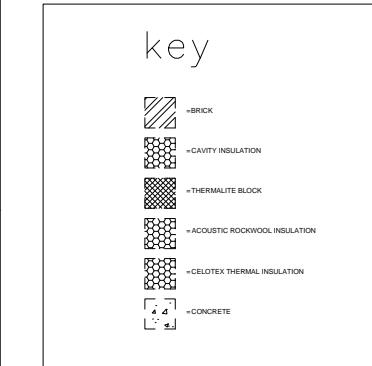


REFER TO STRUCTURAL SE DETAILS FOR ALL TIMBER AND STEEL SIZES AND SPACINGS



★ = 30min Fire Door with 3 hinges & 25x32mm stops + Self Closers
 - FD30 Doorsets to be applied to Ground & First

STAIR NOTE : Maintain 2M headroom vertically from nosing (1.9M on landings) and 1.5M at right angles to pitch line. Handrail between 900mm vertically above pitch line. Maximum clear spacings between upright rails is to be 100mm. Minimum going to tapered treads is to be not less than 50mm.

Soakaway Calculations

A) CRATE SYSTEM

Where ground has good soakage (such as sand/gravel) then the size/volume of a crate type soakaway can be calculated as follows:
 Volume = Roof area being drained x (50mm rainfall rate per hr/3000).
 For example, a 50m² roof area would require a crate soakaway of
 $50\text{m}^2 \times (50/3000) = 0.84\text{m}^3$

B) RUBBLE FILLED

These soakaways are normally filled with clean brick/block/concrete pieces no larger than 150mm. It can be assumed that the voids left between the rubble equates to about 30%.

To calculate the size/volume of a rubble filled soakaway, the same calculation can be used but the result divided by 0.3.

For example, 50m² roof area requires a rubble filled soakaway of $(50\text{m}^2 \times (50/3000))/0.3 = 2.8\text{m}^3$

POSITIONS

All soakaways must be sited at least 5m from any building or road and preferably at least 2.5m from any boundary.

For larger areas to be drained or where ground soakage is not good, a soakage test and more detailed calculations should be carried out and further guidance can be found in Approved Document H and BRE Digest 365

My calculations are:

New roof area 126m².

A) Crate System
 $126\text{m}^2 \times (50/3000) = 2.1\text{m}^3$

B) Rubble Filled
 $(126\text{m}^2 \times (50/3000))/0.3 = 7\text{m}^3$

Please note the position, and get the builder to double check with building control these calculations are correct.



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NEW BUILD HOUSE INCLUDING
 EXTENSIONS AND ALTERATIONS TO THE EXISTING
 DWELLING AT
 23 VICTORIA AVENUE, HILLINGDON, UB10 9AH

PROPOSED GROUND FLOOR DRAINAGE PLAN

Scale: 1:50 @ A3 DEC 2022 Dwg. 20/026_FP00

