dek-king

by wilks

Dek-King Technical Specifications Report

Woodrolfe Road · Tollesbury · Essex · CM9 8RY · England
Tel: +44 (0)1621 869609 · Fax: +44 (0)1621 868863
Email: sales@wilks.co.uk · Web: www.wilks.co.uk · www.dek-king.com

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INDEX

Wilks is proud to be one of the world's leading companies in the manufacture and supply of impact protection and decking systems.

Since 1973 we have supplied many leading boat builders with their profi les and our customer base spans the globe.

We manufacture a wide range of fendering profi les for both boat and pontoon applications as well as accessories for other marine users including Dek-King®, a superb alternative to teak decking.

At our premises we hold a vast stock of profi les in fl exible PVC, rigid PVC, PVR, stainless steel, aluminium and rubber; but as manufacturers we can also supply to meet your individual trade requirements.

Disclaimer

All information shown in this brochure is to our knowledge correct at the time of going to print. Whilst we have endeavoured to ensure that the information given herein is true and reliable it is given only for the guidance of our customers. It is the user's responsibility to ascertain the suitability of products by their own tests.

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Classification of reaction to fire in accordance with EN 13501-1 : 2007

Prepared by:	Laboratoire National de Metrologie et D'Essais Laboratoire de Trappes 29, Avenue Roger Hennequin 78197 Trappes Cedex France
Classification Report No:	J 101378
Issue Number :	CEMATE/3
Date of issue:	09/12/2008
Test Methods:	EN ISO 11925-2 (6 tests) EN ISO 9239-1 (3 tests)

The product, Dek-King, in relation to its reaction to fire behaviour is classified:

Bfl

The additional classification in relation to smoke production is:

s1

Reaction to fire classification: Bfl-s1

End use of product: Floor covering of a boat

Classification of reaction to abrasion resistance in accordance with EN 660-2:1999

Prepared by:	SATRA Technology Centre Ltd.
	Wyndham Way, Telford Way, Kettering, Northamptonshire, NN16 8SD, United Kingdom
SATRA Ref:	FLO0199528/1147/2
Report date:	07/12/2011
Test Methods:	BS EN 660-2: 1999 (3 Specimen)
	BS EN 428: 1993 (3 tests)

Results

	Mean Values	Test Critera
Material thickness, mm	5.2 (1.d.p)	BS EN 428: 1993
Mean density, g/cm^3	1.379	BS EN 436: 1994
Mean loss, mg per 100 revolutions	2.7	BS EN 660-2: 1999
Mean volume loss mm^3 per 100 revoltuions	1.9	BS EN 660-2: 1999
BS EN 649: 1997 Wear group classification	T	BS EN 660-2: 1999

Comments

BS EN 660-2: 1999 - Resilient floor coverings. Determination of wear resistance. Part 2 Frick Taber test is intended to access the wear layer of poly vinyl chloride floor coverings under laboratory conditions.

A 100 x 100mm sample was prepared (cut) from the sample submitted and conditioned in a laboratory at 23 ± 2°C, 50 ±5% Relative Humidity, until a constant mass has been reached. (A constant mass is defined as being: when the mass change is less than 0,002g per day). Under normal test conditions three samples are tested in order to satisy the requirements set out in BS EN 660-2.

The sample was then abraded to 5,000 revolutions, witha break for weighing after each cycle of 1,000 revolutions.

Conclusion

With regard to the wear resistance assessment, according to BS EN 660-2 (Volume loss method), the sample submitted with a nominal thickness of 5.2mm (1.d.p) has demonstrated good wear resistance (1.9mm^3 volume loss) when assessed against the requirements of BS EN 649: 2011 and is therefore classified as wear group T.

In relation to the classification for end use suitability for wear resistance, the sample submitted, with a nominal thickness if 5.2mm (1.d.p) is classed as suitable for all applications up to and including Class 34/43 (Class 34 = Commercial/Very Heavy use, Class 43 = Light Industrial/Heavy Use).

Classification of reaction slip resistance in accordance with EN 13893: 2002

Prepared by: SATRA Technology Centre Ltd.
Wyndham Way, Telford Way, Kettering, Northamptonshire, NN16 8SD, United Kingdom

SATRA Ref: FLO0199528/1147/1

Report date: 07/12/2011

Test Methods: BS EN 13893: 2002

Summary

In relation to the property assessed (Dynamic coeffiecient of friction under dry conditions) the compound PVC floor covering submitted has satisfied the minimum requirements set out in BS EN 14041: 2004.

The following additional labelling is therefore permissible under the technical details and should be incororated within the CE Label:

Techical Class DS

Characteristic	BS EN 14041: 2004 Requirements	Direction	Average Results
Slip Resistance	Dynamic Coefficient of friction of ≥0.30	Along	0.62
		Across	0.61

Comments

BS EN 13893: 2002 is conducted to assess the Dynamic Coefficient of Friction of the surface of a vinyl floor covering, which is usually walked on with shoes. The measurements are made in a laboratory on dry floor covering surfaces only.

