

Before we begin, we want to emphasise that this ebook is only a basic guide, and it's not a substitute for a professional snagging survey. Our professional snaggers at HomeSnag are qualified surveyors and specialists who can provide a more detailed and thorough inspection of your new build property, using advanced tools and techniques to identify even the smallest defects that could cause problems in the future.

Therefore, while we hope that this ebook will give you a good overview of the main things to look out for when snagging a new build house, we highly recommend that you consider hiring a professional snagging survey to ensure that your new home meets the highest standards of quality and safety. If you're interested in our professional snagging services, please get in touch with us to learn more.

### DISCLAIMER

Please note that some checks may require accessing hard-to-reach areas, such as the loft or crawl spaces, and it is important to take appropriate safety measures before attempting to do so. We accept no liability for any accidents, injuries, or damages that may occur as a result of using the information in this ebook. While we have made every effort to ensure the accuracy and completeness of the information in this ebook, newbuild tolerances and Building Regulations change on a regular basis so we cannot guarantee that it is free from errors, omissions, or inaccuracies. Therefore, we recommend that you use this ebook as a starting point for your own snagging inspection, and that you seek professional advice if you have any doubts or concerns.

By downloading and using this ebook, you acknowledge that you have read and understood this disclaimer, and that you accept full responsibility for your own actions and decisions when inspecting your new build property.

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### 1

### RECOMMENDED EQUIPMENT

The following is by far not an exhaustive list, but rather what we feel are easily and relatively cheaply available to conduct a basic snagging survey by homeowners:

- Spirit level set: ideally a combination of long (1.2m-2m) and short (boat level up to 0.6m). You want to use a level as long as you can get away with; in other words do not use a small level checking brickwork or flooring etc.
- Carpenters square
- Socket tester
- Tape measure
- Screwdriver: philips + torx bits (for inspection chambers that require it)
- Fire door gap wedge and / or spacers
- Camera phone and snag list app: There are cheap apps but we recommend
   Site Audit Pro which costs around £16 as a one-off fee.
- Stickers ideally bookmark style ones rather than dot-stickers to ensure they do not leave a mark
- Ladders (if no loft ladders): We use telescopic ladders, but please note that
  we only recommend doing a head and shoulders check from the hatch to
  check the insulation / areas nearby.

### POOR DESIGN: EXTERNALLY

The example pictures below and on the next page were taken from houses ranging from a large volume 'quantity rather than quality' builder and a multimillion pound bespoke build.

We cannot provide every possible aspect of poor design / hazards, so the trick is to think how the house will function on a practical basis long-term.

#### Falls from height:

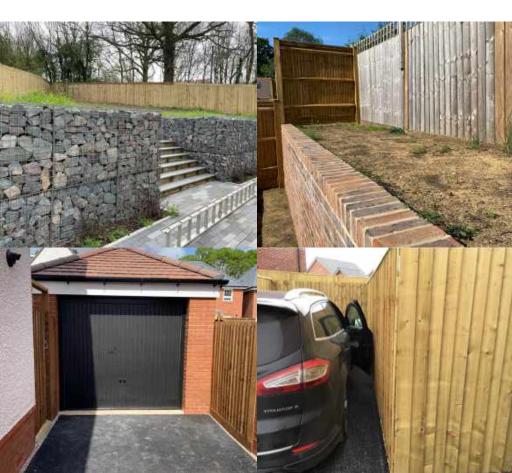
Where ground levels are raised, there should be no fall higher than 600mm without guarding (pic 1).

#### Maintenance:

If you have a narrow strip down the side of the house that has been turfed, it will not survive so it should have gravel or paving. Also if you have very narrow, steep banks or raised areas (pic 2), think of how they will be maintained with a lawn mower.

#### **Functionality**

Picture 3 shows a garage that hasn't been installed central. to the drive. Also check that paths are wide enough for wheelie bins and you actually have enough room to park (pic 4).



### POOR DESIGN: EXTERNALLY

#### Rainwater:

We cover how gutters and downpipes should be installed in the rainwater goods section. However some design flaws may only become apparent after prolonged periods of rain. The first 2 photographs show examples of where (1) rainfall from canopies will run off and saturate the light (and car charger) beneath, and (2) where the canopy does not overhang far enough so the brickwork underneath has turned green from constant rainwater run-off over the space of 12 months.

#### Incorrect design:

The 3rd picture below shows an example of misalignment of windows. A more common issue with smaller builders is they don't consider privacy in bathrooms, as they should have frosted glass.

#### Check it vs. other houses

If something looks like the trades have had to rectify incorrect detail (such as wrong position of the boiler flue as per pic 4), try to visit other houses of the same house type on site or show home to compare it.



# EXTERNAL SNAGGING

BRICKWORK | RENDER | CLADDING | LANDSCAPING | GROUNDWORK | FENESTRATION | ROOFING | RAINWATER GOODS | JOINERY | GARAGES



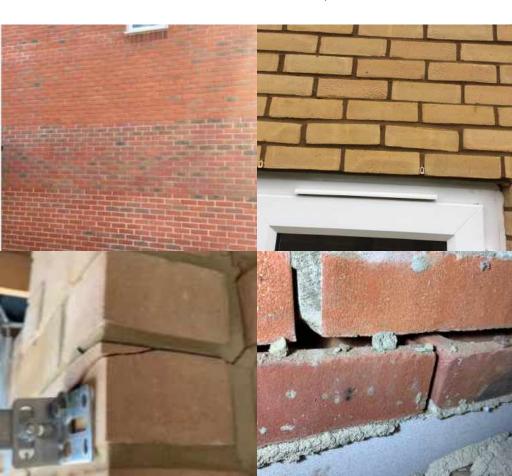
When checking brickwork the main things to look for are:

- walls out of plumb by >8mm using 2m level (plumb means straight)
- any damage or cracks\*
- · mortar needing repointing
- efflorescence
- blocked or fake weep vents
- brick banding

\*unless 'character' bricks which are designed to have imperfections for the aesthetics The four photographs below demonstrate the most common issues we find with brickwork which are:

- banding (where bricks batches are not mixed or otherwise entirely different bricks used at different storeys as shown below)
- unlevel bricks which is a sign of rushed or just poor workmanship
- · damaged bricks
- repointing of mortar

Another sign of poor workmanship is unequal perpends, which is the thickness of mortar at the sides of bricks. They should be 10-15mm wide



#### **Expansion joints**

Newly constructed houses can develop various types of cracks over time, commonly caused by thermal expansion and settlement. Thermal expansion can occur due to temperature changes, which cause building materials to expand and contract. This can lead to cracks that are a vertical (see next page for an example).

To prevent this, houses of a certain size will have expansion joints running up the whole height of the walls. It should not run below the Damp proof course and so is a good indication where the DPC is too low as shown in the first photographs below. It should also not be between openings (ie. windows and doors) as shown in the second photo.

The third photograph shows when an expansion joint has been retrospectively installed, but it is 'fake' as only the first couple of cm have been cut with the mastic covering it (rather than it being all the way through).

#### Settlement

Settlement in new build houses refers to the natural process of the building's foundation settling into the soil over time. When a house is constructed, the weight of the building compresses the soil beneath it, causing it to shift and settle, and cracks will appear during the process.

These cracks can appear as hairline cracks (up to 1mm) which are very common inside the house as well as outside.

The process of settlement can vary in timescale, but generally it is up to 10 years. The majority of settlement issues will be apparent internally (as will be discussed in a later chapter) and will occur over the initial 9-12 months.

The next page will discuss cracking in more detail...



It is more likely for cracks beyond settlement to develop beyond the first several years after completion so we recommend periodically checking the brickwork for any signs of:

#### **Stepped cracking**

As shown in the first image this is commonly caused by subsidence or heave. Heave is typically caused by an upward movement in the ground due to factors such as the expansion of soil or the presence of water beneath the surface, while subsidence occurs when the ground sinks or settles. Two factors that commonly cause this are when trees are cut down or drainage fails (pipes moving or leaking).

#### **Vertical cracking**

An example is shown on the second picture which is caused by thermal expansion and contraction where expansion joints haven't been provisioned.

#### Horizontal cracking

This is associated with an issue of wall ties so requires invasive investigation inside the cavity to check there are sufficient number of ties installed etc.

#### Structural cracking

A crack is considered a structural concern based upon the thickness of it and also if it is cracking through the bricks / blocks rather than 'just' the mortar. As detailed below, we recommend seeking professional advise from a structural engineer when the cracks are considered Category 3...

