



HOME BUILDERS-DEVELOPERS-INVESTORS



RESIDENTIAL ▾

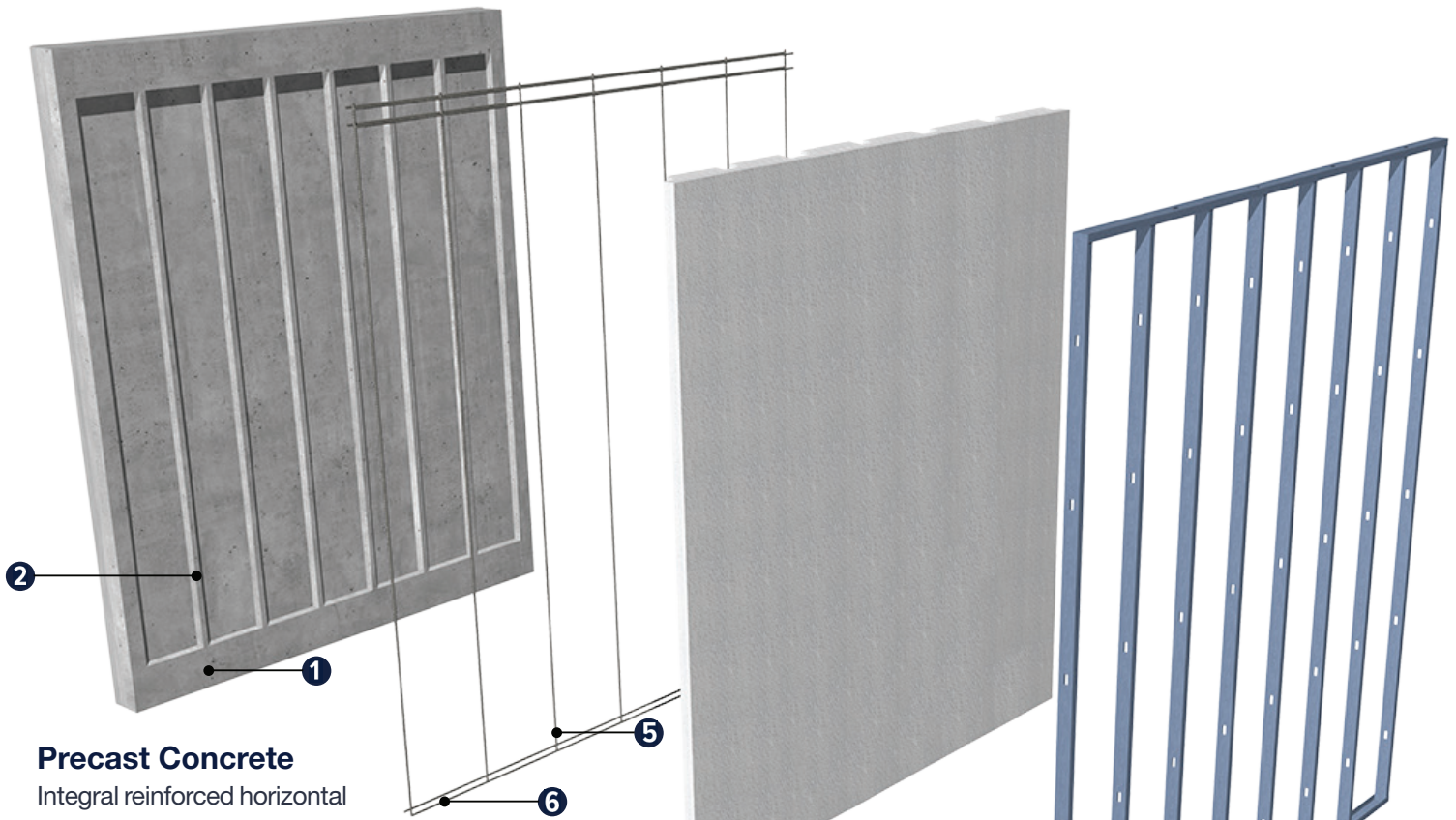
COMMERCIAL ▾

ENVIROCAST®

RESIDENTIAL WALLS SINGLE FAMILY



ENVIROCAST WALL COMPONENTS



Precast Concrete

Integral reinforced horizontal and vertical **concrete studs** and **"bond beams"** provide horizontal and vertical flexural and shear capacity to meet all national, state, and local building codes.

