



The below answer sheet is for your own self-assessment. Please keep your completed questionnaires and answers on file for your record. Sustainability Summit will send you a Refuel certificate once your questionnaire has been submitted.

## **Rethinking Passive Design**

1. What are the key challenges in applying Passivhaus standards in Australia's varying climate zones, and how can these be overcome to ensure optimal sustainability?

Establishing an Australian Passivhaus standard would require a collaborative effort involving adaptation of global principles to local conditions, training and certification of professionals, local research, and robust policy support.

2. Is there a need for a uniquely Australian Passivhaus standard that considers local materials, cultural preferences, and environmental conditions?

Passivhaus can be adapted to the warm, humid summers and mild winters in these areas. The challenge lies in managing heat and humidity, but the standard's focus on energy efficiency can still offer significant benefits.

- 3. How can passive design strategies be integrated with other sustainable practices to create costeffective, energy-efficient buildings in different regions of Australia?
- Tailor strategies to regional conditions
- Use advanced mechanical ventilation systems with moisture recovery to enhance indoor air quality while minimizing energy use.
- Design to minimize direct sunlight penetration with features like:
- Deep eaves
- Shaded verandas
- · Reflective roof surfaces
- Incorporate natural ventilation options and use ceiling fans to improve airflow, reducing reliance on air conditioning.
- 4. What role does government policy play in promoting or hindering the adoption of Passivhaus standards across Australia, and what changes could support wider implementation?

By setting clear and enforceable guidelines that align with local building codes, and by fostering a strong support network for professionals, the concept could be effectively integrated across the nation. With the right mix of incentives, education, and public awareness, Passivhaus could become a key part of Australia's push towards energy-efficient and sustainable building practices.

(Competency codes: PC 3, PC 10, PC 24, PC 31)