

# FLUES & FIREPLACES

NOTICE PLATES FOR HEARTHES AND FLUES:  
 TO SATISFY THE REQUIREMENTS OF REGULATION 74 A DURABLE NOTICE SHALL BE PROVIDED TO CONVEY:  
 I THE LOCATION OF THE HEARTH, FIREPLACE (OR FLUE BOX) OR THE LOCATION OF THE BEGINNING OF THE FLUE;  
 II THE GENERIC TYPE(S) OF COMBUSTION APPLIANCES THAT CAN BE SAFELY ACCOMMODATED;  
 III THE TYPE AND SIZE OF THE FLUE, OR ITS LINER IF IT HAS BEEN RELINED AND THE MANUFACTURER'S NAME; AND  
 IV WHO INSTALLED THE HEARTH, FIREPLACE, FLUE OR CHIMNEY AND THE DATE OF INSTALLATION.  
 THE FORMAT OF NOTICE PLATE SHALL BE SIMILAR TO THAT SHOWN IN TECHNICAL BOOKLET L. NOTICE PLATES SHALL BE ROBUST, INDELBLY MARKED AND SECURELY FIXED IN AN UNOBTUSIVE BUT OBVIOUS POSITION WITHIN THE BUILDING SUCH AS:-

I NEXT TO THE ELECTRICITY CONSUMER UNIT; OR  
 II NEXT TO THE CHIMNEY OR HEARTH DESCRIBED.  
 FOR FLUE PRODUCTS WHOSE PERFORMANCE CHARACTERISTICS HAVE BEEN ASSESSED IN ACCORDANCE WITH A EUROPEAN STANDARD (EN) AND WHICH ARE SUPPLIED OR MARKED WITH A DESIGNATION, THE INSTALLER SHALL INCLUDE THIS DESIGNATION, UNDER ADDITIONAL INFORMATION, ON THE NOTICE PLATE.

CONDENSATES IN FLUES:  
 I THE FLUE FOR A NON-CONDENSING COMBUSTING APPLIANCE SHALL BE INSULATED SO THAT FLUE GAS DOES NOT CONDENSE DURING NORMAL OPERATION; OR  
 II THE FLUE FOR A CONDENSING COMBUSTION APPLIANCE SHALL BE LINED WITH COMPONENTS THAT ARE IMPERVIOUS TO CONDENSATES AND RESISTANT TO CORROSION (BS EN 146 W DESIGNATION) AVOIDING LEDGES, CREVICES ETC. AND  
 III A SUITABLE DRAIN SHALL BE FITTED TO THE COMBUSTION APPLIANCE FOR THE DISPOSAL OF CONDENSATE.

THE FLUE TYPE FOR OIL FIRED APPLIANCES:  
 INFORMATION WILL BE PROVIDED FROM THE APPLIANCE MANUFACTURER TO CONFIRM THAT THE OIL FIRED APPLIANCE FLUE TEMPERATURE WILL NOT EXCEED 250°C. AND  
 THE FLUE SHALL BE BUILT USING FACTORY-MADE COMPONENTS THAT HAVE BEEN INDEPENDENTLY CERTIFIED AS ACHIEVING A PERFORMANCE AT LEAST EQUAL TO THAT CORRESPONDING TO THE DESIGNATION GIVEN IN THE FOLLOWING TABLE FOR THE INTENDED APPLIANCE TYPE, WHEN TESTED TO AN APPROPRIATE EUROPEAN CHIMNEY STANDARD; AND

BE INSTALLED IN ACCORDANCE WITH THE PROVISIONS OF TECHNICAL BOOKLET L AND IN ACCORDANCE WITH THE APPLIANCE MANUFACTURER'S AND COMPONENT MANUFACTURERS INSTALLATION INSTRUCTIONS.  
 FLUE PIPE SPECIFICATIONS TO COMPLY WITH TECHNICAL BOOKLET L 2012

CONSTRUCTION OF MASONRY CHIMNEYS:  
 A NEW CHIMNEY SHALL BE CONSTRUCTED WITH A FLUE LINER AND MASONRY SUITABLE FOR THE INTEND APPLICATION. THE FOLLOWING LINERS ARE SUITABLE FOR A SOLID FUEL APPLIANCE AS WELL AS BEING GENERALLY SUITABLE FOR OTHER FUELS:-

I A LINER WITH A PERFORMANCE THAT IS EQUAL TO THAT CORRESPONDING TO THE DESIGNATION T400 N2 D 3 G, AS DESCRIBED IN BS EN 1444; AND  
 II IMPERFORATE CLAY PIPES WITH JOINTING SOCKETS AS DESCRIBED IN BS EN 1457.

