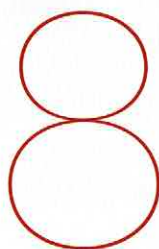


“These homes offer quality design and architecture alongside real comfort”



IMAGES BY DANIEL BARBOUR



COMBINING ENERGY EFFICIENCY WITH COMFORT

WHO HASN'T GOT ENERGY on their mind right now? As we contend with a climate emergency while our gas bills continue to soar, more of us are acquainting ourselves with passivhaus design (which you can read more about on page 249), a construction concept that seeks to minimise energy consumption. Excitingly, Dundee-based architect Kirsty Maguire says the construction industry is upskilling at pace to meet an increased demand for energy-efficient homes.

“Originally, there were only a few of us in Scotland working in passivhaus, and as a community we were very keen to help others upskill so as to make meaningful change at scale,” says Maguire. “That’s now coming into play, which is great to see. We’re part of a team delivering training across the board to consultants, designers and contractors. And, in our own projects, we help to build the expertise of the contractors we’re working with; so, for example, a contractor we worked with recently has decided to pivot their entire business to move into low-energy passivhaus builds, because it combines

high quality with environmental responsibility.”

A holistic, fabric-first approach is taken when creating a passivhaus home. Good insulation and excellent detailing contribute to their success as low-energy buildings, of course, but these are not the only tools in the kit. “We look at how the building sits on the site, optimising the glazing levels so that you get the right amount of sunlight into the building without overheating. We use mechanical ventilation heat-recovery systems that provide great indoor air quality throughout the year, so that you have fresh air in your home whether you open the windows or not, and we employ renewables for hot water; in recent projects we’ve used air-source heat pumps,” continues Maguire.

In previous decades, eco living was associated with asceticism; a hippie finding warmth in a hair shirt. But the reality of living in a passivhaus build couldn’t be further from this outdated stereotype.

“These homes offer a way to have your cake and eat it, because you’re getting quality design and architecture alongside real comfort,” says Maguire. “A warm, low-energy house with plenty of fresh air – who could say no to that?”