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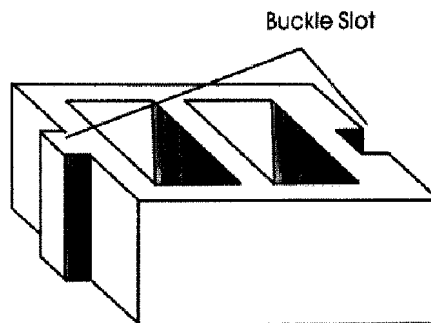
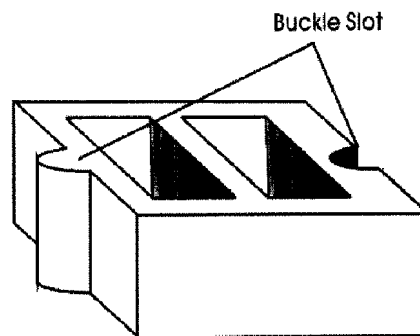
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(71) Demandeurs/Applicants:
HUANG, ZHIJING, CN;
LOU, RENZHI, CN

(72) Inventeurs/Inventors:
HUANG, ZHIJING, CN;
LOU, RENZHI, CN

(54) Titre : MATERIAU DE CONSTRUCTION POUR BRIQUES CREUSES OU PANNEAUX CREUX A REMPLISSAGE INTEGRAL APRES A REGULER SPONTANEMENT LA TEMPERATURE D'UN IMMEUBLE
(54) Title: A KIND OF CONSTRUCTION MATERIAL FOR HOLLOW BRICK OR HOLLOW INTEGRAL BACKBOARD WHICH CAN REGULATE THE TEMPERATURE OF THE BUILDING SPONTANEOUSLY



(57) Abrégé/Abstract:

This kind of utility model provides a kind of environmental friendly construction material for hollow brick and hollow integral backboard which can regulate the temperature of the building spontaneously. It's mainly characterized with hollow brick or hollow integral backboard in which the hole filled with infiltrated material by paraffin wax or other natural or artificial waxiness. It's applying with the natural character of the paraffin wax transforming from solid to softening or from softening to solid, during which process it absorbs or gives off heat. Accordingly it regulates the temperature of the building; it saves the energy and keeps environmental friendly. This utility model design can integrate the construction material and shortens the construction period; it saves the material, keeps the building solid and durable, and helps saving the energy.

Abstract

This kind of utility model provides a kind of environmental friendly construction material for hollow brick and hollow integral backboard which can regulate the temperature of the building spontaneously. It's mainly characterized with hollow brick or hollow integral backboard in which the hole filled with infiltrated material by paraffin wax or other natural or artificial waxiness. It's applying with the natural character of the paraffin wax transforming from solid to softening or from softening to solid, during which process it absorbs or gives off heat. Accordingly it regulates the temperature of the building; it saves the energy and keeps environmental friendly. This utility model design can integrate the construction material and shortens the construction period; it saves the material, keeps the building solid and durable, and helps saving the energy.

Description

Technology Field

This kind of utility model involves a kind of construction material for hollow brick or hollow integral backboard which can regulate the temperature of the building spontaneously.

Technology Background

The invention and application of hollow brick or hollow backboard has been a long history. But ever since there is only improvement on the material quality and appearance of the hollow brick or hollow backboard; little attention was paid to the use value of the hole inside the hollow brick or the hollow backboard.

The worldwide trend is energy saving. But the traditional construction materials and building methods are consuming lots of natural resources and thus will be renovated to be more efficient in energy saving and environment protection.

Based on above background, this kind of utility model provides a new construction material for hollow brick or hollow integral backboard which can regulate the temperature of the building spontaneously and is environmental friendly.

