

Spray Foam Insulation Condition Assessment

EXAMPLE REPORT
sprayfoamcheck.co.uk

14 Birchwood Avenue, Coventry, CV3 5RJ

Non-Invasive · Advisory · Mixed Condition Finding

Property	14 Birchwood Avenue, Coventry, CV3 5RJ
Property Type	Semi-Detached Residential · 1950s Build
Inspection Date	16 January 2026
Prepared For	Mr & Mrs [Client Name]
Assessor	Caoimhe · Independent Spray Foam Assessor
Service	SprayFoamCheck.co.uk
Report Reference	SFC-2026-0116-CV3
Report Status	EXAMPLE REPORT · Advisory · Non-Statutory

This is an example report

This document illustrates the structure, depth, and findings typical of a SprayFoamCheck.co.uk assessment. Property details, names, and specific readings are illustrative. All SprayFoamCheck reports are produced to this standard.

Summary for the Property Owner

This page gives you a plain-English summary of what was found, what it means for you as the owner, and what action to take. The full technical detail follows.

What was found	What it means for you	What to do next
Three zones assessed. Zone A (front pitch) is intact and stable. Zone B (rear) shows partial foam lift with moisture above normal range. Zone C (hip end) shows significant foam lift, rafter masking, blocked ventilation, and moisture readings that exceeded the maximum the meter can measure (>45%).	Zone A needs no immediate action. Zone B needs monitoring over time. Zone C is the serious zone: the foam has lifted and is trapping moisture against the roof timbers while blocking the ventilation the roof needs to stay dry. The condition of the timber behind the foam in Zone C cannot be confirmed without specialist investigation.	Do not instruct remediation works until a specialist has assessed the timber in Zone C. Use this report for any lender, valuer, or solicitor review. Re-check Zone B in 12 months. Zone A can wait 3 years.

OVERALL FINDING	Mixed condition. Zone A — no immediate concern. Zone B — monitor. Zone C — specialist investigation required before any works.	MIXED
-----------------	---	--------------

A note on mortgage lenders and property transactions

Many mainstream lenders take a cautious view of properties with spray foam applied to rafters. If you are planning to sell or remortgage, a documented assessment report provides the evidence a lender, valuer, or solicitor needs to assess the specific conditions at your property — rather than applying a blanket policy. Zone A and B findings support a proportionate response. Zone C requires specialist follow-up before any transaction proceeds.

01

Instruction & Purpose

This assessment was instructed by the property owners of 14 Birchwood Avenue, Coventry, following identification of spray foam insulation within the loft space. The purpose of this report is to provide an independent, non-invasive condition record of the spray foam installation, to document observable risks, and to support informed decision-making by the property owners.

Why this assessment matters

Spray foam insulation, when applied to rafters in a residential loft, can restrict the natural ventilation of the roof structure and prevent visual inspection of the underlying timbers. Where the foam is lifting, bridging, or creating moisture traps, the condition of the rafters behind the foam cannot be confirmed without invasive investigation. This assessment documents observable conditions and associated risks in plain, technically grounded language.

02

Property Context

The subject property is a 1950s semi-detached residential dwelling. The loft space is accessible via a hatch in the landing ceiling. The roof structure is a traditional cut rafter construction with a cold roof configuration. Spray foam insulation has been applied directly to the underside of the roof covering and rafter faces across the majority of the accessible loft area.

Property Type	Semi-Detached · 1950s Construction
Roof Construction	Traditional cut rafter · Cold roof configuration
Spray Foam Type	Open-cell polyurethane (identified by texture and flexibility)
Application Area	Rafter faces and underlay — full loft coverage attempted
Approximate Age	Foam estimated 6–12 years based on condition and appearance
Loft Access	Single hatch via landing · Partial areas inaccessible
Heating System	Gas central heating · No loft-level heat source

03

Inspection Methodology

The inspection was carried out on 16 January 2026 under safe working conditions. The following methodology was applied across all accessible areas of the loft space.

