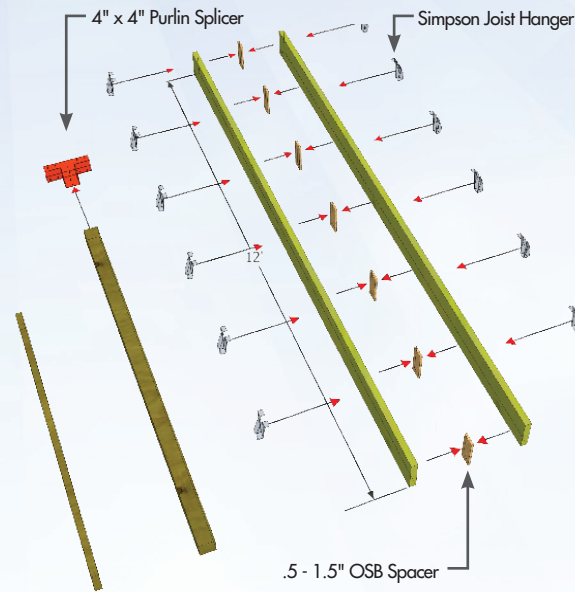


SHORING ASSEMBLY
(See BuildDeck Install Manual for full details)

1. Attach 2"x8" girders back to back with appropriate width spacers using 16d nails.
2. Attach joist hangers to girders 24" O.C. using approved fasteners. Height adjusters are acceptable.
3. Cut posts and vertical supports to ceiling height less 7.5" (girder height).
4. Install purlin splicer on posts.
5. Assemble as shown below.

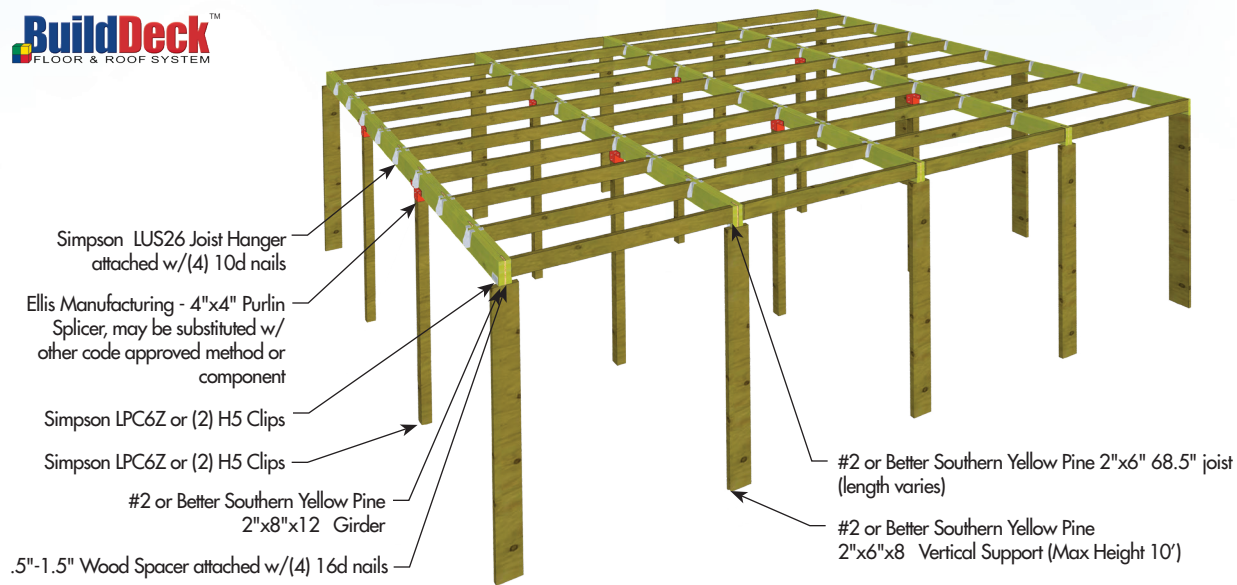


TOOLS AND MATERIALS

- Hand saw / shark tooth saw
- Skill saw / table saw
- Key hole saw
- Drill
- Grinder/tin snips
- Hot knife or combo hot knife kit
- Hammer
- Framing square / speed square
- Concrete finishing tools
- Tape measure
- Rebar bender / cutter
- Shoring materials
- Concrete vibrators (internal / external)
- Foam: Guns, Glue, Cleaner
- Work gloves
- Safety glasses
- Rebar tie tool
- Level, laser level and/or transit

