

**Sponsor:**

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# EN 13501-1 Classification

**CONFIDENTIAL**

**Report:** BMT/RFP/F14057/03

**Product:** Particleboard with Teknos FR lacquer coating

**Issue date:** September 2014

**Notified Body No. 1314**



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## **BM TRADA – the new name for Chiltern International Fire Ltd**

From July 1st 2013, Chiltern International Fire Ltd commenced trading under the name of its parent company BM TRADA and at the same time adopted a brand new visual identity.

Historically, the group has delivered its services through a number of individual companies: BM TRADA Certification Ltd, TRADA Technology Ltd, Chiltern International Fire Ltd (including Chiltern Dynamics) and a network of international offices. Both BM TRADA Group and these individual companies will now trade under the same name - BM TRADA - and adopt the new visual identity.

To coincide with this change, our Technical Reports, Test Reports, Products Assessments, company stationery and marketing collateral have been re-designed to carry the new branding and visual identity.

The validity of all documents previously issued by the individual companies including certificates, test reports and product assessments is unaffected by this change and a letter to this effect will be available to download from our website [www.bmtradagroup.com](http://www.bmtradagroup.com).

### About BM TRADA.

With origins dating back to 1934, we have a deep history and services which are highly valued by our customers. We offer independent certification, testing, inspection, training and technical services around the world. In all these areas we continue to use industry-leading experts in their chosen fields to develop and deliver services – an ethos that has been at the heart of our approach since we began.

A recent review of our businesses and customers revealed that the individual identities sometimes make communications confusing, and that in an already complex business area, clarity and simplicity in communications is rare, but valued. It also revealed that a single identity and combined offer would help us strengthen our appeal.

With this in mind, we brought the companies together under the name BM TRADA and took the opportunity to create a fresh new visual identity.

We have modernised our image and combined our strengths. However, our values, our people and the integrity of our services remain the same. I hope you will welcome these changes and the improvements they will bring.



Jon Osborn  
Chief Operating Officer

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## 1 Introduction

This classification report defines the classification assigned to the product, Particleboard with Teknos FR lacquer coating, in accordance with the procedures given in BS EN 13501-1:2007+A1:2009 Fire classification of construction products and building elements – Part 1: Classification using data from reaction to fire tests.

### 1.1 Membership of EGOLF and GNB-FSG SH02

BM TRADA is a member of EGOLF and GNB-FSG (Fire Sector Group for the Group of Notified Bodies) and any agreements and recommendations that have been drawn up by these bodies to harmonise the approach of Laboratories has, where relevant, been incorporated within this classification report.

### 1.2 Sampling

BM TRADA did not conduct any sampling of this product and the Sponsor did not provide evidence that any sampling had taken place.

## 2 Details of classified product

### 2.1 Product description

The product, Teknos FR Facade, is described briefly below.

Product name	Particleboard with Teknos FR lacquer coating.	
Description	Untreated particleboard with Teknosafe 2467 FR lacquer coating.	
Intended application of the building product	Internal panels and walls for buildings where there are fire safety requirements.	
FR lacquer	Product name:	Teknosafe 2467 FR lacquer
	Generic type:	Intumescent lacquer for internal use
	Manufacturer:	Teknos OY
	Description:	Intumescent lacquer coating for interior use. The product contains raw materials that enable the lacquer to protect the substrate to which it is applied, improving the substrates reaction to fire performance. Chemicals & proportions - <b>See Note 1</b>
	Thickness:	162µm ±10% (wet film thickness)
	Mass per unit area:	200g/m <sup>2</sup> ±10% (wet film weight)
	Colour:	Clear
	Application method:	Spray
Particleboard	Product name:	12mm standard chipboard
	Manufacturer:	Arbor-Trading AS
	Description:	Particle board made of wood chips and carbamide glue. Chemicals & proportions - <b>See Note 1</b>
	Thickness:	12mm (12.44 -12.67mm measured)
	Density:	670 kg/m <sup>3</sup> (652 kg/m <sup>3</sup> measured)
	Colour:	Beige To verify colour of the product BM TRADA use the RAL system, BM TRADA identify the colour of the product as being closest to RAL colour code: 1001
Bulk density of coated board	616 kg/m <sup>3</sup> (measured)	
Mass per unit area of coated board	7.7 kg/m <sup>2</sup> (measured)	

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Thickness of coated board *	12.55mm (12.29 - 12.77mm measured)
Colour of coated board *	Light Ivory To verify colour of the product BM TRADA use the RAL system, BM TRADA identify the colour of the product as being closest to RAL colour code: 1015
Manufacture of coated boards **	12mm particle board samples are coated industrially with approximately 200g/m <sup>2</sup> (wet film weight) of fire retardant lacquer type Teknosafe 2467. The product is produced according to the rules given in the product standard EN 14915:2013.

