

# Reaction to Fire Classification Report

<b>Name of client:</b>	Burnblock ApS		
<b>Product name:</b>	Accoya		
<b>File no.:</b>	PCA10713A		
<b>Date:</b>	2021-03-22	<b>Revision no.:</b>	0
<b>Pages:</b>	5	<b>Encl.:</b>	3
<b>Ref:</b>	JAG / MPA		

## **Client information**

Client: Burnblock ApS

Address: Wilders Plads 15C

DK-1403 Copenhagen K

Denmark

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

## 1. Introduction

This classification report defines the classification assigned to the product “Accoya” in accordance with the procedures given in EN 13501-1:2018.

## 2. Details of classified product

### 2.1 General

The product “Accoya” is defined as solid wood panel of modified pinus radiata according to the product standard:

EN 14915:2013 Solid wood paneling and cladding – Characteristics, evaluation of conformity and marking.

### 2.2 Product description

The product “Accoya” is a Burnblock impregnated solid wood panel.

Following information was given by the client:

Moisture content average before impregnation:	6.2 %.
Average dry density:	568 kg/m <sup>3</sup> .
Burnblock solution concentration:	12% and 14.5 %.
Average product retention:	69.8 kg/m <sup>3</sup> .

Sealed ends (because of the length 1500 mm) with Teknoseal 4002-00. Sealing will be cut of before fire testing.

	Sample size	average retention (kg/m <sup>3</sup> )	median retention (kg/m <sup>3</sup> )	standard deviation (kg/m <sup>3</sup> )	Minimum retention (kg/m <sup>3</sup> )	Maximum retention (kg/m <sup>3</sup> )	Average retention on the first 3 panels in tests (kg/m <sup>3</sup> )
Sampled panels	36	69.9	72.1	6.7	53.0	81.3	76.2

Product was impregnated by Teknologisk Institut and Finotrol Oy (NB No. 2412) sampled panels for test by random selection of the total batch. See sampling report in enclosure 1-3.

Further product specifications are known to DBI - Danish Institute of Fire and Security Technology and are filed under the file number below.

## 3. Reports and results in support of this classification

### 3.1 Reports

Name of laboratory	Name of client	Report ref. No	Test method Field of application rules	Date
DBI	Burnblock ApS	PFA11693A	EN ISO 11925-2:2020 EN 13823:2020	2021-02-12 2021-02-24

### 3.2 Results

Test methods	Parameter	Number of tests <sup>a</sup>	Results	
			Continuous parameter mean (m)	Compliance with parameters
EN 13823	FIGRA <sub>0.2 MJ</sub> (W/s)	3	91	(-)
	FIGRA <sub>0.4 MJ</sub> (W/s)	3	88	(-)
	THR <sub>600s</sub> (MJ)	3	5.4	(-)
	SMOGR <sub>A</sub> (m <sup>2</sup> /s <sup>2</sup> )	3	0	(-)
	TSP <sub>600s</sub> (m <sup>2</sup> )	3	21	(-)
	LFS < edge	3	(-)	Y
	FDP <sub>f≤10s</sub>	3	(-)	Y
	FDP <sub>f&gt;10s</sub>	3	(-)	Y
EN ISO 11925-2				
Surface flame attack, 30 s exposure	F <sub>s</sub> ≤ 150 mm within 60 s.	6	(-)	Y
	No ignition of filter paper	6	(-)	Y
Edge flame attack, 30 s exposure	F <sub>s</sub> ≤ 150 mm within 60 s.	6	(-)	Y
	No ignition of filter paper	6	(-)	Y
a Not for extended application Y "Compliant" (-) not applicable				

## 4. Classification and field of application

### 4.1 Reference of classification

This classification has been carried out in accordance with clause 11.6, 11.9 and 11.10 of EN 13501-1:2018.

### 4.2 Classification

The product "Accoya" in relation to its reaction to fire behavior 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 end use conditions:

- any substrates of classes A1 and A2-s1,d0 of at least 12.5 mm thickness and with a density equal to or greater than 525 kg/m<sup>3</sup>.
- with the product fixed mechanically to the substrate.
- with a ventilated or non-ventilated air gap.
- with no air gap.
- with horizontal and vertical butted joints.
- with the panels mounted horizontally.

