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Tyrer Ecological Consultants Ltd, Roselands, 3 Cross Green, Formby L37 4BH

Dusk Survey Results

July 2023

Former Sawmill

Spring Street

Ramsbottom

Bury

BL0 9JQ

National Grid Ref: SD78921657



Former Sawmill, Spring Street, Ramsbottom, Bury, BL0 9JQ
Dusk Survey Results

Document Title	Dusk Survey Results
Prepared for	PPY Design
Prepared by	Tyrer Ecological Consultants Ltd

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N.B. Bat emergence/re-entry surveys are typically valid for a period of 12-18 months, at the discretion of the Local Planning Authority and/or Natural England. Should your planning application not achieve consent, or a licence application (where required) not be applied for within this time period, updated surveys <u>may</u> be required.

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Appendix I: *Inspection & Assessment in relation to Bats & Breeding Birds* (Tyrer Ecological Consultants Ltd, December 2022)

1.0 Background and Introduction

- 1.1 As part of a proposed planning application regarding the Former Sawmill, Bury, Tyrer Ecological Consultants Ltd conducted a daytime assessment in relation to bats and breeding birds during February 2022. As part of this survey a Preliminary Roost Assessment (PRA) was carried out, which concluded the following:

“Based upon the findings of the survey, covered through sections 6.0 – 7.0 of the report and supported by Appendix I, building B1 at the Former Spring Street Sawmill been determined to offer ‘Moderate’ bat roost potential in accordance with Bat Conservation Trust - Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd ed. (2016), and further surveys by way of dusk/dawn surveys are recommended to be carried out to establish if the building supports a bat roost. No further surveys are required at B2.”

- 1.2 Proposals are understood to involve the demolition of the existing sawmill and subsequent development of the site.
- 1.3 Tyrer Ecological Consultants Ltd were therefore commissioned by PPY Design on behalf of their client, to undertake a further bat survey as recommended in the preliminary survey report; the surveys (two dusk emergences) were carried out in May and June 2023 in accordance with current Bat Conservation Trust (BCT) Guidelines during the active season of bats (see **Figure 1.1**).

Table 7.3 Recommended minimum number of survey visits for presence/absence surveys to give confidence in a negative result for structures (also recommended for trees but unlikely to give confidence in a negative result).		
Low roost suitability	Moderate roost suitability	High roost suitability
One survey visit. One dusk emergence or dawn re-entry survey ^a (structures). No further surveys required (trees).	Two separate survey visits. One dusk emergence and a separate dawn re-entry survey. ^b	Three separate survey visits. At least one dusk emergence and a separate dawn re-entry survey. The third visit could be either dusk or dawn. ^b

Figure 1.1 - Extract from Bat Conservation Trust – Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd ed. (2016)

- 1.4 The results, conclusions and recommendations following the surveys, including any indicative mitigation to inform an application to Natural England for a European protected species mitigation licence (EPSML), where necessary, will be supplied within this report.
- 1.5 This report should be read, understood, and presented to the local authority as an additional document to **Appendix I** (see contents page).
- 1.6 In accordance with *Biodiversity Net Gain: Good practice principles for development* (CIEEM *et al*, 2019), measures have been recommended proportionate to anticipated impacts to ensure that the proposed development results in a biodiversity net gain.

2.0 Bats - Legislation & Policy

2.1 All British bats and their ****roosts**¹ are afforded protection under Schedule 5 of the Wildlife & Countryside Act (1981) (as amended) and are listed in Schedule 2 of The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (SI 2019/579). When dealing with cases where a European Protected Species (EPS) (all UK bats) may be affected, a planning authority is a competent authority within the meaning of the Regulation 7 of the Regulations, that has a statutory duty as the local authority to have due regard to the provisions of the Regulations in the exercise of its functions.

