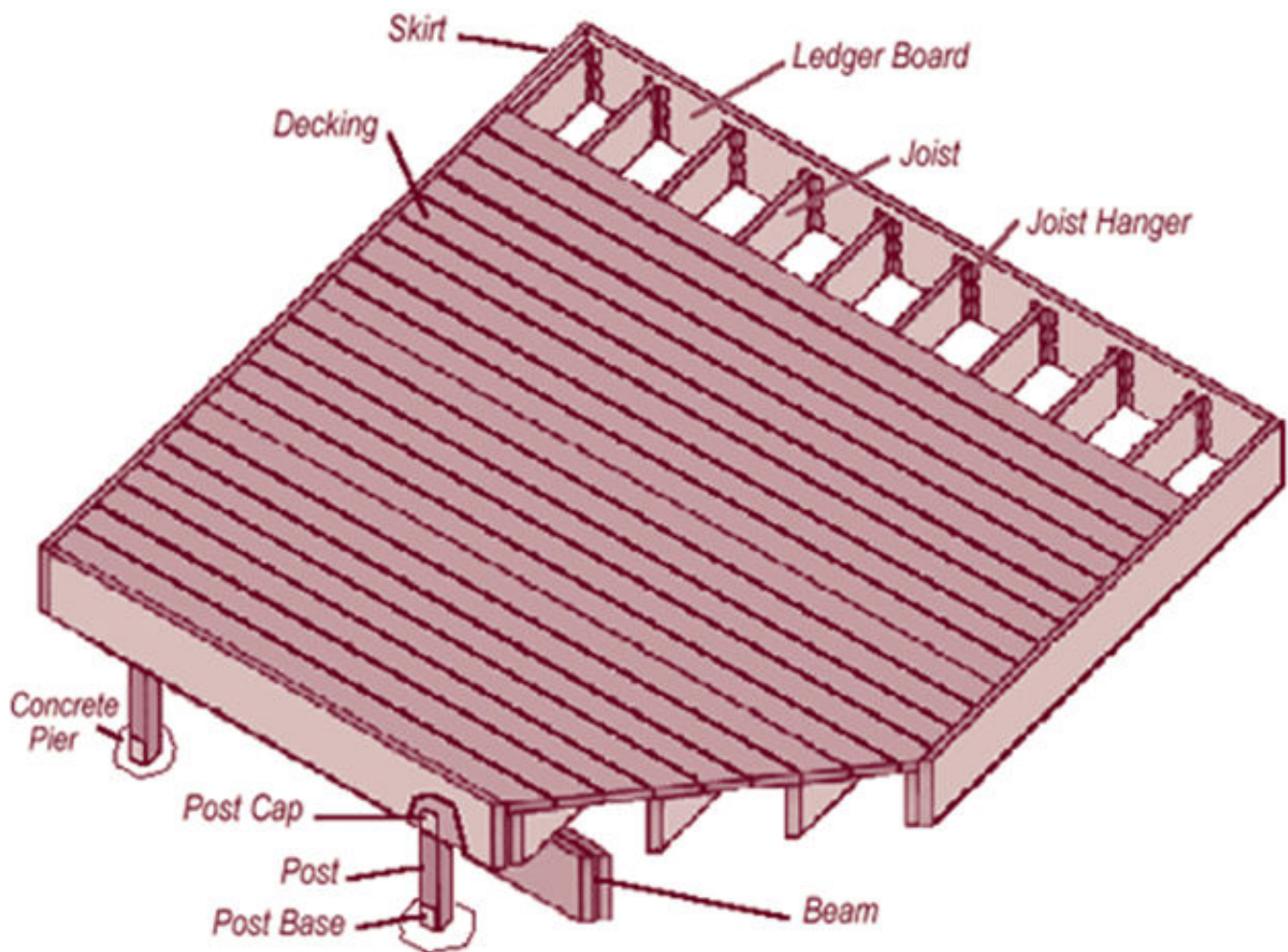


How to Build Good Decks

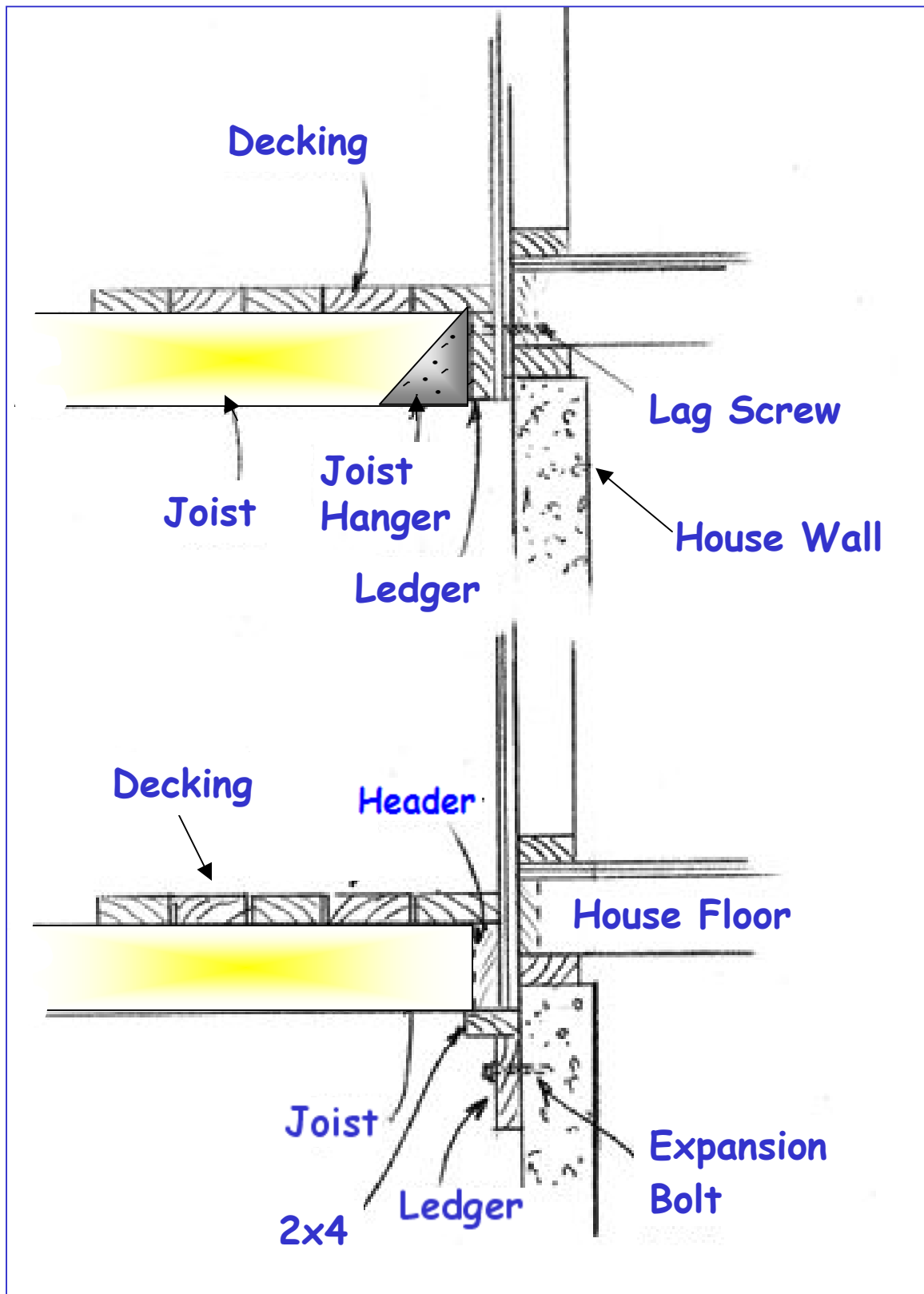


**Worldwide Sleeping Company, Inc
Cary, North Carolina**

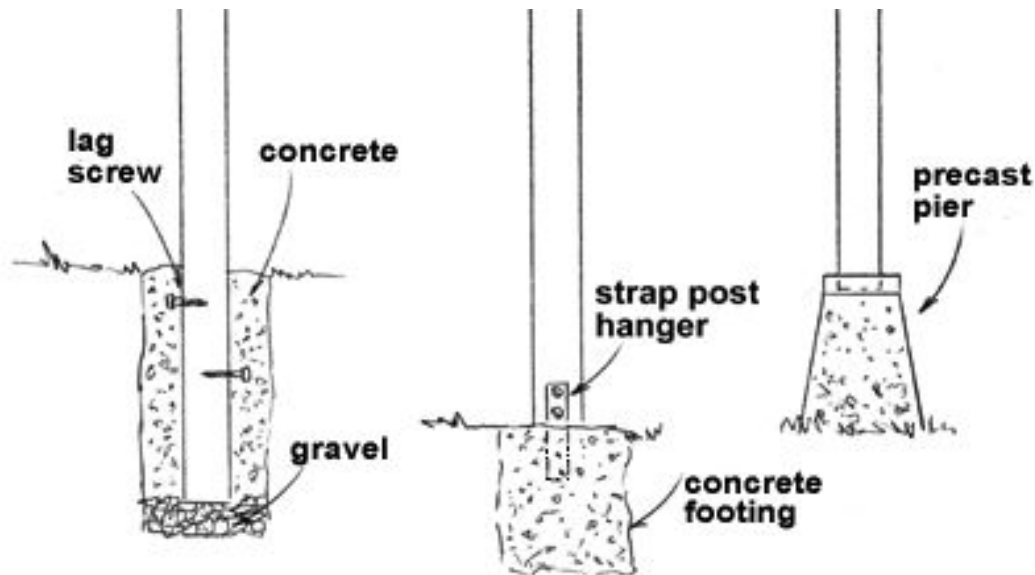
Decking Overview



Decking Overview more



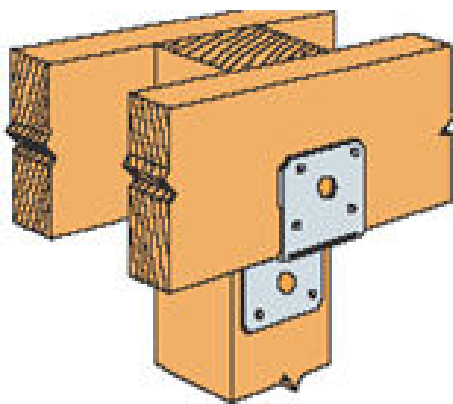
Footings for Decks



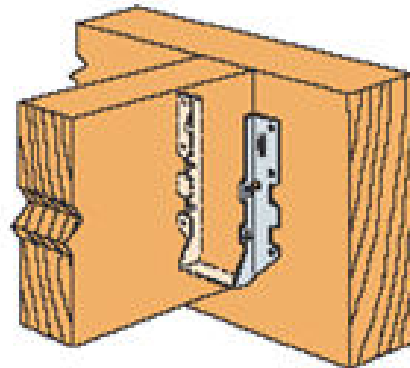
- Concrete deck footings provide the base for the deck structure ... they should be at least twice the width of the posts that rest on them.
