



# Fire Testing Laboratory



## TEST REPORT

for

**IMT Modular Partitions, LTD**

80 Clayson Road  
Toronto, ON M9M 2G7  
Canada

### Surface Burning Characteristics of Building Materials

### ASTM E-84-10


Test Report No: FH-2074

Assignment No: G-593

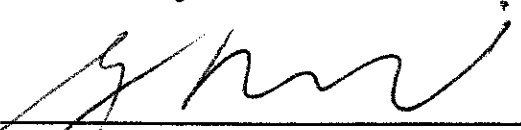
Test Date: 5/6/2010

Report Date: 5/12/2010

Subject Material: IMT Wall System

Prepared by: 

Richard A. Costolnick  
Senior Test Engineer

Reviewed by: 

Robert J. Menchetti  
Director, Laboratory Facilities  
and Testing Services

The results reported in this document apply to specific samples submitted for measurement. No responsibility is assumed for performance of any other specimen. This report may not be reproduced, except in full, without the written approval of the laboratory. The laboratory's test reports in no way constitutes or implies product certification, approval or endorsement by this laboratory.

**MATERIAL TESTED:**

Material submitted by IMT Modular Partitions, Ltd., Toronto, Canada, was identified and described by the client as:

**IMT WALL SYSTEM**

- 1. Steel framing with 5/8" particle board with woodgrain facing and 2.0 in. thick Roxul mineral wool insulation core.**
- 2. Steel framing with 5/8" MDF with white facing and 2.0 in. thick Roxul mineral wool insulation core.**

The material was provided as 24" wide x 8 ft. long panels.

**METHOD OF SUPPORT:**

Three (3) panels of each system were placed end to end, butted tightly together to achieve the required 24 lineal feet for each test. The panels were self supporting in the test chamber.

**LID PROTECTION:**

1/4 in. thick fiber 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>SUPPORT</u>	<u>SIDE EXPOSED</u>	<u>CALCULATED FLAME SPREAD</u>	<u>CALCULATED SMOKE DEVELOPED</u>
1	IMT WALL SYSTEM 5/8" PARTICLE BOARD w/ WOOD GRAIN LAMINATE STEEL FRAME w/ 2" ROXUL MW CORE	SELF	SYMMETRICAL	85.75	160.64
2	IMT WALL SYSTEM 5/8" MDF w/ WHITE LAMINATE STEEL FRAME w/ 2" ROXUL MW CORE	SELF	SYMMETRICAL	29.34	105.61

<u>MATERIAL TESTED</u>	<u>SUPPORT</u>	<u>EXPOSED</u>	<u>FLAME SPREAD INDEX*</u>	<u>SMOKE DEVELOPED INDEX*</u>
RED OAK FLOORING (calib.)	DECKS	NA	100	0
REINFORCED CEMENT BOARD (calib.)	SELF	NA	0	0

IMT WALL SYSTEM 5/8" PARTICLE BOARD w/ WOOD GRAIN LAMINATE STEEL FRAME w/ 2" ROXUL MW CORE	SELF	SYMMETRICAL	85	160
IMT WALL SYSTEM 5/8" MDF w/ WHITE LAMINATE STEEL FRAME w/ 2" ROXUL MW CORE	SELF	SYMMETRICAL	30	105

CLASS	FSI	SDI
A	25 OR LESS	450 or less
B	26-75	450 or less
C	76-200	450 or less

\* Flame Spread Index and Smoke Developed Index is the calculated result rounded to the nearest 5. Smoke Developed in excess of 200, rounded to the nearest 50.