According APPROVED GUIDANCE NB-CPR/SH02/19/832r2 of 14 January 2020 and EN 13501-1:

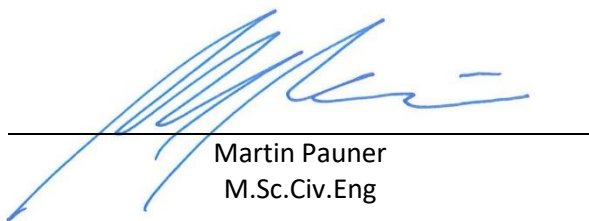
This classification is valid for the following product parameters:

- with a minimum nominal retention level of 76.2 kg/m<sup>3</sup> Burnblock in the individual panel.
- with a nominal thickness of the panel equal to 19 mm.
- with a nominal dry density of 568 kg/m<sup>3</sup> of Accoya before impregnation
- with a planned surface.
- without any surface coating.

For nominal thicknesses larger than 19 mm the reaction to fire class is B-s2,d0.

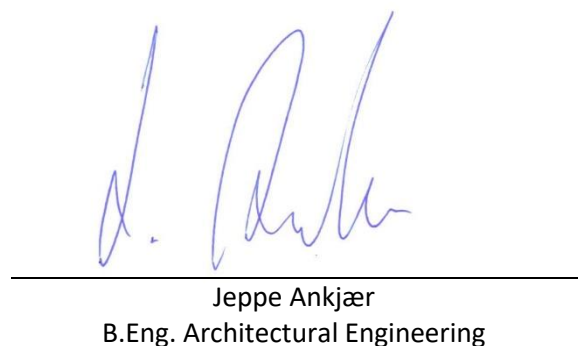
### 5. Limitations

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



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B.Eng. Architectural Engineering

Burnblock ApS  
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DK-1403 Copenhagen K  
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**Reaction to fire test regulation and sampling sheet**

(Should be attached to the test report)

<b>Subscriber information</b> (customer or sponsor of the requisition)	
Name of the company: Burnblock ApS – Wilders Plads 15C; 1403 Copenhagen	
Legal address:	
Reg. no.:	33581173 <small>(Registration number)</small>
VAT no.:	DK33581173 <small>(Value added tax number)</small>
Bank:	Nordea A/S <small>(Name of the bank or code)</small>
Account:	21503498813479 <small>(Bank account)</small>
Phone:	+45 70232053 <small>(Phone number)</small>
@:	info@burnblock.com <small>(E-mail address)</small>
Signatory:	P: _____ N: _____ <small>(Position) (Name) (Surname)</small>
<b>Contact information</b>	
N:	Paw C. <small>(Name)</small>
S:	Fälled <small>(Surname)</small>
P:	Senior R&D Manager <small>(Position)</small>
@:	pf@burnblock.com <small>(e-mail address)</small>
Mob.:	+45 31323667 <small>(Mobile phone)</small>
Phone:	_____ <small>(Phone)</small>
Correspondence address: Wilders Plads 15C; 1403 Copenhagen	
<b>The way of receiving of the test report</b> (please, select)	
<input type="checkbox"/> Personally <small>(receiving in laboratory)</small>	<input type="checkbox"/> Post <small>(correspondence address)</small>
<input checked="" type="checkbox"/> E-mail <small>(contact information e-mail)</small>	
<b>The owner of the test report</b> (to be indicated if different from the customer)	
Name of the company: Burnblock ApS	
Legal address: Wilders Plads 15C; 1403 Copenhagen	
Registration number: 33581173	
<b>Information about test specimen /samples</b>	
Type of the specimen: Accoya (modified Pinus radiata)	
Identification of the specimen: ACC1 – ACC65	
Date: Impregnation date 8.1.2021 – 12.1.2021	
Manufacturing of the test specimen	Place (address): Danish Technological Institute, DTI Gregersensvej 3 2630 Taastrup Denmark Contact person: Morten Klamer
	Specimens manufactured by: Accoya material: Accsys PLC Impregnated with Burnblock FR: DTI
	Materials used for manufacture of the specimen: Accoya (modified Pinus radiata). Accsys PLC have made the material and sent it to DTI for impregnation. Contact person Karl Lindström / Accsys PLC
	Parameters of specimen (e.g. dimensions, weight, other ...): Accoya samples took from the warehouse of Accsys PLC: L= 1500 mm W=195 mm T=19 mm Moisture content: 6 %, Estimated density 400 – 600 kg/m <sup>3</sup> Total amount: 65 pieces  65 pieces delivered DTI for impregnation tests. 12 pieces was rejected during the tests. 53 pieces passed and measured: L= 1500 mm W=195 mm T=19 mm Moisture content average before impregnation: 6,2 % Average dry density: 568 kg/m <sup>3</sup> Burnblock solution concentration: 12% and 14,5 % Sealed ends (because of the length 1500 mm) with Teknoseal 4002-00. Sealing will be cut of before fire testing. Average product retention: 69,8 kg/m <sup>3</sup>

