



### STORAGE & HANDLING

Protected from moisture and weather. Keep covered with factory wrap until time of use. Store on dry level ground using stacked support blocks 10' on-center to loads below of the ground and to allow air circulation.

**DO NOT** store BLU joists flat. onCENTER™™, and rim board should be stacked flat.

**DO NOT** lift BLU joists by top flange with forklift.

**DO NOT** lift BLU joists flatwise.

### SAFETY PRECAUTIONS

Use safety glasses, gloves, hard hats, and other personal protective equipment when handling and installing onCENTER engineered lumber. Contact BlueLinX for MSDS information.

**DO NOT** walk on onCENTER engineered lumber that is lying flat.

**DO NOT** stack building materials on unbraced joists. Stack only over bearing walls or main beams.

**DO NOT** use damaged products.

### BRACING REQUIREMENTS

**DO NOT** allow workers or loads on engineered lumber joists until properly installed and braced.

- Joists are unstable until properly attached and braced laterally. Failure to provide stability can result in serious accidents.
- Restrain joists and beams from rotation at the end supports by use of blocking, gables, a bracing, or continuous closure (rim board, rim joist or structural panel).
- Install all fasteners in each joint, beam, hanger, blocking, panel, a bracing, or continuous closure as it is set.
- Lateral restraint, such as a braced end wall or existing deck, must be established parallel to the first joist in a run. This can also be accomplished by a temporary or permanent deck sheathing fastened to the full length of the first 4' of joists in the run.
- Rows of members running at right angles to the joists and spaced not more than 10' on-center must extend to the established lateral restraint. Bracing should be a minimum of 1" x 4" all along the length of the joist, and in each bay with a minimum of two 8d nails (10d if bracing is 2x4). Ends of bracing should overlap at least two joists.
- Ends of gables/eyer tie temporary bracing on both the top and bottom flanges.
- Sheathing must be completely attached to each BLU joist before additional loads can be placed on the system.
- Joist flanges must remain straight within 1/8" of true alignment.

### INSTALLATION NOTES

- BlueLinX onCENTER products must be protected from weather and used only in covered, dry-use conditions (moisture content of engineered lumber must not be less than 16%).
- Engineered lumber must not be installed in direct contact with masonry or concrete.
- BLU joists must be supported by the bottom flange on walls or beams or in hangers. They must not be supported by the top flange, by a non-structural ridge cap, or by toe-nailing into a beam or ledger.
- For BLU joists, maximum end bearing lengths is 3'-10", minimum intermediate bearing length is 5'-0".
- When nailing to the side face of BLU joists, maintain spacing within the following ranges:

Single Span Spacing	Multiple Span
12" o.c.	12" o.c.
16" o.c.	16" o.c.
24" o.c.	24" o.c.

**NOTE:** 1. When nailing from one side of joist, nails must be placed at 12" o.c. if staggered. 2. For double end bearing, nails must be placed at 12" o.c. on both ends. 3. Do not nail longer than shown above and following nailing to BLU joists.

