

# Passivhaus Training Series



THE PRINCIPLES OF PASSIVHAUS IN FOUR AFTERNOON SESSIONS.  
APPLY TO YOUR PROJECTS, BRIEF YOUR CLIENT, CHALLENGE YOUR ENGINEER.  
TECHNICAL INSIGHT WITH NO CALCULATIONS.



## FUNDAMENTALS

What it is and why it helps

## CONSTRUCTION

What works in practice

## BUILDING SERVICES

Smart design for low energy

## PROJECT CRIT

Input on your own project from the group

This course is aimed principally at building professionals in the UK: architects, builders, structural and services engineers, quantity surveyors and potential clients – all can learn how to deliver real low energy buildings.

It introduces the principles behind the Passivhaus standard and for achieving low energy performance.

Four half-day  
technical sessions

**London**



**Bristol**



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# What does the Passivhaus half-day training series provide?



Although the full Passivhaus training is a fantastic way to gain an in depth understanding of all aspects of Passivhaus design, some construction professionals may not have the time or resources to be able to attend the typical Passivhaus two week course.

These half-day sessions offer insight into all the main principles i.e. what makes a good low energy, comfortable building based on the Passivhaus standard. The training is ideal for architects and other design professionals as the focus in these courses is on design principles.

## About the trainers



Our trainers are time-served designers and engineers who have put Passivhaus principles at the heart of their practice. They continue to expand their knowledge on current projects and to pass on their experience to our delegates.

Previous trainers have included:

**Bill Butcher**

**Alan Clarke**

**Nick Grant**

**Eric Parks**

**Piers Sadler**

**Marine Sanchez**

**Mark Siddall**

**Will South**

**Peter Warm**

# 1. Fundamentals of Passivhaus

This half day session introduces the principles behind the Passivhaus standard (Thermal Comfort!) and the differences from normal construction so that everyone on the design team can understand the process.

At the pre planning stage, the focus is mostly on how the choice of Massing/Shape and Glazing/Fenestration can make significant differences to how easily the design can meet the Passivhaus target. Post Planning permission, particularly at detail design stage, the emphasis shifts to ensuring that the actual construction is as close to the theoretical thermal performance as possible.



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## 2. Construction for Passivhaus

How do I build a Passivhaus? How is it different from normal construction? This half day session answers these questions along with some specific guidance on achieving the level of airtightness and thermal bridge free construction required by the standard.

Airtightness, convective bypass, thermal bridging are discussed in relation to common constructions.

Insulation materials are shown and their properties discussed, singling out those that are effective in damp and load bearing situations. Suitable airtightness materials are discussed and shown, and the necessity of an airtightness strategy discussed.

The session stresses the preferred option of designing out thermal bridges rather than using expensive load bearing insulation. Along with avoiding thermal bridging, keeping the airtightness layer simple on plan and site is stressed. You will get a chance to try your hand at detailing some common construction elements in a small group exercise.

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## 3. Building Services for Passivhaus

What building services are necessary for a Passivhaus? This half-day session explores the different services required in true low energy buildings. In these buildings, the heat requirement is usually smaller than the other loads such as hot water. One of the reasons for this, other than the fabric first approach, is the adoption of mechanical ventilation with heat recovery (MVHR) systems.

These mechanical ventilation systems need to be integrated into the building for successful operation, and we look at the necessary components, how they should best be installed, their space requirements, and where the supply and extract ducts need to be terminated.

The second part of the session looks at how the choice of fuel for heating and hot water system can be different from conventional buildings:

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## 4. Putting Passivhaus into Practice (Crit. Session)

This session has been developed due to demand from participants for feedback on their own designs from experienced Passivhaus designers and certifiers.

During this session, a number of schemes will be shown and discussions followed based on achieving Passivhaus certification. If you would like your design to be included, you will need to contact the trainers beforehand to arrange for your plans to be adapted for projection or printing, as required.





## Passivhaus Half-day Series

### Fees - per half-day session

<i>TGR / AECB / PHT Members</i>	£112 + VAT
Non-Members	£125 + VAT

### Special offer - discounted rate for whole series

<i>TGR / AECB / PHT Members - All 4 sessions</i>	£400 + VAT
Non-Members - All 4 sessions	£450 + VAT

Book online at [www.passivhaustraining.co.uk](http://www.passivhaustraining.co.uk)

### Venues

Pollard Thomas Edwards, Diespeker Wharf, 38 Graham Street, London, N1 8JX



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Our key partners:



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