

ECOLOGIST'S PACK



EXTERNAL WALL INSULATION (EWI) AND ASSOCIATED WORKS TOOLKIT

Pack B: Ecologists | Part 3.1: EWI EPS (Bats) General
Mitigation Statement Template

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



General Mitigation Method Statement for Energy

Improvements

European Protected Species (Bats) Licence

Planning Application No.	
Contact	
Ecologist	
Bat Survey Licence Number	
Date of Method Statement	
Version	



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EXECUTIVE SUMMARY

BACKGROUND

Domestic dwellings across Wales are receiving energy improvements under the [ENTER SCHEME HERE] scheme in order to improve energy efficiency. The dwellings may receive one or a combination of improvements (e.g. loft insulation, replacement windows, replacement boilers, and exterior wall insulation (EWI)). The properties vary widely in age and construction and the number of properties in a given scheme averages around 150 to 500.

The installation of loft insulation and the application of EWI, in particular, carry a risk to protected species (bats and birds) where access holes to resting places and actual resting places could be blocked.

The schemes commence as soon as funding is made available (any time of year) and must be completed within a strict timeframe. The strict deadline, lack of flexibility of start date and the high number of properties being worked on, presents a logistical challenge with regard to protected species survey; survey can rarely be carried out to the extent that is recommended within the published guidelines for bat survey. Presently, no published guidelines are available that specifically address energy improvement measures to buildings.

MITIGATION

Reasonable avoidance measures and 'off-the-peg' mitigation solutions have been devised to enable the projects to proceed within the tight schedules and at any time of year. The mitigation method aims to retain any holes with wildlife potential and thereby avoid the risk of disturbance to or destruction of a bat roost (or nesting birds). The method also ensures that the continued ecological functionality of the site is maintained and that there is no impact on the favourable conservation status of any bat species. An ecologist is engaged at the start of each scheme to assess properties for bat (and bird) potential. Any holes and gaps that have the potential for bats (or birds) are retained. The minimum level of survey is a ground-level walkover, inspection of crevices from scaffold and roof void inspections (where necessary). The current licence application is for a precautionary licence to permit disturbance to a bat roost/resting place if bats are found unexpectedly during the works. An animal welfare strategy will be put in place. Applications will also be made for property-specific derogation licences where necessary. A selection of bat and bird boxes is being installed as habitat enhancement features on properties in every scheme.



A INTRODUCTION

A.1 Background (general)

- A.1.1 Domestic dwellings across Wales have been selected to receive energy improvements under the [ENTER SCHEME HERE] scheme. The aim is to improve housing standards by reducing heat loss and to achieve a reduction in carbon emissions as a result.
- A.1.2 The dwellings will receive one or a combination of improvements, including top-up loft insulation, replacement windows, replacement boilers, and exterior wall insulation (EWI). Replacement of entire roofs may also be undertaken.
- A.1.3 The properties vary widely and can be of any age and construction.
- A.1.4 The numbers of properties included in a given scheme for a given geographic area vary but in general average 150 to 500 properties.
- A.1.5 The schemes commence as soon as funding is made available, which can be at any time of year, and must be completed within a strict, often limited timeframe.
- A.1.6 The works, in particular the installation of loft insulation and the application of EWI carry a risk to protected species (bats and birds) as a result of access holes to resting places and actual resting places becoming blocked. Typical examples include spaces behind fascia and bargeboards, holes in soffits, any holes leading to eaves and roof voids, crevices in exterior stonework, cavity wall, spaces between the wall plate and roof/eaves. In the case of roof replacement, any number of crevices within the entire roof structure (internal and external) could be lost.
- A.1.7 The strict deadline, lack of flexibility of start date and the high number of properties being worked on, presents a logistical challenge with regard to protected species survey; survey can rarely be carried out to the extent that is recommended within the published guidelines for bat survey¹. Presently, no published guidelines are available that specifically address energy improvement measures to buildings.

