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GENERAL NOTES:

NOTICE OF COMMENCEMENT
A NOTICE OF COMMENCEMENT IS TO BE SUBMITTED TO BUILDING CONTROL WITHIN 5 DAYS OF WORK BEING REGARDED AS COMMENCED, UNDER REGULATION 16 OF THE BUILDING REGULATIONS ETC. (AMENDMENT) (ENGLAND) REGULATIONS 2010.

WORK WILL BE DEEMED TO HAVE COMMENCED WHEN THE BUILD HAS PROGRESSED TO AT LEAST ONE OF THE FOLLOWING:

FOR COMPLEX BUILDINGS || FOUNDATIONS ARE CONSTRUCTED, AND THE STRUCTURE OF THE LOWEST FLOOR LEVEL IS COMPLETE.
FOR NEW BUILDINGS AND HORIZONTAL EXTENSIONS - SUB SURFACE STRUCTURE OF THE BUILDING OR THE EXTENSION INCLUDING ALL FOUNDATIONS AND THE STRUCTURE OF THE GROUND FLOOR LEVEL IS COMPLETED.
FOR ALL OTHER WORKS || CONSTRUCTED 15% OF THE OVERALL WORK.

NOTICE OF COMPLETION
A NOTICE OF COMPLETION TO BE GIVEN TO BUILDING CONTROL NOT MORE THAN 5 DAYS AFTER THE WORK HAS BEEN COMPLETED. THE NOTICE TO CONTAIN THE FOLLOWING INFORMATION:
* THE NAME, ADDRESS, TELEPHONE NUMBER AND (IF AVAILABLE) EMAIL ADDRESS OF THE CLIENT, PRINCIPAL CONTRACTOR, AND PRINCIPAL DESIGNER.
* A STATEMENT FROM THE APPLICANT TO SAY THAT THE WORKS HAVE BEEN COMPLETED AND COMPLIES WITH ALL THE APPLICABLE REGULATIONS TO THE BEST OF THEIR KNOWLEDGE.
* A STATEMENT FROM BOTH THE PRINCIPAL CONTRACTOR AND PRINCIPAL DESIGNER TO CONFIRM THEY HAVE FULFILLED THEIR DUTIES UNDER PART 2A (DUTY HOLDERS AND COMPETENCE).

CDM REGULATIONS 2015
THE CLIENT MUST ABIDE BY THE CONSTRUCTION DESIGN AND MANAGEMENT REGULATIONS 2015. THE CLIENT MUST APPOINT A CONTRACTOR, IF MORE THAN ONE CONTRACTOR IS TO BE INVOLVED, THE CLIENT WILL NEED TO APPOINT (IN WRITING) A PRINCIPAL DESIGNER (TO PLAN, MANAGE AND COORDINATE THE PLANNING AND DESIGN WORK) AND A PRINCIPAL CONTRACTOR (TO PLAN, MANAGE AND COORDINATE THE CONSTRUCTION AND ENSURE THERE ARE ARRANGEMENTS IN PLACE FOR MANAGING AND ORGANISING THE PROJECT).

DOMESTIC CLIENTS
THE DOMESTIC CLIENT IS TO APPOINT A PRINCIPAL DESIGNER AND A PRINCIPAL CONTRACTOR WHEN THERE IS MORE THAN ONE CONTRACTOR, IF NOT YOUR DUTIES WILL AUTOMATICALLY BE TRANSFERRED TO THE CONTRACTOR OR PRINCIPAL CONTRACTOR.

THE DESIGNER CAN TAKE ON THE DUTIES, PROVIDED THERE IS A WRITTEN AGREEMENT BETWEEN YOU AND THE DESIGNER TO DO SO.

THE HEALTH AND SAFETY EXECUTIVE IS TO BE NOTIFIED AS SOON AS POSSIBLE BEFORE CONSTRUCTION WORK STARTS IF THE WORKS:

(A) LAST LONGER THAN 30 WORKING DAYS AND HAS MORE THAN 20 WORKERS WORKING SIMULTANEOUSLY AT ANY POINT IN THE PROJECT.
OR:
(B) EXCEEDS 500 PERSON DAYS

PARTY WALL ACT
SHOULD THEY NEED TO DO SO UNDER THE REQUIREMENTS OF THE PARTY WALL ACT 1996, THE OWNER HAS A DUTY TO SERVE A PARTY STRUCTURE NOTICE ON ANY ADJOINING OWNER IF THE BUILDING WORK INVOLVES ANY OF THE FOLLOWING TO A PARTY WALL:
- SUPPORT OF BEAM
- INSERTION OF DPC THROUGH WALL
- RAISING A WALL OR CUTTING OFF PROJECTIONS
- DEMOLITION AND REBUILDING
- UNDERPINNING
- INSERTION OF LEAD FLASHINGS

