Textilní zkušební ústav

TEXTILNÍ ZKUŠEBNÍ ÚSTAV, s.p.

(TEXTILE TESTING INSTITUTE)

ACCREDITED CERTIFICATION BODY FOR THE CERTIFICATION OF PRODUCTS No. 3044
ACCREDITED BY CAI ACCORDING TO EN ISO/IEC 17065
VÁCLAVSKÁ 6, 658 41 BRNO, CZECH REPUBLIC

FINAL PROTOCOL

No.: COV/17/040

Producer:	**Fatra, a.s., třída Tomáše Bati 1541, 763 61 Napajedla, Czech Republic**
IN:	27465021
Products:	**NOVOFLOR STANDARD type 1000** **NOVOFLOR STANDARD FC type 1000** **NOVOFLOR EXTRA type 1002** **NOVOFLOR EXTRA AMOS type 1002** **NOVOFLOR EXTRA STATIK SD type 1002** **Heterogeneous vinyl floor coverings** material composition: polyvinylchloride
Evaluated according to:	• **EN ISO 10582:2012 Resilient floor coverings – Heterogeneous polyvinylchloride floor coverings – Specification**
Classification according to:	• **EN ISO 10874:2012 Resilient, textile and laminate floor coverings – Classification**
Evaluation conclusion:	Evaluated types of products meet the requirements of the standard mentioned above. These products NOVOFLOR STANDARD (NFS), NOVOFLOR EXTRA - AMOS, STATIK SD (NFE) are classified according to level of use to classes: • **21, 22, 23 - NFS type 1000, thickness 1,5 mm** • **21, 22, 23, 31, 32, 41 - NFS type 1000, thickness 2,0 mm** • **21, 22, 23 - NFS FC type 1000, thickness 1,5 mm and 1,8 mm** • **21, 22, 23, 31, 32, 33, 41, 42 - NFS FC type 1000, thickness 2,0 mm** • **21, 22, 23, 31, 32, 33, 34, 41, 42, 43 - NFE type 1002, thickness 2,0 mm**
Terms of protocol application:	This Protocol applies to these products mentioned above and can be used only for these products. The Protocol may not be published but entire. The customer can publish a part of the Protocol only if approved by the Certification Body for the certification of products No. 3044.

Contract No. of Inspection Activity: COV/17/03

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Protocol issued by:

Jitka Paulová
Certification Body

CERTIFIKAČNÍ ORGÁN PRO CERTIFIKACI VÝROBKŮ TZÚ TEXTILNÍ ZKUŠEBNÍ ÚSTAV BRNO * 3044 *

Reviewed:

Ing. Svatava Horáčková
Head of Certification Body

1. GENERAL DATA

1.1 Data on the customer

Customer is the producer: Fatra, a.s., třída Tomáše Bati 1541, 763 61 Napajedla, Czech Republic.
IN: 27465021

1.2 Data on the products

1.2.1 NOVOFLOR STANDARD type 1000 is a heterogeneous vinyl floor covering, created from three layers. Wear layer is transparent - back side is printed and top side is with pattern and PUR protective layer for easy care. Floor covering is produced in sheets wound on roll. It is declared for fully glued installation. The sheets are welded with the welding rod Novoplast or by cold welding. It is made in different colour designs (colour collection).
NOVOFLOR STANDARD FC type 1000 is made in form of panels.

Construction parameters of the product – **in form of sheets** (declaration of producer):

Material composition:	polyvinylchloride	
Total thickness:	1,5 mm and 2,0 mm (+0,13; -0,10)	
Thickness of wear layer:	0,4 mm (+13%; -10%)	
Total mass per unit area:	2,400 kg.m^{-2} (+13%; -10%)	for thickness 1,5 mm
Total mass per unit area:	3,280 kg.m^{-2} (+13%; -10%)	for thickness 2,0 mm
Density of utility layer:	1280 kg.m^{-3} (±50)	
Roll width:	1500 mm (+10; -0)	

Construction parameters of the product – **in form of panels** (declaration of producer):

Material composition:	polyvinylchloride
Total thickness:	1,5 mm (+0,13; -0,10)
Thickness of wear layer:	0,4 mm and 0,55 mm (+13%; -10%)
Total mass per unit area:	2,400 kg.m^{-2} (+13%; -10%)
Dimension of panels:	925 x 628 mm, 1245 x 950 mm, 632 x 928 mm
Tolerance:	(+6, -1) x (+5, -2) mm
Total thickness:	1,8 mm (+0,13; -0,10)
Thickness of wear layer:	0,55 mm (+13%; -10%)
Total mass per unit area:	2,850 kg.m^{-2} (+13%; -10%)
Dimension of panels:	1815 x 950 mm
Tolerance:	(+9, -5) x (+5, -2) mm
Total thickness:	2,0 mm (+0,13; -0,10)
Thickness of wear layer:	0,55 mm (+13%; -10%)
Total mass per unit area:	3,180 kg.m^{-2} (+13%; -10%)
Dimension of panels:	1219 x 914 mm, 1610 x 950 mm, 2215 x 914 mm
Tolerance:	(+6 -1) x (+5, -2) mm
Density of utility layer:	1280 kg.m^{-3} (±50)

The product is specified in detail in the standard of producer PND-5-243-97, edition No. 12.

