The MORRIS Lesser horseshoe 'Cool Room/Tower'

Lesser horseshoe bats, like all bats living in temperate regions, require a range of micro-environments in a roost, including an area where they can go into torpor in times of inclement weather, poor insect availability or as their body condition, age or sex dictates. 'Cool rooms' may also be used in times when the temperature inside the roost is too hot.

Sites that lesser horseshoe bats generally use in summer have a range of conditions readily available, usually in the roof voids of a large house or farm building. In some cases, smaller sites are chosen where at least a part of the roost temperature is influenced by an independent heat source, for example a central heating boiler or heating exhaust flue. In these circumstances, the remaining section of the building is generally cooler.

The loss of many roost sites has been well documented in Britain. Those that are not lost completely are sometimes adapted to accommodate bats in a smaller section of the building. In these sites, it is likely that the range of micro-climates has also been restricted. At a large country house in west Dorset, a bat colony was evicted from the main house and took up residence in a tiny outbuilding known as The Potting Shed. Being less than four metres long, two metres wide and only two and a half metres tall at the highest point, the single elevation slate roof offered little in the way of temperature range. Basically the bats could only roost on the underside of the roofing felt; no roosting habitat was available lower in the building, where it would be a few degrees cooler.

The following figures suggest a way of offering bats an opportunity to roost at different 'altitudes'. It has proved to be very successful: within a few days bats began to use the structure, and although there are only around 30 animals in the colony, there is an accumulation of droppings 50-75mm deep on each 'floor'. Despite the lowest floor/ceiling being just 450mm from the ground, it is extensively used.

Colin Morris

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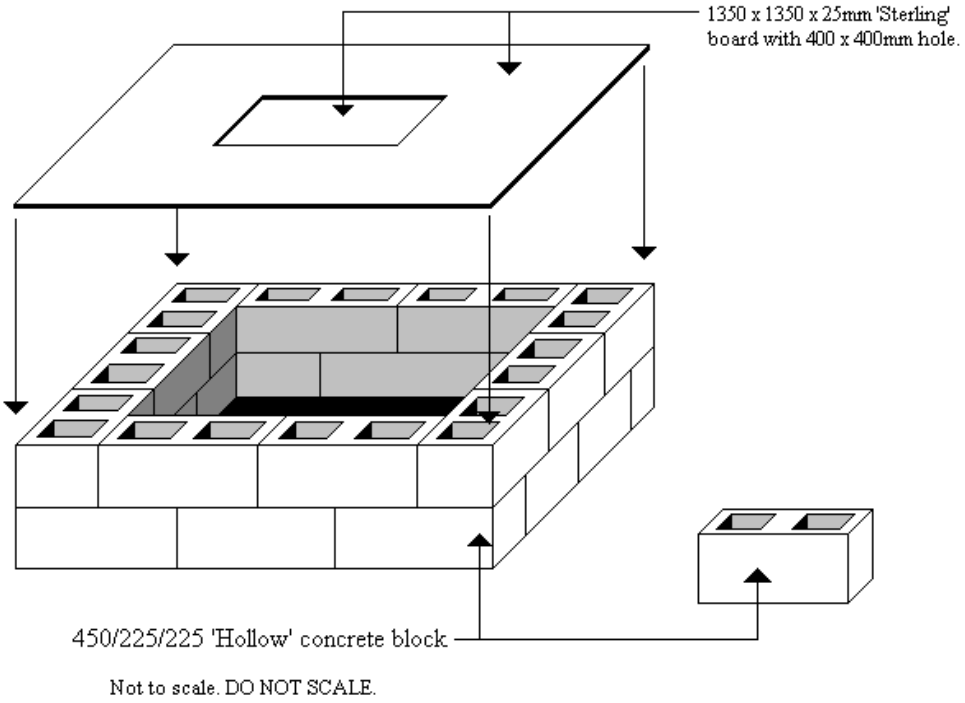


Fig 1. BASE.
The floor/ground need to be flat and level. Sterling board has been suggested as it has a 'rough' surface, enabling lesser horseshoe bats to grip. In the 'original' tower I fitted nylon netting to the underside of the boarding.

