

Damp and Timber Survey Report

Marshalls Manor

High Street
Cuckfield
Haywards Heath
West Sussex
RH17 5EL



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1. Instruction and Scope of Survey

1.1 Instruction

SHDR Ltd were instructed to carry out a detailed Damp and Timber investigation at Marshalls Manor, a Grade II* listed building dating from the late 16th century, with 18th-century refronting in Ardingly sandstone.

The instruction followed visible plaster failure in the south-east first-floor master bedroom, mould growth and persistently high humidity within the annexe, and standing water in the basement.

The purpose of the survey was to identify the true causes of water movement within the building. This included distinguishing between rainwater penetration and condensation, assessing how existing materials affect the building's ability to dry, and considering how temperature and ventilation influence current conditions.

The property has therefore been assessed as a connected environmental system, rather than as a collection of unrelated defects.

1.2 Scope

The inspection comprised a detailed external assessment of the masonry elevations, roof drainage arrangements and discharge detailing, in order to understand how rainwater is being collected, directed and dispersed at high level.

Internally, all accessible wall surfaces, ceiling planes and floor junctions were examined, with focused attention given to areas displaying plaster breakdown, mould growth or visible staining.

Environmental conditions were measured at the time of survey, including internal air temperature, relative humidity and calculated dew point. Surface temperatures were recorded to determine whether condensation thresholds were being reached under prevailing conditions.

Targeted moisture profiling was undertaken at identified defect zones, and accessible timber elements were inspected for evidence of fungal decay or insect activity.

No destructive investigation was undertaken and no finishes were removed. Conclusions are therefore based upon accessible inspection and measured environmental data recorded during the visit.

The survey was conducted during cooler seasonal conditions, a period in which solid wall historic buildings commonly experience elevated condensation risk. This reflects normal winter behaviour in traditional construction and has been taken into account in the analysis.

2. Building Description and Material Behaviour

Marshall's Manor is a solid wall construction with no cavity separation between the internal and external leaves. The original timber frame and masonry infill assembly functioned historically as a vapour-open system governed by capillarity and evaporation.

Under traditional lime construction, rainfall absorbed into masonry would dissipate through mortar joints and external surfaces during drying cycles driven by solar gain, wind pressure and internal heat differentials.



The Ardingly sandstone used on the main elevation is naturally porous. It contains tiny voids and capillaries that allow it to absorb water during rainfall and then release it again as conditions dry. This cycle of wetting and drying is normal and helps the stone remain durable over time.

That balance changes when cement pointing is introduced. Cement is harder and far less breathable than traditional lime mortar. Instead of helping the wall dry through the joints, it slows evaporation and forces more of the drying process to occur through the stone's face. As a result, the masonry remains wet for longer after rainfall. Water is not escaping as efficiently as it was designed to, and the stone stays saturated for extended periods.

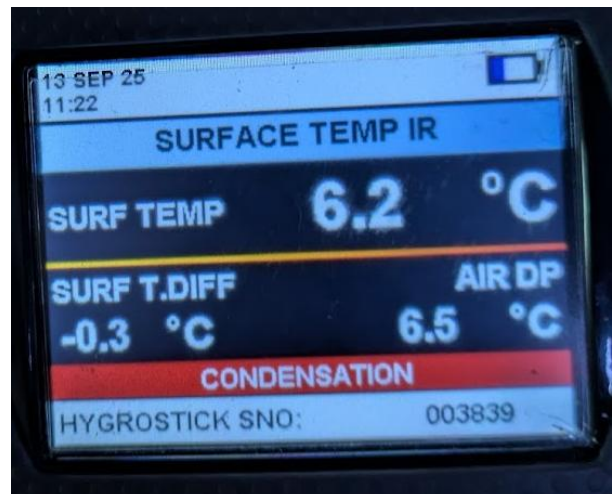
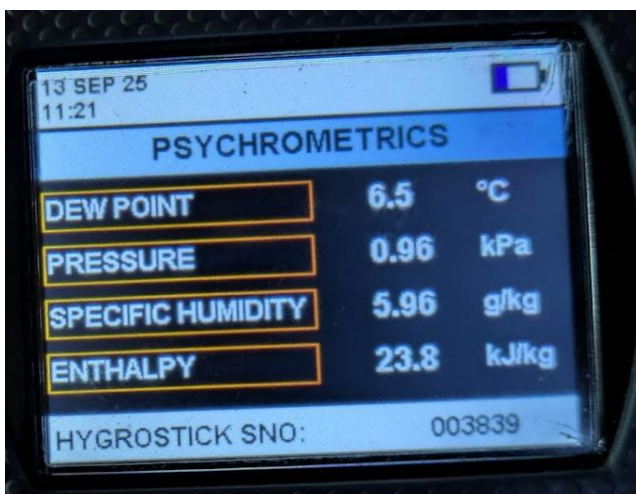
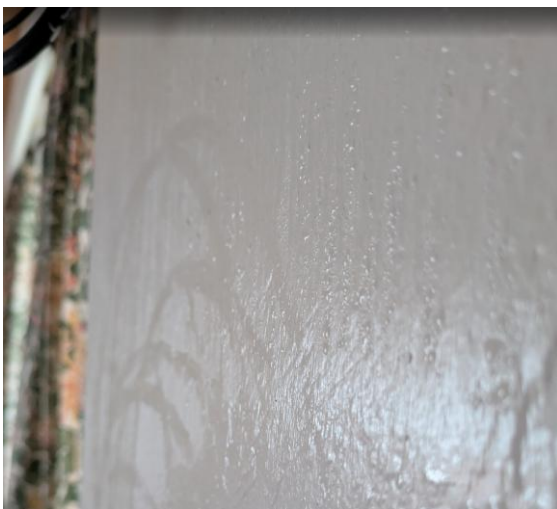
There is also a thermal effect. A wet wall conducts heat more readily than a dry one, which means damp areas become colder internally during the winter months. Colder surfaces sit closer to dew point, increasing the likelihood of condensation forming on the inside.

