15.01.09

AJ

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SMALL PROJECTS PART 1

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Moonshine, Bath
Architect: Mitchell Taylor Workshop
Cost: £150,000

Moonshine, a 1786 castellated stone building, has no car access within 400 yards, and this self-build addition (*see pages 36–37 for detail drawings*) was constructed with components that had to be carried by hand along a woodland path. The client acted as main contractor and the building was completed in six months. It is clad externally with dark grey corrugated sheet – a nod to local corrugated Dutch barns. The extension touches the ground lightly, using small pad footings in eight positions, which allows the water table to remain unaffected and minimises concrete use.

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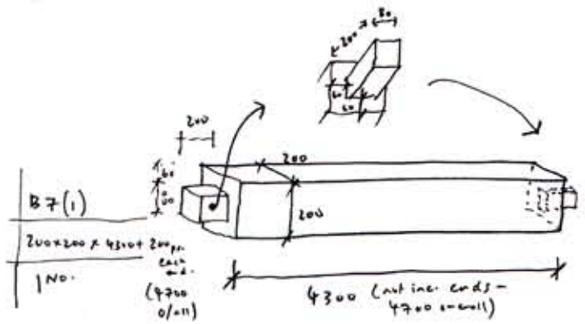
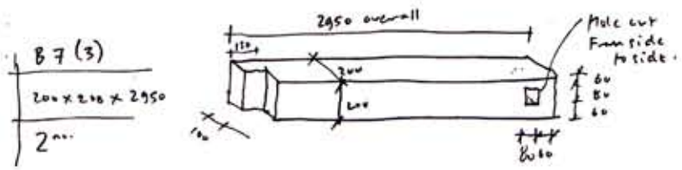
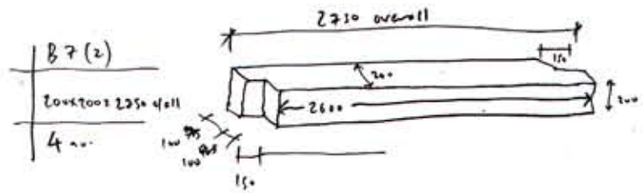
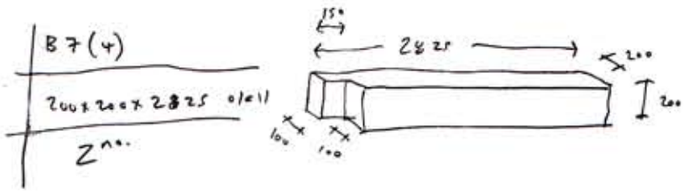
A Timber Room, Somerset
Architect: Unit 7, London Metropolitan University
Cost: £9,500

This timber structure was originally built for last year's Ecobuild exhibition at Earls Court, London. Constructed from Kerto-S composite timber elements donated by Finnforest, it was clad internally in 12mm plywood to create a materially rich sculptural interior. Artists Rut Blees Luxemburg and Hilary Koob-Sassen invited the students to rebuild the structure in Hadspen, Somerset. It was transported by lorry, reassembled and added to, creating a visually and thermally warm space inside an existing agricultural shed.

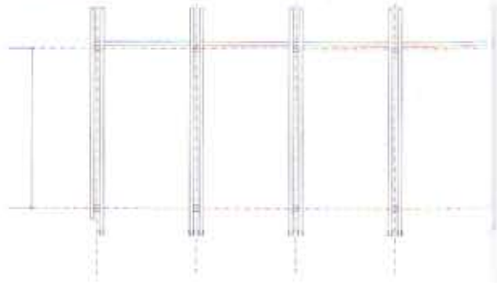




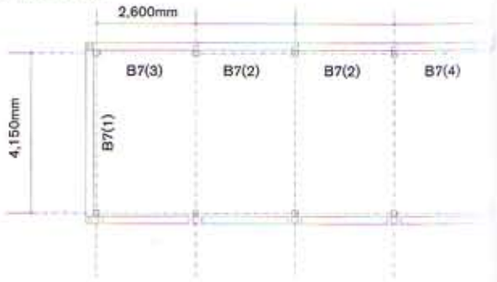




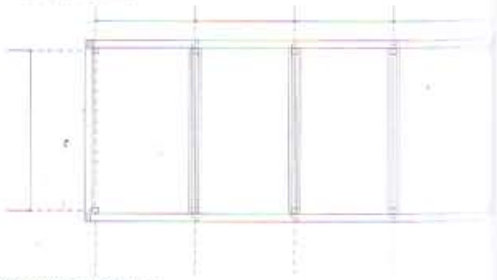
Roof beams



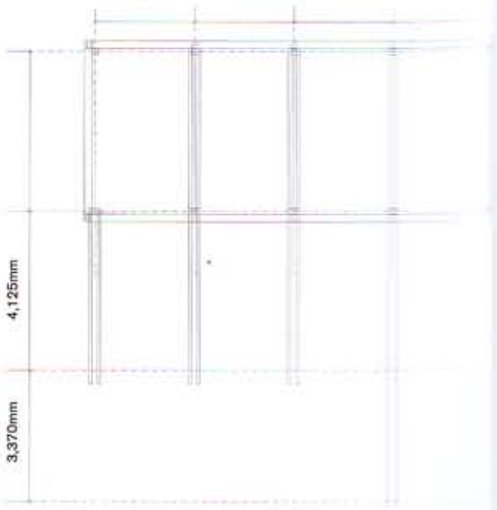
Eaves beams



First-floor beams



Ground-floor beams



Above Members used to construct Moonshine's frame, shown here as hand-drawn sketches by Piers Taylor of Mitchell Taylor Workshop
Right The frame set-out drawing shows how the members connect with each other

OAK FRAME, MOONSHINE, BATH, BY MITCHELL TAYLOR WORKSHOP

Moonshine's self-build addition (*see page 30*) was designed on the back of an envelope. We'd been living in the tiny old bit of the building and, with a third child on the way, we needed more. I hadn't intended to build it myself, but my contractor moved too slowly, so I sacked him.