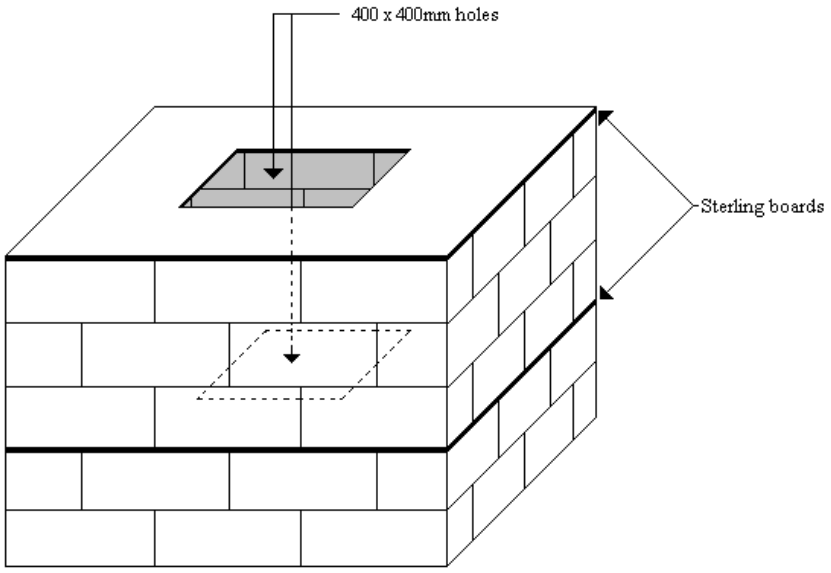


Fig 2. CENTRAL SECTION. 400x 400mm holes cut centrally through boarding

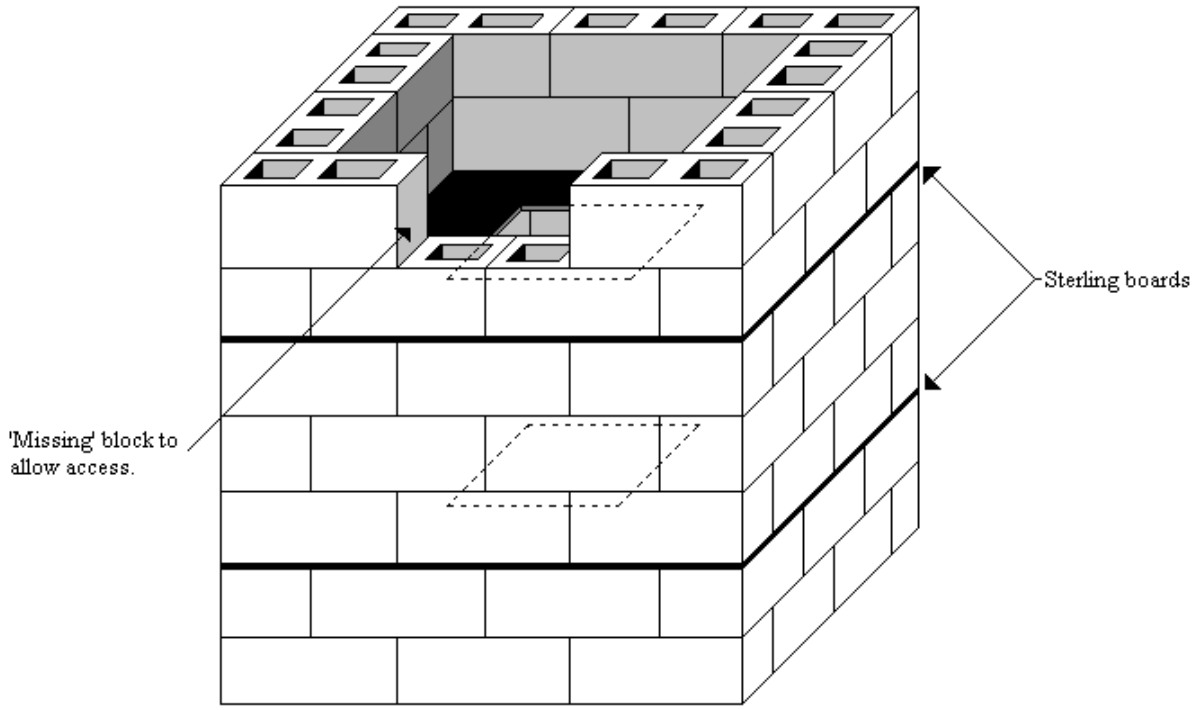


Fig 3. UPPER SECTION. Showing 'missing' block to allow bats access

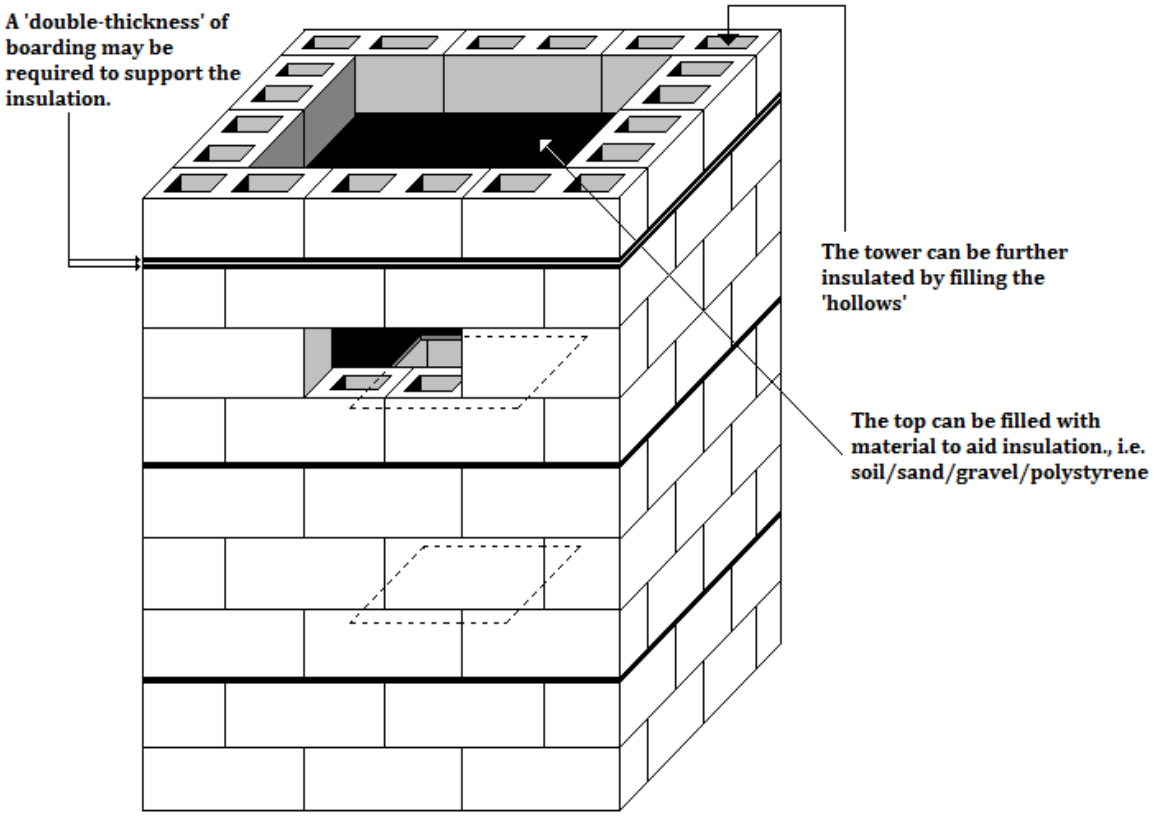