In simple terms, the change from lime to cement has altered how the wall manages water and heat. The materials are now working against each other rather than with each other, which affects both drying performance and internal comfort.

3. Environmental Conditions

Atmospheric readings were taken in the main home and the annexe, where the air temperature ranged from 8.3 °C to 8.9 °C, with humidity between 85 % and just over 90 %. That is a very cold space holding a very high level of water in the air.

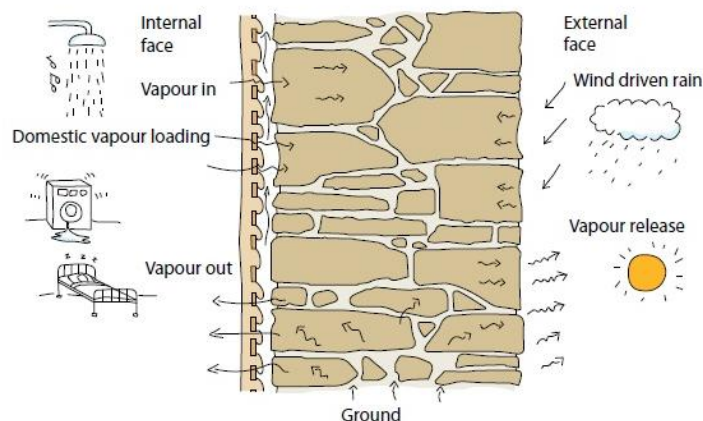
When air like this touches a cold wall, the water it is carrying settles out as liquid. The wall surfaces were measured at around 6 °C, which means condensation was always going to occur. It was not a possibility; it was physically happening at the time of inspection.



The majority of the surrounding brickwork in the annexe is a mix of cavity and 9" solid brickwork. The brick mortar has been removed and replaced with cement, and there are no provisions for cavity airflow or crossflow ventilation, which means the water inside the cavity stays trapped. The annex main roof void was also noted to have no insulation, which will cause significant temperature swings. This should be dealt with asap

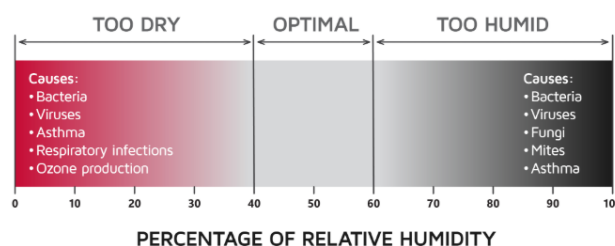
The main building is constructed in sandstone, a heavy material with significant thermal mass. Traditionally, these walls relied on a balance of heat, airflow and breathability. They would slowly absorb warmth, release it gradually, and allow water to evaporate through lime mortar and vapour-open finishes. That balance kept the internal environment stable.

When we alter that fabric by introducing cement pointing, dense plasters and restricted ventilation, we change how the building behaves. The walls stay colder, drying slows down, and the internal climate becomes more humid. The physics upon which the house once relied are disrupted, see below.



A useful way to picture this is to imagine living inside the Eden Project (70+ RH, daily). Warm bodies, daily living, cooking and breathing all release water into the air. If airflow is limited and surfaces are cold, condensation forms everywhere. When period homes are sealed, and ventilation is reduced, similar conditions can develop quietly in winter.

HUMIDITY



Ideally, a home should have a relative humidity between 40% and 60%. That range keeps the internal air comfortable for occupants and reduces the likelihood of condensation forming on colder surfaces.

When humidity consistently rises above 60 %, the balance shifts. Surfaces cool more easily, mould finds opportunity, and traditional solid walls begin to struggle to regulate themselves.

Keeping humidity within that mid-range is not about chasing numbers for their own sake. It is about maintaining a stable internal environment in which both the building fabric and the people living in it remain healthy.

It is easy to blame the water that appears on the surface. In reality, the building is responding to altered materials and modern living patterns. We generate significant water simply by occupying the space. In a breathable, well-ventilated building, this is manageable. In a colder, sealed environment, it becomes a driver of persistent condensation and mould.

Main House Conditions

Humidity levels in the main house remained at or above 70 % during the inspection. While this is lower than the annexe, it is still above the ideal winter range of 40 % to 60 % and indicates that the wider building is also carrying elevated levels of water in the air.

