



Fire Testing Laboratory



TEST REPORT for

Crane Composites, Inc

8015 Dixon Drive
Florence, KY 41042

Surface Burning Characteristics of Building Materials

ASTM E-84-08

Test Report No: FH-1902-1

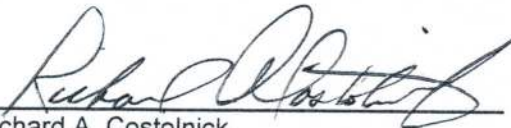
Assignment No: H-581

Test Date: 2/16/2009

Report Date: 10/12/2009

Subject Material: FTSTF

Prepared by:


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Reviewed by:


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Director, Laboratory Facilities
and Testing Services

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MATERIAL TESTED:

Material submitted by Crane Composites, Inc., Florence, KY was identified and described by the client as:

0.090 in. thick FTSTF FRP

The material was provided 24 in. wide x 8 ft.

The tests were conducted by placing the material in the furnace end to end, and butted tightly together to achieve the required 24 lineal feet.

METHOD OF SUPPORT:

A continuous length of 2.0 in. hexagonal poultry netting was placed atop 1/4" dia. steel rods spaced 24 in. on center. The test samples were placed over the netting, end to end, and butted tightly together to achieve the required 24 lineal feet

LID PROTECTION:

1/4 in. thick non- combustible fiber reinforced cement board was placed over the test specimen as lid protection.

RESULTS:

The results can be found on page 3 of this report.

RESULTS:

<u>TEST NO.</u>	<u>MATERIAL TESTED</u>	<u>SIDE EXPOSED</u>	<u>SUPPORT</u>	<u>CALCULATED FLAME SPREAD</u>	<u>CALCULATED SMOKE DEVELOPED</u>
1	0.090 in. FTSTF FRP	SYMMETRICAL	WIRE & RODS	142.53	292.09

<u>MATERIAL TESTED</u>	<u>SIDE EXPOSED</u>	<u>SUPPORT</u>	<u>FLAME SPREAD INDEX*</u>	<u>SMOKE DEVELOPED INDEX*</u>
RED OAK FLOORING	FINISH	DECKS	100	100
REINFORCED CEMENT BOARD	SYMMETRICAL	SELF	0	0
0.090 in. FTSTF FRP	SYMMETRICAL	WIRE & RODS	145	300

CLASSIFICATION	FSI	SDI
CLASS "A"	<25	0-450
CLASS "B"	26-75	0-450
CLASS "C"	76-200	0-450

* Flame Spread/Smoke Developed Index is the result (or average of the results of multiple tests), rounded to the nearest multiple of 5. Smoke Developed in excess of 200, rounded to the nearest 50.