### INSTALLATION CAUTIONS

**DO NOT** support BLU joist by top flange of walls.

**DO NOT** violate hole table rules.

**DO NOT** bore out BLU joist just face of wall. See Detail F8.

**DO NOT** bore out bottom flange at high end of roof joist. See roof detail F2.

**DO NOT** cut or notch flanges for cutting to fit and for bracing cutouts (root detail F6).

### FLOOR SPANS

#### 40 PSF Live Load + 10 PSF Dead Load (L/480)

Joist	Depth	12" o.c.	16" o.c.	24" o.c.	12" o.c.	16" o.c.	24" o.c.
BLU 40	11 1/2"	11'-00"	12'-00"	13'-00"	11'-00"	12'-00"	13'-00"
BLU 40	11 1/2"	21'-00"	19'-00"	18'-00"	23'-00"	20'-00"	18'-00"
BLU 40	11 1/2"	24'-00"	22'-00"	20'-00"	18'-00"	21'-00"	18'-00"
BLU 40	11 1/2"	28'-00"	24'-00"	22'-00"	19'-00"	24'-00"	22'-00"
BLU 40	11 1/2"	32'-00"	29'-00"	27'-00"	24'-00"	22'-00"	19'-00"
BLU 60	14"	25'-00"	23'-00"	22'-00"	20'-00"	25'-00"	24'-00"
BLU 60	14"	28'-00"	26'-00"	24'-00"	22'-00"	31'-00"	28'-00"
BLU 60	14"	31'-00"	28'-00"	26'-00"	24'-00"	29'-00"	26'-00"
BLU 60	14"	34'-00"	31'-00"	29'-00"	27'-00"	32'-00"	29'-00"
BLU 700	14"	28'-00"	26'-00"	24'-00"	22'-00"	28'-00"	26'-00"
BLU 700	14"	31'-00"	29'-00"	27'-00"	25'-00"	31'-00"	29'-00"
BLU 700	14"	34'-00"	31'-00"	29'-00"	27'-00"	34'-00"	31'-00"
BLU 900	14"	29'-11"	27'-00"	25'-00"	23'-00"	32'-00"	29'-11"
BLU 900	14"	33'-00"	30'-00"	28'-00"	26'-00"	35'-00"	32'-00"

### NOTES:

- Spans are maximum clear distance between supports, based on uniform loads.
- Live load deflection is limited to L/480; providing joists that are one-third other than required.
- Spans are based on composite action with 1/2" thick 40# concrete slab on top of joist.
- Maximum bearing length: 10" end, 30" intermediate.
- For multiple spans, end spans must be at least 40% of adjacent span.
- Table below shows required fasteners spacing and number of rows. End distances and edge distances must comply with diagram on the left. For other fastening patterns, maximum and minimum spacing to all lines.
- Fastening requirements for depths less than 7 1/2" require special consideration. Contact BlueLinX.
- All joists must have full attachment of the shank, but must not be over-driven, over-lightened, or cut-slotted.
- Both hole diameter must be 1/8" to 1/4" larger than the bolt diameter. Both ends to meet ASTM A307 or A325 grades. Start bolt end extends through the full thickness of the member and is least 1" beyond. Use required to cut the hole and end.
- Carriage bolts (1/2" diameter) are acceptable to use in the 1/2" tall joists. Carriage bolts must be driven to the face of the joist. Beams such that the top of the hole is even with the exterior face of the outer ply of the joist.
- Spacing closer than indicated may be acceptable, but require consultation. Please contact BlueLinX.
- SDS and SDS structural screws are produced by Simpson Strong-Tie Company, Inc. SDS structural screws are produced by United States and Canada. Simpson Strong-Tie Company, Inc. SDS structural screws are produced by FastenBrace-CMG, Inc. Install screws per the specific manufacturer's instructions.

### onCENTER FRAMING SYSTEMS

### F1 ATTACHMENT AT END BEARINGS

10d nail on each end of each joist at bearing length. 10d nail on each end of each joist at bearing length.

### F2 BLOODING PANEL EXTERIOR

10d nail on each end of each joist at bearing length. 10d nail on each end of each joist at bearing length.

### F3 BLU RIM JOIST / onCENTER JOIST

10d nail on each end of each joist at bearing length. 10d nail on each end of each joist at bearing length.

### F4 SQUARE BLOCKS AT WALLS

10d nail on each end of each joist at bearing length. 10d nail on each end of each joist at bearing length.

### F5 onCENTER RIM BOARD CLOSURE

10d nail on each end of each joist at bearing length. 10d nail on each end of each joist at bearing length.

### F6 DECK ATTACHMENT TO RIM BOARD

10d nail on each end of each joist at bearing length. 10d nail on each end of each joist at bearing length.

### F7 BLOODING PANEL USED FOR BRACING

10d nail on each end of each joist at bearing length. 10d nail on each end of each joist at bearing length.

### F8 BEVEL END JOIST

10d nail on each end of each joist at bearing length. 10d nail on each end of each joist at bearing length.

### F9 BLOODING PANEL INTERIOR

10d nail on each end of each joist at bearing length. 10d nail on each end of each joist at bearing length.

### F10 SQUARE BLOCKS AT INTERIOR BEARING

10d nail on each end of each joist at bearing length. 10d nail on each end of each joist at bearing length.

