

Total Quality. Assured. **TEST REPORT**

Applicant:



Number: GZHT90984373

Date: Aug 14, 2020

HONEYWELL SALISBURY

4091 AZALEA DRIVE, NORTH CHARLESTON,

RAMESH KANNAN Attn:

Sample Description:

Three (3) groups of submitted samples said to be:
(A) Twelve (12) pairs 52000 Men's safety boots in Red/Black
(B) Twelve (12) pairs 52001 Men's safety boots in Red/Black
(C) Five (5) pairs of Non-metallic insole boards used for Sample B.

Test Standard/Method : CSA Z195-14

ASTM F2413-18 ASTM F2913-19 SATRA TM144: 2011

Size 6, 9, 12, 16

Buyer's Name

Ref. No 52000 &52001

Brand Manufacturer

Colour Red/Black

Vendor Supplier

P.O. No. 178358 Toe Cap Non Metallic

Vamp Lining CR XR Quarter Lining Seat Region Lining CR Sole Rubber Country Of Origin China Goods Exported To U.S.A.

Aug. 06, 2020 Date Received/Date Test Started:

Date Final Information Confirmed:

Test Result Please Refer To Attached Page(S).

Should you have any guery on this report, you may contact at qzfootwear@intertek.com

Authorized By:

For Intertek Testing Services Shenzhen Ltd.

Guangzhou Branch

Guiliang Dong Senior Lab Manager

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MI / bettyxlchen

Intertek Testing Services Shenzhen Ltd. Guangzhou Branch

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Tests Conducted (As Requested By The Applicant)

Protective Toe Impact Resistance (I) (ASTM F2412-18a, 5, Impact Force: 101.7 J (75 lbf), Testing Performed At 22 $^{\circ}$ And 50% RH)

2 Protective Toe Compression Resistance (C) (ASTM F2412-18a, 6, Compression Force: 11 121 N (2 500 lbf), Testing Performed At 22 ℃ And 50% RH)

	(A)	ASTM F2413-18 Requirement	Pass/Fail
	Interior Height Clearance		
Left:	23.1 mm	≥ 12.7 mm	Pass
Right:	26.0 mm	≥ 12.7 mm	Pass
Right:	24.0 mm	≥ 12.7 mm	Pass
	(R)	ASTM F2413-18	Pass/Fail
	(B)	Requirement	<u> Pass/Fall</u>
	Interior Height Clearance		<u>rass/raii</u>
Left:			Pass
Left: Right:	Interior Height Clearance	Requirement	,

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3 Puncture Resistance Footwear (PR) (ASTM F2412-18a, 11, Conditioned At 22 °C And 50 % RH For 24 h And Testing Performed At The Same Conditions.)

	(C)	ASTM F2413-18 Requirement	Pass/Fail
Left:	The Test Pin Did Not Penetrate Beyond The Face Of The Material Nearest The	Min. 1 200 N (*)	Pass
Right:	Foot Before 1 200 N. The Test Pin Did Not Penetrate Beyond The Face Of The Material Nearest The	Min. 1 200 N (*)	Pass
Right:	Foot Before 1 200 N. The Test Pin Did Not Penetrate Beyond The Face Of The Material Nearest The Foot Before 1 200 N.	Min. 1 200 N (*)	Pass

Remark: * = The Test Pin Does Not Visually Penetrate Beyond The Face Of The Material Nearest The Foot.

4 Flex Resistance For Puncture Resistant Devices (ASTM F2412-18a, 11.7 & CSA Z195-14, 6.3.2)

	(C)	ASTM F2413-18	Pass/Fail
		<u>Requirement</u>	
Left:	No Signs Of De-lamination Of Layers Or Cracking After 1.5×10^6 Flexes.	*	Pass
Right:	No Signs Of De-lamination Of Layers Or Cracking After 1.5×10^6 Flexes.	*	Pass
Left:	No Signs Of De-lamination Of Layers Or Cracking After 1.5×10^6 Flexes.	*	Pass

Remark: * = No Signs Of De-lamination Of Layers Or Cracking After 1.5 x 10^6 Flexes.

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5 Toecap Impact Resistance (CSA Z195-14, 6.2, Grade 1: 125 Joules)

(A)		The Internal Toe Clearance	<u>Requirement</u>	Pass/Fail
Size M's 9	Left:	23.2 mm	Min. 12.7 mm (*)	Pass
	Right:	24.1 mm	Min. 12.7 mm (*)	Pass
(B)		The Internal Toe Clearance	<u>Requirement</u>	Pass/Fail
Size M's 9	Left:	21.8 mm	Min. 12.7 mm (*)	Pass
	Right:	22.0 mm	Min. 12.7 mm (*)	Pass

Remark: * = In Addition, The Protective Toecap Shall Not Fracture Through Its Thickness.

