

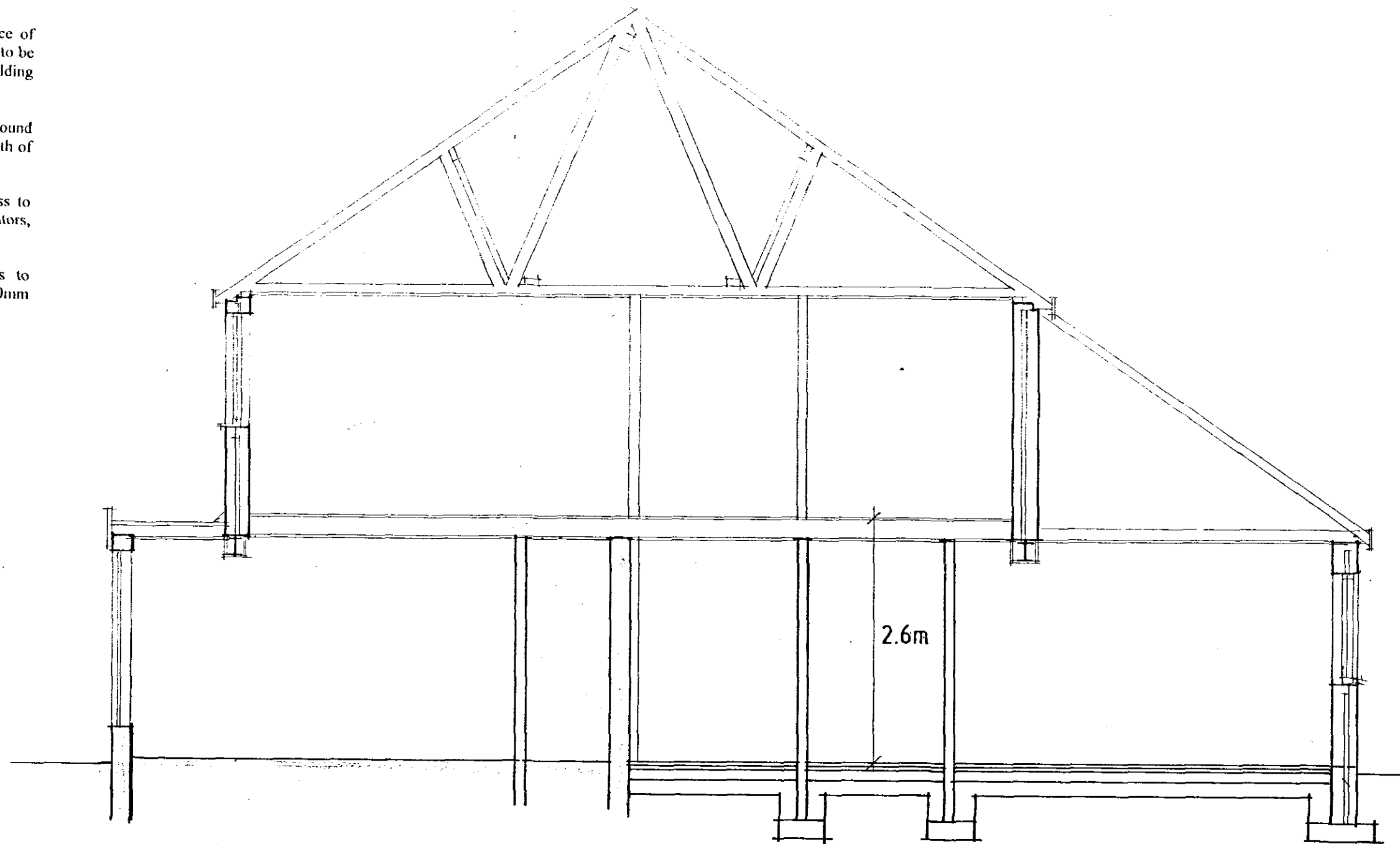
I.G. Type L1/S75 lintels to cavity walls and I.G. type internal lintels to 100mm internal walls unless stated otherwise. To be confirmed on site with Building Control Surveyor.

Provide a firm level approach to front entrance of minimum width 900mm. Gradient of approach to be no steeper than 1:20. At entrance to building threshold to be maximum 15mm high.

External access door that serves as access to ground floor WC to have a minimum clear opening width of 775mm.

