

Berrywell, Springvale

Bat Survey Report

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Prepared by:

Middleton Bell Ecology, School House, Green Moor, Sheffield, S35 7DQ

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For Planning	G Slack MCIEEM <i>Greg Slack</i>	P Middleton MCIEEM <i>P Middleton</i>	G Slack MCIEEM <i>Greg Slack</i>	03/11/2025

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1. Summary

- 1.1.1 A bat inspection was commissioned by the client, Will Tomson, at Berrywell, Springvale to inform proposals to demolish the existing dwelling and construct a replacement. The inspection was carried out in October 2025 to identify any evidence of roosting bats or nesting birds and to assess the need for further ecological survey or mitigation.
- 1.1.2 The site was a detached bungalow with several later extensions set on the southern edge of the plot within a garden. Areas of lawn, meadow and mature trees were present within the grounds, with a swimming pond and wildlife pond elsewhere within the ownership boundary. The wider landscape included pasture and arable farmland bordered by hedgerows, a railway line to the north, and Castle Dike running through a clough to the west. These features provided good connectivity to the wider countryside and the site and its surroundings were considered to offer above-average suitability for foraging and commuting bats.
- 1.1.3 No bats or signs of bats were recorded during the internal and external inspection. Potential bat roost features comprised missing verge mortar and a loose cladding panel. Although the building was located within suitable foraging habitat, its overall bat roost suitability was assessed as low.
- 1.1.4 An old bird's nest was present within the roof. The building and surrounding vegetation were considered to offer limited suitability for nesting birds.
- 1.1.5 It was recommended that a destructive survey of the identified potential roost features be undertaken under the supervision of a suitably qualified ecologist immediately prior to demolition. Should bats be found, work would stop and a bat mitigation licence obtained. To compensate for the loss of potential roost features, three interconnected integrated bat boxes would be installed on the new dwelling.
- 1.1.6 Any new exterior lighting would follow good practice guidance to avoid disturbance to bats. For birds, either demolition should take place outside the nesting season (March–August) or a pre-demolition check should be carried out, and one integrated bird box would be incorporated into the new building.
- 1.1.7 The findings and recommendations in this report were considered valid for eight months from the survey date. If the project was delayed beyond this period, Middleton Bell Ecology should be contacted to determine whether an updated survey would be required.

2. Introduction

- 2.1.1 A bat inspection of a house at Berrywell was commissioned by the client Will Tomson on 6th October 2025. The survey was undertaken to inform plans to demolish the existing building and replace it with a new dwelling.
- 2.1.2 The legislative context to the survey and assessment reported here is included in Appendix 1.

3. Habitat Assessment

- 3.1.1 The site was located in Springvale on the eastern edge of Penistone in South Yorkshire. A swimming pond, separate wildlife pond, and mature trees were present within the landownership boundary, although these were located outside the survey area.
- 3.1.2 The surrounding area included a railway line to the north with a business park and other dwellings and associated gardens beyond. To the south, east and west mixed pasture and arable farmland was present. Castle Dike ran through a small clough to the west of the site. The dike fed into Kirkwood Beck near the northern end of the site and in turn the beck fed into the River Don approximately 420 m to the north (Figure 1 and Plate 1 and 2).
- 3.1.3 The site and immediate surrounding habitats were considered to comprise above average foraging and commuting habitat for bats. The adjacent beck and railway line provided good connectivity to the wider landscape

Figure 1. The survey area



Plate 1. The site (approximate outline in red) and the surrounding area viewed from the northeast



Plate 2. The site and surrounding area viewed from the south



3.1.4 Table 1 summarises the habitats present within, and adjacent to the site.

Table 1. Location and habitat table

Name and address: Berrywell, Kirkwood Bridge Lane, Springvale, Sheffield, S36 6AX			
OS Grid Ref. SE 25797 02685		Elevation. 213 m	
Local Planning Authority: Barnsley Metropolitan Borough Council			
Features on site and adjacent to site			
Feature	On site	Adjacent	Comments
River bordered by trees		✓	Castle Dike c. 25 m west.
Standing water	✓		A swimming pond and separate wildlife pond within the landownership boundary.
Bridges tunnels and culverts		✓	A bridge carrying the adjacent railway c. 30 m northwest.
Trees	✓	✓	Mature trees present within the garden and adjacent to the railway line and field boundaries.
Woodland			None.
Grassland	✓	✓	Meadow areas and lawn within the garden and pasture in the adjacent field.
River bordered by trees		✓	Kirkwood Beck and the River Don were both tree lined.

