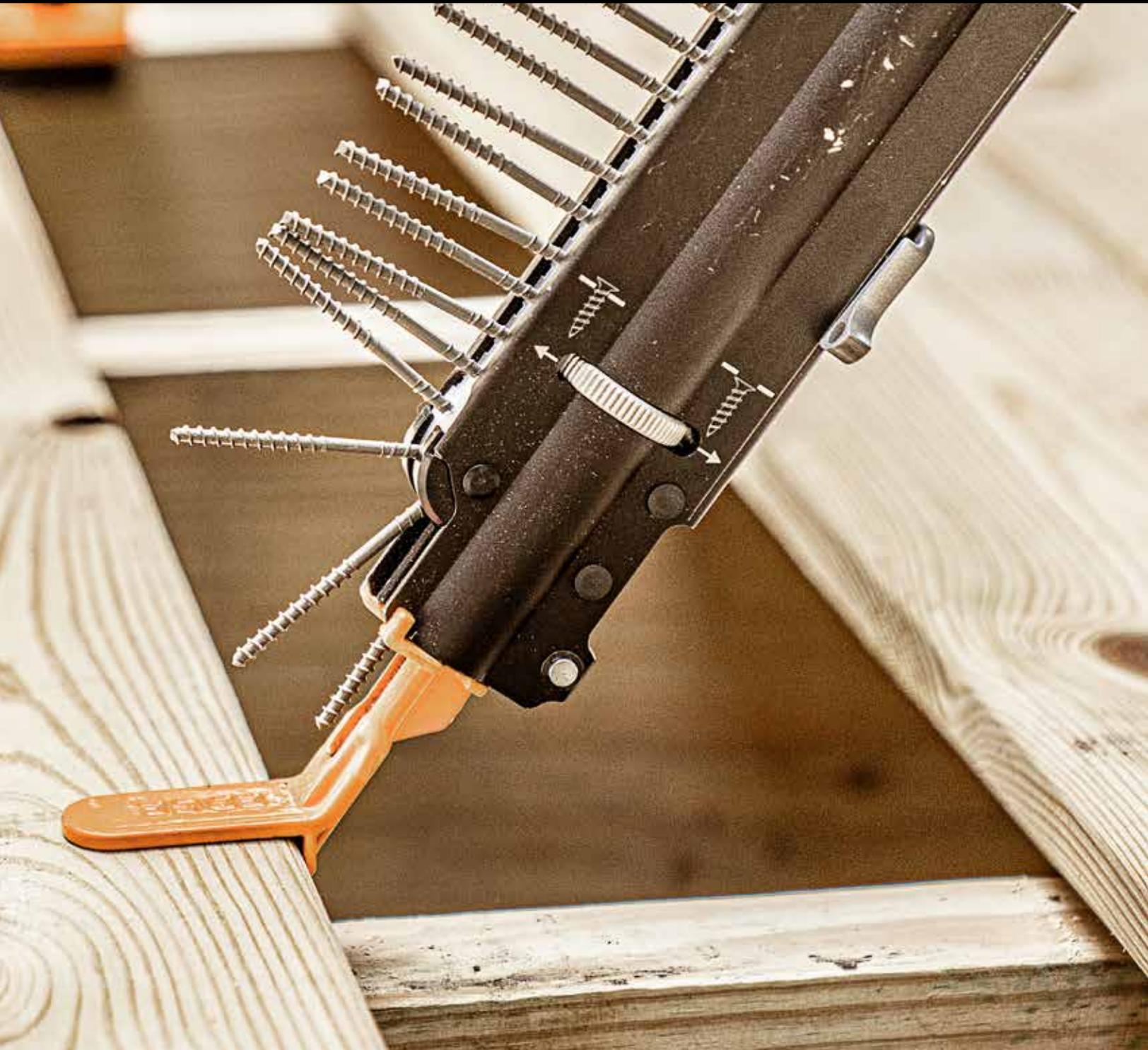


DRIVE

Stand up, save your back and knees, and save your time with the award-winning CAMO DRIVE® system. The DRIVE tool can be used to fasten almost any board* while comfortably standing up. DRIVE is for exclusive use with CAMO Collated Edge and Face Screws and CAMO Universal Deck Clips.

