



BUILDING NEST BOXES FOR THE SWIFT *INTO CEMENT BLOCK, BRICK AND EXTERNALLY INSULATED WALLS*

GUIDANCE ON BEST PRACTICE





Swift exiting nest site at Castlebar Leisure Complex

Written and Compiled by Lynda Huxley

www.swiftconservation.ie

swiftconservationireland@gmail.com

NOVEMBER 2021

Cover Image: Swifts flying past the nest entrances at Castlebar Leisure Complex

All photos by Lynda Huxley unless otherwise credited.

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Production of this leaflet was made possible by a grant from
National Parks and Wildlife Service of the Department of Housing, Local Government and Heritage



An tSeirbhís Páirceanna Náisiúnta
agus Fiadhúlra
National Parks and Wildlife Service



An Roinn Tithíochta,
Rialtais Aitiúil agus Oidhreacht
Department of Housing,
Local Government and Heritage



CONTENTS

GENERAL INFORMATION ABOUT THE SWIFTS AND NEST BOXES	4
WHAT IS A SWIFT?	4
WHY DOES THE SWIFT NEED OUR HELP?	4
WHY INCORPORATE NEST BOXES IN THE WALL OF A BUILDING?	4
ARE THERE GOOD EXAMPLES OF NEW BUILDINGS WITH BUILT-IN NEST BOXES?	4
HOW WILL THE SWIFTS FIND THE NEST BOXES?	5
WILL THE BIRDS LEAVE ANY MESS?	5
Picture 1. Westport Town Hall built-in boxes (all occupied by swifts) - no bird droppings on the wall	5
Picture 2. Westport Town Hall – Swifts looking into two of the nest box entrances (June 2018)	6
PROVIDING NEST BOXES FOR SWIFTS	6
WHICH NEST BOX MODEL SHOULD BE USED ?	6
WHAT IS THE IDEAL LOCATION FOR NEST BOXES BEING BUILT INTO A WALL?	6
CAN THE NEST BOXES BE PLACED ONE ABOVE THE OTHER?	7
Picture 3. Nest boxes side-by-side in horizontal row at Edgeworthstown library	7
Picture 3a. Staggered Woodstone nest boxes	7
ABOUT THE WOODSTONE BUILD-IN SWIFT NEST BOX DEEP	8
INSTALLING THE WOODSTONE SWIFT NEST BOX DEEP	9
Picture 4. The nest boxes can easily be incorporated into a block wall	9
Picture 5. The nest box protrudes a few centimetres into the cavity but there is room for insulation	9
Picture 6. Five Woodstone nest boxes incorporated in walls of Ballinrobe NS	9
Picture 7. A piece of foam insulation is placed in the entrance hole	10
Picture 7a. Ballinrobe NS project completed in 2020	10
Picture 8. Woodstone Swift Nest Box Deep installed in red brick gable wall at Partry NS	10
ABOUT THE SCHWEGLER 17A TRIPLE ENTRANCE/CAVITY NEST BOX	11
INSTALLING THE SCHWEGLER 17A	12
Picture 9. The nest boxes can easily be incorporated into a block wall	12
Picture 10. Lintel is placed above the Schwegler 17A nest box	12
Picture 11. Nest boxes staggered in two rows	12
Picture 12. Nest boxes in a horizontal row next to each other	12
INCORPORATING NEST BOXES INTO BLOCKS OF EXTERNAL INSULATION	13
Picture 13a. The shape/dimensions of the nest box were marked out on the insulation blocks and the insulation removed from this space.	13
Picture 13b. The nest box was slotted into the space and secured with adhesive.	13
Picture 13c. Nest boxes incorporated with entrance disks in place in horizontal position.	13
Picture 13d. Edgeworthstown Library project rendered and painted	13
PROTECTING THE ENTRANCE HOLES DURING SCUDDING AND RENDERING OF THE WALL	14
Picture 14. Westport Town Hall all entrances are horizontal	14
Picture 15: Nest entrance hole protected with piece of foam prior to rendering	14
Picture 16: Nest entrance holes protected with tape	14
APPENDIX 1: WHERE TO BUY SWIFT NEST BOXES	15
WHERE TO BUY THE WOODSTONE SWIFT NEST BOX DEEP	15
WHERE TO BUY THE SCHWEGLER NEST BOXES	16
APPENDIX 2: ATTRACTION CALLS	17
ABOUT THE ATTRACTION CALL SYSTEM	17
WHERE TO LOCATE THE SPEAKER AND AMPLIFIER IS PARTICULAR TO EVERY PROJECT DEPENDING ON THE DESIGN OF THE BUILDING.	18
Picture 17. Mary Robinson Centre a waterproof speaker installed in box above the nest boxes	17
Picture 18: Mount St Michael Sec. School a waterproof speaker incorporated into fascia	17
Picture 19. Sancta Maria College a waterproof speaker incorporated into the soffit.	19
Picture 20: Waterproof speaker mounted in metal wall plate	19
NPWS LURE LICENCE	19



