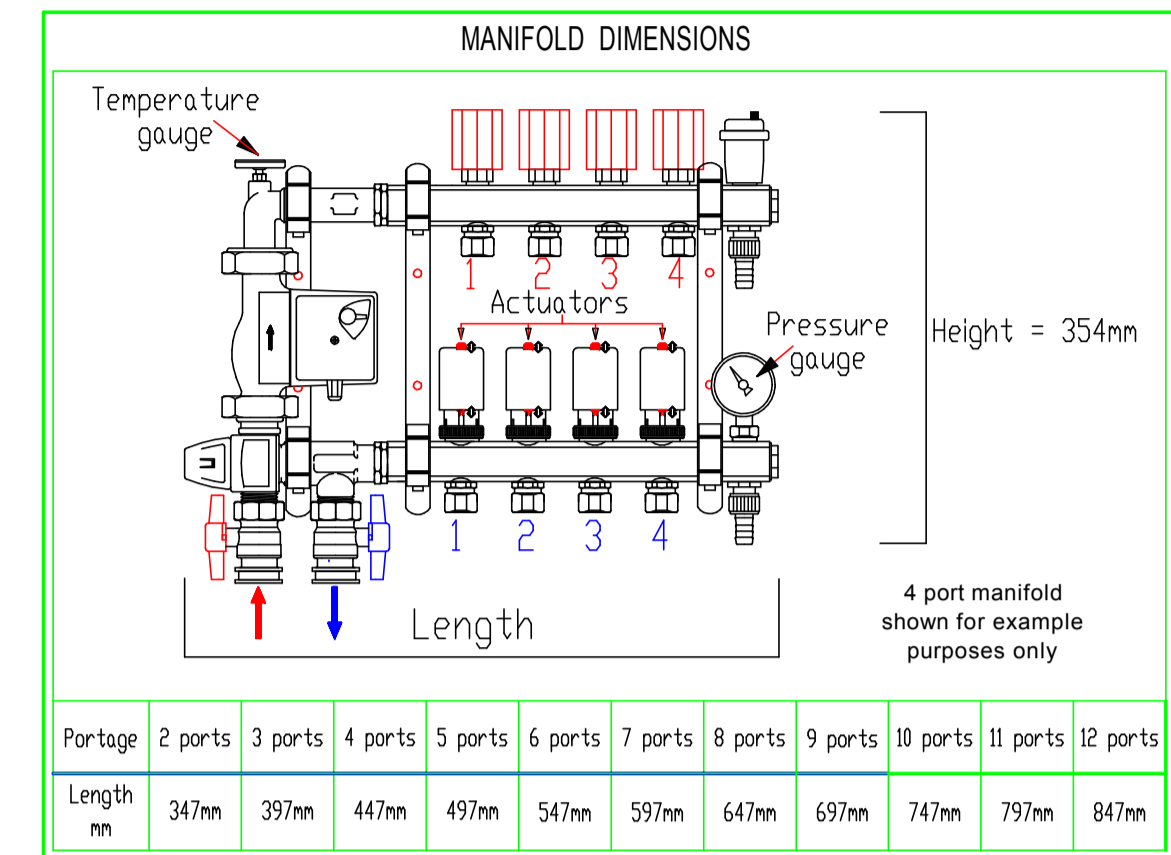
