

Damp and Timber Report

Date of Survey: 18/12/2025

Date: 05/01/2026

Client: Justin Williams and Anna Cleland

Site address: The Old Scantling's, 26 Church Street, Shoreham by Sea, BN43 5DQ

Surveyor: Matilda Jacobs-Milburn

Dear Justin and Anna,

Further to your recent instructions, we have now carried out a damp survey at the above property address. The inspection was undertaken in two stages. An initial investigation was conducted during dry, sunny weather, and a subsequent revisit was carried out during rainfall to confirm whether the property's condition had changed and to observe its performance in wet weather.

As no material changes to the condition of the property were identified between visits, the findings of both inspections have been incorporated into this report. Consequently, some observations and photographic records refer to dry conditions, while others refer to wet conditions. This has been clearly stated where relevant and is considered beneficial, as it allowed the property to be assessed under differing external environmental conditions.

We hope we have interpreted your instructions correctly; however, if this is not the case, please let us know immediately. Our observations and recommendations are set out below based on the practical examination that was possible at the time of our inspections.

Neither the inspection nor this report should be construed as a structural survey, nor a substitute for such, and where your attention is drawn to defects, these should be considered as guidance only and in no way a comment on the overall integrity of the building inspected.

The inspection did not include any parts of the structure that were covered, unexposed or inaccessible, and we are therefore unable to confirm that such areas are free from defect. Should these areas become accessible in the future, particularly if we are appointed to undertake remedial works and concealed elements are exposed, further findings and recommendations may be necessary.

Our Approach:

A traditionally constructed building needs to be treated with respect and understanding. The composition of older buildings was designed to utilise the raw materials readily available within a six-mile radius of the local area at the time of construction.

Due to the permeable and flexible nature of many of these raw materials, period structures have weathered constant ground movements and withstood the brutal weather patterns experienced in the British Isles. Therefore, careful material selection is crucial in keeping them dry and upright.

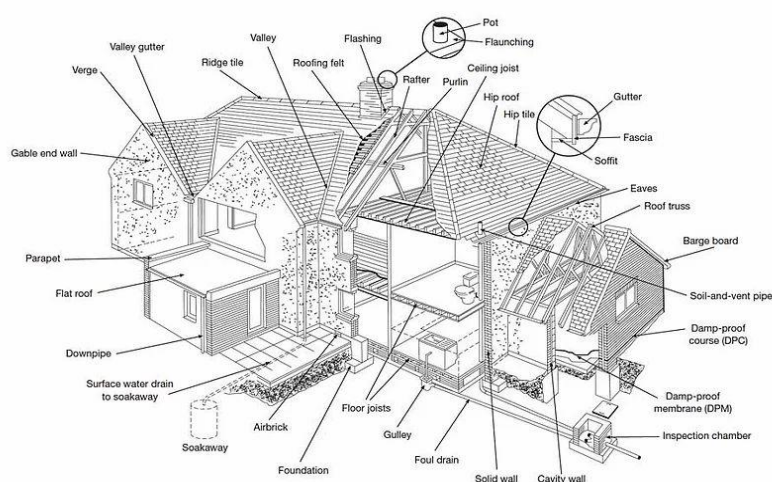
Unfortunately, we often see them in much worse condition because modern materials are used in construction instead of traditional ones that better reflect the building's original construction and permanence. In many cases, buildings and structures would be better off having been completely untouched, with the odd repair or lick of paint applied using the same materials used when the house was first built.

There are further benefits to these materials being used than simply their suitability and sympathetic nature for period properties. Traditional materials like sheep's wool or hemp insulation, lime-based mortars and reclaimed masonry, timber and metalwork all add historical value and remain in line with practices used for centuries that are both sustainable and benefit the property, lowering our impact on the planet and our built heritage.

If water has found its way into a home through any means, and damp is now showing, it is essential to recognise how this has manifested itself by piecing together the evidence to find the SOURCE of the problem. Rather than covering the problem up, it is essential to remove the SOURCE, otherwise the damp will persist.

Being 'watertight' does not mean 'damp-proofed'. Understanding, prioritising, and maintaining the (roof) hat, (walls) jacket, and (ground) boots of your period property will ensure it stays dry. If you are catching and diverting rain/groundwater away from the structure, it'll be watertight and free of damp.

Small amounts of moisture in historical properties are not only common, but necessary to maintain its healthy structural composition.



Introduction:



The Old Scantlings, situated on Church Street in the historic heart of Shoreham-by-Sea, is a Grade II listed 16th-century building constructed in traditional knapped flint and stone with lime mortar, later adapted with brick and render detailing. It stands within the town's medieval core, close to St Mary de Haura Church. The site lies on the low-lying coastal plain of the River Adur estuary, where the ground consists primarily of alluvial soils, layers of silt, clay, sand, and gravel deposited over centuries by river action. This alluvial subsoil is a vital clue to the building's long-standing relationship with moisture, suggesting the property has likely been in a naturally damp environment since its construction. As such, moisture within the structure is not merely a modern defect but an inherent characteristic of its setting.

The principal objective, therefore, is not to "fix" dampness in the modern sense, but to help the building manage it through appropriate ventilation, the use of breathable materials such as lime plaster and mortar, and careful attention to surface drainage and ground-level management, which are particularly important now that the original suspended timber floor has been replaced with a solid floor, altering how moisture disperses within the building.

Our External Observations:

Main Roof Covering:



Inspection of the main roof covering was carried out from the front of the property by accessing the rainwater valley via the window. From this vantage point, the roof appeared to be in good overall condition. No cracked, spalled, or displaced slate tiles were observed, and all valley junctions appear to be well constructed and free from visible weaknesses. The slate tiles themselves are in excellent condition. A re-roofing may have been undertaken within the past five years, as the slates appear relatively new; if older, they are performing exceptionally well.

Observations of the roof undertaken during periods of heavy rainfall were consistent with those recorded during dry weather conditions. The rainwater valley is formed with adequate falls, allowing rainwater to disperse efficiently from the roof without evidence of ponding or backflow.

Chimney Stack:



One defect was noted on the chimney stack at roof level. A significant crack was observed within the render or flaunching at the top of the stack, with vegetation growth emerging from the opening. As plants require a consistent moisture source to survive, this indicates that water is penetrating the cracked flaunching. While this may not yet result in internal leakage, it does suggest that moisture is entering the chimney structure and could raise humidity levels within the stack. Trapped moisture of this nature can contribute to long-term deterioration of masonry, mortar, or embedded metal fixings if not addressed.

It should also be noted that the chimney stack has been thoroughly coated in cement render. Cementitious coatings tend to reduce breathability and can cause the upper section of the flue and chimney stack to become significantly colder than the lower sections of the chimney. This effect is increased as the stack projects above roof level and is fully exposed to external weather conditions.

Where chimneys are not in regular use, humidity can accumulate within the flue. As warm, moisture-laden air rises, it can reach the colder zone of the chimney above roof level, where condensation may form internally within the chimney breast or stack. Over time, this can contribute to elevated moisture levels, increased risk of masonry deterioration, and may exacerbate defects such as cracking to flaunching or render if moisture is unable to dissipate effectively.

Rainwater Management System:

Why Rainwater Management Is So Important:

The rainwater management system is a property's first line of defence against water-related damage. Efficiently collecting and directing rainwater away from the building, it helps to:

- Protect walls and foundations from moisture saturation.
- Prevent ground erosion and subsidence risks.
- Reduce the likelihood of penetrating damp, mould, and timber decay.
- Maintain a stable and dry environment beneath and around the structure.

A neglected or compromised system can allow even small leaks to cause gradual, long-term damage that is costly to repair. Regular maintenance and prompt repairs are therefore essential.



All rainwater goods around the property are slightly compromised and require maintenance. The gutters are heavily obstructed with debris, which reduces their effective capacity and increases the likelihood of overflow during heavy rainfall. The accumulated debris is also likely to travel into the downpipes, potentially blocking drainage channels below ground.

There is clear evidence of overspilling water, indicated by dark staining on the undersides of the guttering. Several sections are misaligned and do not fall correctly toward their respective downpipes. In some areas, this has resulted in water discharging over the outer edge of the gutter and onto the patio, while in others, the gutters are tilted toward the property, allowing water to escape over the back edge and run down the external walls.

Where guttering undulates, water collects in the low points rather than flowing freely. This standing water accelerates wear on the rubber seals at the joints, leading to persistent dripping from the underside of connections. Gutters are designed to channel water efficiently to downpipes, not to retain large volumes as they are currently doing.

One downpipe within the neighbouring garden discharges above a water butt, although observation suggests that in heavy rainfall, much of the flow overshoots the butt entirely, allowing water to soak into the adjacent ground. This may increase moisture content around the building's foundations and, during periods of heavy rain, could also result in splashback against the rendered wall of the property.

