

Tielt, 08/02/2024

TYPE II QUALITY DECLARATION

The undersigned Patrick Molemans, in his capacity of Chief Executive Officer of Grandeco Wallfashion Group NV declares:

- The main activity of Grandeco Wallfashion Group, is the production of Decorative wallcovering.
- According to the Federal Specification CCC-W-408D, Grandeco produces the product type named "Medium Duty Wallcovering".
- The company Texdecor is a customer of Grandeco Wallfashion Group
- The wallcovering identified as product type "medium duty wallcoverings" as declared on report number 19-09185 (August 19, 2019) by the Commercial Testing Company, is classified as Type II.
- The collections "Lino", "Velvet", "Dhaka", "Empera", "Velona" and "Linum" are produced at Grandeco, conform the medium duty specifications on behalf of and exclusively for Texdecor and conform the properties given below according the current state of knowledge:

Nr.	Property	Value	Test report
1.	Weight	470 g/m ²	/
2	Phthalate content	< 0.2%	20.02074.03
3	CCC-W408D	TYPE II	19-09185
4.	Volatile content	A+ (French VOC regulation)	392-2018-00127701_A_EN
5	Reaction to fire	B-s2,d0	DO-19-1549\C-R1

Signature

Patrick Molemans

CEO — Chief Executive Officer





Rapport de classement de réaction au feu *Classification report of reaction to fire performance*

1. Introduction

Le présent rapport de classement définit le classement attribué à Grandeco Medium Duty wallcovering (Q135901 (midden) (T192794), Q136002 (donker) (T1927195), Q136003 (licht) (T1927196)) conformément aux modes opératoires donnés dans la NF EN 13501-1 :2018 / *This classification report defines the classification assigned to Grandeco Medium Duty wallcovering (Q135901 (midden) (T192794), Q136002 (donker) (T1927195), Q136003 (licht) (T1927196)) according to the procedures given in NF EN 13501-1: 2018.*



CLASSEMENT DE LA REACTION AU FEU CONFORMEMENT A NF EN 13501-1: 2018 CLASSIFICATION OF REACTION TO FIRE PERFORMANCE ACCORDING TO NF EN 13501-1: 2018

Commanditaire:
Sponsor:

CENTEXBEL
Technologiepark 7
9052 ZWIJNAARDE
Belgique

Etabli par:
Established by :

CREPIM
Rue Christophe Colomb
Parc de la Porte Nord
62700 Bruay-la-Buissière
FRANCE

Nom du produit:
Product name :

Grandeco Medium Duty wallcovering (Q135901 (midden) (T192794), Q136002 (donker) (T1927195), Q136003 (licht) (T1927196))

N° de rapport de classement:
Classification report number:

DO-19-1549\C-R1

Numéro d'émission:
Issue number:

1

Date de validité:
Date of issue:

5 ans à compter de / 5 years as from 06/02/2020



2. Détails du produit classé / *Details of classified product*

2.1 Généralités / *General*

Le produit Grandeco Medium Duty wallcovering (Q135901 (midden) (T192794), Q136002 (donker) (T1927195), Q136003 (licht) (T1927196)) est défini comme Revêtement mural décoratif
The product Grandeco Medium Duty wallcovering (Q135901 (midden) (T192794), Q136002 (donker) (T1927195), Q136003 (licht) (T1927196)) is defined as Decorative wallcovering

2.2 Description du produit / *Product description*

Le produit Grandeco Medium Duty wallcovering (Q135901 (midden) (T192794), Q136002 (donker) (T1927195), Q136003 (licht) (T1927196)) est décrit ci-dessous ou est décrit dans les rapports d'essais fournis en appui du classement détaillé en 3.1.
The product Grandeco Medium Duty wallcovering (Q135901 (midden) (T192794), Q136002 (donker) (T1927195), Q136003 (licht) (T1927196)) is fully described below or is fully described in the tests reports provided in support of classification listed in Clause 3.1.

Description du produit / *Product description:*

Revêtement mural décoratif composé d'un envers non-tissé 105g/m² et d'une couche de protection en finition, d'encre acrylique base aqueuse et d'un coating PVC ignifugé /
Decorative wall covering made a non-woven backing 105g/m² and a protective layer finish, acrylic water based ink and FR-treated vinyl coating

Epaisseur du produit / *Thickness: 0.79 mm (déclarée par le client / Declared by sponsor)*

Masse surfacique du produit / *Surface density: 0.47 kg/m² (déclarée par le client / Declared by sponsor)*

Couleur / *Color : Violet / Purple*

Face exposée / *Exposed face : Face decorative / Decorative side*

Substrat / *Substrate : Silicate de calcium 11m 870kg/m³ / Calcium silicate plate 11mm 870kg/m³*

Mode de fixation / *Mounting method : Collé avec joint vertical à l'aide d'une colle Methyl cellulose (T1927214) à 250 g/m² / Glued with vertical joint using Methyl cellulose glue (T1927214) at 250g/m²*

3. Rapports et résultats à l'appui de ce classement / Reports and results in support of classification

3.1 Rapports / Reports

Nom du laboratoire <i>Name of laboratory</i>	Nom du commanditaire <i>Name of sponsor</i>	N° de réf. du rapport <i>Reports ref. number</i>	Méthode d'essai et date Règles du domaine d'application et date <i>Test method and date / Rules of scope and date</i>
CREPIM	CENTEXBEL	DO-19-1549\C-R1	NF EN ISO 11925-2 : 2013
CREPIM	CENTEXBEL		NF EN 13823+A1 : 2015

3.2 Résultats d'essais / Test results

Méthode d'essai <i>Test methods</i>	Paramètre <i>Parameter</i>	Nombre d'essais a) <i>Number of test a)</i>	Résultats / Results	
			Paramètre continu – moyenne (m) <i>Continuous parameter – average (m)</i>	Conformité aux paramètres <i>Compliance with parameters</i>
NF EN ISO 11925-2	Atteinte du repère à 150 mm <i>Reaching of the mark at 150 mm</i>	6 essais "application bord" et 6 essais "application surface" <i>6 tests "edge application" and 6 tests "surface application"</i>	-	Conforme <i>Compliant</i>
	Inflammation du papier filtre <i>Ignition of filter paper</i>		-	Conforme <i>Compliant</i>
NF EN 13823+A1	FIGRA (0,2 MJ) (W/s)	3 essais <i>3 tests</i>	66.1	-
	FIGRA (0,4 MJ) (W/s)		59.9	-
	Propagation de la flamme jusqu'au bord de l'éprouvette <i>Lateral spread of flame until the end of sample</i>		-	Conforme <i>Compliant</i>
	THR 600s (MJ)		2.1	-
	SMOGRA (m ² /s ²)		31.4	-
	TSP 600s (m ²)		61.1	-
	Gouttelettes / particules enflammées <i>Flaming droplets / particles</i>		-	Conforme <i>Compliant</i>
a) Non applicable à l'application étendue / <i>Not applicable to the extended application</i>				

(-) : signifie non applicable, means non applicable.