INTRODUCTION	19
DRIVE FOR EDGE FASTENING	20
DRIVE FOR FACE FASTENING	22
DRIVE FOR CLIP FASTENING	24



Get to know your *DRIVE* tool



SELECT A NOSE PIECE

	EDGE	CLIP	FACE
Nose Piece			
How It Works			
Compatible Board Profiles	Square Edge	Grooved	Square Edge
Compatible Deck Boards	Pressure Treated Composite PVC Cedar Redwood	Composite PVC Capped Composite* Hardwood*	Pressure Treated Composite PVC Capped Composite*
Compatible Fasteners	Collated Edge Screws	Universal Deck Clips	Collated Wood and Composite Screws

FOR EXCLUSIVE USE WITH CAMO COLLATED SCREWS



FOR EXCLUSIVE USE WITH CAMO UNIVERSAL DECK CLIPS



*We do not recommend using the DRIVE tool to Edge fasten capped composites or hardwood as these boards need to be pre-drilled. Instead, use the MARKSMAN Pro® Tool and Edge Screws (p. 32).

Setup for Edge fastening



A INSTALL T-15 DRIVER BIT



Using a bit, press the release button in the channel and remove the lower body of the tool.



Position the tool body so the large collar of the drive shaft is on a stable surface.



Pull the body of the tool back with one hand to reveal the bit holder. Continue to hold in place.



Put the T-15 bit in your other hand, pull down on the bit holder, and set the bit in place.



Pull up on the bit holder to ensure the bit is locked in.



Slide the lower tool body over the bit—it will click into position.

B INSERT EDGE NOSE PIECE



Press the release button.



Insert the Edge nose piece. It will lock into place.

C INSTALL HANDLE



Attach the handle by screwing it onto the bolt at the top of the tool. You can reverse the handle for right or left-handed use by simply loosening the bolt and reinstalling it on the other side of the tool.

D ATTACH YOUR DRILL



Make sure the drill is set in the forward position. Insert the large collar of the drive shaft into the drill chuck and tighten.



Set your drill to its highest torque setting.

E INSERT SCREW STRIP



Slide the collated screw strip into the screw strip channel.



Push the strip through the nose piece.



Slide the picker up.



Push the end of the strip into the picker teeth.

F TEST & ADJUST SCREW HEIGHT



Before fastening on the deck top, drive a few screws into a scrap piece of material and adjust the depth set dial accordingly. For Edge screws, sink them 1/8-1/4 in below the surface of the deck board.

How to Edge fasten

BEFORE YOU BEGIN

Where Edge fastening with the DRIVE isn't possible, use CAMO Premium Deck or Composite Screws. Go to page 53 for full instructions.



SCAN TO
WATCH THE
HOW-TO
VIDEO

1



POSITION NOSE PIECE

Starting on the outer edge of the board, line up the nose piece with the joist at least 1 in from the board end.

2



ENGAGE DRILL

With the nose piece flat on the surface of the board, and pressure on the DRIVE handle, run the drill at full speed, and push the driver drill down to engage the bit and screw.

3



FASTEN THE BOARD

Apply steady pressure, but do not force the screw—it will auger the surface on its own. Continue driving until the drill is fully compressed and the depth release disengages.

4



LIFT DRIVE UP

After fastening, lift up on the DRIVE tool to return your drill to starting position. The screw will automatically advance.

5



FASTEN EVERY JOIST

Install a screw at every joist on the outer edge of the board.

6



REPEAT ON OTHER SIDE OF THE BOARD

Follow the same steps to fasten the inside edge of the board.

Setup for Face fastening



A INSTALL T-20 DRIVER BIT



Using a bit, press the release button in the channel and remove the lower body of the tool.



Position the tool body so the large collar of the drive shaft is on a stable surface.



Pull the body of the tool back with one hand to reveal the bit holder. Continue to hold in place.



Put the T-20 bit in your other hand, pull down on the bit holder, and set the bit in place.



Pull up on the bit holder to fully insert the bit and then pull up on the bit to make sure it is locked in place.