A PARTY WALL NOTICE IS ALSO REQUIRED FOR:
- ANY EXCAVATIONS WITHIN 3 METRES OF ANY PART OF A NEIGHBOURING OWNER'S BUILDING OR STRUCTURE, WHERE ANY PART OF THAT WORK WILL GO DEEPER THAN THE NEIGHBOUR'S FOUNDATIONS OR
- ANY EXCAVATIONS FOR A NEW BUILDING OR STRUCTURE, WITHIN 6 METRES OF ANY PART OF A NEIGHBOURING OWNER'S BUILDING OR STRUCTURE, WHERE ANY PART OF THAT WORK WILL MEET A LINE DRAWN DOWNWARDS AT 45° IN THE DIRECTION OF THE EXCAVATION FROM THE BOTTOM OF THE NEIGHBOUR'S FOUNDATIONS. SEE DIAGRAM 7 IN THE FOLLOWING GOVERNMENT GUIDANCE, HTTPS://WWW.GOV.UK/GOVERNMENT/PUBLICATIONS/PREVENTING-AND-RESOLVING-DISPUTES-IN-RELATION-TO-PARTY-WALLS/THE-PARTY-WALL-ETC-ACT-1996-EXPLANATORY-BOOKLET#PARA_28

A PARTY WALL AGREEMENT IS TO BE IN PLACE PRIOR TO START OF WORKS ON SITE.

THERMAL BRIDGING
CARE SHALL BE TAKEN TO LIMIT THE OCCURRENCE OF THERMAL BRIDGING IN THE INSULATION LAYERS CAUSED BY GAPS WITHIN THE THERMAL ELEMENT (I.E. AROUND WINDOWS AND DOOR OPENINGS).

MATERIALS AND WORKMANSHIP
ALL WORKS ARE TO BE CARRIED OUT IN A WORKMANLIKE MANNER. ALL MATERIALS AND WORKMANSHIP MUST COMPLY WITH REGULATION 7 OF THE BUILDING REGULATIONS. ALL RELEVANT BRITISH STANDARDS, EUROPEAN STANDARDS, AGREEMENT CERTIFICATES, PRODUCT CERTIFICATES OF SCHEMES (KITE MARKS) ETC. PRODUCTS CONFORMING TO A EUROPEAN TECHNICAL STANDARD OR HARMONISED EUROPEAN PRODUCT SHOULD HAVE A CE MARKING.
THE LATEST EDITION OF THE BRITISH STANDARD (INCLUDING ANY AMENDMENTS) APPLIES TO ANY UNDATED REFERENCES WITHIN THESE SPECIFICATIONS.

SITE PREPARATION:

RADON PROTECTION
PLEASE CHECK THE NEED FOR RADON PROTECTION IN YOUR AREA WITH YOUR LOCAL AUTHORITY.
GROUND GASES, CONTAMINANTS AND AGGRESSIVE GROUND CONDITIONS MAY REQUIRE THE INCLUSION OF A SUITABLE GROUND BARRIER TO PROTECT THE STRUCTURE APPROPRIATELY. SPECIALIST ADVICE MUST BE SOUGHT IN RESPECT OF DEALING WITH GROUND GASES, AND DESIGNERS ARE ADVISED TO CHECK CURRENT STANDARDS AT THE TIME OF CONSTRUCTION FOR SUITABLE GUIDANCE.

SITE PREPARATION
GROUND TO BE PREPARED FOR NEW WORKS BY REMOVING ALL UNSUITABLE MATERIAL, VEGETABLE MATTER AND TREE OR SHRUB ROOTS TO A SUITABLE DEPTH TO PREVENT FUTURE GROWTH. SEAL UP, CAP OFF, DISCONNECT AND REMOVE EXISTING REDUNDANT SERVICES AS NECESSARY. REASONABLE PRECAUTIONS MUST ALSO BE TAKEN TO AVOID DANGER TO HEALTH AND SAFETY CAUSED BY CONTAMINANTS AND GROUND GASES, E.G. LANDFILL GASES, RADON, VAPOURS ETC. ON OR IN THE GROUND COVERED, OR TO BE COVERED BY THE BUILDING.

STRUCTURE:

EXISTING STRUCTURE
PROVIDE ALL NECESSARY TEMPORARY PROTECTION, SUPPORT, SHORING AND WORKING PLATFORMS ETC. IN COMPLIANCE WITH CURRENT HEALTH AND SAFETY REQUIREMENTS AND STRUCTURAL ENGINEER'S DETAILS..
A STRUCTURAL ENGINEER TO CARRY OUT A DESKTOP ANALYSIS OF THE GEOLOGY AND HYDROLOGY OF THE SITE TO GUIDE THE DESIGN OF FOUNDATION AND BASEMENT STRUCTURE.
EXISTING STRUCTURE INCLUDING FOUNDATIONS, FLOOR BEAMS, WALLS, ROOF AND LINTELS ARE TO BE EXPOSED AND CHECKED BY STRUCTURAL ENGINEER FOR ADEQUACY PRIOR TO COMMENCEMENT OF WORK AND AS REQUIRED BY THE BUILDING CONTROL OFFICER. ANY REMEDIAL WORKS REQUIRED TO BE DESIGNED BY A STRUCTURAL ENGINEER.
NOTE: STRUCTURAL WATERPROOFING DESIGN AND GEOTECHNICAL INVESTIGATIONS ARE SPECIALIST FIELDS, ADVICE MUST BE SOUGHT FROM SUITABLY EXPERIENCED PARTIES. AN APPROPRIATE STRUCTURAL DESIGN MUST BE UNDERTAKEN BY A CHARTERED STRUCTURAL ENGINEER.

