MOISTURE & MOULD TECHNICAL INSPECTION REPORT

Mould Removal Services Ireland – Part of Causeway Cleaning Group

SURVEY & REMEDIATION

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SAMPLE & DEMONSTRATION REPORT — FOR MARKETING USE ONLY

This document is a fully synthetic example report produced by Causeway Cleaning Ltd to demonstrate the forensic standard, structured methodology, and technical depth of our inspection and remediation service. **All data, readings, names, addresses, dates, images, and reference numbers in this report are entirely representative examples and are not derived from any real job, client, or property.** No client data has been used or exposed.

Executive Summary

PRIMARY DIAGNOSIS

Primary mechanism: Condensation — Surface condensation driven by thermal failure

Confidence: Strongly indicated

Contributing factors: Ventilation failure (primary extract), cold bridging at structural junctions

Moisture pattern: Whole-house / multi-room distribution, concentrated at cold surfaces

★ **All values shown are representative examples only**

Inspection findings are most consistent with condensation-driven mould contamination across multiple rooms, with cold bridging at structural junctions and deficient mechanical extract ventilation confirmed as the principal contributing mechanisms. Moisture distribution follows the pattern expected of surface condensation: elevated readings concentrated at cold-surface zones, corner junctions, and areas with restricted airflow, rather than a localised point-source pattern. No evidence of penetrating damp or rising damp was identified. Primary environmental conditions — inadequate humidity extraction and thermal bridging — are confirmed as the root cause.

This example report demonstrates how a Causeway Cleaning Group forensic inspection presents findings: root cause first, with all conclusions linked to instrument data. Surface contamination was successfully remediated, verified by ATP bioluminescence testing. Long-term resolution requires correction of the underlying environmental drivers identified during inspection.

REMEDIATION OUTCOME — REPRESENTATIVE EXAMPLE

★ **REPRESENTATIVE EXAMPLE READING — NOT FROM A REAL JOB**

ATP BEFORE (PRE-TREATMENT)	ATP AFTER (POST-TREATMENT)
3,480	**8**
✗ FAIL	✓ PASS

Property Overview & Reported Issue

★ REPRESENTATIVE EXAMPLE READING — NOT FROM A REAL JOB

Property **Sample Property — Mid-Terrace Dwelling**	Property Type **Mid-Terrace House**	Construction Era **1960s – 1970s**
Occupancy **Tenanted**	Client Reference **Sample Client**	Inspection Ref **SAMPLE-001**
Date **Survey Date (Example)**	Prepared by **Lead Surveyor — IICRC S520 Accredited**	Report Type **Survey & Remediation**

REPORTED ISSUE

Resident Description of Affected Areas

The resident reported widespread mould growth affecting bedroom walls, the bathroom ceiling, and the living room external wall corners. The issue had developed progressively over two heating seasons. Black mould was visible on painted surfaces, wallpaper, and soft furnishings. Musty odour was reported throughout. No previous professional remediation had been carried out.

RESIDENT QUESTIONNAIRE — SUMMARY

Field	Response	Field	Response
Respiratory illness	Yes — one resident	Vulnerable persons	Yes — child under 5
Children under 16	Yes	Number of residents	3
Damp confirmed	Yes	Type reported	Condensation / mould
Winter only	Yes	Occurs during rain	No
Known leaks	No	Occupancy	Tenanted

Inspection Methodology

This inspection was conducted as a non-invasive technical assessment in accordance with the ANSI/IICRC S520 Standard for Professional Mould Remediation. The scope comprised visual inspection, thermal imaging, moisture measurement, air quality assessment, and ATP surface hygiene verification. No destructive or intrusive works were undertaken. The assessment relied on surface and near-surface diagnostic methods only.

1. Environmental baseline assessment (temperature, humidity, dew point, surface temperatures)
2. Non-invasive moisture mapping — pin, pinless, and masonry meters
3. Thermal imaging survey — cold surface zones and condensation risk areas
4. Air quality and particulate assessment — 10µm threshold
5. Visual inspection of all accessible areas — room by room
6. ATP baseline sampling from representative affected surfaces
7. Correlation of all data — primary mechanism and contributing factors
8. Post-remediation ATP verification — hygiene confirmation

SCOPE OF WORKS

✓ **Overview and specification of works**

This process combines identification, treatment, and verification, ensuring remediation is measurable and not based on visual cleaning alone.

✓ **Property check — thermal imaging and moisture meter**

HIKMICRO M30 thermal camera and Protimeter MMS3 used to identify cold surface zones, thermal bridging, and potential moisture anomalies contributing to condensation and mould risk.

✓ **Air quality / particle monitoring**

Airborne particulate levels assessed using Extech VPC300 particle counter. Readings evaluated against green zone threshold (0–55 particles/m³ at 10µm).

✓ **Baseline ATP verification (pre-remediation)**

Pre-clean ATP swabs taken using Ensure Touch meter and Ultra Swabs from representative affected surfaces to quantify baseline surface biological contamination.

✓ **Targeted antimicrobial application (EN-standard biocide)**

Professional-grade EN-standard antimicrobial agent applied to all affected and high-risk surfaces to neutralise active microbial contamination and inhibit regrowth.

