KEYSTONE LINTOLS
Over new door and window openings fit KEYSTONE STEEL LINTOLS for all new openings sized as plan layout notes.
All fitted to manufactures instructions.
Shown red dotted.

WINDOWS
Supply and fit new UPVC or Timber windows laid out to match plan layouts and elevations. Where marked ESCAPE WINDOW the opening section must have an unobstructed opening area of 0.33m2 with both horizontal & vertical measurements being not less than 450mm, and the max cill height to be not more than 1100mm above FFL. (Even where not marked it is advisable where practical to have an external escape route from all habitable rooms.) All glazing to be double glazed with Low-E, en=0.15 glass (ie Pilkington K Glass or similar and approved.) With minimum 16mm clear air gap to achieve a U Value of 1.5W/m2K. Max
Note:- All panes of glass with any part less than 800mm above FFL. Or within 300mm of any type of doorway. Must have the double glazed units formed with 2 sheets of 6.4mm laminated glass Low-E, en=0.15 (ie Pilkington K Glass or similar and approved.) With minimum 16mm clear air gap Max

All windows to comply part Q building regulation and to meet security requirements of PAS24:2012
Refer to Manual 1

EXTERNAL DOORS
Supply and fit new UPVC or Timber doors laid out to match plan layouts and elevations. All panes of glass within any type of external doors. Must have the double glazed units formed with 2 sheets of 6.4mm laminated glass Low-E, en=0.15 (ie Pilkington K Glass or similar and approved.) With minimum 16mm clear air gap to achieve a O/A U Value of 1.49W/m2K. O/A Front door to be composite 1.2W/m2K Bifold or sliding doors U Value of 1.5W/m2K. All max U values.
Note. Internal Doors. All panes of glass. Must be single sheet of 6.4mm laminated glass. (No glass to be fitted within fire check doors unless specific details are given elsewhere on drawing.

All EXTERNALdoors to comply part Q building regulation and to meet security requirements of PAS24:2012
have a viewer if not clear glass and have door chain or door limiter Refer to Manual 1

ENTRANCE THRESHOLDS
Upstand must not exceed 15mm.

GLAZING TO NEW DOORS AND WINDOWS.
Glazed door panels to be minimum double glazed sealed unit with 2 layers of 6.4mm laminated glass.
All glazing below 800mm above finished floor level to double glazed sealed units with 2 layers of 6.4mm laminated glass.
Any glazing within 300mm of a door to be double glazed sealed units with 2 layers of 6.4mm laminated glass.
All Safety glazing to BS.6206.
All as the building regulations. All other glass to be as standard.

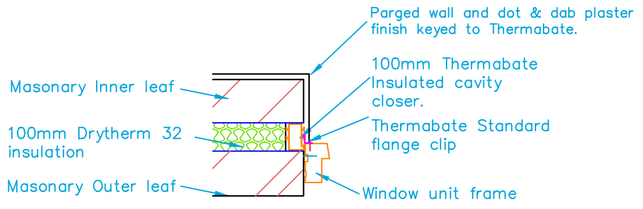
All glazing to comply part Q building regulation and to meet security requirements of PAS24:2012
Refer to Manual 1

INTERNAL DOORWAYS
Door clear opening to be a min of 750mm when appoched head on or from a corridor min 1200mm wide. Or a min of 775 when approched from a corridor 1050mm wide. Or a min of 900 when approched from a corridor 900mm wide.

There should be a 300mm nib to the side ot the leading edge of doors on entrance level of house.

The front door must have a min 800mm clear opening.

FIRE CHECK DOORS	
FD20	Fire check door and frame with intumescent strip. Hinges to be 3 No 102x36x3mm Steel butt hinges.



CAVITY CLOSER DETAIL
SCALE 1:10

EXTERNAL WALLS
Construct 302mm thick external walls outer skin to be 102mm brickwork to 100mm thick Drytherm 32 insulation batts to 100mm inner skin of Fibolite blocks.All to B.S.5628.

Brick and blocks to be laid in 1:1:6 mortar to B.S..5628.

All to be manufacturer instruction.
Giving Min total U value of 0.25 W/m2K.