Summary of Invention

1. This kind of utility model involves a new type of construction material for hollow brick or hollow integral backboard. Here, the integral backboard is not only for the moulding process of the backboard, but also for the integrated hollow backboard connected by the buckle slot (figure 1) and connection hole (figure 2), which are pressed to shape rectangle or semi circle during the process of pressing; so as the whole constructure of the building is built up. This will greatly shorten the work period; reduce the costing and the energy consumption as well. This kind of new construction structure is more durable and solider than the traditional structures.
2. This kind of utility model involves a kind of construction material for hollow brick or hollow integral backboard in the hole of which are filled with infiltrated material by paraffin wax or other natural or artificial waxiness (figure 3). This patent mainly involves paraffin wax. Paraffin wax is light in weight, comparably stable in chemical property, nonpoisonous and anti flaming. Paraffin wax is in solid state at 20 celsius degree. It's getting softening when the temperature around is higher than 20 celsius degree. Paraffin wax can melt down at 40 celcius degree. The relative density of paraffin wax will reach 0.87 to 0.92 when the temperature

is between 57 to 63 celcius degree; the paraffin wax will reach its melting point but not dissociate. In other words, when the temperature goes down, the paraffin wax will transform from liquid to solid. The paraffin wax will absorb the heat when melt, and give off heat when concrete.

3. This kind of utility model is applying with the nature of paraffin wax who absorbs and gives off heat during the transforming from solid to softening and from softening to solid; it applies with the timber, or compound material made from wheat straw, corn stalk, dried leaves, wood ash and hay infiltrated by paraffin wax, another 50-70% non-infiltrated material (figure 4) are added to be filled inside the hole of the hollow brick or hollow integral backboard (figure 5). So, when the temperature of the building is going up, the paraffin wax will get soften and melt in which process the paraffin wax will absorb the heat; accordingly the temperature of the building will go down. When the temperature of the building is going down, the paraffin wax will get solid in which process the paraffin wax will give off the heat; accordingly, the temperature of the building will go up. The paraffin wax is cost-effective with the nature of nontoxic and odorless; it brings no pollution to the building and is harmless to human body. Furthermore, paraffin wax is good for storage, it's basically sealed inside the hole of the construction material together with the wood material good in absorption; it is hard to degenerate. Even the degeneration appears after a long time use, the infiltrated material can be replaced soon.
4. This kind of utility model applies with the nature of anti-flaming of the wood material infiltrated by paraffin wax. Extra flame retardant can be added to the wood material, for example, chlorinated paraffin wax-70. In case the building is on fire, the wood material filled inside the hole of the construction material is less possible to burn out than other regular material.
5. As the wood material filled inside the construction material is infiltrated by paraffin wax, the wood material is less possible to attract insects and ants. It also blocks the insects from entering the construction material.
6. This kind of construction material inside which filled with infiltrated material by paraffin wax can be used in the interlayer or attached layer of the wall (figure 6); in other words, it can be inserted between two layers of walls or affixed to the surface of a single wall.
7. This kind of utility model applies with wood material partly infiltrated at 30% to 50% by paraffin wax. It can leave some space for the transforming of paraffin wax from solid to softening or from softening to solid and its volume changes as well. Accordingly, the filling material increase the hollow brick or the hollow integral backboard in solid performance; it also blocks the insects from entering the construction material.

