ASTM_E-162 Surface Flammability Test

The results from this test were obtained from cored vinyl ester glass reinforced laminate specimens cured in a press and coated with a 63 mil thick layer of Thermashield™. This test, the Standard Method of Test for Surface Flammability of Materials Using a Radiant Heat Energy Source, is to determine the relative surface flammability performance of various materials under specific test conditions when using a radiant heat source. The results are recorded as a Flame spread Index.

Please refer to the test data and results below. The Flame Spread (Is) is calculated by multiplying the Flame spread Factor (Fs), the speed at which the flame front burns down the specimen, times the Evolution of Heat Factor (Q), determined by the maximum temperature developed in the stack above the burning sample as a result of the burning characteristics of the material under test. NFPA – No. 101 classifies Class A (I) Flame spread to be 0 to 25, Class B (II) Flame spread to be 26 to 75, and Class B (III) Flame spread to be 76 to 100. As indicated below, the test results indicate the laminate panel attained a Class A (I) Flame spread.

E-162 FLAME SPREAD DATA

COMPANY:
PRODUCT: 81006010
COLOR: Beige **AL. FOIL ?** YES
DIMENSIONS: 6" X 18" **EXP TIME:** 15 MIN.
THICKNESS: 0.766" **DATE:** 12/17/99
OBSERVATIONS: No unusual observations.

TIME TO: SAMPLE #	3 INCHES min.	6 INCHES min.	9 INCHES min.	12 INCHES min.	15 INCHES min.
1	4.88	13.97	-	-	-
2	6.70	8.73	-	-	-
3	7.00	-	-	-	-
4	8.00	-	-	-	-

SAMPLE	Fs	Q	Sample Wt KG	Base Temp deg C	Max Temp deg C	Is INDEX
1	1.31	9.81	1.047	199	251	12.91
2	1.46	7.93	1.033	199	241	11.56
3	1.14	8.49	1.081	199	244	9.71
4	1.12	7.36	1.043	197	236	8.28
AVERAGE:	**1.26**	**8.40**	**1.051**	**182**	**243**	**10.61**

TEST RESULTS

AVG FLAMESPREAD FACTOR (FS)	**=**	1.26		
AVERAGE HEAT OF EVOLUTION (Q)	**=**	8.40		
AVERAGE FLAME SPREAD INDEX (Is)	**=**	10.61		
FLAMESPREAD INDEX RANGE (Is)	**=**	8.28	TO	12.91