Installing the Independent Containment System (ICS)

Complete these instructions to install the Independent Containment System (ICS).

Prerequisites

- This installation requires a team of at least two people.
- The installation area must be clean and free from any obstructions.
- Installation requires 10 feet of vertical space and 300 square feet of floor space.
- Unpack all components of the ICS. A single kit contains 4 frame posts, 2 short beams, 2 long beams, and fasteners.
- At least two 6-foot step-ladders, or scaffolding of 3 or 4 feet in height.

Installation tools

- Hex sockets, including 3/4" and 1-1/8" sizes
- Wrenches, including 3/4" and 1-1/8" sizes
- Powered driver
- Torque wrench
- Spirit (bubble) level
- Hammer drill
- Masonry drill bit 17/32" (.531) diameter
- Hammer
- Optional tools include a carpenter’s square, marking pencil, and chalk line.
Lay out the ICS floor plan and drill anchor holes

Each frame post base measures 7 inches by 10 inches and has four holes at 4 inches by 7 inches on center. Each hole is 1-1/2 inches from each side at the corners.

Lay out the floor plan using a chalk line and carpenter’s square or similar layout tools.

Use one of two methods to lay out the floor plan:

1. Create a paper template of a frame post base. Mark the outside dimensions of the ICS as shown. Orient the template at each corner and mark the anchor holes.

2. Mark the anchor holes using a grid of chalk lines as shown.
Complete the following steps to drill the anchor holes.

1. Using a hammer drill and 17/32" (.531) masonry drill bit, drill four holes per frame post base.
   For concrete slab floor drill the hole 2 1/2 inches deep.
   For concrete floor over metal deck, drill the holes 2 1/4 inches deep.

2. Clean the holes. Each hole must be free of debris to properly anchor the bolts.

Install the ICS

Complete the following steps to install the ICS.

1. Align a frame post over the anchor holes. Make sure the beam mounting tabs are oriented toward the anchor holes. The single mounting tab must be aligned with the shorter side.

2. Using a hammer, drive four 3/4" Kwik bolts and expansion anchors through the base into the holes. At least four threads must be below the top of the base.
   Using a wrench or socket, tighten the bolt until it just touches the base, allowing frame post adjustment during installation.

3. Align a frame post over the anchor holes closest to the frame post installed in step 1. Make sure the single mounting tab faces the same tab in the other frame post.

4. Insert four Kwik bolts and expansion anchors as described in step 2.
5. Install a short cross beam between the two frame posts. On each end, insert four 1-1/8” bolts with a flat washer on each side, and lock washer just inside the 1-1/8” nut as shown. Finger tighten to allow adjustment during installation.

6. Align a frame post over the anchor holes on the same plane as the frame post installed in step 1. Make sure the single mounting tab is aligned with the shorter side.

7. Insert four Kwik bolts and expansion anchors as described in step 2.
8. Install a long beam using the following process:

   a. Partially insert one end of a long beam between the mounting tabs of the first frame post as shown.

      Note that the horizontal mounting tabs on the long beam must face the interior of the ICS.

   b. Insert one 1-1/8” bolt and attach a washer, lock washer, and 1-1/8” nut. Finger tighten only.

   c. Swing the free end of the beam up to align the remaining bolt holes.

   d. Insert seven 1-1/8” bolts and attach a washer, lock washer, and 1-1/8” nut to each bolt. Finger tighten only.

9. Align the final frame post over the remaining anchor holes. Make sure the single mounting tab is aligned with the shorter side.

10. Insert four Kwik bolts and expansion anchors as described in step 2.
11. Install a short cross beam between the two frame posts. On each end, insert four 1-1/8" bolts and attach a large washer, lock washer, and 1-1/8" nut to each bolt. Finger tighten to allow adjustment during installation.

12. Install the final beam as described in step 8.

13. Level and align all installed components.

14. Using a torque wrench, tighten the anchor bolts to 75 ft-lbs. Tighten the beam bolts to 220 ft-lbs.

Installation is complete.