

## SPECIFICATIONS **GaiaBloc**

#### 1. Definition of Material:

The GaiaBloc is a non-toxic, 100% bio based/ renewable, carbon negative solid-state product. GaiaBloc can be produced on site or manufactured offsite. They are produced with the inner core of industrial hemp/ kenaf plant, hot lime, misc. pozzolans and water. The material is mixed, molded, and compressed. They cure in the open air or humidity-controlled environment. Sizes for GaiaBloc can and may vary on size. Standard sizes include 9 to 40 cm wide.

## 2. Applications:

Interior insulation, renovation projects, and new build construction. GaiaBlocs are fast and easy to install. The blocs can be used to provide room partitions, replacement of unhealthy insulation and drywall/ plaster and or create new spaces in open areas like basements, warehouses, barns garages and more. They can also be used to cover existing drywall/ plaster interior walls.

## 3. Physical Characteristics:

Density: TBD

Thermal Conductivity: TDB

Resistance to Compression: TBD

Fire Rating: TBD

Bio Based- 100%

#### 4. Product Characteristics:

GaiaBlocs have a porous appearance and construction. The color of these blocs varies from light tan to grey in nature. They have a smooth to rough surface. They are lightweight and can/may float in water.

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#### 5. Accreditations:

GaiaBloc has been Bio Base Tested by Beta Analytics of Miami Florida for a 99.96% Bio Based Content. This Test was done in accordance with the USDA Bio Preferred Program. GaiaBloc is awaiting USDA Bio Preferred certification (11/22).

## 6. Carbon Footprint:

The hemp plant stores carbon during its growth and this, combined with the low carbon footprint of lime and its very efficient insulating properties, gives the material a 'better than zero carbon' footprint.

## 7. Application:

The installation of GaiaBlocs are to be done in accordance to the manufacturers instructions. These instructions vary from project to project however the following are basic guidelines for installation.

#### A. Mortar

To be used as a bedding compound and for all joints of blocks. This mortar is to be used in accordance with the manufacturer's recommendations.

#### B. First Course of Block

Blocks should be installed 15 inches above slab in damp locations. A waterproof membrane on the underside of the first course of block is advised. This first course should be bed in mortar.

### C. Additional Courses

Blocks are to be installed in a bedding of ¼ inch +/- of mortar. Joints should be offset 8 inches. Mortar may be applied with a margin trowel, bricklayers' trowel, and finished with a brick jointer (if desired).

### D. Last Course

A minimum space of 1/4 inch +/- no more then a 1/2 to be left on top of last course of block. His gap is to be filled with mortar. A margin trowel and brick jointer are useful in this step.



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## 8. Finishing:

These blocks can be finished in several eco-friendly breathable materials. These materials should be used in accordance with the manufacturer's instructions.