✓ **Physical cleaning and contaminant removal**

Physical removal of residual contamination following chemical treatment to eliminate remaining organic matter and ensure effective surface decontamination.

✓ **Post-remediation ATP verification**

Post-clean ATP swabs taken from same locations to verify treatment effectiveness. Pass threshold: ≤100 RLU.

✓ **Ozone shock treatment — environmental sanitisation**

Controlled ozone shock treatment completed in fully unoccupied property. Peak concentration approx. 42 mg/m³ — within professional shock treatment range (>19.63 mg/m³).

INSTRUMENTATION USED

HIKMICRO M30 Thermal Imaging Camera — Surface temperature mapping, cold bridging identification, condensation risk zones.

Protimeter MMS3 (Pin and Pinless Modes) — Moisture content in building materials. Pinless: non-invasive scanning. Pin mode: reference depth readings.

Tramex MEX5 Masonry Moisture Meter — Non-invasive assessment of masonry, concrete, and dense substrate moisture levels.

Testo 605i Thermohygrometer — Relative humidity, air temperature, dew point, and absolute humidity of the internal environment.

Testo 805i Infrared Surface Thermometer — Surface temperatures and dew point differential at identified risk surfaces.

Extech VPC300 Particle Counter — Airborne particulate levels at 10µm — indication of mould spore load and air quality.

Ensure Touch ATP Meter with Ultra Swabs — Quantify surface biological load before and after remediation. Objective verification of treatment effectiveness.

Professional Ozone Generator — Controlled ozone shock treatment for environmental sanitisation of treated spaces.

SAMPLE REPORT — DEMONSTRATION ONLY

Environmental Readings

SELECTED ENVIRONMENTAL & PSYCHROMETRIC READINGS

★ REPRESENTATIVE EXAMPLE READING — NOT FROM A REAL JOB

Relative Humidity **74.3%**	Air Temperature **13.8°C**	Dew Point **9.4°C**
Surface Temp (min) **8.7°C**	Absolute Humidity **8.9 g/m³**	Wet Bulb Temp **10.6°C**

■ ACTIVE CONDENSATION RISK — Surface temperature 8.7°C is 0.7°C BELOW dew point (9.4°C) at the coldest recorded surface. Condensation is actively occurring at this surface.

ROOM-BY-ROOM SURFACE MOISTURE ASSESSMENT — TESTO MOULD SMART KIT

★ REPRESENTATIVE EXAMPLE READING — NOT FROM A REAL JOB

Location	Surf. Moisture	RH	Surf. Temp	Dew Point	Abs. Humidity	Risk Status
Bedroom 1 — North wall (primary)	72.4%	76.1%	10.2°C	9.8°C	9.51 g/m³	BORDERLINE — 0.4°C above DP
Bedroom 1 — External corner	68.9%	74.3%	8.7°C	9.4°C	8.9 g/m³	■ RISK — 0.7°C BELOW DP
Bedroom 2 — North-facing wall	64.2%	71.8%	11.4°C	9.1°C	8.72 g/m³	Clear — 2.3°C above DP
Bathroom — Ceiling	81.3%	83.4%	12.1°C	10.8°C	10.1 g/m³	BORDERLINE — 1.3°C above DP
Bathroom — External wall	77.6%	80.2%	10.9°C	10.3°C	9.63 g/m³	BORDERLINE — 0.6°C above DP
Living room — External corner	58.1%	69.4%	12.8°C	9.2°C	8.36 g/m³	Clear — 3.6°C above DP
Living room — Bay window reveal	54.7%	67.2%	13.2°C	8.7°C	8.03 g/m³	Clear — 4.5°C above DP
Kitchen — External wall	61.4%	72.1%	14.1°C	9.6°C	8.94 g/m³	Clear — 4.5°C above DP

MOISTURE METER READINGS — TRAMEX MEX5 & PROTIMETER MMS3

★ REPRESENTATIVE EXAMPLE READING — NOT FROM A REAL JOB

Tramex MEX5 — REL **42**	Protimeter Pinless **312**	Protimeter Pin WME **24%**

AIR QUALITY & ATP

★ REPRESENTATIVE EXAMPLE READING — NOT FROM A REAL JOB

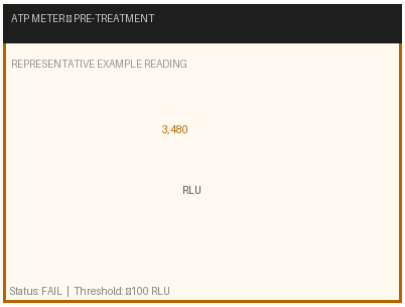
Particles (10 µm/m³)	ATP Before (RLU)	ATP After (RLU)	Ozone Treatment
187	3,480	8	42 mg/m³

Particle Size	Green Zone (Acceptable) — particles/m³	This Job (Example)
10 µm	0 – 55	187 ■ ELEVATED
5 µm	0 – 193	341 ■ ELEVATED
2.5 µm	0 – 545	892 — Within range
1 µm	0 – 8,300	2,140 — Within range

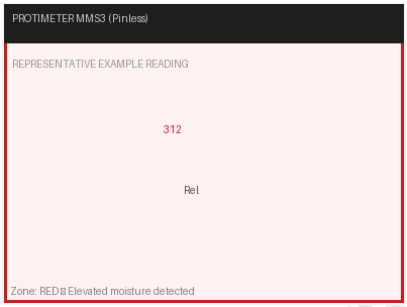
SAMPLE REPORT — DEMONSTRATION ONLY

Instrument & Environmental Evidence

The following images are **synthetic instrument card illustrations** created for demonstration purposes. They are NOT photographs from a real job. In a live report, this section contains actual instrument screen photographs with timestamped readings from the specific property inspected.

