New York Product Testing & Services Inc.

"Success Through Testing"

DATE:	**September 10, 2002**
LAB. No.:	**02-107473**
CLIENT:	**Fairmount Distributors, Inc.**
	202-210 Fairmount Ave.
	Jersey City, NJ 07306
ATTENTION:	**Melvin Lindner**
CLIENT'S ORDER NO.:	**Verbal/Mel Lindner**
MATERIAL:	**Composition Construction Panel, 10mm thick, referred to as**
	"Dragon Board" by client.
MARKED:	**No Markings**
SUBMITTED FOR:	**ASTM E84 Standard Method of Test for Surface Burning**
	Characteristics of Building Materials.

1.0 INTRODUCTION:
This report is a presentation of results of a surface flammability test on Composition Construction Panel as submitted by Client.

The test was conducted in accordance with the American Society for Test and Materials fire test response standard E 84, *Surface Burning Characteristics of Building Materials*, sometimes referred to as the Steiner tunnel test. This test is applicable to exposed surfaces such as walls and ceilings. The test is conducted with the sample in the ceiling position with the surface to be evaluated exposed face down to the ignition source. The method, which is similar to NFPA No. 255 and UL No. 723, is an American National Standard (ANSI) and has been approved for use by agencies of the department of Defense for listing in the DoD *Index of Specifications and Standards.*

This standard is used to measure and describe the response of materials, products, or assemblies to heat and flame under controlled conditions, but does not by itself incorporate all factors required for fire hazard or fire-risk assessment of materials, products, or assemblies under actual conditions.

2.0 PURPOSE:
The purpose of the test is to provide only the comparative measurements of surface flame spread and smoke development of materials with that of select grade red oak and reinforced cement board under specific fire exposure conditions. The test exposes a nominal 24-foot long by 20-inch wide test sample to a controlled air flow and flaming fire along the entire length of the sample. During the 10-minute test duration, flamespread over the specimen surface and density of the resulting smoke are measured and recorded. The results are calculated relative to reinforced cement board, which has a rating of 0.

The test results are expressed as Flame Spread Index and Smoke Developed Index. The Flame Spread Index is defined in ASTM E 176 as "a number or classification indicating a comparative measure derived from smoke obscuration data collected during the test for surface burning characteristics." There is not necessarily a relationship between the two measurements.

The method does not provide for measurement of heat transmission through the surface tested, the effect of aggravated flame spread behavior of an assembly resulting from the proximity of combustible walls and ceilings, or classifying a material as noncombustible solely by means of a Flame Spread Index.

The zero reference and other parameters critical to furnace operation are verified on the day of the test by conducting a 10-minute test using ¼-inch reinforced cement board.

3.0 TEST SAMPLE:
The submitted test samples were identified by client as composition construction panels and were physically self-supporting. The panels were transferred to storage racks and conditioned to equilibrium in an atmosphere with the temperature maintained at 71±2°F and relative humidity at 50±5%. For testing, the panels were placed end-to-end on the ledges of the tunnel furnace to make up the necessary 24-foot test sample, the test was conducted with no auxiliary support mechanism required.

4.0 TEST RESULTS:
The test results, calculated on the basis of observed flame propagation and the integrated area under the recorded smoke density curve, are presented below.

Test Specimen	Flame Spread Index	Smoke Developed Index
Reinforced Cement Board (reference)	0	0
Composition Panels (actual test sample)	0	0

5.0 OBSERVATIONS:
No sample ignition occurred over the burners. No flame spread was observed

6.0 CLASSIFICATION:
The Flame Spread Index and Smoke Developed Index values obtained by ASTM E84 tests are frequently used by code officials and regulatory agencies in the acceptance of finish materials for various applications. The most widely accepted classification system is described in the National Fire Protection Association publication NFPA 101 *Life Safety Code*, where:

CLASS	FLAME SPREAD INDEX	SMOKE DEVELOPED INDEX
A	0-25	0-450
B	26-75	0-450
C	76-200	0-450

Class A, B, and C correspond to Type, II, and III respectively in other codes such as SBCCI, BOCA, and ICBO. They do not preclude a material being otherwise classified by the authority of jurisdiction.

ASTM E84 TEST DATA

Parameter	Result
Time to ignition	No ignition occurred.
Maximum Flamespread Distance	None
Time to Maximum Flame Spread	None
Flame Spread Index	0
Smoke Developed Index	0

The tested composition panels were found to have a Class A rating.

7.0 CERTIFICATION AND SIGNATURES:

We certify that this report is a true report of results obtained from tests of this material.

Respectfully submitted,
New York Product Testing & Services, Inc.

Al Barbera, Project Engineer