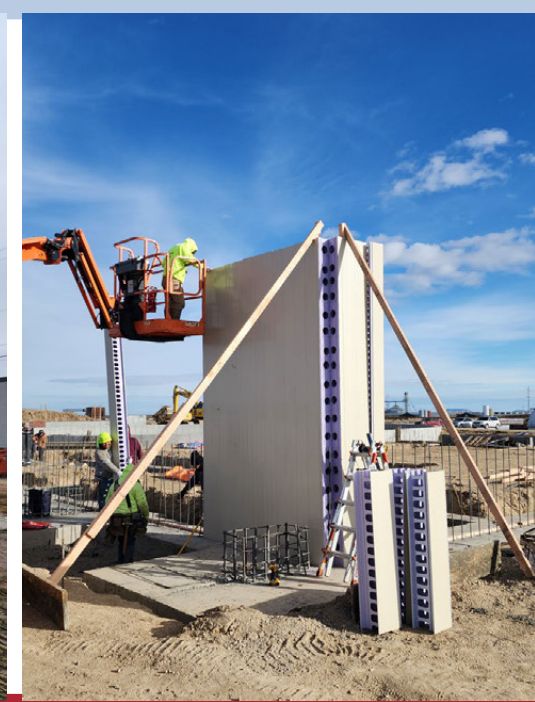


EZ Forms® Concrete Wall System

Technical & Install Guide



Focused on the Customer Experience



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About AmeriLux International

AmeriLux is a value-adding distributor of multiwall and corrugated polycarbonate sheets, PVC liner panels and wall forms, HDPE panels, acrylic sheet, and many other plastic sheet products. Our products are used in a variety of glazing, cladding, and daylighting applications in the industrial, agricultural, horticultural, residential, and architectural markets.

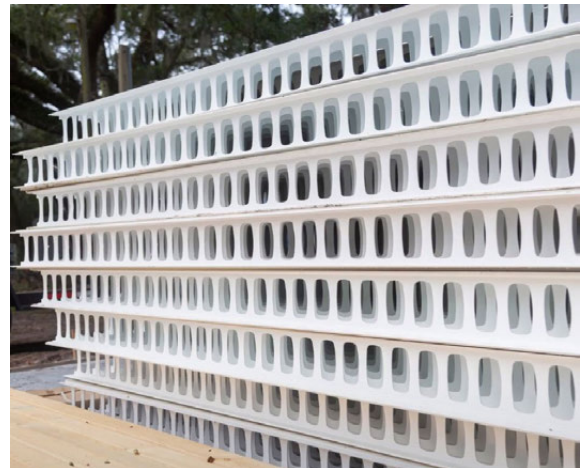
Headquartered in De Pere, Wisconsin, AmeriLux sources and distributes materials from and to companies around the world. It is by building and maintain strategic, win-win partnerships with vendors, customers, and employees that AmeriLux is able to profitably – and sustainably – grow its business.

What is EZ Forms® Concrete Form Assembly System?

EZ Forms® revolutionary concrete wall-forming system is easier to assemble because the forms and spacers snap together horizontally. Water leakage problems are eliminated because the webs are not back-to-back. No double webs with this system!

A cost-effective option to traditional concrete wall construction, EZ Forms® is a revolutionary new concrete wall-forming system and is available in two core sizes: 6" EZ Forms® and 8" EZ Forms®. These stay-in-place forms are made from an extremely durable PVC material that is lined with pre-mixed concrete and rebar reinforcement. The system's innovative nine-inch form length accommodates vertical rebar placement spacing of eighteen inches (18") perfectly.

EZ Forms® unique corner design simplifies the installation and inspection process. The corners remain exposed until the final piece is snapped in place, allowing for easy fitment and access to all rebars for simple and easy inspection by the building inspector. In addition, the corners 'larger 45 degree' fills with concrete completely unlike similar products.



Features & Benefits of EZ Forms® Concrete Wall-Forming System

- **Horizontal 'Push-n-Click' Install System**
- **Energy & Installation Cost Savings**
- **Unique Corner Design & Assembly**
- **Low Maintenance, Easy-to-Clean**

Concrete Form Assembly System Install Components

6" Concrete Form Assembly System

Specs: Interior Depth: 6" | Exterior Depth: 6.20" | Width: 9" | Thickness: .100"

Components: 9" Wide Form, 2.25" Spacer, 1.75" Spacer, 6" Cap, Female Starter, Male Starter, 3-Piece Corner, 4.5" Form, and 45° Corner.

8" Concrete Form Assembly System

Specs: Interior Depth: 8" | Exterior Depth: 8.25" | Width: 9" | Thickness: .120"

Components: 9" Wide Form, 4.5" Spacer, 2.5" Spacer, 8" Cap, Female Starter, Male Starter, and 2-Piece Corner.