Category 0 – Hairline cracks of less than about 0.1 mm are classed as negligible.

Category 1 - Crack widths up to 1 mm. Can be treated easily.

Category 2 – Crack widths up to 5 mm. Cracks easily filled.

Category 3 – Crack widths are 5 to 15 mm, or several of circa 3 mm. Require minor remedial works as weather-tightness often impaired.

Category 4 – Typical crack widths are 15 to 25 mm, but also depends on number of cracks. Extensive damage which requires replacing sections of walls.

Category 5 – Typical crack widths are greater than 25 mm but depends on number of cracks. Structural damage that requires a major repair job.



#### Efflorescence

This is a common issue that can occur in new builds, but often it is excessive. It can be isolated to areas where a particular pallet of bricks are left unprotected and they get saturated over months before they are used. In some instances such as the first photo below it can be an issue that affects the entire house.

The second photograph shows that it can be a 'warning sign' of isolated saturation such as a leak from gutters onto brickwork or from particular weep vents (explained in a chapter shortly) suggesting excess water in the cavity.

If efflorescence does occur, it can usually be removed with a stiff-bristled brush and a solution of water and vinegar or a proprietary efflorescence remover. However, it is important to address the underlying moisture issue to prevent the problem from reoccurring. Most of the time builders and warranty company's say efflorescence is harmless, but in our opinion, at the very least, it is unsightly and should be rectified.

Efflorescence is the process by which salts from building materials are brought to the surface and form a white, powdery residue. This residue is often seen on the surface of walls, floors, and other masonry surfaces. Efflorescence occurs when water seeps into the pores of building materials such as concrete, mortar, and brick, and then evaporates, leaving behind salt deposits.

To prevent excessive efflorescence, it is the builders responsibility to ensure that the building materials are properly cured and protected before construction begins, and that any moisture issues are addressed before finishing work is done.

As a rule of thumb in our opinion, if efflorescence is isolated to just a couple of small areas it is not a concern. If it is widespread all around the the house or it suggests constant saturation to a specific area then it should be investigated / rectified by the builder.



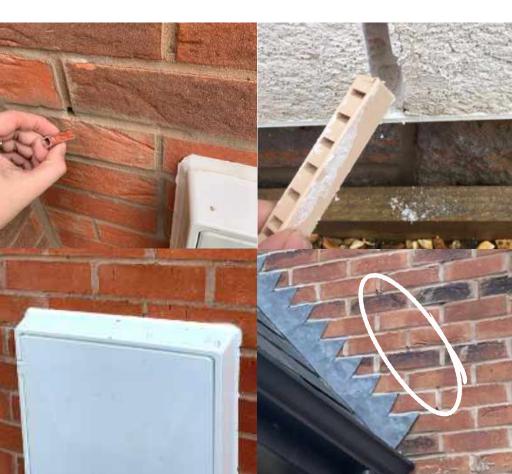
#### Cavity trays and weep vents

Cavity trays prevent rainwater from settling in-between the outer brickwork and inner blockwork / timber frame by providing a barrier to openings which directs water that enters towards a weep hole, which allows it to drain away safely.

They are located above 'openings' such as external windows, doors, bay or extensions They should also be above meter boxes (see pic 1 where the weep vents are fake and pic 3 where missing).

Weep vents are small openings that are inserted into the external walls of a building at regular intervals to allow any moisture that has penetrated the cavity to escape.

Finally, as shown in the last picture it is important that the weep vents are at the correct height to flashings. Lead flashings will be above front door canopies, bay windows and stepped in line with (adjoined) garage roofs etc. Often the weep vents are too high to the flashing suggesting the flashing and cavity tray are misaligned.



#### Damp Proof Course (DPC)

In the UK, rising damp is an often a misdiagnosed issue. It is rare to find on most houses, and a very rare issue with new build properties where the warranty company should check the Damp Proof Course (DPC) at the point of installing the foundations. However the issue to look out for is when ground levels are too high and there is a possibility of moisture bridging over the DPC. A DPC should be installed at least 150mm above ground level, regardless of disability access...

In new build houses, a double damp proof course is often installed around entry doors to provide disabled access. This is particularly important where ramps are built up to the height of the door threshold, which can create a gap in the DPC. By installing a double DPC, builders can ensure that there is a continuous barrier against moisture, even where the ramp meets the threshold.

As per the pictures below, having ground levels at the same height as the damp proof course is an issue as rainwater may bridge over and find its way to the internal blockwork.

Often a DPC can be hard to find but a good indication is the height of air bricks (explained next) which is typically directly below the DPC, or if the house does not require air bricks then look for a different band of brick types (such as engineered bricks which will be shinier in texture) around the building at a consistent height.

#### Retrospective works

The second photo below shows how the builder have bridged the DPC. This means that the render is lower than the DPC, and so any moisture is able to rise above it.

They have had to retrospectively drill and insert weep vents in the render due to the error, but the issue of rising damp is a possibility regardless.



#### **Air Bricks**

Located under the Damp Proof Course you may find air bricks which are vents to allow for air to flow the sub floor. This is only on houses with suspended floors to prevent damp and moisture buildup inside the sub-floor.

They are deigned to be slanted down to prevent rainwater entering which can even sometimes be done incorrectly (see pic 1 which shows it upside down).

If done correctly, the air brick should be 75mm higher than ground level (or more, depending on floor height respective to ground levels outside, such as if your house is on a hill). The number of air bricks required will depend on the size of the building but sometimes where we see just a couple, others may be buried as seen the the other photos below.

Air bricks are vents that are installed at low levels in the walls of a building to allow for air flow and ventilation with houses with suspended floors. In new build properties, air bricks are an important feature that helps to prevent damp and moisture buildup inside the sub-floor.

It is particularly important to identify air bricks that too low and next to hard surfaces such as tarmac driveways, as rainwater is likely to easily enter and cause issues in the long run (see last image).

You may see the same sort of air bricks higher up on walls which will be installed rather than normal vent grills for extraction from kitchen and bathrooms.



### RENDER

Other than poor application or repairs, render can experience ghosting and crazing. Ghosting, a form of efflorescence, is where the blocks become visible (see pic 1). Crazing, on the other hand, appears as a network of fine cracks on the surface of the render, and is often caused by a lack of curing time or over-troweling. Most houses will have expansion joints to prevent vertical cracks from thermal expansion so check this is installed if you have a large or adjoined house.

The NHBC tolerance is for it to:

- be reasonably consistent in texture, finish and colour
- be flat, within a maximum ±4mm vertical and horizontal deviation in 5m
- be free from crazing; less than 1mm in depth and no more than 0.2mm wide.

The most common issues we find are when the finish is uneven (pic 2), the weep vents have been entirely covered (pic 3) or repairs aren't flattering (pic 4).



### **CLADDING**

#### **Brick Slips:**

Brick cladding or otherwise known as brick-slips is a popular choice for apartments due to its durability and timeless aesthetic. However, issues can arise if the bricks are not installed correctly or if the mortar isn't fully filled (applied after the bricks are secured to the wall). They are secured to the wall by adhesive (similar to tile adhesive) which if improperly mixed can deteriorate over time. If the mortar between the brick slips is improperly filled then rainwater can deteriorate the adhesive and the tiles can come away particularly in the winter from frost attack.

#### Stone Cladding:

Similar to brick-slips, issues can arise if the stone is not properly installed or if there are problems with the underlying structure. Water penetration can cause damage to the stone mainly in the winter when frost causes cracking to the adhesive and mortar.

#### **Timber Cladding:**

Timber is susceptible to rot and decay if not treated and maintained correctly. Insect infestations can also occur, so regularly monitor during the summer.

#### **Metal Cladding:**

Metal cladding is a durable and lowmaintenance option for many buildings. However, issues can arise if the metal is not properly fixed or if there are issues with the underlying structure. Metal can be prone to corrosion if not treated or if it comes into contact with incompatible materials.

#### **Composite Cladding:**

Composite cladding is a popular option due to its low maintenance requirements and versatility in design. However, issues can arise if the cladding is not properly installed.

The two photographs below show some of the common issues we find with cladding which are

- · missing trim
- excessive gaps

These issues make it susceptible to insect and birds entering and potentially causing damage.



### LANDSCAPING

#### Topsoil

This is the uppermost layer of soil, which contains most of the nutrients required for healthy turf. We use a soil probe to check the consistency; see Pic 1, which has a heavy clay consistency in the layer that is meant to be topsoil. You can use a garden trowel or small spade to check the clay consistency quite easily: dig and remove a small section about 10cm deep and inspect the soil by pressing your thumb into it. It should crumble as shown in the 2nd picture, but if your thumb imprints into it (i.e. feels like plasticine) then it is heavy in clay; a cause of boggy lawns.