Slide the lower tool body over the bit—it will click into position.

B INSERT EDGE NOSE PIECE



Press the release button.



Insert the Face nose piece. It will lock into place.

C INSTALL HANDLE



Attach the handle by screwing it onto the bolt at the top of the tool. You can reverse the handle for right or left-handed use by simply loosening the bolt and reinstalling it on the other side of the tool.

D ATTACH YOUR DRILL



Make sure the drill is set in the forward position. Insert the large collar of the drive shaft into the drill chuck and tighten.



Set your drill to its highest torque setting.

E INSERT SCREW STRIP



Slide the collated screw strip into the screw strip channel.



Push the strip through the nose piece.



Slide the picker up.



Push the end of the strip into the picker teeth.

F TEST & ADJUST SCREW HEIGHT



Before fastening on the deck top, drive a few screws into a scrap piece of material and adjust the depth set dial accordingly. For Face screws, you can drive them flush or countersink them.

How to Face fasten



SCAN TO
WATCH THE
HOW-TO
VIDEO

1



POSITION NOSE PIECE

Starting on the outer edge of the board, line up the nose piece with the joist at least 1 in from the board end and edge.

2



ENGAGE DRILL

With the nose piece flat on the surface of the board, and pressure on the DRIVE handle, run the drill at full speed, and push the driver drill down to engage the bit and screw.

3



FASTEN THE BOARD

Apply steady pressure, but do not force the screw—it will auger the surface on its own. Continue driving until the drill is fully compressed and the depth release disengages.

4



LIFT DRIVE UP

After fastening, lift up on the DRIVE tool to return your drill to starting position. The screw will automatically advance.

5



FASTEN EVERY JOIST

Install two screws at every joist until the entire board is installed.

Setup for Clip fastening



A INSTALL T-15 DRIVER BIT



Using a bit, press the release button in the channel and remove the lower body of the tool.



Position the tool body so the large collar of the drive shaft is on a stable surface.



Pull the body of the tool back with one hand to reveal the bit holder. Continue to hold in place.



Put the T-15 bit in your other hand, pull down on the bit holder, and set the bit in place.



Pull up on the bit holder to ensure the bit is locked in.



Slide the lower tool body over the bit—it will click into position.

B INSERT CLIP NOSE PIECE



Press the release button.



Insert the Clip nose piece. It will lock into place.

C INSTALL HANDLE



Attach the handle by screwing it onto the bolt at the top of the tool. You can reverse the handle for right or left-handed use by simply loosening the bolt and reinstalling it on the other side of the tool.

D ATTACH YOUR DRILL



Make sure the drill is set in the forward position. Insert the large collar of the drive shaft into the drill chuck and tighten.



If your drill has a drill and clutch mode, set it to clutch mode. Turn down torque to the lowest setting. Increase as necessary until the board is snugly fastened by the clip. **Do not overdrive.**

How to Clip fasten



BEFORE YOU BEGIN

Lay down rows of boards and clips* and hold or lock them in place.

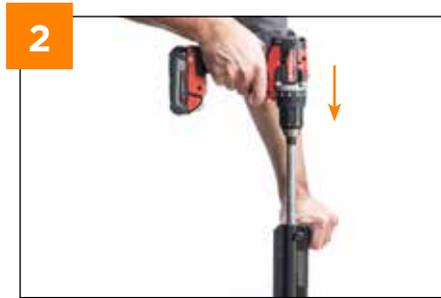


SCAN TO WATCH THE HOW-TO VIDEO



1 POSITION NOSE PIECE

Starting at the outermost board, place the Clip* nose piece over the exposed screw.



2 ENGAGE DRILL

With the nose piece flat on the surface of the board, and pressure on the DRIVE handle, run the drill at full speed, and push the driver drill down to engage the bit and screw.



3 FASTEN THE BOARD

Apply steady pressure and continue to drive until the drill clutch releases or until clip is snug. **Do not overdrive.**



4 LIFT DRIVE UP

After fastening, lift up on the DRIVE tool to return your drill to starting position.



