EFECTIS ERA AVRASYA
TEST VE BELGELENDİRME A.Ş.

Fire Test Laboratory

Test
TS EN ISO/IEC 17025
AB-0556-T

AB-0556-T
EEA-23-054
07-23

CLASSIFICATION OF FIRE RESISTANCE PERFORMANCE IN ACCORDANCE WITH EN 13501-2:2016

Sponsor	: RAWAND GAHITLY FACTORY Kerkuk Road, Erbil / IRAQ
Prepared by	: EFECTIS ERA AVRASYA TEST VE BELGELENDİRME A.Ş. Dilovası OSB 5. Kısım Fırat Cad. No: 18, 41455 Dilovası, Kocaeli / TÜRKİYE
Product name	: Non-loadbearing Fire Resistant Wall Consisted of "**Pumice Blocks**"
Classification report No.	: EEA-23-054
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1. INTRODUCTION

This classification report defines the classification in accordance with the procedures given in EN 13501-2:2016, assigned to Non-loadbearing Fire Resistant Wall Consisted of "**Pumice Blocks**".

2. DETAILS OF CLASSIFIED PRODUCT

2.1. General

The element Non-loadbearing Fire Resistant Wall Consisted of "**Pumice Blocks**" is defined as a type of product.

2.2. Description

Non-loadbearing Fire Resistant Wall Consisted of "**Pumice Blocks**" is fully described below.

2.2.1. General

Product identification : Non-loadbearing Fire Resistant Wall Consisted of **"Pumice Blocks"**

Manufacturer : RAWAND GAHITLY FACTORY
Kerkuk Road, Erbil / IRAQ

Sponsor of test : RAWAND GAHITLY FACTORY
Kerkuk Road, Erbil / IRAQ

2.2.2. Construction

Symmetrical, non-loadbearing wall system was comprised 8 lines pumice blocks at horizontal axis and 15 lines solid pumice blocks at vertical axis. Cement based mortar was used to connect the blocks. The total thickness of the wall was 150 mm.

One vertical edge was mounted as in practice and the other vertical edge was constructed as a free edge to simulate a wider wall construction.

2.2.3. Components

2.2.3.1. Blocks

- Type : Solid Pumice Blocks – RAWAND GAHITLY
- Type of cement used : Pumice stone
- Fire class : A1
- Nominal dimensions : 39 x 15 x 18,5 cm (w x d x h)
- Measured dry weight : 7,5 Kg
- Compressive strength : 1,8 N/mm^2
- Measured dry density : 1506 kg/m^3
- Measured humidity : %3,84

2.2.3.2. Mortar

- Type : Cement based mortar
    - Mixing ratio : for 1 cm bed
        - Sand : 18 kg
        - Cement : 3,75 kg – CEM I Portland Cement
        - Water : 2,85 kg
    - Location : Used between horizontal joints of blocks
    - Cement density : 2200 kg/m^3
    - Measured density : 2014 kg/m^3
    - Thickness : 10 mm

See figure 1 – figure 4 for detailed information.

3. REPORTS AND RESULTS IN SUPPORT OF CLASSIFICATION

3.1. Reports

Name of laboratory	Name of sponsor	Test report ref. no.	Test method
EFECTIS ERA AVRASYA TEST VE BELGELENDİRME A.Ş.	RAWAND GAHITLY	RFTR23076	EN 1364-1:2015

3.2. Results

Test Method	Parameter	Results
EN 1364-1:2015	Integrity, [**E**] – Cotton pad – Gap gauges Ø 6 mm Ø 25 mm – Flames longer than 10 s	 No failure (not applied). No failure (not applied). No failure (not applied). Not observed.
	Insulation, [**I**] – Average temperature – Maximum temperature	 No failure. No failure.
Test was terminated at the 120th minute after consulted with sponsor.		

4. CLASSIFICATION AND FIELD OF APPLICATION

4.1. Reference of classification

This classification has been carried out in accordance with clause 7.5.2 of EN 13501-2:2016.

4.2. Classification

Non-loadbearing Fire Resistant Wall Consisted of "**Pumice Blocks**" is classified according to the following combinations of performance parameters and classes as appropriate.

R	E	I	W		t	t	-	M	S	C	IncSlow	sn	ef	r

FIRE RESISTANCE CLASSIFICATION
E120, EI120

4.3. Field of application

4.3.1. General

This report details the method of construction, the test conditions and the results obtained when the specific elements of construction described herein was tested following the procedure outlined in EN 1363-1:2020, and when appropriate EN 1363-2:1999. Any significant deviation with respect to size, constructional details, load stresses, edge or end conditions other than those allowed under the field of direct application in the relevant test method is not covered by this report.