### F11 DOUBLE JOIST CONSTRUCTION WITH FILLER

10d nail on each end of each joist at bearing length. 10d nail on each end of each joist at bearing length.

### F12 FLOOR OPENING, RIM JOIST HANGERS

Joist Depth	Material
BLU 40, 700	2x4
BLU 60, 900	2x4
BLU 60, 900	2x4

### F13 FLOOR OPENING, FACE JOIST HANGERS

Joist Depth	Material
BLU 40, 700	2x4
BLU 60, 900	2x4
BLU 60, 900	2x4

### F14 STAR STRINGER JOINT CONNECTION

10d nail on each end of each joist at bearing length. 10d nail on each end of each joist at bearing length.

### F16 JOIST TO BEAM CONNECTION, STEP DOWN

10d nail on each end of each joist at bearing length. 10d nail on each end of each joist at bearing length.

### F17 JOIST TO DROPPED BEAM CONNECTION, STEP DOWN

10d nail on each end of each joist at bearing length. 10d nail on each end of each joist at bearing length.

### F18 BEARING STIFFENERS

10d nail on each end of each joist at bearing length. 10d nail on each end of each joist at bearing length.

### F19 SQUARE BLOCKS AT CONCENTRATED LOADS

10d nail on each end of each joist at bearing length. 10d nail on each end of each joist at bearing length.

### F20 WEB STIFFENERS

10d nail on each end of each joist at bearing length. 10d nail on each end of each joist at bearing length.

### F21 FLOOR PERFORMANCE ENHANCERS

10d nail on each end of each joist at bearing length. 10d nail on each end of each joist at bearing length.

### C1 CANTILEVER, REINFORCED

10d nail on each end of each joist at bearing length. 10d nail on each end of each joist at bearing length.

### C2 CANTILEVER, REINFORCED

10d nail on each end of each joist at bearing length. 10d nail on each end of each joist at bearing length.

### C3 CANTILEVER, REINFORCED

10d nail on each end of each joist at bearing length. 10d nail on each end of each joist at bearing length.

### C4 CANTILEVER, REINFORCED

10d nail on each end of each joist at bearing length. 10d nail on each end of each joist at bearing length.

### C5 CANTILEVER, DROPPED

10d nail on each end of each joist at bearing length. 10d nail on each end of each joist at bearing length.

### F1 JOIST SPACING BELOW FINISHING WALL

10d nail on each end of each joist at bearing length. 10d nail on each end of each joist at bearing length.

### F2 JOIST SPACING BELOW PLUMBING FIXTURES

10d nail on each end of each joist at bearing length. 10d nail on each end of each joist at bearing length.

### F3 UPPER END BEARING ON WALL

10d nail on each end of each joist at bearing length. 10d nail on each end of each joist at bearing length.

### F4 INTERMEDIATE BEARING

10d nail on each end of each joist at bearing length. 10d nail on each end of each joist at bearing length.

### F5 JOISTS ON BEVELLED PLATE

10d nail on each end of each joist at bearing length. 10d nail on each end of each joist at bearing length.

### F6 BRESMOUTH CUT

10d nail on each end of each joist at bearing length. 10d nail on each end of each joist at bearing length.

### R7 ROOF OPENING, FACE JOIST HANGERS

10d nail on each end of each joist at bearing length. 10d nail on each end of each joist at bearing length.

### R8 BEVELLED END JOIST

10d nail on each end of each joist at bearing length. 10d nail on each end of each joist at bearing length.

### R9 OPTIONAL OVERHANG EXTENSIONS

10d nail on each end of each joist at bearing length. 10d nail on each end of each joist at bearing length.

### R10 OVERHANG PARALLEL TO JOIST

10d nail on each end of each joist at bearing length. 10d nail on each end of each joist at bearing length.

### R11 ROOF OPENING WITH PERMITTED VENTILATION

10d nail on each end of each joist at bearing length. 10d nail on each end of each joist at bearing length.

### HOLES

10d nail on each end of each joist at bearing length. 10d nail on each end of each joist at bearing length.