FLUEPIPES:  
 FLUEPIPES SHALL BE CONSTRUCTED FROM:-  
 (A) CAST IRON COMPLYING WITH BS 41  
 (B) METAL FLUE PIPE APPROPRIATELY DESIGNATED IN ACCORDANCE WITH BS EN 1856: 2 TO SUIT THE APPLIANCE AND TYPES OF FUELS TO BE BURNT  
 (C) VITREOUS ENAMELLED STEEL PIPE COMPLYING WITH BS 6999;  
 (D) OTHER FLUE PIPES HAVING THE NECESSARY PERFORMANCE DESIGNATION FOR USE WITH THE INTENDED APPLIANCE.

A FLUE PIPE WITH SPIGOT AND SOCKET JOINTS SHOULD BE FITTED WITH THE SOCKET FACING UPWARDS TO CONTAIN MOISTURE AND OTHER CONDENSATES IN THE FLUE. JOINTS SHOULD BE MADE GAS TIGHT BY THE USE OF PROPRIETARY JOINTING ACCESSORIES OR, WHERE APPROPRIATE, BY PACKING JOINTS WITH NON-COMBUSTIBLE ROPE OR FIRE CEMENT.

A PLASTIC FLUE PIPE SHOULD BE APPROPRIATELY DESIGNATED IN ACCORDANCE WITH BS EN 14471 TO SUIT THE APPLIANCE, FUEL AND FLUE CHARACTERISTICS.  
 THE USE OF AN OVERSIZED FLUE CAN BE UNSAFE SO A FLUE SHALL BE LINED TO REDUCE THE FLUE AREA TO SUIT THE INTENDED COMBUSTION APPLIANCE. IF A CHIMNEY HAS BEEN RELINED IN THE PAST USING A METAL LINING SYSTEM AND THE APPLIANCE IS BEING REPLACED, THE METAL LINER SHALL ALSO BE REPLACED, UNLESS IT CAN BE PROVEN THAT IT WAS RECENTLY INSTALLED AND IT CAN BE SEEN TO BE IN GOOD CONDITION.

USE OF FLEXIBLE METAL FLUE LINERS FOR THE RELINING OF CHIMNEYS:  
 A CHIMNEY MAY BE RELINED USING A FLEXIBLE METAL FLUE LINER, APPROPRIATELY DESIGNATED IN ACCORDANCE WITH BS EN 1856: 2 TO SUIT THE APPLIANCE, FUEL AND FLUE GAS CHARACTERISTICS. FLEXIBLE FLUE LINERS SHOULD ONLY BE USED TO RELINE A CHIMNEY AND SHOULD NOT BE USED AS THE PRIMARY LINER OF A NEW CHIMNEY. THEY CANNOT BE USED TO CONNECT GAS BOILERS TO CHIMNEYS WHERE THE APPLIANCE IS LOCATED IN A FIREPLACE RECESS.

FLEXIBLE FLUE LINERS SHALL ONLY BE USED TO RELINE A CHIMNEY AND SHALL NOT BE USED AS THE PRIMARY LINER OF A CHIMNEY.  
 FACTORY-MADE METAL CHIMNEYS:  
 A FACTORY-MADE METAL CHIMNEY SHALL BE:-  
 I A COMPONENT SYSTEM INDEPENDENTLY CERTIFIED AS COMPLYING WITH THE RELEVANT SECTIONS OF BS EN 1856: 1; OR BS EN 1859; INSTALLED IN ACCORDANCE WITH THE RELEVANT RECOMMENDATION IN BS 7566 PART 1;  
 BS 7566 PART 2; BS 7566 PART 3; AND BS 7566 PART 4; OR

II A TWIN WALL COMPONENT SYSTEM FOR AN OIL FIRED APPLIANCE AND A SINGLE WALL COMPONENT FOR GAS COMPLYING WITH THE RECOMMENDATIONS OF BS EN 1856: 1; AND BS EN 1856: 2; AND INSTALLED IN ACCORDANCE WITH THE RECOMMENDATIONS OF BS 5440: 1; WHERE THE FLUE TEMPERATURES WILL NOT NORMALLY EXCEED 250°C.

