



COMMERCIAL TESTING COMPANY

1215 South Hamilton Street • Dalton, Georgia 30720
Telephone (706) 278-3935 • Facsimile (706) 278-3936

WA Quality Standard for Polymer Coated Fabric Wallcovering

W-101 (2013)

Neschen Performance Wallpaper – Smooth

Report Number 19-11151

Test Number 5492-4232

November 19, 2019

Neschen Coating GmbH
Bückeberg, Germany

Commercial Testing Company

(Authorized Signature)

This report is provided for the exclusive use of the client to whom it is addressed. It may be used in its entirety to gain product acceptance from duly constituted authorities. The test results presented in this report apply only to the samples tested and are not necessarily indicative of apparent identical or similar materials. Sample selection and identification were provided by the client. A sampling plan, if described in the referenced test procedure, was not necessarily followed. This report, or the name of Commercial Testing Company, shall not be used under any circumstance in advertising to the general public.

TESTED TO BE SURE®
Since 1974

INTRODUCTION

This report is a presentation of results of an evaluation of wallcovering submitted by Neschen Coating GmbH, Bückebug, Germany. The client submitted a sample of PVC free polymer coated nonwoven wallcovering identified as **Neschen Performance Wallpaper – Smooth**.

The evaluation was done in accordance with the W-101 (2013), *Quality Standard for Polymer Coated Fabric Wallcovering*. The purpose of the standard is to establish nationally recognized quality standards for polymer coated fabric wallcovering for institutional and commercial use, and to provide producers, distributors, and users with a basis for a common understanding of the characteristics of the product. It sets forth quality standards and test methods for measuring the properties of polymer coated fabric wallcovering.

The Standard covers three types based upon specific physical test requirements: Type I – Light Duty, intended for use in areas of low wear; Type II – Medium Duty, intended for use in areas of medium wear; and Type III – Heavy Duty, intended for use in areas of heavy wear.

NOTE: The standard also provides two Classes based on ASTM Test Method E 84 data: Class A – Flame Spread Index of 0–25 inclusive and Smoke development of 0–50 inclusive; Class B – Flame Spread Index of 26–75 inclusive and Smoke development of 0–100 inclusive.

Unless otherwise specified, the flame spread and the smoke development testing shall be conducted on glass reinforced cement board (GRC) or equivalent. Materials that meet the requirements of NFPA 286, are exempt.

PHYSICAL TEST REQUIREMENTS

	Type I Light Duty	Type II Medium Duty	Type III Heavy Duty
Total Wt., oz / yd ² (min)			
PVC Coated Wallcovering	7	13	22
EVA Coated Wallcovering	5.5	10	17
Breaking Strength, lbf (min)			
Machine Direction	30	50	95
Cross Machine Direction	30	50	95
Tearing Strength, Scale Reading (min)			
Machine Direction	12	25	50
Cross Machine Direction	12	25	50
Coating Adhesion, lbf for 1" width	2	3	3
Colorfastness to Light	200	200	200
Blocking, scale rating (max)	2	2	2
Crocking, scale rating (min)	Good	Good	Good
Cold Crack Resistance, -20°F	No Change	No Change	No Change
Heat Aging, 7 days at 158°F	Note 1	Note 1	Note 1
Shrinkage, % (max)			
Machine Direction	2	2	2
Cross Machine Direction	1	1	1.5
Stain Resistance, Reagents	1 — 9 (Note 2)	1 — 12 (Note 2)	1 — 12 (Note 2)
Washability, cycles (min)	100	100	100
Scrubbability, cycles (min)	200	300	500

Note 1: The specimen shall not become stiff, brittle, discolored, or show loss of grain.

Note 2: Stain Resistance

Reagent	Reagent	Reagent
(1) 75°F distilled water	(5) 1% NaOH solution	(9) orange juice
(2) 120°F distilled water	(6) 5% HCl	(10) butter
(3) 50% ethyl alcohol	(7) standard soap solution	(11) catsup
(4) vinegar (3% acetic acid)	(8) detergent solution	(12) tea

MATERIAL TESTED AND TEST DATA

The client submitted a sample of PVC free polymer coated nonwoven wallcovering identified as **Neschen Performance Wallpaper – Smooth**.

	Test Data	Test Result
Total Wt., oz / yd ² (min)		
EVA Coated Wallcovering	6.1	Type I. Light Duty
Breaking Strength, lbf (min)		
Machine Direction	168	Type III. Heavy Duty
Cross Machine Direction	125	Type III. Heavy Duty
Tearing Strength, Scale Reading (min)		
Machine Direction	8.4	Unclassifiable
Cross Machine Direction	16.4	Unclassifiable
Coating Adhesion, lbf for 1" width		
Machine Direction	(Note 1)	Type III. Heavy Duty
Cross Machine Direction	(Note 1)	Type III. Heavy Duty
Colorfastness to Light	Excellent	Type III. Heavy Duty
Blocking, scale rating (max)	2	Type III. Heavy Duty
Croaking, scale rating (min)	Good	Type III. Heavy Duty
Cold Crack Resistance, -20°F	No Change	Type III. Heavy Duty
Heat Aging, 7 days at 158°F	No Change	Type III. Heavy Duty
Shrinkage, % (max)		
Machine Direction	+ 0.088%	Type III. Heavy Duty
Cross Machine Direction	- 0.181%	Type III. Heavy Duty
Stain Resistance	12 of 12 (Note 2)	Type III. Heavy Duty
Washability, cycles (min)	Pass (100)	Type III. Heavy Duty
Scrubability, cycles (min)	Pass (300)	Type II. Medium Duty
Flame Spread Index	Class A	Type III. Heavy Duty
Smoke Developed Index	Class A	Type III. Heavy Duty

Note 1 — Coating Adhesion

The test for coating adhesion is not applicable to wall covering from which a coating cannot be separated.

Note 2 — Stain Resistance

Reagent	Rating	Reagent	Rating
(1) 75°F distilled water	5	(7) standard soap solution	5
(2) 120°F distilled water	5	(8) detergent solution	5
(3) 50% ethyl alcohol	5	(9) orange juice	5
(4) vinegar	5	(10) butter	5
(5) 1% NaOH solution	5	(11) catsup	5
(6) 5% HCl	5	(12) tea	5

The rating system is based on the AATCC *Nomenclature for Subjective Rating Processes* in which a rating of 5 = negligible or no staining, 4 = slight staining, 3 = noticeable staining, 2 = considerable staining, and 1 = severe staining. A rating of less than 4 is considered "appreciable" in relation to severity of change.

TYPE AND CLASSIFICATION

Based on the overall test results obtained for the wallcovering identified as **Neschen Performance Wallpaper – Smooth**, the material is Unclassifiable.