

**ZINGERLE  
GROUP**

 **Fire Testing  
Certifications**

Canopy Tent Fabrics

**MASTERTENT®**

**ECOTENT®** 

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OVERVIEW

NFPA 701

CPAI-84 SEC.6

CAN/ULC-S109

EN 13501-1:2007

**⚠ IMPORTANT:** Read all details in this manual before using equipment to ensure proper understanding of warranty coverage and procedures. Keep this manual for future reference.



Our signature Pirontex® and top quality Oxford Polyester, PVC, and Fiberglass fabrics receive fire-retardant treatments to ensure compliance with fire industry standards for public safety, in North America.

THESE SAFETY CERTIFICATIONS INCLUDE:



**NFPA 701:**  
Standard Methods for Fire Tests for Flame Propagation of Textiles and Films



**CPAI-84 Sec.6:**  
A Specification for Flame Resistant Materials Used In Camping Tentage



**CAN/ULC-S109:**  
Standard for Flame Tests of Flame Resistant Fabrics and Films



**EN 13501-1:2007:**  
Classification of Reaction to Fire Performance in Accordance with EN 13501-1:2007+A1:2009

REVIEW FABRIC MATERIALS BY BRAND AND PRODUCT:

	<b>MASTERTENT</b>	<b>ECOTENT</b> 
<b>Pirontex®</b>	Series 1 Rooftops Series 1 Sidewalls Rescue Sidewalls	
<b>Oxford 500D</b>	Series 1 Rooftops Series 1 Sidewalls	E1 Rooftops E1 Sidewalls
<b>Oxford 250D</b>	Corner Curtains Attachable Valances Double-Sided Flags/Banners	E2 Rooftops E2 Sidewalls E2 Rooftops E3 Sidewalls*
<b>400g PVC</b>	Upgraded Rooftops Upgraded Sidewalls Rescue Sidewall Base Rescue Flooring Transport Bags Pavilion Rooftops Rain Gutters	E1 Sidewall Base
<b>Recycled</b>		Upgraded Rooftops* Upgraded Sidewalls*
<b>Fiberglass</b>	Upgraded Rooftops Upgraded Sidewalls	

\*Ecotent® recycled fabrics and E3 fabrics are not treated to be fire-rated.



## **NFPA 701**

Standard Methods for Fire  
Tests for Flame Propagation  
of Textiles and Films



February 7, 2023

Mr. Brad Smith  
 ZINGERLE GROUP USA, INC.  
 6965 Northpark Blvd  
 Suite N  
 Charlotte, NC 28216

Reference: Laboratory Test Report  
 Lab Identification No. 53606  
 Invoice No. 84985

Dear Mr. Smith:

One (1) sample, identified as **Pirontex**, was received and tested in accordance with the National Fire Protection Association No. 701, "Standard Methods of Fire Tests for Flame Propagation of Textiles and Films, 2023 Edition, (Test 1)". The results are as follows:

<u>Test Results</u>		
<u>Specimen Number</u>	<u>Residual Flame</u> (seconds)	<u>Weight Loss</u> (percent)
1	0.0	2.44
2	0.0	0.37
3	0.0	1.19
4	0.0	0.06
5	0.0	0.63
6	0.0	12.01
7	0.0	0.37
8	0.0	0.99
9	0.0	0.12
<u>10</u>	<u>0.0</u>	<u>1.72</u>
<b>AVG</b>	<b>0.0</b>	<b>1.99</b>

The sample submitted **meets** the minimum requirements of the above standard. The average percent weight loss cannot exceed 40% and the weight loss of individual specimens cannot exceed mean value plus three standard deviations. The average residual flame cannot exceed 2.0 seconds.

Sincerely,

Brian S. Dement

BSD/mr



OUR LETTERS AND REPORTS ARE FOR THE EXCLUSIVE USE OF THE CLIENT TO WHOM THEY ARE ADDRESSED. ANY COMMUNICATION TO OTHERS OR THE USE OF OUR COMPANY NAME MUST RECEIVE PRIOR APPROVAL. OUR TEST RESULTS APPLY ONLY TO THE SAMPLE TESTED AND ARE NOT NECESSARILY INDICATIVE OF THE QUALITIES OF APPARENTLY IDENTICAL OR SIMILAR PRODUCTS. UNLESS OTHERWISE SPECIFIED, ALL COMPLIANCE STATEMENTS ARE SIMPLE ACCEPTANCE. SAMPLES NOT DESTROYED IN TESTING ARE RETAINED A MAXIMUM OF THIRTY DAYS. THE LETTERS, REPORTS OR NAME OF DIVERSIFIED TESTING LABORATORIES, INC. MAY NOT BE USED IN ADVERTISING TO THE GENERAL PUBLIC.

# NFPA 701

## 500D Oxford Polyester



June 18, 2018

Mr. Justin D. Russell  
 ZINGERLE GROUP USA, INC.  
 6965 Northpark Blvd  
 Suite N  
 Charlotte, NC 28216

Reference: Laboratory Test Report  
 Lab Identification No. 30751  
 Invoice No. 62145

Dear Mr. Russell:

One (1) fabric sample, identified as **POLYESTER OXFORD 500X500D**, was received and tested in accordance with the National Fire Protection Association No. 701, "Standard Methods of Fire Tests for Flame Propagation of Textiles and Films, 2015 Edition, (Test 2, Large Scale)". The results are as follows:

### TEST RESULTS – FOLDS

<u>Specimen Number</u>	<u>After Flame (seconds)</u>	<u>Residual Flame (seconds)</u>	<u>Char Length (inches)</u>
1	0.0	0.0	12.5
2	0.0	0.0	12.0
3	0.0	0.0	11.5
4	0.0	0.0	12.0

The sample submitted **meets** the minimum requirements of the above standard. The length of char on the individual folded specimens shall not exceed 41.3 inches. Additionally, no specimen shall continue flaming for more than two (2) seconds after the test flame is removed and no residues shall fall to the floor of the test chamber and continue flaming for more than two (2) seconds at any time during the test.

If there are any questions or when we can be of further assistance, please let us know.

Sincerely,

Brian S. Dement



BSD/mr

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NFPA 701

# NFPA 701

## 250D Oxford Polyester

MASTERTENT

ECOTENT



June 18, 2018

Mr. Justin D. Russell  
ZINGERLE GROUP USA, INC.  
6965 Northpark Blvd  
Suite N  
Charlotte, NC 28216

Reference: Laboratory Test Report  
Lab Identification No. 30751  
Invoice No. 62145

Dear Mr. Russell:

One (1) fabric sample, identified as **POLYESTER OXFORD 250X250D**, was received and tested in accordance with the National Fire Protection Association No. 701, "Standard Methods of Fire Tests for Flame Propagation of Textiles and Films, 2015 Edition, (Test 2, Large Scale)". The results are as follows:

### TEST RESULTS – FOLDS

<u>Specimen Number</u>	<u>After Flame (seconds)</u>	<u>Residual Flame (seconds)</u>	<u>Char Length (inches)</u>
1	0.0	0.0	12.5
2	0.0	0.0	12.5
3	0.0	0.0	11.0
4	0.0	0.0	12.0

The sample submitted **meets** the minimum requirements of the above standard. The length of char on the individual folded specimens shall not exceed 41.3 inches. Additionally, no specimen shall continue flaming for more than two (2) seconds after the test flame is removed and no residues shall fall to the floor of the test chamber and continue flaming for more than two (2) seconds at any time during the test.