GENERAL INFORMATION ABOUT THE SWIFTS AND NEST BOXES

WHAT IS A SWIFT?

- Swifts are a family of birds that look similar to Swallows and Martins
- The Common Swift is the only one of the Swift family that comes to Ireland to breed
- They arrive in Ireland in late April/early May and leave in late August when the chicks have all left the nest.
- They go to Africa for the winter months.
- The Swift is unique because they eat, drink and sleep on the wing
- They only land to breed between May and August each year so the rest of the year they are flying
- They feed on airborne insects such as midges, aphids and tiny spiders

Find out more about swifts at www.swiftconservation.ie and in the Swift Conservation Ireland booklet 'We are Swifts, We are in Trouble'.

WHY DOES THE SWIFT NEED OUR HELP?

- The Common Swift *Apus apus* is a Red-listed bird of conservation concern in Ireland
- The population has declined in abundance by close to 50% in the past 30 years
- This decline is mostly due to loss of 'traditional' nest sites
- The majority of the 'traditional' nest sites are in old buildings in our urban areas
- When these buildings are renovated/demolished the nest sites are lost and the swifts are homeless
- They come here in May to breed
- They do not breed in Africa – where they spend the winter months
- We can help recovery of the Swifts by providing permanent nest sites where they can breed

WHY INCORPORATE NEST BOXES IN THE WALL OF A BUILDING?

There are several reasons:

- To help recover the declining swift population
- Built-in nest boxes are the closest thing to the 'traditional' nest sites
- Built-in nest boxes will be there for the life of the building which is very important because the Swift is a long-lived bird and 100% faithful to its nest site
- Built-in nest boxes have proven to be very effective for attracting Swifts

ARE THERE GOOD EXAMPLES OF NEW BUILDINGS WITH BUILT-IN NEST BOXES?

There are several successful new build projects in public buildings in County Mayo:

- 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.
- Swimming pool/Leisure Centre at Lough Lannagh 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 uptake and seems to indicate that Swifts like built-in nest boxes. In 2021, Swifts were observed using 18 of the nest compartments.
- Mount St Michael Secondary School, Claremorris where 8 triple cavity boxes were installed providing 24 nest compartments in 2019. In 2021, Swifts were observed using 3 of the nest compartments.

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 project. See Appendix 2 (page 16) for further information.

WILL THE BIRDS LEAVE ANY MESS?

Swifts are not messy birds and there will be no mess on the wall or on the ground below the nest boxes, see Picture 1.

BUT, the correct entrance size must be used.

Maximum 29.5mm high by 65mm wide.

Minimum 28mm high x 60mm wide. This is ideal for Swifts but too small for a Starling to enter. It is very important to use a hole that is too small for Starlings because a) they are aggressive to Swifts b) they bring in sticks and other nest material which makes the nest compartment unusable for Swifts.

The nest boxes are sealed units which do not require any maintenance and do not need to be cleaned out.



PICTURE 1.
Westport Town Hall built-in boxes (all occupied by swifts) - no bird droppings on the wall

PROVIDING NEST BOXES FOR SWIFTS

WHICH NEST BOX MODEL SHOULD BE USED ?

