

GRYPHON HOUSE - WARWICKSHIRE

Energy efficient contemporary home

Project: Gryphon House, Warwickshire

Company: Frame Technologies

Sector: Self Build

Technology: Timber frame

As the chosen timber frame supplier, Frame Technologies needed to come up with specific solutions to integrate features to help the couple build their dream home. Gryphon House is a stunning contemporary 5 bed, two-storey house set in a spectacular location in Warwickshire.

The house is timber frame and clad in stone, with some fibre cement cladding and a slate roof. As well as being highly efficient, it incorporates beautiful features, such as a floating, curved staircase, external balconies around the rear elevation, and a vaulted ceiling over the kitchen with a bridge to the bedrooms over the garage. Large triple glazed sliding doors in four rooms lead to patio/balconies, providing a light, bright and sunny interior, and the incredibly popular inside/outside living feel. The curved staircase and external balconies provided interesting design challenges.

Energy efficiency was at the forefront of design. The Shepperds chose Frame Technologies' unique TechVantage™ S system because of the energy performance it would provide. The TechVantage™ S system is a breathable closed panel system fully filled with 140mm 035 timber rafter batt in the factory. The system is lined on the inside with a 50mm PIR Liner and service batten and plasterboard with a Thermo breather paper on the outside. This delivers a 0.15 U Value through the walls, while a Superglass loft roll was used in the roof to achieve 0.13 U value. A Superglass acoustic insulation in the internal walls and floor zone delivered a well-insulated energy efficient airtight new home.

The complete house achieved a SAP rating of 99, which is exemplary, and achieved the highest Passivhaus standard when tested for air tightness.

Building with timber frame offered a number of benefits to the Shepperds. The lightweight and flexible nature of the material meant they didn't need all the supporting foundational components that would be required for other build methods. The flexibility of timber also meant they could make adjustments easily during the build process.

Frame Tech MD Simon's design skills helped Chris and Jenny realise their dreams of large connected internal spaces, large sliding windows for inside outside living with cantilevered balconies and feature curved cantilevered main staircase.

Air source heat pump powering hot water and underfloor heating on both floors, heat recovery ventilation, triple glazing throughout, 11kW PV panels supplying electricity on sunny days ready for battery storage, all combined with the benefits of an airtight, highly insulated shell to make a comfortable, cheap to run, but elegant home.