If there are any questions or when we can be of further assistance, please let us know.

Sincerely,

Brian S. Dement

BSD/mr



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NFPA 701

# NFPA 701 400g PVC

MASTERTENT

ECOTENT



June 18, 2018

Mr. Justin D. Russell  
ZINGERLE GROUP USA, INC.  
6965 Northpark Blvd  
Suite N  
Charlotte, NC 28216

Reference: Laboratory Test Report  
Lab Identification No. 30751  
Invoice No. 62145

Dear Mr. Russell:

One (1) fabric sample, identified as **PVC FABRIC, LAMINATED 400 GR/M<sup>2</sup>**, was received and tested in accordance with the National Fire Protection Association No. 701, "Standard Methods of Fire Tests for Flame Propagation of Textiles and Films, 2015 Edition, (Test 2, Large Scale)". The results are as follows:

### TEST RESULTS – FOLDS

<u>Specimen Number</u>	<u>After Flame (seconds)</u>	<u>Residual Flame (seconds)</u>	<u>Char Length (inches)</u>
1	0.0	0.0	19.0
2	0.0	0.0	17.5
3	0.0	0.0	18.0
4	0.0	0.0	19.0

The sample submitted **meets** the minimum requirements of the above standard. The length of char on the individual folded specimens shall not exceed 41.3 inches. Additionally, no specimen shall continue flaming for more than two (2) seconds after the test flame is removed and no residues shall fall to the floor of the test chamber and continue flaming for more than two (2) seconds at any time during the test.

If there are any questions or when we can be of further assistance, please let us know.

Sincerely,

Brian S. Dement

BSD/mr

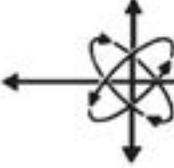


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NFPA 701

# NFPA 701 Fiberglass

**MASTERTENT**



**DIVERSIFIED**  
TESTING LABORATORIES, INC.  
WORLDWIDE SERVICE

“We Test Per Your Request”

336 WEST FRONT STREET  
P.O. BOX 4004  
BURLINGTON, NORTH CAROLINA 27215  
PHONE (336) 227-7710 • FAX (336) 227-1175  
www.diversifiedtestinglabs.com

May 18, 2022

Mr. Brad Smith  
ZINGERLE GROUP USA, INC.  
6965 Northpark Blvd  
Suite N  
Charlotte, NC 28216

Reference: Laboratory Test Report  
Lab Identification No. 50130  
Invoice No. 81544

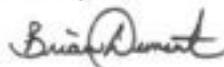
Dear Mr. Smith:

One (1) sample, identified as **Fiberglass Fabric**, was received and tested in accordance with the National Fire Protection Association No. 701, “Standard Methods of Fire Tests for Flame Propagation of Textiles and Films, 2019 Edition, (Test 1)”. The results are as follows:

<u>Test Results</u>		
<u>Specimen Number</u>	<u>Residual Flame</u> (seconds)	<u>Weight Loss</u> (percent)
1	0.0	0.98
2	0.0	0.73
3	0.0	0.85
4	0.0	0.85
5	0.0	0.79
6	0.0	0.85
7	0.0	0.77
8	0.0	0.75
9	0.0	0.82
<u>10</u>	<u>0.0</u>	<u>0.85</u>
<b>AVG</b>	<b>0.0</b>	<b>0.82</b>

The sample submitted **meets** the minimum requirements of the above standard. The average percent weight loss cannot exceed 40% and the weight loss of individual specimens cannot exceed mean value plus three standard deviations. The average residual flame cannot exceed 2.0 seconds.

Sincerely,



Brian S. Dement

BSD/mr



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NFPA 701

## **CPAI-84 Sec.6**

A Specification for Flame  
Resistant Materials Used in  
Camping Tentage



February 7, 2023

Mr. Brad Smith  
ZINGERLE GROUP USA, INC.  
6965 Northpark Blvd  
Suite N  
Charlotte, NC 28216

Reference: Laboratory Test Report  
Lab Identification No. 53606  
Invoice No. 84985

Dear Mr. Smith:

Attached are the test results on one (1) fabric sample, identified as **Pirontex**. The sample was received and tested in accordance with CPAI 84, "A Specification for Flame Resistant Materials Used In Camping Tentage," Section 6, Wall and Top Material.

Per the above test procedure, the sample was tested in its original state, after 72 hours of leaching and after 100 standard hours of accelerated weathering.

The sample submitted **meets** the minimum requirements of the above standard. When the untreated weight of the sample is over 6.0 oz./sq. yd. but not over 8.0 oz./sq. yd., the maximum average char length may not exceed 6.5 inches, with no individual specimen exceeding 10.0 inches. Additionally, the average afterflame may not exceed 2.0 seconds with no individual value exceeding 4.0 seconds and there may be no residual flame on any of the specimens tested.

Sincerely,

Brian S. Dement

BSD/mr



OUR LETTERS AND REPORTS ARE FOR THE EXCLUSIVE USE OF THE CLIENT TO WHOM THEY ARE ADDRESSED. ANY COMMUNICATION TO OTHERS OR THE USE OF OUR COMPANY NAME WITHOUT EXPLICIT WRITTEN APPROVAL. OUR TEST RESULTS APPLY ONLY TO THE SAMPLE TESTED AND ARE NOT NECESSARILY INDICATORS OF THE QUALITY OF APPARENTLY IDENTICAL OR SIMILAR PRODUCTS. UNLESS OTHERWISE SPECIFIED, ALL COMPLIANCE STANDARDS ARE SAMPLE ACCEPTANCE. SAMPLES NOT DESTROYED OR DESTROYED IN TESTING ARE RETAINED A MAXIMUM OF THIRTY DAYS. THE LETTERS, REPORTS OR MARKS OF DIVERSIFIED TESTING LABORATORIES, INC. MAY NOT BE REPRODUCED OR ADVERTISED TO THE GENERAL PUBLIC.