BEAMS
SUPPLY AND INSTALL NEW STRUCTURAL ELEMENTS SUCH AS NEW BEAMS, ROOF STRUCTURE, FLOOR STRUCTURE, BEARINGS, AND PADSTONES IN ACCORDANCE WITH THE STRUCTURAL ENGINEER'S CALCULATIONS AND DETAILS. NEW STEEL BEAMS TO BE ENCASED IN 12.5MM GYPROC FIRELINE BOARD WITH STAGGERED JOINTS, GYPROC FIRECASE OR PAINTED IN NULLIFIRE S OR SIMILAR INTUMESCENT PAINT TO PROVIDE 1/2 HOUR FIRE RESISTANCE AS AGREED WITH BUILDING CONTROL. ALL FIRE PROTECTION TO BE INSTALLED AS DETAILED BY SPECIALIST MANUFACTURER.

LINTELS
- FOR UNIFORMLY DISTRIBUTED LOADS AND STANDARD 2 STOREY DOMESTIC LOADINGS ONLY
LINTEL WIDTHS ARE TO BE EQUAL TO WALL THICKNESS. ALL LINTELS OVER 750MM SIZED INTERNAL DOOR OPENINGS TO BE 65MM DEEP PRE-STRESSED CONCRETE FLAME LINTELS. 150MM DEEP LINTELS ARE TO BE USED FOR 900MM SIZED INTERNAL DOOR OPENINGS. LINTELS TO HAVE A MINIMUM BEARING OF 150MM ON EACH END. ANY EXISTING LINTELS CARRYING ADDITIONAL LOADS ARE TO BE EXPOSED FOR INSPECTION AT COMMENCEMENT OF WORK ON SITE. ALL PRE-STRESSED CONCRETE LINTELS TO BE DESIGNED AND MANUFACTURED IN ACCORDANCE WITH BS EN 1992-1-1:2023 EUROCODE 2, WITH A CONCRETE STRENGTH OF 50 OR 60 N/MM² AND INCORPORATING STEEL STRANDS TO BS 5896 TO SUPPORT LOADINGS ASSESSED TO BS EN 845-2:2013.
FOR OTHER STRUCTURAL OPENINGS PROVIDE PROPRIETARY INSULATED STEEL LINTELS SUITABLE FOR SPANS AND LOADINGS IN COMPLIANCE WITH APPROVED DOCUMENT A AND LINTEL MANUFACTURER'S STANDARD TABLES. STOP ENDS, DPC TRAYS AND WEEP HOLES TO BE PROVIDED ABOVE ALL EXTERNALLY LOCATED LINTELS.
INDEPENDENT LINTELS TO HAVE AN INSULATED CAVITY CLOSURE BETWEEN THE INNER AND OUTER LINTEL.

STRAPPING FOR PITCHED ROOF
GABLE WALLS SHOULD BE STRAPPED TO ROOFS AT 2M CENTRES. ALL EXTERNAL WALLS RUNNING PARALLEL TO ROOF RAFTERS TO BE RESTRAINED AT ROOF LEVEL USING 200MM X 30MM X 5MM GALVANISED MILD STEEL HORIZONTAL STRAPS OR OTHER APPROVED TO BS EN 845-1 (+A1:2016), STRAPS TO BE SCREW FIXED, BUILT INTO WALLS AT MAX 2000MM CENTRES, AND TAKEN ACROSS A MINIMUM OF 3 RAFTERS. PROVIDE SOLID NOGGING BETWEEN RAFTERS AT STRAP POSITIONS. ALL WALL PLATES TO BE 100 X 50MM MIN TIMBER TO INNER SKIN OF CAVITY WALL USING 30MM X 5MM X 1200MM GALVANIZED METAL STRAPS OR OTHER APPROVED TO BS EN 845-1 (+A1:2016) AT MAXIMUM 2M CENTRES.

STRAPPING OF FLOORS
LATERAL RESTRAINT TO BE PROVIDED WHERE JOISTS RUN PARALLEL TO WALLS. FLOORS TO BE STRAPPED TO WALLS AT MAX 2.0M CENTRES WITH 1200MM X 30MM X 5MM GALVANISED MILD STEEL STRAPS OR OTHER APPROVED, IN COMPLIANCE WITH BS EN 845-1 (+A1:2016). STRAPS TO BE TAKEN ACROSS MINIMUM OF 3 JOISTS AND BUILT INTO WALLS. PROVIDE 38MM WIDE X ¾ DEPTH SOLID NOGGING BETWEEN JOISTS AT STRAP POSITIONS.

