

PROJECT NUMBER: 30160 04-62232-2

PAGE: 1 of 5

DATE: January 7, 2005

**TWIN CITY TESTING CORPORATION
662 Cromwell Avenue
St. Paul, Minnesota 55114**

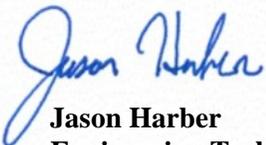
**OPEN FLAME EVALUATION CONDUCTED ON A
STRETCHER MATTRESS IDENTIFIED AS #1**

**IN ACCORDANCE WITH
CALIFORNIA TECHNICAL BULLETIN 129
“FLAMMABILITY TEST PROCEDURE FOR MATTRESSES
FOR USE IN PUBLIC BUILDINGS”**

**Prepared for:
DERBY INDUSTRIES
Attn: Mr. Tim Shelby
24350 State Road 23 South
South Bend, IN 46614**

Client Purchase Order Number: Verbal

Prepared by:



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Reviewed by:



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Project Engineer
Bedding Evaluation Services
Phone: (651) 659 - 7275**

The test results contained in this report pertain only to the samples submitted for testing and not necessarily to all similar products.

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OPEN FLAME EVALUATION – CA T.B. 129

INTRODUCTION:

This report presents the results of a full scale open flame test conducted on the following:

TB 129

| | |
|--|---|
| PROJECT #: | 30160 04-62232 |
| TEST SEQUENCE #: | 2 |
| TEST REQUESTOR: name: address: | Tim Shelby 24350 State Road 23 South South Bend, IN 46614 |
| TEST CONFIGURATION: | C - Test Room - 12' x 10' x 8' |
| PRODUCT MANUFACTURER or SUPPLIER: | Derby Industries |
| PRODUCT ID MARKS & DESCRIPTION: | Mattress # 1 |
| MATTRESS: width x length x thickness (in): | 24.00 x 75.00 x 4.00 |
| FOUNDATION: width x length x thickness (in): | -- x -- x -- |
| CONDITIONING ROOM: temp (°F) / R.H. (%): | 72.0 / 50 |
| BURN ROOM: temp (°F) / R.H. (%): | n/a |
| TOTAL INITIAL MASS (kg): | 5.22 |
| TEST DATE: | 01-07-2005 |
| COMMENTS: | |

| Test Results | Data | Criteria | Pass/Fail |
|--|---------|------------------|-----------|
| Peak rate of heat release (kW): | 35.4 | 100 kW | Pass |
| Time @ peak release (mm:ss): | 01 : 12 | -- | - |
| Total heat released @ 10 min (MJ): | 6.5 | 25.0 MJ | Pass |
| Total mass loss @ 10 min (kg): | 0.2 | 1.4 kg (3.0 lbs) | Pass |
| Peak rate of smoke release (m ² /s): | 0.46 | -- | - |
| Time @ peak smoke (mm:ss): | 02 : 44 | -- | - |
| Total smoke released @ 10 min (m ²): | 104.2 | -- | - |

OBSERVATIONS:

| Time (mm : ss) | Observation |
|-----------------------|-------------------------------------|
| 00 : 00 | Burner ON |
| 00 : 20 | Flaming Droplets |
| 01 : 03 | Flaming Droplets |
| 01 : 42 | Flaming Droplets |
| 02 : 19 | Flaming Droplets |
| 03 : 00 | Burner OFF |
| 03 : 44 | Pool Fire |
| 19 : 50 | All signs of combustion have ceased |

TEST PROCEDURE:

This test was conducted in accordance with California Technical Bulletin 129, a brief summary is detailed below:

The mattress was allowed to condition for at least 48 hours in conditions compliant with California technical bulletin 129 (temperature – 73°F ± 5°F / relative humidity – 50% ± 5%). The instrumentation was calibrated and zeroed prior to the evaluation. After the specimen was placed on the bed frame inside the test room the burner alignment procedure was performed. Data logging and video were obtained for 2 minutes prior to burner ignition. The burner application time was 180 seconds. Upon completion of the flame application time, the burner unit was removed from the test room.

The test proceeded until either all combustion had ceased, 60 minutes had passed or the development of a fire of such size as to require suppression for the safety of the facility.

REMARKS:

Due to the nature of the test the specimen will be discarded upon completion of the procedure, unless otherwise requested.

