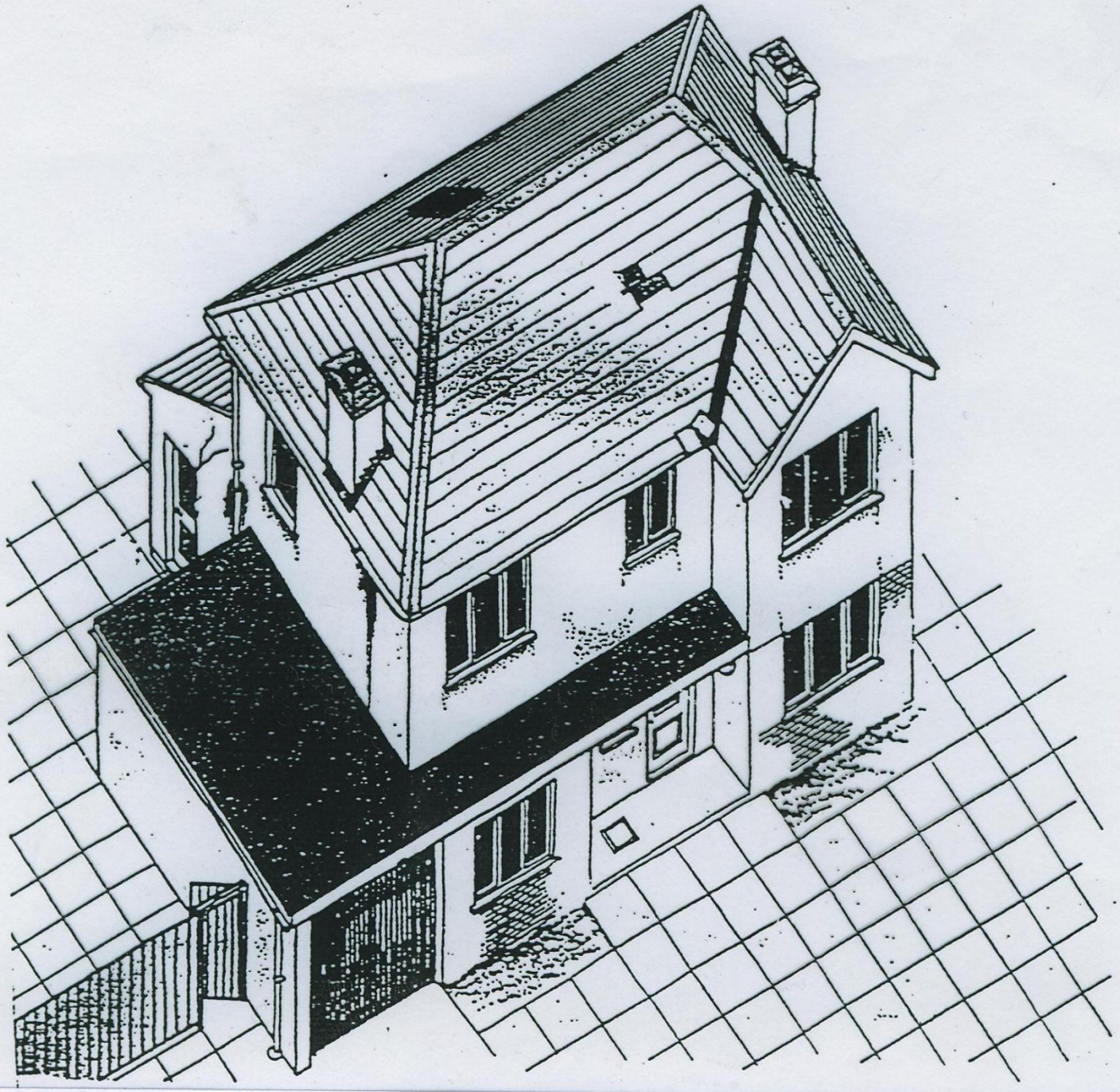
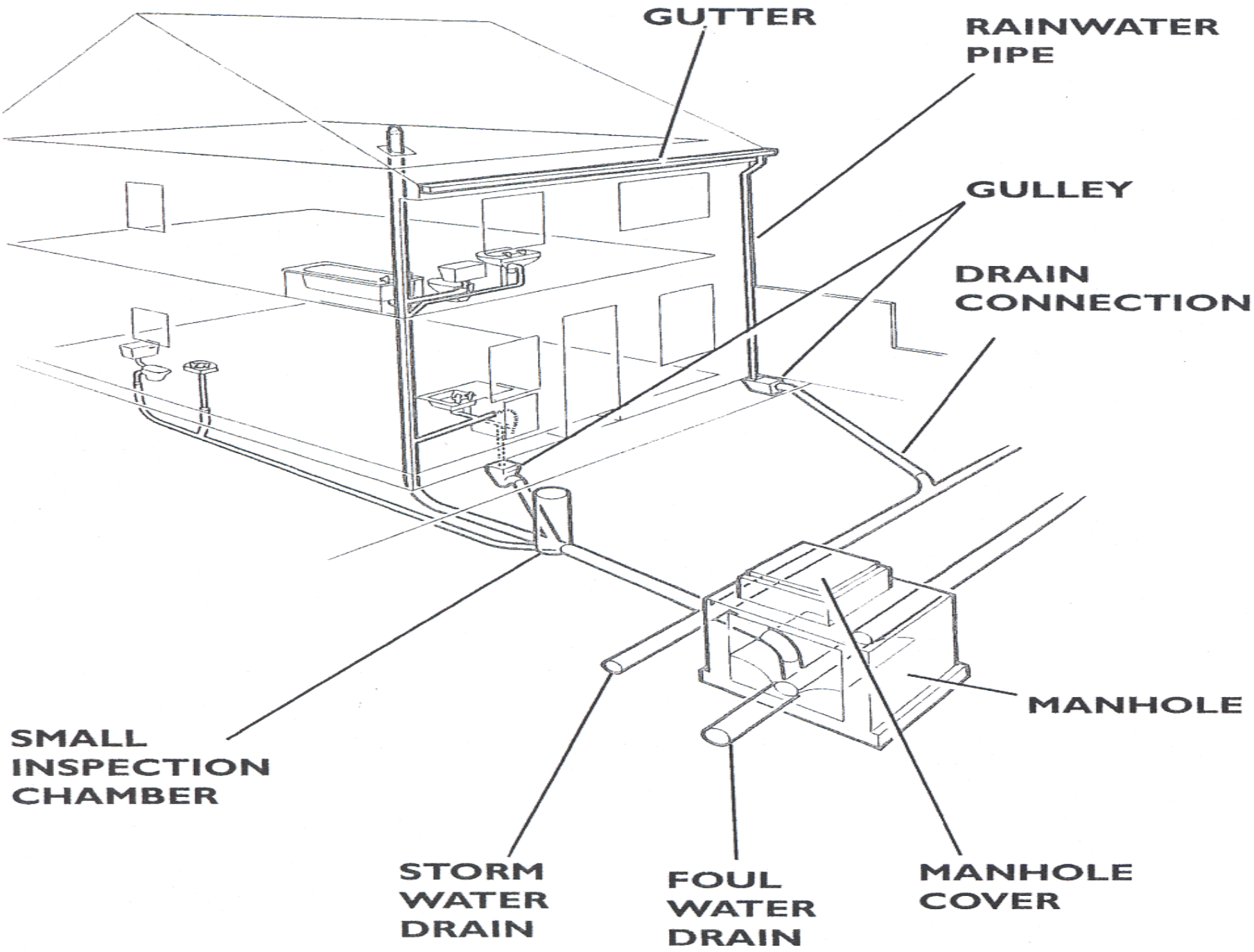


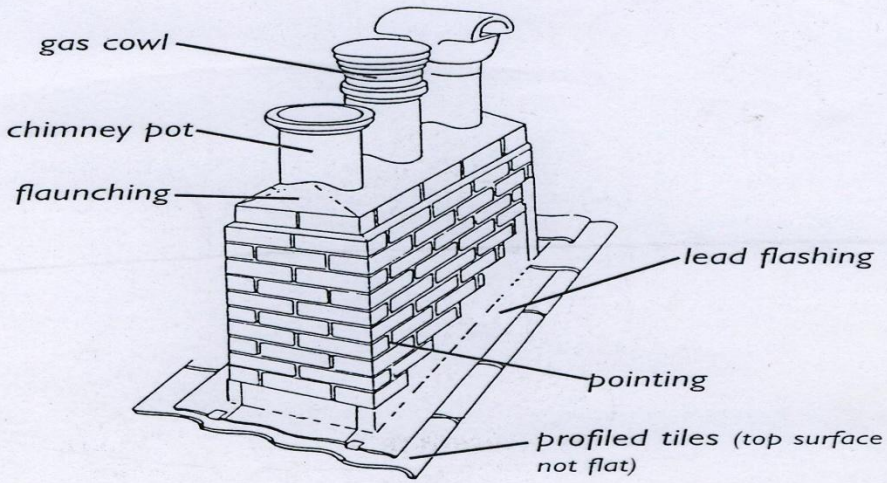
- *What Equipment Do You Take ?*



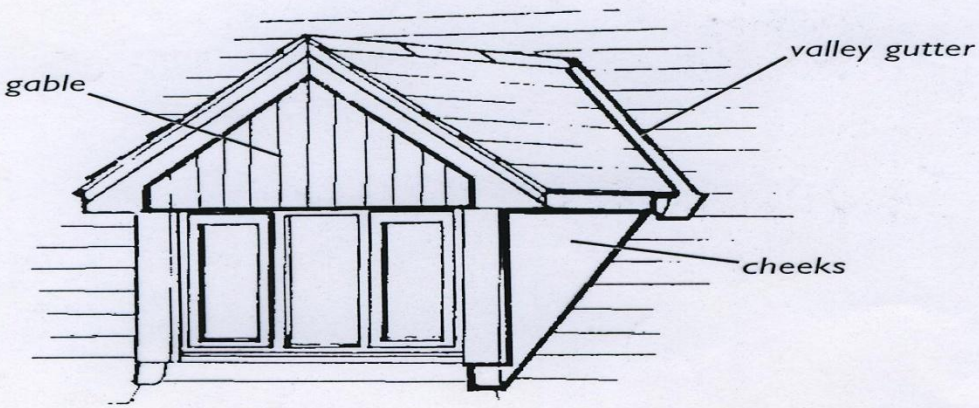

GUTTER
RAINWATER PIPE
GULLEY
DRAIN CONNECTION
MANHOLE
SMALL INSPECTION CHAMBER
STORM WATER DRAIN
FOUL WATER DRAIN
MANHOLE COVER



Chimney stack with three flues



Dormer window (with pitched roof)