During the test a slider made from two calibrated leather sliders and one calibrated shoe rubber slider is loaded to impose a specified force (10kg) on to the resilient floor covering. The loaded slider is pulled parallel to the surface of the floor covering at a constant speed, with five samples being tested in the along and across direction of manufacture.

BS EN 14041: 2004 stipulates a minimum safety requirement for floor coverings where a claim of slip resistance is made. The floor covering intended to be used in dry and non-contaminated conditions shall have a Dynamic Coefficient of Fraction of ≥0.30 when tested according to BS EN 13893: 2002.

Note

However, it should be noted that this does not ensure safety of floor coverings. Slip is affected by a number of other parameters including installation, environment, maintenance, contaminates, footwear and user behaviour.

Classification of reaction slip resistance in accordance with BS 7976 Part2: 2002

Prepared by: SATRA Technology Centre Ltd.
Wyndham Way, Telford Way, Kettering, Northamptonshire, NN16 8SD, United Kingdom
SATRA Ref: FLO0201818/1208
Report date: 05/03/2012
Test Methods: BS 7976-2: 2002
(assessed in accordance with the UK Slip Resistance Group guidelines, Issue 4: 2011)

Summary

The compound PVC floor covering submitted has demonstrated a low slip potential under both wet and dry test conditions, when tested using BS 7976-2: 2002 and assessed in accordance with the UJ Slip Resistance Group guidelines, Issue 4: 2011. the minimum requirements set out in BS EN 14041: 2004.

Results

Table 1. BS 7976-2: 2002 (endulum Testers, method of operation (Using Slider 96)

Condition	Direction of Test			Overall average slip measurement (PTV's)
	A	B	C	
Dry	58	74	68	67
Wet (water)	47	53	53	51

Direction of Test

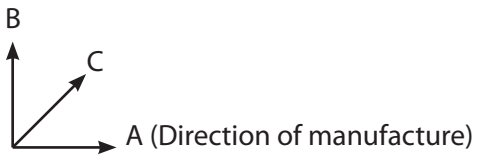


Table 2. Surface Roughness measurements (Rz)[3]

Roughness measurement	1	2	3	4	5	6	7	8	9	10	Ave
RZ value	30.9	49.8	47.3	19.8	45.8	66.1	62.4	46.1	52.7	12.8	43.4

Comments

BS 7976-2: 2002 (Slip Resistance)

The method of test is intended to assess the potential of slipping for people walking on a flooring material. A pendulum attached to a spring loaded foot fitted with a standard rubber slider referenced Slider 96 (formally known as Four S Rubber) is allowed to swing so the slider contacys a dry or wet test flooring over a set distance. The extent to which the pendulum fails to reach its release height on the overswing is determined as a measurement of slip resistance. The procedure is carried out in three directions, in one principle direction, at 90° to this and at 45° to the principle direction.

The following table contains guidelines recommended by the UK Slip Resistance Group - Issue 4 2011.

Table 3. UK Slip Resistance Group Guidelines

Slip Potential	PTV
High slip potential	0 - 24
Moderate slip potential	25 - 35
Low slip potential	36 +

Surface Roughness Measurements (Rz)

Dureing the assessment the surface roughness meter (Surtronic 3+) travelled across the surface of the floor covering at ten different areas. The surface roughness meter travels over a 4mm distance and measures the maximum trough to peak height in five 0.8mm sections (rt1 to rt5); where the Rz roughness is the average of the 5 rt values.

The values achieved for surface roughness would suggest that the floor covering submitted for testing has a low slip potential in wet conditions, as details in Table 4 below.

Table 4. Surface Roughness Criterion. These values apply to water wet situations.

Slip Potential	Rz value
High slip potential	Below 10 µm
Moderate slip potential	10 - 20 µm
Low slip potential	20 + µm

It is important to understand that the measurements undertaken should not be taken in isolation and that the pendulum test results take precedence when assessing slip potential.

'In any complaint involving slip, the floor surface, the footwear and other enviromental factors will all have an important bearing on slip resistance. It will be impossible to make either footwear or floorings slip resistant under all conditions which may be encountered in wear.'