5 FASTEN EVERY JOIST

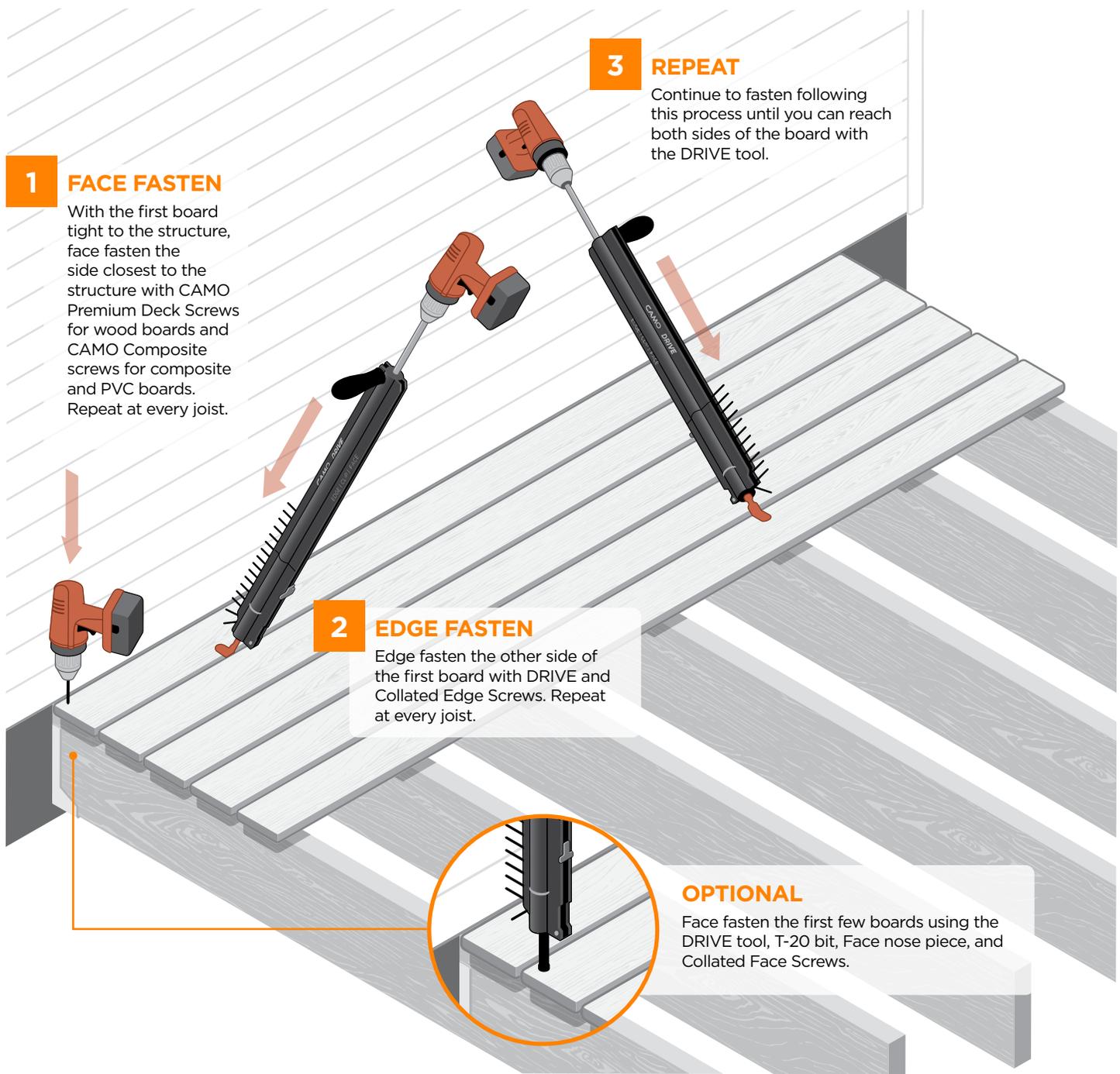
Fasten all of the remaining clips at each joist.

*FIND MORE SPECIFIC INFORMATION ABOUT EACH CLIP TYPE ON PAGES 8-17.

