

CLASSIFICATION OF REACTION TO FIRE PERFORMANCE IN ACCORDANCE WITH EN 13501-1:2007

Sponsor	Falk Bouwsystemen B.V. Neonstraat 23 6718 WX EDE (Gld) The Netherlands
Prepared by	Efectis Nederland BV Lange Kleiweg 5 P.O. Box 1090 NL-2280 CB RIJSWIJK The Netherlands
Notified Body no.	1234
Product name	FALK dak 1000 GL , thickness 40/80 mm
Classification report no	2010-Efectis-R0540
Issue number	1
Date of issue	May 2010
Project number	2010283

This classification report consists of four pages and may only be used in its entirety.

This report is issued by Efectis Nederland BV (previously **TNO** Centre for Fire Research). Efectis Nederland BV and her sister company Efectis France are full subsidiaries of Efectis Holding SAS since 1st January 2008, in which the Dutch TNO and the French CTICM participate. The activities of the TNO Centre for Fire Research were privatised in Efectis Nederland BV since 1st July 2006. This is in response to international developments and requests by customers. In order to be able to give a better answer to the customer's request and offer a more comprehensive service of high quality and a wider range of facilities, the international collaboration has been further expanded. This is done with highly experienced partners in fire safety in Norway (Sintef-NBL), Spain (Afiti-Licof), Germany (IFT), USA (South West Research Institute) and China (TFRI). Further information can be found at our website.

1. Introduction

This classification report defines the classification assigned to **FALK dak 1000 GL**, thickness 40/80 mm, in accordance with the procedures given in EN 13501-1:2007.

2. Details of classified product

2.1 General

The product, **FALK dak 1000 GL**, thickness 40/80 mm, is defined as a panel for flat roofs.

2.2 Product description

The product is composed of (from the inside to the outside):

- coating 15 µm;
- steel sheet 0.4 mm;
- PIR 40 mm, type Elastopir 1132/501/0;
- steel sheet 0.5 mm;
- coating HPS Ultra 200, 200 µm.

The product has a core thickness of 40 mm (the corrugation is 40 mm), a mass per unit area of approx. 10.8 kg/m².

Product drawings are included in the test reports.

2.3 Manufacturer/Importer

Falk Bouwsystemen B.V.
Neonstraat 23
6718 WX EDE (Gld)
The Netherlands

3. Test reports & test results in support of classification

3.1 Test reports

Name of Laboratories	Name of sponsor	Test reports	Test method
Efectis Nederland BV The Netherlands	Falk Bouwsystemen The Netherlands	2010-Efectis-R0538 2010-Efectis-R0539	EN ISO 11925-2:2002 EN 13823:2002

3.2 Test results

Test method & test number	Parameter	No. tests	Results	
			Continuous parameter - mean (m)	Compliance parameters
EN 13823	FIGRA _{0.2MJ} [W/s]	3	37	-
	FIGRA _{0.4MJ} [W/s]		30	-
	THR _{600s} [MJ]		2.6	-
	LFS < edge		-	Compliant
	SMOGRA [m ² /s ²]		9.0	-
	TSP _{600s} [m ²]		115	-
	Flaming debris - flaming ≤ 10 s		-	Compliant
	- flaming > 10 s		-	Compliant
EN-ISO 11925-2				
surface flame impingement	Fs ≤ 150 mm	6	33	-
	Ignition of filter paper		-	Compliant
edge flame impingement	Fs ≤ 150 mm	6	42	-
	Ignition of filter paper		-	Compliant
Side flame impingement	Fs ≤ 150 mm	6	83	-
	Ignition of filter paper		-	Compliant

4. Classification and field of application

4.1 Reference of classification

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

4.2 Classification

The product, **FALK dak 1000 GL**, thickness 40/80 mm, in relation to its reaction to fire behaviour is classified:

B

The additional classification in relation to smoke production is:

s2

The additional classification in relation to flaming droplets / particles is:

d0

Reaction to fire classification: B - s2, d0

4.3 Field of application

- Thickness	
Core	40 mm
Total	40 mm
- Surface density	10.8 kg/m ²

This classification is valid for the following end use applications:

- Substrate	not applicable
- Air gap	80 mm minimum, free standing
- Methods and means of fixing	not applicable
- Joints	vertical joints only
- Other aspects of end use conditions	panel for flat roofs

4.4 Duration of the validity of this classification report

There are no limitations in time on the validity of this report.

5. Limitations

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



C.C.M. Steinhage B.Sc.



A.J. Lock

This report is issued by Efectis Nederland BV (previously **TNO** Centre for Fire Research). Efectis Nederland BV and her sister company Efectis France are full subsidiaries of Efectis Holding SAS since 1st January 2008, in which the Dutch TNO and the French CTICM participate. The activities of the TNO Centre for Fire Research were privatised in Efectis Nederland BV since 1st July 2006. This is in response to international developments and requests by customers. In order to be able to give a better answer to the customer's request and offer a more comprehensive service of high quality and a wider range of facilities, the international collaboration has been further expanded. This is done with highly experienced partners in fire safety in Norway (Sintef-NBL), Spain (Afiti-Licof), Germany (IFT), USA (South West Research Institute) and China (TFRI). Further information can be found at our website.