

Concre-Panel BUILDING SYSTEM



Free Form

BUILD • INSULATE • DECORATE •

Manufacturer of Expandable Polystyrene (EPS) products, the Uniquely Suitable Choice for your building, insulating and decorating needs.



Benefit from our knowledge. Profit from our experience.

In 2002, **Free Form Factory** became the only business in Jamaica to produce expanded polystyrene (EPS), a lightweight plastic made up of small, interconnected beads. The company

constructs private houses and commercial spaces using a cost-effective, Concre-Panel Building System, and supplies the local construction sector with EPS materials for property development and road rehabilitation.

To deliver safe and reliable structures, Free Form employs highly skilled engineers and architects to manage its

Concre-Panel model home



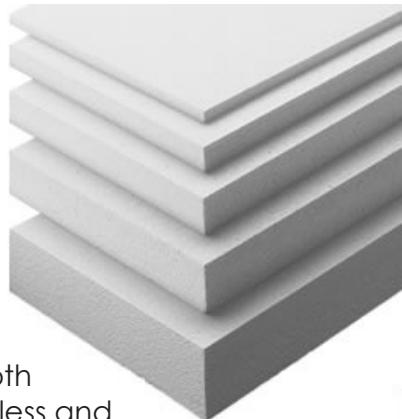
projects, and partners with the multi-national firm, Schnell, the global leader in steel processing (rebar), to acquire cutting edge, production machinery.

As part of its commitment to providing affordable housing solutions without compromising on quality, Free Form works closely with local parish councils to acquire building approvals and collaborates with leading mortgage lenders, including the National Housing Trust (NHT), to secure financing options for home buyers.

For more information about Free Form Factory, its products and services, please contact the head office at 876-923-8988 or 876-757-2395, or visit the corporate website at www.freeformfactory.com.

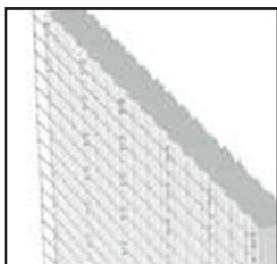
What is EPS?

For more than 50 years, EPS has been used to develop a variety of products, including Styrofoam cups, packaging material and car bumpers. Although it is made of 95% air and 5% plastic, EPS is quite rigid, acting as a great shock absorber and excellent insulator of both heat and sound. Since EPS is odourless and non-toxic, it is a safe and inexpensive alternative to other materials, and like most plastics, can be recycled.



What is the Concre-Panel Building System?

The Concre-Panel Building System replaces traditional concrete blocks with EPS panels inserted between steel and concrete. During construction, two basic components, a single panel and a floor panel, are used to erect structures.



Single Panel



Floor Panel

Use of the building system has become increasingly popular amongst contractors worldwide and it has even been tapped for rebuilding efforts in Haiti following its devastating earthquake.

To learn more about the Concre-Panel Building System, please watch the informative video posted at www.youtube.com/watch?v=7uRaCALNXN8.

Waterloo, St. Catherine



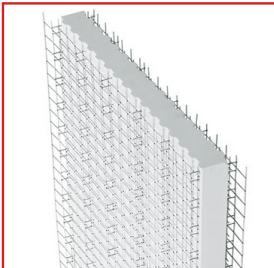
CONCRE-PANEL HOME CONSTRUCTION

Concre-Panel Installation

STEP 1	STEP 2	STEP 3
		
Installation of the EPS foam panels which are lightweight and can be installed by a single operator.	Concrete is poured between the panels for a double panel installation	Installation of the floor/roof panels being carried out and is supported by the walls below
STEP 4	STEP 5	STEP 6
		
Prepare for the plumbing and electrical installation by using a hot air gun or blow torch to create channels in the EPS foam for conduits, switch boxes cable and plumbing pipes.	The installation of the plumbing and waste pipes in the channels that were created in EPS foam.	Application of concrete on the skin of the EPS foam by shot-creting.

TYPES OF PANELS

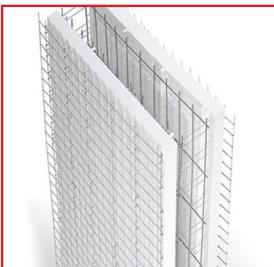
Single Panel



This panel is perfect for walls, partitions, claddings, floors and roofing for both civil and industrial buildings.

For a 4-storey building, it can be used as a load-bearing structure with the application of structural plaster on both sides of the panels. It also fits well as partitions and claddings in new or existing building. It functions well as an insulating disposable form for roofing and floor at a reduced span, prepared with or without pre-installed ribs.

Double Panel



Insulating double panel is an excellent substitute for reinforced concrete wall such as load-bearing wall and retention wall. This double panel consists of two basic panel, suitably shaped and joined together by double horizontal connectors to create a space in between the panels. This space is to be filled with concrete.

Floor Panel



This floor panel supersedes other material in terms of lightness, insulation and rapidity of assembling for any type of floor and roofing with r.c. joists.

The floor panel composed of a foam polystyrene block shaped to realize floors and roofing of buildings with the addition of supplementary steel inside the panel. It is suitable for joists and subsequent casting at site.



BizTown, Caenwood Centre, Kingston



Above: Model home located at CD Alexander, 4a Marescaux Rd, Kingston 5
Right: Hanover Infirmary - constructed entirely using Concre-panel



BENEFITS

	Shorter Construction Timelines	Assembling concre-panels takes less time than stacking concrete blocks.
	Cooler Indoor Temperatures	Concre-Panel buildings tend to be 10 — 15° cooler than block and steel structures.
	Fire Resistant	With its unique material, concre-panels delay the spread of flames during a fire.
	Sound Proof Walls	Concre-Panel walls act as a great sound insulator, helping to limit noise flow through buildings.
	Reduced Building Costs	Shorter construction time-lines equal lower building costs, with average savings of 25%.
	Earthquake/ Hurricane Resistant	Concre-Panel structures can withstand 250 km/h winds and magnitude 5 earthquakes.
	Versatile Design Options	Builders can assemble concre-panels to achieve any architectural design plan.
	Strong Buildings	Made with concrete and steel, concre-panel buildings are structurally safe and sturdy.



Two storey home built using EPS Concre-panel

DREAM it
BUILD it
with EPS CONCRE-
PANEL



White Diamond, Trelawny

GEOFOAM



Geofoam – used in Rehabilitation of Highway 2000

Geofoam is an ideal material to be used as a void filler in road construction or other areas where subsurface soil is soft. EPS geofoam is approximately 1% the weight of soil and less than 10% the weight of other lightweight fill materials. It is made from a molded bead process which produces blocks that can be cut into various shapes and sizes and a range of compressive strengths.



Geofoam used to construct
BNS Christiana Car Park



Lot 6, Nanse Pen Drive, Kingston 11, Jamaica

Tel: (876) 923-8988 | (876) 757-2395

Email: info@freeformfactory.com



www.freeformfactory.com

