Contacts:

Swift Conservation UK <u>mail@swift-conservation.org</u>

20207 794 2098 <u>www.swift-conservation.org</u>

Swift Conservation Germany

Goebenstrasse 3a - 30161 Hannover

2005 11) 66 00 93 - email: <u>bund.hannover@bund.net</u>

More information at www.bund-hannover.de

Supported by: DBU Region Hannover Landeshauptstadt Hannover Bingo! Umwelstiftung Niedersachsen



This is an English language version of a booklet produced by:

BUND Region Hannover, Goebenstr. 3a, 30161 Hannover Text: J. Lübbert, S. Salinger Photos: R. Gross / www.rogro.org (Titelseite), S. Maurer-Wohlatz, S.Salinger, J. Lübbert, H.-J. Schrader, Dipl.-Ing. A. Schneider Graphic artwork: J. Lübbert, Fa. Schwegler, Fa. Hasselfeldt Published 2010 / 2011



Information for Energy Consultants, Architects & Builders

Thermal Insulation & the Protection of building-dependent Bird and Bat species



Protection of bird and bat species which inhabit buildings, during renovation, restoration and redevelopment

Our hidden residents

A number of species such as common swifts, pipistrelle bats, house sparrows and black redstarts, live in our cities and rely for their nesting places on our buildings where they often live under our roofs. These useful creatures are endangered and therefore protected both under UK and EU law.





During renovation of buildings their nest sites, usually small niches in the roof tiles or facades, are often closed off without even noticing and no replacement is created. Even in new buildings the needs of these beneficial insect eating creatures are not being considered. As a result, our avian residents are suffering a severe "housing shortage".

Thermal insulation & the protection of buildingdependent species

To protect these creatures for the long term, existing nests and roosting places should be retained during building renovation or replacements provided based on professional advice. The planning of nest sites into new buildings also makes sense. There are many possible solutions which can be implemented with little effort and low cost including the following:

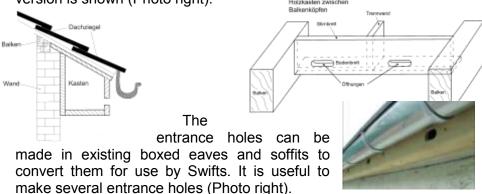
- Installation of exterior nest boxes
- Installation of brick boxes in the facade or thermal insulation
- Designs in eaves & between rafters & joists
- Installation in a pitched roof
- Installation in the gable area

Creating nest sites in eaves, soffits and gables

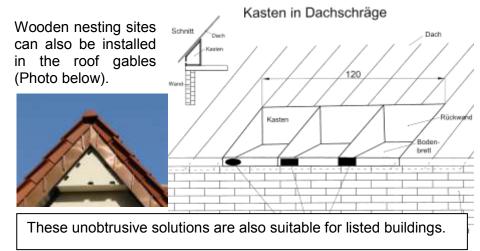
Nesting areas can be created in the eaves and gable areas or in the attic area, manufactured from plywood with little cost or effort.

A fascia board can be mounted in the area between the eaves and beam heads and provided with holes, a separator board and a floor board (Diagrams below). A box shape version is shown (Photo right).





Tailor-made self-contained nesting sites can be created in pitched roofs. In addition openings in the existing fascia boards can be made on the facade.

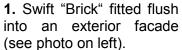


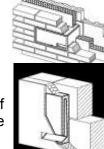
1

<u>Placing concrete nest boxes within thermal wall</u> insulation

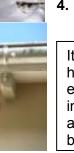
Swift "Bricks" (concrete or terracota boxes) can be easily integrated into a brick or blockwork facade or into exterior insulation.



