

## STORAGE & HANDLING



using stacked support blocks 10' on

center to keep bundles at least 6" off

the ground and to allow air circulation.

SAFETY PRECAUTIONS

Use safety glasses, gloves, hard

**BRACING REQUIREMENTS** 

DO NOT allow workers or loads on

installed and braced.

structural panel).

engineered lumber joists until properly

provide stability can result in serious accidents.

x-bridging, or continuous closure as it is set.

2. Restrain joists and beams from rotation at the end supports by use of

3. Install all fasteners in each joist, beam, hanger, blocking panel,

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

blocking panels, x-bridging, or continuous closure (rim board, rim joist or

accomplished by a temporary or permanent deck (sheathing) fastened to the full length of the first 4' of joists in the run.

information.



DO NOT walk on onCENTER







**INSTALLATION NOTES** 

 BlueLinx onCENTER products must be protected from weather and used only in covered, dry-use conditions (conditions in which

moisture content of solid sawn lumber is less than 16%).

3. For BLI joists, minimum end bearing length is 1¾"; minimum

intermediate bearing length is 31/2"

compression edge.

masonry or concrete.

within the following ranges:

may be used.

F18 BEARING STIFFENERS

2. BLI 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 board, or by toe-nailing into a beam or ledger.

4. BLI joists and LVL must be restrained from rotation at ends and each

support. The top (or compression) edge must have continuous latera

**DO NOT** lift BLI joists by top flange

Keep covered with factory wrap until (onCENTER® LVL and rim board time of use. Store on dry level ground should be stacked flatwise).

1. Joists are unstable until properly attached and braced laterally. Failure to 5. Rows of temporary bracing running at right angles to the joists and

## hats, and other personal protective engineered lumber that is lying flat. equipment when handling and installing onCENTER engineere lumber. Contact BlueLinx for SDS

# unsheathed joists. Stack only over bearing walls or main beams.

spaced not more than 10' on center must extend to the established lateral restraint. Bracing should be a minimum of 1x4, at least 8' long,

attached to the top face of each joist with a minimum of two 8d nails

10d if bracing is 2x4). Ends of bracing should overlap at least two

6. Ends of cantilevers require temporary bracing on both the top and

7. Sheathing must be completely attached to each BLI joist before

8. Joist flanges must remain straight within ½" of true alignment.

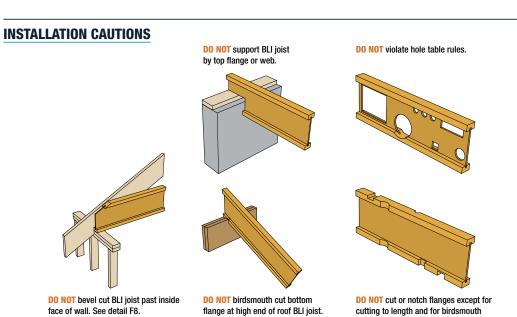
additional loads can be placed on the system.

# Face 16d (0.162") 1½" 5" 5" -

- support, such as properly installed sheathing directly attached to the 9. BLI joists are manufactured with no camber, and may be installed
  - with web markings reading right side up or upside down. 10. Except when cutting to length or for birdsmouth cuts, BLI joist
- 5. Engineered lumber must not be installed in direct contact with flanges should not be cut, tapered, notched, or drilled.
- 6. When nail type is not specified in this guide, common, box or sinkers 1. Concentrated loads should be supported by the top surface of the top flange, not hung from the bottom flange (Exceptions: lighting 7. When nailing to the wide face of BLI joist flanges, maintain spacing
  - 12. Certain applications of staple-up radiant heating may increase deflection in I-joists with solid-sawn flanges due to unequal drying within the floor cavity (see APA publication TT-113).
    - 3. With fire-retardent or preservative treated wood, use only stainless steel or hot-dipped galvanized connectors, fasteners and other metal hardware as required by code. As a minimum requirement, hot-dipped galvanized dipped galvanized coated connectors should conform to ASTM Standard A 653 (Class G-185). In highly corrosive environments, stainless steel connectors and fasteners should be used.

cuts (roof detail R6).

