Entwicklungs- und Prueflabor Holztechnologie GmbH · Zellescher Weg 24 · 01217 Dresden · Germany

Amtico International
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VEREINIGTES KÖNIGREICH

Dresden, 06/11/2024
RPIA

Test Report
Order no. 2724539/F

This test report is a translation of test report 2724539/F dated 06/11/2024.

Client:	Amtico International Kingfield Rd Coventry CV6 5AA, United Kingdom
Order:	Reaction to fire tests of floor coverings according to EN 13501-1:2018-12
Contractor:	Entwicklungs- und Prueflabor Holztechnologie GmbH Laboratory Unit Surface Testing Zellescher Weg 24 01217 Dresden, Germany
Engineer in charge:	Dipl.-Ing. (BA) Robert Piatkowiak

Dipl.-Ing. Andreas Möschner
Head of Laboratory Unit Surface Testing

The test report contains 6 pages and 1 annex with 6 pages. Any duplication of extracts requires written permission of EPH. The test results refer exclusively to the material tested.
NOTE: All numerical values within this document are given with a comma as decimal.

1 Task

The accredited Entwicklungs und Prueflabor Holztechnologie GmbH was instructed as Notified Fire Testing Body (No. 0766) by company Amtico International in Coventry, United Kingdom to conduct reaction to fire tests according to EN 13501-1:2018-12 for the following product:

„Amtico Form"; 2,5 mm

2 Test material

2.1 Information about the test material

The following samples and information were selected for testing and submitted to the contractor by the client:

Name of product:	Amtico Form
Article no.:	FS7W5950HS.YE0BUE
Décor:	Rural Oak
Dimension:	(1219,2 x 184,2 x 2,5) mm
Date of production:	23/08/2024
Product classification:	nonhomogeneous building product
Field of application:	floor covering for interior use
Material composition:	cf. table 1
Sampling procedure:	by the client / manufacturer
Date of sample receipt:	27/09/2024

Table 1: Details of product composition

Details of product composition		Status
Nominal thickness [mm]:	2,5	ifc
Total thickness [mm]:	2,5	mbl
Total mass per unit area [kg/m²]:	3,45	mbl
Feature	**top layer (1)**	**+**
Characteristic:	Wear layer	ifc
Material:	PVC	ifc
Thickness [mm]:	0,7	mbl
Mass per unit area [kg/m²]:	-	
	layer 2	**+**
Characteristic:	Décor layer	ifc
Material:	PVC	ifc
Thickness [mm]:	< 0,1	mbl
Mass per unit area [kg/m²]:	-	
	layer 3	**+**
Characteristic:	Substrate layer	ifc
Material:	PVC	ifc
Thickness [mm]:	1,8	mbl
Mass per unit area [kg/m²]:	-	
	layer 4	**o**
Characteristic:	-	
Material:	-	
Thickness [mm]:	-	
Mass per unit area [kg/m²]:	-	
	layer 5	**o**
Characteristic:	-	
Material:	-	
Thickness [mm]:	-	
Mass per unit area [kg/m²]:	-	

+...existing / **o**...non-existing / **-**...not specified / **ifc**...information from client / **mbl**...measured by laboratory

2.2 Specimen preparation

Specimen dimension: (l x w x t / orientation)	▪ 1050 mm x 230 mm x product thickness according to EN ISO 9239-1:2010-06, clause 6.1 ▪ 250 mm x 90 mm x product thickness according to EN ISO 11925-2:2020-03, clause 5.2 **for each** testing procedure: 3 specimens (PK) lengthwise (L) and 3 PK crosswise (Q) to manufacturing direction
Substrate board:	20 mm particleboard according to EN 13238:2010-02, clause 5.2
Specimen mounting:	mechanical according to loose laying
Conditioning:	for a set period of time at a temperature of (23 ± 2) °C and a relative air humidity of (50 ± 5) % according to EN 13238:2010-02, clause 4.3
Beginning of conditioning:	01/10/2024

3 Test performance

The reaction to fire tests were carried out in accordance with the following test methods referred in EN 13501-1:2018-12, clause 9 for floor coverings of the classes B to E:

- **EN ISO 9239-1:2010-06**
  Reaction to fire tests for floorings - Part 1: Determination of the burning behaviour using a radiant heat source

- **EN ISO 11925-2:2020-03**
  Reaction to fire test - Ignitability of products subjected to direct impingement of flame - Part 2: Single-flame source test

4 Results

4.1 Burning behaviour using a radiant heat source according to EN ISO 9239-1

The following classification characteristics were determined on 05/11/2024:

Parameter	Orientation	Number of tests	Test result[1)] (average)
Critical heat flux [kW/m²]	lengthwise	**3**	10,12
Smoke production [% x min]			218,7

[1)] Classification limits according to EN 13501-1:2018-12, table 2:

Critical heat flux		Fire class	Smoke production		Spezifikation
≥ 3,0 kW/m²	→	D_{fl}	≤ 750 % x min	→	s1
≥ 4,5 kW/m²	→	C_{fl}	else	→	s2
≥ 8,0 kW/m²	→	B_{fl}			

The detailed results are described in Annex B.

4.2 Single-flame source test according to EN ISO 11925-2

The following classification characteristics were determined on 05/11/2024:

Kind of impingment	Time of impingement	Number of tests	Parameter	Test result[1)]
Surface impingement	15 s	6	Ignition occurs	Yes
			$F_s \leq 150$ mm (max. flame height)	Yes
			Burning droplets	No

[1)] Classification limits according to EN 13501-1:2018-12, table 2:

Maximum flame hight within 20 s test duration		Fire class
$F_s \leq 150$ mm	→	B_{fl}, C_{fl}, D_{fl}, E_{fl}

The detailed results are described in Annex A.

5 Further restriction clauses

a) The test results only apply to the reaction to fire behaviour of the in article 2 specified product under the described testing conditions during the tests, i.e. used as a horizontal floor covering installed on a wooden subfloor or subfloors made of class A1 or A2-s1, d0 material according to EN 13238:2010-02, using adhesives or not. Those are not allowed to be the only one criterion for the evaluation of the potential fire hazard of the building product in use case.

b) The test results are not valid, if in difference to the specifications in article 2 the floor covering is furnished with other or additional surface coatings, substratum for insulation/moisture barrier etc., subconstructions or further modifications of the product or end use parameters according to CEN/TS 15117:2005-08.

c) The test report is basis for the product classification in terms of the reaction to fire behaviour according to EN 13501-1:2018-12 but does not represent an otherwise general technical approval according to national building regulations.

d) Statements on conformity assessment/classification were made on the basis of the measurement results obtained. Measurement uncertainties were not included in the assessment (ILAC G8 03/2009 "Guidelines on the Reporting of Compliance with Specification" Section 2.7).

6 Annexes

The detailed results of the reaction to fire tests are described in the following annexes:

Test standard	Title	Annex
EN ISO 11925-2	Single-flame source test	**2724539/F - A**
EN ISO 9239-1	Burning behaviour using a radiant heat source	**2724539/F - B**

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