CPAI-84 SEC.6



Lab Identification No. 53606

Test Procedure: CPAI 84, "A Specification for Flame Resistant Materials Used in Camping Tentage," Section 6, Wall and Top Material

Sample Identification: Pirontex

**ORIGINAL STATE**

Test Results

Specimen Number	After Flame (sec)		Residual Flame (sec)		Char Length (in)	
	Length	Width	Length	Width	Length	Width
1	0.0	0.0	0.0	0.0	3.5	3.9
2	0.0	0.0	0.0	0.0	2.8	4.4
3	0.0	0.0	0.0	0.0	3.1	4.3
4	0.0	0.0	0.0	0.0	3.5	4.2
<b>Avg.</b>	<b>0.0</b>				<b>3.7</b>	

**AFTER LEACHING**

Test Results

Specimen Number	After Flame (sec)		Residual Flame (sec)		Char Length (in)	
	Length	Width	Length	Width	Length	Width
1	0.0	0.0	0.0	0.0	3.0	3.7
2	0.0	0.0	0.0	0.0	3.4	4.3
3	0.0	0.0	0.0	0.0	2.9	3.5
4	0.0	0.0	0.0	0.0	3.6	2.7
<b>Avg.</b>	<b>0.0</b>				<b>3.4</b>	

**AFTER ACCELERATED WEATHERING**

Test Results

Specimen Number	After Flame (sec)		Residual Flame (sec)		Char Length (in)	
	Length	Width	Length	Width	Length	Width
1	0.0	0.0	0.0	0.0	2.9	3.5
2	0.0	0.0	0.0	0.0	2.8	3.0
3	0.0	0.0	0.0	0.0	3.4	3.7
4	0.0	0.0	0.0	0.0	3.6	3.5
<b>Avg.</b>	<b>0.0</b>				<b>3.3</b>	

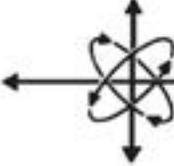
**CONCLUSION: PASS**

OUR LETTERS AND REPORTS ARE FOR THE EXCLUSIVE USE OF THE CLIENT TO WHOM THEY ARE ADDRESSED. ANY COMMUNICATION TO OTHERS OR THE USE OF OUR COMPANY NAME MUST HAVE YOUR APPROVAL. OUR TEST RESULTS APPLY ONLY TO THE SAMPLE TESTED AND ARE NOT NECESSARILY INDICATORS OF THE QUALITY OF APPARENTLY IDENTICAL OR SIMILAR PRODUCTS, UNLESS OTHERWISE SPECIFIED. ALL COMPLIANCE STANDARDS ARE SAMPLE ACCEPTANCE SAMPLES NOT DESTROYED IN TESTING ARE RETAINED A MAXIMUM OF THIRTY DAYS. THE LETTERS, REPORTS OR MADE OF DIVERSIFIED TESTING LABORATORIES INC MAY NOT BE USED IN ADVERTISING TO THE GENERAL PUBLIC.

CPAI-84 SEC.6

# CPAI-84 Sec.6

## 500D Oxford Polyester



**DIVERSIFIED**  
TESTING LABORATORIES, INC.  
WORLDWIDE SERVICE

336 WEST FRONT STREET  
P.O. BOX 4004  
BURLINGTON, NORTH CAROLINA 27215  
PHONE (336) 227-7710 • FAX (336) 227-1175  
www.diversifiedtestinglabs.com

"We Test Per Your Request"

June 18, 2018

Mr. Justin D. Russell  
ZINGERLE GROUP USA, INC.  
6965 Northpark Blvd  
Suite N  
Charlotte, NC 28216

Reference: Laboratory Test Report  
Lab Identification No. 30751  
Invoice No. 62145

Dear Mr. Russell:

One (1) fabric sample, identified as **POLYESTER OXFORD 500X500D**, was received and tested in accordance with **CPAI 84, "A Specification For Flame Resistant Materials Used In Camping Tentage," (Wall and Top Material)**. The results are as follows:

Test Results

Specimen Number	After Flame (sec)		Residual Flame (sec)		Char Length (in)	
	Length	Width	Length	Width	Length	Width
1	0.0	0.0	0.0	0.0	3.7	3.2
2	0.0	18.0	0.0	0.0	3.7	5.2
3	0.0	17.0	0.0	0.0	3.6	6.2
4	0.0	0.0	0.0	0.0	3.9	3.7
<b>Avg.</b>	<b>4.4</b>				<b>4.2</b>	

The sample submitted, when tested in its **original state**, **does not meet** the minimum requirements of the above standard. When the untreated weight of the sample is over 6.0 oz./sq. yd. but not over 8.0 oz./sq. yd., the maximum average char length may not exceed 6.5 inches, with no individual specimen exceeding 10.0 inches. Additionally, the average afterflame may not exceed 2.0 seconds with no individual value exceeding 4.0 seconds and there may be no residual flame on any of the specimens tested.

If there are any questions or when we can be of further assistance, please let us know.

Sincerely,



Brian S. Dement

BSD/mr



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CPAI-84 SEC.6



June 18, 2018

Mr. Justin D. Russell  
 ZINGERLE GROUP USA, INC.  
 6965 Northpark Blvd  
 Suite N  
 Charlotte, NC 28216

Reference: Laboratory Test Report  
 Lab Identification No. 30751  
 Invoice No. 62145

Dear Mr. Russell:

Attached are the test results on one (1) fabric sample, identified as **POLYESTER OXFORD 250X250D**. The sample was received and tested in accordance with CPAI 84, "A Specification for Flame Resistant Materials Used In Camping Tentage," Section 6, Wall and Top Material.

Per the above test procedure, the sample was tested in its original state, after 72 hours of leaching and after 100 standard hours of accelerated weathering.

The sample submitted **meets** the minimum requirements of the above standard. When the untreated weight of the sample is over 4.0 oz./sq. yd. but not over 6.0 oz./sq. yd., the maximum average char length may not exceed 7.5 inches, with no individual specimen exceeding 10.0 inches. Additionally, the average afterflame may not exceed 2.0 seconds with no individual value exceeding 4.0 seconds and there may be no residual flame on any of the specimens tested.

If there are any questions or when we can be of further assistance, please let us know.

