



The Premier ICF System consists of R-Shield® MPS with termite treatment and Premier ICF Ties. Premier ICF system offers a flexible, cost effective way to build a permanent insulated concrete wall. Contractors with a basic construction skill level can build Premier ICF by following these steps and using the details in the Premier ICF Construction Manual.

- Study the Premier ICF Construction Manual.
- Become familiar with the site.
- Site work must be level.
- For below grade work, cut area wide enough to accommodate work activities; overcutting 3' or greater works best.
- Footings should be level, square, and properly engineered to support the Premier ICF wall and meet local building codes.
- On the footing, snap a chalk line to mark outside toe-plate guide line.
- Install toe-plate outboard of chalk line using double-headed nails or Tapcon screws so you can remove plating later. Repeat for all exterior walls.

## Footings:

- Footings should be level; when they are not, simply shim first course with strips of R-Shield MPS.
- Footing step-downs should ideally be built in 1' increments. If odd dimensions are necessary, saw cut R-Shield MPS to size and notch with tie cuts and assemble as usual.

## Corners:

- Factory cut corner pieces allow for exact placement of Premier ICF ties and start the form building process; 90° and 45° corners are standard. Custom angles and radius corners are readily available.
- Using factory cut corners, begin building the Premier



- As you build the first course, start at the corners of each wall segment and work to the middle of the wall. Field cut R-Shield MPS to fit; use a common hand saw or keyhole saw.
- Since the Premier ICF System is designed to use stacked vertical joints, the R-Shield MPS pieces remain a constant length for the height of the wall.



- Place horizontal rebar as required by local codes in the appropriate Premier ICF Tie rebar cradles. A helpful technique to support vertical rebar is to insert them in appropriate Premier ICF Tie courses.



- As you build corners, use a key hole saw to notch factory long corners, top and bottom, in locations shown in photo. Cut Premier ICF half and full Snap-Ties so the web can reach into the wall cavity. Set Premier ICF cut ties in notches.



- Notch the succeeding factory long corners, top and bottom, as in above photo. Set the factory long corner into the cut Premier ICF Ties. This will keep the factory corners at a level elevation as you build succeeding courses of the Premier ICF wall and will provide a solid tie face connection for claddings or finishes attached to the Premier ICF wall.





- Continue building the Premier ICF wall by installing Premier ICF Ties into the factory notches of the R-Shield MPS planks.



- The installation of the R-Shield MPS planks goes easily and quickly. Remember to install rebar in the appropriate courses of the Premier ICF wall as you build upward.



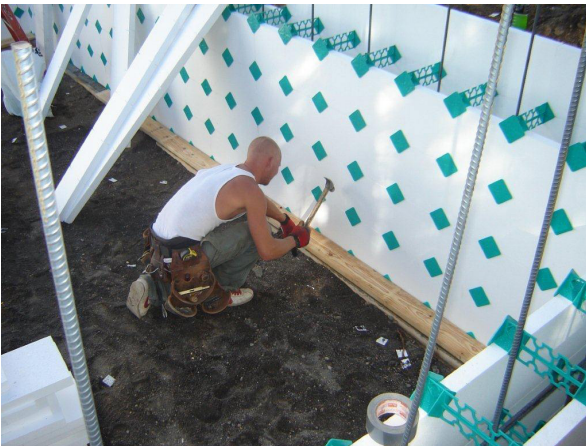
- At each corner having a long factory corner piece, place a vertical corner brace, cleating it to the toe-plate.
- Note: Refer to the Premier ICF Construction Manual for bracing details for corners and T-corner intersections.



- Install diagonal kickers to plumb vertical corner brace.



- Fasten kickers securely to the vertical corner brace top and bottom. It is further recommended that additional kickers be installed to the vertical corner brace at its mid-point prior to pouring concrete.



- Install interior toe plate onto the footer tightly against the interior side of the Premier ICF wall using double headed nails or Tapcon screws so you can remove plating later. Repeat for all interior walls.



### Openings.

- If the Premier ICF wall has openings such as windows and doors, place appropriate blocking and bracing to create openings; use treated lumber if blocking is to be permanent.
- Note: Pre-formed vinyl bucks can also be used. Follow vinyl buck manufacturers' installation guidelines.
- As you build the Premier ICF wall, trim the R-Shield MPS planks to fit flush at blocking of openings.
- Use spaced blocking at the sill of the opening so concrete can be poured directly into the Premier ICF wall area below the sill opening.



