



EXTERNAL WALL INSULATION (EWI) AND ASSOCIATED WORKS TOOLKIT

Pack B: Ecologists | Part 2: Guidance for Ecologists

Home Improvement Series









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TOOLKIT PACKS



Pack A: Clients Pack

- Part 1 General introduction
- Part 2 Guidance for clients



Pack B: Ecologist's Pack

- Part 1 General introduction
- Part 2 Guidance for Ecologists
- Part 3 Precautionary Derogation Licence Application
 - application form
 - MS template



Pack C: Contractors Pack

- Part 1 General introduction
- Part 2 Guidance for Contractors
- Part 3 Mitigation method statement
- Part 4 Toolbox talk



Pack D: Mitigation Pack

- Part 1 Property mitigation audit form
- Part 2 Example of a completed mitigation audit form
- Part 3 Mitigation solutions and enhancements catalogue
- Part 4 Bat and bird public information request
- Part 5 Information on protected species and wildlife boxes for property owners



OVERALL PROCESS

STAGE 1: Determine risk to bats and breeding birds

- Desktop survey including Local Record Centre search
- Walkover survey by suitably qualified ecologist checking for signs of bats, bat potential including potential access points and signs of breeding birds

Property has NO signs of breeding birds or bats / potential for bats – continue with works incorporating enhancements on those properties

Property has signs of breeding birds or bats / potential for bats – continue to stage 2

STAGE 2: Mitigate through design

- Avoid impacts by ensuring all bat access points are retained and the roofline/soffits are not affected
- Carry out works outside of bird breeding season
- Provide replacement bird nests appropriate for relevant species

Property's bat access points CAN be retained / no extensions to the roof required / no new soffits/fascias required

- Produce method statement including bat and bird mitigation and enhancements and apply for precautionary bat licence
- continue with works in accordance with method statement for those properties

Property's bat access points CANNOT be retained / extensions to the roof required / new soffits/fascias required – continue to stage 3

STAGE 3: Presence / absence survey

 Where potential impacts can't be avoided, bat presence / absence surveys will be required in accordance with published guidelines

Property has NO evidence of bats

- Produce method statement including bat and bird mitigation and enhancements and apply for precautionary bat licence
- Continue with works in accordance with method statement for those properties

Property HAS evidence of bats - Apply for specific bat (derogation) licence for that property and carry out works in accordance with method statement (incorporating bird mitigation and enhancements) OR do not carry out works



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1 INTRODUCTION

1.1 Aim of this document

- 1.1.1 The purpose of this document is to provide guidance (not rules) for the ecologist on how to undertake protected species survey (bats and birds) on properties having EWI, and takes into consideration the constraints of time, size of scheme, financial and human resources.
- 1.1.2 The document does not aim to repeat any of existing published guidance (for example the bat survey guidelines).
- 1.1.3 The document does not aim to provide risk assessments or detail on health and safety. The companies delivering the schemes will have their own systems in place and it is up to the ecologist to find out what is required (e.g. PPE, risk assessment, CSCS cards, PI insurance, PL insurance, reporting to site).

2 SURVEY

2.1 Survey aims and strategy

- 2.1.1 An ecological survey will be required for bats and nesting birds, which are the protected wildlife most likely to suffer negative impact as a result of EWI installation.
- 2.1.2 The ecological survey should follow the strategy illustrated in figure B2-1 in Appendix A.
- 2.1.3 The aim should be to carry out as much survey as possible based on the published guidance¹ but also within the constraints of time, size and budget of the scheme. The installation of EWI is often constrained by time and resources (see Part 1, General Introduction). In many cases a minimum level of ecological survey is permissible (desktop, walkover and inspection from the scaffold) on the condition that off-the-peg mitigation is implemented wherever potential wildlife features are found under the provision of a Derogation Licence (see Part 1 and Part 3 of the Ecologist pack). The strategy assumes that time and resources will not allow a sufficient level of survey to confirm use of a potential feature by wildlife and so a precautionary approach to mitigation is adopted unless special circumstances prevail (e.g. the need for an emergence survey for planning or because more detailed information about protected species is needed for a given property).

