



ECONOMY ♦ EXCELLENCE ♦ ETHICS

MERINO PLYMEISTER TECHNICAL GUIDE



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1. INTRODUCTION

Merino Ply Meister is a high-quality product recommended for diverse interior applications.

By combining a superior PU+ coating with the sheer strength of high-quality plywood, Merino has crafted a product that will last long and create an amazing look.

2. PRE-FABRICATION

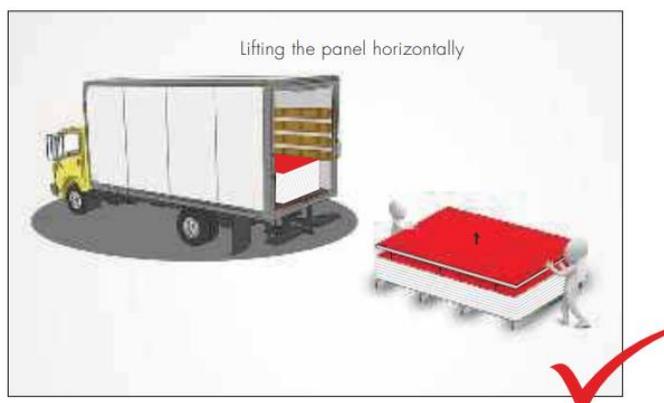
Ply Meister panels have a Plywood core, which combined with the innovative manufacturing technology allows high performance with exceptional looks. To ensure the product maintains its décor and performance, please follow the pre-fabrication guidelines.

2.1 TRANSPORT, STORAGE & HANDLING

Key points to consider-

- **TRANSPORT & HANDLING**

- Ply Meister panels are supplied in stacks of limited quantity. Please don't exceed the stacking number as it may lead to stress.
- The panels must be handled carefully. They should never come in contact with the ground. Ensure any pallets used are clean and structurally sound.



- When loading/unloading Ply Meister panels, ensure the panels are lifted cleanly and don't scrape or slide over each other.

- **STORAGE**

- When stacking Ply Meister sheets for storage, place a protective laminate over the top and under the bottom panel. Usually the stacking of panels in supply of up to 10 boards is done with one sheet of 2mm or thicker laminate each at the bottom and similar laminate on the top. The top cover in all cases should be placed with some additional weight at appropriate places and in uniform manner to help prevent any warping
- Ply Meister panels should be absolutely parallel to each other in the rack and should not be stored in contact with walls or the ground.

- Stored stock should be rotated such that older sheets are used first. The place of storage should be well ventilated and protected from moisture.

3. FABRICATION

Ply Meister panels are available in both gloss and matt surfaces and thus find applications in wide scenarios. By following the recommended fabrication guidelines, fabricators can design a surface that is attractive and long lasting.

3.1 CUTTING

Merino recommends cutting Ply Meister panels to size using CNC cutting process. The key factors to success in getting a good CNC cut are selecting the right bit, feed speed (or cutting speed) and spindle/router RPM.

During the process of CNC When selecting the CNC bit, ensure the chip load is not high, as it can lead to a poor surface finish and even damage the bit. When processing Ply Meister panels, Merino recommends using compression or spiral down-cut bits. Adjust the feed speed as per the number of flutes in the bit.

Merino recommends trying the following settings and adjusting accordingly as per the quality of the cut and tool productivity-

- a. Bit –Sharp, solid carbide tools
- b. Feed Speed – Moderate feed speed of approx 15 -20 metres / min.
- c. Spindle RPM – High cutting spindle speed of approx 18K rpm

For very thick panels, cutting in multiple passes is recommended.

Another option for cutting is the beam Saw. When using beam saw to cut Ply Meister Panels, please ensure that blade used is sharp and the following guidelines are kept in mind-

- a. Tool - preferably Sharp solid carbide tipped blades with 3 to 5 Teeth per cm
- b. Only fresh or grinded tools to be used
- c. Speed -
 - i. Main Saw - 4000 rpm
 - ii. Feed - 25 mts / min
- d. Always use scourer blade to avoid chipping at the back side of the panel.

3.2 CUT-OUTS, HOLES AND ADDING FASTENERS

CNC cutting doesn't allow for square corners, and attempting to create square-cut inside corners using other tools may cause stress cracking. All internal corners and cut-outs should be rounded as far as possible.

3.3 DRILLING

Some guidelines for drilling into Ply Meister panels-

- Use steel or carbide based drills. While TCT bits may prove to be economical due to their long life, Rectified HSS bits are sharper. Longer tool life helps improve reproducibility while sharper blades improve the quality of the cuts.
- Drill bits without a centering point or pilot point are preferred when drilling small holes. For larger holes, specialized tools with a centering point such as hole cutters, milling cutters are recommended.
- Use a tipping angle of 100 to 120 degrees
- Adjust the speed to avoid overheating of the panel. By controlling the feed speed of the drill, the panel is less likely to be damaged. A drill feed speed of 0.03-0.05mm per revolution is recommended.
- Edges of the hole should be smooth and cleaned after drilling.
- When working on a project that demands high reproducibility, drilling templates should be used. For such mass production scenarios, reproducibility may be the most important factor during machining and fabrication. Merino recommends using a stationary drilling machine with an automatic feed.

4. POST FABRICATION

Once the fabrication of Ply Meister Panels is completed, it is safe to remove the protective film. Please ensure the film doesn't stay on the surface beyond a few months as it may leave a residue on the surface that can become hard to remove with time.

5. CARE & MAINTENANCE

Ply Meister panels require minimal maintenance and care to help retain their look compared to most decorative surfacing materials.

- Care

When taken care of, Ply Meister panels will last for a long time. Protect the surface from any heat sources. Do not use sharp objects on the decorative surface.

- Cleaning

For High Gloss Ply Meister panels, a simple wipe with a moist cloth is recommended for regular cleaning of stains and marks.

For High Matt Ply Meister panels, first wipe the surface with a dry microfiber cloth to remove any dust particles, and if required, follow up by wiping with a moist cloth.

For persistent stains like coffee or tea, use a mild cleaner/detergent followed by wiping with a clean cloth. Do not use brushes or scourers at any time, especially on High Matte finish.