Prolonged rainfall and low external temperatures reduce the drying capacity of solid masonry. When ventilation is limited, internal humidity gradually rises, and the difference between the room temperature and the dew point decreases. This means surfaces cool to the condensation point more easily.

The annexe is responding more severely because it is less well insulated, the loft and walls, thus losing heat more quickly. However, the main house is influenced by the same external conditions, just to a lesser degree.



Environmental Summary

The annexe is currently operating outside the stable environmental range expected for a traditional solid wall building. The combination of cold air, high humidity, and cold masonry surfaces creates repeated condensation during winter.

This pattern is consistent with environmental imbalance and a small structural failure. The moisture observed is being driven in by driving rain and wind, and due to the hidden parapet detail and the hopper. This is an easy fix; better summer ventilation will solve the problem.

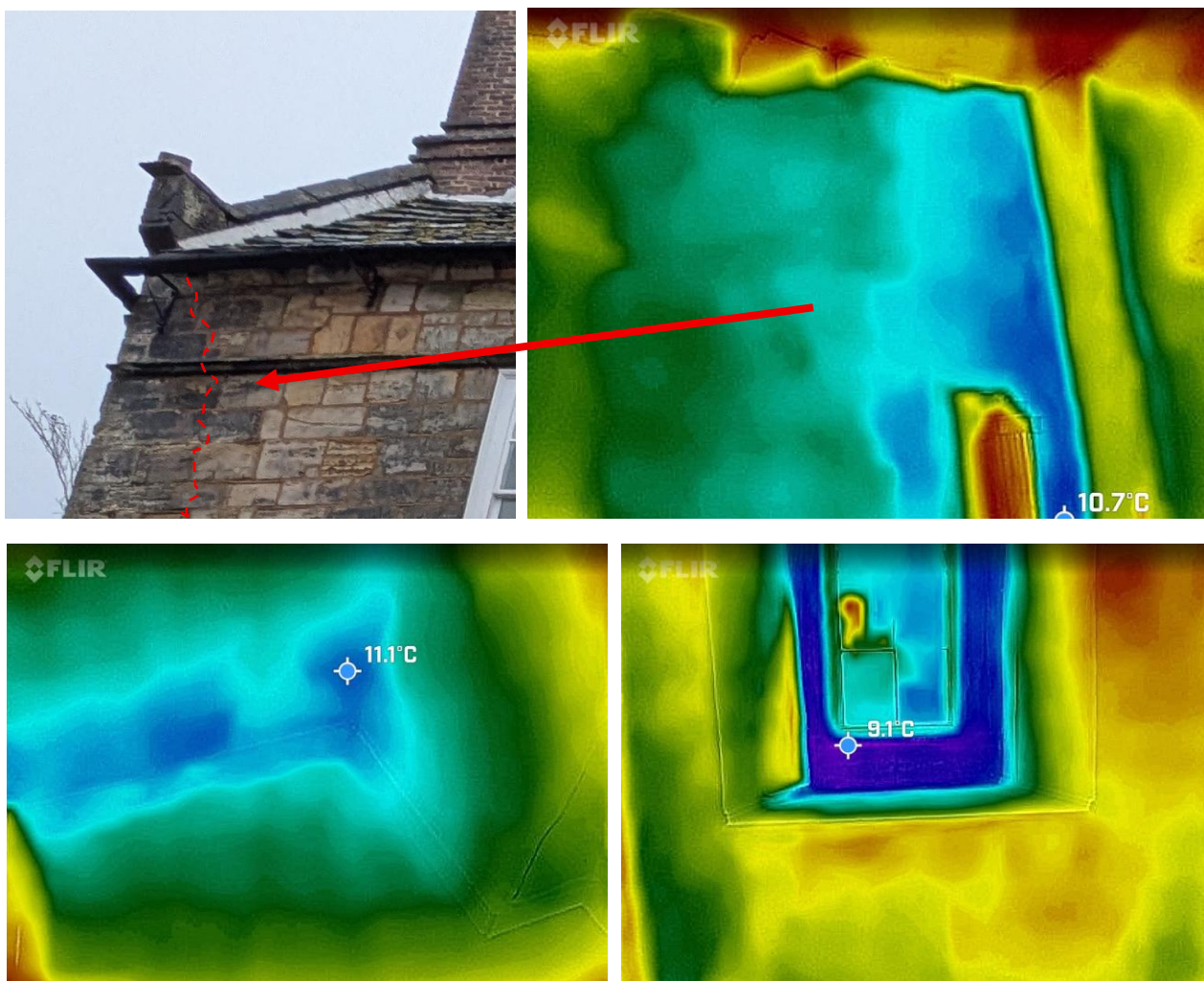


4. South-East Elevation – Master Bedroom

Penetrating Rainwater and Lateral Moisture Redistribution

The damp symptoms in the master bedroom is being caused by a failure in the rainwater hopper above. During rainfall, water is discharging onto the wall rather than fully entering the downpipe, leading to repeated masonry saturation below. This is a localised rainwater issue, not a general damp condition.

The sandstone in this area readily absorbs water. Normally, lime mortar joints would allow that water to evaporate back out, helping the wall dry naturally. However, cement pointing has been used, reducing evaporation and allowing the wall to retain water for longer.