WHERE A FACTORY-MADE CHIMNEY PASSES THROUGH A WALL, SLEEVES SHALL BE PROVIDED TO PREVENT DAMAGE TO THE FLUE OR BUILDING THROUGH THERMAL EXPANSION. TO FACILITATE THE CHECKING OF GAS TIGHTNESS, JOINTS BETWEEN CHIMNEY SECTIONS SHALL NOT BE CONCEALED WITHIN CEILING JOIST SPACES OR WITHIN THE THICKNESS OF WALLS.

A FACTORY-MADE CHIMNEY SHALL BE KEPT A SAFE DISTANCE AWAY FROM ANY COMBUSTIBLE MATERIAL. IN NO CIRCUMSTANCES SHALL THE SEPARATION DISTANCE BETWEEN THE CHIMNEY AND THE COMBUSTIBLE MATERIAL OR SUITABLE GUARD BE LESS THAN 25MM.

CONFIGURATION OF NATURAL DRAUGHT FLUES SERVING OPEN-FUELED APPLIANCES:  
 THE FLUE SYSTEM SHALL OFFER LEAST RESISTANCE TO THE PASSAGE OF THE FLUE GAS BY MINIMISING CHANGES IN DIRECTION OR HORIZONTAL LENGTH. THE FLUE SHALL BE STRAIGHT AND VERTICAL EXCEPT FOR THE CONNECTION TO A COMBUSTION APPLIANCE WITH A REAR OUTLET. THE CONNECTING HORIZONTAL SECTION SHALL NOT BE GREATER THAN 1500MM IN LENGTH. WHERE BENDS ARE ESSENTIAL, THEY SHALL BE ANGLED AT NOT MORE THAN 45° TO THE VERTICAL AND LIMITED TO NO MORE THAN FOUR 45° BENDS WITH NOT MORE THAN TWO OF THESE BEING BETWEEN AN INTENDED POINT OF ACCESS FOR SWEEPING AND EITHER ANOTHER POINT OF ACCESS OF SWEEPINGS OR THE FLUE OUTLET.

DRY LINING AROUND FIREPLACE OPENINGS:  
 WHERE A DECORATIVE TREATMENT, SUCH AS A FIREPLACE SURROUND, MASONRY CLADDING OR DRY LINING, IS PROVIDED AROUND A FIREPLACE OPENING, ANY GAPS THAT COULD ALLOW FLUE GAS TO ESCAPE FROM THE FIREPLACE OPENING INTO THE VOID BEHIND THE DECORATIVE TREATMENT SHALL BE SEALED TO PREVENT SUCH LEAKAGE. THE SEALING MATERIAL SHALL BE CAPABLE OF REMAINING IN PLACE DESPITE ANY RELATIVE MOVEMENT BETWEEN THE DECORATIVE TREATMENT AND THE FIREPLACE RECESS.

CONDITION OF COMBUSTION INSTALLATION AT COMPLETION:  
 THE FLUE SHALL BE CHECKED AT COMPLETION STAGE TO ENSURE THAT IT IS FREE FROM OBSTRUCTIONS. SATISFACTORY GAS-TIGHT AND CONSTRUCTED WITH MATERIALS AND COMPONENTS OF SIZES THAT SUIT THE INTENDED APPLICATION WHERE THE BUILDING WORK INCLUDES THE INSTALLATION OF A COMBUSTION APPLIANCE. ALL THE TESTS SHALL INCLUDE THE FLUEPIPE AND THE GAS TIGHTNESS OF THE JOINT BETWEEN THE FLUEPIPE AND THE COMBUSTION APPLIANCE OUTLET. A SPIRAGE TEST SHALL BE CARRIED OUT WITH THE APPLIANCE UNDER FIRE. EVIDENCE OF FLUE TEST AND SPIRAGE TEST SHALL BE GIVEN TO DISTRICT BUILDING CONTROL OFFICE.

