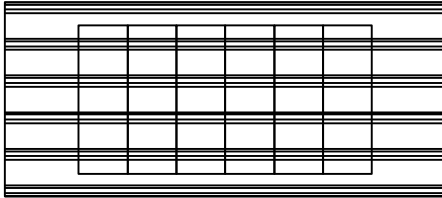


THE ZEST HIVE FOR LANGSTROTH CONVERSION OPTION 3 FOR USE WITH BLOCK SIZES IN THE USA

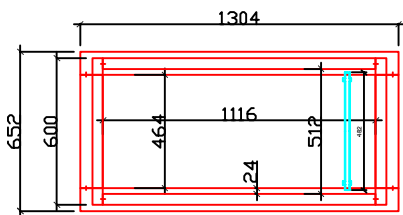
- BLOCKS
- WOOD
- INSULATION
- PLASTIC

COMPONENTS

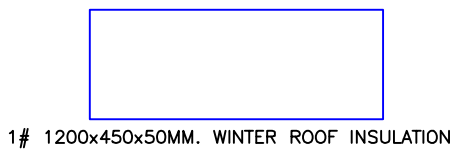


ROOF

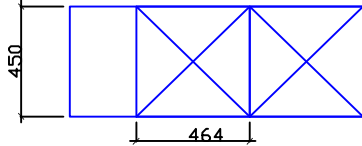
2000 X 1000 METAL SHEET HELD DOWN WITH ROPES AT EACH END ONTO ROOF BLOCKS. PROVIDE 2 SHORT PIECES OF 12 DIA. HOSE TO PROTECT THE ROPE AGAINST THE SHEET EDGE.



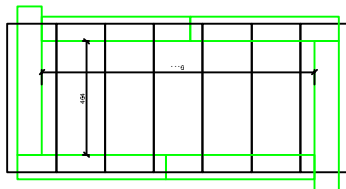
MAKE FRAME BEARER FROM 94X44 SOFTWOOD AND STAPLE AT CORNERS. MAKE CONTAINMENT FRAME WITH 44X20 SOFTWOOD AND STAPLE AT CORNERS



1# 1200x450x50MM. WINTER ROOF INSULATION

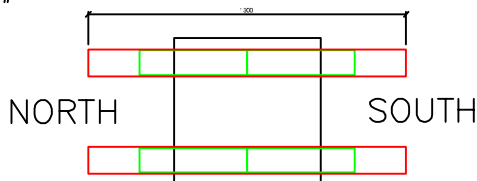


2# 20MM. WINTER PARTITION INSULATION



BLOCK EXTERNAL ENVELOPE

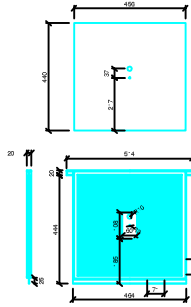
FLOOR WALLS AND ROOF FORMED FROM 25#608X200X100 LIGHTWEIGHT INSULATING BLOCKS.



SUPPORT EXTERNAL ENVELOPE

2# 1300X100X50 TREATED SOFTWOOD BEAMS. INSTAL OVERHANGING POLYTHENE D.P.C. (TO DETER CLIMBING VERMIN) ON 4# 440X215X100 HEAVY CONCRETE BLOCKS CANTVERED OUT OVER EDGES OF 600X600 CONCRETE SLAB.

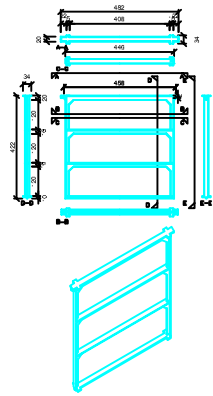
QUEEN EXCLUDERS AND PARTITIONS



2# 5MM. PLASTIC CORDEK BOARDS TO TURN 2 OF THE QUEEN EXCLUDERS INTO 2 PARTITIONS TO LIMIT COLONY SPACE.