#### Boggy lawn

Boggy conditions tend to only be noticeable during the Autumn and Winter months due to the higher levels of rainfall. A boggy lawn is a sign of either inadequate drainage being provisioned if the topography requires it, or soil heavy in clay consistency. We suggest first checking the turf for clay, and then consider inadequate drainage as the cause when approaching the builder.

NHBC requirement is to have at least 100mm depth of toposil



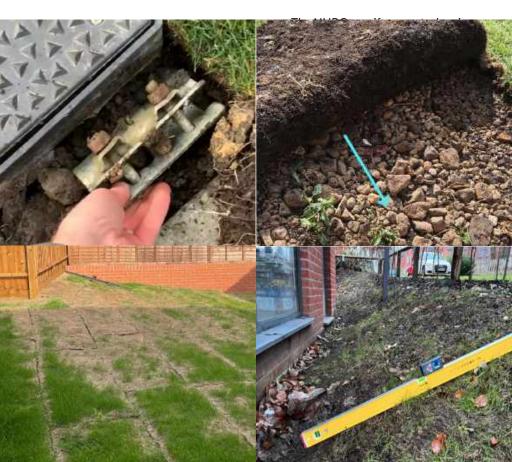
### LANDSCAPING

#### **Debris**

Any stones or debris can create an uneven surface but also it will mean the turf will not thrive. Common areas for stones and debris to be found is next to paths, inspection chambers and fencing. Stones are the most common culprit but we have found an array of items as seen in picture 1. If you have newly laid lawn by the developer, try not to walk on it to avoid imprints so either spot-check where you can reach from the path or wait a few weeks, as any areas that doesn't thrive will turn yellow.

#### **Gradients**

Steep gradients towards the house (such as pic 3) are also more likely to encounter pooling rainwater. It can look poor and unlikely to be enjoyed recreationally (see pic 3). In this instance it is recommended to install retaining walls that will allow for flatter lawns. The NHBC state that the gradient should not exceed 1:6, and the way in which we check this on our surveys (as shown in the 4th picture) is to use a level with a 'disto' laser measure placed on top which detects gradients.



### LANDSCAPING

#### **Maintenance**

A steep lawn will be impractical to mow as well as hazardous to walk over and you want to ensure that the inspection chambers are at ground level to the lawn to ensure the blade of the lawn mower does not catch it. For any narrow sections (e.g. pic 1), ideally it should either have weed membrane laid and stone or bark adding rather than adding turf, as it isn't practical to maintain. If you have moved in to a property in summer with newly laid turf, it is important to water regularly to prevent it drying out (see pic 2).

#### **Weed Prevention**

Where there is mulch / bark chippings, these areas are often not properly prepared as seen in pictures 3 & 4. They should have weed membranes before the decorative layer is poured on, so if you have any areas like this we recommend scooping some away to check if it is laid underneath.



### **GROUNDWORKS**

#### **Inspection chambers**

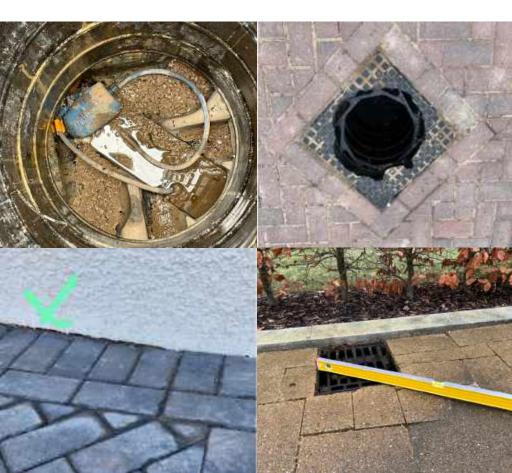
These are access points to check junctions of drainage pipes, and to allow them to be rodded if blocked. An example of a blocked drain is shown below (pic 1) which is very common. Waste pipes should have a 1:60 fall which is shallow enough for toilet paper and solids to run with the water rather than be left behind. The chambers should also be level with the surrounding grounds. We recommend removing the chambers to inspect if safe to do so (caution advised as some can be heavy-duty).

The other issue to consider is the type of inspection chamber that has been installed on the drive, as those only meant for pedestrian weight are installed and break when driven over (see pic 2):

A15 - pedestrian only A35 / A50 / B125 - driveways

#### **Ground levels**

Ground levels can be too high (pic 3, and also refer to brickwork DPC), and uneven grounds will see rainwater pooling and not drain away (pic 4 showing the rainwater drain is high)



### GROUNDWORKS

#### **Aco Channel Drains**

These are often found at the foot of garage entrances or at the side of driveways to collect and send rainwater to to the drainage system. Due to their location, they often get filled with tarmac and debris (pic 1), and occasionally we find they do not have a gulley hole at either end of it.

#### **Paving**

Check that the paving slabs (or 'flagstones') and edging stones are not damaged, are secure and are aligned to each-other without any edges presenting a trip hazard.

The width of the paths leading to the door should be 900mm wide and have a slope no more than 1:6 (at which point steps are required).

The width of the route for refuge should be at least 750mm wide. As mentioned under the section regarding external design flaws, this means that the side path where you drag your wheelie bin through should having paving 750mm wide. Pic 2 shows it being too narrow.

#### **Thresholds**

It is important to consider how excess rainwater will cope around the front and back door thresholds which have a level access (ie. are the same height as the ground rather than stepped up). At the least, there should be a slight gap between the paving slabs abutting the threshold to allow rainwater to drain, or ideally install a brickslot. These are a smaller version of an Aco drain but the main difference is that a brickslot does not need to be connected to the drains; it just needs to divert water away from the door.

Paving abutting aco or drainslot channel drains should be 5mm above, as does the threshold the other side of it. The second picture provided below shows a brickslot which still has its protective wrapper on, but the issue is that the threshold is leaning in to the door, so rainwater that lands between the door and brickslot will likely pool and find its way in the property.



### **FENCING**

#### **Functionality**

You'd think the basic function of being able to close and lock a gate are taken as granted, however most of the time we find an issue. Often the gate posts aren't aligned plumb so there is an unequal gap which causes the gate to be twisted. Other common issues include the gate coming in contact with objects (pic 1), the latch bending or coming off due to wind smashing the gate, the bolt not aligning or large gaps underneath as shown in pic 2.

The most common form of damage is when the fence panels are warped and you can see your neighbours garden. Otherwise nails are often exposed so particularly check all the posts.

#### Wind

The posts should be plumb and secure so spend 1 minute walking around applying slight pressure to the posts to ensure they will cope under heavy wind conditions. If you have concrete posts, a common issue is for the fence panels not fitting flush so they rattle loudly in the wind (see last picture below for an example of this).



### **FENESTRATION**

Fenestration refers to the installation of external doors and windows, and whilst a variety of issues can occur with them, this page will concentrate on the most common issues...

#### Operation

The first and most obvious is when the doors and windows do not open or close easily. Due to the settlement process, doors and windows may operate smoothly for a period and then one day they may start catching. This is especially noticeable for houses with bi fold doors because it is a large opening and so only slight changes in alignment will require adjustment.

#### **Gaps**

Check there are no gaps between the window and frame using a spacer as shown in the first picture. The most common area we find gaps is in patio doors, and particularly at the bottom where the doors join and you can see daylight through.

#### <u>Damage</u>

Whilst checking they operate, check for any cracks or scratches in the glass and frame. Unfortunately there is no way to easily repair glass, so any scratches longer than 25mm is considered out of NHBC tolerance so will require the glass pane replacing. It is best to inspect glass when the sun is out as it will highlight any scratches (see pic 2).

#### Sealant

It is common for sealant around windows to be untidy and particularly common for mastic to be missing entirely underneath external door thresholds as shown in the third picture below.

#### Trim

Occasionally the sections of windows (known as the mullion, transom and glazing bars) are not straight or level. Also the edges of the glass will have plastic trim that is often not cut to size so there are sharp edges at the mitre join or they bend out.