We recommend these models for building into the fabric of a wall:

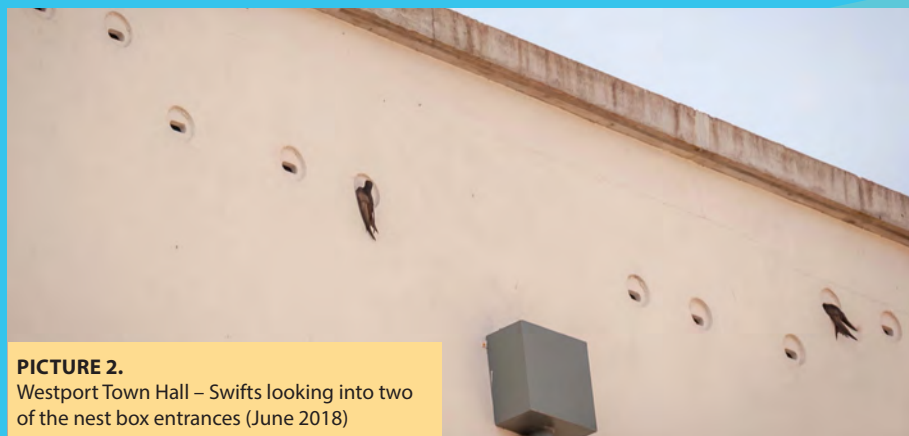
- Woodstone Build-in Swift Nest Box Deep – single entrance/cavity
- Schwegler 17A Triple entrance/cavity Nest Box

Details on where to buy them can be found in Appendix 1 (page 14).

WHAT IS THE IDEAL LOCATION FOR NEST BOXES BEING BUILT INTO A WALL?

- Any aspect is ok for built in nest boxes (N, S, E or W) but N, NE is best.
- **Minimum** 5 metres above ground level – close to roof level is best.
- **OPEN ASPECT** i.e. no large trees or walls and no roof directly below the nest entrance. The birds need to have direct flight in and out (these birds do not perch so must have direct flight path to swoop in and drop out of the nest entrance.
- **NOT** directly under or close to spotlights/floodlight because these 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.
- **NOT** immediately next to clear glazed windows.

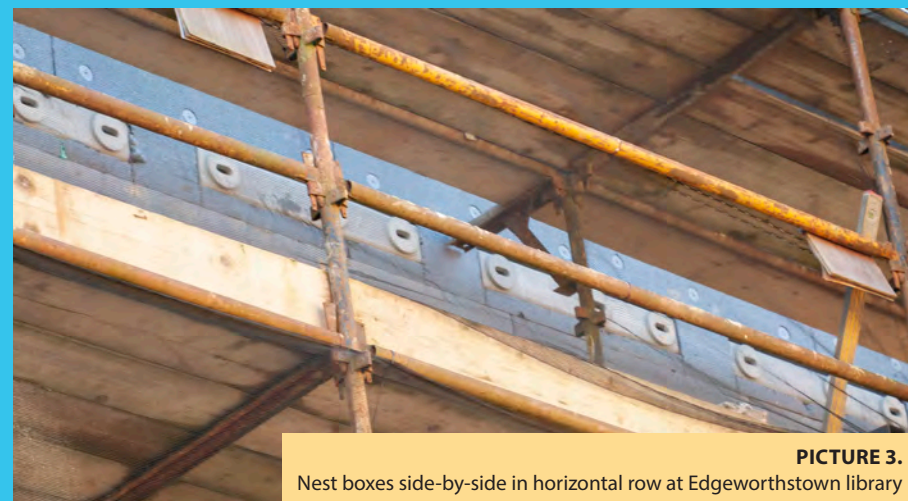
Both models of nest box can be built into exterior cement block and brick walls. They can be incorporated into walls fitted with blocks of external insulation.



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

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 50 kilometres per hour.



PICTURE 3.
Nest boxes side-by-side in horizontal row at Edgeworthstown library



PICTURE 3A.
Staggered Woodstone nest boxes

ABOUT THE WOODSTONE BUILD-IN SWIFT NEST BOX DEEP

Woodstone nest box products are made by VivaraPro. In 2012, following several years of research, development and trials, they launched the WoodStone® range.

