

## 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 Certification of Schemes (Kite Marks) etc. Products conforming to a European technical standard or harmonised European product should have a CE marking.

## EXISTING STRUCTURE

Existing structure including foundations, floor, beams, walls, roof and lintels are to be exposed and checked for adequacy prior to commencement of work and as required by the Building Control Officer.

## BEAMS AND STRUCTURE

Engineer's Structural calculations and details are to be provided for all beams, roof, lintels, joists, bearings, padstones and any other load bearing elements before works commence on site. 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.

## LEAD WORK AND FLASHINGS

All lead flashings, any valleys or soakers to be Code 5 lead and laid according to Lead Development Association. 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. All work to be undertaken in accordance with the Lead Development Association recommendations.

## BACKGROUND VENTILATION

Controllable background ventilation at least 1700mm above floor level to be provided to habitable rooms and kitchens at a rate of min 10,000mm<sup>2</sup>, and to wet rooms at a rate of min 5000mm<sup>2</sup>, Background ventilators to be tested to BS EN 13141-1 Background ventilator equivalent area and operation to be measured and recorded.

## EXTRACT FOR SHOWER ROOM

Provide mechanical extract ventilation to shower room ducted to external air capable of extracting at a rate of not less than 15 litres per second. Vent to be connected to light switch and to have 15 minute over run if no window in the room. Internal doors should be provided with a 10mm gap below the door to aid air circulation. Ventilation provision in accordance with the Domestic Ventilation Compliance Guide. Intermittent extract fans to BS EN 13141-4. 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.

## EXTRACT TO BATHROOM

Bathroom to have mechanical vent ducted to external air to provide min 15 litres / sec extraction. Vent to be connected to light switch and to have 15 minute over run if no window in room. Internal doors should be provided with a 10mm gap below the door to aid air circulation. Ventilation provision in accordance with the Domestic Ventilation Compliance Guide. Intermittent extract fans to BS EN 13141-4. 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.

## EXTRACT TO W/C

W/C to have mechanical ventilation ducted to external air with an extract rating of 15l/s operated via the light switch. Vent to have a 15min overrun if no window in room. Internal doors should be provided with a 10mm gap below the door to aid air circulation. Ventilation provision in accordance with the Domestic Ventilation Compliance Guide. Intermittent extract fans to BS EN 13141-4. 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 1.4 Approved Document F1.

Hinged 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.

Sash windows, external doors or hinged 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 4 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

## PITCHED ROOF VENTILATION

Maintain a 50mm air gap above insulation in the roof pitch to ventilate roof. Provide opening at eaves level at least equal to continuous strip 25mm wide and opening at ridge equal to continuous strip 5mm wide to promote ventilation.

## FLAT ROOF VENTILATION

Cross ventilation to be provided on opposing sides by a proprietary eaves ventilation strip equivalent to 25mm continuous with fly proof screen. Flat roof insulation is to be continuous with the wall insulation but stopped back to allow a continuous 50mm air gap above the insulation for ventilation.

## RAINWATER DRAINAGE

New rainwater goods to be new 110mm upvc half round gutters taken to and connected into 68mm dia upvc downpipes

## ABOVE GROUND DRAINAGE

All new above ground drainage and plumbing to comply with BS EN 12056-2:2000 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 vacuum 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

W/c - 6m for 100mm pipe for single WC

All branch pipes to connect to 110mm soil and vent pipe terminating min 900mm above any openings within 3m.

Or to 110mm upvc soil pipe with accessible internal air admittance valve complying with BS EN 12380, placed at a height so that the outlet is above the trap of the highest fitting.

Waste pipes not to connect within 200mm of the WC connection. Supply hot and cold water to all fittings as appropriate.

