

SURFACE DRAINAGE

PROVIDE & FIX 100 mm HR EAVES GUTTERS WITH APPROPRIATE STOP ENDS & OUTLETS TO FACIAS WITH APPROVED BRACKETS.
PROVIDE & FIX DOWN PIPES OR CONNECT TO EXISTING RAIN WATER PIPES AT POSITIONS SHOWN ON DRAWING. CONNECT TO B.I.GULLIES. RUN TO EXISTING DISPOSAL POINT OR TO NEW SOAKAWAY.

MAX ROOF AREA	GUTTER SIZE	OUTLET SIZE	FLOW CAPACITY
6 Metres ²	Not Required	Not Required	
18 Metres ²	75 mm Dia.	50 mm Dia	0.38 Litres per Second
37 Metres ²	100 mm Dia.	63 mm Dia	0.78 Litres per Second
53 Metres ²	115 mm Dia.	63 mm Dia	1.11 Litres per Second
65 Metres ²	125 mm Dia.	75 mm Dia	1.37 Litres per Second
103 Metres ²	150 mm Dia.	89 mm Dia	2.16 Litres per Second

FLAT ROOF	PLAN AREA
PITCHED ROOF 30 DEGREES	PLAN OF AREA x 1.29
PITCHED ROOF 45 DEGREES	PLAN OF AREA x 1.5
PITCHED ROOF 60 DEGREES	PLAN OF AREA x 1.87
PITCHED ROOF 70 DEGREES	ELEVATIONAL AREA x 0.5

UNDERGROUND STORM WATER DRAINAGE

DEPTH OF PIPES

REFER TO SECTION 2.27 – 2.28 (H1) BUILDING REGULATIONS.

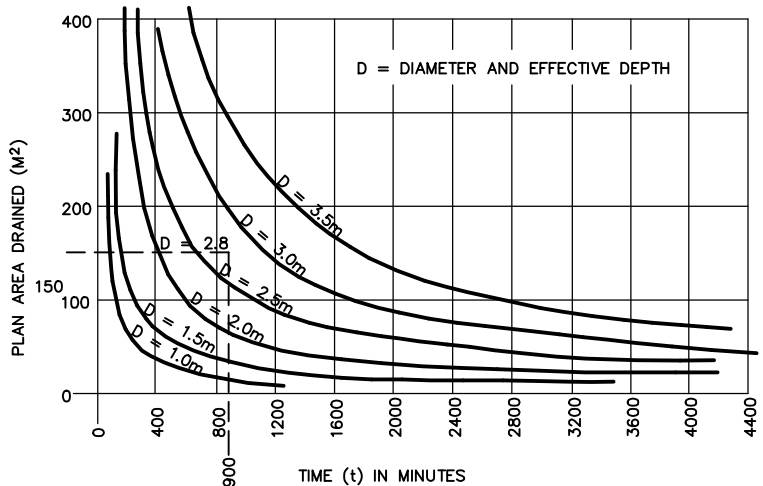
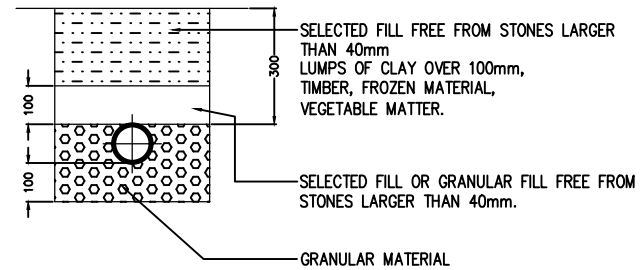
PIPE GRADIENTS & SIZE

100 mm DIAMETER RAINWATER DRAIN LAID TO 1:00.

MATERIALS

USE UPVC RAINWATER DRAINAGE PIPES or PIPES OF ANY MATERIAL SHOWN IN TABLE 7 (H1) BUILDING REGULATIONS.
JOINTS SHOULD BE APPROPRIATE TO THE MATERIAL OF THE PIPES.

