

# EQUIPMENT SCHEDULE AND INSTALLATION NOTES.

1. Heating system to be commissioned and balanced in accordance with BS5449 and item 1.47 of Building Regulation L1 2002. System to be flushed in accordance with BS7593 and if an inhibitor is used it should be in accordance with the manufacturers recommendations.

2. System to comply with materials & installation specification for domestic central heating BS5449.

3. Hot & cold water services must comply with BS6700 1997 and Building Regulations.

4. The installation must comply with the current British Standards, codes of practice, CORGI and water authority regulations and manufacturers installation instructions.

5. Where traditional joists are used, they are to be notched/drilled in accordance with BS5449 and NHBC recommendations.

6. All pipework to be insulated in accordance with Building Regulation L1 item 1.52, BS5449 & BS6700, and the Water regulations Guide.

7. Ballofix isolating valves incorporating flow restrictors shall be provided to all sanitary fittings with a maximum flow rate of 12 litres/min to showers and 18 litres/min to baths.

8. All pipework to be laid to fall to permit ease of draining and venting with air vents at high points and drain cocks at all low points.

9. Joints that are soldered should be made using lead free solder and a flux that is sparingly applied and any residue flushed out of the system before commissioning using a chemical cleanser if necessary.

10. All necessary check valves etc to be installed as required to ensure compliance with BS6700 and the Water Regulations Guide. All valves shall be in positions that are readily accessible.

11. Hot and cold water services designs are based on a minimum incoming MCWS pressure of 1.5 bar being available at the highest point in the system. It is the sub contractors responsibility to ensure this is available by contacting the Water Authority.

12. Where thermostatic radiator valves are installed the room containing the room thermostat are to have 2 No LSV's.

13. Designs are based on information received at the time of design. If at a later date a problem arises out of a lack of information or drawings at design stage the design service cannot be held responsible.

14. Safety valve discharge pipe termination locations to be agreed with local building control before commencement of contract.

15. These designs are indemnified by the designer, however a duty of care is to be employed by all parties involved in the supply and installation of the system.

16. With unvented water systems wall mounted meter boxes are only suitable for properties up to 3 bed 1 bath. For properties with 2 or more baths they should not be used. Any horizontal water meters should be line size.

17. All designs are based on copper pipework installations unless indicated otherwise.

18. The heating system has been based on a flow temperature of 82oC and a return of 71oC.

19. Where plastic pipework is used for hot water services it must be rated at a minimum of 8 bar @70oC.

20. Where the temporary hardness of the mains cold water services exceeds 200ppm a scale reduction device should be fitted in the cold water system prior to the boiler connection where combination boilers are used. Scale reducers are also required to some other boilers and cylinders - if in doubt contact the design service. It is the subcontractors responsibility to ascertain the water hardness and specify a suitable scale reducer.

## RADIATOR SCHEDULE

Barlo Compact Radiators					
Room	Temp	Watts	Catalogue	Len	Hgt
Lounge	21	1298	T22706KD	600	700
Lounge	21	1298	T22706KD	600	700
Kitchen	21	1251	T22409KD	900	400
Hall	18	619	T11606KD	600	600
Study	21	280	T11305KD	500	300
Bedroom-1	18	802	T11411KD	1100	400
Bedroom-2	18	802	T11411KD	1100	400
Landing	18	516	T11605KD	500	600
Bathroom	22	531	T11506KD	600	500
En-Suite	22	510	T11407KD	700	400

## EQUIPMENT SCHEDULE

Boiler	Wall mounted boiler with standard horizontal balanced flue.
Cylinder	Indirect Mains Pressure Unvented Cylinder.
Radiators	Barlo Radiators as per schedule.
Controls	Invensys UWH 527 pack
Pump	Grundfos Alpha + 15 - 60 28 valves
Sealed System Kit	Reliance sealed system vessel 209 12 litre c/w EASI 209 100 controls kit.
Radiator Valves	Drayton TRV 4 TRV's & LSV's to all Radiators except those in rooms containing room thermostats. These radiators are to have 2No LSV's.
Service Valves	To be manufactured by Reliance Water Controls
Gas Supply	22mm service to within 300mm of boiler, final connection to gas cock 15mm.

F.A. = FROM ABOVE

F.B. = FROM BELOW

T.A. = TO ABOVE

T.B. = TO BELOW

F&R = FLOW AND RETURN

MCWS = MAINS COLD WATER SUPPLY

DCWS = DOWN COLD WATER SUPPLY

HWS = HOT WATER SUPPLY

RS = ROOM THERMOSTAT

FS = FROST THERMOSTAT

PIPEWORK BELOW FLOOR LEVEL - - - - -

PIPEWORK AT LOW LEVEL ————

PIPEWORK AT HIGH LEVEL - - - - -

PIPEWORK IN ROOF SPACE - - - - -

SC = STOPCOCK

DOC = DRAIN OFF COCK

WM = WASHING MACHINE

C/W = COMPLETE WITH

**Client: SAMPLE DESIGN**

**Project: 2 BEDROOM FLAT**

**Scale: 1:50**

**Date: FEB 2008**



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