Ensure minimum 900mm corridor width, access to ground floor WC with no obstructions (radiators, etc.) to corridor area adjacent doors

Sockets, light switches, TV points, doorbells to habitable rooms to be positioned between 450mm and 1200mm above floor level.



SECTION A-A

Lintels

All coded lintels as stated in Schedule or marked on plan to be by I.G. To be installed in strict accordance with manufacturers instructions. Form d.p.c. cavity tray above all lintels. To all exposed lintels i.e. not sheltered from overhanging eaves, etc. to have proprietary weepholes to joints of brickwork at approximately 450mm c/c. To be confirmed on site with Building Control Surveyor

Opening at eaves level to be L1/E lintels by I.G. or similar approved.

Sub-structure Walling

100 mm Class A dense concrete blocks. Bitumen felt d.p.c. to external walls 150mm above ground level. Weak mix infill to base of cavities to terminate 225mm below lowest d.p.c. level.

Foundations

As indicated on plan provide concrete strip foundations. To cavity walls provide 700mm wide x 225mm thick and to 100mm walls provide 450mm wide x 225mm thick, unless noted otherwise. To non-load bearing internal walls thicken out ground floor oversite concrete to 450mm wide x 200mm thick. Widen foundations at chimney breast accordingly and make 300mm thick. Foundations to be taken down to an approved firm base, subject to local authority specifications. Concrete to be ST3 grade unless noted otherwise. Proximity of existing and proposed trees are to be taken into account in accordance with N.H.B.C. chapter 4 when determining foundation depth.

Sound Insulation to single Dwelling

The intermediate floor should be provided with 100mm thickness mineral wool between the joists. In addition internal stud walls should be suitably sound resisting to walls around bedrooms, WC and en-suites (unless the wall contains a door).

Electrical Work

All electrical work required to meet the requirements of Part P (electrical safety) must be designed, installed, inspected and tested by a person competent to do so. Prior to completion of the works the council must be satisfied that either:-
a) an electrical installation certificate issued under a competent person's scheme has been issued or
b) an appropriate electrical installation certificate has been issued for the work, and that it has been signed by a person competent to do so.

Brickwork below d.p.c. to be F.L. quality

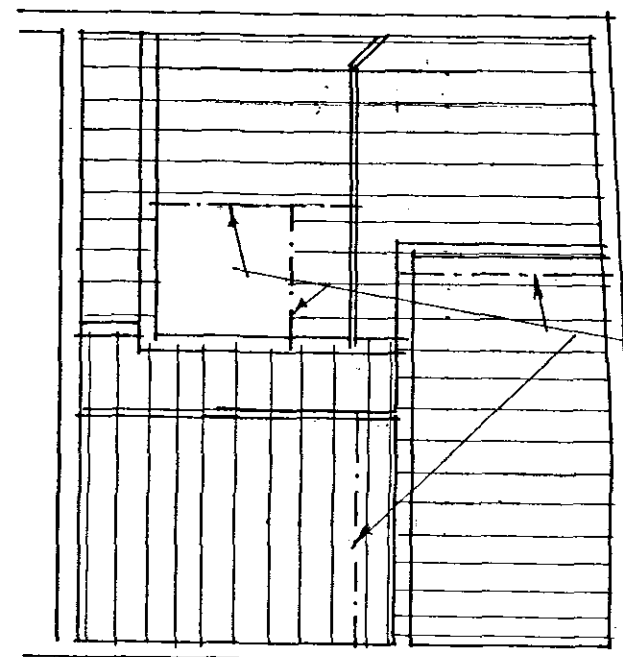
Outlets from balanced flue boilers to be at least 300mm from any openings.

Any bends in flues should not be more than 45°.

All external lintels to be insulated type.

All external joinery to be fully draught proofed.

Loft hatch to be draught sealed and latched shut.