Ensuring all rainwater goods are clear, correctly aligned, and fully functional is essential to prevent continued saturation of masonry and ground adjacent to the walls. Properly maintained gutters and downpipes are critical to directing roof water safely away from the building, reducing the risk of damp penetration and localised foundation moisture.

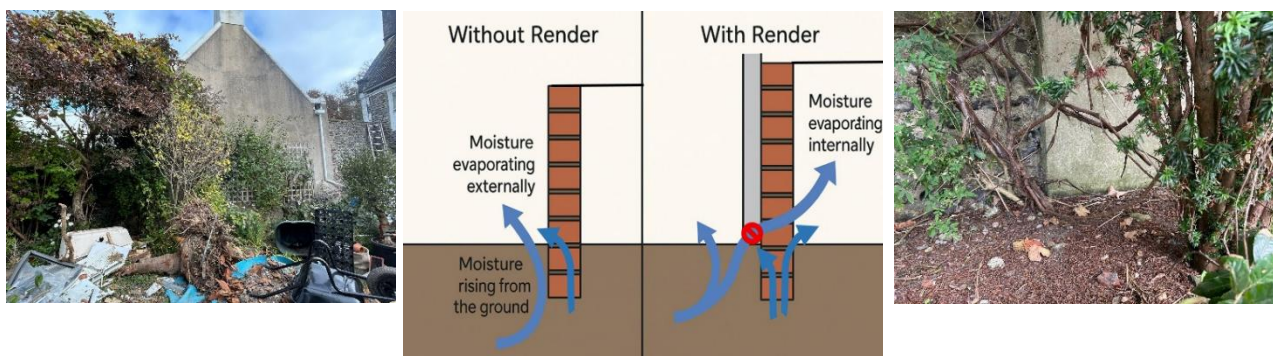
All the above observations were also confirmed during rainfall.

Cement-Based Materials and Their Effects:

Cement has no place on a property of this age and type of construction. The Old Scantlings was built using traditional breathable materials such as lime mortar, lime plaster, and stone or flint masonry. These materials allow moisture to move naturally through the wall and evaporate to the outside.

Cement, by contrast, is a dense, impermeable material that traps moisture within the structure. When applied to a historic stone or flint wall, it prevents evaporation and alters the way the building fabric regulates temperature and humidity.

Cement Render:



The left-hand external wall, located within the neighbouring garden, has been fully rendered in cement from top to bottom, with the render extending below external ground level. This is particularly problematic because moisture that naturally rises through the ground has no opportunity to evaporate once it reaches the surface. Under normal conditions, any ground moisture entering the base of a traditional lime wall would evaporate harmlessly as soon as it rose above ground level. However, with cement render continuing below the soil line, that evaporation path is blocked. As a result, the trapped moisture is forced to evaporate internally rather than externally, where conditions are warmer, and evaporation is easier.

The wall, therefore, remains permanently damp and much colder than intended. Cold, moisture-laden masonry is prone to condensation on the internal face and to salt crystallisation and frost damage within the wall core. Over time, this trapped moisture can cause the stone or flint faces to spall and the render itself to delaminate.

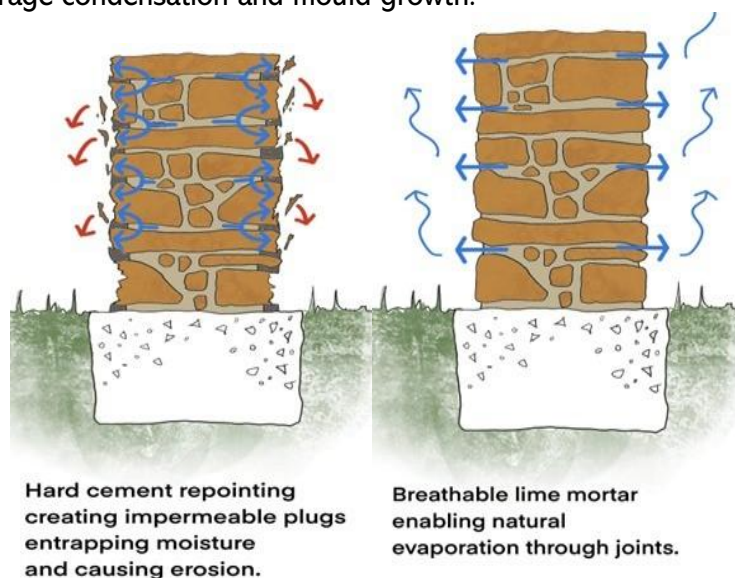
Cement Pointing/Fillets:



All visible pointing around the property appears to have been replaced with hard cement mortar, including low-level cement fillets at the front elevation. Cement pointing does not flex or breathe in the same way as lime. As the building expands and contracts naturally with temperature and humidity, the rigid cement develops fine cracks. These cracks allow small quantities of moisture to penetrate the wall, but then prevent it from escaping.

In a flint wall, this problem is particularly acute, as flint itself is non-porous and cannot release moisture through its surface. The wall relies entirely on the permeability of its lime pointing to regulate internal moisture. With lime replaced by cement, this mechanism is lost, creating a wall with no practical means of evaporation, much like the fully rendered wall described above.

The result is a cold, damp structure that cannot regulate its moisture content effectively. While this may not result in visible water ingress, it significantly lowers the wall temperature and creates internal conditions that encourage condensation and mould growth.



The images provided above are not representative of the construction at The Old Scantlings, which is of flint stone construction rather than sandstone. However, the images are included for illustrative purposes only, as they demonstrate that moisture cannot evaporate through cement-based finishes and can become trapped within the wall structure.

Abutting Partition Garden Wall:



The partition garden wall abutting both The Old Scantlings and the neighbouring property has also been heavily repaired with cement. Numerous cracks are present, and vegetation growth is visible from the joints, indicating moisture ingress. At the top of this wall, evidence of trapped water can be seen, saturating the masonry and providing a constant source of moisture. This damp, cold wall lies directly against the property and has the potential to transfer moisture laterally into the stonework of the building, contributing to persistent dampness along the adjoining elevation.

External Joinery:



Most external joinery elements, primarily windows, have been finished with a plastic-based vinyl paint. This type of coating is non-breathable and traps moisture within the timber, which accelerates decay. The problem becomes more severe as the paint ages and begins to crack or flake. When this happens, water can penetrate through the damaged areas, but the surrounding impermeable coating prevents the trapped moisture from evaporating. This dramatically increases the rate of deterioration.

Ground Levels/Drainage:

Surface water drainage around the property is very limited and generally ineffective. At the front of the property, a layer of cement has been applied over the lower section of the front garden, likely as an attempt to manage water run-off. However, this has had the opposite effect. The area now acts much like a clay bowl, holding onto water rather than allowing it to drain away. As shown in the images provided, green moss and algae are present across the surface, clear evidence that water remains here for prolonged periods after rainfall. Although a small drain is present at the far corner, it sits at the highest point of the cemented area, meaning that water has to accumulate significantly before any can reach it. In practice, water is trapped against the base of the wall, with no suitable discharge point.

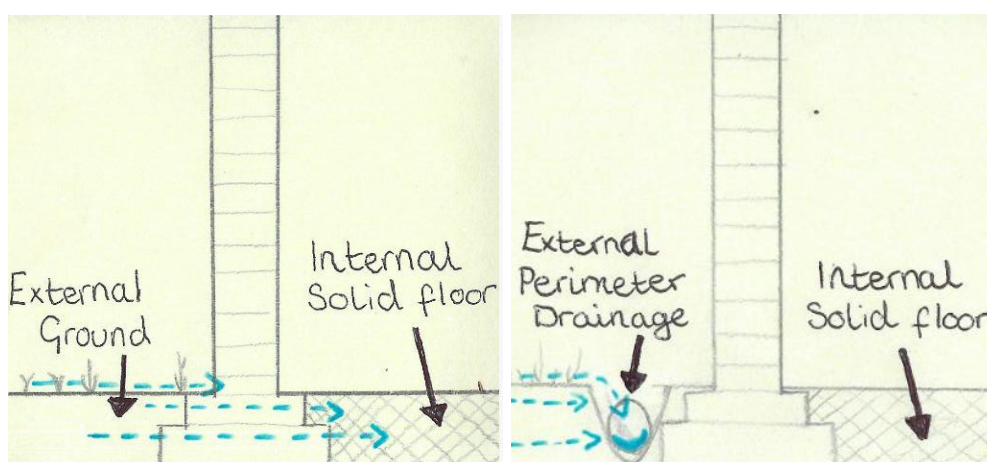
This situation is further complicated by the fact that the property sits in an area of fluctuating high-water table. Any moisture within the ground beneath the cement layer cannot evaporate naturally into the atmosphere, as the impermeable surface seals it in. Allowing moisture to evaporate freely from the soil is essential in locations like this to prevent water from building up below ground. When evaporation is restricted, the trapped moisture will seek alternative escape routes, often migrating horizontally or upward into the structure itself. The current surface finish, therefore, not only holds surface water against the wall but also restricts the natural release of subsurface moisture, increasing the risk of dampness within the lower masonry.

