External walls	Main walls: As specified; 125mm cavity part filled with 75mm Kingspan. 140mm medium dense block in inner leaf. U= 0.17 w/m2k Basement walls: As discussed, 60mm PIR (k=0.022) installed on 50mm studwall inside RC retaining wall. U=0.24 w/m2k Stud wall Filled with 100mm mineral wool/glassfibre (k=0.040 w/mk).				
Roofs	Sloping ceiling: insulation in rafters 150mm Celotex or equivalent; underdrawn by 25mm Celotex. U= 0.16 w/m2k Flat roofs 125mm (average depth) Thermataper insulation (k=0.024). U=0.18 w/m2k .				
Heat loss floors	Basement floor: 100mm Kinspan or equiv (k=0.022) over concrete slab. U=0.15 w/m2k Ground floor (where not over basement): 100mm Kinspan or equiv (k=0.022) over beam & block deck. U=0.15 w/m2k				
External door U-value	U= 1.2 w/m^{2}k				
Windows	U=1.4 w/m^{2}k Solar factor, g-value=0.71 (minimum)				
Rooflights	U = 1.4 w/m^{2}k				
Design Pressure test	4 m^3/h/m^2				
Linear thermal bridging i.e. heat loss around structural junctions.	Concrete Block Association (CBA) details and Accredited Construction Details to be followed. Details have been selected in order to optimise the performance in SAP. A full list of junction details will be in the SAP thermal bridging reports. The following CBA details are to be incorporated. CBA 214 Sills CBA 215 Jambs CBA 202 Ground floor (Ground based slab) CBA 203 Intermediate floors CBA 216 Normal corners Other structural junctions are to follow Accredited Construction Details. ACD Details: *www.planningportal.gov.uk/buildingregulations* CBA details: *http://www.cba-blocks.org.uk/tech/thermal-bridge.html*				
Lintels above openings	Independent lintels to detail CBA 213 in the CBA details.				
Heating	Each Unit to be served by 2 x Ideal Logic Heat 30 (Boiler ID 41-409-96). Each boiler assumed to serve half the dwelling (in terms of floor area) Underfloor heating included (pipes in screed). No radiators (other than heated towel rails in bathrooms). Boiler & heating controls to comply with 2013 Domestic Building Services Compliance Guide.				
Heating controls	Time and temperature control zone (Control code CBI), as required for a property of this size. Delayed start added to the boiler controls. Boiler interlock included.				
Hot water	Two no. 300 litre hot water cylinder has been included for each unit, each with a measured heat loss of 1.89kwh/day. E.g. Megaflo Eco cylinder All showers are assumed to be non-electric.				
Lighting	100% low energy lighting.				
Ventilation	Polypipe Silavent HRX2 MVHR systems (SAP ref: 500332) to serve each unit Each system assumed to serve wet rooms				
PV / Alternative Technologies	Air source heat pump to be included to provide heating and cooling.				
Rainwater Recycling.	A rainwater harvesting tank is to be incorporated to collect rainwater for garden and common areas use				
Car Charging	2 electrical charging points are to be included within the development.				