- › Visual inspection of all accessible rafter bays and foam surfaces
- › Handheld capacitance moisture meter readings from accessible timber elements
- › Assessment of foam adhesion, lift, bridging, and separation at eaves and ridge
- › Assessment of ventilation pathway continuity at eaves level
- › Photographic documentation of all observed conditions and anomalies
- › Division of loft into assessment zones (A, B, C) based on condition homogeneity
- › Review of underlay condition where visible at foam edges

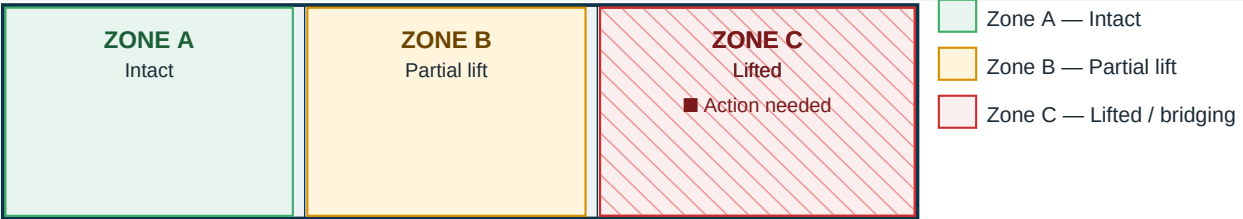
Scope limitations

This is a non-invasive assessment. The condition of timber elements behind spray foam cannot be confirmed without removal or lifting of the foam. This report documents observable surface conditions and indicative moisture readings only. It does not constitute a structural survey, timber pathology report, or warranty of any kind.

04 Zone Assessment Overview

The accessible loft space has been divided into three assessment zones based on the observed condition of the spray foam and indicative moisture readings. The zones are described in the plan below and summarised in the table.

SPRAY FOAM CONDITION — ZONE PLAN (SCHEMATIC)



Schematic plan — not to scale. Zone boundaries approximate. Based on accessible areas only.

ZONE	LOCATION	FOAM CONDITION	INDICATIVE MC
A	Front pitch Accessible	Intact — adhered to rafters No visible lift or separation	14 – 18% Within range

ZONE	LOCATION	FOAM CONDITION	INDICATIVE MC
B	<i>Rear pitch Partially accessible</i>	Partial edge lift noted Minor separation at eaves	<i>22 – 31% Above equilibrium</i>
C	<i>Hip end Accessible</i>	Significant lift and bridging Rafter masking observed Moisture trap indicators	<i>34 – >45% Instrument maximum</i>

Summary finding

Zone A presents no immediate cause for concern at time of inspection. Zone B warrants monitoring. Zone C presents significant concerns requiring specialist further investigation prior to any remediation works being specified or instructed.

05 Spray Foam Condition — Detailed Observations

Zone A — Front Pitch

Spray foam in Zone A is intact and fully adhered to rafter faces and underlay. No visible lift, separation, or bridging was observed. The foam surface appears uniform. Moisture readings in this zone are within the typical equilibrium range for timber in this configuration.

Zone B — Rear Pitch

Partial edge lift was observed along the eaves line in Zone B. The foam has separated from the underlay at the lower edge in two sections, creating a narrow gap of approximately 10–15mm. This represents a localised loss of adhesion rather than systemic failure. Moisture readings are elevated above equilibrium range, consistent with reduced ventilation at the point of lift.

Zone C — Hip End (Significant Concern)

- › Significant lifting and bridging of spray foam observed across multiple rafter bays
- › Foam has separated from rafter faces in sections, creating trapped void spaces between foam and timber
- › Rafter masking — foam bridging between rafters prevents visual inspection of rafter faces
- › Moisture readings exceeded instrument calibrated maximum (>45%) at two locations
- › Visible discolouration and staining to accessible foam surfaces consistent with moisture ingress
- › Eaves ventilation pathway appears obstructed by foam at the hip end
- › Underlay not visible at foam edges — condition of underlay in this zone cannot be confirmed

Zone C assessment

The conditions observed in Zone C are consistent with a foam application that has lost adhesion and is creating active moisture traps at the rafter interface. The condition of the structural timbers behind the foam in this zone cannot be confirmed without invasive investigation. This zone requires specialist attention prior to any remediation works being specified.

06

Moisture Observations

Indicative surface moisture readings were obtained from accessible timber elements across all three zones. Readings should be interpreted in the context of the observed foam condition in each zone.