SQUASH BLOCKS AT CONCENTRATED LOADS F19



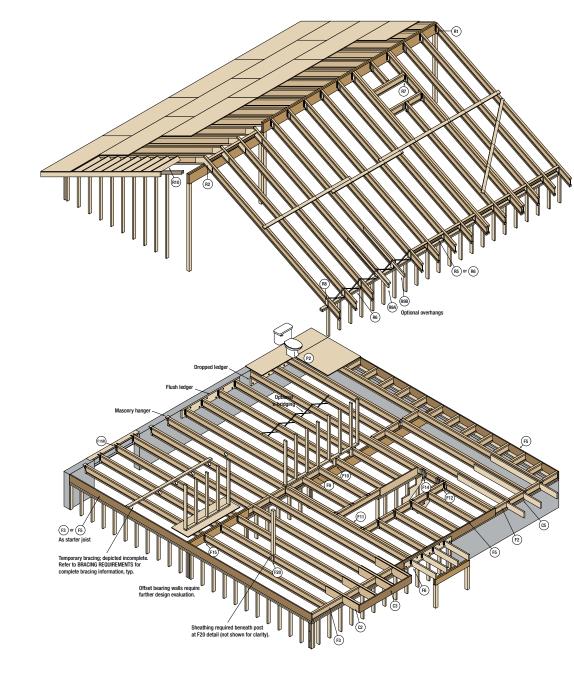
See roof details R2 & R3.

# 21'-05" 19'-07" 18'-06" 16'-08" 23'-04" 20'-05" 18'-07" 16'-07" **14"** 24'-04" 22'-02" 20'-06" 18'-04" 25'-11" 22'-05" 20'-05" 18'-03" **16"** 26'-11" 24'-03" 22'-01" 19'-09" 27'-11" 24'-02" 22'-00" 19'-08" 25'-08" 23'-06" 22'-02" 20'-08" 28'-00" 25'-07" 24'-01" 19'-09" 28'-06" 26'-00" 24'-07" 22'-10" 31'-01" 28'-04" 24'-09" 19'-09" **11**%" 26'-04" 24'-00" 22'-07" 21'-00" 28'-08" 26'-01" 24'-07" 22'-10" BLI 900 14" 29'-11" 27'-02" 25'-07" 23'-10" 32'-07" 29'-07" 27'-10" 25'-11" **16"** 33'-01" 30'-01" 28'-04" 26'-04" 36'-01" 32'-09" 30'-10" 26'-07" Live load deflection is limited to L/480, providing joists that are one-third stiffer than required by code. Experience has shown that floors designed to the code minimum For multiple-span joists (two or more spans), end spans must be at least 40% of adjacent span. live load deflection (L/360) may not meet the occupant's expectations for floor

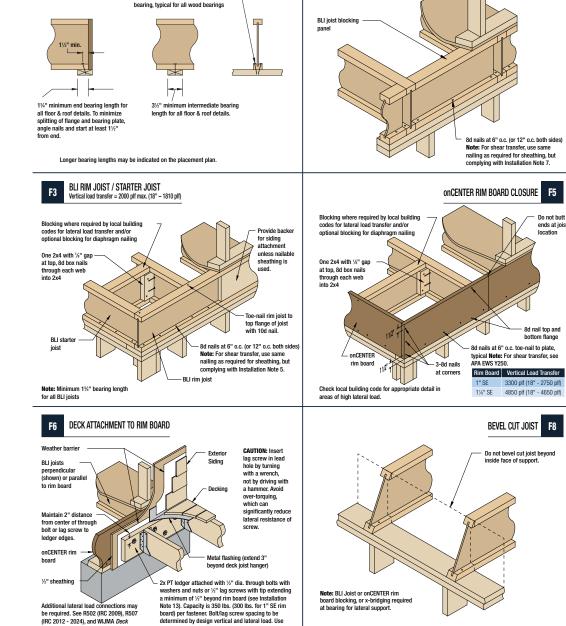
40 PSF Live Load + 10 PSF Dead Load (L/480)