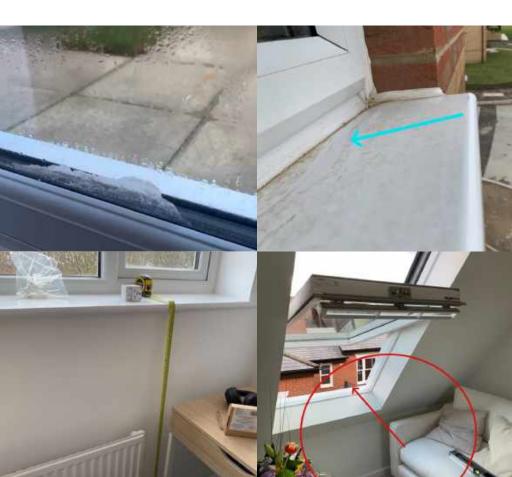


The other less common aspects to consider are

- privacy: is the glass in bathrooms and WC's frosted?
- blown inside the double glazing: the beads or moisture may be visible as shown in the first photograph
- the window sill leans in rather than out to prevent rainwater potentially seeping to the reveal inside (second picture below).
- The height of windows being too low or too high

The last point is the most important as it concerns safety of children and escaping in the even of a fire....

The height of windows in a 2 storey home should be no less than 800mm but not higher than 1100mm (see picture 3 below). In a 3 storey homes and apartments the windows should have restrictors as the exit in a fire is from the staircase and not the windows. Picture 4 shows a concern of a child being able to climb and fall from a low-level velux window on a 3 storey house. This should not be able to open more than 100mm wide.



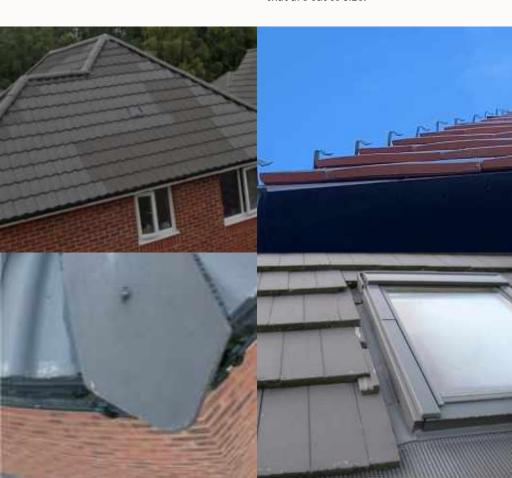
### ROOFING

The most obvious issue to look for on a roof is any slipped tiles or slates. On our snagging surveys we use poles on cameras or even drones to inspect roofs that are not easily inspected from ground level. Therefore it may be difficult to inspect unless the land around allows clear view, in which case we'd recommend using binoculars if you are able to.

Other than damage, the below photographs demonstrate some of the other issues we find with roofs which include:

- Different batches of tiles (pic 1)
- Verge clips not in contact with tiles (pic 2)
- Dry verges (plastic caps) not secured
- Gaps to soffits, fascias and bargeboards more than 10mm
- Hip tiles over projecting (pic 3)
- Ridge or Hip tiles not screwed in.

Also on roofs with velux windows, often there are narrow tiles which come away (see pic 4). To avoid this the roofer should use 1 and a half tiles that are cut to size.

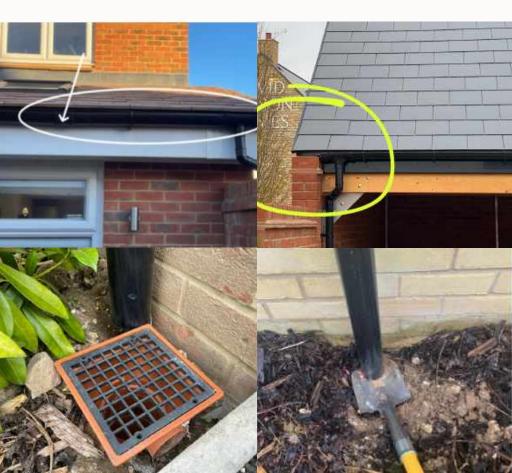


### RAINWATER GOODS

It is best to try and inspect how the gutters and downpipes react by inspecting in heavy rainfall, although signs of blocked gutters can be apparent by isolated pools of water the morning after. Reasons for gutters leaking include: having leaves or debris in them, the tiles do not overhang into the gutter properly (they should project 50mm into the gutter), there is a gap, or the gutter tilts / is twisted. It is also important that they have a steady gradient toward the nearest downpipe and don't have have dips. Picture 1 shows this issue.

Sometimes as shown in the second picture, the gutter doesn't even extend out far enough. It is also surprising the amount of times that we find that rainwater downpipes are not connected to the drain, as shown in the third and fourth picture below. The volume of water from the roof will cause saturated grounds and potentially cause structural issues.

Finally, where there is a flat roof it should not have excessive amounts of pooling rainwater so likewise check a day or two after rainfall.



### LOFT

#### **Spandrel panels**

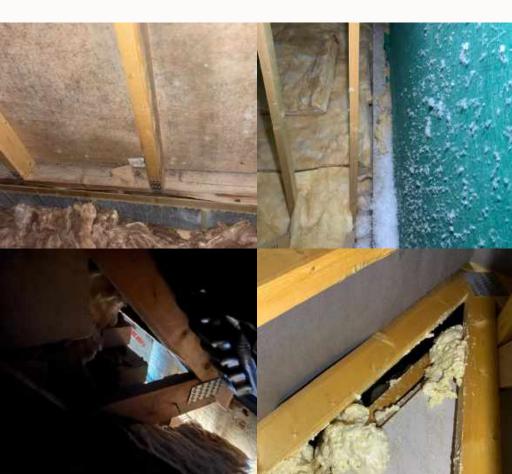
These are pre-fabricated panels seen at the gable (triangular top sections of the roof) as an alternative approach to building the gable wall with blocks due to the time it saves installing. It is important that they are

- secured using metal straps every 1.8 for gable walls or 1.2m for party walls
- There is blue (dyed) acoustic rated cavity insulation when party wall
- No gaps around it or at the eaves of the party wall

Picture 1 shows a lack of straps holding the spandrel panel in place. Picture 2 shows a party wall with white cavity insulation blown out, so confirmation of this was requested as it should be blue to suggest acoustic rating.

The 3rd picture shows lack of protection at the corners of this party wall, where fire can spread through the eaves to the neighbours house and vice versa.

The 4th picture shows a poor attempt of filling gaps around the panel.



#### **Restraint straps**

These provide stability to the gable walls and they should be connected to the 'inner side' of the block in the cavity. So with this in mind, you should not see the strap's right angle as it should be the other side of the block. The first picture shows the strap's right angle is on the wrong side of the block and of course it has been poorly secured.

Even if the screws had been fixed using rawl plugs, it is not allowed. Often it is too late to tie it into the inner block, the joiner gives up as seen in pic 4.

The way the strap is attached is also often incorrectly installed. Sometimes it is only fixed directly to the trusses (pic 3) rather than to timber bracing or noggings. The most common approach is attaching it to 'bracing' [a stretch of timber running horizontally as shown on the other pictures]. It should have 8 nails fixing it to this bracing which is often not done as seen in the second photo below.

Note: as it is often difficult to access this area, we suggest looking from the hatch or hire a professional to check.



#### **Insulation**

Most lofts have mineral wool insulation laid on the deck of the loft (lower section between the bottom part of the trusses), but an alternative approach is having rigid insulation panels between the truss upright sections, secured in place by plyboard. If in doubt, ask your developer how it is insulated or check your property's EPC.

Assuming your loft has mineral wool insulation laid on the deck which is the most common way, it is meant to achieve a thickness of around 300mm. This is meant to be achieved by crosslaying the insulation: the first layer in line with the truss (i.e. it fits between the timbers) and then the second layer

cross-lays over the top of it in the opposite direction. Pic 1 at the foreground only shows 1 layer or insulation and in the background has none laid at all. A common area to be missed is at the eaves (picture 2).

#### Vent trays

The purpose of these is to allow air flow from the eaves up into the loftspace which is vital to prevent excessive condensation issues (discussed in more detail shortly). They allow for the insulation to be butted up against them, but are often pulled tight (see pics 2 and 3) or at the wrong height (pic 4).



#### Roof underlay (breathable membrane)

These should sag in the middle to encourage moisture away from the timbers. If the underlay is too tight, any water will run down the underlay until it reaches a batten, from there it will collect until it eventually seeps through the batten nail holes in the underlay. An example of this issue is shown in the first picture.

#### Soil pipes

Unless you have soil pipe[s] on the exterior of your house, they will run internally and terminate in the loft. There should be an Air Admittance Valve to assist with drainage and prevent foul smells. The second picture shows an AAV, but it needs to be straight to perform properly.

