

BUILDING SBEM CALCULATION PROJECT QUESTIONNAIRE

Contact Name:

Company:

Address:

Telephone Number:

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Project Name:

ROOM DATA SHEET

The purpose of this document is to allow to specify and configure the model in terms of geometrical, constructional and thermal parameters. This will allow the building to be modelled and simulated to the highest possible degree of accuracy.

The following sections will detail the parameters required for the simulation. Where possible, the client should enter details as fully and as accurately as possible. If a parameter is unknown, a default value will be used, however the more information released the more accurate the results.

MODEL DATA INPUTS AND PARAMETERS

Site, Location and Climate Data

This information is important as it will allow wether effects to be accurately modelled and it is especially important if there will be some solar analysis involved.

Site Orientation - As an angle measured anti-clockwise from North:

Location - Please enter city, or nearest city:



Building Geometry

Drawings will need to be supplied, with all plans, sections and elevations of the building, including all interior layout details and any preferred zoning requirements. the drawings should be supplied in their original format. These can then be cleaned and converted to DXFs for the compatibility with the software.

Constructions and Materials

We require details of all the constructional components found in the building, in order to take into account the effect of thermal mass and glazed facades.

For each opaque and glazed component overleaf, specific details of each layer are required in terms of the type of material and the respective thickness.

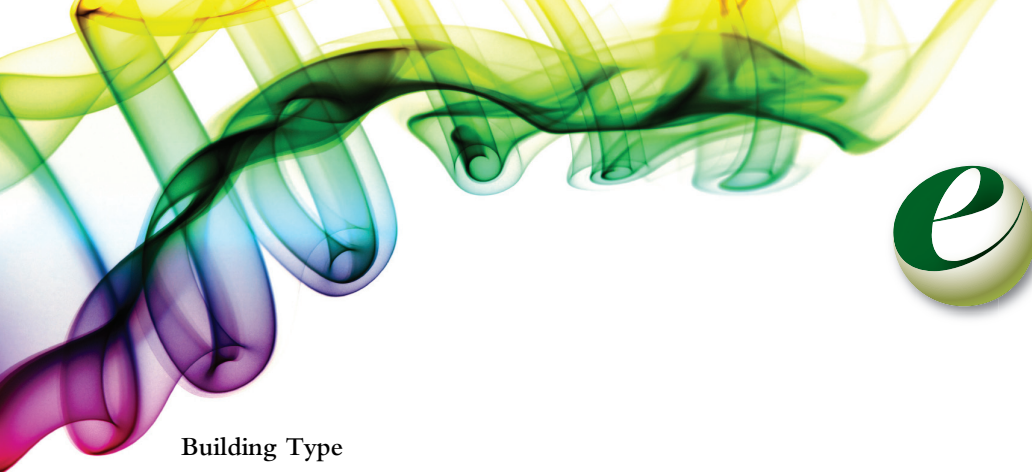
If the layer is non-standard or custom made, accurate details of the conductivity, resistance capacity and density will also be required. Layers can be added to the table as desired.

If the construction details are unknown, or irrelevant for any reason, then default values will be attributed to the model.

Fabric Details: (Description of the buildings fabric)

Total m2 = _____

Construction - Opaque	Layer (Outside - Inside)	Thickness (m)	Insulation Type & Thickness	Overall U Value (W/m²K) if known
External walls (Type 1)	1. 2. 3. 4. 5.			
External walls (Type 2 - if required)	1. 2. 3. 4. 5.			
Internal Partitions	1. 2. 3. 4. 5.			
Ceiling/ Internal Floor	1. 2. 3. 4. 5.			
Ground Floor	1. 2. 3. 4. 5.			
Roof	1. 2. 3. 4.			
Door(s)				
Glazing	1. 2. 3.			



Building Type

From the list, please select the relevant building type according to the requirements of the National Calculation Methodology.

Airport Terminal

Crown or County Court

Community/Day Centre

Dwelling > = 450 sq m

Emergency Services

Hospital

Hotel

Industrial Process Building

Launderette

Library, Museum or Gallery

Nursing/Residential Home or Hostel

Office

Prison

Primary Health Care Building

Primary School

Restaurant or Public House

Retail

Retail Warehouse

Secondary School

Social Club

Sports/Leisure Centre

Sports Ground or Arena

Bus/Train Station or Seaport Terminal

Telephone Exchange

Theatre, Cinema, Music Hall or Auditorium

University or Further Education Building

Warehouse/Storage

Workshop or Maintenance Depot

Additional Notes



SPACE TYPES

Each room/zone in the model has to be assigned attributes that determine its environmental control, Casual gains and fixed rate of air exchange, such as infiltration/mechanical ventilation. In order to do this in an efficient manner, it is usual to assign each room to a 'space type' such as office space or void.

Please enter below, the space types i.e. office space, circulation, found in your building. If more space is required please use a separate sheet of paper or notes section at the end of this form.

1.	
2.	
3.	
4.	
5.	

LIGHTING

If known, please enter the lighting controls for each space in the space below.

Space Type	Lighting Type
1.	
2.	
3.	
4.	
5.	

Please also enter any other information related to the lighting design i.e. complex control strategies, dimming control, perimeter bank lighting etc....

HVAC

System Type(s)

Please also enter any other details relevant to the system used within this building i.e. energy efficient methods used, fuel type, CHP - BIO-Mass etc...

APPENDIX

Example External Wall:

Product	Thickness (mm)	U Value (W/m2K)
DR100	60	0.33
	80	0.25
	100	0.21

Example External Roof:

Product	Thickness (mm)	U Value (W/m2K)
DR100	80	0.25
	100	0.21

Example External Wall

Layer	Thickness	Resistance (m2K/W)	Conductivity (W/mK)	Capacity (J/kgK)	Density (kg/m3)
Brickwork (Outer Leaf)	0.100 m	0.119	0.840	800.0	1700.0
Dense EPS Slab Insulation	0.059 m	2.360	0.025	1400.0	30.0
Concrete Block (Medium)	0.100 m	0.196	0.510	1000.0	1400.0
Gypsum Plastering	0.015 m	0.036	0.420	837.0	1200.0