Sincerely,

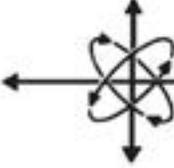
Brian S. Dement

BSD/mr



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CPAI-84 SEC.6



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"We Test Per Your Request"

Lab Identification No. 30751  
Page 2

Test Procedure: CPAI 84, "A Specification for Flame Resistant Materials Used in Camping Tentage," Section 6, Wall and Top Material

Sample Identification: POLYESTER OXFORD 250X250D

**ORIGINAL STATE**

Test Results

Specimen Number	After Flame (sec)		Residual Flame (sec)		Char Length (in)	
	Length	Width	Length	Width	Length	Width
1	0.0	0.0	0.0	0.0	4.8	5.0
2	0.0	0.0	0.0	0.0	5.3	5.3
3	0.0	0.0	0.0	0.0	5.4	4.3
4	0.0	0.0	0.0	0.0	5.2	4.2
<b>Avg.</b>	<b>0.0</b>				<b>4.9</b>	

**AFTER LEACHING**

Test Results

Specimen Number	After Flame (sec)		Residual Flame (sec)		Char Length (in)	
	Length	Width	Length	Width	Length	Width
1	0.0	0.0	0.0	0.0	4.3	4.9
2	0.0	0.0	0.0	0.0	4.8	5.0
3	0.0	0.0	0.0	0.0	4.6	5.0
4	0.0	0.0	0.0	0.0	4.1	4.2
<b>Avg.</b>	<b>0.0</b>				<b>4.6</b>	

**AFTER ACCELERATED WEATHERING**

Test Results

Specimen Number	After Flame (sec)		Residual Flame (sec)		Char Length (in)	
	Length	Width	Length	Width	Length	Width
1	0.0	0.0	0.0	0.0	3.8	4.7
2	0.0	0.0	0.0	0.0	5.4	4.4
3	0.0	0.0	0.0	0.0	4.1	4.2
4	0.0	0.0	0.0	0.0	4.5	4.3
<b>Avg.</b>	<b>0.0</b>				<b>4.4</b>	

**CONCLUSION: PASS**

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CPAI-84 SEC.6

# CPAI-84 Sec.6

## 400g PVC, Roofs & Sidewalls

Page 1 of 2



June 18, 2018

Mr. Justin D. Russell  
 ZINGERLE GROUP USA, INC.  
 6965 Northpark Blvd  
 Suite N  
 Charlotte, NC 28216

Reference: Laboratory Test Report  
 Lab Identification No. 30751  
 Invoice No. 62145

Dear Mr. Russell:

Attached are the test results on one (1) fabric sample, identified as **PVC FABRIC, LAMINATED 400 GR/M<sup>2</sup>**. The sample was received and tested in accordance with CPAI 84, "A Specification for Flame Resistant Materials Used In Camping Tentage," Section 6, Wall and Top Material.

Per the above test procedure, the sample was tested in its original state, after 72 hours of leaching and after 100 standard hours of accelerated weathering.

The sample submitted **meets** the minimum requirements of the above standard. When the untreated weight of the sample is over 10.0 oz./sq. yd., the maximum average char length may not exceed 4.5 inches, with no individual specimen exceeding 10.0 inches. Additionally, the average afterflame may not exceed 2.0 seconds with no individual value exceeding 4.0 seconds and there may be no residual flame on any of the specimens tested.

If there are any questions or when we can be of further assistance, please let us know.

Sincerely,

Brian S. Dement

BSD/mr



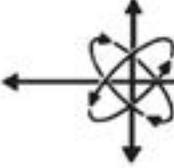
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CPAI-84 SEC.6

# CPAI-84 Sec.6

## 400g PVC, Roofs & Sidewalls

Page 2 of 2



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Lab Identification No. 30751  
Page 2

Test Procedure: CPAI 84, "A Specification for Flame Resistant Materials Used in Camping Tentage," Section 6, Wall and Top Material

Sample Identification: PVC FABRIC, LAMINATED 400 GRM<sup>2</sup>

**ORIGINAL STATE**

Test Results

Specimen Number	After Flame (sec)		Residual Flame (sec)		Char Length (in)	
	Length	Width	Length	Width	Length	Width
1	0.0	0.0	0.0	0.0	4.4	4.8
2	0.0	0.0	0.0	0.0	4.2	4.7
3	0.0	0.0	0.0	0.0	4.2	4.8
4	0.0	0.0	0.0	0.0	4.3	4.5
<b>Avg.</b>	<b>0.0</b>				<b>4.5</b>	

**AFTER LEACHING**

Test Results

Specimen Number	After Flame (sec)		Residual Flame (sec)		Char Length (in)	
	Length	Width	Length	Width	Length	Width
1	0.0	0.0	0.0	0.0	3.1	4.3
2	0.0	0.0	0.0	0.0	4.5	4.0
3	0.0	0.0	0.0	0.0	4.4	4.3
4	0.0	0.0	0.0	0.0	4.1	4.4
<b>Avg.</b>	<b>0.0</b>				<b>4.1</b>	

**AFTER ACCELERATED WEATHERING**

Test Results

Specimen Number	After Flame (sec)		Residual Flame (sec)		Char Length (in)	
	Length	Width	Length	Width	Length	Width
1	0.0	0.0	0.0	0.0	4.3	4.2
2	0.0	0.0	0.0	0.0	3.8	3.4
3	0.0	0.0	0.0	0.0	4.0	2.8
4	0.0	0.0	0.0	0.0	4.3	3.9
<b>Avg.</b>	<b>0.0</b>				<b>4.0</b>	

**CONCLUSION: PASS**

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CPAI-84 SEC.6



June 18, 2018

Mr. Justin D. Russell  
ZINGERLE GROUP USA, INC.  
6965 Northpark Blvd  
Suite N  
Charlotte, NC 28216

Reference: Laboratory Test Report  
Lab Identification No. 30751  
Invoice No. 62145

Dear Mr. Russell:

Attached are the test results on one (1) fabric sample, identified as **PVC FABRIC, LAMINATED 400 GR/M<sup>2</sup>**. The sample was received and tested in accordance with **CPAI 84, "A Specification For Flame Resistant Materials Used In Camping Tentage," Section 5, Flooring Material.**

Per the above test procedure, the sample was tested in its original state, after 72 hours of leaching and after 100 standard hours of accelerated weathering.

The sample submitted **meets** the minimum requirements of the above standard. No specimen shall be damaged to within 25 mm of the specimen holder.

If there are any questions or when we can be of further assistance, please let us know.

Sincerely,

Brian S. Dement

BSD/mr



CPAI-84 SEC.6



Lab Identification No. 30751  
 Page 2

Test Procedure: CPAI 84, "A Specification For Flame Resistant Materials Used in Camping Tentage," Section 5, Flooring Material

Sample Identification: PVC FABRIC, LAMINATED 400 GRM<sup>2</sup>

**ORIGINAL STATE**

<u>Specimen Number</u>	<u>Test Results</u>	<u>Uncharred Area (mm)</u>
1		84
2		89
3		89
4		86

**AFTER LEACHING**

<u>Specimen Number</u>	<u>Test Results</u>	<u>Uncharred Area (mm)</u>
1		91
2		90
3		95
4		90

**AFTER ACCELERATED WEATHERING**

<u>Specimen Number</u>	<u>Test Results</u>	<u>Uncharred Area (mm)</u>
1		89
2		84
3		84
4		86

**CONCLUSION: PASS**

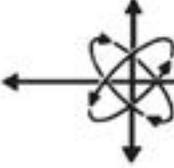
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CPAI-84 SEC.6

# CPAI-84 Sec.6

## Fiberglass, Page 1 of 2

**MASTERTENT**



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"We Test Per Your Request"

May 18, 2022

Mr. Brad Smith  
ZINGERLE GROUP USA, INC.  
6965 Northpark Blvd  
Suite N  
Charlotte, NC 28216

Reference: Laboratory Test Report  
Lab Identification No. 50130  
Invoice No. 81544

Dear Mr. Smith:

Attached are the test results on one (1) fabric sample, identified as **Fiberglass Fabric**. The sample was received and tested in accordance with CPAI 84, "A Specification for Flame Resistant Materials Used In Camping Tentage," Section 6, Wall and Top Material.