1.2.2 NOVOFLOR EXTRA type 1002 is a heterogeneous vinyl floor covering, created from three layers. Wear layer is transparent - back side is printed and top side is with pattern and PUR protective layer for easy care. Floor covering is produced in sheets wound on roll. It is declared for fully glued installation. The sheets are welded with the welding rod Novoplast or by cold welding. It is made in different colour designs (colour collection).
NOVOFLOR EXTRA AMOS is not covered with PUR protective layer.
NOVOFLOR EXTRA STATIK SD is electrostatic dissipative.

Construction parameters of the product (declaration of producer):

Material composition:	polyvinylchloride
Total thickness:	2,0 mm (+0,13; -0,10)
Thickness of wear layer:	0,8 mm / AMOS 0,7 mm (+13%; -10%)
Total mass per unit area:	3,180 kg.m^{-2} (+13%; -10%)
Density of utility layer:	1280 kg.m^{-3} (±50)
Roll width:	1500 mm (+10; -0)

The product is specified in detail in the standard of producer PND-5-245-97, edition No. 11.

1.3 Data on the certification procedure

Assessment of product is carried out according to certification scheme No. 1 according to EN ISO/IEC 17067. It means type testing and evaluation.

2. VERIFICATION OF PRODUCT CONFORMITY WITH REQUIREMENTS OF THE STANDARD

2.1 Evaluated characteristics and classification of product

Evaluated characteristics are determined by the standard:

- EN ISO 10582 Resilient floor coverings – Heterogeneous polyvinylchloride floor coverings - Specification (art. 4.1, art. 4.2, art. 5).

Classification of product and symbols for labelling according to levels of use:

- EN ISO 10874 Resilient, textile and laminate floor coverings – Classification.

2.2 Testing results

New verification tests were performed on products NOVOFLOR STANDARD and NOVOFLOR EXTRA, thickness 2,0 mm. Test of colour fastness to artificial light was performed on colour designs (in the table the lowest result is mentioned).
According to EN ISO 10582 (art. 4.1, table 1) the product is declared as "type I" on the base of material composition of wear layer (declaration of producer).

Test results compared with the requirements of the standard EN ISO 10582 are specified in Tables No. 1 and No. 2.

Table No. 1: Evaluation of test results - **General requirements** (EN ISO 10582, art. 4.2., table 2)

Characteristic	Testing method	Measu-ring unit	Requirement	Value identified	Evalua-tion
Roll form - length - width	ISO 24341	m mm	min. 12 1500 - 1510	12 1510	D S
Panels (NFS FC) - side length	ISO 24342	mm	925 x 628 (±6; -1 x +5; -2)	925 x 628	D
Overall thickness (NFS) - average value - individual values	ISO 24346	mm	2,0 (+0,13; -0,10) ±0,15	2,09 2,13 - 2,05	S S
Overall thickness (NFE) - average value - individual values	ISO 24346	mm	2,0 (+0,13; -0,10) ±0,15	1,97 1,98 - 1,95	S S
Total mass per unit area (NFS) - average value	ISO 23997	$g.m^{-2}$	3280 (+13%; -10%)	3360 (+2,4%)	S
Total mass per unit area (NFE) - average value	ISO 23997	$g.m^{-2}$	3180 (+13%; -10%)	3106 (-2,3%)	S
Total mass per unit area (NFE ST) - average value	ISO 23997	$g.m^{-2}$	3180 (+13%; -10%)	3116 (-2,0%)	S
Dimensional stability after exposure to heat • Sheets and tiles-panels (intended for welding) • Tiles-panels (intended for dry-joint laying) - machine direct / cross direct	ISO 23999	%	≤ 0,40 ≤ 0,25	- 0,2 / - 0,1	S
Curling after exposure to heat • Sheets and tiles-panels (intended for heat welding) • Tiles-panels (intended for dry-joint laying)	ISO 23999	mm	≤ 8 ≤ 2	1,3	S
Flexibility	ISO 24344 method A	-	No cracking in using a 20 mm mandrel	No cracking in using a 20 mm mandrel	S
Residual indentation - average value	ISO 24343-1	mm	≤ 0,1	0,06	S
Effect of castor chair	ISO 4918	number of cycles	25 000 without damage	25 000 without damage	S
Colour fastness to artificial light	EN ISO 105-B02	grade	min. 6	6*	S

Legend: S - Satisfy D - Declaration of producer * - the lowest value identified on tested colour samples
The tests were carried out on the sample NFS (unless otherwise indicated).

