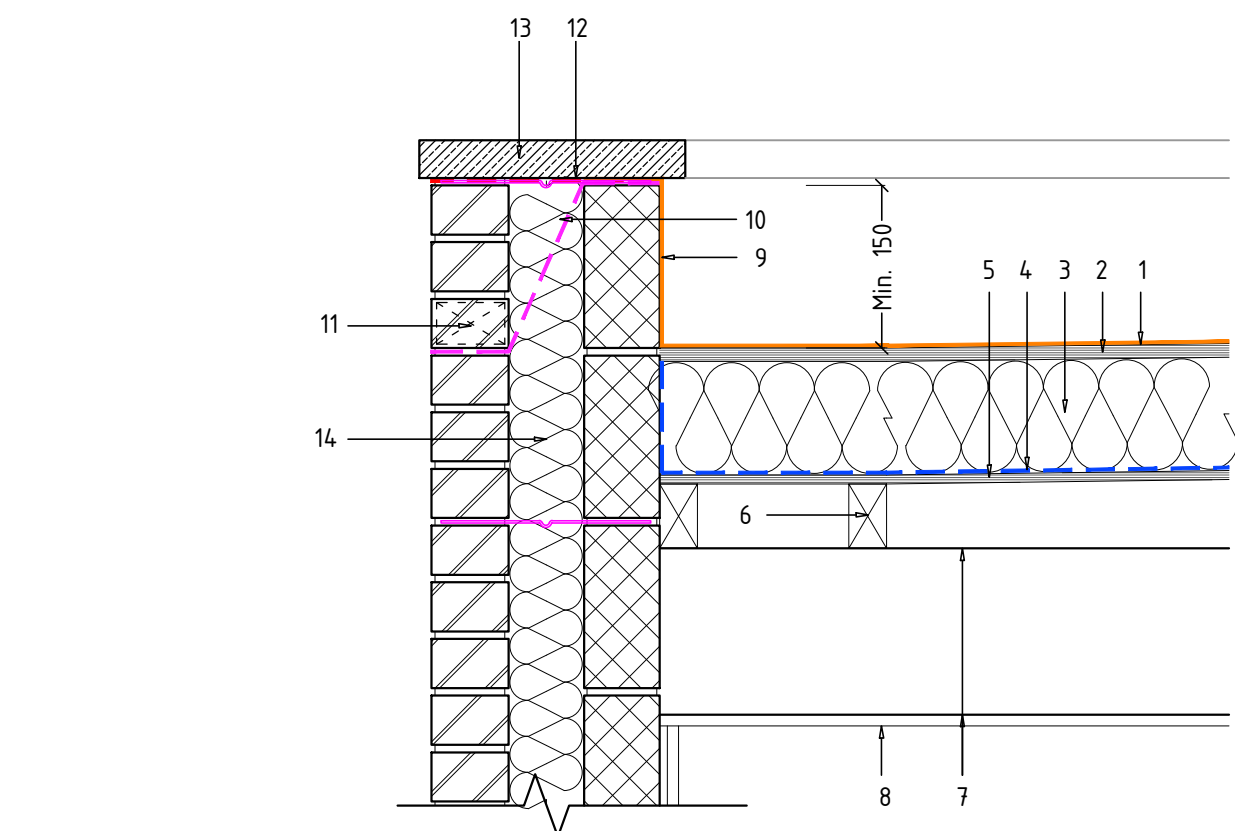
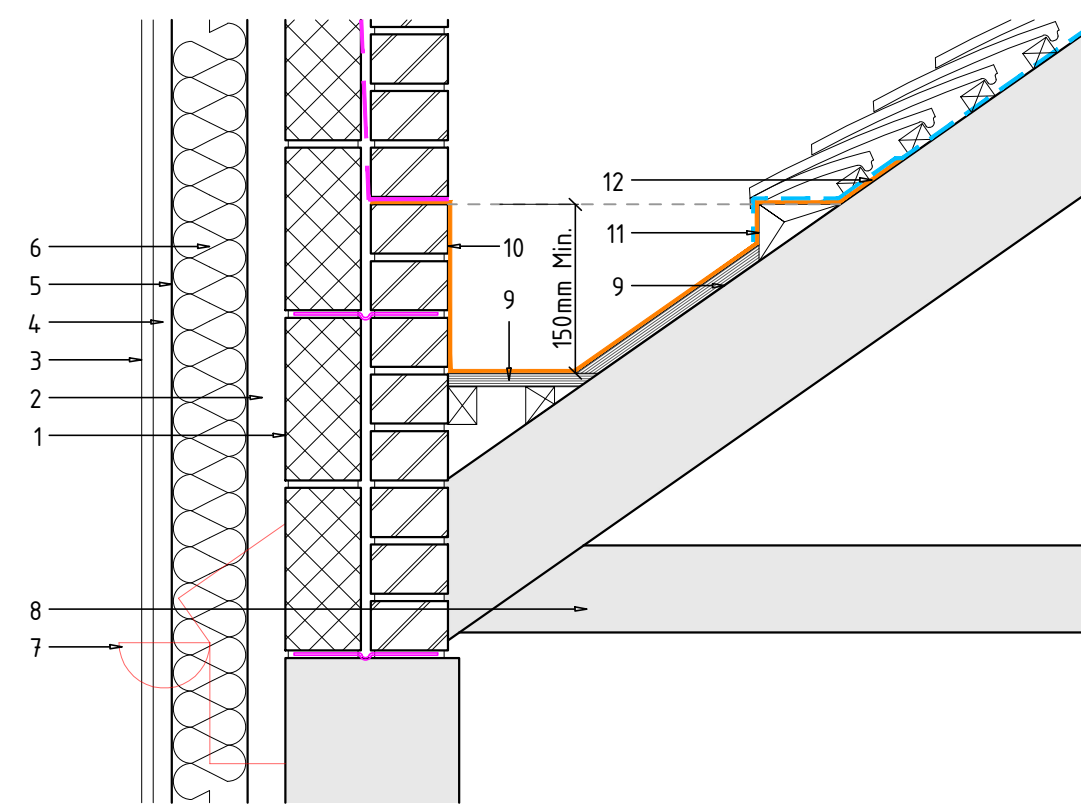




