

Tiger Claw[®] **Hidden Deck Fasteners**

Selecting a Hidden Deck Fastener

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White paper
July 2004

Summary

This article describes the growing trend of using hidden deck fasteners as an alternative to traditional nails and screws. It also contains a list of tips for professional contractors and do-it-yourselfers who may not know what to look for when selecting hidden deck fasteners for their building projects.

Introduction

Hidden deck fasteners, as an alternative to traditional nails and screws, have been available for more than a decade and yet they haven't been widely adopted — until now. In the past, they have been difficult to install, time-consuming and cost prohibitive. Many builders and homeowners have chosen to stick with traditional hardware despite the fact that nails and screws cause wood rot, board splitting, and a less-than-attractive appearance.

Today's hidden deck fasteners create a smooth "nail-free" surface, which preserves the beauty of the wood and reduces splitting, splintering, cupping, and rotting. With some fasteners on the market, costs and installation time have been reduced dramatically. Homeowners can now have a better-looking, longer-lasting, and safer deck.

One of the most popular and newest types of hidden deck fasteners is Tiger Claw's four-pronged, stainless steel deck clip with black oxide coating. It has a large surface for hold down

strength, wide spacing to distribute hold down force, a wide spread to accommodate butt joints, and a slotted hole to allow for expansion and contraction of the decking material.

Tiger Claw's patented design makes fasteners very easy and quick to install. The first step is to insert the outer prongs of the fastener into the installation block (provided by the manufacturer with each box or bucket of fasteners). While the fastener is in the block, center it over the joist. Hammer the fastener into the decking by striking the installation block with a hammer. Next, drive a #8 x 2" galvanized or stainless steel decking screw at a 45 degree angle through the hole into the fastener and into the joist. Repeat over every joist. Then move the next decking board into position. Stand on the decking board being installed before striking it with a sledge hammer. To ensure an even surface, the decking board must be tight down on the joists before being set on the prongs.

Different fasteners for different types of wood

Today, there are many choices when it comes to decking materials. Pressure-treated lumber is perhaps the most popular due to its low cost. When it comes to hidden deck fasteners, builders need to make sure their hardware is compatible. Many types of lumber are treated with ACQ, or ammonia cal copper quaternary. When mixing dissimilar metals, one of them deteriorates. In most cases, it's the fastener. Chemical companies are now recommending hardware made of 304 stainless steel.

The popular composite, or synthetic, lumber looks like real wood but also offers the benefit of little maintenance and a longer life. But like wood, nails and screws cause the same types of problems — mushrooming, linear expansion, and a non-uniform look. Some lumber manufacturers even suggest that you drill pilot holes before driving screws, thus increasing the labor time.

Tiger Claw's four-pronged hidden deck fasteners provide almost automatic spacing between deck boards. There is no fear of mushrooming because the fasteners are not on the surface of the boards. In some cases, the installation time of Tiger Claw hidden deck fasteners is actually less than the installation time of traditional screws and the end result is a more beautiful deck.

Tropical hardwoods also require special deck fasteners. Today, builders and homeowners are choosing such woods as Ipe, Cambara and Meranti because of their beauty, durability, strength, and natural resistance to decay, wet conditions, and insect infestation. With exotic woods, hidden deck fasteners eliminate the laborious process of pre-drilling with a counter sink bit, installing the screw, covering the screw with a wooden plug and then sanding the surface until smooth. Certain hidden deck fasteners — like Tiger Claw — take less time to install and truly enhance the value of the more expensive exotic woods.

About the author

Don Martel

Veteran builder Don Martel is co-inventor of Tiger Claw's three hidden deck fasteners. With more than 20 years of hands-on experience in the high-end custom home building industry, he is dedicated to making sure builders get products that are durable, simple-to-use, and cost-effective. In addition, he has been instrumental in the success of his 40-year-old family-owned business, Martel & Sons Builders, of Connecticut. The Tiger Claw patent was approved in 2000. Tiger Claw hidden deck fasteners are available at more than 120 independent retail outlets and many Home Depot stores nationwide. You can also purchase them online at www.deckfastener.com or call toll-free, (800) 928-4437.

Tips for selecting hidden deck fasteners

Cost. The cheapest is not always the best.

Ease of installation. Can you install them yourself or do you need to hire a contractor? Do you need to be under the deck in order to install the fastener? Look for a fastener with a simple “topside” installation. Read the instructions before buying. Make sure you understand the installation process.

Hold down strength. This is one of the most important factors when selecting a hidden deck fastener. The hold down strength will keep your boards from cupping, squeaking, or moving. Pressure treated lumber especially has a tendency to move after drying in the sun so you will need something with a lot of hold down power. Look for thicker gauge stainless steel, a large surface on the fastener, wide spacing to distribute hold down force, and more than two prongs. A flange can add strength and stability during installation.

Hint: Compare the top of a screw (hold down area) to a deck fastener that has two or four prongs that go into a board. You’ll find the hidden deck fastener has two to four times greater surface area holding down your deck board than a screw.

Special tools. One of the hidden costs is the requirement to purchase special tools in order to install your hidden deck fastener. Some fasteners require a biscuit cutter, a router, or a special installation hammer. Others include an installation tool with every box or bucket of fasteners.

Material. For the best hold down strength, select a fastener made of heavy gauge stainless steel. This will also reduce the threat of corrosion.

Glue. Does your deck fastener require the use of glue? If yes, then the glue will ultimately hold down your boards and not the fastener. Glue does not provide the hold down strength that most pronged fasteners do. Glue can also be compromised in severe weather situations.

The Weather. Look for a fastener that is going to hold up over time, especially if you live in an area with varying weather conditions. Remember that when water freezes under the boards, they will eventually expand and start lifting up. Again, look for a fastener that has the optimal hold down strength.

Linear expansion. When using composite lumber, the length of the boards can grow up to 3/8 of an inch. Screws don’t have any give thus run the possibility of being sheared. Look for fasteners with a slotted hole that allows for expansion and contraction. Look for a design that allows the board to move.