They are made from a mix of concrete and responsibly sourced wood fibres. According to VivaraPro this mix of materials provides:

- Excellent insulating properties which give a more consistent internal temperature
- A very durable exterior which makes the boxes resistant to all weather conditions
- They are breathable, avoiding problems with condensation

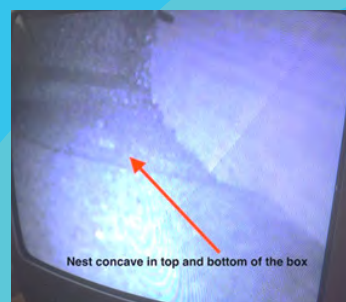
PROS:

- The nest compartment dimensions provide an adequate space for breeding Swifts
- The builders find it easy to work with because it is a similar size to a cement block
- It can also be installed in a brick wall
- It is readily available with delivery time usually in a matter of weeks
- Very cost effective

External Dimensions	Nest Compartment Dimensions
LENGTH: 42cm	LENGTH: 38cm
DEPTH: 15.5cm	DEPTH: 13cm
HEIGHT: 17cm	HEIGHT: 13cm

- **Weight:** 5.3kg
- **Entrance hole dimensions:** 29-30mm high x 60mm wide

The Woodstone Swift Nest Box Deep (image below) has a shallow nest concave in the floor and ceiling of the box which means there is no risk of installing the nest box the wrong way up.



See Appendix 1 (page 14) for information on where to buy the Woodstone Swift Nest Box Deep

INSTALLING THE WOODSTONE SWIFT NEST BOX DEEP



PICTURE 4.
The nest boxes can easily be incorporated into a block wall

The insulation in the cavity can simply continue behind the block, so there is no thermal bridge.

If insulation has to be cut away, it is important to cut the insulation around the circumference of the block.



PICTURE 5.
The nest box protrudes a few centimetres into the cavity but there is room for insulation



PICTURE 6.
Five Woodstone nest boxes incorporated in walls of Ballinrobe N.S.



PICTURE 7.
A piece of foam insulation is placed in the entrance hole

PROTECTING THE ENTRANCE HOLE

Placing of a piece of foam insulation in the entrance ensures the hole is protected from being altered in size during the rendering process. **BUT** it must be removed once the rendering is finished.



PICTURE 7A.
Ballinrobe NS project completed in 2020



PICTURE 8.
Woodstone Swift Nest Box Deep installed in red brick gable wall at Partry NS

ABOUT THE SCHWEGLER 17A TRIPLE ENTRANCE/CAVITY NEST BOX

Schwegler is a company based in Germany.

The Schwegler 17A is made from a wood-concrete mix which, according to Schwegler gives them excellent insulation as well as breathability and longevity. Their nest boxes are a high quality species-specific design, breathable and resistant to weather.

PROS:

- The Schwegler has been designed to be built into a wall
- It is a tripe entrance/corpartment nest box which can be built into a wall replacing cement blocks

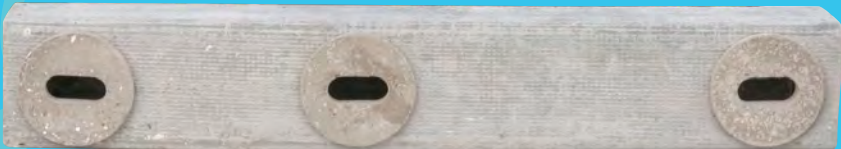
CONS:

- This box is close to a metre long and so we recommend that nest boxes are capped with a lintel to provide additional strength
- Relatively expensive compared to Woodstone nest box
- Delivery time can take up to 4 months

External Dimensions of this triple entrance/cavity nest box	Nest Compartment Dimensions
LENGTH: 98cm	LENGTH: 30cm
DEPTH: 15cm	DEPTH: 14cm
HEIGHT: 15cm	HEIGHT: 14cm

Weight: approx. 7.1 kg.

Entrance hole dimensions: 29mm high x 65mm wide



See Appendix 1 (page 15) for information on where to buy Schwegler 17A nest boxes.