It is quite common for us to find soil (pipes neither having a AAV nor connected to a roof vent as shown in pic 3. For clarity, the black pipe is the soil pipe and the white duct is an unconnected extraction vent.

#### Extraction vents

Check in bathrooms whether the extraction vents are connected to the ceiling, and if so make a note of where they are so you can check in the loft. The vent ducts in the loft need to vent externally through the roof tiles, and they need to be:

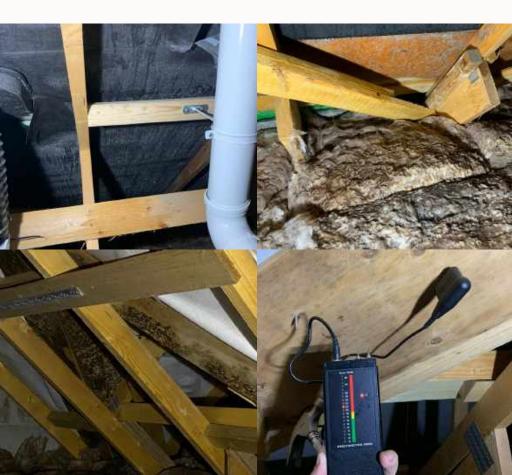
- insulated
- connected properly
- as short as possible, with no dips where condensation can pool. Pic 4 shows an excessively long duct.



#### Condensation issues

It is common for winter months to experience condensation in the loft. The cause of this is either poor ventilation or poorly laid insulation where heat from the bedrooms are causing excess moisture to form. Often in situations where there is excessive amounts of condensation in lofts, it is a combination of both. Therefore check for adequate ventilation at eaves / the ridge and for any gaps in the insulation. The 2nd picture shows how the condensation in the loft is dripping down and causing the mineral wool insulation to be saturated due to the eaves being packed with insulation and having no ventilation.

Where moisture from condensation saturates timber for long periods of time, it is a concern as it could effect the integrity of the roof. When the moisture content of timber is in the region of 18-20%, it makes untreated timber susceptible to such damp issues. This will often appear as black, green or white mould as seen in picture 3. The way to check for the moisture content of timber is use a moisture meter as shown in the 4th picture below. However, these are expensive so if you have concerns, your money may be better spent on a surveyor attending.



### **GARAGES**

#### Wall plates

The trusses in the garage should be connected to the wall plate (timber running along the top of the wall) via truss clips or two 4.5mm x 100mm galvanized round wire nails. Pic 1 shows neither installed.

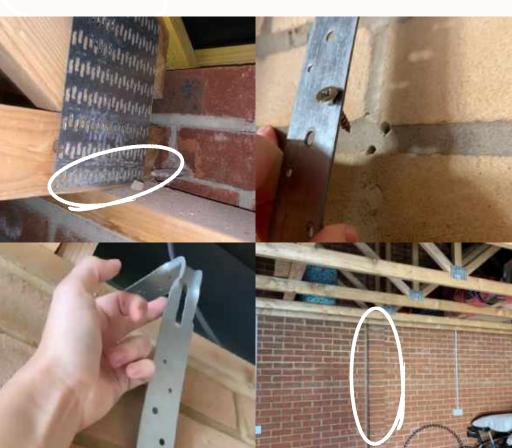
#### Restraint straps

Where a garage roof is susceptible to uplift, it also needs straps which are attached to the top of the wall plate and run down the side of the internal wall. These straps should be no more than 2m apart. It is common for them not to be secured properly (pics 2 & 3).

#### **Piers**

As the garage structure is only 1 brick deep (if not attached to the property), there will likely be piers which are sections of brickwork adding stability. These should extend the full height of the garage gable wall and be wider than 1 standard brick (pic 4). Most piers for this reason will be built with blocks, but they are often loose so check the stability of them.

The NHBC requires that for detached garages, there should be piers in the corners and at intermediate centres not exceeding 3m.



### **GARAGES**

#### Fire Safety

Where the garage is integrated to the house, the personnel door requires a self closing device. There should be a 100mm step up to the personnel door or the floor should slope toward the exit. The concern is that any spilt flammable liquids stored in the garage could otherwise pass into the house. Integrated garage walls should not have gaps for fire to spread and have intumescent sealant around pipes entering the house (pic 1). Likewise the ceiling should have pink fire plasterboard or double plasterboard where a bedroom is above.

#### Proximity of personell door

Double door garages should not have a side door within 2m of the front edge (see picture 3 which was short) and should have paving leading to it.

#### Rainwater ingress

Typically the garage should have an aco (channel drain) at the foot of the opening, or again by having a slope or a 'lip' at the entry.

The last picture below shows where neither have been installed, and the added issue in this photo was the slope of the drive was toward the garage which made matters worse.



## INTERNAL SNAGGING

PLUMBING | HEATING | JOINERY | ELECTRICS | INSULATION | FLOORING | PLASTERING & PAINTWORK | KITCHENS | FIRE SAFETY | VENTILATION



### POOR DESIGN: INTERNALLY

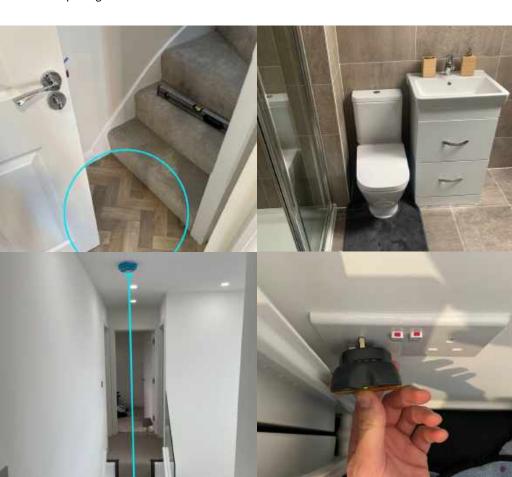
#### Access:

Access issues include:

- Doors open into hallways / landings and near stairs (pic 1)
- insufficient width provisioned for shower area so the screen doesn't open far enough
- Toilets position too close to towel rails or walls etc (see pic 2).
- Doors hits radiators so can't fully open
- Smoke alarms or loft hatches over staircases (pic 3)
- Switches the wrong side of door opening.

#### **Functionality:**

- Generally open and close all doors to check they do not hit the wall or radiators (etc). They should have door-stops when it is likely to impact in daily use.
- Also check all kitchen cupboards: example issues include the dishwasher door catching due to plinth not cut underneath and doors hitting handles of nearby doors.
- Check that sockets work and can actually be accessed (pic 4).



### **PLUMBING**

#### **Leaks**

Fill the bath to the level of overflow and check the overflow pipe is not leaking. Filling the bath will also allow you to check that the sealant around the perimeter of it doesn't split under weight. Some leaks under the bath may be slow or instant, so it is worth keeping a close eye as the water is emptying.

#### **Temperature**

Baths should not exceed 48 degrees according to building regulations and to combat this most plumbers fit TMV2

valves underneath which restrict the temperature. The reason is to prevent scolding children, but is only for baths. You can use a basic thermometer (used in cooking) to check.

Check all sinks and showers to ensure:-

- the hot and cold water are correctly connected
- the pressure isn't too low
- the taps etc are sturdy
- the sinks and toilets are level
- there are no blockages
- bath feet are level (see last picture)



# **PLUMBING**

### Cylinder tanks

A tundish is normally a black plastic device on pipework that allows a visual and audible warning if the pressure is too high. Water will spurt through it, so it should be visible and below all expansion vessels. In the example first photo below, the issue is the tundish is on a different section of pipework than the vessel.

Underneath the expansion vessel (normally red or white in colour) there will be a pressure gauge which is important to check regularly as it can indicate any slow leaks. The vessel should be secured in place (normally with a jubilee clip).

### Vacuum issues

Sometimes water backs-up in the shower when the sink or bath empties (pic 2) or the sinks make a loud "glug" noise draining. These noises suggest there is a vacuum in the system, created by a potential blockage or failing air admittance valve (AAV) [see loft section for more info]. One way to assist in balancing out vaccums if drains aren't blocked is to replace the standard u-bend traps under the sink with anti-vac traps (see pic 3 below).

### **Backflow**

The last image presents a potential back flow issue, where there is the chance for dirty water to enter the fresh water supply. If your shower hose is able to reach the toilet like this, it needs a clip or shortening.



