SP

REPORT
issued by an Accredited Testing Laboratory

SWEDAC ACKREDITERING
1002
ISO/IEC 17025

Date 2009-01-23
Reference F900081A
Page 1 (3)

Handled by, department
Marina C Andersson, kb
Fire Technology
010-516 52 92, marina.andersson@sp.se

Acqwool Development AB
Stora vägen 22
520 10 GÄLLSTAD

Reaction to fire classification report

1 Introduction

This classification report defines the classification assigned to free hanging acoustic fabrics in accordance with the procedure given in EN 13501-1:2007.

2 Details of classified product

2.1 General

The products are defined as free hanging acoustic fabrics. Their classification is valid for the end use application as free hanging acoustic fabrics for indoor use.

2.2 Product description

The products are fully described below.

Table 1. Acoustic fabric consisting of woven fabric of 100 % wool.

Product name	Nominal area weight (g/m^2)	Thickness (mm)	Comments
Qwaiet Compact	1500	5	Plain surface.
Qwaiet Single	1800	5 + ribs	Ribbed surface on one side, plain surface on the other side.
Qwaiet Double	2200	5 + ribs	The surface is ribbed on both sides.

3 Test reports & test results in support of classification

3.1 Test reports

This classification is based on the test report listed below:

Name of laboratory	Name of sponsor	Test report ref no	Test method
SP	Acqwool Development AB	F900081	EN ISO 11925-2

3.2 Test results

The test results listed below show the worst case as found in the test programme performed and reported according to the table above. The tests have been carried out on products covering the area weight range and thickness range of the product group.

Test method	Parameter	Number of tests	Results	
			Continuous parameter mean (m)	Compliance with parameters
EN ISO 11925-2				
Edge exposure*		6		
30 s exposure	*Fs* ≤ 150 mm		(-)	Compliant
Flaming droplets/particles	Ignition of filter paper		(-)	No ignition of filter paper
EN ISO 11925-2				
Surface exposure*		6		
30 s exposure	*Fs* ≤ 150 mm		(-)	Compliant
Flaming droplets/particles	Ignition of filter paper		(-)	No ignition of filter paper

* : as required to the end use application of the product
(-) : not applicable

4 Classification and field of application

4.1 Reference and direct field of application

This classification has been carried out in accordance with clause 11 and 15 of EN 13501-1:2007.

4.2 Classification

The products as listed in table 1 in this report in relation to its reaction to fire behaviour is classified:

E

The format of the reaction to fire classification for construction products excluding floorings and linear pipe thermal insulation product is:

Reaction to fire classification: *E*

4.3 Field of application:

This classification is valid for the following product parameters:

See table 1 in this report.

This classification is valid for the following end use application:

- Free hanging sound absorbents.

The sample was delivered by the client. SP Fire Technology was not involved in the sampling procedure.

5 Limitations

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

SP Technical Research Institute of Sweden
Fire Technology - Fire Dynamics

Per Thureson
Technical Manager

Marina C Andersson
Technical Officer

Handled by, department
Marina C Andersson, kb
Fire Technology
010-516 52 92, marina.andersson@sp.se

Acqwool Development AB
Stora vägen 22
520 10 GÄLLSTAD

Ignitability according to EN ISO 11925-2

(3 appendices)

Product

According to the client:
Acoustic fabric consisting of woven fabric of 100 % wool. Tested products are shown in the table below. All products in this product group are listed in appendix No. 1.

Product name	Nominal area weight (g/m^2)	Thickness (mm)	Comments	Tested according to EN ISO 11925-2
Qwaiet Compact	1500	5	Plain surface.	Appendix No. 2.
Qwaiet Double	2200	5 + ribs	The surface is ribbed on both sides.	Appendix No. 3.

Manufacturer

Acqwool Development AB, Gällstad, Sweden.

Purpose of test

Basis for technical fire classification.

Sampling

The samples were delivered by the client. It is not known to SP Fire Technology if the products received are representative of the mean production characteristics.

The samples were received January 14, 2009 at SP Fire Technology.