OPENINGS AND RETURNS
AN OPENING OR RECESS GREATER THAN 0.1M² SHALL BE AT LEAST 550MM FROM THE SUPPORTED WALL (MEASURED INTERNALLY).

LEAD WORK AND FLASHINGS
ALL LEAD FLASHINGS, ANY VALLEYS OR SOAKERS TO BE CODE 5 LEAD AND LAID IN ACCORDANCE WITH BS 5534 AND BS EN 12588. FLASHINGS TO BE PROVIDED TO ALL JAMBS AND BELOW WINDOW OPENINGS WITH WELDED UPSTANDS. JOINTS TO BE LAPPED MIN 150MM AND LEAD TO BE DRESSED 200MM UNDER TILES, ETC.

ADDITIONAL NOTES FOR WALLS:

DPC
WHERE AN EXISTING DPC CANNOT BE IDENTIFIED OR IS DEFECTIVE, A REMEDIAL DPC WITH AN INSURANCE-BACKED GUARANTEE SHOULD BE PROVIDED. DPC TO BE AT LEAST 150MM ABOVE EXTERNAL GROUND LEVEL. WHERE IT IS NOT POSSIBLE TO PROVIDE A REMEDIAL DPC THE WALL SHOULD BE ASSESSED TO DEMONSTRATE THAT IT PREVENTS RISING DAMPNESS FROM ENTERING INTO THE BUILDING.
PRODUCTS USED IN CHEMICALLY INJECTED SYSTEMS TO HOLD CURRENT INDEPENDENT THIRD-PARTY CERTIFICATES.

WALL TIES
ALL WALLS CONSTRUCTED USING STAINLESS STEEL VERTICAL TWIST TYPE RETAINING WALL TIES BUILT IN AT 750MM CTRS HORIZONTALLY, 450MM VERTICALLY AND 225MM CTRS AT REVEALS AND CORNERS IN STAGGERED ROWS. WALL TIES TO BE SUITABLE FOR CAVITY WIDTH AND IN ACCORDANCE WITH BS EN 845-1:2013.
WALL TIES FOR CAVITIES OVER 150MM TO BE SUITABLE FOR CAVITY WIDTH, AND INSTALLED AS MANUFACTURER'S DETAILS.

STUD WALL BETWEEN HOUSE AND GARAGE

TO ACHIEVE MINIMUM U VALUE OF 0.18 W/M²K
CONSTRUCT STUD WALL USING 100MM X 50MM HEAD AND SOLE PLATES AND VERTICAL STUDS (WITH NOGGINS) AT 400MM CTRS OR TO STRUCTURAL ENGINEER'S DETAILS AND CALCULATIONS. INSULATION TO BE 90MM CELOTEX GA4000 BETWEEN STUDS WITH 50MM CELOTEX GA4000 AND VCL OVER. FIX 12.5MM GYPROC FIRELINE PLASTERBOARD TO THE GARAGE SIDE OF THE STUD WALL. FINISH WITH SKIM COAT OF FINISHING PLASTER. ALL JUNCTIONS TO HAVE WATER TIGHT CONSTRUCTION, SEAL ALL PERIMETER JOINTS WITH TAPE INTERNALLY AND WITH SILICON SEALANT EXTERNALLY.
NOTE: THESE WALLS NEED TO GO FULL HEIGHT AND BE FIRE STOPPED AGAINST THE ROOF OR FLOOR ABOVE. A LESSER PROVISION OF INSULATION MAY BE APPROPRIATE WHERE MEETING SUCH A STANDARD WOULD RESULT IN A REDUCTION OF MORE THAN 5% IN THE INTERNAL FLOOR AREA OF THE ROOM..

CAVITIES
PROVIDE CAVITY TRAYS OVER NEW OPENINGS. ALL CAVITIES TO BE CLOSED AT EAVES AND AROUND OPENINGS USING THERMABATE OR SIMILAR NON COMBUSTIBLE INSULATED CAVITY CLOSERS. PROVIDE VERTICAL DPCS AROUND OPENINGS AND ABUTMENTS. ALL CAVITY TRAYS MUST HAVE 150MM UPSTANDS AND SUITABLE CAVITY WEEP HOLES (MIN 2) AT MAX 900MM CENTRES.

GAS MEMBRANE SPECIFICATION
A BBA-CERTIFIED GAS MEMBRANE, COMPLYING WITH NHBC FOUNDATIONS NF34, AND BS 8485:2015+A1:2019, SHALL BE INSTALLED TO PROTECT THE BUILDING FROM HARMFUL GROUND GASES. THE MEMBRANE SHALL BE LAID OVER A CLEAN, DRY GROUND SURFACE, OVERLAPPED AND SEALED AT JOINTS, AND EXTENDED BEYOND THE BUILDING FOOTPRINT. A VENTILATION LAYER SHALL BE INSTALLED ABOVE THE MEMBRANE. INSTALLATION SHALL COMPLY WITH APPROVED DOCUMENT C1 OF THE BUILDING REGULATIONS. CONSULT MANUFACTURER'S INSTRUCTIONS FOR SPECIFIC DETAILS.