At the rear of the property, the external ground levels remain flush with the internal floor levels, and no perimeter drainage measures are present. As a result, when the surrounding ground becomes saturated, moisture can migrate laterally through the ground and into the solid floor construction by capillary action. This may contribute to localised dampness or cooling of the floor and lower wall sections internally.

With external ground levels at this height in relation to the internal floors, the introduction of appropriate drainage measures to intercept and divert surface and groundwater away from the building remains essential.



The diagrams below illustrate how perimeter drainage can be used to intercept ground moisture and divert it away from the solid floor, reducing the risk of lateral moisture movement.



Our Internal Observations:

Overall Humidity Readings Within the Property:



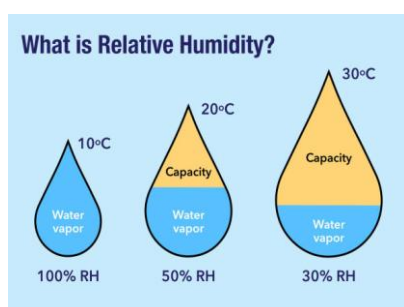
During our inspection, we recorded humidity levels of 73% at 17.7°C. This humidity level is too high; the ideal range for indoor humidity is 40% to 60%.

It should be noted that this was only a snapshot reading taken on a dry and sunny day. Humidity levels within the property are likely to be higher at night or in the winter months, varying between 75% and 85% depending on temperature changes and everyday activities such as cooking and cleaning.

We can confirm that when we returned during heavy rainfall, humidity levels were between 78-81% RH.

The property's higher humidity is largely a result of changes to its original construction and environmental balance. Modern materials such as cement render, cement pointing, and impermeable wall finishes have been used throughout, preventing the building from regulating internal moisture vapour as it was designed to do. Originally, moisture generated inside the house would have travelled through the breathable lime-based walls and escaped to the outside. This process has been restricted, allowing moisture to build up internally. In addition, the open fire has been replaced with a log burner, which removes far less humidity from the internal air. Combined with the external issues noted earlier, such as poor surface water drainage, high ground levels, and trapped moisture in the walls, these factors have increased the overall moisture burden within the property, contributing to raised internal humidity levels.

Understanding Relative Humidity



Relative humidity is the amount of water vapour present in the air, expressed as a percentage of the maximum amount the air can hold at a given temperature. At 100% RH, the air is fully saturated. As internal temperatures drop, such as overnight or during the winter, RH naturally increases, even if no additional moisture has been introduced. This is because warm air can hold more moisture than cold air. When RH levels exceed 65%, conditions become ideal for condensation to form and for mould growth to occur.

Impact on Building Fabric and Timber

High humidity can have significant effects on building materials:

- Hygroscopic salts within walls and plaster absorb moisture from the air, causing them to expand over time. This expansion can damage plasterwork, weaken structural integrity, and lead to flaking, crumbling, and staining.
- Timber elements within the property are also vulnerable. Prolonged exposure to high humidity can cause timber to swell, distort, and weaken. Over time, this can increase the risk of fungal decay.

- When air with high humidity touches a cold surface, it creates the perfect conditions for condensation and mould to develop. This condensation can saturate building materials, making it appear as though moisture is penetrating from outside, when in fact it is only forming on the surface.

Health Implications

From a health perspective, consistently elevated humidity supports the growth of mould, mildew, and dust mites, all common triggers for allergies and respiratory problems. For occupants with asthma or other breathing difficulties, exposure to high moisture levels in the air can lead to wheezing, chest tightness, and increased frequency of flare-ups.

Breathing stale, moisture-laden air is comparable to drinking from a glass of water that has been left out for weeks; it may appear harmless, but it is likely to contain unseen bacteria and contaminants. Over time, inhaling stagnant air can be harmful to the respiratory system.

The solution is effective air exchange, improving ventilation to allow fresh air to circulate. This will:

- Balance humidity levels
- Remove pollutants
- Create a healthier and safer indoor environment

Proper ventilation is essential in preventing damp-related issues and maintaining good indoor air quality.

Eaves Space:



All eaves spaces within the second floor were inspected. Relative humidity readings of 70 to 71% were recorded at a temperature of 17.8°C. These levels indicate that the eaves space lacks adequate ventilation, as no provision for air movement was observed.

Using a Protimeter, the dew point was calculated at 12.9°C. This means that if any surface within the eaves voids cools to 12.9°C while the humidity remains at 71%, condensation will begin to form on that surface. Without ventilation, moisture-laden air becomes trapped, allowing condensation to accumulate on cooler materials such as rafters, insulation, and wall plates.

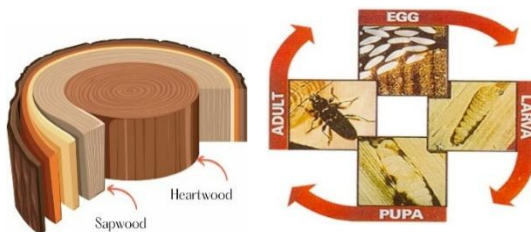
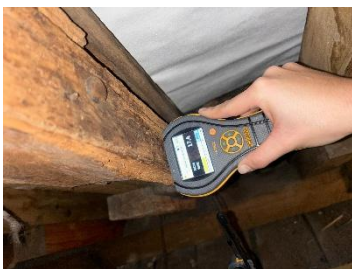
Evidence of Woodworm:

The roof timbers readily absorb prolonged high humidity and condensation. Evidence of historical woodworm activity was observed, with flight holes consistent with both Common Furniture Beetle (*Anobium punctatum*) and Deathwatch Beetle (*Xestobium rufovillosum*), the latter typically associated with oak. Moisture content readings taken from a range of timbers averaged 12.9%, which is too dry to sustain active infestation, suggesting that most of the activity is historic. However, localised areas returned higher moisture content readings of 17.4%, just above the 16% threshold at which wood-boring insects can begin to feed. If these elevated levels persist, the conditions could once again support active woodworm.

No evidence of live beetles or larvae was observed during the inspection, though this may be due to timing, as the insects are not active during this season. Monitoring is advised from April to May, when adult beetles typically emerge.

Improving ventilation within the eaves space is strongly recommended. Increasing airflow will lower humidity levels, prevent condensation, and create an environment that discourages insect activity. Chemical spray treatments are not advised, as they address the symptom rather than the cause. Woodworm thrives in damp conditions; by drying the environment, the timbers become too hard and dry for them to feed. The insects are simply indicators of a moisture problem, and once the environment is stable, they will move on naturally.

As a note of reassurance, the majority of the main roof structure is formed of hardwood. During the life of a tree, it sends all of its natural toxins to the heartwood, which is where its strength comes from. This process creates a natural insecticide that protects the tree's structural core and allows it to remain standing and resistant to insect attack. When the tree is felled and used in construction, that natural insecticide remains within the heartwood. As a result, woodworm rarely infest this dense inner section, preferring instead the softer, nutrient-rich sapwood just beneath the bark. Since the structural strength of a beam lies in its heartwood, limited surface-level woodworm damage within the sapwood generally does not compromise overall integrity, provided it is monitored, and the surrounding environment remains dry and stable.



Fireplace (Inglenook):



The fireplace at The Old Scantlings is a traditional inglenook, originally designed as the main source of both heating and ventilation for the property. In a house of this age, the open fire would have been lit almost every day, providing not only warmth but also a constant movement of air through the chimney. The natural draw of the fire created a steady upward airflow that helped remove internal humidity and kept the surrounding masonry dry and warm.

In its current state, the fireplace has been adapted to accommodate a log burner. While efficient at retaining heat within the room, a log burner does not generate the same level of radiant heat as an open fire, nor does it provide the same degree of air exchange through the chimney. All heat and air movement are now contained within the metal flue liner, meaning that the chimney breast itself receives little to no warmth or airflow. This change has fundamentally altered how the masonry surrounding the fireplace manages moisture.

During inspection, the brick hearth was found to have cement-based pointing, which prevents moisture from evaporating through the joints. As a result, any moisture that accumulates in the masonry is forced to escape laterally into the adjoining solid floor. Evidence of this was visible where the gripper rods had decayed and where the outline of the carpet could be seen on the floor surface. The area beneath the carpet felt damp to the touch, suggesting that the floor is absorbing excess moisture that the hearth and chimney structure can no longer release naturally.

The interior surfaces of the inglenook show signs of long-term moisture retention. Historically, soot and tar from open fires would have been deposited throughout the chimney flue. These deposits contain hygroscopic salts, which readily absorb atmospheric moisture. Under normal circumstances, the warmth and airflow from a daily fire would have kept the chimney dry. However, because the log burner now directs all heat and movement through its sealed flue, the interior of the chimney remains cool and still. This provides the perfect conditions for the hygroscopic salts to draw in moisture from the air and release it into the surrounding brickwork.