- Deck footings need to be dug below the frost line to prevent frost upheaval. The depth may vary from 12" in southern climates, to 48" (or more) in northern climates ... use 18" in NC.
- Dig the hole wider near the bottom. This "lip" will help anchor the concrete in the ground.
- Let the footings set up and cure for a few days.

Deck Connectors Examples

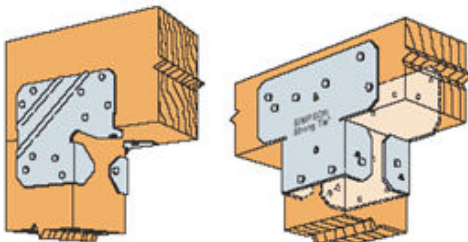
The following connectors are some of the products that may be suitable for deck retrofit. Selection of products based upon performance and/or suitability for a specific application should be made by a qualified professional. Simpson recommends that product choice be approved by the local building department before work begins.



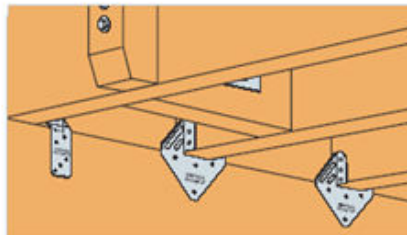
DJT14Z: Connects beams at the side of the post.



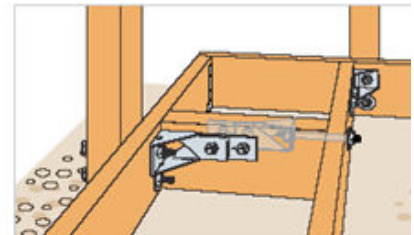
LUSZ Joist Hanger: Provides bearing and uplift resistance, features double-shear nailing for added strength.



LCEZ/ACZ Retrofit Post Caps: Two-piece cap may be installed before or after lumber is in place.

