**RIBA Awards 2019**

**Sustainability Criteria**

The RIBA is committed to meeting the challenges of climate change and resource depletion, and raising the understanding of sustainability within the profession. The RIBA also believes that environmental and social sustainability and ethics are vital parts of good design. This information is helpful to the RIBA and the industry in understanding current practice and informing how the profession might better meet the challenge of climate change. Please try to complete the questions where possible, and please note the mandatory fields for projects with a total value of over £1 million. Try to be succinct and factual in your answers, e.g. bullet points for narrative answers.

# 1. Project Data

|  |  |
| --- | --- |
| **Project name** |  |

|  |  |
| --- | --- |
| **Gross Floor Area (m2)** |  |
| **Net conditioned floor area (m2)** |  |
| **Cost (£)** |  |

|  |  |
| --- | --- |
| **I consent for information on this form to be published and made publicly available.** Sharing information for benchmarking is valuable to the industry. If you answer ‘No’, the only your answer to the ‘Summary’ question will be published. | Y / N |

# 2. Summary

|  |  |
| --- | --- |
| **2.1. Outline the drivers, concept, and performance of the building in terms of sustainability.**  E.g. Building performance objectives. How has sustainability informed the architectural concept, building form, construction, systems, and building use? Where there any special project objectives, challenges, or constraints? Was the design reviewed against the impacts of future climate change (e.g. future weather, flood risk, overheating risk)? Are there any innovations in sustainable construction?  *Mandatory for projects over £1m in value. Maximum 300 words. This answer will be published.* |  |

# 3. Operational Energy and Carbon Performance

|  |  |
| --- | --- |
| **3.1. Explain the key operation energy and carbon emissions strategies**  E.g. Building fabric and ‘fabric first design’, building systems, renewable energy generation, energy storage, smart appliance and electric vehicle integration, climate change resilience, grid decarbonisation, building automation and control systems, costs and expected savings and payback periods, impact on maintenance costs. And, whether the building enables sustainable lifestyles, e.g. responsive controls, low carbon travel.  *Mandatory for projects over £1m in value. Maximum 300 words.* |  |

**3.2. Provide a breakdown of the building’s operation energy and carbon performance**

If actual monitoring data is available, please provide instead of modelled data.

*Mandatory for projects over £1m in value.*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Total final energy energy use for whole building \* |  | kWh/m2/yr  Regulated only |  | kWh/m2/yr PE  Primary energy |
|  |  | kWh/m2/yr  All |  | kWh/m2/yr PE  Primary energy |
| Heating |  | kWh/m2/yr |  |  |
| Cooling |  | kWh/m2/yr |  |  |
| Ventilation |  | kWh/m2/yr |  |  |
| Lighting |  | kWh/m2/yr |  |  |
| Other / Unregulated \*\* |  | kWh/m2/yr |  | Sub-metering results. kWh/m2/yr per sub-meter. |
| Total on-site renewable energy *generation* |  | kWh/yr |  | kWP  Peak generation |
| Net final energy demand \*\*\* |  | kWh/m2/yr  Regulated only |  | kWh/m2/yr PE  Primary energy (all) |
|  |  | kWh/m2/yr  All |  | KgCO2eq/m2/yr  Carbon emissions (all) |

*\* ‘Total final energy demand’ is the total/gross amount of energy used by the building per m2 of conditioned floor area, including energy from both the grid and renewables.*

*\*\* E.g. Power sockets including computers, cooking, pumps.*

*\*\*\* ‘Net final energy demand’ is the ‘total final energy demand’ less any energy demand reductions from renewables and other reduction technologies such as energy storage. It is the ‘metered’ energy and o can be negative in a energy net-positive building.*

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| --- | --- |
| **3.3. Confirm the basis for the results provided in the breakdown**  Are they modelled/predicted or actual performance from monitoring? If they are modelled, please give details of the methodology and software used. E.g. Passive House PHPP model, bespoke dynamic model based on x, y, z, or only Part L compliance calculation. If they are from actual monitoring, please give details of the approach and duration. What is the basis for your carbon calculation?  *Mandatory for projects over £1m in value. Maximum 100 words.* |  |

**3.4. Provide details of the building fabric performance.**

U-values to be provided as area weighted for all of that element, building-wide.