BEDDING & BACKFILLING for FLEXIBLE PIPES



REFER TO NHBC STANDARDS CHAPTER 5.3

NOTE: STORM WATER DISPOSAL TO BE AGREED WITH THE
LOCAL BUILDING CONTROL SURVEYOR

EXISTING SOAKAWAY

IF AN EXISTING SURFACE WATER SOAKAWAY IS TO BE REUSED IT WILL NEED TO BE EXPOSED TO CHECK FOR ADEQUACY AND THAT IT IS STILL IN A USABLE CONDITION.

NEW SOAKAWAY

NEW SOAKAWAYS TO BE A MIN 5000mm FROM ANY BUILDING OR ROAD TO BE BLOCK LINED WITH OPEN PERPENDICULAR JOINTS & HAVE A CONCRETE COVER. MIN VOLUME ONE METRE CUBED.

PERCOLATION TEST

A PERCOLATION TEST TO BE CARRIED OUT BY THE CONTRACTOR TO DETERMINE THE CAPACITY OF THE SOIL.

TEST PROCEDURE

A TRIAL HOLE IN A SIMILAR LOCATION & TO THE SAME DEPTH AS THE PROPOSED SOAKAWAY WILL GIVE A MEASURED RATE OF PERCOLATION.

1. BORE A HOLE 150mm DIAMETER TO A DEPTH OF 1000mm.
2. FILL WITH WATER TO A DEPTH OF 300mm ABOVE THE BOTTOM
3. OBSERVE THE TIME TAKEN IN MINUTES FOR THE WATER TO SOAK AWAY
4. IF POSSIBLE REPEAT THE TEST AND USE AN AVERAGE TIME.
5. A SECOND GROUP OF TESTS SHOULD BE CARRIED OUT AFTER THE HOLE HAS BEEN BORED OUT TO A DEPTH OF 2000mm, STILL USING 300mm OF WATER ABOVE THE BOTTOM OF THE HOLE.
6. IF THE SOIL APPEARS TO BECOME MORE PERMEABLE WITH DEPTH, IT MAY BE USEFUL TO DEEPEN& RETEST THE BORE IN ONE METRE STAGES.

DESIGN OF SOAKAWAY

THE RELATIONSHIP BETWEEN THE DIAMETER OR EFFECTIVE DEPTH REQUIRED FOR A SOAKAWAY TO SUIT A GIVEN AREA OF ROOF AND/OR PAVED AREA, AND THE AVERAGE TIME (t) GIVEN BY THE TEST OUTLINED ABOVE IS SHOWN ON THE GRAPH BELOW. THE DIAMETER AND EFFECTIVE DEPTH BELOW INVERT LEVEL ARE ASSUMED TO BE THE SAME DIMENSION (D).

DESIGN EXAMPLE

TEST TIME (t) = 900 MINUTES
PLAN AREA TO DRAIN = 150m²
THEREFORE USING THE GRAPH, THE DIAMETER AND EFFECTIVE DEPTH OF THE SOAKAWAY (D) ARE BOTH 2.8m

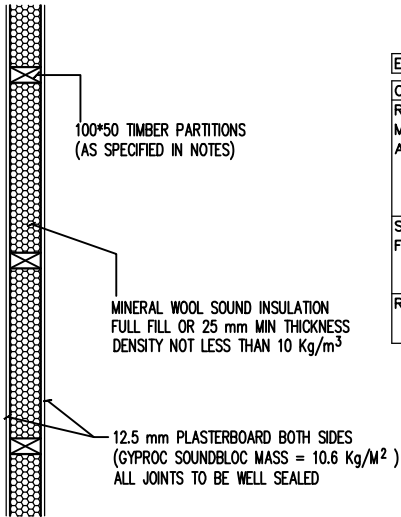
SOUND INSULATION

PROVIDE ADEQUATE SOUND RESISTANCE TO THE FOLLOWING NEW ELEMENTS

- a) ALL INTERNAL FLOORS
- b) ALL INTERNAL WALLS SEPARATING A ROOM FROM A WC (UNLESS EN-SUITE OR CONTAINING A DOOR)
- c) ALL INTERNAL WALLS SEPARATING A BEDROOM FROM ANOTHER ROOM (UNLESS CONTAINING A DOOR)

IT IS RECOMMENDED THAT DOOR SETS ARE USED AT DOOR OPENINGS WITH A GOOD PERIMETER SEALING

WALL TYPE B
TIMBER OR METAL
LININGS TO BE PROVIDED ON EACH SIDE OF THE FRAME
EACH LINING TO CONSIST OF A SINGLE LAYER OF PLASTERBOARD WHICH HAS A MASS PER UNIT AREA OF 10 Kg/m ² OR MORE
FINISHED WITH A COAT OF PLASTER. CLASS 3 (NATIONAL CLASS) OR CLASS D-S3,d2 (EUROPEAN CLASS)
ALL JOINTS TO BE WELL SEALED
A MIN OF 75 mm IF FIXED TO A TIMBER FRAME
A MIN OF 45 mm IF FIXED TO A METAL FRAME
UNFACED WOOL BATTS OR QUILT WITH: THICKNESS OF 25 mm OR MORE; AND DENSITY OF 10 Kg/m ³ OR MORE
SUSPENDED IN THE CAVITY
THE ABSORBENT LAYER MAY BE WIRE REINFORCED



ELEMENT	WALL TYPE C
CORE STRUCTURE REQUIRED MASS PER UNIT AREA	CONCRETE BLOCK WALL A MASS PER UNIT AREA, EXCLUDING FINISH OF 120 Kg/m ² OR MORE
SURFACE FINISH	A COAT OF PLASTER BOTH SIDES CLASS 3 (NATIONAL CLASS) OR CLASS D-S3,d2 (EUROPEAN CLASS)
RESTRICTIONS	NO SPECIFIC RESTRICTIONS

TYPICAL SECTION THROUGH
WALL TYPE B
(Scale 1 : 25)

FIRE DETECTION & ALARM SYSTEMS

PROVIDE & INSTALL A FIRE DETECTION & FIRE ALARM SYSTEM IN ACCORDANCE WITH THE RELEVANT RECOMMENDATIONS OF BS 5839-6:2004 TO AT LEAST GRADE D CATEGORY LD3 STANDARD

LARGE HOUSES TO BE FITTED WITH A FIRE DETECTION & FIRE ALARM SYSTEM OF GRADE B CATEGORY LD3 AS DESCRIBED IN BS 5839-6:2013

THE SMOKE & HEAT ALARMS SHOULD BE MAINS OPERATED & CONFORM TO BS5446-1:2000 OR BS5446-2:2003 RESPECTIVELY
THEY SHOULD BE FITTED WITH A STANDBY POWER SUPPLY SUCH AS A BATTERY (RECHARGEABLE OR NON RECHARGEABLE) OR A CAPACITOR
THE ELECTRICAL INSTALLATION SHOULD COMPLY WITH APPROVED DOCUMENT P (ELECTRICAL SAFETY)

IT IS ESSENTIAL THAT FIRE DETECTION & FIRE ALARM SYSTEMS ARE PROPERLY DESIGNED, INSTALLED & MAINTAINED. WHERE A FIRE ALARM IS INSTALLED AN INSTALLATION & TEST/COMMISSIONING CERTIFICATE SHOULD BE SUBMITTED AT COMPLETION.

ALARM LOCATIONS

TO BE PROVIDED WITHIN THE CIRCULATION SPACES ON ALL LEVELS OF THE BUILDING.

TO BE LOCATED WITHIN 7.5 METRES OF ANY DOOR TO A HABITABLE ROOM MEASURED HORIZONTALLY.

AT LEAST 300 mm FROM ANY WALL OR LIGHT FITTING IF FIXED TO CEILING.
150 – 300 mm BELOW CEILING IF DESIGNED TO BE WALL MOUNTED.

(S) INTER-LINKED OPTICAL SMOKE DETECTORS (INDICATED ON PLANS)

(HD) HEAT DETECTOR (INDICATED ON PLANS)

WHERE THE KITCHEN AREA IS NOT SEPERATED FROM A STAIRWAY OR CIRCULATION SPACE BY A DOOR

IT IS RECOMMENDED THAT IF AN EXISTING SMOKE DETECTION SYSTEM IS IN USE. IT SHOULD BE EXAMINED & UPGRADED TO THE SPECIFICATION.
IE MAINS OPERATED AND INTERLINKED.

