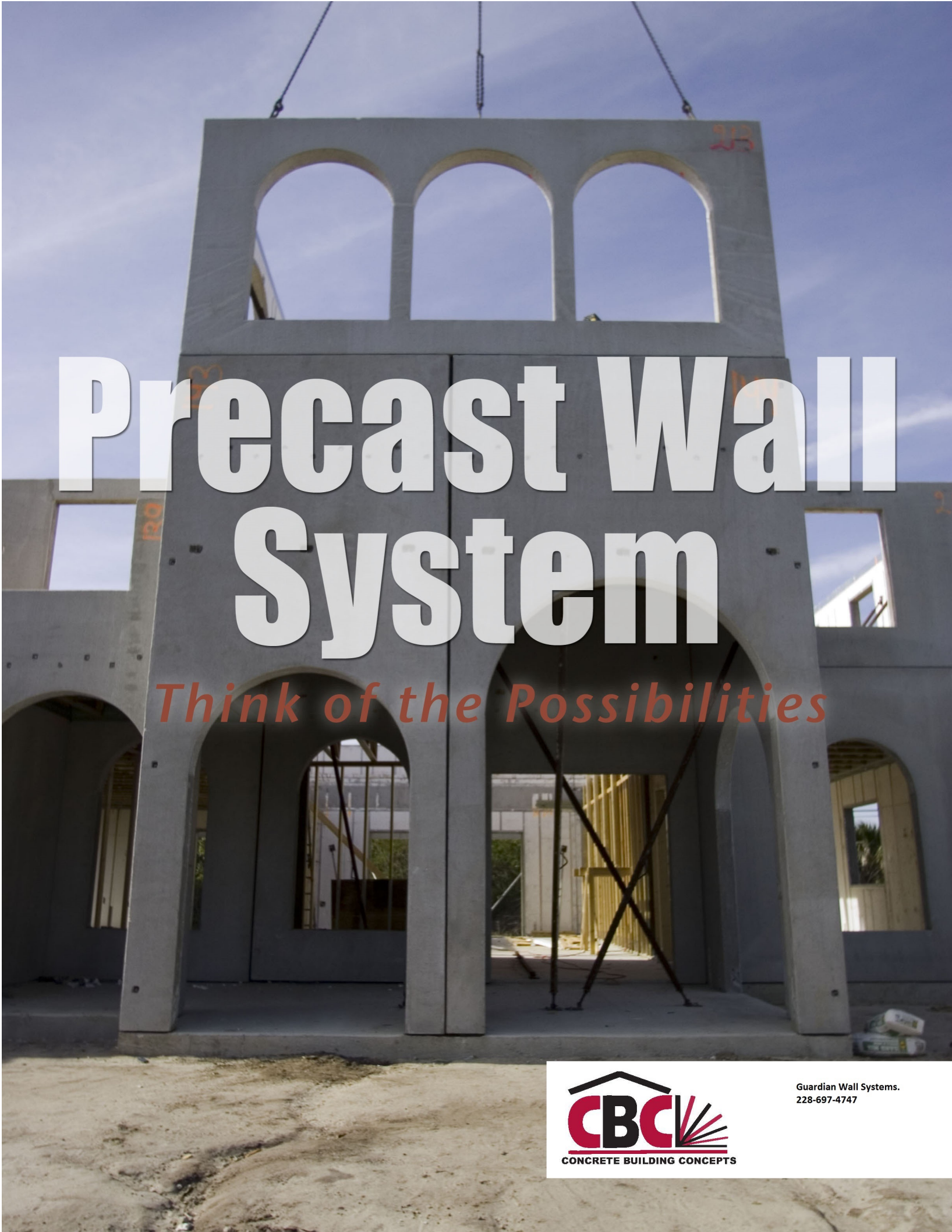


Precast Wall System

Think of the Possibilities

CBC
CONCRETE BUILDING CONCEPTS

Guardian Wall Systems.
228-697-4747

Product Overview

Precast Wall System

The **C.B.C. Guardian Wall** precast walls have been used in over 25,000 applications throughout the southeastern United States and the Caribbean. This system combines, concrete, polystyrene and reinforced steel to create structures that can withstand the category 5 hurricane winds of Florida, while also offering comfort and affordability to the customer.

The **C.B.C. Guardian Wall** systems approach to building enables the manufacturing of many building components off site, with the use of the **Precast Wall System** being the core approach. Prefabrication of the walls reduces construction costs and waste generated on site. The wall panel has the added benefit of limiting the effects of prolonged inclement weather conditions and construction schedules by reducing time on site from a month or more in traditional construction to a few days.

COMMERCIAL RESIDENTIAL INDUSTRIAL EDUCATIONAL

Typical Wall Sections

Design Flexibility

> With total flexibility from small details to elaborate features, Royal Concrete Concepts precast walls allow architects to create any design solution necessary.