INDICATIVE MOISTURE READINGS — BY ZONE

Zone A	14 – 18%	Within typical equilibrium range
Zone B	22 – 31%	Above equilibrium — monitoring warranted
Zone C	34 – >45%	Significantly elevated / instrument maximum

Indicative surface readings by handheld capacitance meter. Advisory only — not laboratory analysis.

Roof Assembly — Cross-Section

SPRAY FOAM APPLICATION — CROSS-SECTION (SCHEMATIC)

ROOF TILES

SARKING FELT / UNDERLAY

RAFTER — SPRAY FOAM APPLIED

SPRAY FOAM (open-cell shown)

RESTRICTED VOID / AIR GAP

CEILING BOARD / PLASTERBOARD

ROOF TILES

SARKING FELT / UNDERLAY

RAFTER — SPRAY FOAM APPLIED

Spray foam (open-cell)

RESTRICTED AIRFLOW

CEILING BOARD / PLASTERBOARD

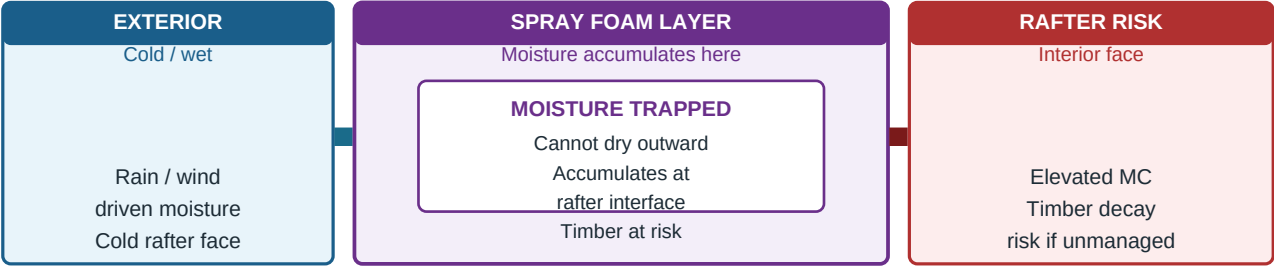
■ Zone C: rafter masking and restricted void observed (see Section 5)

■ Spray foam layer (open-cell typical)

■ Restricted / trapped void zone

Moisture Trapping Mechanism

MOISTURE TRAPPING MECHANISM — SPRAY FOAM ON RAFTERS



Schematic — not to scale. Advisory representation of moisture trapping risk mechanism. Based on observed conditions.

Zone C moisture reading — instrument maximum

Readings in Zone C exceeded the calibrated maximum measurable threshold of the instrument (>45%) at two measurement points. This is recorded precisely as ">45% (Instrument Maximum)". These readings indicate moisture content beyond the instrument display capacity and are consistent with active moisture accumulation at the rafter/foam interface.

07 Ventilation & Roof Void Condition

The original roof construction is a cold roof design, relying on natural ventilation through eaves and ridge to manage moisture within the roof void. Spray foam applied directly to the underside of the roof covering fundamentally alters this ventilation dynamic by converting the space to a warm roof configuration — but without the vapour control and airtightness measures required for a correctly performing warm roof.

- › Eaves ventilation appears obstructed in Zone C — foam application has reduced or eliminated the natural air pathway at the eaves line
- › The roof void is no longer functioning as a ventilated cold roof in the affected section
- › Without adequate ventilation, moisture from the interior cannot escape through the roof structure
- › This creates the conditions for interstitial condensation on cold structural surfaces
- › The conversion from cold roof to warm roof configuration has not been accompanied by appropriate vapour control layer installation

Critical context

NHBC, BBA, and most mainstream lenders take a cautious position on spray foam applied to rafters in residential properties, in part due to the ventilation and moisture management risks described in this section. This assessment documents the specific conditions observed at this property in support of any lender, valuer, or solicitor review.

08 Risk Considerations

The following asset and transactional risks are documented for the property owner's consideration. Risk levels reflect conditions observed at the time of inspection.

