



## NATIONAL TECHNICAL SYSTEMS

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# — TEST REPORT —

## COMPARATIVE EVALUATIONS ON THREE (3) FLOOR PADS

*Testing For:*

**Comfortex**

**1680 Wilkie Drive**

**Winona, MN 55987**

*Attention:*

**Mr. Mike Murphy**

MJO #: 003391

December 14, 2004



Cert #: 0214-08

A2LA Field of Testing: Mechanical

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Brent Wilson, Department Manager

Robert B. Lenker, Quality Assurance Manager



# — T E S T R E P O R T —

**MJO #: 003391**  
**December 14, 2004**

**DATE RECEIVED:** 11/30/2004  
**DATE STARTED:** 11/30/2004  
**DATE COMPLETED:** 12/13/2004

**CUSTOMER P.O. #:** 0018188  
**NTS QUOTE #:** D-1004-3391, 10/27/2004

**TEST SAMPLE(s):** Floor Pads

**TEST SPECIFICATION(s):** Customer fax dated October 25, 2004; Maxim Technologies Project No. 3018 99 05288 (procedure document), February 1, 1999; ASTM F 355-86.

**CONDITION RECEIVED:** A total of three (3) Floor Pads were presented for testing. Sample numbers of 003391-1 through 003391-3, inclusive, were assigned, by NTS, to the test samples, as received, for A2LA documentation purposes. All test samples were received in a condition ready for test.

**TEST TITLE:** **COMPARATIVE EVALUATIONS**

## TEST RESULTS:

Drop testing was performed on each test sample, utilizing a 15.94 lb bowling ball as an impactor. A total of three (3) drops were performed, one (1) each of 12 inches, 18 inches, and 24 inches in height (from the surface of the test sample). An accelerometer was attached to the bowling ball and peak g-force and time to peak g were recorded for each drop test. Impact data onto the bare floor (without a test sample), was also recorded for engineering evaluation purposes. All drop data are presented on page 3 herein.

Pull testing was also performed on each test sample, utilizing a 50.64 lb weight laying atop the test sample. Testing was performed by pulling on one end of the test sample and recording the force required to slide the test sample across a vinyl tile floor. All pull data are also presented on page 3 herein.

A post test visual examination was performed with no visible damage note to any of the three (3) test

All testing was performed at standard room ambient conditions.



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## DROP TEST DATA

Sample No. / Drop Height	Peak g's	Time to Peak (msec)
SN 1 / 12 inches	56.99	9.5
SN 1 / 18 inches	101.3	7.7
SN 1 / 24 inches	152.4	6.8
SN 2 / 12 inches	211.1	3.0
SN 2 / 18 inches	630.6	0.9
SN 2 / 24 inches	739.7	0.89
SN 3 / 12 inches	426.9	1.1
SN 3 / 18 inches	655.8	0.89
SN 3 / 24 inches	858.4	0.9
(Bare Floor)* / 12 inches	726.5	0.4
(Bare Floor)* / 18 inches	1014	0.45
(Bare Floor)* / 24 inches	1389	0.45
Ball Weight: 15.94 lbs		
*Note: Bare Floor - Reference Only (No Test Sample).		

*See Chart on Page 6 herein.*

## PULL TEST DATA

Sample No.	Pull Force (lbf)
SN 1	24.26
SN 2	17.64
SN 3	31.66
Floor: Vinyl Tile	
Weight: 50.62 lbs	

*See Chart on Page 7 herein.*

## SAMPLE DESCRIPTIONS

Sample No.	Color
SN 1	Grey
SN 2	Light Blue
SN 3	Navy Blue

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**Drop test (representative). Sample No. 1.**