## UPGRADE OF EXISTING FLOORS

Ensure first floor achieves modified half-hour fire resistance. New second floor –Joists to be 50mm minimum from chimney breasts. (joist size to structural engineer's details and calculations) Provide min 20mm t and g chipboard or timber board flooring. In areas such as kitchens, utility rooms and bathrooms flooring to be moisture resistant grade in accordance with BS EN 312). Identification marking must be laid upper most to allow easy identification. To upgrade to half hour fire resistance and provide adequate sound insulation lay minimum 150mm Rockwool insulating material or equivalent on chicken wire between joists and extended to eaves. Chicken wire to be fixed to the joists with nails or staples these should penetrate the joists side to a minimum depth of 20mm, in accordance with BRE-Digest 208 1988. Joists spans over 2.5m to be strutted at mid span use 38 x 38mm herringbone strutting or 38mm solid strutting (at least 2/3 of joist depth). Provide lateral restraint where joists run parallel to walls. Floors are to be strapped to walls with 1000mm x 30mm x 5mm galvanised mild steel straps or other approved in compliance with BS EN 845-1 at max 2.0m centres, straps to be taken across minimum 3 no. joists. Straps to be built into walls. Provide 38mm wide x ¾ depth solid noggins between joists at strap positions.

## INTERNAL STUD PARTITIONS

100mm x 50mm softwood treated timbers studs at 400mm cts with 50 x 100mm head and sole plates and solid intermediate horizontal noggins at 1/3 height or 450mm c/cs. Provide min 10kg/m<sup>3</sup> density acoustic soundproof quilt tightly packed (eg. 100mm Rockwool or Isowool mineral fibre sound insulation) in all voids the full depth of the stud. Partitions built off doubled up joists where partitions run parallel or provide noggins where at right angles. Walls faced throughout with 12.5mm plaster board with skim plaster finish. Taped and jointed complete with beads and stops.

## NEW STAIRCASE

Dimensions to be checked and measured on site prior to fabrication of stairs. Timber stairs to comply with BS585 and with Part K of the Building Regulations. Max rise 220mm, min going 220mm. Two risers plus one going should be between 550 and 700mm. Tapered treads to have going in centre of tread at least the same as the going on the straight. Min 50mm going of tapered treads measured at narrow end. Pitch not to exceed 42 degrees. The width and length of every landing should be at least as great as the smallest width of the flight. Doors which swing across a landing at the bottom of a flight should leave a clear space of at least 400mm across the full width of the flight. Min 2.0m headroom measured vertically above pitch line of stairs and landings. However, if there is not enough space to achieve this height the headroom will be satisfactory if the height measured at the centre of the stair width is 1.9 m reducing to 1.8m at one side of the stair. Handrail on staircase to be 900mm above the pitchline, handrail to be at least one side if stairs are less than 1m wide and on both sides if they are wider. Ensure a clear width between handrails of minimum 600mm. Balustrading designed to be unclimbable and should contain no space through which a 100mm sphere could pass. Allow for all structure as designed by a Structural Engineer.

## ELECTRICAL WORKS

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 the Council.

## 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 by laws, Gas safety requirements and IEE regulations.

Client	MR MICHAEL		
Project	24 EBBSFLEET ROAD, London, NW23 NA		
Job Title	LOFT AS BUILT		
Drawing Title	NOTES 1		
Date	December 2022	Drawing No.	INT/2022/12/01/01
Revision:	PRELIMINARY/01		
Date:	04/12/2022		
Suitability			
Ref Archt. Dwg.			
<b>INTELLECT C&amp;C LIMITED</b> 30 MOUNTSIDE STANMORE,HA7 2DP.			
1:50	Scale 1:50		
1m	0	1m	2m
1:100	Scale 1:100		
2m	0	2m	4m

#### MEANS OF ESCAPE - Fire doors

Form a protected escape stairway by providing half hour fire resistance to all partitions as well as floors and ceilings above and below rooms. Stairway to be protected at all levels - from the loft room/rooms then leading directly to an external door at ground level (no inner rooms allowed). All doors on to the stairway must be FD20 rated fire doors to BS 476-22:1987 or the European equivalent BS EN 1634 (fitted with intumescent strips rebated around sides & top of door or frame if required by BCO). Where applicable, any glazing in fire doors to be half hour fire resisting and glazing in the walls forming the escape route enclosure to have 30 minutes fire resistance and be at least 1.1m above the floor level or stair pitch line.