4. Classement et champ d'application / Classification and field of application

4.1 Référence du classement / Reference of classification

Le présent classement a été effectué conformément à la norme NF EN 13501-1 : 2018.

This classification has been carried out in accordance with NF EN 13501-1: 2018.

4.2 Classement / Classification

Le produit, Grandeco Medium Duty wallcovering (Q135901 (midden) (T192794), Q136002 (donker) (T1927195), Q136003 (licht) (T1927196)), en fonction de son comportement au feu, est classé / *The product, Grandeco Medium Duty wallcovering (Q135901 (midden) (T192794), Q136002 (donker) (T1927195), Q136003 (licht) (T1927196)), based on its reaction to fire behavior, is classified: B.*

Le classement complémentaire en relation avec la production de fumée est / *Complementary classification in relation to smoke production is: s2.*

Le classement complémentaire en relation avec les gouttelettes/particules enflammées est / *Complementary classification in relation to fall of flaming droplets/particles is: d0.*

Le format du classement de réaction au feu pour les produits de construction, à l'exception des revêtements de sol et des produits d'isolation thermique pour conduites linéaires est / *The format of the reaction to fire classification for construction products excluding flooring and linear pipe thermal insulation products is:*

Comportement au feu <i>Fire behaviour</i>		Production de fumée <i>Smoke production</i>			Gouttelettes enflammées <i>Flaming droplets</i>	
B	-	s	2	,	d	0

Autrement dit / In other words, B – s2, d0

Classement de réaction au feu / <i>Reaction to fire classification :</i>	B-s2,d0
---	----------------

4.3 Champ d'application / Field of application:

Le présent classement est valable pour les paramètres suivants liés au produit / *The classification is valid for the following product parameters :*

Composition : Aucune variation autorisée / *No variation allowed*

Épaisseur / *Thickness:* 0.79 mm

Masse surfacique / *Surface density:* 0.47 kg/m²

Masse volumique / *Density :* kg/m³

Face exposée / *Exposed face :* Face décorative / *Decorative side*

Couleur / *Color :* Toutes / *Any*

Motif / *Pattern :* Tous / *Any*



Le classement est valable pour les conditions d'utilisation finale suivantes / *The classification is valid for the following end-use condition:*

Support / *Substrate* : Silicate de calcium 11mm 870kg/m³ et tous les substrats d'utilisation finale classés A1 et A2-s1,d0 de densité supérieure à 652.5 kg/m³ (excepté la plaque de plâtre cartonnée) / *Used over a Calcium silicate plate 11mm 870kg/m³ and all substrates classified A1 and A2-s1, d0 which density is superior to 652.5 kg/m³ (except plasterboard).*

Fixation / *Mounting method*: Collé avec joint vertical à l'aide d'une colle Methyl cellulose (T1927214) à 250 g/m² / *Glued with vertical joint using Methyl cellulose glue (T1927214) at 250g/m².*

5. Restrictions / Limitations

Le présent document de classement ne constitue ni une approbation de type ni une certification du produit.

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

Signé

Signature de la personne qui effectue le classement
Signature of the person who realize the classification

Thomas TURE
Ingénieur praticien
Test engineer

Approuvé

signature de la personne autorisant le présent rapport
Signature of the person who authorize the report

Skander KHELIFI
Responsable Technique
Technical Manager

Rapport N° / Report N° DO-19-1549C-R1 émis le / edited the 06/02/2020

Résultats suivant / Results according to NF EN ISO 11925-2 A : 2013

Date de réception / Reception Date :	13/12/2019
Date de l'essai / Test date :	27/01/2020
Conditionnement / Conditioning :	23 ± 2 °C, 50 ± 5 % HR conformément à / according to EN 13238
Dimension des échantillons / Samples dimensions (mm) :	250 mm x 90 mm
Epaisseur / Thickness (mm) :	0.79

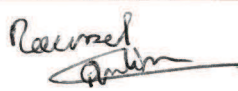
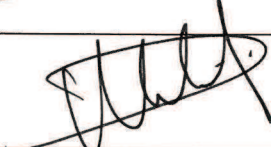
L'accréditation du COFRAC atteste de la compétence des laboratoires pour les seuls essais couverts par l'accréditation / COFRAC accreditation attests competence of the laboratories for the only tests covered by the accreditation

Temps d'exposition / Exposition time (s)
30

Echantillons	Sens / Direction	Attaque de flamme / Flame attack	Inflammation / Ignition ?	La flamme atteint 150mm / Flame reached 150mm marker?	Temps pour atteindre 150mm / Time to reach 150mm marker (s)?	Inflammation du papier filtre / Filter paper ignition?
Echantillon / Sample 01	NA	Surface	Non / No	Non / No	NA	Non / No
Echantillon / Sample 02	NA	Surface	Non / No	Non / No	NA	Non / No
Echantillon / Sample 03	NA	Surface	Non / No	Non / No	NA	Non / No
Echantillon / Sample 04	NA	Surface	Non / No	Non / No	NA	Non / No
Echantillon / Sample 05	NA	Surface	Non / No	Non / No	NA	Non / No
Echantillon / Sample 06	NA	Surface	Non / No	Non / No	NA	Non / No
Echantillon / Sample 07	NA	Bord / Edge	Oui / Yes	Non / No	NA	Non / No
Echantillon / Sample 08	NA	Bord / Edge	Oui / Yes	Non / No	NA	Non / No
Echantillon / Sample 09	NA	Bord / Edge	Oui / Yes	Non / No	NA	Non / No
Echantillon / Sample 10	NA	Bord / Edge	Oui / Yes	Non / No	NA	Non / No
Echantillon / Sample 11	NA	Bord / Edge	Oui / Yes	Non / No	NA	Non / No
Echantillon / Sample 12	NA	Bord / Edge	Oui / Yes	Non / No	NA	Non / No