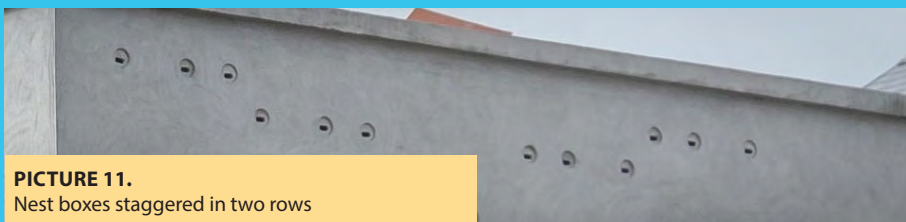
INSTALLING THE SCHWEGLER 17A



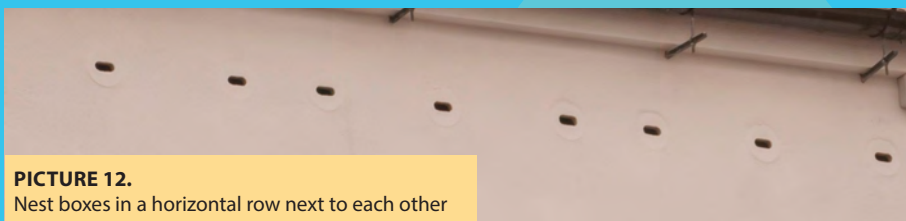
PICTURE 9.
The nest boxes can easily be incorporated into a block wall



PICTURE 10.
Lintel is placed above the Schwegler 17A nest box



PICTURE 11.
Nest boxes staggered in two rows

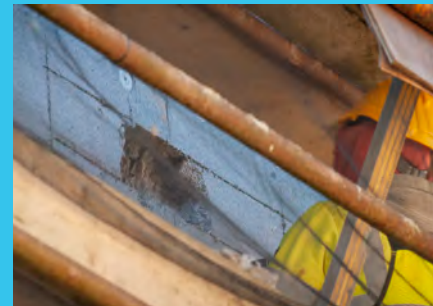


PICTURE 12.
Nest boxes in a horizontal row next to each other

INCORPORATING NEST BOXES INTO BLOCKS OF EXTERNAL INSULATION

In 2021, Schwegler 17A nest boxes were incorporated into blocks of external insulation of the new library building in Edgeworthstown, Co. Longford.

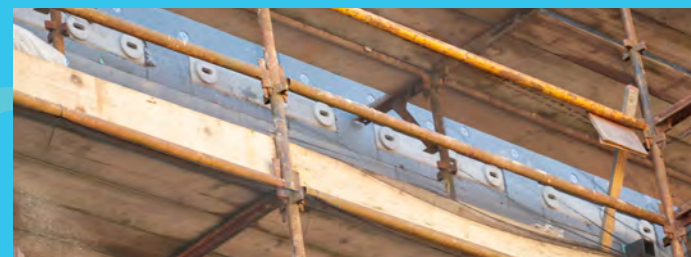
The process of installing the nest boxes is laid out below :



PICTURE 13A.
The shape/dimensions of the nest box were marked out on the insulation blocks and the insulation removed from this space.



PICTURE 13B.
The nest box was slotted into the space and secured with adhesive.



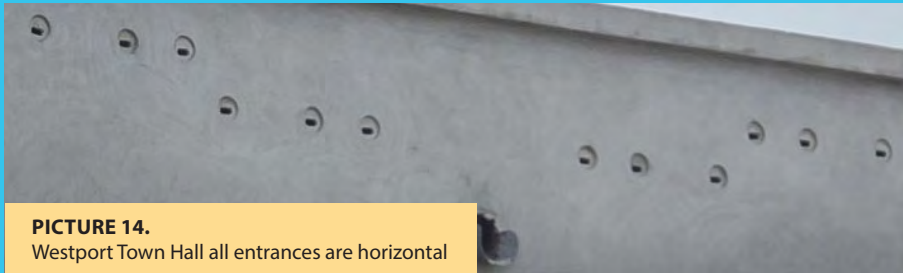
PICTURE 13C.
Nest boxes incorporated with entrance disks in place in horizontal position.



PICTURE 13D.
Edgeworthstown Library project rendered and painted.

PROTECTING THE ENTRANCE HOLES

The Schwegler entrance discs can be turned. Therefore, before the wall is rendered you MUST ensure the entrance discs of the Schwegler 17A are aligned so that the holes are horizontal.



PICTURE 14.
Westport Town Hall all entrances are horizontal



PICTURE 15.
Nest entrance hole protected with piece of foam prior to rendering

The nest entrance holes 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 entrances can be protected with tape.



PICTURE 16.
Nest entrance holes protected with tape



APPENDIX 1: WHERE TO BUY SWIFT NEST BOXES

WHERE TO BUY THE WOODSTONE SWIFT NEST BOX DEEP

- **QuickCrop** - Co. Sligo

Quick Crop is the only supplier of the Vivara GZ 03 in Ireland.

