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## Testing In Accordance With

## 16 CFR Part 1633

Standard for the Flammability (Open Flame) of Mattress Sets Effective July 1, 2007 Latest Revision: February 2008

> Test Report No.T6653-1 March 23, 2010

Testing Performed For

Michigan State Industries Jackson Garment/Mattress Factories G. Robert Cotton Correctional Facility 3500 N Elm Rd

Jackson MI 49201 P.O.: Credit Card

ity is The Test.

Description of Specimen Tested

Prototype ID 26F-3255-P Sample #1
Mattress w/Integrated Pillow, 100% Polyester Core @ 2.25 PCF
(18 oz. PSF, Lot #EL591, 100% Low Melt Polyester Pillow Batt, Sure-Chek 44 Ticking, 12 oz., Light Green-Finished Size 38"x76"x 6"

Testing Performed and Report Submitted by

TouchStone Systems & Services Inc. 1817 Porter St SW Wyoming MI 49519 (616) 532-0060 <u>touchsto@iserv.net</u>

TESTING MANAGED BY: MIKE CHLEBOWSKI

LAB MANAGER:

TERRY S. HEATH

The test specimen identification and component material identification is as provided by the client and TouchStone Systems & Services, Inc. accepts no responsibility for any inaccuracies therein. The results apply specifically to the specimen tested, in the manner tested, and not to the entire production of these or similar materials, nor to the performance when used in combination with other materials.

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#### TEST SPECIFICATION:

THIS REPORT DESCRIBES THE RESULTS OF THE OPEN FLAME TEST PERFORMED PER CONSUMER PRODUCT SAFETY COMMISSION STANDARD 16 CFR PART 1633 FOR THE FLAMMABILITY (OPEN FLAME) OF MATTRESS SETS TEST DATED MARCH 15, 2006 AND EFFECTIVE JULY 1, 2007.

#### **DESCRIPTION OF TEST SPECIMEN:**

SEE THE PRODUCT DESCRIPTION ON THE APPLICATION FOR EVALUATION OF MATTRESS ON PAGE 3, WHICH WAS SUBMITTED BY THE CLIENT FOR THIS PARTICULAR SPECIMEN TESTED.

TEST EQUIPMENT USED: TEST CONFIGURATION B ROOM

#### **TEST PROCEDURE:**

THE MATTRESS IS REMOVED FROM ANY PACKAGING AND INSPECTED. IT IS THEN CONDITIONED AT A TEMPERATURE GREATER THAN 18°C (65°F) AND LESS THAN 25°C (77°F) AND LESS THAN 55% FOR AT LEAST 48 CONTINUOUS HOURS PRIOR TO TEST.

CALIBRATION PROCEDURES ARE CARRIED OUT PRIOR TO TEST.

THE MATTRESS OR MATTRESS SET IS PLACED ON THE BED FRAME IN THE LOCATION OF THE TEST ROOM PER 1633.7 OF THE SPECIFICATION AND TESTING IS TO START WITHIN 20 MINUTES AFTER REMOVAL FROM THE CONDITIONING AREA.

THE BURNER HEADS ARE WITHIN 300MM (1 FT) OF THE MID-LENGTH OF THE MATTRESS. THE HORIZONTAL AND VERTICAL BURNER IS PLACED ON THE MATTRESS PER 1633.7 (h) (2) OF THE SPECIFICATION. RECORDING SYSTEMS AND PILOTS ARE STARTED. THE TEST IS INITIATED BY TURNING POWER TO BOTH BURNER SOLENOIDS AND STARTING THE 30 MINUTE TIMER OF THE TEST DURATION. THE HORIZONTAL (TOP) TIME OF FLAME EXPOSURE IS 70 SECONDS AND THE VERTICAL BURNER (SIDE) IS 50 SECONDS.

AFTER THE BURNERS HAVE BEEN PULLED AWAY, THE SPECIMEN IS ALLOWED TO BURN FREELY FOR 30 MINUTES. MEASUREMENTS ARE TAKEN OF THE HEAT RELEASE RATE FROM THE SPECIMEN AND ENERGY GENERATED FROM THE FIRE.





THE CONTRACTOR AND ADMINISTRAL AND RESERVED AND ADMINISTRAL PROPERTY.	