Edge Fastening Against a Structure

BY HAND & WITH DRIVE

Given the length of the DRIVE tool and the angle required for installation, you will not be able to Edge fasten both sides of the first few rows of boards next to a structure. In these instances, use CAMO Premium Deck or Composite Screws following the instructions below.



1 FACE FASTEN
With the first board tight to the structure, face fasten the side closest to the structure with CAMO Premium Deck Screws for wood boards and CAMO Composite screws for composite and PVC boards. Repeat at every joist.

2 EDGE FASTEN
Edge fasten the other side of the first board with DRIVE and Collated Edge Screws. Repeat at every joist.

3 REPEAT
Continue to fasten following this process until you can reach both sides of the board with the DRIVE tool.

OPTIONAL
Face fasten the first few boards using the DRIVE tool, T-20 bit, Face nose piece, and Collated Face Screws.

Best Practices for Edge Fastening

 Failure to install CAMO Edge Screws in accordance with this installation guide may affect fastener performance and void product warranty.

 CAMO Edge Screws are intended for attaching deck boards directly to deck substructure using CAMO tools. Any other use is not recommended or covered by warranty.

GUIDELINES FOR EVERY EDGE FASTENING INSTALLATION

DECK SLOPE:

Your deck surface should be sloped a minimum of 1/4 in per 12 feet of horizontal run to allow for moisture run-off.

AIRFLOW/DRAINAGE:

You must have unobstructed airflow under 50% of the deck to allow for sufficient cross-ventilation from one side to the other. This allows the underside of the deck structure to dry and prevents heat build-up. Never install a deck directly over any solid surface, such as concrete.

INSTALL DOUBLE (SISTER) JOISTS:

A double joist is required at butt joints where two board ends meet on the deck surface.

FROWN DOWN:

When you look at the wood deck board ends, you will see the lumber's growth rings. Make sure those rings are facing downward—the direction of a frown—when laid flat on the joists for fastening. This will reduce the natural tendency for the board to cup upward when it dries.

FASTENING:

- Do not fasten within 1 in of the deck board ends.
- Use two screws on every board at each joist location.
- Do not force the Edge screw. Allow the Edge screw to scrape and auger the surface with light pressure, which allows the Edge screw to enter the board without splitting.
- Never use CAMO Edge screws to attach decking to a floating substructure.

SELECTING THE RIGHT EDGE SCREW

Edge screws are available in two sizes:

- 1⁷/₈ in for boards 1 in thick or less
- 2³/₈ in for boards thicker than 1 in

Edge screws are available in PROTECH® Coating and 316 Stainless Steel.



DECK BOARD MATERIAL	RECOMMENDED CAMO EDGE SCREW
Pressure Treated Lumber	Stainless Steel or PROTECH Coated
Composite	Stainless Steel or PROTECH Coated
Capped Composite	Stainless Steel or PROTECH Coated (with partial pre-drill)
PVC	Stainless Steel Required
Cedar	Stainless Steel Required
Redwood	Stainless Steel Required
Hardwood or Imported Hardwood	Stainless Steel Required (with partial pre-drill)

Recommendations by Board



PRESSURE TREATED

Twisting, warping, cupping, and splitting are expected performance attributes with pressure treated decking in its wet/green state. Following the guidelines presented will reduce, but not eliminate, the normal behavior of pressure treated deck boards.

- **Board Spacing:** Typical pressure treated decking (moisture content above 19%) needs little to no spacing between boards at the time of installation. As the boards dry, they will shrink, creating a space naturally.
- **Installing on Sleeper Systems:** CAMO Edge Screws are not recommended for sleeper systems using treated lumber.
- **Recommended CAMO Tools:**
 - DRIVE (no gap)
 - MARKSMAN® EDGE (no gap)
 - MARKSMAN Pro®-X1 (1/16 in gap)



COMPOSITE DECKING

Air temperature variation results in the expansion and contraction of various boards, including composite. Following the guidelines presented will ensure the best installation and reduce problems associated with board movement.