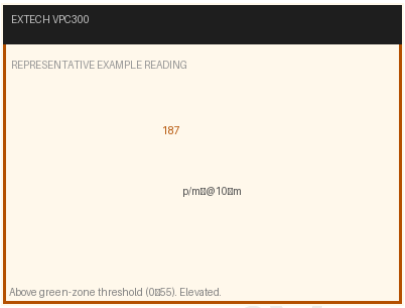


ATP Meter — Pre-Treatment Representative: 3,480 RLU (FAIL) Confirms elevated surface biological contamination



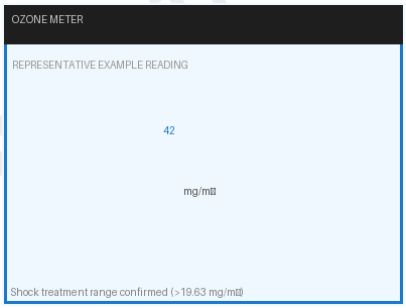
Protimeter MMS3 — Pinless Mode Representative: 312 Rel (Red zone — elevated moisture confirmed)

Tramex MEX5 Masonry Meter Representative: 42 REL (Amber zone — borderline/elevated)



Extech VPC300 Particle Counter Representative: 187 p/m³ @ 10µm (Above green zone threshold of 55)

ATP Meter — Post-Treatment Representative: 8 RLU (PASS — Excellent) 100% reduction confirmed



Ozone Concentration Meter Representative: 42 mg/m³ (Shock treatment range — professional grade)

Note on imagery: In a real delivered report, this section contains actual photographs of each instrument screen taken during inspection, showing the property address on the ATP device, exact timestamp, and individual location labels. All instrument data is cross-referenced and traceable to a specific inspection event.

Moisture Diagnosis

PRIMARY MOISTURE MECHANISM

✓ **Condensation — Surface condensation driven by thermal failure and ventilation deficiency — Strongly indicated**

Diagnostic Confidence

Strongly Indicated 84%

DIFFERENTIAL DIAGNOSIS — ELIMINATED CAUSES

✗ **Penetrating damp** — Moisture distribution pattern does not correspond to a localised external defect. No point-source ingress correlation identified. Moisture is present at multiple internal surfaces consistent with whole-house condensation, not directional water tracking. Rainfall-independent.

✗ **Rising damp** — No vertical moisture gradient confirmed on either the Protimeter MMS3 or Tramex MEX5. No elevated readings at skirting or low-level positions. Pattern and distribution are not consistent with capillary rise. Property does not have solid ground-floor construction characteristics associated with rising damp.

✗ **Plumbing failure** — No evidence of active plumbing leaks identified during inspection. No pipe trace correlation with affected areas. No localised water staining consistent with pipe failure.

CAUSATION ANALYSIS

Psychrometric confirmation: Environmental data recorded at the time of inspection confirms the conditions required for surface condensation. Relative humidity was 74.3%, air temperature was 13.8°C, and the calculated dew point was 9.4°C. The minimum recorded surface temperature was 8.7°C — 0.7°C below the dew point — confirming that active condensation was occurring at that surface at the time of inspection. This is not a borderline finding. The combination of high indoor humidity and cold-surface junctions created conditions in which moisture deposited continuously onto the affected surfaces, sustaining the mould growth identified.

The primary moisture mechanism is surface condensation. Thermal bridging at structural junctions reduces surface temperatures to below the dew point, creating continuous condensation zones at predictable locations: external wall corners, window reveals, wall-ceiling junctions, and the north-facing external walls. These cold surfaces coincide exactly with the locations of mould growth. The deficient mechanical extract ventilation in the bathroom and kitchen allows moisture-laden air to migrate throughout the dwelling, sustaining high whole-house relative humidity. The combination of thermal deficiency and ventilation failure constitutes the complete causal mechanism for the observed contamination.