2.2 Use of Buildings by Bats

- a) Summer breeding roost (May-August)
- b) Hibernation roost (October-March)
- c) Transitional or temporary roost (Mainly spring/summer months)

Roost selection is often closely correlated to suitable foraging habitat within a reasonable commuting distance from the roost and different sites are used depending upon insect densities and abundance, climatic conditions can also affect their ability to successfully forage. All British bats are insectivorous.

Policy

2.3 Paragraph 180 of the National Policy Planning Framework (as revised in July 2021) states:

180. When determining planning applications, local planning authorities should apply the following principles:

- a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;*
- b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;*
- c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and,*
- d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be*

¹ ******The term roost is generically referred to as a place that bat/s use for the any of the above reasons, however it should be noted that under the Conservation of Habitats and Species Regulations (2019) (EU Exit) (Regulation 43 (d) the term roost is not used but refers to “a *breeding site or resting place of such an animal*” and is afforded legal protection. The roost, breeding site or resting place of bats, which ever terminology is used is legally protected whether or not bats are in occupation.

integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.

- 2.4 Policy EN15 of the Manchester Core Strategy 2012 to 2027, titled Biodiversity & Geological Conservation, echoes this national focus on ecological conservation, and states:

“Developers will be expected to identify and implement reasonable opportunities to enhance, restore or create new biodiversity, either on-site or adjacent to the site, contributing to linkages between valuable or potentially valuable habitat areas where appropriate...”

and:

“Where adverse impacts are unavoidable, developers will be required to provide appropriate mitigation and/or compensation”, “It is important to recognise that brownfield sites often contain diverse and valuable biodiversity.”

3.0 Protected Species in Greater Manchester

- 3.1 Up to ten species have been recorded in Greater Manchester, most of which use built structures notably occupied residential properties for roosting - also trees. Bats (*Chiroptera*) feature on the Greater Manchester BAP and all are fully protected by UK legislation. The most frequently encountered bat species is the common pipistrelle (*Pipistrellus pipistrellus*) and its abundant status in Greater Manchester is reflected throughout the UK.

4.0 Survey Methods

- 4.1 Bat Conservation Trust - Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd ed. (2016) edition states:-

“The guidelines do not aim to either override or replace knowledge and experience. It is accepted that departures from the guidelines (e.g. either decreasing or increasing the number of surveys carried out or using alternative methods) are often appropriate. The guidance should be interpreted and adapted on a case-by-case basis according to site-specific factors and the professional judgement of an experienced ecologist. Where examples are used in the guidelines, they are descriptive rather than prescriptive.”

- 4.2 Relative to the above the survey protocol has been determined using the collective and long standing experience of Tyrer Ecological Consultants Ltd and knowledge of the specific nature of the site.

Survey Protocol

- 4.3 The timing of the surveys took place in May and June thus within the main active period of bats, at a time when bats have entered their active season and a period of the year when maternity colonies are forming at established bat roosts, following on from winter hibernation. The active season of bats is generally accepted as May – August across the industry.
- 4.4 In accordance with Bat Conservation Trust - Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd ed. (2016), it is specified that: *“The bat active period is generally considered to be between April and October inclusive”*, though the period of May - August is the optimal most productive period that Natural England accept bat surveys and grant European Protected Species Mitigation licences (EPSML).
- 4.5 Where bats are roosting, they are likely to be detected by the ecologists who are trained in the use of bat detector hardware and call analysis software (Analook / Kaleidoscope), and specifically how to detect bats and to correctly identify/disseminate bat calls.
- 4.6 Furthermore, at dawn, temperatures are usually lower than at dusk; as a result, bat activity can, in some locations, be less frequent. Additionally, where singular/small numbers of bats are present and there are no survey constraints then dawn surveys are of no more value than dusk surveys; singular bats can and do return to a roost before dawn and as a result a dawn survey would not record them anyway.

BCT issued an Interim Guidance Note in May 2022 in advance of a 4th edition of bat survey guidelines to be published in Summer 2022, which supersedes existing guidelines and states in relation to dawn surveys that:

“Whilst dawn surveys can reward surveyors with displays of dawn swarming behaviour, there is a concern that bats that have returned earlier will be missed...”

