

## INTERLOCKING OF BRICKS - A REVIEW

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### ABSTRACT—

In this study Interlocking bricks are strong, durable, and also requires less maintenance than normal bricks. It is easier to recover the interlocking wall bricks without any damage if you decide to dismantle the building. However, if you used the normal bricks and mortar, it would be more difficult.

The main advantage when looking at interlock bricks compared to concrete is that **if a paver cracks or strains for any reason—the individual pavers can be replaced.** If you have a crack or strain in concrete, we can replace the entire slab or a wall.

**KEYWORDS:** Interlocking bricks, concrete, fired bricks, paving bricks, landscape bricks.

### I. INTRODUCTION

Interlocking bricks are cost effective and sustainable in construction material which has potential to bring durable and affordable homes to developing countries around the world.

Interlocking bricks are much energy efficient because it requires anywhere from 1/5<sup>th</sup> to 1/15<sup>th</sup> of the energy to make when compared to fired or normal bricks. Concrete masonry units. As we all know that, the traditional masonry requires a lot of skilled labor, expensive materials, and consumption of time.

The interlocking bricks nature is a mortar-less construction, which reduces the need for skilled labor and shortens the construction time. These reductions lower the cost of labor by as much as 80%.

There are different types of interlocking bricks are:

1. Interlocking paving bricks
2. Interlock wall bricks
3. Interlocking landscape bricks
4. Interlocking retaining wall bricks.



Fig-1: Interlocking paving bricks



Fig-2: interlock wall brick



Fig-3: interlock landscape brick



**Fig-4: interlocking retaining wall bricks**

## II. PREPARATION OF INTERLOCKING BRICKS

Interlocking bricks are not made by normal or fired bricks. These are manufactured by mixing and compressed sand, soil, and cement in a machine. In order to create interlocking bricks, a mixture of 6 MM baby metal (aggregate), water, and crusher dust must be blended and squeezed. Mostly murrum soil, it is recommended to making of cement stabilized interlocking bricks. This type of soli if found at sub-levels of ground.

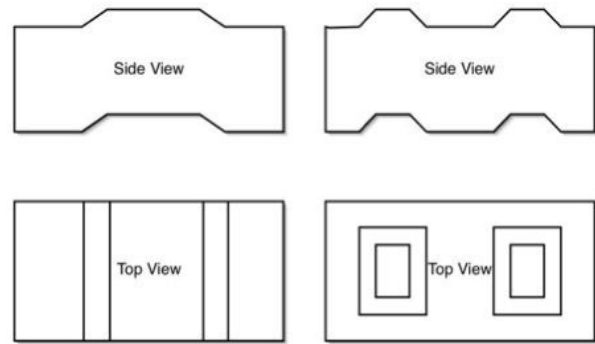
### Procedure: making of interlocking bricks

- First the materials which are required for interlocking bricks are batched and mixed proportionally.
- Then the prepared mix is compressed in a hydraulic compression machine.
- Now these compressed bricks are collected and cured for 7 days.
- Interlocking bricks requires 7 days of curing process.
- After curing the cement sets and bonds with sand, to form a stabilized interlocking brick.



**Fig-5: Concrete interlocking bricks**

## Interlocking Brick Profiles



**Fig-6: interlocking bricks views**

### Interlocking brick sizes are:

There are two different sizes are come under such as

- Full interlock bricks with size of 300x150x100MM
- Half interlocking bricks with size of 150x150x100MM these are usually made by cutting the full interlocking bricks in half.

## III. CONCLUSION:

Overall, the use of the interlocking bricks gives more benefits such as reduce construction cost, fair-faced finish structure and fast project completion. It can be used as a load and non-load bearing system since the interlocking bricks meets the minimum requirement and there has many possibilities and gap of study need to be conducted in order to explore the interlocking bricks in details.

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