3.2 Aims

3.2.1 The survey was conducted to help determine the:

- Presence/absence of roosting bats within the building.
- Potential roosting areas and roost access/egress points.
- Level of bat roost suitability associated with the building.
- Current or historic use of the buildings by nesting birds.
- Further survey work or mitigation requirements.

4. Methodology

4.1 Data Consultation

4.1.1 A desk study was undertaken with South Yorkshire Bat Group to request bat records for locations within 2 km of the site.

4.1.2 A search of the Multi-Agency Geographical Information for the Countryside (MAGIC) website was undertaken to identify historic European Protected Species (EPS) licences obtained for locations within 2 km of the site.

4.2 Field Survey

Internal and External Visual Inspection

4.2.1 An inspection of the building was undertaken on 21st October 2025 by Greg Slack (MCIEEM; Class licence WML-A34-Level 4, 2017-28068-CLS-CLS).

4.2.2 The following activities were carried out during the initial inspection survey:

- An examination of all parts of the building to record structural features and condition, and features that may be suitable for use by roosting bats. Particular attention was paid to any holes, crevices or gaps in walls, lintels, windows, and windowsills, gaps/holes in cladding and soffits and to the possibility of finding droppings stuck to walls, floors or other surfaces, or insect remains below features.
- Any signs indicative of a bat roost presence including live or dead bats, droppings, feeding remains, scratch marks and staining were recorded.
- An assessment of the bat roost suitability of the buildings (negligible, low, moderate, high or confirmed roost).

4.2.3 The following equipment was used or on hand during the inspection:

- a high powered torch;
- binoculars;
- ladders;
- an endoscope;
- a camera; and
- an ultralight drone (DJI mini 4 Pro).

4.3 Survey Limitations

4.3.1 No significant limitations were encountered.

5. Results

5.1 Data Consultation

5.1.1 Although the records have been requested from South Yorkshire Bat Group they have not yet been provided. This report will be updated with the records once available.

5.1.2 Three bat EPS mitigation licence had been issued within 2 km of the site. The details of the licences are given in Table 2 below.

Table 2. Bat EPS mitigation licences within 2 km

Species listed on the licence	Licence start date	Licence end date	What does the licence cover?	Approximate distance (m)	Direction
Common pipistrelle	09/03/2011	01/02/2013	Destruction of a resting place.	1922	NW
Common pipistrelle	14/10/2009	31/08/2011	Destruction of a breeding site and resting place.	1922	NW
Common pipistrelle	27/03/2020	31/08/2023	Damage and destruction of a breeding site and resting place.	1209	SE

5.2 Field Survey

Internal and External Visual Inspection

Building description

- 5.2.1 The building comprised a detached bungalow with a porch on the northeast aspect (Plate 3). The building was located on the south edge of the plot. The original building had been extended to the southwest by the addition of a full length rear extension with a shallow pitched roof extending up to the original ridge (Plate 4), and a series of three extensions to the northwest.
- 5.2.2 The extensions to the northwest comprised a single storey entrance porch and dining area with a two-pitched roof, and bathroom with a separate, lower two pitched roof. A storage area was present at the end of this series of extensions.

Plate 3. The building viewed from the northeast



Plate 4. The building viewed from a drone to the southeast



- 5.2.3 A void was present over the rear extension. Although no hatch was present to allow access into this area, a panel at the southeast gable was removed during the inspection to allow this space to be checked (Plate 5 and 6).

Plate 5. Removed panel allowing access to the void



Plate 6. Interior of the void



External inspection

5.2.4 The potential bat roost features present were limited to missing verge mortar, and a loose cladding panel. The potential roost features are shown in Table 3, and their locations shown on Figure 2.

Table 3. Potential Roost Features Recorded

PRF	Example Photo	Description
A	A photograph showing a person's hand holding a handheld electronic device (likely a thermal imager or similar inspection tool) with a screen. The device is pointed towards a roof edge. The roof edge shows a gap or missing mortar between the tiles and the structure. The background shows a green field and a cloudy sky.	Missing verge mortar.