Sampling	Date:	9.2.2021
	Sampling place:	Danish Institute of Fire and Security Technology, DBI according to remote sampling procedure of Finotrol Oy
	Address:	DBI Jemholmen 12 2650 Hvidovre Denmark.
	Sampling procedure, methods*:	Accoya samples took from the warehouse of Accsys PLC Total amount: 65 pieces) Accoya material delivered to DTI 4.2.2020  DTI picked 53 pieces after rejected 12 pieces (numbers marked originally 1 – 65) for the final impregnation tests. Impregnation tests were performed during 8.1.2021 – 12.1.2021. Average product retention 69,8 kg/m <sup>3</sup> .  Sampling made for the classification test, 3 SBI tests, 12 samples x 3 = 36 samples.  Additional information: Average retention of randomly chosen samples is 69,6 kg/m <sup>3</sup>  Sampling of 36 pieces is made randomly from the batch of 53 pieces.
Numbers of the samples:	Marking of the samples ACC + number: ACC 1, 2, 4, 7, 8, 9, 11, 12, 14, 15, 19, 21, 23, 24, 26, 28, 29, 31, 32, 35, 37, 38, 40, 41, 43, 44, 45, 46, 48, 50, 52, 54, 57, 59, 62 and ACC 63	
Sample photos:	<input checked="" type="checkbox"/> Photos taken <input type="checkbox"/> Photos not taken	
Sampling done by:	Remote procedure: Petteri Tornainen and Timo Aavakallio Finotrol Oy, Notified Body nr. 2412  Picking, photo and marking: Jeppe Ankjaer, DBI, accredited laboratory	
Other information:	<b>Test and classification standards</b>  <b>Test shall be carried out according to (mark actual):</b> <input checked="" type="checkbox"/> EN 13823 requirements <input type="checkbox"/> EN ISO 11925-2 requirements  The relevant classification system accordance EN 13501-1.  <b>Scope of the test:</b> <input checked="" type="checkbox"/> Initial type testing; <input type="checkbox"/> Factory product control.  <b>Conditioning of specimens:</b> <input checked="" type="checkbox"/> required <input type="checkbox"/> not required.  <b>Reference of related harmonized product standard in CE marking:</b> EN 14915:2013	

	<p><b>Information about fire protection chemical or paint, manufacturer:</b> Bumblock</p> <p><b>Description of the wood material:</b></p> <ul style="list-style-type: none"> <li>- Accoya (modified Pinus radiata) impregnated with Bumblock fire retardant.</li> </ul> <p><b>Description of the treatment:</b></p> <ul style="list-style-type: none"> <li>- Application method: Vacuum-pressure impregnation</li> <li>- Parameters: Vacuum 20 min 0,1 bar and pressure 90 min 12 bar</li> <li>- Bumblock (PO number PRO100577) concentration: 12-14,5 %</li> <li>- Bumblock (PO number PRO100577) retention: 69,8 kg/m<sup>3</sup></li> </ul> <p><b>Manufacture of specimen:</b></p> <ul style="list-style-type: none"> <li>- Accoya: Accsys PLC</li> <li>- Impregnation: DTI</li> </ul> <p><b>Product description in test:</b></p> <ul style="list-style-type: none"> <li>- product name: Accoya</li> <li>- wood species: Pinus radiata</li> <li>- treatment: impregnated with Bumblock</li> </ul> <p><b>Additional information:</b></p> <ul style="list-style-type: none"> <li>- end-use conditions; mounted horizontally, standard substrate, ventilated air gap, fixing: horizontal/vertical joints.</li> </ul>

\* For example: 1) Sampling carried out accordingly with described procedure and plan or with standardized method; 2) The sample taken from the production line; 3) The sample taken from warehouse of ready production; 4) Specially made for testing; 5) The sample taken at random; 6) Specially selected the best/strongest; 7) Other ...

Other conditions:


The test order presumes that the laboratory is accredited as notified test laboratory and meets the requirements of CPR Article 43 and there is valid written subcontracting agreement with Finotrol Oy.

Test laboratory has a request to verify that the samples received correspond to the information in this test requisition and sampling sheet.

If any ambiguity is noticed, should contact Finotrol Oy immediately.

10.03.2021

(Date)



(Signature)

Petteri Torniainen

(Name, surname)

Test order No. DBI PFA11693A  
(fill in by testing laboratory)