The 4th edition of the survey guidelines will therefore transition away from the standard use of dawn surveys, particularly as a method for presence/absence surveys in favour of dusk surveys supported by NVAs. The use of NVAs has the potential to improve the quality of dusk surveys, providing clarity on exact emergence points and bat counts that might not otherwise be available because of the limitations of the human eye.”

- 4.7 Survey protocol should not be determined by parties who are 1) not familiar with the site, and 2) do not have a sufficient level of experience in relation to the undertaking of dusk/dawn bat surveys.
- 4.8 The number of surveys and surveyors was adequate relative to the roost potential that was identified during the daytime appraisal – i.e. **‘Moderate’** potential. Two surveyors were required to accurately monitor potential roost features (PRF’s) on the building at any one time; the locations and positions of the surveyors was in correspondence with the features that were identified during the daytime survey.
- 4.9 Surveyors were strategically positioned so that all elevations with bat roost potential, as described in the daytime report, could be observed without limitations. The surveyors were aided with Anabat, Batlogger, Echometer EM2, Peersonic, or equivalent electronic bat detectors that enable the locating and recording of the high frequency calls that are emitted by bats; echolocation calls were analysed the next day using Analook or equivalent computer software to verify field observations; where deemed appropriate by the attending ecologists, elevations were also surveyed via the use of a Night Visual Aid (NVA) Camera (Panasonic HC-VXF990) – recordings would be subject to review the following day.

Survey Limitations

- 4.10 Following the completion of the further survey, having carefully considered the results and conclusions, no significant constraints were experienced that might hinder the gathering of ecological data on which to base sound conclusions and recommendations.

5.0 Results

5.1 Dusk emergence surveys were undertaken on the 16th May and 07th June 2023 by a combination of three surveyors; the credentials of which have been given within **Table 5.1**. **Table 5.2** and **Figures 5.1 and 5.2** document the results of the dusk surveys.