- **Board Spacing:** Always review and follow your deck manufacturer's gap and spacing requirements for deck board installation. These requirements can vary by manufacturer and installation temperature and environment.
- **Installing on Sleeper Systems:** You must allow a 1-1/2 in minimum of unobstructed airflow beneath the deck on both ends in the direction that the joist runs and have at least 3/16 in board spacing.
- **Recommended CAMO Tools:**
 - MARKSMAN Pro® (3/16 in gap)
 - CLIPDRIVE™ with clips on grooved boards
 - DRIVE (with secondary 3/16 in spacer)



KDAT (KILN DRIED AFTER TREATING)

Twisting, warping, cupping, and splitting are expected performance attributes with KDAT decking. Following the guidelines presented will reduce, but not eliminate, the normal behavior of pressure treated deck boards.

- **KDAT weatherization treatment:** KDAT must always be sealed with a water repellent with UV protection before or immediately after installation.
 - Stain: Use a penetrating stain with water repellent and UV stabilizer.
 - Paint: Use an oil-based primer followed by two coats of latex (acrylic) paint.
- **Board Spacing:** Install KDAT decking with a minimum of 3/16 in spacing between boards. KDAT boards are installed in a thirsty state and will expand slightly as they are exposed to moisture.
- **Installing on Sleeper Systems:** You must allow a 1-1/2 in minimum of unobstructed airflow beneath the deck on both ends in the direction that the joist runs.
- **Recommended CAMO Tools:**
 - MARKSMAN Pro® (3/16 in gap)
 - DRIVE (with secondary 3/16 in spacer)

When you require the use of secondary spacers, use a couple of MARKSMAN tools to properly space your boards before fastening with DRIVE. They also come in handy in tight fastening situations.

Recommendations by Board



PVC DECKING

Air temperature variation results in the expansion and contraction of various boards, including PVC. Following the guidelines presented will ensure the best installation and reduce problems associated with board movement.

- **Acclimating:** Boards should be kept at ambient temperature and shaded from direct sun prior to cutting and immediate fastening.
- **Board Spacing:** Always review and follow your deck manufacturer’s gap and spacing requirements for deck board installation. These requirements can vary by manufacturer and installation temperature and environment.
- **Board Size:** Because of the potential for linear expansion and contraction from temperature variance, use shorter board lengths where possible.
 - Use a breaker board design to shorten board runs.
 - End-To-Side board spacing (Where deck board end meets fixed breaker or picture frame board) see chart below
 - For board runs 16’ and longer, face fasten at the midpoint and at both ends of the boards with color matched stainless steel composite screws. (Plug systems are acceptable)
- **Installing on Sleeper Systems::** You must allow a 1-1/2 in minimum of unobstructed airflow beneath the deck on both ends in the direction that the joist runs and have at least 3/16 in board spacing
- **Recommended CAMO Tools:**
 - MARKSMAN Pro. (3/16 in gap)
 - DRIVE (with secondary 3/16 in spacer)
 - CLIPDRIVE™ with clips for grooved boards
 - AZEK SIDELOC Guide (1/8 in gap)

END-TO-SIDE BOARD SPACING BY INSTALLATION TEMPERATURE

70 Degrees and below	71 Degrees and above
3/16" (5mm)	1/8" (3.2mm)

Troubleshooting

REMOVING COLLATED SCREWS FROM DRIVE

1



SLIDE PICKER

Slide the picker up to the nose piece to release tension.

2



REMOVE STRIP

The strip should easily pop free, or you can pull it out.

UNJAMMING COLLATED STRIPS

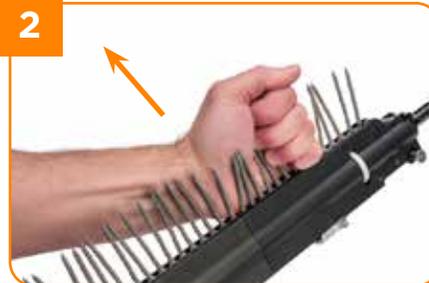
1



RELEASE STRIP

Slide picker up to release the strip from the picker.

2



BACK OUT OR TEAR STRIP

If possible, back out the strip from the nose piece. If you can't back it out, tear the strip away from the jammed fastener.

3



REMOVE NOSE PIECE

Remove the nose piece to ensure it's clear of fasteners.