The cement render on the reverse side of the chimney wall further restricts breathability. Moisture that once evaporated through the masonry is now trapped within it, gradually being drawn inward rather than outward. This has resulted in visible dampness, salt migration, and a general sense that the fireplace is struggling to regulate moisture in the way it originally did.

Encouraging regular use of the fire, together with the use of breathable materials around the hearth and fireplace, will help restore some of the chimney's natural moisture regulation. Allowing gentle warmth and airflow through the structure will reduce condensation, discourage salt activity, and enable trapped moisture to dissipate gradually.

As a side note, there appears to be evidence of a potential creosote build-up within the inglenook. This should be inspected by a qualified chimney sweep or chimney specialist.

Subsequent Inspection During Wet Weather Conditions:



The observations described above were recorded during the initial inspection, which was undertaken during dry weather conditions. A subsequent re-inspection was carried out during a period of rainfall to assess the performance of the chimney and surrounding structure under wet external conditions.

During this later inspection, active moisture was observed within the chimney breast. Water was noted dripping onto the hearth area behind the log burner, and significant wetting was recorded within the eaves cupboard at the second floor level. In this location, the rear elevation wall, which corresponds with the externally cement-rendered wall, together with the chimney breast itself, was found to be heavily saturated.

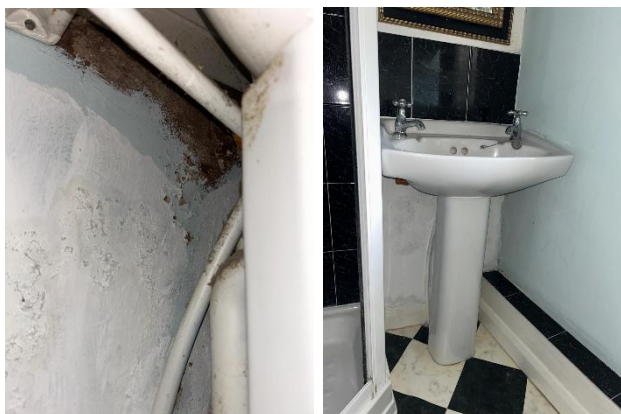
While the presence of free water may suggest rainwater ingress, the pattern, extent, and distribution of moisture remain consistent with severe condensation occurring within a cold, poorly ventilated chimney structure. The chimney breast, flue, and adjacent masonry are formed of dense materials, further affected by cement render and modern finishes, which significantly restrict breathability. In the absence of meaningful heat and airflow through the chimney, these cold surfaces provide ideal conditions for condensation to occur, even to the extent that liquid water can be produced and discharged internally.

It is acknowledged that a minor rainwater ingress at high level, particularly at the cracked render or flaunching noted on the chimney stack, could be contributing additional moisture to the system. However, due to the inability to safely access and fully inspect the chimney stack from roof level, owing to the fragility of the slate covering, this could not be conclusively confirmed at the time of inspection. A more detailed inspection of the chimney stack by a suitably qualified roofing contractor or chimney specialist is therefore recommended to rule out contributory defects.

Notwithstanding this, it is considered likely that the majority of the moisture observed internally is the result of condensation driven by cold masonry, restricted ventilation, and the use of impermeable materials. This conclusion is further supported by the presence of modern pink gypsum plaster on the chimney breast and the internally affected external wall. Gypsum plaster is not well-suited to cold or high-humidity environments and will readily exhibit signs of moisture distress when applied to solid walls or chimney structures of this nature.

In summary, while a minor defect at the chimney stack may be adding to the overall moisture burden, the primary mechanism is considered to be condensation associated with altered fireplace use, reduced heat transfer to the chimney mass, limited ventilation, and inappropriate material selection.

Cold Surfaces, Condensation, and Incompatible Materials:

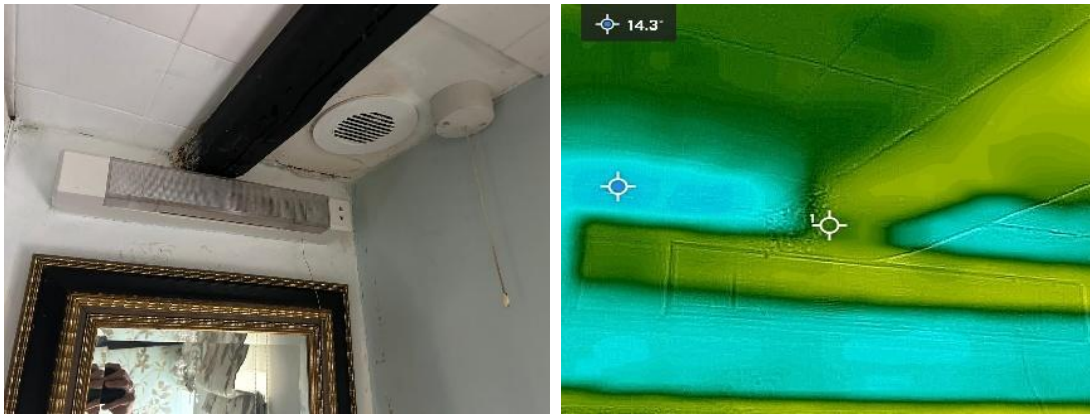


Areas of the property have been repaired or replastered using modern, non-breathable materials such as cement mortars and gypsum plaster. These materials are trapping moisture within the building fabric, creating cold wall surfaces that are highly susceptible to condensation. Thermal imaging confirmed significant temperature differences across the walls, particularly around upper corners, beams, and behind fixtures, with readings as low as 14.3°C.

A clear example is behind the sink basin in the main bedroom, where condensation and salt activity are breaking down the modern plaster. The embedded timber within the wall is softening, and crystalline salts are erupting through the plaster surface. This wall was recorded as one of the coldest in the property, and with the adjacent shower generating high humidity, moisture repeatedly condenses on its surface.

Gypsum plaster and dense finishes cannot cope with this moisture or the salts drawn inward by evaporation. As salts crystallise, they expand, causing plaster failure and surface flaking. The surrounding beams also show mould growth and salt deposits, further evidence of condensation forming on cold, impermeable surfaces.

These issues are not necessarily caused by water ingress but by trapped vapour unable to escape through modern materials. Reinstating breathable lime-based finishes and improving ventilation in high-humidity areas will allow the walls to dry naturally, stabilise humidity levels, and prevent further condensation and salt-related decay.



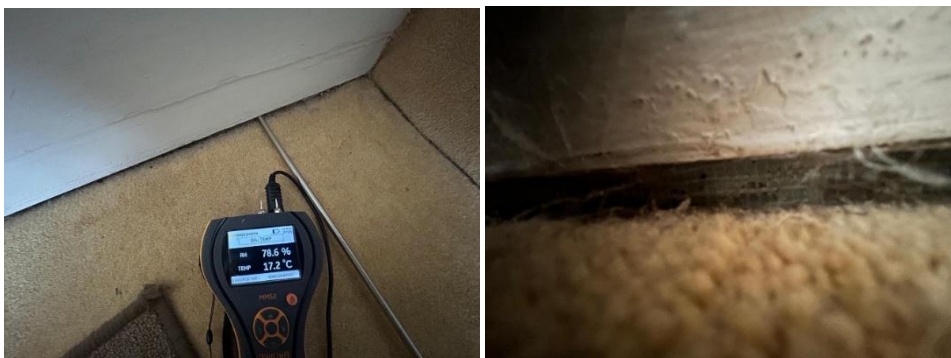
Application of Membrane System to Living Room Wall:

An old membrane system has been applied to the external wall of the living room. It is very likely that this was installed following a misdiagnosis of damp issues. As outlined in the earlier sections on cement-based materials and external ground levels, this wall has become cold and moisture-retentive due to the use of non-breathable materials and poor surface drainage at the front of the property. These conditions make the wall highly susceptible to condensation, particularly near its base, where moisture naturally collects. Over time, condensation would have drawn salts to the surface, disrupted plaster finishes, and caused minor decay to the skirting board, creating the appearance of rising damp or penetrating moisture when the issue was actually condensation forming on a cold surface.

Instead of addressing the root causes, such as impermeable cement pointing and inadequate drainage, a membrane system has been installed to block moisture transfer into the internal finishes. While this conceals visible symptoms, it does not resolve the underlying issue. The wall is now sealed on both sides, preventing evaporation externally or internally. This can allow trapped moisture to remain active within the wall, leading to unseen deterioration of the masonry.

Humidity readings taken from beneath the skirting board recorded a relative humidity of 78.6%, confirming that moisture remains present behind the membrane and that the problem has not been resolved, only hidden.