VISUAL INDICATORS

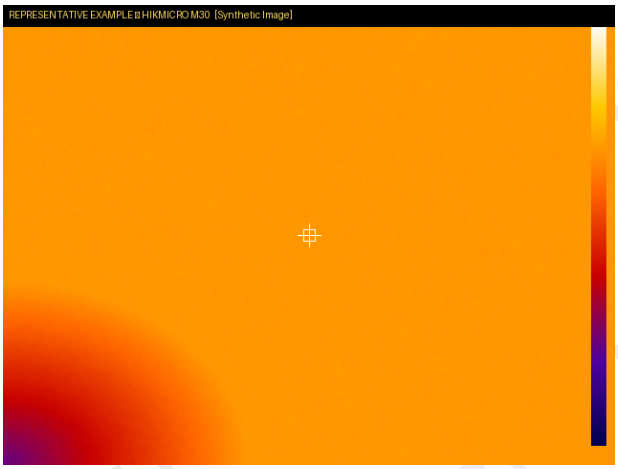
Crumbling / Bubbling **Yes — bathroom wall**	Peeling Paint **Yes — bedroom corners**	Condensation on Walls **Yes — north walls**
Staining / Watermarks **Yes — multiple rooms**	Mould Growth **Yes — extensive**	Discolouration **Yes — ceiling, corners**

Thermal Imaging Assessment — HIKMICRO M30

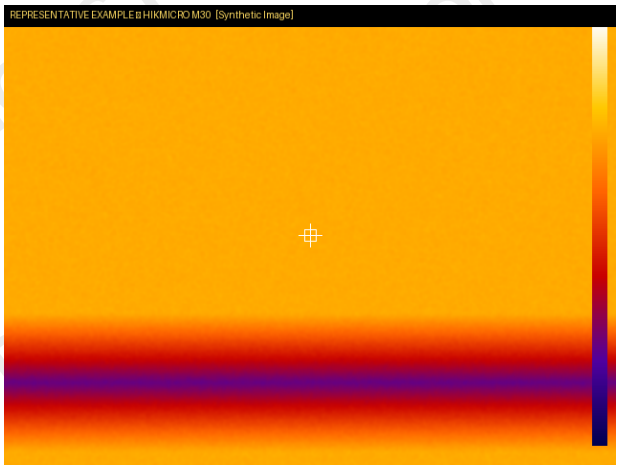
Thermal imaging was used to identify cold-surface patterns, thermal bridge locations, and areas at elevated condensation risk. Cooler blue and purple regions indicate surfaces losing heat more rapidly than the surrounding fabric. These cold zones directly correspond to the locations of visible mould growth identified during visual inspection, confirming the condensation mechanism.

The thermal imaging survey confirmed cold bridging at multiple structural junctions throughout the property. The coldest surface recorded during the survey measured 8.7°C — 0.7°C below the measured dew point of 9.4°C. Condensation was confirmed as actively occurring at this surface. Multiple thermal bridges were identified at external wall corners, window frame perimeters, wall-ceiling junctions, and floor-wall junctions. The pattern of cold zones is consistent with the construction era of the property and corresponds precisely to the distribution of mould contamination recorded during visual inspection.

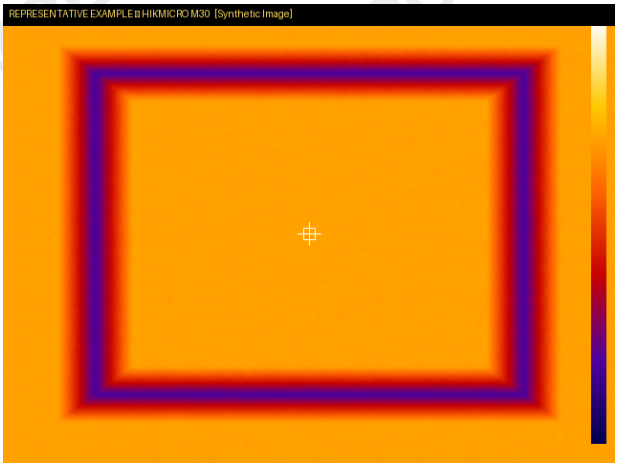
Note on images below: *These are* ***synthetic thermal illustrations*** *generated to demonstrate how thermal evidence appears in a real CCL report. In a delivered report, this section contains actual HIKMICRO M30 thermal camera photographs from the specific inspected property.*



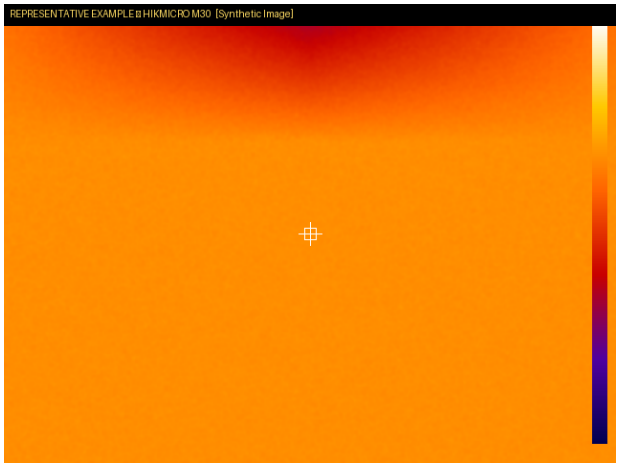
Bedroom 1 — N/W corner junction Cold zone at floor-wall-ceiling intersection (Synthetic illustration — representative pattern)