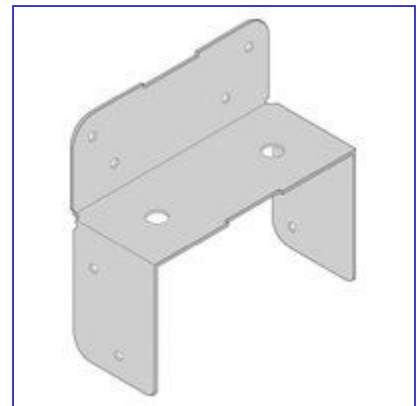
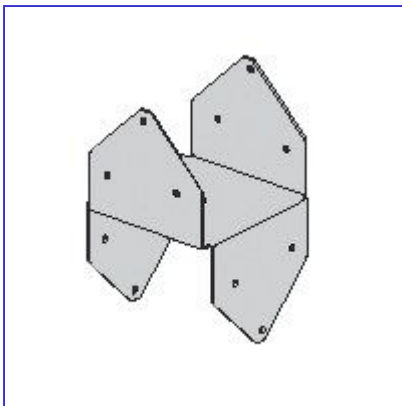
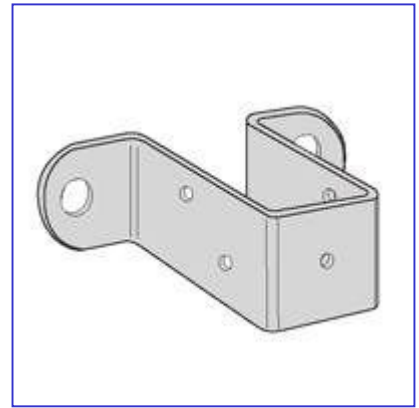
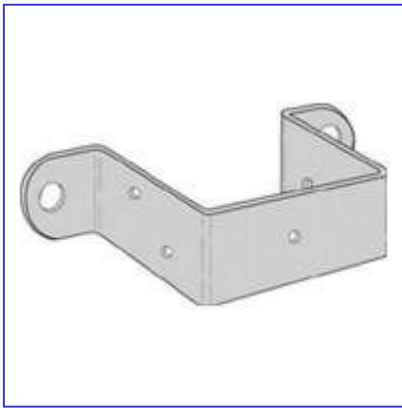
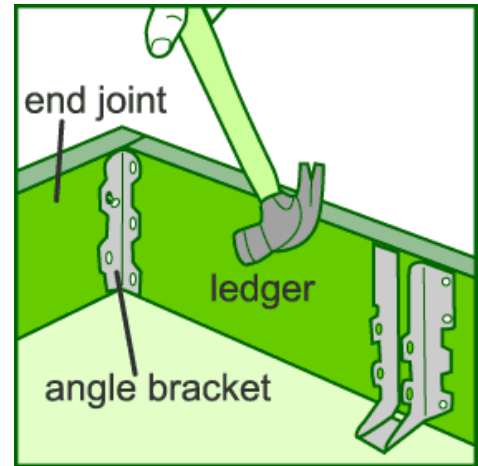
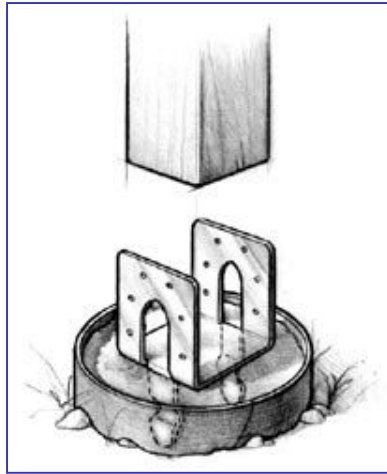
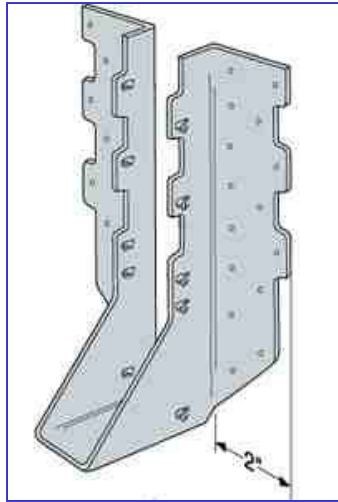


H1Z Hurricane Tie: Holds joist on both sides.



HD2AHDG Holdown: Horizontal application fastening railing post to deck framing.

Deck Connectors More examples



Decking Screws ...

Reduce installation time with a reliable way to secure deck boards. Screws are widely considered to be the best way to fasten decking material due to the holding power of the threads. Nails typically pull out over time, leaving the head protruding above the decking. In addition, many manufacturers of composite decking material recommend screws to fasten their products.



SCREWS FOR FASTENING DECKING

WSNTLG SERIES
N2000® Finish



DTHQ SERIES
Trim Head, Quik Guard® Finish



SS3DSCB SERIES
305 Stainless Steel #10



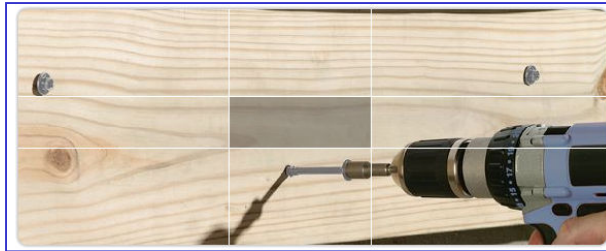
SSDTH SERIES
305 Stainless Steel, #8 Trim Head