Per the above test procedure, the sample was tested in its original state, after 72 hours of leaching and after 100 standard hours of accelerated weathering.

When the untreated weight of the sample is over 10.0 oz./sq. yd., the maximum average char length may not exceed 4.5 inches, with no individual specimen exceeding 10.0 inches. Additionally, the average afterflame may not exceed 2.0 seconds with no individual value exceeding 4.0 seconds and there may be no residual flame on any of the specimens tested.

Sincerely,



Brian S. Dement

BSD/mr

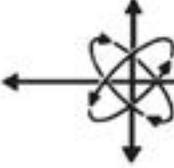


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# CPAI-84 Sec.6

## Fiberglass, Page 2 of 2



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Lab Identification No. 50130  
Page 2

Test Procedure: CPAI 84, "A Specification for Flame Resistant Materials Used in Camping Tentage," Section 6, Wall and Top Material

Sample Identification: Fiberglass Fabric

### ORIGINAL STATE

#### Test Results

Specimen Number	After Flame (sec)		Residual Flame (sec)		Char Length (in)	
	Length	Width	Length	Width	Length	Width
1	0.0	0.0	0.0	0.0	2.0	2.2
2	0.0	0.0	0.0	0.0	2.1	2.5
3	0.0	0.0	0.0	0.0	2.4	2.3
4	0.0	0.0	0.0	0.0	2.3	2.1
<b>Avg.</b>	<b>0.0</b>				<b>2.2</b>	

### AFTER LEACHING

#### Test Results

Specimen Number	After Flame (sec)		Residual Flame (sec)		Char Length (in)	
	Length	Width	Length	Width	Length	Width
1	0.0	0.0	0.0	0.0	1.4	2.1
2	0.0	0.0	0.0	0.0	1.7	1.7
3	0.0	0.0	0.0	0.0	1.9	2.0
4	0.0	0.0	0.0	0.0	1.8	1.9
<b>Avg.</b>	<b>0.0</b>				<b>1.8</b>	

### AFTER ACCELERATED WEATHERING

#### Test Results

Specimen Number	After Flame (sec)		Residual Flame (sec)		Char Length (in)	
	Length	Width	Length	Width	Length	Width
1	0.0	0.0	0.0	0.0	1.5	1.8
2	0.0	0.0	0.0	0.0	1.3	1.9
3	0.0	0.0	0.0	0.0	1.7	1.6
4	0.0	0.0	0.0	0.0	1.4	1.8
<b>Avg.</b>	<b>0.0</b>				<b>1.6</b>	

**CONCLUSION: PASS**

OUR LETTERS AND REPORTS ARE FOR THE EXCLUSIVE USE OF THE CLIENT TO WHOM THEY ARE ADDRESSED. ANY COMMUNICATION TO OTHERS OR THE USE OF OUR COMPANY NAME WITHOUT EXPLICIT APPROVAL. OUR TEST RESULTS APPLY ONLY TO THE SAMPLE TESTED AND ARE NOT NECESSARILY INDICATORS OF THE QUALITY OF APPARENTLY IDENTICAL OR SIMILAR PRODUCTS, UNLESS OTHERWISE SPECIFIED. ALL COMPLIANCE STANDARDS ARE SAMPLE ACCEPTANCE SAMPLES NOT DESTROYED OR DESTROYED IN TESTING ARE RETURNED WITHIN A MAXIMUM OF THIRTY DAYS. THE LETTERS, REPORTS OR MADE OF DIVERSIFIED TESTING LABORATORIES INC MAY NOT BE USED IN ADVERTISING TO THE GENERAL PUBLIC.

CPAI-84 SEC.6



# **CAN/ULC-S109-14**

Standard for Flame Tests  
of Flame Resistant Farbics  
and Films



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 P.O. BOX 4004  
 BURLINGTON, NORTH CAROLINA 27215  
 PHONE (336) 227-7710 • FAX (336) 227-1175  
 www.diversifiedtestinglabs.com

February 7, 2023

Mr. Brad Smith  
 ZINGERLE GROUP USA, INC.  
 6965 Northpark Blvd  
 Suite N  
 Charlotte, NC 28216

Reference: Laboratory Test Report  
 Lab Identification No. 53606  
 Invoice No. 84985

Dear Mr. Smith:

One (1) sample, identified as **Pirontex**, was received and tested in accordance with CAN/ULC-S109-14, "Standard for Flame Tests of Flame-Resistant Fabrics and Films", Small-Flame Test. The results are as follows:

Specimen Number	Residual Flame (sec)		Damaged Length (mm)	
	Warp	Fill	Warp	Fill
1	0.0	0.0	77	125
2	0.0	0.0	75	76
3	0.0	0.0	80	104
4	0.0	0.0	81	105
5	0.0	0.0	85	97
<b>Avg.</b>			<b>91</b>	

The fabric sample submitted **meets** the minimum requirements of the Small-Flame Test. The maximum average damaged length shall not exceed 165 millimeters and the maximum damaged length for any individual specimen shall not exceed 190 millimeters. No residues shall fall to the floor of the test chamber and continue flaming for more than two (2) seconds at any time during the test.

Sincerely,

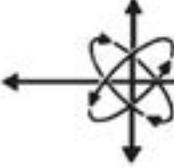
Brian S. Dement

BSD/mr



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CAN/ULC-S109



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February 7, 2023

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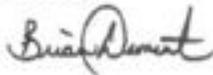
Dear Mr. Smith:

One (1) sample, identified as **Pirontex**, was received and tested in accordance with CAN/ULC-S109-14, "Standard for Flame Tests of Flame-Resistant Fabrics and Films", Large-Flame Test. The results are as follows:

<b>Test Results</b>		
<u>Specimen Number</u>	<u>Residual Flame (sec)</u>	<u>Char Length (mm)</u>
Length 1	0.0	95
Length 2	0.0	53
Width 1	0.0	67
Width 2	0.0	59

The fabric sample submitted **meets** the minimum requirements of the Large-Flame Test. The length of char on the individual folded specimens shall not exceed 835 millimeters. No residues shall fall to the floor of the test chamber and continue flaming for more than two (2) seconds at any time during the test.