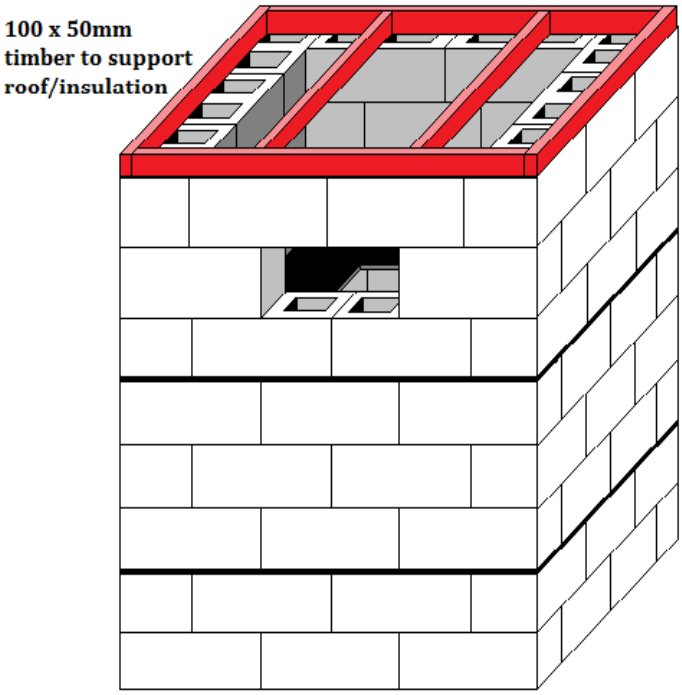


Fig 4. FULL TOWER. Insulation can be increased by filling the hollow sections and covering the roof with suitable material ie soil/sand/gravel/polystyrene

Fig 5.Alternative ceiling/roof support using 100 x 50mm timber.