PRE-POUR CHECKLIST

- Check all bracing for proper set-up
- Inspect and install additional shoring where necessary
- Go over utility diagrams
- Ensure all ceiling attach strips are in place
- Inspect all steel, steel splices and intersections for proper connection and concrete embedment
- Verify concrete mix ordered
- Prepare all finishing tools
- Prepare all accessories that may be needed
- Have extra lumber, fasteners, etc available



BuildDeck™ 8"



BuildDeck™ 10"



BuildDeck™ 12"



BUILDBLOCK REPRESENTATIVE:



BuildDeck™ System is a lightweight, stay-in-place Insulating Concrete floor and/or roof decking Form System.

BuildDeck™ is perfect for Insulated site-cast or precast concrete floors, roofs, decks, and walls for commercial, industrial and residential uses.

BuildDeck™ Provides structural integrity and strength through the reinforced concrete floor roof, deck or wall, the form creates.

BuildDeck™ Offers superior EPS insulation resulting in highly insulated structures that are both comfortable and extremely quiet.



STEP 1 WALL/SITE PREPARATION

1. Refer to "BuildBlock Install Manual" for proper wall installation procedures.
2. Determine ceiling height of current floor level. With laser level, indicate and mark "ceiling height" location.
3. Determine top or side mount method. (Will the BuildDeck panel sit on top of the ICF wall, or abut the side of the ICF wall) Cut interior ICF panel height accordingly.

INTERIOR PANEL CUT GUIDE

Side Mount = Cut 2.5" above line

Top Mount = Cut flush with line

4. Attach utility angle with fine thread screws 12" O.C. at top of ceiling (bottom of floor) height.

STEP 2 INSTALL SHORING (SEE SHORING ASSEMBLY SECTION)

1. Attach 2x6(min.) vertical girder supports to ICF wall with 2.5" screws, 12" O.C. Start in corner, install supports 72" O.C. from end wall along both side (long) walls.
2. Attach 2"x8" girders to intermediate posts with purlin splicers. Place girders on top of vertical supports. At this point, make certain that the top of the girders are the same height as the intended ceiling height.
3. Place joists in pre-hung joist hangers.
4. Attach girders to vertical supports with Simpson LPZ6C or H5 clips.

STEP 3 INSTALL DECKING

1. Starting in one corner of the floor, place a BuildDeck panel. Interlock the next panel utilizing the male/female connection tongues. Continue until first row is complete.
2. Once a row is complete, cut the male tongues off the appropriate end, and glue them into the female cores on the other end to eliminate concrete waste.
3. Install BuildBlock provided 2" x 2.5" x 2" C-channel around one arm of the BuildDeck panel. This will provide an attachment strip for ceiling elements every 24" O.C. (these may be installed on both arms optional)
4. Repeating steps 1 through 3 continue placing rows until the floor area is covered. Any cuts that need to be made in order to achieve proper fit can be done at the end of a row, and on the last row to be placed. The panels should fit snug, but may require glue or further attachment. If gluing do not cover drain holes.

STEP 4 INSTALL BEAM STEEL

1. Each beam that is formed by the panels will require 2 runs of steel in the bottom unless otherwise specified by your Engineer. The steel size will vary based on Engineer's recommendations.
2. Place appropriate size steel on min. 3/4" risers, overlapping a minimum of forty times the diameter of the rebar being used at each splice. Horizontal beam steel must extend past the wall's horizontal steel to within 3/4" of outside wall panel.