Table 1: Product specification

**Note 1:** The sponsor was unwilling/unable to provide this information

The product is described in greater detail in the test reports provided in support of classification listed in Clause 3.1 of this document.

The sponsor has confirmed that there is a clearly identifiable stage in the production process of this component which results in an improvement in the reaction to fire performance.

## 3 Test reports/extended application reports and test results in support of classification

### 3.1 Test reports/extended application reports

Name of Laboratory	Name of Sponsor	Test Reports / Extended application results	Test Method
BM TRADA	Teknos A/S	BMT/RFP/ F14057/01	BS EN ISO 11925-2:2010
BM TRADA	Teknos A/S	BMT/RFP/ F14057/02	BS EN 13823:2010

### 3.2 Test results

Test Method	Number of tests and report number	Parameter	Results	
			Parameter - mean	Compliance with parameters for classification
<b>BS EN ISO 11925-2:2010</b>				
30s exposure surface test Clause 7.3.3.1	6 BMT/RFP/ F14057/01	F <sub>s</sub> (flame spread)	F <sub>s</sub> ≤ 150mm within 60s	compliant
		Flaming droplets/ particles	No ignition of filter paper	compliant
<b>BS EN 13823:2010</b>				
BS EN 13823:2010	3 BMT/RFP/ F14057/02	FIGRA 0.2 MJ	29.7	compliant
		LFS (to edge of specimen)	None	compliant
		THR 600s	3.75	compliant
		SMOGRA	0	compliant
		TSP 600s	37.9	compliant
		Flaming droplets/ particles	None	compliant

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## 4 Classification and field of application

### 4.1 Reference of classification

This classification has been carried out in accordance with clause 8 of BS EN 13501-1:2007+A1:2009 Fire classification of construction products and building elements – Part 1: Classification using data from reaction to fire tests.

### 4.2 Classification

The product, Teknos FR Facade, in relation to its reaction to fire behaviour is classified:

**B**

The additional classification in relation to smoke production is:

**s1**

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

**d0**

**Reaction to fire classification: B-s1, d0**

## 4.3 Field of application

This classification is valid for the following product parameters:

<b>Nominal thickness</b>	12 mm
<b>Colour</b>	Light Ivory
<b>Particleboard</b>	12mm standard chipboard (manufactured by Arbor-Trading AS)
<b>Lacquer coating</b>	Teknosafe 2467 FR lacquer (162µm ±10% wet film thickness, 200g/m <sup>2</sup> ±10% wet film weight)
<b>Mass per unit area</b>	7.7kg/m <sup>2</sup>
<b>Surface classified</b>	The classification has been carried out with the coated surface of the product being deemed as the front face.

This classification is valid for the following end use applications:

<b>Substrate**</b>	Any substrate of Class A1 or A2-s1,d0 with a density of at least 510 kg/m <sup>3</sup> and a thickness of at least 10.0mm.  Any wood based substrate of class D-s2,d0 with a density equal to or greater than 510 kg/m <sup>3</sup> and a thickness of at least 10.0mm.
<b>Air gap</b>	No air gap
<b>Means of fixing</b>	None
<b>Corner joint</b>	Butt joint
<b>Horizontal joint</b>	No
<b>Vertical joint</b>	No
<b>Exposed edges</b>	No

\*\* Reference EGOLF recommendation EGR 57:2011 (substrate thickness)

**5 Limitations**

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

**6 Authorisation**

	Written by:	Checked by:	Authorised by:
<b>Signature:</b>			
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<b>Date of issue:</b>	5th September 2014		

**BM TRADA provides independent certification, testing, inspection, training and technical services around the world.** We help customers large and small to prove their business and product credentials and to improve performance and compliance. With an international presence across many industry sectors, we offer a special focus and long history of technical excellence in supply chain certification, product certification and testing, and technical services to the timber, building, fire and furniture industries.



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