

ArtGo Logistics



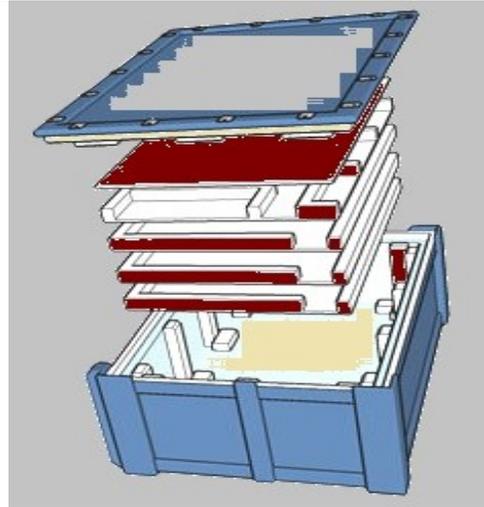
The Crating Department should offer packing solutions for art and antiquities of every medium.

- Each crate to be designed from the ground up and built from scratch is tailored to the specific requirements for the safety and security of the cargo.
- All plywood is chemically treated and lumber is heat-treated to comply with international guidelines and restrictions, and to ensure a pest-free container.

The outer shells of crates can be categorized into four basic classes:

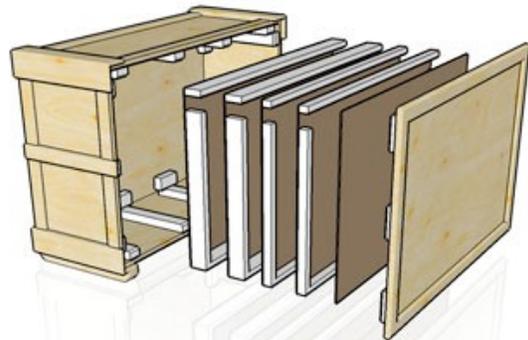
Travel Crates

- For traveling shows, high-end artworks, long-term storage
- shell constructed of MDO, with plastic laminate under each face for a dual moisture barrier
- interior lined with EPS thermal insulation
- exterior painted, and lacquered for moisture resistance and stenciled identification
- gasket and bolt fastened for air-tight sealing
- no exposure to wood
- EPS can be lined with Barrier Film for insulation from gasses and pollutants
- interior seams are caulked



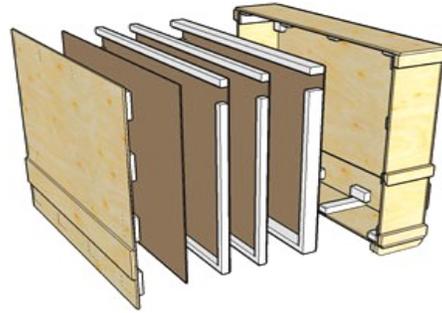
B-Crates (Two-Way Crates)

- combining the A-crate's structural strength and versatility with reduced production costs where practical, these adaptable crates meet the needs of clients on a budget
- shell constructed of battened BCX
- interior packing can be equal in quality to a travel crate or scaled back as safety of the object and budget permit
- exterior fit and finish upgrades such as bolt closures are also available for these crates



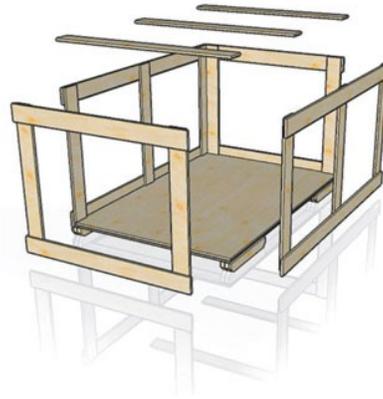
**C-Crates
(One-Way Crates)**

- suited for economical one-way transport and short-term storage
- extra thick battens placed only at corners ensure sturdy construction and reduce shipping volume overall
- strong enough for international transport



**Slat Crates
(Skeleton Crates)**

- recommended for sturdy items where a cardboard box is not sufficient and full crating not needed
- can be skinned with cardboard or wrapped in plastic
- suited for non-freight shipment of items such as bronze sculptures and oversized solid pieces



MDO is exterior-type plywood. It is overlaid (heat-fused) with a smooth sheet of resin on one or both surfaces. These surfaces can be painted and function as a water-resistant coating.