FIRST FLOOR JOIST PLAN

Boiler

Provide balanced flue condensing type gas boiler of required rating in position indicated on drawing to be either a wall hung type or free standing on 125mm high concrete hearth above oversite. Boiler outlet to have protective guard cover and to be a minimum 300mm from any opening into the building which is wholly or partially above the terminal. Read in conjunction with Approved Document J1/2/3. At completion of works commissioning of heating system to be provided to the local authority Building Control by a competent Corgi registered person. Boiler to have a Sedbuk rating of 78%

Roof Construction

Concrete interlocking roof tiles (see site plan for details) on 38 x 25mm softwood treated timber battens on underfelt to BS747 (Type 1F) lapped 150mm horizontally and 100mm vertically. Prefabricated roof trusses at 600mm c/c and pitch as stated in accordance with BS5268, 1985. Provide 25 x 100mm timber bracing and fix in accordance with truss manufacturers instructions. All trusses and gable ladders (if any) to be strapped to 50 x 100mm timber wallplate, the gable wall at verges and ceiling level with 30 x 5mm mild steel anchor and lateral restraint straps to span minimum 3 no. trusses at a maximum of 1200mm c/c. At strap positions provide pack and noggins to trusses. Main contractor to supply local authority building control with roof truss calculations 28 days prior to erection on site. Provide concrete padstones at compound truss supports where required by roof design. Water storage tanks to be installed in accordance with Technical Bulletin No. 41.T.P.A. with timber support members to span 4 no. trusses.

Garage Floor Construction

100mm concrete oversite on 1200 gauge polythene d.p.m. on minimum 150mm, maximum 600mm well blinded and compacted hardcore. If garage is integral to house finished floor level to be 100mm below that of house. Wall d.p.c. to lap floor d.p.m. by a minimum of 50mm.

Ground Floor Construction

65mm sand/cement screed on proprietary 100 mm thick Jablet floor insulation or 60mm Celotex with perimeter insulation to screed on 1200 gauge polythene d.p.m. on 100mm concrete oversite on minimum 150mm, maximum 600mm well blinded and compacted hardcore. Wall d.p.c. to lap floor d.p.m. by a minimum of 50mm.

Provide area within main driveway of hard surfacing (block paving, tarmac or similar) of adequate size to enable wheelchair access from parked vehicle direct to main access of dwelling. Footpath minimum 900mm wide to be directly linked to hard surfacing driveway.

Minimum width of corridors and passageways for a range of doorway widths

Doorway clear opening width (mm)	Corridor/Passageway width (mm)
750 or wider	900 (when approached head-on)
750	1200 (When approached not head-on)
775	1050 (when approached not head-on)
800	900 (when approached at head-on)

All windows to give minimum 1/20th of floor area as ventilation and to be double-glazed.

Glazing

All windows and doors to be double-glazed with minimum 16mm spacing and to use Pilkington 'K' glass or similar approved, efficiency of 0.05.

Commissioning of Heating and HWS Systems

A competent person, i.e. the main contractor or sub-contractor shall supply a Certificate of Satisfactory Compliance with Building Regulations Part L. A copy of which shall be made available to both the client and the Building Control body.

A suitable set of operating and maintenance instructions are to be made available to the client to explain to the householders how to operate the systems so that they can perform efficiently and what routine maintenance is advisable for the purpose of the conservation of fuel and power.

External Lighting Fixed to the Building

External lights include lights in porches but not lights in garages and carports.

External lights should be made to enable effective control and/or the use of efficient lamps as follows:

- Automatically extinguish when there is enough daylight and when not required at night.
- Have sockets that can only be used with lamps having an efficiency greater than 40 lumens per circuit watt.

Insulation in roof space to meet with insulation in external cavity walls to prevent cold bridging.

To all domestic floors to external perimeter walls provide 25mm thick insulation dressed up walls to prevent cold bridging.

Hot water cylinder to be minimum 115lt capacity.

Seal all openings and joints to perimeter walls.

All doors, windows and any loft hatches to be effectively sealed and draught proofed.

Provide a fibrous separating member between floor screed and insulation and provide broken wire between insulation and screed.

First floor habitable rooms shall have means of escape windows with openings of at least 450mm wide x 450mm high and a minimum area of 0.33m². Escape windows to be within 1.1m of floor.

Remove existing detached garaged to make way for extension.

Build on new semi-detached house in the manner shown.

Brick up existing openings in existing house where shown.

Form opening for new window in existing Kitchen/Lounge/Diner where shown, support over with IF Box 200 lintel or similar approved.

Form opening in existing internal wall where shown to create Kitchen/Diner/Lounge, support over with steel beam all to South Lines Consulting Structural Details/Calculations.

Remove existing chimney and make good to all affected areas.

