LSP Healthcare Construction Systems

Product Data

Bio/CR-2 Hygienic Panel

(Walls and Ceilings)

General Description:

Bio/CR-2 panels are part of the LSP Healthcare Construction Systems product line. The panels used in the Bio/CR-2 system are 6 mm thick and are an aggregate of components made of polymers, metal and reinforced plastic composite that form an economical composite wall panel. The exposed face is a gel coat polymer with a consistent smooth finish. The panel finish is a semi-gloss and the composite panel assembly is ASTM E 84 Class A for smoke and flame spread. Bio/CR panels are PVC free.

The primary features of the Healthcare Construction Panels are a non-porous high density surface, high chemical resistance, and a virtually seamless installation. As such the Hygienic System does not support the growth of infectious microbes and can be cleaned and disinfected with the rigorous cleaning protocols required in infectious disease programs

The panel will be supplied in standard 4' x 8', 4' x 9' and 4' x 10' sizes. The vertical edges are routed in a design that allows for mechanical fastening as well as an adhesive mount. The final exposed routed joint recess is filled with a 100% solids LEED compliant urethane sealant which also provides a semi-gloss finish consistent with the panel face.

The Bio/CR-2 "system" is designed specifically so it can be installed as both a sealed seamless bio-containment and a general hygienic application. The system has been used successfully in research facilities working with infectious disease and select agents.

The system can be installed as a negative pressure containment area if needed. Further the design of the Hygienic Panel system eliminates the need for painting and reduces construction time.

The same mounting system used to install the panels for walls is also used for ceilings as a "hard lid" system that is seamless and batten free.

Bio/CR-2 panel typical applications:

- Operating Rooms/Surgical Suites
- Infectious Disease Isolation Areas
- Sterilization and Prep or Scrub Rooms
- Emergency Rooms
- MRI or Diagnostic Rooms
- Recovery Rooms

Cleaning: Healthcare Hygienic Panels can withstand daily surface washing and disinfecting with chemicals and fumigants used in critical patient areas. The resinous finish will not support the growth of bacteria or mold. Ask your LSP Representative for more detailed maintenance instructions.

The panels have the following properties:

Fire Rating Panel Assembly: Class A ASTM E 84
Light Reflectance @ 85: 94.3
Minimum Weight: 1.7 lbs. per square foot
Finish: Polyester gel coat smooth
Panel thickness: 6 mm
Color: White
Finish: Semi-Gloss
Hardness: ASTM D-785 46 Barcol
Flexural Mod ASTM D-790-07: 557,693
Flexural Strength-ASTM D 79007: 5325 psi
Water Vapor Transmission ASTM E-96: < 0.0001 perms
Air Permeance ASTM E-2178 (L/s/m^2): 0.00001 @ 300 pa

Tensile Strength: ASTM D-638: 3272 psi
Tensile Mod ASTM D-638: 511,000
Coefficient of Linear Thermal Expansion CLTE (mm mm C) ASTM D-696: 4.30 E 05
Compressive Strength ASTM D- 695: 5364 psi
Modulus: ASTM D695: 49,873 psi

Chemical Resistance	**20% Acetic Acid**	**Occasional Spill**
	50% Citric Acid	**Good**
	20% Nitric Acid	**Occasional Spill**
	30% Hydrochloric Acid	**Occasional Spill**
	10% Hydrofluoric Acid	**Occasional Spill**
	Hydrogen Peroxide	**Good**
	40% Potassium Hydroxide	**Good**
	40% Sodium Hydroxide	**Good**
	50% Sulfuric Acid	**Good**
	Clorox	**Good**
	VHP	**Good**

The joint adhesive/sealant has the following properties:

Hardness Shore D	**ASTM D-1706**	**70 - 80**
Tensile Strength	**ASTM D-638**	**3,000 psi min.**
Flexural Strength	**ASTM D-790**	**4,000 psi min.**
Thermal Shock	**Mil F-52505**	**No cracking or loss of adhesion**
Abrasion Resistance (Taber Abrader, CS-17 Wheels, 1000 gm. load, 1000 cycles)	**ASTM D-4060**	**.035 gm loss**
Ultimate Elongation	**ASTM D-638**	**20% min.**