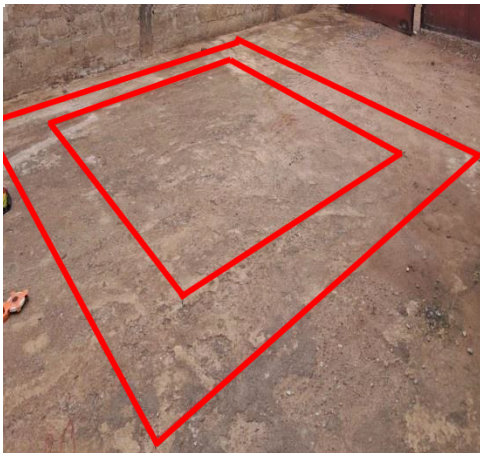


HOW TO CONSTRUCT A MORE COLD SPACE SYSTEM **USING MORE ECO-BRICKS**

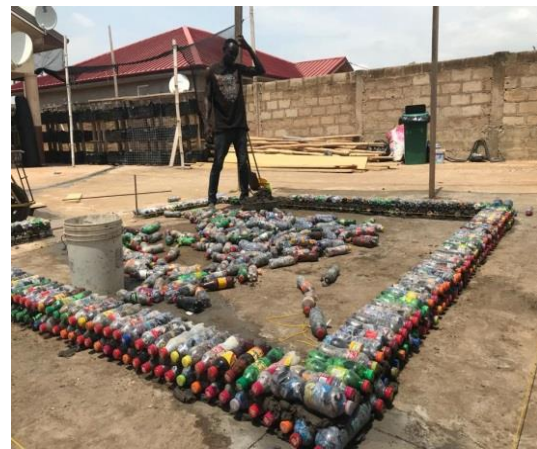
***MORE Cold Space (MCC)** is a cold storage facility made of MORE ecobricks and locally sourced materials. Half of all food is lost between field and table due to lack of refrigeration.*

1) Foundation construction of MORE Cold Space

Clear a flat area 14 feet x 14 feet and mark your wall foundation as shown 12 ft x 12 ft on the outside and 10ft x 10ft on the inside. Dig two inches deep x 24 inches wide all around and fill with concrete. Then begin to lay the Eco-Bricks side x side in the bed of cement foundation. Then put a thin layer of cement between each course of Eco-bricks.



Mark the ground of cement



Laying the inner wall of the cold



Laying of both walls as shown



Carefully arrange the ecobricks



Attaching the door frame to the ecobricks



Fill in between the two walls with treated saw dust as shown.



Raising the outside walls as shown.



Carefully continue to lay the walls as shown.



Spread the mortar on the wall and continue to lay the bricks.

2) Wall construction

The double wall insulating system made of MORE Eco-Bricks is built to 6 feet in height. Between the two Eco-Brick walls pack with treated sawdust to create a thermal break as shown. The sawdust can be treated with dry cement dust to prevent termites. Also, borax or baking soda can be added to keep the sawdust dry and pest free. Sawdust offers excellent insulation value and each of the Eco-Bricks is a dead air space which also offers more insulation. Build a wood door frame that is 2.5 feet wide and 4 feet tall. The door is made from solid foam pieces glued together with the sides cut for friction fit when pressed into place for tight airtight fit. The AC opening size will be 2 feet wide x 1.5 feet tall lined with plywood. This will allow the AC to be slipped into place inside. The list of AC units that are compatible for the system is linked in the material section at the bottom. You will be able to buy an AC on the street or may already have one that is compatible.



Create a window AC unit opening



Pack in between the two walls with treated saw dust as shown



Lay EcoBricks till it gets to 6feet



Spread the cement mortar layers between EcoBrick leveling as you go.



Fill between the two walls again with treated saw dust.



6 feet tall gets skin coat.



Plaster the entire walls with cement

3) Framing and insulating the ceiling.

