FUTURE HOMES STANDARD (FHS) COMPLIANCE INSIGHTS

During 2022, we undertook collaborations with the Future Homes Hub (FHH). Whilst policy and regulatory progress is being made through the FHH Oversight Group (and the HBF Technical & Sustainability Committee), the headline progress to date is most evident in the proposed 2022 amendments to the Building Regulations Approved Documents*.

It is envisaged a more comprehensive approach and set of outcomes to the following criteria will be seen during 2023. In the meantime, by collaborating with selected and focused advocacy networks and industry experts, we are de-risking projects and progressively achieving our known 2030 roadmap milestones. We recommend this insight is read in accordance with our Principal Risks and Uncertainties Register.

For current purposes, each section of the Future Homes Standard (FHS) is being assessed. It is important to state, the FHS is evolving quickly and is far from consolidated & complete. Through concerted commitments from the Hill Sustainability Leadership Group and its Environmental Focus Groups – continuing progress is envisaged. Passivhaus, Active Homes and equivalent standards supports the transformative journey required from 2013 Part L compliant homes to achieve the FHS, and the interim standards & FLOS*.

**Government published Building Regulations FLOS in 2022: Ventilation (Part F), Conservation of Fuel and Power (Part L), Overheating (Part O) & Infrastructure for Charging EVs (Part S)*

	Headline goal (& Hill workstream)	From 2025	From 2030	From 2040	Comments
Homes that are:	Zero carbon ready (Hill Environmental Working Group 1)	Zero carbon ready (for regulated energy) across all homes, with very high-fabric efficient standards (kWh/m2/yr.; precise level to be determined). Investigation of how to further reduce energy demand and emissions sector-wide.			The Passivhaus and Active Homes approach being undertaken at Agar Grove, CIP schemes & Marleigh in Cambridge provide good routes to compliance. The FHH costs analysis indicates cost variation between 4% & 24%. Our low carbon (sustainable) pathways, 2030 Roadmap align with the FHH published reports. The importance of Post Occupancy Evaluation (POE) studies to bridge the performance-gap cannot be overstated for lower running costs, better air/acoustic quality & wellbeing potential, to protect our reputation and increasingly green-finance and green-mortgages. In addition to meeting FHS regulated CO2 expectations, offsets as required by the London Plan ergo £95TCO2 is becoming more common. Offsets will form an important part of achieving our 2030 Net zero ambitions.
	Healthy, safe & comfort (EWG 1.2)	Future standards to be set for 2025 for interlinked elements such as: overheating, air quality, sound, space and accessibility, safety, and daylighting.			The application of CIBSE Guidance TM59, new Approved Document Building Regulation Part O Building Regulations and our collaboration with competent consultants, indicates compliance routes. Where overheating risks result, solutions are manageable, with lessons learnt being incorporated into Whole Life Carbon (WLC) Pattern Books and enhanced design standards. Internal air quality standards should be mitigated through Part F and the widespread installation of MVHR systems. Sound standards will be met through Part E of the Building Regulations and for example the enhanced standards achieved through Fusion and optimised MMC solutions. Space and accessibility standards will be met through the application of the Nationally Described Space Standards (NDSS) & Part M. Safety expectations will be managed through the evolving Building Safety requirements. Daylighting factor will be a balanced solution approach to Parts F, L & O.
	Water efficient (EWG 1.2)	By 2023, move to a fittings-based approach to achieve water efficiency with mandatory labelling. Rapid collaborative analysis to establish minimum product standards in new build, and the potential role for innovative water systems for 2025 and 2030.			Our current specification delivers 105 litres per person per day(lpppd) of water use, compared to Part G level of 125lpppd. The water fixtures & fittings approach evolving through the FHS is to be published. Typically, UK resident uses around 150lpppd. Within our Roadmap we have endeavoured to predict regulatory water standards 2025 & 2030, and potentially enhance standards for waster stressed areas. The concept of water neutrality is to be introduced during the decade.