Flat Roof, Parapet + Abutment Construction Detail 1:10

1. Single Ply EPDM or Fibreglass roofing membrane fixed to ply deck in accordance with the manufacturers instructions
2. 12mm WBP Deck fixed to insulation in accordnce with insulation manufacturers instructions
3. 150mm thick PIR Insulation 0.022W/mK Flat roofing insulation fixed to manufacturers recommendations.
4. 1000 gauge polythene vapour control layer installed tightly to internal face of insulation and lapped and taped with in accordance with the manufacturer instructions
5. 18mm WBP Deck fixed to firrings
6. SW treated timber Firring pieces to form 1:80 fall for main roof, 1:60 fall for box gutters
7. Flat roof joists, See Structural Drawings for Structural Sizes
8. Ceilings finished with 12.5mm Gypsum plasterboard with a smooth plaster skim finish
9. Roofing membrane to lap up internal face of wall and below coping at all abutments; roofing upstands / penetrations to be carried out in accordance with the specialist roofing membrane manufacturers details
10. Cavity tray over lintel, to extend min. 150mm past each end of lintel
11. Weep hole vents bottom edge of all cavity trays at 1000mm (max).
12. 2000 Gauge DPC to top of parapet
13. Stone Coping to match existing like-for-like at top of parapet
14. Refer to alternative detail for wall construction