#### MEANS OF ESCAPE - Door upgrade

Form a protected escape stairway by providing half hour fire resistance to all partitions as well as floors and ceilings above and below rooms. Stairway to be protected at all levels - from the loft room/rooms then leading directly to an external door at ground level (no inner rooms allowed). Existing doors on to protected route to be upgraded with proprietary intumescent paint/paper products with relevant BBA certificate applied as manufacturer's details to achieve 20 minutes fire resistance (check suitability of doors as agreed with building control before works commence on site). A copy of the purchase invoice will be required by building control on completion to confirm product used and manufacture to confirm fire resistance achieved. Doors to be fitted with intumescent strips rebated around sides & top of door or frame if required by BCO. Where applicable, any glazing in fire doors to be half hour fire resisting and glazing in the walls forming the escape route enclosure to have 30 minutes fire resistance and be at least 1.1m above the floor level or stair pitch line.

#### MEANS OF ESCAPE - SDs in all rooms and retaining existing doors (LABC guidance note Ref 07/02).

The following 3 conditions should All be met:

Provide smoke detectors at every storey level, at half landing levels adjacent to habitable rooms and in all habitable rooms. An additional heat detector is also required in the kitchen. Smoke detection to be mains operated linked smoke alarm detection system to BS 5446 - 1:2000 mains powered with battery back up.

Provide an egress window at first floor level with an unobstructed openable area that complies with: minimum height of 450mm and minimum width of 450mm. minimum area 0.33m<sup>2</sup>. the bottom of the openable area should be not more than 1100mm above the floor. The window should enable the person to reach a place free from danger from fire.

Provide a protected escape route requiring doors to be min standard of traditional timber panel type at least 32mm thick with steel hinges, not warped and fitting well into its frame with no visible defects particularly in the panels, (hardboard or other lightweight flush doors are not acceptable). Walls throughout stair enclosure and frames around doors must be checked and be free from defects as required by the Building Control Officer Any glazing in doors to be half hour fire resisting and glazing in the walls forming the escape route enclosure to have 30 minutes fire resistance and be at least 1.1m above the floor level or stair pitch line.

#### ROOF LIGHTS

Min U-value of 1.6 W/m<sup>2</sup>K.

Roof-lights to be double glazed with 16mm argon gap and soft low-E glass. Window Energy Rating to be Band C or better. Roof lights to be fitted in accordance with manufacturer's instructions with rafters doubled up to sides and suitable flashings etc.

#### SAFETY GLAZING

All glazing in critical locations to be toughened or laminated safety glass to BS 6206, BS EN 14179 or BS EN ISO 12543-1:2011 and Part K (Part N in Wales) of the current building regulations. i.e. within 1500mm above floor level in doors and side panels within 300mm of door opening and within 800mm above floor level in windows.

#### NEW AND REPLACEMENT WINDOWS

New and replacement windows to be double glazed with 16-20mm argon gap and soft coat low-E glass. Window Energy Rating to be Band B or better and to achieve U-value of 1.4 W/m<sup>2</sup>K. The door and window openings should be limited to 25% of the extension floor area plus the area of any existing openings covered by the extension. Insulated plasterboard to be used in reveals to abut jambs and to be considered within reveal soffits. Fully insulated and continuous cavity closers to be used around reveals. Windows and door frames to be taped to surrounding openings using air sealing tape.

