

01-12 NOV 2021

GLASGOW

# COP26

IN PARTNERSHIP WITH ITALY

## SUSTAINABLE BUILDINGS OF GLASGOW TOUR

**Explore the sustainable buildings of Glasgow and surrounds with the International Passive House Association (iPHA) on this free, half-day guided tour!**

Back by popular demand, we have organised our annual sustainable buildings COP tour for **Monday, 8th of November from 9am until 1:30pm**. Planned visits include new Passive House social housing units at Newfield Square, three retrofitted high-rise towers in Cedar Court, and an in-depth presentation of an EnerPHit, the Passive House Standard for retrofits, refurbishment of traditional Victorian tenement flats on Niddrie Road.

Participants will receive an in-depth guided tour from top architects involved in the project, giving them the opportunity to view the buildings inside and out and learn how Passive House are constructed from the envelope to the finishing touches. The tour will conclude at the Construction Scotland Innovation Centre in Hamilton, where participants will have the opportunity to network and take part in an interactive Passive House workshop.

This tour is free and will include a bus for travel between sites. Register by contacting **[info@passivehouse-international.org](mailto:info@passivehouse-international.org)** with the subject line „Sustainable buildings of Glasgow tour“. **Be quick! There are only 30 spaces available.**

International

**PASSIVE HOUSE**

Association



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## TOUR SCHEDULE

Monday, 8th of November, 2021 | Glasgow, UK

**9:00** Departure from Cathedral Street at North Frederick Street

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**9:15** Arrival at Cedar Court for tour

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**9:50** Departure from Cedar Court

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**10:10** Arrival at Newfield Square for tour

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**10:40** Departure from Newfield Square

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Participants who need to leave the tour early can return to COP26 centre via Queens Park stop

**11:15** Arrival at CSIC

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Coffee break

**11:30** Niddrie Road presentation

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**12:00** Passive House workshop

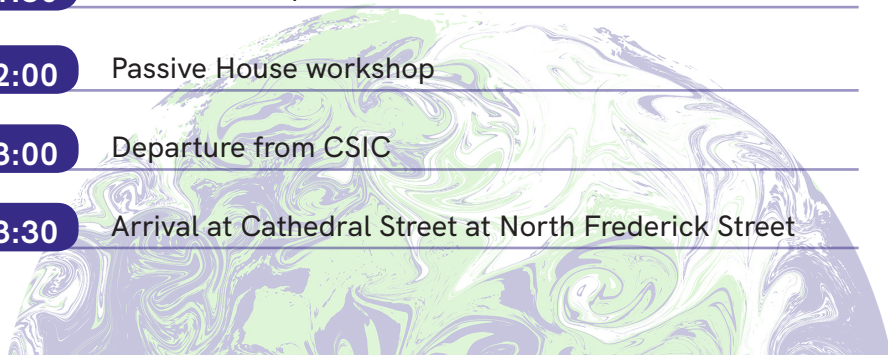
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**13:00** Departure from CSIC

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**13:30** Arrival at Cathedral Street at North Frederick Street

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## Cedar Court

### Woodside area, Glasgow EnerPHit retrofit

Cedar Court is a refurbishment of three high rise towers in the Woodside area of Glasgow. The project targeted the EnerPHit standard, the Passive House Standard for retrofits, to demonstrate how deep retrofit can be achieved at scale. Queens Cross Housing Association's Cedar Court and Cedar Street, built in the 1960s, now look like new, and perform better than most new builds, providing warmth and comfort to the tenants of 314 homes.

**Project Owner/Client:**  
Queens Cross Housing Association

**Architect:**  
Collective Architecture

**Build start date:** 2016  
**Date of occupation:** 2019

**Cost:**  
£13.3 million

Overall, the project goes to show that by retrofitting rather than demolishing, the associated whole life carbon is likely to be closer to Net Zero Carbon than most new builds. A fabric first approach allows energy savings to be locked into the building fabric for the life of the building and mean that any subsequent local renewable energy generation would represent additionality rather than simply offset poor building performance. This approach would also help improve comfort and wellbeing for the residents whilst improving air quality via mechanical ventilation with heat recovery.



Cedar Street and Cedar Court  
© Andrew Lee / Collective Architecture



## Newfield Square

### Craigbank Nitshill, Glasgow Passive House semi-detached blocks

Newfield Square is a mixed tenure scheme at Craigbank in Glasgow's Nitshill, providing a total of 178 new dwellings for social rent, mid-market rent and Shared Equity sale on a brownfield site. Delivered on behalf of Sanctuary Scotland Housing Association by CCG (Scotland) Ltd., the wider development is a significant large-scale regeneration of a site which had been left vacant for some 15 years following clearance of dilapidated tenement stock, providing much needed affordable housing in one of Glasgow's most deprived areas.

**Project Owner/Client:**  
Sanctuary Scotland Housing  
Association Ltd

**Architect:**  
Mast Architects

**Cost:**  
£19.6 million

As part of the project, five semi-detached blocks were selected for consideration as part of a pilot study promoted by Glasgow City Council to investigate how varying levels of sustainability could be achieved within a typical 2-bedroom dwelling, with a view to informing the future baseline standard for affordable housing in the city. Each of the blocks were configured to achieve ever-increasing levels of sustainability and energy efficiency, including two Type A5 blocks, which have been certified to the Passive House Standard.