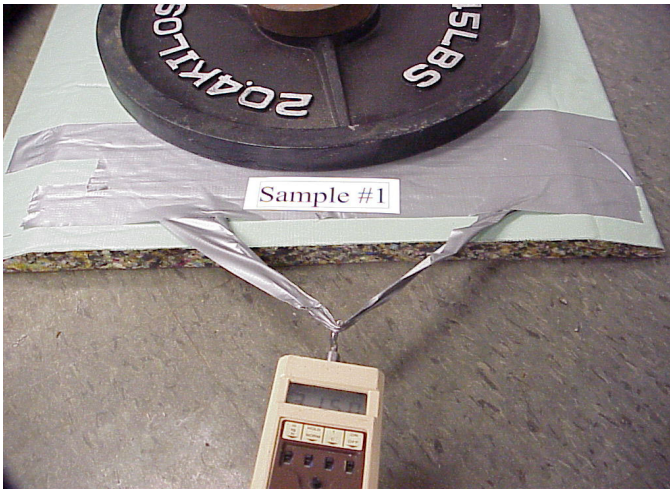


**Drop test (representative). Sample No. 2.**

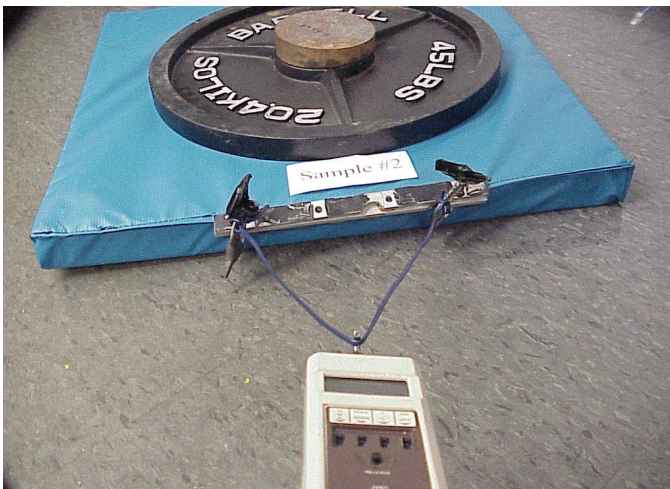


**Drop test (representative). Sample No. 3.**

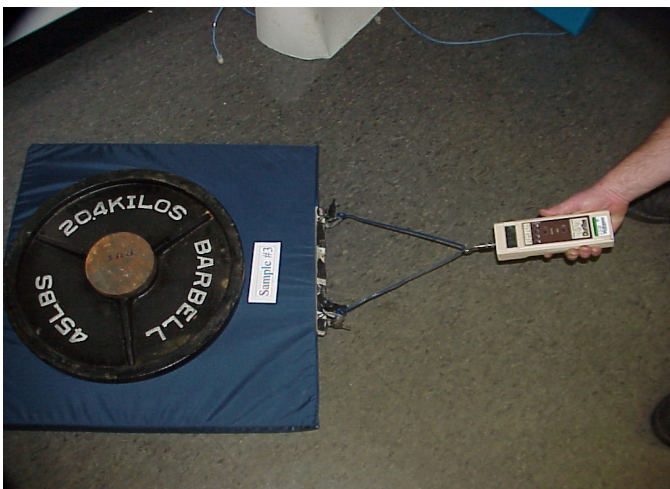
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**Pull test (representative). Sample No. 1.**



**Pull test (representative). Sample No. 2.**

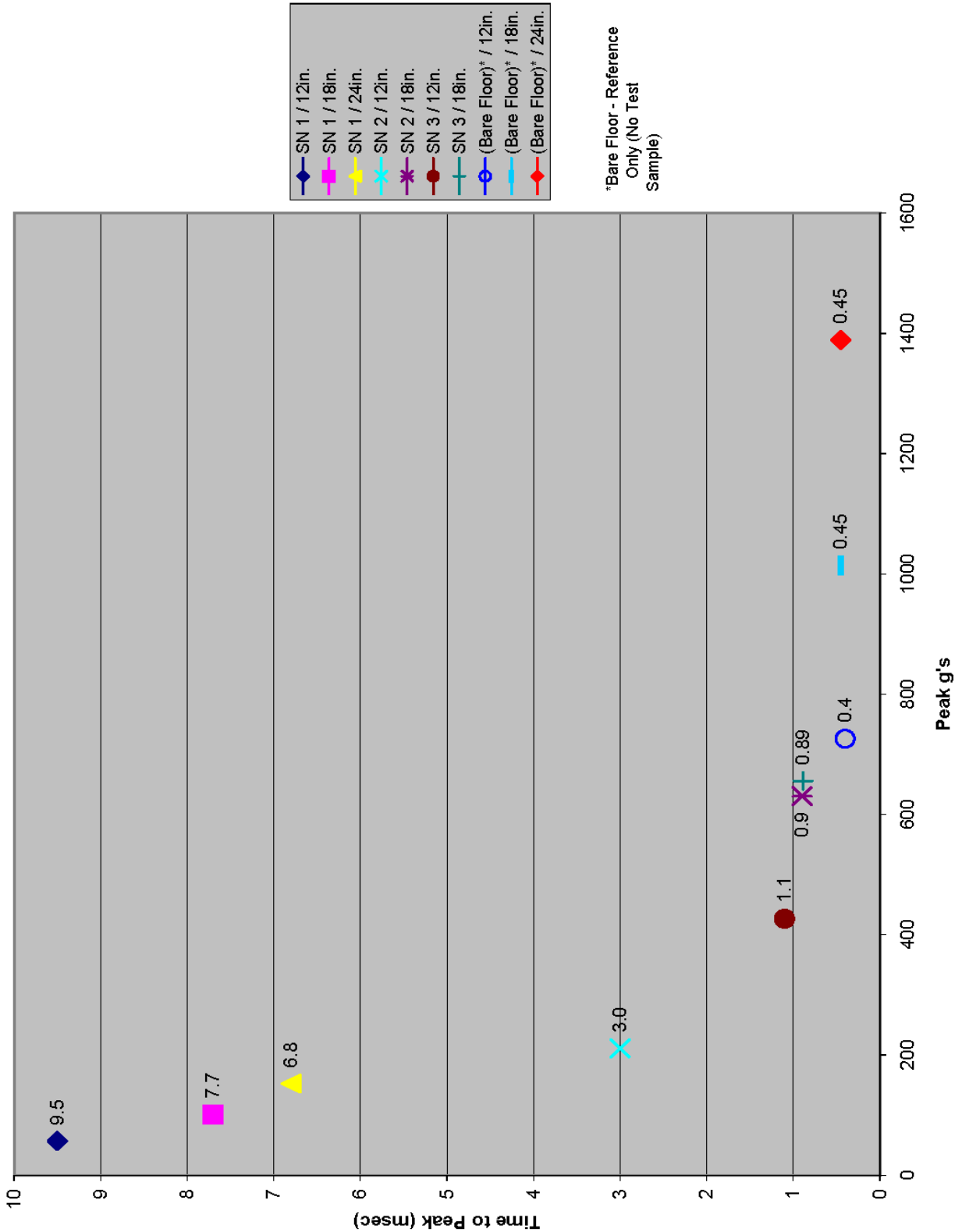


**Pull test (representative). Sample No. 3.**



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