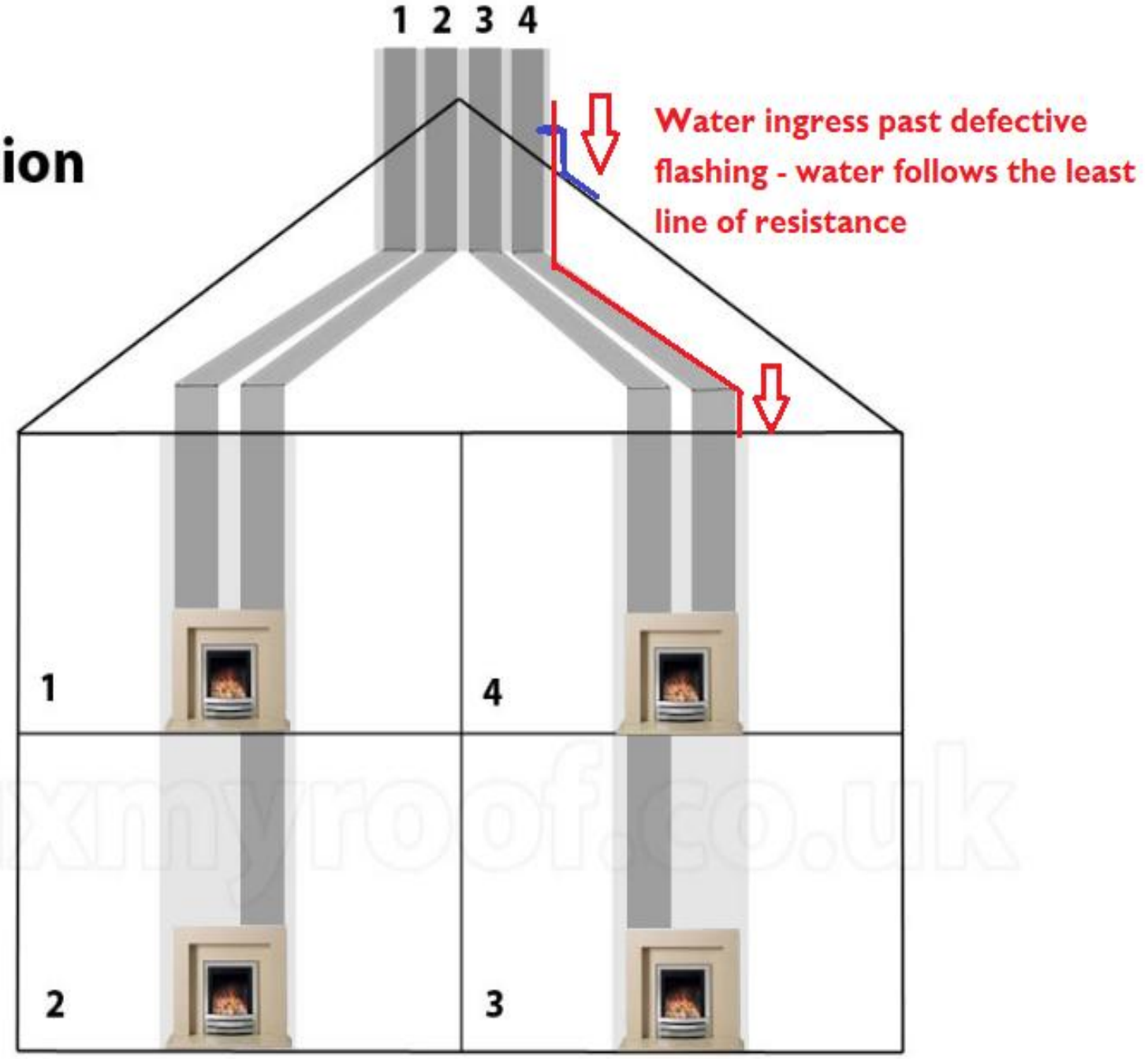






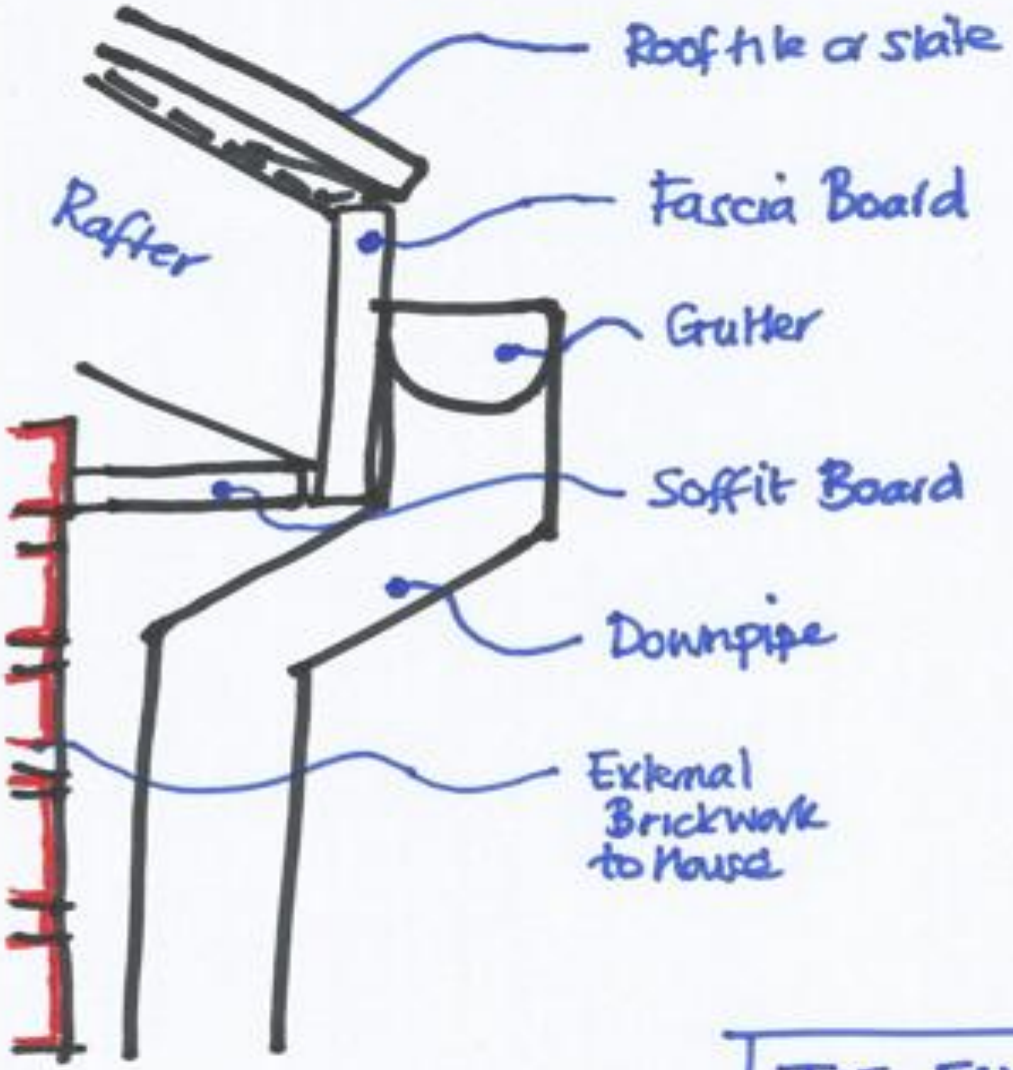


Chimney construction

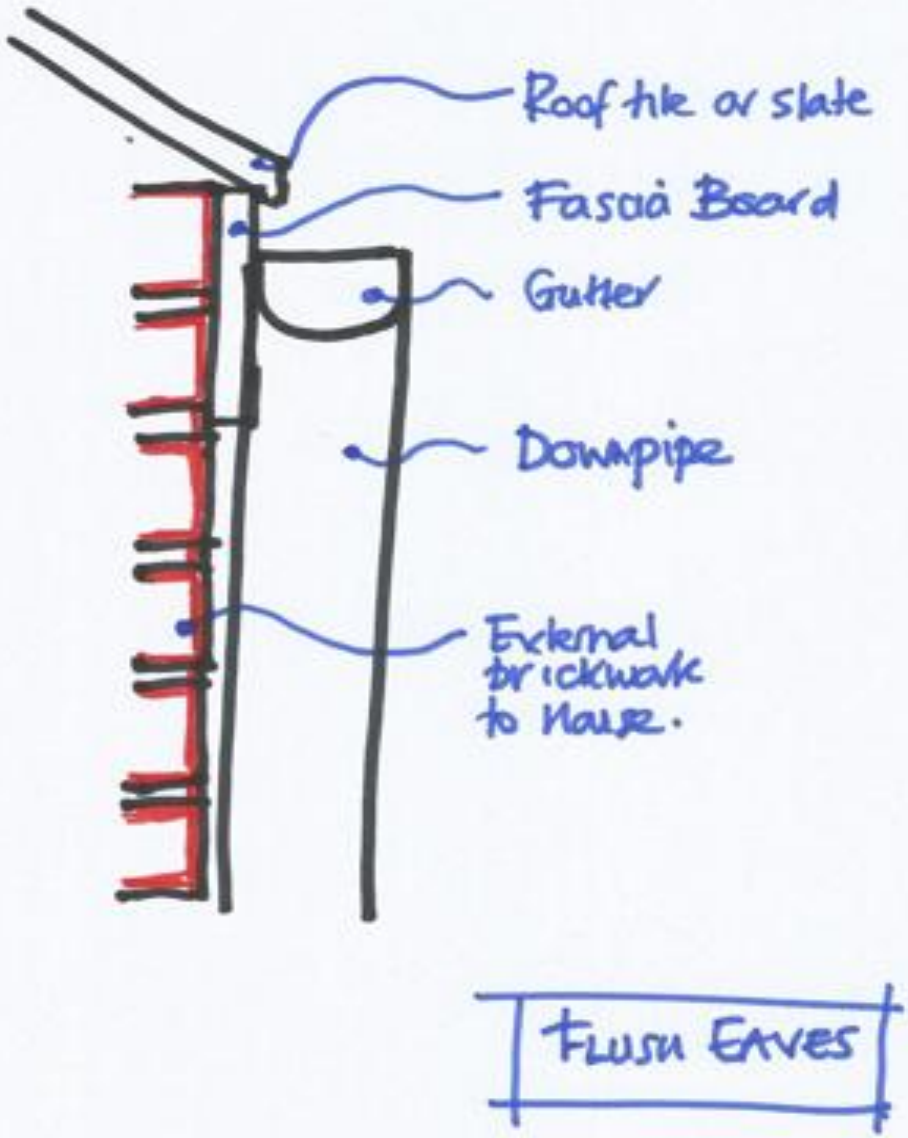


fixmyroof.co.uk




Roof tile or slate
Fascia Board
Rafter
Gutter
Soffit Board
Downpipe
External Brickwork to House

THE EAVES

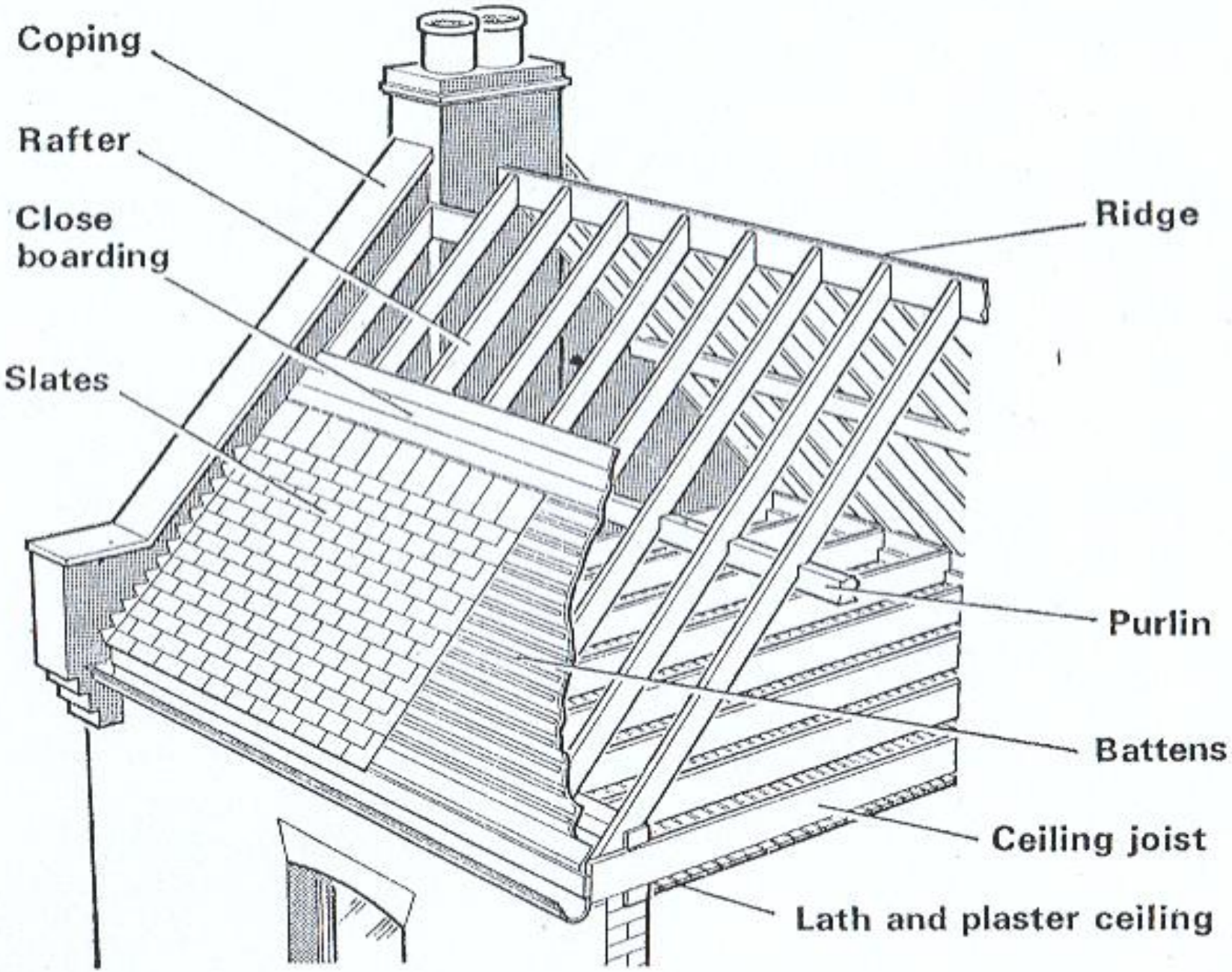

Roof tile or slate
Fascia Board
Gutter
Downpipe
External brickwork to House.

FLUSH EAVES








Coping
Rafter
Close boarding
Slates
Ridge
Purlin
Battens
Ceiling joist
Lath and plaster ceiling