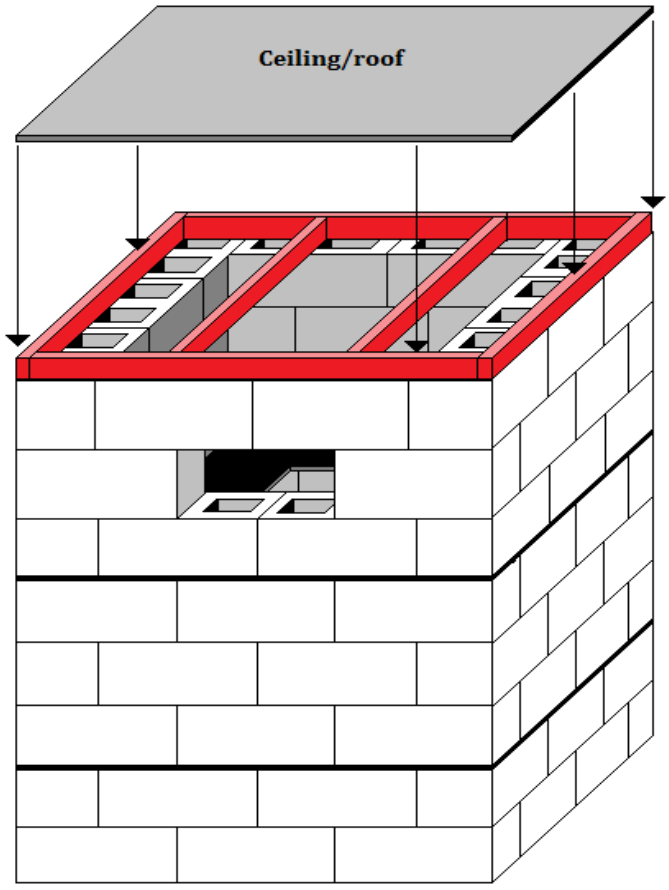


Fig 6: Alternative roof/ceiling construction using 100 x 50mm timbers.

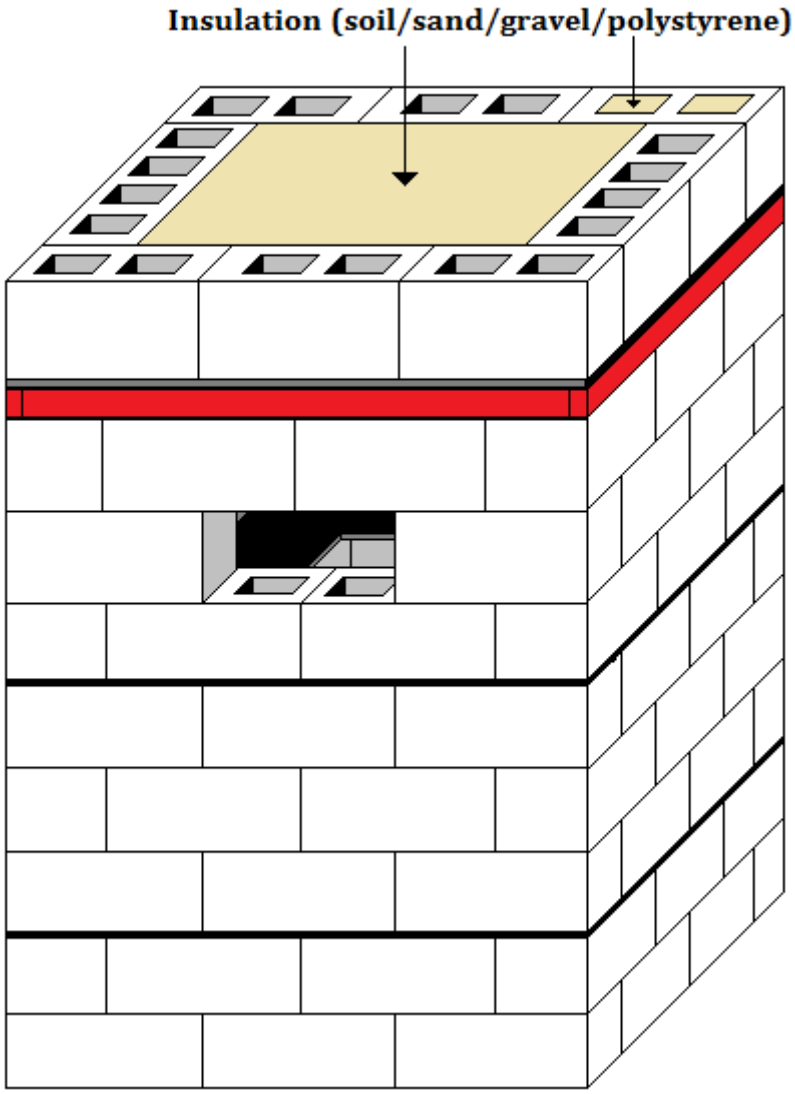


Fig 7. Tower with timber supported ceiling/roof and insulation