# HEATING

## Air / Sludge in system

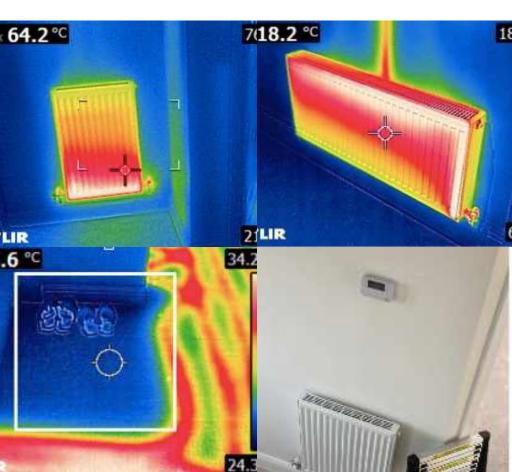
With radiators, it is common to have air pockets where they need bleeding or for sludge to have settled in the system, and the radiator will be either colder at the top or bottom respectively (the difference shown side by side in pic 1 and 2).

# **Underfloor heating**

The underfloor pipes can have sections missing (pic 3) pontially due to changes in design, or pressure issues. To check without a thermal camera, walk around after a few hours to feel for cold spots.

#### **Dual zones**

Typically there will be 2 thermostats controlling 2 zones; normally upstairs vs downstairs. The exception may be the landing radiator which may come on alongside the downstairs radiators. We quite often find that the thermostats are controlling the wrong zone so we recommend turning one thermostat on first and seeing which radiators come on. The thermostat should not be close to radiator (pic 4) and the radiators in the room with the thermostats should not have TRV valves on them.



# **HEATING**

### Gas Meter

Open the gas meter box, and there should be intumescent putty where the pipes enter the property (see picture 1 where it is missing).

Also the pipework should be earthed which is identified by a green and yellow wire (pic 2 shows it missing).

### **Boiler Flue**

Check the flue is sealed (pic 3) and the flue is directed toward the boiler slightly, so any hot moisture does not drip from the flue outside; rather returns to the boiler [pic 4].

### **Cold Rooms**

If you have a 3 storey house, often there is insufficient pressure to heat the radiators up so bleeding will not improve them if they feel cold. Also a bedroom above a garage will invariably be colder than other rooms and there is likely not much that will improve the situation other than having its own thermostat.

Otherwise if the radiators seem to be functioning and they are of ample size, there is a possibility cold rooms are due to missing loft / cavity insulation.



# JOINERY - DOORS

#### **Doors**

It is common for doors to misalign after time due to the movement of the house throughout the settlement process. However, a door should not rattle in the frame, it should not be bowed against the door lining, it should not pop out easily from the keep (by gentle pulling without operating the handle), and it should not have any unequal gaps.

Furthermore the NHBC has the following guidelines:

- The frame should be no more than 5mm out of plumb and not lean in both directions over the length of the frame
- The gap at sides and the top should be 4mm or less (pic 1) [also see section of fire safety]
- The bottom of the door should have a gap of 10mm (see pic 2).

It is worth checking a few door handles by undoing the plate that covers the screws. Often there are only one or two screws in place, and a wobbly handle is a warning sign of this (see picture 3). As mentioned in the section regarding design flaws, check for doors that may cause damage to fixtures such as radiators and wardrobes. The exception is when there is a wide arc where the door is unlikely to be contacting the wall or fixture. Even when there are door stops we sometimes find the fixing is hit before the stopper (picture 4).

Generally, internal doors are prone to damage as they frequently get taken off to fit carpets etc, so check for damage and missing hinge screws.

Please make sure to refer to the section on Fire Safety if your house is 3 storeys.



# JOINERY - STAIRS

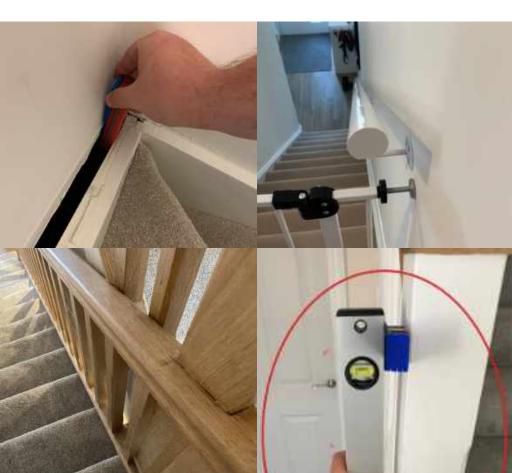
## **Stringers**

The stairs are the biggest opening in a house so are considered a weak spot from a structural point of view. It therefore suffers the most from movement cracks along the stringer and ceiling. Experiencing cracks up to 2mm along the stringer is normal, but anything 3mm or wider needs the developer to action. The first picture below shows an excessive gap beyond normal settlement expectations. The string should terminate in line with the skirting at the landing rather than protrude out and cause a trip hazard.

### Handrails

Handrails at the top of the stairs should be returned into the wall to prevent clothes getting caught (2nd photo).

If the staircase returns back on itself or is wide (a reach greater than 1100mm from one side to the other) then there may be the need for a second handrail (i.e. on both sides). Handrails should be uninterrupted with 25mm gap for your fingers (see pic 3 showing this issue). Newel caps should be securely fixed, and the posts should be straight (pic 4).



# JOINERY - STAIRS

### **Spindles**

Alongside the newel posts, spindles should be straight and to prevent a child getting their head stuck, a 100mm sphere should not be able to pass through the spindles (see picture 1).

## Level steps

The top of the steps should be completely level and flat to prevent tripping. Pic 2 shows an example of a potential accident waiting to happen. Treads should also be level to ensure even footing.

Pictures 3 and 4 show that the treads should be level in both width and depth. The homeowner of the house in the 4th photo had actually fallen down the stairs due to this issue.

Please also refer to Internal design flaws for an example of doors opening out near the staircase which is also a safety concern.



# NOISE

### **Creaking floorboards**

This is the most common noise issue we come across on our surveys:

- If it creaks it is likely due to screws
- If it cracking similar to a pencil snapping then it is more structural

Adjusting creaking floorboards will involve taking the carpets up getting to the screws to check they are the correct type, there is an adequate amount of them securing the floorboard down and they are tight. It is best to glue and screw floorboards. Cracking noises will be heard predominantly downstairs under the area and will require invasive action to remedy. It can be due to a number of things such as wide spans of joists or incorrect detailing at the joist hangers.

# Tapping (pipes)

If you have tapping noises coming from the walls or ceiling when the water is running, it will be due to a copper or plastic water pipe (normally hot) which is expanding or moving position and is not secured in place properly. It will involve removing sections of the plasterboard and insulation to find it.

# Banging (boiler / tank)

This will commonly be due a pressure issue so check the pressure gauge on the boiler or cylinder tank. With pressurised systems there shouldn't be the need to regularly top up the pressure so if it is at zero there wil be a leak in the system somewhere.

### Rattling (boiler / tank / radiator)

This will likely be due to small particles in the system such as loose solder. It would require the system to be emptied to remove and then refilled.

## Gurgling (sinks etc)

As described. in the section regarding plumbing, if you pull the plug to empty water or use the toilet shower etc and you experience a loud "glugging" type sound then this will be a vacuum often created by either the air admittance valve not working at the top of the soil stack or a blockage. If the blockage cannot be found then the remedy is to install anti-vac traps to the sink.

#### Party walls and floors

There are two ways that noise is tested:

- impact, where a 'tapping machine' is placed on the floor of the apartment above and the noise is recorded below.
- airborne where speakers in the larger room are placed and records the dB of white noise in the smaller room next door

The weak spots between walls can be sockets thats back on to each-other but can be due to other aspects such as a lack of acoustic insulation in the party wall (see section on loft). The pass rate for the UK is lower than the other counties. Scotland's pass rate is 56db vs. 45dB in the UK. The point being, if you can hear your neighbours either walking above you in a flat or hear voices next door, it does not necessarily mean it doesn't comply with building regulations. There are companies that offer acoustic testing if this is a concern for you. Just be aware that building regulations tests only between two dwellings: it doesn't apply to creaking floorboards in the same household e.g bedroom floor noise being heard in

the downstairs lounge.

# **ELECTRICS**

## **Socket wiring**

To test the sockets are wired correctly is a cheap and easy process: you just need to buy a socket tester which you can buy easily online or at a DIY store. As shown in the first picture, when a socket has not been installed correctly it'll highlight what the issue with it is.

### **Exposed cables**

The most common area we find live wires are in the kitchen around cupboard lighting and in the loft as shown below (pic 3). If you spot any exposed wires we recommend to stay clear and wait for an electrician to make safe.