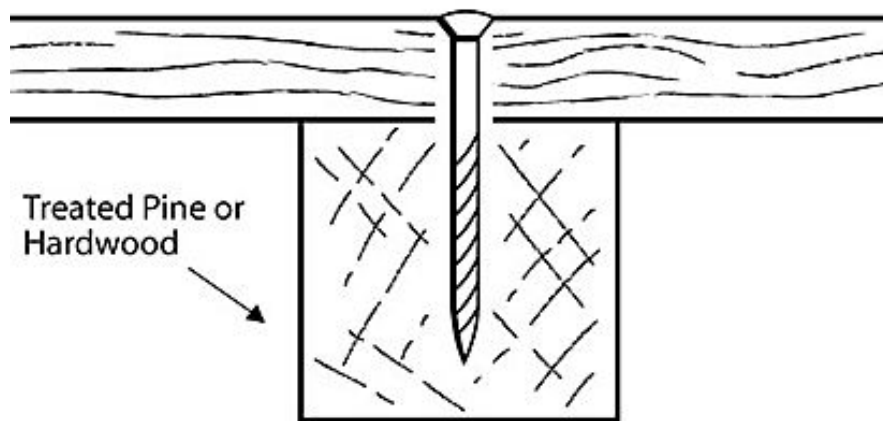
- The general rule of thumb is **ONE INCH** of penetration into the framing material. Since 2x6 decking is 1-1/2" thick, you can use 2-1/2" deck screws, or longer.
- There is not much benefit to using longer screws, because the screws will usually break before they pull out of the wood.



Decking Screws ... Examples



Decking



Decking Screws ... Examples

#6 X 1-1/4"

Bit Size
#1

#6 X 1-5/8"

Bit Size
#1

#8 X 2"

Bit Size
#2

#8 X 2-1/4"

Bit Size
#2



FLAT BUGLE
HEAD



TRIM HEAD



SQUARE DRIVE
BITS

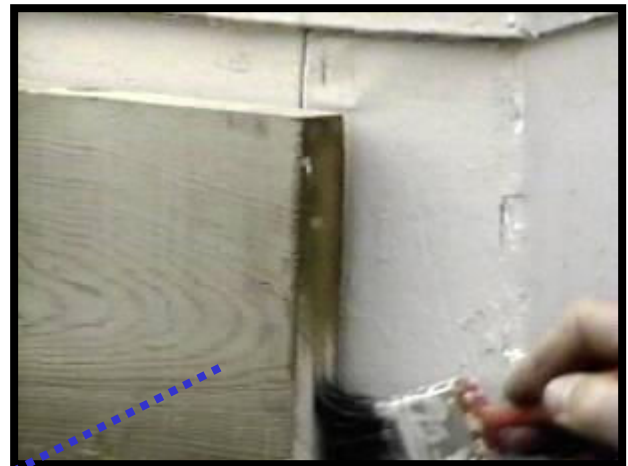


Square
Drive



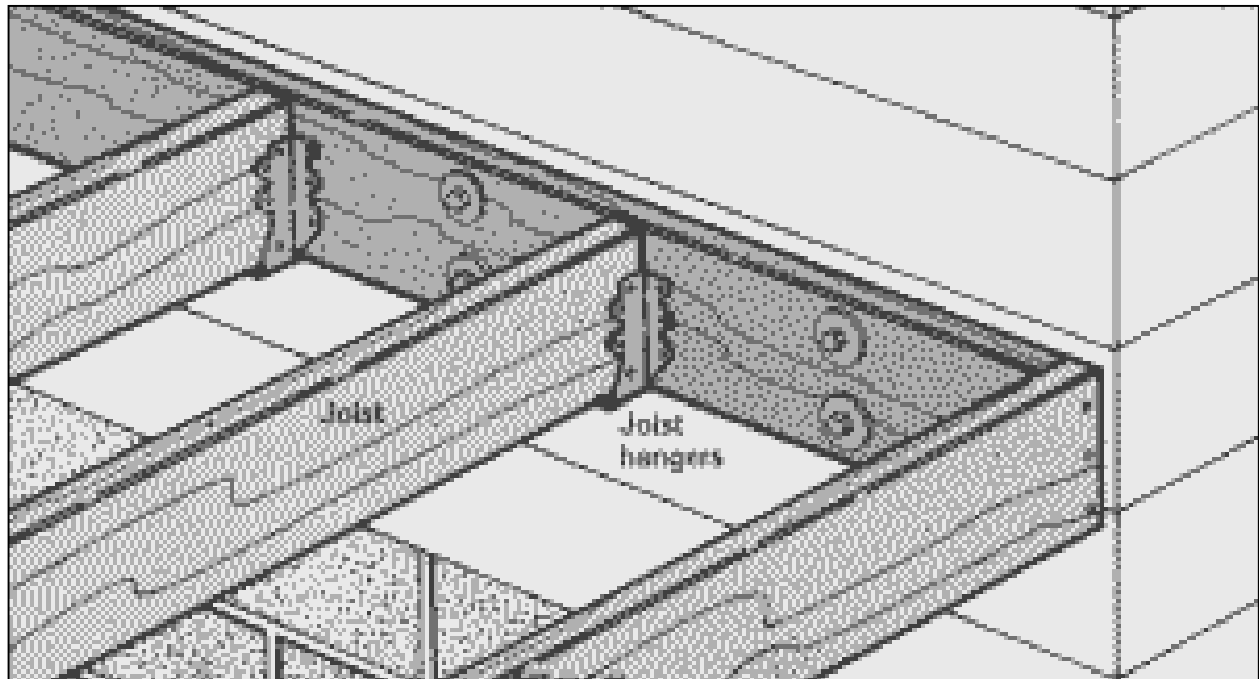
Attaching one side of the deck, a ledger, to the house wall ...

