

The Ultimate Solution For Energy Efficient Buildings

Foam Concrete Bricks

The BriX





Introduction

The BriX is a multi purpose versatile foamed concrete (CLC) building block which consists primarily of cement-based mortar mixed with at least 20% air by volume. It has low weight, controlled strength with excellent sound, thermal and fire insulation properties.





The BriX comes in many forms and sizes, either standard blocks (bricks) for all common applications, flooring and roofing. **The BriX** is also customized as interlocking blocks for facilitated construction especially for walls and separators.

Foam Concrete is made by mixing foam into mortar. The mortar is a cement mix with sand (for higher densities) and water. As a result you end up with a mix that is lighter than "normal" concrete. The mass, or density as we call it here, (weight per cubic meter) depends on how much foam is added to the mortar.

BriX is very unique as it is being manufactured by the state-of-theart foam concrete generator **FoamX** giving a homogenous mix with the desired densities while being pumped by **PumpX RollX** series pumps that can discharge foam concrete at densities up to 1400kg/m³.



FEATURES & BENEFITS

For the owners:

- High thermal insulation Energy efficiency Lower energy bills.
- Built to last Better able to withstand natural disasters from hurricanes to fires
- Excellent sound insulation Improved sound attenuation A quiet indoor environment.
- Low water absorption
- Reduce in insect infestation.
- Reduce likelihood of dangerous molds.
- Improved Resale Value For all the reasons mentioned above.
- Strong walls.
- Fire disaster resistance and safety
- Sound-blocking ability.
- Overall comfort
- Earthquake resistant



For the contractors & builders:

- Fast, easy construction
- Flexibility
- Light weight for easy shipping purpose.
- Compatibility with carpenter trades
- Ability to meet higher energy code mandates and facilitates complicated construction



Comparison Between Different Types Of Building Blocks

Parameters	Foam Concrete Blocks (BriX)	Concrete Blocks	Red Clay Bricks
Fire Resistance 11,5 cm Wall	exceeding 6 hours	1.8 hours	1.5 hours
	6 h	1.81	LSb
Water Absorption at	12%	52%	95%
Density 900kg/m ³			
Composition	Almost 100% recycled waste product	Up to 5 % recycled material	0% recycled material, uses only natural soil



Parameters	Foam Concrete Blocks (BriX)	Concrete Blocks	Red Clay Bricks
Density	450-1800 kg/m ³ light-weight	2400-2800 kg/m³ very heavy	1600-2000 kg/m³ very heavy
Compressive Strengths	7-175 kg/cm ²	40-60 kg/cm ²	20-30 kg/cm ²
Thermal Insulation Values	0.079-0.61 W/mK	1,6 – 2,1 W/mK	0,5 – 1,4 W/mK
Aging Behaviour	Gains strength with time	Gains strength with time	Weakens over time

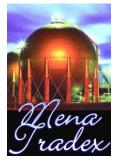


APPLICATIONS

The following are the just examples of where using foam concrete blocks (**BriX**) would be beneficial:

- 1. Insulating cellular concrete for roof decks with 2-hour fire ratings (ULlisted)
- 2. Floor/ceiling fill systems
- 3. Pre-cast, reinforced-concrete wall, floor & roof panels
- 4. Permeable pavement underlayment & recharge beds
- 5. Firewalls
- 6. Slab-on-grade insulation & sub-base fill
- 7. Underground thermal conduit linings
- 8. Pipeline & culvert installation (bedding & backfill)
- 9. Roadway rehabilitation
- 10. Retaining wall backfill





PumpX
Mena Tradex products
20 Mohamed El-Mahdy St.,
Ard El-Golf, Heliopolis,
Cairo Egypt, 11341

Tel: +202-22910566 Fax: +202-2907401

Email: <u>info@pumpx.me</u> www.pumpx.me