# Fire Testing Laboratory

DATE: 5/6/2010

TEST #: FH-2074-1

TEST METHOD: ASTM E-84-10

CLIENT: IMT MODULAR PARTITIONS

PROJECT #: G-593

SAMPLE: IMT WALL SYSTEM  
 5/8" PARTICLE BOARD -WOOD GRAIN LAMINATE  
 STEEL FRAME w/ 2" ROXUL MW INSULATION CORE

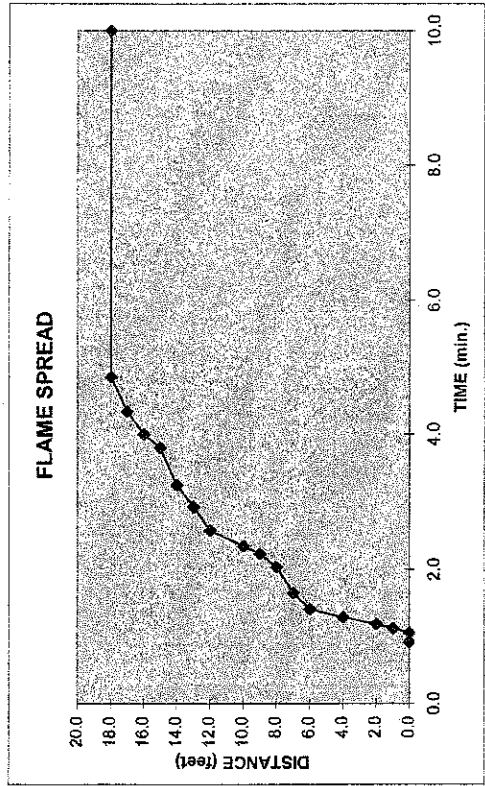
METHOD OF SUPPORT: SELF

REMARKS: IGNITION 0:55

MAX. FLAME FRONT 18.0 FT. @ 4:51

ADC DRAFT (IN. H2O) 0.078  
 GAS PRESS. (IN. H2O) 0.291  
 GAS VOL. (CF) 50.08  
 BTU/cf 1008  
 SHUTTER 3"  
 TEMP. 13' BURIED 105°F

FLAME SPREAD- **85.75**  
 AREA UNDER THE CURVE (min.-ft.) 137.86  
 SMOKE DEVELOPED- **160.64**



#	TIME (Min.)	TIME (Sec.)	DISTANCE (Ft.)
1	0	55	0.0
2	1	3	0.0
3	1	7	1.0
4	1	11	2.0
5	1	17	4.0
6	1	24	6.0
7	1	39	7.0
8	2	2	8.0
9	2	14	9.0
10	2	21	10.0
11	2	35	12.0
12	2	56	13.0
13	3	15	14.0
14	3	48	15.0
15	4	0	16.0
16	4	20	17.0
17	4	51	18.0
18	10	0	18.0
19			
20			

WITNESSED BY:

E-MAIL: [ngctest@ngctestingservices.com](mailto:ngctest@ngctestingservices.com)