PRF	Example Photo	Description
B		<p>Lose cladding panel (removed for inspection in photo).</p>

Figure 2. Potential roost feature locations



Internal inspection

5.2.5 No bats or signs of bats were present within the building. Approximately 20 mouse droppings were found within the roof void (Plate 7), and an old bird's nest was found at the northwestern gable but the client reported that it hadn't been used in recent years as the smoke from the adjacent flue tended to blow into the roof void when the log burner was used.

Plate 7. Two of the mouse droppings within the roof void



6. Assessment

6.1 Summary and Evaluation of Findings

6.1.1 Although potential roost features were present within the building, no bats or signs of bats were recorded. A close inspection was completed for all of the features present. Although the building was located in an area of above average suitability habitat, it was considered that the bat roost suitability of the building was low.

6.2 Further Survey, Recommendations and Enhancements

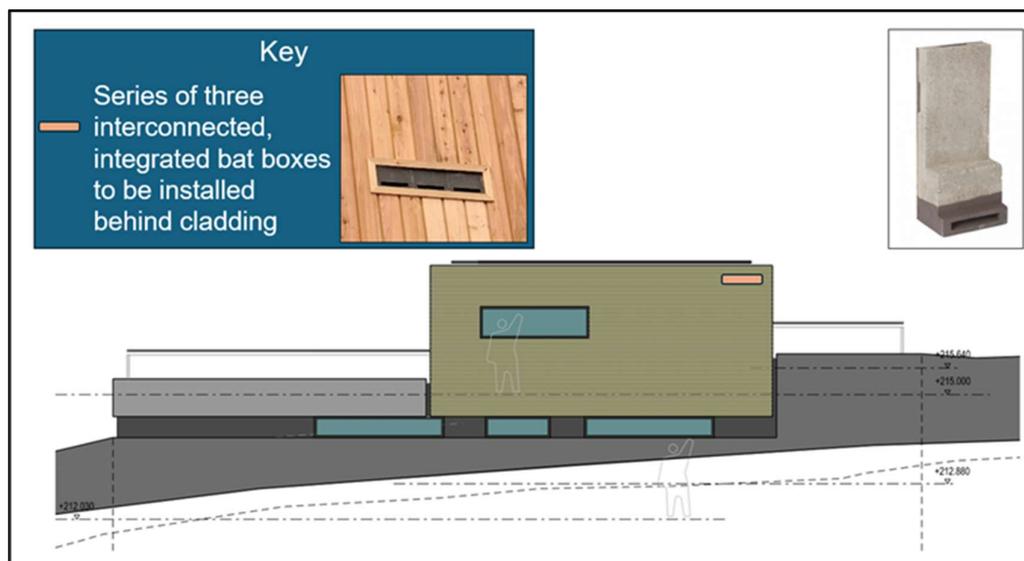
Further survey

- 6.2.1 The standard approach would be to complete a nocturnal survey of the building ahead of demolition. In line with guidance surveys must take place between May and August.
- 6.2.2 Delaying planning permission for this low-suitability building is considered disproportionate to the risk of finding a bat roost. Therefore, instead, it is proposed that a destructive survey of the potential bat roost features is undertaken in order to check for bats and/or signs of bats. The destructive survey should be completed by, or under the supervision of a suitably qualified ecologist following a toolbox talk given to the roofing team. A suitable toolbox talk is given in Appendix 2. The tiles in key areas should be removed while the ecologist is supervising the work.
- 6.2.3 Good practice survey guidance (Collins, 2023) states “*if all areas (including voids, cracks and crevices) of a structure have been inspected and no evidence found (and is unlikely to have been removed by weather or cleaning or be hidden), then further surveys are not appropriate*”. The destructive survey will allow the inspection of these features and key areas can be checked prior to the removal of the tiles.
- 6.2.4 If bats are present then the work must stop and the need for a licence re-considered.

Mitigation requirements

- 6.2.5 To mitigate the loss of the potential roost features and enhance the site for bats a bank of three interconnected, integrated bat boxes will be installed on the southeast corner of the new dwelling (Figure 3). These boxes would be suitable for use by a large (maternity) roost of a crevice dwelling bat species or smaller numbers of any of the bat species present in South Yorkshire.