Claim

1. This kind of utility model provides a kind of environmental friendly construction material for hollow brick and hollow integral backboard which can regulate the temperature spontaneously. It's made up of hollow brick or hollow integral backboard, and the infiltrated material by paraffin wax being filled in its hole. It's characterized with the infiltrated material by paraffin wax, being filled in the hole of hollow brick or hollow integral backboard.
2. According to claim 1, it's characterized with a kind of construction material designed for hollow brick or hollow integral backboard;
3. According to claim 1, it's characterized with a kind of construction material for hollow brick or hollow backboard which can buckle up to each another;
4. According to claim 1, it's characterized with a kind of design in construction material for hollow brick or hollow integral backboard with buckle slot and connection hole which are shaped during the process of pressing;
5. According to claim 1, it's characterized with a kind of construction material for hollow brick or hollow integral backboard with hollow design;
6. According to claim 1, it's characterized with a kind of construction material for hollow brick or hollow integral board in the hole of which are filled with infiltrated material by paraffin wax ;
7. According to claim 1, it's characterized with a kind of construction material for hollow brick or hollow integral board in the hole of which are filled with infiltrated material by paraffin wax; the filling material can be taken out and replaced;
8. According to claim 1, it's characterized with a kind of construction material for hollow brick or hollow integral backboard in the hole of which are filled with infiltrated material by paraffin wax; the filling material has two to three parts, only one part of the material is infiltrated by paraffin wax;
9. According to claim 1, the filling material is made from timber, or compound pressed material made from wheat straw, corn stalk, dried leaves, wood ash and hay (compound pressed material made from wheat straw, corn stalk, dried leaves, wood ash and hay will be involved in another patent application) ;
10. According to claim 1, the filling material is infiltrated by paraffin wax, or other

natural or artificial waxiness.

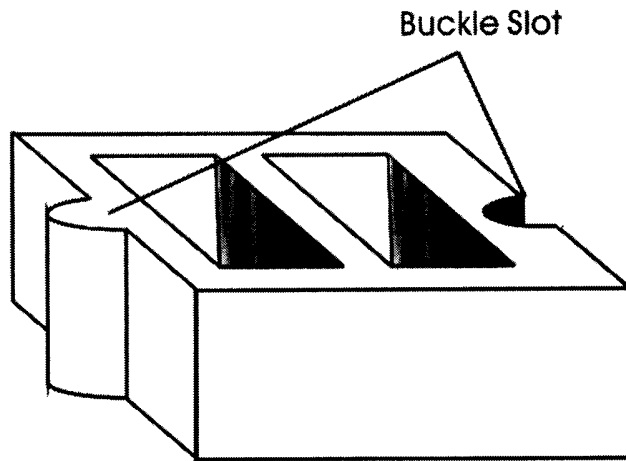
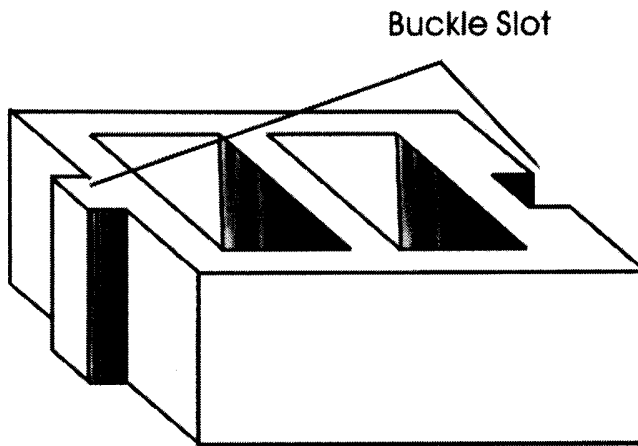