Internally, the wall is currently finished with gypsum board. The gypsum forms a relatively sealed surface, limiting drying from the inside. As a result, water becomes trapped within the wall and small cavity and migrates towards the internal surface, leading to blistering and paint failure. The completely wet surfaces are indicated in pink and blue.

The affected area is on the first floor and directly aligned with the defective hopper. There is no evidence of moisture travelling from anywhere else nearby.

Moisture readings confirm that the issue is confined to the hopper alignment zone.

The first step is to repair the hopper and ensure rainwater is properly directed into the drainage system. Cement pointing in the affected area should then be replaced with compatible lime mortar to restore outward drying.

Damaged internal plaster should be removed locally, and the wall allowed to dry naturally over time. Reinstatement should use breathable materials to prevent recurrence.

6. Basement Substructure – High Evaporating Humidity Levels

The basement condition is materially distinct from both the south-east rainwater defect and the annexe condensation behaviour, yet it contributes to the overall moisture loading of the structure.

Standing water was observed in a corner of the basement floor, at a location corresponding to a historic drain outlet. The drain appears obstructed or partially collapsed, resulting in water accumulation during rainfall events. The water present is not under hydrostatic pressure through the wall face.

The mechanism is accumulation and evaporation rather than penetration. The image below shows the worst pooling area and the open coal shoot directly above it. This is allowing water to enter, while the blocked gully is preventing it from escaping.



Water sitting at floor level in the basement is constantly evaporating. In a confined space with little ventilation, that water has nowhere to go. The air gradually becomes increasingly saturated until the space feels heavy and damp.

Humidity levels in the basement were elevated at the time of inspection. When air remains this humid for long periods, timber begins to absorb that water from the air. If sustained, this can push timber towards moisture levels where decay becomes possible.

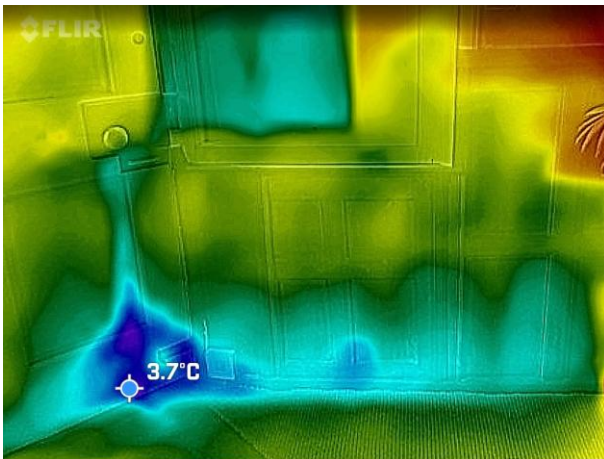
Air inside a building does not stay neatly in one place. It moves. The stairwell linking the basement to the ground floor acts like a chimney. As warmer air rises above, cooler air from the basement is drawn upward to replace it. If the basement air is humid, that moisture is carried with it into the rest of the house.

Readings taken in the hallway above the basement showed 76 % relative humidity at 11 °C. Under those conditions, surfaces that cool to around 7 °C will begin to form condensation, even if rain is not getting in. This means the wet basement is influencing conditions elsewhere.

The images below show the hallway and basement humidity levels; they are nearly identical.



The trapped humidity from below is also causing the damp symptoms around the front door. The thermal images highlight this cause-and-effect. This is escaping humidity from below.



A basement does not cause rising damp. It acts as a reservoir of humid air. That stored humidity reduces the margin for error throughout the building, especially in colder months when wall surfaces cool more easily.

The timber in the basement is higher than normal, and woodworm is actively thriving. This is important to witness as timber responds directly to the air around it. If humidity remains above 75 % for extended periods, timber will gradually absorb more water and approach levels where wood-boring insect activity and fungal growth can begin.

The priority is to remove the standing water and restore drainage. Once liquid water is removed, mechanical ventilation must be introduced to keep the basement humidity below 65%. Until that source of airborne humidity is controlled, the upper floors will continue to feel its effects.

