Home of 2030 Competition Phase 2 Appendix 3
Responsible and Efficient Resource Use Template

This template has been provided to assist teams in evidencing key outcomes regarding Product and Material Resources. There are three tabs to be completed:

-**Group Elements** (which includes Substructure, Superstructure and Internal Finishes)

-**Design for Dissassembly and Adaptability** (details around the adoption of principles for disassembly and adaptability as identified in ISO 20887:2020)

-**Construction waste** (expected waste quantity and management route)

Please complete **all three tabs** with information where known, assuming a 100m2 house

If the system applied in apartments is substantially different, please give typical data of those elements in an additional set of sheets.

The following definitions are used for construction waste and end of life waste management routes

Reuse	any operation by which products or components that are not waste are used again for the same purpose for which they were conceived.
Recycling	any operation by which waste is reprocessed into products, materials or substances, whether for its original or other purposes. It does not include energy recovery or reprocessing into materials to be used as fuels or for backfilling operations.
Recovery	any operation which has the main result of waste serving a useful purpose by replacing non-waste materials that would otherwise have been used to fulfil a particular function, e.g. via a waste transfer station.
Energy recovery	material sent for incineration with energy recovery.
Landfill	any operation which is not recovery (even where the operation has a secondary consequence of reclaiming substances or energy). Sending waste to landfill is a form of disposal.

	Group Elements															
	All quantities / volume to be calculated per average 100m2 house															
		Please complete Grey Cells										Please add as much detail as possible				
	Element description		Product description	Comprehensive product specification with manufacturer's details (where possible)	Quantity (per average 100m2 house)	Unit (eg item, m2)	weight/ unit kg	total wt kg	% by weight	kg CO2e/unit	Total CO2e kg	% of overall CO2e	Responsible sourcing details (EPD)	% Recycled/ reclaimed content	Probable End of life waste management - based on current practices (see drop down list for options)	Additional Commentary: include details on responsible sourcing, recycled / reclaimed content, end of life / waste management other "eco" certification.
1	Substructure*		*Concrete*	*Manufacturer A, product D*	*1,000*	*tonnes*	*1000*	*1000000*	*100*	*1200*	*1200000*	*100*				
2	Superstructure	Floors	*Concrete*													
			DPM													
			Insulation													
			Floor finish													
			etc.													
		Walls														
		Roof														
		Ceiling														
		Openings														
		Windows														
		Doors														
3	Internal Finishes	Internal partitions														
4	Fittings, Furnishings & Equipment	Kitchen														
		Bathroom														
5	Services	Heating														
		Water														
		Ventilation														
		Electrical														
6	Prefabricated buildings and building units															
8	External Works															
	Totals							1000000			1200000					

*** As ground conditions are not defined, please use typical estimated values.**

Design for Disassembly & Adaptability

Have the following DfDA been applied (in accordance with BS ISO 20887:2020)?

Adaptability	**Yes**	**No**	**If yes, provide brief details here and further details in Technical brief**
Versatility			
Convertibility			
Expandability			
Disassembly			
Ease of access to components & services			
Independence			
Avoidance of unnecessary treatments & finishes			
Supporting reuse/ circular economy business models			
Simplicity			
Standardization			
Safety of disassembly			
Documentation & information			
Disassembly/ Adaptation manual produced			
Products & materials supplier detailed records			
Products & materials info directly accessible (e.g. RFID tagging/ affixed label/ QR code etc.)			
(Reversible) connection detailing documented			
BIM/Asset Information Model produced			

Construction Waste

Identify by type the 10 greatest expected types of waste produced during construction (including factory based production for off site fabrication)

All quantities / volume to be calculated per average 100m2 house.

	Waste type (see examples below)	Expected waste amount (tonnes) per average 100m2 house	Expected waste management route	Is there supplier take back of packaging, off cuts or surplus (Yes/No)	Please provide brief details of any supplier take-back
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

Example waste streams

Bricks
Tiles and Ceramics
Concrete
Inert
Insulation materials (non hazardous)
Metals
Packaging materials
Plasterboard / Gypsum
Binders
Plastic (excluding packaging waste)
Timber
Floor coverings (soft)
Electrical and electronic equipment (non hazardous)
Furniture
Canteen/Office/Adhoc waste
Liquids
Oils
Soils
Bituminous mixtures (non hazardous e.g. asphalt)
Hazardous waste
Aggregates
Stone
Slate
Glass (uncontaminated)