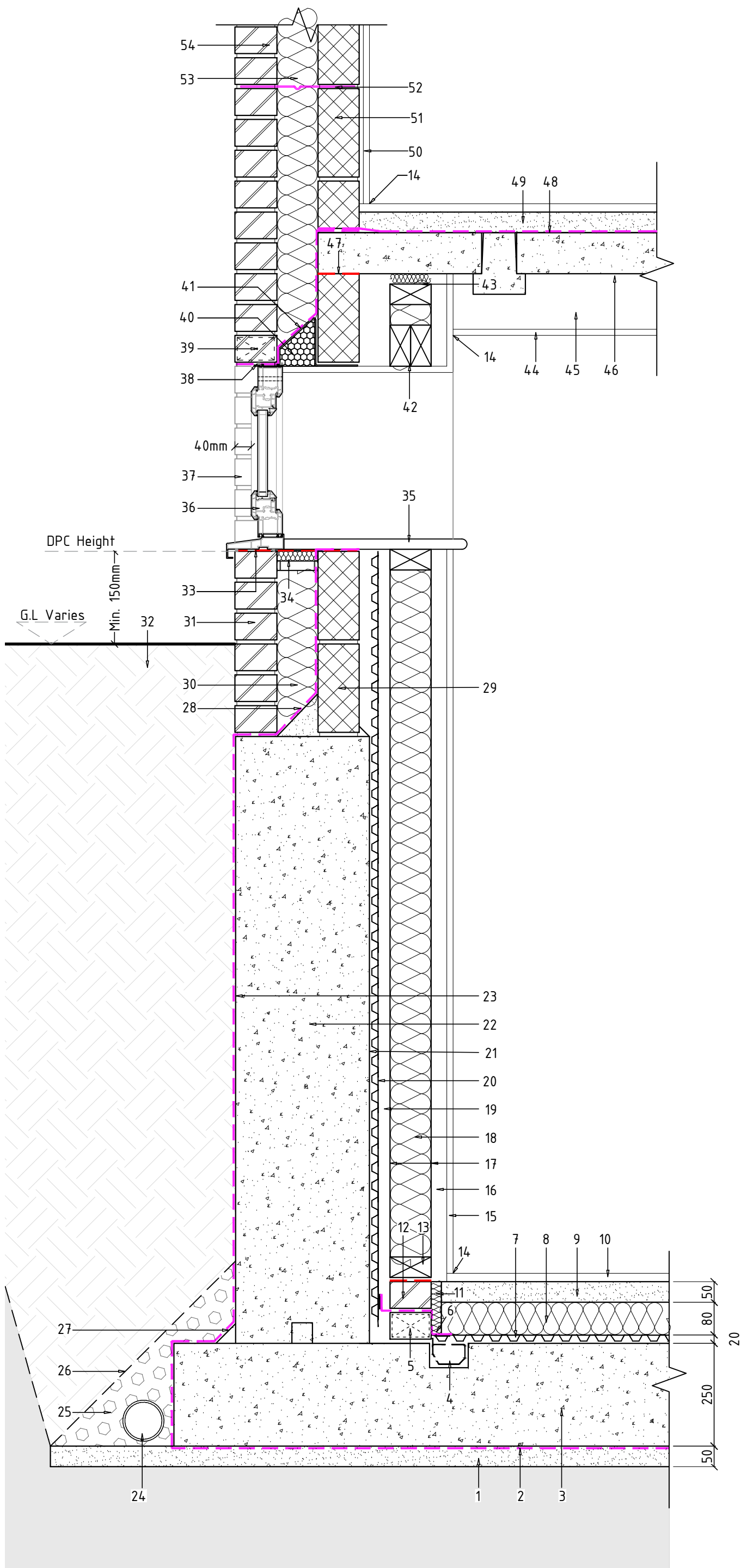


Box Gutter Construction Detail 1:10

1. Existing masonry wall to extend up to form coping
2. 50mm min gap maintained between existing masonry wall and new timber
3. 12.5mm Plasterboard to receive a skim finish
4. Service void - formed using 38 x 50 SW treated vertical timber battens fixed through to studs at same centres
5. 47 X 100 C16 studwork @ 400mm centres
6. 100mm PIR insulation boards between studwork
7. Existing Eaves to be removed and wall to be repaired where necessary - Ensure existing rafters & ceiling joists maintain fixing to wall
8. Existing Roof
9. 18mm WBP Ply
10. Code 5 Lead Box Gutter to be carried out in accordance with the LSA details
11. Tilting Fillet
12. Roofing membrane to lap over lead

Notes :-

1. All Edward Parsley Associates drawings to be read in conjunction with all relevant calculation sheets.
2. Figured dimensions to be taken in preference to scaled dimensions. No scaled dimensions are to be used for setting out or ordering of materials
3. Contractor is responsible for checking all dimensions and site setting out. Any discrepancies to be reported to Edward Parsley Associates before work commences and or materials are ordered.
4. Any works carried out before Building Regulations approval is obtained are carried out at your own risk. Client / contractor is to ensure all necessary statutory approvals (planning permission / planning conditions) are in place before commencing work on site.
5. Drawings to be read in conjunction with approved planning drawings and no work is to commence on site until all planning conditions are approved.
6. Client is responsible for ensuring all steps are taken to comply with the Party Wall Etc Act 1996 when working near / on boundary lines and separating walls.
7. If in doubt please ask.