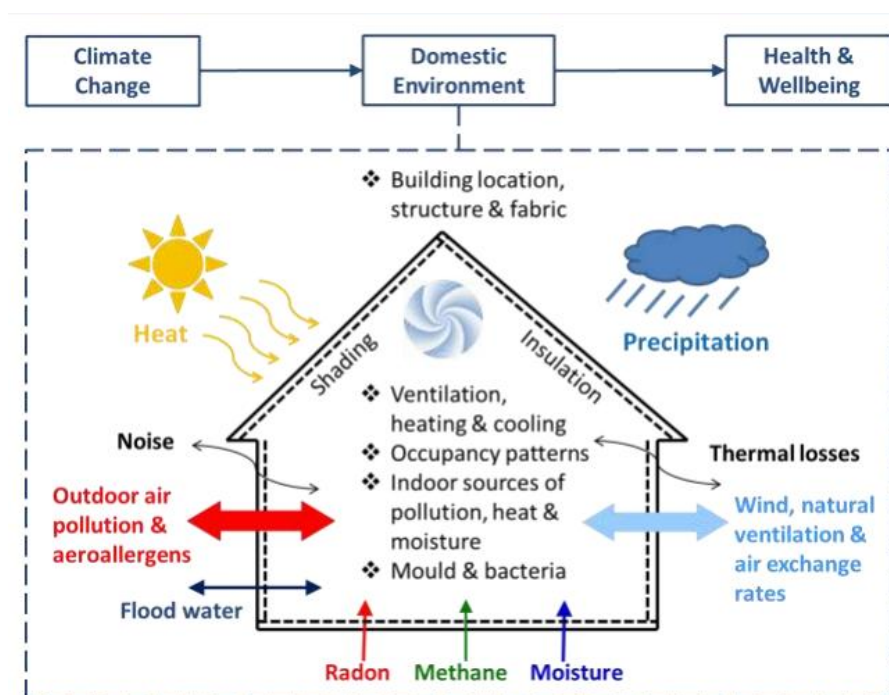
7. Integrated Thermal Interaction Modelling

The building must be understood as a connected hygrothermal system rather than a series of isolated defects. The issues identified during inspection are interacting with each other both thermally and atmospherically.

At present, three primary variables are operating simultaneously:

1. External rainwater entering at the south-east elevation due to hopper failure.
2. Elevated internal vapour levels within the annexe caused by low temperatures and insufficient ventilation.
3. Moisture vapour contribution from the basement due to standing water and poor evaporation pathways.

In addition, reduced vapour permeability due to cementitious pointing is limiting the masonry's natural drying capacity.



Effect of Moisture on Thermal Performance

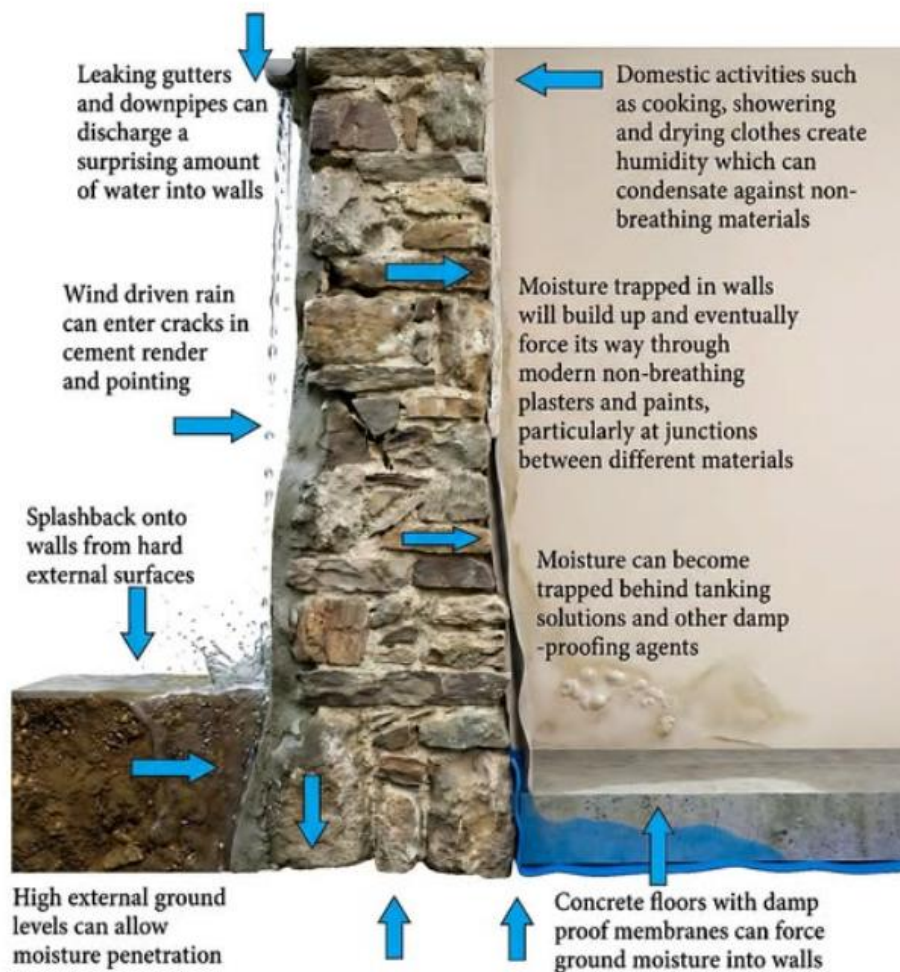
Dry masonry contains air within its pore structure. Air reduces heat transfer. When masonry becomes saturated, water replaces that air.

Water conducts heat more readily than air. As a result:

- Wet masonry loses heat faster than dry masonry.
- Internal wall surface temperatures decrease.
- The likelihood of condensation increases.

This is a critical point. Moisture within masonry does not simply create a damp appearance. It directly alters the wall's thermal behaviour.

Once the surface temperature decreases, the difference between the air temperature and the dew point becomes smaller. When this margin narrows sufficiently, condensation forms.



