

Sustainable Design Brief - Commercial

The Sustainable Design Brief (SDB) sets out a range of requirements to deliver net positive impacts for our commercial developments. The overarching emphasis is for designers and contractors to adopt and where possible, improve on these requirements in the design. The SDB forms the second part of a suite of three documents designed to support project teams to deliver Hammerson's net positive [development approach](#). This document sets out specific sustainability objectives, requirements and measures for the proposed project in response to Hammerson's [Sustainability Vision](#) for developments.

The SDB must be reviewed by the project team and opportunities identified at the beginning of RIBA Stage 2. It is recommended that a dedicated workshop is held to facilitate this and the opportunities recorded as a series of targets, actions and responsibilities in the [Sustainability Implementation Plan](#). Not all requirements will be relevant however project teams will be expected to justify reasons why.



When responding to the SDB, the requirements of national legislation, local planning and any site specific sustainability opportunities also need to be considered. Where possible, the most ambitious requirements should become the relevant project targets.

Responsibility for delivering the SDB rests with the relevant Hammerson Development Manager and Project Manager with support from the Environmental Manager [Richard Quartermaine](#). The external project team are responsible for responding to the SDB and delivering its requirements.

Please note all Hammerson suppliers (including consultants) are required to complete the [Supplier Survey](#) and score a minimum of 70%. Contact sustainability@hammerson.com about how a supplier can access the survey.

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Objectives	Requirements	Suggested Measures
<p>CARBON</p> <p>Achieve Net Positive position for annual operational carbon emissions: emissions avoided exceed emissions generated.</p> <p>Minimise operational utility costs for the building and reduce exposure to energy price risks</p> <p>Achieve Net Positive position for embodied carbon emissions of the building</p>	<p>A design that delivers a building that will achieve a net positive position for annual operational carbon emissions. This must include key technological and management options using operational performance modelling tools (i.e. CIBSE TM54) and lifecycle carbon and cost analysis</p> <p>Exceed Nearly Zero Energy Buildings compliance (where applicable)</p> <p>Reduce 'cradle-to-gate' (A1-A3) carbon intensity by at least 25%/m² against a measured baseline for the project</p> <p>Use embodied carbon assessment software in accordance with BS EN 15978:2011 calculation methodology (i.e. IMPACT) to monitor, report and improve embodied carbon performance</p> <p>Minimise carbon emissions from tenant's operational activities</p>	<ul style="list-style-type: none"> • Employ passive design principles (i.e natural ventilation, daylight, optimise building form and utilise thermal mass) • Maximise energy efficiency of lighting and mechanical ventilation • Preference for electricity based heating, cooling and hot water systems to reflect grid decarbonisation (i.e. heat pumps) • Compare centralised versus decentralised systems (i.e. centralised ambient energy loop and storage) • Maximise on-site renewable energy generation (particularly PV) and link to battery storage and electric vehicle charging • Design for effective operation - implement full Soft Landings; specify BMS to suit user needs; early modelling of operational energy consumption; undertake Post Occupancy Evaluation after one year • Early engagement with tenants regarding Hammerson's fit out requirements and embed within fit-out approval process • Local carbon offset opportunities if net zero carbon emissions not achieved through on-site measures