Classification of QUV and Xenotest Weathering Data

Prepared by: Dugdale plc
Valley Mill, Sowerby Bridge, West Yorkshire, HX6 2AA, United Kingdom
Dugdale Ref: CT03/002 Teak B752
Report date: 14/07/2006

Test Protocol

Machine: Xenotest Beta-LM
Test conditions: RAL-GZ 716/1 (1994)
Black panel temperature: 60°C
Relative humidity: 65%
Water spray cycle, on: 18 minutes
Water spray cycle off: 102 minutes

Results

Based on QUV (1600 hours) and Xenotest (4000 hours) accelerated weathering data.
The QUV results obtained for the CT03/002 were as follows:

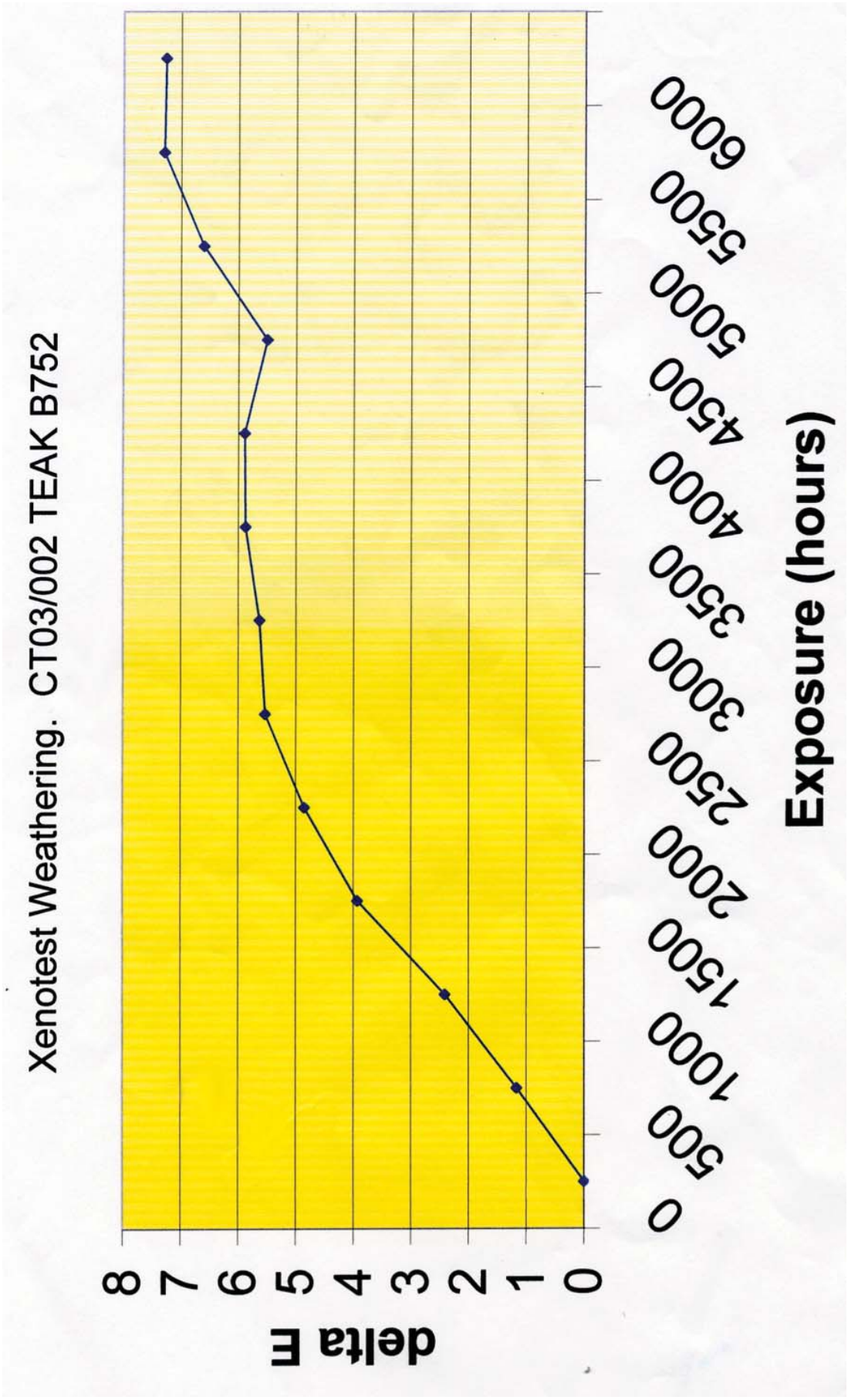
	L	a	b
Unexposed	53.95	9.79	22.13
Exposed	52.16	8.10	21.48

Delta E 2.55

The Xentotest results were as follows:

	L	a	b
Unexposed	55.01	9.71	20.73
Exposed	50.27	4.13	22.38

Delta E 7.50


Xenotest Weathering. CT03/002 TEAK B752
delta E
0
1
2
3
4
5
6
7
8
Exposure (hours)
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000

Classification of tensile strength in accordance with ISO 37 / DIN 53504

Test Methods: ISO 37
DIN 53504

Summary

A PVC floor product was adhered using Sabafix along the male/female seam and submitted to determine tensile strength at break when tested using ISO 37 and DIN 53504.

Results

	Nm
Seam test using Sabafix	3.77