4.3.2. Specific conditions for dimensions and fixing

Test results are directly applicable to similar constructions where one or more of the changes listed below are made and the construction continues to comply with the appropriate design code for its stiffness and stability.

- decrease in height
- increase in the thickness of the wall
- increase in the thickness of component materials

4.3.3. Extension of height

The height of the construction may be increased up to 1 meter for a fire resistance of **120 minutes** for the criteria of thermal insulation and integrity, because the lateral deflection of the construction is less than 100 mm.

4.3.4. Extension of width

The width of an identical construction may be increased, because the construction is tested with a width of 3 meters with one vertical free edge.

5. LIMITATIONS

This classification report does not represent any type approval or certification of the product. This report is initially valid until **24th July 2028** providing that no significant modifications are made in technical specification of the specimen and related test and classification standards.

Signed:	**Approved**:
e-signed	e-signed
.....	.....
Osman AYYILDIZ	Ali BAYRAKTAR
Person in charge of test	Laboratory Manager

6. DRAWINGS

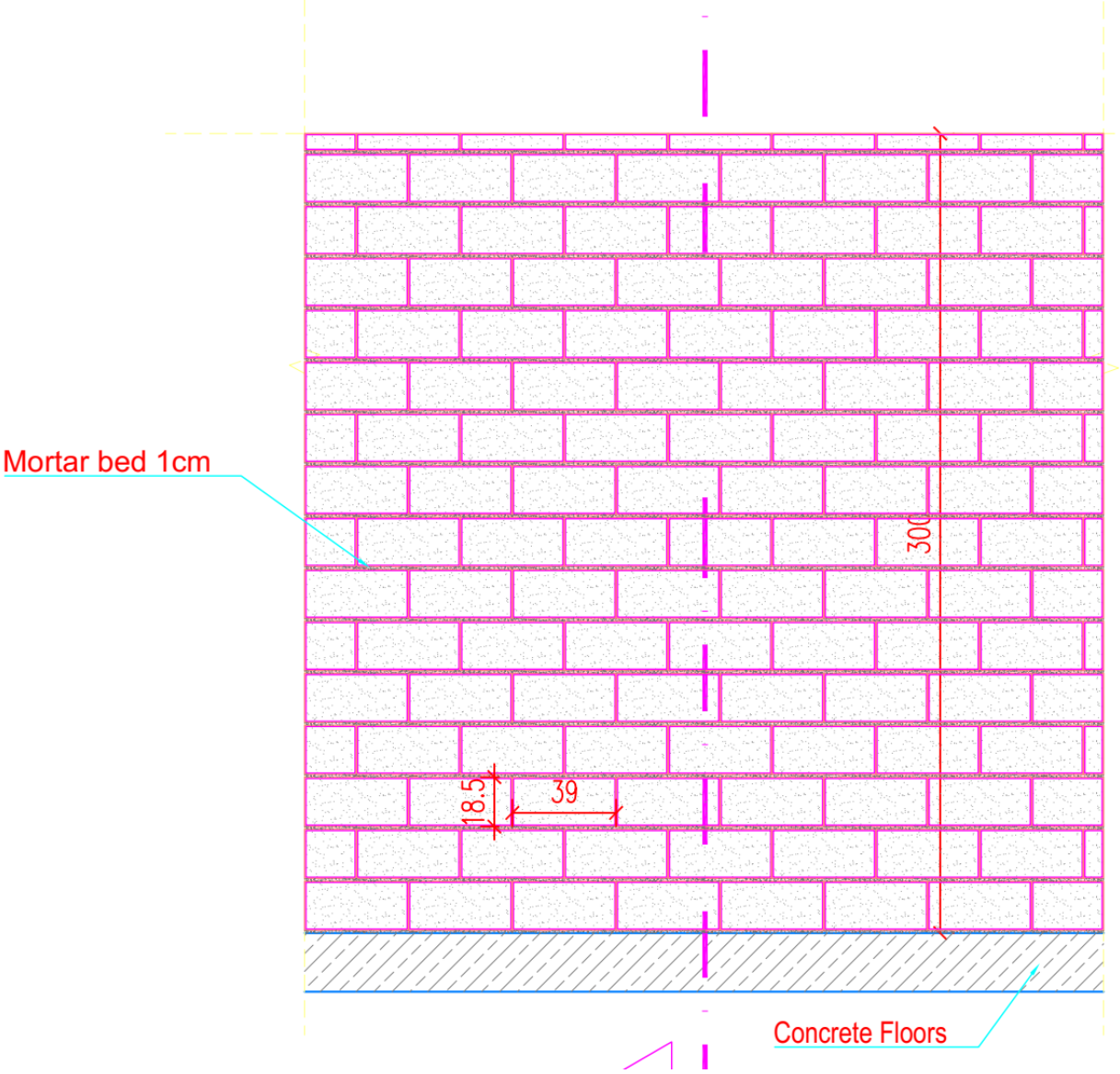

Figure 1: General view of the test specimen

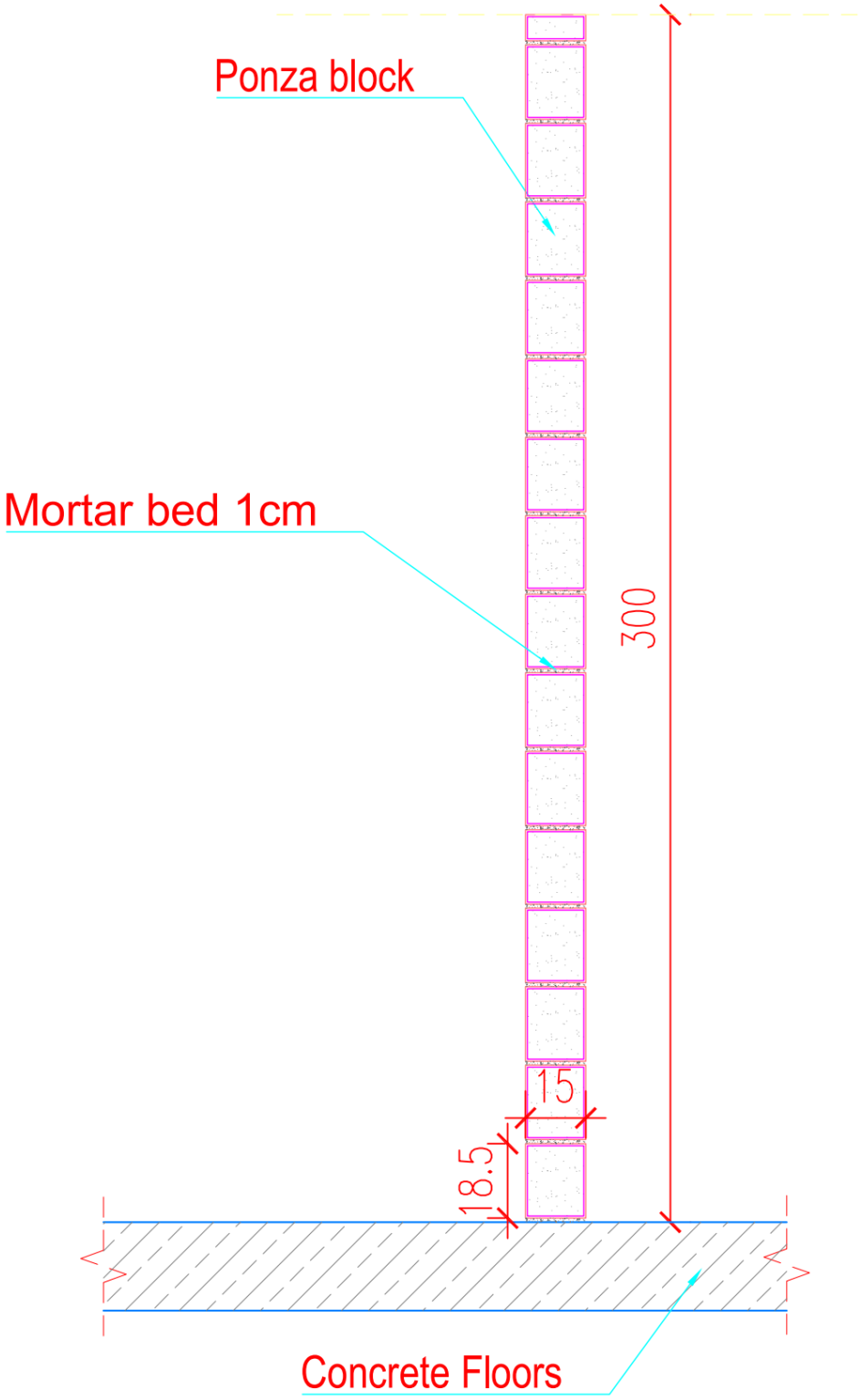

Figure 2: Longitudinal view of the test specimen

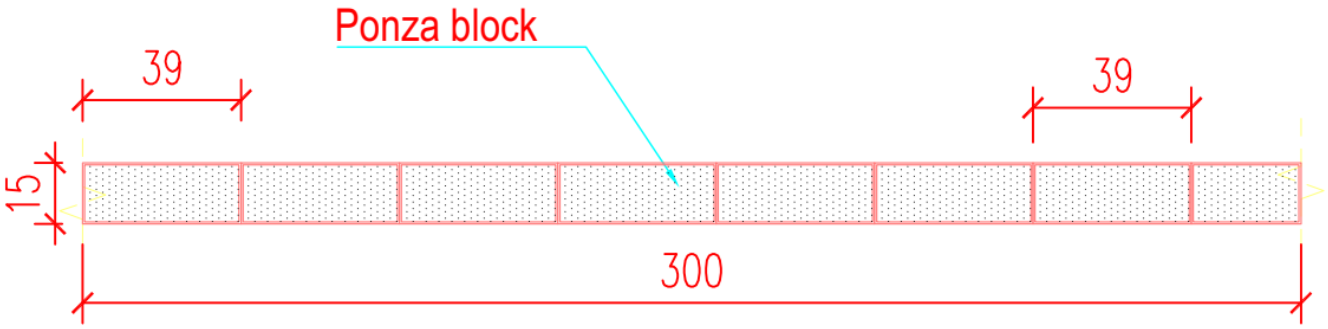

Figure 3: Cross section view of exposed side of the test specimen

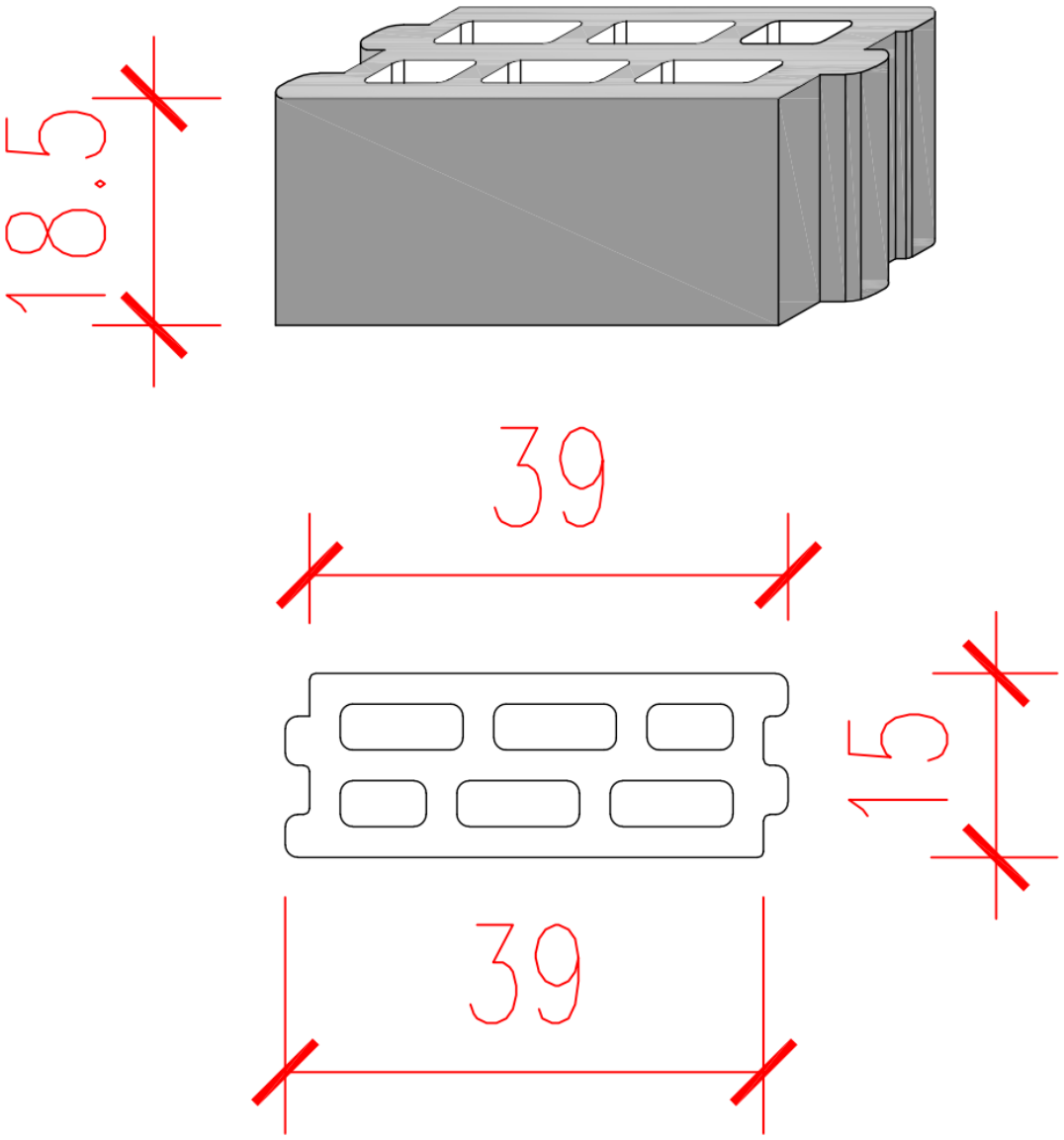

Figure 4: Pumice block details