A.2 Full details of proposed works on site that are to be covered by the licence

(Note that the following proposed works will not apply to every property)

- A.2.1 Erection of scaffold around walls where EWI to be applied.
- A.2.2 Application of EWI and render.
- A.2.3 Replacement of fascia, bargeboards, copings and soffits.
- A.2.4 Adjustment of roof lines where required (e.g. extension to slates).
- A.2.5 Removal of chimneys.
- A.2.6 Fitting of loft insulation.
- A.2.7 Access to roof voids at any time of year.
- A.2.8 Replacement of windows and doors.

A.3 Actions requiring licensing

¹ Hundt, L (2012). Bat Surveys: Good Practice Guidelines, 2nd Edition. Bat Conservation Trust.



- A.3.1 Disturbance to the bats (if still present) when the proposed works are undertaken.
- A.3.2 Potential for the destruction of a bat roost.

B IMPACT ASSESSMENT (IN THE ABSENCE OF ANY MITIGATION)¹

B.1 Short-term impacts: disturbance

- B.1.1 Disturbance due to the presence of scaffolding and activity associated with construction.

B.2 Long-term impacts: roost loss

- B.2.1 Loss of bat roosts.

B.3 Long-term impacts: fragmentation/isolation

- B.3.1 Potential for fragmentation and isolation if a network of regular resting places within a given geographical area are lost (e.g. as a result of EWI). Pipistrelles, for example, move around within an area throughout a season.
- B.3.2 The works do not affect vegetation.

B.4 Post development impacts

- B.4.1 No post-development impacts are predicted because all potential impacts occur during the actual work.

B.5 Predicted scale of impact

- B.5.1 The scheme will ensure that where bat roosts are identified, actions will not be detrimental to the maintenance of the favourable conservation status of a bat population (or colony) potentially affected by the proposals. If the ecologist considers that works could be detrimental, works will stop and may only resume under a bespoke licence.

C REASONABLE AVOIDANCE MEASURES

C.1 Desktop survey

- C.1.1 [ENTER CONTRACTORS HERE] will arrange for the ecologist to carry out a desktop survey.
- C.1.2 A survey will be made of existing bat and bird records for a given scheme. Any records of bat roosts in any properties affected by the proposals will be followed up and a tailored mitigation method devised for those sites. Additional survey is to be carried out as necessary for those sites.
- C.1.3 Information will be made available to the ecologist that shows what improvements are being made to each property. The ecologist will prioritise further surveys of properties receiving EWI and/or loft insulation and new roofs.

C.2 Site survey

- C.2.1 [ENTER CONTRACTORS HERE] will arrange for the ecologist to carry out a walkover survey of all the properties in a given scheme.



- C.2.2 The ecologist will record any holes, gaps or features with potential for bats or birds.
- C.2.3 The ecologist will carry out a close inspection of all holes, gaps or features with potential for bats or birds from the scaffold and carry out roof void inspections where necessary. The inspections will make use of appropriate survey equipment including torches, endoscopes, close-focus binoculars, and mirrors.
- C.2.4 In circumstances where a bat colony is found, additional survey may be required in order to gain sufficient information on species, colony size and status. The surveys may include internal, dawn and/or dusk surveys. The results of any additional surveys will inform an appropriate mitigation method for that property and whether or not a property-specific EPS licence is required.
- C.2.5 The site manager will accompany the ecologist on all close inspections so that an appropriate mitigation strategy for each given feature can be discussed.

C.3 Mitigation strategy

- C.3.1 Site managers will agree with the ecologist an appropriate 'off-the-peg' mitigation strategy that retains holes, gaps or features with potential for bats or birds. The ecologist will agree which measures are appropriate for a given situation on a given property. A dedicated Mitigation Form (Table 1) will be completed for each property requiring bat (or bird) mitigation. The Mitigation Form includes a list of all possible mitigation strategies. The ecologist will highlight the features required for the property affected (e.g. Table 2). The table also forms the basis of a post mitigation compliance audit.
- C.3.2 The site manager will ensure that all the mitigation action is implemented. If this mitigation is not implemented as outlined in the report, then the licence is not being accorded with which is an offence under European law, the Conservation of Habitats and Species Regulations 2010 as amended. It is also an offence to provide false information in relation to a licence.
- C.3.1 The site manager will arrange for the ecologist to carry out a compliance audit of the mitigation detailed in any of the ecology reports relating to this scheme *before* any scaffold is taken down and before contractors leave site. Any mitigation that has not been implemented as agreed will be corrected.