### ALLOWABLE HOLE LOCATION FOR BLU 40 (Simple or Multiple Span)

Joist Depth	12" o.c.	16" o.c.	24" o.c.
11 1/2"	1'-00"	1'-00"	1'-00"
11 1/2"	2'-00"	2'-00"	2'-00"
11 1/2"	3'-00"	3'-00"	3'-00"

### ALLOWABLE HOLE LOCATION FOR BLU 60, 90, 700, and 900 (Simple or Multiple Span)

Joist Depth	12" o.c.	16" o.c.	24" o.c.
14"	1'-00"	1'-00"	1'-00"
14"	2'-00"	2'-00"	2'-00"
14"	3'-00"	3'-00"	3'-00"

### onCENTER LVL BEARING DETAILS

10d nail on each end of each joist at bearing length. 10d nail on each end of each joist at bearing length.

### B1 BEARING ON WALL

10d nail on each end of each joist at bearing length. 10d nail on each end of each joist at bearing length.

### B2 BEARING ON CONCRETE WALL

10d nail on each end of each joist at bearing length. 10d nail on each end of each joist at bearing length.

### B3 BEAM-TO-BEAM CONNECTION

10d nail on each end of each joist at bearing length. 10d nail on each end of each joist at bearing length.

### B4 BEARING ON COLUMN

10d nail on each end of each joist at bearing length. 10d nail on each end of each joist at bearing length.

### B5 BEAM-TO-COLUMN LATERAL BRACE

10d nail on each end of each joist at bearing length. 10d nail on each end of each joist at bearing length.

### B6 BEARING FOR DOOR OR WINDOW HEADER

10d nail on each end of each joist at bearing length. 10d nail on each end of each joist at bearing length.

### HIGH END HIP BEARING

10d nail on each end of each joist at bearing length. 10d nail on each end of each joist at bearing length.

### LOW END HIP BEARING

10d nail on each end of each joist at bearing length. 10d nail on each end of each joist at bearing length.

### NOTCHING / SEAT CUT

10d nail on each end of each joist at bearing length. 10d nail on each end of each joist at bearing length.

### MULTIPLE-PLY LVL FASTENING GENERAL NOTES

- These minimum requirements are adequate only when all loads are evenly applied to the top surface of all plies. Loads are applied to the side faces of the bases, use designer's specifications.
- Table below shows required fasteners spacing and number of rows. End distances and edge distances must comply with diagram on the left. For other fastening patterns, maximum and minimum spacing to all lines.
- Fastening requirements for depths less than 7 1/2" require special consideration. Contact BlueLinX.
- All joists must have full attachment of the shank, but must not be over-driven, over-lightened, or cut-slotted.
- Both hole diameter must be 1/8" to 1/4" larger than the bolt diameter. Both ends to meet ASTM A307 or A325 grades. Start bolt end extends through the full thickness of the member and is least 1" beyond. Use required to cut the hole and end.
- Carriage bolts (1/2" diameter) are acceptable to use in the 1/2" tall joists. Carriage bolts must be driven to the face of the joist. Beams such that the top of the hole is even with the exterior face of the outer ply of the joist.
- Spacing closer than indicated may be acceptable, but require consultation. Please contact BlueLinX.
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### ALLOWABLE HORIZONTAL HOLES IN onCENTER LVL

10d nail on each end of each joist at bearing length. 10d nail on each end of each joist at bearing length.

### ALLOWABLE HOLE SIZES

Beam Depth	Maximum Round Hole Diameter
4 1/2"	1 1/2"
6 1/2"	2 1/2"
9 1/2"	3 1/2"

### GENERAL:

The sale of BlueLinX Engineered Lumber Products shall be subject to BlueLinX standard terms of sale located at [www.blueinlx.com/terms](http://www.blueinlx.com/terms) or salesrepresentations. BlueLinX reserves the right to revise the information located in BlueLinX standard terms of sale in this document without notice.

### INSTALLATION:

Installer is responsible for proper installation of BlueLinX engineered lumber products. BlueLinX engineered lumber products must be installed in accordance with the installation guide and in compliance with all applicable laws, ordinances, building code requirements, and regulations. BlueLinX does not warrant and is not responsible for the design or construction of any finished structure into which BlueLinX engineered lumber products are incorporated. Finally, BlueLinX is not responsible for any other building components which are used in conjunction with BlueLinX engineered lumber products.

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BlueLinX Engineered Products

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