

Installing Deck Joists

OVERVIEW



Introduction

Joists provide the framing platform for the deck boards. Before you can install the joists, the ledger should be in place along the house and the girder(s) should be secured to the posts. The joists will be anchored to the house via the ledger and then supported by the girders.

BEFORE YOU START...

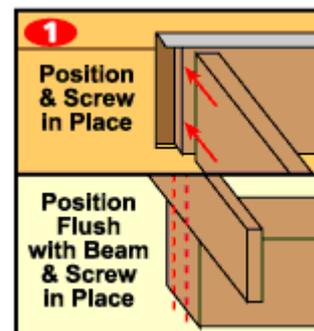
SKILL LEVEL & TIME TO COMPLETE

Time to complete this project depends on the size of the deck and the level of help available, the times listed here are for two people on a 10'x 30' deck with the house defining two sides of the deck.

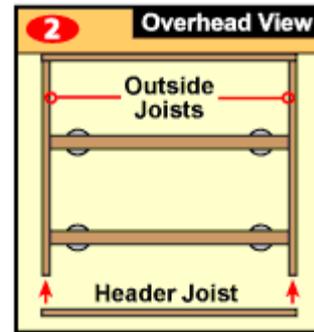
- Beginner - 2 to 3 days
- Intermediate - 1 to 2 days
- Advanced - about 1 day

STEPS

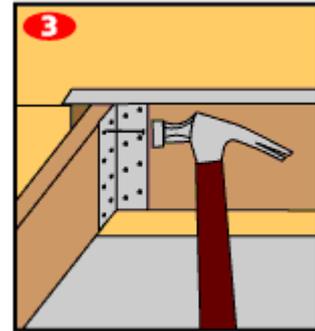
1. Cut the two outside joists to length. Take the first joist and position it next to the end of the ledger. Screw it in place with a screw gun. Position the opposite end of the joist on top of and flush with the end of the beam. Screw it in place by angling a screw through the edge of the joist and into the beam. Repeat for the other outside joists that attach to the house.



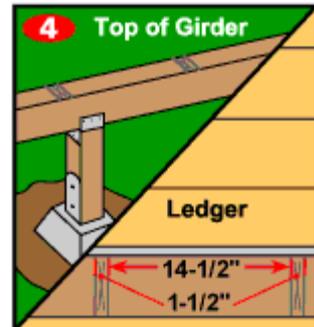
2. Measure and cut the header joist. Position it across the ends of the outside joists and screw it into the ends of the outside joists.



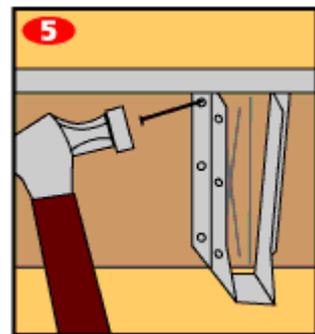
3. To add support to each of the 4 corners of the deck, screw in angle brackets in each inside corner. You can now remove the braces that were holding the posts in position. Your deck frame should now be locked in position.



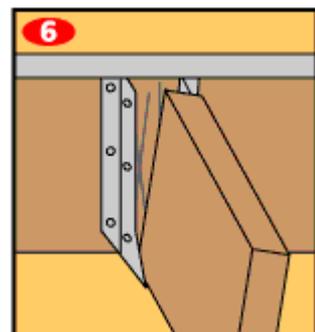
4. On the ledger, on top of the girders and on the inside of the header joist, mark the locations for the joists. They should be 16" on center. You need 2 marks to indicate either side of each joist. This translates to 14-1/2" in between each joist and 1-1/2" for the thickness of each joist. Then use a square to scribe the lines across the face of the board. Take a short piece of joist material, butt it up along the line and scribe the other line for positioning each joist. Put an X in between the lines to indicate the location of the joist.



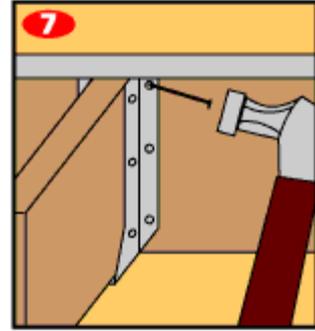
5. Position a joist hanger along one of the scribed line. Screw or nail 1 side of it in place through its flange.



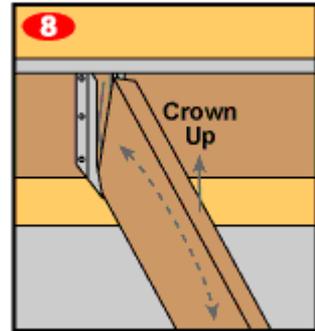
6. Take the short piece of joist material and put it in place in the open joist hanger.



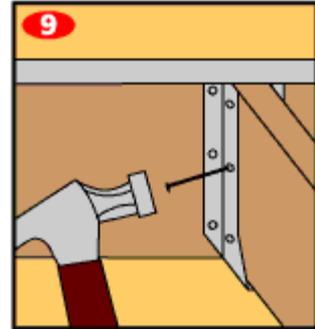
7. Flex the joist hanger up tight against the board. Make sure the top of the board is flush with the ledger of header joist. Nail the other side of the joist hanger in place. Repeat the last 2 steps until all the joist hangers are in place.



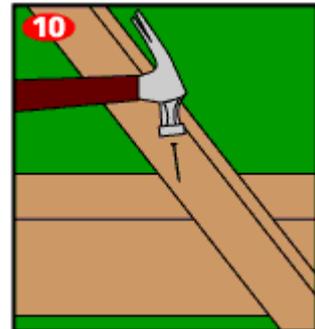
8. Measure and cut each joist to length using a circular saw. Use a square to mark each board to ensure a square cut edge. View down the end of each joist to determine which side has a crown. Lay each joist in place with the crown side up.



9. Screw or nail the ends on each joist to the joist hanger.



10. Where each joist crosses the beam, screw or toe-nail the joist to the beam. The deck frame is now complete. It is time to proceed with decking and railings.



SHOP LIST

Materials Needed

- Lumber for joists
- Joist hangers
- Screws

Tools Needed

- Miter saw
- Circular saw
- Pry bar
- Square

- Level
- Screw gun
- Reciprocating saw
- Tape measure