Observations / Remarks :	/
--------------------------	---

L'attention est attirée sur le fait que les résultats obtenus avec l'échantillon objet du présent rapport d'essais ne sont pas généralisables sans justification de la représentativité des échantillons et essais. Le rapport d'essai ne concerne que l'objet soumis à l'essai. Ces résultats d'essais rendent compte du comportement des éprouvettes d'un matériau soumis à des conditions spécifiques d'essai; ils ne prétendent pas représenter le seul critère d'évaluation du danger potentiel de contribution à l'incendie que présente le produit dans les conditions d'utilisation. / Attention is drawn to the fact that the results obtained with the sample that is the subject of this test report cannot be generalized without justification of the representativity of the samples and tests. The test report only concerns the object under test. These test results account for the behavior of specimens of a material subject to specific test conditions; they do not purport to represent the only criterion for assessing the potential fire hazard posed by the product under the conditions of use

Responsable de l'Essai / Test Officer :	Quentin ROUSSEL	
Responsable Technique / Technical Manager :	Skander KHELIFI	

Rapport N° / Report N° DO-19-1549\C-R1 émis le / edited the 06/02/2020

Résultats suivant / Results according to NF EN 13823 + A1 : 2015

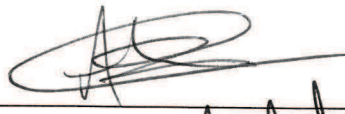
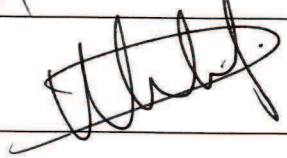
Date de réception / Reception Date :	13/12/2019
Date de l'essai / Test date :	27/01/2020
Conditionnement / Conditioning :	23 ± 2 °C, 50 ± 5 % HR conformément à / according to EN 13238
Dimension des échantillons / Samples dimensions (mm) :	495 mm x 1500 mm et/and 1000 mm x 1500 mm
Epaisseur / Thickness (mm) :	0.79

L'accréditation du COFRAC atteste de la compétence des laboratoires pour les seuls essais couverts par l'accréditation / COFRAC accreditation attests competence of the laboratories for the only tests covered by the accreditation

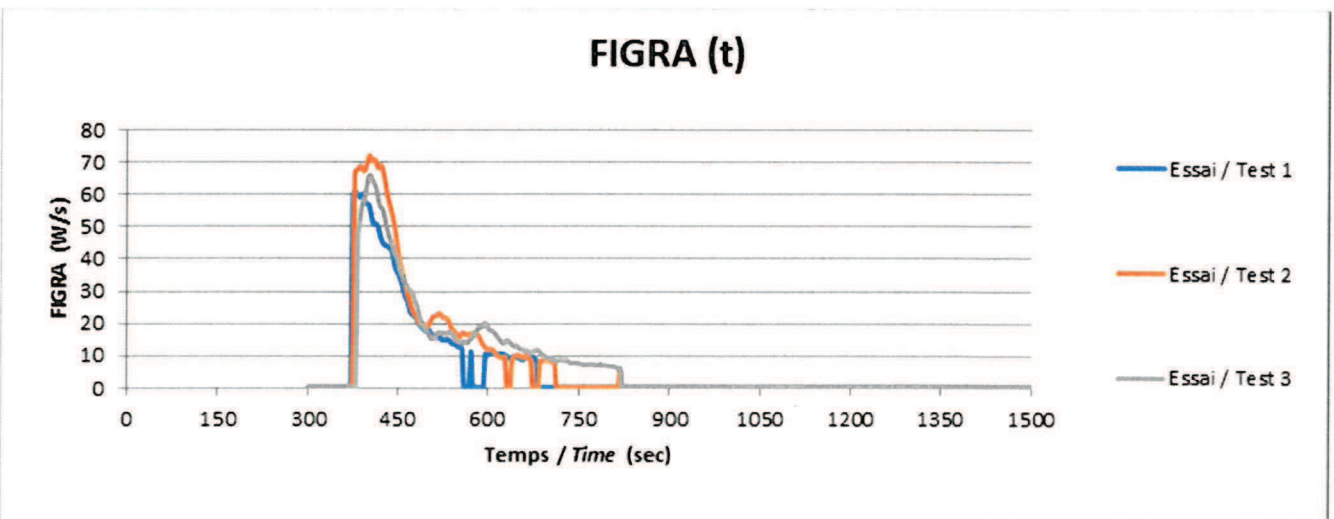
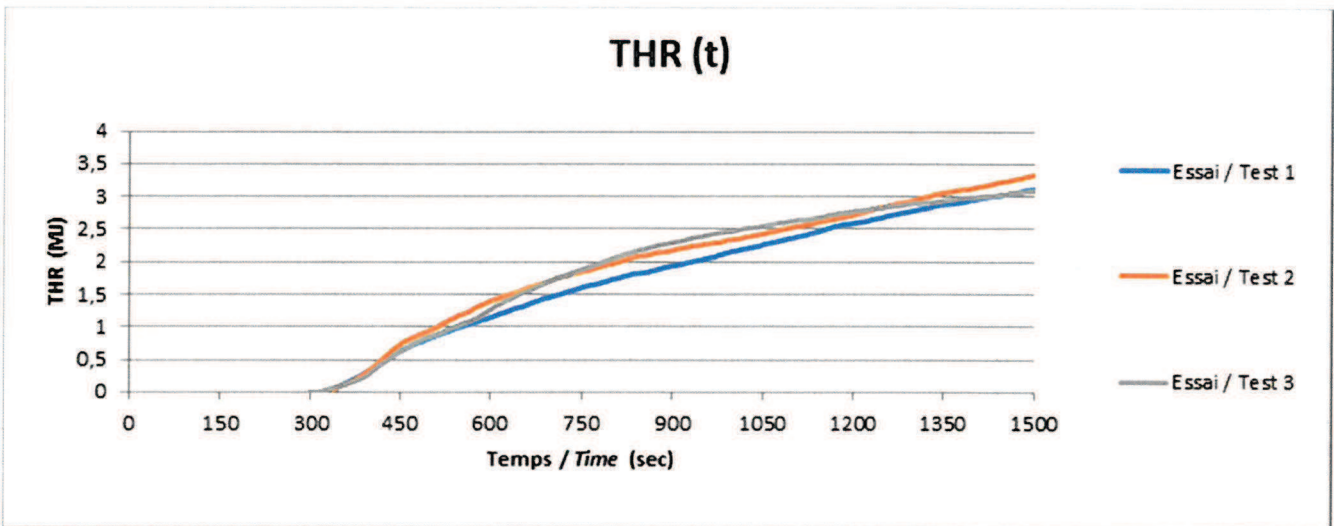
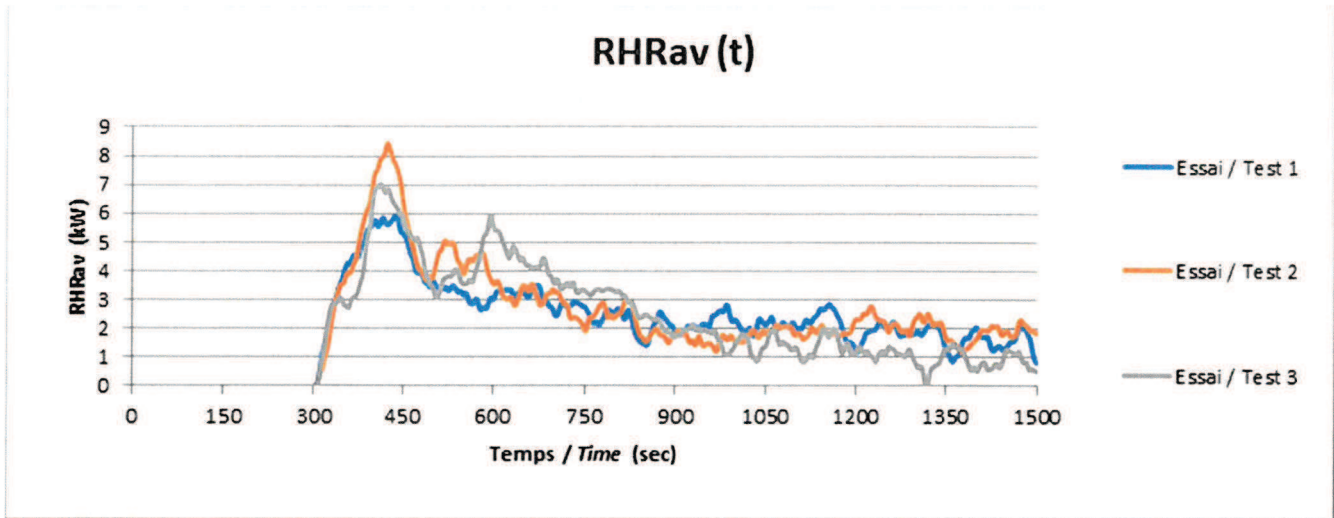
	Essai / Test 1	Essai / Test 2	Essai / Test 3	Moyenne / Average
FIGRA0,2MJ (W/s)	60,8	71,8	65,6	66,1
FIGRA0,4MJ (W/s)	50,7	70,7	58,4	59,9
THR600s (MJ)	1,9	2,2	2,3	2,1
SMOGRA (m ² /s ²)	36,6	31,1	26,4	31,4
TSP600s (m ²)	71,5	59,6	52,4	61,1
Propagation jusqu'au bord / Flame spread to the edge	Non/No	Non/No	Non/No	/
Chûte de débris enflammées ≤ 10s / Flamming drops ≤ 10s	Non/No	Non/No	Non/No	/
Chûte de débris enflammées >10s / Flamming drops > 10s	Non/No	Non/No	Non/No	/
Chute de l'éprouvette / Collapse of specimen	Non/No	Non/No	Non/No	/