Test results

The products were tested with surface exposure and edge exposure, flame application time 30 seconds.

The test results are given in appendix 2 - 3.

The test results relate to the behaviour of the test specimens of a product under the particular conditions of the test; they are not intended to be the sole criterion for assessing the potential fire hazard of the product in use.

Note

The accreditation referred to is valid for EN ISO 11925-2.

SP Technical Research Institute of Sweden
Fire Technology - Fire Dynamics

Per Thureson
Technical Manager

Marina C Andersson
Technical Officer

Appendices

1 List of Products.
2 - 3 Test Results.

List of Products

According to the client:
Acoustic fabric consisting of woven fabric of 100 % wool. The tests have been carried out on products covering the area weight range of the product group. All products in this product group are listed in the table below.

Product name	Nominal area weight (g/m2)	Thickness (mm)	Comments	Tested according to EN ISO 11925-2
Qwaiet Compact	1500	5	Plain surface.	Appendix No. 2.
Qwaiet Single	1800	5 + ribs	Ribbed surface on one side, plain surface on the other side.	-
Qwaiet Double	2200	5 + ribs	The surface is ribbed on both sides.	Appendix No. 3.

Appendix 2

Test results – EN ISO 11925-2, 2002

Product

Product called "Qwaiet Double", consisting of wool. The product has a nominal area weight of 2200 g/m^2.

Application

Edge exposure. Flame exposure time was 30 seconds.

Test results

Test no	1	2	3	4	5	6
The sample ignited, s	9	7	8	10	10	10
The flames reach 150 mm, s	-*	-*	-*	-*	-*	-*
Flames died out, s	-*	-*	-*	-*	-*	-*
Burning droplets	No	No	No	No	No	No
Time when filter paper ignited, s	-	-	-	-	-	-

*Flaming ceased before the flame tip reached 150 mm.

Application

Surface exposure. Flame exposure time was 30 seconds.

Test results

Test no	1	2	3	4	5	6
The sample ignited, s	13	12	14	14	13	13
The flames reach 150 mm, s	-*	-*	-*	-*	-*	-*
Flames died out, s	-*	-*	-*	-*	-*	-*
Burning droplets	No	No	No	No	No	No
Time when filter paper ignited, s	-	-	-	-	-	-

*Flaming ceased before the flame tip reached 150 mm.

Measured data

Thickness 4.5 - 7.5 mm, 14.7 - 15.7 mm (plain core and incl. ribs).
Area weight 2.2 kg/m^2.

Conditioning

According to EN 13238, 2001.
Temperature 23 ± 2 °C.
Relative humidity 50 ± 5 %.

Date of test

January 19, 2009.

Test results – EN ISO 11925-2, 2002

Product

Product called "Qwaiet Compact", consisting of wool. The product has a nominal area weight of 1500 g/m^2.

Application

Edge exposure. Flame exposure time was 30 seconds.

Test results

Test no	1	2	3	4	5	6
The sample ignited, s	9	-	-	-	-	-
The flames reach 150 mm, s	-*	-	-	-	-	-
Flames died out, s	-*	-	-	-	-	-
Burning droplets	No	-	-	-	-	-
Time when filter paper ignited, s	-	-	-	-	-	-

*Flaming ceased before the flame tip reached 150 mm.

Application

Surface exposure. Flame exposure time was 30 seconds.

Test results

Test no	1	2	3	4	5	6
The sample ignited, s	13	-	-	-	-	-
The flames reach 150 mm, s	-*	-	-	-	-	-
Flames died out, s	-*	-	-	-	-	-
Burning droplets	No	-	-	-	-	-
Time when filter paper ignited, s	-	-	-	-	-	-

*Flaming ceased before the flame tip reached 150 mm.

Measured data

Thickness 6.3 - 6.6 mm.
Area weight 1.6 kg/m^2.

Conditioning

According to EN 13238, 2001.
Temperature 23 ± 2 °C.
Relative humidity 50 ± 5 %.

Date of test

January 19, 2009.