ASTM E162 TESTING
FOR
QUANTUM TECHNICAL
ON
PRECIDIUM MTI RAIL
VTEC #100-5376-1
TESTED: NOVEMBER 1, 2016
REVISION 1.0: JANUARY 19, 2017

VTEC Laboratories Inc.

November 22, 2016

Client: Quantum Technical
15 Riel Drive
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Attention: Tony LaGrange

I. SCOPE:

This report contains the reference to the test method, purpose, limitations, description of materials, operating data, and test results.

II. TEST METHOD:

The test was conducted in accordance with ASTM Designation E-162, "Standard Method of Test for Surface Flammability of Materials Using a Radiant Heat Energy Source".

III. PURPOSE:

The purpose of the test 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 Flamespread Index.

VIII. DISCLAIMER:

This is a factual report of the results obtained from the laboratory tests of sample products. The results may be applied only to the products tested and should not be construed as applicable to other similar products of the manufacturer. The report is not a recommendation or a disapprobation by VTEC Laboratories Inc. of the material tested. While this report may be used for obtaining product acceptance, it may not be used in advertising.

E162 FLAME SPREAD DATA

DATE: 11/1/2016
PROJECT #: 100-5376-1
SUPPLIER: Quantum Technical
CONDITIONING: 140°F for 24 hours.
EXPOSURE TIME: 15 Minutes
SPECIMEN MOUNTING: Standard with aluminum foil backing.
SPECIAL PREPARATION: None
AVERAGE THICKNESS: 0.25 inch for sample 2-4 and .37 inch for sample 1
SPECIMEN COMPOSITION: .125 inch coating with .125 inch steel backing for samples 2-4 and .25 inch steel backing for sample 1
SPECIMEN COLOR: Gray, black and white
SPECIMEN DESCRIPTION: Precidium MTI Rail

TIME TO…	3 INCHES min.	6 INCHES min.	9 INCHES min.	12 INCHES min.	15 INCHES min.
SPECIMEN#					
1	1.70	3.33	7.62	-	-
2	1.20	3.43	6.68	-	-
3	1.05	2.93	6.07	10.38	-
4	1.17	3.33	6.47	13.03	-

SPECIMEN#	Fs	Q	Sample Wt g	Base Temp deg C	Max Temp deg C	Is INDEX
1	2.43	8.15	3540.0	200.1	246.2	19.85
2	2.59	12.27	1828.6	208.2	277.6	31.77
3	3.03	13.76	1794.4	208.1	285.9	41.75
4	2.79	15.01	1777.1	203.1	288.0	41.89
AVERAGE :	2.71	12.30	2235.0	204.9	274.4	33.82

OBSERVATIONS: No flaming drips or falling particles fell off of the test samples.

REVISION 1.0: Final report was revised to include the latest specimen composition.

TEST RESULTS:

AVG. FLAMESPREAD FACTOR (FS) =	2.71		
AVERAGE HEAT OF EVOLUTION (Q) =	12.30		
AVERAGE FLAMESPREAD INDEX (Is) =	**33.82**		
FLAMESPREAD INDEX RANGE (Is) =	19.85	TO	41.89

Neil Schultz
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