4



REATTACH

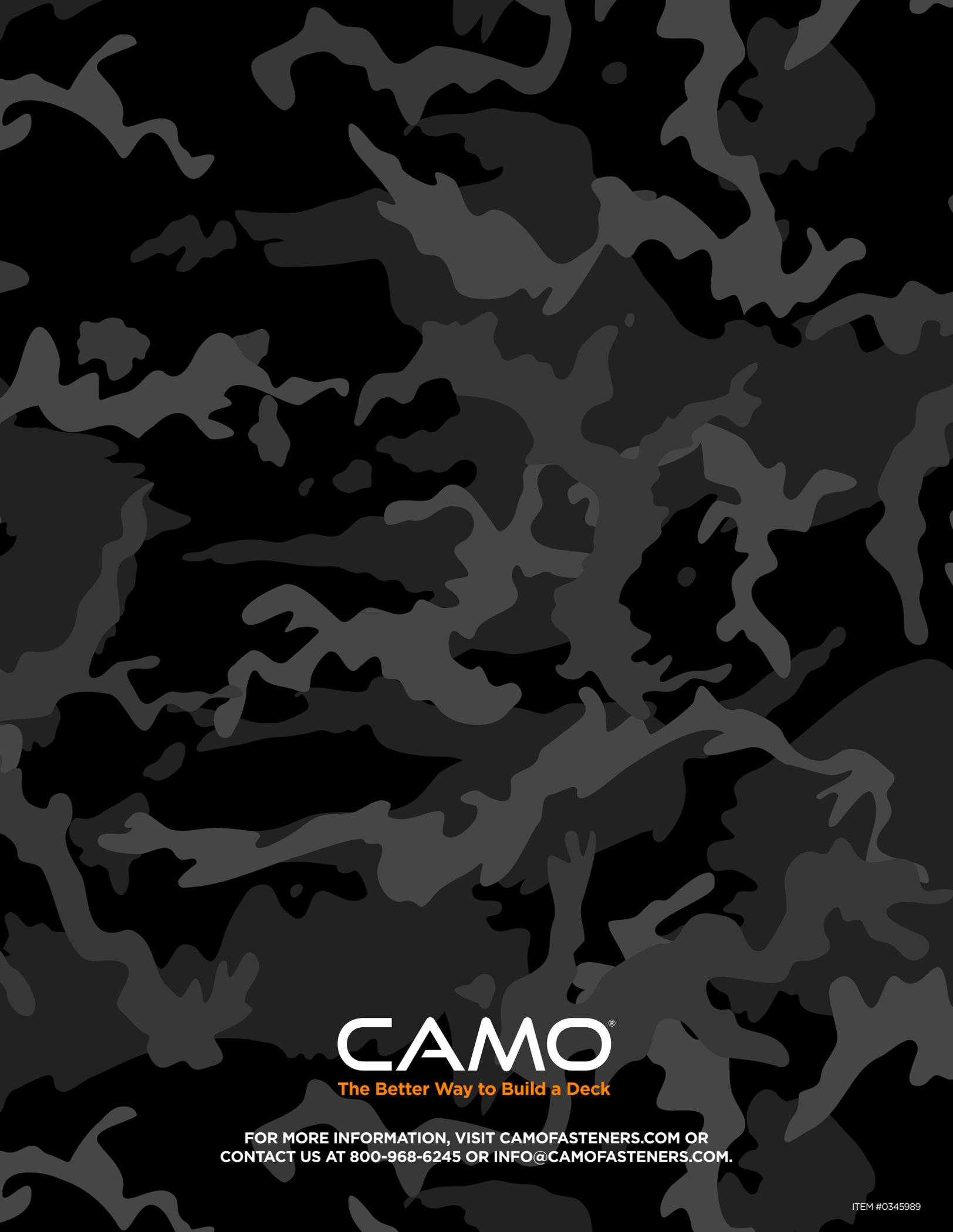
Insert the nose piece again

5



RELOAD

Load a new strip of screws.



CAMO[®]

The Better Way to Build a Deck

FOR MORE INFORMATION, VISIT CAMOFASTENERS.COM OR
CONTACT US AT 800-968-6245 OR INFO@CAMOFASTENERS.COM.

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