The easiest way to install a ledger (large board against the house wall) is with washers and lag screws. If your siding is not flat (beveled siding, aluminum siding, shingles, etc) use more or fewer washers on the top screws to compensate and cause the ledger to be installed truly vertical.



If you are using pressure-treated lumber or a decay resistant lumber that is not all heart, we recommend that you paint a waterproofing on the cut ends of the ledger and all other exposed boards.

Attaching the Joists to the Wall Ledger ...

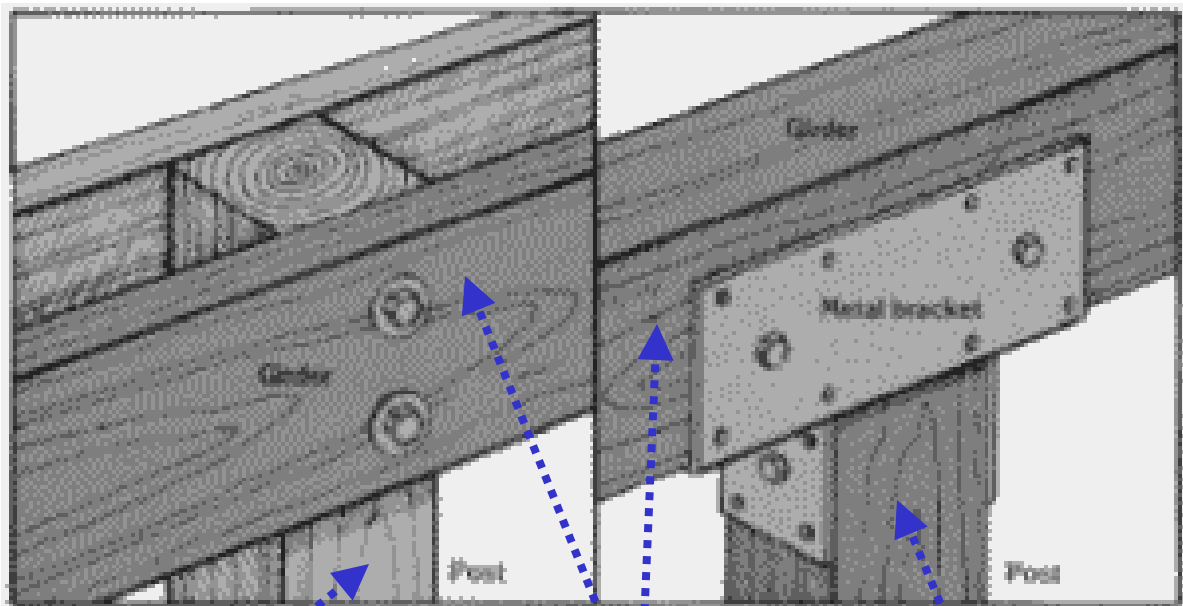


Installing Joist Hangers ... facing the Wall ...



Girders or Beams

To build a girder/post system for the deck, first cut the wooden posts the proper height. Note the 2 different levels of the posts and the bottoms of the joists.



