

CLASSIFICATION REPORT

Loadbearing wall

Name of sponsor:	REXCON system ApS		
Product name:	ReBLOCK system		
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Client information

Client: REXCON system ApS

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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.

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Introduction

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

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

Details of classified product

General

Producer of product: REXCON system ApS

The product was designated: ReBLOCK system.

The classification is valid for the following end use application: Loadbearing wall with fire separating function.

Product description

The product is a loadbearing construction consisting of ReBLOCK system mounted with staggered joints, with a wooden cladding (exposed side) and a fibre plaster board on the (unexposed side).

The construction was asymmetrical and was only tested from the outer side (wooden cladding toward the fire).

The details of the product are described in DBI test report PGA12288B.

Reports in support of the classification

Test report

The product was successfully tested in accordance with EN1365-1:2012. 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	REXCON system ApS	PGA12288B dated 01-08-2023	EN 1365-1:2012	14-04-2023

Test results

DBI test report PGA12288B concerns a loadbearing wall with fire **exposure** from the outer side (wooden cladding toward the fire).

Test Duration	Parameter	Test results
63 minutes	Load-bearing capacity	
	Failure: the load could not be maintained	60 minutes
	- Failure of vertical axial contraction	No failure
	- Failure of vertical axial contraction rate	60 minutes
	Integrity	
	Failure of integrity due to failure of load-bearing capacity	60 minutes
	- Time of ignition of cotton pad:	No Failure
	- Time of occurrence of sustained flaming:	No Failure
	- Time of failure of gap gauge criteria:	No failure
	Insulation	
	- Failure of insulation due to failure of integrity or load-bearing capacity:	60 minutes
	- Time of failure of measured average temperature rise:	No failure
	- Failure of maximum measured temperature rise:	No failure
	Average measured temperature rise during test:	2 °C
	Maximum measured temperature rise	2 °C

Classification and field of application

Reference

This classification has been carried out in accordance with clause 7.3.2 of EN 13501-2:2016.

Classification

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

Fire resistance classification: **REI 30 (o→i) & REI 60 (o→i)**

The classification is only valid for fire resistance from the outer side.

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 decrease in height of the construction. The maximum height of the construction is 3108 mm.
- With increase in the thickness of the wall. Minimum thickness 448 mm
- With increase in the thickness of component materials.
- With decrease in the linear dimensions of the boards but not the thickness.
The maximum ReBLOCK is 596 x 342 x 300 mm (width x depth x height).
- With decrease in stud spacing. The maximum distance between the stud is 300 mm.
- With decrease in distance between fixing centres. the maximum c/c distance for each layer can be seen in test report PGA12288B.
- With increase in the width of the construction.
- With wooden cladding designated "Frøslev tagbræt ru" with nominal density 430 kg/m³ horizontal mounted.
- With vertical joints in the wooden cladding with or without fer & not in the gathering.
- With decrease in the applied load. The maximum load is 9.82 kN/m. the load applied in the centre of the loadbearing part of the construction.
- All other detail and materials should be as in test report PGA12288B.

Limitations

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

Danish Institute of Fire and Security Technology



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