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Places that:	Are designed for sustainable living (EWG 2)	Incorporate zero emission vehicle readiness and other sustainable lifestyle enabling technologies as appropriate.			The London Plan has led this area of innovation, albeit Part S is now mandated. Balancing the expectation of ASHP (Pumps) and EV charging is a balancing act for energy infrastructure capacity, especially in London! Marleigh Active Homes is a good practice example where Active Homes sets out a future low carbon path.
	Are well designed (EWG 2)	All relevant applications will consistently design low carbon, nature, sustainable lifestyles, resilience, health, and beauty into developments, in line with National Model Design Code (NMDC) as early as possible. This will include greater connectivity with low carbon modes of transport.			NMDC has been woven into the Company Design Brief, Standards and Peer Review process. In addition, the Building for a Healthy Life Standard has been incorporated into processes and is being trialled on 3 projects. Given our balance of brownfield v greenfield development, our average PTAL rating is 3.
	Have maximum biodiversity gain (EWG 2)	Optimise benefits for nature from biodiversity gain (BG) once introduced. Enable and pilot the move to environmental gain, learning from Biodiversity Gain.			BG is incorporated into the Sustainability Linked Loan, hence improvements above the National 10% requirement are expected, given the SSLL threshold was 15%:2022> 30%:2025. Where on site mitigation is not possible, an agreed offsetting mechanism is employed. 30-year management plans (as required by the Environment Act) are being designed. It is understood DLUHC will provide improved policy insights in Q4-2023.
	Achieve water resilience (EWG 2)	All relevant applications give early and strategic consideration of how to proactively manage long-term flood risk and water resilience, availability and quality at site and property level including through the use of multi-benefit sustainable drainage systems (SuDS).			Ground engineering solutions and above ground SuDs, and brown / green (not blue) roof attenuation systems are helping to mitigate precipitation risks. SuDs positively form part of BG strategies, and enhanced placemaking creates an enhanced sales premium.
	Respect environmental thresholds (EWG 2)	Collaborative action to reduce pressures across the system, notably in areas vulnerable to nutrient overloads, water stress and floods.			As widely reported, the risks associated with water nutrient and water neutrality are becoming more widely spread and many developers have schemes that are either; no longer viable or are at significant non-compliance risk. The area of respecting environmental thresholds is to be closely monitored during 2023+.
Production & construction that achieves:	Zero embodied carbon (EWG 1)	Ambition to meet or exceed the World Green Building Council Net Zero pathway, with rapid analysis to set robust and stretching targets for 2025, 2030 and 2040 and/or other dates as appropriate.			To achieve the 2030 objective of a 75-80% regulated CO2 and currently a non-regulatory 40% reduction in embodied* carbon, as set out in LETI (Climate Emergency Design Guide), incremental reductions are set out in the 2030 Roadmap. During 2023, a set of pattern books (green v brownfield > low, medium & high-rise) are to be developed. The importance of seeking EPDs and the innovation plans from our supply chain cannot be overstated. Note* Approved Document Part Z (Whole Life Carbon (WLC)) is expected to support the FHS in readiness from 2025.
	Resource efficiency (EWG 3)	Incremental improvements and target to be set for 2025, 2030 and 2040. Zero avoidable waste at all stages of the construction lifecycle.			A zero waste (non-hazardous) to landfill commitment is included in the 2030 Roadmap to meet the emerging expectations from 2025. As seen in London, Circular Economy assessments are being called for and will continue, given the convergence of these requirements with WLC expectations, and the 2030 ambitions being set by our sector.
	Water efficiency (EWG 1)	Up to 30% reduction	Up to 40% reduction	Up to 50% reduction	Up to a circa 30% reduction is part of our 2030 Roadmap. To achieve this standard a recourse to water recycling (green/possibly grey water) will be required as the water fixtures & fittings approach. The FHH will be reporting on practical compliance in 2023. As noted above, our Roadmap is preparing for future water standards, albeit national policy and water stressed area policies are required.
	Low emission to air (EWG 2)	Air quality target to be set for 2025, 2030 and 2040.			Air quality targets are more evident in London and increasingly Cities and Metropolitan areas. Better visibility of policy and standards is required before an objective assessment of risk can be undertaken. Air quality neutral schemes in London are fairly typical – albeit air quality negative solutions are yet to be properly defined for 2030.