Figure 1



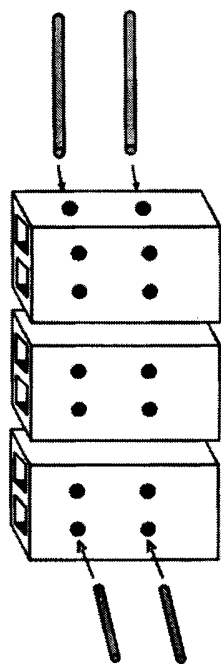


Figure 2

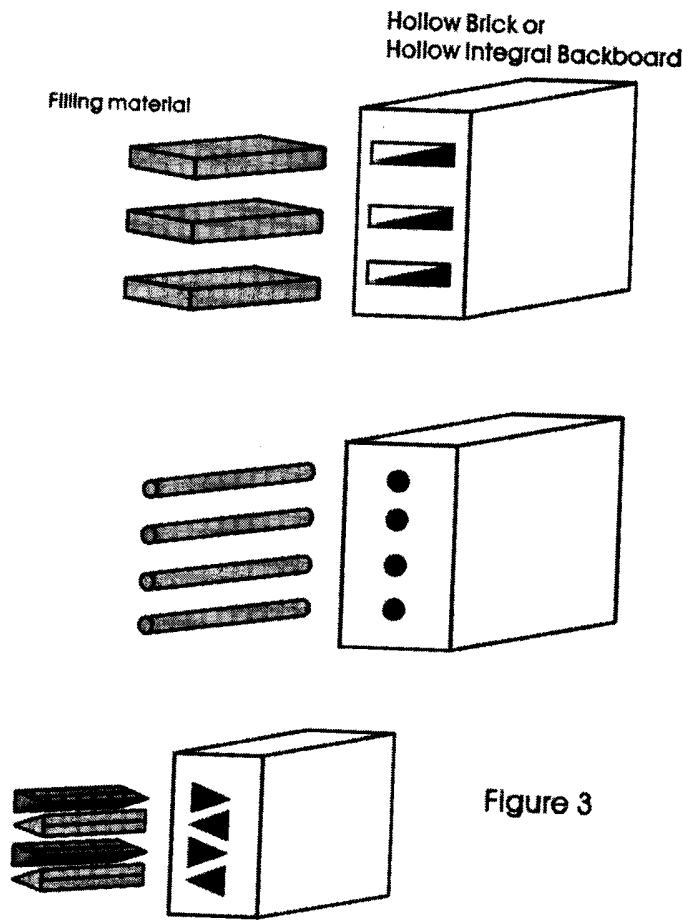
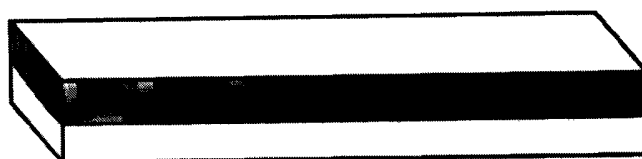
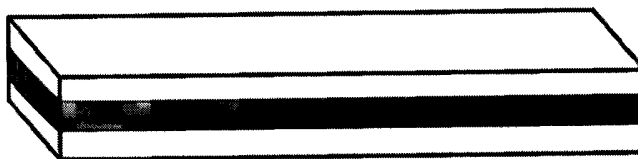


