



Passivhaus cafe - 'Goldfinch Create and Play Cafe'

Design company name: **Seb + Fin Architects**
Build company name: **Earthwise Construction**
Consultancy: **Ecospheric**
Project location: **Bristol**
Project completion date: **2023**

Project brief

The aim of client and founder of Goldfinch Create & Play, Nicole Strong, was to create a bright and welcoming environment to nurture wellbeing and creativity through children's play and craft. Goldfinch provides a place for people to meet, make and connect. Delivering an inspiring, comfortable, and environmentally sustainable space for the community to gather.

Goldfinch Create & Play in Bristol is the world's first Passivhaus certified art café.

Sustainability features

- Passivhaus Classic Standard typically equates to a 90% reduction in operational energy demands than existing UK building stock
- The building achieves an operational carbon reduction of 73% compared to building to Part L notional
- The whole life carbon analysis is 540 kgCO₂e/m² (excluding operational energy), meeting the RIBA 2030 Embodied Carbon Targets for new build schools (the most appropriate category to apply) - this is around 46% lower embodied carbon than a typical school building
- Using the heat pump rather than a gas boiler results in a reduction of 50% in total lifetime CO₂ emissions
- Predominantly timber frame construction with blown cellulose insulation
- Airtightness Achieved: 0.43 ACH @ 50Pa (N50) (Requirement: <0.60 ACH @ 50Pa (N50))
- Air Source Heat Pump (ASHP)
- 21 solar panels & 7kW battery offset much of the grid electricity requirement

Find out more: www.sebandfin.com