They are based in Co. Sligo. They usually have the boxes in stock and can supply within a few days of ordering.

<https://www.quickcrop.ie/products/built-in-swift-nest-box-ib-gz-03.html>

- **WILDCARE**

Wildcare in the UK but has an EU office in France which allows purchase in Euros. We recommend phoning to request quotation including Irish VAT rate of 23% and shipping costs.

www.wildcare.eu/10736-nichoir-martinets-encastrer.html

NOTE: their EU website is in French but you can phone them using the UK phone number on their UK website <https://www.wildcare.co.uk/10736-vivara-pro-woodstone-build-in.html>

- **VIVARAPRO**

VivaraPro are the manufacturers of the Woodstone Swift Nest Box Deep. They have a UK office and you can buy direct from them. There is free delivery to Ireland for orders over €1,500 but for orders between €500 to €1,499 there is a €75 pallet fee. Minimum order is €500 plus delivery.

NOTE: they cannot charge Irish VAT, therefore, you must ask for a quotation in Euros excluding VAT.

www.vivarapro.co.uk/quote/add?p_id=130&p_qty=1

You will then pay Irish VAT of 23% to the import agent prior to delivery. This item is exempt from customs duty (cost per box incl. VAT and delivery for order over €1,500 at time of writing is €32.00)

NOTE: You have to supply them with an EORI number which you can obtain from Irish Revenue <https://www.revenue.ie/en/customs-traders-and-agents/customs-electronic-systems/eori-system.aspx>

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

ALTERNATIVELY: Swift Conservation Ireland usually holds some of each of these nest boxes and may be able to supply if there is an urgency to the project. For enquiries email swiftconservationireland@gmail.com

WHERE TO BUY THE SCHWEGLER NEST BOXES

NOTE: Schwegler nest boxes cannot be purchased from mainland Europe because the UK company Jacobi Jayne is the registered distributor for UK and Ireland, and they supply the companies listed below.

There are three No.17 nest box sizes:

- 1) **17A** with three nest compartments
- 2) **17B** with one nest compartment
- 3) **17C** with two nest compartments

It is important to be aware that Schwegler make 2 entrance hole sizes for the No.17 model:

- 1) **32mm x 65mm** – BUT this size entrance is too large for use in Ireland because it enables Starlings to access the nest compartment.
- 2) **29mm x 65mm** – Is used and recommended by Swift Conservation Ireland BUT has to be ordered by special request.

The following UK companies will ship to Ireland and will accept payment in Euros.

NOTE: it can take at least 4 months for delivery from the time of order.

• QUICKCROP IN CO. SLIGO

Quick Crop is based in Co. Sligo.

NOTE: they are the only outlet in Ireland that sells the Schwegler 17 Swift Nest boxes with the Irish spec entrance hole size.

NOTE: You must ask NHBS for unique Product Code 249572 ensuring you order the smaller nest entrance hole (29mm x 65mm) - as used by Swift Conservation Ireland.

<https://www.quickcrop.ie/products/triple-swift-nest-box-17a-irish-spec.html>

NOTE: cost per box of the 17A and delivery at time of writing is approximately €400. You can order on-line at the link above.

• NHBS

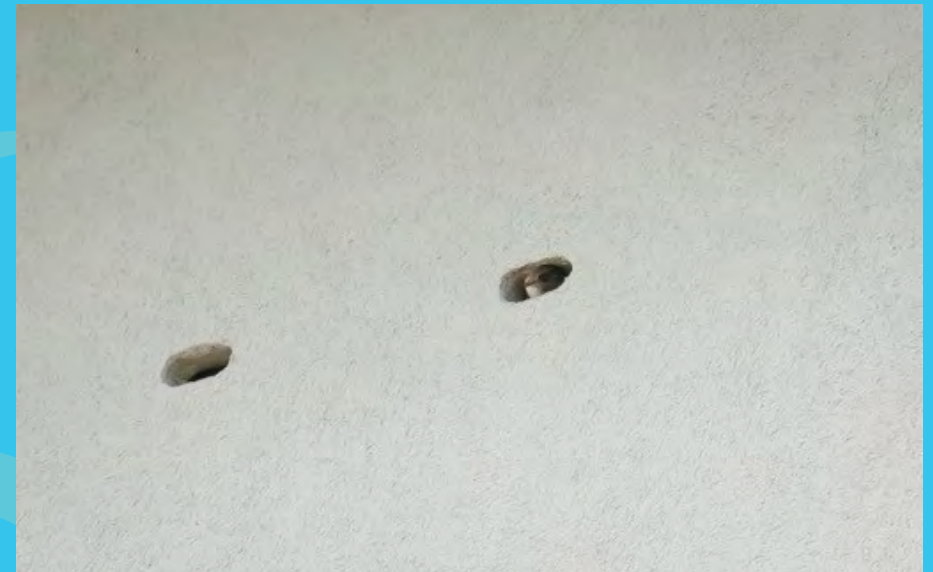
NHBS is based in the UK with an office in Germany which means that you can purchase in Euros.