¹ Collins, J (ed) (2016) BatSurveys for Professional Ecologists: Good Practice Guidelines (3rd edn). The Bat Conservation Trust, London. ISBN-13 978-1-972745-96-1



2.2 Planning consent and listed buildings

- 2.2.1 Most energy improvement schemes are classed as permitted development, although some local authorities will require planning consent (e.g. Snowdonia National Park Authority).
- 2.2.2 The project managers in charge of the scheme should find out whether properties are listed and whether buildings are affected by any other conservation restrictions that might negate eligibility for EWI.

3 TYPES OF SURVEY

3.1 Desktop survey

- 3.1.1 It is helpful to make a digital exploration of the properties on the scheme using a street-view programme (e.g. via the maps of a well-known search engine). Survey for wildlife potential is not possible with this method but it is possible to gain an impression of the types of structures involved in order to plan the walkover and to clarify house numbers and locations.
- 3.1.2 Always request biological records for the area of the scheme, if available. Some biological records centres offer a dedicated 'bat and bird' search for cases where it is not necessary to obtain all species records. Note that a lack of records for a given area does not indicate an absence of a species from that area. Any records of bats or birds that do occur within the scheme must be followed up with a closer inspection (roof void and closer inspection of eaves). An emergence survey might also be necessary.
- 3.1.3 Obtain all details of proposed works from the contractors. Other work can be carried out at the same time that might also have an impact on bats and birds, for example replacement of an entire roof, removal of chimneys, replacement of soffits and fascia, whether eaves will be blocked up or the cavity wall sealed at the top.

3.2 Walkover survey

- 3.2.1 Always carry out a walkover of every property on the scheme. An example walkover survey sheet is provided in Appendix C (Table B1-1).
- 3.2.2 A single walkover should be sufficient if all the properties on a scheme can be surveyed en bloc. Occasionally, outliers are added to schemes at a later stage and will require a separate visit.
- 3.2.3 Walkover surveys should be carried out as soon as possible at the start of a scheme. Note that the contractors might still be engaging with property owners and the list of properties receiving exterior insulation will be evolving (i.e. not final). It is better to survey too many in one go than to make repeated visits.



- 3.2.4 Respect for privacy is imperative during the walkover, given that some property owners will not yet have engaged with the contractors, or may have only just been notified about the scheme by mail. Avoid use of torches and binoculars (unless these can be used very discretely). Avoid entering gardens or other private land. Survey only from the pavement. Unfortunately this approach limits the ability to survey backs of properties and scaffold surveys might be necessary later on in order to check these areas. This should be noted within the survey.
- 3.2.5 Ecologists should carry an identity badge to ensure any enquiring members of the public who you are and what you are doing. You may also receive a letter from the client (e.g. local authority/contractor) to explain what you are doing. Check with the contractor whether additional PPE is required. Once the site office has been set up then the entire area covered by the scheme can be designated a construction site for any employees, subcontractors and anyone else involved in the scheme. Then it might be necessary to wear full PPE (e.g. hard hat, gloves, high visibility clothing and appropriate footwear). If PPE is not required, consider wearing a jacket with the contractor's logo on as another means of confirming your identity and job to members of the public.

3.3 Bat emergence survey

- 3.3.1 Check whether the local authority requires emergence surveys to be undertaken. Most do not insist on emergence surveys but others (e.g. Snowdonia National Park Authority) may require an emergence survey report to accompany the planning application. A preliminary inspection might be sufficient provided that the level of survey is undertaken in accordance with the published guidance¹. If in doubt, discuss the matter directly with the local authority Ecologist or Biodiversity Officer.
- 3.3.2 Emergence surveys can be logistically challenging on large schemes and can quickly become costly, time consuming and place a significant demand on surveyor resources. The emergence survey might not even be possible if the scheme commences out of the active bat season, in which case survey from the scaffold and void inspections will be necessary for properties with potential eaves access. If an emergence survey is not required for planning, think whether an emergence survey is absolutely necessary. Can sufficient information be gained from a void inspection and inspection of the structure from the scaffold, with mitigation where appropriate? If surveys are required but cannot be carried out in the funding timescales, then those properties will need to be taken out of the scheme.