WALL TIES
All walls constructed with stainless steel vertical twist type retaining wall ties built in at 750mm ctrs horizontally, 450mm vertically and 225mm ctrs at reveals and corners in stagger

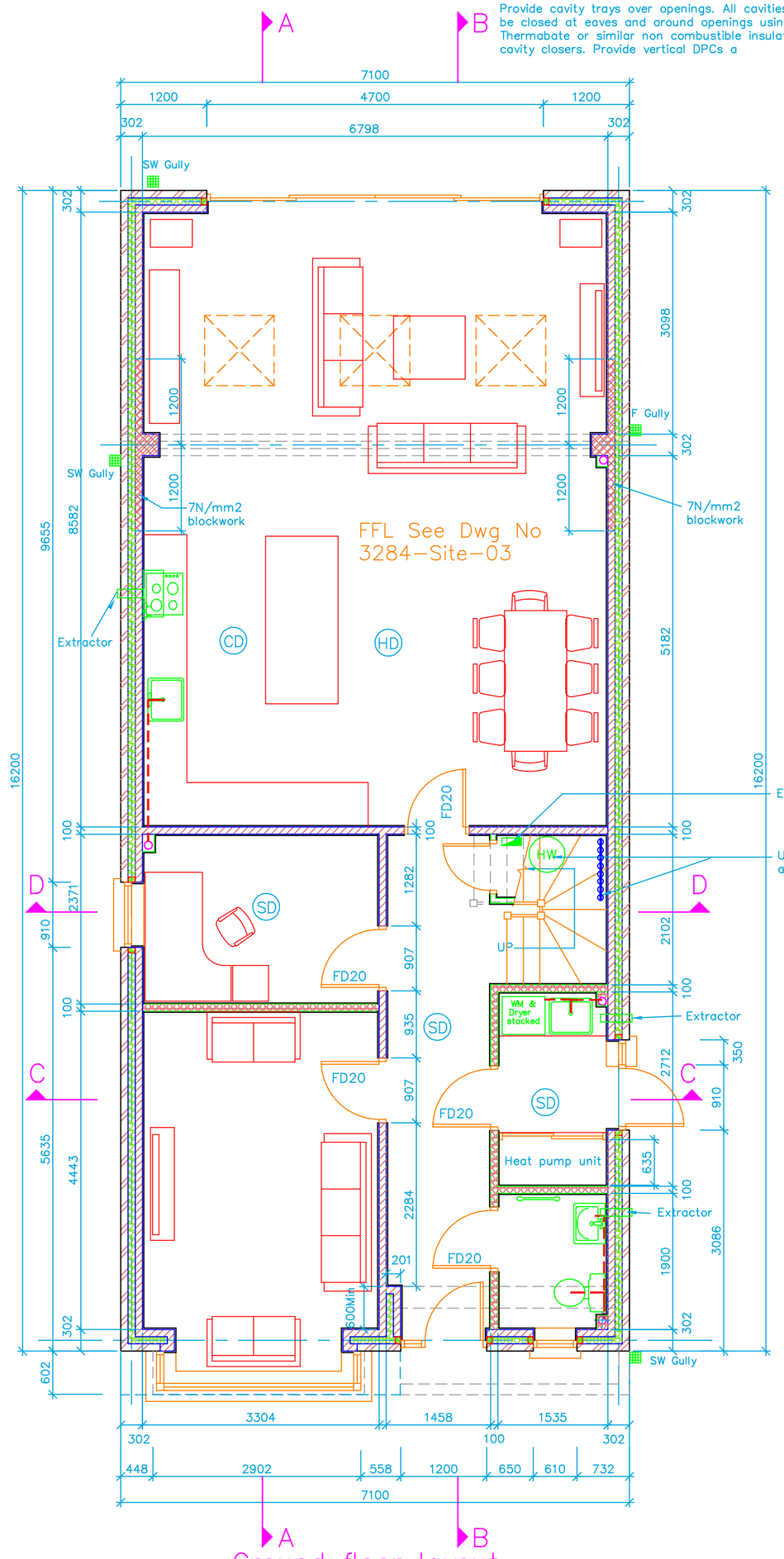
CAVITIES
Provide cavity trays over openings. All cavities to be closed at eaves and around openings using Thermabate or similar non combustible insulated cavity closers. Provide vertical DPCs a

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 3:1) - half the above spacings and 1.5m from corners.
Movement joint widths for clay bricks to be not less than 1.3mm/m i.e. 12m = 16mm 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 PLASTER WORK
All external & seperating masonary walls to have all joints filled, wall to be parged with Gyproc Soundcoat and 12.7mm plasterboard to be fitted with dot & dab. all finished with plaster skimcoat.



Ground floor layout

Heat pump system
by specislist see drawing No

SD	Fit mains powered & battery backup smoke detectors min 300mm away from walls & lights. all to be linked together to operate simultaneously. All to BS 5446.
HD	Fit mains powered & battery backup Heat detectors min 300mm away from walls & lights. all to be linked together to operate simultaneously. All to BS 5446.
CD	Fit mains powered & battery backup Carbon Monozide detectors min 300mm away from walls & lights.all to be linked together to operate simultaneously. All to BS 5446.

