**HOW TO BUILD SWIFT NEST BOXES INTO CEMENT BLOCK WALLS**

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Why incorporate nest boxes in the wall of a building?

There are several reasons:

a) to help recover the declining swift population  
   b) built-in nest boxes are the closest thing to the natural nest sites  
   c) built-in nest boxes will be there for the life of the building which very important as the Swift is a long-lived bird and 100% faithful to its nest site  
   d) built-in nest boxes have proven to be very effective in attracting Swifts

Are there any good examples of new buildings with built-in nest boxes?

Three projects in County Mayo:

1) Town Hall in Westport where 4 triple cavity boxes were installed in 2014 giving 12 nest boxes. By 2018 all 12 nest boxes were occupied by Swifts. 
2) New Swimming pool in Castlebar where 8 triple cavity boxes have been installed in the winter of 2017. Within 5 weeks of switching on the attraction calls in May 2018, Swifts were seen entering 7 of the 24 nest boxes. This is an extremely quick take up and seems to indicate that Swifts like built-in nest boxes. In 2019 Swifts were seen entering 10 of the nest boxes. 
3) Sancta Maria College, Louisburgh where 2 triple cavity boxes were installed. 
4) Mount St Michael Secondary School, Claremorris

How will the Swifts find the nest boxes?

It is essential to play attraction calls. The set-up of the call system can be tailored to suit the building e.g. in the Westport Town Hall the call system is set up in a waterproof box on the flat roof just above the nest boxes. For the Swimming Pool project waterproof speakers have been installed under the overhang of the roof with cabling running through to a maintenance room where the mini amplifier is powered. SEE ANNEX 1 (page 13) for further information.

Will the birds leave any mess?

It is important to note that these are not messy birds and so there will be no mess below the nest boxes. However, the correct nest entrance size must be used (i.e. 29mm x 65mm maximum) which is ideal for Swifts but too small for a Starling to enter (It is important to use a hole that is too small for Starlings). Also, the nest boxes are sealed units that do not need to be cleaned out.

Below is a photo of the nest boxes at the Town Hall in Westport with no mess under the boxes. All 8 of these nest boxes have been occupied by Swifts since 2017.
**Picture 1.** Westport Town Hall built-in boxes in June 2018 - no marks of bird droppings on the wall.

![Picture 1]

**Picture 2.** Westport Town Hall – Swifts looking into two of the nest box entrances (June 2018)

![Picture 2]
Which nest box model should be used?

We recommend two models of nest box for building into the fabric of a wall:
1) Woodstone Build-in Swift Nest Box Deep
2) Schwegler 17A

Woodstone Build-in Swift Nest Box Deep

Swift Conservation Ireland uses this model in preference to the Schwegler 17A.

a) The dimensions meet our size requirements for suitable Swift nest space
b) The builders like it because the block layers will find it easy to work with
c) It is more readily available with delivery time usually in a matter of weeks
d) Very cost effective

<table>
<thead>
<tr>
<th>External Dimensions</th>
<th>Internal Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length : 42cm</td>
<td>Length: 38cm</td>
</tr>
<tr>
<td>Depth : 15.5cm</td>
<td>Depth: 14cm</td>
</tr>
<tr>
<td>Height : 18cm</td>
<td>Height: 13cm</td>
</tr>
</tbody>
</table>

Weight of box 5.3kg

Entrance hole dimensions: 60mm (W) x 29-30mm (H)

Where do I buy the Woodstone Swift Nest Box Deep?

There is NO supplier in Ireland but you can buy them from NHBS in the UK England. [https://www.nhbs.com/woodstone-build-in-swift-nest-box-deep](https://www.nhbs.com/woodstone-build-in-swift-nest-box-deep)

They can usually deliver within a few weeks of your order.

Swift Conservation Ireland does usually hold some of these nest boxes and may be able to supply in if there is an urgency to the project. For enquiries email swiftconservationireland@gmail.com.
Picture 3. The nest boxes can easily be incorporated into a block wall

Picture 4. The block protrudes a few cms into the cavity but there is room for insulation to be inserted in the cavity
**Schwegler 17A**

The Schwegler 17A is a tripe entrance nest box which can be built into a wall replacing blocks. This box is close to a metre long and so we recommend that nest boxes are capped with a lintel to provide additional strength, however, the Schwegler has been designed to be built into a wall.