Observations / Remarks :	/
--------------------------	---

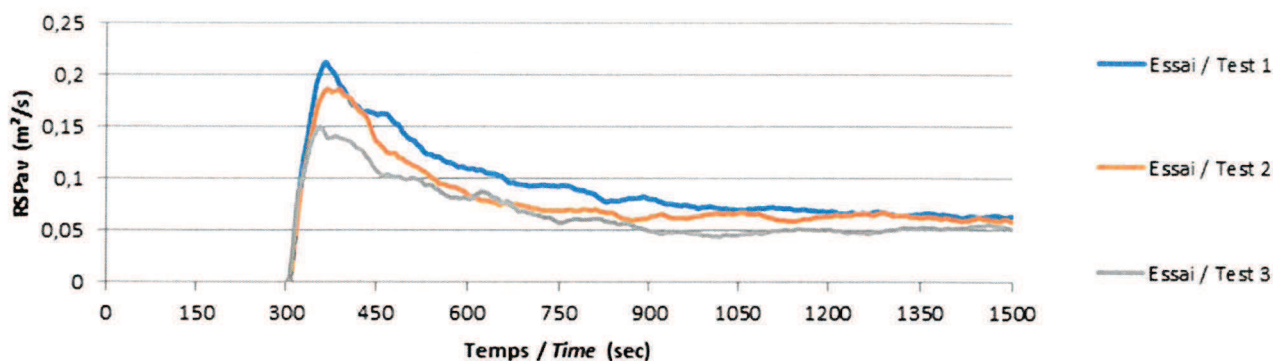
L'attention est attirée sur le fait que les résultats obtenus avec l'échantillon objet du présent rapport d'essais ne sont pas généralisables sans justification de la représentativité des échantillons et essais. Le rapport d'essai ne concerne que l'objet soumis à l'essai. Ces résultats d'essais rendent compte du comportement des éprouvettes d'un matériau soumis à des conditions spécifiques d'essai; ils ne prétendent pas représenter le seul critère d'évaluation du danger potentiel de contribution à l'incendie que présente le produit dans les conditions d'utilisation. / Attention is drawn to the fact that the results obtained with the sample that is the subject of this test report cannot be generalized without justification of the representativity of the samples and tests. The test report only concerns the object under test. These test results account for the behavior of specimens of a material subject to specific test conditions; they do not purport to represent the only criterion for assessing the potential fire hazard posed by the product under the conditions of use

Responsable de l'Essai / Test Officer :	Mourad ALIOUA	
Responsable Technique / Technical Manager :	Skander KHELIFI	

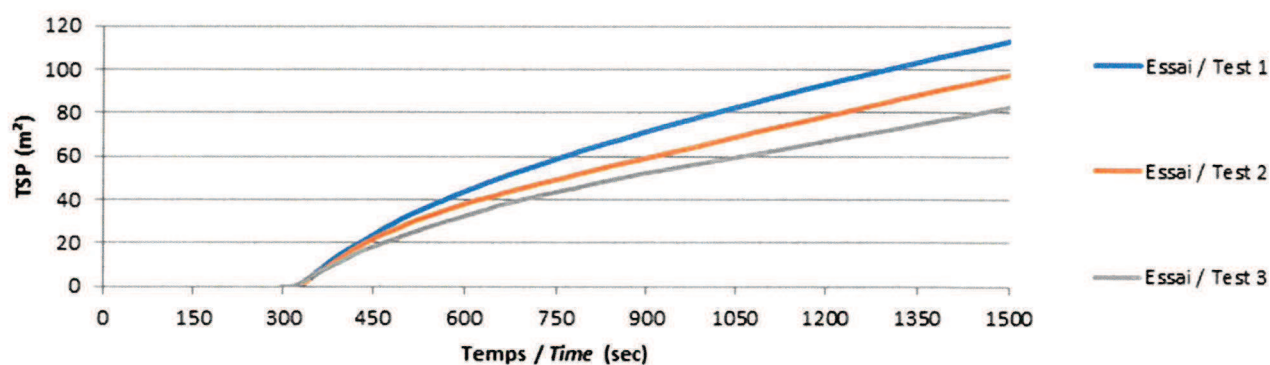
Annexe / Appendix 1 : Graphiques / Graphics