Sincerely,



Brian S. Dement

BSD/mr



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CAN/ULC-S109

**CAN/ULC-S109-14**  
500D Oxford Polyester

**MASTERTENT**

**ECOTENT** 

CAN/ULC-S109

**CAN/ULC-S109-14**  
250D Oxford Polyester

**MASTERTENT**

**ECOTENT** 

CAN/ULC-S109

**CAN/ULC-S109-14**  
400g PVC

**MASTERTENT**

**ECOTENT** 

CAN/ULC-S109



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 BURLINGTON, NORTH CAROLINA 27215  
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May 18, 2022

Mr. Brad Smith  
 ZINGERLE GROUP USA, INC.  
 6965 Northpark Blvd  
 Suite N  
 Charlotte, NC 28216

Reference: Laboratory Test Report  
 Lab Identification No. 50130  
 Invoice No. 81544

Dear Mr. Smith:

One (1) sample, identified as **Fiberglass Fabric**, was received and tested in accordance with CAN/ULC-S109-14, "Standard for Flame Tests of Flame-Resistant Fabrics and Films", Small-Flame Test. The results are as follows:

Specimen Number	Test Results			
	Residual Flame (sec)		Damaged Length (mm)	
	Warp	Fil	Warp	Fil
1	0.0	0.0	56	62
2	0.0	0.0	54	64
3	0.0	0.0	54	66
4	0.0	0.0	62	67
5	0.0	0.0	60	58
<b>Avg.</b>			<b>60</b>	

The fabric sample submitted meets the minimum requirements of the Small-Flame Test. The maximum average damaged length shall not exceed 165 millimeters and the maximum damaged length for any individual specimen shall not exceed 190 millimeters. No residues shall fall to the floor of the test chamber and continue flaming for more than two (2) seconds at any time during the test.

Sincerely,

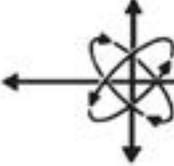
Brian S. Dement

BSD/mr



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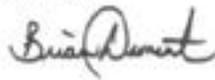
Dear Mr. Smith:

One (1) sample, identified as **Fiberglass Fabric**, was received and tested in accordance with CAN/ULC-S109-14, "Standard for Flame Tests of Flame-Resistant Fabrics and Films", Large-Flame Test. The results are as follows:

<u>Test Results</u>		
<u>Specimen Number</u>	<u>Residual Flame (sec)</u>	<u>Char Length (mm)</u>
Length 1	0.0	45
Length 2	0.0	56
Width 1	0.0	148
Width 2	0.0	115

The fabric sample submitted **meets** the minimum requirements of the Large-Flame Test. The length of char on the individual folded specimens shall not exceed 635 millimeters. No residues shall fall to the floor of the test chamber and continue flaming for more than two (2) seconds at any time during the test.

Sincerely,



Brian S. Dement

BSD/mr



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CAN/ULC-S109

## **EN 13501-1:2007**

Classification of Reaction to Fire  
Performance in Accordance  
with EN 13501-1:2007+A1:2009





P.O. Box 554 - 2665 ZH Bielewijk  
Brandpuntlaan Zuid 16 - 2665 NZ Bielewijk  
The Netherlands  
+31 88 3473 723  
nederland@effectis.com

**CLASSIFICATION**

**CLASSIFICATION OF REACTION TO FIRE PERFORMANCE  
IN ACCORDANCE WITH EN 13501-1:2007+A1:2009**

Classification no.	2013-Efectis-R0497f
Sponsor	Zingerle Metal GmbH Industriezone 103 39040 Natz/Schabs Italy
Product name	<b>Fabric</b> <b>LKR056-400 - Polyester Oxford 500x5000</b>
Prepared by	Efectis Nederland BV
Notified body no.	1234
Author(s)	C.C.M. Steinhage B.Sc. A.J. Lock
Project number	2013497
Date of issue	November 2013
Number of pages	5

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Page 1 / 5



Efectis Nederland Report  
2013-Efectis-R0497  
November 2013  
Zingerle Metal GmbH

**CLASSIFICATION**

**1. INTRODUCTION**

This classification report defines the classification assigned to fabric, type LKR056400 - Polyester Oxford 500x500D in accordance with the procedures given in EN 13501-1:2007+A1:2009.

**2. DETAILS OF CLASSIFIED PRODUCT**

**2.1. GENERAL**

The product, fabric, type LKR056400 - Polyester Oxford 500x500D, will be used as fabric for tents.

**2.2. PRODUCT DESCRIPTION**

The product is composed of:  
Polyester fabric, FR grade, designated LKR056400 - Polyester Oxford 500x500D  
Surface density approx. 0.225 kg/m<sup>2</sup>.

**2.3. MANUFACTURER/IMPORTER**

Zingerle Metal GmbH  
Industriezone 103  
39040 Natz/Schabs  
Italy

**3. STANDARDS, REPORTS, RESULTS AND CRITERIA IN SUPPORT OF THIS CLASSIFICATION**

**3.1. REPORTS**

Name of Laboratories	Name of sponsor	Report ref. no.	Test method
Efectis Nederland BV The Netherlands	Zingerle Metal GmbH Italy	2013-Efectis-R0497d 2013-Efectis-R0497e	EN ISO 11925-2:2010 EN 13823:2010



Efectis Nederland Report  
2013-Efectis-RO497  
November 2013  
Zinglerle Metal GmbH

**CLASSIFICATION**

**3.2. TEST RESULTS**

Test method and test number	Parameter	No. tests	Results	
			Continuous parameter - mean (m)	Compliance with parameters
<b>EN-ISO 11925-2</b>				
surface flame impingement	$F_p \leq 150$ mm	6	25	-
	ignition of filter paper		-	Compliant
Edge flame impingement	$F_p \leq 150$ mm	6	25	-
	ignition of filter paper		-	Compliant
<b>EN 13823</b>				
	FIGRA0.2MJ [W/s]	3	0.0	-
	FIGRA0.4MJ [W/s]		0.0	-
	THR600s [MJ]		0.6	-
	LFS < edge		-	Compliant
	SMOGRA [m <sup>2</sup> /s <sup>2</sup> ]		7	-
	TSP600s [m <sup>2</sup> ]		83	-
	Flaming debris - flaming $\leq 10$ s - flaming $> 10$ s		-	Compliant Compliant

**3.3. CLASSIFICATION CRITERIA**

Fire classification of construction products and building elements Excluding floorings and linear pipe thermal insulation products.			
Classification criteria			
Class	B	C	D
Test method(s)			
EN 13823	FIGRA $\leq 120$ W/s LFS < edge of specimen THR <sub>600s</sub> $\leq 7,5$ MJ	FIGRA $\leq 250$ W/s LFS < edge of specimen THR <sub>600s</sub> $\leq 15$ MJ	FIGRA $\leq 750$ W/s
EN ISO 11925-2 Exposure = 30 s	$F_p \leq 150$ mm within 60 s Ignition of the paper in EN ISO 11925-2 results in a d2 classification.		
Additional classification			
Smoke production	s1 = SMOGRA $\leq 30$ m <sup>2</sup> /s <sup>2</sup> and TSP <sub>600s</sub> $\leq 50$ m <sup>2</sup> ; s2 = SMOGRA $\leq 180$ m <sup>2</sup> /s <sup>2</sup> and TSP <sub>600s</sub> $\leq 200$ m <sup>2</sup> ; s3 = not s1 or s2		
Flaming Droplets/particles	d0 = no flaming droplets/particles in EN 13823 within 600 s; d1 = no flaming droplets/particles persisting longer than 10 s in EN 13823 within 600 s; d2 = not d0 or d1.		