Annexe Thermal Instability

The annexe is thermally weak due to the absence of effective loft insulation within the roof void. Heat loss through the ceiling reduces internal air temperature and increases mouldy conditions.

As internal air temperature drops:

- Relative humidity increases for the same moisture content.
- The dew point moves closer to the internal air temperature.
- The probability of condensation increases.

This means that even without additional moisture being introduced, reduced temperature alone can trigger condensation. Where cold masonry surfaces coincide with high internal humidity, surface water deposition becomes unavoidable.



Basement Vapour Contribution

The basement is currently functioning as a vapour source due to standing water. Water exposed within a confined space evaporates into the surrounding air.

In the absence of adequate ventilation:

- Specific humidity within the basement increases.
- Vapour migrates upward through convection and pressure equalisation.
- Overall humidity levels rise throughout the building.

As internal vapour load increases, the dew point temperature rises. When the dew point rises, surfaces that were previously above the condensation threshold may fall below it.

This means that the basement condition influences condensation risk in upper floors, even if those rooms have no direct water ingress.



8. Timber Risk Modelling and Biological Viability Analysis

Timber performance in historic buildings cannot be judged from isolated readings taken on a single day. Timber is hygroscopic. It absorbs and releases water in response to the surrounding air. What determines risk is not a single moisture meter value, but the environmental conditions that timber is subjected to over time.

At Marshalls Manor, accessible structural timbers within the principal building were found to be structurally intact at the time of inspection. Some active fungal fruiting bodies were identified in accessible areas. However, the environmental conditions currently operating within the basement and annexe create a trajectory of risk that must be addressed as a priority.

8.1 Biological thresholds and equilibrium behaviour

Fungal decay requires three conditions.

- Sufficient moisture content within the timber.
- Oxygen availability.
- Temperatures generally above approximately 5 °C.

In practical building terms, sustained timber moisture content above approximately 20 % WME is widely recognised as the threshold at which fungal activity becomes viable. It is not short peaks that cause decay, but prolonged inability to dry.

Timber moisture content is governed by equilibrium with the surrounding air.

- At approximately 60 % relative humidity, timber typically stabilises around 11 to 12 %.
- At approximately 75 % relative humidity, equilibrium rises toward 16 to 18 %.
- At sustained levels above 80 %, equilibrium can approach or exceed 20 %, particularly where condensation intermittently wets surfaces.

Where internal air regularly exceeds 75% relative humidity, timber will tend to increase in moisture content. Where surfaces are cold, and condensation forms, that process accelerates.

The annexe recorded relative humidity between 85 % and 90.3 % at temperatures below 9 °C. Under these conditions, timber in that space is not simply at cosmetic mould risk. It falls within an environmental range that, if sustained over multiple seasons, will gradually elevate its moisture content toward fungal viability thresholds.



8.2 Basement timber condition and active decay environment

The basement presents the most significant timber risk within the building.

Standing water at floor level is generating continuous vapour within a confined environment. Relative humidity within the basement remains persistently elevated. Substructure timbers sit within this air mass for prolonged periods.

The basement timbers are already demonstrating signs consistent with a very damp environment. The environment is not seasonally dry. It is persistently moisture-laden. Timber exposed to such conditions will not stabilise below safe equilibrium levels unless the vapour source is removed.

Importantly, wood-boring insect activity was noted within this zone. Woodworm does not create damp timber. It selects damp timber. Active woodworm is an environmental indicator. It is evidence that the timber has been in a moisture condition suitable for insect viability over an extended period.

Wood-boring beetles require elevated timber moisture to complete their lifecycle. While exact species identification would require further sampling, the presence of activity confirms that the basement environment has supported elevated timber moisture for long enough to sustain insect habitation.

This is not a cosmetic issue. It is a signal of prolonged environmental dampness.



8.3 Upward environmental influence on principal structure

The basement does not operate in isolation.

Air moves vertically within buildings through the stack effect. As warmer air rises in the upper floors, replacement air is drawn upward from below. In the current condition, humid basement air is being drawn into the ground floor and beyond.

This means that the principal building timbers above are not merely influenced by external winter humidity. They are being influenced by a damp substructure environment feeding upward.



While no structural decay was confirmed in accessible upper timbers at the time of inspection, continued operation of the basement as a vapour reservoir increases the risk that embedded joist ends, floor timbers adjacent to the stairwell, and lower-level structural elements will experience elevated equilibrium moisture content over time.

Where timber ends are embedded in masonry that is itself damp and slow to dry due to cement pointing and reduced breathability, the microclimate at that junction can remain persistently damp even if room air improves intermittently.

8.4 Overall timber risk position

The key point at Marshalls Manor is not that widespread structural decay is currently evident. It is that the environmental conditions now operating are capable of driving timber moisture content into biologically viable ranges if sustained.

The hierarchy of risk is as follows.

Highest risk zone: Basement structural timbers due to persistent standing water and active woodworm indication.

Moderate risk zone: Annexe roof void timbers due to high humidity, poor cross-flow ventilation, and thermal weakness.

Conditional risk zone: Embedded joist ends and lower-level structural timbers influenced by basement vapour migration.

The control of timber risk in this building is inseparable from the control of water and air.