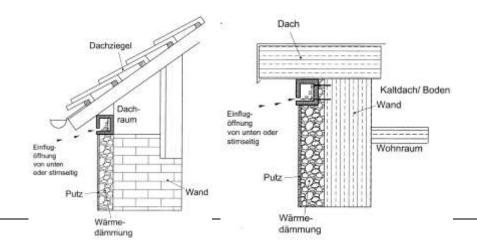




- **2.** Swift Brick incorporated in blockwork facade of insulated cavity wall (see diagram on right).
- **3.** Plastering the "Bricks" leaving only the entrance hole visible (see photo on left).
- **4.** Finished with exterior paint (photo below left)



It is adviseable to install a thin layer of high value insulation board behind each Swift Brick where it has been incorporated in an insulated surface so as to avoid "cold bridges" (diagrams below).



Action to be taken during renovation, restoration and redevelopment

If there are signs that nesting and roosting is present in the building, these should be taken into consideration in good time and species conservation measures planned in. Wild birds, Bats and their roosts are protected, and therefore must be taken into account in all work on buildings. Experts should be consulted where



necessary. They can advise on suitable places for alternative nest sites. Timely action and planning will prevent delays and keep costs low.

- 1. Check before work begins for the presence of birds & bats and their nests / roosts.
- 2. When incorporating new or alternative nest sites, take professional advice in good time to avoid problems and delays.

Taking account of the breeding season in planning the timing of renovations

Building works should be planned taking into account breeding seasons and the presence of birds and bats inhabiting the buildings. Not all creatures who breed in buildings migrate like swifts and swallows do. Many species use their nests throughout the year eg some bat species hibernate in buildings. It is strongly recommended that:

- 1. Any restoration of areas containing nest places and roosts takes place outside the breeding season to keep within the law.
- 2. Remedial works do not coincide with the presence of creatures in the buildings so as not to endanger them or cause delays.
- 3. Most birds will be breeding during the period February to end June
- 4. But Swifts breed during the period end-April to end-July, extending sometimes into August.
- 5. Bats may be present at any time of year.

Building-dependent Birds

Species	Calendar of presence	Nest sites in buildings
Common Swift	Late April to mid August	In the roof area eg under tiles, in the eaves, in window blind boxes & in niches in the walls
House Martin	April to mid September	Mud nests attached to the facade, built under the eaves or balconies
Barn Swallow	Mid March to mid October	Mud nests inside accessible buildings eg stables, barns
Black Redstart	Mid March to mid October	Holes in roof areas, sometimes inside buildings
House Sparrow	All year round	In the roof area eg under tiles, in window blind boxes, and in climbing plants on walls eg ivy

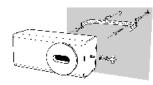
Swifts' needs - what you must consider

If nests are being created for Swifts the following points need to be taken into account:

- Provide alternative nest places in exactly the same place as the originals, or as near as possible, as Swifts are very loyal to a particular location.
- Provide for a clear all round flight path lots of airspace
- Mount as high as possible (above 4m)
- Place in sheltered cool areas out of the sun, or under eaves
- Firmly secure boxes into or onto the walls or to the eaves soffit
- Try and ensure boxes are maintenance free types. NB Swift boxes do not need cleaning out, but their fixings may need to be checked regularly for integrity.
- Nest boxes can be painted with non-toxic exterior paint (colour matched), wooden boxes can be treated with linseed oil
- Mounting of several nest boxes together or the use of multiple boxes is desirable as Swifts prefer to breed in loose colonies.

Nest Boxes

Commercially available nest boxes made from weather-resistant wood or concrete can be easily mounted on a wall (see right and below).







Starling-proof boxes are also available (Picture - left). Nesting boxes – especially wooden ones – should be in a sheltered area e.g. mounted under the eaves (see photo above) out of full sunlight.

You can make nesting boxes yourself out of rough, weather-resistant wood. The boxes need to have the entrance hole facing outwards to clear air. Each box should be a minimum of 15 x 15 x 35 cm (height x width x depth). The entrance holes should be located no more than 20 to 30 mm above internal floor level. Typical hole sizes can be 45mm to 50mm diameter or a slot of 75mm wide x 30mm to 35mm high. The smaller height will deter Starlings.

Swifts prefer to breed in colonies and this can be provided for with multiple boxes with divided compartments (Diagram and photo above).