Strength & Safety

> **C.B.C. Guardian Wall** precast walls are stronger than conventional block or tilt-wall construction.

> Our construction process combines reinforced steel, concrete, and polystyrene to produce buildings capable of sustaining the winds of a Category 5 hurricane. The synergy effectively creates some of the safest, most durable buildings on the market today.

> **CBC** uses 4,000 PSI concrete vs. 1,800 PSI concrete block.

> **C.B.C. Guardian Wall** precast wall panels meet the new Florida Building Code requiring 34 mph large missile impact resistance.

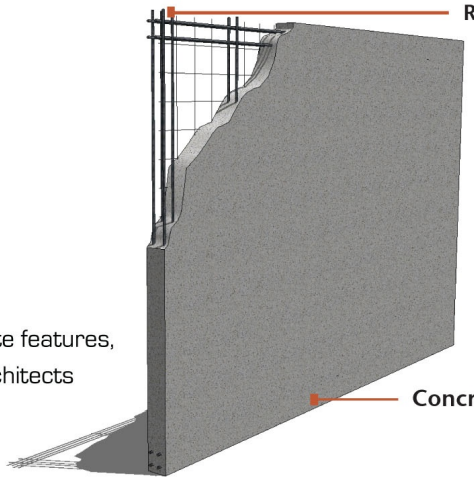
Speed of Construction

> **C.B.C. Guardian Wall** precast walls are built off site saving months during the overall construction schedule.

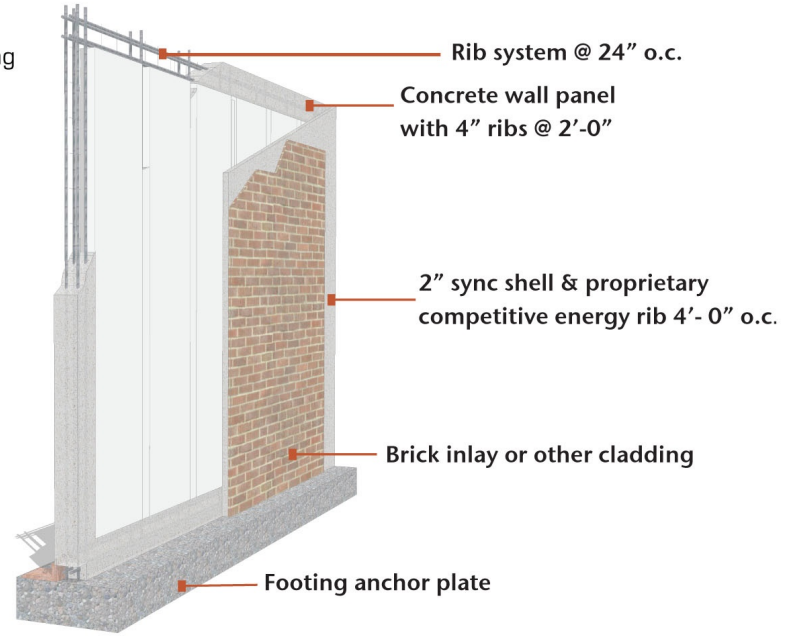
> The **CBC** building system eliminates the need of on-site forming, steel placement and pouring of concrete.

> Fewer inspections necessary.

4" - 7 1/4" solid concrete panel



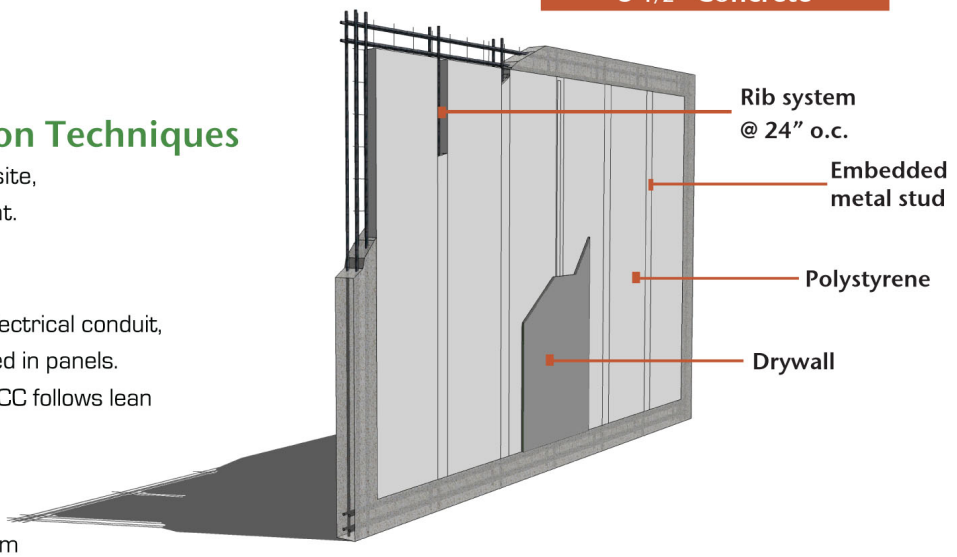
7 1/4" sandwich wall panel



Green Construction Techniques

- Less waste and impact on site, 20% use of recycled content.
- Built off site.
- Less trades on site.
- Concrete, steel, insulation, electrical conduit, window & door bucks included in panels.
- Centralized quality control; RCC follows lean construction processes.