It should also be noted that listed building regulations require consent for any alteration that affects the fabric or character of the structure. Installing a membrane system on an original wall is generally not supported unless the work is fully reversible and demonstrably necessary. The use of such materials should be reviewed in consultation with the local conservation officer. Reinstating breathable finishes, such as lime plaster, and improving external drainage will allow the wall to regulate moisture naturally and preserve the historic fabric of the property.



Moisture Retention in Solid Floor Construction:

The solid floor within the property is taking on moisture due to raised external ground levels and the lack of effective surface drainage. When the carpet was raised near the back door, the surrounding timber was found to be completely decayed. This deterioration has occurred because the solid floor is finished with an impervious underlay and carpet, which traps moisture within the floor structure and prevents natural evaporation.

It is likely that the solid floor is a later alteration that replaced an original suspended timber floor. Depending on when this change was made, a damp-proof membrane may have been incorporated within the new floor. However, in several areas, the external ground levels are higher than the internal floor surface, meaning that any damp-proof membrane would be bridged. Once bridged, moisture can pass laterally from the surrounding ground into the solid floor regardless of whether a membrane is present.

Because the floor surface is sealed, any moisture that builds up within the slab cannot evaporate evenly. It becomes trapped beneath the floor covering and can only escape at the perimeter where the carpet meets the wall. This small gap acts as a localised evaporation zone, releasing cold, damp air at low level. The surrounding skirting boards and adjacent plaster then absorb this moisture, becoming cold and damp and more susceptible to condensation. Over time, this has caused visible timber decay and deterioration of low-level finishes.



It is also possible that salts from the ground are being drawn upward with the retained moisture, further contributing to damage in the lower walls. The lack of adequate external drainage and the raised ground levels mean that groundwater pressure beneath the slab remains consistently high, keeping the floor base in a damp condition.

Once external ground levels and drainage have been corrected, the internal floor should be able to perform as intended and normal carpet finishes can be used without trapping excess moisture.

Under-Stairs Cupboard and Suspended Timber Floor Void:

Beneath the under-stairs cupboard adjacent to the front door is a small void of approximately 1 m² that retains a section of the original suspended timber floor. This appears to be the only remaining part of the building with a traditional suspended timber construction. Unfortunately, this cavity has been left with no form of ventilation.

A humidity reading taken from beneath the floorboards within this void recorded 85.1% relative humidity at a temperature of 16.9°C, which is extremely high. Conditions of this kind create an ideal environment for fungal decay, including wet rot and potentially dry rot, to develop within the joists, floorboards, and stair base.

Externally, this area corresponds with one of the most moisture-retentive parts of the property. The ground levels are raised, the flint wall is finished with a cement fillet, and the adjacent boundary wall traps water against the structure. Moisture is therefore migrating laterally through the masonry and entering the under-stairs space, as shown in the photographs. The wall surfaces, skirting, and timber elements in this location are visibly damp and beginning to decay.

Because the rest of the ground floor has been replaced with a solid floor, this isolated patch of suspended timber floor has effectively been sealed off. The small void beneath it is now completely enclosed, preventing any air movement and allowing humidity to rise unchecked. This situation would have been avoided had the floor been replaced at the same time as the rest of the ground level or provided with appropriate cross-ventilation. Leaving such a small area of suspended floor surrounded by impermeable materials makes long-term moisture control almost impossible.

A small inspection camera was used to examine the underside of the suspended void, and at the time of inspection, there was no visible evidence of active wet rot or dry rot. However, if the current conditions persist, the risk of fungal decay developing in the near future is very high.



Boxed-In Area at the Base of the Main Stairs:

At the base of the stairs in the living room, a small section has been boxed in and fitted with a ventilation grill on both the internal and external faces, presumably to provide airflow into the enclosed space.

During inspection, the internal grill was removed to check the effectiveness of the system. It was discovered that only two small holes had been drilled through the timber behind the grill, meaning that almost no air circulation is actually taking place. The installation provides little to no ventilation and is therefore functionally redundant.

An inspection camera was inserted through one of these holes to observe the interior of the boxed-in void. The space was found to be filled with rubble and debris, which appeared dark and compacted, suggesting dampness. There was no sign of active pipework or airflow channels. The internal surfaces of the surrounding timbers appeared sound and showed no visible signs of decay at this stage, though the environment is clearly stagnant.

The photographs illustrate that the area is sealed, with accumulated material likely holding residual moisture. This combination of damp debris, trapped air, and timber enclosure can lead to localised humidity build-up and eventual fungal decay if not ventilated properly.



Executive Summary:

The Old Scantlings is a beautiful Grade II listed 16th-century house built of flint, stone, and lime. Its position on the low-lying River Adur floodplain means the building has always lived with moisture. The main finding of this inspection is that modern, non-breathable materials and poor surface water management have disturbed the building's natural ability to handle that moisture. As a result, several walls and floors have become cooler and damper, encouraging condensation, salt activity, and localised timber decay.

None of these conditions are irreversible. The structure itself remains sound, and the problems stem from incompatible materials and alterations rather than structural failure. With careful reinstatement of traditional breathable finishes, improved ventilation, and proper drainage, the house can return to a healthy equilibrium and continue to stand proudly as one of Shoreham's historic treasures.

Headline Findings:

- **Roof:** The main roof is in good condition. The slate covering is sound and well-fitted, though the chimney flaunching has cracked, and vegetation is growing from it, showing that moisture is entering the stack.
- **Rainwater Goods:** The gutters and downpipes are blocked, misaligned, and locally ponding. This has led to overspilling and water running down the walls. Some sections fall the wrong way, and one neighbouring downpipe overflows onto the ground beside the wall, increasing foundation dampness.

- **Cement Render and Pointing:** Modern cement has been used instead of lime mortar, preventing the walls from breathing. The render continues below ground level, trapping rising moisture that would normally evaporate outside. In a flint wall, where the flint cannot release moisture, cement pointing blocks the only escape route. This keeps the masonry cold and damp, leading to condensation and salt crystallisation.
- **Ground Levels and Drainage:** The cemented area at the front acts like a bowl, trapping water against the base of the wall. At the rear, the patio slopes toward the property and the gully sits too high to collect water effectively. Because the property sits on a high-water table, moisture that builds up below the surface cannot evaporate through the sealed ground and will instead migrate into the structure.
- **Internal Humidity:** A relative humidity reading of 73% at 17.7°C was recorded on a dry day, with higher values expected in colder conditions. The eaves recorded 70-71% at 17.8°C, indicating inadequate ventilation. The dew point of 12.9°C confirms a high risk of condensation forming on cooler surfaces.
- **Timbers and Woodworm:** Historic woodworm damage was found, mainly from common furniture beetle and deathwatch beetle, but no live activity was seen. Average timber moisture content was 12.9%, which is too low for active infestation, though isolated readings of 17.4% should be monitored.
- **Fireplace (Inglenook):** The conversion to a log burner has removed the open fire's natural warmth and airflow. The chimney and hearth are now cool, allowing moisture and salts to remain active. Cement pointing at the hearth restricts evaporation, pushing dampness into the adjoining floor and finishes. Condensation forming around and within the chimney is fairly severe and causing deterioration to plaster finishes.
- **Cold Surfaces and Modern Plaster:** Modern finishes such as gypsum plaster and cement mortars are failing where condensation and salts are present. Behind the main bedroom basin, salts are erupting through the plaster, and the embedded timber is softening. These materials cannot cope with moisture or salt migration and are breaking down as a result.
- **Living Room Membrane:** An "Old Royd" impermeable membrane has been applied to the external wall internally, likely due to a past misdiagnosis of rising damp. The wall is now sealed both inside and out, preventing any evaporation. A relative humidity reading of 78.6% beneath the skirting confirms that moisture remains trapped.
- **Solid Floor Construction:** The solid floor is absorbing moisture because external ground levels are too high and surface drainage is poor. The impervious carpet underlay prevents evaporation, forcing damp air to escape around the edges of the room. This moisture raises the humidity at skirting level and makes low-level plaster cold and damp. Any existing damp-proof membrane would be bridged by the higher external ground.
- **Under-Stairs Cupboard and Void:** A small section of the original suspended timber floor remains under the stairs, covering an area of about one square metre. This void has no ventilation, and the relative humidity was measured at 85.1% at 16.9°C. The environment is ideal for fungal decay to develop if not improved. An inspection camera found no active wet or dry rot, but the risk is high if the conditions remain unchanged.
- **Boxed-In Area at Stair Base:** A small enclosed section at the base of the stairs has ventilation grilles fitted inside and out, but only two small holes behind the internal grille allow any air movement. The void contains dark, damp rubble, suggesting retained moisture. The surrounding timbers are currently sound, but the space is stagnant and could deteriorate without proper ventilation.