Table 5.1 – Surveyor Credentials

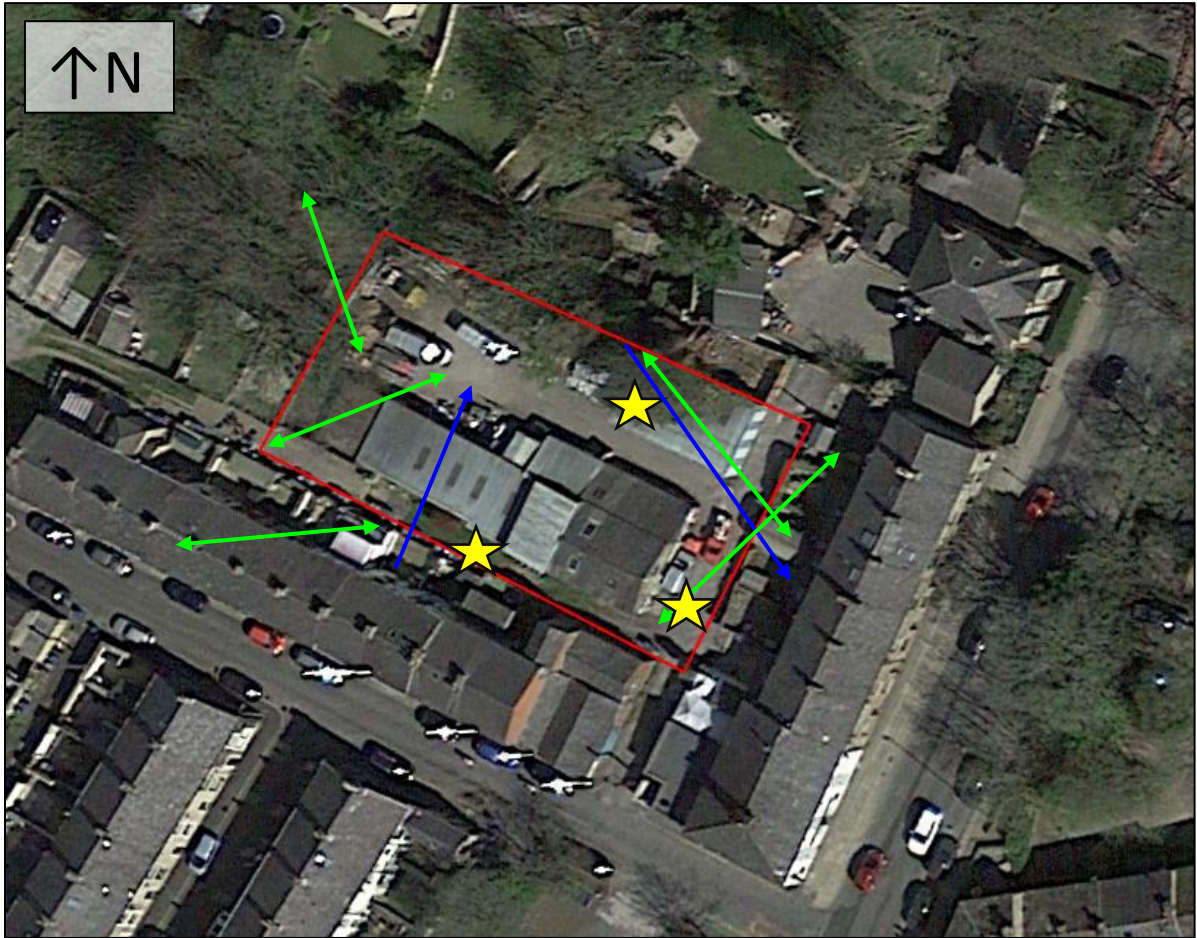
Surveyor(s)	Experience	Surveyor Credentials
Miss. T. Hesketh	3 years	- An experienced Consultant Ecologist with 3 years of professional training and experience; holding a BSc in Wildlife Conservation and MSc in Conservation & Biodiversity. - Accredited agent on the Class 2 Natural England bat license of Mrs. K. Wilding (CLS-14227).
Mr. D. Burrows	3 years	- An experienced Consultant Ecologist with 3 years of professional training and experience; holding a BSc in Wildlife Conservation and MSc in Conservation & Biodiversity. - Accredited agent on the Class 2 Natural England bat license of Mrs. K. Wilding (CLS-14227).
Mr. D. Boyd	8 years	A highly experienced bat surveyor with several years' experience with Tyrer Ecological Consultants Ltd
Miss. A. Hamer	2 years	An experienced Ecologist working as a sub-contractor for Tyrer Ecological Consultants who holds a Natural England Class 1 bat licence (2021-54008-CLS-CLS)

Table 5.2 – Survey dates, times and weather conditions

Time	Date	Weather Conditions
2046 – 2235	16 th May 2023	Sunset: 2106: Dry, Light breeze, 10% cloud cover Start temp: 14.0°C End temp: 11.0°C
2116 – 2305	7 th June 2023	Sunset: 2136: Dry, Light breeze, 5% cloud cover Start temp: 14.0 °C End temp: 12.0 °C

Table 5.3 – Dusk Survey Results

Time	Dusk Survey	Activity
2046 – 2235	16 th May 2023	Summary: No bat emergence from the building, common pipistrelle activity was recorded locally 2127 hrs: Common pipistrelle (CP) foraging around trees 2136 hrs: CP commuting north to south 2140 hrs: CP pass overhead 2143 hrs: 3x CP feeding around building 2148 hrs: CP emerging from terrace behind surveyor 2151 hrs: 12x CP foraging over houses to the south of Site 2152 hrs: CP foraging to east of Site 2154 hrs: Commuting CP to east of Site 2200 hrs: Bats returning to a crack repeatedly but no entry General activity consisted of commuting and foraging by a maximum of 12x common pipistrelles throughout the duration of the survey
2116 - 2305	7 th June 2023	Summary: No bat emergence from the building, common pipistrelle activity was recorded locally 2158 hrs: CP foraging along southern aspect of building on Site 2203 hrs: CP foraging along terraced houses to south 2210 hrs: CP commuting along treeline to north 2215-2222 hrs: A single CP foraging over terraced houses to south 2225 hrs: A CP foraging between buildings to northeast of Site 2230: CP pass recorded but not observed General activity consisted of commuting and foraging by a single common pipistrelle around the Site throughout the duration of the survey.