1650 MILITARY ROAD, BUFFALO, 14217 TEL 716-873-9760 FAX 716-873-9763

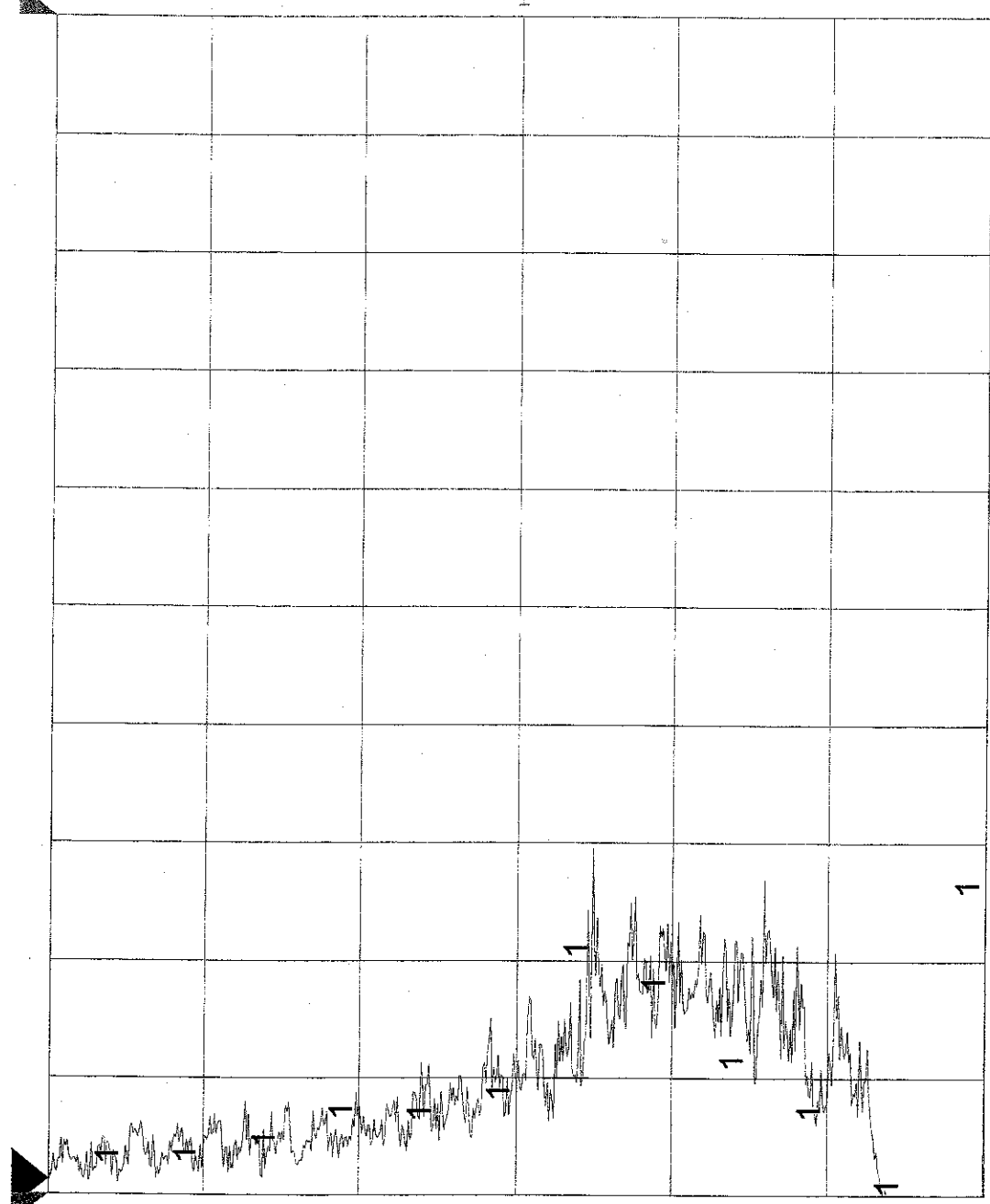
T1 INPUTOV

Analog In 1

MV

0.0000

10.000



:40:19PM  
/6/2010

:38:38PM  
/6/2010

:36:56PM  
/6/2010

:35:15PM  
/6/2010

:33:34PM  
/6/2010

1:34:10AM  
/6/2010

1:42:00PM 5/6/2010

02:07:49

11:34:10AM 5/6/2010

SMOKE DEVELOPED

FH-2074-1

IMT MODULAR PARTITIONS  
5/8" PARTICLE BOARD  
w/ WOOD GRAIN LAMINATE  
STEEL FRAME w/ 2" ROXUL  
(ASSEMBLY)  
SELF SUPPORT

Area = 2.57 sq. in.

