

Test laboratory for the fire behavior of building materials, Dipl.-Ing. (FH) Andreas Hoch  
Testing, supervising and certifying body, authorized by the building supervision authority

# TEST REPORT

## PZ-Hoch-240031

on the reaction to fire according to DIN 4102, part 1

Translation of the German test report – no guarantee for translation of technical terms

<b>Company</b>	<b>Vescom B.V.</b> Sint Jozefstraat 20 NL–5753 AV Deurne
<b>Name of the material</b>	„Lamu“
<b>Description of samples Sampling</b>	Wool fabric in brown/beige by the company
<b>Content of request</b>	Prove of the Fire behaviour according to the requirements of the class <b>B2</b> "normal entflammbar" according to the German standard DIN 4102-1 : 1998.
<b>Validity of test report</b>	31.12.2028
<b>Result</b>	<b>The product complies freely suspended or in a distance &gt; 40 mm to same or other plain materials with the requirements of class B2 for "normal entflammbare" building materials according to the German standard DIN 4102-1 : 1998</b>

This test report includes 3 pages.

Remarks:

For legal interests only the German original version is relevant.

If the above mentioned building material is not used as product according to MBO § 2, Abs. 9, No. 1, there is no need for a general building supervisory test report.

This test report is not valid if the examined building material is used as product in the meaning of state building prescriptions (MBO § 17, Abs. 3).

This test report does not replace an eventually necessary proof of applicability concerning building supervisory or building laws in the meaning of state building prescriptions. This has to be verified by:

- "allgemeine bauaufsichtliche Zulassung" (general building inspectorate approval ) or by
- "allgemeines bauaufsichtliches Prüfzeugnis" (general building inspectorate certificate) or by
- "Zustimmung im Einzelfall" (exceptional approval)

This test report can underlie building supervisory procedures

- for regular building products for the prescribed proofs of conformity
- for non regular building products for the needed proofs of applicability.

This test report must not be published and copied without preceding agreement of the test laboratory and if agreed, only during validity and unchanged concerning appearance and contents.

**1. Properties and composition of the test material in as-delivered condition**
**PN 38327** „Lamu“

Wool fabric in brown/beige, consisting of 75% wool, 20% polyester and 5% polyamide, with FR

Warp thread: light brown

Weft thread: beige

Characteristic values determined by the laboratory:

Thickness	1,38 mm
Area weight	≈ 450 g/m <sup>2</sup>

More details of the composition of the test samples are not known to the laboratory. Some reference samples are stored in a depot.

**2. Preparation and conditioning of the samples**

From the delivered material samples were cut for the edge and surface test with the dimensions 9 x 19 cm and 9 x 23 cm.

The samples were kept in the climate chamber (23/50) according to DIN 50014-23/50-2 for a minimum of 14 days.

**3. Arrangement of samples**

- freely suspended

**4. Date of test 18.12.2023**
**5. Results of the fire tests**

The fire test was carried out according to the German standard DIN 4102-1 : 1998 clause 6.2.

PN 38328	Edge exposure								Surface exposure				Dimension
	Tested freely suspended												
Sample no.	1	2	3	4	5	6	7	8	1	2	3	4	--
Side	AL	AL	AL	AL	AL	BL	AQ	--	AL	AQ	--	--	--
Ignition <sup>1)</sup>	1	1	1	1	1	1	1	--	11	5	--	--	s
Top flames at the limit <sup>1)2)</sup>	-/-	-/-	-/-	-/-	-/-	-/-	-/-	--	-/-	-/-	--	--	s
Max. flame height <sup>1)2)</sup>	<b>10</b>	<b>11</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	--	<b>6</b>	<b>8</b>	--	--	<b>cm</b>
Time <sup>1)2)</sup>	13	14	13	13	13	13	13	--	15	16	--	--	s
Self extinguishing of the flames termination of burning <sup>1)</sup>	18	20	18	16	19	16	19	--	16	16	--	--	s
Start of glowing <sup>1)</sup>	-/-	-/-	-/-	-/-	-/-	-/-	-/-	--	-/-	-/-	--	--	s
End of glowing <sup>1)</sup>	-/-	-/-	-/-	-/-	-/-	-/-	-/-	--	-/-	-/-	--	--	s
The flames were extinguished after <sup>1)</sup>	-/-	-/-	-/-	-/-	-/-	-/-	-/-	--	-/-	-/-	--	--	s
Smoke development (visually)	heavy								heavy				--
Burning particles / droplets within 20 s <sup>1</sup>	-/-	-/-	-/-	-/-	-/-	-/-	-/-	--	-/-	-/-	--	--	s
The samples were burned/melted cone-shaped with a max. width of 3 cm x height 8 cm.													

<sup>1)</sup> time from the beginning

<sup>2)</sup> within 20 seconds

-/- no occurrence

-- no data

A frontside

B = backside

L = lengthwise

Q = crosswise

K = warp direction

S = weft direction

**6. Remarks to the setting of the test –none**

**7. Classification**

**7.1 Building material class**

Based on the test results described above the material complies with the requirements of the building material class "normal entflammbar" DIN 4102 - B2.

The classification is valid freely suspended or in a distance > 40 mm to same or other plain materials.

**7.2 Test for falling of burning particles (droplets)**

The tested material shows freely suspended no burning particles / droplets as described in DIN 4102-1, clause 6.2.6.1.

**8. Additional directions**

This test report is no substitute for a General Building Inspectorate Certificate. For legal interests only the German original version is relevant.

This report is only valid for the material as described under paragraph 1. In combination with other materials or with additional coatings or grounds etc. the burning behaviour may differ. The fire performance of other than the parameters given above has to be tested and classified separately.

This test report is not valid, as soon as the material is used as a building product in the sense of the "Landesbauordnungen" (state building requirements, MBO § 17, par. 3). According DIN 4102, section 7, the material has to be marked:

**DIN 4102 – B2**

**9. Validity of the test report**

This test report is valid to date specified on page 1.

The test report becomes invalid in case the standards on which the tests are based are changed.

Fladungen, 11.01.2024

Clerk in charge



(Christina Kümmeth)



Head of the test laboratory



(Dipl.-Ing.(FH) Andreas Hoch)