REDUCING THE RISK OF SCALDING:  
 THE DOMESTIC HOT WATER DISTRIBUTION SYSTEM SHALL INCORPORATE AN IN-LINE TEMPERING VALVE TO ENSURE THAT THE TEMPERATURE OF WATER THAT CAN BE DELIVERED DOES NOT EXCEED 60 DEG C.

THE HOT WATER SUPPLY TO ANY FIXED BATH SHALL BE LIMITED TO 48 DEG C BY THE USE OF AN IN-LINE BLENDING VALVE.

# SPACE HEATING

TABLE F - CRITICAL SPECIFICATION TO ACHIEVE A DESIGN DER LOWER THAN THE NOTIONAL TER DWELLING CONSTRUCTED TO DOLG PUBLISHED ACCREDITED CONSTRUCTION DETAILS FOR PART F PROVIDE ALL INTERNAL ENERGY EFFICIENT FIXED LIGHTING THROUGHOUT DWELLING (EXCLUDING GARAGES)

HWC CAPACITY 215 LITRES  
 HVC FACTORY INSULATED JACKET 80MM THICK  
 OIL FIRED BOILER TO HAVE SEDUK EFFICIENCY RATING OF 93.33 %  
 FULL ZONE CONTROL TO SPACE HEATING AND HWC  
 FULL ZONE CONTROL METAS APPROVED DUEL FUEL OPEN FIRE WITH EFFICIENCY RATING OF 37%  
 ALL EXTERNAL GLAZING IS DOUBLE GLAZED WITH 16MM + AIR GAP SOFT COAT LOW E (EN-0.05)  
 DESIGN AIR PERMEABILITY TO BE NOT MORE THAN 0.14 (m<sup>2</sup> @ 50Pa)  
 WIRE TYPE WALL TIES TO BE USED IN CAVITY WALL WIRE TYPE  
 INNER LEAF OF CAVITY WALL TO BE DENSE CONCRETE BLOCK WORK WITH A DENSITY OF 2000KG/M<sup>3</sup>  
 BLOCK CAVITY WALL INSULATION HAS THE THERMAL CONDUCTIVITY OF NOT GREATER THAN 0.023 WM/K (E.G. XTRATHERM XTOW65MM THICK)  
 HOT WATER STORAGE:  
 VENTED COPPER HOT WATER STORAGE VESSELS WILL COMPLY WITH THE HEAT LOSS AND HEAT EXCHANGER REQUIREMENTS OF BS1566.  
 AN UNVENTED HOT WATER STORAGE SYSTEM SHOULD:  
 (A) COMPLY WITH BS 6700 - A1 OR BS EN 12897  
 (B) BE A UNIT OR PACKAGED SYSTEM WHICH HAS BEEN CERTIFIED  
 (C) AS MEETING THE RELEVANT REQUIREMENTS OF REGULATION 68 BY A MEMBER BODY OF THE EUROPEAN ORGANISATION FOR TECHNICAL APPROVALS (EOTA) OPERATING A TECHNICAL APPROVALS SCHEME (EO) THE BRITISH BOARD OF AGREEMENT UNIT M04T 201968 OR  
 (D) BY A CERTIFICATION BODY HAVING NATIONAL ACCREDITATION AS COMPLYING WITH BS EN 12897  
 (E) HAVE CONTROLS OVER THE HEATING SOURCE OR SOURCES COMPLYING WITH PARAGRAPH 2.17  
 (F) HAVE A TUNDISH OR TUNDISHES COMPLYING WITH PARAGRAPH 2.15 AND  
 (G) HAVE A SUITABLE DISCHARGE PIPE OR PIPES COMPLYING WITH PARAGRAPH 2.14 TO 2.17