29 06 2015 11:03

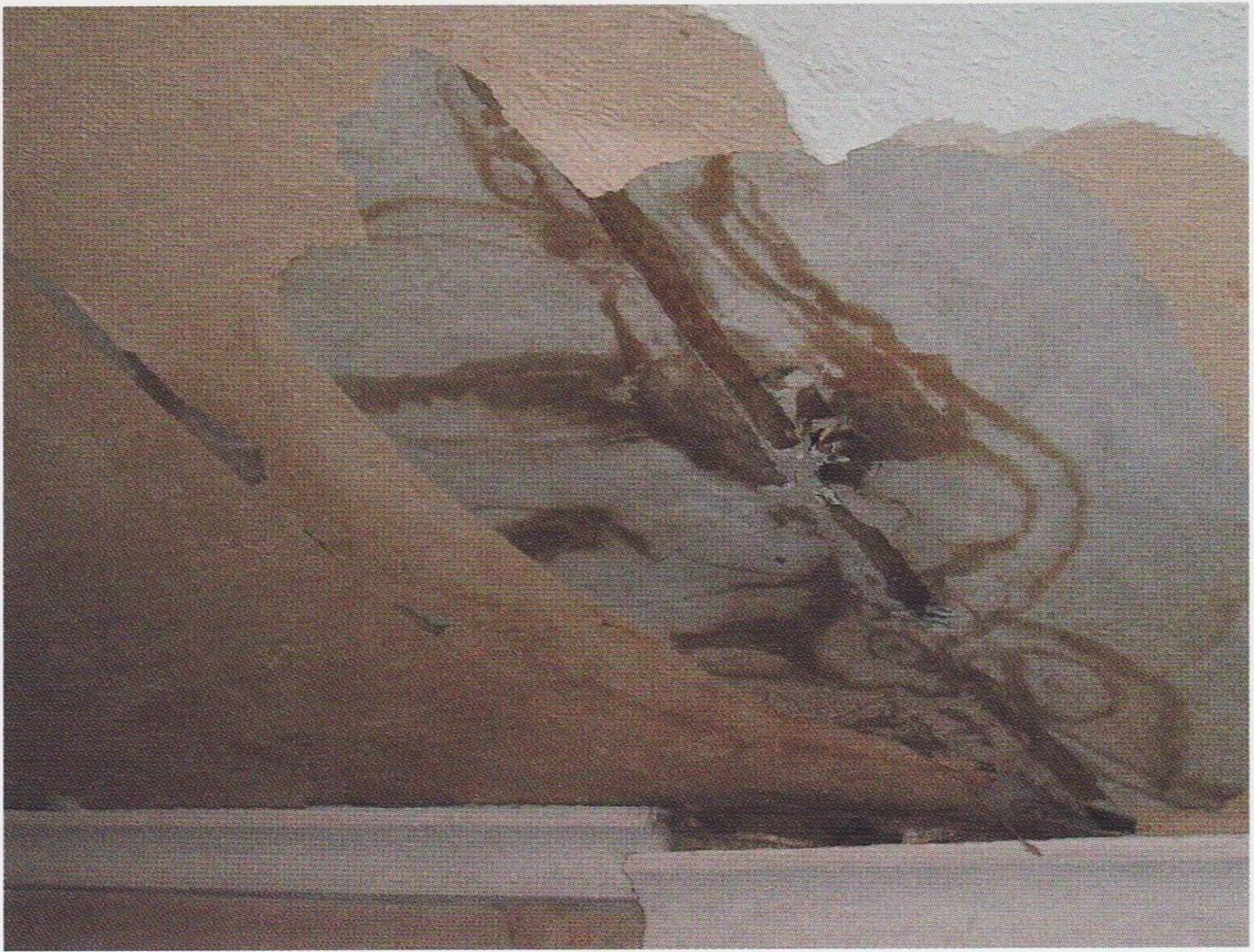


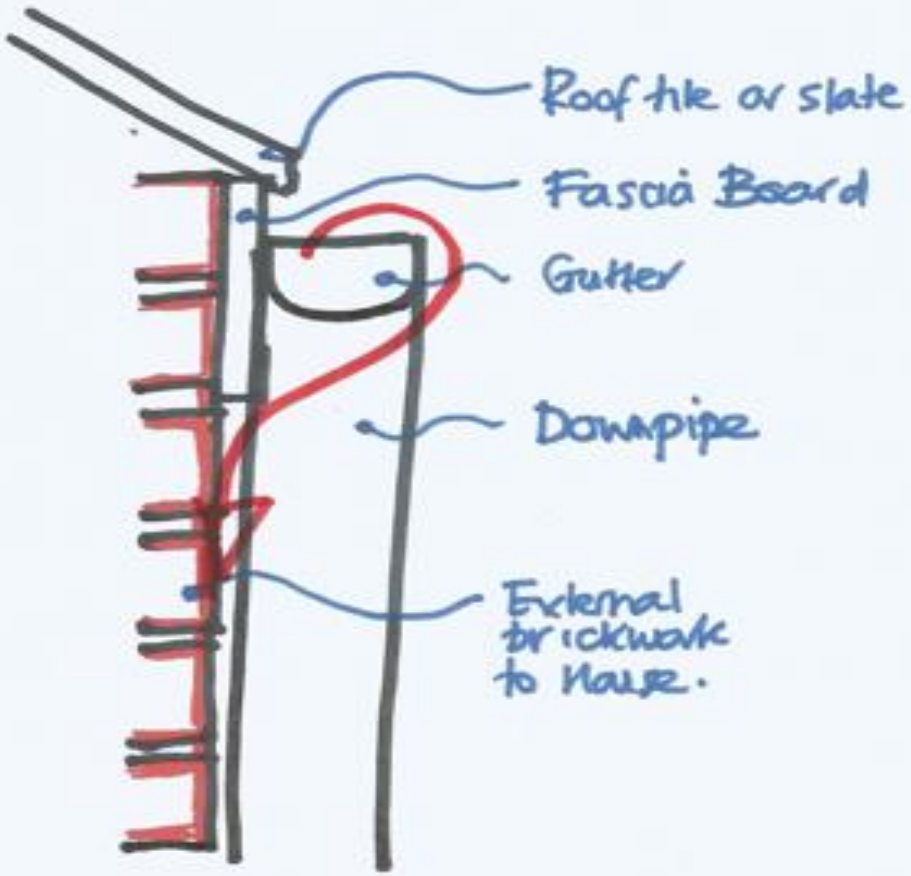






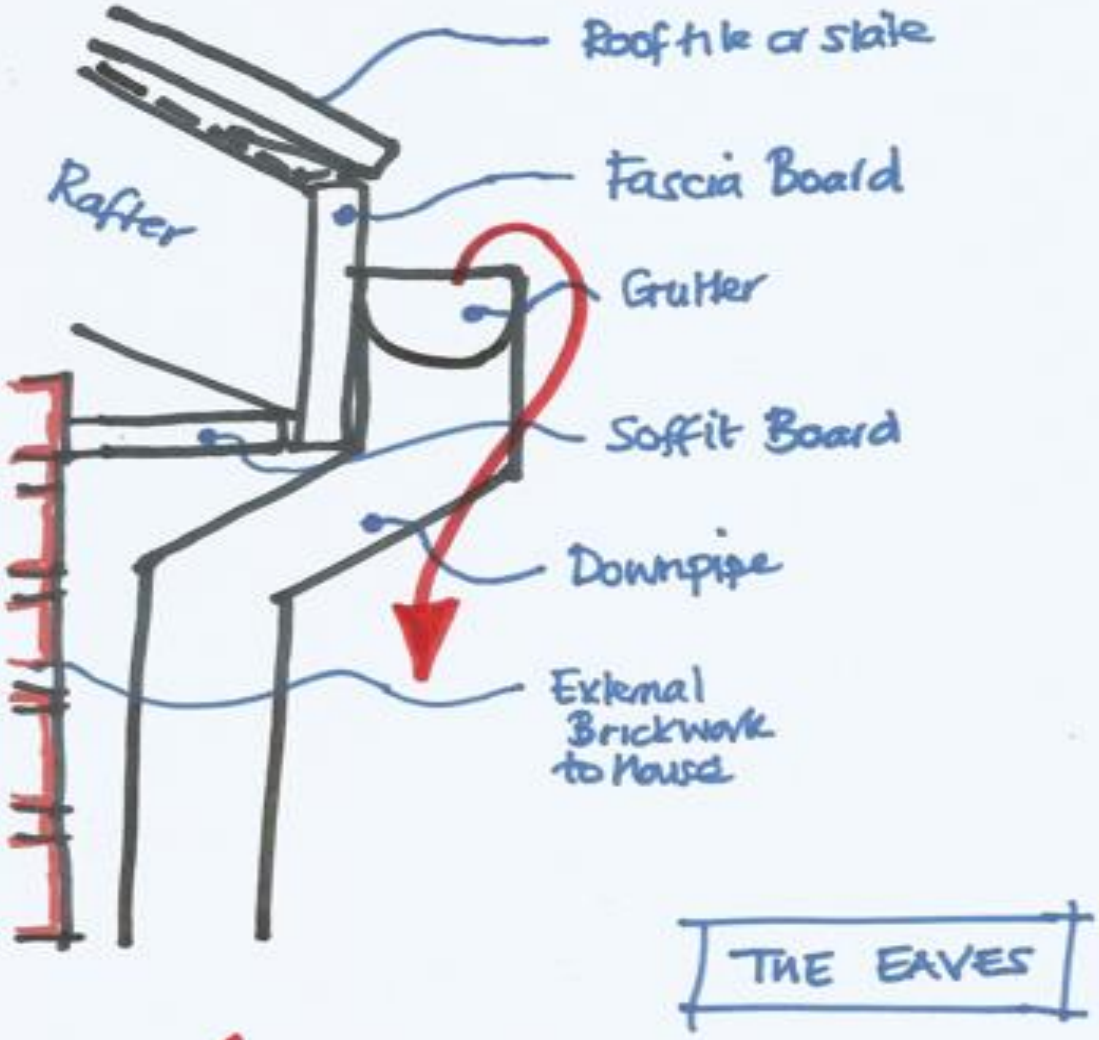






FLUSH EAVES

FLUSH EAVES WOULD SOAK THE WALL AND ROT THE 'FASCIA BOARD' BEHIND

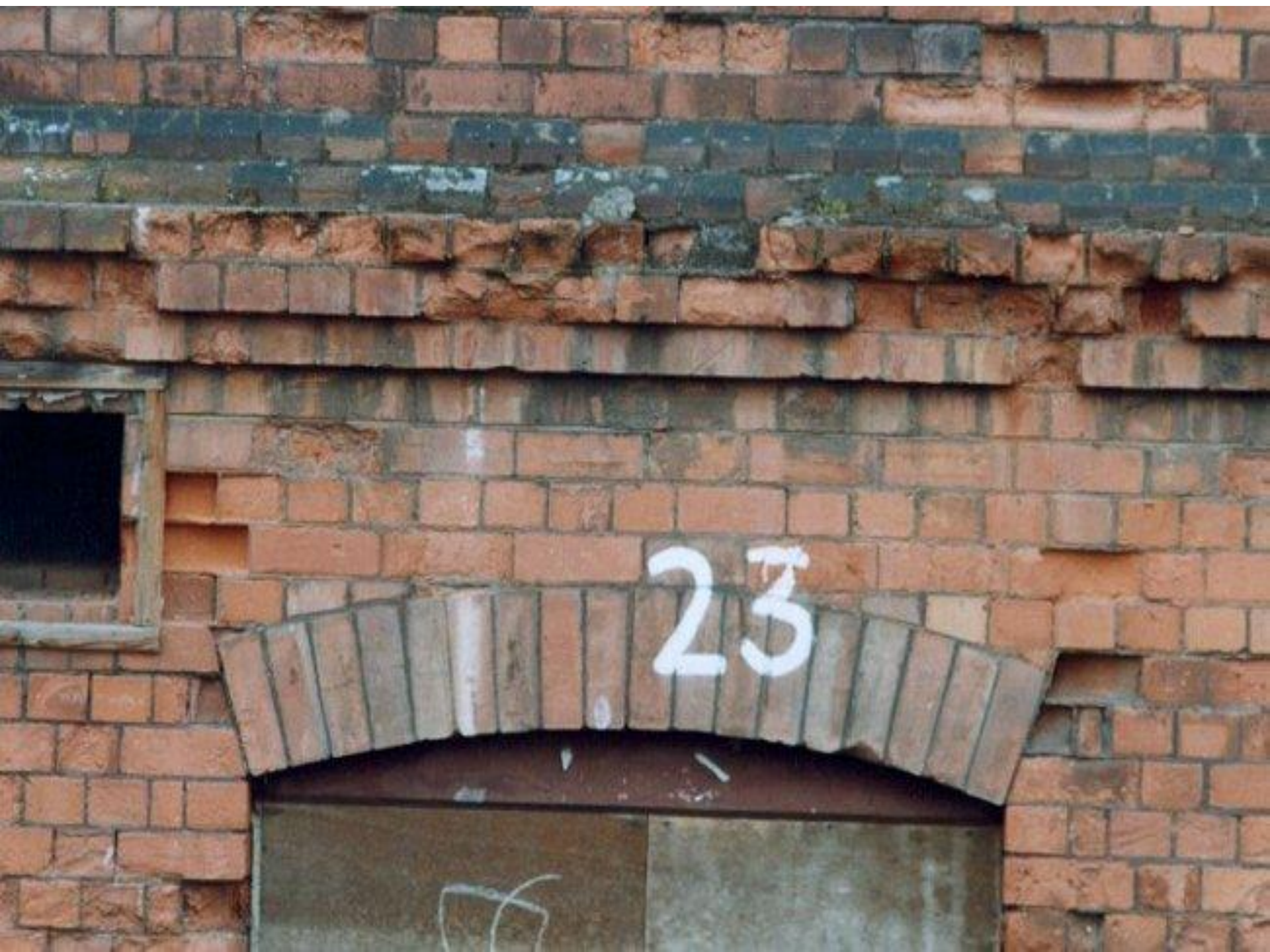


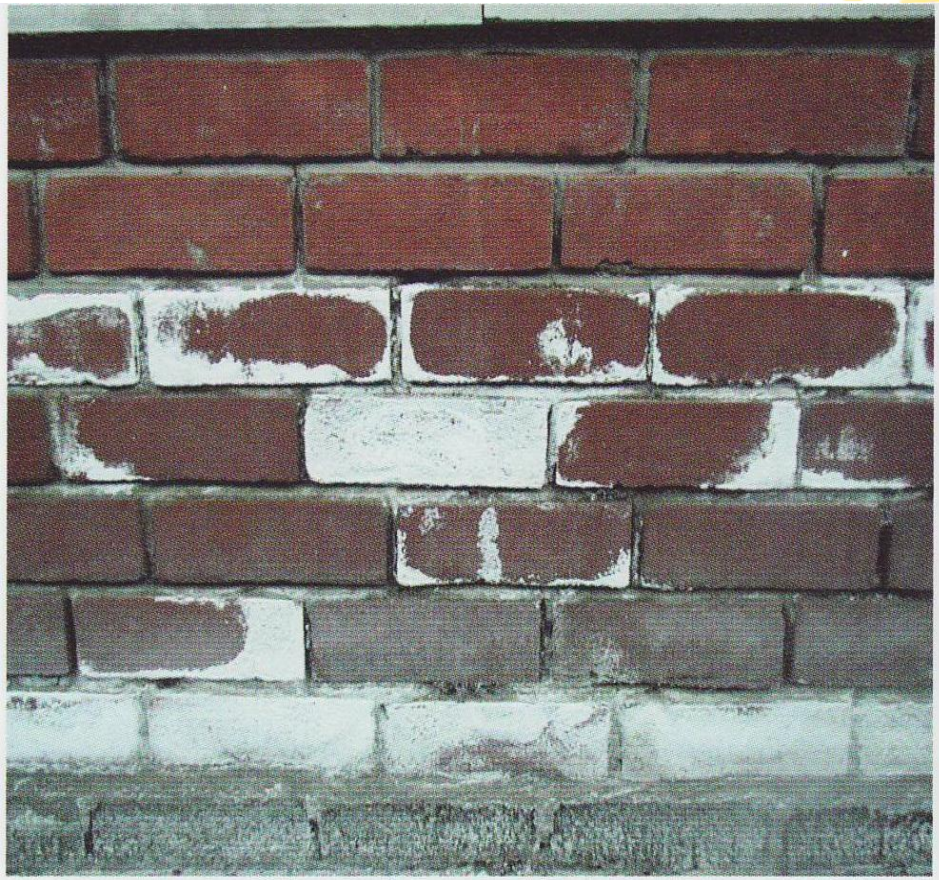
THE EAVES

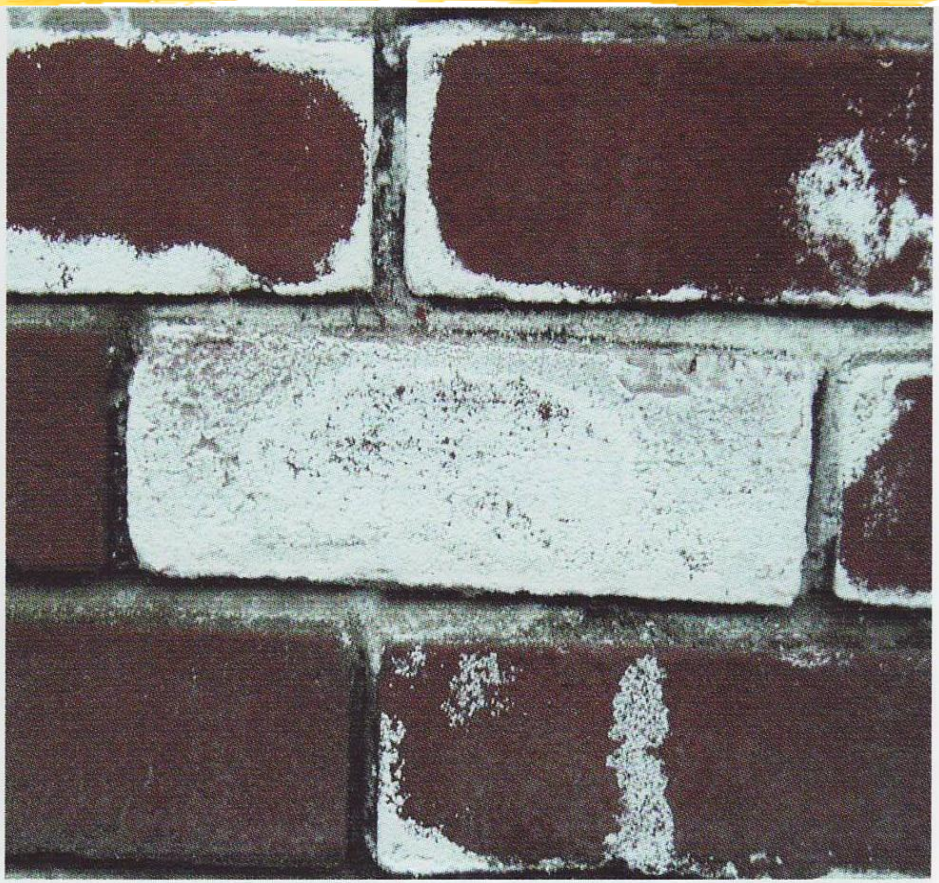
'OVERHANGING ROOF ACTS AS AN UMBRELLA' TO THE WALL






23





White surface on the face of new brickwork irritates rather than damages the bricks. It should go away as the salts are washed out of the bricks. This is an example of heavy efflorescence.