6 Toecap Impact Resistance (CSA Z195-14, 5.1.1, -18 °C x 12h Grade 1: 125 Joules)

(A)		The Internal Toe Clearance	<u>Requirement</u>	Pass/Fail
Size M's 9	Left:	26.2 mm	Min. 12.7 mm (*)	Pass
	Right:	27.2 mm	Min. 12.7 mm (*)	Pass
(B)		The Internal Toe Clearance	<u>Requirement</u>	Pass/Fail
Size M's 9	Left:	25.2 mm	Min. 12.7 mm (*)	Pass
	Right:	25.4 mm	Min. 12.7 mm (*)	Pass

Remark: * = In Addition, The Protective Toecap Shall Not Fracture Through Its Thickness.

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7 Slip Resistance(ASTM F2913-19)

Conditioning For Specimen:

Temperature: (23 ± 2) °C Relative Humidity: (50 ± 5) % At Least 3 Hours

Test Condition:

Test Surface: Clay Tile Vertical Force: 500 N

Sample	Size	Sequence	Conditions	Modes	Results
(A)				Forward Heel Slip	0.84
	9		Dry	Backward Forepart Slip	1.38
	(Left)	Wet After		Forward Flat Slip	1.24
		Dry		Forward Heel Slip	0.74
			Wet	Backward Forepart Slip	0.78
				Forward Flat Slip	0.84
				Forward Heel Slip	0.73
		Dry After Wet	Wet	Backward Forepart Slip	0.80
				Forward Flat Slip	0.82
				Forward Heel Slip	0.85
		Dry	Backward Forepart Slip	1.33	
				Forward Flat Slip	1.20

Sample	Size	Sequence	Conditions	Modes	Results
(B)				Forward Heel Slip	0.85
	9		Dry	Backward Forepart Slip	0.84
	(Left)	Wet After	-	Forward Flat Slip	0.98
		Dry		Forward Heel Slip	0.55
		. Wet	Wet	Backward Forepart Slip	0.58
				Forward Flat Slip	0.57
				Forward Heel Slip	0.54
			Wet	Backward Forepart Slip	0.58
	(Right)			Forward Flat Slip	0.60
	Wet		Forward Heel Slip	0.88	
			Dry	Backward Forepart Slip	0.85
				Forward Flat Slip	0.99

Note:

It Must Be Noted That The Slip Resistance Test Carried Out In This Report Denotes An Indication Of Slip Of This Particular Footwear/Component On The Surface Mentioned In The Test Item. It Is Important To Note That Footwear Is Subject To Many Different Conditions Encountered In Everyday Use And That It Is Impossible To Make Footwear Resistant To Slip In All Conditions. Nevertheless, It Is Generally Accepted That Problems Are Minimized If The Guideline Coefficients Of Friction Are Achieved.

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中国认可 国际互认 检测

TESTING CNAS L0220

GZHT90984373

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8 Slip Resistance (SATRA TM144: 2011, Ice Surface At -7°C, Vertical Force: 500 N)

(B)

Heelpart	Dry Smooth Icy 0.20	Wet Icy 0.15
Forepart	0.14	0.09
Heelpart	0.23	0.16
Forepart	0.16	0.10

Note:

- 1. The Outsole Of Test Sample Was Pre-Chilled To -7℃ In Water-Ethanol Bath Before Testing.
- 2. It Must Be Noted That The Slip Resistance Test Carried Out In This Report Denotes An Indication Of Slip Of This Particular Footwear/Component On The Surface Mentioned In The Test Item. It Is Important To Note That Footwear Is Subject To Many Different Conditions Encountered In Everyday Use And That It Is Impossible To Make Footwear Resistant To Slip In All Conditions. Nevertheless, It Is Generally Accepted That Problems Are Minimized If The Guideline Coefficients Of Friction Are Achieved.

Expended Uncertainty: 0.01, With k = 2 At 95% Confidence Level.

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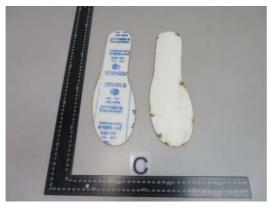
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End Of Report

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