Request Quote

Accreditation

**CAL TB 133** 

16 CFR 1633

Contact Us

Home

Spec	imen	D	escri	p	tion
<b>Test</b>	Per 1	6	<b>CFR</b>	1	633

For TSS Use Only
Test No. 10053-1
Lab No. 100 770-3

Please complete one form for every specimen set presented

Today's Date: 03/12/10

Please type or print clearly

Please print this form from your browser, fill it	out, then fax to (616)532-0447, or send with sample			
Company Name & Address: MICHIGAN STATE INDUSTRIES 3500 N. ELM RD.	Contact Person: LANNY AKERS  Title PLANT MANAGER			
JACKSON, MI	Phone: (517) 780-5169 Ext:			
49201	E-Mail: AKERSLD@MICHIGAN.GOV			
Bill To Address: Same as above MDOC	Mailing Address for Report: G. ROBERT COTTON CORRECTIONAL FACILITY			
FINANCE DIVISION	MICHIGAN STATE INDUSTRIES			
P.O. BOX 30003	3500 N. ELM RD.			
LANSING, MICHIGAN 48909	JACKSON, MI 49201			
Video Required: ØNo ○Yes	Return Sample: 🛣 No 🔘 Yes			
Purchase Order #: CREDIT CARD	Who will Witness?			
Specimen Info	rmation Required			
Product Name/Description:	Prototype ID:			
MATTRESS W/ INTERGRATED PILLOW, 100% POLYESTER CORE @ 2.25 PCF(180Z. PSF, LOT #EL591, 100% LOW MELT POLYESTER PILLOW BATT, SURE-CHEK 44 TICKING, 120Z., LIGHT GREEN-FINISHED SIZE 38" X 76" X 6"				
NOTE: SAMPLE IDENTIFIED BY MARKING ON THE BOTTOM SIDE OF THE SMALL MSI TAG.				
Caution: The performance of the submitted sample is not necessibilities.	sarily an accurate indication of the performance in a real-life fire			
TouchStone Systems & Services, Inc. 1817 Porter Street S.W., Wyoming, MI 49519 Phone: (616)532-0060 Toll Free: (888)532-0060 Fax: (616)532-0447 E-Mail: touchsto@iserv.net				

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### **ACCEPTANCE CRITERIA:**

THE MATTRESS SET MUST MEET TWO CRITERIA:

- 1) THE PEAK RATE OF HEAT RELEASE FOR THE MATTRESS SET MUST NOT EXCEED 200 kW AT ANY TIME DURING THE 30 MINUTE TEST.
- 2) THE TOTAL HEAT RELEASE MUST NOT EXCEED 15 MJ FOR THE FIRST 10 MINUTES OF THE TEST.

#### TEST RESULTS:

## **PASSED**

## Mattress, W/Integrated Pillow Prototype ID 26F-3255-P

OBSERVATIONS MADE DURING TEST:

### MIN/SEC

00:07	TOP IGNITED
80:00	FRONT IGNITED
01:08	FRONT SELF-EXTINGUISHED
02:21	TOP SELF-EXTINGUISHED
02:40	NO MORE SMOKE
30:00	END OF TEST
30:20	STOPPED DATA COLLECTION

TEST RESULTS AND CHARTS ARE ON PAGES 5-7

PHOTOS TAKEN BEFORE, DURING AND AFTER TEST ARE ON PAGES 8-11. A DVD OF THE TEST IS PROVIDED SEPARATELY.

### **DISPOSITION:**

THE MATTRESS WAS DISPOSED OF PER INSTRUCTIONS FROM CLIENT.



# **TouchStone Systems Test Results**

# Test per CFR Part 1633

Test No. T6653-1

Date 3/23/2010 1:37 PM

Client Michigan State Industries

The following tests were produced under the conditions of section 1633.7(a)(2)(ii) (test room).

Peak rate of heat release given in kilowatt and time

14.41 at 00:01:49

Total heat release in MJ in the first 10 minutes of the test

1.4

Mattress fails to meet the following requirements of this test procedure if any of the following criteria are exceeded.