Defective scratch coat





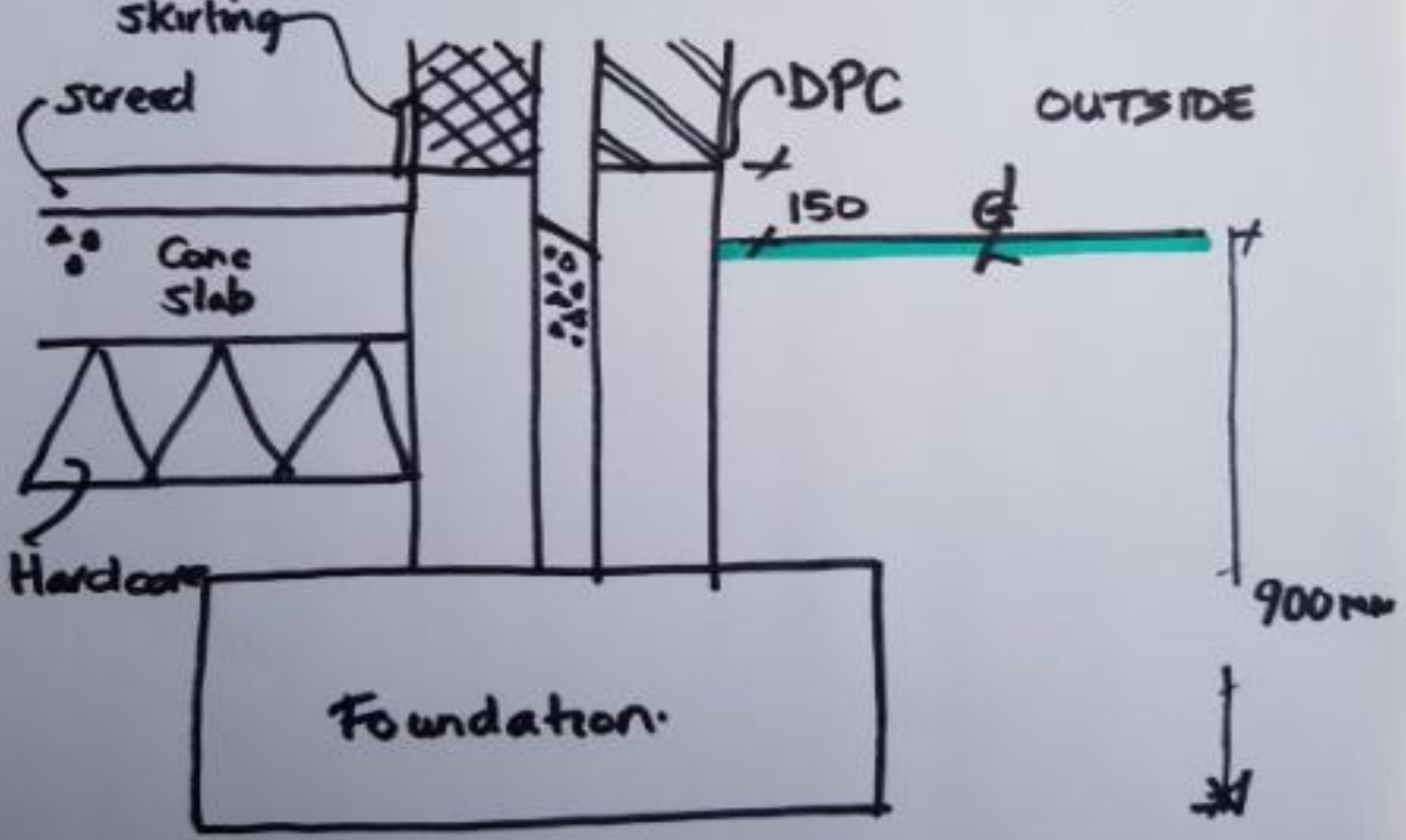
Figure 84: Front elevation of a period property in Brighton on the English south