Figure 3



Filling material partly infiltrated
at 50% by Paraffin Wax



Filling material partly infiltrated
at 30% by Paraffin Wax

Figure 4

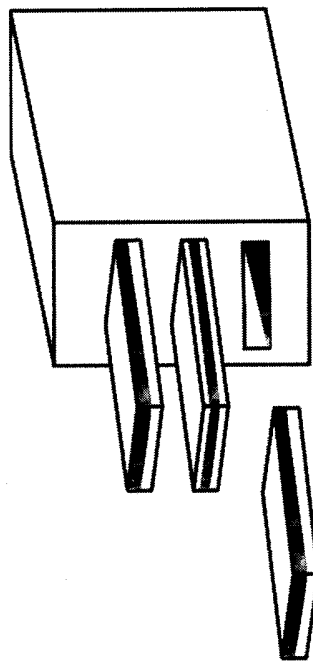


Figure 5

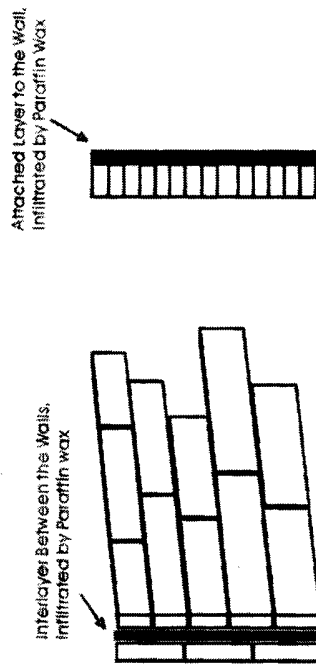
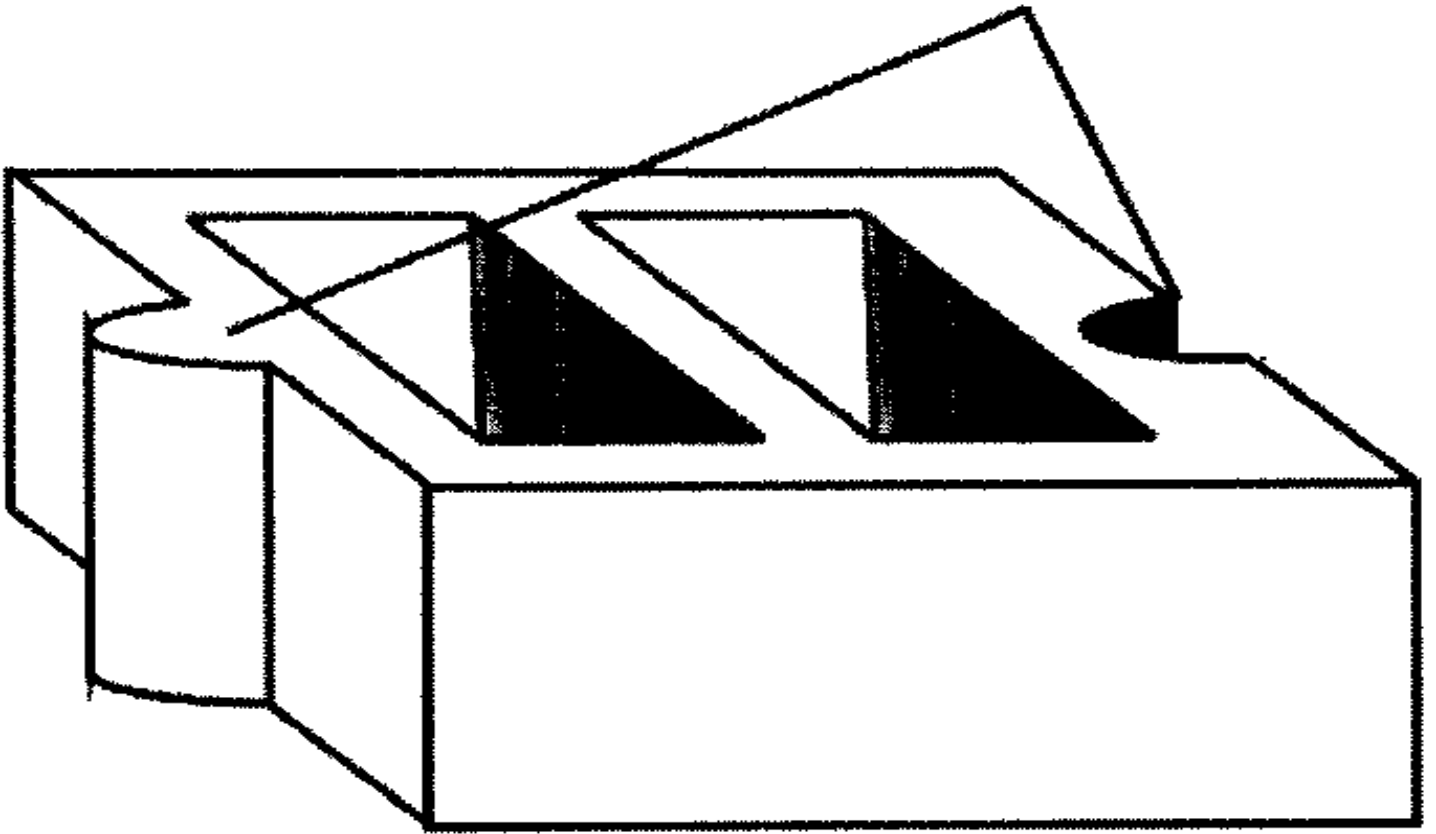


Figure 6

Buckle Slot



Buckle Slot

