

### **Decks**

a simple guide to a better deck

#### **Tool Check List**

□ Tape Measure
□ Post Hole Digger
□ Power Saw

## ☐ String Line☐ Level☐ Gloves

### 1. Where To Start (Deck Size and Location)

Determine the corners of the deck by running a strig line around the perimeter. Be sure to stake the corners at the exact size of the deck package purchased.

When determining the height, be sure there is clearance for the framework. If using the 5/4x6 decking, there should be at least 6.3/4" from ground level to the top of the deck. If using 2x4 or 2x6 decking, be sure to have at least 7" from ground level to the top of the deck. The deck height should taper or slope away from the house 1/2" per 10' of deck. (Figure 1)

Make sure the deck location is square. To check the squareness of a deck location, measure diagonally form corner to corner. The measurement should be the same going in both directions. **(Figure 2)** 

Leave the string line up until the outside framework of the deck is complete

### 2. Installing Ledger

The ledger is a pressure treated 2x6 that is attached to the house. If the ledger will installed underneath a sliding glass door, it is necessary to remove the trim board that sits underneath the door and seal with metal.

Install the ledger underneath the door so that there is a clearance of the deck thickness plus 1/8" between the bottom of the sliding glass door and the top of the 2x6 ledger. (Figure 3-A)

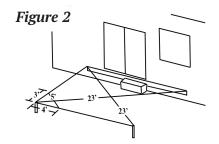
The total length of the deck of the ledger needs to be 4" less than the length of the deck, leaving 2" on each side. **(Figure 3-B)** 

If there is a concrete step in the way of the ledger, simply cut the 2x6 ledger to fit around the step. (Figure 3-C)

Now that the ledger will fit correctly, nail the it to the house with #16 box nails. Use one nail per 6" in a staggered pattern, lag bolts if over 30", 2 per 2'. (Figure 3-D)

When installing the ledger ans any other pressure treated 2x6, make that the "crown" is up. (Figure 4)

# Figure 1 10' 20' Level 1" Deck Height



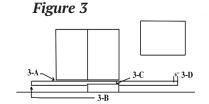
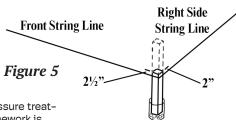


Figure 4



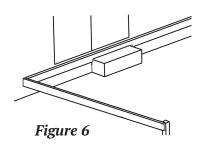
### 3. Building Framework

Set the corner post 2" from the side string line and  $2\frac{1}{2}$ " in from the front string line. Use a 4x4 pressure treated post. (Figure 5) Set posts at the correct height. It is very difficult to cut posts off once the framework is attached.

Post holes should be a minimum of 8" deep and 6" in diameter. Use 1/3 bag of concrete premix per post. Put a small amount of gravel in the bottom of the hole. Set the post on top of the gravel and put the dry concrete around the post.

Once all the posts are set and the framework is done, water down each post several times until water stops disappearing into the concrete. As a rule, posts should set for at least 2 days before nailing on the deck boards. However, a small deck can be completed in one day. Water down the posts after the deck is completely done.

Attach the side 2x6 pressure treated joists. One end will attach to the ledger with 3 - #16 box nails, the other end to the 4x45 - #16 box nails. (Figure 6)



Attach the front 2x6 pressure treated joist. The front joist will cover the corner posts and the ends of 2x6 side joist. (Figure 7-A)

Set intermediate posts along side and front joists. When using 2x6 framework, do not set posts more than 8' apart. To determine exact post spacing, refer to the deck plans that corresponds to your deck.

If the deck width is more than 8' wide, it is necessary to install an intermediate 2x6 joist. See the deck plans that correspond to your deck to determine spacing. (Figure 7-B)

### 4. Installing Joist Hangers

If using  $5/4 \times 6$  decking, joist hangers will be 16" on center. If using 2x4 or 2x6 decking, joist hangers will be 24" on center.

To determine the proper location of 2x6 joist hangers, attach the tape meaure to the left side joist and meaure the off every 16" or 24" (depending on deck surface) by marking a "V" on ledger or rim joist. It is important to make all marks by measuring from one point to eliminate accumulative error. (Figure 8) Mark the intermediate joist the same way.

Install the 2x6 joist hangers by nailing them to the ledger or rim joist with  $1\frac{1}{4}$ " teco nails. The center of the joist hanger should be at the "V" on the ledger or rim joist. Also, the joist hanger is to be set at the bottom of the ledger or rim joist so that when a 2x6 joist is put in the joist hanger, it will be flush with the top of the ledger or rim joist. It is helpful to put in a piece of scrap 2x6 joist hanger while nailing the joist hanger up to assure a proper fit of the 2x6 joist. (Figure 9)

### 5. Install 2x6 Joists

To install a pressure treated joist, measure from the inside of the rim joist to the inside of the intermediate joist. Trim 2x6 to fit.

Set one end of the 2x6 joist in a joist hanger and line the other end up with the "V" on the intermediate joist. Nail through the intermediate joist into the end of the 2x6 with 3 – #16 box nails. Use 1¼" teco nails to nail through the joist hanger into the 2x6 joist. (Figure 10)

Once all of the 2x6 joists are installed between the rim joists and the intermediate joist, install the joist hangers and a 2x6 joist between the intermediate joist and the front joist. (Figure 11)

### 6. Installing the Deck Surface

In order to keep the deck ends even, tack a piece of scrap wood to the left side joist so that deck boards can butt up against it. (Figure 12-A) When laying the deck boards, start at the house and work out. Start at the left and work to the right. Nail boards down with 2 nails with two nails per joist. If using 5/4x6 decking use #10 casing nails. If using 2x4 or 2x6 decking, use #16 casing nails.

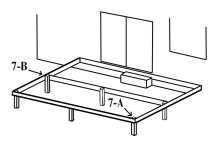
In most cases, the decking will need to follow a pattern. To ensure the best looking deck and proper material usage, be sure to follow the Deck Surface Pattern on the deck drawing that corresponds to your deck. When two or more deck boards need to be put together to make one run of decking, be sure that the boards meet in the middle of a 2x6 joist. It may be necessary to trim off a fraction of a deck board. (Figure 12-B)

Each run of decking should be 1/8" apart. Use the shank of a casing nail as a spacer. **(Figure 12-C)** 

Allow boards to overhang on the right side. Once all the boards are laid down, use a chalkline to create a straight line and cut all the boards at one time. Do not cut boards individually or it will leave an uneven side. **(Figure 12–D)** 

Once all the decking is on, you may want to purchase some skirting material to put around the sides of the deck to give it a more finshed look.

Figure 7



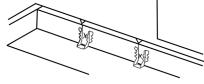


Figure 8

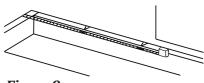
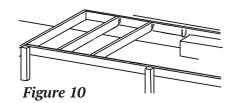
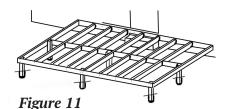


Figure 9





12 - A

Figure 12

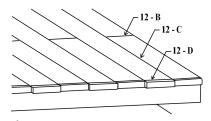


Figure 12B, C, & D