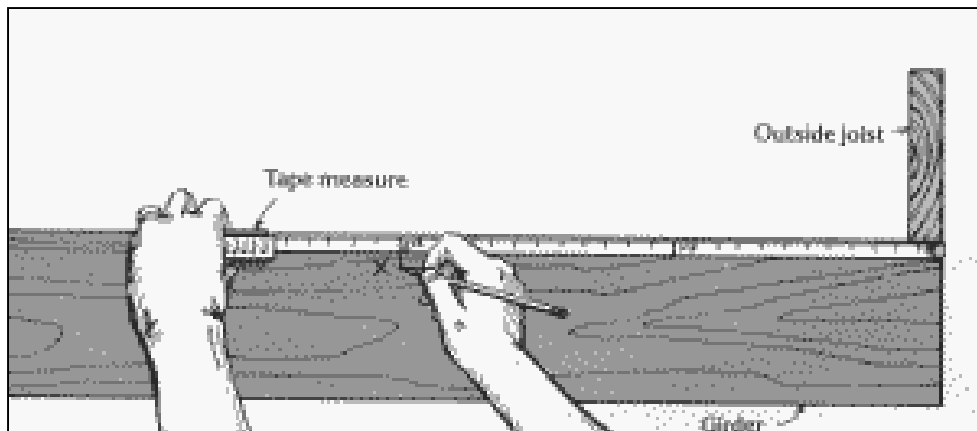
Post

Girder

Post

Installing Joists

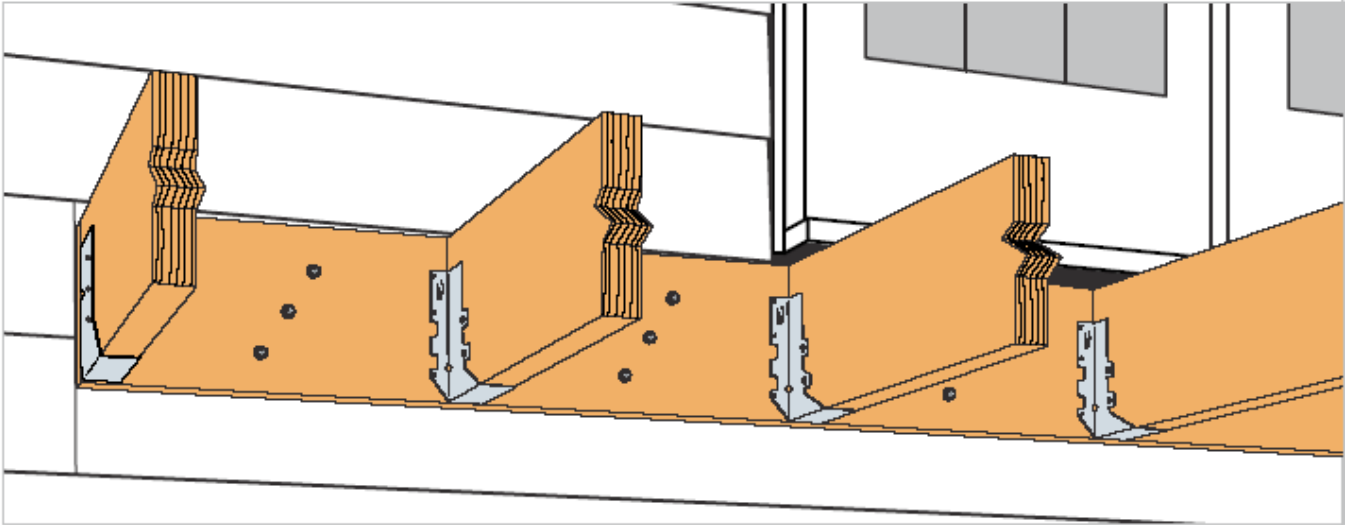
- Floor joists for a deck, placed 24" on center, are usually adequate.
- Determined joist spacing layout. Starting from a nail placed at the center of one of the 2 outer joists already installed, measure along ledger, making a clear mark every 24" (or 16"). Using a combination square, draw straight down at each point across the ledger/beam/girder. Then nail joist hangers on flush with the edge of these new marks.



Next, begin nailing the metal joist hangers on the ledger/beam/girder.

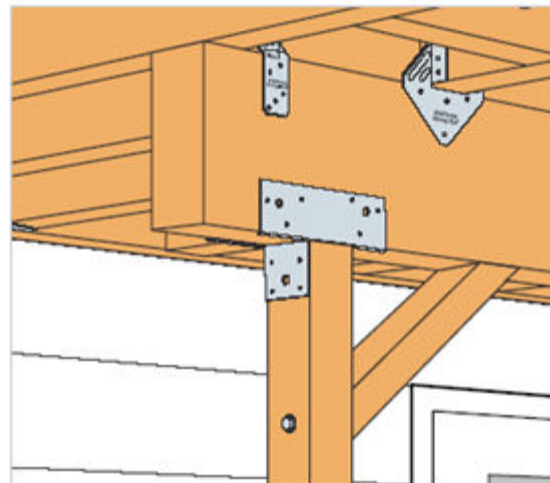
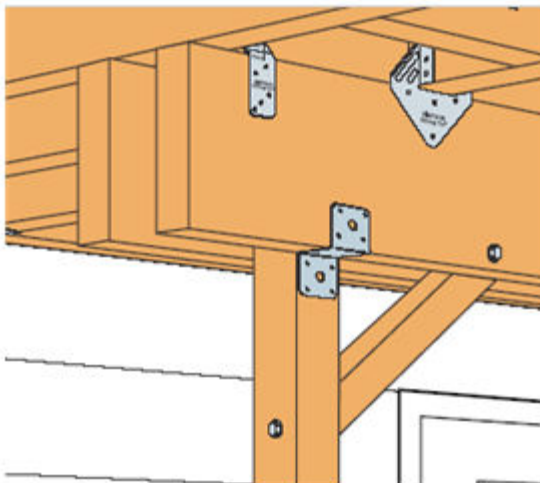