5 1/2" Concrete



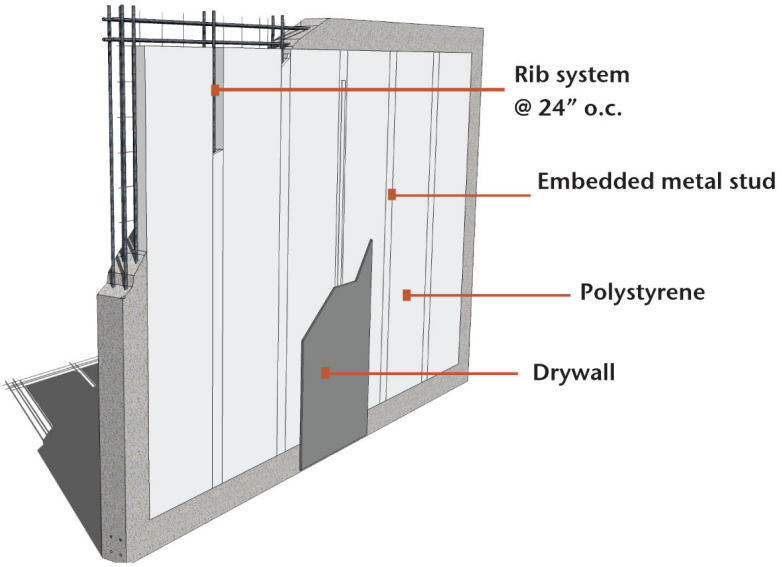
Energy Efficient

- Featuring an insulation system that combines concrete, polystyrene, and steel, this is one of the most energy efficient products available, with thermal resistance values up to R-22. The low heat transfer rate of cement keeps temperatures even throughout the structure. Overall, these factors add up to significant long-term savings on heating and air conditioning expenses.
- FPL recognizes 30% energy savings and over 70% of Build Smart homes in FL are built with RCC wall system.
- South East Building Conference's most energy efficient award for 17 years.

Health & Comfort

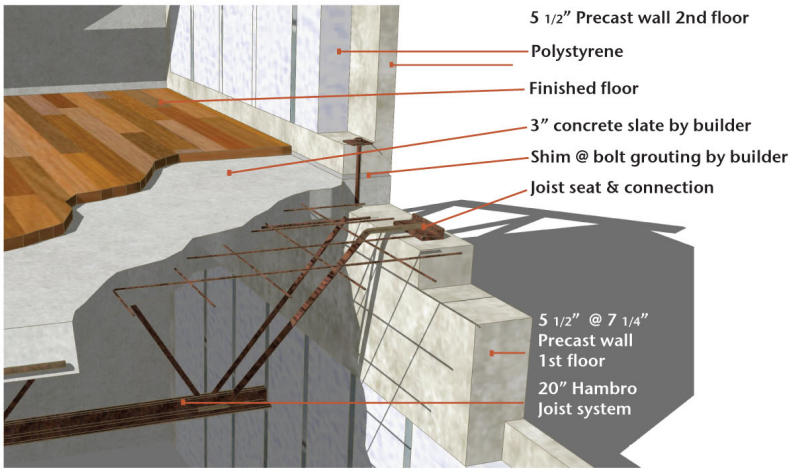
- Our structures are virtually termite free, never breed mold or mildew, and do not harbor pollutants that can lead to allergies, headaches, and upper respiratory problems.
- The use of concrete eliminates excessive air leakage, vapor permeation, and pest infestation.
- Rigid polystyrene insulation provides extreme energy efficiency and eliminates harmful VOCs present in fiberglass insulation.
- Highly absorbent materials form a natural sound barrier and create a quieter indoor environment.
- Off-site construction creates less disruption on site to allow uninterrupted education.