Note: For longer lengths, formwork can be spliced together. Staggered joints is recommended.

EZ Forms® Installation Guidelines

Before You Start

- Before starting your project, inspect all EZ Forms® components for damage. Confirm all system pieces were received and quantities are correct.
- Even though PVC is extremely durable, pick up and carry pieces to avoid unnecessary scratches.
- Store EZ Forms® in an area protected from extreme temperature and weather conditions.
- If panels need to be cut, use a power miter saw or a table saw with a fine-tooth carbon blade.
- Run the saw at full speed RPM. Move at a slow advance rate to avoid chipping or cracking. Always wear safety protection!

Layout

- In order to achieve the least amount of site work, the layout should be done with respect to the rebar layout provided.
- Whether the formwork is being installed on top of a footing or on a slab, it is **IMPERATIVE THAT THE SURFACE IS LEVEL AND FREE OF DIRT AND DEBRIS.**
- Level is **EVERYTHING!** If the footings or concrete surface are uneven or unlevel, imperfections in the wall height will show and will need to be fixed.



- The extra time and attention spent confirming the footings or slab are dead level will save a lot of hassle, time, and money.
- The formwork installation and layout should start in a corner and work outward.

Note: Always use safe construction methods and personal protective equipment when installing formwork panels.

Starting Point

- To begin installing the formwork panels, first locate the starting point on the drawing.
- The starting point will always be at a corner, working out in each direction.
- Only install the ‘inside corner’ at this time. Make sure to pay close attention to the direction of the ‘male’ and ‘female’ tabs located on the sides of the formwork.
- Screw inside corner with 4” long screws at 16” centerline in both directions for added protection.
- The ‘exterior corner’ will be installed **AFTER** the corner rebar is inspected by the proper authority who oversees the project.

Note: EZ Forms® features an ‘open corner’. The inspector doesn’t have to go up to the top of the formwork wall and look down into the corner with a flashlight. This is safer and saves time!



Panel Installation

- EZ Forms® panels are fabricated to snap in place. Simply ‘push-n-click’ the panels together.
- In order to do this, you need to insert the ‘male leg’ into the ‘female tab’ at the bottom.
- With the panel at an angle, move the panel back towards you and then push it into place.



Time Lapse Install Video

SCAN HERE



Panel Install Video

SCAN HERE



- To ensure the panel is seated properly, pull back on the panel to make sure it doesn't come out.
- If formwork panels do not easily 'push-n-click', use a white 'non-marking' rubber mallet to help snap panels into place.

Note: You will hear the panel 'click'. This clicking sound will confirm the pieces are firmly connected.



How to Video
Push-N-Click
Panel Install

SCAN HERE



Ensuring Panel is
Seated Properly

SCAN HERE



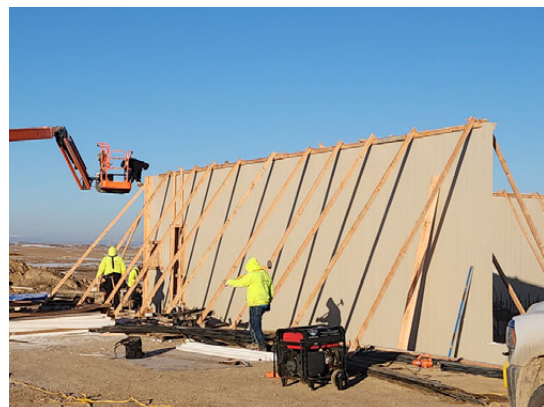
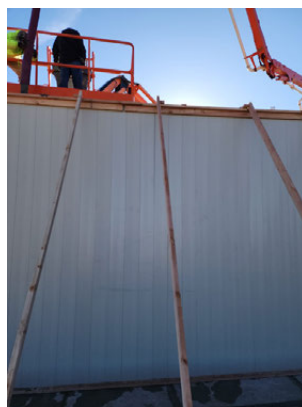
Leveling the Wall

- Do not start installation of panels until slab or footing is level.
- Install the corner first with a few panels going in either direction.
- Confirm the wall is fully interlocked, making sure all forms are snapped together properly.
- Use temporary braces and plumb the corner so it is level.
- After moving down the wall, come back and confirm the corner is plumb in each direction.
- If footing or slab is plumb the last panel should be plumb
- Make sure the formwork wall is level and square before pouring concrete.

Note: There are various methods to plumb a wall from the old fashioned plumb bob, 6' levels, string liners, or lasers.

Bracing

- For the formwork wall layout, install bottom runners on either the 'inside' or 'exterior' of the chalk line. This is usually a 2x4 shot into the concrete to stabilize the formwork wall.
- After the entire formwork wall is installed, then the other side needs bracing installed to stop the formwork wall from kicking out during the concrete pour.



