THE WORLD OF MUD BRICK HOUSES

1. Mud brick houses have been built around the world for centuries

2. These houses are still built to date
   - In developing countries this is due to the cheapness of soil, which is abundantly available and in reach of the most. Sometimes it is the only alternative to acquire shelter
   - In developed and rich countries, the environmental factors are of prime considerations. Comfort and cost also attract even the rich to build mud brick houses

3. Mud brick houses are acceptable in the world; both by the poor and rich

4. Compressed mud brick is a descendant of sun dried brick, it is superior

5. The compressed interlocking mud brick is probably the latest form of mud brick. It is superior to normal compressed mud bricks because it allows fast construction, ease of electrical installation and allows provision of reinforcement increase house performance with regard to strength and stability. Larger and disaster resistant houses can safely be constructed.
This house declares the acceptability of mud house by the society

The Cinva ram machine for production of compressed mud bricks

The best compressed mud bricks comes from clayey soils
Mud brick houses in suburban areas  

Mud brick house in developed world
A decent mud brick house

A rural brick house

A decent mud brick house

Construction process for mud brick house

The decorated Adobe house

Mud brick house in Africa
Another beautiful mud brick house

The interior of a brick house

The interior of a brick house, attractive

The interior of a brick house, welcoming

Bridging the openings with arches

Bridging the openings with arches
Multiple and large openings can be bridged by arches and beams

Large buildings can be built of mud bricks, compressed mud bricks and the interlocking compressed mud bricks will just perform wonderfully.

A mud brick house roofed with tiles (heavy material)
A town with large mud brick houses - Shibam

Mud brick houses are easily destroyed by natural disasters.
Both large and small buildings are crushed easily by disasters.

Unreinforced mud brick houses collapse suddenly during disasters, giving no chance to escape, therefore the loses of life and property are higher than other buildings.

Strong winds also impose threat and damage to mud brick houses.
Houses damaged by ground shaking

**MY SOLUTION**

1. Production of interlocking bricks from soils with high clay contents for stronger bricks

2. Construction of wall with thickness 300mm, in dry bond but where necessary mud mortar or dry sand can also be used

3. Provide reinforcement in strips or beams and columns formed in cores of wall by means of special bricks

4. Design the house according to the rule of thumb or by engineering methods

5. Protect all parts of the house from all sorts of moisture

6. Reinforcement can be welded mesh, round bars or ribbed bars with specified characteristics

7. Concrete can be of any specified grade according to design requirements but, no less than grade 20. Coarse aggregate for areas with small cross sectional area to be of pea size and not more than 1/4 inch (grouted).

8. Mud plaster to be applied on constructed walls followed by other specified and appropriate finishes

A demonstration wall of compressed mud interlocking bricks built at NHBRA - Tanzania
A demonstration wall of compressed mud interlocking bricks built at NHBRA - Tanzania

(In the picture Engineer Amri and assistant Juma)

A demonstration wall of compressed mud interlocking bricks built at NHBRA - Tanzania showing provision for beams casting (Engineer Amri inspecting the work)

A demonstration wall of compressed mud interlocking bricks built at NHBRA - Tanzania plastered in mud mortar ready for further finishing coats.