



High Quality Custom Displays



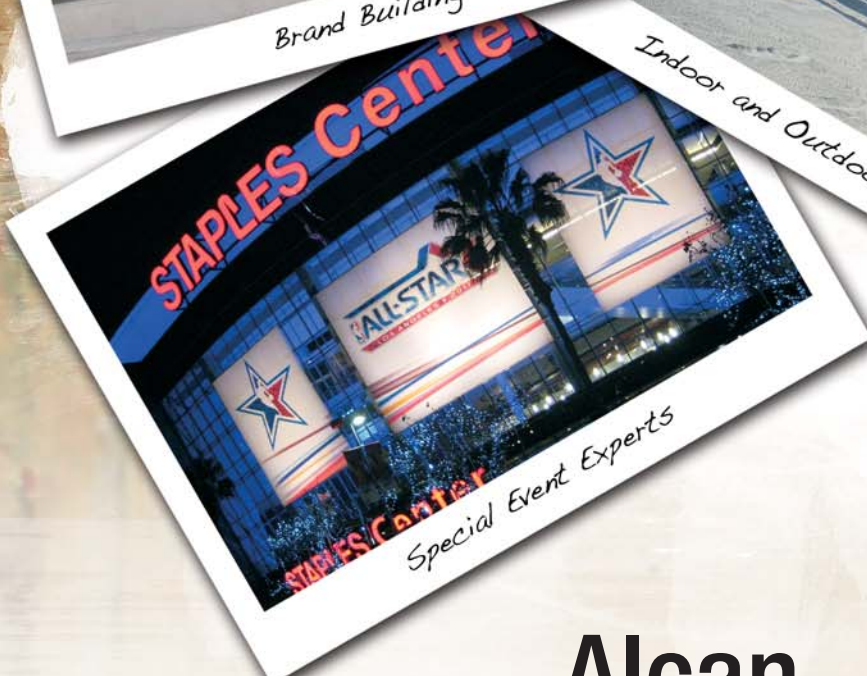
Say it Big!



Brand Building



Indoor and Outdoor Banners



Special Event Experts

Alcan – Sintra Fire Certificate



3. High Oxygen Index — ASTM D-2863 measures the percent of oxygen in an oxygen/nitrogen mixture which barely supports burning. The oxygen content of the earth's atmosphere is about 21%. Materials with oxygen index values of approximately 26 and above should not continue burning after the flame source is removed because the normal atmospheric oxygen content is insufficient to support combustion. The oxygen index values of Sintra material is 46–49%.
4. No "Flaming Drip" — some burning polymers produce molten flaming drips which contribute to flame spread. Sintra material produces a form-retaining carbonaceous char that does not drip.

UL 1975

Fire Test for Foamed Plastics Used for Decorative Purposes

The test method determines the ability of foamed plastics and products containing foamed plastics used for decorative purposes to resist rapid heat release when subjected to a flaming ignition source. The method is intended to products used for the following decorative purposes:

- Typical open-ceiling, portable exhibit booth constructions incorporating manufactured panels.
- Individual, manufactured decorative objects such as, but not limited to, mannequins, murals, and signs.
- Theater, motion picture, and television stage settings, with or without horizontal projections.

THICKNESS	DENSITY (lbs/ft ³)	MAX. INST. RHR (kW)
1 mm	44	38
6 mm	44	42
10 mm	28	80
19 mm	28	62

Alcan Composites USA Inc.

P.O. Box 507 • 208 W. 5th Street • Benton, KY 42025-0507
800-382-6445 • 270-527-4200 • Fax 270-527-1552

www.alcancompositesusa.com

A member of the ALCAN group of companies



UL 94 Standard for Flammability of Plastic Materials for Parts in Devices and Appliances

The test method is intended to characterize flame propagation of a material and its tendency to char. The test also indicates the tendency of the material to produce flaming particles which could ignite a cotton indicator located below the sample. It is used to determine a material's tendency either to extinguish or to spread the flame once the specimen has been ignited.

October 19, 2005

There are various flame classifications specified in UL 94 that are assigned to materials based on the results of these bench top tests. The classifications are used to distinguish a material's burning characteristics.

UL-94 Classification	Sintra Gauges
V-0	1 – 19 mm
5VA	2 – 19 mm
5VB	1 mm

These classifications show that the material was tested in a vertical position and self-extinguished within a specified time after the ignition source was removed. These classifications also indicate that the material dripped no flaming particle that ignited a cotton indicator located below the sample. A material with a 5VA or 5VB classification is subjected to a flame ignition source that is approximately five times more severe than that used in the V-0 classification.

ASTM E-84 (UL Steiner Tunnel Test) Standard Test Method for Surface Burning Characteristics of Building Materials

The test method uses a sample of material 20-24" wide by 24' long that fits under the roof of a 25' long tunnel forming the ceiling of the tunnel. Gas burners on one end of the tunnel impinge a flame on 7 square feet of the test specimen. The progression of the flame is observed and smoke development is measured by a photometer.



Page 4
October 19, 2005



The flame propagation is plotted as distance vs. time. The photometer data is plotted as percent of absorption vs. time. The flame spread and smoke development indexes are then calculated and reported.

Sintra Material Performance - ASTM E-84

Thickness	Flame Spread	Smoke Development
2mm	20	380
3mm	20	315
4mm	20	425
5mm	20	>450
6mm	20	>450
10mm	25	>450
13mm	>25	>450
19mm	>25	>450