MV

2:35AM 2/16/2009

FH-1902-1
 CRANE COMPOSITES
 0.090" FTSTF
 FRP
 RODS & WIRE

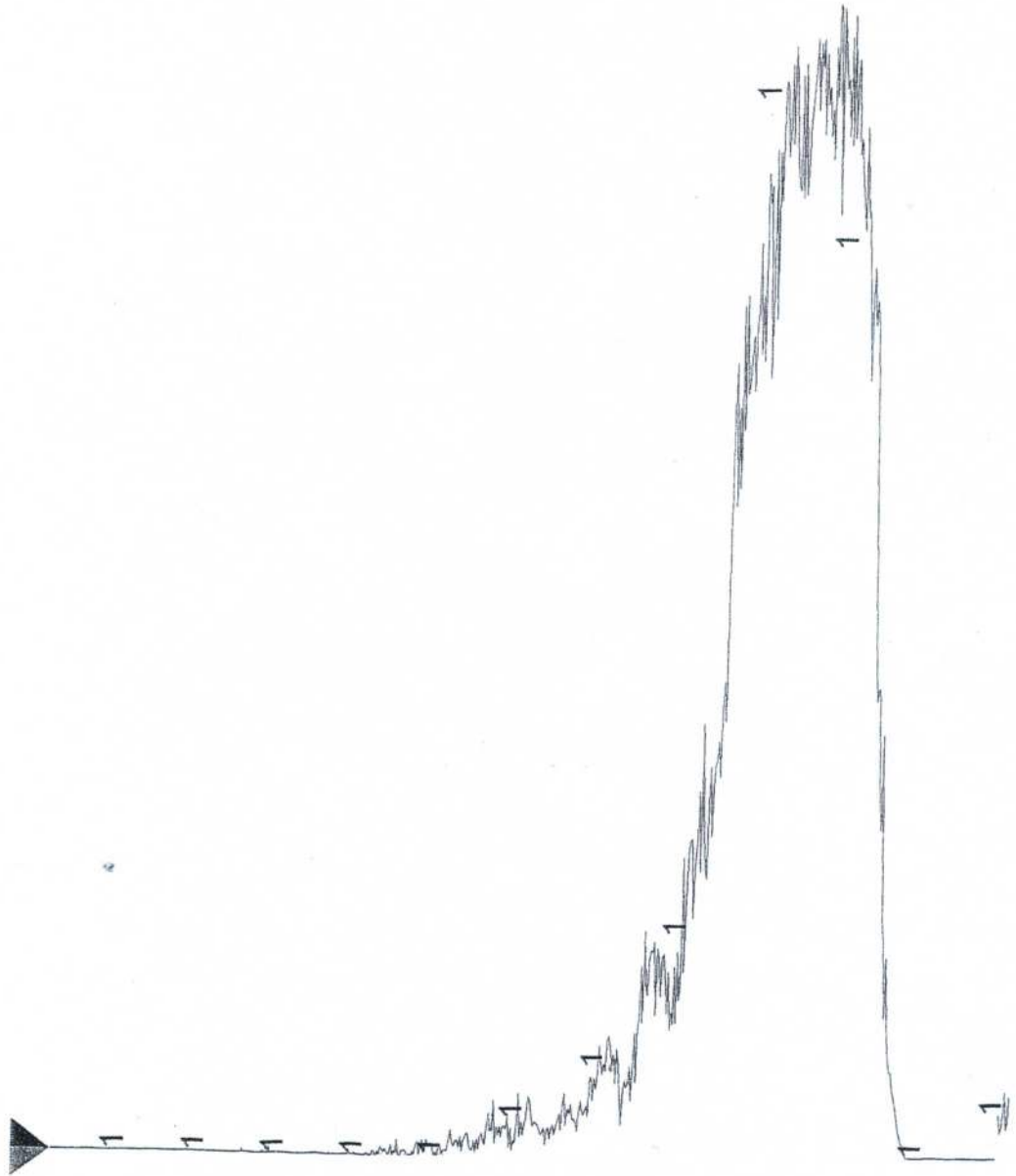
10/16/09

$A = 4.67 \text{ m}^2$
 $SD = 292.09$

2:25AM 2/16/2009

Analog In 1

T1 INPUTOV



FACE TAG INPUTOV UNITS MV ANALOG In 1 HI-LIM 10.000 LO-LIM 0.0000



Fire Testing Laboratory

DATE 2/16/2009

TEST #: FH-1902-1

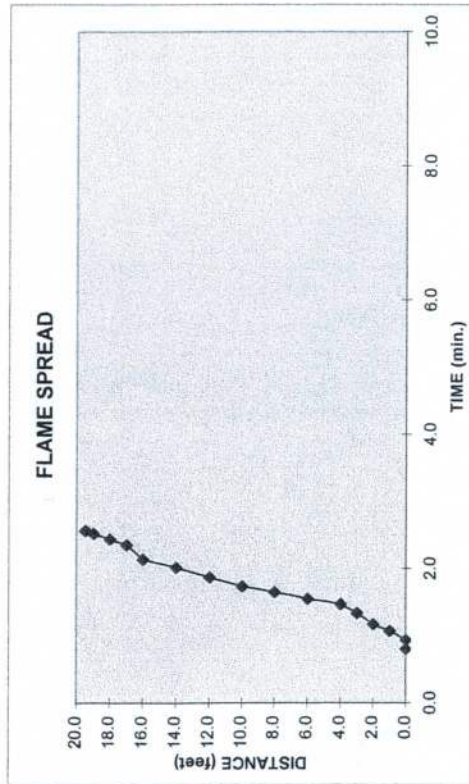
TEST METHOD: ASTM E-84-08

CLIENT: CRANE COMPOSITES

ADC DRAFT (IN. H2O) 0.082
 GAS PRESS. (IN. H2O) 0.290
 GAS VOL. (CF) 49.98
 BTU/cf 997
 SHUTTER 3"
 TEMP. 13' BURIED 105°F

PROJECT #: H-581
 SAMPLE: FRP
 MATERIAL: 0.090" FTSTF
 METHOD OF SUPPORT: RODS & WIRE
 REMARKS: IGNITION :48
 MAX. FLAME FRONT 19.5 FT. @2:34

FLAME SPREAD- 142.53
AREA UNDER THE CURVE (min.-ft.) 160.62
SMOKE DEVELOPED- 292.09



#	TIME (Min.)	TIME (Sec.)	DISTANCE (Ft.)
1	0	48	0.0
2	0	56	0.0
3	1	4	1.0
4	1	10	2.0
5	1	20	3.0
6	1	28	4.0
7	1	33	6.0
8	1	39	8.0
9	1	44	10.0
10	1	52	12.0
11	2	1	14.0
12	2	8	16.0
13	2	21	17.0
14	2	26	18.0
15	2	31	19.0
16	2	34	19.5
17			
18			
19			
20			

WITNESSED BY: *[Signature]*