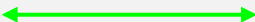
16/05/2023

Key			
	Site Boundary		Foraging activity
	Surveyor Positions		Commuting activity
	Directional compass		

Figure 5.1 – Visual Aid – Dusk Survey Results with Key



07/06/2023

Key			
	Site Boundary		Foraging activity
	Surveyor Positions		Commuting activity
	Directional compass		

6.0 Survey Conclusions & Recommendations

- 6.1 From the dusk survey results, it can be concluded that whilst using best practice survey methodology, emergence of bats was absent at the Former Sawmill during the survey; activity comprised of foraging and commuting by a maximum of twelve common pipistrelles (*Pipistrellus pipistrellus*) in close proximity to the site. Although during the first survey, there were multiple bats displaying behaviour typically associated with re entry to a building such as circling and flying up towards the gutter in close proximity to the wall, no bats went inside the building. This behaviour was repeated for several minutes and can sometimes indicate the sharing of information in respect to a potential roost location for a variety of purposes including transitional, mating or hibernation for example. At the area of the building where this behaviour occurred, there are multiple, significant gaps in the stonework that provide PRF's for bats (see **Figure 6.1**).

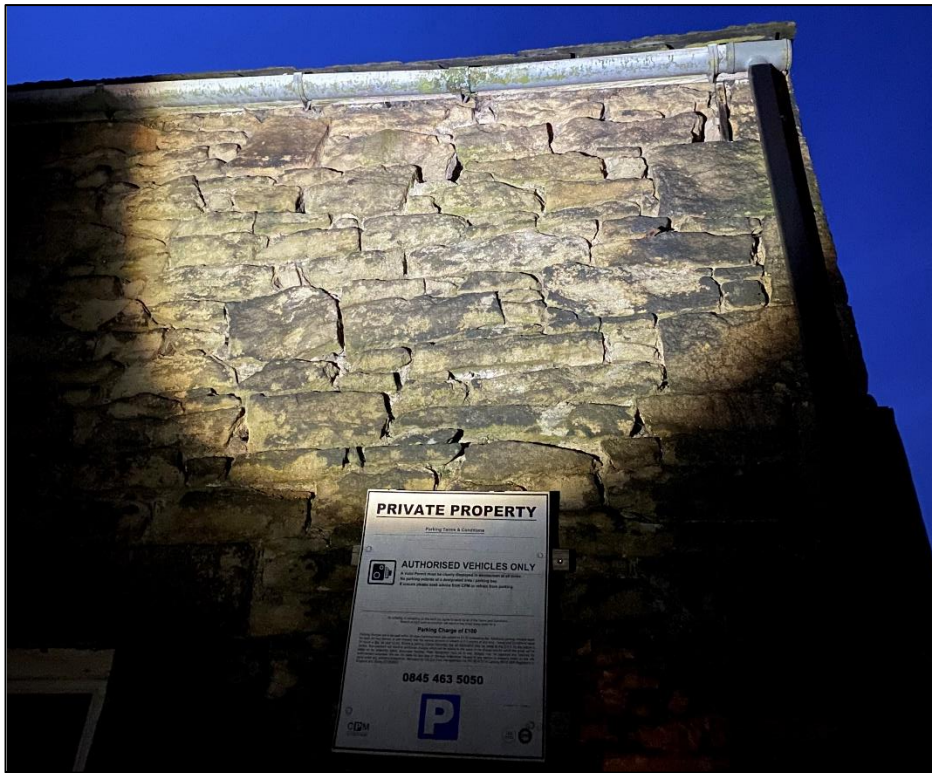


Figure 6.1 – Gaps in stonework at area of interest

- 6.2 Although no bat emergence was recorded during the dusk surveys, due to the observed behaviour during the first dusk survey, in addition to the high number of bats observed and their transient nature, it is recommended that an Ecological Clerk of Works (ECoW) is present whilst work commences at the site, the ECoW will undertake further checks for the possible presence of bats or recent evidence of use which will include the use of