Maximum rate of heat release of 200 kW

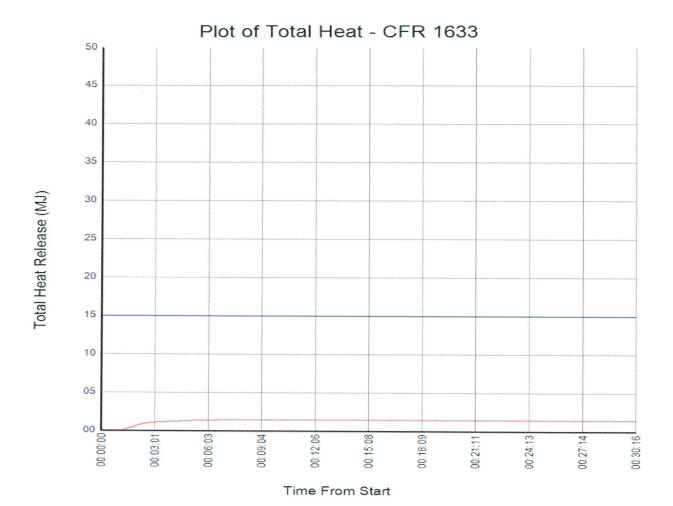
**Not Exceeded** 

Total heat release in first 10 minutes greater than 15 MJ

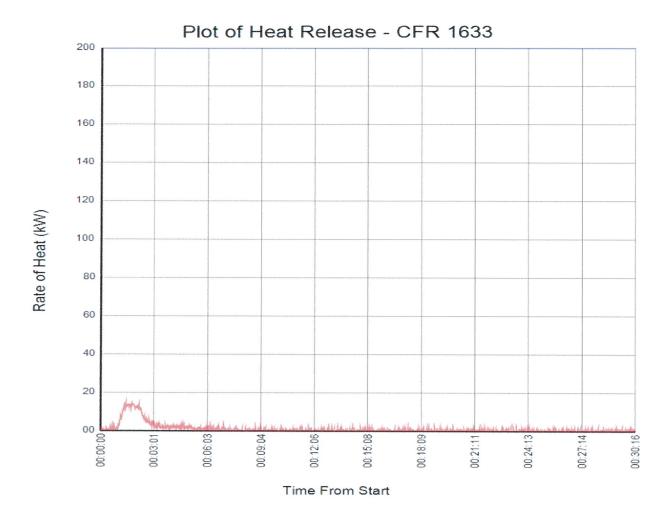
**Not Exceeded** 

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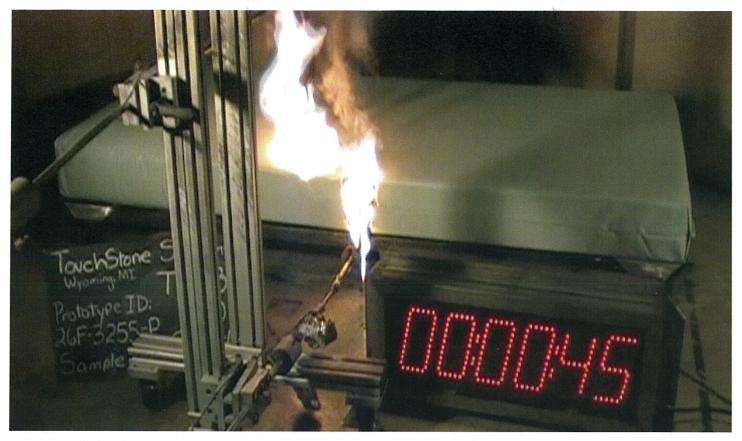
Lab No. 1007703