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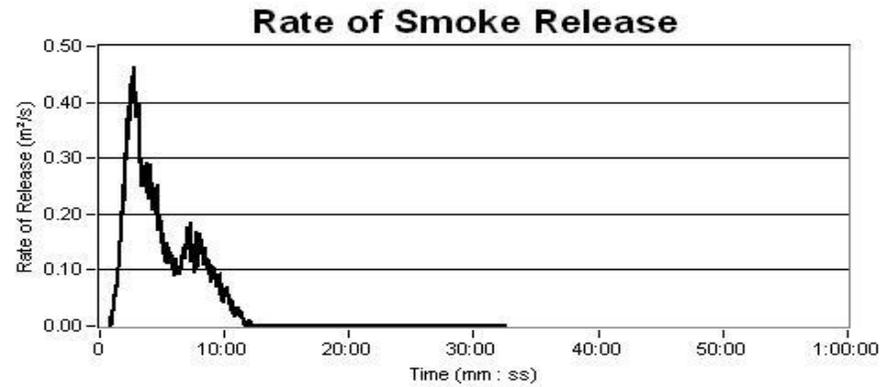
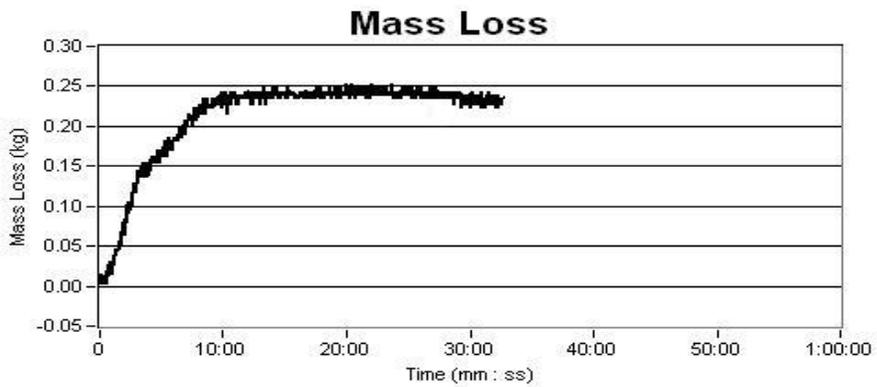
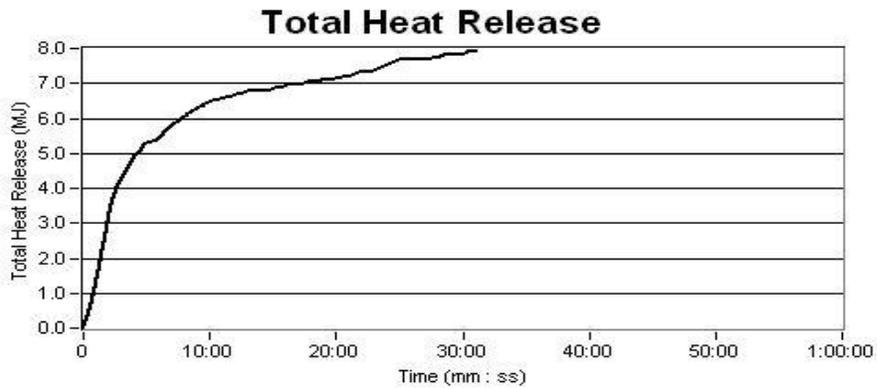
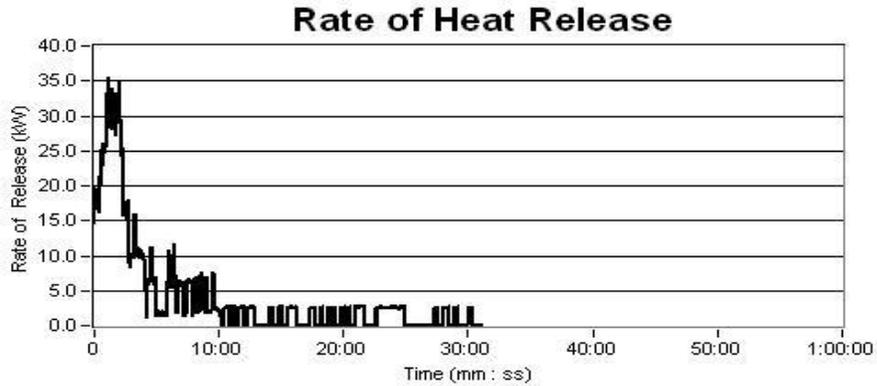
SAMPLE DESCRIPTION:

| | | |
|--|---|-------------------------------|
| Product: Stretcher Mattress | Sample ID or Model#: 1 | |
| Fabric Type (include % composition and weight): Derby Berry Omalon | Fabric Color: Berry | |
| Sample Weight: 17 lbs | Weight of Combustibles: | |
| Weight of Frame: | Interliner/Blocking Layer Description (if present): Vintex Fire Barrier | |
| Fill Description (with order of Layering): | Mattress Dimensions: | Foundation Dimensions: |

Does the Sample contain any of the following: (Check all that apply)

YES **NO**
 N **P** **S** **F** **C1** **Br**

GRAPHS:



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