SUPPORTING STEELWORK

BEFORE FABRICATION OF ANY STEELWORK ALL DIMENSIONS MUST BE CHECKED ON SITE.

WALLS ABOVE SUPPORTED BY STEELWORK MUST SIT CORRECTLY ON THE GIVEN SECTION CALCULATED.

STEEL SECTIONS ARE TO BE SET IN PLACE ON SUFFICIENT SIZE PADSTONES, MILD STEEL PLTS. OR COLUMNS

ALL STEELWORK TO BE GIVEN A COAT OF RED OXIDE PRIMER. FOR EXTRA PROTECTION AGAINST RISING DAMP, CONDENSATION AND MOISTURE APPLY ONE COAT METALISTIC BLACK

BITUMINOUS PAINT SHOULD BE APPLIED.

ALL STRUCTURAL STEELWORK TO BE FIRE RESISTANT FOR UP TO ONE HOUR TO BE ACHIEVED BY

a) BE ENCASED IN 20mm 'VERMILUX' OR SIMILAR

b) BE ENCASED IN TWO LAYERS OF 12.5mm PLASTERBOARD

c) BRUSH ON PROTECTIVE COATING 'COPON' PYROTECH SPX 60

CALCULATION SHEETS ATTACHED.

ALL DETAILING OF STRUCTURAL STEELWORK & CONNECTIONS TO BE UNDERTAKEN BY CONSTRUCTIONAL ENGINEERING COMPANY SUPPLYING THE STEELWORK.

TO BE ORGANISED BY THE PROJECT MANAGER/BUILDER

COLUMN BASE PLATES AS PER CALCS. USE M20 RESIN ANCHORS TO FIX INTO FOUNDATIONS. COLUMNS FIXED TO WALLS WITH M16 RESIN ANCHORS AT 500mm CENTRES.

BEARINGS ARE BASED ON THE DESIGN STRENGTH OF MASONRY OF 0.36 N/mm²

EXISTING WALLS ARE TO BE EXPOSED AT NEW BEARING POSITIONS FOR INSPECTION BY THE L/AUTHORITY BUILDING CONTROL INSPECTOR TO DETERMINE THE STRENGTH OF THE EXISTING WALL AND IF NECESSARY REQUEST A RE-CALCULATION.

Rev Date Description

This drawing is intended for Planning & Building Regulation applications only & is not a detailed working drawing.
Building works not to commence until the necessary Planning & Building control approvals have been granted.
Contractors, subcontractors & suppliers are to check all relevant dimensions, site & building levels before commencing any shop drawings, fabrications, or building works.
Any discrepancies found in dimensions or levels to be reported to MARTECH Ltd thus enabling further checks to be carried out.
Methods of construction & materials used are the responsibility of the building contractor assigned to the project.

All new works to be carried out in accordance with
Building Regs 2010 and all current codes of practice
(Drawings subject to revision until fully approved by building control)

A3 SHEET

Measurements shown are in millimeters

PAPER SIZE A3 - SCALE 1:100

0.00 m 1.00 m 2.00 m 3.00 m 4.00 m 5.00 m

PAPER SIZE A3 - SCALE 1:50

0.00 m 1.00 m 2.00 m 3.00 m 4.00 m

A3 SHEET

Drawing Title

PROPOSED
NOTES & DETAILS

Client

Mr & Mrs M Holebrook

Home Address

36 Nichol Road
Chandlers Ford
Eastleigh
Hants SO53 5AS

Site Address

36 Nichol Road
Chandlers Ford
Eastleigh
Hants SO53 5AS

Scale

As Shown

Date

May 2023

Project Number

2223-109

Drawing Number

12

Rev

0

MARTECH
BUILDING DESIGN Ltd
& CAD Draughting Services

Terry Marston
Project Designer

Mobile: 07775 982 104
Email: martech@talktalk.net