requirements for heat networks (point 5) **Methodology:** 5. Amended 'Feasibility study' to include reference to 'CIBSE Code of Practice for Heat Networks' **Knowledge Base:** 6. Amended 'Air source heat pump' to refer to other types of heat pumps REMOVED: Criteria: 'Monitors and controls' (content included in 'Smart Homes' issue)
5.3 Impact on Local Air Quality		11	15		None	None	The aim of this issue is to reduce the impact on local air quality from the home's heating and hot-water generating appliances. This issue now assesses NOx, VOCs and particulate emissions. The benchmarks for NOx have been revised. All emission benchmarks are percentage improvements on EU legislative maximums. Please refer to scheme manual for full details.
6.1 Responsible Sourcing		31	25		None	Legally harvested and traded timber	**Criteria:** 1. Reduced credit available for 'Product procurement policy' 2. Reduced credits available for 'Responsible sourcing of construction products assessment' 3. Amended credit allocation for 'Responsible sourcing of construction products assessment' **Methodology:** 4. Amended 'Product procurement policy' 5. Amended 'Responsible sourcing of construction products assessment' **Evidence:** 6. Amended 'Product procurement policy' **Definitions:** 7. *NEW 'Responsible sourcing of construction products' REMOVED: Criteria & Definitions: 'Intermediate route'

Issue	Issue change	Credits		*NEW Indicator backstop	*NEW Minimum Requirements	Issue pre-requisite	Key changes to issue
		Beta	ONE	ONE	ONE	ONE	
6.2 Environmental Impact of Materials		31	25		None	None	**Criteria:** 1. Criteria split into 'Product procurement policy' and 'Product environmental information' 2. Reduced credit for 'Product procurement policy' 3. Reduced credit for 'Product environmental information' 4. Amended credit scale for 'Product environmental information' 5. Reduced credits for 'Building life cycle assessment' 6. Amended credit scale for 'Building life cycle assessment' **Methodology:** 7. Amended 'Documented product procurement policy' 8. Amended 'Environmental product declaration (EPD) classification' 9. Amended 'Building life cycle assessment' 10. Amended 'IMPACT compliant tool requirement' 11. Amended 'Scope of assessment' table **Evidence:** 12. Amended 'Product procurement policy' **Definitions:** 13. *NEW 'Embodied carbon' 14. *NEW 'House type'
6.3 Life Cycle Costing		18	12		None	None	**Criteria:** 1. Reduced credits available for 'Occupant's life cycle cost report' 2. Reduced credits available for 'Component level life cycle cost optimisation' **Methodology:** 3. *NEW 'Assumptions, exclusions and contingencies' 4. *NEW 'Occupant's report' 5. *NEW 'Period of Analysis' **Evidence:** 6. *NEW 'Life cycle costing analysis' 7. Amended 'Component level life cycle cost optimisation' **Definitions:** 8. *NEW 'Economic Sustainability' 9. Suitably Qualified Cost Consultant (SQCC)'

Issue	Issue change	Credits		*NEW Indicator backstop	*NEW Minimum Requirements	Issue pre-requisite	Key changes to issue
		Beta	ONE	ONE	ONE	ONE	
6.4 Durability		10	7		None	None	**Criteria:** 1. Reduced credits available for 'Integral elements' 2. Reduced credits available for 'Finishing elements' **Definitions:** 3. Amended 'Appropriate measures'
7.1 Drying Space					None	None	**Indicators:** 1. 'Internal drying' – 'My wellbeing' indicator weighting increased to 0.75 **Criteria:** 1. Amended 'External drying' criteria 2. Amended 'Internal drying' criteria REMOVED: Compliance Note: 'Adequate internal drying space' Compliance Note: 'Inadequate internal drying space'
7.2 Access and Space		10	11	☺Q	None	Home information	**Criteria:** 1. *NEW issue prerequisite for home information 2. Additional credit available for 'Nationally described space standards' 3. Amended 'Nationally described space standards' requirement to include 0.5m² built-in storage 4. Reduction of credit from 'Accessible and adaptable design' 5. Amended 'Accessible and adaptable design' criteria to include 'Accredited access consultant' 6. *NEW 'Accredited access consultant confirmation' criteria **Definitions:** 7. *NEW 'Accredited access consultant' 8. Amended 'Internal functional space' REMOVED: Compliance Note: 'Flexible design options'
7.3 Recyclable Waste					None	Home information	**Criteria:** 1. *NEW issue prerequisite for home information **Definitions:** 2. *NEW 'Composting' 3. Amended 'Safe pedestrian routes'

Issue	Issue change	Credits		*NEW Indicator backstop	*NEW Minimum Requirements	Issue pre-requisite	Key changes to issue
		Beta	ONE	ONE	ONE	ONE	
8.1 Water Efficiency		10	17		None	None	**Criteria:** 1. *NEW Approved Document G is only applicable in England but no equivalent is available in other UK countries. For this reason, and for the purposes of HQM only, AD G should be used to determine compliance for assessments carried out in Wales and Scotland **where required by the criteria** 2. Additional credits available for 'Water efficient fittings'. 3. *NEW sliding credit scale for 'Water efficient fittings' 4. Additional credits available for 'Water recycling' 5. *NEW sliding credit scale for 'Demand for WC flushing met by rainwater or greywater' **Methodology:** 6. *NEW methodology for calculating water consumption for washer driers **Checklists, Tables & Illustrations:** 7. Amended Table 52 'Water fittings standards' to clarify that the fittings standards (optional and advanced) for washing machines applies to washer dryers as well
9.1 Project Preparation		N/A	6		Project delivery plan Product procurement and substitution policy Dissemination of information	None	New issue. This issue is aimed at recognising the implementation of quality assurance processes early on in the project, which feed through the lifetime of the project. Elements of the 'Quality improvement' issue from Beta have been incorporated into the 'Project preparation' issue including collaborative working and feedback from previous projects. The 'commissioning and testing strategy' part of the 'commissioning and testing' issue have been incorporated into this issue, including the addition of a specific requirement for fabric performance targets to be made. Please refer to scheme manual for full details.