### Consumer board

The consumer board switches needs to be 1350-1450mm from ground level. As shown in Pic 2, they're often installed too high.

#### Socket & Switches location

It is allowed for switches to be in bathrooms and WC's, but they should be 60cm away from sinks.
In kitchens, switches and sockets should be more than 100mm away from the hob and 300mm away from the sink.



# FIRE SAFETY

### Smoke & Heat sensors

There should be smoke alarms to all floors near to the bedrooms and it is a requirement for them to be mainswired and interlined. This means if you press the test button on one alarm, the others should respond slightly delayed. If you have an open plan kitchen, especially with open doors or no doors to the staircase, it is important that a heat sensor is located in the kitchen, since it is the location that more fires originate. This should also be mains wired and connected to the other alarms.

CO monitors detect for Carbon Monixide and should be located in same room as the boiler unless in a confined cupboard. There should also be one where there is a wood burning stove.

#### 2 Storey homes

When your house is 2 storey (one set of stairs) then there should be fire escape windows to habitable rooms upstairs. It is therefore important that you do not lock the window handles, which is why most developers put pips in the handle lock.

To prevent falls from height accidentally, window manufacturers add restrictors to the windows but often fit them the wrong way making it hard to unlock in an emergency. The first picture below shows an incorrectly fitted restrictor.

#### 3 Storey homes

When your property is 3 storeys (or an apartment) the windows are not to be considered a point of egress, so they should always be restricted. Instead the staircase should be protected to ensure safe passage walking down and straight out. Protecting a staircase involves having fire doors which should have a FD30 label as shown below. It should also have intumiscent seals to the door frames which have the appearance of narrow plastic strips. Check all 3 sides of the frame have them in place. The purpose of them is to swell under heat, so it is important to check the gap between the door and frame does not exceed 4mm. We use a fire door wedge to check this. The only doors that do not need intumiscent seals are those that aren't deemed habitable. such as bathrooms. A common issue we find with intumescent seals is when they have been painted over: see last picture below of an example.



# FIRE SAFETY

## [3 storey continued]...

It is important that the front exit door has a thumbturn lock to allow easy access without a key. The door in the first picture below is an example that does not comply.

If you are concerned about the security of this (i.e. being more easily broken into), you can install protective plates that prevent it being turned via the letterbox. You should have a door chain but otherwise should not have more than one mechanism to operate to get out.

If your 3 storey home has a loft hatch in the bedroom when there is another bedroom on the top floor, this needs to be a fire rated metal loft hatch. This is to prevent fire easily spreading between the rooms. The second picture shows a normal loft hatch fitted in this scenario, so does not comply.

One of the lesser-found issues but one important to consider if you have a 3 storey home is the size of enclosed yard / garden if that is where you exit in an emergency. Refer to part B of the Building regulations for variations such as if there is an extension, but otherwise the size of the enclosure should be no less than the height of the building. The 2nd picture below is of a yard that did not meet building regulations as it was half the size required, with no means of getting out of the yard.

In high rise apartments, there are many more considerations such as communal doors, signage and sprinkler systems. This ebook is concentrating on snagging new-build houses, so we recommend that a fire risk assessor attends if you have concerns about the fire safety of your apartment.



# **VENTILATION**

There are 3 different methods of ventilating a house. The first relies on natural ventilation and the others have MEV - Mechanical Extract Ventilation.

### System 1

This applies to most houses which have a comparatively simple set up: The windows in all the rooms will have 'trickle vents' to allow natural air to circulate and in bathrooms / utility rooms to help get rid of the excess moisture in the air they have mechanical extract fans that overrun by 10-12 mins to help remove smells and moisture directly outside.

### System 2

This differs as the fans don't just expel the air, they provide ventilation. These are most commonly installed in apartments where you can't open windows and/or they don't have trickle vents. There is a similar MEV system which also provides the heating in apartments.

#### System 3

This has two types of MEV. The first kind called cMEV which is normally obvious by going into the loft as there'll be a big unit with multiple ducts feeding the different rooms in the house. The second type is called dMEV which is less obvious, and often mistaken for a system 1 as the extractor fans found in bathrooms look very similar. Both these two MEW systems will be constantly running.

Assuming you have a System 1 ventilation system which relies on natural ventilation, the important consideration is that you do not want to have the trickle vents closed all the time. Many people choose to close them due to noise if they live on busy roads, but if this is an issue for you there are acoustic trickle vents available.

We recommend trickle vents are left open as much as possible because they help:

- prevent condensation
- maintain a healthy indoor environment by diluting and pollutants and moisture
- facilitate the exchange of moist indoor air with drier outdoor air, helping to control humidity levels.

We are often called out to investigate condensation related issues in bathrooms and en-suites and it is a common misconception that the extractor fan is not doing it's job. It is more commonly a high level of moisture in the room that not even the strongest extractor fan is capable of handling. If you have excessively long hot showers then we recommend opening the bathroom window to encourage the excess moisture to exit. If you are concerned about your extractor fan then simply hold a piece of toilet tissue against it. If it holds it in place then the extractor fan is not the issue, it is rather the relative humidity being too high in the room. If your bathroom does not have a window then we recommend that you leave the door open after showering and the nearest window is open to help the moisture escape.

# VENTILATION

Nature is always looking for an equilibrium, so one of the best ways of removing moisture in a bathroom is opening a window or door as the moisture will be drawn to it. With this in mind, the best position of an extractor fan is not near the entrance door, it is the furthest location away from it.

Other than bathrooms, it is common for mould to occur inside areas such as wall mounted cupboards, as shown in the example picture below. In the case of wall mounted cupboards where the unit has been attached to plastered walls, it can be due to the moisture in the plaster being trapped before it has dried out. In areas such as cupboards under the stairs or wardrobes, it is simply the case there is not enough ventilation.

The best remedy is to leave those doors open, ensuring there is natural ventilation entering the area and allowing the plaster / timber to dry naturally. We do not recommend using dehumidifiers as they can cause excessive shrinkage by drying too quickly. The best remedy for any mould is to wipe it off using white vinegar on a cloth.

Interstitial condensation is a consideration of how much moisture is in the household which increases with number of occupants and exacerbated by certain activities such as drying clothes indoors. If this moist air is not adequately ventilated or removed via mechanical extraction it will migrate to the cold spots in the room. This is why windows are a common place for condensation to form.

Other activities that generate moisture within the home, include cooking without proper ventilation, using humidifiers excessively, or as mentioned previously taking hot showers without adequate ventilation.

If you feel as though you are ventilating your property adequately and there is reoccurring condensation then we recommend instructing a surveyor that is experienced with causes of damp. As shown on the last photo, specialist equipment will be able to check for relative humidity readings which will determine whther it is interstitial condensation or other potential causes (e.g. internal or external leaks or insulation issues).







# TILING

#### Setting out

Setting out means how (or where) the tiler decides to start tiling from to ensure an aesthetically pleasing finish. As shown in the first image, the tiling is off-centre from the window as they've started at one side of the wall rather than from the centre of the window and working outward. The second picture shows a similar example of poor setting out where the bond pattern and tile size around the bath changes.

Similarly, when tiling the floor it is common for rooms to not be square so the grout line and wall run-off parallel to eachother. Or another common issue is when the tiler finishes next to the door threshold and the grout line v.s threshold bar is not parallel. For someone with a professional eye, it is the first thing you notice walking in.

#### Flatness

The best way of checking whether tiles are flat is using a credit card or thin spacer as shown in the image below. If you place the credit card against an adjoining tile and run your fingers along, you should not be able to feel the edge of the tile.

The NHBC guidance on this the variation in surface level between adjacent tiles should be no more than 1mm - 2mm. Similarly, the allowance

for flatness of floors with tiles is less

than other rooms (carpeted etc) as the

surface level should be within ±3mm.

## Cracks

Generally, tiles are more susceptible to cracking in upstairs rooms due to movement from settlement. The most important area to monitor is in the shower area to prevent water ingress.



# **FLOORING**

### Flat vs level

This is important to understand because you can have a flat floor that isn't level, and the two have different tolerances to check against.

The way to check if a floor is not flat is using a long spirit level...but pay attention to the straight edge of it, not the spirit bubble. If the floor has any humps or dips where the straight edge does not lie touching the floor, it is not flat (see pic 1 and 2). The way to measure the gap is using a ruler or spacers.

This tends to be most troublesome in dining areas where the chairs and tables will rock due to the unevenness. The NHBC states that anything more than 5mm deviation, measured using a 2m straight edge with equal offsets is out of tolerance.