Reinforcing Rebar

Steel rebar is used to structurally reinforce the precast concrete wall unit. Wire mesh reinforcing may be added to enhance in-plane shear capacity.

Core EPS Insulation

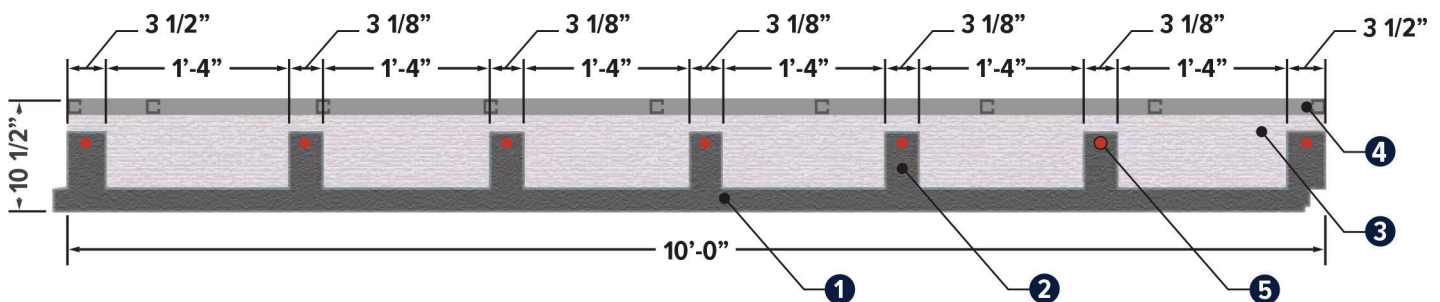
Insulation properties are achieved with **Core EPS Insulation**. Wall R-values will vary depending on actual wall configuration, R-values comply with the 2021 Energy Code requirements for walls.

Metal Stud Framing

20 gauge integral metal studs complete the interior of the wall making it ready to receive the wall finish.

LEGEND	
1	CONCRETE FACE
2	CONCRETE STUD
3	EPS INSULATION
4	1 5/8" OR 2 1/2", 20 GA. METAL STUDS
5	#6 RE-BAR EA. STUD
6	(4) RE-BARS @ BASE & BOND BEAM

"Durable high strength fiber reinforced walls, pre-insulated and pre-studded. Ready for electrical and drywall on the inside, ready for paint on the outside.."



*Actual cross section and components may vary subject to final design and local codes.

SPEED OF INSTALLATION

"Increase Speed to Revenue by Increasing Speed of Construction."

2 *HOMES **IN** **1** DAY

BUILD FASTER SELL FASTER - Due to shortages of on-site trade labor, the residential housing industry is unable to keep up with the demand for rapid home construction. Pre-fabrication greatly increases the speed of residential home construction, and shortens the time to occupancy. Construction speed makes Envirocast wall systems the ideal choice for builders who need to build faster and get homes on the market sooner.

Envirocast wall systems are a cost effective solution that makes it possible to install walls faster than wood frame or CMU block walls.

TIME MATTERS - When time is a priority and quality is a requirement, builders turn to Envirocast wall systems. Envirocast wall systems are engineered and designed to increase speed of construction. They feature flexible designs that are highly adaptable and have been engineered to fit a variety of applications. Our walls can be easily sized to meet specific project requirements.

Large home builders, project developers, architects, engineers are embracing Envirocast wall systems as an improved alternative to stick built and concrete block construction.