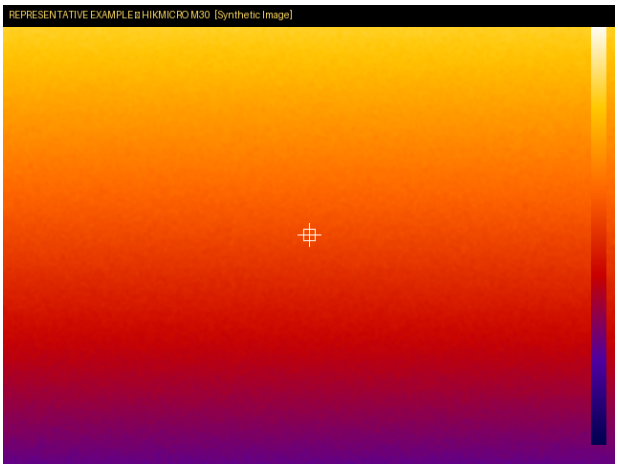
Bedroom 1 — External wall base Cold bridge along lower horizontal zone (Synthetic illustration — representative pattern)



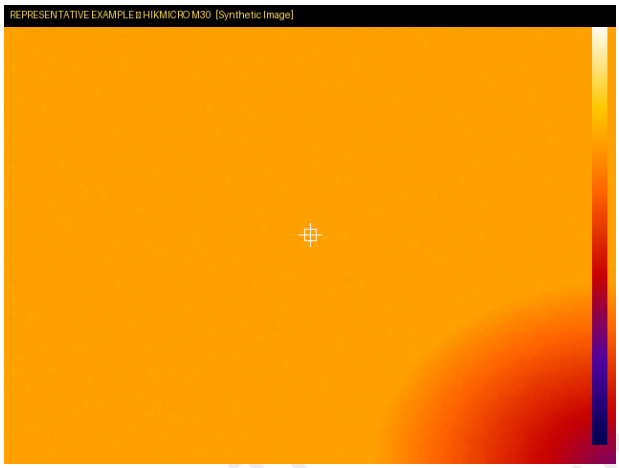
Living Room — Window reveal Cold bridging around window frame perimeter (Synthetic illustration — representative pattern)



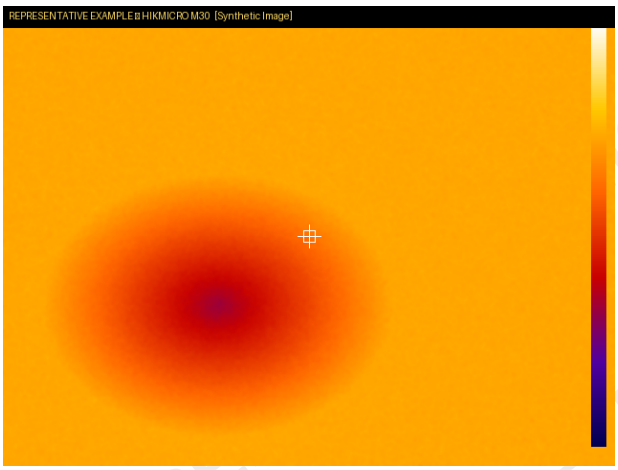
Bathroom — Ceiling junction Cold zone at wall-ceiling structural junction (Synthetic illustration — representative pattern)



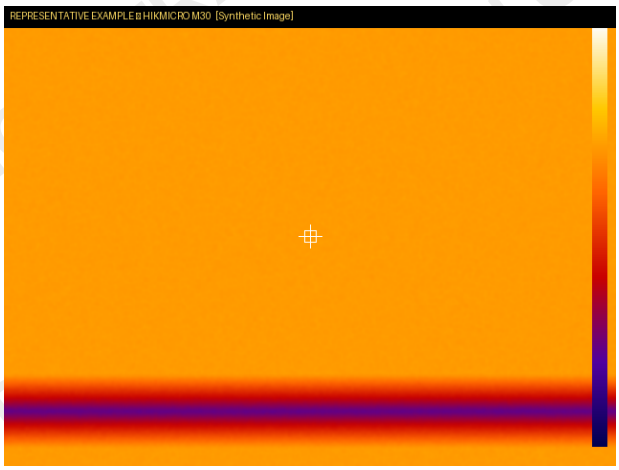
External wall — Temperature gradient Warm-to-cold gradient across wall fabric (Synthetic illustration — representative pattern)



Bedroom 2 — S/E corner Cold zone at corner junction (Synthetic illustration — representative pattern)



Living Room — Cold patch mid-wall Localised cold area behind thermal bridge (Synthetic illustration — representative pattern)



Kitchen — Floor-wall junction Cold bridge at floor zone (Synthetic illustration — representative pattern)

Thermal Evidence Interpretation: The thermal images record the principal cold-surface patterns of the type identified in a condensation-driven job. The cooler zones shown support a whole-house picture of cold bridging, heat loss, and sustained condensation at vulnerable junctions. In a live report, all thermal images are tagged with location, surface temperature at the crosshair point, and the calculated dew-point differential at that surface.

