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TEST REPORT



中国认可
国际互认
检测
TESTING
CNAS L0220

Number: GZHT91153853

Date: Nov 14, 2022

Applicant: CORTINA N.V.
MEERSBLOEM-MELDEN 42,
9700 OUDENAARDE,BELGIUM

Attn: REBECCA/JENNY

Sample Description:

- Four (4) groups of submitted samples said to be:
- (A) Three (3) pairs of Men's safety shoes in Black
- (B) One (1) pair of Men's safety shoes in Grey
- (C) One (1) pair of Men's safety shoes in Navy
- (D) Four and a half (4.5) pairs of steel plates.

Standard : ASTM F2413-18
ASTM F3445-21

Size : US 9

Buyer's Name : CORTINA

Ref. No : ECOFITZ S1P LOW

Brand : SAFETY JOGGER

Manufacturer : CORTINA

Colour : Black/Grey/Navy

Vendor : --

Supplier : --

P.O. No. : --

Authorized By:
For Intertek Testing Services Shenzhen Ltd.
Guangzhou Branch

Guiliang Dong
Senior Lab Manager



AY / karrieliu

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Ref. : Black/Grey/Navy Safety Low shoe
Sole: Black PU/PU
Insert Plate: SJ Steel Penetration Insert Plate
Toe Cap: Steel Toecap 459
Upper: Black Polyester Recycled Flyknit Fabric
Vamp Lining: Black Polyester Non-woven
Quarter Lining: Black Polyester Recycled BK Mesh
Seat Region Lining: Black Polyester Recycled BK Mesh
Insole: Grey Polyester Non-woven
Collar: Black Polyester Recycled Flyknit Fabric
Tongue: Black Polyester Recycled Flyknit Fabric
Insock: Black/Yellow SJ BK Polyester mesh+ SJFOAM (PU)

Country Of Origin : CHINA
Goods Exported To : EU/US
Date Received/Date Test Started: Nov 01, 2022
Date Final Information Confirmed: --

Test Result Please Refer To Attached Page(S).

Should you have any query on this report, you may contact at gzfootwear@intertek.com

Authorized By:
For Intertek Testing Services Shenzhen Ltd.
Guangzhou Branch

Guiliang Dong
Senior Lab Manager





- 1 Protective Toe Impact Resistance (I) (ASTM F2412-18a, 5, Impact Force: 101.7 J (75 lbf), Testing Performed At 22°C And 50% RH)

	(A)	ASTM F2413-18 Requirement	Pass/Fail
	Interior Height Clearance		
Left:	18.2 mm	*	Pass
Right:	17.8 mm	*	Pass
Left:	15.7 mm	*	Pass

Remark: * = ≥ 12.7 mm

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

	(A)	ASTM F2413-18 Requirement	Pass/Fail
	Interior Height Clearance		
Left:	21.6 mm	*	Pass
Right:	23.4 mm	*	Pass
Right:	23.8 mm	*	Pass

Remark: * = ≥ 12.7 mm





3 Static Dissipative Footwear (SD) (ASTM F2412-18a, 10, Conditioned At 22°C And 50% RH For 24 h And Testing Performed At The Same Conditions)

		(A)	ASTM F2413-18 Requirement	Pass/Fail
Sample 1	Left	$2.1 \times 10^7 \Omega$	*	Pass
	Right	$3.3 \times 10^7 \Omega$	*	Pass
	One Pair	$1.6 \times 10^7 \Omega$	*	Pass
Sample 2	Left	$1.3 \times 10^7 \Omega$	*	Pass
	Right	$3.5 \times 10^7 \Omega$	*	Pass
	One Pair	$1.2 \times 10^7 \Omega$	*	Pass
Sample 3	Left	$1.6 \times 10^7 \Omega$	*	Pass
	Right	$3.3 \times 10^7 \Omega$	*	Pass
	One Pair	$1.2 \times 10^7 \Omega$	*	Pass

Remark: * = SD 35: $1 \times 10^6 \Omega \sim 3.5 \times 10^7 \Omega$

4 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)

	(D)	ASTM F2413-18 Requirement	Pass/Fail
Left:	The Test Pin Did Not Penetrate Beyond The Face Of The Material Nearest The Foot After An Applied Force Of 1200 N.	*	Pass
Right:	The Test Pin Did Not Penetrate Beyond The Face Of The Material Nearest The Foot After An Applied Force Of 1200 N.	*	Pass
Right:	The Test Pin Did Not Penetrate Beyond The Face Of The Material Nearest The Foot After An Applied Force Of 1200 N.	*	Pass

Remark: * = The Test Pin Does Not Visually Penetrate Beyond The Face Of The Material Nearest The Foot, After An Applied Force Of 1200 N.





5 Corrosion Resistance For Puncture Resistant Plates (ASTM F2412-18a, 11.8 & ASTM B117, 5% NaCl Solution For 24 Hours)

	(D)	<u>ASTM F2413-18 Requirement</u>	<u>Pass/Fail</u>
Left:	No Sign Of Corrosion.	*	Pass
Right:	No Sign Of Corrosion.	*	Pass
Left:	No Sign Of Corrosion.	*	Pass

Remark: * = No Sign Of Corrosion, De-lamination, Or Deterioration.

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

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

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





7 Slip Resistance (ASTM F2913-19)

Conditioning Test Specimen		Test Condition	
Temperature	(23±2)°C	Atmosphere	(23±2)°C, (50±5)% RH
Relative Humidity	(50±5)% RH	Test Surface	Flat Unglazed Clay Quarry Tile
Period	At Least 3 Hours	Vertical Force	500 N

Sample	Size	Sequence	Conditions	Modes	Results (COF)	ASTM F3445-21 Requirement	Pass/Fail
(A)	9 (Left)	Dry Then Wet	Dry	Forward Heel Slip	0.68	Min. 0.40	Pass
				Backward Forepart Slip	0.54	Min. 0.40	Pass
		Wet	Wet	Forward Heel Slip	0.56	Min. 0.40	Pass
				Backward Forepart Slip	0.44	Min. 0.40	Pass
	9 (Right)	Wet Then Dry	Wet	Forward Heel Slip	0.48	Min. 0.40	Pass
				Backward Forepart Slip	0.43	Min. 0.40	Pass
		Dry	Dry	Forward Heel Slip	0.69	Min. 0.40	Pass
				Backward Forepart Slip	0.56	Min. 0.40	Pass
	9 (Right)	Dry Then Wet	Dry	Forward Heel Slip	0.68	Min. 0.40	Pass
				Backward Forepart Slip	0.56	Min. 0.40	Pass
		Wet	Wet	Forward Heel Slip	0.49	Min. 0.40	Pass
				Backward Forepart Slip	0.44	Min. 0.40	Pass

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 Subjected 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.





End Of Report

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Remark:

1. As Requested by the Applicant, For Details Refer to Attached Page (s).
2. All the tested item are tested under the standard condition.
3. The report is valid with commission test only for the test samples in the case of delivering samples by clients.