Newfield Square  
© Mast Architects



## Niddrie Road

### 107 Niddrie Road, Glasgow EnerPHit retrofit

Niddrie Road was commissioned by Southside Housing Association to refurbish a typical Glasgow tenement to the EnerPHit standard, the Passive House Standard for retrofits. All eight flats will be fully renovated including internal finishes and fittings, as well as a comprehensive upgrade of external elements such as roof, stonework and rainwater goods.

**Project Owner/Client:**  
Southside Housing Association

**Architect:**  
John Gilbert Architects

**Funding:**  
£250k from Scottish Government

The project was one of only two awarded around £250k in Scottish Government funding via the Scottish Funding Council to investigate and disseminate innovative and sustainable approaches to housing. The focus of the work is to demonstrate an approach that rigorously tackles energy efficiency and fuel poverty whilst also addressing issues related to health and well-being as well as heritage, building maintenance and management. This holistic approach is supported by an extensive monitoring regime that will track ongoing conditions in the homes once occupied.



Niddrie Road

© John Gilbert Architects

## PASSIVE HOUSE WORKSHOP

The Passive House Workshop will be delivered in **CSIC's Innovation Factory**, using Passivhaus rigs. Learners will gain hands-on experience to learn more about the Passive House Standard and develop their practical skills. The training will make use of parts of CSIC's Passivhaus in Practice programme, which was developed and supported by the Scottish Funding Council, and aims to promote the wider adoption of environmentally friendly construction to help reduce the sector's carbon footprint, in line with Scotland's national net-zero emissions targets.

The Passivhaus in Practice training programme is aimed at those who want to gain new low-carbon skills in construction, delivered by a number of training specialists, including world-renowned BRE, Passivhaus training specialists AECB & WARM, and Construction Scotland Innovation Centre.

Spaces are limited to allow for the protection and comfort of all guests. As such, all visitors are required to book a place.

Please check-in prior to arrival using this **visitor sign in link**.



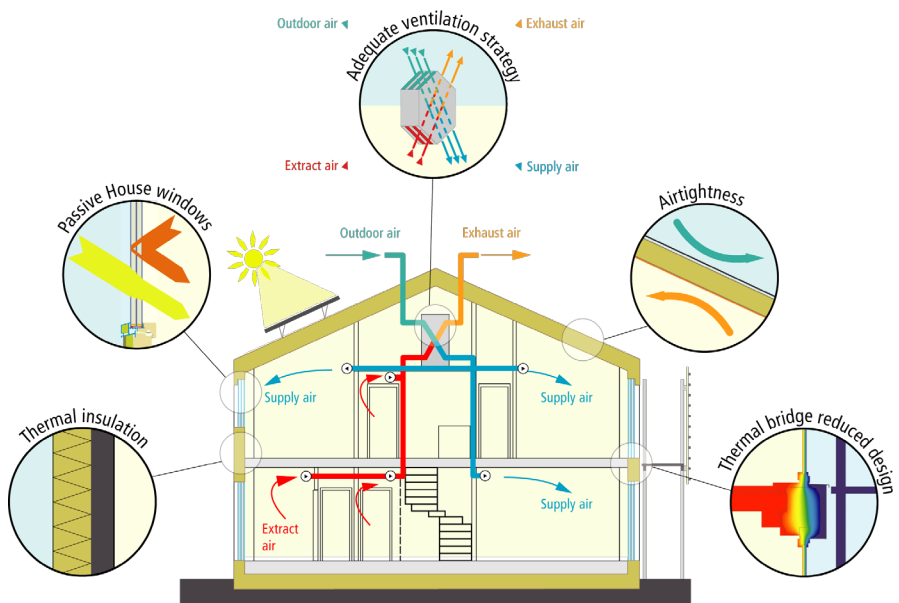
## The Passive House Standard

Passive House **stands for comfort, health, sustainability and savings.**

As the name suggests, Passive House buildings make efficient use of passive heating and cooling sources. This means they are heated mainly from the sun and from heat generated by people and equipment.

During the warmer months, strategic, passive cooling techniques such as night ventilation and shading keep Passive House buildings comfortably cool. This substantially reduces the need for active cooling.

**The Passive House standard is future-oriented and benefits all.** Building professionals profit from a growing industry, without a performance gap – making for satisfied customers! While end-users benefit from greater comfort, health and quality assurance, the environment benefits from a substantial reduction in building-related carbon emissions. The Passive House standard is performance-based, making it transparent and applicable to all building typologies and climates.







## The benefits of the Passive House Standard

### Passive House buildings:

**Achieve a high level of comfort:** Passive Houses are optimally insulated for the local climate creating a consistently comfortable indoor climate, free of draughts.

**Provide fresh air:** The ventilation system with heat recovery cares for comfortable indoor temperatures. In humid climates, a humidity recovery is applied.

**Are built to last:** Passive House buildings are resistant to moisture build-up and mould damage. The reason: Good airtightness and high-quality components.

**Perform as planned:** The planning tool (PHPP) ensures a reliable energy balance. There is no so-called “performance gap” between the planned energy need and the real energy consumption of a building.

**Can be designed as desired:** The Passive House standard is a performance standard and not a specific construction method. Designers are free to choose how to meet the energy performance criteria.

**Are more cost-effective:** Over the building’s lifecycle, a Passive House building is more cost effective than a conventional build, due to its extremely low energy demand and therefore low running costs.

**Are a perfect match for renewables:** The low energy demand of a Passive House building makes it easy to achieve more with less. Renewables placed on even a small surface area suffice to cover the largest share of your energy demand!

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