



Natural Latex- Foam -Cement Sandwich Insulated Panels (NFC SIPs)



Very Much Trash from Foam Packagings



Waste from Recycling Textiles Factories



Abundant Natural Latex in Thailand

Recycled EPS Foam

Fabric Fibres

Natural Latex



New Energy-Efficient Building Materials for Constructing Affordable Prefabricated Buildings

PRODUCT FEATURE



Very Good Thermal Insulation



Many Patterns and Colors Surface



High Modulus of Rupture



Fast and Easy Installation



Non-Flamable



High Compressive Strength



Ability to Hang Load



Lightweight



Good Sound Absorption



Affordable Cost



Environmentally Friendly

INNOVATION

- Using new aggregates and mixture ratios by using fabric fiber from waste from scrap fabric recycling factories, recycled EPS foam from trash packaging, natural latex and water in cement.
- Design of new production process with water production, cement, fabric fiber and natural latex to become air bubbles (blowing) for mixing well with recycled EPS foam.
- Development of assembling new alternative weave bamboo finish surfaces with NFC SIP.



INVENTOR INFORMATION

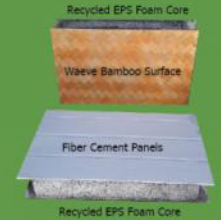


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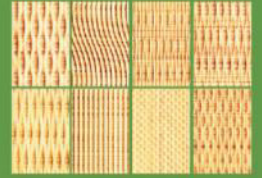


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APPLICATIONS



Insulated Wall Panels



Interior Bamboo Surfaces



Insulated Roof Panels



Insulated Ceiling Boards

INNOVENTION DESCRIPTION

NFC SIPs are a high performance thermal efficient composite panel which consists of a sandwich of main layers of structural board with an insulating layer of EPS foam cement in between for walls, ceilings and roofs in affordable prefabricated and energy-saving buildings. The main features are high thermal resistance, lightweight and low density, high compressive strength, easy and quick installation, low construction and material cost, ability to hang load and environmentally friendly.

PATENT STATUS : On Process



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