endoscope and narrow beam torch light. It should be noted that if bat/s are located at this time works will cease, the roost retained, and it will then be necessary to apply for a European Protected Species Mitigation License (EPSML). It should be stated that if bats, or evidence of bats (see **Figure 6.1**), is / are found at any other stage during the works then as a legal requirement the work at the site should immediately cease and a bat ecologist contacted for further advice.



Figure 6.2 – Bat droppings (left) and pipistrelle bat (right)

- 6.3 If bat(s) or their roost will be affected then a Natural England Mitigation licence will be required to legally continue with the work. Notwithstanding the granting of a licence works that would affect a roost cannot take place if a maternity colony is in occupation.
- 6.4 Notwithstanding absence of roost behaviour observed, the proposed development scheme might consider enhancement for bats as part of its biodiversity net-gain goals, in accordance with local and national planning policy.

See Figures overleaf for indicative ideas which could be integrated during the proposed new development at the Former Sawmill.

Enhancing a development site for Bats

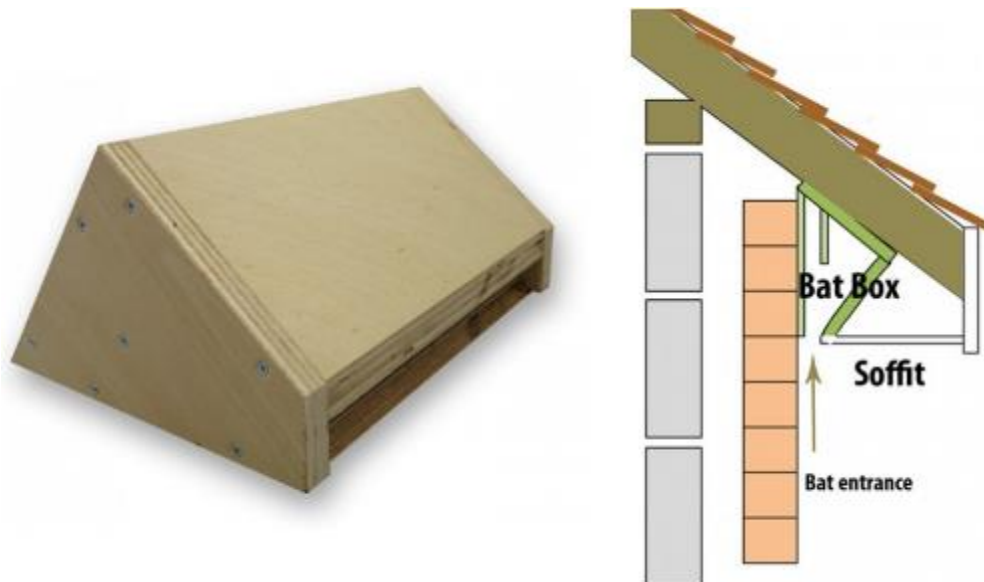
Integrated bat box

The Habibat Bat Box is a solid box made of insulating concrete with internal roosting space. The box blends seamlessly into brick-built properties and may be incorporated into the fabric of buildings, being best placed on gable elevations.



Soffit access

Where soffits are instated at gable elevations, roost provision may be instated in the form of a soffit bat box with internal roosting space.



Externally fitted boxes

A large number of externally fitted box models for bats exist for buildings and trees. Suitable models for both buildings and trees may include the Eco Kent Bat Box.

