

Declaration of Conformity (page 2 of 2)

2. VISIBLE RETROREFLECTIVE MATERIAL

- Amount of visible retroreflective material (smallest size offered) .13m² (201 in.²)

Please list each type of material that contributes towards **VISIBLE RETROREFLECTIVE MATERIAL** listed above.

Material 1 Test Data

Test Lab: Calcoast – Test Report# 150123-02A	
Date: 2/20/15	Style #: CSR 1303-2
Description: 50mm wide sew on silver reflective trim	

Material 2 Test Data

Test Lab:	
Date:	Style #:
Description:	

**Use separate sheet for additional materials*

The undersigned hereby warrants that he/she is authorized to legally bind the company identified above.

Signed: _____ Title: _____

Print Name: _____ Date: _____

Third Party Certification
(ANSI/ISEA 107-2015)
HIGH VISIBILITY COMPLIANCE CERTIFICATE

Submitted by: Tingley Rubber Corporation
Name: Mesh Vest
Color Hi Vis Fluorescent Orange Red

Date: February 23, 2016

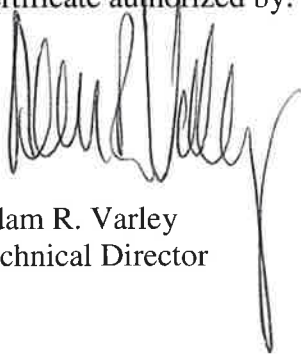
Report #: TINGLE.A020416M

The submitted fabric **MEETS** the requirements of ANSI/ISEA 107-2015 specification for the tests conducted in this report covering high visibility background material.

All of the above tests and evaluations were performed in accordance with ISO/IEC 17025 Quality Systems.

This certification applies to the background material only.

Certificate authorized by:



Adam R. Varley
Technical Director



Serial 60085020416M.TINGLE

*This certification applies to the particular sample tested and to the specific tests carried out as dated and detailed in the report referenced above. It does not signify any measure of approval, control, supervision, or surveillance by Vartest Laboratories Inc. to this or any related product.

ISO/IEC 17025 Certified Third Party Test Report

DATE: February 26, 2016 **FILE:** TINGLE.A020416M
PO #: 17124

CLIENT: Tingley Rubber Corporation **ATTN:** Erika Puello
1551 S Washington Ave, Suite 403
Piscataway, NJ 08854

SAMPLE IDENTIFIED BY CLIENT AS:

Fabric Submitted
Per ANSI/ISEA 107-2015 Specification
Name: Mesh Vest
Color Hi Vis Fluorescent Orange Red

EXECUTIVE SUMMARY:

PASS

FAIL

X

The submitted fabric **MEETS** the requirements of ANSI/ISEA 107-2015 Specification for the applicable tests conducted in this report covering high visibility background material.

REQUIRED TESTS:

Test/Method	Section	ANSI/ISEA 107 REQUIREMENTS	TEST RESULT	PASS/FAIL/NA
Determination of Color ASTM E1164-12 (Single layer)	8.1.1 8.2.4 10.2	Test specimen must fulfill the colorimetric requirements of Table 3 for background material	As submitted: x = y = % Y =	N/A
			After 40x Xenon x = y = % Y =	N/A
Determination of Color ASTM E1164-12 (Two layers of the same material)	8.1.1 8.2.4 10.2	Test specimen must fulfill the colorimetric requirements of Table 3 for background material	As submitted: x = 0.601 y = 0.362 % Y = 42.70	PASS
			After 40x Xenon x = 0.568 y = 0.366 % Y = 46.51	PASS
Colorfastness Crocking AATCC 8-2013	8.2.1	Wet 3.0 Dry 3.0	Wet: 4.5 Dry: 4.5	PASS PASS
Colorfastness Perspiration AATCC 15-2013	8.2.2	Shade change 4.0 Staining 3.0	Shade Change: 5.0 Acetate: 4.5 Cotton: 4.5 Nylon: 4.0 Polyester: 5.0 Acrylic: 5.0 Wool: 4.5	PASS PASS

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Name: Mesh Vest
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REQUIRED TESTS (Cont.):

Test/Method	Section	ANSI/ISEA 107 REQUIREMENTS	TEST RESULT	PASS/FAIL/NA
Bursting Strength (Knitted or Other Nonwovens) ASTM D6797-07 (2011)	8.4.1	267 N (60 lbf) (27.2fkg)	99.1 lbs average	PASS
Tear Resistance (Woven) ASTM D1424-09 (2013)	8.4.2	13 N (1326 gf) (2.92 lbf) Avg. force machine Avg. force cross-machine		N/A N/A

TESTED AS CARE LABEL DICTATES:

Test/Method	Section	ANSI/ISEA 107 REQUIREMENTS	TEST RESULT	PASS/FAIL/NA
Colorfastness Domestic Laundry AATCC 61-2013-2A 105°F (Modified)	8.2.3 Table 4	Shade Change 4.5 Staining 3.0	Shade Change: 4.5 Acetate: 3.5 Cotton: 4.0 Nylon: 3.0 Polyester: 4.0 Acrylic: 4.5 Wool: 4.0	PASS PASS
Colorfastness Commercial Laundry AATCC 61-2013-3A 145°F (Modified)	8.2.3 Table 4	Shade Change 4.5 Staining 3.0	Shade Change: Acetate: Cotton: Nylon: Polyester: Acrylic: Wool:	N/A N/A
Colorfastness Water AATCC 107-2013	8.2.3 Table 4	Shade Change 3.0 3.0	Shade Change: 4.5 Acetate: 4.5 Cotton: 4.5 Nylon: 4.5 Polyester: 5.0 Acrylic: 5.0 Wool: 4.5	PASS PASS
Colorfastness Hypochlorite Bleaching AATCC 61-2013-4A (Commercial)	8.2.3 Table 4	Fading 4.0		N/A
Colorfastness Hypochlorite Bleaching AATCC 61-2013-5A (Domestic)	8.2.3 Table 4	Fading 4.0		N/A

ISO/IEC 17025 Certified Third Party Test Report

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Fabric Submitted

Per ANSI/ISEA 107-2015 Specification

Name: Mesh Vest

Color Hi Vis Fluorescent Orange Red

TESTED AS CARE LABEL DICTATES:

Test/Method	Section	ANSI/ISEA 107 REQUIREMENTS	TEST RESULT	PASS/FAIL/NA
Colorfastness Hot-pressing AATCC 133-2013	8.2.3 Table 4	Shade Change: 4.5 Staining: 3.0	230°F Shade Change: 5.0 Staining: 5.0	PASS
			300°F Shade Change: 5.0 Staining: 5.0	PASS
			390°F Shade Change: 5.0 Staining: 5.0	PASS
Colorfastness Dry Cleaning AATCC 132-2013	8.2.3 Table 4	Shade Change 4.0		N/A
Dimensional change Domestic AATCC 135-2012 (3)IIIA(ii) @ 105°F	8.3.1	Woven L +/- 4% W +/-2%	5th Cycle Length= Width =	N/A
		Knit or Coated, Non-Woven	5th Cycle Length= -3.6% Width = -1.9%	PASS

TESTED AS CARE LABEL DICTATES (cont.):

Test/Method	Section	ANSI/ISEA 107 REQUIREMENTS	TEST RESULT	PASS/FAIL/NA
Dimensional change Commercial AATCC 96-2012 IIIC-A and/or E@145°F	8.3.1	Woven L +/- 4% W +/-2%	5th Cycle Length= Width =	N/A
		Knit or Coated, Non-Woven L +/- 7% W +/-5%	5th Cycle Length= Width =	N/A
Dimensional change Drycleaning AATCC 158-2011	8.3.1	Woven L +/- 4% W +/-2%	5th Cycle Length= Width =	N/A
		Knit or Coated, Non-Woven L +/- 7% W +/-5%	5th Cycle Length= Width =	N/A

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TESTED AS CARE LABEL DICTATES (cont.):

Test/Method	Section	ANSI/ISEA 107 REQUIREMENTS	TEST RESULT	PASS/FAIL/NA
Water Repellency AATCC 22-2010	8.5.1	90 New 70 After 5X Launderings	New: After:	N/A N/A
Water Resistance AATCC 35-2013	8.5.2	≤ 1 g of water penetration Level 1	New: After 5X Launderings:	N/A N/A
Waterproof AATCC 127-2013	8.5.3	200 cm New 200 cm After 5X Launderings	New: After:	N/A N/A
Breathability ASTM E96-2013 Procedure B or BW	8.6	Procedure B: 600 g/m ² /24 hr microporous		N/A
		Procedure BW: 3600 g/m ² /24 hr hydrophilic		N/A

