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NOTIFIED BODY 1391

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CLASSIFICATION REPORT OF FIRE RESISTANCE

Subject of classification: *Loadbearing walls with fire separating function in accordance with ČSN EN 13501-2:2024, cl. 7.3.2*

Report No.: **PK2-02-24-017-E-0**

Product name: *Loadbearing wall CLT Standard NOVATOP 120 mm with lining of gypsum plasterboards Rigips RF (DF) 12.5 mm on one side Heat exposure from the side of Rigips RF boards lining*

Sponsor: **AGROP NOVA a.s.**
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Prepared by: *PAVUS, a.s.
Accredited certification body for product certification No. 3041
– accreditation issued by Czech Accreditation Institute, p. s. c.,
– Certificate of Accreditation No. 16/2024*

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1 INTRODUCTION

- 1.1 This classification report defines the resistance to fire classification assigned to element *Loadbearing wall CLT Standard NOVATOP 120 mm with lining of gypsum plasterboards Rigips RF (DF) 12.5 mm on one side* in accordance with the procedures given in ČSN EN 13501-2:2024.
- 1.2 This classification report consists of 4 pages and may only be used or reproduced in its entirety.

2 DETAILS OF CLASSIFIED PRODUCT

2.1 General

The element - *Loadbearing wall CLT Standard NOVATOP 120 mm with lining of gypsum plasterboards Rigips RF (DF) 12.5 mm on one side* - is defined as an element of loadbearing construction. It has been designated as a fire separating construction with regard to its fire resistance parameters mentioned in cl. 5 of ČSN EN 13501-2.

2.2 Description

The subject matter of the classification is the construction of loadbearing wall with total dimensions of 3 000 mm (width) × 3 000 mm (height) × 132.5 mm (thickness), made of cross-laminated timber CLT Standard NOVATOP 120 mm with lining made of gypsum plasterboards Rigips RF (DF) of 12.5 mm in thickness on one side.

Description of the construction:

The loadbearing wall consists of 2 vertically oriented panels CLT Standard NOVATOP 120 mm (manufacturer: AGROP NOVA a.s.) of 3000 mm in height and of 120 mm in thickness. Both panels are of 1575 mm in width with a rabbet on one vertical edge in size of 150x60 mm (width x depth). The panels consist of 3 layers of crosswise oriented layers of spruce lamellas of 40 mm in thickness, of strength class C24 and of 450 kg/m³ in nominal density. Individual layers of lamellas are glued together with PU adhesive JOWAT (150 g/m², manufacturer: Jowat). Panels are connected to each other over a rabbet using screws Ø 8x100 mm in maximum spacing of 350 mm.

One layer of gypsum plasterboards Rigips RF (DF) of 12.5 mm in thickness (manufacturer: Saint-Gobain Construction Products, division Rigips) is screwed to the wall on one side. Basic dimensions of the boards are 1250 mm (width) x 2000 mm (height) and the nominal density was 835 kg/m³ (measured in ATL). The boards are fixed to the CLT panels using screws TN Ø 3.5x35 mm in maximum spacing of 200 mm, in vertical rows along the board edges and at mid-width of the board. The boards are fit ≤ 1 mm closely to the gaps. Joints of gypsum boards, as well as the heads of screws, are covered with Rigips MAX joint filler. Glass reinforcing strip Rigips of 50 mm in width is used on the joints (manufacturer of joint filler and strip: Saint-Gobain Construction Products, division Rigips).

The mass of the wall is 598.5 kg.

Manufacturer of the tested element: AGROP NOVA a.s.

Detailed description of the element, including drawings, is given in the Test Report No. Pr-24-2.120-En dated July 30th, 2024.

3 TEST REPORTS / EXTENDED APPLICATION REPORTS AND TEST RESULTS IN SUPPORT OF THE CLASSIFICATION

3.1 Test reports / extended application reports

Name of laboratory Address Accreditation No.	Name of sponsor	Report ref. No. Date of issue	Test standard and date / field of extended application standards and dates
PAVUS, a.s. Veselí nad Lužnicí Accredited Testing Laboratory No. 1026	AGROP NOVA a.s. Ptenský Dvorek 99 798 43 Ptení Czech Republic	Pr-24-2.120-En 2024-07-30	ČSN EN 1365-1:2013

3.2 Test results

Test method Report number Date of issue	Parameter	Results, details of load
ČSN EN 1365-1 Pr-24-2.120-En 2024-07-30	Exposure conditions Direction of fire exposure Number of exposed faces Load application Supporting conditions	<i>standard temperature / time curve from the side of Rigips RF boards lining 1 continuous load 150 kN/m (450 kN/specimen), axially in loadbearing part of CLT both vertical edges free both horizontal edges fixed</i>
	Loadbearing capacity (R) - limiting vertical contraction - limiting rate of vertical contraction	60 minut 89 minutes ¹⁾ 89 minutes ¹⁾
	Integrity (E) - cotton pad - gap gauges - sustained flaming	60 minut 89 minutes ²⁾ 89 minutes ²⁾ 89 minutes ²⁾
	Insulation (I) - mean temperature - maximum temperature	60 minut 89 minutes ²⁾ 89 minutes ²⁾
	Radiation (W) ⁴⁾ - < 15 kW.m ⁻² (was not measured)	60 minut 89 minutes ³⁾

¹⁾ During the 90th minute, before the end of the test, the wall started to collapse and limiting vertical contraction and limiting rate of vertical contraction was attained.

²⁾ Failure of loadbearing capacity means automatically failure of the insulation and integrity criterion (see ČSN EN 1363-1 cl. 11.4.1).

³⁾ Failure of integrity means automatically failure of the radiation criterion (see ČSN EN 13501-2 cl. 5.2.4).

⁴⁾ There is no requirement to measure the radiation from a surface with a temperature below 300 °C because the radiation from such a surface is low (see ČSN EN 1363-2 cl. 8.1).

4 CLASSIFICATION AND FIELD OF APPLICATION

4.1 Reference of classification

This classification has been carried out in accordance with Clause 7.3.2 of ČSN EN 13501-2:2024.

4.2 Classification

The element - *Loadbearing wall CLT Standard NOVATOP 120 mm with lining of gypsum plasterboards Rigips RF (DF) 12.5 mm on one side* - is classified according to the example of the following combinations of performance parameters and classes as appropriate.

Fire resistance classification:

RE 60 / REI 60 / REW 60

Classification is valid for heat exposure from the side of Rigips RF boards lining

4.3 Field of application

This classification is valid for the following end use application in accordance with ČSN EN 1365-1. The results of the fire test are directly applicable to constructions of the sample tested, where only one or more of the modifications listed below are made:

- decrease in height;
- increase in the thickness of the wall;
- increase in the thickness of component materials;
- decrease in linear dimensions of boards but not thickness;
- decrease in distance of fixing centres;
- decrease in the applied load;
- increase in the width.

5 LIMITATIONS

This classification is valid unless the conditions, under which it was issued, have been changed (i.e., until the materials used, the composition or design of the product or the technical regulations relating to the product change).

The sponsor may request the issuing authority to review the influence of changes on the classification validity.

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

Elaborated by:



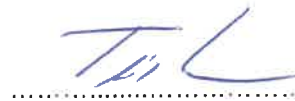
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