SAFETY DEVICES:  
 AN UNVENTED HOT WATER STORAGE SYSTEM SHOULD HAVE THE FOLLOWING SAFETY DEVICES TO LIMIT THE TEMPERATURE OF STORED WATER:-  
 (A) A NON SELF-RESETTING THERMAL CUT-OUT ON EACH HEATING SOURCE, COMPLYING WITH EITHER:  
 (i) BS EN 60335-2-73 - A2 OR  
 (ii) BS EN 297, WHEN THE STORED WATER IS HEATED BY A GAS BURNING APPLIANCE; AND  
 (B) ONE OR MORE TEMPERATURE RELIEF VALVES TO BS 6893 PART 2 OR BS EN 1490 WHICH HAVE A TOTAL DISCHARGE CAPACITY (MEASURED IN ACCORDANCE WITH APPENDIX F OF BS 6893 PART 2 OR BS EN 1490) AT LEAST EQUAL TO THE POWER INPUT TO THE WATER.  
 THESE SAFETY DEVICES SHOULD BE FACTORY FITTED AND LOCATED DIRECTLY ON THE STORAGE VESSEL. OPERATE IN SEQUENCE AS THE TEMPERATURE RISES AND BE ADDITIONAL TO ANY THERMOSTATIC DEVICE FITTED TO CONTROL THE TEMPERATURE OF THE STORED WATER.

PRESSURE DEVICES:  
 AN UNVENTED HOT WATER STORAGE SYSTEM SHOULD HAVE THE FOLLOWING DEVICES TO CONTROL THE PRESSURE WITHIN THE SYSTEM:  
 (A) A PRESSURE REDUCING VALVE COMPLYING WITH BS EN 1567 AND  
 (B) AN EXPANSION VALVE COMPLYING WITH BS EN 1491.  
 OTHER DEVICES:  
 AN UNVENTED HOT WATER STORAGE SYSTEM SHOULD ALSO HAVE  
 (A) A CHECK VALVE COMPLYING WITH BS EN 13999 TO PREVENT THE EXPANSION OF WATER TO THE COLD SUPPLY; AND  
 (B) AN EXPANSION VESSEL COMPLYING WITH BS EN 6144 SIZED TO ACCOMMODATE ALL THE EXPANSION OF THE WATER ON HEATING.

TUNDISHES:  
 EACH TEMPERATURE RELIEF VALVE AND EXPANSION VALVE SHOULD DISCHARGE THROUGH A METAL PIPE EITHER INDIVIDUALLY OR VIA A MANIFOLD, TO A TUNDISH INCORPORATING AN AIR BREAK. WHERE THE DISCHARGE IS INDIVIDUAL, THE PIPE SIZE BETWEEN THE VALVE AND THE TUNDISH, SHOULD BE NOT LESS THAN THE NOMINAL OUTLET SIZE OF THE VALVE.  
 WHERE A MANIFOLD IS USED IT SHOULD BE SO SIZED THAT IT CAN ACCEPT THE TOTAL DISCHARGES FROM THE VALVES CONNECTED TO IT.  
 WHERE DISCHARGES FROM SAFETY DEVICES MAY NOT BE APPARENT, CONDENSATION SHOULD BE GIVEN TO THE INSTALLATION OF A SUITABLE DEVICE TO WARN WHEN DISCHARGE TAKES PLACE. THE TUNDISH SHOULD BE LOCATED:  
 (A) VERTICALLY;  
 (B) NOT MORE THAN 500MM HORIZONTALLY FROM ANY VALVE DISCHARGING TO IT;  
 (C) WHERE IT CAN BE READILY SEEN BUT NOT CREATE A HAZARD; AND  
 (D) IN THE CASE OF A TEMPERATURE RELIEF VALVE - IN THE SAME SPACE AS THE STORAGE VESSEL.  
 THE TUNDISH SHOULD BE CONNECTED TO A DISCHARGE PIPE COMPLYING WITH PARAGRAPH 2.14-2.17.

DISCHARGE PIPES FROM TUNDISHES:  
 A DISCHARGE PIPE FROM A TUNDISH SHOULD  
 (A) BE MADE OF:-  
 (i) METAL; OR  
 (ii) OTHER MATERIAL THAT HAS BEEN DEMONSTRATED TO BE CAPABLE OF SAFELY WITHSTANDING THE TEMPERATURES OF THE WATER DISCHARGED AND IS CLEARLY AND PERMANENTLY MARKED TO IDENTIFY THE PRODUCT AND PERFORMANCE STANDARD (AS BS 7291 - 1);  
 (B) BE AT LEAST ONE PIPE SIZE LARGER THAN THE OUTLET OF THE SAFETY DEVICE OR MANIFOLD DISCHARGING TO THE TUNDISH;  
 (C) BE NO LONGER THAN THE EQUIVALENT IN HYDRAULIC RESISTANCE OF A STRAIGHT 9M LENGTH OF PIPE UNLESS ITS SIZE IS INCREASED IN ACCORDANCE WITH PARAGRAPH 2.15;  
 (D) HAVE A VERTICAL SECTION OF NOT LESS THAN 300MM LONG BELOW THE TUNDISH BEFORE ANY ELBOWS OR BENDS IN THE PIPEWORK; AND  
 (E) HAVE A CONTINUOUS FALL.