Figure 3. Proposed location of three integrated bat boxes



Roofing and cladding membranes

- 6.2.6 Many of the breathable roofing membranes are not safe for bats if they come into contact with them. Due to the suitability of the area for bats it is recommended that any cladding membrane used is one of the products identified as safer for use in areas with roosting bats. Further information on the issue of bats and roofing membranes is included in Appendix 3.

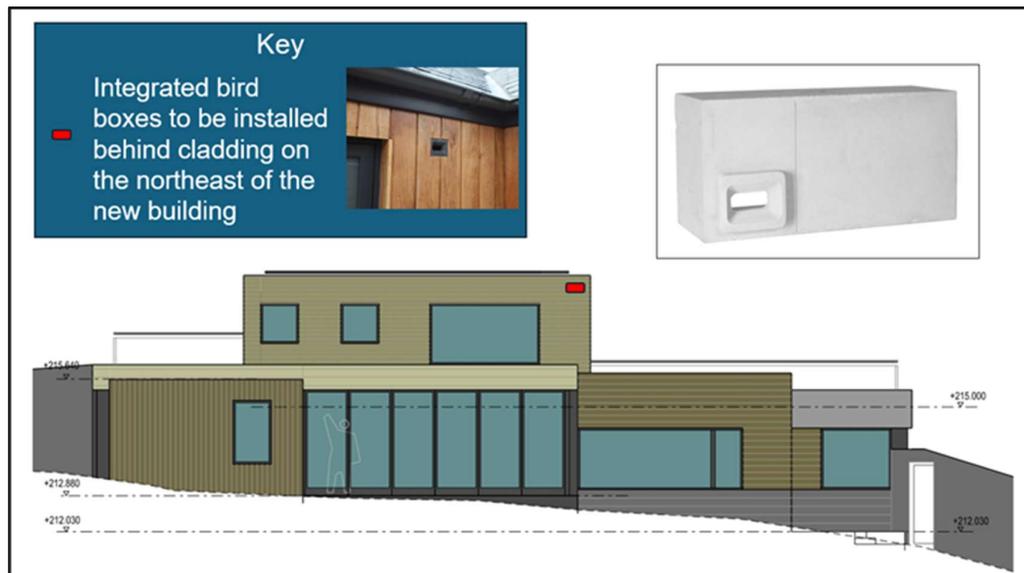
Lighting

- 6.2.7 Any new exterior lighting required for the site should be designed in line with guidance from the Bat Conservation Trust and the Institute of Lighting Professionals (ILP, 2023). New lighting should not be directed upwards and should not spill onto the location of the proposed bat boxes. In addition any new external lighting should be a warm white colour (3000 K), and activated by passive Infrared (PIR) movement sensors and timers to ensure lights are not left on throughout the entire night.

Nesting birds

- 6.2.8 It is recommended that either the demolition occurs outside the nesting bird season (March to August), or that a check of the building by a suitably qualified ecologist is made prior to the start of demolition. If an active nest is present, it must be retained until the young have fledged.
- 6.2.9 To mitigate the loss of the nest site it is recommended that an integrated bird box is installed behind the cladding on the northeast elevation of the new building (Figure 4).

Figure 4. Proposed location for the integrated bird box



7. Conclusion

- 7.1.1 Although one nocturnal survey would usually be required to inform the proposed demolition of the low suitability building, it is considered that the proposed destructive search and inclusion of three interconnected integrated bat boxes would be sufficient to mitigate the presence of any roost, in the unlikely event one may be using the building. It is also considered that this mitigation would be sufficient to allow a bat mitigation licence to be applied for, if a bat roost was identified during the destructive search, using Natural England's Licensing Policy 4.
- 7.1.2 The recommendations included in this report are considered valid for 8 months. If the project is delayed until after this time, Middleton Bell Ecology should be contacted to assess the need for an update survey.

8. References

Collins, J. (ed.) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines. The Bat Conservation Trust.

ILP (2023) Bats and Artificial Lighting at Night. Institute of Lighting Professionals. Available online at: <https://www.theilp.org.uk/documents/guidance-note-8-bats-and-artificial-lighting/>

Appendix 1. Legislation and Policy Guidance

Bats

Bats receive protection under the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 and the Wildlife and Countryside Act 1981 (as amended).

