
Title:

Fire resistance classification report assigned to a non-loadbearing wall, exposed to fire on one of its faces, in accordance with the procedure given in the Standard EN 13501-2:2016.

Material tested:

- Flexible non-loadbearing wall of 3000 x 3000 mm (width x height) with reference MODUS WF 75/155 LV.
-

File number: 21/32305972-1

Sponsor:

FASSA S.r.l.

Via Lazzaris 3

31027 Spresiano (TV)

Italy

Report date:

29th November, 2021



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This document contains 9 pages which 4 are annexes.

1 INTRODUCTION

This classification report defines the resistance to fire classification assigned to an element:

Internal Laboratory reference	Reference provided by the sponsor
2824-1	MODUS WF 75/155 LV

in accordance with the procedure given in the Standard EN 13501-2:2016 "Fire classification of construction products and building elements. Part 2: Classification using data from fire resistance tests, excluding ventilation services", a flexible non-loadbearing wall, provided by FASSA S.r.l.

2 DETAILS OF THE CLASSIFIED ELEMENTS

2.1 General:

The tested element, with reference MODUS WF 75/155 LV, is defined as a flexible non-loadbearing wall of 3000 x 3000 mm (width x height) and 155 mm thickness (with insulation).

2.2 Description:

The element, with reference MODUS WF 75/155 LV, is fully described in the test report in support of classification listed in 3.

3 TEST REPORTS

File number	21/32305972
Laboratory	LGAI Technological Center, S.A.
Sponsor	FASSA S.r.l
Test date	21 th October, 2021
Test Standard	EN 1364-1:2015*

*This Standard corresponds to the current version on test date. Results obtained in this test are the ones used in this classification report.

4 DETAILS AND TEST RESULTS

4.1 Details of the test:

File number	21/32305972
Parameter	Details
Temperature-time curve	$T = 345 \log_{10} (8t+1) + 20$
Load applied	Not applied
Supporting construction	Rigth edge free (seen from unexposed side). Tested without supporting construction.
Number of exposed sides	1 side (symmetrical sample)
Exposed side	2 layers of plasterboard ref. Gypsotech FOCUS BA 20 Type DFI by GYPSOTECH® Fassa S.r.l. of 20 mm thick.

4.2 Results:

Test specimen	2824-1	
Criterion	Minute failure	Reason
Integrity	-	It is maintained throughout the entire test, 208 minutes.
Thermal insulation	205	Roving thermocouple is applied at the centre of the sample and records an increase of temperature greater than 180°C over the initial mean temperature.

5 CLASSIFICATION

5.1 Reference of classification:

This classification has been carried out in accordance with clause 7 of the Standard EN 13501-2:2016.

5.2 Classification:

This element, with reference MODUS WF 75/155 LV, is classified as:

Flexible non-loadbearing wall of 3000 x 3000 mm (width x height) with reference MODUS WF 75/155 LV.	EI 180
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The decision rule to declare conformance to the specification or standard, is by following a simple binary decision rule. In this case, the upper limit of the probability value of false acceptance or false rejection, according to ILAC G8, 50 %.

6 FIELD OF APPLICATION

(acc/section 13 of the Standard EN 1364-1:2015).

This classification obtained is directly applicable to the constructions equal to the model tested when one or more of the following modifications are made:

Characteristics	Reference of sample tested*	Modification permitted
Height	<ul style="list-style-type: none"> - 3000 mm in total height. - Max. deflection <100 mm. - Test sample without supporting construction. - The expansion allowances are increased pro-data. 	<ul style="list-style-type: none"> - Allowed decrease. - Allowed increase by 1.0 m.
Width	<ul style="list-style-type: none"> - 3000 mm in total width. - Test sample without supporting construction. - Right edge free (seen from unexposed side). 	<ul style="list-style-type: none"> - Allowed increase in construction identical to the sample tested.
Thickness	<ul style="list-style-type: none"> - 155 mm in total thickness. 	<ul style="list-style-type: none"> - Allowed increase.
Thickness of component material	<ul style="list-style-type: none"> - Plasterboard with ref. Gypsotech FOCUS BA 20 Type DFI by GYPSOTECH® Fassa S.r.l. of 20 mm thick. - Glass wool panel ref. GypsoGLASS 039 by GYPSOTECH® Fassa S.r.l. of 45 mm thick. - Runner ref. U 40/75/40 by GYPSOTECH® Fassa S.r.l. of 75 mm thick. - Stud ref. C 50/74/47 by GYPSOTECH® Fassa S.r.l. of 74 mm thick. 	<ul style="list-style-type: none"> - Allowed increase.
Panels/boards dimensions	<ul style="list-style-type: none"> - Maximum plasterboard dimension with ref. Gypsotech FOCUS BA 20 Type DFI of 1200 x 2000 mm (width x height) and 20 mm thick. - Glass wool panel dimension with ref. GypsoGLASS 039 of 600 x 3000 mm (width x height) and 45 mm thick. 	<ul style="list-style-type: none"> - Allowed decrease of linear dimensions of panels. - Not allowed decrease in thickness.
Stud spacing	<ul style="list-style-type: none"> - 600 mm. 	<ul style="list-style-type: none"> - Allowed decrease.
Distance of fixing centres	<ul style="list-style-type: none"> - See test report n°21/32305972*. 	<ul style="list-style-type: none"> - Allowed decrease.
Horizontal joints	<ul style="list-style-type: none"> - Sample tested with an horizontal joint tested at 500 mm from the top edge (see test report n°21/32305972*). 	<ul style="list-style-type: none"> - Allowed increase in the number of horizontal joints of the type tested.
Vertical joints	<ul style="list-style-type: none"> - Sample tested with vertical joints. (see test report n°21/32305972*). 	<ul style="list-style-type: none"> - Allowed increase in the number of vertical joints of the type tested.

Accessories	- Not tested.	- Not applicable.
Horizontal /vertical joints	- Sample tested with horizontal/vertical joints.	- Allowed with horizontal and/or vertical joints of the type tested.
Supporting construction	- Tested without supporting construction.	- Applicable to high density rigid constructions with at least the same fire resistance of the sample tested.

* The reference values of the sample tested not indicated in this section are described in section 3 "Sample tested" of file number: 21/32305972.

The modifications permitted in the field of direct application are based on data included in the test report nº21/32305972.

The period of validity is the one stated in the product certification system.

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

Fire Laboratory Responsible
LGAI Technological Center, S.A.

The results of the tests carried out refer only and exclusively to the sample tested, and in the moment and under the conditions indicated herein.

LGAI Technological Center, S.A. is not responsible for the information supplied by the sponsor.

Service Quality Guarantee

Applus+, guarantees that this task has been carried out following the exigencies of our Quality and Sustainability System, complying with the contractual conditions and legal regulation.

Within the framework of our improvement programme, we appreciate any comment you may deem appropriate, addressing them to the responsible who signs this document or to the Quality Director of Applus+, to the address: satisfaccion.cliente@applus.com

ANNEX:

A. DOCUMENTATION SUPPLIED BY THE SPONSOR

SAMPLE NAME

Wall "MODUS WF 75/155 LV"

