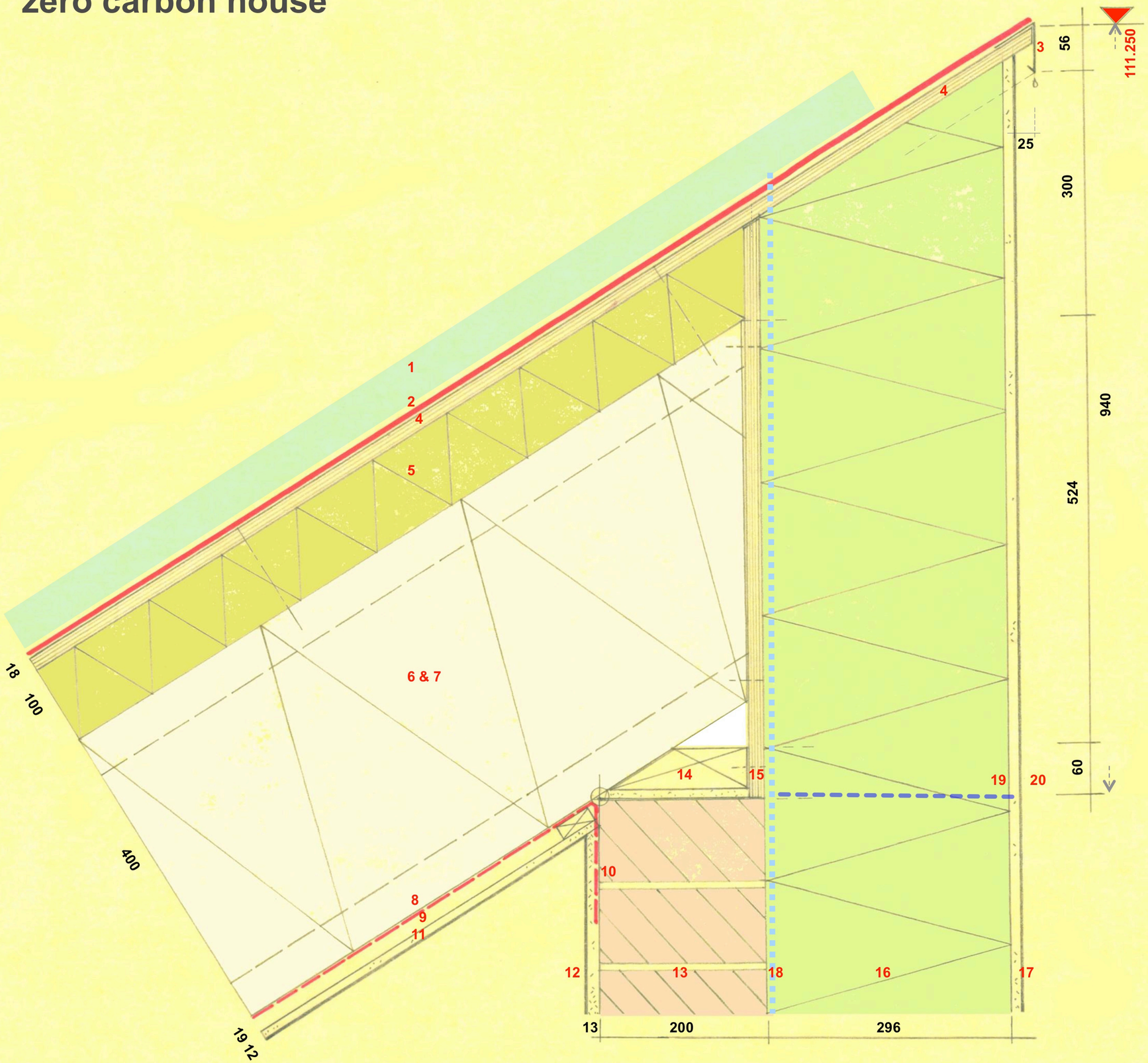
zero carbon house

CONSTRUCTION

Mono-ridge detail May 2008 1:5 at A3 103 (27) 08 C

A: 4.11.8: redrawn, omit slates, battens, void, ply lining, special ridge flashing; add Alwitra, PV drop, squash board, insulation types, spec.
B: Sto prelim issue C: 19.4.9: Render mvt joint added; notes + dims updated.



1. Position of PV and thermal solar roof panels to separate details. Roofer note spec J42/65 regarding waterproofing of roof penetrations.
2. Roof membrane J42/11, 30 degree pitch.
3. 56mm downstand 120 degree edge trim. Note this is to line through with standard 50mm 90 degrees edge trim used at verges, shown dotted, see drawing (27)15.
4. 18mm OSB ply deck K11/40 through-fixed back to i-beams.
5. 100mm cellulose insulation board P10/46.
6. 400mm timber i-beam rafters at 600 c/c G20/06.
7. Dry blown cellulose insulation infill P10/06.
8. Variable vapour permeable airtight membrane very carefully installed and sealed with proprietary tapes P10/66.
9. 19x44mm SW battens at 600mm to clamp airtight membrane. G20/10.
10. Strip of mesh/airtight membrane sealed into bonding plaster, mastering galvanised straps to wall plate.
11. 12.5mm plasterboard lining/ceiling M20/50.
12. 13mm wet lime plaster with recycled glass aggregate M20/19, forms airtight seal.
13. 203mm unfired clay block masonry F10/32 laid flat.
14. Ex 175x50 SW wall plate fixed with galvanised straps. G20/10.
15. 18mm OSB squash board K11/40 fixed to ends of timber i-beam rafters and close fitted to underside of insulation over-boarding to retain blown cellulose insulation.
16. 296mm insulated render system M21 with no mechanical fixings..
17. Render.
18. Position of PV wiring drop.
19. Movement joint type E carefully aligned across this elevation with window heads & coloured render panel, with compressed foam infill at joint in backing insulation to prevent airgap/cold bridge.

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