It is an offence to:

- Deliberately capture (or take), injure or kill a bat.
- Intentionally or recklessly disturb bats whilst they are occupying a structure or place used for shelter or protection or obstruct access to any such place.
- Damage or destroy the breeding or resting place (roost) of a bat.
- Possess a bat (live or dead), or any part of a bat.
- Intentionally or recklessly obstruct access to a bat roost.
- Sell (or offer for sale) or exchange bats (dead or alive), or parts of parts.

The Convention on Biological Diversity, signed in Rio de Janeiro, Brazil in 1992, requires member states to develop national strategies and to undertake a range of actions aimed at maintaining or restoring biodiversity. The UK Biodiversity Strategy was produced in response to the Convention.

In England & Wales, the Natural Environment and Rural Communities (NERC) Act, 2006 imposes a duty on all public bodies, including local authorities and statutory bodies, in exercising their functions, “to have due regard, as far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity”. It notes that “conserving biodiversity includes restoring or enhancing a population or habitat”. Barbastelle *Barbastella barbastellus*, Bechstein’s bat *Myotis bechsteinii*, brown long-eared bat *Plecotus auritus*, greater horseshoe bat *Rhinolophus ferrumequinum*, lesser horseshoe bat *Rhinolophus hipposideros*, noctule *Nyctalus noctula* and soprano pipistrelle *Pipistrellus pygmaeus* are included as priority species within Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006. At a more local level there are Local Biodiversity Action Plans for smaller geographical areas which may cover a greater or lesser range of bat species.

Where it is proposed to carry out works which will have an adverse impact on roosting bats a European Protected Species (EPS) license must first be obtained from Natural England. This requirement applies even if no bats are expected to be present when the work is carried out.

Birds

All wild birds are protected under the Wildlife and Countryside Act 1981 (as amended by the Countryside and Rights of Way Act 2000), which makes it illegal (subject to exceptions) to:

- Intentionally kill, injure or take any wild bird.
- Take, damage or destroy the nest (whilst being built or in use) or eggs of any wild bird.

National Planning Policy Framework

The National Planning Policy Framework for England was revised in 2023. This document states that plans should ‘promote the conservation, restoration and re-creation of priority habitats, ecological networks and the protection and recovery of

priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity’.

Appendix 2. Non-licenced Method Statement – Berrywell

Toolbox talk

It is not known whether Berrywell is used by roosting bats. The building has low suitability to be used by bats and has been subject to an inspection with no bats or signs of bats recorded but no nocturnal surveys have been completed.

Without a bat licence, it is illegal to deliberately capture, injure or kill a bat. Bats are protected from disturbance and their roosts are also protected¹.



Above: a pipistrelle approximately 5 cm in length

UK bats are very small, the bodies of the smallest bats can fit inside a match box. Several UK species rest in gaps and crevices no wider than 1 cm.

Suitable roost locations include missing verge mortar, and loose cladding panels. Any material forming a crevice must be removed carefully by hand. Suitable crevices/features should be searched by the ecologist prior to removal. All material over a crevice/void should be lifted in such a way as to avoid crushing any bats underneath. If bats or droppings are found, then all works in the surrounding area should cease and the ecologist contacted.

Below: location of the suitable roost features present



All tiles at the verge should be removed under the supervision of the ecologist. Additional supervision may be required depending on the initial findings. Other areas must be signed off in advance by the ecologist before works proceed unsupervised.

¹ Disturbing or destroying a bat roost can lead to unlimited fines, up to six months in prison and seizing of items used to commit the offence, e.g. vehicles, plant or machinery.

The membrane used behind the cladding used must be a type which has passed a snagging propensity test and has been approved as safe to use in bat roosts by Natural England².

As a minimum three interconnected integrated bat boxes will be installed within the new building.

The cladding membrane and bat boxes must be signed off as suitably installed by the ecologist.

Construction staff should not handle bats³.

Bat droppings look like mouse droppings, but crumble to dust, unlike mouse droppings. They may be present between roofing materials, in crevices in walls and on the wall tops.

If bats are recorded, then all works in the surrounding area should cease and a licensed bat worker should be contacted immediately (Greg Slack – 07514940990).