VISIBLE OR DISCHARGE:  
 THE DISCHARGE FROM A SAFETY DEVICE WHICH MAY CONSIST OF SCALDING WATER AND STEAM, SHOULD BE VISIBLE AT THE TUNDISH AND SHOULD ALSO BE VISIBLE AT THE FINAL POINT OF DISCHARGE. ACCEPTABLE DISCHARGE ARRANGEMENTS INCLUDE:  
 (A) BELOW A FIXED COVERED GRATING AND ABOVE THE WATER SEAL IN A TRAPPED GULLY; OR  
 (B) DOWNWARD DISCHARGE AT LOW LEVEL BUT NO LESS THAN 100MM ABOVE EXTERNAL SURFACES AND HAVING A WIRE CAGE OR SUITABLE GUARD TO PREVENT CONTACT.

SYSTEM PREPARATION AND WATER TREATMENT:  
 CENTRAL HEATING SYSTEMS SHOULD BE THOROUGHLY CLEANED AND FLUSHED OUT BEFORE INSTALLING A NEW BOILER. DURING FINAL FILLING OF THE SYSTEM A CHEMICAL WATER TREATMENT FORMULATION SHOULD BE ADDED TO THE PRIMARY CIRCUIT TO CONTROL CORROSION AND THE FORMATION OF SCALE AND SLUDGE. REASONABLE PROVISION SHOULD BE MADE TO FOLLOW THE GUIDANCE ON HOW TO PREPARE AND COMMISSION SYSTEMS GIVEN IN BS 7596. INSTALLERS SHOULD ALSO REFER TO THE BOILER MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR APPROPRIATE TREATMENT PRODUCTS AND SPECIAL REQUIREMENTS FOR INDIVIDUAL BOILER MODELS, WHERE THE MAINS WATER HARDNESS EXCEEDS 200 PARTS PER MILLION. PROVISIONS SHOULD BE MADE TO TREAT THE FEED WATER TO WATER HEATERS AND THE HOT WATER CIRCUIT OF COMBINATION BOILERS TO REDUCE THE RATE OF ACCUMULATION OF THE LIME SCALE.

COMMISSIONING BOILER AND HOT WATER STORAGE SYSTEM:  
 ON COMPLETION OF THE INSTALLATION OF THE BOILER OR THE HOT WATER STORAGE SYSTEM, TOGETHER WITH ASSOCIATED EQUIPMENT SUCH AS PIPEWORK, PUMPS AND CONTROLS, THE EQUIPMENT MUST BE COMMISSIONED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. THESE INSTRUCTIONS MUST BE SPECIFIC TO THE PARTICULAR BOILER AND / OR HOT WATER STORAGE SYSTEM.  
 THE INSTALLER MUST GIVE A FULL EXPLANATION OF THE SYSTEM AND ITS OPERATION TO THE USER, INCLUDING THE MANUFACTURER'S USER MANUAL AND OPERATIONAL AND MAINTENANCE INSTRUCTIONS, TO ENABLE THE DWELLING AND ITS FIXED BUILDING SERVICES TO BE OPERATED AND MAINTAINED IN AN ENERGY EFFICIENT MANNER. A NOTICE CONFIRMING THAT ALL FIXED BUILDING SERVICES HAVE BEEN PROPERLY COMMISSIONED SHALL BE PROVIDED AND A COPY SHALL BE GIVEN TO THE DISTRICT BUILDING CONTROL OFFICE. THE NOTICE SHALL BE SIGNED BY A SUITABLY QUALIFIED PERSON.