It will not be achieved through surface treatments or chemical applications. It will be achieved through:

- Elimination of standing water in the basement.
- Restoration of effective drainage.
- Introduction of controlled ventilation to the basement and annexe.
- Improvement of thermal stability in the annexe roof.
- Restoration of breathability where cement pointing is restricting drying.

When the internal relative humidity is consistently maintained below approximately 60 % during colder months, timber equilibrium moisture content will naturally decrease, insect viability will decline, and fungal risk will fall below critical thresholds.

In summary, the timber at Marshalls Manor is not currently in widespread structural failure. However, the basement is already operating as a decay-supporting environment, as evidenced by wood-boring insect activity. Unless the environmental drivers are corrected, that risk will extend progressively upward into the principal structure over time.

9. Recommendations and Sequenced Next Steps

The corrective strategy at Marshalls Manor must follow the order of causation identified within this report. The defects observed are not isolated surface failures. They are the result of identifiable water introduction points, restricted drying capacity and elevated internal vapour levels interacting within a historic solid wall structure.

For that reason, any attempt to redecorate, treat timber, or apply internal remedial finishes before addressing the underlying drivers will be ineffective and temporary. The objective is to remove sources of liquid water, reduce airborne humidity, restore the building's ability to dry, and then allow the structure to stabilise before internal reinstatement proceeds.

The recommended sequence is set out below in priority order.

9.1 External Rainwater Rectification

The defective hopper and associated rainwater goods at the south-east elevation constitute an active, recurring wetting mechanism. During rainfall events, water is discharging onto the masonry face rather than being fully captured and directed into the downpipe system. This results in repeated saturation of the sandstone below, followed by lateral redistribution internally due to restricted evaporation.

This defect must be corrected as the first intervention.

Works should include full inspection of the hopper, gutter joints and discharge alignment. Water must be observed during rainfall to confirm that flow is fully contained, conveyed into the downpipe, and discharged into a functional drainage system without overflow, splash-back, or backfall. Where joints or unions are compromised, these must be replaced rather than temporarily sealed.

Until this is completed, the basement level will continue to experience cyclic saturation, and internal plaster finishes in the master bedroom will remain vulnerable to failure regardless of improvements made elsewhere.

9.2 Basement Drainage and Standing Water Removal

The standing water identified within the basement is currently functioning as a continuous vapour source. While it is not exerting hydrostatic pressure through the walls, it is evaporating into a confined and poorly ventilated space.

This is elevating the basement relative humidity and contributing to higher dew points in the ground-floor accommodation via vertical air movement.

The basement drainage system requires formal investigation. A CCTV survey is recommended to determine whether the historic drain is obstructed, collapsed or disconnected. Clearance alone may be insufficient if structural failure is present. The objective is the complete elimination of standing water and reinstatement of reliable discharge.

The open coal chute and gully arrangement should also be assessed to ensure that rainwater does not enter the basement from above while preventing it from escaping below.

Until liquid water is removed from this space, the basement will continue to operate as a vapour reservoir. This will maintain elevated humidity within the substructure and increase timber moisture content over time.

The front of the building is crying out for a French drain to catch and divert any surface water first, before it laterally moves into the basement confines, and then your home.

9.3 Environmental Control Through Mechanical Ventilation

Once liquid water sources have been eliminated, internal vapour levels must be actively managed. The environmental data confirm that relative humidity levels within the annexe are currently between 85 % and 90 %, placing both masonry and timber within a biologically vulnerable range if sustained.

Ventilation must be introduced as a controlled and continuous system rather than as intermittent purge ventilation. The purpose is to reduce specific humidity, lower the dew point and widen the safety margin between air temperature and surface temperature.

The annexe should be capable of maintaining relative humidity consistently below 60 % during winter conditions. The basement should be maintained at a relative humidity below approximately 65% to reduce timber equilibrium moisture content and suppress the viability of wood-boring insects.

Ventilation design must ensure reliable air exchange rates appropriate to the room volume. Without consistent vapour dilution, condensation cycles will continue regardless of insulation upgrades.

9.4 Thermal Stabilisation of the Annexe

The annexe roof void currently lacks effective insulation. As a result, internal heat is lost rapidly through the ceiling plane. Reduced air temperature increases relative humidity for a given moisture content and moves the internal air mass closer to the dew point.

Insulation should be installed at ceiling level in a manner compatible with the historic fabric. The roof void ventilation pathways must be maintained or improved during this process to prevent interstitial condensation.

The effect of this intervention will be to increase internal air temperature and raise internal surface temperatures. This widens the gap between air temperature and dew point, reducing the frequency and duration of surface condensation events.

This stage should follow, not precede, drainage and ventilation measures.

9.5 Restoration of Vapour Permeability

Cementitious pointing is currently restricting outward drying of the sandstone elevations, particularly at the south-east corner. This prolongs masonry saturation after rainfall and reduces internal surface temperatures during winter conditions.

A phased programme of lime repointing should be undertaken in accordance with listed building requirements. Priority should be given to elevations showing recurrent wetting or internal condensation correlation.

The purpose of this work is functional rather than cosmetic. Lime mortar restores the wall's ability to release absorbed water through the joints rather than through the stone face. Over time, this improves drying rates, reduces retained moisture within the masonry mass and contributes to improved thermal performance.