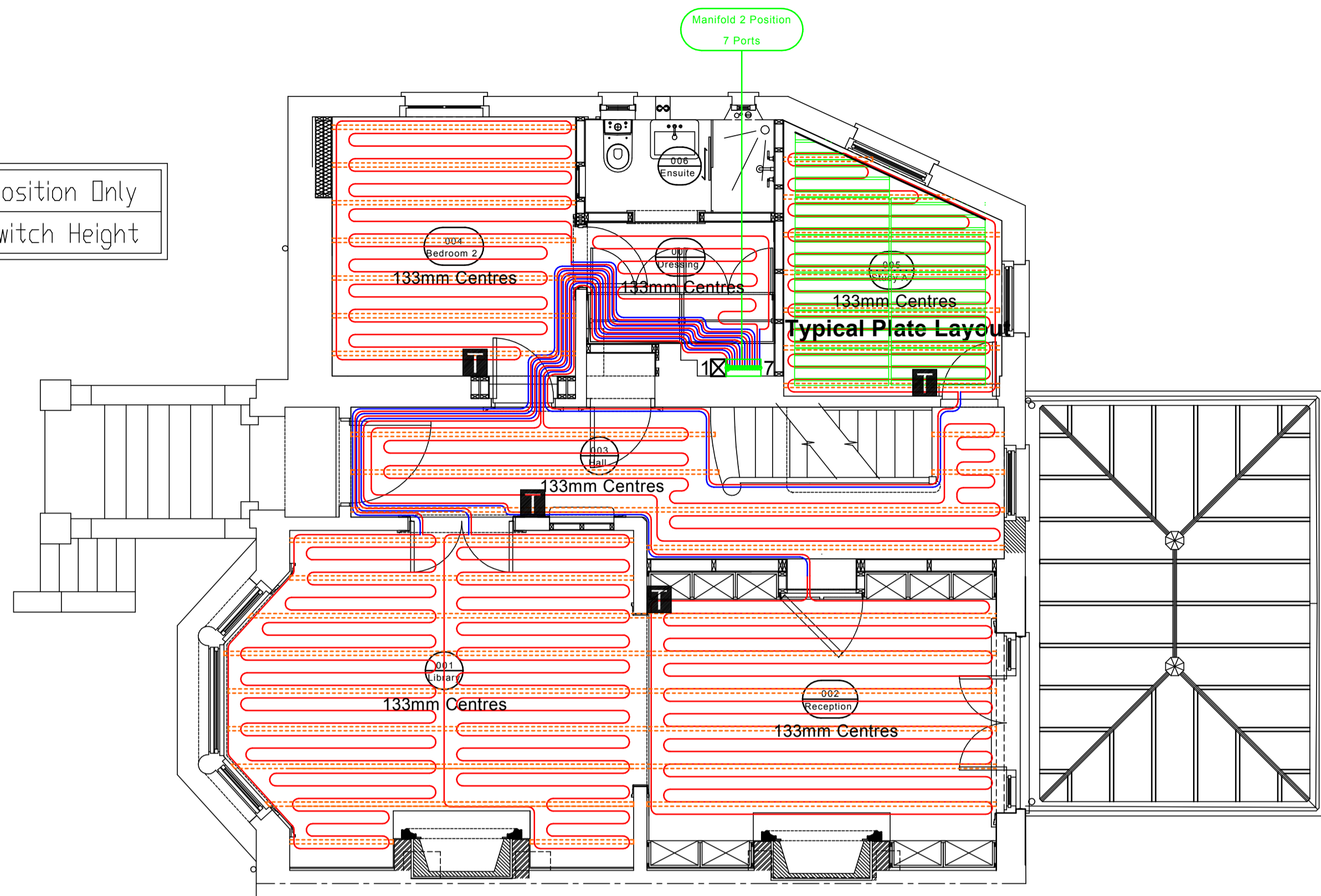