The dimensions of this nest box is:
- **External dimensions:** W 98 x H 15 x D 15 cm.
- **Brood chamber:** W 30 x H 14 x D 14 cm.
- **Weight:** approx. 7.1 kg.

**Where do I buy the Schwegler nest boxes?**

There is NO supplier in Ireland but you can buy them from NHBS in the UK England.

If you place your order over the phone they will let you know what the shipping cost will be. [https://www.nhbs.com/no-17a-schwegler-swift-nest-box-triple-cavity](https://www.nhbs.com/no-17a-schwegler-swift-nest-box-triple-cavity)

**NOTE:** You must quote the unique Product Code is 249572 which ensures you order the smaller nest entrance hole (29mm height) as per those used by Swift Conservation Ireland.

OR you can buy from Swift Conservation Ireland, who usually have some in stock. For enquiries email swiftconservationireland@gmail.com. This option may work out easier and more economical if you are buying less than 4 boxes, because they have to be delivered by pallet which has a minimum charge.

**What is the ideal location for nest boxes being built into a wall?**

- **any aspect** is ok N, S, E or W.
- **Minimum** 3 metres above ground level.
- **OPEN ASPECT** in front i.e. no trees or other walls so that birds can get a direct flight in and out (these birds do not perch so must have direct flight path in and out).
- **NOT** directly under or close to spotlights **AND NOT** a wall where floodlights would blind birds entering or leaving the nest boxes in the evening. They will enter and leave nest sites in the near dark.
- **NOT** near flapping flags because birds could collide with these when leaving nest site.

**Can the nest boxes be placed one above the other?**

**NO** - they must either be placed side by side or staggered (see photos below). This is so that the birds do not collide when approaching their nest boxes at speed – the usual approach speed is 30 miles per hour.
**Picture 5.** The nest boxes can easily be incorporated into a block wall

**Picture 6.** A Lintel is placed above the nest box
Picture 7. At Westport Town Hall the nest boxes are staggered.

Picture 8. At the Castlebar Swimming Pool the nest boxes are all placed at the same height in a row.
Picture 9. Boxes being installed in a row at Mount St Michael, Claremorris, Co. Mayo

Picture 10. Close up of boxes being installed at Sancta Maria College in Louisburgh, Co. Mayo
Pictures 11, 12. How to protect the entrance holes during scudding and rendering of the wall

The nest hole entrances can be plugged with a piece of foam pipe insulation
1) This prevents render from getting inside the box
2) Helps retain the shape of the hole during the rendering process
This foam filler MUST BE REMOVED once the rendering is finished.

OR

The nest holes can be protected with tape
**Picture 13.** Before the wall is rendered you must ensure the entrance discs of the Schwegler 17A are aligned so that the holes are horizontal.

*This picture is of Westport Town Hall rendered and ready for painting.*

**Picture 15.** Castlebar swimming pool wall finished with nest box entrance holes clearly visible in a horizontal row.
ANNEX 1. ATTRACTION CALLS

An attraction call system must be used to help the Swifts locate the nest boxes and to ensure that the project is a success.

However, calls only need to be played for a few seasons until Swifts have started nesting in the boxes. They should be played from May to September each year.

Where to locate the speaker and amplifier is particular to every project depending on the design of the building.

Picture 16. Westport Town Hall the call system was installed on the flat roof just above the nest boxes.

A special waterproof electric box was used for this purpose to house the plugs and amplifier.

Picture 17. At the Swimming Pool externally fitted speaker box

Water proof speakers have been installed on the exterior wall just above the nest boxes with cabling running to the amplifier located indoors next to a plug socket.
**Picture 17. Mount St Michael Secondary School**

A water proof speaker was incorporated into the fascia board.

**Picture 18. Lyon’s Mill in Sligo**

At this site the calls were built into the wall by incorporating a water proof speaker into a pipe.
**NPWS Lure Licence**

Call systems and advice on how and where to locate them can be obtained from Swift Conservation Ireland by emailing swiftconservationireland@gmail.com

Attraction calls should be played under a lure licence from NPWS. For projects associated with Swift Conservation Ireland, the playing of attraction calls will be covered under their NPWS licence but full details of location of site and contact person must be supplied.

**NOTE**: This document will be updated on a regular basis so check [www.swiftconservation.ie](http://www.swiftconservation.ie) for the latest version.

**Acknowledgements**:
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