

WORKING WITH PANELS

with Rob Matejka

Panels are a great mural making option. They are portable, can be cut into shapes, can be worked on in the comforts of a controlled environment, & can be stored before being installed anywhere possible.

Aside from the many types & grades of plywood, etc., the best, practical, & most commonly used panels are MDO (“medium density overlay” - an exterior type of plywood pressed with weather-resistant resin) & HARDBOARD (masonite).

HARDBOARD is thin, very light, fragile, & cost effective at less than \$10.00 per 8’ X 4’ sheet, but not recommended for exterior use.

MDO is designed for exterior use, will initially substantially withstand wet weather even without a sealer, is heavy (approx. 40 lbs. each), durable, most often used “good one side” in 1/2 inch thickness, & costs about \$60.00 per 8’ X 4’ sheet.

When cost & weight are an issue then HARDBOARD is a legitimate interior option, but for all exterior & more hardy applications MDO is recommended.

Both HARDBOARD & MDO can be cut with jigsaws, circular saws, table saws, scroll saws, & coping saws - both can then be prepared, painted, & treated for instillation. Though the rest of this handout is applicable to both HARDBOARD & MDO, we will focus on MDO (for exterior application) because it is a leading standard, & refer to them all as panels.

CUTTING PANELS

When cutting panels it is always advisable to work with 1-3 assistants - depending on panel size & level of cutting difficulty. Assistants will help spot/hold the panel so nothing falls & breaks, & help keep an eye out for safety hazards (any unwanted cutting of; fresh, supports, electrical cords, etc.) - this way the person cutting can be more focused on cutting accurately & safely. Sometimes using clamps to hold panels in place is advisable when cutting panels - especially when enough assistants aren’t available.

SANDING

The amount of sanding required is subjective to individual standard & preference, but once panels are cut it is important to sand ALL edges & corners to some degree, with something in the range of 120 grit sandpaper. Seams (where one panel meets another) should be sanded less to not emphasize/highlight the seams, the back sides of panels (the side that will face the wall) can be sanded less if preferred, & front sides plus corners of panels should/could be sanded/rounded more.

Without sanding, the panel edges are unsafe to handle - posing serious “paper cut” risks with very sharp edges - while unrounded edges/corners are more susceptible to damage in transport & can also inflict injury.

Basically if one can't imagine running their finger along a panel edge, or pressing their finger on a corner without risking injury then the panel has not been sanded enough.

Additionally, for extra assurance that the base coat/primer will best adhere to the panel, it is always an extra worthwhile investment to give the "good side" a general once over "wax on, wax off" sanding to scuff up the relatively smooth surface.

PAINTING, ETC.

When priming panels, make sure to prime the edges as well - covering/sealing the edges completely to help protect against moisture seeping in & compromising the life span of the project. When painting (artist acrylic or exterior latex) also make sure to paint the edges. Any varnish/topcoat (Varathane) should cover the back side of the panel first, then the edges, then the front side of the panels, & finally the edges **again**.

****Any layer of paint/product/sealer that is used to create the artwork, & used to cover the edges as well, helps increase the panels' weather-resistance.****

INSTALLATION

Panel installation needs to be done with hardware specific/suitable for the installation site - brick/concrete, drywall, wood, etc. all have their specific installation standards. For example - wood screws, plugs, & TAPCON screws.

For exterior panel installation into brick/concrete TAPCON screws are most often used as they are up to safety standards, do not require plugs, & are galvanized (top coated with zinc to prevent rusting). Really small/light pieces can be installed without drilling holes by using CONSTRUCTION ADHESIVE (No Nails, etc.).

****If drilling holes through top-coated panels for the purpose of installation an extra precaution would be to bring along some of the top-coat & a brush to brush over the screws/holes with.****