3.4 Survey from the scaffold

- 3.4.1 A lot of information can be gained from inspections directly from the scaffold. Features are always very different close up and other potential wildlife features may be spotted that were not seen from ground level.
- 3.4.2 Note that EWI will commence as soon as the scaffold has been erected. Request that the site manager accompanies the ecologist on the close inspection. Mark any holes and



- agree the mitigation strategy then and there. Follow up immediately with a list to confirm the mitigation agreed and details of any bat/bird boxes needing to be purchased (including model numbers and source). Providing the site manager with a web link directly to the store and item will help to ensure that the correct item is purchased.
- 3.4.3 The scaffold will be removed as soon as the work has been completed. Ensure that the mitigation audit (see Section 6) is carried out before the scaffold is removed.

4 SURVEY DATA

4.1 Biological records

4.1.1 Summarise as appropriate. Respect confidential records.

4.2 Walkover data

- 4.2.1 An example data sheet to record features that might be used by bats or birds is given in Table B2-1, Appendix B2-1. Record any crevices/potential crevices that might be used by bats/birds, either as resting/nesting places or that might lead to another structure use by bats/birds. Note any other observations, for example whether the presence of the hole is uncertain (might be a shadow), if birds are active around a particular spot on a regular basis, the presence of a porch with a slate top and lead flashing; and/or any other features that are not listed in the table that could be relevant to the proposed work and the potential impact on protected species.
- 4.2.2 Take into consideration *all* the proposed works for that scheme/property when recording data.
- 4.2.3 Also recorded should be where enhancement features may be suitable.
- 4.2.4 Reproduce the completed table in an appropriate format, for inclusion in the report.

5 MITIGATION

- 5.1.1 Decide with the site manager on appropriate mitigation measures for properties with issues. Figure B2-2 in Appendix B provides an outline for deciding on the mitigation method. A catalogue of suggested 'off-the-peg' mitigation solutions is given in Pack D, Part 3. The ecologist should have sufficient experience to decide what type of wildlife box/boxes is/are suitable for a given situation.
- 5.1.2 If one of the off-the-peg solutions is not suitable for a given property then the site manager will discuss how to retain that feature and a tailored mitigation method will be written for that property.
- 5.1.3 Given that each property with issues might require a different mitigation strategy, a 'Property Mitigation and Audit Form' (Pack D, Part 1) has been designed to i) select appropriate 'off-the-peg' mitigation for a given property and ii) provide a record of the



- mitigation for that property's file and iii) record the mitigation audit. A separate form is completed for each property requiring mitigation. The relevant sections (issues and choice of mitigation) are highlighted. The form is given to the site manager so that the mitigation can be actioned and the form filed appropriately.
- 5.1.4 Once developed the mitigation measures should be detailed in the report and the report signed off by the site manager to say they have read, understood and will implement the mitigation.
- 5.1.5 It is the contractors/clients responsibility to seek householder permission for the mitigation but ensure this has been done so that the factors identified can be incorporated.

6 EPS DEROGATION LICENCE

6.1.1 Where bat roost potential has been identified, even if low, an EPS Derogation Licence will be required for the works as a precautionary measure for if bats are found (see Part 1 for more information). An example licence and recommended method statement template are provided in Part 3).

7 MITIGATION AUDIT

- 7.1.1 An audit is to be carried out of all the mitigation installed. Note that this audit is for mitigation and not biodiversity enhancement features. The mitigation audit requires inspection while the *scaffold is in place* in case adjustments to the mitigation are required. The scaffold will be removed as soon as the work is completed and it is, therefore, imperative that the audit is booked with the site manager in good time (given that straightforward installation of EWI only takes a few days).
- 7.1.2 The Property Mitigation and Audit Form (Pack D, Part 1) includes a check box against the mitigation to confirm when the audit has been completed.

