

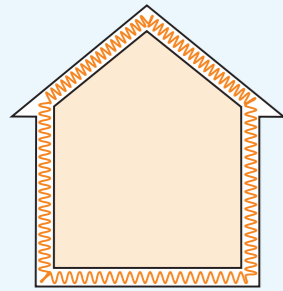
9.2.2_A RULE 1: FABRIC FIRST APPROACH

PROPOSED CONSTRUCTION AND ENERGY METHODOLOGY DECEMBER 2023

PIPPIN BARN

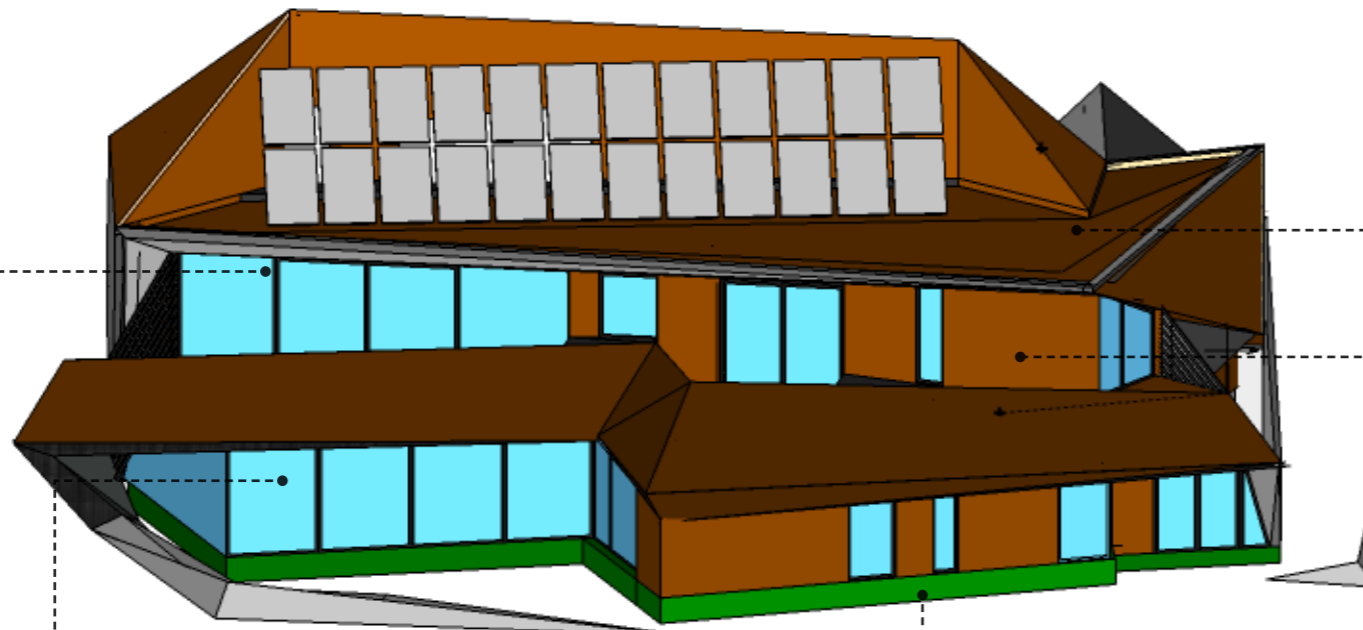
Proposed Seasonal Energy Solution: Build better to need and use less energy.

1. Fabric First Approach



Focus investment on building envelope efficiency:

- High levels of insulation = less heat required
- High airtightness = less heat loss = less heat required
- High performance triple glazed windows = less heat loss
- Mechanical Ventilation Heat Recovery (MVHR) = less heat loss



● WALLS AND ROOF - 0.14 W/M2K

300mm engineered timber framed panels. Recycled newspaper insulation, Panelvent external cladding, Actis multifoil insulation internally enhances insulation & performs airtightness & vapour barrier roles. External cladding varies.



● WINDOWS - U-VALUE < 0.8 W/M2K (INC. FRAME)

Triple glazed, triple sealed Argon filled timber framed & insulated aluminium clad "Passivhaus" certified windows & doors to be specified throughout.

● SLAB - U-VALUE 0.13 W/M2K

High levels of insulation (200mm) on a beam and block floor. Perimeter block work lifts the timber frame up to prevent moisture contact with the ground.

