



Steel Framing for ICF Construction

Bracing and Installation Instructions

These notes are general in nature and are to be used as a guide.

Project specific details, sequencing, and construction bracing should be considered during installation.

- ❖ Care should be taken in handling assemblies during unloading, moving, and setting in place so assemblies remain square, plumb, and straight as manufactured.
 - ✓ When using mechanical equipment such as lulls to move assemblies, it is recommended that lumber (2" x 10") of adequate length or a transport frame be used to avoid crimping or point loads.
 - ✓ The spreader bars at the bottom of the assemblies or internal "x" bracing should not be used to lift assemblies as this can cause distortion. Spreader bars are not intended for final placement but to aid in transportation.
- ❖ Assemblies are permanent units and require being set square and plumb to receive doors and hardware as specified. Periodically check assemblies during wall erection and initial set-up.
- ❖ Jambes are to be placed after the floor slab has been poured and anchored in place except as noted on the second-floor area.
 - ✓ Spreader bars are used only for handling and additional wood struts should be used at floor level to control tolerances, twists, and stability of the frame assembly during construction.
 - ✓ Provide horizontal wall supports adjacent to assembly jambes. Wall should be supported on both sides to keep assemblies' plumb and straight within the wall plane.
 - ✓ Bracing should be within the concrete area of the assembly and spread with blocking. Bracing shall be placed to avoid torque on the assembly jambes and head.
 - ✓ Bracing should be applied so it is in line with the loads from the concrete.
- ❖ Assemblies provide anchorage to the ICF block, provide a bulkhead system for wall construction, and need to be braced to receive temporary construction loads above the openings to limit assembly jamb and head deflections.
 - ✓ Installation and function of doors will be compromised if deflections are not controlled and checked during the process and as the wall cures.
 - ✓ Wall concrete needs to be cured sufficiently to carry dead and live loads around the opening for pours above the openings as designed.
 - ✓ Temporary door assembly bracing and supports should not be removed until the adjacent concrete has gained enough strength for beam action per structural drawings.

5101 Commerce Crossings Drive Suite A.

Louisville, KY 40229

www.stalaf framing.com

502.526.6127



Steel Framing for ICF Construction

- ❖ Concrete shall be placed balanced on both sides of the assembly jambs (with one-foot maximum differential). Unbalanced loads could cause twisting and torque on the frame if not braced for such with enough “x” bracing or bulkhead.
- ❖ Avoid discharging concrete from the pump directly onto the assembly jambs or head.
 - ✓ Concrete should be placed such that pumping impact is limited and concrete vibrated, so it flows along the assembly jambs and head until covered completely and no void exists.
 - ✓ Caution not to over vibrate.
- ❖ Watch combined loadings on bracing and supports. It has been best practice to keep vertical loads from the concrete placement above assemblies’ head separate from other bracing and to be transferred through assembly bracing down to the footings by struts and not back into the ICF form or into horizontal wall bracing.
 - ✓ Various bracing options and pour sequences should be considered and will be acceptable if the assembly remains stable and within acceptable tolerances to allow for operation of doors.
 - ✓ Most assemblies can be braced with basement jacks or struts and blocking with limited risk if pours are controlled, impact and unbalanced loads are avoided, and concrete is set prior to going above the frame head. Assemblies wider than six feet require additional consideration; please contact Stala Integrated Assemblies for assistance.
- ❖ Install doors and hardware per manufacturer templates, recommendations, and instructions.