Overall Conclusion:

The issues at The Old Scantlings are the result of modern interventions conflicting with traditional construction principles. The building was designed to breathe, allowing moisture to move through lime-based materials and evaporate naturally. Cement, gypsum, plastic paints, and impermeable membranes have interrupted this balance, causing moisture to become trapped and encouraging condensation and salt activity.

Despite these challenges, the building remains fundamentally strong. The dampness and decay observed are environmental, not structural. Once external drainage is corrected, ground levels are lowered, and traditional breathable materials are reinstated, the house will begin to regulate itself again.

The Old Scantlings is a charming and historically significant building that has stood for centuries. By returning it to its traditional working methods, allowing it to breathe and manage moisture naturally, it will once again become a dry, comfortable, and healthy home. Restoring it in this way will also protect and preserve an important part of Shoreham's architectural heritage for many years to come.

Our Recommended Solutions:

Our recommendations are listed below in order of urgency, with the most critical remedial works at the top and the less urgent, cosmetic or decorative items towards the bottom.

While this priority order helps you understand what to address first, it is essential to remember that every recommendation plays a part in one overall, connected solution for the property. The issues in your home are interlinked; if some measures are implemented while others are left undone, the underlying problems may persist or return in the future. To achieve lasting protection for both the structure and your living environment, all recommendations should be fully implemented over time.

GREY - Areas Which Require Further Investigation / Ongoing Monitoring:

Oldroyd Membrane and Drylining System:

Following further research, it has been confirmed that it is not illegal to install a plastic (Oldroyd-type) membrane within a listed building, provided that the installation was carried out in a fully reversible manner, without causing damage to the original structure, and that the correct listed building consent was obtained beforehand.

While the presence of an Oldroyd plastic membrane has been confirmed within the living room wall, the exact method of installation could not be verified during this inspection. The next step should be to try to obtain as much information as possible about how the work was carried out. If possible, obtain a copy of the original quotation, scope of works, or listed building consent documentation relating to the installation.

Once this information is known, the next course of action can be decided based on how the membrane was installed and whether it has the necessary approvals.

If the membrane was installed **with** a listed building consent and in a fully reversible manner, the decision moving forward is entirely yours. There are two possible approaches:

1. Full restoration of breathability:

Remove the external cement pointing and the internal plastic membrane and dry-lining system, then reinstate both the internal and external finishes with traditional lime-based materials. This approach would return the wall to its original breathable condition, allowing moisture to pass naturally through the structure without retention.

2. Partial improvement while retaining the membrane:

If you prefer to retain the existing dry-lining system, re-pointing the external wall in lime mortar will at least allow moisture to evaporate externally. Although this will not make the wall fully breathable, it will significantly improve its ability to expel moisture that is currently being trapped within it.

Listed Building Consent Considerations:

If a listed building consent was not obtained for the works and retrospective consent was subsequently refused, the situation may require further consideration. Listed buildings are protected under the Planning (Listed Buildings and Conservation Areas) Act 1990, and works that affect their character are required to have the appropriate approvals in place. Where alterations have been carried out without consent, the local authority may require that the works be amended or reversed to bring them back into line with conservation requirements.

Responsibility for obtaining listed building consent rests with the person who commissioned or carried out the works at the time. Although you were not personally involved in those decisions, listed building matters relate to the property rather than the individual, and it is therefore necessary for the position to be clarified as part of the current ownership.

If it transpires that the installation was unauthorised, it would be prudent to engage with the local conservation officer to discuss an appropriate way forward. This approach allows solutions to be agreed that respect the historic fabric of the building while ensuring compliance with statutory requirements.

In summary, establishing whether listed building consent was obtained is the essential next step. Once this position is confirmed, informed decisions can be made regarding any remedial or corrective works required, ensuring the building can manage moisture effectively and remain compliant with heritage regulations.

Woodworm Activity in Eaves Spaces:

The eaves spaces should be monitored through to April, which is the beginning of the beetles' flight season. During this period, check for signs of live beetles, fresh flight holes, or new frass deposits around the timbers. Any new activity would indicate that certain areas remain slightly damp and suitable for infestation.

Chemical treatments are not advised. They do not address the underlying cause of woodworm activity, which is excess moisture. The best and most sustainable method of control is to maintain a dry, well-ventilated environment where the beetles cannot survive.

To achieve this, tile vents should be installed within the main roof covering to introduce a consistent flow of fresh air throughout all eaves. Improved airflow will help reduce humidity, limit condensation, and keep the timbers dry and stable.

Once ventilation has been improved and humidity reduced, the timbers will naturally resist reinfestation. The area should continue to be checked annually as part of routine maintenance, ensuring the environment remains dry and healthy.

RED – First Steps:

Ground Levels and Drainage:

The current ground levels and drainage arrangements around The Old Scantlings are allowing water to collect and sit against the building, preventing evaporation and increasing moisture pressure on the lower walls and solid floor. Improvements are required at both the front and rear of the property to restore proper drainage and allow the surrounding ground to dry naturally.

Front of the Property

- Break up and remove the concrete slabs that currently abut the front wall of the property to expose the natural ground beneath. The existing concrete acts like a sealed bowl, trapping surface water and forcing moisture into the masonry.
- Once the concrete has been removed, lay a breathable weed-suppressant membrane over the exposed soil to prevent vegetation growth while still allowing moisture vapour to pass freely through the ground.
- Cover the membrane with decorative stones measuring 40–50 mm in size. These larger angular stones create small voids that encourage free evaporation. Avoid small pea shingle or compacted gravel, as these materials bind tightly together and restrict airflow.

This alteration provides three important benefits:

1. Improved drainage – water will no longer pool against the base of the property but will percolate down into the soil, where it can dissipate naturally.
2. Enhanced evaporation – on dry, sunny days, any moisture retained in the ground will be able to evaporate through the stones, restoring the natural balance of absorption and release.
3. Lowered ground levels – removing the concrete slab will also reduce external ground pressure on the internal solid floor, relieving one of the main sources of lateral moisture movement into the base of the walls.

This change will help the front elevation dry externally, preventing ground moisture from being forced to evaporate internally.

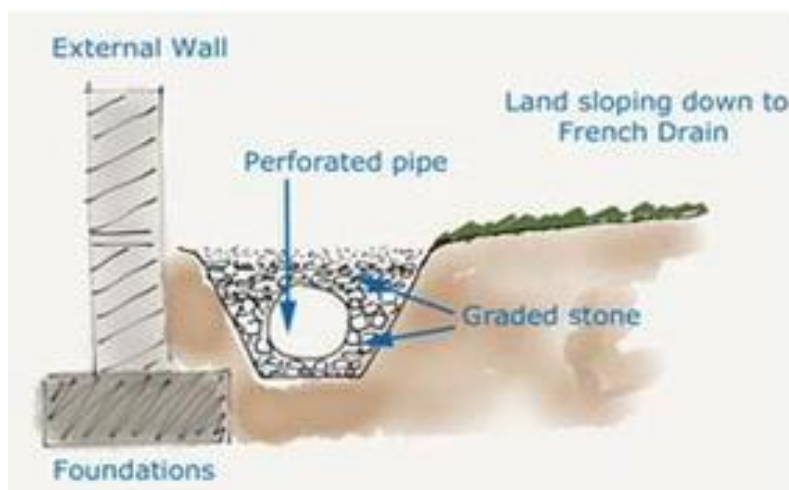


The above is an edited example image of what it could look like.

Rear of the Property

At the rear of the property, a French drain should be installed to intercept and divert surface water away from the wall and solid floor:

- Raise and store the existing brick pavers.
- Excavate a V-shaped trench graded toward the outlet point, which should connect directly into the existing rainwater gully where the downpipe discharges.
- Install a 100 mm perforated drainage pipe wrapped in a geotextile membrane at the base of the trench. The membrane prevents silt from clogging the pipe while allowing water to pass freely through.
- Connect the perforated pipe into the gully to ensure all collected water is carried away from the structure.
- Backfill the trench with 40–50 mm angular stone to promote percolation and long-term system performance.
- Include rodding points at key locations along the run to allow for inspection, flushing, and maintenance.



Before installation, the rainwater gully and below-ground drainage line should be inspected by a professional drainage specialist using a CCTV camera to ensure that the existing pipework is sound and properly aligned. If the underground pipe is cracked or misaligned, water could leak into the surrounding soil, negating the benefits of the new system.

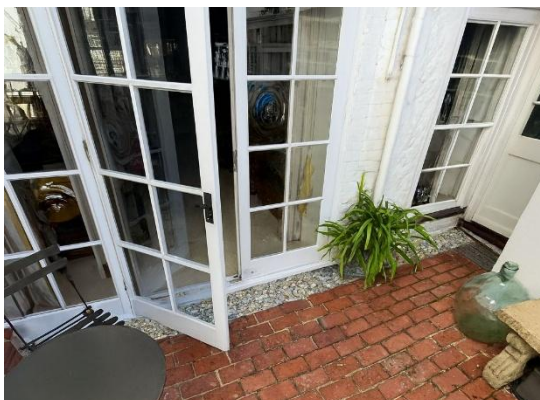
Listed building consent should be obtained before installing the French drain, as the works alter the ground immediately adjacent to the structure. However, as the installation is fully reversible and its purpose is to protect the building fabric by directing water safely away from the solid floor, permission should be straightforward to secure.