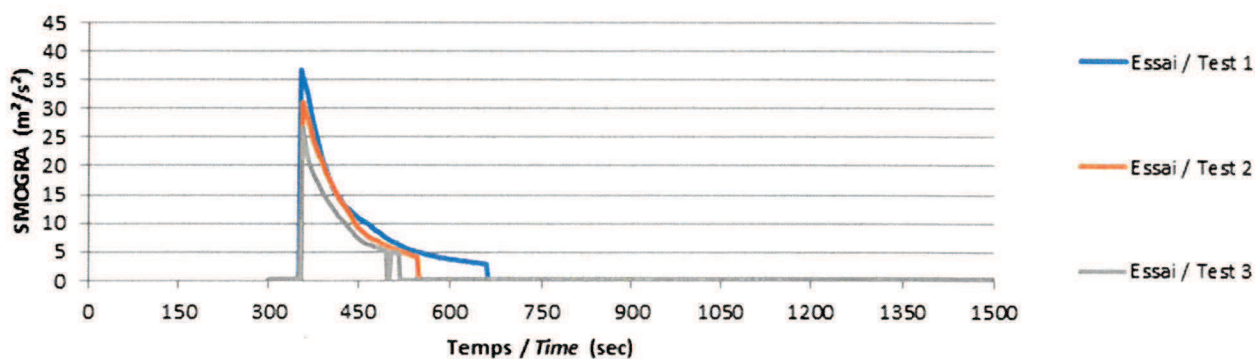
RSPav (t)



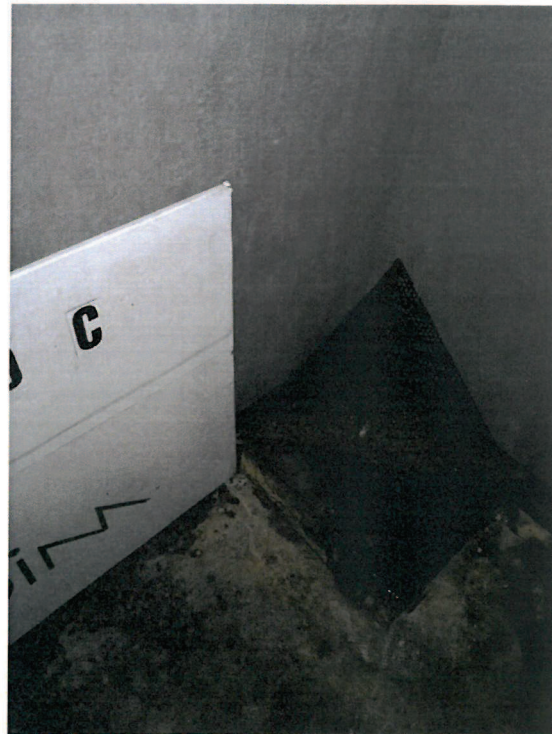
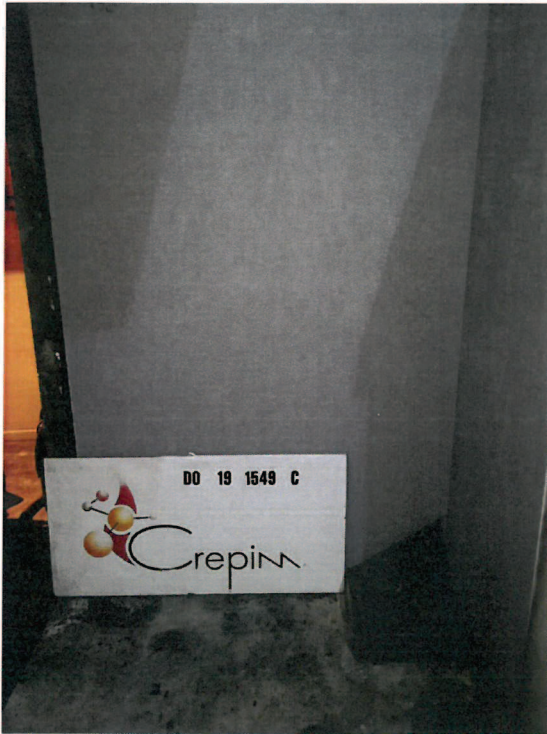
TSP (t)



SMOGRA (t)



Annexe / Appendix 2 : Photos / Pictures





COMMERCIAL TESTING COMPANY

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

Evaluation of Vinyl-Coated Wallcovering
Federal Specification CCC-W-408D

Grandeco Medium Duty Wallcovering

Report Number 19-09185

Test Number 5450-3264-0919R
August 19, 2019

Grandeco Wallfashion Group Belgium nv
Tielt, Belgium

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, and a sampling plan, if described in the referenced test procedure, was not necessarily followed. This report, or the name 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 on a non-woven backed, FR-treated vinyl wallcovering conducted for Grandeco Wallfashion Group Belgium nv of Tielt, Belgium. The material was tested to determine compliance with Federal Specification CCC-W-408D, *Wall Covering, Vinyl-Coated*, dated January 14, 1994. Section 1.2 of CCC-W-408D which classifies a material **Type I** – Light Duty, **Type II** – Medium Duty, or **Type III** – Heavy Duty.

SAMPLING

The sampling was done by the client. One roll of wallcovering was submitted for testing and was identified as **Grandeco Medium Duty Wallcovering**.

