

## CLASSIFICATION OF FIRE RESISTANCE in accordance with EVS-EN 13501-2:2016

SPONSOR: Palavaneri Oy

ADDRESS : Salpakankaankatu 36, 80100 Joensuu, Finland

MANUFACTURER: Palavaneri Oy

ADDRESS : Salpakankaankatu 36, 80100 Joensuu, Finland

PREPARED BY: TÜV EESTI OÜ

PRODUCT NAME : Inspection hatch "EI30ESL" in flexible wall

CLASSIFICATION REPORT : TEK- 252/20en

DATE OF ISSUE : 24.01.2020

## 1. Introduction

This classification report defines the resistance to fire classification assigned to steel hatch in accordance with procedures given in EVS-EN 13501-2: 2016

## 2. Details of classified product

### 2.1 General

Inspection hatch “EI30ESL” is defined as the vertically mounted insulated single leaf steelframe hatch.

### 2.2 Description

Inspection hatch “EI30ESL” is described below and is fully described in the test report listed in 3.1.

#### 2.2.1 Specimen “EI30ESL”

Inspection hatch “EI30ESL” was tested using following dimensions of leaf and frame.

##### 2.2.1.1 Frame

The maximum dimensions of the frame is 597 mm × 597 mm (width × height). Minimum dimensions of frame 150 mm × 150 mm (width × height) The frame depth is 30 mm, steel material thickness 1,0 mm. One strip of fire resistant gasket Flexilodice 2,0x30mm on the frame.

##### 2.2.1.2 Hatch leaf

The maximum dimensions of the leaf is 540 mm x 540 mm, minimum dimensions 140x140 mm, thickness of insulation 39 mm. Leaf steel material thickness 1,0 mm. Leaf is made of two layers of mineral board (Odiboard3.2 30 mm, measured density 333 kg/m<sup>3</sup>, Fibrodice, thickness 9,0mm) with total thickness 39 mm. Layers glued with Pyrocol A, 500g/m<sup>2</sup>.

##### 2.2.1.3 Installation

Hatch was installed to standard flexible plasterboard wall (single layer of 12,5 mm gypsumboard on each side) with steel anchors (M5x40mm) 4 pcs per hatch if frame dimension is 397x397 or less. Hatch frame 440x440mm or bigger is fixed with 8 pcs of steel anchors (M5x40mm).

### 3. Extended application report and test results in support of classification

#### 3.1 Test reports

Test laboratory	Name of sponsor	Test report number	Date
TÜV Eesti OÜ	Palavaneri Oy	812-19TML	05.11.2019

#### 3.2 Test results

**Table 1. Inspection hatch “EI30ESL”**

Performance criteria	Hatch 597x597mm on exposed side	Hatch 597x597mm on unexposed side	
<b>INSULATION</b>	<b>Test time (min)</b>		
	<b>36 minutes</b>		
	The average temperature rise on the unexposed side, >140 °C	116°C	87°C
The maximum temperature rise on the unexposed side, >180 °C - normal procedure	128°C(tc 39)	92°C(tc 56)	
<b>INTEGRITY</b>	<b>Test time (min)</b>		
	<b>36 minutes</b>		
	Cracks or openings in excess of given dimensions	No failure	No failure
	Ignition of the cotton pad	No ignition	No ignition
Sustained flaming on the unexposed side	No flaming	No flaming	

**Test was stopped by request of sponsor at test time 36 minutes.**

## 4. Classification and field of application

### 4.1 Reference of classification

This classification has been carried out in accordance with Clause 7.5.5 of EN 13501-2:2016.

### 4.2 Classification of “EI30ESL”

Inspection hatch “EI30ESL” is classified according to the following combinations of performance parameters and classes as appropriate.

R	E	I <sub>1</sub>	I <sub>2</sub>	W	t	t	M	S	C	IncSlow	sn	ef	r	
---	<b>30</b>	-	<b>30</b>	-	--	-	-	--	---	---	-	---	---	---

### Fire resistance classifications:

**EI<sub>2</sub>30 / E30**

#### 4.2.1 Field of direct application

This classification is valid for the Inspection hatch “EI30ESL” with following end use application and changes in the product:

- Alternative paints are acceptable and may be added to leaves or frames for decorative finish.
- The number of fixings used to attach frame to supporting constructions may be increased but shall not be decreased and the distance between fixings may be reduced but shall not be increased.
- The number of movement restrictors such as locks, latches and hinges may be increased but shall not be decreased.
- Size increase is not allowed;
- Reduction in sizes of the hatch limited to 150mm width and 150mm height.

## 5. Limitations

### 5.1 Restriction

The product, described in clause 2, classification is valid if all materials and construction remains unchanged.

### 5.2 Warning

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

This classification report is issued only in English language.