EN 13501-1:2007



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Zinglerle Metal GmbH

## CLASSIFICATION

### 4. CLASSIFICATION AND FIELD OF APPLICATION

#### 4.1. REFERENCE OF CLASSIFICATION

This classification has been carried out in accordance with clause 11 of EN 13501-1:2007+A1:2009.

#### 4.2. CLASSIFICATION

The product, fabric, type LKR056400 - Polyester Oxford 500x500D, in relation to its reaction to fire behaviour is classified:

**B**

The additional classification in relation to smoke production is:

**s2**

The additional classification in relation to flaming droplets / particles is:

**d0**

**Reaction to fire classification: B - s2, d0**

#### 4.3. FIELD OF APPLICATION

This classification is valid for the following product parameters:

Surface density	0.225 kg/m <sup>2</sup>
Other properties	FR grade

This classification is valid for the following end use applications:

Substrate	Not applicable
Air gap	Free standing
Methods and means of fixing	Not applicable
Joints	No joints
Other aspects of end use conditions	Used for tents

#### 4.4. DURATION OF THE VALIDITY OF THIS CLASSIFICATION REPORT

There are no limitations in time on the validity of this report.



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November 2013  
Zinglerle Metal GmbH

**CLASSIFICATION**

**5. LIMITATIONS**

This classification document does not represent type approval or certification of the product.

C.C.M. Steinhage B.Sc.  
Project leader reaction to fire

A.J. Lock  
Project leader reaction to fire



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**CLASSIFICATION**

**CLASSIFICATION OF REACTION TO FIRE PERFORMANCE  
IN ACCORDANCE WITH EN 13501-1:2007+A1:2009**

Classification no.	2013-Efectis-R0497c
Sponsor	Zingerle Metal GmbH Industriezone 103 39040 Natz/Schabs Italy
Product name	<b>Fabric</b> <b>LKR056300 - Polyester Oxford 250x2500</b>
Prepared by	Efectis Nederland BV
Notified body no.	1234
Author(s)	C.C.M. Steinhage B.Sc. A. J. Lock
Project number	2013497
Date of issue	November 2013
Number of pages	5

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Zingerle Metal GmbH

**CLASSIFICATION**

**1. INTRODUCTION**

This classification report defines the classification assigned to fabric, type LKR056300 - Polyester Oxford 250x250D in accordance with the procedures given in EN 13501-1:2007+A1:2009.

**2. DETAILS OF CLASSIFIED PRODUCT**

**2.1. GENERAL**

The product, fabric, type LKR056300 - Polyester Oxford 250x250D, will be used as fabric for tents.

**2.2. PRODUCT DESCRIPTION**

The product is composed of:  
Polyester fabric, FR grade, designated LKR056300 - Polyester Oxford 250x250D  
Surface density approx. 0.15 kg/m<sup>2</sup>.

**2.3. MANUFACTURER/IMPORTER**

Zingerle Metal GmbH  
Industriezone 103  
39040 Natz/Schabs  
Italy

**3. STANDARDS, REPORTS, RESULTS AND CRITERIA IN SUPPORT OF THIS CLASSIFICATION**

**3.1. REPORTS**

Name of Laboratories	Name of sponsor	Report ref. no.	Test method
Efectis Nederland BV The Netherlands	Zingerle Metal GmbH Italy	2013-Efectis-R0497a 2013-Efectis-R0497b	EN ISO 11925-2:2010 EN 13823:2010



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CLASSIFICATION

3.2. TEST RESULTS

Test method and test number	Parameter	No. tests	Results	
			Continuous parameter - mean (m)	Compliance with parameters
<b>EN-ISO 11925-2</b>				
surface flame impingement	$F_p \leq 150$ mm	6	25	-
	ignition of filter paper		-	Compliant
Edge flame impingement	$F_p \leq 150$ mm	6	25	-
	ignition of filter paper		-	Compliant
<b>EN 13823</b>				
	FIGRA0.2MJ [W/s]	3	0.0	-
	FIGRA0.4MJ [W/s]		0.0	-
	THR600s [MJ]		0.3	-
	LFS < edge		-	Compliant
	SMOGRA [m <sup>2</sup> /s <sup>2</sup> ]		4	-
	TSP600s [m <sup>2</sup> ]		60	-
	Flaming debris - flaming $\leq 10$ s - flaming $> 10$ s		-	Compliant Compliant

3.3. CLASSIFICATION CRITERIA

Fire classification of construction products and building elements Excluding floorings and linear pipe thermal insulation products.			
Classification criteria			
Class	B	C	D
Test method(s)			
EN 13823	FIGRA $\leq 120$ W/s LFS < edge of specimen THR <sub>600s</sub> $\leq 7,5$ MJ	FIGRA $\leq 250$ W/s LFS < edge of specimen THR <sub>600s</sub> $\leq 15$ MJ	FIGRA $\leq 750$ W/s
EN ISO 11925-2 Exposure = 30 s	$F_p \leq 150$ mm within 60 s Ignition of the paper in EN ISO 11925-2 results in a d2 classification.		
Additional classification			
Smoke production	s1 = SMOGRA $\leq 30$ m <sup>2</sup> /s <sup>2</sup> and TSP <sub>600s</sub> $\leq 50$ m <sup>2</sup> ; s2 = SMOGRA $\leq 180$ m <sup>2</sup> /s <sup>2</sup> and TSP <sub>600s</sub> $\leq 200$ m <sup>2</sup> ; s3 = not s1 or s2		
Flaming Droplets/particles	d0 = no flaming droplets/particles in EN 13823 within 600 s; d1 = no flaming droplets/particles persisting longer than 10 s in EN 13823 within 600 s; d2 = not d0 or d1.		



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Zinglerle Metal GmbH

## CLASSIFICATION

### 4. CLASSIFICATION AND FIELD OF APPLICATION

#### 4.1. REFERENCE OF CLASSIFICATION

This classification has been carried out in accordance with clause 11 of EN 13501-1:2007+A1:2009.