Build a 14 feet x 14 feet square wood frame for the ceiling of the room. On one side staple 6 mil plastic sheet for the ceiling and use furring strips to hold in place as shown. Set the frame on top of the eco-brick walls with the plastic facing down. Secure the wood frames to the top of the eco-brick walls with furring strips as shown. Then place pre-cut EPS foam between the ceiling beams as shown. Once the foam is set in place then cover the foam with treated sawdust. Fill the remaining space between the ceiling beams with saw dust as show. Then cover the top of the framed ceiling with 6 mill plastic and staple down into the 14 ft X 2” x 10” ceiling beams so that both the top and bottom of the ceiling are covered with 6mil black plastic.



Frame the 14 feet x 14feet square insulation box



Cover one side with 6mill black plastic as shown and turn it over.



Installation of EPS foam in the ceiling framed box



Cover the top of the insulation box with 6mill black plastic shown



Insulating inside floor with EPS foam and plywood as shown



Picture of the door from outside as shown.



Picture of the door with EPS foam shown.

4) Roof framing and finishing.

Once the ceiling beams are in place you are ready to frame the roof. First build a ridge beam as shown that will be 30 inches above the top of the wall. Secure the roof rafters to the top ridge beam as shown. Nail together securely on all sides and to ceiling framing. Once framing is complete cover the roof area with a tarp to block the sun and rain.



Errect a ridge beam and wood trusses on top of the cold storage space



Frame the roof and cover with white Tarp as shown



Inner ceiling as shown



Cold storage space ready for painting



Cold storage space paint with white
And fix AC



Deep freezer in the CSS keep fish
freeze and fresh

1. MORE ECO BRICKS 12,000 PIECES
2. ¼ INCH IRON RODS 20 FEET 5 PIECES
3. 2 X 10 INCHES X 14 FEET WOOD 13 PIECES
4. CEILING BUTTON' WOOD STRIPS 12 PIECES
5. ROLL 100 FEET X 6 FEET ROLL OF 6 MILL PLASTIC ONE
6. CEMENT 25 BAGS
7. TREATED SAW DUST FOR INSULATION 20 CUBIC YARDS
8. NAILS FOR WOOD FRAMING 5 POUNDS
9. STAPLE GUN WITH PIN ONE GUN AND 4 BOXES OF STAPLE
10. 6 SHEET OF 4 FEET X 8 FEET PLYWOOD FOR AC HOLDER AND DOOR
11. SAND FOR CEMENT 15 CUBIC YARDS
12. WHITE PAINT 2 20 LITERS GALON
13. POLYSTYRENE FOAM 24 INCHES WIDE X 14 FEET LONG 6 PIECES AND 16 INCHES WIDE 14 FEET LONG.
14. WHITE TARP 24 SQUARE FEET
15. AIR CONDITIONER 1 24000 BTU

16.COOLBOT 1 UNIT

MATERIALS AND PRICES IN 2023



Woods for the cold storage roofing

2 X 10 inches X 14 feet long 6 pieces

2 x 4 inches 14 feet long 4 pieces

Ceiling button' wood strips 12 pieces



50kg 25 bags of cement



Size and volume of EPS foam for insulation

6 piece) 24'' wide x 4''thick x 14 feet long

1 piece) 16'' wide x 4'' thick x 14 feet long



1) 24,000 BTU AC



Patented temperature controller



Patented temperature controller fixed inside the CSS with a compatible AC



6 feet x 100 feet 6 mill black plastic



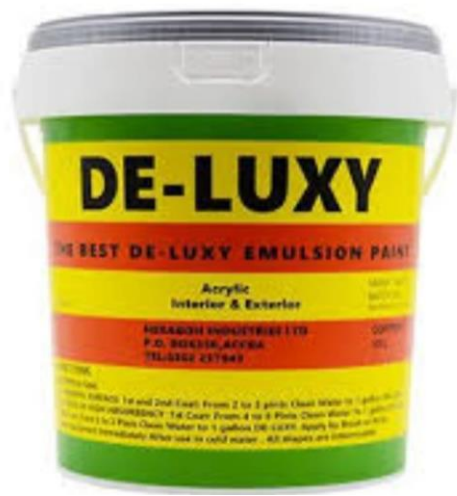
1 Staple gun with 3 staple



15 yards of Sand for mixing mortar



4 inches 5 pounds nails



One bucket of 20 liters paint