EPS Expanded Polystyrene Foam

PROCESSES:

Barrier Films

Wood emits volatile organic compounds that can harm some materials (such as metals); direct contact with wood can also stain objects. To prevent these problems, it is generally preferable to use materials other than wood when making supports or containers for artifacts. However, in many instances wood is still chosen because it is strong, rigid, readily available, easily worked, and relatively inexpensive. If wood is used, it should be sealed to prevent unnecessary damage.

Wood can be easily (although sometimes inefficiently) sealed with paints. However, oil-based paints are not recommended because they emit high levels of organic acids, and they should certainly never be used inside enclosures (e.g. display cases or storage cabinets). Even recommended paints, which include emulsion paints (i.e. latex), two-part epoxies, two-part urethanes, and shellacs, emit some harmful organic compounds. When these are used inside enclosures, they should be allowed to dry for at least 4 weeks to allow all the possible harmful compounds to evaporate.

As an alternative to painting wood, plastic-laminated aluminum foil can be applied as a seal or barrier. Plastic-laminated aluminum foil is one of the best vapor or gas barriers on the market and can be purchased from various distributors. One type commonly used by conservators is Marvelseal 360, an aluminum foil coated with nylon on one side and polyethylene film on the other. The nylon side is usually shinier than the polyethylene side and often has the brand name printed on it. Plastic-laminated aluminum foils can be adhered to wood with heat. Place the polyethylene side adjacent to the surface of the wood and then apply heat with an iron or hot



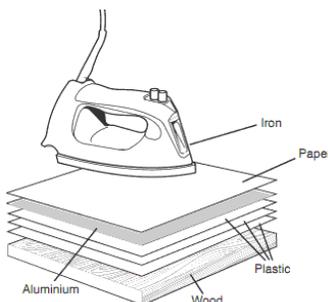
spatula. Because polyethylene melts at a fairly low temperature, about 170°C (335°F), domestic irons set to the "permanent press" setting are usually adequate to fuse the polyethylene to the surface beneath. However, the heat must be applied evenly to the entire surface to ensure proper melting and good adhesion. Any holes or tears can easily be repaired by ironing a patch of the same aluminum barrier foil over the damaged area.

Another option to attach the plastic-laminated aluminum foil to wood is double-sided tape. Apply the tape in a grid pattern to ensure that the foil is attached uniformly over the entire surface area.

A panel covered with plastic-laminated aluminum foil, polyester batting, and fabric. Once applied, the surface of the plastic-laminated aluminum foil is susceptible to scratches. However, because the surface is usually covered with layers of padding and fabric or mat board, this does not generally cause problems.

Apply an aluminum foil barrier with an iron, paper, aluminum, plastic, and wood.

A low-cost alternative to commercial products such as Marvel seal can be created using aluminum foil and polyethylene grocery bags, garbage bags, or sheeting



To protect the aluminum foil from tearing when assembling the barrier, insert a paper sheet between the iron and the foil. If the plastic sheet is thin, up to 3 layers may be needed. Plain aluminum foil is even more susceptible to scratches than commercial products that have a nylon covering, so special care is important. However, if scratches or perforations do occur, they can be easily repaired by ironing on a patch of the same aluminum foil and polyethylene.

Look for the triangle recycling logo with the letters LDPE or the numeral 4 to ensure the plastic is low-density polyethylene)



PREPARING THE CONSIGNMENT

Packing

- All crate contents are isolated, immobilized and surrounded with ample shock absorption material
- an appropriate packing strategy is developed for each artwork from a palette of industry standard features including:
 - inner boxes
 - sliding trays
 - guillotines
 - travel frames
 - foam beds
 - cavity packs
 - braces
 - buckled straps
 - webbing
 - welled trays
 - lined bumpers
 - soft packing
 - loose fill

Corner Protectors



Bubble Wrap



Cellulose Wadding



Material Sources:

Expanded Polystyrene Foam (EPS): <http://www.foam-control.com/>

Corner Protectors: http://www.uline.com/BL_2160/Corrugated-Corner-Protectors

Bubble Wrap: <http://www.uline.com/CustomStaticBubbleRolls.htm>

Protectors: http://www.uline.com/BL_1906/Cellulose-Wadding-Versa-Pak-White