TEST PROCEDURES

The procedures used to conduct these tests are described in CCC-W-408D. The purpose of these tests is to determine compliance with Section 3.4 Physical Properties, Table I. The physical properties are briefly outlined as:

Requirements	Type I	Type II	Type III
Colorfastness to Light ¹	200	200	200
Washability ²	100	100	100
Scrubbability ³	200	300	500
Abrasion Resistance ⁴	200	300	1,000
Breaking Strength ⁵ , Machine Direction	≥ 40 lb	≥ 50 lb	≥ 100 lb
Breaking Strength ⁵ , Cross Machine	≥ 30 lb	≥ 55 lb	≥ 95 lb
Crocking, Dry ⁶	Good	Good	Good
Stain Resistance Reagents ⁷	1-9	1-12	1-12
Tear Resistance ⁸ , Machine Direction	12	25	50
Tear Resistance ⁸ , Cross Machine	12	25	50
Blocking Resistance ⁹	≤ 2	≤ 2	≤ 2
Coating Adhesion ¹⁰ , lbs/inch	≥ 2 lb/in	≥ 3 lb/in	≥ 3 lb/in
Cold Crack Resistance ¹¹	No Change	No Change	No Change
Heat Ageing Resistance ¹²	Pass	Pass	Pass
Flame Spread ¹³ , maximum	≤ 25	≤ 25	≤ 25
Smoke Development ¹³ , maximum	≤ 50	≤ 50	≤ 50
Shrinkage ¹⁴ , Machine Direction	≤ 2%	≤ 2%	≤ 2%
Shrinkage ¹⁴ , Cross Machine	≤ 1%	≤ 1%	≤ 1.5%

1. *Colorfastness to Light* — The specimen shall show no appreciable change after carbon arc exposure to the specified Standard Fading Hours (SFH) when tested in accordance with Federal Test Method Standard 191A, Method 5660.
2. *Washability* — The material is exposed to the required number of cycles in a Gardner Washability Machine Model M-105 equipped with a WG-2000C detergent soaked sponge under a load of 1 pound. Prior to testing, the material has 1 tablespoon of detergent placed beneath the sponge. When the required cycles are finished, the specimen is rinsed with tap water and air dried at 70°F. When viewed from a distance of 4 feet in a Macbeth Spectralight viewing booth, there is no appreciable discoloration, change in gloss, blistering, softening, swelling or loss of adhesion.
3. *Scrubbability* — The material is exposed to the required number of cycles in a Gardner Washability Machine M-105 equipped with a WG2000NMA detergent soaked brush under a load of 1 pound. One tablespoon of detergent is added beneath the brush prior to testing. After the required number of cycles, the specimen is rinsed with tap water and air dried. When viewed from a distance of 4 feet in a Macbeth Spectralight viewing booth, there is no appreciable damage to the printed or base surface.
4. *Abrasion Resistance* — The number of required cycles (double rubs) is done using a Wyzenbeck Precision Wear Tester equipped with 220 grit silicon carbide abrasive sheet. The tester is operated with a tension of 6 pounds force and the pressure set at 2 pounds force. The wallcovering shall have no visual evidence of fiber show-through or damage to the supporting substrate.

5. *Breaking Strength* — The test was conducted in accordance with ASTM Test Method D 751, Section 11, Breaking Strength, using Procedure A – Grab Test Method. The test was conducted using an Instron CRE type tensile tester operating at an extension rate of 12 inches per minute.
6. *Crocking* — Resistance to dry crocking was determined in accordance with Federal Test Method Standard 191, Method 5651, using the crockmeter method. Crocking refers to the transfer of matter from the wallcovering to the standard white cotton crockmeter cloth.
7. *Stain Resistance* — Approximately 1 ml of each reagent is placed on the surface of the wallcovering, covered with a watch glass, and allowed to stand for 24 hours. The covers are removed from the reagents and the exposed areas cleaned using warm distilled water. After drying, the sample shall show no evidence of appreciable change. The staining reagents are: (1) 75°F distilled water; (2) 120°F distilled water; (3) 50% ethyl alcohol; (4) vinegar; (5) 1% NaOH solution; (6) 5% HCl; (7) standard soap solution; (8) detergent solution; (9) orange juice; (10) butter; (11) catsup; and, (12) tea.
8. *Tear Resistance* — The test is conducted in accordance with ASTM Test Method D 751, Method A, using an Elmendorf tear tester. The result is reported as the scale reading.
9. *Blocking Resistance* — The test is conducted in accordance with Federal Test Method Standard 191, Method 5872, *Temperature, High; Effect on Cloth Blocking*. Specimens are folded face to face, placed between glass plates, and the assembly placed in a circulating air oven for 30 minutes at 180°F. After 30 minutes, the specimens are removed, allowed to cool for 5 minutes, and examined for evidence of adhering or peeling of the coating. Resistance to blocking is evaluated by the following scale: 1 = No Blocking (surfaces are free); 2 = No Blocking (adhered slightly); 3 = Slight Blocking (must be lightly peeled to separate); and 4 = Blocking (surfaces separate with difficulty).
10. *Coating Adhesion* — The test was conducted in accordance with ASTM Test Method D 751, Section 50, *Adhesion of Coating to Fabric*. The test was conducted using an Instron CRE type tensile tester operated at an extension rate of 12 inches per minute.
11. *Cold Crack Resistance* — Specimens are placed in a cold chamber for 30 minutes at 20 ± 4°F. Immediately after removal from the chamber, the specimen is bent 180° around a 1/2-inch diameter mandrel. The sample shall not crack during folding around the mandrel.
12. *Heat Ageing Resistance* — The test sample shall not become stiff, brittle, soft, tacky, discolored, or show loss of grain after 168 hours in a circulating air oven maintained at 158°F.
13. *Flame Spread and Smoke Development* — The Flame Spread and Smoke Development are determined in accordance with ASTM Test Method E84–18b, *Surface Burning Characteristics of Building Materials*. The test sample was prepared in accordance with ASTM E2404-15a, *Standard Practice for Specimen Preparation and Mounting of Textile, Paper or Vinyl Wall or Ceiling Coverings to Assess Surface Burning Characteristics*, Section 8.3, Wall or Ceiling Coverings Intended to be Applied over Gypsum Board.
14. *Shrinkage* — Specimens are die cut from the test sample and conditioned for 24 hours at 70°F and 65% relative humidity. The initial dimensions are determined and recorded at three locations along the length and width of the specimen. After soaking for 30 minutes in distilled water and subsequent drying 30 minutes at 200°F, specimens are conditioned for 24 hours 70°F and 65% relative humidity and the final dimensional measurements determined. The shrinkage is calculated as $\% \text{ Shrinkage} = 100 \times (A - B)/A$ where A is the initial measurement and B is the final measurement.

TEST DATA AND TEST RESULT

The purpose of this evaluation was to determine compliance with requirements for a Type II Medium Duty wallcovering as defined by Federal Specification CCC-W-408D. The test results are presented in tabular form on the following page.

