TECHNICAL ACADEMY

nZEB In Practice

Understand the new standard for building energy efficiency

Course Description

A one-day course undertaken in the Saint-Gobain Technical Academy, Dublin.

Attendees of the course will attain a comprehensive overview of the fundamental requirements to achieve compliance with nZEB building energy standards. The course forms part of a new three-part suite of modules offered by the Saint-Gobain Technical Academy. Completion of all three modules provides a comprehensive platform for candidates to go forward and attain further recognition as a Certified Passive House Tradesperson.

Covering all aspects of the required building energy performances and how compliance needs to be demonstrated, the nZEB course recognises the benefits of ensuring a primarily fabric first approach to residential buildings balanced with the buildings heating and mechanical services, including contribution from renewable sources. Key topics include Insulation, Airtightness, Thermal Bridging and Ventilation, ensuring that attendees understand the importance of integrating all elements in a coherent manner to offer high quality comfortable buildings with good levels of air quality without causing undue risks with overheating or condensation.

Other course details:

Location: Saint-Gobain Technical Academy, Kilcarbery Business Park, Dublin

Duration: 1 day

Start time: 09:00

Finish time: 16:30

Lunch: Buffet lunch and refreshments will be provided

Attendance requirements

Attendees are expected to have a basic knowledge of construction principles

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Course objectives

- **The nZEB concept:** Understand the concept of nZEB: How this relates to previous Building Regulation requirements and a comparison of nZEB with Passive House requirements.
- **Demonstrating compliance:** Understand how compliance is demonstrated through building energy performance calculation ion DEAP and how this compares to the PHPP software used for Passive Houses.
- **The benefits of achieving continuity of the building envelope:** How to coherently integrate insulation, airtightness and vapour control around the full building envelope to eliminate and mitigate the risks of thermal bridging.
- **The glazing effect:** The significance of windows in nZEB and Passive buildings. There impact on performance and comfort.
- **Contribution from building energy services:** Understand how space heating, water heating, ventilation and other mechanical services are factored into the energy performance and the revised requirements for renewables.
- **Avoiding the risks - Condensation:** Understand the risks associated with condensation and mould growth and how good detailing prevents such occurrences.
- **Avoiding the risks – Air quality and ventilation:** The need to provide a well-designed ventilation strategy and other factors that can lead to poor air quality or overheating.
- **Joined up thinking, joined up application:** Compliance is the paperwork exercise. The expectation is high performing quality buildings. Understand the importance of communication and interfacing between trades to ensure detailing maintains performance expectations. Typical examples of what can go wrong and why.

Certified Passive House Tradesperson – Building Envelope

There are many similarities between the standards and building physics principles of nZEB when compared to those required to achieve Passive House Standards. The Saint-Gobain Technical Academy has structured the nZEB course and it's two Airtightness courses to ensure that the all the learning objectives of the Certified Passive House Tradesperson – Building Envelope qualification have been addressed.

Attendance to all three of our free to attend one day courses (as listed below) will provide the learning platform for a candidate to put themselves forward to sit the Certified Passive House Tradesperson – Building Envelope examination.

- nZEB
- Airtightness & Moisture control
- Airtightness skills

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