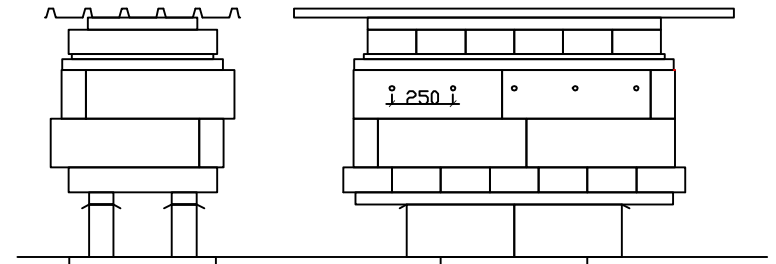
4 PLASTIC ZEST QUEEN EXCLUDERS WITH 3MM BARS AT 6.3 C/C. GIVING A 3.3 MM BEE SPACE

24 PLASTIC ZEST FRAMES



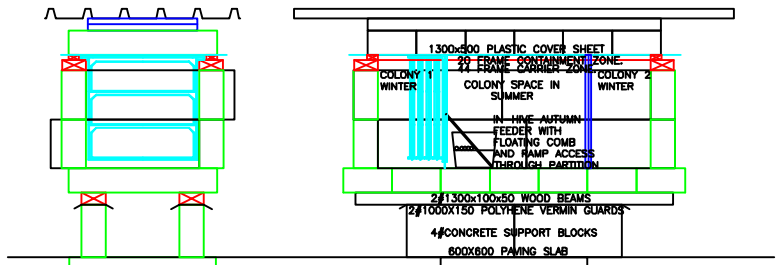
Plastic frames not yet available

ASSEMBLY



END ELEVATION

LONG ELEVATION



CROSS SECTION

LONG SECTION

Guidance on building your ZEST hive

1. Clear the ground and level it. Treat it with something unpleasant (like used engine oil) but not dangerous. To prevent burrowing rodents from undermining the foundation slab.
2. Lay the 600x600x38 foundation paving slab. Level with a spirit level. There is only one slab so that any uneven settlement can be easily dealt with by levering it up and repacking with earth to re-level it.
3. Lay the 4# 440x215x100 heavy foundation blocks on the slab as shown on the drawing, being corbelled out from the foundation paving slab.
4. Lay 2#1000x150 polythene d.p.c. vermin guards on the foundation blocks.
5. Lay 2#1300x100x50 treated softwood on blocks as floor support beams.
6. Lay 25#608x200x100 lightweight insulating blocks from Aercon AAC Item 4045 on the wood beams to form the floor, roof and walls. If not available other lightweight blocks may be used.
7. Assemble the 94x44 wood carrier frame. Lay it on the block floor so that is central in both directions and join with staples. Mark the internal volume of the ZEST hive on the floor. Lay the wall blocks to the lines
8. Ensure that the vertical joints are staggered in the second course to achieve bond. Blocks are laid loose.
9. Place the frame containment frame onto the carrier frame and ensure alignment. Join with staples
10. Insert the plastic frames, partitions and queen excluders as required into the hive.
11. Refer to the drawing "Zest Transition and Management Diagrams" for colony insertion from a traditional hive.
12. Deploy the 2# closing partition insulation boards on the side of the partition away from the bees.
13. Deploy the plastic cover sheet on the containment frame.
14. The 6 roof blocks are placed on the top edge of the carrier frame.
15. Lay the 2000x1000 roof sheet on the roof blocks. This can be scrap metal and is preferred as it is light weight.
16. Hold the roof sheet down with holding down ropes at each end with the rope passing under the floor beams. Protect the rope at the sheet edge contact points with plastic hose. Additional insulation is best deployed on the roof blocks in winter.
18. Ventilation and bee access holes of 22mm. (wine cork sized) will need to be drilled through the block approximately 75mm. down where show on the elevation. These will receive virgin cages which can be open or closed to bees and/or air as required.