1. 50mm Lean mix blinding
2. Delta Koster Deuxan 2c membrane
3. 250mm reinforced waterproof concrete slab. See separate drawing for reinforcement details
4. Delta Drainage Channel set into recess in slab - to manufacturer's details
5. Intermittent perpend to be omitted to allow drainage - ensure weep holes are kept clean at all times
6. Delta Corner Strip taken through masonry to link floor and wall membrane. Delta Tape to be used to lap wall cavity drainage to floor drainage
7. Delta MS20 cavity drainage membrane across main floor area
8. 80mm PIR insulation boards
9. 50mm Anhydrite liquid screed incorporating wet underfloor heating system
10. Floor finish to Client's requirements
11. 25mm PIR insulation to perimeter
12. 2no. course engineering brickwork built off slab
13. 47 X 100 C16 timber fixed 2000 guage DPC through to brickwork
14. Seal all perimeters with clear silicone sealant to minimise air leakage
15. 12.5mm Plasterboard to receive a skim finish
16. Service void - formed using 38 x 50 SW treated vertical timber battens fixed through to studs at same centres
17. 47 X 100 C16 studwork @ 400mm centres - Where applicable, timber frame ties fixed to timbers, spaced in a staggered pattern to manufacturer's specification, lies to be bedded a minimum of 50mm into inner leaf.
18. 100mm PIR insulation boards between studwork
19. 30mm clear void retained between cavity drain and studwork
20. Delta MS500 Cavity Drainage Membrane
21. Delta Koster Polysil TG 500 anti-lime coating to internal face of basement wall
22. 300mm wide waterproof reinforced concrete retaining walls. Refer to Foundation drawing for further information
23. Delta Koster Deuxan 2c bitumen waterproofing applied to external face of basement walls to lap up from slab
24. Perforated land drain wrapped in geo-textile membrane to perimeter of slab
25. Free drainage layer of free draining material such as coarse aggregate, clean gravel or crushed stone
26. Geotextile membrane
27. Cement fillet
28. Koster Deuxan 2C to be lapped & carried up internal face of cavity to lap with DPC
29. Dense concrete blocks below DPC level
30. Ensure wall and floor insulation lap
31. FL quality brickwork below DPC
32. Backfill with tightly compacted non-cohesive soil
33. 2000 gauge DPC set 150mm min. above external ground level
34. Proprietary insulated cavity closers to jambs and cills
35. Softwood internal cills
36. Timber Frame double glazed Casement windows to match existing. Where windows do not open, windows to be fixed sashes, not direct glazed. Double glazed units with an argon filled gap of 16mm with low E glass sealed units achieving a U-value of 1.5 W/m2K or less secured to structure with window cramps or plugged and screwed. Seal around all windows Internally with clear mastic sealant to minimize air leakage. All glazing below 800mm generally and 1500mm in or within 300mm of doors to be toughened or laminated type complying with BS 6206 and part N of the building regulations
37. Windows set back from face of external brickwork to match existing
38. External quality sealant to windows
39. Weep hole vents above all windows and to bottom edge of all cavity trays. Weep holes should be provided at 450mm (max) centres with at least two weep holes per opening.
40. Proprietary insulated cavity lintels over windows, 150mm min bearing each side of opening see schedule for details
41. Continuous cavity tray over lintel
42. 2no. 47x100 Timber lintel over window
43. 47x100 C16 timber head plate to be set min. 25mm below Beam / Block above with compressible material to be laid over headplate.
44. 12.5mm plasterboard with skim finish ready for painting to create suspended ceiling. Fixed to metal frame suspended ceiling system by specialist manufacturer.
45. Service void
46. Concrete beam and block flooring to specialist design and manufacture
47. 2000 gauge DPC under beams
48. 1200 gauge polythene membrane laid over beam and block, lapped and sealed to manufacturers instructions, DPM carried up and over cavity tray
49. 50mm Anhydrite liquid screed
50. 12.5mm plasterboard on dabs applied directly to blockwork
51. 100mm blockwork to internal leaf, min. 0.015W/mK
52. Stainless steel wall ties at 450mm centres vertically and 900mm centres horizontally. Spacing increased to 225mm centres vertically at all openings.
53. 100mm full fill cavity wall batts, min. 0.032W/mK
54. Facing brickwork - painted to match existing