**FLOOR SPANS** 

- 3. Spans are based on composite action with glued-nailed APA Rated Sheathing or Sturd-I-Floor® panels of minimum thickness 1%2" (40/20 or 20 oc) for joist spacing of 19.2" or less, or 2%2" (48/24 or 24 oc) for a joist spacing of 24". BlueLinx recommends using an adhesive (applied to top flange of joists) that has been qualified as a Class 1/8 in., Type P/O subfloor adhesive in accordance with ASTM D3498, applied per adhesive manufacturer's instructions. Surfaces must be clean and dry. If adhesive is not used, reduce spans by 12".
- mbinations. Neither simple nor multiple spans require bearing stiffeners. Longer
  - spans may be possible by analyzing a specific span condition and/or by adding earing stiffeners. Check using isDesign® software. '. For span charts with 40 psf live load and 20 psf dead load, refer to Specifier's Guide



**onCENTER FRAMING SYSTEMS** 

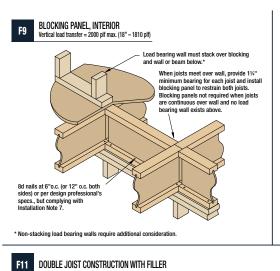


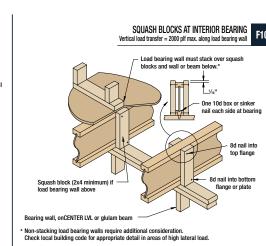
Check local building code for appropriate detail in areas of high lateral load

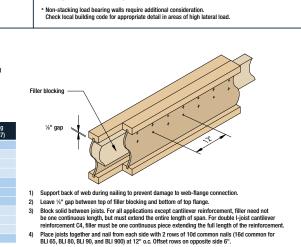
JOISTS ABOVE RIDGE SUPPORT BEAM 12/12 maximum slope R2

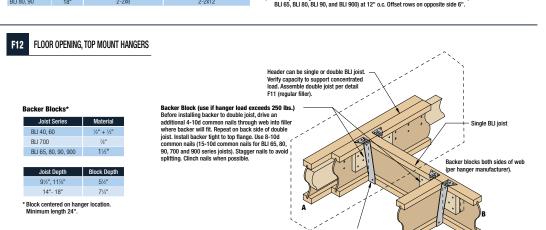
high quality caulk to fill holes and seal flashing.

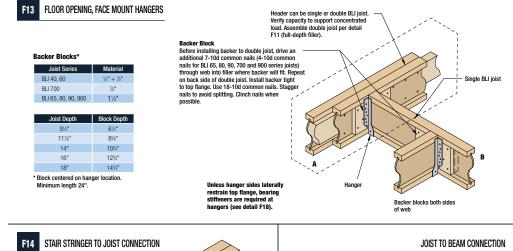
F1 ATTACHMENT AT BEARING

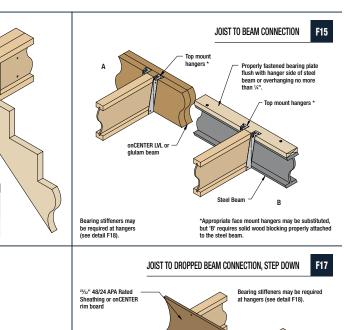










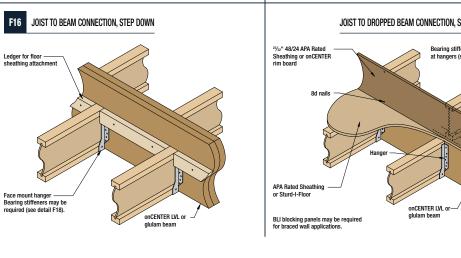


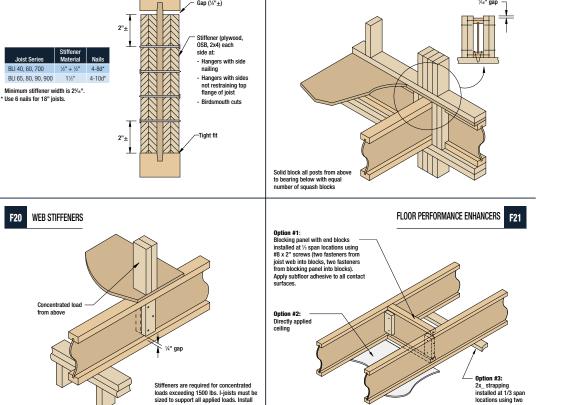
distance from inside face

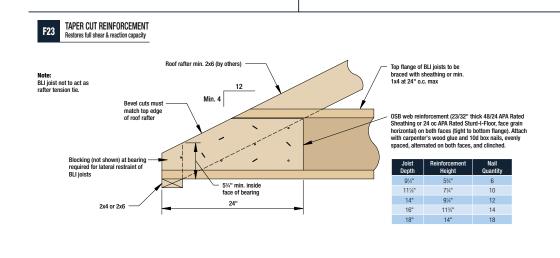
DO NOT cut or drill flanges.

