

3A COMPOSITES



SINTRA®

EXPANDED PVC BOARDS

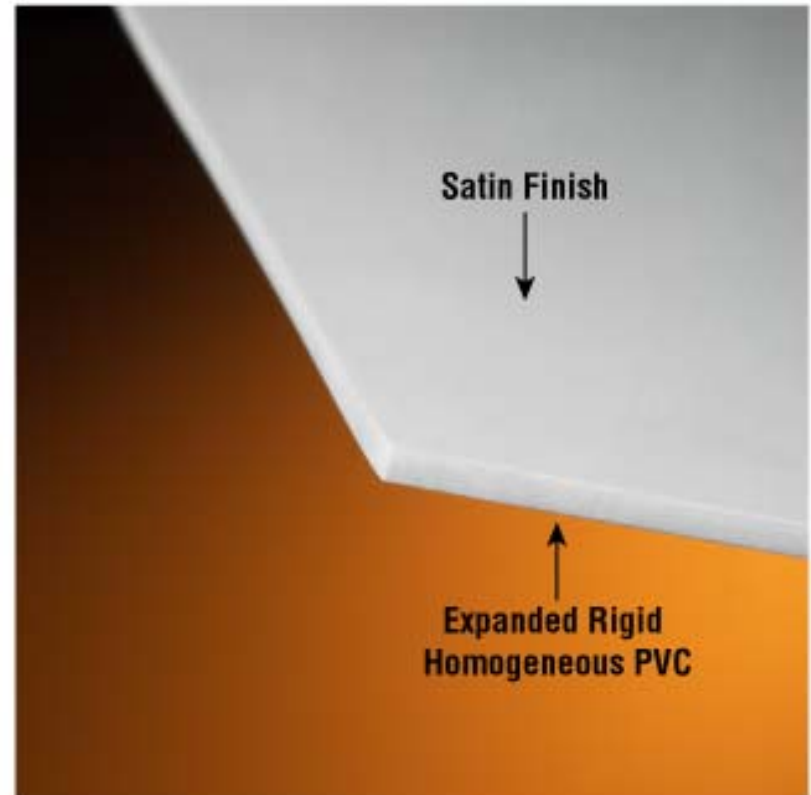
Sales Training Presentation by 3A Composites
Level 201



- Welcome to the Sales Training Presentation by 3A Composites
- In this 201 level regarding the Sintra[®] expanded PVC board family, you will learn the answers to the most frequently asked questions about this material.
- These questions refer to Sintra's general fabrication techniques. Our Sintra Fabrication Manual should be referred to for more details.

What is Sintra®?

- Sintra® is a lightweight but rigid board of moderately expanded rigid closed-cell polyvinyl chloride (PVC).
- Sintra is a homogenous sheet with an integral skin that has a low gloss matte finish.
- Sintra is made by extruding PVC resin in a continuous process to form sheets.
- It contains no coatings or liners



How can you fabricate Sintra?

- Please refer to the Sintra® Fabrication Guide over the next few slides

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

- What photo mounting methods can be used with Sintra®?
 - Cold mounting in cold roller laminators
 - Cold vacuum mounting
 - Hand lamination
 - Since Sintra will warp at temperatures about 150F, it cannot be dry or hot mounted

- How do I bond Sintra to itself?
 - For bonding Sintra to itself, the same solvent type adhesives that are used for rigid PVC's 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.

- Can you reposition vinyl on Sintra®?
 - Yes, if you make a mistake while mounting vinyl on Sintra, you can remove it and reposition the graphics a second time without harming the substrate's surface

- Can Sintra[®] be direct digital printed?
 - Yes, Sintra's surface provides great ink adhesion even at fast printing speeds on flatbed digital printers

- 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 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.

■ Can I paint Sintra®?

- Sintra can be easily painted using PVC compatible paints
- The use of primers is not normally required
- The surface should be cleaned with isopropyl alcohol
- Recommended paints include
 - Vinyl
 - Acrylic lacquers
 - Two-component polyurethanes

■ 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

- How do I cut Sintra®?
 - Sintra up to 3mm thick can easily be cut with a knife.
 - Thicker sheets should be cut with a hand, circular, or saber saws
 - Sintra also can be shaped easily using a router.
- Can Sintra be die-cut?
 - Yes, in gauges up to 5 mm or 3/16”

Embossing, Forming Curves, and Framing

- Can Sintra[®] be embossed?
 - No
- Can Sintra be heat bent and thermoformed?
 - Yes, by using a simple heat gun. Once the material cools it retains the shape it was formed into.
- Sintra can also be used in Framing if desired

- White Sintra® is ok to use outdoors
- Colored 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.
- 6mm should be the minimum gauge used for outdoor signage, as thinner gauges have less impact resistance than thicker ones

- 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.
- What does Sintra weigh in comparison to solid PVC?
 - Sintra is half the weight of solid PVC in gauges of 1-6mm. (0.700g/cm³) Sintra is slightly over 1/3 the weight of solid PVC in 10, 13, & 19mm gauges. (0.500g/cm³)
- 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.

Sintra® Selling Points

- It is the “Trusted Brand Leader”
- It is the Brightest, Whitest expanded PVC available
- It is lightweight, rigid and durable
- It does not delaminate as it is homogeneous
- Can be heat formed into shapes
- Can be easily fabricated using both foam board and wood fabrication techniques
- Offered in a variety of stock colors, gauges and sizes, and also available in custom runs

THE END

For more detailed information on fabricating this product you can refer to the

Sintra® Fabrication Manual available on-line at:

www.SintraUSA.com

or by calling

800.626.3365.