

Sprayed Foam Insulation applied to the pitches of existing timber framed roofs,
Summary of stakeholder group investigation and conclusions – Autumn 2021

There has been significant conjecture over the use of sprayed polyurethane (PU) foams in domestic property leading to confusion amongst surveyors and valuers about how to report on the condition of a roof with sprayed foam applied to the underside of the roof covering, and with some lenders refusing to offer loans on affected properties. The result is that consumers may, unwittingly, put themselves in a position of detriment, sometimes restricting the saleability of, or ability to release equity from, their home.

A great deal of negative press coverage has followed but little work had been done to help surveyors and valuers who are tasked with providing advice to their clients—whether consumers, lenders, or others.

In response to the uncertainty that surrounds the issue the Property Care Association (PCA) and the Residential Property Surveyors Association (RPSA) jointly convened a forum of industry stakeholders to consider the use and implications of sprayed foam products within existing pitched roofs of domestic property.

The first stakeholder meeting took place in September 2021, followed by two technical sub-group meetings, the findings of which were communicated and discussed at a further stakeholder group meeting late in October 2021.

It is anticipated that each stakeholder will issue guidance or commentary to their own communities, but the findings of the stakeholder group can be summarised as follows: -

“Unless the following detailed information is available to the surveyor at the point of inspection, it is unlikely that any property professional could be expected to comment of the condition of concealed roof timbers or speculate on medium- or long-term risk posed by water ingress or condensate.”

Condition of the roof	Roof coverings Flashings Parapets and valleys Leadwork, flashings, and flaunching
Is the PU foam	Open or closed cell Vapour permeability of the foam used
Primary function of PU	Insulation Extend the life of failing roof coverings
Timber condition	Moisture content before application Timber condition before application



Nature of the roof void	Warm Void Cold Void – Is there provision for adequate ventilation
Hygrothermal Evaluation	Detailed results from the pre-installation hygrothermal evaluation
Atmospheric moisture control	Adequate ventilation in the occupied space Vapour tightness of the ceiling Ventilation of the roof void (cold roofs only)
Underlay Characteristics	Accurate description and understanding of the vapour permeability characteristics of the underlay. (Bituminous felt, VCL, breather membrane, etc)

Unless ALL of the above information is available at the time of inspection then even a surveyor who has the capacity to understand the significance of such information is unlikely to be able to evaluate the appropriateness of the PU foam present. The evaluation of moisture risk associated with water ingress or condensate will be difficult or impossible to assess, and in most situations the professional surveyor will be unable, and ill advised, to comment on the condition of the timber roof structure.

It may be possible through research or detailed investigation by a trained and competent specialist to discover the information that is needed to understand risk and condition. However, such investigations may be lengthy, and will often result in partial or full removal, and irreparable damage to, insulation or roof coverings.

Conclusion

It is unlikely that a surveyor undertaking a valuation, or a condition survey will be able to provide any advice relating to the condition or life expectancy of the roof structure where the installation of PU foam is not supported by detailed technical information.

Where closed cell PU foam has been applied directly to the underside of primary roofing materials the building professional will have no alternative but to recommend that the roof should be scheduled for early renewal with a provision for extensive replacement of the roofs structure as well as the roof covering.

Where there is any uncertainty about the composition of the foam present (open or closed cell) or the presence of a vapour permeable membrane beneath open cell foam, the surveyor will in all likelihood wish to recommend a cautious approach and recommend provision for early renewal of the roof and the removal of the PU insulation.



Property Care Association



Residential Property Surveyors Association