EXISTING TO NEW WALL
CAVITIES IN NEW WALL TO BE MADE CONTINUOUS WITH EXISTING, WHERE POSSIBLE, TO ENSURE CONTINUOUS WEATHER BREAK. IF A CONTINUOUS CAVITY CANNOT BE ACHIEVED, WHERE NEW WALLS ABUTS THE EXISTING WALLS PROVIDE A MOVEMENT JOINT WITH VERTICAL DPC. ALL TIED INTO EXISTING CONSTRUCTION WITH SUITABLE PROPRIETARY STAINLESS STEEL PROFILES.

MOVEMENT JOINTS
MOVEMENT JOINTS TO BE PROVIDED AT THE FOLLOWING MAXIMUM SPACING:
CLAY BRICKWORK - 12M.
CALCIUM SILICATE BRICK - 7.5-9M.
LIGHTWEIGHT CONCRETE BLOCK - DENSITY NOT EXCEEDING 1,500KG/M³ - 6M.
DENSE CONCRETE BLOCK - DENSITY EXCEEDING 1,500KG/M³ & 7.5-9M.
ANY MASONRY IN A PARAPET WALL (LENGTH TO HEIGHT RATIO GREATER THAN 2:1) - HALF THE ABOVE SPACINGS AND 15M FROM CORNERS.
MOVEMENT JOINT WIDTHS FOR CLAY BRICKS TO BE NOT LESS THAN 1.5MM I.E. 10M = 10MM AND FOR OTHER MASONRY NOT LESS THAN 10MM.
ADDITIONAL MOVEMENT JOINTS MAY BE REQUIRED WHERE THE ASPECT RATIO OF THE WALL (LENGTH :HEIGHT) IS MORE THAN 3:1.
CONSIDERATIONS TO BE GIVEN TO BS EN 1996-1-2:2005 EUROCODE 6: DESIGN OF MASONRY STRUCTURE.

INTERNAL WORKS:

INTERNAL STUD PARTITIONS
100MM X 50MM SOFTWOOD TREATED TIMBERS STUDS AT 400MM CTRS WITH 50 X 100MM HEAD AND SOLE PLATES AND SOLID INTERMEDIATE HORIZONTAL NOGGINS AT 1/2 HEIGHT OR 450MM C/CS. PROVIDE MIN 10KG/M³ DENSITY ACOUSTIC SOUNDPROOF QUILT TIGHTLY PACKED (E.G.100MM ROCKWOOL OR ISOWOOL MINERAL FIBRE SOUND INSULATION) IN ALL VOIDS THE FULL DEPTH OF THE STUD. PARTITIONS TO BE BUILT OFF DOUBLED UP JOISTS WHERE PARTITIONS RUN PARALLEL OR PROVIDE NOGGINS WHERE AT RIGHT ANGLES, OR TO BE BUILT OFF DPC ON THICKENED CONCRETE SLAB IF SOLID GROUND FLOOR. WALLS FACED THROUGHOUT WITH 12.5MM PLASTERBOARD WITH SKIM PLASTER FINISH. PLASTERBOARD TO BE TAPED AND JOINTED COMPLETE WITH BEADS AND STOPS.

INTERNAL MASONRY PARTITIONS
CONSTRUCT NON LOAD BEARING INTERNAL MASONRY PARTITIONS USING DENSE CONCRETE BLOCKS BUILT OFF THICKENED FLOOR SLAB. WALL TO BE TIED AT 225MM CENTRES WITH PROPRIETARY STEEL PROFILES OR BLOCK BONDED TO ALL INTERNAL AND EXTERNAL WALLS. WALLS FACED THROUGHOUT WITH 12.5MM PLASTERBOARD ON DABS WITH SKIM PLASTER FINISH OR 13MM LIGHTWEIGHT PLASTER.

ELECTRICAL
ALL ELECTRICAL WORK REQUIRED TO MEET THE REQUIREMENTS OF PART P (ELECTRICAL SAFETY) MUST BE DESIGNED, INSTALLED, INSPECTED AND TESTED BY A COMPETENT PERSON REGISTERED UNDER A COMPETENT PERSON SELF CERTIFICATION SCHEME SUCH AS BRE CERTIFICATION LTD, BSI, NICEIC CERTIFICATION SERVICES OR ZURICH LTD. AN APPROPRIATE BS7671 ELECTRICAL INSTALLATION CERTIFICATE IS TO BE ISSUED FOR THE WORK BY A PERSON COMPETENT TO DO SO. A COPY OF A CERTIFICATE WILL BE GIVEN TO BUILDING CONTROL ON COMPLETION.