Issue	Issue change	Credits		*NEW Indicator backstop	*NEW Minimum Requirements	Issue pre-requisite	Key changes to issue
		Beta	ONE	ONE	ONE	ONE	
9.2 Commissioning and Testing		10	11		Commissioning building services and control systems	None	**Criteria:** 1. *NEW minimum requirement added for 'Commissioning building services and control systems' 2. *NEW 'Fabric pre-testing' criteria 3. Additional credits available for 'Post-construction testing' 4. *NEW sliding credit scale for 'Post-construction testing' 5. Amended 'Post-construction testing' criteria to require any defects identified from post-construction testing to be rectified before handover 6. Amended requirements for 'Thermographic surveys' to recognise ABBE qualification 'level 3 certificate in Domestic Infrared Thermography Class 1 Operators' **Methodology:** 7. *NEW 'Pre-testing' 8. *NEW 'Post-construction testing – temporary sealing' **Definitions:** 9. *NEW 'Primary air barrier' 10. Amended 'Commissioning best practice'
9.3 Inspection and Completion		N/A	16		Visual defects inspection Construction inspections Construction record	None	New issue. This issue is aimed at recognising the implementation of quality assurance processes early on in the project, which feed through the lifetime of the project. Elements of the '4-6 week visit' criteria in the 'Aftercare' issue from Beta have been improved and moved to this issue as the early and seasonal inspection visits. Elements of the 'quality control' criteria in the 'Quality improvement' issue have been improved and moved into this issue as the 'construction inspections' and 'construction record' requirements. Please refer to scheme manual for full details.
10.1 Responsible Construction Practices		4	5		None	None	This issue has become more outcome focused and it defines specific requirements, including vehicle movement and health and safety. CCS or other schemes can still contribute to awarding some credits. Please refer to scheme manual for full details. More information is available in Guidance Note 33.
10.2 Construction Energy Use					None	None	**Evidence:** 1. Amended requirement to consider data reports from Automatic Meter Reading (AMR) systems **Definition:** 2. *NEW 'Automatic Meter Reading (AMR)'

Issue	Issue change	Credits		*NEW Indicator backstop	*NEW Minimum Requirements	Issue pre-requisite	Key changes to issue
		Beta	ONE	ONE	ONE	ONE	
10.3 Construction Water Use					None	None	**Evidence:** 1. Amended requirement to consider data reports from Automatic Meter Reading (AMR) systems **Definition:** 2. *NEW 'Automatic Meter Reading (AMR)'
10.4 Site Waste Management		15	16		None	None	**Criteria:** 1. Additional credit available for 'Diversion of excavation waste from landfill' **Evidence:** 2. Amended requirements for 'Resource Management Plan and pre-demolition audit' **Definitions:** 3. Amended 'Best practice construction waste management plan' 4. *NEW PAS402:2013 5. Amended 'Resource Management Plan (RMP)'
11.1 Aftercare		10	4		Building warranty Handover visit	None	**Criteria:** 1. *NEW minimum requirement added for 'handover visit' 2. Amended 'On-call support' criteria to require support to be in place for 2 or 3 years 3. Moved demonstrations part of 4-6 week visit into the handover visit **Methodology:** 4. *NEW 'Handover visit timing' **Definitions:** 5. *NEW 'Active systems' **Knowledge Base:** 6. Amended 'Aligning with other relevant requirements' 7. *NEW 'Flexible handover visit' REMOVED: Criteria: 'Remote support' Criteria: '4-6 week visit' improved and moved to 'Inspections and Completion' issue (see issue) The 6 credits from the removed content have been moved to the early and seasonal visit criteria in the 'Inspections and Completion' issue

Issue	Issue change	Credits		*NEW Indicator backstop	*NEW Minimum Requirements	Issue pre-requisite	Key changes to issue
		Beta	ONE	ONE	ONE	ONE	
11.2 Home Information		5	0		Home information	None	**Criteria:** 1. *NEW whole issue has become a minimum requirement 2. *NEW home information requirement for 'Sustainable Transport Options' 3. *NEW home information requirement for 'Recyclable Waste' 4. *NEW Information required to be written in Welsh for Wales scheme version **Definitions:** 5. *NEW 'Active systems' REMOVED: CN2 Home systems (replaced with 'Active systems')
11.3 Smart Homes		7	8		None	Home information	The structure of this issue now makes the criteria more flexible and accessible to reflect consumer demands and how these may differ. The criteria content more accurately reflects current technologies. The criteria extends the connectivity requirements to also recognise measures installed to improve connectivity in the home. The smart heating and lighting has been further separated to recognise 'basic' and 'advanced' measures adopted in relation to these. Please refer to scheme manual for full details.
11.4 Post Occupancy Evaluation		9	10		None	None	**Criteria:** 1. Amended criteria structure to reflect sequential order 2. Additional credit available for this issue 3. *NEW requirement relating to the protection of occupants' data **Methodology:** 1. Amended 'Occupant feedback' topics to align them with HQM issues 2. *NEW format requirements for different data collected **Definitions:** 3. *NEW 'Active systems' 4. Amended 'Appropriately qualified professional' 5. Amended 'Independent third party' REMOVED: Routes of rigour: criteria has been restructured