FASTENING METHODS AND FASTENERS

SCREW-DOWN METHODS

Screwing your Mataverde Premium Hardwood Decking to the deck substructure is the strongest method is securing your boards. The two most effective methods of installing decking screws are:

- The traditional pre-drilling, countersinking and screwing method which can be completed in two steps.
- The "Ejector Screw" method where the drilling, countersinking and screwing are performed in one quick step.

Regardless of which screw-down method you choose, the following chart is a handy guideline for estimating the proper quantity and placement of screws:

FASTENER REQUIREMENTS								
	16" On Center Supports				24" On Center Supports			
Board Size	1 x 4	1 x 6	5/4 x 4	5/4 x 6	5/4 x 4	5/4 x 6		
Stainless	5.7 screws /	5.5 screws /	5.7 screws /	3.6 screws /	4 screws /	2.6 screws /		
Steel Screws	sq. ft.	sq. ft.	sq. ft.	sq. ft.	sq. ft.	sq. ft.		
2-1/4"	2 per joist	3 per joist	2 per joist	2 per joist	2 per joist	2 per joist		

TRADITIONAL PRE-DRILLING METHOD

A craftsman using tropical hardwoods for the first time will find that a new set of installation techniques and fasteners are necessary to successfully complete a project with maximum efficiency.

The first step is to pre-drill the decking boards.

A good countersink bit is necessary to fasten the wood. Tapered bits are preferable. They provide a good "slip hole" through the tropical hardwood and a smaller tapered hole in the joist or framing.

Stainless steel screws are the only choice for fastening tropical hardwoods.

The fastener life must match the longevity of the material being used. Tropical hardwoods will significantly outlast galvanized or coated screws. Mataverde® Deck Screws are the finest grade of 305 stainless and are double waxed with a Teflon coating in order to facilitate screw penetration. We recommend #7 trim head square drive screws for either ³/₄" or 1' material. These screws use a #1 square drive driver to reduce "cam out".

Technique is just as important as the material used!

The countersink hole should be made slightly deeper than the head of the screw. This allows the head of the screw to be set slightly below the surface. When shrinkage occurs, the head will be flush or just below the surface. It is very important that the countersink bit must be held at a right angle to the wood surface. The drill bit will break if there is too much pressure at an angle

prior to finishing the drilling operation. Remember, Mataverde® products are among the hardest woods on earth.

Slow the speed of your drill down when you countersink.

Drill the hole to half depth, back the bit out and clean the drilling waste prior to finishing the hole. This will reduce breakage, extend the life of the bit and countersink as well as provide a cleaner, more consistent hole.

Go slow and steady when you install the screw.

This will prevent the screw from heating up excessively, distorting or breaking. If the screw starts to distort while driving it in, stop! Move on to the next screw. This will allow the screw to cool down before you stress it during the removal. Discard the screw and apply wax to the replacement screw threads. Drive the new screw in slowly.

What do you do if you break a screw?

Take a moment to determine what caused the breakage. Was the screw driven in too quickly? Did it hit another fastener or building hardware below the surface? Vice grips are the tool of choice for removing broken screws. Clamp the vice grips on the head or what is left of the screw on the surface and twist the screw out. If the screw breaks below the surface, drill a slightly angled hole adjacent to the broken screw. It is best to use a 1/8" drill bit to perform this rather than a tapered countersink. Wax a new screw and slowly and carefully install it next to the broken screw.

Mataverde® Deck Screws and Accessories	
Titebond Adhesive	29 oz
1" Screws (Sub rail to Handrail)	316/box
1-1/4" Screws (Sub rail to Baluster)	243/box
1-5/8" Screws (Sub rail to Post)	189/box
2-1/4" #7 Screws 1 lb	138/box
2-1/4" #7 Screws 3 lb	414/box
2-1/4" #7 Screws 5 lb	690/box
2-1/4" #7 Screws 10 lb	1380/box
3" x #10 Screws	1500/box
Insert Bit	each
5/32 Countersink	each
5/32 Tapered Bit	each
3/8" Mataverde Plugs	100/bag

Mataverde[®] Deck Screws 305 stainless steel screws are the superior screw for tropical dack woods, with #1 square drive on trim head screws and #2 square drive on bugie head screws that resists cam out, and will not rust or turn black on deck face.

Mataverde® Deck Screws are available as follows:



[estimated coverage: IQO square feet]

#7 X 2 1/4" 350 pieces per box packaged in plastic carrying case

#7 X 2 1/4" 3009 pieces per boz

1509 pieces per box





EJECTOR SCREW METHOD

A recent development in screw technology has created the Muro "Ejector Screw". This patented screw has a drill point, a coarse lower thread, a finer upper thread and a countersink head. The drill point eliminates the need for pre-drilling. The coarse thread drives the screw home. The finer thread ejects the drilling waste. The countersink head eliminates the need for countersinking. This amazing new screw performs all four steps in one smooth motion.



Whether you are a homeowner or a construction professional the Muro Ejector Screw will save you time and wear and tear on your body. In addition to reducing the stress, strain and fatigue on your shoulders, arms, knees and lower back muscles. The Muro Speed Driver can accurately apply over 1,000 screws per hour. That makes it about five times faster than conventional drilling and screwing techniques.

Muro Products



Muro Speed Driver Gun (*includes 10 bits)	each
Muro Ultra Driver Gun (*includes 10 bits)	each
2" Muro Ejector Screws	1800/box
2" Muro Ejector Screws	150/coil
2-1/2" Muro Ejector Screws	900/box
2-1/2" Muro Ejector Screws	150/coil
3" Muro Ejector Screws	900/box
3" Muro Ejector Screws	150/coil
Muro Square Drive Bits	10/CT



Contact your Mataverde Representative for more information or additional items











If you prefer a deck where the fasteners are not visible, you may want to consider using a Mataverde® Premium Hardwood Decking product that is "pre-grooved" or "slotted" on the sides. Rather than drilling or screwing through the face of the deck boards, the hidden fasteners are screwed on a 45 degree angle though the deck boards into the joists. The next slotted deck board is then seated onto the fastener and the fastening process is repeated.

Hidden Fasteners	
EB-TY® Deck Fastening System W/O Screws	100/box
EB-TY® Deck Fastening System W/O Screws	500/box
EB-TY® Deck Fastening System W/Screws	100/box
EB-TY® Deck Fastening System W/Screws	500/box
22-1/2" Powder Coated Bracket for 4/4 material DM100-10	10/box
22-1/2" Powder Coated Bracket for 4/4 material DM100-100	100/box
22-1/2" Powder Coated Bracket for 5/4 material DM125-10	10/box
22-1/2" Powder Coated Bracket for 5/4 material DM125-100	100/box



If you don't have the inclination to cut slots into your decking boards, all Mataverde species are available Pre-Grooved. This continuous groove makes installation much quicker whether you are installing your deck boards square or on a diagonal.