8 BIODIVERSITY ENHANCEMENTS

- 8.1.1 Always ask for biodiversity enhancement features to be fitted, including bat and bird boxes.
- 8.1.2 Give the contractors a target; a minimum number of features to aim for. The target should be less than the actual number of suitable properties on the list because some owners will not want wildlife boxes fitted on their property. Some areas will have more suitable surrounding habitat than others and so the number of features provided varies for each scheme. The number of features will also depend on cost. Choose appropriate sites for bird and bat boxes (e.g. near trees or mature vegetation, away from lights).
- 8.1.3 Provide a list of all properties where biodiversity enhancement features could be provided together with the detail (e.g. bird box or bat box, how many, details of models).



- 8.1.4 The contractors must gain permission from the property owner before fitting any biodiversity features. An information leaflet is provided (Pack D, Part 5) which might help an uncertain property owner to reach a decision. It also helps if the ecologist can advise a property owner directly.
- 8.1.5 The enhancement features should be durable and be able to last as long as the property. Opt for prefabricated woodcrete or similar products that can be embedded in the wall insulation (with the exception of some bird boxes, e.g. sparrow terraces or house martin nests, which have to be attached to the surface). The same sorts of models of bat boxes can be used as proposed for the mitigation. See the Mitigation Solutions Catalogue, Pack D, Part 3.

9 REPORT

9.1 Report format

- 9.1.1 A report will need to be produced for the contractors. Aim to keep the report as simple as possible for ease of reading and extraction of relevant information. An example of a suitable format is given in Appendix D.
- 9.1.2 Treat the report as a working document that will be subject to change. Produce a preliminary report immediately after the walkover. Before any work is undertaken, ensure that the site manager has a copy of the report and has signed it off to say they have read, understand and will implement any measures identified. It also means that all further survey and mitigation can be discussed in advance. Update with results of further surveys later on and as properties are added or removed from the scheme (if necessary), and get each version signed off.
- 9.1.3 Present the results of the walkover survey in the report for the contractors. All properties are listed whether issues are found or not. The inclusion of properties without issues in the table i) provides written confirmation that those properties do not require follow up and ii) shows project managers and contractors that those properties have been surveyed. Exclusion of these properties from the table leads to uncertainty.
- 9.1.4 It is also important to demonstrate what information was given at the time with regards to the works on that property so it can be clear if the contractors need to contact the Ecologist with regards to changes to the required works if necessary.



APPENDIX A: SURVEY METHOD

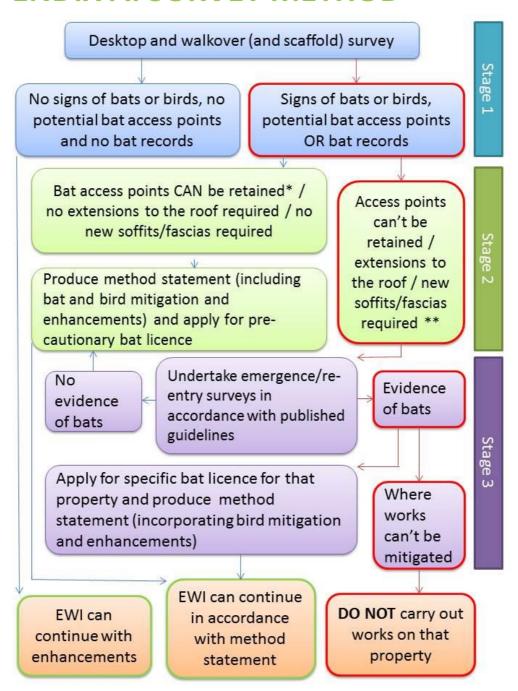


Figure B2-1: Protected species survey strategy

- *Where bat records exist, lack of bat access MUST be confirmed by closer inspection and void inspection where necessary, otherwise emergence/re-entry surveys are required.
- **if access points can't be retained or roof works are proposed but there is no access to the void (confirmed through internal inspection/endoscope from scaffold), suitable mitigation can be proposed in accordance with B2.2 as part of the method statement and precautionary licence application and therefore further survey work would be needed may be avoided.