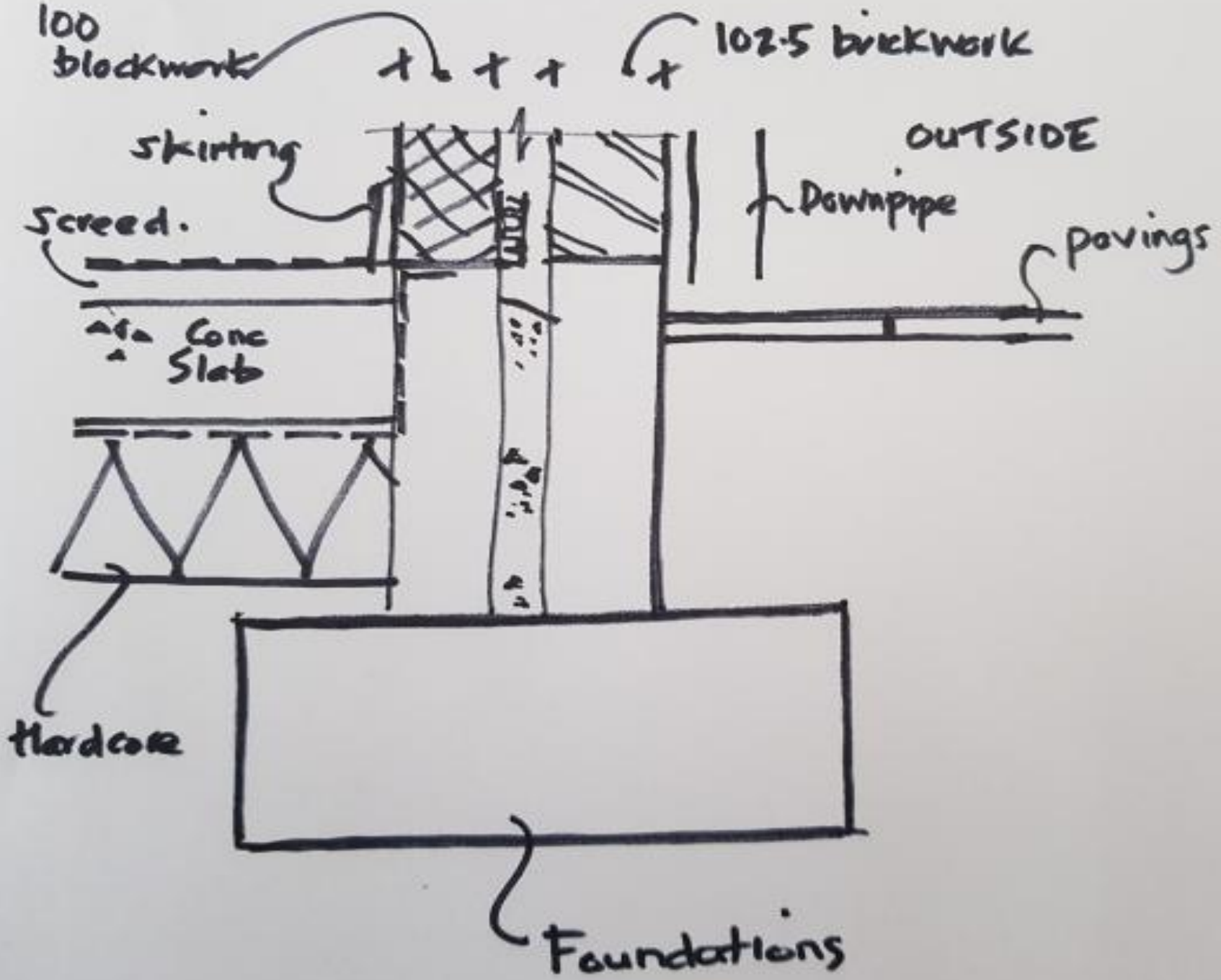


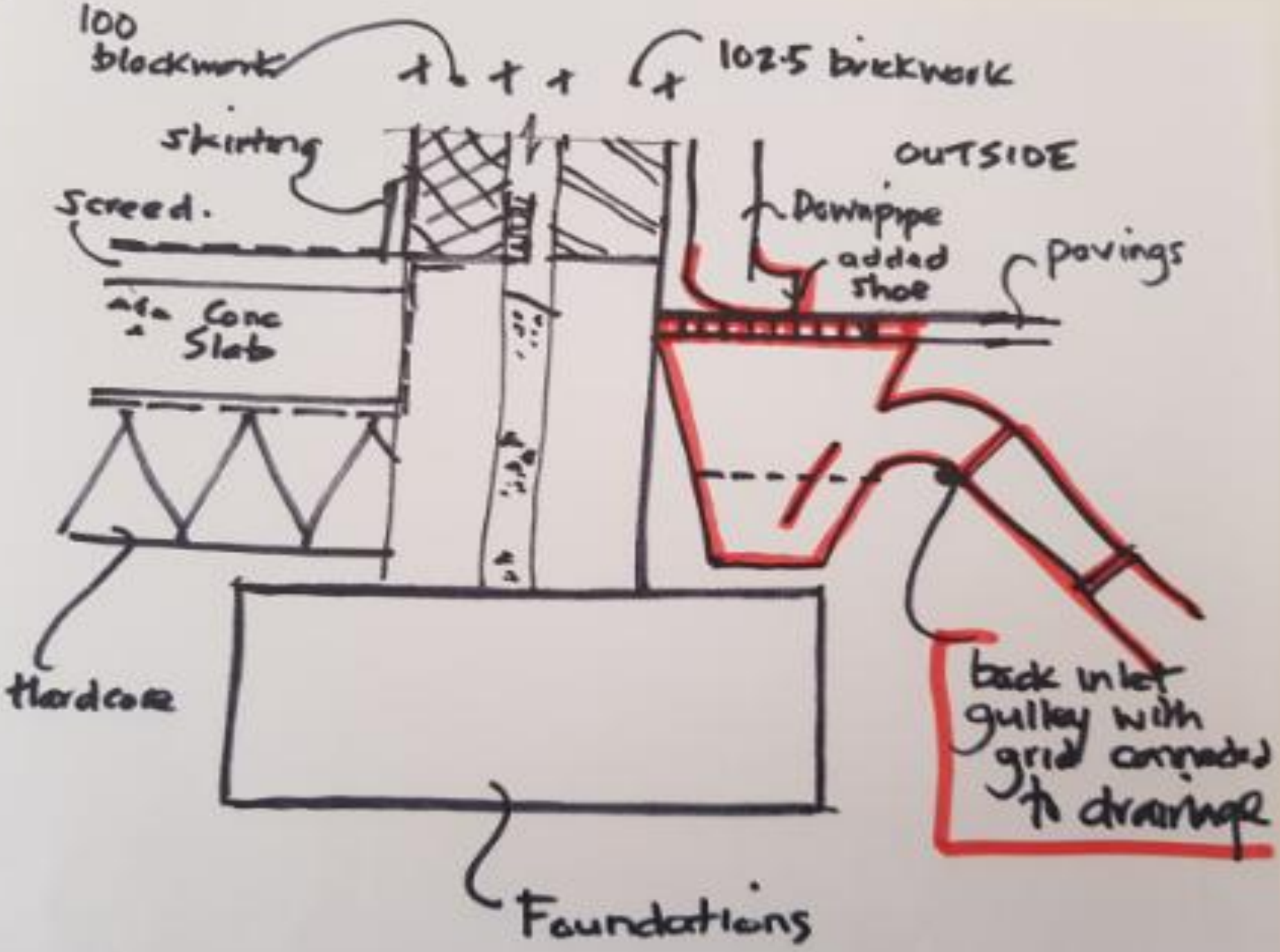


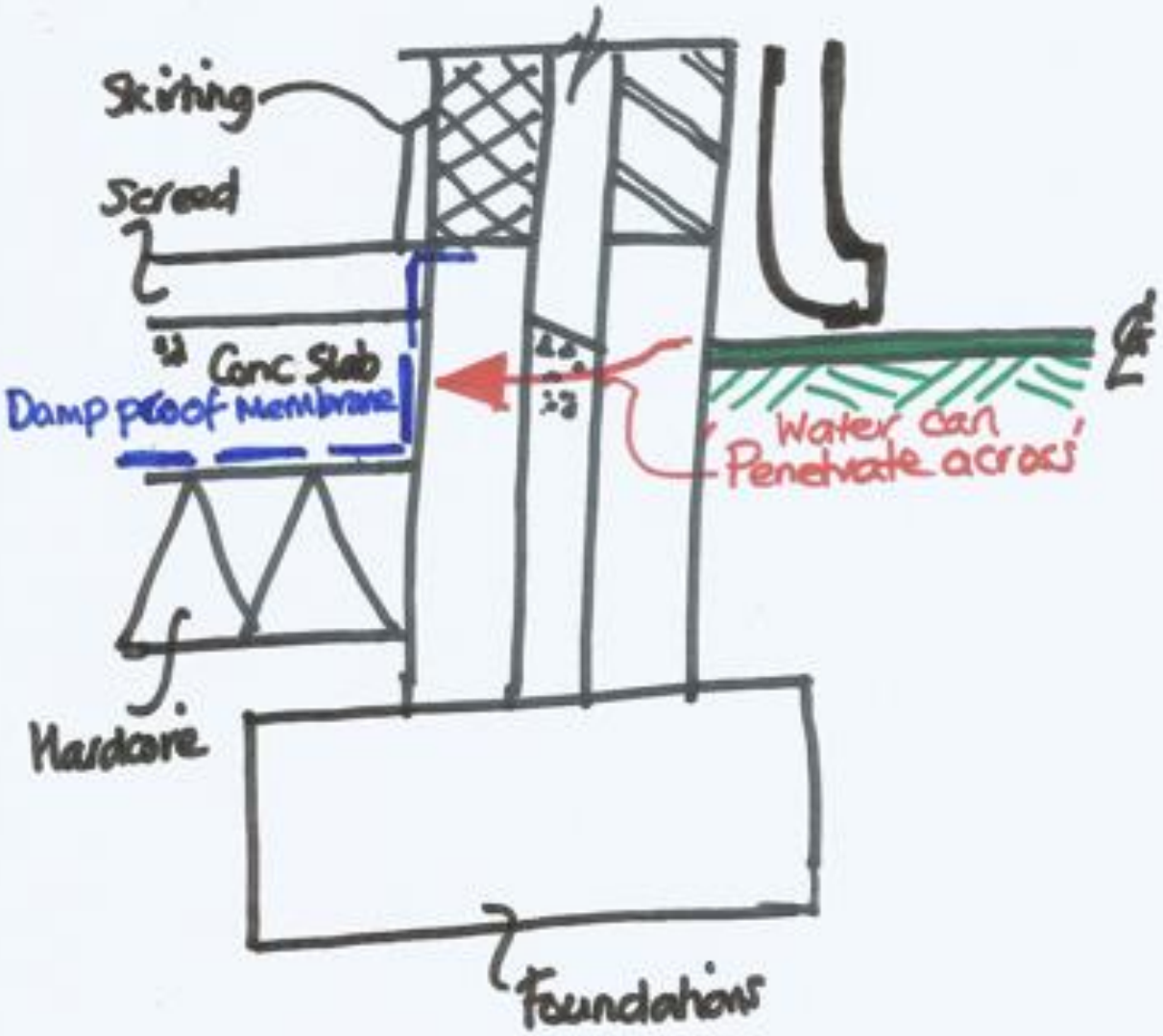
DPC – 150mm above ground level

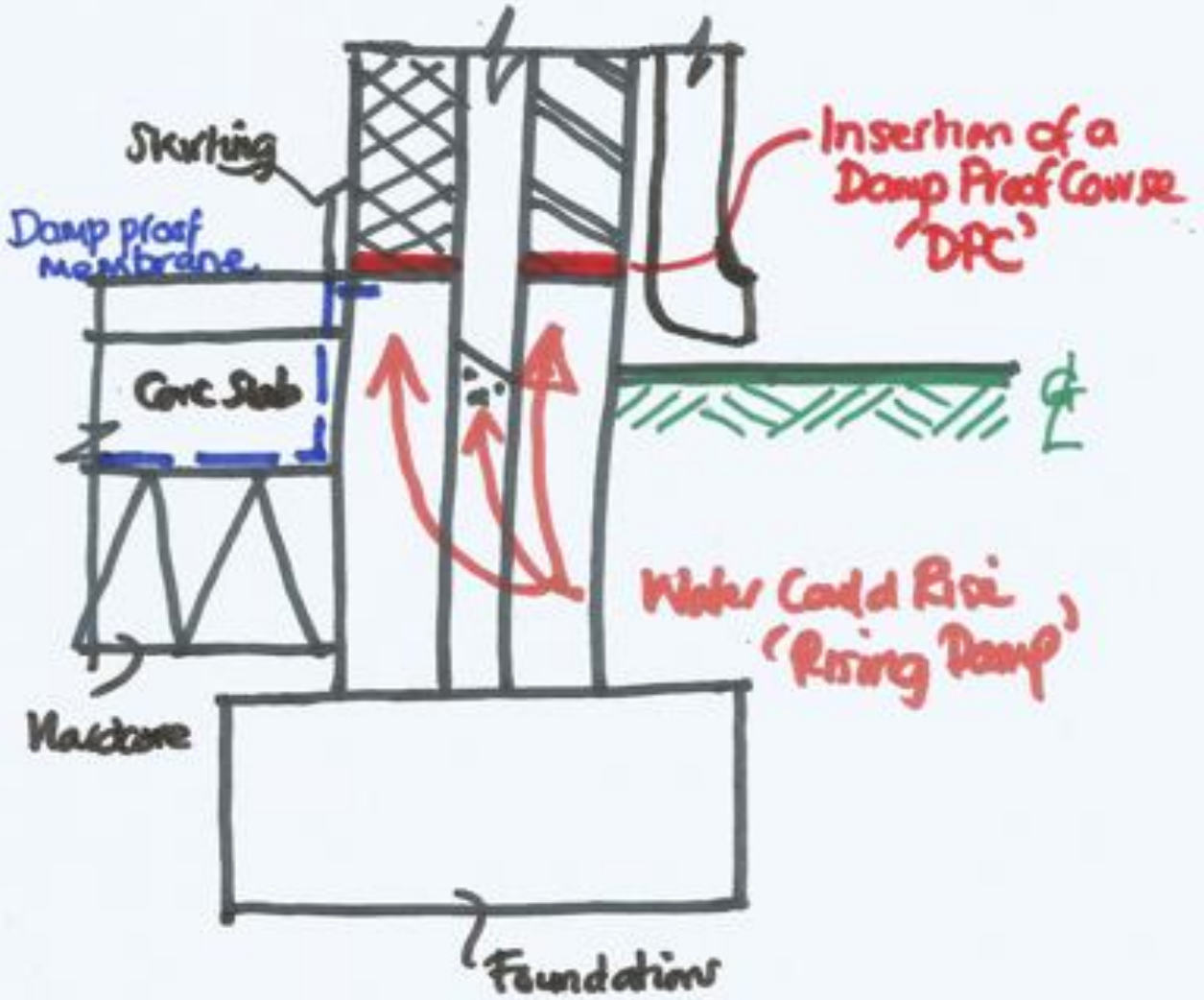
Typical Foundation Detail




100 blockwork
102.5 brickwork
skirting
OUTSIDE
Downpipe
screed.
pavings
Conc Slab
hardcore
Foundations


100 blockwork
102.5 brickwork
skirting
OUTSIDE
Screed.
Downpipe
added shoe
pavings
Conc Slab
hardcore
back inlet gulley with grid connected to drainage
Foundations


Skirting
Screed
Conc Slab
Damp proof Membrane
Water can Penetrate across
Hardcore
Foundations


Skirting
Insertion of a
Damp Proof Course
'DPC'
Damp proof
Membrane
Conc Slab
Water Could Rise
'Rising Damp'
Moisture
Foundations

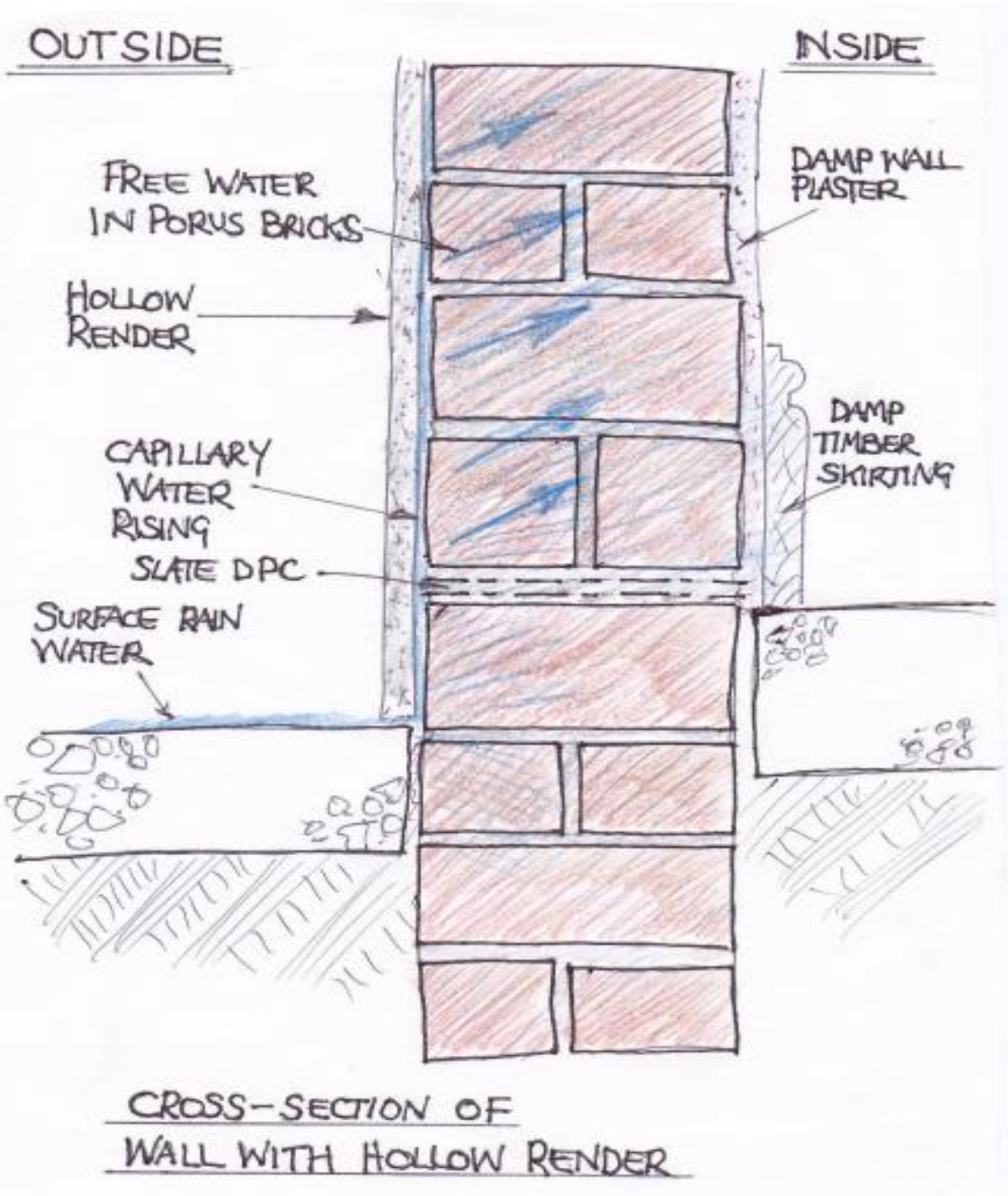
3.2 Poor workmanship






Wheelers Cross
88 - 94




OUTSIDE
INSIDE
FREE WATER IN PORUS BRICKS
DAMP WALL PLASTER
HOLLOW RENDER
DAMP TIMBER SKIRTING
CAPILLARY WATER RISING
SLATE DPC
SURFACE RAIN WATER
CROSS-SECTION OF WALL WITH HOLLOW RENDER













What's this?





Condensation

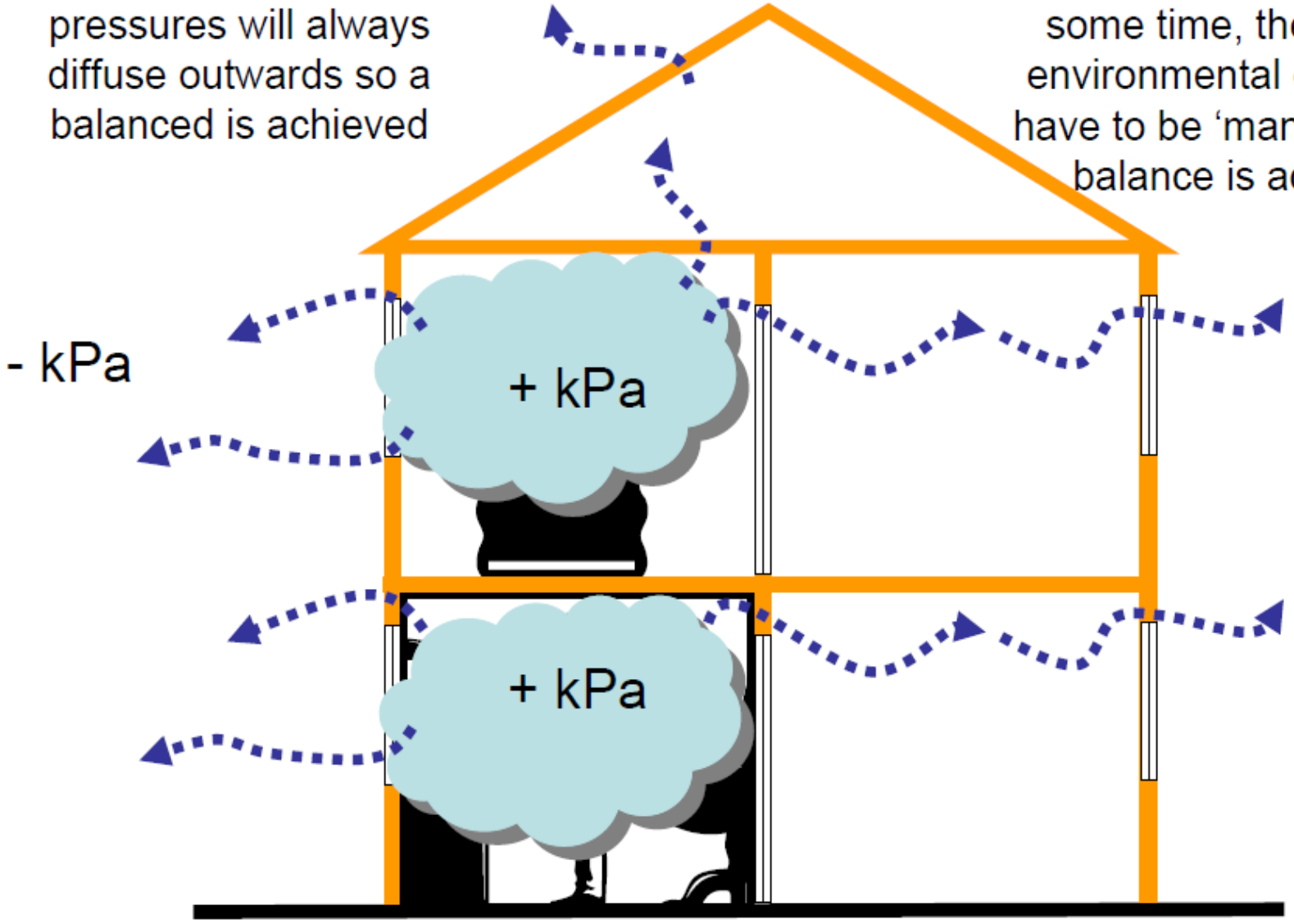
Condensation

- *What is Condensation ?*



Higher internal vapour pressures will always diffuse outwards so a balanced is achieved

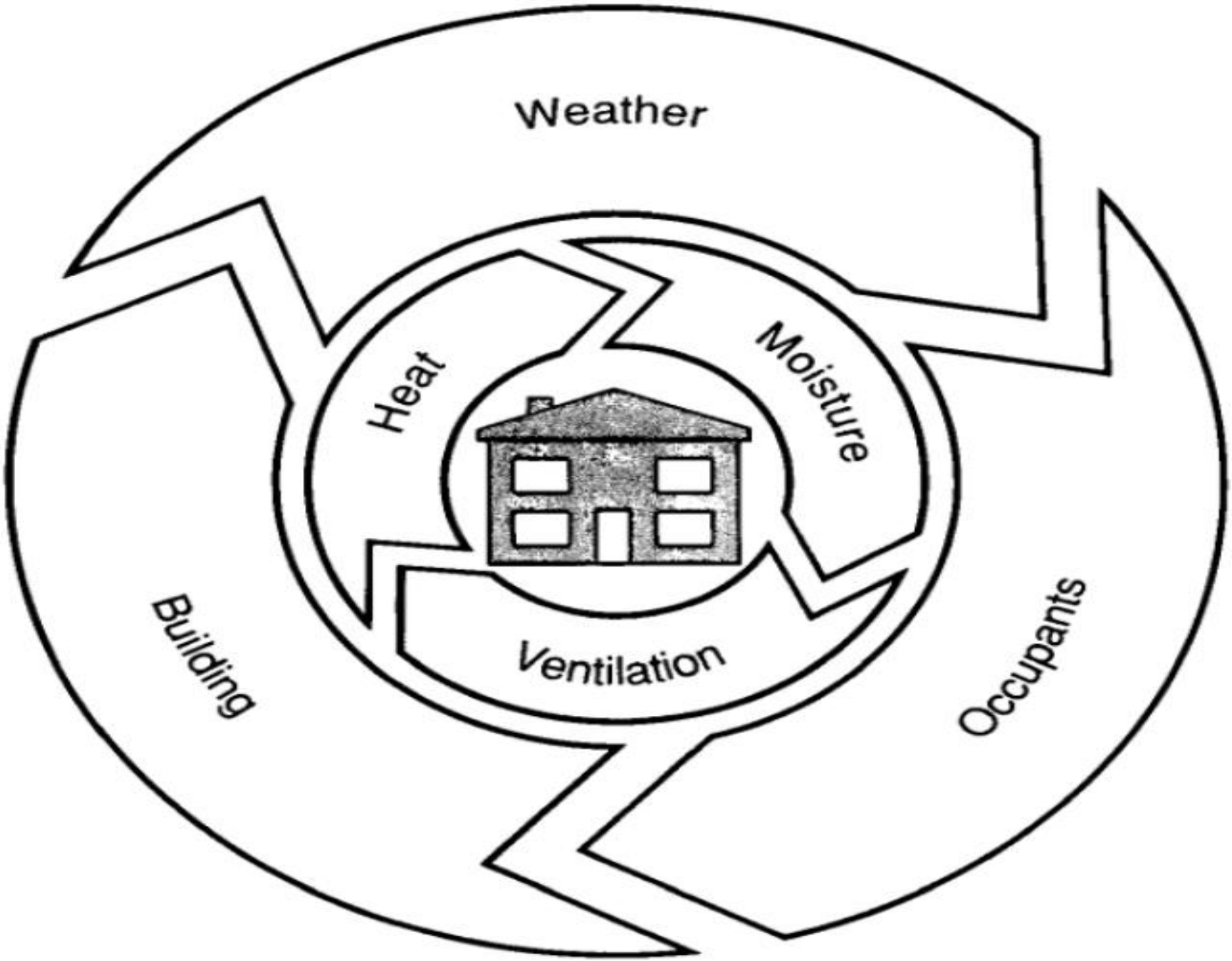
Because this may take some time, the internal environmental conditions have to be 'managed' so a balance is achieved



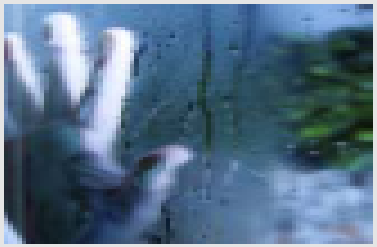
To do this effectively, the buildings have to be 'tolerant' so a range of different lifestyles can safely be accommodated

Identify the factors needing to be considered when addressing the likelihood of condensation occurring in a property ?