Grandeco Wallfashion Group Belgium nv
Tielt, Belgium

Grandeco Medium Duty Wallcovering

Characteristic	Type II Requirement	Test Data	Test Result
Colorfastness to Light	200	Good to Excellent	Pass
Washability	100	100 cycles	Pass
Scrubability	300	300 cycles	Pass
Abrasion Resistance	300	300 cycles	Pass
Breaking Strength, Machine Direction	≥ 50 lb	81 lb	Pass
Breaking Strength, Cross Machine	≥ 55 lb	89 lb	Pass
Crocking, Dry	Good	Excellent	Pass
Stain Resistance Reagents	1-12	(See Note 1)	Pass
Tear Resistance, Machine Direction	25	29.6	Pass
Tear Resistance, Cross Machine	25	37.0	Pass
Blocking Resistance	≤ 2	1	Pass
Coating Adhesion, lbs/inch	≥ 3 lb/in	(See Note 2)	Pass
Cold Crack Resistance	No Change	No Change	Pass
Heat Ageing Resistance	Pass	Pass	Pass
Flame Spread, maximum	≤ 25	10	Pass
Smoke Development, maximum	≤ 50	15	Pass
Shrinkage, Machine Direction	≤ 2%	0.272%	Pass
Shrinkage, Cross Machine	≤ 1%	0.529%	Pass

Note 1 — 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	4.5

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.

Note 2 — Coating Adhesion

The test for coating adhesion is not applicable to wallcovering from which a coating cannot be separated (Reference: CCC-W-408D, Table III).

CONCLUSION

Based on the results of this evaluation, the wallcovering identified as **Grandeco Medium Duty Wallcovering** is classifiable as Type II.

Demander / Sponsor :	TEXDECOR / CASAMANCE
Contact :	Stéphanie CORNIL
Adresse / Address :	2 rue d'hém
Code postal / Post Code :	59780
Ville / City :	Willems
Pays / Country :	France

Numéro de commande / Purchase Order :	Accord sur devis
Date commande / Dated on :	27/07/2023

Rapport N° / Report N° DO-23-5136\A-R2 émis le / edited the 11/09/2023

Description du produit testé / Tested product description

Référence commerciale / Commercial reference :	CONTRACT VINYL WALLCOVERING / Vinyl Type II
Date de réception / Reception Date :	24/07/2023
Description :	Revêtement mural constitué d'une couche en PVC sans phtalate, imprimé à l'aide d'encre à base d'eau, sur un support non-tissé / Wall covering consisting of a phthalate-free PVC layer, printed using water-based inks, on a non-woven backing.
Application finale / Final application :	Revêtement mural / Wall covering
Épaisseur / Thickness :	0,55 mm (déclarée par le client / Declared by sponsor)
Masse volumique / Density :	235 kg/m ³ (déclarée par le client / Declared by sponsor)
Masse surfacique / Surface density :	470 g/m ² (déclarée par le client / Declared by sponsor)
Couleur / Color :	Beige
Substrat / Substrate :	Silicate de calcium 25 mm d'épaisseur 950 kg/m ³ / Calcium silicate 25 mm 950 kg/m ³ .
Mode de fixation / Mounting method :	Collé / Glued
Type et quantité de colle / Type and amount of glue :	Ovallit TM à 250 g/m ² .
Face exposée / Exposed face :	Face PVC / PVC side.
N° Lot de fabrication / Batch N°	91660239 / Lot 22/409959
Date d'échantillonnage / Date of sampling :	
Conditionnement / Conditioning :	23 ± 2 °C, 50 ± 5 % HR

Documents de référence / Reference documents	Nom / Name
FTP CODE 2010	Code international de 2010 pour l'application des méthodes d'essai au feu (résolution MSC.307(88)) / International code for application of fire test procedures 2010

A la vue des résultats détaillés dans ce rapport le produit testé obtient le classement suivant / Based on results detailed in this report the product obtained the following classification

Résultats obtenus / Obtained results

Norme d'essai / Test standard	Objet de l'essai / Object of the test	Résultats / Results	
Annexe 1: Partie 5 Annex 1 : Part 5	Essai d'inflammabilité des surfaces / Flammability testing of surfaces	Flux critique à l'extinction / Critical flux at extinguishment CFE (kW/m ²)	33,52
		Chaleur de combustion soutenue / Sustained combustion heat Qsb (MJ/m ²)	2,63
		Dégagement de chaleur total / Total heat release Qt (MJ)	0,01
		Taux maximal de chaleur dégagé / Maximum Heat release rate Qp (kW)	0,4
		Gouttelettes en combustion / Flaming droplets	0

Le produit objet des essais est conforme aux exigences du FTP CODE 2010 en tant que revêtement mural et de plafond.

The product submitted to test is compliant with requirements of FTP CODE 2010 as wall and cladding covering.

Pour déclarer, ou non, la conformité à la spécification, il n'a pas été tenu explicitement compte de l'incertitude associée au résultat
Whether or not to declare compliance with the specification, the uncertainty associated with the result was not explicitly taken into account

Responsable de la classification / Responsible for the classification :	Thomas TURF	
Responsable Technique / Technical Manager :	Skander KHELIFI	

Rapport N° / Report N° DO-23-5136/A-R2 émis le / edited the 11/09/2023
Résultats suivant / Results according to FTP CODE Annexe 1 Partie 5 : 2010

Date de réception / Reception Date:	24/07/2023
Date de l'essai / Test date:	22/08/2023
Dimension des échantillons / Samples dimensions (mm) :	800 mm x 155 mm
Epaisseur / Thickness (mm):	0,55 mm

L'accréditation du COFRAC atteste de la compétence des laboratoires pour les seuls essais couverts par l'accréditation / COFRAC accreditation attests competence of the laboratories for the only tests covered by the accreditation

	Essai / Test 1	Essai / Test 2	Essai / Test 3	Moyenne / Average
Poids / Weight (g)	3001,5	3148,6	3353	/
Flamme pilote / Pilot Flame	Propane	Propane	Propane	/
Durée de l'essai / Test duration (s)	281	279	298	/
Temps d'ignition / Time to ignition (s)	2	2	4	/
Temps d'extinction / Time to extinction (s)	101	99	118	/
Propagation de flamme / Flame spread (mm)	280	275	260	/
CFE (kW/m ²)	32,51	33,12	34,92	33,52
Qsb (MJ/m ²)	2,5	2,34	3,05	2,63
Qt (MJ)	0,01	0,01	0	0,01
Qp (kW)	0,45	0,5	0,24	0,4
Nombre de gouttes enflammées / Flaming drips number	0	0	0	0