BACKGROUND VENTILATION.
Provide the following background ventilation. Formed with a conbination of air bricks and window trickle vents.
Habitable rooms 8000 sq mm
kitchen 5000 sq mm
Utility room 5000 sq mm
Bathroom 5000 sq mm

KITCHEN VENTILATION
Provide and fit cooker hood with capability of extracting 60 ltrs per second. This may be operated by independent switching.

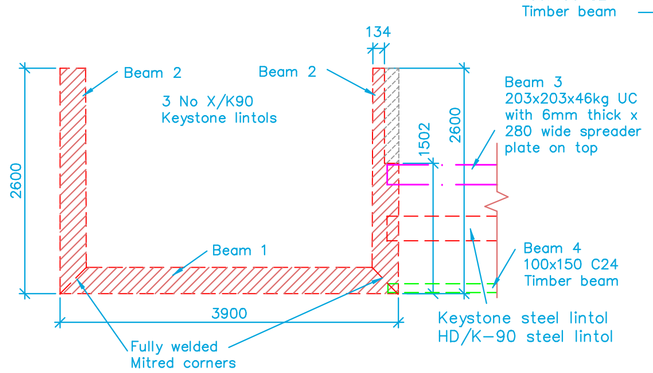
BATHROOM with Shower extract
Provide ant fit mechnical extract of minimum 15 Ltrs/second. Switched from and Humidistat. Wired through a switched spur at high level.
Note
All vents/extractors to be to outside air

AIR PERMEABILITY TEST.

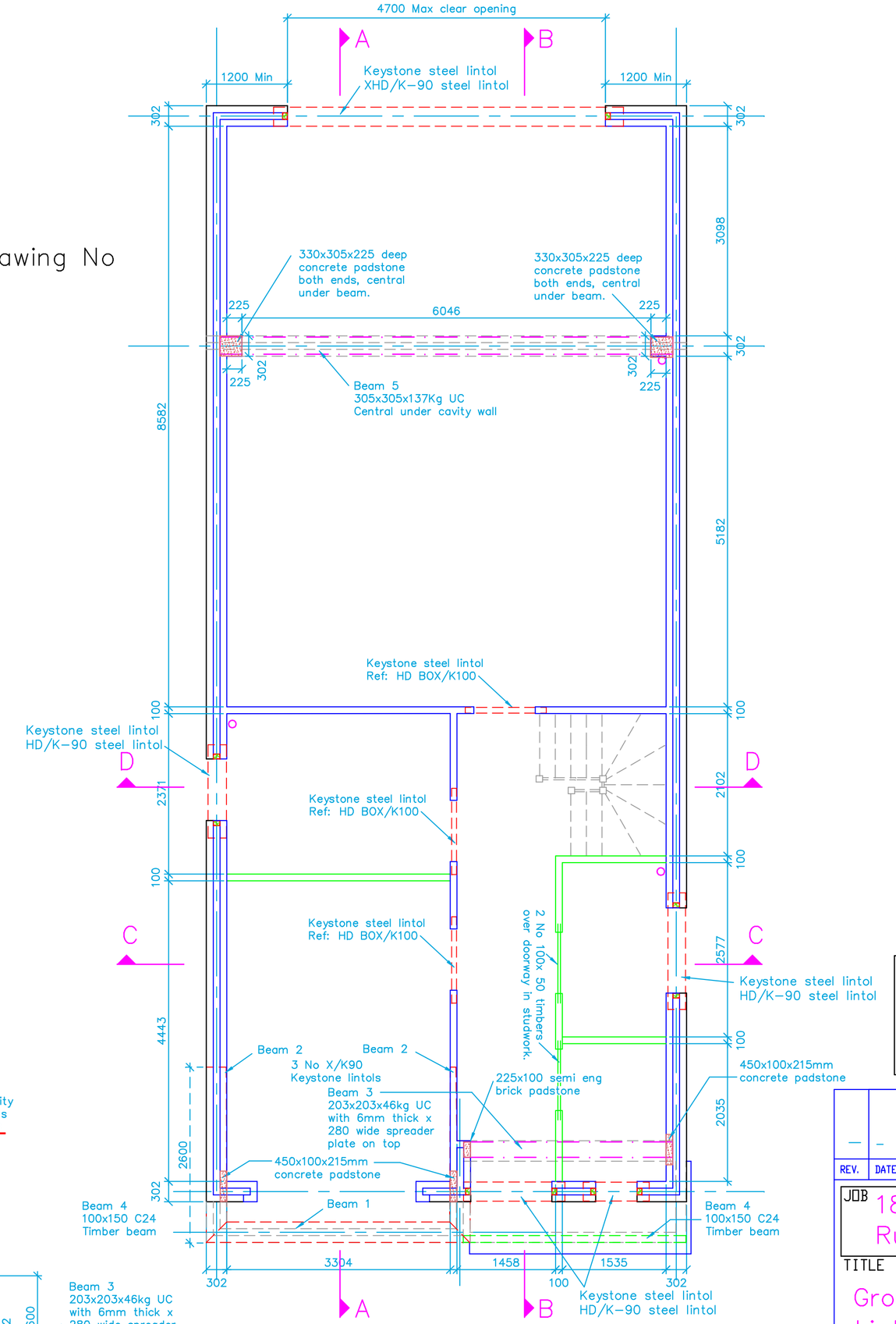
At completion stage, complete an air permeability test by an appoved firm, confirm the test resuls comply with the Saps 2012 design level of 5.00
For all other Criterion on the Part L1A please see saps results design & as built.