TRADE CONSOLIDATION

TRADE CHALLENGES - Concrete Masonry Unit (CMU) Construction requires multiple trades and process steps that are interdependent and time consuming. CMU trades also require valuable dedicated site space for materials, and costly time for post trade site clean up.

CMU Construction typically includes installation of:

- **Steel reinforcing cast protruding from slab**
- **Concrete Masonry Units**
- **Steel reinforcing in cavities**
- **Grout within reinforced cavities and bond beams**
- **Roof truss**
- **Insulation in non-reinforced CMUs**
- **Studs/furring strips for interior wall**
- **Insulation for interior wall**
- **Exterior cementitious finish or EIFS**
- **Door and window rough ins**
- **Punch-ins for electrical receptacles**

TRADE CONSOLIDATION - Envirocast walls combine the work of multiple trades, eliminating costly time from the construction schedule as well as the delays often resulting from interdependent trades. Same day wall installation requires no long term site space or costly site clean up.

Envirocast Walls typically include installation of:

- **Installation of completed wall units**

9 **PROCESSES **IN** **1** STEP

*Most typical home exterior walls can be installed in a single day.

**Listing of most common processes used in CMU construction. Actual processes used may vary.

CONCRETE BENEFITS

The Envirocast Wall System delivers the strength and durability of concrete while providing the look and feel of home. Concrete is widely recognized as a superior structural building material having numerous benefits. Envirocast combines the benefits of concrete with the speed of pre-fabrication to offer the most advanced wall solution available.

DESIGN VERSATILITY - The Envirocast wall system allows for a variety of design features including brick ledges, slab support ledges, beam pockets, and treated wood framing around window and door openings. Other precast accessories can be provided like footings, headers, columns, and more for special applications.

Envirocast wall system components and finishes offer a wide range of design versatility, and can be used in different combinations to allow for standard or customized wall solutions. Our internal network of design and engineering professionals work together to oversee each project from inception to installation.

APPLICATION FLEXIBILITY - The Envirocast above grade residential walls are designed and engineered for use in single family and multi family residential applications, as well as for common areas and commercial space. Envirocast walls may be stacked for multi level residential homes.

- **CONSISTENT QUALITY** - Envirocast walls are manufactured in a climate controlled environment to the rigid standards of the Envirocast quality control program. Plant controlled conditions allow for tighter tolerances and sharper, cleaner edges.
- **FIRE RESISTANT** - Envirocast wall systems exceed industry standards / construction codes for applications requiring UL1715 Burn Testing.
- **STRENGTH/DURABILITY** - The strength and durability of concrete makes Envirocast the ideal wall solution in areas affected by severe weather events, such as hurricanes, tornados, flooding or wildfires.
- **PRE-FABRICATED** - Envirocast walls are designed to dramatically reduce installation and project schedule time. Envirocast walls are ready to install when the jobsite is ready. No down time waiting on trades to complete multiple phases of work.



SAVINGS • COMPLIANCE • STRENGTH • SUSTAINABILITY

SAVINGS - Envirocast saves time by making it possible to install walls in a matter of hours, instead of days or weeks. A faster build means sooner to market, resulting in a rapid ROI. Envirocast wall systems are plant manufactured in a quality and climate controlled environment while excavation is being performed on-site, allowing for immediate installation of walls.

Exterior walls for a home can be installed in half a day, complete with insulation and studs for maximum efficiency.

COMPLIANCE - Envirocast wall systems meet all local, state and national building codes. Reinforced vertical and horizontal integral concrete studs and "bond beams" provide vertical and horizontal flexural as well as shear capacity to ensure building code compliance.

STRENGTH - The strength, durability and fire resistance of concrete makes Envirocast the ideal wall solution in areas affected by severe weather events, such as hurricanes, tornados, flooding or wildfires.