Typical Basement / Floor / Wall / Roof Details 1:10

WINDOWS

Windows to supply trickle ventilation to rooms as detailed above. uPVC casement windows to match existing. Where windows do not open, windows to be fixed sashes, not direct glazed. Double glazed units with an argon filled gap with low E glass sealed units achieving a U-value of 1.5 W/m2K or less, secured to structure with window cramps or plugged and screwed. Seal around all windows internally with clear mastic sealant to minimize air leakage, full fixing details to manufacturers specifications.

EXTERNAL DOORS

External doors are to be uPVC to match windows, double glazed with an argon filled gap with low E glass achieving a U-Value of 1.5W/m2K. Doors to be fully insulated and to achieve a U-value of 1.5W/m2K or less in areas of door where not glazed

LINTELS

Proprietary Insulated lintels provided over all openings, see structural drawings for types. End bearings for lintels to be no less than 150mm (each end). The overhang of masonry supported by the lintels should not exceed 25mm. Provide cavity trays over Lintels, 140mm min deep and provide a DPC over the cavity tray extending over end of lintel to form drip externally past window. Weep hole vents above all windows and to bottom edge of all cavity trays. Weep holes should be provided at 450mm (max) centres with at least two weep holes per opening.

STEEL BEAMS

All structural steelwork to be painted with intumescent paint to achieve 1 hour fire resistance

ELECTRICS

All electrical work must be designed, installed, inspected and tested by a person competent to do so, i.e registered with N.I.C / E.I.C or E.C.A. All switches, electrical sockets, TV sockets and telephone points will be set between 450mm and 1200mm above finished floor level. Prior to completion of all electrical works, Building Control must be issued with an appropriate BS 7671 electrical installation certificate for the work carried out.

INTERNAL LIGHTING

100% of all new light fittings are to be energy efficient. Energy light fittings to be dedicated in that they must be capable of only accepting lamps having a luminous efficiency greater than 45 lumens per circuit watt. The fixing must be permanently fixed to the ceiling or wall. A light fitting may contain one or more lamps. Lighting installation to be designed to achieve the following lighting levels at the working plane: Offices 500 lux; Classrooms and play areas 500 lux; Kitchens 500 lux; Toilets 100 lux; Store rooms 100 lux; Circulation areas 100 lux.

SMOKE DETECTORS

Existing fire alarm system to be extended into new extension; break glass system to be designed by specialist in accordance with BS5839. Emergency lighting to be provided to all rooms as shown on floor plans in accordance with BS5266.

COLOUR CONTRASTING FITTINGS

Surface finishes in WC to contrast with fittings and grab bars etc heat emitters located so as not to impede wheelchair maneuvering space. Colour contrast to be provided generally throughout the building i.e door furniture to background, ramps to landings, nosings to steps, handrails to the background, glazing manifestation, door frames to surrounding walls, wall to ceilings, walls to floors, call control buttons to surrounding face plate, face plate to the surface it is mounted, switches to the surface they are mounted. The nosing of the stair is to be apparent and is to visually contrast with the stair tread, the material should be a minimum of 55mm wide on both the tread and the riser.

HEATING AND HOT WATER

Existing heating and hot water systems to be extended into new extension. LST radiators (max 43 degC) to provide heating to all areas as required. Heating system to be designed to achieve the following comfort temperatures: Offices 20 degC; Classrooms and play areas 20 degC; Kitchens 20 degC; Toilets 20 degC; Store rooms 18 degC; Circulation areas 18 degC. All heating pipework (other than that within locked storerooms to which children have no access) is to be boxed in. Heating system to Play Group to be fitted with individual thermostatic valves and controls. All heating pipework to be suitably lagged where running through unheated spaces).

WASTE PLUMBING

All waste fittings to be UPVC with minimum 75mm deep seal traps.

