

TEST REPORT

DATE: 10-25-2017 Page 1 of 1 **TEST NUMBER**: 0241320

CLIENT UPOFLOOR

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



DESCRIPTION OF TEST SAMPLE			
IDENTIFICATION	Zero Tiles 5112/9501		
LOT NUMBER	25617		
CONSTRUCTION	Vinyl Tile		

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	24 Hours at 140° F				
CONDITIONING OF TEST SAMPLE	24 Hours at 70° F and 50% Relative Humidity				
TESTING CONDITION	As Received				
FURNACE VOLTAGE	118 V	IRRADIANCE	2.5 watts/sq cm		
CHAMBER TEMPERATURE	95° F	CHAMBER PRESSURE	3" H₂O		
TEST MODE	Non-Flaming				

AVERAGE MAXIMUM DENSITY CORRECTED (Dmc)		NON-FLAMING	88
AVERAGE SPECIFIC OPTICAL DENSITY AT 4.0	12		
	Specimen 1	Specimen 2	Specimen 3
Maximum Density (Dm)	89.0	96.0	86.0
Time to Dm (minutes)	20.0	20.0	20.0
Clear Beam (Dc)	2.0	5.0	1.0
Corr. Max Density (Dmc)	87.0	91.0	85.0
Density at 1.5 minutes	2.0	4.0	1.0
Density at 4.0 minutes	11.0	16.0	10.0
Time to 90% Dm (minutes)	14.5	14.5	13.5
Specimen Weight (grams)	19.4	19.3	19.7

^{*} This sample PASSES the requirements of 450 or less.

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