SUSTAINABILITY - Envirocast meets Leadership in Energy and Environmental Design (LEED) and Home Energy Rating System (HERS) standards, and complies with green building practices and 2021 Energy Codes. Envirocast delivers superior R-values from R-16.8 to R-21.3 depending upon the wall height and configuration.

Envirocast incorporates recycled materials and up to 95 percent of Envirocast materials are reclaimable and can be recycled into new structures. Envirocast is designed and engineered to be the future of green building.

*LEEDS® and HER certifications are pending.



"R" & "U" VALUE

R/U VALUE CERTIFICATION
FOR 10 FOOT ENVIROCAST
WALL SYSTEM
(10 1/2" thick panel)

R-Values:

Concrete		0.11	R/inch
EPS Insulation	(@75 degrees F)	3.60	R/inch
Interior Air Film		0.68	R/inch
Exterior Air Film		0.17	R/inch
Sheetrock		0.91	R/inch

Section @ Concrete Top&Mid: R-Values U-Values

9.5" Concrete Rib	1.00	
1" EPS Insulation	3.60	
1" Air Film Int	0.68	
1" Air Film Ext	0.17	
Totals	5.45	0.183

Section @ Concrete Ribs: R-Values U-Values

7.5" Concrete Rib	0.79	
1 3/8" EPS Insulation	4.95	
1" Air Film Int	0.68	
1" Air Film Ext	0.17	
1" Air Space	0.96	
1/2" Sheet Rock	0.45	
Totals	8.01	0.125

Section @ Cavity: 3"

Concrete Face	0.32	
5 7/8" EPS Insulation	21.15	
1" Air Film Int	0.68	
1" Air Film Ext	0.17	
1" Air Space	0.96	
1/2" Sheet Rock	0.45	
Totals	23.73	0.042

Composite U Values:

Section @ Concrete Top	x 3.02 % Area	= .0055
Section @ Concrete Ribs	x 15.76 % Area	= .0197
Section @ Cavity	x 81.22 % Area	= .0341

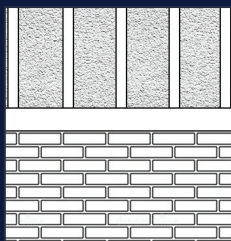
***Total U Factor 0.059**
***Total R Value 16.80**

*Value may vary depending on final design per application.

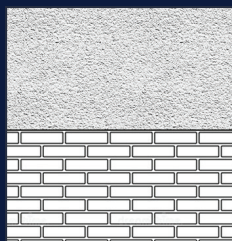
FINISHES

Envirocast wall systems are available in a variety of finishes with a range of color and texture combinations. Finishes include smooth, broom, stucco, stamped brick, stamped stone, stacked stone, board & batten panel, smooth with brick tie backs, and more. Envirocast walls can also be a versatile component of the building facade.

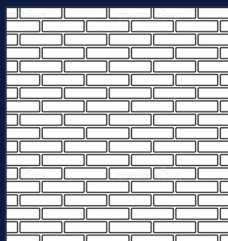
Call our Envirocast Technical Team today for help designing your Envirocast wall solution. Let our team of experts help you get the look you want with the performance you need.



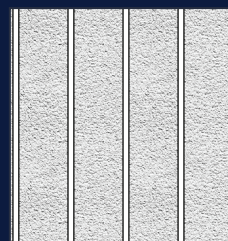
BRICK & PANEL



BRICK & SMOOTH



BRICK STAMP



BOARD & BATTEN



STUCCO

BASEMENT SOLUTIONS

ENVIROCAST BASEMENT WALLS



Residential Multi Family Installation



Residential Basement Wall Installation



Installation of Above Grade Walls



Residential Basement Framed Out



Completed Basement Ready for the Floor System



Residential Basement Installation

DESIGNED FOR SPEED • ENGINEERED TO LAST

SPEED - The Envirocast wall system is designed to install finish-ready basement walls in a matter of hours, instead of days or even weeks building out traditional basement walls. Envirocast provides an all inclusive basement wall system, ready to receive electrical and the finishing drywall. As with above grade Envirocast wall systems, every Envirocast basement wall system is plant manufactured in a quality and climate controlled environment while excavation is being performed on-site, allowing for immediate installation of basement walls.

