CLASSIFICATION REPORTS
Covering

CONTENT	**EcoCocon straw-wood panel with Fermacell boards** **EcoCocon straw-wood panel with clay**
PURPOSE OF THE DOCUMENT	This document brings together the DBI (Danish Institute of Fire and Security Technology) classification reports for two EcoCocon wall coverings: the straw-wood panel with Fermacell boards, and the straw-wood panel with clay. Both were tested for fire protection ability under EN 14135 and classified K_1 10 and K_2 10 under EN 13501-2.
WHO IS THIS DOCUMENT FOR	Architects, structural and fire safety engineers, building authorities and certifiers, contractors and EcoCocon partners who need documented fire performance for EcoCocon panel build-ups in project design, permitting and compliance.

DBI
FIRE AND SECURITY

CLASSIFICATION REPORT
Covering

Name of sponsor:	**EcoCocon UAB**		
Product name:	EcoCocon straw-wood panel with Fermacell boards		
File no.:	PCA10852A	**Revision No:**	1
Date:	2023-10-17		
Pages:	6	**Encl.:**	0
Ref:	JBK / CHB		

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Notified Body no. 0845

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TEST Reg.no.0012

Client information

Client: EcoCocon UAB

Address: Odminiu Str 10-10

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The results relate only to the items tested. The classification report should only be reproduced in extenso – in extracts only with a written agreement with this institute.

Revision chronology				
Rev. no.	Date	Description	Author	Approved
0	31-01-2023		MRD	NOL
1	13-10-2023	Updated to newest classification standard, updated field of application	JBK	CHB

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1 Introduction

This classification report defines the classification assigned to the product in accordance with the procedures given in EN 13501-2:2023.

This classification report includes the direct field of application of the test results.

2 Details of classified product

General

Producer of product: EcoCocon UAB

The product was designated: Fermacell fibre boards.
The substrate was designated: EcoCocon straw-wood panel

The classification is valid for the following end use application: Covering

Product description

The test specimen was tested on a non-standard substrate. The substrate consisted of one layer of straw panel, wind blocker, plywood formwork and the covering consisted of one layer of gypsum fiberboard.
The details of the product are described in DBI test report PGA12240A.

3 Reports in support of the classification

Test report

The product was successfully tested in accordance with EN 14135:2004 Coverings – Determination of fire protection ability. The evidence for this is given in the test report listed below:

Reference test:				
Name of Laboratory	Name of sponsor	Test report file no.	Test method	Date of test
Danish Institute of Fire and Security Technology	EcoCocon UAB	PGA12240A dated 17-10-2023	EN 14135:2004	25-01-2023

Test results

DBI test report PGA12240A concerns a fire protection ability test of a covering consisting of “Fermacell fibergips” and straw-wood panel.

Test Duration	Parameter	Test results
10 minutes	**Integrity**	
	- Collapse of the covering or parts of it:	No failure
	- Ignition or charring of the chipboard:	No failure
	- Burnt, charred, melted or shrunk material on the wood straw-panels:	No failure
	Insulation	No failure
	- Temperature rise on the unexposed side of the covering:	
	Average:	97 °C
	Maximum:	102 °C
	- Temperature rise on the lower side of the substrate:	
	Average:	91 °C
	Maximum:	94 °C

4 Classification and field of application

Reference

This classification has been carried out in accordance with clause 7.6 of EN 13501-2:2023.

Classification

The product is classified according to the following combinations of performance and classes as appropriate.

Fire protection ability classification: **K_1 10 and K_2 10**

Field of application

The classification is valid for the following end use conditions:

The test results are directly applicable to similar constructions where one or more changes in this field of application are made, and the construction continues to comply with the appropriate design code for its stiffness and stability. Other changes are not permitted.

Covering

- With gypsum fibre boards designated “Fermacell fibergips” with a maximum dimension of 1200 x 900 mm (width x length) or smaller.
- One layer of gypsum fibre boards designated “Fermacell fibergips” with a nominal thickness of 12.5 mm.
- The fiber boards were installed on the formwork of the substrate without an airgap, since the straw is bulging out approximately 6 mm from the wooden frame in the elements.

- With the same fixing method (staples TJEP PZ-16 50 mm) with a cc of maximum 145 mm or closer distance between the fixings in the test specimen
- The distance between the rows of stables shall be maximum 800 mm.
- Horizontal, vertical and sloped application of the covering.
- The fibre boards were mounted with glue designated "Fermacell™ klæbefuge+ greenline" in the butted joints.
- The rest of the details must be as in test report PGA12240A.

Substrate

- On a substrate as tested minimum 400 mm straw-wood panels with a nominal density of 100 kg/m^3, designated "Standard, Column and Braced"
- The wood straw panels a maximum panel size of 3000 x 800 mm (length x width) and mounted with T-joints and X-joints.
- One layer of wind blocker designated "Solitex Mento" with a nominal thickness of 0.4 mm.
- The plywood formwork shall 6 mm thick
- One layer of straw-wood panel with a thickness of 400 mm.

- The rest of the details must be as in test report PGA12240A.

