

Prepared by :  
Brent L. Larson  
TWIN CITY TESTING CORPORATION  
662 Cromwell Avenue  
St. Paul, Minnesota 55114  
Phone: (612) 659-7275

BODY INTERFACE PRESSURE POINT TEST  
TEMPUR – MED 6” HOSPITAL REPLACEMENT MATTRESS

Prepared for:  
TEMPUR PEDIC , INC.  
848 – G Nan Dino Blvd.  
Lexington , KY 40511

Client Purchase order Number : n / a  
Twin City Testing Corporation Project Number : 4140 93 – 2582

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TWIN CITY TESTING CORPORATION

Reviewed by :

Brent L. Larson  
Engineering Technician  
Mechanical / Metallurgical Department

Richard O. Thomalla  
Bedding Evaluation  
Mechanical / Metallurgical Department

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

**PROJECT NUMBER: 4140 93 – 2582**

## **BODY INTERFACE PRESSURE POINT TEST**

### **INTRODUCTION:**

This report documents the results on interface pressure point testing conducted on a Tempur – Med 6” hospital mattress submitted by Tempur Pedic Inc. August 23, 1993. This work was requested by Mr. Bob Hoeller of Tempur Pedic on August 17, 1993 with the testing conducted August 25 – 27, 1993.

### **SUMMARY OF RESULTS:**

**Average Pressure (mm hg) – All Subjects (10)**  
(Standard Deviation Values in Parentheses)

	<b>Tempur – Med 6”</b>
Scapula (shoulder blade)	16 (4.4)
Sacral Prominence	20 (5.3)
Heel	26 (31.1)
Trochanter (hip)	39 (10.1)

It is the policy of twin City Testing Corporation to use recognized test procedures whenever possible, such as ASTM, ANSI, ISO etc. To TCT’s knowledge, no standard procedure exists for interface body contact pressure testing at the present time. The test method employed for this analysis is based on sound laboratory practice. Precautions were employed to position the sensor correctly in each case. The pressure monitor was calibrated before and after each series of measurements.

### **SPECIMEN DESCRIPTION:**

The 6” thick Tempur – Med hospital replacement mattress consisted of a 3 ½ ” thick – 100% visco-elastic open cell polyurethane foam laminated to a 2 ½ ” thick polyurethane rigid foam section.

Dimensions: 82” x 36.5” x 6”  
Weight: 38 lbs

## TEST PROCEDURE :

A Tally Oxford Pressure Monitor - Model MK11 was used for this analysis. The mattress was placed directly on a sturdy laboratory table. Three subjects were used for the analysis and selected according to specific weight and height ranges. The subjects were dressed in an appropriate size cotton sweat suit with no shoes to ensure proper placement of the 4" x 5"-12 sensor pad. Positioning of the sensor pad was accomplished by both the subject and experimenter. Repositioning between the three replications conducted on each subject was also part of the test procedure. The subject's weight, height and gender are listed below.

SUBJECT	SEX	HEIGHT	WEIGHT
1	F	5'5"	120
2	F	5'5"	124
3	M	5'9"	165
4	M	5'8"	179
5	M	5'8"	145
6	M	6'1"	200
7	M	5'10"	195
8	M	5'10"	175
9	F	5'6"	120
10	F	5'5"	175

## TEST RESULTS

### Average pressure (mm hg) – Individual Subjects

#### Tempur – Med 6"

	<u>#1</u>	<u>#2</u>	<u>#3</u>	<u>#4</u>	<u>#5</u>	<u>#6</u>	<u>#7</u>	<u>#8</u>	<u>#9</u>	<u>#10</u>	<u>Avg.</u>
Scapula	14	11	16	17	18	20	17	16	13	14	16
Sacral	23	14	22	23	19	20	19	18	21	25	20
Prominence Heel	29	24	26	28	30	22	25	32	23	20	26
Trochanter	35	36	36	48	35	44	41	36	37	41	39

### Maximum Pressure (mm hg) – Individual Subjects

	<u>#1</u>	<u>#2</u>	<u>#3</u>	<u>#4</u>	<u>#5</u>	<u>#6</u>	<u>#7</u>	<u>#8</u>	<u>#9</u>	<u>#10</u>	<u>Avg.</u>
Scapula	27	17	22	24	33	34	22	21	19	22	24
Sacral	39	22	32	28	33	29	29	27	31	38	31
Prominence Heel	97	82	84	137	105	80	74	176	93	84	101
Trochanter	45	62	59	87	62	73	52	77	58	55	63