Basement walls for a home can be installed in half a day, pre-insulated and ready to receive electrical and drywall.

ENGINEERING - Envirocast basement wall systems are pre-engineered to meet or exceed all structural and design codes as required per project. Every Envirocast basement wall is engineered to interlock and withstand exterior sub-grade soil pressures. Envirocast high-strength 5,000 psi concrete mix is designed to be moisture resistant, eliminating additional moisture barrier or damp proofing in many below-grade applications.

PRE-INSULATED - Every Envirocast basement wall system is pre-insulated, saving valuable trade time on the jobsite. Core EPS insulation panels are bonded directly to the concrete wall, providing superior R-values and reducing energy costs. Wall R-values will vary depending on actual wall configuration, R-values comply with the 2021 Energy Code requirements for walls.

PATENTED TECHNOLOGY- Envirocast basement walls are designed, engineered, and plant manufactured using patented industry leading technologies to create a superior basement wall system. Envirocast utilizes innovative solutions to install complete, structurally engineered basements in a fraction of the time required by other wall systems.

Envirocast Basement Walls... Building the Foundations of Tomorrow

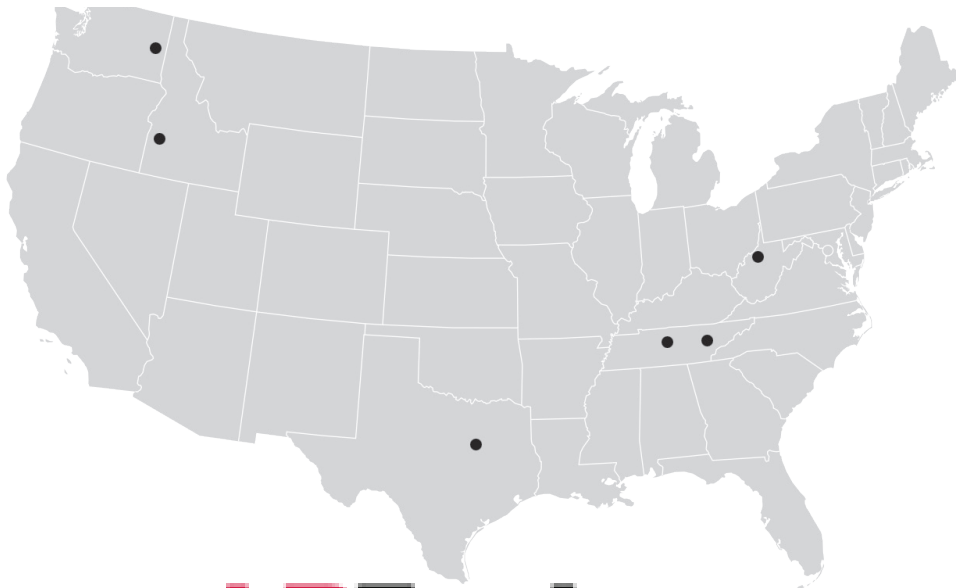


1 WALL

ENDLESS CONFIGURATIONS

ENVIROCAST®

RESIDENTIAL WALLS SINGLE FAMILY



LB Foster
CXT® Products

CXT is a leading manufacturer of precast concrete products in the United States for the industrial, agriculture, infrastructure, energy and waste water industries. CXT manufactures precast concrete restroom, shower, concession and storage buildings, storm shelters, and concrete ties for railroads.

CXT, a wholly owned subsidiary of L.B. Foster Company, The products are manufactured in ISO 9001:2015 registered facilities in Nampa, ID, and Hillsboro, TX, as well as through our wholly owned subsidiaries, Carr Concrete in Waverly, WV and LarKen Precast in Nampa, ID



LB Foster
CXT® Products