N.B All room layouts to be clearly marked out on site by others prior to UFH installation

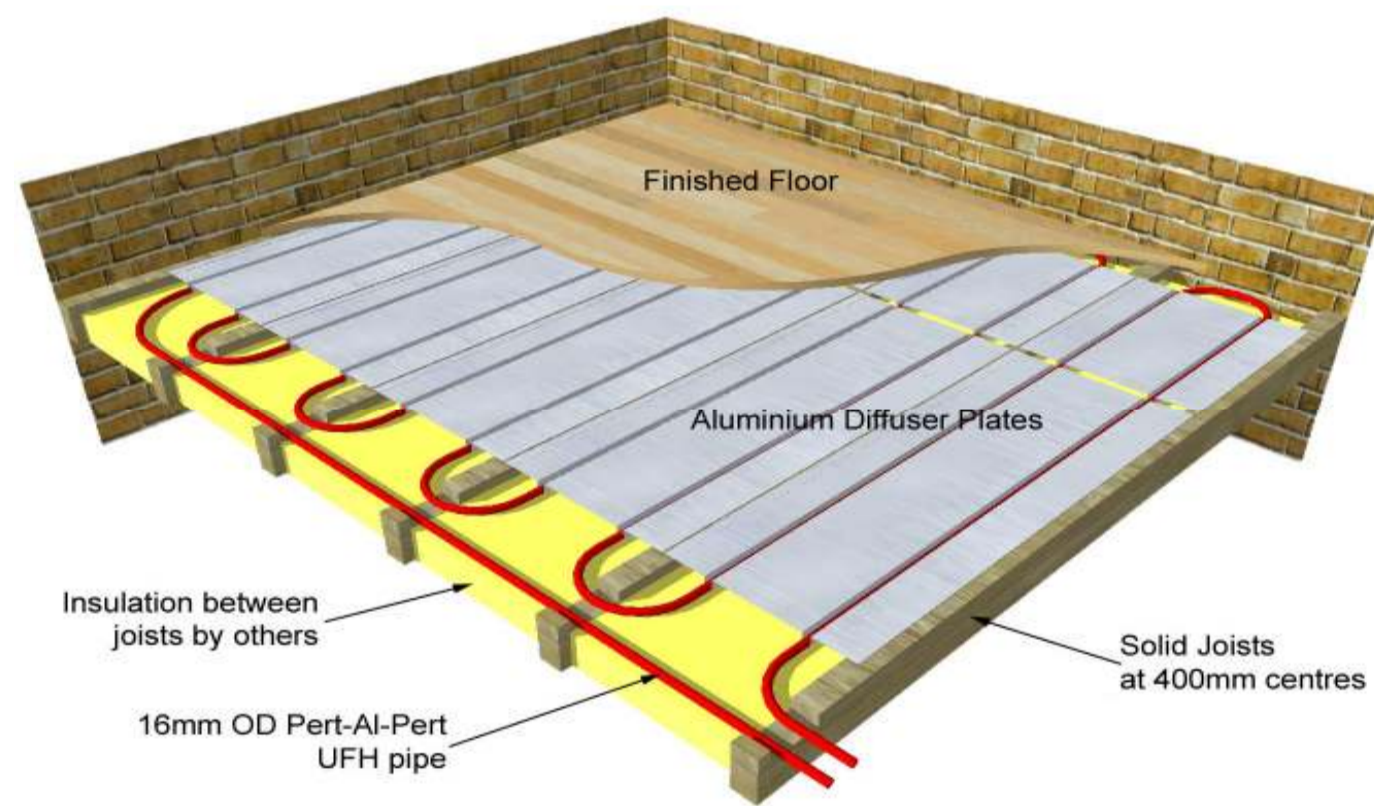
Note: Not all plates have been drawn to preserve the clarity of pipe runs

T Indicative Thermostat Position Only
Thermostats Positioned at Light Switch Height