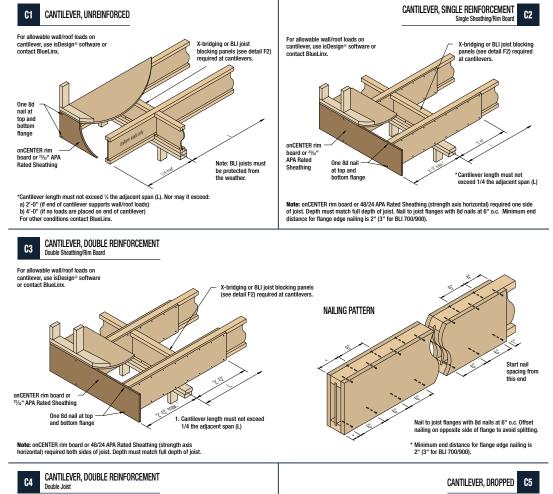
hole locations, use isDesign®

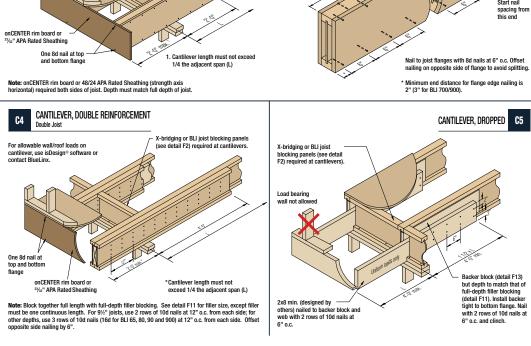
of support to nearest edge of hole.

