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Integral nest boxes — Selection and installation for new developments — Specification

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Foreword

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Commentary, explanation and general informative material is presented in smaller italic type, and does not constitute a normative element.

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0 Introduction

0.1 General

Many bird species nest in holes, crevices, defects in trees, walls and rock faces. A range of integral nest boxes has been created with the intention of mimicking such holes and providing nest places for birds in buildings.

This British Standard has been created to address the variability in the quality of many prefabricated bird boxes and to improve the quality of their installation.

New development is a major part of the UK's strategy for the provision of new homes. Large areas of "brownfield", redundant industrial or commercial areas, "greenfield" and agricultural areas have been earmarked for development. Without viable and active policies, the wildlife resident in these areas is likely to be eliminated. A well-thought-out nest box policy provides, alongside other local and appropriate "green" features, space for nature in built environments.

The number of once common species such as the house sparrow, starling and swift have suffered historic declines.

Swifts, in particular, are iconic summer visitors that brighten skies with their high-speed aerial antics, however they are uniquely dependent on the built environment for nest sites. With extensive renovation of older buildings and new builds which create a totally sealed space, building-dependent species such as swifts can no longer access nooks and crannies in walls or voids under the eaves of buildings.

Part of the solution to these losses is to provide large numbers of integral bird boxes in new development and especially in new-build houses.

The most robust external boxes have a limited life span and are easily removed and therefore integral nest boxes are required.

There are a range of integral nest boxes that:

a) are suitable for most construction methods;

b) conform to building regulations;

c) are typically maintenance-free and remain usable for the lifetime of the building;

d) are less prone to predation;

e) are more thermally stable;

f) are manufactured from sustainable materials; and

g) are easily and unobtrusively built into the fabric of buildings without compromising either the structure or the overall aesthetics.

The government's 25-year environment plan seeks to embed net gain for biodiversity within the planning system. Biodiversity net gain is an approach to development that aims to leave biodiversity in a better state than before. Where a development has an impact on biodiversity it encourages developers to provide an increase in appropriate natural habitat and ecological features over and above that being affected. In such a way, it is hoped that the current loss of biodiversity through development will be halted and ecological networks can be restored.

Siting bird boxes for cavity-nesting species within the built environment complements biodiversity net gain and, in turn, the features provided through biodiversity net gain help support the bird populations using these boxes.

0.2 Health and wellbeing

The government's publication, *A Green Future: Our 25 Year Plan to Improve the Environment* [1] states:

"Spending time in the natural environment – as a resident or a visitor – improves our mental health and feelings of wellbeing. It can reduce stress, fatigue, anxiety and depression. It can help boost immune systems, encourage physical activity and may reduce the risk of chronic diseases such as asthma. It can combat loneliness and bind communities together."

Bringing people closer to birds and birdsong can play an important part in fostering human health and wellbeing, while at the same time making a significant contribution to bird conservation.

Scientists at the University of Surrey studied the "restorative benefits of birdsong", testing whether it improves mental health. They discovered that, of all the natural sounds, birdsongs and calls were those most often cited as helping people recover from stress and allowing them to restore and refocus their attention.

The size of the bird food industry provides an indication of the interest and love that the human population has for common bird species. According to the British Trust for Ornithology, the bird food market in the UK is estimated to be worth £200 million per year.

1 Scope

This British Standard specifies requirements for the selection and installation of integral nest boxes in buildings within new developments, including traditional, modular and modern methods of construction intended for new build developments for:

a) residential;

b) commercial, industrial and public buildings; and

c) renovation and refurbishment of a) or b).

This British Standard covers the design and installation of integral nest boxes associated, principally, with the following bird species:

1) swift (*Apus apus*);

2) starling (*Sturnus vulgaris*);

3) great tit (*Parus major*);

4) blue tit (*Cyanistes caeruleus*); and

5) house sparrow (*Passer domesticus*).

NOTE 1 There are a number of other bird species that nest in cavities which could be accommodated in integral nest boxes.

This British Standard does not cover installation of:

i) integral nest boxes in buildings where the surface is primarily glass, as glass surfaces present well-known and fatal hazards for birds, or in metal-framed buildings with any form of insulated or fire-rated cladding; and

ii) exterior bird boxes.

NOTE 2 Examples of species that might breed in external nest boxes in the built environment include little owl, barn owl, tawny owl, kestrel, peregrine, stock dove, jackdaw, black redstart, pied wagtail, spotted flycatcher, robin, wren, tree sparrow, swallow and house martin.

NOTE 3 For other species using exterior bird boxes, a competent person can advise on the species of bird that are present and suitable mitigation for them. Expert advice is also available from Royal Society

for the Protection of Birds (RSPB), British Trust for Ornithology (BTO) and species-specific groups, e.g. Swift Conservation, Action for Swifts, Hawk and Owl Trust, Barn Owl Trust, Wildlife Trust, Wildfowl and Wetland Trust. See Annex A for a list of relevant sources of advice.

This British Standard is relevant to professionals and contractors involved in the selection, procurement and installation of integral nest boxes, including competent persons such as ornithologists, ecologists, architects, town planners and building contractors.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application[1]. For dated references, only the edition cited applies. For undated references, the latest edition of the reference document (including any amendments) applies.

BS 8683, *Process for designing and implementing Biodiversity Net Gain – Specification*

BS 42020:2013, *Biodiversity – Code of practice for planning and development*

3 Terms and definitions

For the purposes of this British Standard, the following terms and definitions apply.

3.1 cavity wall

wall formed from two thicknesses of brickwork or blockwork with a space between them

3.2 cold void

unheated area of a dwelling

NOTE Examples include within a cavity wall or loft space.

3.3 competent person

person who has the qualifications, training, skills and experience relevant to the task being undertaken

3.4 eaves

part of a roof that meets or overhangs the walls of a building

3.5 gable end

triangular upper part of a wall at the end of a ridged roof

3.6 green infrastructure

network of multifunctional green space and water features, in urban and rural situations, delivering quality of life and environmental benefits for wildlife and communities

3.7 integral nest box

manufactured built-in nest box or chamber incorporated into walls and buildings providing a nesting site for building dependent species

NOTE Large buildings include, but are not limited to residential apartments over three storeys, public buildings, hospitals, laboratories, medical facilities, educational institutions, recreational facilities, plant nurseries, car wash facilities, mini-malls and other business complexes, shopping malls, hotels, office buildings, public warehouses and other light industrial complexes.

[1] Documents that are referred to solely in an informative manner are listed in the Bibliography.