INTERNAL LIGHTING
INSTALL LOW ENERGY LIGHT FITTINGS THAT ONLY TAKE LAMPS HAVING A LUMINOUS EFFICIENCY BETTER THAN 80 LUMENS PER CIRCUIT WATT. ALL FIXED TO HAVE LIGHTING CAPACITY (LM) 185 X TOTAL FLOOR AREA, TO COMPLY WITH PART L OF THE CURRENT BUILDING REGULATIONS AND THE DOMESTIC BUILDING SERVICES COMPLIANCE GUIDE.

HEATING
EXTEND ALL HEATING AND HOT WATER SERVICES FROM EXISTING AND PROVIDE NEW TRVS TO RADIATORS. HEATING SYSTEM TO BE DESIGNED, INSTALLED, TESTED AND FULLY CERTIFIED BY A GAS SAFE REGISTERED SPECIALIST. ALL WORK TO BE IN ACCORDANCE WITH THE LOCAL WATER AUTHORITIES BYE LAWS, THE GAS SAFETY (INSTALLATION AND USE) REGULATIONS 1998 AND IEE REGULATIONS.
THE ENERGY PERFORMANCE OF THE NEW COMPONENTS TO BE ASSESSED. THE RESULTS SHOULD BE RECORDED AND GIVEN TO THE BUILDING OWNER.
ALL ACCESSIBLE PIPES TO BE INSULATED TO THE STANDARDS IN TABLE 4.3 APPROVED DOCUMENT L.

MEANS OF ESCAPE AND FIRE RESC:

SMOKE DETECTION
PROVIDE A LINKED SMOKE ALARM DETECTION SYSTEM TO BS EN 14604 AND BS 5839-6:2019 TO AT LEAST A GRADE D2 (GRADE A FOR LARGE HOUSES) CATEGORY LD2 STANDARD SYSTEM TO BE MAINS POWERED WITH BATTERY BACK UP. SMOKE DETECTORS TO BE PROVIDED TO:
- EACH HALLWAY AND LANDING
- EVERY PRINCIPAL LIVING ROOM (AS REQUIRED BY THE BUILDING CONTROL OFFICER)
AN INTERLINKED HEAT DETECTOR TO BE PROVIDED IN THE KITCHEN.
IN HALLWAYS EXCEEDING 7.5M IN LENGTH, NO POINT WITHIN THE HALLWAY SHOULD EXCEED 7.5M FROM THE NEAREST DETECTOR AND NO BEDROOM DOOR SHOULD BE FURTHER THAN 2M FROM THE NEAREST SMOKE ALARM. IF CEILING MOUNTED DETECTORS TO BE 300MM FROM THE WALLS AND LIGHT FITTINGS.

ESCAPE WINDOWS
PROVIDE EMERGENCY EGRESS WINDOWS TO ANY NEWLY CREATED FIRST FLOOR HABITABLE ROOMS AND GROUND FLOOR INNER ROOMS.
THE WINDOW SHOULD HAVE AN UNOBSTRUCTED CLEAR OPENABLE AREA THAT IS AT LEAST 0.33M² AND HAVE NO CLEAR DIMENSION LESS THAN 450MM HIGH OR 450MM WIDE.
THE BOTTOM OF THE OPENABLE AREA SHOULD BE NOT MORE THAN 1100M ABOVE THE FLOOR.
THE WINDOW SHOULD ENABLE THE PERSON TO REACH A PLACE FREE FROM DANGER FROM FIRE.
NOTE: PLEASE ENSURE THAT WHERE PART K APPLIES THE WINDOW IS NOT LESS THAN 800MM ABOVE FLOOR LEVEL OR IS PROVIDED WITH SUITABLE GUARDING AND/OR SAFETY GLASS AS APPROPRIATE

UNPROTECTED AREAS LESS THAN 1M FROM BOUNDARY
ANY WINDOW OR DOOR OPENINGS SHOULD MEET THE CONDITIONS IN DIAGRAM 11.5 IN PART B VOLUME 1 (SMALL UNPROTECTED AREAS), AND THE REST OF THE WALL SHOULD BE FIRE RESISTING FROM BOTH SIDES.
EXTERNAL SURFACE MATERIALS FACING THE BOUNDARY SHOULD BE CLASS B-S3, D2 OR BETTER.