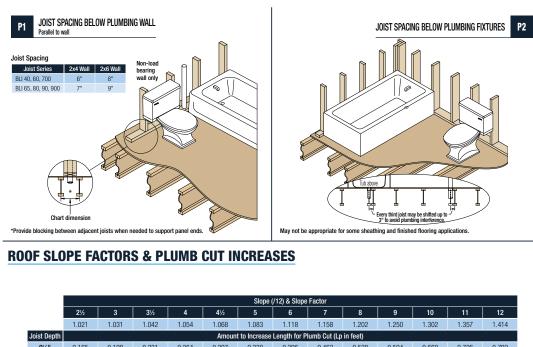


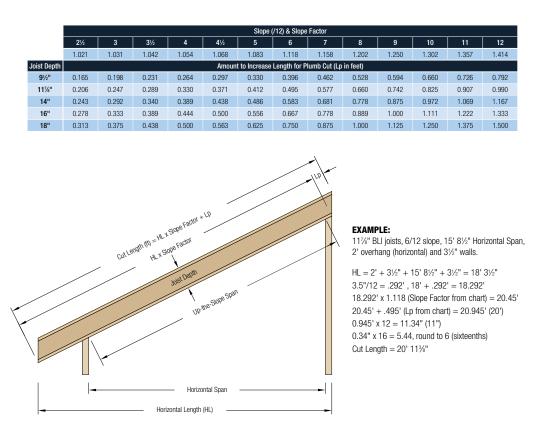


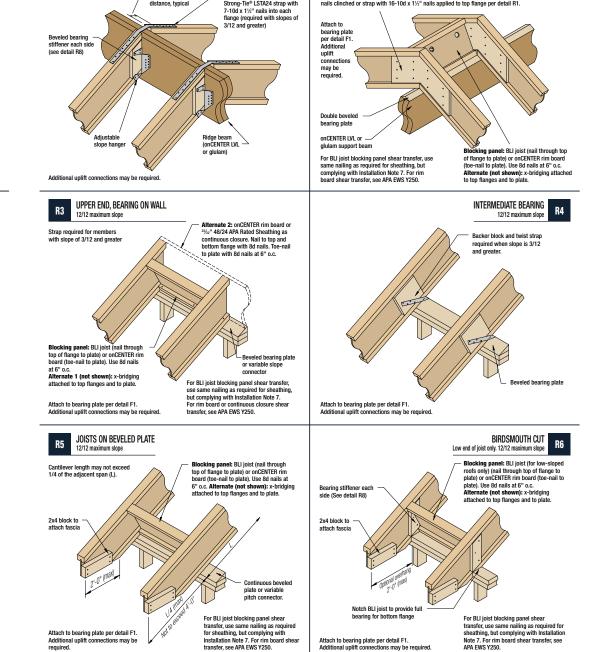


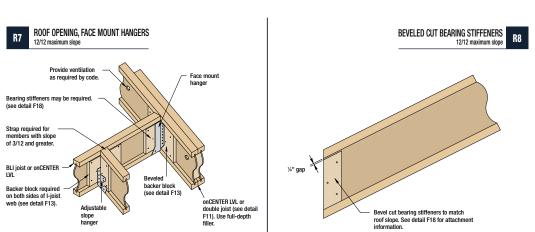


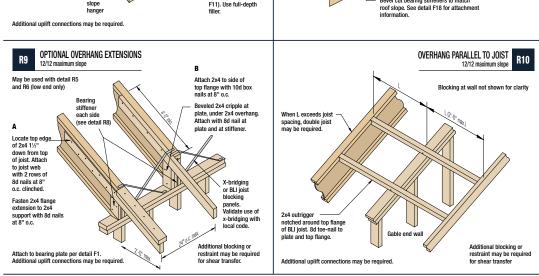


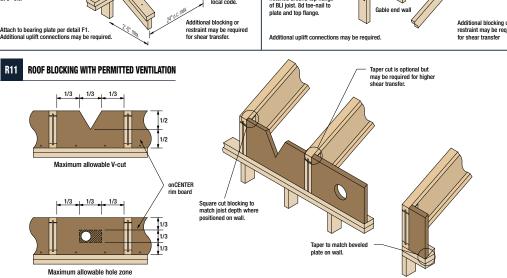


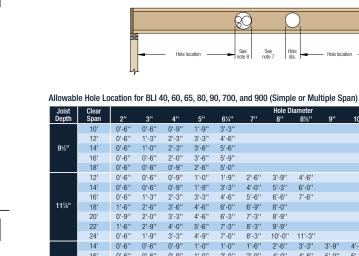


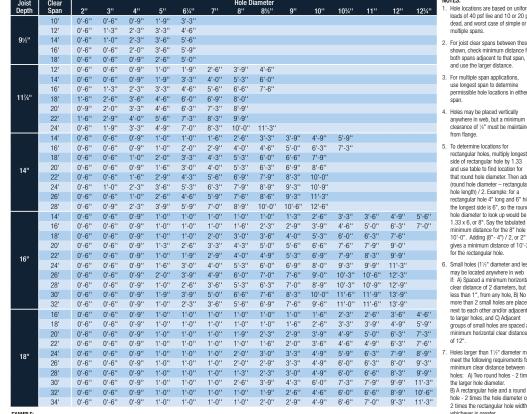






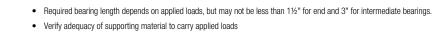


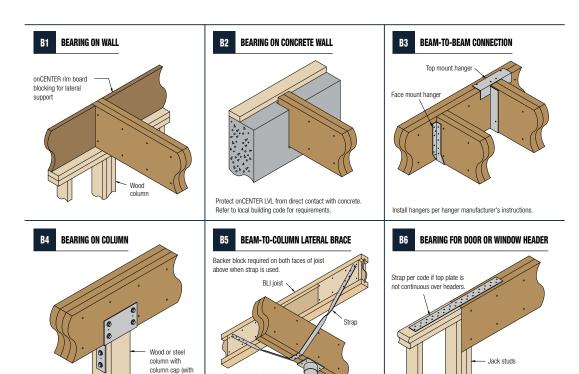




Following the 16' row across to the column for an 8" diameter hole yields a distance of 6'-6". The 18' row yields a distance of 8'-0". The larger distance controls, so 8'-0" is the minimum clear distance for an 8"