RESOURCE USE	<p>Net Positive for resource use: waste avoided, recycled or re-used exceeds materials used that are neither recycled, renewable or sent to landfill.</p>	<p>A design that:</p> <ul style="list-style-type: none"> • Embeds ‘circular economy’ principles from the earliest opportunity in the project • Adopts the reduce, reuse, recycle principles by optimising materials efficiency to reduce quantity and waste • Maximises the use of renewable materials such as timber, in lieu of materials with higher embodied carbon • Prioritises materials with low environmental impacts • Maximises recycled content within non-renewable materials • Minimises waste generated and waste sent to landfill 	<ul style="list-style-type: none"> • Review circular economy principles (below) and guidance published by the UKGBC here and identify opportunities to implement: <ol style="list-style-type: none"> A. Reuse (including refurbish and repurpose) <ol style="list-style-type: none"> i. Reuse the existing asset ii. Recover materials and products on site or from another site iii. Share materials or products for onward reuse B. Design buildings for optimisation <ol style="list-style-type: none"> i. Design for longevity ii. Design for flexibility iii. Design for adaptability iv. Design for assembly, disassembly and recoverability C. Standardisation or modularisation (e.g. Laing O’Rourke’s ‘D-frame’ precast concrete frame system) D. Servitisation and leasing E. Design and construct responsibly <ol style="list-style-type: none"> i. Use low impact new materials <ul style="list-style-type: none"> o Target - prioritise the use of timber and avoid using aluminium where possible ii. Use recycled content or secondary material <ul style="list-style-type: none"> o Target - specify concrete with minimum 50% GGBS iii. Design out waste <ul style="list-style-type: none"> o Target - zero non-hazardous construction waste to landfill o Target - generate <1.9 tonnes per 100m2 GIFA of non-hazardous construction waste iv. Reduce construction impacts <ul style="list-style-type: none"> o Target - locally source materials where possible o Target - responsibly source 100% of timber and 80% of non-timber materials • On-site composter or digester for food waste (i.e. Biowhale) • Early engagement with tenants regarding Hammerson’s fit out requirements and embed within fit-out approval process
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<p style="writing-mode: vertical-rl; transform: rotate(180deg);">WATER</p>	<p>Achieve Net Positive position for annual water: water replenished by external projects exceeds water consumed from mains supply.</p>	<p>A design that clearly establishes how the building will achieve a net positive position for potable water consumption using operational performance modelling tools (i.e. BREEAM Wat01 calculator) with cost-benefit analysis</p>	<ul style="list-style-type: none"> • Highly efficient sanitary fittings and appliances targeting current best practice standard (i.e. waterless urinals, ultra low flush WCs etc) • Rain and/or grey water recycling to provide as a minimum irrigation and cleaning of external spaces/terraces and for flushing where possible • Sustainable Urban Drainage Systems (e.g. permeable paving, reduction in hardstanding, and water collection at roof/terrace level) • Planting to be drought tolerant and biodiverse • Incorporate reed beds into landscaping for a natural filtration system for greywater and rainwater • Early engagement with tenants regarding Hammerson’s fit out requirements and embed within fit-out approval process • Local water offset opportunities to offset potable water consumption
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">WELLBEING</p>	<p>Deliver a clean development that supports the good health and wellbeing of occupiers and visitors</p>	<p>A design that delivers:</p> <ul style="list-style-type: none"> • a safe and secure building for occupiers and visitors both on site and journeying to and from site • a building that is accessible to anticipated user groups and accommodates changing using group accessibility requirements • no negative impact on local air quality compared to pre-development baseline and targets a positive improvement in local air quality • access to open green space • on-site facilities that support positive health and wellbeing outcomes such accessible green space, co-working facilities, communal space 	<ul style="list-style-type: none"> • Incorporate sustainable transport options and on-site facilities and accommodate the transition to electric vehicles and mobility as a service • Preference for ‘zero combustion’ energy strategy to improve local air quality • Comfortable internal environment (i.e. no overheating), high levels of daylight and access to good quality fresh air • Pollution absorbing planting scheme • Specification of construction materials with low or zero volatile organic compounds and zero toxic construction materials • Assess development against the WELL standard (certification not required) and review opportunities to improve performance

BIODIVERSITY	Provide urban green space	A design that achieves a net biodiversity gain compared to pre-development baseline	<ul style="list-style-type: none"> • Specify species-rich (and bee friendly) native planting • Incorporate other biodiversity measures such as green/brown roofs and walls, bug hotels, bat and bird boxes etc. • Use harvested rainwater for irrigation and compost from on-site food composter
TRANSPORT	Facilitate use of sustainable transport	A reduction in scope 3 carbon emissions from private car use by promoting sustainable forms of transport	<ul style="list-style-type: none"> • Sufficient cycle storage provision in dedicated and secure space • Dedicated space for shared bike and car schemes • Provide electric vehicle charge points to 10% of car park spaces with sufficient capacity for another 10% in the future • Provide drop off and pick up space for mobility as a service
CLIMATE RISK	Minimise exposure to physical climate risks including flood and extreme temperatures	<p>A design that delivers a building that will accommodate the next 30 years of predicted climate change</p> <p>A positive impact on site flood risk compared to pre-development levels</p>	<ul style="list-style-type: none"> • Use building fabric, orientation and natural ventilation to mitigate overheating risk caused by higher summer peak temperatures • Specification of materials that reduce flood risk from higher peak rainfall events • Capture non-potable water supplies for irrigation and flushing for prolonged summer drought periods • Ensure materials and workmanship can withstand more volatile storm events

SOCIO-ECONOMIC	<p>Net Positive for socio-economic impacts - making a measurable positive impact on socio-economic issues relevant to our local communities beyond a measured baseline.</p>	<p>A clear placemaking strategy incorporating local community engagement and feedback that reflects the needs of the local community</p> <p>A community engagement plan for the development that addresses issues identified as relevant to the local community.</p> <p>A community engagement plan for the operational life of the asset</p> <p>An employment and skills plan for construction and operation stages of the development</p>	<ul style="list-style-type: none"> • Set targets and monitor for the number of jobs to be created during construction and in operation (including local jobs) • Set targets and monitor for procurement of local suppliers during construction process • Set targets and monitor for training opportunities including apprenticeships during construction and operation
MANAGEMENT	<p>Handover of a building that performs as designed</p>	<p>Deliver a building with environmental performance that aligns with the design and provide a supported handover from construction to operation that complies with Soft Landings</p>	<ul style="list-style-type: none"> • Plan for minimum 12 months operational performance monitoring post completion • Incorporate Soft Landings within relevant contractor appointments • Specify review of operational and maintenance guidance manuals with operational teams • Establish 'Building Passport' including key construction and M&E information
CERTIFICATION	<p>Achieve highest BREEAM rating</p>	<p>Minimum BREEAM Excellent rating and preference for Outstanding</p>	<ul style="list-style-type: none"> • Prioritise those credits that support the objectives outlined above • Avoid credits which do not provide any value or benefit to the development • Where there is a conflict between Net Positive outcomes and the highest building certification outcomes, priorities the best Net Positive outcomes