BOILER INTERLOCK:  
 THE BOILER-BASED SYSTEM WILL HAVE A BOILER CONTROL INTERLOCK IN WHICH CONTROLS ARE WIRED SO THAT WHEN THERE IS NO DEMAND FOR EITHER SPACE HEATING OR HOT WATER, THE BOILER AND PUMP ARE SWITCHED OFF.  
 THE USE OF THERMOSTATIC RADIACTOR VALVES (TRVs) ALONE DOES NOT PROVIDE INTERLOCK.

SPACE HEATING ZONES:  
 DWELLING WITH A TOTAL USABLE FLOOR AREA UP TO 150M<sup>2</sup> WILL BE DIVIDED INTO AT LEAST TWO SPACE HEATING ZONES WITH INDEPENDENT TEMPERATURE CONTROL, ONE OF WHICH IS ASSIGNED TO THE LIVING AREA. DWELLING WITH A TOTAL USABLE FLOOR AREA GREATER THAN 150M<sup>2</sup> WILL BE PROVIDED WITH AT LEAST TWO SPACE HEATING ZONES, EACH HAVING SEPARATE TIMING AND TEMPERATURE CONTROLS.  
 SINGLE STOREY OPEN PLAN DWELLINGS IN WHICH THE LIVING AREA IS GREATER THAN 70% OF THE TOTAL FLOOR AREA, SUB-ZONING OF THE TEMPERATURE CONTROL IS NOT APPROPRIATE.

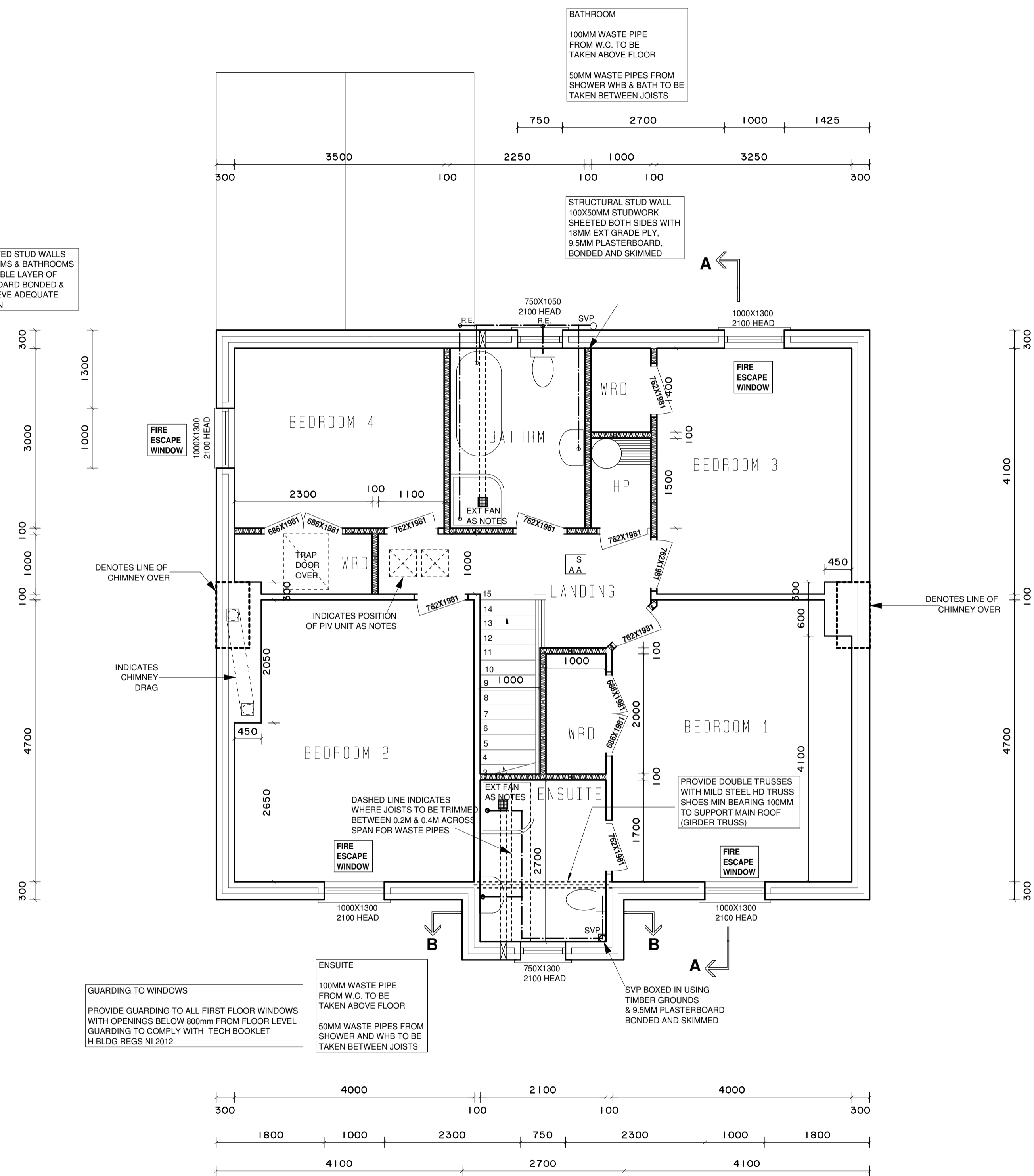
WATER HEATING ZONES:  
 THE DWELLING WILL HAVE A SEPARATE HOT WATER ZONE IN ADDITION TO SPACE HEATING ZONES. SEE TABLE F.  
 TIME CONTROL OF SPACE AND WATER HEATING:  
 TIME CONTROL OF SPACE HEATING AND WATER HEATING WILL BE PROVIDED BY:  
 I A FULL PROGRAMMER WITH SEPARATE TIMING TO EACH CIRCUIT;  
 II TWO OR MORE SEPARATE TIMERS PROVIDING TIMING CONTROL TO EACH CIRCUIT; OR  
 III PROGRAMMABLE ROOM THERMOSTATS (RTS) TO THE HEATING CIRCUIT(S), WITH SEPARATE TIMING OF THE HOT WATER CIRCUIT.  
 SEE TABLE F.