Signed For The Company By

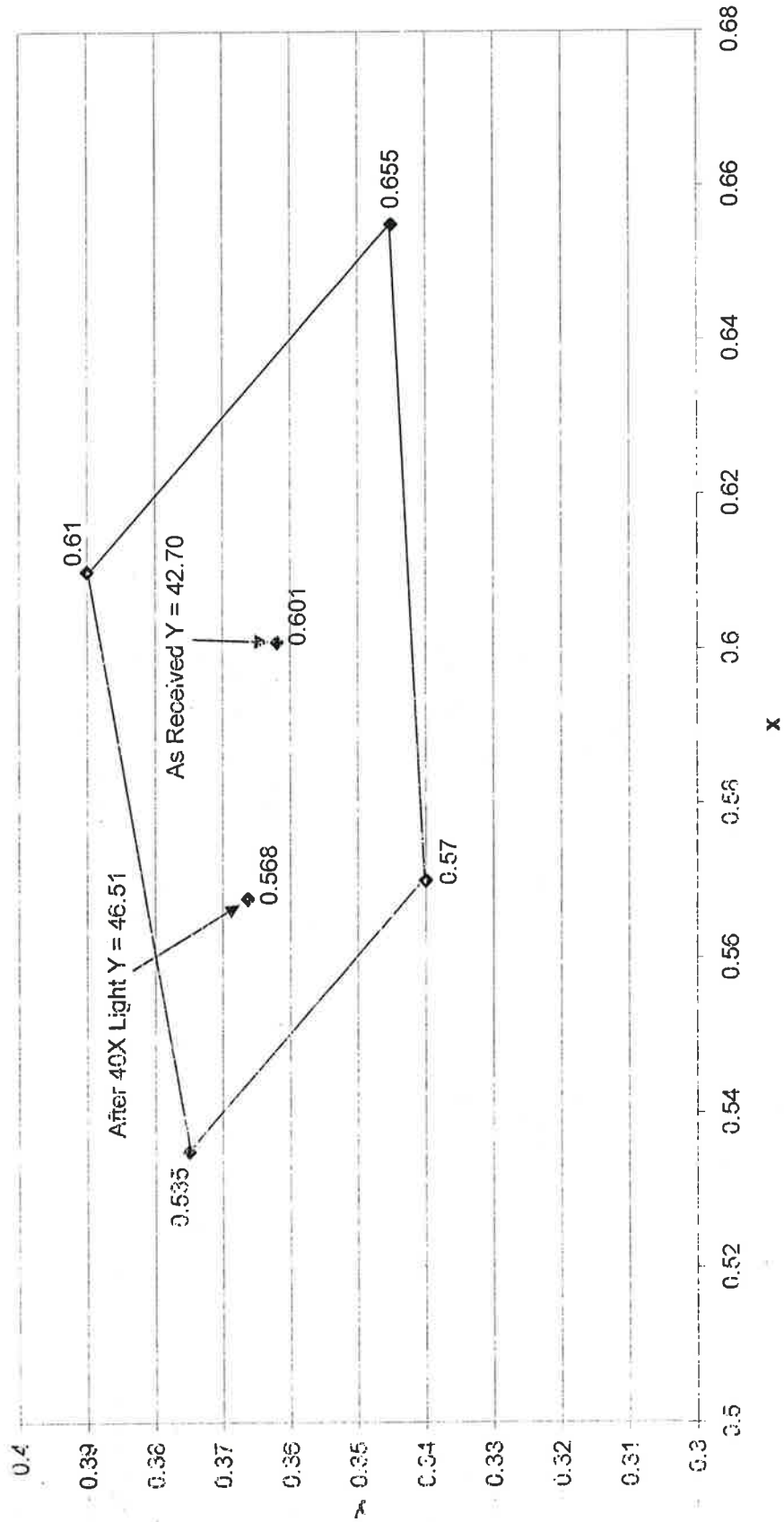
Adam R. Varley
Technical Director

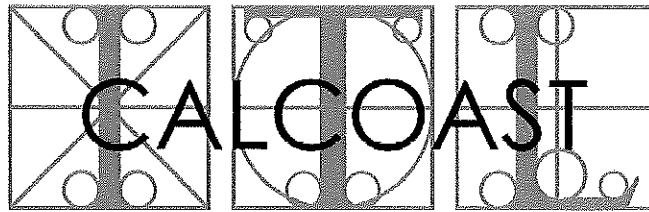
JG/02/212



Stacy Sadowy
Quality Assurance Supervisor

Chromaticity Coordinates
TINGLE.A.020416M
Fluorescent Orange- red
ANSI 107-2015 Requirement: $Y \geq 40$
Test Performed with Double Layers of Fabric





INDUSTRIAL TESTING LABORATORY

CERTIFICATE OF COMPLIANCE

Based on Report No. 150123-02A

Report Date: 20 February 2015

Project Name: Tingley CSR 1303-2 Non-Waterproof Sew-On Silver Retroreflective Trim on PE Base

Submitted by: Tingley Rubber Corporation South Plainfield, NJ 07080

Test Laboratory: Calcoast - ITL San Leandro, CA 94577

Product: 50 mm (2") wide retroreflective trim, submitted 23 Jan 2015

SUMMARY

Specification: ANSI/ISEA 107-2010 American National Standard for High-Visibility Safety Apparel Retroreflective Material, Level 1 or 2

Color

Prior to Exposure..... Not Applicable
Colorfastness..... Not Applicable

Photometric Performance, Initial

Level 2..... Passed
Level 1..... Passed

Retroreflection after Test Exposure

Abrasion..... Passed
Flexing..... Passed
Folding at Cold Temperatures..... Passed
Exposure to Temperature Variation..... Passed
Washing (25X)..... Passed
Dry-cleaning (0X)..... Not Tested
Retroreflective Performance in Rainfall..... Passed
Flame Resistance..... Not Tested

Written by:

Douglas G. Cummins
Photometric Engineer

Approved by:

Mark A. Evans
Laboratory Director

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PHOTOGRAPH SHEET

Project Name: Tingley CSR 1303-2 Non-Waterproof Sew-On
Silver Retroreflective Trim on PE Base