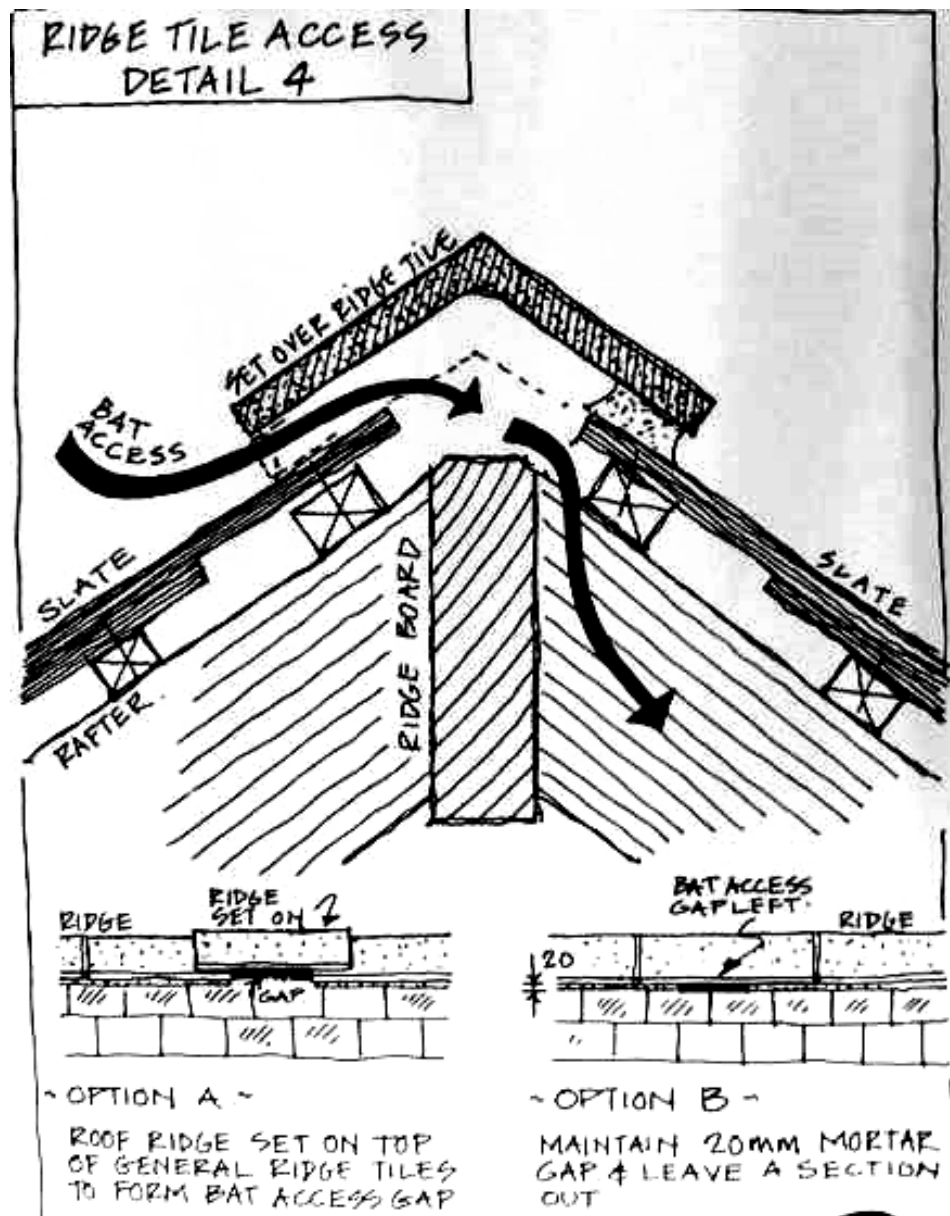


Ridge access

Where appropriated, ridge tile access should be made with the incorporation of traditional Bitumen 1F underfelt immediately beneath ridge tiles. Breathable BRM membrane can cause significant problems where bats are in contact with it, whereby their fine claws become entangled within the fibres of the membrane, entrapping and killing bats.

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7.0 References

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