TEST REPORT

DATE: 11/30/2006 **TEST NUMBER**: 104215

CLIENT	Mats, Inc.

TEST METHOD CONDUCTED	ASTM E662-03 Smoke Density (Flaming) Standard Test Method for Specific Optical Density of Smoke Generated by Solid Materials also referenced as NFPA 258

DESCRIPTION OF TEST SAMPLE	
IDENTIFICATION	Pro Shield Tile
COLOR	Blue
ROLL	-----
CONSTRUCTION	Needle Punch
FIBER	-----
BACKING	Rubber
REFERENCE	

GENERAL PRINCIPLE

This procedure is designed to measure the specific optical density of smoke generated by the test specimen within a closed chamber. Each specimen is exposed to an electrically heated radiant-energy source positioned to provide a constant irradiance level of 2.5 watts/square cm on the specimen surface. Measurements are recorded through a photometric system employing a vertical beam of light and a photo detector positioned to detect the attenuation of light transmittance caused by smoke accumulation within the chamber. The light transmittance measurements are used to calculate specific optical density, a quantitative value which can be factored to estimate the smoke potential of materials. Two burning conditions can be simulated by the test apparatus. The radiant heating in the absence of ignition is referred to as the Non-Flaming Mode. A flaming combustion in the presence of supporting radiation constitutes the Flaming Mode.

CONDITIONS			
PREDRYING OF TEST SAMPLE **CONDITIONING OF TEST SAMPLE**	24 Hours at 140º F 24 Hours at 70º F and 50% Relative Humidity		
FURNACE VOLTAGE **CHAMBER TEMPERATURE** **TEST MODE**	114 V 95º F Flaming	**IRRADIANCE** **CHAMBER PRESSURE**	2.5 watts/sq cm 3" H_2O

AVERAGE MAXIMUM DENSITY CORRECTED (Dmc)		**FLAMING**	104
AVERAGE SPECIFIC OPTICAL DENSITY AT 4.0 MINUTES			56
	Specimen 1	**Specimen 2**	**Specimen 3**
Maximum Density (Dm)	143.0	122.0	84.0
Time to Dm (minutes)	11.0	11.5	12.0
Clear Beam (Dc)	14.0	11.0	11.0
Corr. Max Density (Dmc)	129.0	111.0	73.0
Density at 1.5 minutes	41.0	42.0	41.0
Density at 4.0 minutes	57.0	54.0	56.0
Time to 90% Dm (minutes)	9.0	9.0	9.5
Specimen Weight (grams)	17.4	17.4	17.4

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