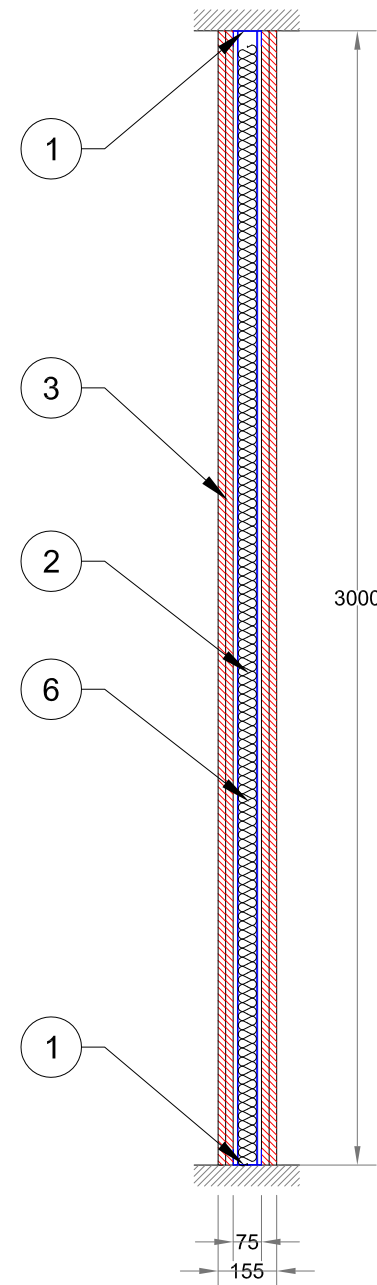
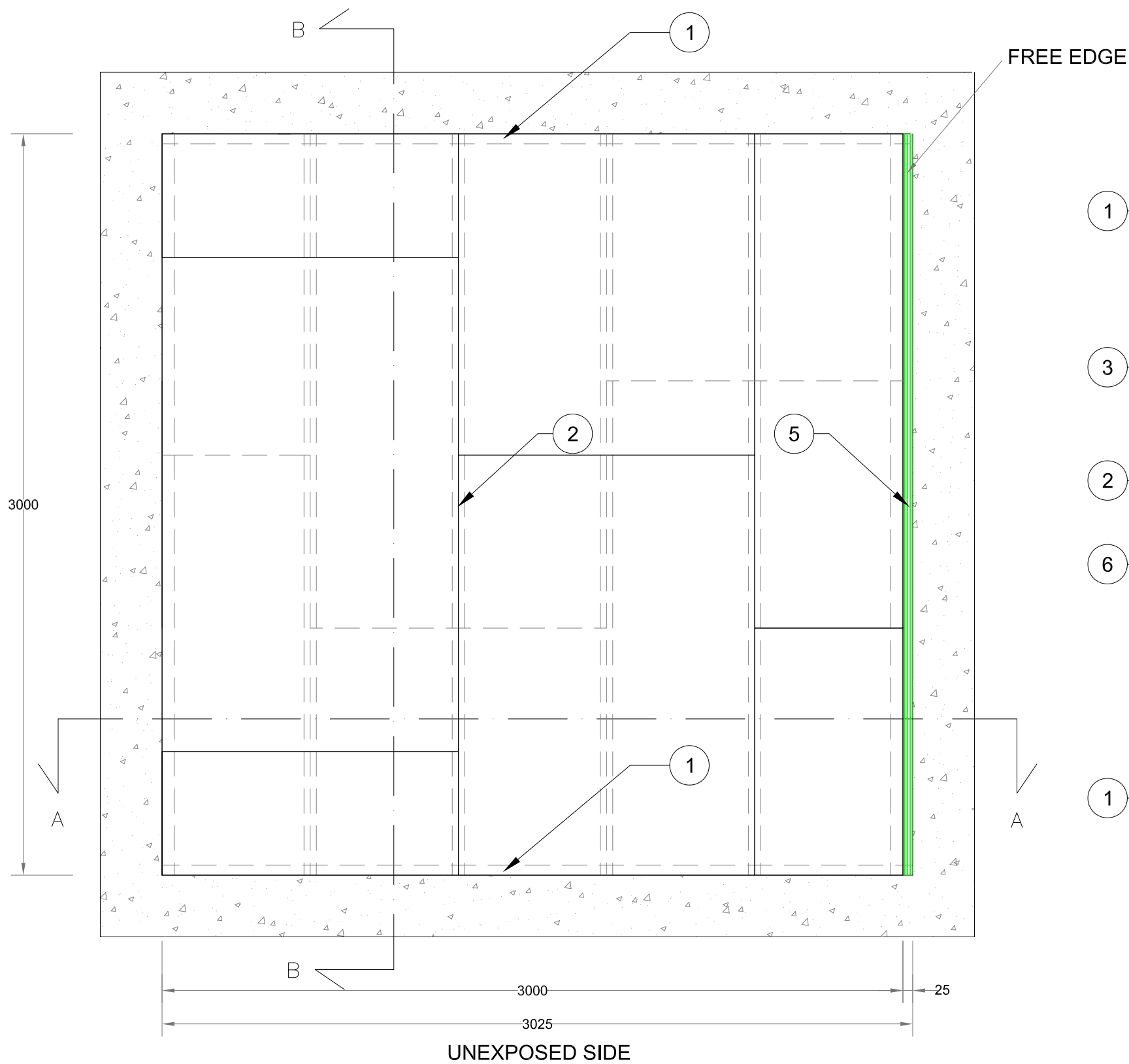
SAMPLE DESCRIPTION