Basin waste to be:
32mm (up to 1.7m max length)

40mm (up to 3m max length)
Sinks, showers and baths to be:
40mm (up to 3m max length)

50mm (up to 4m max length)

Anti-syphonic traps will be installed where waste runs are in excess of above dimensions.

Any combined waste pipes to be at least 50mm diameter Soil and vent pipe to be 100mm fitted with air admittance valves located above highest connection into soil and vent pipe and to be located so are easily accessible. No soil and vent pipes are to be visible from outside the building. Suitable access points to be fitted to waste plumbing. All plumbing to comply with relevant Water Authority Regulations for supply and storage.

COLD WATER

Existing mains cold water system to be extended into new extension. Wholesome water to be supplied to any place where drinking water is drawn off and to any sink where food is prepared. Wholesome water of softened water should also be supplied to washbasins in or adjacent to a room containing a sanitary convenience.

HOT WATER

Existing hot water system to be extended into new extension. Heated wholesome water or heated softened water should be supplied to any wasbasin in or adjacent to a room containing a sanitary convenience and any sink where food is prepared. The hot water temperature should be limited to a maximum 43°C by the use of an in-line bleeding valve (thermostatic mixing valve TMV) or other appropriate temperature control device, with a maximum temperature stop and suitable arrangement of pipework.

DRAINAGE

All pipework and fittings to be UPVC complying with BS 1989 and BS2494:1986. All drainage work to be undertaken strictly in accordance with manufacturers recommendations, CP 301:1971 (Building Drainage) CP 2005 1968 (Sewerage) and BS 5955 part 6, 1980 (Installation of un-plasticised PVC pipe work for gravity drains and sewers). Manholes and inspection chambers shall be as follows by Hepworth Building Products and shall be strictly in accordance with manufacturers recommendations: Manholes shall be 480mm dia. Polypropylene Inspection Chamber (PPIC) laid and bedded on a pea shingle base complying with BS 5955 part 6:1980 where drain is less than 1000mm deep. Manhole Covers to be circular and in accordance with BS 479 and shall be grade C single seal to areas not accessible to vehicular traffic or Grade B class 2 in any other area. Trench widths should be no less than 300mm plus pipe dia and pea shingle bedding, surround and cover to complete with BS 5955 Part 6: 1980 strictly in accordance with manufacturers recommendations. Pipes through walls should be laid through wall protection sleeve and concrete lintel should be incorporated above drain line. Sleeve to be packed to prevent ingress of vermin. Foul drainage to be connected to new treatment plant as shown on the site plan. Clean water to discharge from the treatment plant to finger drain soakaways as detailed on the drainage plan. Surface water to discharge into new soakaway located a min of 5m from any building, size of soakaway to be determined by a percolation test to BRE 365.

AIR LEAKAGE

To minimise air leakage throughout the building all joints at external walls are to be adequately sealed with clear mastic adhesive, i.e around skirting's, wall / ceiling abutments, windows and doors. All insulation vapour control and breather membranes to be installed strictly in accordance with manufacturers with all laps and joints suitably taped and sealed. Any penetrations made are to be adequately sealed in accordance with manufacturers guidelines. Service penetrations such as soil and vent pipes and vent outlets are to be sealed at penetrations with proprietary sealants. Any loft hatches to be provided with suitable draught stripping. Windows and doors to be manufactured to a high standard with draught stripping and sealant as necessary to minimise air leakage.

Preliminary

A	Amendments in accordance with comments from Building Control.	CD	24.7.20
rev	Amendments	by	date

Address
Foakes Memorial Hall, Stortford
Road, Dunmow, Essex, CM6 1DG

Description
Proposed 3 Storey Side Extension
Inc. Basement – Construction
Details & Notes

EPA	Edward Parsley Associates consulting structural engineers		
	WEST END BARN, THE STREET, RAYNE, BRANTREE, ESSEX, CM77 6RY T 01376 349929 e edward.parsley@btconnect.com w www.edwardparsleyassociates.co.uk		
	Drawn Checked Approved	CD CD CD	Date FEB 2020 Scale 1:10 Paper A1-L
	Project 11066	Drawing R-04A	© This drawing is copyright and should not be reproduced in whole or in part without the written permission of Edward Parsley Associates