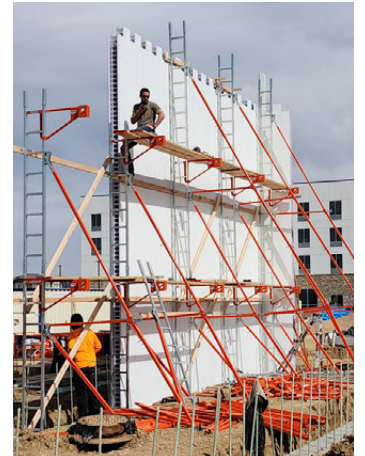
- Pre-make bracing for a run of 18 feet at the top, going each direction from the corner.
- If you are using 2x4's, then it will resemble a 'ladder'.
- It is important the formwork wall is properly braced, both vertically and horizontally to prevent any shifting during the pouring process.

Note: Follow ACI guidelines for bracing and allow concrete to cure properly before applying loads and fill.



There are many kinds of bracing available from 3rd parties in the marketplace. Whatever you choose to use for bracing, the following needs be considered.

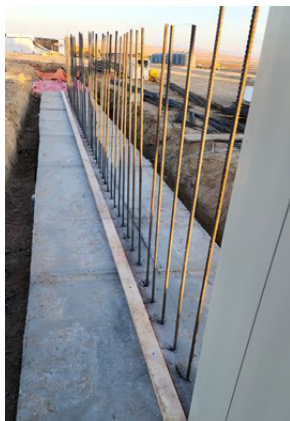
- Top bracing as well as runners on the bottom are required wherever there is a wall.
- Used for bracing the wood framework, outriggers provide additional strength and stiffness and are required every 10 feet in order to keep the wall plumb.
- Whalers will be required at midspan for walls over 20 feet.
- Corner bracing is required in both directions. Every 2 feet at bottom and 3 to 4 feet at top.



Rebar Placement

- The EZ Forms® concrete wall forming system is designed to meet US standards for rebar placement at 18 inches on center each way (vertical and horizontal) for most projects.
- The systems form pieces are nine inches in length, allowing for an open space to install the vertical rebar to the dowel previously installed.
- The first set of horizontal rebar is placed when 20 feet of the formwork wall is erected.
- To do this, push the horizontal rebar from the corner down to the 20-foot mark.
- When the next 20 feet of wall is installed, push the final 2 feet in from the corner.

Note: When the next 20 feet of wall is erected, you will have your 2-foot overlap required for horizontal placement.



Concrete Pouring

- Before pouring concrete, double check bracing, confirming walls are set straight, level, and square to building lines.
- Use a pea gravel mix of 3500 psi concrete with a slump of 7-8 at discharge. (The slump comes out a 4 and is reduced to 7-8 at the time of pour.)
- **TO REDUCE STRESS AT THE CORNER BRACING, IT IS IMPORTANT TO START THE CONCRETE POUR FROM THE CORNER, WORKING TO THE CENTER OF THE WALL.**
- Pour concrete in a steady, even manner from each corner to the center in 4-foot lifts.
- To determine height and ensure vibration, use a white rubber mallet and tap on the walls. You can also touch the rebar at the top of the wall with a concrete vibrator. The backside of a skill saw can also be used to create this vibration.
- We do not recommend using a vibrator inside the formwork panels because it can get stuck in the webs, and you could lose the head of the vibrator. One exception is areas underneath a window or fan opening.



Note: When working with concrete below 35 degrees, use a superplasticizer. You will want to make sure your concrete mixture is suitable for the time of year and climate conditions as per the project's specifications.

Concrete must be set and hard before removing bracing. Formwork walls should remain braced and properly supported throughout the entire construction process, per design to project completion.

Cleaning

- After the final wall is poured, remove any concrete residue from the surface of the EZ Forms® panels. Wet concrete can easily be sprayed off with a regular garden hose.
- For harder to clean areas, a power washer may be used. Keep the nozzle 4 to 6 feet away from the formwork wall and use a wide spray to distribute even water pressure.



Note: Concrete spillage can be very difficult to remove if not cleaned off right away. It may also leave unsightly lime stains after a prolonged period of time.

Additional Information

If additional technical or installation information is needed, please contact AmeriLux International. If you have a specific question about requirements in your region, contact your local code office or building inspector.

Drawings and technical reports are provided for reference only. Drawings are not project-specific and are for product representation only. Actual products may vary. These drawings are the property of AmeriLux International and are to be used solely as a representation of AmeriLux products. These designs may not be recreated or produced without the expressed, written consent of AmeriLux.

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