C.4 Training

- C.4.1 All contractors/site managers involved with the installation of EWI and loft insulation will arrange for the ecologist to deliver a toolkit talk that emphasises the risk to bats/birds and the importance of the mitigation detail.



C.5 Animal welfare

- C.5.1 If any bats are seen/found when the ecologist is not on site then the contractors will stop work, cover/screen the bat(s) again and contact the ecologist (**ENTER ECOLOGIST CONTACT DETAILS HERE**) on how to proceed. If the ecologist cannot be reached, contact Natural Resources Wales protected species officer (0300XXX XXXX) or the BCT HelpLine 0345 1300 228 (operates out of hours during active season). Avoid handling bats where possible for reasons of personal health and safety and risk of injury to bats.
- C.5.2 In the event that any bats are accidentally injured during the works, the injured animal will be placed in a dark box and the ecologist notified immediately. A record of the circumstances will be passed to the ecologist for subsequent reporting to NRW.
- C.5.3 In the event that any bats are accidentally killed during the works, the corpse will be retained and the ecologist immediately notified. A record of the circumstances will be passed to the ecologist for subsequent reporting to NRW.
- C.5.4 If a bat maternity (nursery) roost is discovered at any point during the surveys then the roost area will be secured (i.e. the bats protected) and work will be postponed until a suitable time of year. An application will be made for a property-specific EPS licence if necessary.

C.6 Mechanism for ensuring delivery of mitigation and compensation measures

- C.6.1 The licence-holder will ensure that the method statement is followed correctly.
- C.6.2 The ecologist will carry out an audit of the mitigation before the scaffold is removed. The highlighted features will be ticked in audit column of the Mitigation Form (Tables 1 and 2) for the relevant property.
- C.6.3 The ecologist will instruct the Site manager to rework any wildlife features that have not fitted correctly.

C.7 Other protected species

- C.7.1 Although this licence application is not relevant to birds, it is appropriate to mention that birds are being included in the surveys and mitigation methods. Bird boxes will also be fitted as habitat enhancement features. In addition, although not a licensable offence, the mitigation measures will prevent obstructions to bat access points. Bat enhancements will also be included in the scheme.

**Table 1: Mitigation Form (one form per property requiring mitigation)**

Address:		
Follow mitigation method below		
More survey required	Void inspection	
	Emergence/return to roost survey	
Property specific EPS		
Feature	Mitigation	Audit
EWI		
Lead flashing	Avoid pressing down any lead flashing.	
Gap behind fascia board	Fit EWI 5 cm below the bottom edge of the fascia boards. Create a rough surface on top of the EWI trim.	
	Fit EWI up to fascia board but retain gap (as agreed with ecologist).	
	Retain opening at end(s) of fascia board.	
Hole in soffit	Fit EWI 5 cm lower than top of wall. Create a rough surface on top of the EWI trim.	
	Fit EWI up to fascia board but retain gap (as agreed with ecologist).	
	Fit a Schwegler Bat Access Panel (front only; figure 1) to allow access to hole.	
	Fit a Schwegler Bat Shelter (figure 2).	
	Fit a soffit bat box (figure 4).	
Gap under bargeboard/copings	Fit EWI 5 cm below the bottom edge of the bargeboard/copings. Create a rough surface on top of the EWI trim.	
Crevice in stonework or brickwork	Retain crevice as is.	
	Fit an 'Ibstock' Bat brick (figure 5)	
	Fit a Schwegler Bat Access Panel (front only; figure 1) to allow access to hole.	
	Fit a Schwegler Bat Shelter (figure 2).	
LOFT INSULATION		
Bat evidence in roof void (any)	Ensure ecologist present when insulation fitted.	
	Fit insulation in the Autumn months only.	
	Avoid blocking eaves.	
ROOF REPLACEMENT		
All roofs (bat evidence or not)	Proceed during the Autumn months only.	
	Arrange for ecologist to be present on site when coverings removed.	



