

#200
Series



TEST REPORT:

Impact and Compression Testing

REPORT TO:

Ellwood Safety Appliance Co.
P.O. Box 831
Ellwood City, PA 16117

ATTENTION:

Mr. Richard P. Gray

REPORT DATE:

September 9, 2009

Project No. 0823182
Laboratory No. SPT-90161

Report Date: September 9, 2009
Page 2 of 2

SCOPE OF SERVICES

General

On September 1, 2009, Professional Service Industries, Inc. (PSI) received one (1) style of industrial footwear, identified below, for "Impact and Compression Resistance" testing in general accordance with ASTM F2412-05, Sections 5 and 6. Testing was performed on September 8, 2009 as outlined below.

Sample Identification

- ◆ Sample #200 – Over Shoe Protective Footwear

Test Procedure

Impact

Test Equipment: Model PSI footwear impact test apparatus with 50 pound steel impactor
Procedure: The impactor is dropped from a height that provides the required impact velocity and strikes the sample at the approximate center of the toe box. The distance from the insole to the toe box is recorded as the impact clearance.
Requirement: Minimum impact clearance for men is 0.500", women is 0.468".

Compression Resistance

Test Equipment: ATS Series 910 Universal Testing Machine. Serial #00-1049-6-00.
Procedure: The test load is applied to the sample at a rate of approximately fifty (50) pounds/sec until the specified compressive force is reached. The distance from the insole to the toe box is recorded.
Requirement: Minimum compression clearance for men is 0.50", women is 0.468".

Compression Resistance (minimum): C/75 = 2,500 pound, C/50 = 1,750 pound, and C/30 = 1,000 pound

RESULTS

Class: **Impact:** 75 **Compression:** 75

Sample ID / Trial #	Impact Clearance (Inches)	Compressive Clearance (Inches)
#200 over shoe/#1	1.37	1.29
#200 over shoe/#2	1.28	1.30
#200 over shoe/#3	1.32	1.24

Conclusion

The above sample **MEETS** the specified ASTM F2413-05 Sections 5.1.4.1 and 5.2.4.1 requirements for "Impact and Compression Resistance" testing.





REPORT TO:	Ellwood Safety Appliance Co. P.O. Box 831 Ellwood City, PA 16117	PROJECT:	Impact & Compression Testing
ATTENTION:	Mr. Richard P. Gray	PSI PROJECT NO.:	0823182
DATE:	September 9, 2009	PSI LAB NO.:	SPT-90161

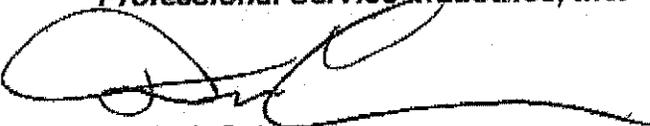
Professional Service Industries, Inc. (PSI) has performed testing on the referenced project. The results of our tests are presented in the accompanying report.

Our services for this project were performed in accordance with PSI Proposal No. 823-9207 dated September 2, 2009. The proposal included a proposed scope of services, estimated costs, unit rates, and PSI's General Conditions. Authorization to perform this project was in the form of signed acceptance of the aforementioned proposal, acknowledged September 2, 2009.

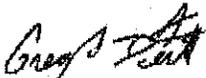
The results contained in this report are related only to the item(s) tested. The pages of this report (including attachments) shall not be reproduced, except in full, without written approval of PSI. All testing was conducted by and under the continuous, direct supervision of Professional Service Industries, Inc.

Please contact us should you have any questions concerning this report.

Respectfully submitted,
Professional Service Industries, Inc.



Denis J. Columbare
Technician, Special Test



Greg R. Deitt
Manager, Special Test/Electrical

SCOPE OF SERVICES

General

On September 1, 2009, Professional Service Industries, Inc. (PSI) received one (1) style of industrial footwear, identified below, for "Metatarsal Impact Resistance" testing in general accordance with ASTM F-2412-05, Section 7. Testing was performed on September 8, 2009 as outlined below.

Sample Identification

- ◆ #200 over shoe protective footwear

Test Procedure

Test Equipment: Model PSI footwear impact test apparatus with 50 pound steel metatarsal impactor
Procedure: The metatarsal impactor is dropped from a height that provides the required impact velocity and strikes the metatarsal guard of the sample. The distance from the insole to the metatarsal guard is recorded as the impact clearance.
Requirement: Minimum impact clearance for men is 1", women is $15/16$ "

RESULTS

Class: Impact: 75

Sample ID / Trial #	Impact Clearance (Inches)
#200 over shoe/#1	1.71"
#200 over shoe/#2	1.68"
#200 over shoe/#3	1.72"

Conclusion

The above samples **MEET** the specified ASTM F-2413-05, Section 5.3 requirement for "Metatarsal Impact Resistance" testing.