Ventilation Performance Assessment

★ REPRESENTATIVE EXAMPLE READING — NOT FROM A REAL JOB

ROOM-BY-ROOM ASSESSMENT

Bathroom — Extract fan

System Type	Room Volume	Required Flow
Extract fan	8.2 m³	54 m³/h
Measured Flow	**Adequacy**	
4.7 m³/h	■ DEFICIENT	

Kitchen — Extract fan

System Type	Room Volume	Required Flow
Extract fan	21.4 m³	30 m³/h
Measured Flow	**Adequacy**	
6.2 m³/h	■ DEFICIENT	

WC — Extract fan

System Type	Room Volume	Required Flow
Extract fan	3.6 m³	54 m³/h
Measured Flow	**Adequacy**	
2.1 m³/h	■ DEFICIENT	

PERFORMANCE ASSESSMENT

Ventilation performance across all assessed wet rooms was found to be severely deficient against Approved Document F requirements. All three extract fans delivered flow rates far below the minimum standards for wet rooms. The bathroom extract delivered only 8.7% of the required flow rate. The kitchen extract delivered only 20.7% of the required rate. Neither fan approached the performance level needed to remove moisture generated during normal daily activities. This deficiency is confirmed as a primary contributing factor to the elevated whole-house relative humidity recorded throughout the inspection. The property lacks any form of passive background ventilation — no trickle vents were present on window frames — meaning the only humidity-removal pathway is occupant behaviour (opening windows), which is insufficient. Corrective action must include installing compliant mechanical extract ventilation in all wet rooms.

Heating & Building Fabric Assessment

Heating Type **Gas central heating**	Heating Control **Manual thermostat**	Insulation **Partial — loft insulated; walls uninsulated**
Window Type **Single glazed timber frame**	Property Age **1960s – 1970s**	Property Type **Mid-Terrace House**

The property is heated by a gas central heating system with manual thermostat control, indicating that temperature regulation depends on occupant behaviour rather than programmed temperature management. At the time of inspection, internal air temperature measured 13.8°C — below the recommended minimum of 18°C for habitable rooms per WHO guidance. This low baseline temperature reduces the dew-point margin across all surfaces and increases condensation risk.

The single-glazed timber frame windows represent a significant thermal weakness. Single glazing surface temperatures in cold weather typically fall well below the dew point of a normally occupied room, creating persistent condensation on glazing and the immediately adjacent wall surfaces. The timber reveals compound this effect by providing a direct thermal bridge between the cold external environment and the internal surface. No cavity wall insulation was identified during the inspection. Solid wall construction of this era relies on wall mass for thermal performance, but uninsulated solid walls are a consistent source of cold bridging at external corners, revealing one of the principal mechanisms sustaining condensation in this property.

Inspection Findings

Mould growth was confirmed across multiple rooms, with the heaviest contamination concentrated at predictable cold-bridge locations: external wall corners in both bedrooms, the bathroom ceiling, and the living room bay window reveal. The distribution pattern is entirely consistent with surface condensation driven by cold bridging and ventilation failure. There is no localised point-source pattern that would indicate penetrating damp or plumbing failure. Mould growth is present at surfaces where thermal imaging confirmed temperatures below or near the dew point.

Pre-remediation ATP swabs from the most heavily contaminated surfaces returned a representative reading of 3,480 RLU, placing contamination well above the 1,000 RLU threshold for high contamination requiring immediate treatment. Airborne particulate readings at 10µm of 187 per cubic metre exceeded the green-zone threshold of 55, indicating elevated airborne biological material consistent with active mould growth in the space. These data points — combined with the visual extent of contamination and the psychrometric confirmation of active condensation — constitute a clear and defensible record of the condition at the time of inspection.

PHOTOGRAPHIC EVIDENCE — REPRESENTATIVE PLACEHOLDERS

In a real delivered report, this section contains photographic evidence from the specific property: room-by-room imagery of affected surfaces, moisture damage patterns, and visual mould extent. All images are captioned with location, surface description, and relevant instrument readings. Images below are representative placeholders for demonstration purposes.

[Photo: Bedroom 1 — Mould at N/W corner]	*[Photo: Bathroom — Ceiling contamination]*	*[Photo: Living Room — Window reveal]*

Representative photo placeholders — Bedroom 1 / Bathroom / Living Room external wall corner

Remediation Actions

Remediation works comprised targeted cleaning and decontamination of all identified affected surfaces, followed by ozone shock treatment for environmental sanitisation. ATP verification swabs confirmed treatment effectiveness at every sampled location. Pre-remediation readings recorded 3,480 RLU. Post-remediation readings recorded 8 RLU, representing a 99.8% reduction and a high-level decontamination result against the pass threshold of 100 RLU. Surfaces have been returned to a hygienic condition suitable for reoccupation.

Remediation addresses the biological contamination present at the time of treatment. It does not resolve the underlying moisture drivers. Long-term resolution depends on correcting the ventilation deficiency and thermal performance issues identified in this report.

