

Our Ref: P22691

24 February 2023

New Houses, 40-48 Mount Pleasant, Reading

The houses pass SAP 10 and conform to Part L 2021 Building Regulations as long as the following specifications are met:

- An air source heat pump should be used to provide low temperature underfloor heating. This should have a full zone control allowing separate timing to living rooms and bedrooms. The exact power of the air source heat pump needs to be calculated by the installer and the manufacturer. It is also necessary to consider the amount of space that would be taken up by the air source heat pump. The rear windows of the houses may need to be moved further apart or shortened to allow room for the heat pump.
- The windows and glazed doors should have a U value of 1.2.
- The ground floor should be insulated with 200mm of Celotex. See U Value calculations for full details.
- The walls, sloping roof and balcony ceiling above the front bedroom should be insulated with 140mm of Cellulose insulation between the timber joists and 75mm of Celotex over the joists.
- The buildings should be constructed to an air tightness of $Q = 4$ and an air pressure test should be carried out on completion.

Malcolm Lisle, SAPS4U, Accredited Assessor P736-0001