FOR DWELLINGS WITH A TOTAL USABLE FLOOR AREA GREATER THAN 150M<sup>2</sup> TIMING OF THE SEPARATE SPACE HEATING ZONES CAN BE ACHIEVED BY:  
 I MULTIPLE HEATING ZONE PROGRAMMERS; OR  
 II A SINGLE MULTI-CHANNEL PROGRAMMER; OR  
 III PROGRAMMABLE ROOM THERMOSTATS; OR  
 IV SEPARATE THERMISTERS TO EACH CIRCUIT; OR  
 V A COMBINATION OF (ii) AND (iv) ABOVE.  
 SEE TABLE F.

TEMPERATURE CONTROL OF SPACE HEATING:  
 SEPARATE TEMPERATURE CONTROL OF ZONES WITHIN THE DWELLING, WILL BE PROVIDED, USING:  
 I ROOM THERMOSTATS OR PROGRAMMABLE ROOM THERMOSTATS IN ALL ZONES; OR  
 II A ROOM THERMOSTAT OR PROGRAMMABLE ROOM THERMOSTAT IN THE MAIN ZONE AND INDIVIDUAL RADIACTOR CONTROLS SUCH AS THERMOSTATIC RADIACTOR VALVES (TRVs) ON ALL RADIACTORS IN THE OTHER ZONES; OR  
 III A COMBINATION OF (ii) AND (iii).  
 SEE TABLE F.

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100X50MM INSULATED STUD WALLS BETWEEN BEDROOMS & BATHROOMS TO RECEIVE A DOUBLE LAYER OF 12.5MM PLASTERBOARD BONDED & SKIMMED TO ACHIEVE ADEQUATE SOUND INSULATION



FIRST FLOOR PLAN (SCALE 1-50)

## HT 2B

THESE DRAWINGS ARE PRELIMINARY AND ARE NOT BUILDING CONTROL APPROVED THEREFORE MUST NOT BE USED ON SITE

REVISION	
<b>MARCUS KERR</b> DESIGN	
CLIENT	CORRA CONTRACTS
PROJECT	PROPOSED HOUSING DEVELOPMENT
LOCATION	CORRADINNA ROAD OMAGH
DATE	01/18
SCALE	1:50
DRWG TITLE	FIRST FLOOR PLAN
111 GILLYGOOLEY ROAD OMAGH CO. TYRONE NI BT78 4SU TEL: 028 6263 1211 E-MAIL: MARCUS.KERR@BTINTERNET.COM	