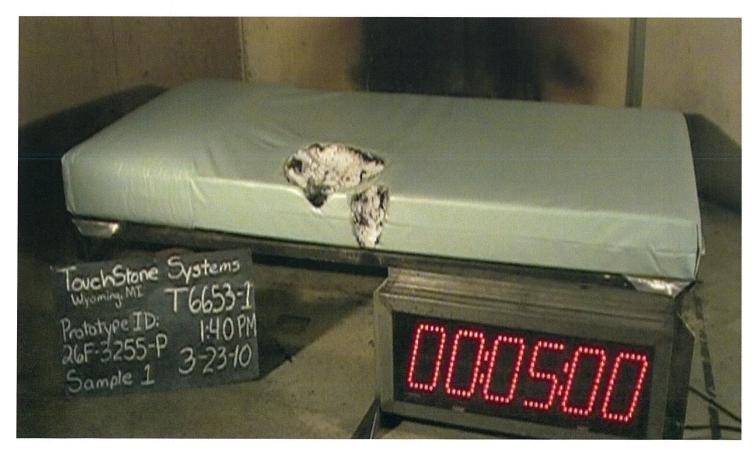
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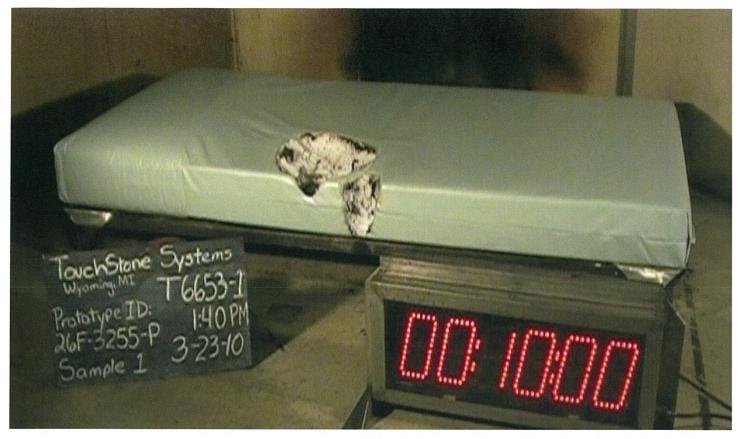
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T6653-1 16CFR1633 45 sec. into test



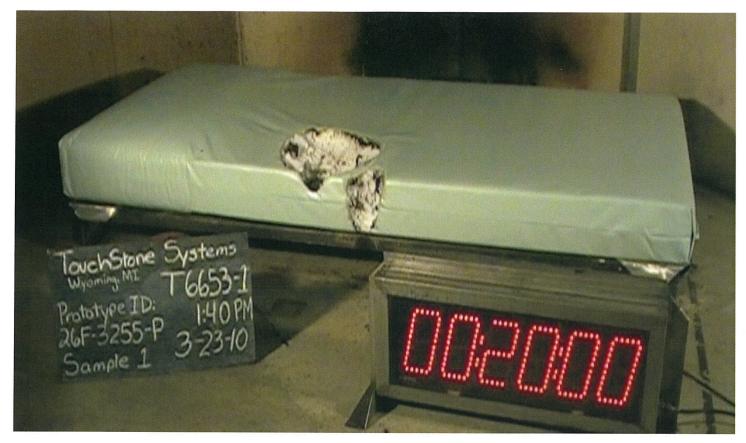
T6653-1 16CFR1633 5 min. into test



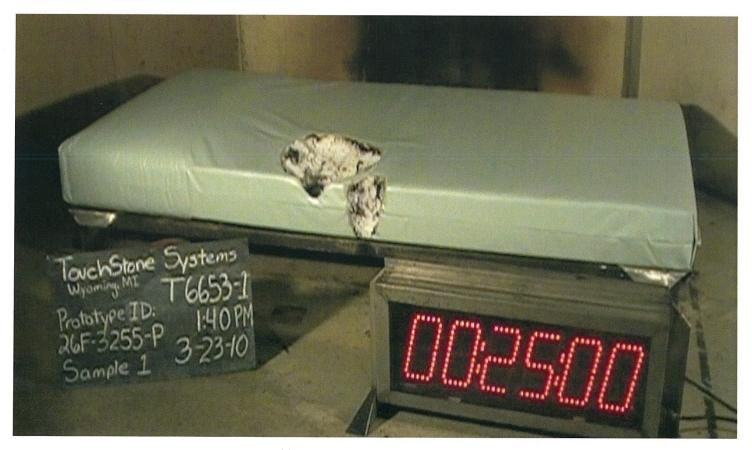
T6653-1 16CFR1633 10 min. into test



T6653-1 16CFR1633 15 min. into test



T6653-1 16CFR1633 20 min. into test



T6653-1 16CFR1633 25 min. into test



T6653-1 16CFR1633 30 min. into test