	Essai / Test 1	Essai / Test 2	Essai / Test 3
Distance (mm)	Temps / Time (sec)		
50	39	26	50
100	45	38	57
150	50	44	66
200	61	65	75
250	75	70	92
300	/	/	/

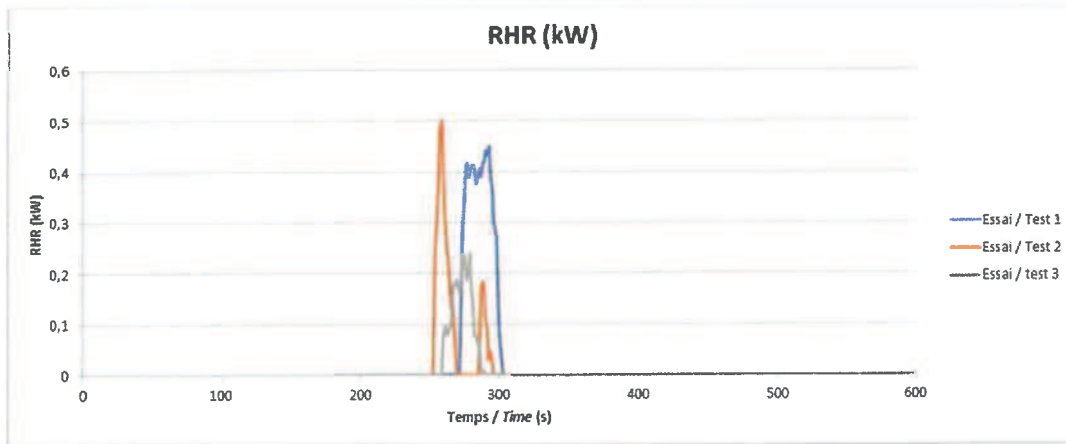
	Essai / Test 1	Essai / Test 2	Essai / Test 3
Flux mesuré à / Flux measured at 150, 200, 250, 300, 350, 400mm	Qsb (MJ/m ²)		
45,40	2,27	2,00	3,00
41,37	2,52	2,69	3,10
36,09	2,71	/	/
30,02	/	/	/
23,75	/	/	/
17,91	/	/	/

Observations / Remark :	Conformément au paragraphe 2.2 de l'Annexe 2 du FTP Code 2010, les matériaux de surface dont le dégagement calorifique total (Qt) n'est pas supérieur à 0,2 MJ et dont le taux maximal de dégagement de chaleur (Qp) n'est pas supérieur à 1 kW sont considérés comme satisfaisant aux prescriptions de la partie 2 de l'Annexe 1 sans avoir à être soumis à de nouveaux essais.
--------------------------------	--

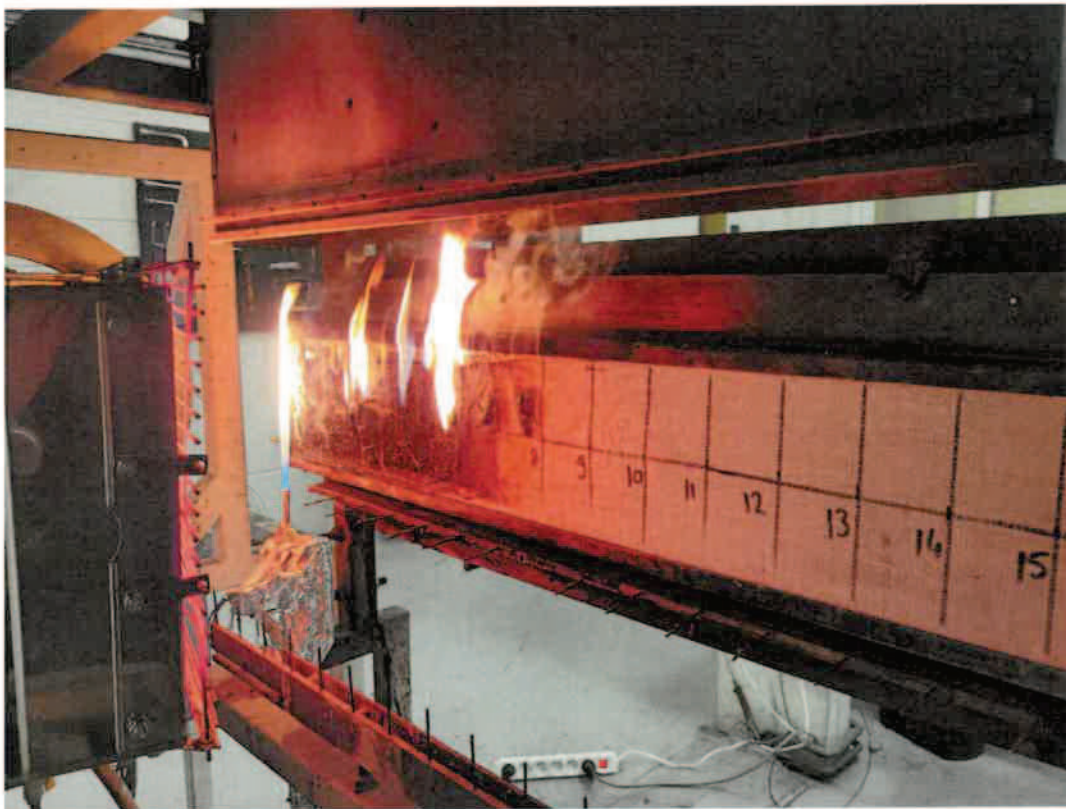
L'attention est attirée sur le fait que les résultats obtenus avec l'échantillon objet du présent rapport d'essais ne sont pas généralisables sans justification de la représentativité des échantillons et essais. Le rapport d'essai ne concerne que l'objet soumis à l'essai. Ces résultats d'essais rendent compte du comportement des éprouvettes d'un matériau soumis à des conditions spécifiques d'essai; ils ne prétendent pas représenter le seul critère d'évaluation du danger potentiel de contribution à l'incendie que présente le produit dans les conditions d'utilisation. / Attention is drawn to the fact that the results obtained with the sample that is the subject of this test report cannot be generalized without justification of the representativity of the samples and tests. The test report only concerns the object under test. These test results account for the behavior of specimens of a material subject to specific test conditions; they do not purport to represent the only criterion for assessing the potential fire hazard posed by the product under the conditions of use

Responsable de l'Essai / Test Officer :	Laura EVRARD	
Responsable Technique / Technical Manager :	Skander KHELIFI	

Annexe / Appendix 1 : Graphique / Graphic



Annexe / Appendix 2 : Photo / Picture



Fin du rapport / End of report