- *The Residents – number, patterns of work, culture, lifestyle occupation, fuel poverty etc*
- *The Building*
- *Heating*
- *Insulation*
- *Ventilation*
- *Weather*
- *Orientation*
- *Moisture Movement and Absorption*


Weather
Heat
Moisture
Ventilation
Building
Occupants

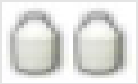
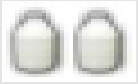
Moisture Produced in Your Home



Everyday activities add extra moisture to the air inside our homes. Even our breathing adds some moisture (remember breathing on cold windows and mirrors to fog them up?).

One person asleep adds half a pint of water to the air overnight and at twice that rate when active during the day.

To give you some idea as to how much extra water this could be in a day, here are a few examples, imagine the pints as milk bottles:-

- 2 people at home for 16 hours = 3 pints 
- A bath or shower = 2 pints 
- Drying clothes indoors = 9 pints 
- Cooking and use of a kettle = 6 pints 
- Washing dishes = 2 pints 
- Bottled gas heater (8 hours use) = 4 pints 
- **Total moisture added in one day = 26 pints or 14.8 litres**

SOURCES OF CONDENSATION

How much moisture is produced (in a day) by typical household activities?



Clothes washing — 1 pint



Bath and personal washing — 2 pints



Four people sleeping 8 hours — 3 pints



Parrafin heater for 5 hours — 3 pints



Two people active for 16 hours — 4 pints



Cooking by gas for 3 hours — 6 pints



Clothes drying in un-vented tumble dryer — 10 pints

Total 29 pints

Reduce the potential for condensation by producing less moisture

Hang your washing outside to dry if possible, or hang it in the bathroom with the door closed and a window slightly open or extractor fan on if one is fitted. Do not be tempted to put it on radiator or in front of a radiant fire.





- If you use a tumble dryer, make sure it is vented to the outside or that it is of the new condensing type.
- Always cook with pan lids on, and turn the heat down once the water has boiled. Only use the minimum amount of water for cooking vegetables.





- When filling your bath, run the cold water first then add the hot - it will reduce the steam by 90%, which leads to condensation.





- Try to avoid use of bottled gas heaters: they produce about 8 pints of moisture from an average-sized gas cylinder. (Your tenancy Agreement may not allow you to use this type of heater)
- Do not use your gas cooker to heat your kitchen as it produces moisture when burning gas. (You might notice your windows misting over).













SECTION THROUGH A SOLID WALL

DISTANCE THAT COLD HAS TO TRAVEL THROUGH A WALL

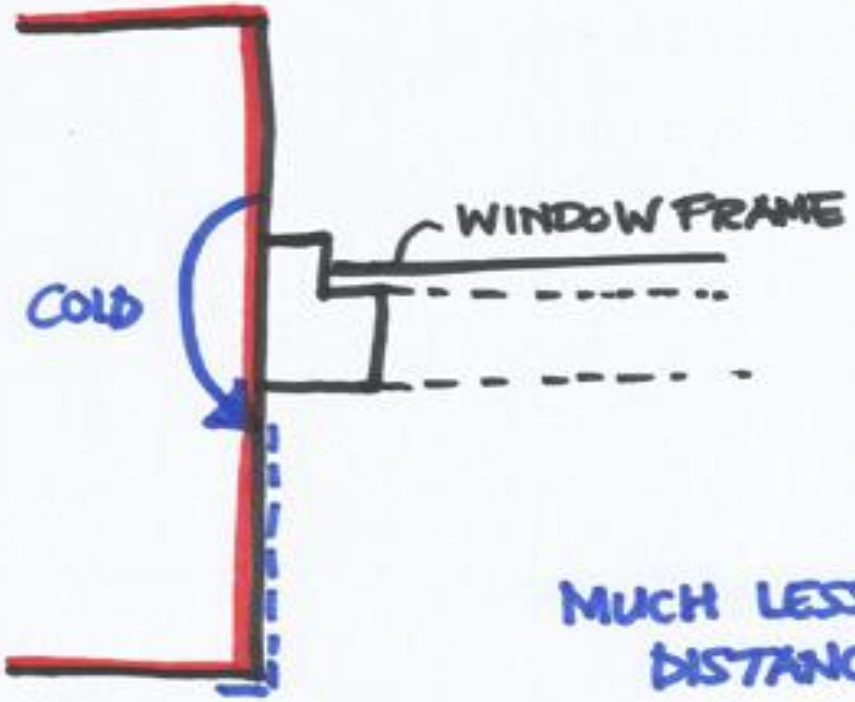
OUTSIDE



INSIDE

SECTION THROUGH A WALL

DISTANCE THAT COLD HAS TO TRAVEL THROUGH A WALL AT A WINDOW?

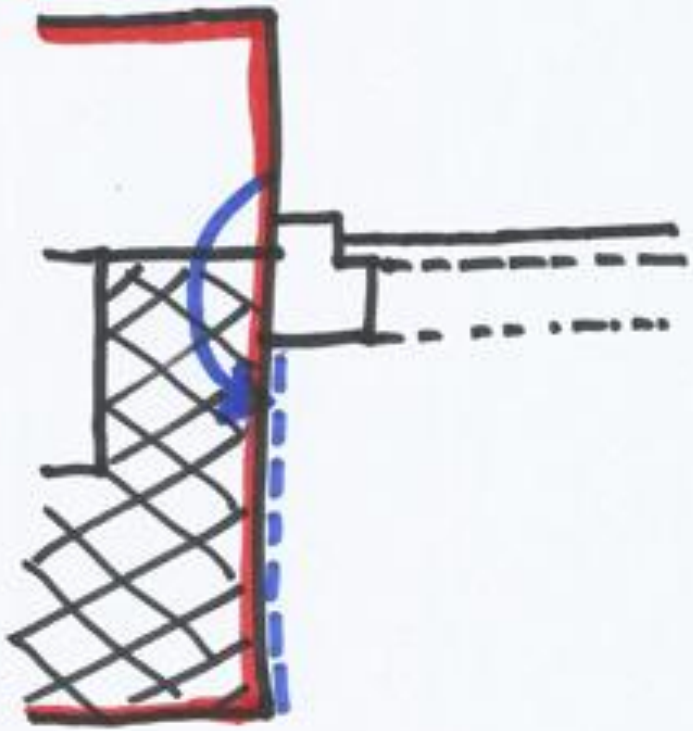


MUCH LESS OF A DISTANCE

'COLD BRIDGING'

SECTION THROUGH A CAVITY WALL

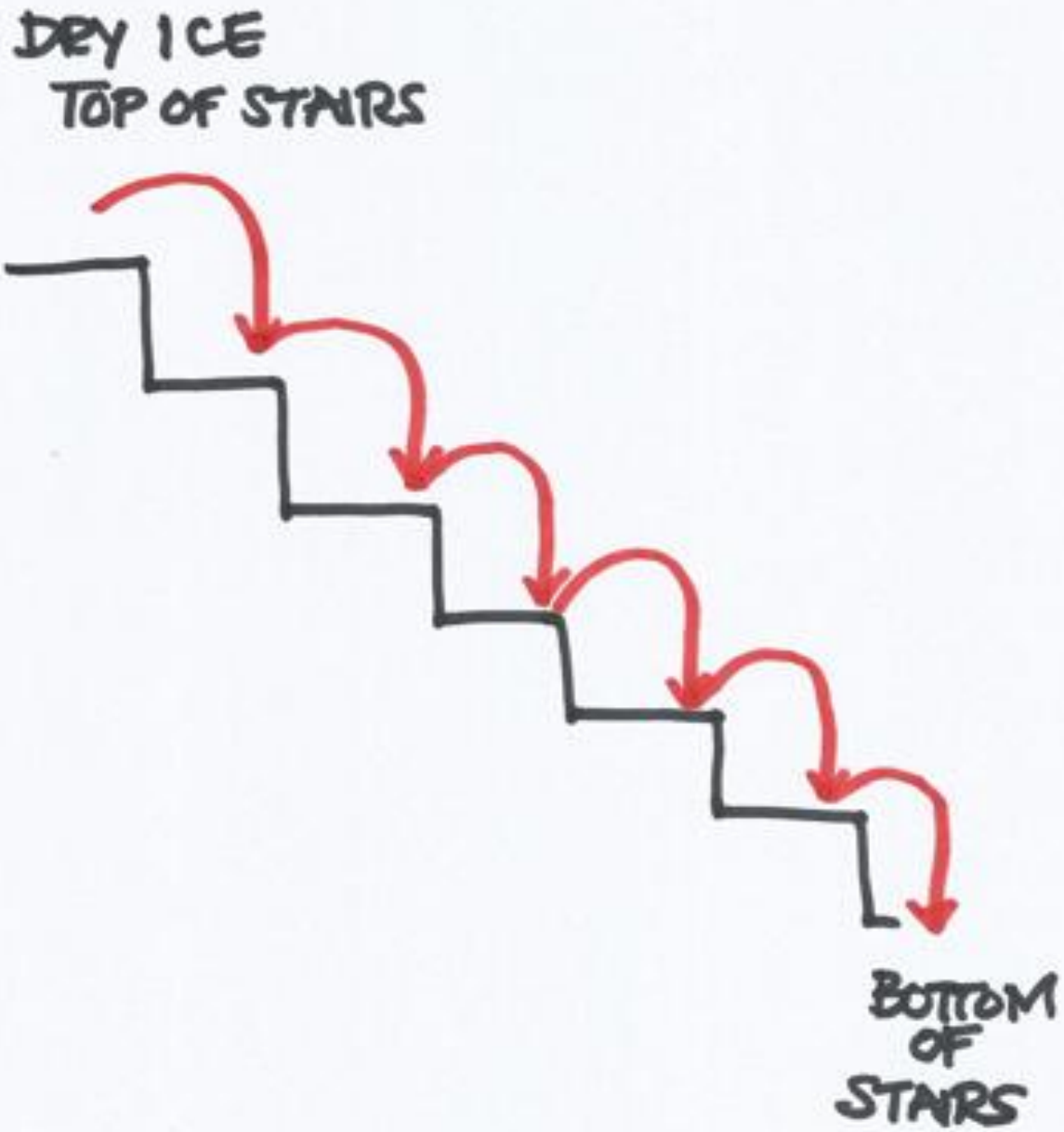
COLD BRIDGING WITH A CAVITY WALL.





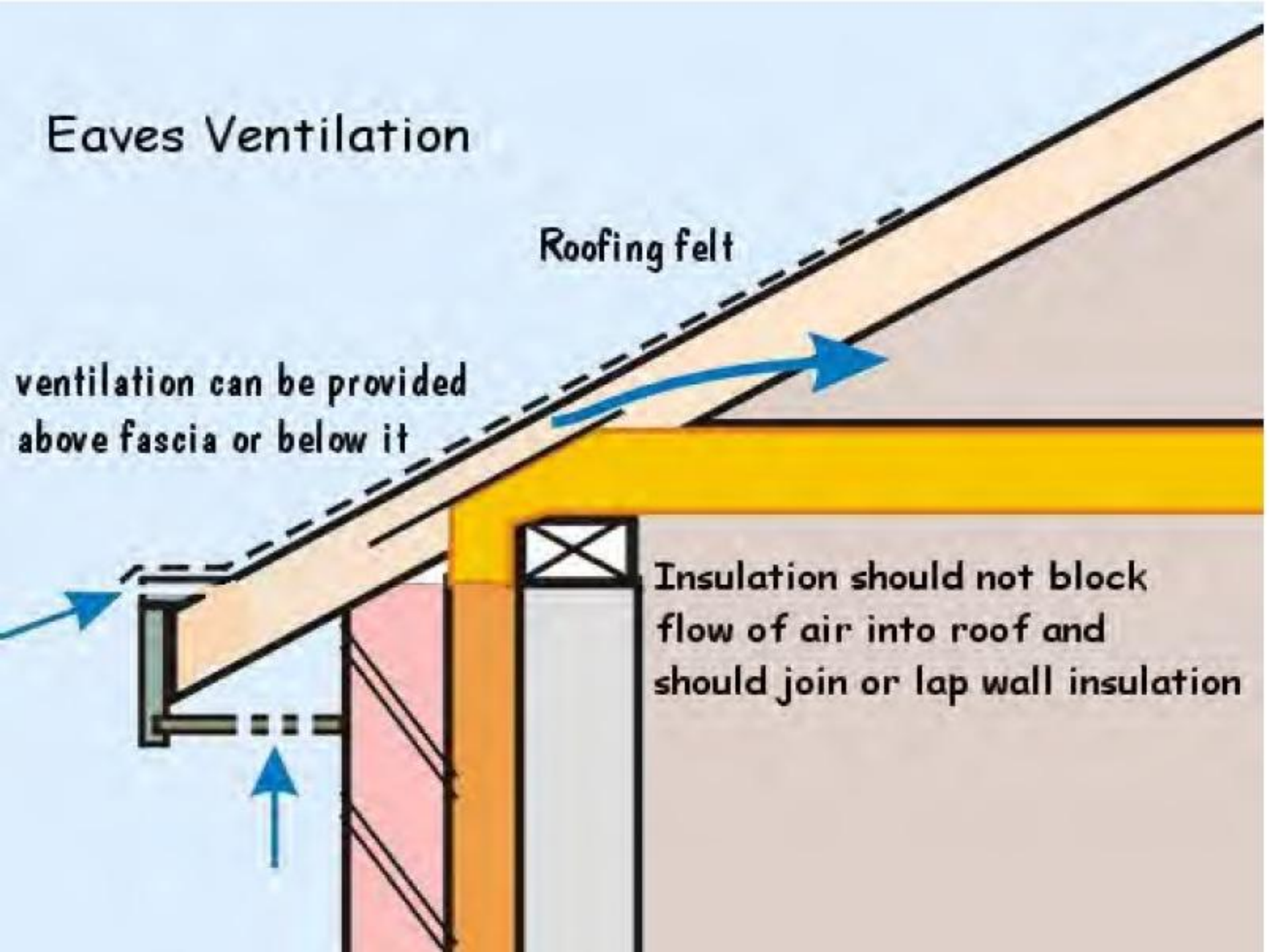


Consider the flow pattern in a Lava Lamp


DRY ICE
TOP OF STAIRS
BOTTOM OF STAIRS






Eaves Ventilation
Roofing felt
ventilation can be provided
above fascia or below it
Insulation should not block
flow of air into roof and
should join or lap wall insulation


Concentrated mould growth to ceiling




Missing insulation
over bathroom!
EPSON STYLUS C70 Plus

Identify the forms of ventilation that can help prevent the likelihood of condensation forming in a dwelling ?