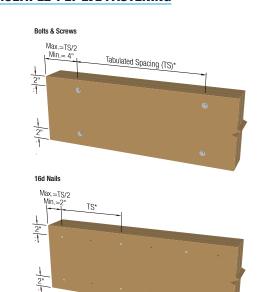






| load transfer.  | Strap not required if cap has side plates or if beam is connected to cap with four %" x 2½" lag screws. |   |
|---|---|---|
| B7 HIGH END HIP BEARING   | B8 LOW END HIP BEARING  | B9 NOTCHING / SEAT CUT  |
| Miter cuts (may not be necessary depending on bearing requirements) |   |   |
| Hip beams must bear on post or in properly designed connector.      | Wall plate or post must fully support hip beam. Seat cut must not extend beyond inside face of bearing. | DO NOT notch beam at bearing. Seat cut must not extend beyond inside face of bearing. |

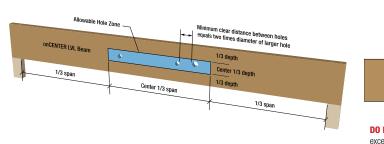
## **MULTIPLE-PLY LVL FASTENING**



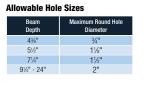
- 1. These minimum requirements are adequate only when all loads are evenly applied to the top surface of all plies. If loads are applied to the side face(s) of the beam, see designer's specifications. Table below shows required fastener spacings and number of rows. End
- distances and edge distances must comply with diagram on the left. For offset fastening patterns, maximum end distance applies to all rows. 3. Fastening for depths less than  $7 \ensuremath{\ensuremath{\%^{\text{"}}}}$  requires special consideration.
- 4. Fasteners must have full embedment of the shank, but must not be over driven, over-tightened, or countersunk. 5. Bolt hole diameter must be 1/32" to 1/16" larger than bolt diameter. Bolts are to meet ASTM A307 or SAE J429 grades. Bolts must extend through full thickness of member and at least  $\frac{1}{2}$ " beyond. Use a washer under
- 6. Carriage bolts (1/2" diameter) may be used for through bolts. Carriage bolt heads may be drawn into the face of the LVL such that the top of the heads are even with the exterior face of the outer ply. . Spacings closer than those indicated may be acceptable, but require evaluation. Please contact BlueLinx.
- 8. WS and WSWH structural screws are produced by MiTek USA, Inc. SDS and SDW structural screws are produced by Simpson Strong-Tie® Company, Inc. FlatLOK® and TrussLOK® structural screws are produced by FastenMaster-OMG, Inc. Install screws per manufacturers' guidelines.

| Fastener Type  | LVL Depth  | Fastener<br>Rows | Fastener<br>Spacing | 3½" Wide (2-ply 1¾")   | 5¼" Wide (3-ply 1¾") | 7" Wide (4-ply 1¾") |
|--|------------|------------------|---------------------|------------------------|----------------------|---------------------|
| <b>16d Nails</b><br>(0.131" x 3.5")<br>or Common (0.162" x 3.5") | 7¼" - 11¾" | 2<br>(shown)     | 12"                 |                        |                      | Not<br>Permitted    |
|  | 14" - 18"  | 3                | 12"                 |                        |                      |                     |
|  | 24"        | 4                | 12"                 |                        |                      |                     |
| 1/2" Through Bolts   | 7¼" - 18"  | 2<br>(shown)     | 24"                 |                        |                      |                     |
|  | 24"        | 3                | 24"                 |                        |                      |                     |
|  |            |                  |                     | 3½" Screw Length       | 3½" Screw Length     | 6" Screw Length     |
| WS or SDS Screws   | 7¼" - 18"  | 2<br>(shown)     | 24"                 |                        |                      |                     |
|  | 24"        | 3                | 24"                 | -                      |                      |                     |
|  |            |                  |                     | 3%" - 3½" Screw Length | 5" Screw Length      | 6¾" Screw Length    |
| SDW22, WSWH, FlatL0K,<br>or TrussL0K Screws                      | 7¼" - 18"  | 2                | 24"                 |                        |                      |                     |
|  | 24"        | 3<br>(shown)     | 24"                 |                        |                      |                     |

## **ALLOWABLE HORIZONTAL HOLES IN onCENTER LVL**







MILDEW ARE EXPRESSLY EXCLUDED.







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possible. Please contact BlueLinx.

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