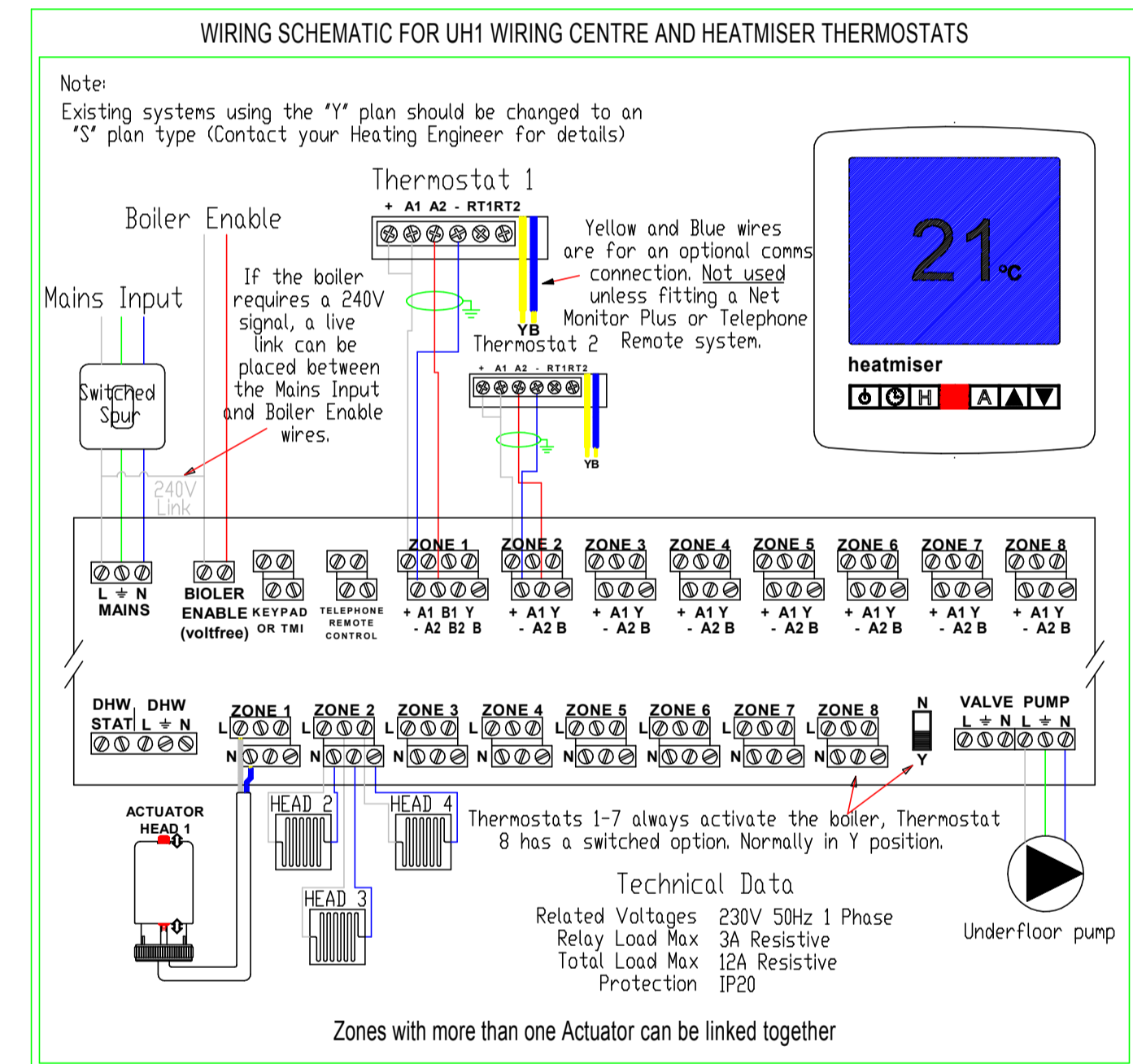
HEATLOSS DETAILS

Room	Area	Design Temp.	Air Change	Heatloss per m2	Total Heatloss	Maximum UFH Output	UFH Shortfall Against Heatloss
Library	18.4 m ²	21 °C	1.5 1/h	62 W/m ²	1134 Watt	1554 Watt	
Reception	14.9 m ²	21 °C	1.5 1/h	57 W/m ²	855 Watt	1033 Watt	
Hall	12.4 m ²	18 °C	1.5 1/h	28 W/m ²	349 Watt	901 Watt	
Bedroom 2	9 m ²	18 °C	1.5 1/h	51 W/m ²	460 Watt	810 Watt	
Dressing	1.9 m ²	21 °C	1.5 1/h	80 W/m ²	150 Watt	171 Watt	
Study A	6.9 m ²	21 °C	1.5 1/h	84 W/m ²	585 Watt	621 Watt	



Manifold 2 Details

Loop No.	Room	Pipe Centres	Design Length	Install Length
1	Study A	133 mm	69 m	
2	Hall	133 mm	67 m	
3	Reception	133 mm	107 m	
4	Library	133 mm	78 m	
5	Library	133 mm	77 m	
6	Bedroom 2	133 mm	63 m	
7	Dressing	133 mm	13 m	



DESIGN PARAMETERS

EXTERNAL DESIGN TEMPERATURE	-3	
PARTY WALL OTHERSIDE TEMP	NA	
ELEMENT	CONSTRUCTION	U VALUE
EXTERNAL WALL	Solid	0.35
INTERNAL WALL	Blk/PB	1.8
PARTY WALL	NA	NA
GARAGE WALL	NA	NA
GROUND FLOOR	Ins solid	0.0 UFH
INTERNAL FLOORS	NA	NA
ROOF	Ins Pitch	0.20
WINDOWS	D Glazed	2.8
DOOR		2.0

