

SAP Specification – Design Stage

Client: Paddock Johnson

Site: Proposed Development
Amberley Drive,
Wythenshawe

Proposals: New Build Semi Detached consisting of two Beds and three Beds

Building regulations: Part L Volume 1 2021 and SAP10

Planning Condition: None

Documents required from client:

- **PHOTO REPORT, including thermal junctions, insulation, heating, lights and windows**
- U-value data sheets for windows and doors
- Lighting data showing lumens / watt
- Make and model of heating system and confirmation of efficiency
- Solar PV certification, MSC accredited, photos of panels and meter
- Air test certificates
- Registered postal address schedule

Prepared by	Date	Project No.	Revision	SAP Version
CT	13.09.23	S11157	REV1	SAP10

Changes to specification

Build Standards

Floor Elements

Ground floor (u-value 0.11 W/m²k) – 100mm concrete beam and block, 150mm PIR insulation (conductivity 0.022W/mk) and 75mm screed.

Wall Elements

External wall (u-value 0.18 W/m²k) – 102.5mm brick, 150mm cavity fully filled with DriTherm 32 (conductivity 0.032W/mk), 100mm lightweight block (conductivity 0.19W/mk), and 12.5mm plasterboard on dabs with 3mm skim.

Party wall – (u-value 0.00 W/m²k) – fully filled cavity with sealed edges

Roof Elements

Pitched roof flat ceiling (u-value 0.09 W/m²k) – 500mm Rockwool insulation (conductivity 0.044w/mk) consisting of 350mm Rockwool over timber joists with 150mm between timber joists and 12.5mm plasterboard with 3mm skim.

Windows/doors

Window (whole u-value 1.2W/m²k) Windows are double glazed, low E, argon filled.

Solid entrance door (U-value 1.0W/2mk)

All windows and doors are newly fitted and are to meet minimum standards for building regulations.

Heating

Heat source: Electric Air Source heat Pump – Assumed – Nibe S2125 S2125 1x230V

Emitters: Underfloor Flow temp >35C

Heating controls

Time and temperature zone control by suitable arrangement of plumbing

Hot water system

Cylinder fed from main heating system. Volume 200 Litres. Measured heat loss 1.89kWh/24h

Type of Shower, unvented cylinder

Ventilation

Natural with trickle vents and extract fans to wet rooms and kitchen

Lighting

80 Lumens / watt

8 Wattage of bulb

11 Number of fittings - TBC

100% of the lights are dedicated low energy

Renewable Technology

Solar PV – 9 panels producing 3.6kWp for all plots.

2B 4P West facing with little or no shading.

3B 5P Southwest facing with little or no shading.

All Plots to have a diverter and export cable installed.

Thermal Bridging

Recognised Construction Details (RCD) to be implemented in the design and construction of the dwelling/s. Checklists to be completed and signed towards the end of construction.

Thermal junctions complied with as follows: -

- E1 Other lintels
- E3 Sill
- E4 Jamb
- E5 Ground floor (normal)
- E6 Intermediate floor within a dwelling
- E10 Eaves (insulated at ceiling level)
- E12 Gable (insulated at ceiling level)
- E16 Corner (normal)
- E18 Party Wall between dwellings
- P1 Party Wall – Ground Floor
- P4 Party Wall – Roof (insulation at ceiling level)

Air Permeability

Air test design air permeability 4. (Blower Door test). An air test certificate to be provided at as built stage of construction.

Specification sign off

By signing below, you are confirming the above specification(s) will be implemented in the design and construction of the dwelling/s. If any changes are made to these above specifications, this could potentially result in a failed SAP calculation.

YOU MUST INFORM BASE ENERGY OF ANY PROPOSED CHANGES TO THE ABOVE SPECIFICATION

Base Energy are not liable for any building issues with the dwelling based on the above specifications. These specifications are solely to guide SAP compliance and should be checked with all relevant parties including your warranty provider, M&E contractor, employer, structural engineer, architect and any other relevant agent.

Please note: EPC's need to meet an energy rating of at least an E in order to sell or let a property, with renewed or new leases. The are proposals for dwellings to be an EPC 'C' rating for renting of properties from 2025 and would advise to use this as a minimum target.

NEW REQUIREMENTS – PHOTOGRAPHIC EVIDENCE

ANY DEVELOPMENT FALLING UNDER THE **NEW PART L**, IN FORCE AS OF 15TH JUNE 2022, WILL NEED **PHOTOGRAPHIC EVIDENCE** OF JUNCTION DETAILING AT THERMAL BRIDGES, INSULATION, HEATING SYSTEMS AND TO BE SUPPLIED FOR **EVERY PLOT**

No or insufficient photographic evidence may prevent the issuing of EPCs and/or SAP reports which demonstrate compliance.

You will be supplied with a 'BREL template report to complete for every plot. This will also indicate the areas to photograph and the stages to record.

Company**Name****Signature****Date**