7 1/4" Panel

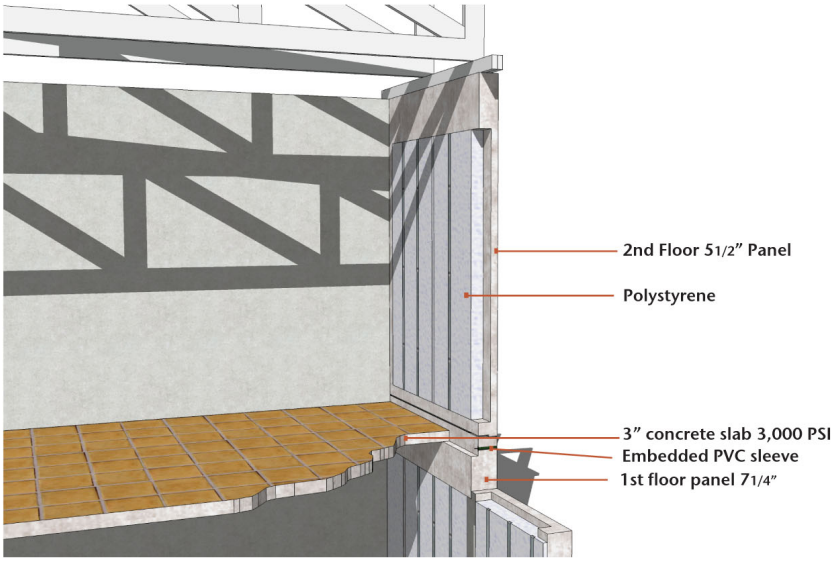


Typical Wall Connection Details

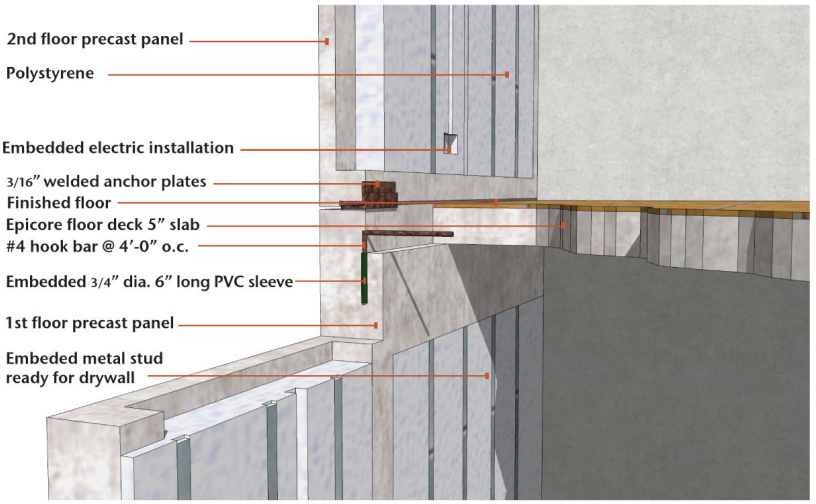
Precast Wall System
Filigree Wideslab



Precast Wall System
Hambro Floor



Precast Wall System
Epicore Deck



Production Process

> **Free proposal:** Concrete Building Concepts staff reviews the plans received from a prospective customer and provides a free proposal, providing each customer an exact cost for the project before it starts.

> **Engineering:** Computer-aided design is used to engineer each panel to meet the customer's specifications, with strength and precision being the highest priority. The engineering calculations are then provided to the customer to be used for approvals and permits.

> **Form Layout:** Welded wire mesh and additional reinforcing steel are all tied and chaired in steel cambered casting beds at standard 5 1/2" and 7 1/4" widths.

> **Quality Control Inspection:** After all components and electrical and plumbing blockouts are set in place, the materials are thoroughly inspected to ensure all required engineering standards are met.

> **High Strength Concrete:** After a complete inspection, 4,000 PSI concrete is poured and vibrated onto the casting bed to produce a wall panel.

INNOVATION INTEGRITY INSPIRATION

Installation Process

> **Delivery:** Once the wall panels are completed, they are placed on flatbed trucks and transported to the building site for installation.

> **Precise Placement:** Individual wall panel sections are carefully lowered into place using a crane.

> **Panel Fastening:** After the wall sections are in place, they are individually joined by a trained and qualified installation crew. Plates embedded into the wall panels are welded together to secure the panels using a process engineered for strength and durability even under harsh conditions.

> **Ready for Finishes:** The wall can now accommodate owner-specified coverings and finishes. Engineering letters are provided to assure installation quality and assist in satisfying on-site inspections from the building department.

> **Fast Installation:** Completion occurs in days and in most cases in just a few hours, in comparison to competing systems that can take several weeks. The Concrete Building Concepts wall panels can accommodate buildings up to four stories.

Features and Benefits

End Customers

Non-combustible
Termite-resistant
Safe, rock solid construction
Reduced life cycle cost
Minimal sound transfer
Energy-efficient
Reduced insurance cost

Architects/Engineers

Design flexibility
Fully engineered
Proven details with all systems
Design and technical support

Builders

Cost effective
Speed of construction
Reduced on-site supervision
Safe and clean job site

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A product of

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