An annotated image has been included to show the proposed location for the French drain installation.



French Drain Layout – Image Key

- Blue lines – Indicate the recommended locations for French drain installation around the property with arrows showing the direction of water flow.
- Red arrows – Show the proposed drainage points (gullies) where collected water should be directed to drain safely away from the property.
- Red circles – Mark the positions where rodding points should be installed, providing access for maintenance and ensuring the long-term functionality of the system.



The above is an edited example image of what it could look like.

Rainwater Management System:

The rainwater management system is essential in protecting The Old Scantlings from dampness and foundation moisture. The existing plastic gutters and downpipes are compromised and require full maintenance to restore proper flow and control of rainwater. The following actions are recommended:

- Clear all gutters and downpipes of moss, leaves, and debris that are restricting water flow and causing overspilling during rainfall. Once cleared, check performance during heavy rain to confirm free movement of water.
- Check and repair joints. Any joints showing signs of dripping or leakage should be dismantled, cleaned, and re-sealed. Replace any damaged fittings or perished rubber seals.
- Realign misfitted sections. Several gutter runs currently undulate or fall in the wrong direction. These should be adjusted to provide a continuous fall toward the nearest downpipe. Correct alignment will stop water from pooling in low points and reduce wear on seals.
- Address overspilling and back-fall. Dark staining on the underside of guttering confirms that water has been regularly spilling over. Any gutters tilting towards the property should be re-fixed to ensure water discharges away from the walls, preventing saturation of the masonry and moisture build-up at the wall base.

- Inspect downpipes for blockages and secure discharge. Ensure all downpipes are clear and properly connected to their gullies. Where a downpipe currently discharges above a water butt, the outlet should be adjusted so that overflow cannot soak into the surrounding foundations or splash back onto the wall.

- Review fittings and supports. Check that all plastic brackets and joints are firmly secured and that the system is capable of supporting the full weight of water during heavy rainfall.

Once all maintenance and realignment have been completed, the rainwater system should be monitored during periods of heavy rain to confirm effective flow and discharge. Regular seasonal cleaning and visual checks are advised to keep the system performing properly.

A well-functioning rainwater system will significantly reduce the amount of moisture reaching the walls and foundations, helping the property remain dry and stable.

Cement Render and Pointing:

The existing cement render and cement-based pointing are preventing the walls of The Old Scantlings from breathing and releasing moisture naturally. While complete removal of these materials might appear ideal, it must be approached carefully to avoid unnecessary disruption or damage to the historic masonry.

Cement Render:

Removing all of the cement render could cause more harm than good, as the process may destabilise or damage the underlying flint and stone during removal. A more measured and conservation-friendly approach is advised:

- Remove approximately 150–300 mm of cement render from the base of the rendered wall to expose the underlying masonry.
- Once removed, install a bell-cast bead along the base of the remaining render to deflect rainwater away from the wall face.
- This modification will create an evaporation zone that allows trapped moisture within the wall to escape externally. Over time, this will help the masonry dry naturally and will assist in regulating moisture within the adjoining hearth of the fireplace.
- The approach maintains the visual appearance of the wall, which may be necessary if the render has been included within the property's listed status, while still restoring the building's ability to breathe and manage moisture effectively.

If the render has been formally listed as part of the building's character, listed building consent may be required before removing the lower section. However, since cement is not a traditional or compatible material, there should be strong grounds to support this partial alteration. The conservation officer should be provided with this report to demonstrate the reasoning and the benefits to the long-term preservation of the structure.

As the wall in question lies within the neighbouring garden, permission will also need to be obtained from the adjoining property owner before work begins.

Cement Pointing:

All cement pointing prevents natural evaporation through the joints and should be replaced with lime mortar to allow the wall to breathe. However, repointing the entire property at once may not be financially viable, so a staged approach is recommended:

- Prioritise low-level pointing and cement fillets around the base of the walls, as these areas retain the most moisture and contribute most directly to dampness inside the property.
- Once the low-level work has been completed, the remaining elevations can be repointed gradually, as future repairs become necessary.
- All future repointing work should be carried out using a lime mortar, preferably a natural hydraulic lime (NHL 2 or NHL 3.5) mix suitable for flint and stone construction, allowing the walls to move and breathe as intended.

Replacing the hard cement mortar with lime will reinstate the wall's ability to evaporate moisture harmlessly, reduce salt build-up, and help maintain stable temperatures within the masonry. Over time, this will restore the natural balance of the building fabric while preserving its historic character.

Installation of Mechanical Ventilation Units:

Installing a Heat Recovery Unit in the kitchen and a Humidistat-controlled Extraction unit in all bathrooms will efficiently target and reduce excess moisture at its source. By significantly reducing indoor humidity levels, these systems will prevent condensation and mould from developing, particularly during the winter months when moisture problems tend to worsen.

Addressing humidity levels now will ensure a healthier indoor environment and help prevent these issues from becoming persistent or severe.

Heat Recovery Unit:

Mechanical Heat Recovery Units (MHRUs) are energy-efficient ventilation systems designed to improve indoor air quality while minimizing heat loss. These units work by extracting stale, moisture-laden air from inside a home and replacing it with fresh, filtered air from outside.

What sets MHRUs apart is their ability to recover heat from the outgoing air and transfer it to the incoming air, reducing the need for additional heating.

This process not only helps maintain a comfortable indoor temperature but also reduces energy costs. By constantly renewing indoor air, MHRUs effectively manage humidity levels, prevent condensation, and create a healthier living environment.



Please see the link for more information: https://youtu.be/Cw_Rs800NoU?si=CQxp8ysrPO017yfu

Humidity-Controlled Extraction:

A humidistat-controlled extraction unit is a ventilation device that automatically activates based on the humidity levels in a room.

It is equipped with a humidistat, a sensor that monitors relative humidity, and triggers the extractor fan when the humidity exceeds the 60%RH threshold.

This type of unit is commonly used in bathrooms or other areas prone to high moisture levels, to help prevent condensation, mould growth, and dampness by efficiently removing excess moisture from the air.

Install the Aico iCON 60 Extractor Fan in the bathroom. These fans have been successfully used in similar projects and provide quiet, continuous extraction that effectively controls steam and humidity while being energy-efficient and unobtrusive.

Please see the link for more information: <https://www.tlc-direct.co.uk/Products/ADICON60.html>



Settings- During installation, all fans should be configured so that the automatic boost mode (fan speed) activates whenever relative humidity exceeds 60% RH. This ensures that any sudden increase in moisture, such as from bathing or cooking, is addressed immediately before condensation forms on cold surfaces.

Once mechanical ventilation units have been installed, humidity levels should be monitored using a Govee hygrometer or similar digital monitoring device. These small sensors allow you to track temperature and relative humidity in real time and store data over several weeks. This helps confirm that the new ventilation measures are successfully reducing internal moisture levels and maintaining a stable indoor environment throughout seasonal changes.

ORANGE – Next Steps:**Chimney Stack Flaunching:**

A crack was observed in the flaunching at the top of the chimney stack on The Old Scantlings, with vegetation growing from the opening. This confirms that moisture is entering through the damaged area and being retained within the chimney structure. While this **may** not yet be causing direct internal leakage, it will increase humidity within the stack and accelerate deterioration of the surrounding masonry, mortar, and any embedded metal fixings if left unrepaired.

The following remedial work is recommended:

- The cracked flaunching should be carefully removed and replaced using a new lime-based mortar flaunching, providing a durable yet breathable seal around the chimney pots.

- All vegetation and root material should be removed completely to prevent regrowth and ensure a clean, stable surface for the new flaunching.
- The replacement flaunching should be finished with a smooth, weathered profile that sheds rainwater evenly away from the chimney pots and prevents pooling.

This work can be carried out at the same time as the lead dressing to the partition garden wall and the installation of tile vents. Grouping these tasks together will be practical and efficient, as they require similar access and skills from the roofing contractor.