Removal should be undertaken in stages to ensure structural stability and compliance with conservation practice.

9.6 Internal Reinstatement Following Drying Period

Internal plaster disruption within the master bedroom should not be fully reinstated until the rainwater defect is corrected and the wall has undergone a natural drying period. Solid sandstone walls of this thickness dry gradually over seasonal cycles rather than weeks.

A realistic expectation is that meaningful drying will occur over approximately 9 to 12 months following elimination of active water entry and restoration of breathability.

During this period, temporary finishes should remain vapour open. Dense gypsum patching and vinyl paints should be avoided. Once environmental monitoring confirms stable humidity and progressive reduction in wall moisture, reinstatement should proceed using lime-based plaster and vapour-permeable decorative systems.

Premature sealing of the wall surface will recreate vapour trapping conditions and lead to the recurrence of blistering and salt mobilisation.

10. In Summary, What Is Happening Within the Building

When I inspected Marshalls Manor, it became clear that this is not one single damp problem. It is three separate mechanisms operating simultaneously, each influencing the others.

At the south-east first-floor corner in the master bedroom, rainwater is entering at a high level due to a failure of the hopper arrangement. I observed external evidence of overflow, and the internal plaster failure aligns directly with that detail. Water is discharging onto the sandstone and being absorbed into the masonry. Because the wall has cement pointing externally and relatively dense finishes internally, it cannot release that water efficiently. The moisture is effectively slowed on both faces of the wall, so it migrates inward and disrupts the plaster finish.

That defect is mechanical. It begins with rainwater entry from above. It is localised and clearly traceable to that hopper detail.

The annexe is behaving differently. Environmental readings taken during the inspection confirmed very high relative humidity in a cold space. Surface temperatures were measured at or below the dew point. Condensation was physically occurring at the time.

The annexe roof lacks effective insulation. Heat is escaping. As internal air temperature drops, relative humidity rises. When warm air meets cold surfaces, water condenses. This is not water from outside penetrating. It is an internal atmospheric imbalance driven by cold surfaces and insufficient ventilation.

The basement presents a third influence. Standing water was present at floor level. In a confined, poorly ventilated space, that water is continuously evaporating into the surrounding air. The air in the basement is persistently damp. Timber in that environment is already showing signs of decay and wood-boring insect activity.

Woodworm is not the cause. It is an indicator. Insects select timber that has remained damp long enough to support their lifecycle. Its presence confirms that the basement environment has been elevated in humidity for a sustained period.

Air does not remain static within a building. It moves. The humidity generated in the basement is migrating upward; readings in the hallway above confirm that this lower-level environment is influencing the principal structure.

In summary, I observed:

- A defined rainwater entry point at the south-east hopper.
- An annexe operating in active condensation conditions.
- A basement functioning as a sustained high-humidity zone.
- Timber in the basement is already responding to that environment.

The building is not structurally failing. However, it is currently out of balance with the environment. If the humidity levels observed in the annexe and basement persist into future seasons, timber moisture content will increase, and the biological risk will expand beyond the basement.

The corrective path is straightforward and proportionate.

The hopper must be repaired so that rainwater is properly discharged.

The basement drainage must be reinstated and standing water eliminated.

Controlled ventilation must be introduced to stabilise internal humidity.

The annexe roof requires insulation to reduce heat loss.

Cement pointing should be phased out and replaced with lime to restore drying capacity.

When those measures are implemented in the correct order, the building will begin to regulate itself again. Walls will dry more efficiently. Internal surface temperatures will improve. Timber moisture levels will reduce naturally.

This is not a terminal structure. It is a historic building that is currently being compromised by modern alterations and restricted airflow. Once balance is restored, stability will follow.

11. Final Position

Marshalls Manor remains structurally sound and historic. The issues identified during inspection are the result of identifiable and manageable influences rather than inherent structural failure.

The rainwater defect, the environmental imbalance within the annexe, and the sustained damp conditions in the basement each have clear causes.

None of them require invasive damp-proof systems or chemical timber treatments. They require correction of water management, reinstatement of ventilation and restoration of material compatibility.

The key consideration now is timing and order. If the hopper defect and basement drainage are addressed promptly, and internal humidity is brought under control, the building will stabilise naturally. Timber moisture levels will reduce. Condensation frequency will decline. Internal finishes will remain sound once reinstated.

If, however, the current humidity levels within the basement and annexe are allowed to persist through future winter cycles, the risk profile will increase. Timber decay does not begin dramatically. It begins slowly in persistently damp environments.

The building is not beyond recovery. It is currently operating under environmental stress. Correct the stressors, and the structure will respond.

The recommendations within this report are proportionate, conservation-minded and based on observed conditions at the time of survey.

Marshalls Manor does not need sealing. It needs balance restored.

Yours sincerely,

Aaron West

Director | SHDR Ltd | Chief Damp Engineer

SHDR LTD

Main Office | Vinalls Business Centre | Nep Town Road

Henfield | West Sussex | BN5 9DZ

T: **01273 569135**

E: **office@shdr.co.uk**