5 Limitations

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

Danish Institute of Fire and Security Technology

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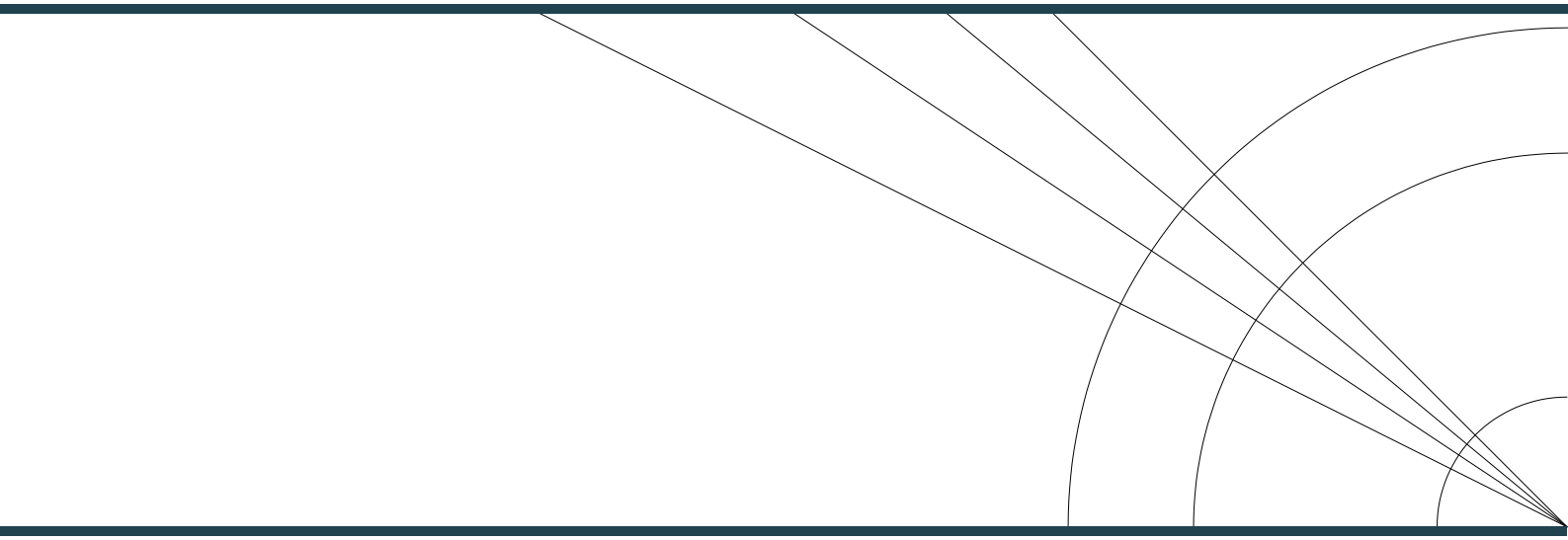
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Lithuania

DBI
FIRE AND SECURITY

CLASSIFICATION REPORT
Covering

Name of sponsor:	**EcoCocon UAB**		
Product name:	EcoCocon straw-wood panel with clay		
File no.:	PCA10852A	**Revision No:**	0
Date:	30-01-2023		
Pages:	6	**Encl.:**	0
Ref:	MRD / NOL		



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Introduction

This classification report defines the classification assigned to the product in accordance with the procedures given in EN 13501-2:2016.

This classification report includes the direct field of application of the test results.

Details of classified product

General

Producer of product: EcoCocon UAB

The product was designated: EcoCocon straw-wood panel with clay.

The classification is valid for the following end use application: Covering

Product description

The product was 6 pieces of straw-wood panels fastened to each other with a layer of clay.

The details of the product are described in DBI test report PGA12221A.

Reports in support of the classification

Test report

The product was successfully tested in accordance with EN 14135:2004 Coverings – Determination of fire protection ability. The evidence for this is given in the test report listed below:

Reference test:				
Name of Laboratory	Name of sponsor	Test report file no.	Test method	Date of test
Danish Institute of Fire and Security Technology	Ecococon UAB	PGA12221A dated 20-01-2023	EN 14135:2004	12-01-2023

Test results

DBI test report PGA12221A concerns a fire protection ability test of a covering consisting of clay and straw-wood panel.

Test Duration	Parameter	Test results
10 minutes	**Integrity**	
	- Collapse of the covering or parts of it:	No failure
	- Ignition or charring of the chipboard:	No failure
	- Burnt, charred, melted or shrunk material on the EPS:	No failure
	Insulation	No failure
	- Temperature rise on the lower side of the substrate: Average: Maximum:	 125 °C 174 °C

Classification and field of application

Reference

This classification has been carried out in accordance with clause 7.6 of EN 13501-2:2016.

Classification

The product is classified according to the following combinations of performance and classes as appropriate.

Fire protection ability classification: **K_1 10 and K_2 10**

Field of application

The classification is valid for the following end use conditions:

The test results are directly applicable to similar constructions where one or more changes in this field of application are made, and the construction continues to comply with the appropriate design code for its stiffness and stability. Other changes are not permitted.

- With a layer of clay min. 25 mm and min. density 1600 kg/m^3 made of 0 – 4 mm sharp sand/gravel aggregate mixed with clay powder. With a mesh net place 5 mm in from the exposed side.
- One layer of straw-wood panel with a thickness of 400 mm, a maximum panel size of 3000 x 800 mm (length x width). The wooden framing system can be mounted with T-joints, X-joints and angular-joints as tested.
- Horizontal, vertical and sloped application of the covering.
- On a substrate as tested: 400 mm thick straw-wood panels with a nominal density of 100 kg/m^3, designated “Standard, Column and Braced”.
- The rest of the details must be as in test report PGA12221A.

Limitations

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

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