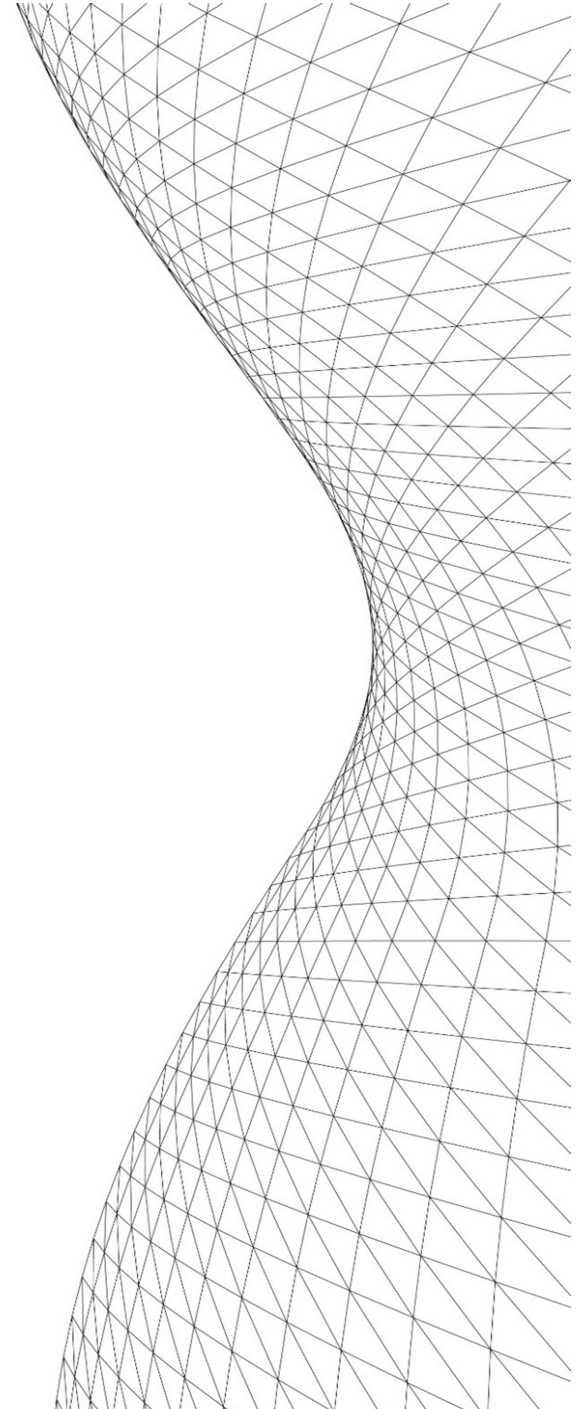


Swansea Road

Draft SAP specification - Planning

Part L1A of The Building Regulations (2013 with 2016 amendments)

Prepared for	Helix
Revision	2
Issue Purpose	Design Issue
Assessor	Matt Fitzpatrick
Date of issue	27 January 2021



Regs	2013		Specification Used In Design Stage SAP Calculations			
SITE	Swansea Road					
CLIENT	Helix		Types			
SAP SPEC: Revision 2		27/01/2021	U Value	Description	Ref	Comment
Fabric U Values	Roof	Cold Roof	0.11	400mm total- 200mm Rockwool between joists, 200mm crosslaid		
		Sloping Ceiling	0.15	120mm Celotex XR4000 (or equivalent) between the rafters and 62.5mm PL4040 Underslung		
		Loft Hatch	Note	Insulated access hatch to be proprietary (Manthorpe) injection moulded polypropylene having closed cell compressible seals and anti wind uplift mechanism with rigid integral insulation to Table 2 of the ADL		
	External Walls	Brickwork	0.25	102.5mm Brick		
				100mm mineral wool (0.032 W/mK)		
				100mm Celcon 3.5N (0.15W/mK-2 storey) or Celcon 7N (0.19W/mK - 3 Storey)		
				12.5mm Plasterboard on 15mm dot and dab layer		
	Party Walls	Party Wall	Notional U value 0 W/m2k	12.5mm Plasterboard on dot and dab on 8mm scratch coat render		
				100mm Aircrete 7N (0.19W/mK)		
				100mm Cavity fully filled with mineral wool		
	Party Walls	Party Wall Existing	Notional U value 0 W/m2k	100mm Aircrete 7N (0.19W/mK)		
				12.5mm Plasterboard on dot and dab on 8mm scratch coat render		
	Floors	Suspended Floor	0.11	150mm Kingspan Kooltherm K103 on suspended block and beam floor		
		Timber Floor Over Garage	0.15	22mm Chipboard, 250mm Mineral between joists at 450mm centers, underslung withCelotex PL4015 27.5mm		
	Windows	U Value	1.40	Target to be achieved		
		G Figure	0.43	Target to be achieved		
		Frame Factor	0.00	Not Required as BFRC is being supplied		
BFRC		Yes	BFRC Certificate Assumed available	Developer to provide an electronic copy of BFRC Certificate for audit		
Roof lights	U Value	1.20	U Value in SAP to be adjusted for slope.			
	G Figure	0.63	g Figure taken as default 0.63 for double glazing			

SAP SPEC: Revision 2		27/01/2021	U Value	Description	Ref	Comment
	Houses - Doors		1.20	1.2 W/m2K - Inclusive of door frame.		
	Lintels		HiTherm Lintel	0.05 (HiTherm)		
	Psi-Values		Measured Lengths	Values to be taken from Constructive Details		
	Thermal Mass		Measured	To be measured on a plot by plot basis to ensure the thermal mass is as low as possible		
Ventilation	Air Tightness		Houses	4.65		
	Mechanical ventilation-2		System 3 Decentralised MEV (DMEV)	Greenwood CV2 GIP with Insulated Rigid Ducting		
Heating	Boiler Combi		Gas	Potterton Ultra Combi		
	Heat Emitters			Radiators		
	Design Flow Temperature		Design Flow	> 45°C		
	Controls			Time and Temperature Zone Control controlled by suitable arrangement of plumbing and TRVs and Bypass		
	Delayed Start Stat			Delayed Start Stat		
	Weather/Load Compensation			None		
	Pump Type	In Heated Space		Yes		
		Type		2013 or later, with interlock.		
	Secondary Heating			None		
Hot Water	Water Heating		Combi	No Cylinder		
	Water Heating Controls			Cylinderstat and water heater timed separatley		
	Insulation			Fully Insulated Primary Pipework		
Low Energy lighting			Yes	100%, any reduction to this will reduce the DER		
Renewables/LC Technology			PV	4.5kWp of PV to be laid at between 15 - 37.5 degrees to the South East/South West roof elevations		
Energy Policy/Requirement			19% Improvement over TER	19% above TER		