

CAMO® Hidden Deck Fastening System Installation Instructions – CAMO Marksman Pro® -X1

The CAMO Hidden Deck Fastening System is easy to use on treated wood, hardwood, cedar, composite or PVC deckboards. The following instructions will share the simple installation process to create a beautiful, fastener-free deck surface using the CAMO Marksman Pro-X1.

It is important to note that this is a system - CAMO Hidden Fasteners, CAMO Marksman® Tools and CAMO Driver Bits are engineered to work exclusively together. Using other branded tools or guides, fasteners or bits will impair performance and not produce the desired results.

Before beginning installation of your deck, you will need the following:

- CAMO Hidden Fasteners
- CAMO Marksman Pro-X1
- CAMO Driver Bit (included with CAMO Hidden Fasteners; Grooved Board Driver Bits are available separately)
- Drill (set drill speed to highest setting for maximum driving efficiency)
- Optional: L brackets or 2 1/2" x #7 trimhead CAMO Exterior Premium Deck Screws (for the board that abuts the structure)

CAMO MARKSMAN PRO-X1 SCHEMATIC:

It is important to be familiar with the Marksman Pro-X1. This tool is used to guide CAMO Hidden Fasteners into the side of the deckboard and into the joist. It can be used on any 5-1/4" - 5-3/4" wide solid or grooved deckboard. No pre-drilling is required*, and the Marksman Pro-X1 provides automatic 1/16" spacing between deckboards.



ADJUSTING THE TOOL:



Adjust the CAMO Marksman Pro-X1 to fit the boards you are using. Loosen the Thumb Dial at the rear of the tool to adjust the Spacer to fit the width of your deckboards. The middle setting fits most standard 5-1/4" - 5-3/4" solid or grooved deckboards.

THE BOARD ABUTTING THE STRUCTURE:

To begin deck installation, lay the first board that abuts the structure into position. If the abutting board runs parallel to the house or other structure, it may be necessary to face fasten (see options below). If so, we recommend using 2 1/2" x #7 trimhead CAMO Exterior Premium Deck Screws.

You can secure the board abutting the structure in several ways:

- (1) When using CAMO Hidden Fasteners, lay the board abutting the structure in place; at each joist, mark the location for the fasteners that will be driven toward the structure on the outside edge of the deckboard; pull the board away from the structure and position the Marksman Pro-X1 on the desired mark at one end of the board and load one CAMO Hidden Fastener into the Screw Guide on the outside edge of the deckboard. Steady the Marksman Pro-X1 and pre-start the screw about 1/2" into the board. Now squeeze the Trigger Handle to remove the Marksman Pro-X1 leaving the partially driven screw in place. Continue this process the entire length of the deckboard. Once you have reached the end of the board, reposition the deckboard with the pre-started screws on the OUTSIDE edge with the board snug to the structure. Now, finish driving the CAMO Hidden Fasteners into the board manually (don't use the Pro-X1 tool). Finish the deckboard by face fastening the inside edge. We recommend using 2 1/2" x #7 trimhead CAMO Exterior Premium Deck Screws.
- (2) Face fasten the first board or board and a half.
- (3) Avoid face fastening by using L brackets to fasten the abutted board from below the deck to the joists.

Once you have secured the abutted board, proceed with installing the remainder of the deckboards using the CAMO System. It is as easy as Set, Load and Drive!

SET:



Beginning on one end of the deckboard (we recommend a minimum of 1" from board ends), squeeze the Trigger Handle of the Marksman Pro-X1 and set the tool over the deckboard. Release the Trigger Handle allowing the Spacers to contract and grip the deckboard. A properly adjusted tool clamps securely to the board. The Tool Feet must be flat on the surface of the board and the tool centered over the joist.

With the CAMO Marksman Pro-X1 in place on the deckboard, push the deckboard snugly against the previous board. The Spacer automatically provides a 1/16" gap between the boards.

LOAD:



With the Marksman Pro-X1 set on the board, place one CAMO Hidden Fastener into the Screw Guides on both ends of the Marksman Pro-X1 tool. Note: if the tool is not set on the deckboard, the screws will slide out of the Screw Guides.

DRIVE:



Set drill to highest speed. A high RPM drill is recommended.

Begin on the outside edge at the end of the unfastened deckboard (the edge furthest away from the installed deckboard or abutted board).

The handle of the Marksman Pro-X1 is not intended to be weight-bearing. Just steady the Marksman Pro-X1 and start driving, running the drill at full speed throughout. The CAMO Hidden Fastener is designed to spin and auger out material for approximately 1/2 inch to prevent splitting. Once the screw is started, you may gently increase pressure and the screw will bite and drive home quickly. **Let the screw do the work. Forcing the screw can result in mushrooming or splitting.**

When the shoulder of the CAMO Driver Bit reaches the Screw Guide, you are finished driving the screw. The depth of drive is automatically set and you cannot over drive it.

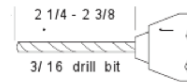
Once you have fastened the first screw on the outside edge, repeat the same drive instructions on the inside edge of the board. Continue this process down the length of the board until the entire board is installed. Fasten both edges of every board at each joist.

ATTENTION:

To ensure proper performance of the CAMO Marksman Pro-X1, it is important to regularly check the Screw Guides for deck material build-up. If material is present, use the CAMO Driver Bit to clear the Screw Guides. If you are installing IPE or other dense deck product, you will want to perform this action more frequently.

***Pre-Drill Option:** The CAMO Hidden Deck Fastening System does not require pre-drilling; however, when using stainless steel CAMO Hidden Fasteners with hardwood decking such as IPE, Cumaru, Tigerwood, Ironwood, or similar deck products, we recommend pre-drilling.

1. Use a 3/16" drill bit chucked at 2 1/4" to 2 3/8" from the tip of the bit to the drill chuck as shown below:



2. Place the Marksman Pro-X1 in the correct fastening position on the deckboard over the joist.
3. Using the Marksman Pro-X1 as a guide, pre-drill both sides of the deckboard.
4. Leaving the Marksman Pro-X1 in place, insert CAMO Hidden Fasteners in the Screw Guides and fasten.

NOTE: Due to the density of these products, it is recommended that you fasten a minimum of 1" from board ends when fastening boards to the joist.

To see an installation video for pre-drilling CAMO Hidden Fasteners with hardwoods, view the Hardwood video in the Video Gallery on www.camofasteners.com

Butt Joints: Follow deckboard manufacturers' suggested spacing and fastening installation methods. It may be necessary to block joist at the butt joint depending on the type of decking you are installing.

45° Angle Installations: Position the Marksman Pro-X1 over the edge of the high side of the joist so that the fastener remains completely in the joist when fully driven. You may find marking the deckboard where it intersects the joist useful. To do this, draw a line where they intersect and position the Marksman Pro-X1 so the middle of the Screw Guide rests over the line. Proceed to drive the screw per above instructions. Repeat this process down the length of the deckboard on both edges.

To view an installation video or for more information visit www.camofasteners.com or contact us at (800) 968-6245.