Provide and install dummy chimney in position shown with external finish to match that of house walls.

Existing vents from washing machines in Launderette to be blocked off to suit extension. Provide new duct and openings through proposed garage to provide suitable ventilation to washing machines in Launderette, all in accordance with washing machine manufacturer's recommendations, etc.,

Flat roof over front of Launderette to be lowered to allow for shop sign to be level as shown. Provide for all necessary flashings, etc., to make completely watertight.

Provide steel beams and walls where shown to support new walls above. Refer to South Lines Consulting Details/Calculations, etc.

All steel beams to be encased to give ½ hour fire protection.

Provide all necessary flashing at roof/wall junctions, etc., all to make completely watertight.

Flat roof over Launderette to be removed and replaced with first-floor construction for new bedrooms above.

Provide suitable sound insulation between floors and walls where separated between new semi-detached house and existing house/Launderette, all in accordance with specialist's recommendations and specifications.

Connect foul and surface water drains to main sewer in Holbeach Road, all in accordance with Anglian Water requirements.

Extend existing roof as shown, all to match in with existing.

Roof tiles to match those of existing house.

External walls to be rendered and paired all to match in with existing.

Private Stairs

Stairwell formed by timber trimmers and load bearing walls (see plan). Provide timber balustrading to open side of stairs 900mm above pitch line and 1000mm high to stairwell opening to act as guarding and to be capable of resisting a horizontal force of 0.36 kN/m. Balustrading to be vertical type, not horizontal or ranch style. No parts of stairs to have any gaps greater than 99mm. Provide timber handrail to top of balustrading or independently 900mm above pitch line. Ensure minimum headroom above pitch line is 2000mm. Total rise: See plan. Maximum rise: 220mm. Minimum going: 220mm. Maximum pitch: 42°. Read in conjunction with Approved Document K.

Roof/Wall Abutments

Provide Code 4 lead flashings and lap over roof covering. Dress up wall a minimum of 150mm (stepped on pitched abutments) and provide d.p.c. cavity tray to make completely watertight.

Flat Roof Construction (Warm Deck)

12.7mm white spar chippings bedded on bitumen on 3 no. layers built up felt (first layer asbestos based) on insulated roof deck comprising felt on Celotex Double R RG2080 85mm insulation on 12mm external grade plywood decking on 7mm to 0mm timber firings securely spiked to treated timber joists (size stated on drawing). Provide 30 x 5mm mild steel anchor and lateral restraint straps to joists fixed to walls at maximum 1200mm c/c. Provide suitably sized fascia board. Form all necessary felt drips including tilting fillets and keep felt drips clear of fascia boarding. If flat roof intersects with pitched roof ensure flat roof felt laps under felt of pitched roof by a minimum of 600mm.