The test sample consists of:

- Metal framework of 75 mm nominal thickness, made of profiles according to EN 14195, and formed by:
 - o N. 2 horizontal guides made of galvanized steel profiles "U" shaped, 75x40 mm nominal section and 0,6 mm nominal thickness, placed on the floor and on the ceiling and fastened to the test frame by mean of M5x45 screws placed at 500 mm centre distance;
 - o Studs made of galvanized steel profiles "C" shaped, 50x74x47 mm nominal section and 0,6 mm nominal thickness, placed at 600 mm centre distance, inserted at the ends into the guides;
The stud located on the fixed edge was fastened to the test frame by means of M5x45 screws placed at 500 mm centre distance;
- Lining of 40 mm nominal thickness, applied on both sides of the metal framework described above and made of n. 2 layers of plasterboard type "DFI" according to EN 520 and A2-s1,d0 reaction to fire class, named "Gypsotech FOCUS BA 20", 1200 mm nominal width, 20 mm nominal thickness and 18,6 kg/m² nominal weight, made of a gypsum core reinforced with glass fibre and mineral additives and an external paper coating, layed with staggered joints and fixed to the metal framework by means of self-drilling phosphated screws, 3.5 mm nominal diameter and 35 mm nominal length for the first layer, placed at 600 mm centre distance, and 55 mm nominal length for the second layer, placed at 300 mm centre distance;
On the wall surface the joints between the boards was sealed with micro-perforated paper reinforcement tape, 50 mm nominal width, and jointing compound according to EN 13963 named "FASSAJOINT 1H", while the screw heads and the perimeter edges were sealed only with jointing compound named "FASSAJOINT 1H".
- Internal insulation placed in the center of the cavity between the two linings made of a layer of glass wool panels in compliance with EN 13162 named "GypsoGLASS 039", 45 mm nominal thickness and 12 kg/m³ nominal density.

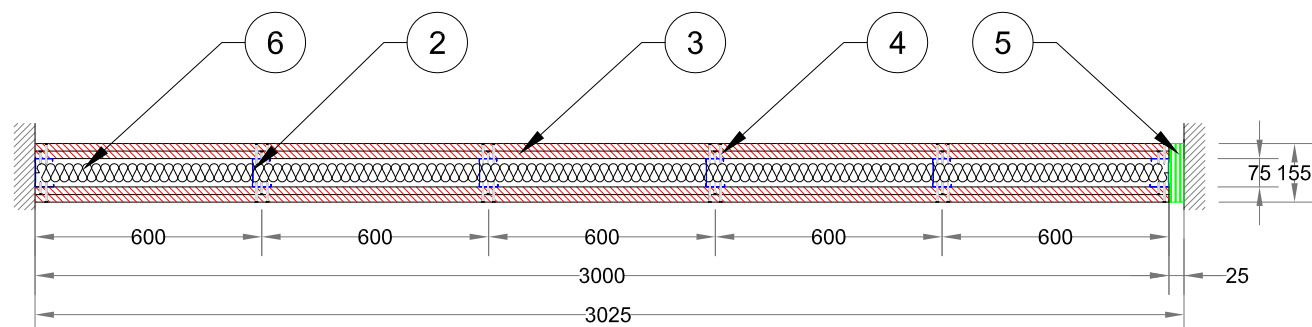
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LEGEND