*Mandatory for projects over £1m in value.*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Whole envelope** |  | **W/m2k** |  |  |
| Exterior walls |  | W/m2k |  |  |
| Roofs |  | W/m2k |  |  |
| Exterior floors and soffits |  | W/m2k |  |  |
| Exterior doors |  | W/m2k |  |  |
| Exterior windows and glazing systems |  | W/m2k (Uw) |  | W/m2k (Uf) |
|  |  | W/m2k (Ug) |
| Rooflights |  | W/m2k (Uw) |  | W/m2k (Uf) |
|  |  |  | W/m2k (Ug) |

|  |  |  |  |
| --- | --- | --- | --- |
| Airtightness of the building |  | m3/hr m2 @ 50Pa | Select one: compression / decompression / av. of compression and decompression |
|  |  | ACH @ 50Pa |

|  |  |  |  |
| --- | --- | --- | --- |
| Overall Thermal Bridging Heat Transfer Coefficient (Y-value) |  | (W/m2k) | Select one: compression / decompression / av. of compression and decompression |

# 4. Life-cycle / Whole life performance

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| --- | --- |
| **4.1. Explain the key whole-life performance strategies**  Including:  - Whole life energy and carbon. E.g. Whole Life Carbon (WLC) assessment, embodied carbon assessments, Environmental Product Declarations (EPD’s), recycled content, local materials.  - Materials Life-cycle. E.g. robust long-life materials, design for end of life / cradle-to-cradle, Life Cycle Analysis (LCA), replacement and maintenance cycles.  - Responsible Sourcing: E.g. responsible sourcing (e.g. FSC timber), avoid non-renewable materials, ethical sourcing.  *Mandatory for projects over £1m in value. Maximum 300 words.* |  |

**4.2. Provide a breakdown of the building’s whole life embodied carbon performance.**

|  |  |  |
| --- | --- | --- |
| **Element** | **Design life (years)** | **Embodied / whole-life carbon (KgCO2eq/m2)** |
| **Whole building** |  |  |
| Structure |  |  |
| Envelope |  |  |
| Services |  |  |
| Fit-out |  |  |

|  |  |
| --- | --- |
| **Confirm the basis for the results provided in the breakdown.**  E.g. Whole-life carbon methodology, Environmental Product Declarations (EPD’s).  *Required if breakdown is completed. Maximum 100 words.* |  |

# 5. Ecology and Biodiversity / External Environment

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| **5.1. Explain the key ecology strategies.**  Including - Ecological Health. E.g. were steps taken to avoid materials or emissions harmful to humans and/or ecosystems during manufacture, use, and end-of-life? Eg. avoiding substances like VOC’s, toxic wood treatment, PVC, Lead, Cadmium, etc.  - Ecological Water Cycle. E.g. reduce water use, recycle all sources of water, sustainable drainage, rainwater harvesting, ecological water/wastewater treatment.  - Biodiversity. E.g. enhancing local/native biodiversity, create or restoring habitats, creating productive landscaping (e.g. local food production).  *Optional. Maximum 300 words.* |  |

|  |  |
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| **5.2. Provide details of water, biodiversity or ecology metrics used to assess the building**  *Optional. Maximum 100 words.* |  |

# 6. Health and Well-being / Internal Environment

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| **6.1. List key strategies to support and health and wellbeing of occupants?**  E.g. Basic Needs (good daylighting, indoor air quality, responsive controls, inclusivity and accessibility); Comfort (visual and thermal comfort, acoustic comfort, appropriate occupant density, functionality of internal space); Well-being (expression and identity, privacy and security, places of social interaction, societal and community benefits).  *Optional. Maximum 300 words.* |  |

|  |  |
| --- | --- |
| **6.2. Provide details of health and wellbeing metrics used to assess the building**  E.g. Well-building Standard score, average daylight factor, indoor air quality monitoring results.  *Optional. Maximum 100 words.* |  |

# 7. Verification and Benchmarking

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| --- | --- |
| **7.1. What assessment methods, certification standards, or relevant benchmarks for buildings of this type are you using to assess the sustainable performance of this building?**  *Mandatory for projects over £1m in value. Maximum 300 words.* |  |

|  |  |
| --- | --- |
| **7.2. What procedures have been used to ensure targeted performance is met, and how they contributed to achieving the teams intended building performance?**  Eg. Robust handover strategy, procurement route, Soft Landings, maintenance strategy, commissioning, follow-up commissioning (1 year on), occupant education, building energy monitoring.  *Mandatory for projects over £1m in value. Maximum 300 words.* |  |

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| --- | --- |
| **7.3. Have you carried out post occupancy evaluation (POE) to see whether the building is performing as intended?**  If so, how have you collected user feedback, what have you learnt, and what impact has it had on the operation and performance of the building? If not, do you intend to?  *Mandatory for projects over £1m in value. Maximum 300 words.* |  |

|  |  |
| --- | --- |
| **7.4. Have you or do you intend to freely disseminate / publishing of information on the building performance?**  If so, please provide links to the published information.  *Mandatory for projects over £1m in value. Maximum 100 words.* |  |

# 8. Further Information

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| --- | --- |
| **8.1. Is there anything else you would like to tell us about your project and its environment and social impact?**  *Optional. Maximum 150 words.* |  |