

Design Statement

Lance & Fiona Smith _ **Summer Lodge**, Copyhold Lane, Cuckfield, Haywards Heath, RH17 5EB

This bespoke home was designed in close collaboration with Lance and Fiona Smith, a retired couple seeking a modest, comfortable home that will support ease of living and long-term sustainability. Their key requirements include an open floor plan to facilitate movement, an abundance of natural light to support light-based health outcomes, a lift, which will insure the whole house is accessible to them in years to come, and a strong connection to the surrounding nature, which has been proven to reduce stress and anxiety. Being mindful of the ongoing climate crisis, they also emphasized the importance of a sustainable home with a net-zero operational carbon footprint.

The proposed four-bedroom home is arranged over three levels, allowing a reduced footprint compared to the existing house. Working with the land, the sloping site has been used to advantage: the basement is discreetly tucked into the earth when viewed from the front, while opening fully to the garden at the rear. The design adopts a chalet-style form with low ridge and eave heights. The gable roof gently slopes toward neighbouring properties. There are no direct lines of sight from the first floor, which eliminates overlooking and preserves privacy. Two bedrooms are situated in the roof space, while the remaining two are on the basement level.

Natural sunlight plays a central role in the design. The south-facing façade is generously glazed to maximize passive solar gain, while the north-facing elevation is more enclosed for privacy and insulation against colder conditions. Glazing on all four sides allows daylight to permeate the home, creating a bright, uplifting environment that supports the well-being and lifestyle Lance and Fiona envision.

This focus on natural light has the advantage of creating a bright aesthetic and supporting health. Research increasingly confirms the critical role daylight plays in producing mood-regulating serotonin and melatonin, in supporting the circadian rhythm which regulates sleep-wake patterns and various other psychological processes, and in warding off depression, most notably Seasonal Affective Disorder. The extensive glass walls not only invite sunlight deep into the home but also establish a seamless visual connection to the outdoors—bringing the calming, restorative benefits of nature into everyday living.

The couple selected Huf Haus as their builder, drawn to its exceptional sustainable building practices and modern design ethos.

The home is designed around a long-term, environmentally conscious energy strategy. It achieves a net-zero operational carbon footprint through a combination of efficient systems and renewable energy. An external air-source heat pump supplies hot water for bathrooms, kitchen, and for the underfloor heating. Electricity is generated by Photovoltaic (PV) panels integrated into both slopes of the roof. The primary construction material is laminated timber, responsibly sourced from sustainable forests. Generous roof overhangs offer protection from both rainfall and harsh sunlight, helping to regulate indoor temperatures and protect the building—functioning like a sun or rain umbrella that shields from overheating and weathering.

This home is not only a reflection of Lance and Fiona's values but is also a thoughtful response to its site, prioritizing sustainability, health, and harmony with nature.