

CLASSIFICATION OF REACTION TO FIRE PERFORMANCE IN ACCORDANCE WITH EN 13501-5:2006 + A1:2009

Sponsor

Magma Industries B.V.

Wagenmakerstraat 15 NL-2984 BD RIDDERKERK

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

Thatched roof, treated with Magma Firestop® Thatchprotector

Classification report no 2010-Efectis-R0793

Issue number

1

Date of issue

August 2010

Project number

2010386

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 a **Thatched roof**, **treated with Magma Firestop**® **Thatchprotector** in accordance with the procedures given in EN 13501-5:2006 + A1:2009.

2. Details of classified product

2.1 General

The product, **Thatched roof, treated with Magma Firestop**® **Thatchprotector**, is defined as a roof covering.

2.2 Product description

Product description:

- A thatched roof (180 mm thick) on a timber frame covering:
 - an open structure (gazebo)

or

- a closed structure (commercial or residential dwelling).
- The reed bundles (±80 mm thick diameter) are fixed to a timber structure by using a thatching needle and tarred sisal twine.
- Reed origin: South Africa
- Thatched roof treatment:

Spray application with the Magma Firestop® Thatchprotector system

1st coat: spray or dip application with Magma Firestop® Thatchprotector type 1,

a waterborne, fire retardant impregnation liquid.

Coverage rate: 0.30 litres per square meter.

2nd coat: spray application with Magma Firestop® Thatchprotector type 2,

a waterborne, fire retardant, exterior type coating.

Coverage rate: 0.40 litres per square meter.

3. Reports and results in support of this classification

3.1 Reports

Name of Laboratories	Name of sponsor	Report ref. no.	Test method	
Efectis Nederland BV The Netherlands	Magma Industries B.V. The Netherlands	2010-Efectis-R0792	ENV 1187:2003	

3.2 Test results

Roof pitch: 45°

Parameter		Criteria		Test	result		Compliance
			1	2	3	4	[Y/N]
Flame spread:							
- Internal, upwards	[cm]	< 70	Υ	Y	Υ	Y	Y
- External, upwards	[cm]	< 70	Υ	Y	Y	Υ	Y
- Internal, downwards	[cm]	< 60	Υ	Υ	Υ	Y	Y
- External, downwards	[cm]	< 60	Υ	Y	Υ	Υ	Y
Maximum burned length:							
- Internal	[cm]	< 60	3-5	3-5	3-5	3-5	Y
- External	[cm]	< 80	3-5	3-5	3-5	3-5	Υ
Lateral flame spread		< edges 1)	Υ	Υ	Υ	Υ	Υ
Burning droplets/debris							
falling from exposed side		None	Ν	N	N	N	Y
Burning/glowing particles							
Penetrating the roof		None	Ν	N	N	N	Υ
Size of through openings:							
- one single opening	$[mm^2]$	< 25	0	0	0	0	Y
- sum of all openings	$[mm^2]$	< 4500	0	0	0	0	Υ

¹⁾ Edge of the measuring zone

4. Classification and field of application

4.1 Reference of classification

This classification has been carried out in accordance with clause 9 of EN 13501-5:2006 + A1:2009.

4.2 Classification

The product, **Thatched roof, treated with Magma Firestop**[®] **Thatchprotector**, in relation to its reaction to fire behaviour is classified:

Reaction to fire classification: B_{ROOF} (B)

4.3 Field of application

This classification is valid for the following product parameters:

- Roof pitch > 20°

- Supporting deck open structure

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.

S.D. Nieuwendijk M.Sc.

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.