



## European Technical Assessment

## ETA 25/0029 of 16/01/2025

### General Part

**Technical Assessment Body issuing the European Technical Assessment:**

**TECNALIA RESEARCH & INNOVATION**

**Trade name of the construction product**

**ALFA FIREGUARD 3**

**Product family to which the construction product belongs**

Fire Protective Mat

**Manufacturer**

**ALFA SEAL GROUP Sp. z o.o.**  
Kineskopowa 1  
05-500 Piaseczno, POLAND

**Manufacturing plant**

MPA3

**This European Technical Assessment contains**

16 pages including 1 annex which forms an integral part of this assessment

**This European Technical Assessment is issued in accordance with regulation (EU) No 305/2011, on the basis of**

EAD 350142-00-1106 Fire protective board, slab and mat products and kits

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## Specific parts

### 1. Technical description of the product

ALFA FIREGUARD 3 is a flexible mat made with a stone wool mat quilted of wire mesh and covered with aluminized polyethylene on the outer face. The inner face of the mat is treated with an ablative component ALFA SEAL T3 protected by a fiber glass fabric. ALFA BAND 3 is an adhesive stripe made by aluminized incombustible fabric used as protection tape for edges of the mat.

ALFA FIREGUARD 3 is produced in rolls of 6000x1000x30 mm and the density is 4,5 kg/m<sup>3</sup>.

The characteristics of the components are described below:

Component	Characteristic
Rock-wool mat	Density: 100 kg/m <sup>3</sup>
Aluminized polyethylene	-
Galvanized hexagonal wire mesh	Dimensions: 25/3 mm
Sheet of fiber glass fabric	Density: 200 g/m <sup>2</sup>
Layer of AF SEAL T3	Yield: 1.5 kg/m <sup>2</sup>

**Table 1:** Characteristics of the components of ALFA FIREGUARD 3.

Ancillary product:

- Steel wire of 10/10 mm thickness to be installed above the ALFA BAND 3.

The ancillary product in this European Technical Assessment within the framework of evaluating resistance to fire (see Annex A) is not covered by this ETA and cannot be CE-marked on the basis of it.



## **2. Specification of the intended use(s) in accordance with the applicable European Assessment Document (hereinafter EAD)**

### **2.1. Intended use**

The intended use of ALFA FIREGUARD 3 is Type 9 Fire Protective Products that contribute to the fire resistance of technical services assemblies in buildings. This ETA covers the use of ALFA FIREGUARD 3 on Type A ducts.

Use category related to the element(s) intended to be protected:

- Type 9: Fire protective products that contribute to the fire resistance of technical services assemblies in buildings.

Use category related to environmental conditions:

- Type Z<sub>1</sub>: intended for internal use, in high humidity environments.

### **2.2. Working life**

The provisions made in this European Technical Assessment are based on an assumed working life of 10 years as minimum, provided that ALFA FIREGUARD 3 is subject to appropriate use and maintenance.

The indications given on the working life cannot be interpreted as a guarantee given by the producer or Assessment Body, but are to be regarded only as a means for choosing the right products in relation to the expected economically reasonable working life of the works.



### 3. Performance of the product and references to the methods used for its assessment

The assessment of ALFA FIREGUARD 3 has been performed in accordance with EAD 350142-00-1106 Fire protective board, slab and mat products and kits.

Basic requirement for construction work	Essential characteristics	Performance
<b>BWR 2: Safety in case of fire</b>	Reaction to fire	B-s1, d0. See Clause 3.1.1.
	Resistance to fire	Clause 3.1.2. and Annex A
	Durability and serviceability	Z <sub>1</sub> . See clause 3.1.3.
<b>BWR 3: Hygiene, health and the environment</b>	Water permeability	Not assessed
<b>BWR 4: Safety and accessibility in use</b>	Flexural strength	Clause 3.2.1.
	Dimensional stability	Clause 3.2.2.
<b>BWR 6: Energy economy and heat retention</b>	Thermal resistance	Not assessed
	Water vapour transmission coefficient	Not assessed

**Table 2:** Summary of ALFA FIREGUARD 3 performance.

#### 3.1. Safety in case of fire (BWR 2)

##### 3.1.1. Reaction to fire

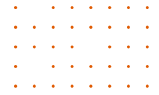
Reaction-to-fire classification of ALFA FIREGUARD 3 was carried out in accordance with EN 13501-1:2007+A1:2009. ALFA FIREGUARD 3 has a reaction to fire classification B-s1, d0.

##### 3.1.2. Resistance to fire

The resistance to fire performance according to EN 13501-3:2005+A1:2009 is given in Annex A of this document. The tests were carried out according to EN 1366-1:1999.

##### 3.1.3. Durability

The fire protective mat ALFA FIREGUARD 3 fulfils the requirements of use category Z<sub>1</sub> in accordance with EAD 350142-00-1106.



### 3.2. Safety and accessibility in use (BWR 4)

#### 3.2.1. Flexural strength

Flexural strength has been determined in accordance with EAD 350142-00-1106 Clause 2.2.2.9 and EN 12089.

Loaded face	Strength(kPa)/Extension (mm)
Lower face	21.7/37.0
Upper face	20.0/29.2

**Table 3:** Flexural strength (longitudinal).

Loaded face	Strength(kPa)/Extension (mm)
Lower face	11.5/36.8
Upper face	12.5/36.4

**Table 4:** Flexural strength (transversal).

#### 3.2.2. Dimensional stability

Dimensional stability has been determined in accordance with EAD 350142-00-1106 Clause 2.2.2.10 and EN 1604.

Conditions	Dimensional change (%)		
	Length	Width	Thickness
-20°C	- 0.2	0.2	- 0.9
70°C / 90% R.H.	- 0.1	- 0.1	0.9

**Table 5:** Dimensional stability.



**4. Assessment and verification of constancy of performance (hereinafter AVCP) system applied, with reference to its legal base**

According to the decision 1999/454/EC, as amended by Decision of the Commission 2001/596/EC, the system of assessment and verification of constancy of performance (see Annex V to the regulation (EU) No 305/2011 and EC Delegated Act No 568/2014) given in the following table apply:

Product(s)	Intended use(s)	Level(s) or class(es)	System(s)
Fire protective products	For fire compartmentation and/or fire protection or fire performance	Any	1

**5. Technical details necessary for the implementation of the AVCP system, as provided for in the applicable EAD**

All the necessary technical details for the implementation of the AVCP system are laid down in the Control Plan deposited at Tecnaia Research and Innovation, with which the Factory Production Control shall be in accordance.

The Control Plan is a confidential part of the ETA and is only handed over to the notified body involved in the assessment and verification of constancy of performance.

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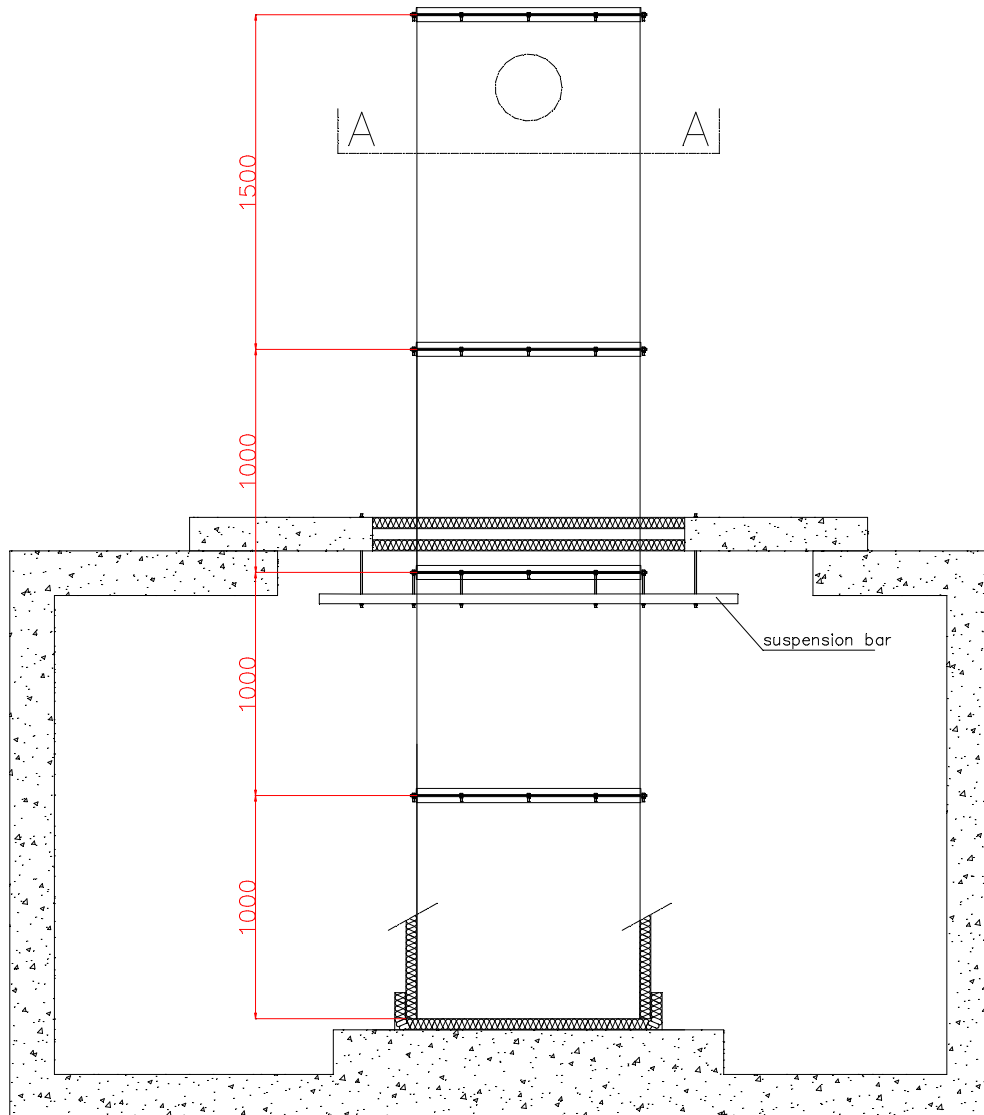
Miguel Mateos  
Innovation and Conformity Assessment Point  
Tecnaia Research & Innovation



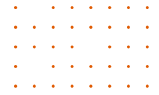
## Annex A: Resistance to fire classification of ALFA FIREGUARD 3

Assembly assessed within the framework of this ETA	Test standard	Classification according to EN 13501-3
1. Vertically orientated rectangular duct Type A	EN 1366-1:1999	EI 120 (ve o->i) S
2. Horizontally orientated rectangular duct Type A	EN 1366-1:1999	EI 120 (ho o->i) S
3. Vertically orientated circular duct Type A	EN 1366-1:1999	EI 180 (ve o->i) S
4. Horizontally orientated circular duct Type A	EN 1366-1:1999	EI 120 (ho o->i) S

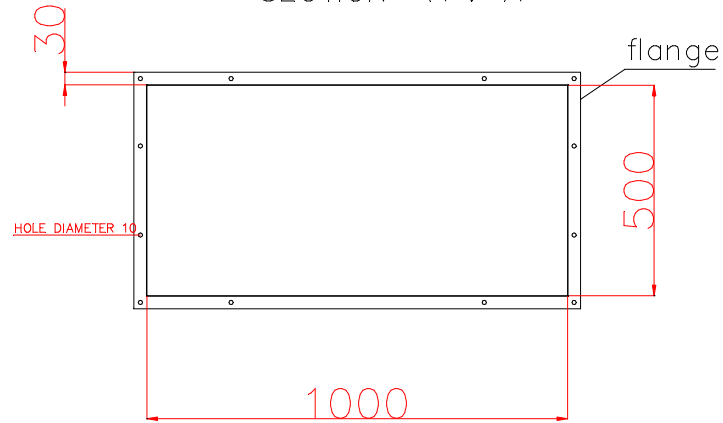
### 1. Vertically orientated rectangular duct Type A assembly



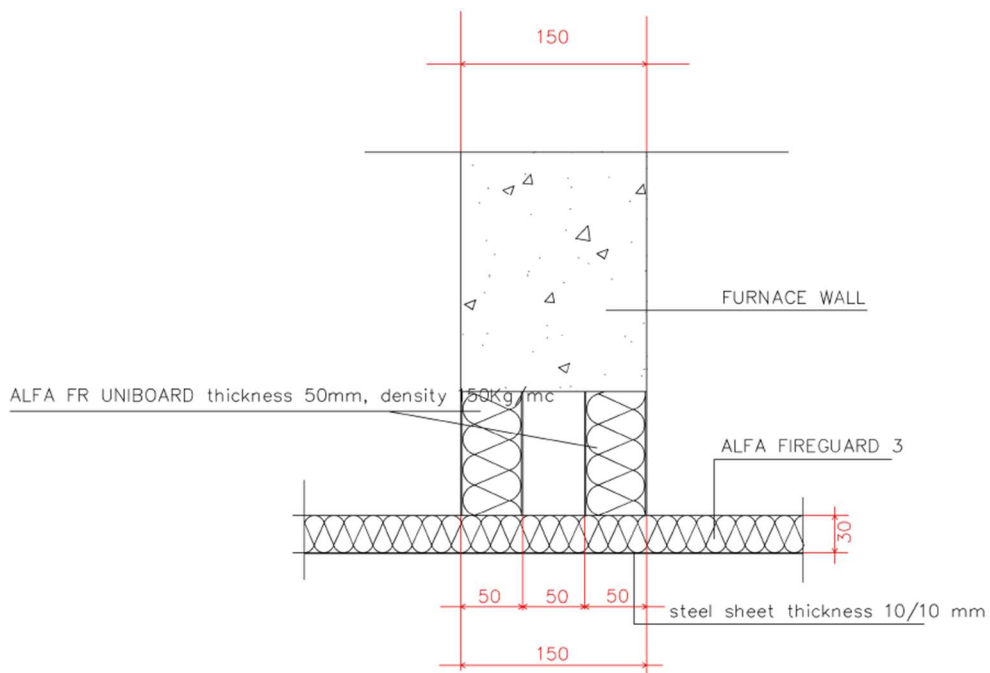




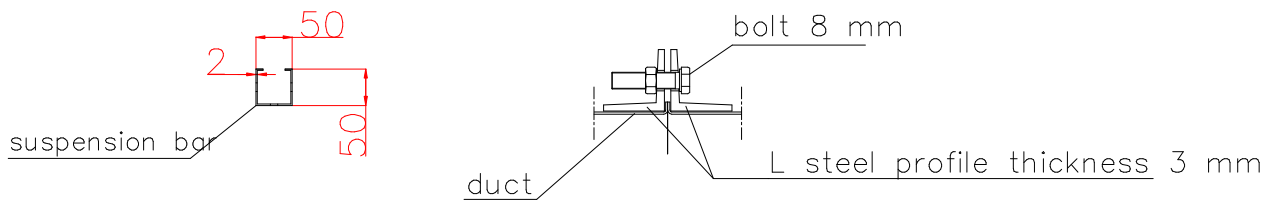