Internal Lighting

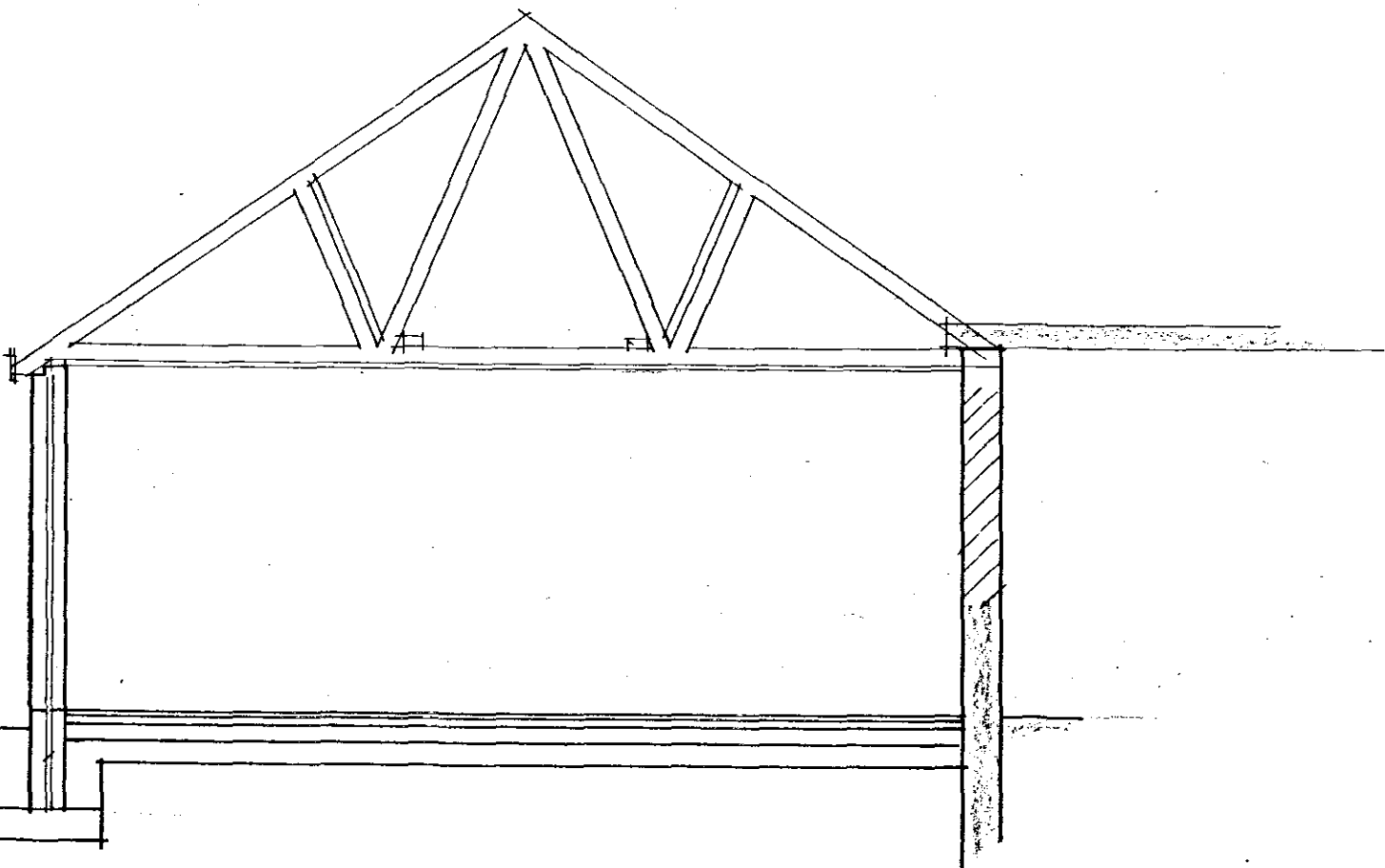
Provide energy efficient lights that only take lamps having a luminous efficiency greater than 40 lumens per circuit watt. Examples of lamps are fluorescent tubes and compact fluorescent lamps (note GLS tungsten lamps with bayonet cap or Edison screw bases).

Method of determining number of locations:

Number of Rooms	Recommended min number of locations
1-3	1
4-6	2
7-9	3
10-12	4

Note - Hall stairs and landing count as one room (but may contain more than one fitting).

Excludes garages, lofts and outhouses.



SECTION B-B

Wall Construction

275mm cavity walls to consist of: 100mm face brickwork (see site plan for details), 75mm cavity to be filled with Crown Drithern full fill insulation in accordance with BBA Certificate No. 86/1678 or similar approved, 190mm internal skin of Celcon standard blocks or similar approved to give 0.35 U-value. Cavity walls ties to be stainless steel type spaced 900mm horizontally and 450mm vertically to BS1243, 1978. Internal blockwork walls to receive 10mm sand/cement render and skim finish. Robust details in accordance with T50, 2001.

Habitable Room Trickle Ventilation

Provide proprietary trickle ventilators to head of windows giving a total opening area of not less than 4000mm²

Kitchen/Utility/Bathroom/WC Trickle Ventilation
Provide proprietary trickle ventilators to head of window giving a total opening area of not less than 4000mm²

Roof Insulation

To roof spaces provide proprietary 300mm thick fibreglass insulation laid as 100mm between joists and 200mm across joists or equivalent to give 0.25 U-value. Ensure a gap of 50mm between roof underfelt and quilt at all times.

Foul Water Drainage

Underground drainage to be proprietary 110mm diameter p.v.c. pipes flexible jointed to fall 1:70 bedded in 100mm pea gravel. Under building drains to be encased in 150mm pea gravel with lintel over pipes at wall abutments. Where drain passes through wall, provide suitable protection to prevent gas ingress to building. 110mm diameter soil and vent pipe to extend 900mm above window head and to terminate in balloon finial. Soil and vent pipe to be fitted with access plate at base. Provide suitably sized wastes from all appliances (in accordance with Approved Document F) complete with minimum 75mm deep sealed traps and rodding eye access points at every direction change. All above ground drainage to BS5582 and all underground drainage to BS8301. Provide seal plates both sides of pipe entry to avoid vermin entry.