S.D = 160.64

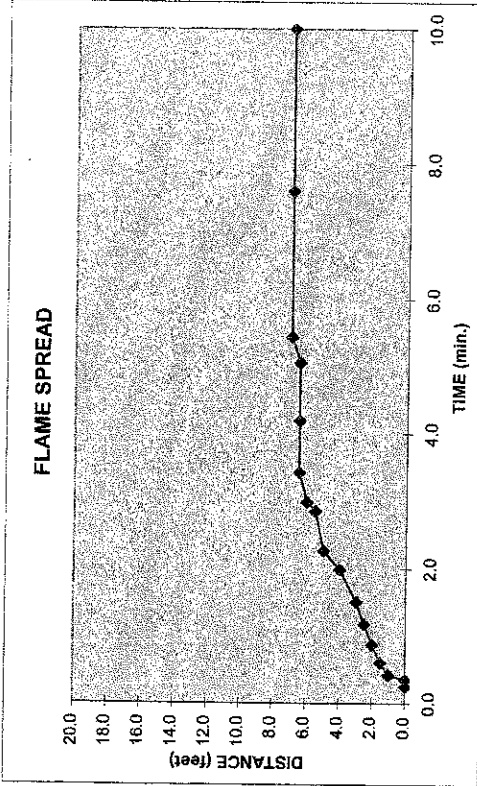
ACE TAG	UNITS	DESCRIPTOR	HI-LIM	LO-LIM
INPUTOV	MV	Analog In 1	10.000	0.0000



# Fire Testing Laboratory

ADC DRAFT (IN. H2O) 0.078  
 GAS PRESS. (IN. H2O) 0.292  
 GAS VOL. (CF) 50.05  
 BTU/cf 1008  
 SHUTTER 3"  
 TEMP. 13' BURIED 105°F

**FLAME SPREAD- 29.34**  
**AREA UNDER THE CURVE (min.-ft.) 56.98**  
**SMOKE DEVELOPED- 105.61**



DATE 5/6/2010  
 TEST #: FH-2074-2  
 TEST METHOD: ASTM E-84-10  
 CLIENT: IMT MODULAR PARTITIONS  
 PROJECT #: G-593  
 IMT WALL SYSTEM  
 SAMPLE: 5/8" MDF FIRE RATED -WHITE LAMINATE  
 STEEL FRAME w/ 2" ROXUL MW INSULATION CORE  
 METHOD OF SUPPORT: SELF  
 REMARKS: IGNITION 0:15  
 MAX. FLAME FRONT 7.0 FT. @ 5:26

#	TIME (Min.)	TIME (Sec.)	DISTANCE (Ft.)
1	0	15	0.0
2	0	21	0.0
3	0	25	1.0
4	0	36	1.5
5	0	52	2.0
6	1	10	2.5
7	1	30	3.0
8	1	59	4.0
9	2	16	5.0
10	2	52	5.5
11	3	0	6.0
12	3	26	6.5
13	4	11	6.5
14	5	3	6.5
15	5	26	7.0
16	7	36	7.0
17	10	0	7.0
18			
19			
20			

WITNESSED BY: *[Signature]*

E-MAIL: [ngctest@ngctestingservices.com](mailto:ngctest@ngctestingservices.com)