Assembling the Deck



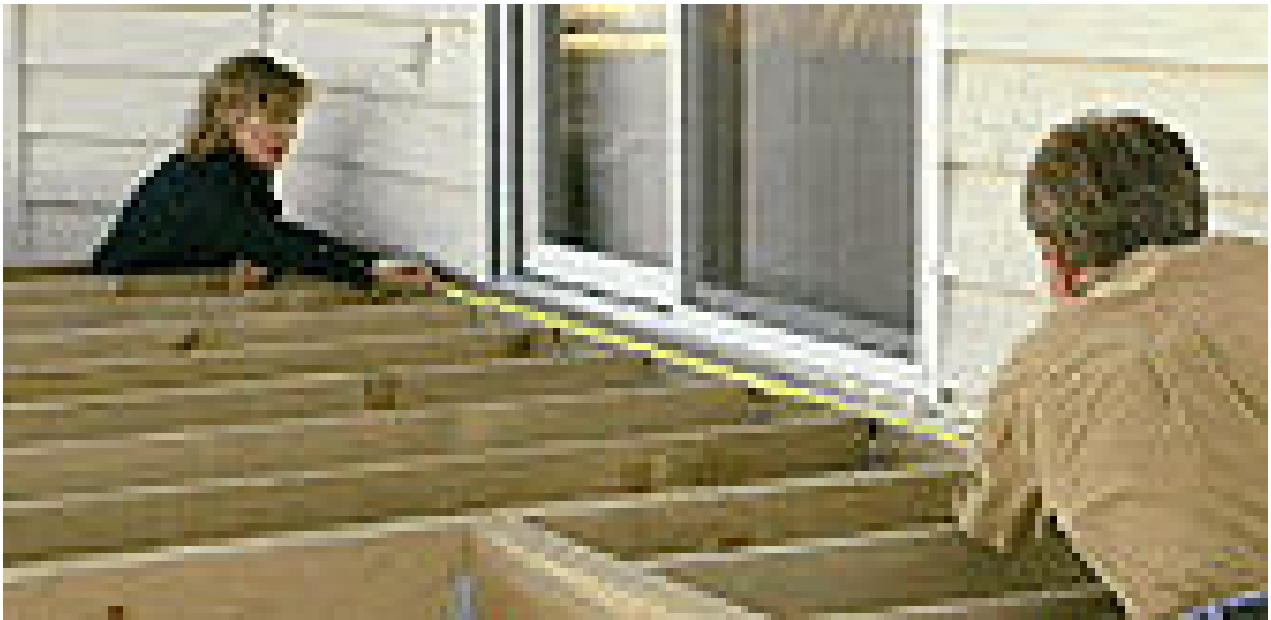
Ledger may not be installed over siding or stucco. It must be fastened directly to the rim joist or stud or through sheathing into an appropriate framing member.

At the point where a beam meets a post, it must be properly connected to the post in order to resist gravity, lateral and uplift loads. This pertains to solid sawn beams or those comprised of multiple members, whether they rest on top or are fastened to the side of the post.



Attaching Decking Boards ...

- Start the decking from the wall and work toward the yard.



- Be sure that the first course next to the wall is made of good, straight pieces because it is the guide ... and if crooked it affects all the other courses.
- Purchase boards that are long enough to span the entire width of the deck. If the deck is too wide, this may not be possible. Even if boards are available, any lengths over 14' are often very crooked.

Attaching Decking Boards ...

Continued ...

- If two boards are needed, they must always join directly over the center of a joist, to provide a nailing surface for each.
- Never join all the courses over the same joist, as it will look like a big split running down the deck. Stagger the joints so that every other course joins over the same joists.



- Spacing deck boards ... if deck boards are relatively dry, use 16 penny nails to establish the proper gaps between the boards. Proper spacing allows moisture to drain off the deck between the boards.



Attaching Decking Boards ...

Continued ...

- Because wood expands when it's wet. If the boards are wet when you install them, you can probably butt them close together without any gap ... they should shrink as they dry out and produce adequate gaps between the boards.
- Drill pilot holes when nailing near the end of a board.
- Use a cordless drill to make pilot holes, each slightly smaller than the shank of the nail or fastening screw this will prevent splitting.



Straighten any boards that are bowed by attaching one end, then working down along the board to the other end.



Completed Decks ...