- *General Vents – Air Bricks/ Grilles/ Spinners*
- *Opening Window – Secure Locks*
- *Trickle Vents*
- *Extractor Fans – Pull Cord/ Timed*
- *Humidistat Fans*
- *Heat Recovery Extractor Fans*
- *Continuous Running – Background Fans*
- *Whole House Ventilation – Ducting, Sensor and Fans*
- *Positive Input Ventilation Units – PVI's – Envirovent, Flatmasters*

Trickle vents

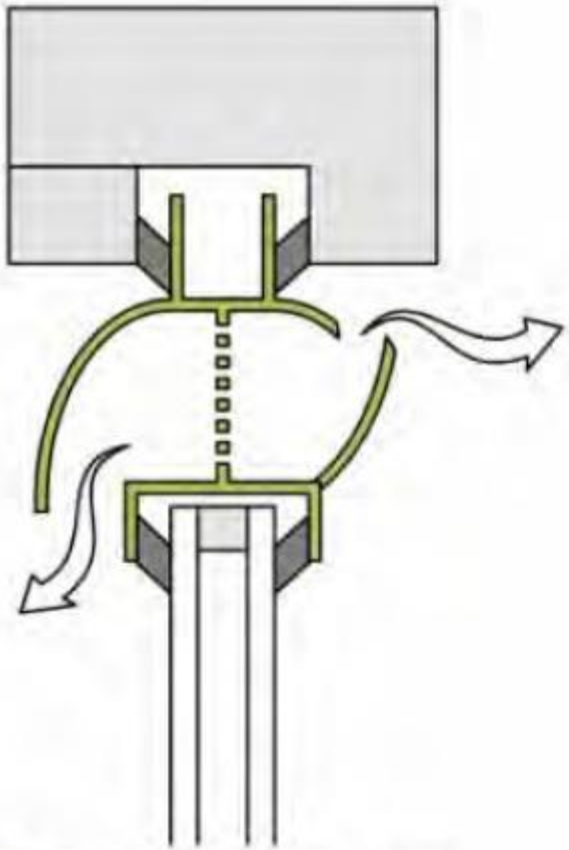
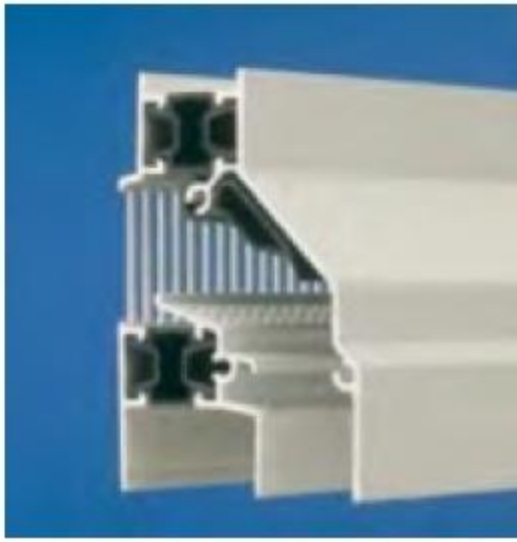


Figure 2 Glazed-in ventilator

10 000m2 per linear metre







fumiture against intemal walls, i.e. walls which have a room on both sides, rather than against outside walls.

Do not cover airbricks or other permanent ventilators. These are often strategically placed to ventilate vulnerable areas. Some ventilators may be providing vital combustion air for gas appliances. Covering these can cause the gas appliance to give off Carbon Monoxide, which is toxic and can be lethal.

Do not block permanent ventilators.

Do not draught-proof rooms where there is a fuel burning heater (e.g. gas fire) or cooker. Do not draught-proof windows in the bathroom or kitchen.

Increasing air flow with new UPVC windows



To allow ventilation without compromising security you can lock the opening part of the window on the first slot to allow ventilation of the room. Alternatively, open the trickle vents if they are installed on your windows.

Ventilation - Extract Fans





envirovent

Filterless Extract Fan

WC, Bathroom + Kitchen

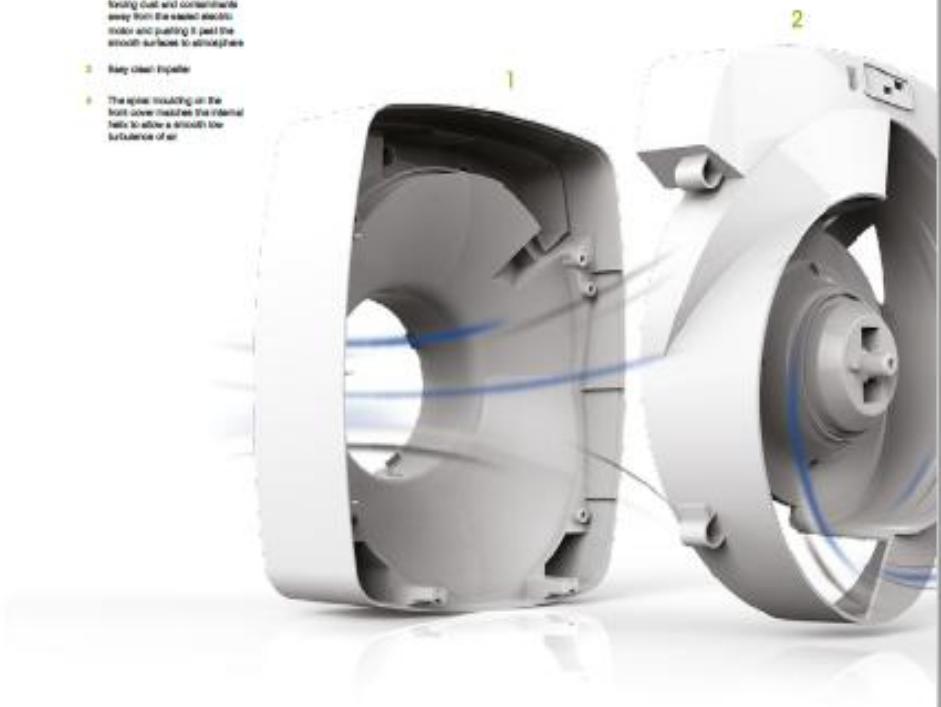
Lifetime Range*



Cyclone Separation Technology

The patented technology behind the Filterless Extract Fan

1. Basic canisters remains in-situ for the lifetime of the building
2. The unique patented helical expansion chamber enables cyclone separation to occur, forcing dust and contaminants away from the sealed electric motor and pushing it past the smooth surfaces to atmosphere
3. Easy clean impeller
4. The spiral moulding on the front cover matches the internal helix to allow a smooth low turbulence of air



Simply put, if a fan hasn't got cyclone separation then it isn't truly filterless.

balanced

intelligent

Lifetime Range*

for life

envirovent

Because Air Matters

heatSava

Intelligent Single Room Heat Recovery Unit

The most radical breakthrough in Single Room Heat Recovery technology ever...



- Introduction 02-03
- Features 04-05
- Innovative 08
- Technology 09
- Individual 10-14
- Technical 15

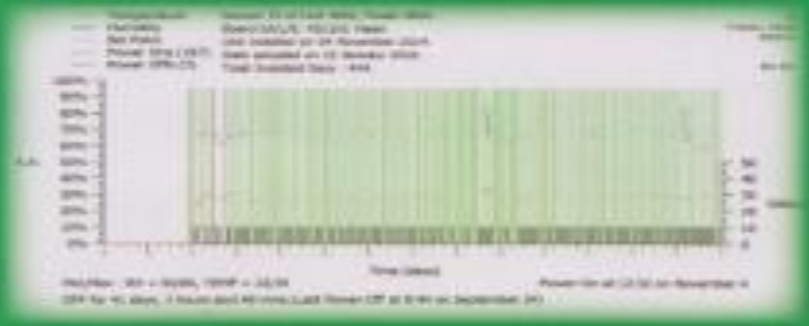


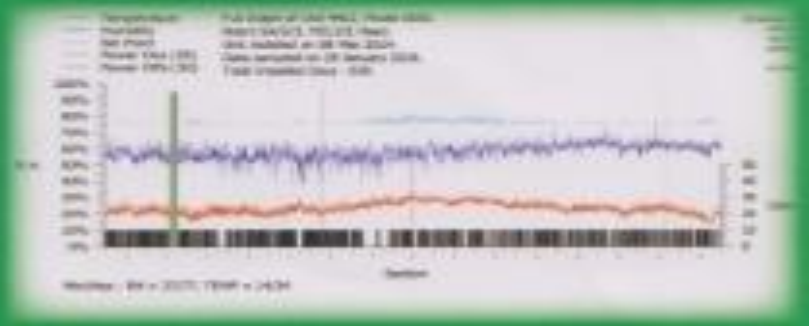
Time Elapse Meter available on Filterless Extract Fans. This records the number of hours the fan runs and thereby enables landlords to prove whether fans are being used or isolated.

DataFan *Putting You in Control*





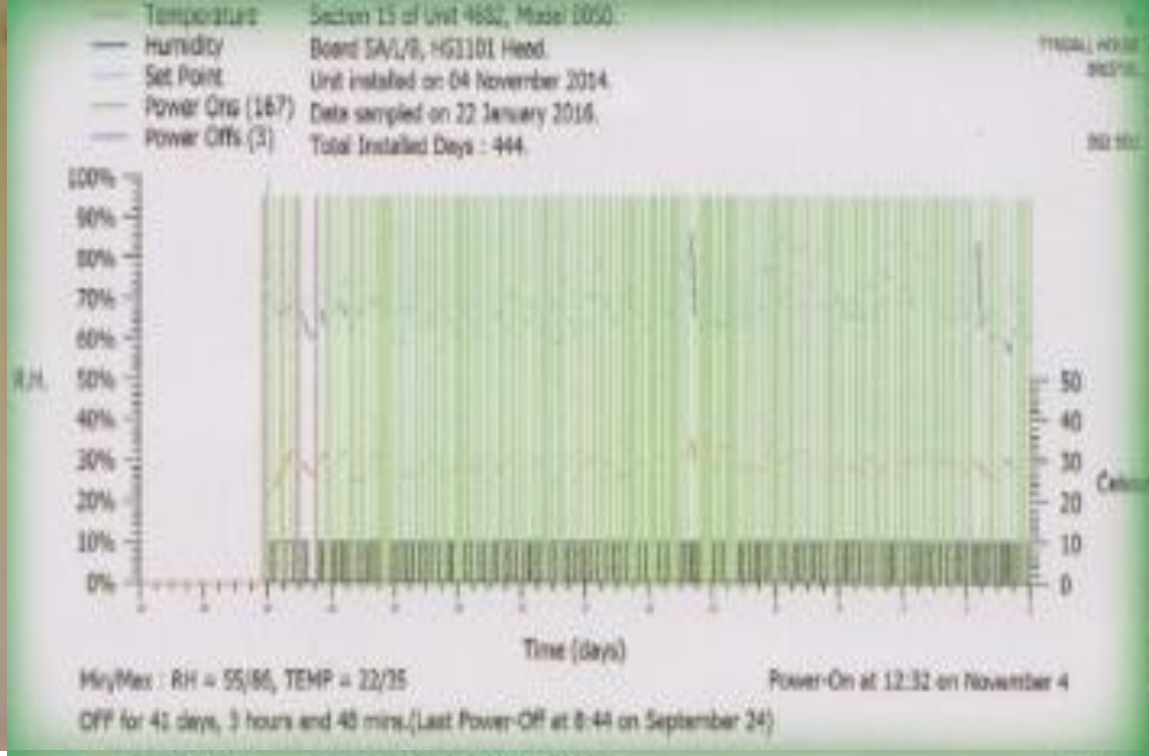


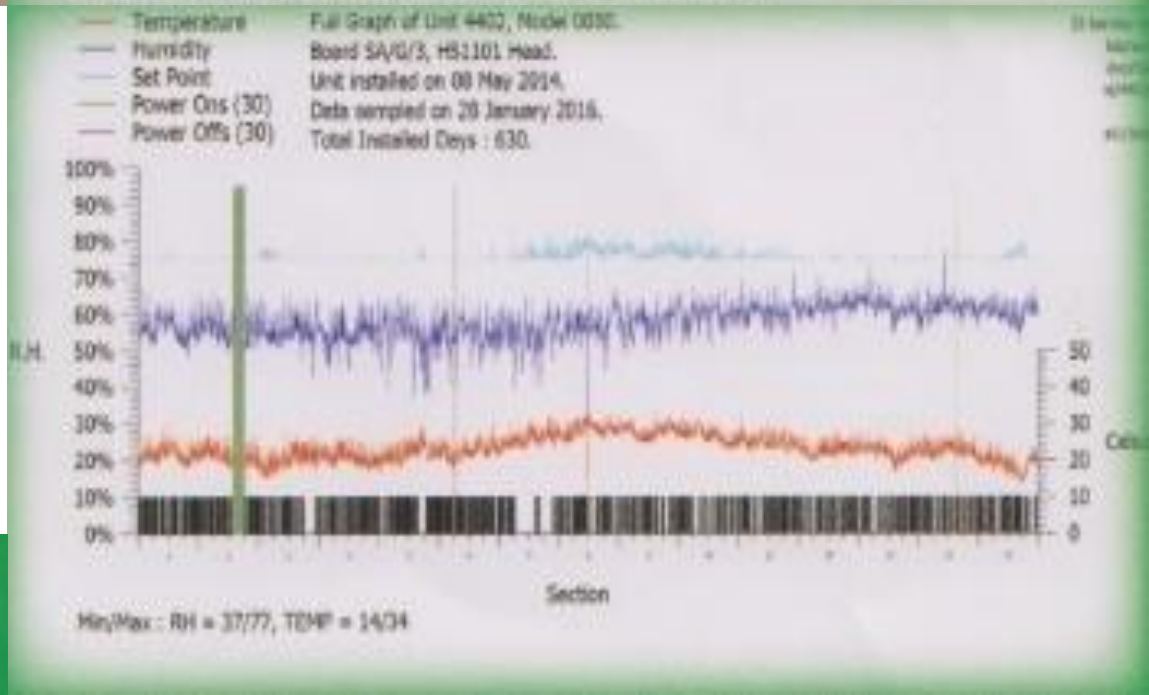


Vital for disrepair cases, high level complaints or ongoing mould and condensation issues.