Un-level floors can often be noticeable by eye due to skirting and door gaps as shown in pic 3. It is often the reason for doors catching on carpets. To check whether out of tolerance involves looking at the bubble in the centre of the spirit level: where it is not reasonably level, use spacers at one end to raise it until the bubble is central to understand how far out it is out as shown in pic 4. The NHBC states that floors should be either:

- level within a 3mm deviation per 1m for floors up to 6m across (measured at the furthest points across the full width of the floor)
- a maximum of 20mm out of level for floors over 6m across



# **KITCHENS**

### **Kitchen Cupboards**

Check units are level, free from damage (pic 1), the doors and handles are level and don't foul opening/ closing. Also use a level or stand back to check that wall units are installed level.

Commonly the base of kitchen unit doors are most susceptible to damage, but also check the inside of cupboards and appliances for dents and scratches. The NHBC guidance is to stand just 0.5m away when checking kitchen cupboards and sanitary ware.

## Sanitary wear

Sinks and hobs should be covered for protection but are commonly scratched by trades carrying out work (see picture 2). Check the worktop is not damaged and there is a neat join. If it is a laminate worktop, check that there is moisture barrier above the dishwasher (pic 3 shows a missing section).

## **Plumbing**

Like all the sinks in the house, run the water to overflow level and check there are no leaks. Whilst under the sink check pipework from the dishwasher / washing machines are secured (normally a jubilee clip) to the waste connection.

# **Appliances**

Turn on the extractor fan to all settings to ensure there is no debris rattling around. Likewise test all appliances ensuring the isolators are correctly labelled. If possible, we recommend removing the plinths to check for leaks and check the stability of the feet.

If you have an integrated fridge freezer, there should be a vent installed to the plinth underneath. The 4th picture shows what this looks like, where the plinth has been damaged.



# SETTLEMENT & SHRINKAGE

#### <u>Settlement</u>

From a building surveying point of view, this process technically lasts for 10 years, although on a practical basis you should only really notice the signs within the first 12 months.

These signs include:-

- Doors not closing
- Cracks around the window sills, stairs and door frames
- · Cracking floor tiles upstairs
- Hairiline cracks to brickwork

The severity of it will depend upon the foundation type and construction method to build the house, ie. timber framed vs traditional build.

The first photo shows a typical shrinkage crack around an opening.

As mentioned previously, most developers are only willing to repair cracks that are 3mm thick or more.

### **Shrinkage**

The cause of this is the construction materials drying out. As 'wet' construction materials (plaster etc) contain a lot of water, it usually takes several months for the shrinkage cracks to occur depending on the time of year. Allowing for ventilation (trickle vents) in the property can help this drying out period. Classic shrinkage cracks run along the top of walls rather than at openings, at a constant width no less than 2mm (see picture 2).

You may also find cracks at corners of internal walls along the line of the angle beads as shown in the 3rd image, or at joins of architraves and skirting boards (pic 4) which is is normally a simple decorative repair.



# PLASTER & PAINTWORK

#### Plaster

Plaster related snags include:

- · Nail / Screw pops
- Poorly patched (filled) areas
- Scrapes
- Blown plasterboard
- Scrim tape visible or not added
- Ceilings not flat or level
- · Walls not straight
- Corners not square

Nail pops will likely appear over time as the house settles and you walk over floorboards. They are small penny sized bumps where the screw 'pops' out slightly. Pic 3 shows blown plasterboard which is simply where the plasterboard is damaged. It is common around sockets where the hole hasn't been cut correctly and gets forced into place.

Scrim tape is what is used between plasterboards to prevent cracks forming. If you have long straight hairline cracks to walls or ceilings (pic 4), it is possible scrim was not installed. Also when installed, the scrim tape is often visible particularly in corners.

Pictures 1 and 2 are examples showing when ceilings are not flat or level or walls are not straight. We use a straight edge to determine this similar to the process when checking flooring. See overleaf for the NHBC tolerances.

The last consideration when it comes to plasterboard issues is when a section isn't square. We use a carpenters square to check inside corners are within 10mm for internal corners and 5mm for external corners (see next page for example pictures).



# PLASTER & PAINTWORK

The NHBC tolerance for checking dry lined or plastered walls is:

 within a maximum ±3mm deviation, measured using a 450mm straight edge with equal offsets

## and for ceilings is:

- level within a 3mm deviation per 1m for ceilings up to 6m across (measured at the furthest points across the full width of the ceiling)
- a maximum of 20mm out of level for ceilings over 6m across
- flat within a ±5mm deviation, measured using a 2m straight edge with equal offsets.

Our best advice is to walk around and stand 2m away from walls, ceilings and fixtures (e.g pic 4) where it will be obvious by eye if the plastering is not straight, level, flat or square.

#### **Paintwork**

Paintwork issues include

- Paint snots (roller residue)
- Paint drips
- Thin or thickly applied paint
- Splashes over ironmongery etc

The NHBC requirement checking the finish of walls is to inspect from a distance of 2m and view in natural light (i.e not to use a torch). However for rooms such as bathrooms that often have no windows, we recommend turning the lights off and using a torch particularly to check the ceilings.

Overall when considering whether to raise paint snags, we recommend first asking yourself whether a painter will make it better or possibly worse, as sometimes a small drip is less noticeable than a freshly painted patch to rectify it.



# TIPS: DEVELOPERS

### **Timescales**

Generally it is best to snag your property as soon possible, ideally before you move in or within the first 2 months. If you have bought from a large developer, it is in their best interest to resolve snags quickly due to a HBF (Home Builders Federation) survey they ask you to complete 8 weeks after completion. The survey asks 2 crucial questions (amongst around 40 other questions) which are: whether you would recommend the builder to a friend, and giving them a score from 0-10.

Most developers reward their staff for good scores from this survey, so they tend to go out of their way during the first several weeks whilst the survey is hanging in the balance.

We appreciate moving in will be a busy time, but if you have the opportunity to walk around the property before you move in, check and photograph for any damage. One great thing about using an App like Site Audit pro is that it can time stamp any photographs to prove liability. The key areas to check is in the kitchen, but also check glass for scratches and any other similar areas that the builder could possibly argue as being accidental damage moving in.

Once you have had time to digest the content of this ebook, we recommend doing a snag list in order of room. In our snagging surveys we allocate the trades required to fix the issue which is often a prompt in snagging apps, but don't worry about this.

The main thing to do is photograph it and specify what room it is in. Where there is a reoccurring issue such as numerous chipped cupboards, we recommend taking a photo from afar as well as close up, just so they have a point of reference. Stickers can be useful in this regard, especially when it comes to scratched glass or paintwork which will vary in appearance in natural / artificial sunlight.

Once you have had chance to raise any concerns in your snag list, we recommend emailing it to the site (not just hand them it, so it is on record) and sit down with the site manager to go through the list. He or she may not agree with everything, so discuss those that are important to you and agree timeframes.

# Warranty & Tolerances

There are several different regulatory bodies that list the requirements and guidelines when it comes with the quality of workmanship, Building Regulations covers the fundamentals such as fire safety, access, insulation etc, whilst the warranty company will go into more detail regarding the workmanship tolerances. The most common and also in-depth warranty provider is the NHBC, but some builders use the LABC, Premier or lesser known insurers. Some private developers even have architects certificates, and the issue is that there are no standards or tolerances you can refer to so be aware of this when purchasing.

# TIPS: DEVELOPERS

### Warranty & Tolerances cont...

The main purpose of the likes of the NHBC is they will insure the property for a 10 year period. They will not only ensure that any structural defects are rectified, they will also step in if a developer closes its doors or refuse to action issues they are found liable for. For the first 2 years, developers do have the responsibility to rectify issues that are out of tolerance. After this time, you may need to raise any concerns with the NHBC (or other warranty company) directly. They will investigate any claim either remotely or by visiting the house (either an employee of the warranty provider or appointed surveyor) to check the merit of the claim. There is no charge to you for doing this, the cost is paid by the developer.

#### Communication

Our advise when it comes to handling your snag list is to build a good relationship with the site manger. Generally it is easier for snags to be rectified within the first several months because the trades will be still on site, however past this time the large developers have customer-care tradesman they tend to be able to handle most minor issues. Site managers differ in their approach; some will carry out jobs in bite-size visits as and when issues arise / trades are available, whilst some request that you wait several months until the house has gone through the settlement process and hit the list in one go. Be aware that often Site Managers move or leave the company, so if you agree on anything we recommend getting it in writing.