ATP HYGIENE VERIFICATION

★ REPRESENTATIVE EXAMPLE READING — NOT FROM A REAL JOB

ATP BEFORE (PRE-TREATMENT)	ATP AFTER (POST-TREATMENT)
3,480	**8**
✗ FAIL	✓ PASS

Range	Classification	Action
>1,000 RLU	High contamination	Immediate action required
101–1,000 RLU	Elevated	Cleaning required
≤100 RLU	Acceptable hygiene level	PASS
≤10 RLU	**Excellent — high-level decontamination**	**Confirmed ✓**

OZONE SHOCK TREATMENT — ENVIRONMENTAL SANITISATION

A controlled ozone shock treatment was undertaken as part of the microbial neutralisation phase of remediation. The treatment was conducted in a fully unoccupied property. No persons, pets, or plants were present during ozone generation. Peak ozone concentration reached approximately 42 mg/m³, consistent with professional shock-treatment parameters.

Purpose	Typical mg/m³ Range
Odour removal	0.98 – 3.93 mg/m³
Bacterial / viral reduction	3.93 – 9.82 mg/m³
Mould spore reduction	9.82 – 19.63 mg/m³
Shock treatment	**>19.63 mg/m³ ← this job**

Cause & Effect Analysis

The following table links each identified condition to its underlying cause, the relevant technical standard, and the corrective action required. All findings are evidence-based and cross-referenced against instrument data.

Identified Issue	Cause	Standard / Reference	Recommended Action
Condensation — whole-house distribution	Thermal bridging reduces surface temperatures below dew point	BS 5250:2021 §5 — Condensation; Approved Document F (2021)	[illegible]
Deficient mechanical extract ventilation	Extract fans undersized or failed. Flow rates at 8.7%–20.7% of required minimum	Approved Document F (2021) — Table 1.1	Replace extract fans with compliant units delivering
Cold bridging at structural junctions	Uninsulated solid wall construction. Single-glazed windows. No cavity insulation.	BS EN ISO 10211; BS 5250 §6	[illegible]
Elevated airborne particulates (10×)	Active mould growth generating airborne spore load above	ANSI/IICRC S520 — Mould Remediation Standard	[illegible] condition. Post-remediation monitoring

Priority Recommendations

These recommendations follow directly from the confirmed findings. They are arranged in priority order so the property owner or managing landlord can see what requires immediate attention, what should follow, and what provides longer-term resilience. All recommendations are specific to this property's confirmed deficiencies — not generic moisture advice.

Immediate Action Required

Address the active environmental drivers that sustain mould growth.

1 Replace Deficient Mechanical Extract Ventilation — All Wet Rooms

What was found

All three extract fans are delivering flow rates of 8.7%–20.7% of the required Approved Document F minimum. This is the primary driver of elevated whole-house relative humidity. Until this is corrected, mould recurrence after remediation is a near certainty.

What needs to happen

Engage a qualified ventilation contractor to supply and install compliant extract ventilation in the bathroom (minimum 54 m³/h), kitchen (minimum 30 m³/h), and WC (minimum 54 m³/h). Consider a Mechanical Extract Ventilation (MEV) or MVHR whole-dwelling system for sustained humidity management across all rooms.

→ Eliminates the primary driver of high indoor humidity. Reduces condensation risk at all cold surfaces. Most impactful single action to prevent mould recurrence.

2 Establish Consistent Background Heating to 18°C Minimum

What was found

Internal air temperature of 13.8°C recorded at inspection is significantly below the WHO recommended minimum of 18°C for habitable rooms. Low air temperature reduces the dew-point margin and increases condensation risk across all surfaces, particularly at cold bridges.

What needs to happen

Set the central heating thermostat to maintain a minimum of 18°C throughout the occupied heating season. Avoid long periods of no heating with sudden rapid reheating. Consistent low-level background heat is more effective at preventing condensation than intermittent high-temperature heating.

→ Raises all surface temperatures, increasing the margin between surface temperature and dew point. Directly reduces condensation frequency and severity across all rooms.

Short-Term Improvements

These should follow once the immediate actions are in place.

1 Window Upgrade — Replace Single-Glazed Timber Frames

What was found

Single-glazed timber window frames are confirmed cold-bridge locations. Glazing surface temperatures in cold weather fall well below the dew point, creating persistent condensation on frames, glass, and immediately adjacent wall surfaces.

What needs to happen

Replace single-glazed windows with double-glazed uPVC or thermally-broken aluminium units with trickle vents. Trickle vents will also provide background ventilation currently absent from the property.

→ Eliminates window-frame cold bridges. Trickle vents provide passive background ventilation year-round. Reduces condensation risk at window locations.

2 Targeted Internal Wall Insulation — External Corner Junctions

What was found

External wall corners are confirmed thermal bridges by thermal imaging. Mould growth at these locations is directly driven by surface temperatures below the dew point. Uninsulated solid walls cannot be resolved by heating or ventilation alone.

What needs to happen

Commission a thermal insulation specialist to assess and specify internal insulated lining boards at the identified external corner junctions in bedrooms and the living room. This is a targeted intervention — not whole-room insulation — focused on the confirmed bridge locations.

→ *Raises surface temperatures at currently cold corners. Eliminates the cold-bridge condensation mechanism at treated junctions. Prevents recurrence of mould at those specific locations.*

Long-Term Measures

Provide sustained improvement to the building's thermal and energy performance.