UNPROTECTED AREAS OVER 1M FROM BOUNDARY
CLADDED WALLS: WHERE A WALL HAS A SURFACE MATERIAL THAT IS WORSE THAN CLASS B-S3,D2 AND IS MORE THAN 1MM THICK, THE UNPROTECTED AREA FOR THE WALL IS DIVIDED IN HALF AND THE REST OF THE WALL REMAINING IS TO BE PROVIDED WITH GYPROC FIRE-LINE BOARD FROM THE INSIDE ONLY.
ACCEPTABLE UNPROTECTED AREAS : UNPROTECTED AREAS MORE THAN 1M FROM THE BOUNDARY.
THE UNPROTECTED AREA SHOULD NOT EXCEED THE FOLLOWING:
MINIMUM DISTANCE FROM THE BOUNDARY MAXIMUM UNPROTECTED AREA (M²)
1.5 6
2 12
3 18
4 24
5 30
6 NO LIMIT
NOTE:
PLEASE NOTE THE EXTENT OF UNPROTECTED AREA ON AN EXTERNAL WALL, I.E. WINDOWS, DOORS, TIMBER CLADDING ETC, SHOULD NOT EXCEED:
- 5.0M² WHEN THE MINIMUM DISTANCE BETWEEN SIDE OF THE BUILDING AND THE RELEVANT BOUNDARY IS 1M
- 12M² WHEN THE MINIMUM DISTANCE BETWEEN THE SIDE OF THE BUILDING AND THE RELEVANT BOUNDARY IS 2M
- 18M² WHEN THE MINIMUM DISTANCE BETWEEN THE SIDE OF THE BUILDING AND THE RELEVANT BOUNDARY IS 3M
- 24M² WHEN THE MINIMUM DISTANCE BETWEEN THE SIDE OF THE BUILDING AND THE RELEVANT BOUNDARY IS 4M
- 30M² WHEN THE MINIMUM DISTANCE BETWEEN THE SIDE OF THE BUILDING AND THE RELEVANT BOUNDARY IS 5M
- NO LIMIT WHEN THE MINIMUM DISTANCE BETWEEN THE SIDE OF THE BUILDING AND THE RELEVANT BOUNDARY IS 6M
(THE ABOVE APPLIES ONLY TO BUILDINGS WHICH ARE 1M OR MORE FROM ANY POINT OF A RELEVANT BOUNDARY)
OTHER METHODS OF CALCULATION ARE GIVEN IN APPROVED DOCUMENT B1.

VENTILATION:

EXTRACT TO KITCHEN
KITCHEN TO HAVE MECHANICAL VENTILATION WITH AN EXTRACT RATING OF 60 L/S, OR 30 L/S IF ADJACENT TO HOB TO EXTERNAL AIR. INTERNAL DOORS SHOULD BE PROVIDED WITH A 10MM GAP BELOW THE DOOR TO AID AIR CIRCULATION. VENTILATION PROVIDED IN ACCORDANCE WITH THE DOMESTIC VENTILATION COMPLIANCE GUIDE. INTERMITTENT EXTRACT FANS TO BS EN 13141-4. COOKER HOODS TO BS EN 13141-3. ALL FIXED MECHANICAL VENTILATION SYSTEMS, WHERE THEY CAN BE TESTED AND ADJUSTED, SHALL BE COMMISSIONED AND A COMMISSIONING NOTICE GIVEN TO THE BUILDING CONTROL BODY.

PURGE VENTILATION
MINIMUM TOTAL AREA OF OPENING IN ACCORDANCE WITH TABLE 1.A APPROVED DOCUMENT F1.
HINGED OR PIVOT WINDOWS WITH AN OPENING ANGLE OF 15 TO 30 DEGREES TO HAVE AN OPENABLE AREA IN EXCESS 1/10 OF THE FLOOR AREA OF THE ROOM.
EXTERNAL DOORS AND SASH, HINGED OR PIVOT WINDOWS WITH AN OPENING ANGLE OF EQUAL TO OR GREATER THAN 30 DEGREES TO HAVE AN OPENABLE AREA IN EXCESS OF 1/20 OF THE FLOOR AREA OF THE ROOM.
PURGE VENTILATION SHOULD BE CAPABLE OF EXTRACTING AT LEAST 6 AIR CHANGES PER HOUR PER ROOM DIRECTLY TO THE OUTSIDE.
INTERNAL DOORS SHOULD BE PROVIDED WITH A 10MM GAP BELOW THE DOOR TO AID AIR CIRCULATION.

BACKGROUND VENTILATION
CONTROLLABLE BACKGROUND VENTILATION AT LEAST 1700MM ABOVE FLOOR LEVEL TO BE PROVIDED TO HABITABLE ROOMS AND KITCHENS AT A RATE OF MIN 8,000MM², AND TO BATHROOMS AT A RATE OF MIN 4,000MM².
TOTAL NUMBER OF VENTILATORS INSTALLED IN A DWELLINGS HABITABLE ROOMS TO BE AT LEAST 1 VENTILATORS FOR ONE BEDROOM DWELLINGS AND 5 VENTILATORS FOR DWELLINGS WITH MORE THAN ONE BEDROOM.
BACKGROUND VENTILATORS TO BE TESTED TO BS EN 13141-1.
BACKGROUND VENTILATOR EQUIVALENT AREA AND OPERATION TO BE MEASURED AND RECORDED.
NOISE ATTENUATING BACKGROUND VENTILATORS SHOULD BE FITTED TO FACADES WITH SUSTAINED LOUD NOISE.