Table No. 2: Evaluation of test results - **Classification requirements for level of use (minimal)** (EN ISO 10582, art. 5, table 3 - for products type I)

Characteristic	Testing method	Measuring unit	Requirement	Value identified	Evaluation
Overall thickness (NFS)	ISO 24346	mm	1,0 – 1,5 (< 2) Class 21, 22, 23	1,5	D
Overall thickness (NFS)	ISO 24346	mm	2,0 Class 21, 22, 23, 31, 32, 41	2,1	S
Thickness of wear layer (NFS)	ISO 24340	mm	0,15 – 0,40 (< 0,55) Class 21, 22, 23, 31, 32, 41	0,40	D
Overall thickness (NFE)	ISO 24346	mm	1,0 – 2,0 Class 21, 22, 23, 31, 32, 33, 34, 41, 42, 43	1,97*	S
Thickness of wear layer (NFE)	ISO 24340	mm	0,15 – 0,70 Class 21, 22, 23, 31, 32, 33, 34, 41, 42, 43	0,80 0,70	D
Overall thickness (NFS FC)	ISO 24346	mm	1,0 – 1,5 (< 2) Class 21, 22, 23	1,5 1,8	D
Thickness of wear layer (NFS FC)	ISO 24340	mm	0,15 – 0,30 Class 21, 22, 23	0,40 0,55	D
Overall thickness (NFS FC)	ISO 24346	mm	2,0 Class 21, 22, 23, 31, 32, 33, 41, 42	2,0	D
Thickness of wear layer (NFS FC)	ISO 24340	mm	0,15 – 0,55 (< 0,70) Class 21, 22, 23, 31, 32, 33, 41, 42	0,55	D
Seam strength (NFS) - average value - individual values	EN 684	N	Class 21, 22, 23 - no requirement Class 31, 32, 33, 34, 41, 42, 43 ≥ 240 ≥ 180	 349,2 308,6	 S S

Legend: S - Satisfy D - Declaration of producer * - in the tolerance (-0,10 mm)

2.3 Test results evaluation

All identified values on the tested samples are in compliance with the requirements of the standard ***EN ISO 10582 Resilient floor coverings – Heterogeneous polyvinylchloride floor coverings – Specification*** regarding:

- Identification requirements, according to composition of wear layer (art. 4.1, table 1)
- General requirements (art. 4.2, table 2)
- Classification requirements for level of use (art. 5, table 3).

2.4 Classification according to level of use

The product is classified according to classification scheme of the standard ***EN ISO 10874 Resilient, textile and laminate floor coverings – Classification***:

- **NOVOFLOR STANDARD type 1000, thickness 1,5 mm** complies with the requirements of **domestic level (class 21, 22, 23).**
- **NOVOFLOR STANDARD type 1000, thickness 2,0 mm** complies with the requirements of **domestic level (class 21, 22, 23), commercial level (class 31, 32) and light industry level (class 41).**
- **NOVOFLOR STANDARD FC type 1000, thickness 1,5 mm and 1,8 mm** complies with the requirements of **domestic level (class 21, 22, 23)**
- **NOVOFLOR STANDARD FC type 1000, thickness 2,0 mm** complies with the requirements of **domestic level (class 21, 22, 23), commercial level (class 31, 32, 33) and light industry level (class 41, 42).**
- **NOVOFLOR EXTRA type 1002 NOVOFLOR EXTRA AMOS type 1002, NOVOFLOR EXTRA STATIK SD, type 1002 thickness 2,0 mm** comply with the requirements of **domestic level (class 21, 22, 23), commercial level (class 31, 32, 33, 34) and light industry level (class 41, 42, 43).**

3. CONCLUSION

Heterogeneous vinyl floor coverings NOVOFLOR STANDARD type 1000, NOVOFLOR STANDARD FC type 1000 and NOVOFLOR EXTRA type 1002, NOVOFLOR EXTRA AMOS type 1002, NOVOFLOR EXTRA STATIK SD type 1002 comply with the basic requirements of standard EN ISO 10582.

These products are classified for level of use according to standard EN ISO 10874. These products can be marked by symbols for use.

4. DOCUMENTS APPLIED TO THIS FINAL PROTOCOL

1. Application for certification No. COV/17/040 from 10th January 2017.
2. Standards mentioned in this Final Protocol.
3. Standards of the producer for evaluated products PND 5-243-97 (edition No. 12), PND 5-245-97 (edition No. 11).
4. Test Protocol No. AZL 17/0087 from 30th January 2017 issued by the accredited testing laboratory of TZÚ Brno.

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