RISK CATEGORY	ASSESSMENT NOTE	INDICATOR
Structural timber integrity	Spray foam masks rafter condition. Elevated MC in Zone C consistent with prolonged moisture exposure at rafter interface.	Elevated
Moisture trapping	Closed application prevents outward drying. Zone C readings indicate active moisture accumulation.	Elevated
Ventilation pathway	Foam application has restricted natural ventilation through eaves in sections. Cold roof ventilation requirements may not be met.	Elevated
Roof covering / underlay access	Spray foam adhered to underlay prevents separation for replacement. Full re-roofing may be required for remediation.	Elevated
Thermal bridging	Zone B partial lift creates discontinuous insulation layer with associated thermal bridging at lift points.	Moderate
Lender / valuation risk	Properties with spray foam insulation may face challenges at point of sale or remortgage. Assessment documentation supports informed decision-making.	Moderate
Listed / heritage status	Not applicable — standard residential construction noted.	Low
Structural integrity	No structural failure observed. Inaccessible areas cannot be confirmed and may warrant further investigation.	Low

09 Recommendations

The following actions are recommended in priority order. Zone C requires urgent attention before any other remediation works are specified or instructed.

	ACTION	DETAIL
1	Zone C — Specialist Timber Investigation	Given elevated moisture readings up to and exceeding instrument maximum in Zone C, a specialist timber investigation is recommended. A qualified structural engineer or conservation surveyor should assess rafter condition following removal or lifting of spray foam at the affected section prior to any further remediation works being specified.
2	Ventilation Pathway Assessment	Assessment of eaves ventilation continuity to confirm whether natural ventilation has been obstructed by foam application. Cold roof design requirements should be verified.
3	Zone B Monitoring Programme	Moisture monitoring at fixed reference points in Zone B across two seasonal cycles. If readings increase above 25% consistently, escalation to specialist investigation is recommended.
4	Pre-Sale / Remortgage Documentation	This report provides documented evidence of the inspection and findings. For transactional purposes, an updated assessment at the point of sale or remortgage application is recommended to reflect current conditions.
5	Zone A Re-Inspection (3 Years)	Zone A presents no immediate concern at time of inspection. Re-inspection within 3 years to confirm continued integrity of foam adhesion and stable moisture conditions.

All specialist works to be specified by a qualified professional. No remediation works should be instructed until Zone C timber condition has been assessed by a specialist.

10 Conclusion

The spray foam insulation at 14 Birchwood Avenue presents a mixed condition picture. Zone A is intact and presents no immediate cause for concern. Zone B requires monitoring due to partial lift and above-equilibrium moisture readings. Zone C presents significant concerns that require specialist further investigation.

The conditions observed in Zone C — significant foam lift, rafter masking, obstructed eaves ventilation, and moisture readings up to and exceeding instrument maximum — are consistent with an installation that is creating active moisture traps at the rafter interface. The condition of the structural timbers in Zone C cannot be confirmed without invasive investigation and should not be assumed to be satisfactory.

The overall roof assembly is no longer performing as the original cold roof design intended. The spray foam application has altered the ventilation dynamic without the corresponding vapour management measures required for a correctly performing warm roof. This has implications both for the long-term condition of the roof structure and for the property's position at point of sale or remortgage.

Owner action recommended

Zone C requires specialist further investigation before any remediation works are instructed. This report provides the documented evidence base for that instruction and for any lender, valuer, or solicitor review.

11 Declaration

This report has been prepared to the best of the assessor's knowledge and professional judgement based on conditions observed at the time of inspection. It constitutes a non-statutory advisory condition report only.

SprayFoamCheck.co.uk provides independent spray foam assessments for residential property owners. We do not sell or install spray foam insulation, nor do we have any commercial relationship with remediation contractors. Our assessments are produced solely in the interests of the property owner.

SPRAY FOAM INSULATION ASSESSMENT · EXAMPLE REPORT

Non-Statutory · Advisory · SprayFoamCheck.co.uk

Assessor: Caoimhe · Independent Spray Foam Assessor

Service: SprayFoamCheck.co.uk

Inspection Date: 16 January 2026

Report Reference: SFC-2026-0116-CV3

Signed: _____

This report is an example only. All property details, names, and findings are illustrative. For a real assessment of your property, visit sprayfoamcheck.co.uk