



Tiger Deck®

Instruction Detail 2008

TOOLS YOU WILL NEED

The following tools are the basic tools necessary to install a Tiger Deck. You may need other tools depending on the complexity of the project. For example; if you wish to really dress up your deck (takes very little extra time and effort) by plugging exposed screws you would need: a plug cutter, a diameter matching counter sink drill bit, glue (we recommend exterior Titebond III) and a belt sander (always sand with the grain and use 120 grit or finer sand paper).

CIRCULAR SAW (we recommend a minimum of 12 amp power) with sharp carbide tipped hardwood crosscut blade.

SAW HORSES to allow trimming at a safe working height (you may want to set up a miter saw or radial arm saw for safety, speed and accuracy in trimming)

REVERSABLE ELECTRIC DRILL (we recommend minimum 12 volt power if cordless) with variable speed settings and clutch. You will need drill bits and screws to pre drill holes for occasional stainless steel face screws.

BOW WRENCH® - This tool (or similar) is **ESSENTIAL** for proper installation of Tiger Deck deck boards using our patented stainless steel clips. If your lumber yard does not stock the Bow Wrench® you can call them directly at: 800-466-9626

BEFORE YOU BEGIN

Tiger Deck is a very dense hardwood with amazing strength and durability properties when compared to other wood and composite decking products. Tiger Deck is a natural product and though our graders and quality control people attempt to ship a 100% usable product you will see pieces on each job which will need to be trimmed. We adhere to or exceed industry (West Coast Lumber Inspection Bureau) standard maximum 5% off grade pieces per shipment to our customers. Your installer will need to inspect the pieces and may need to trim out the following defects **BEFORE** installing the piece:

ENDS - each deck board has 1/2" to 5" of excess length. Our mills do **NOT** trim to exact 2' multiples.

SHAKE - shake is break in the fibers of the wood which occurs in the tree while it is alive (from wind or other natural stresses). After kiln drying and processing it is sometimes difficult to see. It appears as scalloped splits along the edge of a piece or as a 'fish scale' on the face. It causes sharp edges which can give splinters when handled. Tiger Deck is otherwise very smooth and almost splinter free. Shake is the main defect to look for and trim out.

CROOK OR WARP - Crook is the result of natural stresses in the wood fiber. Tiger Deck products are kiln dried to 8% +/- 3% moisture content. At this moisture content most crook and warp which may have happened over time is complete. The decking application is a very harsh environment for wood. Moisture and heat gradients will cause the wood to try to move over time. Install Tiger Deck as soon as practical after acclimating. Proper and tight installation of our system greatly minimizes splits and other time related defects. The Bow Wrench will straighten most of the crook during installation. However, if there is still too much crook, trimming the board into shorter pieces allows utilization of the piece.

KNOTS AND HOLES - Very few knots and holes get by our graders but you may find some. They do not affect the structural integrity of the piece and may be left in or trimmed out for aesthetic reasons.

COLOR - Tiger Deck is tan/gold with black striping and accents. But each piece will be different and can run from an entirely light tan piece to one that is mostly black striping. We recommend that pieces be laid out before installation on the deck to match the color gradient effect desired. Exposure to the sun will even the colors to a rich reddish tan.

PATENTED FASTENING SYSTEM

Tiger Deck provides a Patented hidden fastening system that will eliminate unsightly penetrations in the deck except on the ends, first and last board installed. Our clip design allows the clip to flex with the underlying joist system while maintaining rock solid holding power. The clips are stainless steel alloy and come with star drive bits and stainless steel screws. The black anodized coating on clips and screws will last a lifetime. Clips gap to 3/16" by design. For installation over 4" joists or 45 degree (herringbone) applications an **ANGLE CLIP** is available from your distributor which does everything our **STANDARD CLIP** (which slides over 2" joists) will do.



STORAGE AND HANDLING

Tiger Deck is kiln dried to provide long term stability. A very small amount of shrinkage and expansion will happen over time and is dependent upon your climate conditions. Prior to installation, Tiger Deck should be kept in banded packages, protected from direct sunlight and kept from direct contact with the ground. Due to the natural properties of Tiger Deck, exposed untreated material will begin a color transformation that will lead to uneven color if some boards are left exposed to weather and others are not.

INSTALLATION INSTRUCTIONS

Acclimatize your deck boards prior to installation. Like an interior floor, your deck boards have been kiln dried to very low moisture content and it is designed to fit average climate conditions. The drier the climate, the more helpful it is to lay out your deck boards upside down (no gaps) to allow adjustment to your climate prior to installation. If you can leave them for a week or more this will allow them to equalize to your local climate. The hotter and drier the climate the longer you should let them adjust. Just prior to flipping them over for installation it is **HIGHLY** recommended that you apply a 'sealer' coat of either Penofin or Messmers to the back of the boards (or the same UV protector that you will use on the face). You can slop it on, and it is better if you do **NOT** wipe off excess as you will on the face. As you install the deck, leave the boards you are not working on upside down, this will give you a surface to walk on.