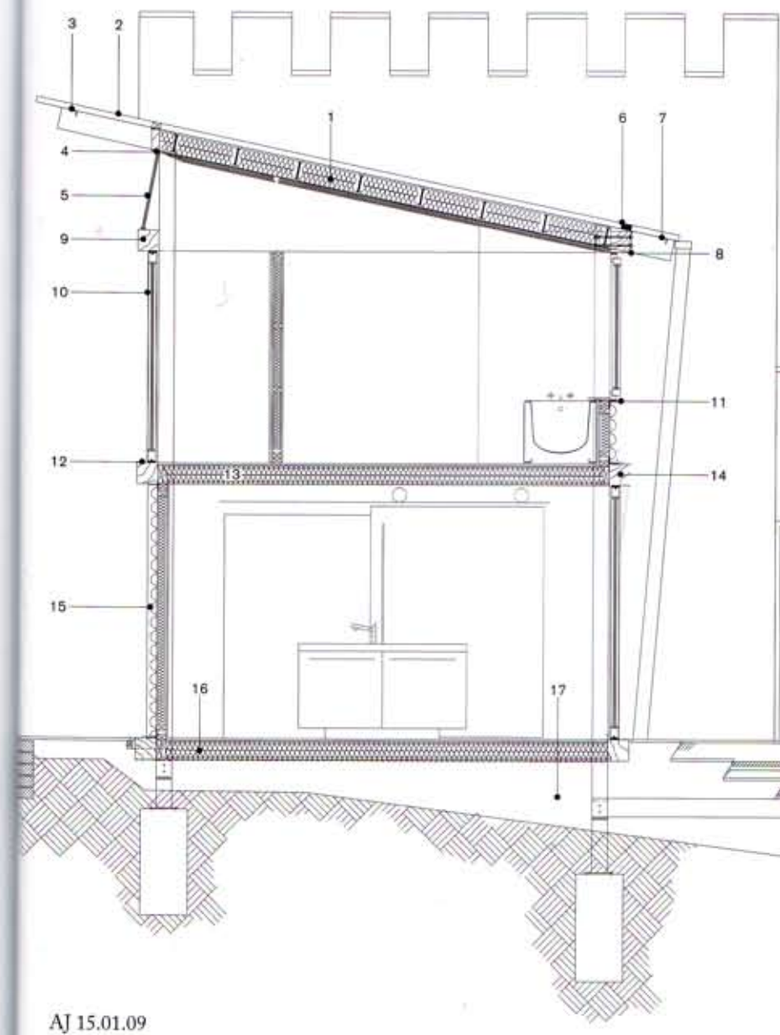
Friends helped with the on-site handiwork, and I didn't tell the subcontractors about the woodland location. Instead, when they turned up, I coaxed them along the 400-yard footpath. The glaziers were astonished – each pane of glass weighs 250kg – but to their credit they just went and got seven more burly blokes.

The shifting clay on which we built could have resulted in water building up behind the new build, so, with Jerry King of Structures1, we created a raised, suspended ground floor on deep pad footings.

Externally, a 200 x 200mm perimeter beam is pinned to each column with a single stainless steel stud. Internally these beams are split in two and bolted together with a compriband strip in the middle to allow for shrinkage, so the longer members could be carried to site in two lighter parts. The perimeter zone allows for glazing, cladding or louvres to be fitted.

The day after we put the frame up, our child was born.

Piers Taylor, director, Mitchell Taylor Workshop



1. Gassell AP55 HR RAL 9007 on Roofshield underlay, on 15mm marined ply deck, on 175 TJI joists lined internally with vapour barrier and 55mm thermal board and skim
2. 150mm splay cut
3. Galvanised angle
4. Galvanised eaves bracket
5. 6/12/6 sealed DGU bedded in silicone
6. Closer in corrugation
7. Galvanised 50 x 50mm angle
8. 200 x 200mm iroko beam
9. Galvanised connection
10. All sliding screens aluminium-framed, argon-filled DGU
11. Galvanised angle to close cladding and support windows
12. Galvanised flashing to all exposed horizontal surfaces
13. 19mm MR chipboard on 175mm TJI joists at 400mm centres with mineral wool insulation
14. 200 x 200mm iroko sole plate
15. 70 x 50 studs at 600mm centres between structural frame filled with insulation and faced with 19mm marine ply and Gassell AP55 cladding. Internally, vapour barrier and 15mm marine ply to studs and clad in 1mm perforated steel sheet
16. Hardwood floor on vapour barrier, 200mm TJI joists at 400mm centres. Mineral wool insulation and masterboard to underside
17. Fully vented void