WASTES
Provide wastes as follows:-
Sink 38mm dia.
Dish washer 38mm dia
Washing Machine 38mm dia.
Basin 32mm dia.
Bath or Shower 38mm dia.
all with 75mm deep sealed traps
All combined waste to be either 50mm dia or to largest connecting pipe.
W.C.100mm dia
All sections of pipe to be accessable for rodding.

LIGHTING
100% of all internal light fittings to be energy efficient lights
Lamps to have luminous efficiency greater than 40 lumens/circuit watt. Pendent lamps by Lampholder 2000 or similar. All light fittings to be fitted to manufacturers instruction. Recessed light fittings must have protection from overheating with intumecent cover etc to keep insulation away from light fitting.
Recessed lights fittings with floors over must be approved to prevent passage of sound and fire between floors.
All exterior lights to the dwelling to be either controlled by daylight switch and timer or have sockets to enable only the use of lamps of 40/lumens/circuit watt efficiency.



Special Keystone lintol
Manufactured by Keystone lintols



Ground floor Lintols & Beams layout

1. Do not scale from this drawing.
2. All dimensions to be checked on site before ordering materials or commencing work.
3. In case of discrepancies in drawings, calculations or details refer to TOWERS ASSOCIATES. for clarification: Unilateral decisions by contractors will not be accepted.
4. For any information not covered by these drawings refer to TOWERS ASSOCIATES. for clarification: Unilateral decisions by contractors will not be accepted.
5. The contractor must ensure that work is being carried out to the latest revisions of all the working drawings.
6. It is the contractors responsibility to inform the local authority before work commences on site, and at all prescribed stages of work. All to the District Surveyors satisfaction.
7. If work commences on site before full plans approval has been given, TOWERS ASSOCIATES accept no responsibility for any additional work or materials that the District Surveyor may require.
8. This drawing and all copies produced there from remain the copyright and property of TOWERS ASSOCIATES It may only be reproduced by TOWERS ASSOCIATES and all copies must be returned to TOWERS ASSOCIATES if demanded.

By using this drawing the user and his or her employer signify their agreement of the above terms and conditions.

(see Struct Calcs For size check)

STRUCTURAL BEAMS
Provide and fit steel beams sized and positioned as drawing. Steel to be grade 43a mild steel, wire brushed and scare to remove rust & mill scale. Then apply 1 coat (min) zinc rich primer. 1 Further coat bitumastic paint applied.
All joints between beams to be bolted size of bolts and cleats as detailed on drawing.
Note
All structural steelwork is to be given 1/2 hour fire protection by encasing in 12.7mm plasterboard with 5mm plaster skim or 2 layers of 12.7mm plasterboard with joints lapped. Alternatively where the above can not be applied satisfactorily use "Rentokil ALBI Steel" intumescent paint all to manufacturers instructions.

NOTE
All double beams or timbers shown with a double line to be bolted together at a max 600mm centres with M12 Bolts and suitable spacers. Spacers to be of a length to center the beam centrally under each leaf of the cavity wall.

KEYSTONE STEEL LINTOLS
Over new door and window openings fit KEYSTONE STEEL LINTOLS for all new openings sized as plan layout notes.
All fitted to manufactures instructions.
Shown red dotted.

ALL PRODUCTS.
To be BBA approved and fitted strictly to manufacturers instructions. Any discrepance with Towers notes must be reported to Towers before use or if possible before ordering.

Check all dimensions on site before work proceeds.

LABC Warranty Please note.
All materials used and construction work completed on this project is to comply with all curent LABC Technical Manual and all other current codes of practice & legislation. If any items on this drawing are found to contradict with this please notify TOWERS ASSOCIATES immediately.

* Denotes nominal dimension to be checked on site before work proceeds.

0 500mm 2.5M 5M
250mm 1M

REV.	DATE	DESCRIPTION
-	-	-

JOB 188 Bury St.
Ruislip. HA4 7TJ

TITLE
Ground floor and GF Lintols & Beams layout

DRG. No. 3284-11 REV. -

SCALE. 1:50 | © Copyright 2021 | DRN. BY JDS
DATE Dec 21
CHECKED PDN
DATE Dec 21

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