The first row of deck boards should be squared accurately to the substructure, pre-drilled and screwed through the face with 1-2 stainless steel or ceramic deck screws per joist. (Illustration 1)



Illustration 1



Illustration 2

Two to five rows of deck boards (or the entire deck) can then be laid out on the joists with one clip on each joist. Do **NOT** screw the clips down as you go. Push everything in place with hand pressure and set up Bow Wrench(s)[®] in preparation for squeezing a 2-5 row section tight. Natural bow should be placed with the belly out. (Illustration 2)

Using the Bow Wrench® installation tool (or equal) pressure can be applied to slowly press the section together (be sure clips are in the grooves, a 16 penny nail inserted into clip screw hole helps clip adjustment). **If you are working by yourself, you can install one board at a time. Pre drill and fasten a screw in the center of both ends when each board is in place and before you screw the clips down on the house side of the deck board. You can then screw the inside clips down; this will hold each board as you go.** Before the section is squeezed tight be sure to tap the ends of the boards with a hammer to snug the ends up tight. Look the section over one more time for defects (which may need to be trimmed out), tight butt joints, boards tight to the clip legs assuring proper spacing, straight lines and color/aesthetics. Squeeze section TIGHT, clips can then be secured to the joists with the stainless steel screws provided. The last row of clips which are closest to the Bow Wrench should not be tighten completely, only enough to hold the last board in place while laying out the next 2 to 5 rows. (Illustration 3)



Illustration 3

Having multiple rows ahead of the Bow Wrench® allows enough holding power on boards to resist natural bow in boards when the pressure is released to move to the next set of boards.

If there is a lot of natural bow in the last board it may be necessary to provide temporary holding power by shooting a nail or staple at an angle into the joist to hold the board until the next set of boards are placed and the Bow Wrench®

is again in tension (some contractors prefer to use two Bow Wrench® tools having the next set of boards in place before releasing the first tool). Boards must be square and tight. Using Tiger Deck clips and screws will provide the proper gap and are designed to allow small amounts of wood movement yet hold tight.

After installation it is highly recommended that you rent a commercial floor sander. Using the finest sandpaper available for the sander (120 grit or finer), LIGHTLY sand the surface of your deck. This will clean all the dirt, water stains and etc off the deck and open the cells to receive your UV protector. You can of course sand each board lightly with a belt sander prior to installation and try not to walk on the finished portion of the deck prior to applying UV protector.

BUTT JOINTS

Butt joints should have 1 screw predrilled and centered as far from the end of the board as possible but still allow penetration into the joist. This can be done as you go or after the deck has been installed using the clip system. Countersink and plugging screw holes adds a beautiful furniture type finished look for a small amount of additional work.

FACIA

Facia boards (or any other continuous face to face application) should be predrilled and face screwed 1" from board edge and through 1/8" or thicker lathe backing every 16" when installed against any flat surface to provide air space/moisture drain to back of board.

REPLACING DECK BOARDS

Tiger Deck installed with our clip system is meant to last a lifetime. It is best to use care in installation so that replacement is not necessary. However; in the event a board must be replaced use the following instructions:

Have the replacement board(s) ready. Select straight boards and cut to length. Cut the old board out by sawing through the piece on either side of the clips an inch or two away from

the joist. Remove screws and clips, clean tops of joists. Replace clips on joists along one side. Slide new board into place and make sure clips are in the groove on one edge (See Illustration below).



Rotate board up on the non clip side enough to place clips in the groove and directly over the joist. Slowly drop board down until the clips are starting to engage slot/joist. When all clips are aligned properly; step on the high side to force the board down and into the slot. Depending on the length of the board it may take two people to do this evenly. If you are not successful with this method you can pre drill and face screw one edge and use the clips on the other edge.

IMPORTANT TIPS

NEVER install any Tiger Deck product flat against green treated wood, roofs, concrete or in any application which traps moisture behind the piece (the obvious exception is deck board back against any joist edge, green treat or otherwise). Flat face to flat face creates a moisture gradient and almost always creates a heat gradient as well. This condition creates stresses which **WILL** cause 'cupping', 'splits', 'warp' and other types of damage. **ALWAYS** use Tiger Deck products as a system and as per our design intent. **EXAMPLE:** Tiger Deck boards must be gapped by our clips or 3/16" apart if face screwed to allow air/water flow. If you want a solid surface with no gaps for covered exterior use then purchase our Tiger Deck T&G Porch Flooring. **EXAMPLE:** Installing Tiger Deck on a room roof demands a floated system; use 2x2 or 2x4 Tiger Deck as joists, tigerwood lathe between roof and joists, drill vent holes in fascia and use Tiger Deck fastening system. **ALL SCREWS** should be predrilled to prevent splitting (the only exceptions are the screws provided with Tiger Deck clips when screwed into softwood joists). All screws should also be stainless steel to match the quality and longevity of Tiger Deck products. **MINIMUM SPACE** between product and ground or concrete is 16", installed on wooden joist material with adequate ventilation and drainage under the deck.

SEALER

Tiger Deck does not require any sealer if the customer is not concerned with preserving color and reducing fine 'spider web' face checking. Tiger Deck will go through a color transformation from its natural state to a deeper red tone and eventually silver (see photo gallery for pictures of untreated Tiger Deck). If the customer wants to preserve natural color there are many different products on the market. Our customers have had the most success with either Penofin's Exotic Hardwood Penetrating Oil (penofin.com) or Messmer's U.V. Plus for Hardwoods (www.messmers.com) for UV protection and finishing material. Follow manufactures recommended procedure for applying and for subsequent treatment. If the customer elects to treat the decking material it should be treated on all sides evenly to maintain the equal moisture condition set by kiln drying and conditioning. An end treatment (such as Anchor Seal) will reduce potential end checks.

SAFETY RECOMMENDATIONS

While we have not heard of any allergic reactions to Tiger Deck materials, it is always recommended when working with hardwood lumber to wear safety glasses and a dust mask. Wood splinters should be removed immediately to prevent infection. All standard safety precautions should be used when cutting, shaping or drilling the product.