

Proposed / existing wall over

Proposed concrete lintel

50mm compressible material eg. polystyrene

Concrete foundation

Compacted granular fill min 150mm around pipe for public sewer

Public sewer

distance to be confirmed with sewerage company

Private sewer

50mm distance

Foundation and structural support for a sewer pipe close to structural

- Foundation and structural support abutting over sewer pipes to structural Engineer details, specifications and bearing requirements
- No additional loads to be transmitted to sewer pipes
- New connections to existing sewer network to be constructed in matching materials and via a manhole or a pre-formed junction
- Foundations to be taken down a minimum of 150mm below invert.
- Minimum 300mm space between floor level and crown of pipe.
- Mask-spraying on all sides with rigid sheet material to prevent entry of fill or vermin.

Structural head trimmers

90 degree framing angles

Structural sill trimmers

Provide double trimmers where necessary

NOTE: All roof designs must be checked and calculated by structural engineer

ROOF LIGHTS
Min U-value of 1.4 W/m²K.
Rooflights 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 manufactures instructions with rafters doubled up to sides and suitable flashings etc.

Technical diagram illustrating the installation of a roof light, showing various components and their assembly:

- Sinking felt to BS747
- Provide drainage gutter as required by manufacture
- Support batten
- Flashing / top apron
- Provide double trimmers when necessary
- Thermal collar
- Felt collar
- Painted apron flashing

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OPTIONS -
BCO the required method

The diagram illustrates a vertical stack system with the following components and annotations:

- Sink:**
 - Provide 40mm dia trap with 75mm water seal. Length of pipe to be 3m max for 40mm pipe or 4m max for 50mm pipe.
 - Slope = 18mm/m min.
 - Trap to stack distance: 900 mm.
 - Clearance from wall: Less than 5m.
- Bath/shower:**
 - Provide 40mm dia trap with 50mm water seal. Length of pipe to be 3m max for 40mm pipe 4m max for 50mm pipe.
 - Slope = 18mm/m min.
 - It is acceptable to reduce a bath/shower trap to 38mm where the appliance discharges directly to a gully.
- Toilet:**
 - WC - provide 100mm dia pipe with 50mm water seal. Length of pipe to be 6m max for single WC.
 - Slope = 18mm/m min.
- Stack System:**
 - Slop to terminate at least 900mm higher than any opening within 3m and top of pipe to be fitted with a cage.
 - Bends in branch pipes should be avoided or have as large a radius as possible.
 - Avoid cross-flow into any other branch pipe connected to the stack by providing an offset and swept entries as detailed in ADH diagram 2.
 - Soil and vent pipes should be fixed to the external wall of the building using pipe clips at no more than 1.8m apart and branch pipes by clips no more than 750mm apart.
 - Ensure a gentle bend at the base of stack with as large a radius as possible, at least 200mm at the centre line, under a concrete support.
 - A branch pipe should not discharge into a stack lower than 450mm above the invert level of the drain (3 storeys).

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 4m 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 the highest fitting. Wastes pipes not to connect on to SVP within 200mm of the WC connection. Supply hot and cold water to all fittings as appropriate.

Provide a P.V.C. sheet or layer of concrete binding over the top to prevent topsoil from sinking down into the soakaway

Build soakaways on land lower than, or sloping away from buildings, at a minimum of 5m away from the foundations of a building (BS 8301)

Fill soakaway with inert granular material, e.g. clean hardcore, broken brick, crushed rock gravel, 10mm -150mm in size

Consult BRE 365 digest for calculation of soakaway size and type

Carry out a percolation test to ensure the ground free draining and granular

Minimum installation depth
Garden and landscaped areas: 450mm
Light Vehicular Traffic Installation: 900mm

Drainage pipe

Cylindrical support column

Water Grate

150mm min. sharp sand or peat shingle backfill

Provides a suitable geotextile membrane, wrapped around full surface of grate

Build soakways on land lower than, or sloping away from buildings, at a minimum of 5m away from the foundations of a building (BS 5301)

Consist BIRE 305 depth for calculation of soakaway size and type
Carry out a percolation test to ensure the ground is free of drains and granular

Compacted granular



Arkiplan

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Site	20 Town Drove, Quadrang, Spalding PE114PU	Date	15.05.2023	
		Sheet	23-0800 D10 REV 0	
		Job	New Extension	
		Scale	Not To Scale	
Title Number	LL358263	Title	Section Detail Drawings 1:10	