On behalf and by authority of TÜV Eesti OÜ.

Approved by

F. Haas

Appendix 1

6 pages

Drawings and specification for EI30ESL

## CLASSIFICATION OF FIRE RESISTANCE in accordance with EVS-EN 13501-2:2016

SPONSOR: Palavaneri Oy

ADDRESS : Salpakankaankatu 36, 80100 Joensuu, Finland

MANUFACTURER: Palavaneri Oy

ADDRESS : Salpakankaankatu 36, 80100 Joensuu, Finland

PREPARED BY: TÜV EESTI OÜ

PRODUCT NAME : Inspection hatch "EI30ESL" in rigid wall

CLASSIFICATION REPORT : TEK- 253/20en

DATE OF ISSUE : 24.01.2020

## 1. Introduction

This classification report defines the resistance to fire classification assigned to steel hatch in accordance with procedures given in EVS-EN 13501-2: 2016

## 2. Details of classified product

### 2.1 General

Inspection hatch “EI30ESL” is defined as the vertically mounted insulated single leaf steelframe hatch.

### 2.2 Description

Inspection hatch “EI30ESL” is described below and is fully described in the test report listed in 3.1.

#### 2.2.1 Specimen “EI30ESL”

Inspection hatch “EI30ESL” was tested using following dimensions of leaf and frame.

##### 2.2.1.1 Frame

The maximum dimensions of the frame is 597 mm × 597 mm (width × height). Minimum dimensions of frame 150 mm × 150 mm (width × height) The frame depth is 30 mm, steel material thickness 1,0 mm. One strip of fire resistant gasket Flexilodice 2,0x30mm on the frame.

##### 2.2.1.2 Hatch leaf

The maximum dimensions of the leaf is 540 mm x 540 mm, minimum dimensions 140x140 mm, thickness of insulation 39 mm. Leaf steel material thickness 1,0 mm. Leaf is made of two layers of mineral board (Odiboard3.2 30 mm, measured density 333 kg/m<sup>3</sup>, Fibrodice, thickness 9,0mm) with total thickness 39 mm. Layers glued with Pyrocol A, 500g/m<sup>2</sup>.

##### 2.2.1.3 Installation

Hatch was installed to standard rigid masonry wall (light weight concrete blocks (650±100 kg/m<sup>3</sup>) thickness 200mm) with steel screws (M5x40mm) 4 pcs per hatch if frame dimension is 397x397 or less. Hatch frame 440x440mm or bigger is fixed with 8 pcs of steel screws (M5x40mm).

### 3. Extended application report and test results in support of classification

#### 3.1 Test reports

Test laboratory	Name of sponsor	Test report number	Date
TÜV Eesti OÜ	Palavaneri Oy	786-19TML	05.11.2019

#### 3.2 Test results

Table 1. Inspection hatch “EI30ESL”

Performance criteria	Hatch 597x597mm on exposed side	Hatch 597x597mm on unexposed side	
<b>INSULATION</b>	<b>Test time (min)</b>		
	<b>36 minutes</b>		
	The average temperature rise on the unexposed side, >140 °C	102°C	95°C
The maximum temperature rise on the unexposed side, >180 °C - normal procedure	102°C(tc 4)	100°C(tc 24)	
<b>INTEGRITY</b>	<b>Test time (min)</b>		
	<b>36 minutes</b>		
	Cracks or openings in excess of given dimensions	No failure	No failure
	Ignition of the cotton pad	No ignition	No ignition
	Sustained flaming on the unexposed side	No flaming	No flaming

**Test was stopped by request of sponsor at test time 70 minutes.**

## 4. Classification and field of application

### 4.1 Reference of classification

This classification has been carried out in accordance with Clause 7.5.5 of EN 13501-2:2016.

### 4.2 Classification of “EI30ESL”

Inspection hatch “EI30ESL” is classified according to the following combinations of performance parameters and classes as appropriate.

R	E	I <sub>1</sub>	I <sub>2</sub>	W		t	t		M	S	C	IncSlow	sn	ef	r
---	<b>30</b>	-	<b>30</b>	-	--	-	-	--	---	---	-	---	---	---	---

**Fire resistance classifications:  
EI<sub>2</sub>30 / E30**

#### 4.2.1 Field of direct application

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- The number of movement restrictors such as locks, latches and hinges may be increased but shall not be decreased.
- Size increase is not allowed;
- Reduction in sizes of the hatch limited to 150mm width and 150mm height.

## 5. Limitations

### 5.1 Restriction

The product, described in clause 2, classification is valid if all materials and construction remains unchanged.

### 5.2 Warning

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

This classification report is issued only in English language.

On behalf and by authority of TÜV Eesti OÜ.

Approved by F. Haas

Appendix 1 6 pages Drawings and specification for EI30ESL