#### 4.2. CLASSIFICATION

The product, fabric, type LKR056300 - Polyester Oxford 250x250D, in relation to its reaction to fire behaviour is classified:

**B**

The additional classification in relation to smoke production is:

**s2**

The additional classification in relation to flaming droplets / particles is:

**d0**

**Reaction to fire classification: B - s2, d0**

#### 4.3. FIELD OF APPLICATION

This classification is valid for the following product parameters:

Surface density	0.15 kg/m <sup>2</sup>
Other properties	FR grade

This classification is valid for the following end use applications:

Substrate	Not applicable
Air gap	Free standing
Methods and means of fixing	Not applicable
Joints	No joints
Other aspects of end use conditions	Used for tents

#### 4.4. DURATION OF THE VALIDITY OF THIS CLASSIFICATION REPORT

There are no limitations in time on the validity of this report.



Efectis Nederland Report  
2013-Efectis-RO497c  
November 2013  
Zinglerle Metal GmbH

**CLASSIFICATION**

**5. LIMITATIONS**

This classification document does not represent type approval or certification of the product.

C.C.M. Steinhage B.Sc.  
Project leader reaction to fire

A.J. Lock  
Project leader reaction to fire



**CLASSIFICATION OF REACTION TO FIRE PERFORMANCE IN  
ACCORDANCE WITH EN 13501-1:2007+A1:2009**

<b>Sponsor</b>	Zingerlemetal AG Förche 7 I-39040 Natz / Schabs (BZ) Italy
<b>Prepared by</b>	Efectis Nederland BV Lange Kleiweg 5 P.O. Box 1090 NL-2280 CB RIJSWIJK The Netherlands
<b>Notified Body no.</b>	1234
<b>Product name</b>	PVC fabric
<b>Classification report no</b>	2012-Efectis-R9353c
<b>Issue number</b>	1
<b>Date of issue</b>	August 2012
<b>Project number</b>	2012353

This classification report consists of four pages and may only be used in its entirety.

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Zingerlemetal AG

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### 1. Introduction

This classification report defines the classification assigned to **PVC fabric** in accordance with the procedures given in EN 13501-1:2007+A1:2009.

### 2. Details of classified product

#### 2.1 General

The product, **PVC fabric**, will be used for tents.

#### 2.2 Product description

The product is composed of:  
Material: PVC fabric, laminated 400 g/m<sup>2</sup>  
Specifications: PES 250x250D, 22x23 / sq.inch  
Treatment: UV + F/R  
Width: 190cm  
Colour: white

The product has a total thickness of 0.3 mm and a mass per unit area of approx. 400 kg/m<sup>2</sup>.

#### 2.3 Manufacturer/Importer

Wonpoong  
South Korea

### 3. Standards, reports, results and criteria in support of this classification

#### 3.1 Reports

Name of Laboratories	Name of sponsor	Report ref. no.	Test method
Efectis Nederland BV The Netherlands	Zingerlemetal AG Italy	2012-Efectis-R9353a 2012-Efectis-R9353b	EN ISO 11925-2:2010 EN 13823:2010

# EN 13501-1:2007

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Zingermetal AG

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### 3.2 Test results

Test method and test number	Parameter	No. tests	Results	
			Continuous parameter – mean (m)	Compliance with parameters
EN-ISO 11925-2				
surface flame impingement	F <sub>s</sub> ≤ 150 mm [mm]	6	95	-
	ignition of filter paper		-	Compliant
edge flame impingement	F <sub>s</sub> ≤ 150 mm [mm]	6	88	-
	ignition of filter paper		-	Compliant
EN 13823				
PVC fabric	FIGRA <sub>0,2MJ</sub> [W/s]	3	14	-
	FIGRA <sub>0,4MJ</sub> [W/s]		0	-
	THR <sub>500s</sub> [MJ]		0,5	-
	LFS < edge		-	Compliant
	SMOGRA [m <sup>2</sup> /s <sup>2</sup> ]		123	-
	TSP <sub>500s</sub> [m <sup>2</sup> ]		142	-
	Flaming debris - flaming ≤ 10 s - flaming > 10 s		-	Compliant

### 3.3 Classification criteria

Classification criteria of the Single Burning Item (SBI) test			
Class	Fire	Class	Smoke
A2	FIGRA <sub>0,2 MJ</sub> ≤ 120 W/s LFS < edge of the long wing specimen THR <sub>500s</sub> ≤ 7,5 MJ	s1	SMOGRA ≤ 30 m <sup>2</sup> /s <sup>2</sup> TSP <sub>500s</sub> ≤ 50 m <sup>2</sup>
B	FIGRA <sub>0,2 MJ</sub> ≤ 120 W/s LFS < edge of the long wing specimen THR <sub>500s</sub> ≤ 7,5 MJ	s2	SMOGRA ≤ 180 m <sup>2</sup> /s <sup>2</sup> TSP <sub>500s</sub> ≤ 200 m <sup>2</sup>
C	FIGRA <sub>0,4 MJ</sub> ≤ 250 W/s LFS < edge of the long wing specimen THR <sub>500s</sub> ≤ 15 MJ	Class Droplets	
		d0	No flaming droplets/particles
D	FIGRA ≤ 750 W/s	d1	Flaming droplets/particles < 10 s
		d2	Not d0 or d1

## 4. Classification and field of application

### 4.1 Reference of classification

This classification has been carried out in accordance with clause 11 of EN 13501-1:2007+A1:2009.

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Zingermetal AG

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#### 4.2 Classification

The product, PVC fabric, in relation to its reaction to fire behaviour is classified:

**B**

The additional classification in relation to smoke production is:

**s2**

The additional classification in relation to flaming droplets / particles is:

**d0**

**Reaction to fire classification: B - s2, d0**

#### 4.3 Field of application

This classification is valid for the following product parameters:

- Thickness	0.3 mm
- Surface density	400 g/m <sup>2</sup>
- Other properties	laminated

This classification is valid for the following end use applications:

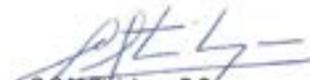
- Substrate	not applicable
- Air gap	free standing
- Methods and means of fixing	not applicable
- Joints	no joints
- Other aspects of end use conditions	used for tents

#### 4.4 Duration of the validity of this classification report

There are no limitations in time on the validity of this report.

#### 5. Limitations

This classification document does not represent type approval or certification of the product.

  
C.C.M. Spinhage B.Sc.  
Project leader reaction to fire

  
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Zingermetal AG

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### 4.2 Classification

The product, PVC fabric, in relation to its reaction to fire behaviour is classified:

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The additional classification in relation to smoke production is:

**s2**

The additional classification in relation to flaming droplets / particles is:

**d0**

**Reaction to fire classification: B - s2, d0**

### 4.3 Field of application

This classification is valid for the following product parameters:

- Thickness	0.3 mm
- Surface density	400 g/m <sup>2</sup>
- Other properties	laminated

This classification is valid for the following end use applications:

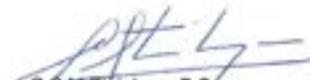
- Substrate	not applicable
- Air gap	free standing
- Methods and means of fixing	not applicable
- Joints	no joints
- Other aspects of end use conditions	used for tents

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C.C.M. Spinhage B.Sc.  
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