STORK®

PROJECT NUMBER: 30160 04-62232-1

PAGE: 1 of 5 **DATE:** August 27, 2004

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

OPEN FLAME EVALUATION CONDUCTED ON A "STRETCHER MATTRESS"

IN ACCORDANCE WITH CALIFORNIA TECHNICAL BULLETIN 603 "REQUIREMENTS AND TEST PROCEDURE FOR RESISTANCE OF A MATTRESS/BOX SPRING SET TO A LARGE OPEN-FLAME"

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

Client Purchase Order Number: n/a

Prepared by:

Jason Harber Engineering Technician Product Evaluation Services Phone: (651) 659 - 7350 **Reviewed by:**

Grent & Saroon

Brent L. Larson 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.

OPEN FLAME EVALUATION – CA T.B. 603

INTRODUCTION:

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

TB 603

PROJECT #:	30160 04-62232		
TEST SEQUENCE #:	1		
TEST REQUESTOR: name:	Tim Shelby		
address:	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 # 2		
MATTRESS: width x length x thickness (in):	26.00 × 76.00 × 4.00		
FOUNDATION: width x length x thickness (in):	X X		
CONDITIONING ROOM: temp (*F) / R.H. (%): BURN ROOM: temp (*F) / R.H. (%):	71 / 57 D/a		
TOTAL INITIAL MASS (kg):	5.10		
TEST DATE:	08-26-2004		
COMMENTS:	00-20-2004		
Commente.			
Test Results	Data	Criteria	Pass/Fail
Deals yets of best values of 1000.	25.0	200 1/07	Deee
Peak rate of heat release (kW):	25.6	200 kW	Pass
Time @ peak release (mm:ss):	00 : 19		-
Total heat released @ 10 min (MJ):	3.2	25.0 MJ	Pass

OBSERVATIONS:

Time (mm : ss)	Observation
00 : 00	Burner ON
00 : 26	Flaming Droplets
00 : 50	Side Burner OFF
00 : 59	Flaming Droplets
01 : 10	Top burner OFF
02 : 35	Flaming Droplets
05 : 40	Flaming Droplets
07 : 41	Flaming Droplets
09 : 31	Flaming Droplets
10 : 46	Flaming Droplets

TEST PROCEDURE:

This test was conducted in accordance with California Technical Bulletin 603, a brief summary is detailed below:

The mattress / mattress set was allowed to condition for at least 24 hours in conditions compliant with California technical bulletin 603 (temperature – greater than $54^{\circ}F$ / relative humidity – less than 70%). 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 70 seconds for the top burner and 50 seconds for the side burner. Upon completion of the flame application times, the top burner was carefully lifted off of the mattress surface and the unit removed from the test room.

The test proceeded until either all combustion had ceased, 30 minutes had passed or the development of a fire of such size as to require suppression for the safety of the facility.

<u>REMARKS</u>:

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

SAMPLE DESCRIPTION:

Product:			Sample ID or Model#:				
Stretcher Mattress							
Fabric Type (include % o	composition and weight):		Fabric Color:				
Omalon			Berry				
Sample Weight:			Weight of Combustibles:				
17 lbs							
Weight of Frame:		Interline	Interliner/Blocking Layer Description (if present):				
			Vintex Fire Barrier				
Fill Description (with order of Layering):		Mattres	s Dimensions:	Foundation Dimensions:			
		26"	x 76" x 4"	N/A			
Does the Sample contain any of the following: (Check all that apply)							
YES N	0						
Ν	P S	F	C1	Br			

F:\MM\MMFILES\BLL\30160 04-62232-1.doc

<u>GRAPHS</u>:

