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Accreditation Certificate N° 277/2017

Branch 0800 – Fire Safety of Buildings

REPORT

On fire resistance classification

Ref. N°: PKP – 20 - 090/AO 204

For the product

Exterior and interior load-bearing timber walls NOVATOP SOLID

Provided on the basis of FIRES-FE-098-10-AUNS

Order N°: Z 080200092
Registration number: 080 – 023597
Customer: AGROP NOVA Inc.
Ptenský Dvorek 99
798 43 Ptení



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1. Introduction

Subject of the Fire Resistance Classification Report are load-bearing timber walls, with utilization of the extended application of test results carried out in accordance with European Standards. This Report determines the classification in conformity with the procedures given in ČSN EN 13501-2+A1.

Normative documents:

ČSN EN 1365-1: Fire resistance tests for load-bearing elements – Part 1: Walls (03/2013)

ČSN EN 13 501-2: Fire classification of construction products and building elements – Part 2: Classification using test data from fire resistance tests excluding the ventilation services (8/2017)

2. Detailed information on the classified product

2.1. Generally

The product is used as a fire resistant wall.

2.2. Product description

2.2.1. Load-bearing exterior walls NOVATOP SOLID (Fig.1) consist of the following parts:

- System façade plaster 8 mm thick (ext.)
- Mineral insulation ISOVER – ORSIL TF ($\rho = 100 \text{ kg.m}^{-3}$) 100 mm thick
- Solid timber wall NOVATOP SOLID 2×42 mm thick
- Gypsum wood-fibre board Fermacell 10 mm thick (int.)

2.2.2. Load-bearing interior walls NOVATOP SOLID (Fig.2) consist of the following parts:

- Gypsum wood-fibre board Fermacell 10 mm thick (int.)
- Solid timber wall NOVATOP SOLID 2×42 mm thick
- Gypsum wood-fibre board Fermacell 10 mm thick (int.)

2.3. Reaction to fire according to ČSN EN 13501-1+A1

- Solid wood – "D-s2, d0"
- Gypsum wood-fibre board Fermacell - "A2-s1, d0" according to ETA-03/0050.
- Thermal insulation from glass-fibre boards – "A1"

3. Test Report used for this classification

3.1. Test Report

Testing laboratory	Customer	Report N ^o Issued on	Test date	Tested according to
FIRES s.r.o., Osloboditeľov 282 059 35 Batizovce SR	AGROP NOVA a.s. Ptenský Dvorek 99 798 43 PTENÍ	FIRES-FR-098-10-AUNS 21. 06. 2010	1.6.2010 2.6.2010	EN 1365-1



3.2. Stress conditions

Report number	Conditions	
FIRES-FR-098-10-AUNS Specimen N° 2	Thermal stress Stress direction Number of exposed sides Induced load	Standard temperature curve i → o 1 20 kN.m ⁻¹
FIRES-FR-098-10-AUNS Specimen N° 1	Thermal stress Stress direction Number of exposed sides Induced load	External fire curve o → i 1 20 kN.m ⁻¹

3.3. Test results

Report N°	Properties monitored	Results
FIRES-FR-098-10-AUNS Stress i → o Specimen N° 2	<ul style="list-style-type: none"> • Load-bearing capacity <ul style="list-style-type: none"> - maximum deflection - deflection increment • Integrity – cotton pad ignition <ul style="list-style-type: none"> - sustained flaming - gauge passing-through • Insulation - average temperature - maximum temperature • Radiation 	61 minutes no fault* 61 minutes no fault* 61 minutes no fault* 61 minutes no fault* 61 minutes no fault* 61 minutes no fault*
FIRES-FR-098-10-AUNS Stress o → i Specimen N° 2	<ul style="list-style-type: none"> • Load-bearing capacity <ul style="list-style-type: none"> - maximum deflection - deflection increment • Integrity – cotton pad ignition <ul style="list-style-type: none"> - sustained flaming - gauge passing-through • Insulation - average temperature - maximum temperature • Radiation 	125 minutes no fault* 125 minutes no fault* 125 minutes no fault* 125 minutes no fault* 125 minutes no fault* 125 minutes no fault*

*Test terminated on customer request– specimen N° in 62nd minute, specimen N° 1 in 126th minute.

According to ČSN EN 1365 – 1 REI (W) 60 (specimen N° 2), REI (W) 120 (specimen N° 1)



4. Classification and the field of direct application

4.1. Classification reference

The classification has been carried out in conformity with item 7.5.2. of ČSN EN 13501-2.

4.2. Classification

The product – exterior and interior load-bearing walls are classified according to the following combinations of property and class parameters.

Thermal stress from the interior side

RE		20	30	45	60		
REI	15	20	30	45	60		
REW		20	30		60		

Thermal stress from the exterior side

RE		20	30	45	60	90	120
REI	15	20	30	45	60	90	120
REW		20	30		60	90	120

- Interior wall REI 60
- Exterior wall at thermal stress $i \rightarrow o$ REW 60 (REI 60)
- Exterior wall at thermal stress $o \rightarrow i$ REI 120-_{ef}

4.3. Field of direct application

In conformity with ČSN EN 13501-2 and ČSN EN 1365-1 these test results can be directly applied to walls, where one or more of the following modifications have been made, provided that the rigidity and stability of the construction continues to meet the relevant design standard:

1. Height decrease
2. Wall thickness increase; decrease not allowed
3. Increase of component materials thickness (Fermacell, insulation, plaster, solid timber); decrease not allowed
4. Decrease of the distance of boards fixing centres
5. Induced load of 20 kN.m^{-1} or less
6. Reaction to fire of the materials used is identical or smaller
7. Construction rigidity is not decreased
8. Height increase up to 4 m (provided the maximum deflection is not exceeded)



5. Provision of the utilization

5.1. Limitation

This Classification Report is valid up to **2025-08-25**, provided the product or the standard provisions will not be changed.