WHERE THE EXTENSION CONNECTS TO AN EXISTING ROOM AND AS A RESULT THE EXISTING ROOM IS LEFT WITH NO WINDOWS OR BACKGROUND VENTILATION LESS THAN 5000MM², THEN THE NEW ROOM BACKGROUND VENTILATION TO BE AT LEAST 10,000MM² EQUIVALENT AREA.
WHERE THE EXTENSION CONNECTS TO AN EXISTING ROOM AND AS A RESULT THE EXISTING ROOM IS LEFT WITH BACKGROUND VENTILATION AT LEAST 5000MM², THEN BOTH THE FOLLOWING IS TO BE PROVIDED:
- BACKGROUND VENTILATORS OF AT LEAST 12,000MM² EQUIVALENT AREA SHOULD BE PROVIDED BETWEEN THE TWO ROOMS.
- BACKGROUND VENTILATORS OF AT LEAST 12,000MM² EQUIVALENT AREA BETWEEN THE ADDITIONAL ROOM AND THE OUTSIDE.

C2. CONDENSATION
WALLS, FLOORS AND ROOF OF THE BUILDING TO BE DESIGNED AND CONSTRUCTED SO THAT THEIR STRUCTURAL AND THERMAL PERFORMANCE WILL NOT BE ADVERSELY AFFECTED BY INTERSTITIAL CONDENSATION, SURFACE CONDENSATION OR MOULD GROWTH. ACCOUNT TO BE TAKEN OF THE BUILDING'S FORM AND ORIENTATION IN RELATION TO TOPOGRAPHY, PREVAILING WINDS, SUNLIGHT AND OVER-SHADOWING, AND THE RATE AT WHICH MOISTURE IS GENERATED.
MATERIALS WITH THE HIGHEST VAPOUR RESISTANCE SHOULD BE LOCATED ON THE WARM SIDE OF A THERMAL ELEMENT. VCLS TO BE PROVIDED WHERE NECESSARY.
THE JUNCTIONS BETWEEN ELEMENTS ARE DESIGNED TO ACCREDITED CONSTRUCTION DETAILS OR GUIDANCE OF BRE IP17/01 AND BS 5250:2021 MANAGEMENT OF MOISTURE IN BUILDINGS TO BE FOLLOWED.

DRAINAGE:

EXTERNAL SURFACE WATER DRAINAGE
DRAINAGE OF PAVING AREAS TO BE CARRIED OUT IN ACCORDANCE WITH BS EN 12056-3:2000 AND APPROVED DOCUMENT H.
HARD SURFACES AROUND THE BUILDING SHOULD BE PROVIDED WITH A PROPRIETARY NON SLIP PERMEABLE SURFACE LAID TO MANUFACTURER'S DETAILS AND IN COMPLIANCE WITH BS EN 1338:2003, TO ALLOW ADEQUATE DRAINAGE.
OR BE PROVIDED WITH A NON SLIP SURFACE AND CROSS FALL OF 1:40 TO 1:60 DRAINING AWAY FROM THE BUILDING (FOR A MINIMUM OF 500MM) TO A SUITABLE SOAKAWAY.
PATHS, DRIVEWAYS AND OTHER NARROW AREAS OF PAVING SHOULD BE FREE DRAINING AWAY FROM ANY BUILDINGS TO A PERVIOUS AREA SUCH AS GRASSLANDS OR TO A SUITABLE SOAKAWAY.

UNDERGROUND FOUL DRAINAGE
UNDERGROUND DRAINAGE TO CONSIST OF 100MM DIAMETER UPVC PROPRIETARY PIPEWORK TO GIVE A 1:40 FALL. SURROUND PIPES IN 100MM PEA SHINGLE.
PROVIDE 600MM SUITABLE COVER (900MM UNDER DRIVES). SHALLOW PIPES TO BE COVERED WITH 100MM REINFORCED CONCRETE SLAB OVER COMPRESSIBLE MATERIAL. PROVIDE RODDING ACCESS AT ALL CHANGES OF DIRECTION AND JUNCTIONS. ALL BELOW GROUND DRAINAGE TO COMPLY WITH BS EN 1401-1 (+A1:2023).

ABOVE GROUND DRAINAGE
ALL NEW ABOVE GROUND DRAINAGE AND PLUMBING TO COMPLY WITH BS EN 12056-2 FOR SANITARY PIPEWORK. ALL DRAINAGE TO BE IN ACCORDANCE WITH PART H OF THE BUILDING REGULATIONS. WASTES TO HAVE 75MM DEEP ANTI-VAC BOTTLE TRAPS AND RODDING EYES TO BE PROVIDED AT CHANGES OF DIRECTION.

SIZE OF WASTES PIPES AND MAX LENGTH OF BRANCH CONNECTIONS (IF MAX LENGTH IS EXCEEDED THEN ANTI-VAC TRAPS TO BE USED).
WASH BASIN - 1.7M FOR 32MM PIPE 3M FOR 40MM PIPE.
BATH/SHOWER - 3M FOR 40MM PIPE 4M FOR 50MM PIPE.
WC - 6M FOR