NOTE: their website states they do not ship this model outside of the UK but this is NOT the case. You must phone the UK office for a quotation including shipping to Ireland. Prior to delivery, an Irish Customs Agent will contact you for payment of the Irish VAT of 23% and Customs Duty of 1.7%.

NOTE: You must ask NHBS for unique Product Code 249572 ensuring you order the smaller nest entrance hole (29mm x 65mm) - as used by Swift Conservation Ireland.

<https://www.nhbs.com/no-17a-schwegler-swift-nest-box-triple-cavity>

NOTE: cost per box ex-VAT and delivery at time of writing is approximately €360. They take payment once items are in stock and usually deliver within a few weeks of payment.



APPENDIX 2: ATTRACTION CALLS

ABOUT THE ATTRACTION CALL SYSTEM

An attraction call system must be used and calls played to help the Swifts locate the nest boxes and ensure that the project is a success. They are played each season, May to September, until the Swifts have taken up residence in the nest boxes.

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

Call systems can be purchased from Swift Conservation Ireland. The price varies from €60 - €90 plus postage (depending on model of speaker being used and current market prices).

The call system is made up of:

- waterproof marine speaker (white or black) mounted externally- see project examples below.
- amplifier, loaded with attraction calls, which plugs into a wall socket inside the building.
- speaker cable running from the externally mounted speaker to the amplifier inside the building.



WHERE TO LOCATE THE CALL SYSTEM

Location of the speaker and amplifier is unique to every project. However, the waterproof speaker **must** be located as close to the nest boxes as possible. In all instances the speaker cable runs from the speaker to where the amplifier is located inside the building.



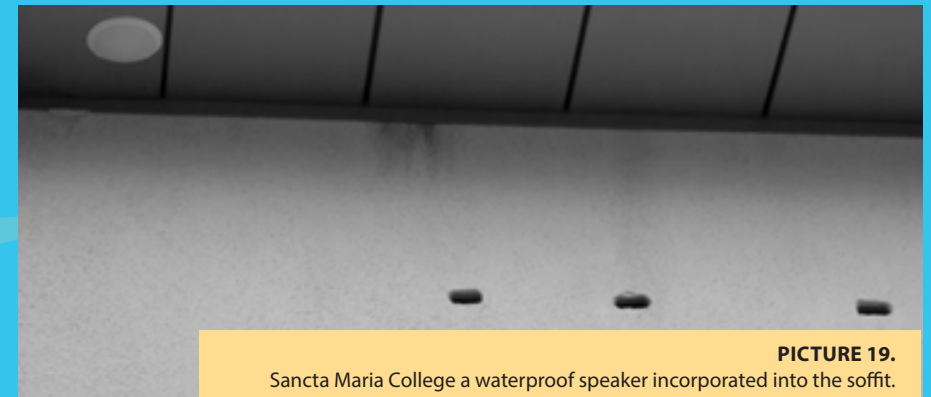
PICTURE 17.

Mary Robinson Centre a waterproof speaker installed in box above the nest boxes



PICTURE 18.

Mount St Michael Sec. School a waterproof speaker incorporated into fascia



PICTURE 19.

Sancta Maria College a waterproof speaker incorporated into the soffit.

NPWS LURE LICENCE

As of February 2024 it is no longer necessary to obtain a lure licence for playing attraction calls for Swift nest box projects.



**Swift
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