Development staff that have received: *Toolbox Talk – Berrywell*

Signature	Name	Organisation	Date

Area inspected	Ecologist signature	Work that can be done in that area (include timeframe)	Date

² The reason for this prescription is that modern non-bitumen coated roofing membranes (including all breathable roof membranes) have been shown to often cause the death of roosting bats, which can become entangled within the component filaments of these materials.

³ Bats in the UK have on rare occasions been shown carry rabies and are easily injured.

Appendix 3. Roofing and Cladding Membranes

Standard roof membranes can cause the death of significant numbers of bats. Traditional bitumen coated roofing felt is recommended where roosting bats are expected to be present.

The problem

Standard non-bitumen coated membranes (including almost all breathable membranes) used below roof slates and tiles present a significant problem for bats. Over time, strands are pulled away from the surface of these materials as bats crawl over them. These fuzzy strands are very strong and can tangle and trap bats, sometimes causing the death of bats over multiple years⁴.

One example we have encountered comprised a pipistrelle roost which formed in a building extension constructed in 2009. Over the course of just 13 years the roofing felt degraded to the extent that it trapped and killed more than 10 bats. Fortunately, the problem in this roost was identified and remedial work was undertaken to replace the roofing membrane in 2022.

Plate A3.1. Four dead pipistrelles tangled in breathable roofing membrane



Although a new roof might be considered to lack potential bat access points, that is often not the case. Roofs covered with stone slates almost always have gaps large enough to be accessed by bats, this is often also the case where imitation stone slates are used. On older buildings the uneven roof timbers and/or building design also often results in gaps on wall tops and between slates. Even on new builds it is often possible for bats to access potential roosts via features such as dry verge capping. Some bats can access a space no wider than a biro pen, therefore it is not surprising that they can find their way into most buildings.

Safe roofing membranes (and membranes behind cladding)

From a bat perspective, the best membrane option for areas where roosts are expected comprises traditional hessian-backed Type 1F bituminous felt. This product has been widely

⁴ Wearing S, Essah E., Gunnell K. & Bonser R. (2013) Double jeopardy: the potential for problems when bats interact with breathable roofing membranes in the United Kingdom. Architecture and Environment

and safely used as a secondary weather barrier since approximately the 1950s/1960s. Wooden sarking has also been used for many decades and if appropriately treated, is safe for use in bat roosts. Wooden sarking also has the benefit of providing additional insulation and is usually breathable.

At the time of writing (and to our knowledge) two products have passed the 'snagging propensity' test; consequently these products are approved by Natural England for use in bat roosts. This test attempts to replicate the wear and tear which results from bats crawling over the membrane. The approved products are: TLX BatSafe^{5,6} and SIGA Majcoat 350. Although they have passed this test, it is unclear how these membranes will degrade in the medium and long term, particularly in larger bat roosts. Therefore we do not recommend that they are used for roosts with multiple bats, and particularly for large (maternity roosts). A third product, SIGA Majcoat 200 SOB Diffusion, passed the test for its upper surface only. This product should not be used in known bat roosts or locations where bat mitigation is to be installed. Although none of these products are considered to be as safe as traditional Type 1F bituminous felt, they may provide an option for roofs where future bat use cannot be ruled out, and a breathable solution is required.

Additional considerations

In recent years a fairly substantial proportion of the lofts we have surveyed which had existing breathable felt, were found to have been damaged by wasps (Plate A3.2). The wasps appear to have chewed holes in the felt and formed nests. This doesn't appear to be a problem associated with traditional bitumen coated roofing felt. Any holes within roofing felt are likely to significantly reduce its functionality as a secondary weather barrier. Where bats or birds come into contact with breathable roofing membranes, they can also damage it causing it to leak, they can also significantly reduce the breathability of the felt in that location.

Plate A3.2. Damage to a breathable roofing membrane adjacent to a wasp nest



Traditional bituminous Type 1F roofing felt is a non-breathable product and therefore ventilation is required. Sufficient ventilation can usually be achieved, even in buildings with vaulted ceilings, however, some consideration during the design stage is required. Products to increase the ventilation within roofs where bituminous Type 1F felt has already been installed are also available.

⁵ <https://www.gov.uk/government/publications/bats-apply-for-a-mitigation-licence#full-publication-update-history:~:text=Use%20of%20safe%20roofing%20membranes>

⁶ TLX BatSafe requires all joints and cut edges to be taped in order to prevent the fraying of bare edges.