For more information and details on how this fan can help you please fill in the form on the back.







Vital for disrepair cases, high level complaints or ongoing mould and condensation issues.



Positive Input Ventilation (PIV)

Ventilation is the intentional introduction of outdoor air into a space and is mainly used to control indoor air quality by diluting and displacing indoor pollutants; it can also be used for purposes of thermal comfort or dehumidification. Positive Input Ventilation or PIV Systems work by encouraging the movement of air from inside to outside from a unit that is usually installed in a loft. These units reduce or eliminate surface condensation altogether by replacing humid stagnant air with fresh filtered air.

Positive Input Ventilation (PIV) also sometimes known as positive pressure ventilation work as a whole house ventilation system and create fresh and healthy living environments by supplying fresh, filtered air into a property at a continuous rate throughout.

PIV is required when:

✓ You don't want to do a full renovation.

✓ You require a whole house ventilation solution.

✓ You don't want to remove any walls or go back to brickwork.



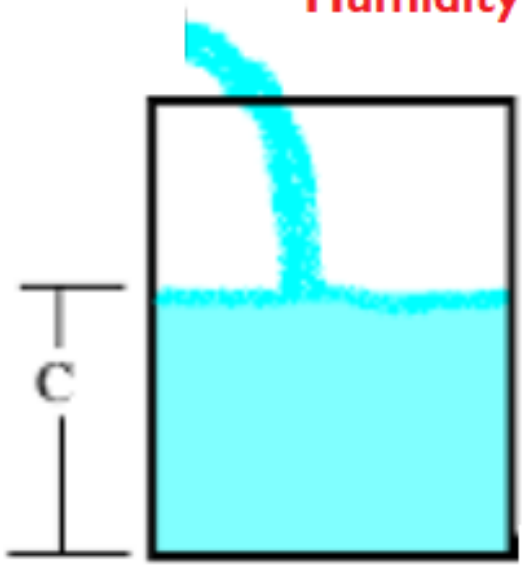
Damp and Condensation

- Heating Implications

What factors might one consider when looking at heating as the cause of condensation occurring in a property ?

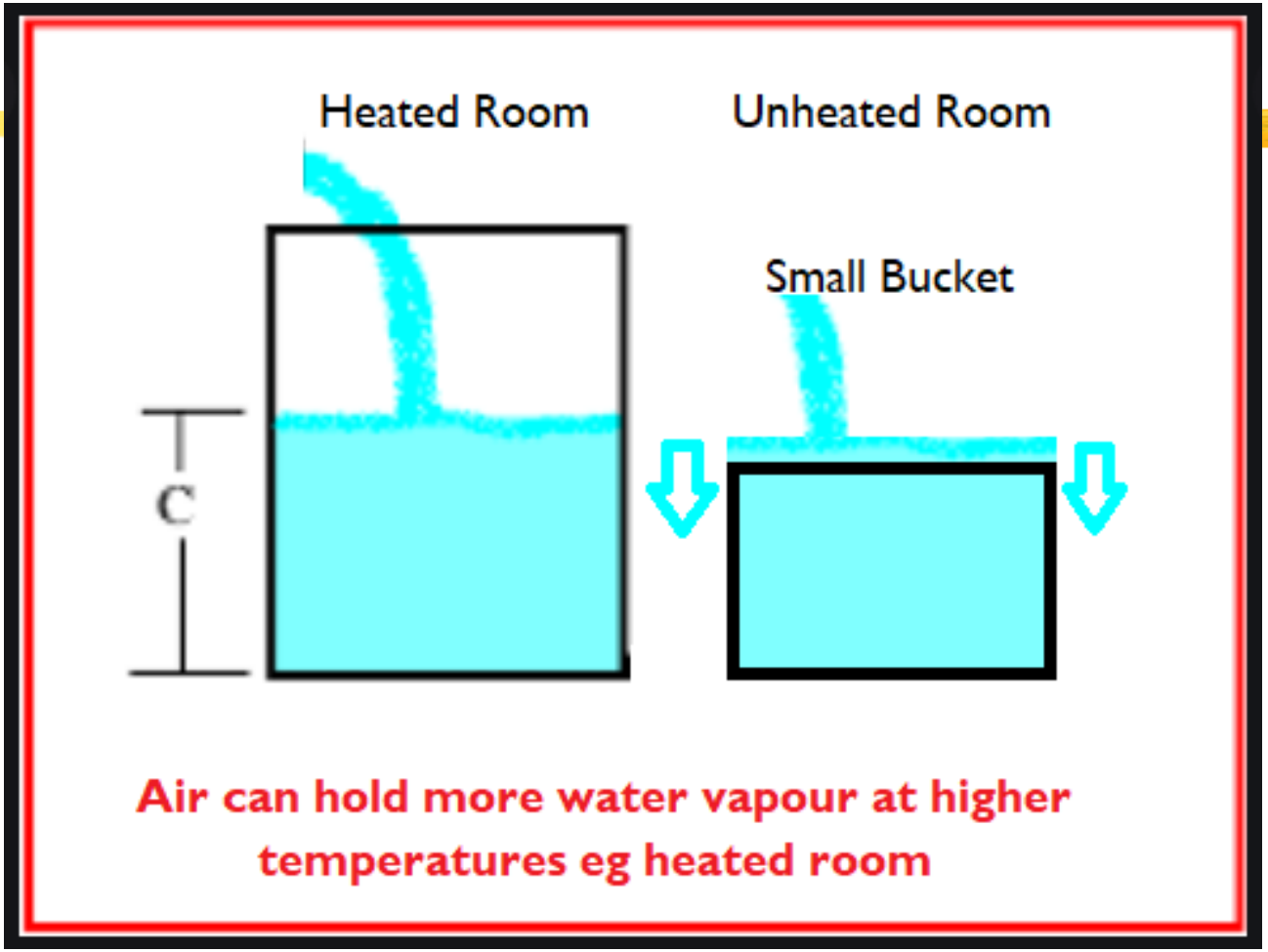
- *Form of Heating - combi, storage heater, communal*
- *Appropriate siting and sizing of radiators and the like*
- *Pattern of heating*
- *Fuel poverty*
- *Effective working of radiators, type of valves and controls*
- *Sensor type and positioning*

Humidity in a room



Big Bucket

Air can hold more water vapour at higher temperatures eg heated room



Air can hold more water vapour at higher temperatures eg heated room

Around 40% of the homes to be upgraded were brick-built. So BDHT asked SPSenvirowall to employ a special 'brick-effect' render finish to ensure planning conditions were met.

By applying the colour of the mortar joint, followed by another brick-coloured coat, then marking out the shape of the bricks with a straight edge and gently removing it to expose the mortar colour, SPSenvirowall was able to recreate the look of the original exterior.



Preventing future condensation



Warm Touch® Insulation

Warm Touch® is a simple solution to common problems caused by cold, solid walls, such as condensation and black mould. Traditional internal insulation is costly and intrusive to fit, requiring the removal of skirting boards, doors, kitchen and bathroom furniture. This is particularly problematic for social housing occupants who may require costly, disruptive alternative accommodation.

Sovereign Warm Touch can be applied easily by decorators, builders and even competent DIY'ers. It is classified as 'M1: Permanently Non-Flammable' and is supplied in flexible rolls of either 5mm or 10mm thickness. Applied like wallpaper, it gives instant insulation and sound proofing. Once fitted, Warm Touch can be painted, wallpapered or even tiled.

In addition to providing a warmer surface, Warm Touch can also be used to renovate cracked and damaged walls. Warm Touch is also ideal for use on chimney breasts and ceilings, particularly dormers and in loft conversions.

Sempatap insulation

- Thermal insulation on ‘a roll’;
- Thickness 10mm;
- Does not improve U values by much (but could be enough!)
- After treatment, a solid brick wall would have a U value of 1.4.

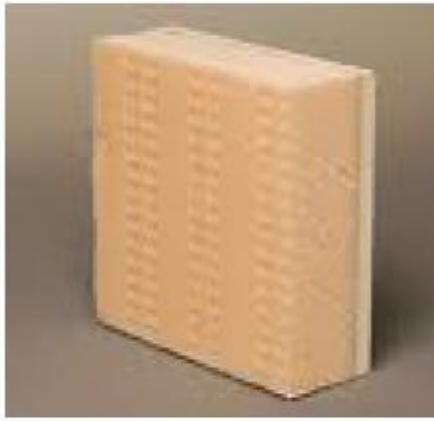




Gypsum Thermalboard

- Expanded polystyrene glued to the rear face of a wall board;
- Stuck onto inside face of the plastered wall;
- Makes more of a difference to the U value (0.7);
- However, it is disruptive and expensive







Wykamol
GROUP LIMITED

THIN INTERNAL WALL INSULATION AND DAMP CONTROL (TIWI)



THERMAL INTERNAL WALL ECO-SYSTEM

WYKAMOL ECO

Basement Waterproofing Association
PCA
BBA
WYKAMOL WATERPROOFING SOLUTIONS

- *What Remedial Measures Can be Adopted to Eliminate Condensation/ Mould etc?*

Identify the remedial measures that could be used by a tenant to get rid of mould in a property be it on a property's surfaces or tenant's belongings ?

- *Shampoo carpets - do not vacuum same*
- *Dry clean clothes*
- *Use an anti-fungicidal wash on the walls – which contains bleach and biocides – from a DIY shop*
- *Use an anti-fungicidal paint if painting*
- *Use anti-fungicidal paste if wallpapering*

- *Also advise of the need to consider lifestyle, ventilation, heating etc as the potential cause*

Sovereign Mould Control Pack

This handy all you need pack contains Dentolite Sterilising Solution Concentrate for removing black mould and sterilising surfaces, as well as two pots of Mould Eradication Additive for mixing into emulsion paint to prevent its return. The pack also includes a pair of protective gloves and protective goggles, plus a paint brush and a sponge.



www.condensationproducts.co.uk

Products



Anti Mould / Anti Fungicidal Paint Additive

Best Buy!

Paint additive to protect the paint film from the effects of damp & mould

read

£7.90 inc VAT
(£6.72 + VAT)

Buy



Anti Mould / Anti Fungicidal Paint Additive-3 PACK

A pack of 3 anti mould Paint additives to protect the paint film from the effects of damp & mould. A pack of 3 saves you 5% on the single bottle price

read

£22.52 inc VAT
(£19.17 + VAT)

Buy



Anti Mould & Anti fungicidal Paint Additive - PACK

Pack of 6 Anti fungicidal Paint additives to protect the paint film from the effects of damp & mould - A pack of 6 bottles is 10% cheaper than the standard price

read

£42.85 inc VAT
(£36.47 + VAT)

Buy

The 'active ingredient' for our additive is a derivitive of what we use to kill dry rot in buildings, ultimately Dry rot & the mould you want to treat are fungus's. We have a **proven track record** with the 'active ingredient' in our additive over many years of treating dry rot outbreaks very successfully.

Anti Mould & Anti Fungicidal Paint Additives

Anti mould & mould resistant additives for paint

Introduction

This excellent anti mould paint additive is specially formulated to resist mould and mildew growth.
Basically this additive turns the paint that you want to use into an anti mould paint without the need for paying silly prices for a 'specialist' anti mould paint!
Our paint additive comes in graded 100ml bottles (with a child proof cap) 1 x 100ml bottle will treat a FULL 5 litre tin of water or 10 litres of oil based paint (Yes that's not a misprint!).
Most of our competitors products are around the same price for only 50 ml bottles, ie your paying the same amount of money for only half the product.

You can add the anti mould additive to

- Water based 'contract' emulsion
- Oil based paint such as Gloss or Satin paints
- Wood primer & undercoat
- Wallpaper paste
- Tile adhesive
- Tile Grout
- PVA adhesive - Handy when you're overskimming walls



- *Specially formulated to prevent condensation damage to interior walls in areas of high humidity*

SCIROCCO _ living the warm

DIASEN

IMPROVE YOUR BUILDING

12 November 2010

C.W.C. Stop Condense - Thermal Paint - Eliminates any mould and condensation

Latex-based white coating with specific mineral powders, that, thanks to insulating features, allow to keep surfaces warmer, eliminating thermal bridge. There is +5°C of difference between the surface treated with C.W.C. and the one treated with a traditional paint. This effect also prevents the air from condensing on the wall, even if there is high relative humidity in the room (up to 90%). The condensation and mould are then eliminated definitively.

ADVANTAGES
- Do-it your self. Simple and quick. Application by brush.
- Definitive and cheap solution.
- Hygienic clearance of residential environments.
- It is possible to paint on the product with hydropaint
- Final physical solution (not chemical, not toxic)
- A fixative is not necessary and the product can be applied onto the existent paint.

PHYSICAL / TECHNICAL DATA



Like | Tweet 0 | +1 0

More information...



Streamline Kontrol Moisture Trap & Condensation Crystal

Our Price: £5.99

New Kontrol Streamline Moisture Trap + 500g Condensation Crystals

Combats moisture & musty odours. Moisture Trap Absorbs up to 1000ml of moisture Ideal for Windows in Caravans, Boats, Utility Rooms, Kitchens, Bathrooms, Wardrobes & Cupboards Protection against (damp) musty odours & mildew Measures 26cm long x 9cm wide x 10cm high Ideal for: Windows, Caravans, Utility Rooms, Kitchens, Bathrooms, Wardrobes & Cupboards
Instructions for use:
Separate your lid tray & base. Remove crystal pack from base. Place tray back into base & carefully sprinkle pack of crystals into tray Wipe away any excess crystals and replace lid. Your moisture trap is now ready to use. Themoisture trap is active for up to 2 to 3 months, depending on the levelof humidity (the crystals will first become solid & may discolouras your trap starts to work) Absorption will continue causing the crystal to dissolve.

Dehumidifiers



- *Selected for there reliability, quietness and efficiency throughout a range conditions.*



Small dehumidifier

Straightforward, simple and perfect for small areas this small dehumidifier is our recommended WP Choice for storage spaces and cupboards.

Price: £39.99



Medium dehumidifier

Our medium dehumidifier is simply one of the best value dehumidifiers on the market . Mobile, easy to operate and the dehumidifying ability of up to 10 litres, it is our WP Choice for quality and value

Price: £149.99



Large dehumidifier

Smart design, built in timer with the ability for continuous drainage, the large dehumidifier is out WP Choice for anyone with bad damp and condensation problems.

Price: £219.00