## **INSULATION**

(New build in Ludlow)

The key element to our build was the insulation. We explored a number of different options but eventually decided on

## 1. Underfloor: Technopor Recycled Glass

https://www.green-construction.org.uk/recycled-products/technopor-in-the-uk/



This is commonly used in retrofit buildings. It has good structural ability, drainage, is inert, fire resistant, odourless, no capillary action (prevents soil moisture coming into the building), frost proof and easy to handle.

## **2. Walls and roof: Warmcel** Blown cellulose fibre (recycled newspaper) https://www.warmcel.co.uk/





This is a high performance thermal insulation for timber framed houses. The thickness of the insulation is 300mm and it is usually blown into the spaces through holes in the internal vapour control layer. The tight packing of warmcel means there are less gaps for heat to escape in winter or warmth to come in summer. External breathable layers reduce the risk of condensation and mould growth. Our experience is that the structure loses little heat in the winter and keeps cool in the summer.