	Coverings to be removed by hand.	
	Refuge bat box to be fitted (at location agreed with ecologist).	
	Site specific EPS licence required (for any site with a maternity roost if work cannot be carried out according to this method statement)	
BIODIVERSITY ENHANCEMENT		
Bat boxes	Schwegler Bat Access Panel <i>with</i> back plate (figure 1)	
	Schwegler 1WI (figure 3)	
Bird boxes	Open-fronted brick box	
	Sparrow terrace	
	Generic nest box	
	Swift box	
	House Martin shelter (compulsory if soffit width being reduced and House Martin nest site being lost)	

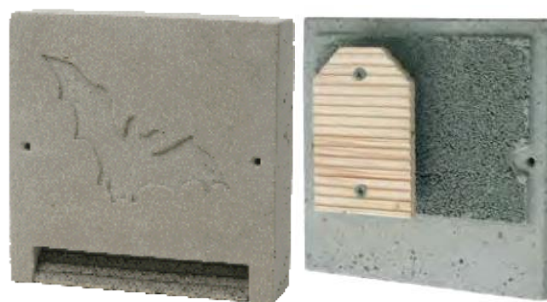


Figure 1: Schwegler bat access panel - front (left) and back plate (right; sold separately)



Figure 2: Schwegler bat shelter (sold in packs of 2)



Figure 3: Schwegler 1WI

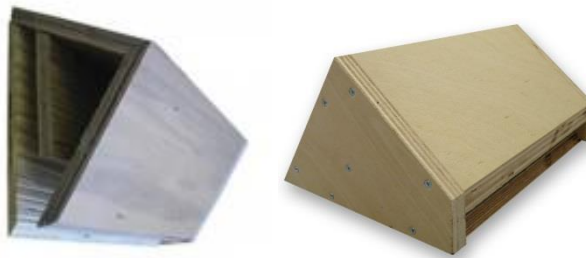


Figure 4: Soffit box (prefabricated boxes are available)



Figure 5: Norfolk bat brick



Table 2: Example of a completed Mitigation Form

Address: 53 Random Road, Gotham		
Follow mitigation method below		
More survey required	Void inspection	
	Emergence/return to roost survey	
Property specific EPS		
Feature	Mitigation	Audit
EWI		
Lead flashing	Avoid pressing down any lead flashing.	
Gap behind fascia board	Fit EWI 5 cm below the bottom edge of the fascia boards. Create a rough surface on top of the EWI trim.	
	Fit EWI up to fascia board but retain gap (as agreed with ecologist).	
	Retain opening at end(s) of fascia board.	
Hole in soffit	Fit EWI 5 cm lower than top of wall. Create a rough surface on top of the EWI trim.	
	Fit EWI up to fascia board but retain gap (as agreed with ecologist).	
	Fit a Schwegler Bat Access Panel (front only) to allow access to hole.	
	Fit a Schwegler Bat Shelter.	
	Fit a soffit bat box.	
Gap under bargeboard/copings	Fit EWI 5 cm below the bottom edge of the bargeboard/copings. Create a rough surface on top of the EWI trim.	
	EWI up to roofline only.	
Crevice in stonework or brickwork	Retain crevice as is	
	Fit an 'Ibstock' Bat brick	
	Fit a Schwegler Bat Access Panel (front only) to allow access to hole.	
	Fit a Schwegler Bat Shelter.	
LOFT INSULATION		
Bat evidence in roof void (any)	Ensure ecologist present when insulation fitted.	
	Fit insulation in the Autumn months only.	
	Avoid blocking eaves.	
ROOF REPLACEMENT		
All roofs (bat evidence or not)	Proceed during the Autumn months only.	
	Arrange for ecologist to be present on site when coverings removed.	



	Coverings to be removed by hand.	
	Refuge bat box to be fitted (at location agreed with ecologist).	
	Site specific EPS licence required (for any site with a maternity roost if work cannot be carried out according to this method statement)	
BIODIVERSITY ENHANCEMENT		
Bat boxes	Schwegler Bat Access Panel <i>with</i> back plate	
	Schwegler 1WI	
Bird boxes	Open-fronted brick box	
	Sparrow terrace	
	Generic nest box	
	Swift box	
	House Martin shelter (compulsory if soffit width being reduced and House Martin nest site being lost)	