STEP 5 INSTALL GRID (SLAB) STEEL

1. The grid placed in the slab will typically be #4 steel in a 12" x 12" grid pattern. Steel must be placed in a manner that ensures minimum 3/4" concrete coverage around all steel.
2. Start with the steel running perpendicular to the beams. Set steel on min. 3/4" risers placed on the top of the BuildDeck Panels.
3. You may bend sticks of steel to make the 90° angle that will splice into your wall, or place straight bars, and come back to tie in pre-fab 90° angle bars. Minimum 40 diameter overlap at all splices.
4. Once perpendicular steel is placed, repeat steps 2 and 3 for all parallel steel. Tie at intersections.

STEP 6 UTILITIES/OTHER PENETRATIONS

1. Work with all mechanical trades to make sure that pass-throughs for all utilities are in place. This includes plumbing, electric/communications, HVAC, or any other item that must continue between floor levels. It is worth the time now to make sure you have not forgotten anything.
2. Cut the appropriate size hole for the needed penetration. Place the item, or a sleeve (typically PVC piping) for the item in the panel. Extend past the top and bottom at least 4". Cover ends so not to fill with concrete. Avoid all cuts in beam areas.
3. Glue each sleeve in place using Foam-to-Foam, low expansion glue.
4. From the underside of the floor system, drive 4" screws through the C-channels protruding into the beam cavity. This will provide positive attachment between the concrete and the ceiling element.

STEP 7 CONCRETE PLACEMENT

1. After you have completed your pre-pour checklist, and double checked all shoring and utility penetrations, it is time to place concrete.
2. If pouring walls and floors separately, fill walls to a height 12" lower than overall wall height.
3. Start by filling walls if they are not completed. Ensure to keep wall/beam intersections clear of loose concrete as it will harden and create a cold joint at this critical intersection.
4. Once walls are filled and properly consolidated, start at one end filling the panel beams. Consolidation is the most important concern. Vibrate the beams as you fill.
5. Once a beam is filled, fill the next beam. Any overflow can be pushed between the two beams to create the slab. As you are filling beams, ensure that enough concrete has been placed on top of the panels to complete the slab.
6. As the beams are being filled, have a float man follow and smooth the concrete floor to the appropriate height.
7. Complete this process until the entire floor area is covered and floated to the appropriate height.



STEP 8 SHORING REMOVAL

1. Once concrete is hardened to adequate strength (concrete reaches full strength at 28 days), start by removing the vertical supports from one end section. Unscrew LPZ or H5 clips as you go.
2. As you remove the last two vertical supports holding a girder, the girder and joists will release. Be cautious to remove joists as you pull girders so they do not fall out and may cause injury.
3. Next, remove the vertical support from the following girder. Detach the purlin splicer from the post, and lower girder to the ground, again being cautious of joists that will come loose with the girder.
4. Repeat step 3 for all remaining girders until all girders and joists are removed.
5. Gather and stack all shoring components for storage to be used on the next BuildDeck job. If girders and joists are not going to be re-used as shoring, disassemble for use within interior framing.

STEP 9 FINISHING

1. Run any electrical, HVAC, plumbing or other items through the BuildDeck foam by cutting in channels with a hot knife. Use foam glue to fill in channel once items are placed.
2. Attach drywall panels to BuildBlock supplied steel C-channels located beneath each beam 24" O.C. Use code approved materials and methods of attachment.

ESTIMATING TABLE

Height	Length	Width	Area	Con. Vol.
8"	24"	24"	4.0 sq.ft.	*.05111111
10"	24"	24"	4.0 sq.ft.	*.055854
12"	24"	24"	4.0 sq.ft.	*.060432
14"	24"	24"	4.0 sq.ft.	*.0653291

* Concrete volume based on top cap height of 3". Add .0122222 cu. yd. per form for each additional 1".

WARNING ! All concrete and steel design must be specified by the Engineer of Record. All tables, figures, diagrams and other information provided by BuildBlock are for estimation purposes only. Follow all instructions carefully.