1 Commission BER / EPC Assessment and Full Thermal Retrofit Plan

What was found

The thermal and fabric deficiencies identified in this inspection are consistent with a poor energy performance rating. The uninsulated solid walls, single-glazed windows, and manually-controlled heating represent a combination of issues that will continue to drive condensation risk in the long term.

What needs to happen

Commission a formal BER (Building Energy Rating) assessment in the Republic of Ireland, or an EPC (Energy Performance Certificate) in Northern Ireland. A full thermal retrofit plan should be developed and phased over an appropriate timeframe. Grant funding may be available through SEAI (ROI) or the Affordable Warmth Scheme (NI).

→ *Delivers lasting reduction in whole-house condensation risk. Improves energy efficiency, reduces heating costs, and provides formal evidence of compliance with current thermal standards.*

Summary Conclusion

CONFIRMEDDIAGNOSIS

Primary moisture mechanism: Condensation — Surface condensation driven by thermal failure and ventilation deficiency

Distribution pattern: Whole-house / multi-room — concentrated at cold-bridge locations

Rising damp: Eliminated | **Penetrating damp:** Eliminated | **Plumbing failure:** Eliminated

★ **All values shown are representative examples only**

REMEDIATION OUTCOME

ATP BEFORE (PRE-TREATMENT)	ATP AFTER (POST-TREATMENT)
3,480	**8**
✗ FAIL	✓ PASS

A comprehensive IICRC-compliant remediation process was carried out across all identified affected areas. Treatment comprised targeted antimicrobial application to affected surfaces, followed by controlled ozone shock treatment. ATP hygiene testing was used to verify treatment effectiveness. Post-treatment results recorded 8 RLU — a 99.8% reduction from the pre-treatment baseline of 3,480 RLU, achieving an excellent decontamination result against the pass threshold of 100 RLU.

RECURRENCE RISK

Remediation addresses the biological contamination present at the time of attendance. It does not correct the confirmed environmental drivers. Recurrence is highly likely unless the ventilation deficiency and thermal performance issues are corrected in the priority order recommended in this report. Without corrective environmental works, the same cold-surface temperatures and high indoor humidity will re-establish mould growth within one to two heating seasons.

Legal, Quality Assurance & Limitations

QUALITY ASSURANCE STATEMENT

This report has been prepared exclusively for the client named by Causeway Cleaning Ltd and is not intended for use or reliance by any third party without prior written consent. The findings and conclusions contained herein are based on the conditions observed and measurements taken at the property on the date of inspection only. Environmental conditions, moisture levels, and microbial activity are subject to change over time and no guarantee is made or implied regarding future conditions or recurrence. All information is provided for diagnostic and advisory purposes and should not be used as the sole basis for contractual, financial, or legal decisions.

DISCLAIMER & LIMITATIONS

This inspection consisted of a visual assessment supported by non-invasive diagnostic methods including thermal imaging, moisture measurement, ATP surface hygiene testing, and airflow analysis. No destructive, intrusive, or opening-up works were carried out. No full structural survey was undertaken. Inaccessible elements such as internal wall cavities, subfloor spaces, or roof voids were not examined. This report must be interpreted within the context of the agreed scope and the conditions observed at the time of inspection.

SURVEYOR DECLARATION

Lead Surveyor — IICRC Mould Remediation Technician (S520)

Causeway Cleaning Ltd | Mould Removal Services Ireland

Survey Date (Example)

WHAT WAS REMOVED, REPLACED & GENERALISED

Element	Action Taken	Replacement / Approach
Client name & contact details	Removed entirely	Replaced with 'Sample Client'
Property address & postcode	Removed entirely	Replaced with 'Sample Property — Mid-Terrace Dwelling'
Report reference number	Removed entirely	Replaced with 'SAMPLE-001'
Inspection date	Removed entirely	Replaced with 'Survey Date (Example)'
Surveyor name	Removed entirely	Replaced with 'Lead Surveyor — IICRC S520 Accredited'
All real ATP readings	Removed entirely	Replaced with representative synthetic values (3,480 / 8 RLU)
All real moisture readings	Removed entirely	Representative synthetic values — labelled as such
All real environmental data	Removed entirely	Representative psychrometric values — labelled as such
All real dates & timestamps	Removed entirely	No real dates appear anywhere in this report
All real instrument images	Removed entirely	Replaced with synthetic instrument card illustrations
All real thermal images	Removed entirely	Replaced with synthetic thermal gradient illustrations
All real property photos	Removed entirely	Replaced with labelled placeholder boxes
Real job scenario	Changed entirely	Synthetic scenario: condensation / mid-terrace (vs. real penetrating damp job)
Job-specific location details	Removed entirely	Generalised to room types (Bedroom 1, Bathroom, etc.)

This sample report preserves 100% of the original report structure, section flow, methodology, technical language, and professional formatting. The synthetic scenario (condensation / mid-terrace) was deliberately chosen to differ from the real job type (penetrating damp / detached house), ensuring the sample cannot be reverse-engineered to identify the source job. All readings are labelled 'Representative Example Reading' throughout the report.

SAMPLE REPORT — DEMONSTRATION ONLY