APPENDIX B: MITIGATION METHODS

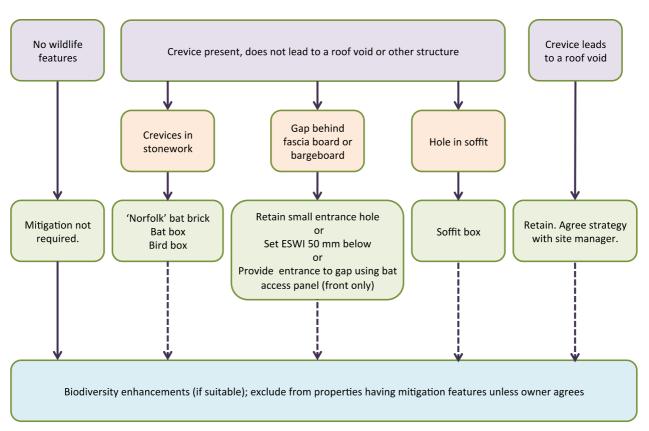


Figure B2-2: Mitigation strategy selection



APPENDIX C: WALKOVER DATA SHEET

Table B2-1: Example walkover data sheet

	Contractor ref	Holes (tick)									
Address		Roof	Soffit	Fascia	Lead flashing	Walls	Eaves	Bargeboard /Copings	Birds	M / U*	Comments / other observations

^{*}M - mitigation required; U - uncertain whether feature present; closer inspection required

Tick the features that might be used by bats or birds, or that might lead to another structure used by bats/birds.

Note in the comments box any other observations, for example whether the presence of the hole is uncertain (might be a shadow), if birds are active around a particular spot on a regular basis, the presence of a porch with a slate top and lead flashing; any other features that are not listed in the table that could be relevant to the proposed work and the potential impact on protected species.

If M, give a suggestion as to a suitable strategy in the comments column

If U, a decision will be made on mitigation after the potential feature has been inspected (eg from the scaffold)



APPENDIX D: REPORT TEMPLATE

Front page with sign off sheet

INTRODUCTION

Background to the scheme

- state who is the ecological consultancy
- who has commissioned the ecological survey
- how many properties (approximately) are included on the scheme
- map/plan showing the approximate geographic area of the scheme

Proposed works

brief summary

Summary of legislation (bats and birds)

• brief summary of legislation relating to bats and birds

METHODS

Desktop survey

Walkover survey

who conducted the survey; qualifications

Survey limitations

RESULTS

Desktop survey

 very brief summary stating whether bats and any bird nests recorded within the area of the scheme; avoid giving addresses or any specific location details

Walkover survey

- brief description of the types of property receiving EWI
- summary of general observations, whether suitable crevices that might be used by bats/birds present; any evidence of use by protected species has been found.
- comment on the suitability of surrounding area and habitat for bats.
- present a table of walkover results (e.g. a typed version of the walkover data sheet)

Void inspections

• note any signs of bats past or present.



• if no signs, note any potential entry points and whether those potential entry points could be lost as a result of the proposed works (EWI or other works on the roof if included in the scheme).

Emergence surveys [if carried out; will not feature in the initial report]

• report as advised in the published guidance.

CONCLUSIONS

- conclude whether surrounding and buildings being worked on are suitable for bats.
- conclude whether further surveys are required; e.g. say how many properties need mitigation (taking into consideration the work required).

METHOD STATEMENT

- start on a new page so that the site manager can locate and print the relevant section efficiently.
- a clause at the start is a helpful reminder to the site manager of their commitment to proper implementation of the mitigation: e.g. "This section is to read and implemented by all relevant parties, including the site manager and team foremen."
- complete a Property Mitigation and Audit form for each of the properties requiring mitigation; included in an appendix at the end.

Training

• emphasise the need for a toolbox talk

Exterior wall insulation mitigation

- detail the mitigation strategy in clear steps
- give the timing of the mitigation e.g. inspection from the scaffold require that site manager arranges for the ecologist to be on site as soon as the scaffold is in place

Mitigation audit

ENHANCEMENTS

- give the target; a minimum number of features to aim for.
- give a table or list of all properties where biodiversity enhancement features could be provided together with the detail (e.g. bird box or bat box, how many, details of models).
- Note that permission from owner must be obtained.
- Point owner/site manager in direction of FAQ about bat and bird boxes.