Fireplace Adaptations:

The inglenook fireplace at The Old Scantlings is struggling to regulate moisture due to changes in its original design and the use of modern, non-breathable materials. The following adaptations are recommended to help the structure manage moisture more effectively and restore its natural balance:

- Rake out and replace the existing cement pointing around the hearth with lime mortar. This will allow the hearth to expel moisture upward through the joints rather than forcing it laterally into the solid floor. Lime is flexible and breathable, helping to maintain a stable moisture balance in the surrounding masonry.
- Have the chimney swept regularly by a qualified professional to remove accumulated soot and tar. This will reduce the amount of hygroscopic salts within the flue that absorb moisture from the air. The chimney sweep should also inspect and comment on the presence and condition of any creosote deposits, as these can pose both moisture and fire risks.
- Use the log burner regularly, as even moderate use will generate warmth within the flue and promote some air movement through the chimney, helping the masonry to remain dry.
- If you wish to reinstate an open fire, this would be highly beneficial for the regulation of moisture within both the hearth and chimney breast. However, before doing so, a professional chimney expert must be consulted to confirm that it is safe for use. They will assess the draw of the flue to ensure smoke can be removed safely and will check for any build-up of tar or creosote that could cause chimney fires. They will also verify that the chimney structure is sound and that no carbon monoxide risk is present.

These measures will restore a degree of warmth, airflow, and breathability to the fireplace, allowing it to function more as it originally did as both a source of heat and a natural ventilator for the property.

Once the fire is in regular use and the flaunching has been repaired, the chimney structure should be monitored to determine whether condensation is continuing and causing an issue, or whether added ventilation and heat have resolved the problem.

Suspended Timber Floor:

Improving airflow to the small section of suspended timber floor beneath the under-stairs cupboard at The Old Scantlings will be extremely difficult. There is no suitable location on the external wall to install an air brick, and effective cross-ventilation cannot be achieved because all surrounding floors are of solid concrete construction.

For these reasons, we recommend removing the remaining suspended timber floor and replacing it with a solid concrete floor incorporating a damp-proof membrane. This will bring the area in line with the rest of the ground floor construction and remove the need for underfloor ventilation.

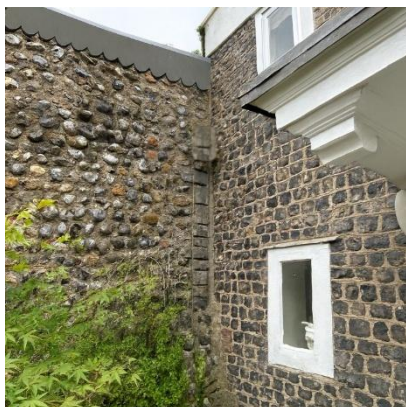
During this work, the base of the staircase should be inspected and rectified by a qualified carpenter, as the lower sections of the timbers have begun to decay due to prolonged contact with moisture and the lack of air circulation in this area. Repairing or splicing in new sections where necessary will help ensure long-term structural stability once the moisture issue is resolved.

Converting this section to a solid floor will remove the enclosed void where moisture and humidity are currently being trapped, preventing further timber decay and helping to stabilise the internal environment at the ground floor level.

Partition Garden Wall:

The partition garden wall between The Old Scantlings and the neighbouring property shows signs of long-term moisture ingress, with cracks, undulations, and vegetation growth indicating saturation. Rainwater currently pools on the top surface, allowing moisture to soak into the wall and become trapped within the masonry.

To prevent further water penetration and allow the wall to begin drying, the following work is recommended:



- Dress the top of the wall with lead sheeting to create a continuous, waterproof capping.
- The lead should be chased securely into both The Old Scantlings and the neighbouring property's wall, forming a smooth and watertight junction along the entire length of the wall top.
- The lead should overhang approximately 0.5 to 1 metre on each side to direct rainwater clear of the wall faces.
- The finished edge of the lead should be slightly flicked outwards, ensuring that rainwater is propelled away from the wall rather than running down its surface.

- The visible edge may be finished with a scalloped or other decorative detail to create a neat and sympathetic appearance in keeping with the historic setting of the property.

This lead dressing will prevent new rainwater from entering the wall through its existing cracks and undulations. Once new moisture is excluded, the water already trapped within the masonry will begin to evaporate gradually, allowing the wall to dry naturally over time.

All leadwork should be carried out by a skilled roofing or conservation contractor familiar with heritage detailing. As the wall is shared, permission must be obtained from the neighbouring property owner before the work is undertaken so that the lead can be properly chased into both sides.

Green – Last Steps / Decorative Finishes:

External Joinery:

All external joinery should be repaired where necessary using hardwood to ensure strength and longevity. Once repairs are complete, the timber should be finished with linseed oil or linseed oil paint, which provides durable weather protection while allowing the wood to regulate its internal moisture content. This breathable finish prevents moisture from becoming trapped within the timber, significantly reducing the risk of future decay and extending the lifespan of the joinery.

Boxed-In Area at the Base of the Stairs:

The boxed-in area at the base of the stairs in The Old Scantlings currently provides almost no ventilation, as only two small holes have been drilled behind the internal grill and the void is filled with rubble and debris. This is preventing airflow and allowing stagnant, moisture-laden air to remain trapped within the cavity.

The following remedial action is recommended:

- Remove all rubble and debris from within the boxed-in area to restore a clean and open void.
- Enlarge the existing opening behind the internal vent so that it matches the full size of the ventilation grill, allowing adequate airflow through the cavity.
- Reinstall the internal ventilation grill once the larger opening has been created, ensuring that air can pass freely through the space.

Once the cavity is clear and properly ventilated, the timbers forming the boxed-in structure should remain sound and free from decay in the long term.

Internal Plaster Finishes:

Several areas within The Old Scantlings, such as the wall in the under-stairs cupboard, the wall behind the sink basin in the main bedroom, and the external walls within the eaves' cupboards, show signs of deterioration caused by condensation, salt migration, and moisture trapped behind modern, non-breathable finishes.

Any damaged or moisture-affected plaster should be carefully removed and replaced with a breathable lime-based plaster. Lime plaster allows moisture to evaporate naturally through the wall surface, helping the building to regulate its internal humidity and prevent further condensation or salt damage.

When undertaking any future plastering work, it is essential to ensure that:

- The lime plaster finish does not extend all the way down to the floor. A small gap of approximately 1 to 2 centimetres should be left between the base of the plaster and the finished floor surface.
- Skirting boards should then be fitted to cover this gap, but the skirting should also be raised slightly above the floor by around 4 millimetres.
- These small, concealed gaps act as evaporation zones, allowing residual moisture within the solid floor or wall base to escape without damaging new finishes.

- The separation between the plaster and the floor also helps to prevent salts drawn up from the floor from transferring into the new plaster, protecting it from future breakdown or staining.

All areas finished with lime plaster should then be painted with a breathable paint, such as traditional limewash or “Earthborn” paint. Using a modern vinyl-based paint would seal the surface and defeat the purpose of applying lime plaster, as it would create an impermeable barrier that traps moisture within the wall.

Following these guidelines will ensure that internal finishes remain both functional and sympathetic to the building’s historic fabric.

Important Note:

Lime-based materials are breathable, meaning they allow moisture and dissolved salts to migrate through the wall and evaporate harmlessly at the surface. It is important to understand that the use of lime does not remove salts from a building. Salts are an inherent part of historic construction materials and, in coastal locations such as this, are continually replenished by salt-laden air. The benefit of lime is that it can accommodate this movement without breaking down. Lime plasters have self-healing properties, allowing minor cracking caused by salt crystallisation to close naturally, rather than leading to plaster failure. When lime is used, salts may still appear at the surface and should be managed through occasional gentle brushing or vacuuming, typically on an annual basis.

In contrast, modern impermeable materials trap moisture within the wall, which increases salt activity and leads to deterioration of the plaster. By allowing moisture to migrate and evaporate freely, lime reduces the conditions that make salts aggressive, making them easier to manage over time rather than attempting to eliminate them.

Moving Forward:

We understand that this report contains a great deal of information and can take time to read through carefully. Please take your time to review it thoroughly and refer back to any sections as needed.

Our company has recently undergone changes, and we no longer carry out all remedial work ourselves. This decision has been made in response to a significant increase in survey enquiries, as more people are beginning to recognise that modern damp-proofing methods are often unsuitable and ineffective for traditionally constructed buildings. We have therefore chosen to focus our efforts on education and on providing accurate, evidence-based information to help property owners make informed decisions.

We still offer in-house ventilation and drying works, which remain a key part of our service. All other remedial works can be completed by external contractors. If you wish, we can provide recommendations for trusted specialists, particularly for drainage, roofing, and lime plastering.

We also offer a project oversight and consultancy service. For an additional fee, we can oversee the entire project, liaise directly with contractors, and ensure that all remedial works are carried out in accordance with the recommendations within this report. Once all works are complete, we can return to inspect the property and confirm that the project has been finished to a satisfactory standard.

Whichever route you choose, this report provides you with clear and reliable guidance on the following steps to protect and preserve The Old Scantlings for the long term.

Closing Statement:

We thank you for inviting our company to carry out a survey on your behalf.

We hope you find our report easy to understand; however, if there is any part you would like explained in greater detail, please get in touch.

Should you have any further queries at this stage, please do not hesitate to contact our office.

Yours sincerely,
Matilda Jacobs-Milburn CSTDB
Senior Surveyor



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