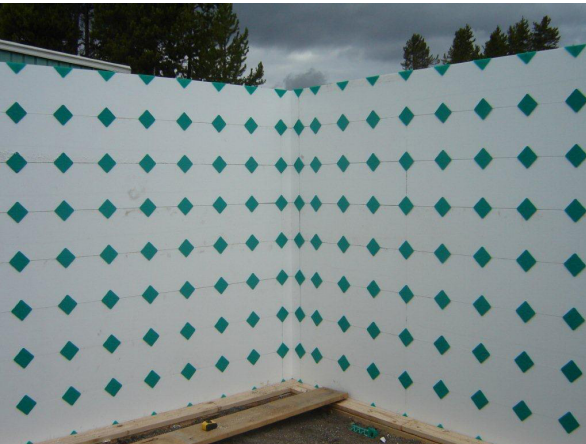




- Premier ICF half ties are used to terminate and support opening boundary.
- Screw through all wood blocking at one foot centers using a screw length that protrudes into the Premier ICF wall cavity at a minimum of 6”.



- Place Premier ICF half ties to cap the R-Shield MPS wall and to provide 12” on center attachment points for cladding or finishing materials.



- Complete the installation of Premier ties and R-Shield MPS planks. Inspect the Premier ICF wall for any damage that may have occurred during installation. Repair and/or replace damaged items.



### Wall Bracing.

- In preparation for pouring concrete, build and install OSHA approved walkway frames where required. These frames provide a means to plumb the Premier ICF wall and safely support workers when pouring concrete. **Installing OSHA approved bracing and walkways is the sole responsibility of the installer.**



- Attach strong-back board with screws to the Premier ICF half ties at the top boundary of the outside Premier ICF wall. Attach kickers at a maximum of 6' on center for walls up to 8' in height, a maximum of 4' for walls up to 12' in height.



- Use a string line to ensure straightness of all Premier ICF walls.



- While holding the Premier ICF wall top to the string line, fasten wall kickers securely to the ground to prevent any potential movement of the Premier ICF wall during the concrete pour.



- Prior to the concrete pour, place adequate reinforcement blocking and/or bracing into the blocked open-





- As a final check, inspect the Premier ICF wall components again, as well as checking the entire bracing system making sure that all components and materials are secure and functional.
- The Premier ICF braced wall is now ready for the concrete pour.



**Concrete.**

- Standard concrete mix designs can be used with Premier ICF system (always check with local codes):
  - 3/4" aggregate size is commonly used
  - 5" slump recommended, 6" maximum
  - 3,000 to 4,000 psi strength typical, as specified by designer and/or local codes.
  - Place concrete at a controlled rate.



- When pouring concrete, maximum 4' lifts should be used. For taller walls, multiple passes around the walls are needed.



- The Premier ICF requires no mechanical vibration. The use of 5" slump concrete with 3/4" aggregate, along with the natural vibration that takes place in the form system during concrete placement is adequate. The Premier ICF system allows for concrete consolidation when installed per Premier ICF instructions.
- When using a boom pump truck, do not let the concrete fall from the full height of the boom into the Premier ICF. For best results, a double S hose end is recommended to control the concrete flow into the Premier ICF wall.



- The top of the wall is screeded, troweled smooth, and anchor bolts are set.
- Once the concrete is sufficiently cured, bracing can be removed and construction can continue. Bracing is not wasted - save lumber and reuse for further building on the site, or use for the next Premier ICF project.

### Finishing the System.

- For below-grade walls, the exterior should be damp-proofed or water-proofed using cutback asphalts, self-adhering sheet membranes, or high-quality acrylic coatings recommended by the coating manufacturer for use with Premier ICF's. Do not use products which are highly solvent-extended.
- For above-grade application, common building claddings can be used. Install according to manufacturer recommendations over the Premier ICF system.
- For electrical outlets/switches, hot knife or router-cut R-Shield MPS, set boxes using concrete fasteners, and install wire per local code, and foam all components securely in place.
- Use only coarse-thread screws for attachment to Premier ICF ties. On a weather exposed side, use non-corrosive screws.

**Disclaimer:** Details, illustrations, pictures and guidelines provided herein give basic information and illustrate examples of Premier ICF System installation. The basic information provided herein is not intended to cover every potential use and application of the Premier ICF System. It is the responsibility of the installer to become familiar with his specific application and determine if the Premier ICF System is suitable. By commencing work, the installer accepts full responsibility for the proper and safe installation of the Premier ICF System at his job site. Furthermore, it is the sole responsibility of the installer to meet all federal and local regulatory requirements for job site safety for himself, his workers and any others on the job site while in the execution of all phases of the Premier ICF System installation. Construction must be done in compliance with local building codes.

**For further information about  
Premier ICFs  
call 800-766-3626 or 406-388-7223**