#### GLASS BALUSTRADING

All balcony balustrades to be min 1.1m height. Balustrades to be toughened laminated glass (thickness to suit span) in accordance with Part K (Part N in Wales) of the Building Regulations and designed to resist the horizontal force given in BS 6180. No openings in any balustrading should allow the passage of a 100mm sphere and children should not readily be able to climb the guarding.

#### TRADITIONAL

#### BALUSTRADES

Provide balustrades to balcony min 1100mm in height and capable of resisting at least the horizontal force given in BS 6180. No openings in any balustrading should allow the passage of a 100mm sphere and children should not readily be able to climb the guarding.

#### CONSTRUCTION NOTES

Obtain Council approval before commencing work.

All structural details and calculations to be approved by Building Control prior to work commencing on site.

Do not scale drawings. All description must be reported to the Engineer.

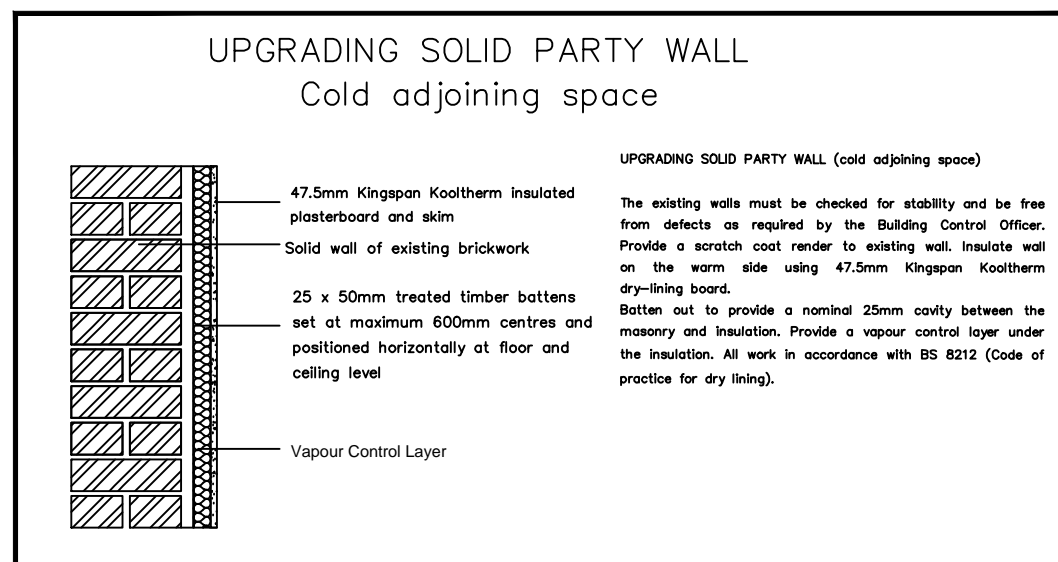
Contractor to be responsible to ensure that all works are carried out in safe and workmanship manner to provide satisfactory temporary propping to maintain the stability of all the structural elements throughout the duration of the proposed works

Should the contractor at any time during the works find that the assumptions made on the drawing are not correct, he must cease that affected operation and notify the Engineer.

The Contractor is responsible for the stability for the adjoining premises throughout the construction.

Setting out information and dimensions should be taken and double checked on site, these drawings are for illustrative purposes and measurements may not be exact.

1. All Steel work to be grade S275.
2. All Concrete to be grade C40
3. All timber to be grade C24
4. Fire casing to steel is to be two layers of 12.5 mm gypsum plaster board with joints taped & staggered. Finish with skim coat of gypsum plaster to achieve 1hour fire resistance.



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Project	24 EBBSFLEET ROAD, London, NW23 NA
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Drawing Title	NOTES
Date	December 2022
Drawing No.	INT/2022/12/01/07
Revision:	PRELIMINARY/01
Date:	04/12/2022
Suitability	
Ref Archt. Dwg.	
<b>INTELLECT C&amp;C LIMITED</b> 30 MOUNTSIDE STANMORE, HA7 2DP.	
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