* INDICATES AN ASSUMED VALUE

NOTES

- THESE DRAWINGS ARE INTENDED FOR INSTALLATION PURPOSES ONLY AND THUS PIPEWORK MAY ALTER FROM THAT SHOWN. THESE DRAWINGS ARE NOT INTENDED FOR CONSTRUCTION USE AND SHOULD NOT BE USED AS SUCH.
- DETAILS OF ANY ALTERATION DURING INSTALLATION SHOULD BE NOTIFIED TO THE UNDERFLOOR HEATING DESIGNER FOR DRAWINGS TO BE PRODUCED SHOWING SYSTEM AS FITTED.
- PRESSURE TESTING: A PRESSURE TEST OF A MINIMUM 3 BAR & MAXIMUM OF 6 BAR MUST BE APPLIED TO ALL THE UNDERFLOOR HEATING PIPEWORK PRIOR TO & DURING FLOOR FIXING.
- SCREED CURING: A CURING PERIOD OF 21 DAYS FOR CEMENT SCREEDS, OR 7 DAYS FOR ANHYDRITE SCREEDS MUST ELAPSE BEFORE HEAT CAN BE APPLIED FOR PRECONDITIONING. CEMENT SCREEDS REQUIRE CURING UNDER POLYTHENE SHEET FOR THE FIRST 7 DAYS AFTER LAYING FOR OPTIMUM STRENGTH. HEAT SHALL BE APPLIED TO THE FLOOR SCREED INITIALLY, USING WARM WATER AT 25-30 degC ON THE FIRST DAY. AFTER WHICH THE FLOW TEMPERATURE CAN BE RAISED BY 5 degC PER DAY UNTIL THE DESIGN TEMPERATURE IS REACHED.
- AMBIENT TEMPERATURES: THE UNDERFLOOR HEATING PIPEWORK SHOULD NOT BE LAID WITH AMBIENT TEMPERATURES OF BELOW 0 degC. SCREEDS SHOULD NOT BE LAID WITH AMBIENT TEMPERATURES OF BELOW 5 degC.
- WOOD FLOORS: BEFORE TIMBER FLOORING IS LAID UPON HEATED SCREEDS THE SCREED MUST HAVE BEEN CURED AND CONDITIONED PREVIOUSLY TO A MOISTURE CONTENT OF APPROX 0.5% (Carbide Method) BY HEATING TO THE OPERATING CONDITION FOR 5 DAYS. IT IS NOT RECOMMENDED TO LAY TIMBER FINISHES WHOSE MOISTURE CONTENT EXCEEDS 8-9% (by volume), AS THE RISK OF WARPING AND SHRINKAGE DAMAGE WILL BECOME UNACCEPTABLE. THE TIMBER MANUFACTURERS INSTRUCTIONS MUST PREVAIL. THE OPERATIONAL SURFACE TEMPERATURE OF WOOD FLOORS SHOULD NOT EXCEED 27 degC AS THIS CARRIES A RISK OF SHRINKAGE. SUBSEQUENT COOLING MAY RESULT IN SWELLING AS EXTRA MOISTURE BECOMES ABSORBED INTO THE WOOD FROM THE ATMOSPHERE.
- CERAMIC TILES ON WOODEN FLOORS: BATHROOM RENOVATION PROJECTS CONTAINING CERAMIC FLOOR TILE ON TIMBER SUB-FLOORS REQUIRE EXTRA CARE. ALL FLOOR BOARD SUBSTRUCTURES REQUIRE TO BE REPLACED OR OVERLAID WITH LARGE SHEETS OF WPB PLYWOOD TO ENSURE MINIMUM FLEXURAL MOVEMENT & SECURED USING ADHESIVE OR NAILS AT 150mm SPACING. CERAMIC TILE ADHESIVE AND GROUTING MUST CONTAIN A FLEXIBLE LATEX ADMIXTURE TO PERMIT MICRO-MOVEMENT OF TILES DURING NORMAL OPERATION OF THE FLOOR HEATING SYSTEM. FAILURE TO CARRY OUT THESE INSTRUCTIONS COULD RESULT IN DAMAGE TO THE PIPEWORK, SCREED OR FLOOR COVERING.
- CARPET CARE SHOULD BE TAKEN TO ENSURE THAT THE COMBINED TOGG VALUE OF BOTH THE CARPET AND THE UNDERLAY DOES NOT EXCEED 2 TOGG.

UNDERFLOOR HEATING TECHNOLOGIES

t: 01386 839 472 www.ufht.co.uk f: 01386 839 474

DRAWING TITLE: Joisted Floor

CLIENT: Mr. E. X. Ample

Underfloor Heating Layout Ground Floor

DRAWN BY: DS DATE: 23/07/13 SCALE @ A1: 1:50 DRG No: UT0105

THIS DRAWING IS CONFIDENTIAL & THE COPYRIGHT PROPERTY OF UNDERFLOOR HEATING TECHNOLOGIES. IT MUST NOT BE DISCLOSED, LOANED OR COPIED WITHOUT WRITTEN PERMISSION.