1. Metal horizontal guides U shaped 40 x 75 x 40 mm, 0.6 mm thickness
2. Metal studs C shaped 50 x 74 x 47 mm, 0.6 mm thickness placed at 600 mm centre distance
3. Plasterboards named Gypsotech FOCUS BA 20 (DFI type) 20 mm thickness
4. Self-drilling phosphated screws \varnothing 3,5 mm, 600 mm centre (first layer) and 300 mm centre (second layer)
5. Incombustible material inside free edge
5. Glass wool insulation named GypsoGLASS 039 45 mm thickness



SECTION A-A



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PROJECT
**FIRE RESISTANCE TEST
GYPSOTECH FASSA BORTOLO**

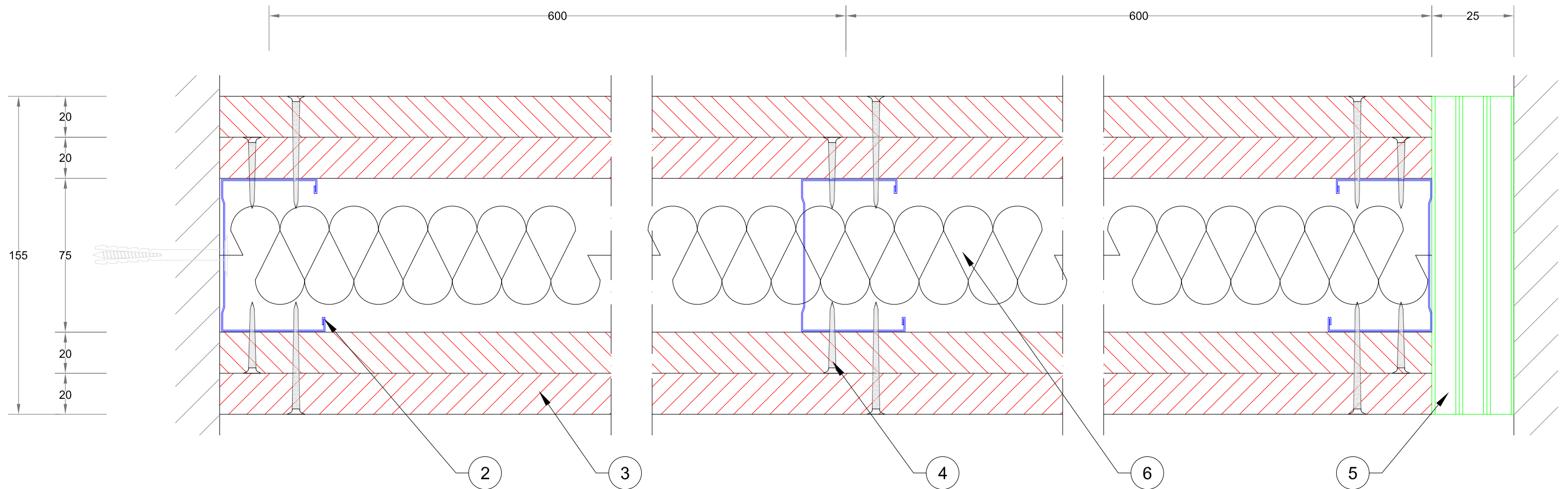
OBJECT
**WALL MODUS WF 75/155 LV
PROSPECT AND SECTIONS**

DRAWING N° **1**

SHEET A3

SCALE 1:20

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SECTION A-A DETAIL

LEGEND

1. Metal horizontal guides U shaped 40 x 75 x 40 mm,
0.6 mm thickness
2. Metal studs C shaped 50 x 74 x 47 mm, 0.6 mm
thickness placed at 600 mm centre distance
3. Plasterboards named Gypsotech FOCUS BA 20 (DFI
type) 20 mm thickness
4. Self-drilling phosphated screws \varnothing 3,5 mm, 600 mm
centre (first layer) and 300 mm centre (second layer)
5. Incombustible material inside free edge
5. Glass wool insulation named GypsoGLASS 039 45
mm thickness

File number: 21/32305972-1



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PROJECT
FIRE RESISTANCE TEST
GYPSOTECH FASSA BORTOLO

OBJECT
WALL MODUS WF 75/155 LV
SECTION DETAIL

DRAWING N° **2**

SHEET A3

SCALE 1:2

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