Protection to Underground Pipes

Where pipes are not under road and have less than 600mm cover concrete paving slabs should be laid as bridging above the pipes on minimum 75mm pea gravel. If flexible pipes are under a road and have less than 900mm cover reinforced concrete bridging should be used instead of paving slabs. Provide compressible material below slab/concrete.

Inspection Chamber Construction

Proprietary polypropylene inspection chambers bedded on 150mm concrete. Form protective 255mm thick concrete collar around head of inspection chamber with 300mm projection from cover. Covers to be Grade C light duty unless inspection chambers are in driveways where Grade B medium duty covers are to be used.

First Floor Walling

Provide 50 x 75mm timber vertical studs at 400mm c/c to be constructed of 50 x 75mm timber head and sole plates. Provide 12.5mm Gyproc plasterboard of 10kg/m² density and skim finish to both sides. Provide to airspace proprietary acoustic insulation. Timber stud partitions running parallel to joist direction to be built off 2 no. floor joists fixed together. Provide 1 no. joist either end of stud partition joist beam to fix flooring.

First Floor Construction

19mm flooring grade moisture resistant decking on timber joists as stated on plan. To external walls joists to be supported on joist hangers (not built into wall). Provide 30mm x 5mm mild steel restraint straps to joists running parallel with wall securely fixed to walls and to span minimum 3 no. joists at maximum 1200mm c/c. At strap positions provide pack and noggin to joists. Solid strutting to be installed mid-span where span of joists between 2.5m and 4.5m. For spans in excess of 4.5m position of struts at 1/3rd span. Double up floor joists locally under bath feet and hot water cylinder where applicable. All doubled up joists to be bolted together at 600mm centres. Provide 75mm fibreglass insulation between floor joists.

Fascia and Bargeboards

To be 25 x 75mm PSF with 6 mm groove to accept 6mm thick exterior grade plywood soffit.

Ceilings

To all insulated roof ceilings provide 12.5mm Gyproc Duplex plasterboard of 10kg/m² or similar and either 5mm skim or Artex finish. To remaining ceilings provide 12.5mm Gyproc plasterboard or similar with finishes as above.

New/Old Walling

Where new walling meets old provide proprietary flexible wall starters.

Roof Ventilation

At eaves provide proprietary ventilation equivalent to a 10mm continuous gap along eaves.

Valleys

Use proprietary fibreglass valleys or provide Code 4 lead to valleys to make completely watertight.

Kitchen Ventilation

Provide proprietary mechanical extract ventilation unit capable of extracting 60 l/sec. Alternatively provide proprietary cooker hood capable of extracting 30 l/sec.

Bathroom/En-suite Ventilation

Provide proprietary mechanical extract ventilation unit capable of extracting 15 l/sec. System to offer intermittent operation.

Hot Water Storage

Provide system approved by BBA and installed by BBA approved installer. System to be vented and insulated in accordance with BS5615 1985. Provide thermostatic control.

Heating System

Provide room thermostat or thermostatic radiator valves or similar approved to control the output from the heating system.

Insulated Pipes and Ducts

All pipes, which do not contribute to the heating of the building, will be insulated to BS5422 1977.

Safety Glazing

Provide safety glass to BS6206 to all windows to a minimum height of 800mm above floor level plus doors to a minimum height of 1500mm above floor level. Side screens to be same as doors if within 300mm of doors.

Smoke Detection

Provide mains operated self-contained smoke alarms to BS5446 Part 1 in accordance with Approved Document B1.

Rainwater Goods

PVC rainwater goods 110mm half round gutters and 68mm diameter downpipes.

Status
DESIGN
CONSULTANTS IN ARCHITECTURE & PLANNING

PROPOSED EXTENSION TO
FORM SEMI-DETACHED HOUSE
AT 84 HOLBEACH ROAD,
SPALDING FOR

MR. T. S. KREMER
TERMINED
PLAN

SECTIONS

1:50 SQ05-065/6

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