5.2. Warning

This Classification Report is valid as a whole only; each and every page must be provided with the Classification Report identification number, with page number of the total pages and with the author stamp. This Classification Report does not substitute either the type approval or the product certificate.



Prepared by:

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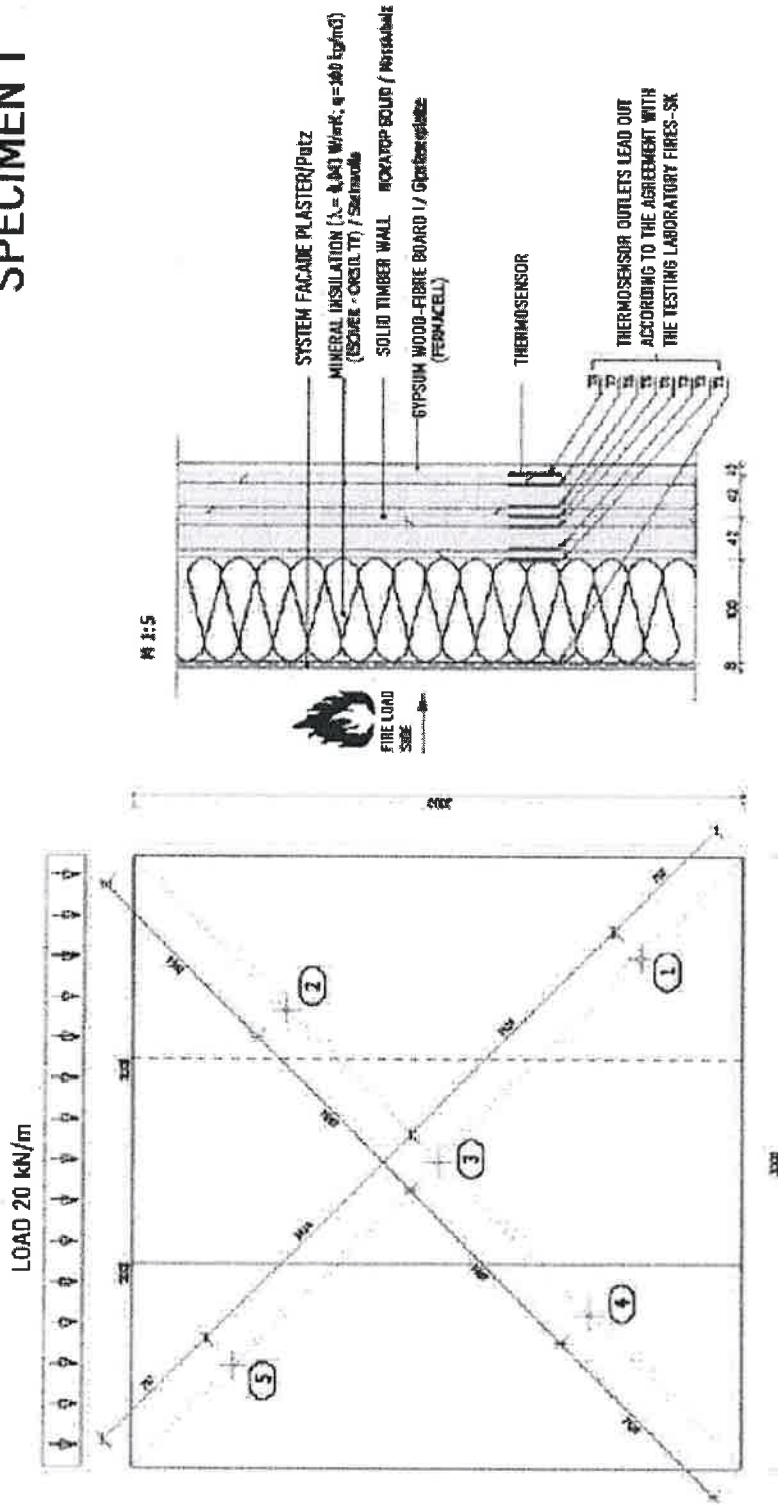
Approved by:

Jiroutová
Ing. Iveta JIROUTOVÁ
Assistant Manager of the Certification Body

Praha, 2020-08-25

Load-bearing exterior walls NOVATOP SOLID – Fig. 1

SPECIMEN 1



SPECIMENS		NOVATOP SOLID	
MANUFACTURER	NOVATOP	TYPE	PROTOTYPE
DESIGNER	NOVATOP	DATE	01
TESTER	NOVATOP	TEST TYPE	NOVATOP SOLID
TEST DATE	NOVATOP	TEST RESULT	NOVATOP SOLID
TEST LOCATION	NOVATOP	TEST STATUS	NOVATOP SOLID
TESTER	NOVATOP	TEST RESULT	NOVATOP SOLID
TEST DATE	NOVATOP	TEST STATUS	NOVATOP SOLID
TEST LOCATION	NOVATOP	TEST RESULT	NOVATOP SOLID
TESTER	NOVATOP	TEST STATUS	NOVATOP SOLID
TEST DATE	NOVATOP	TEST RESULT	NOVATOP SOLID
TEST LOCATION	NOVATOP	TEST STATUS	NOVATOP SOLID

WALL NOVATOP 84 mm THICK
DIMENSIONS 3 m x 3 m