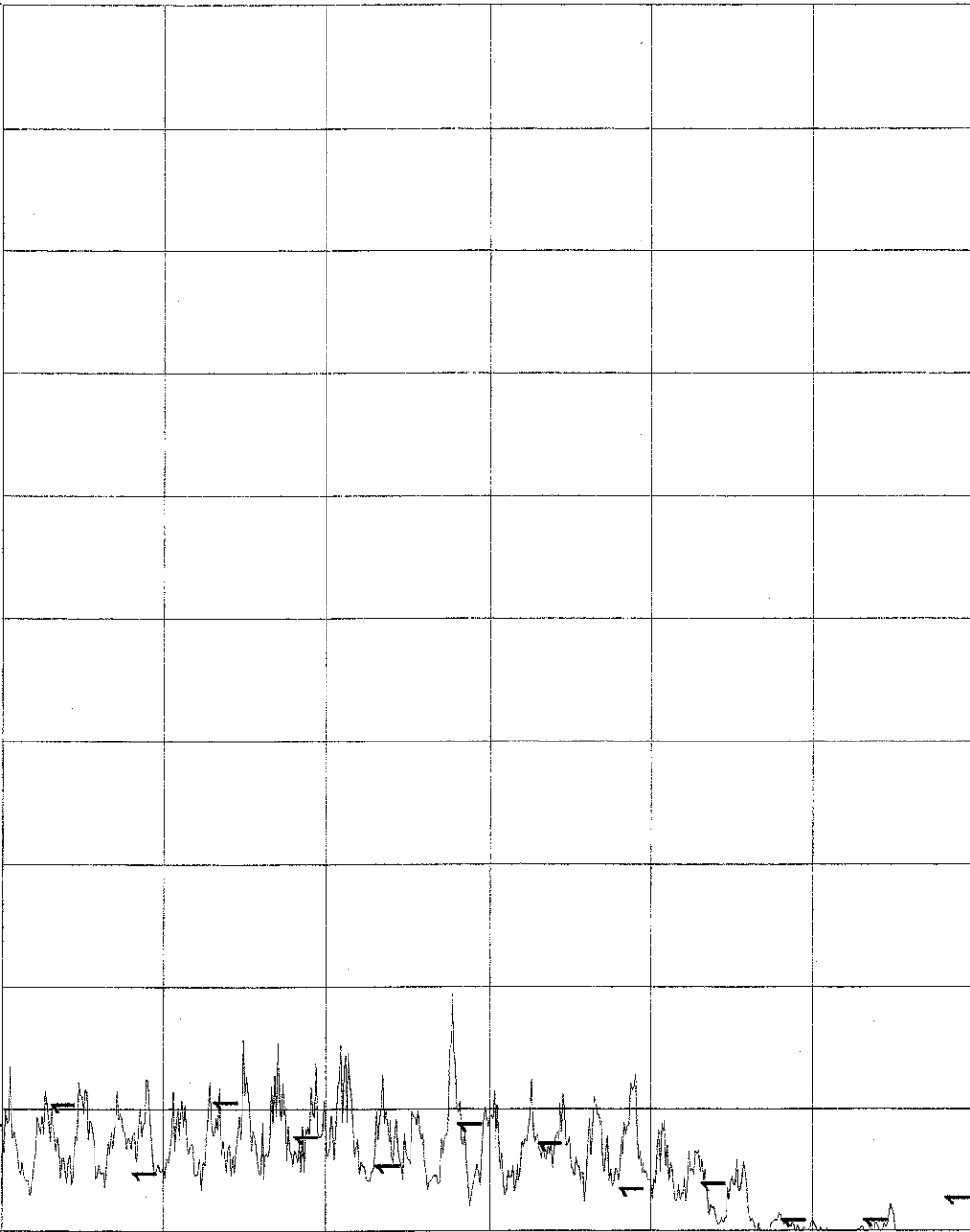
MV

T1 INPUTOV Analog In 1

T1 INPUTOV

10.000

0.0000



2:58:46PM 5/6/2010

SMOKE DEVELOPED  
 FH-2074-2  
 IMT MODULAR PARTITIONS  
 5/8" MDF FIRE RATED  
 w/ WHITE LAMINATE  
 STEEL FRAME w/ 2" ROXUL  
 (ASSEMBLY)  
 SELF SUPPORT

01:16:48

Area = 1.69 sq. in.

S.D = 105.61

1:41:57PM 5/6/2010

2:57:01PM 5/6/2010

2:55:16PM 5/6/2010

2:53:30PM 5/6/2010

2:51:45PM 5/6/2010

2:50:00PM 5/6/2010

1:41:57PM 5/6/2010

RACE TAG UNITS DESCRIPTOR HI-LIM LO-LIM  
 T1 INPUTOV MV Analog In 1 10.000 0.0000