



SMART Sintra Boards

Sintra is a lightweight yet rigid board of moderately expanded closed-cell polyvinyl chloride (PVC) extruded in a homogeneous sheet with a low gloss matte finish.

Features

- Lightweight yet rigid and durable
- Easily formed into just about any shape imaginable using wood and foam board fabrication techniques
- Heat formable and chemical resistant
- Superior dent and scratch resistance

Applications:

M	Pop Displays
M	Exhibits & Kiosks
L	Framing
L	Framing - Archival
M	Signage - Interior
M	Signage - Exterior
	Signage - Structural

M - Medium-term application life
L - Long-term application life

Fabrications:

1	Mounting
	Repositioning Vinyl
	Direct Digital Printing
	Direct Screen printing
	Painting
2	Knife Cutting
	Saw Cutting
	Routing
3	Die Cutting
	Embossing
	Forming Curves
	Framing

1 - Cold mounting techniques only
2 - 1-3 mm may be cut with a knife or blade
3 - May be die cut in gauges up to 5 mm or 3/16"

Available Sizes

Black Sintra Board 3.0mm		4 ft x 8 ft
1.5mm	CLASS A	4 ft x 10 ft
		4 ft x 8 ft
	CLASS B	4 ft x 6 ft
		4 ft x 8 ft
	CLASS C	4 ft x 10 ft
		4 ft x 8 ft
		4 ft x 5 ft
2.0mm	CLASS A	4 ft x 8 ft
	CLASS B	4 ft x 8 ft
3.0mm	CLASS A	4 ft x 10 ft
		4 ft x 8 ft
	CLASS B	3 ft x 6 ft
		4 ft x 6 ft
		4 ft x 8 ft
		4 ft x 10 ft
		5 ft x 10 ft
	CLASS C	4 ft x 8 ft
		4 ft x 6 ft
		4 ft x 5 ft
		3 ft x 5ft
5.0mm	CLASS A	4 ft x 6 ft
		4 ft x 8 ft
	CLASS B	4 ft x 8 ft
6.0mm	CLASS A	4 ft x 8 ft

FREQUENTLY ASKED QUESTIONS:

How is it used?

Typical applications include screen-printing, signage, exhibits, displays, and photo mounting as well as some original equipment manufacturing.

How do I cut Sintra?

Up to 3mm thick can easily be cut with a knife. Thicker sheets should be cut with hand circular or saber saws. Sintra also can be shaped easily using a router.

Can it be die-cut?

Flat pieces of Sintra can be die cut with steel rule dies in the same way as other solid plastics. Best results are obtained using thin rules with long faceted bevels.

How do I bond Sintra to itself?

For bonding Sintra to itself, the same solvent type adhesives that are used for rigid PVC Pipes give excellent results.

How do I bond Sintra to other materials?

For joining Sintra to other substrates, solvent-dispersed adhesives formulated for PVC bonding may be used, as can most neoprene-based adhesives.

What happens to Sintra when used outside?

- Sintra will change colors when used outdoors. The amount of color change depends on the original color, UV levels, and other exposure conditions. This is true of all materials that use organic pigments.
- Sintra expands and contracts with temperature changes. This must be taken into account when mounting large sheets of Sintra outdoors.
- Sintra, like most plastic materials, has less impact resistance in cold conditions. Thinner gauges have less impact resistance than thicker ones. For this reason 6mm should be the minimum gauge used for outdoor signage.

Why must I keep Sintra under 150F?

Foamed extruded plastics contain internal stresses. These stresses relieve themselves at elevated temperatures. If Sintra is allowed to reach 150F it will no longer remain flat and will warp and bow.

Can I paint Sintra?

Sintra can be easily painted using PVC compatible paints. Recommended paints include: vinyls, acrylic lacquers, and two-component polyurethanes. The use of primers is not normally required. The surface should be cleaned with isopropyl alcohol.

How can I prepare the edges before painting?

When Sintra is cut to size during fabrication, edge cells are exposed. Smooth edges can be achieved with a file, plane, or sandpaper. The use of a PVC solvent will chemically collapse the cells or prior to painting, a filler such as spot putty will produce an edge similar to the surface texture of the sheet.

What photo mounting methods can be used with Sintra?

Since Sintra will warp at temperatures about 150F it cannot be dry or hot mounted. Colds mounting in cold roller laminators, cold vacuum mounting, or hand lamination all give excellent results.

Can Sintra be screen-printed?

Screen-printing is easily accomplished with Sintra due to its excellent surface finish. Vinyl and vinyl/acrylic, solvent based inks are compatible with Sintra. Screen-printing inks should air dry rather than be heat dried. Temperatures above 150F may cause warping of the Sintra. UV inks can also be used but care should be taken to keep from overcooking the ink and possibly making the printed Sintra brittle.

What are the fire characteristics of Sintra?

- Sintra material will not support combustion by itself. It requires a flame source to burn. Sintra is a self-extinguishing material and will not continue to burn after the flame source is removed.
- All gauges of Sintra pass the criteria of UL 94V-0, and UL 94-5V. These are industry standard fire tests.
- Thinner gauges of Sintra, 1-4mm, also pass ASTM E-84 which is also known as the UL Steiner Tunner Test.

Can Sintra be heat bent and thermoformed?

Sintra is a thermoplastic that can be heated and bent or formed into various shapes. Once the material cools it retains the shape