SECTION A : A

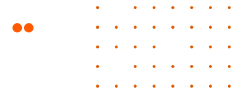


TOP AND SIDE SEALING DETAIL

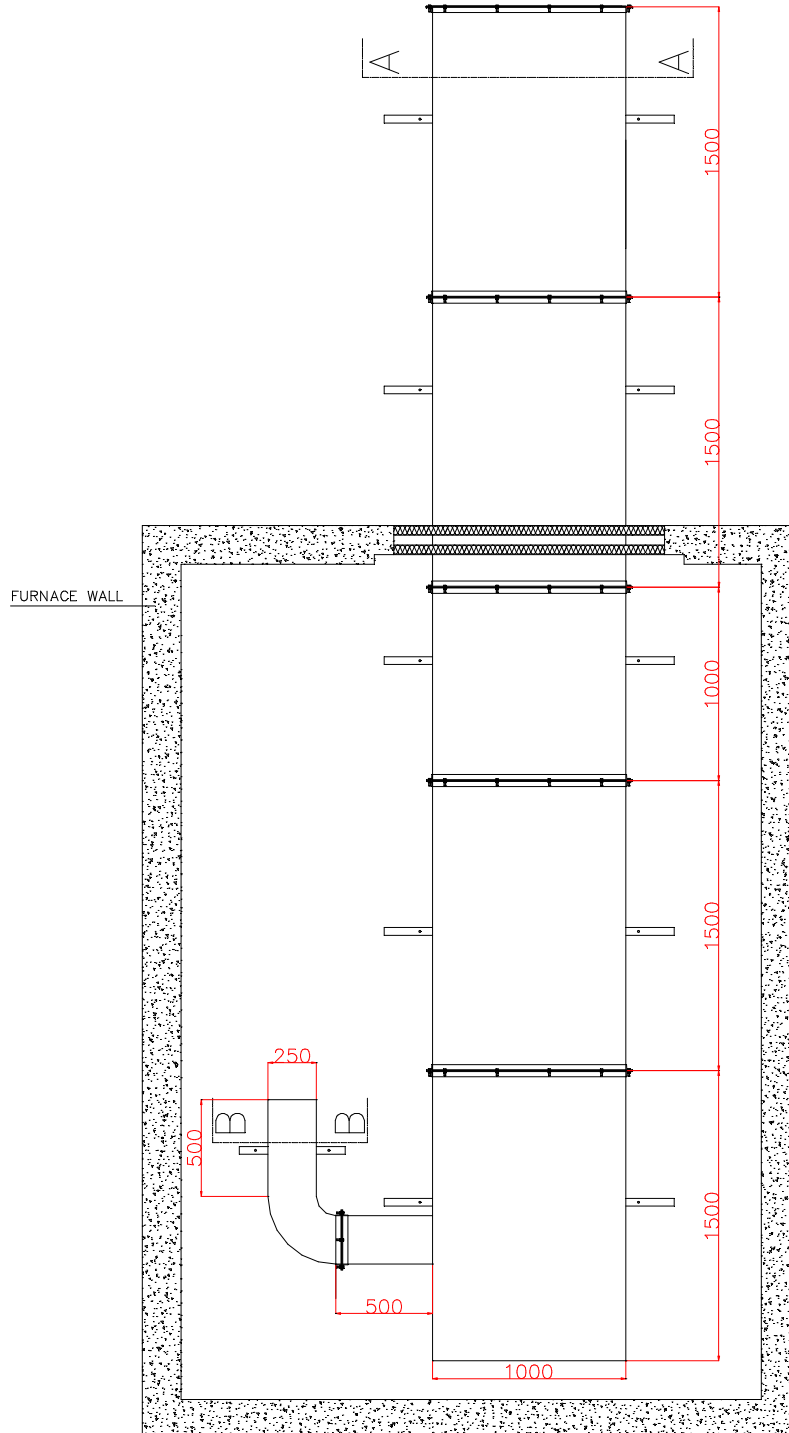


DETAIL FIXING FLANGE



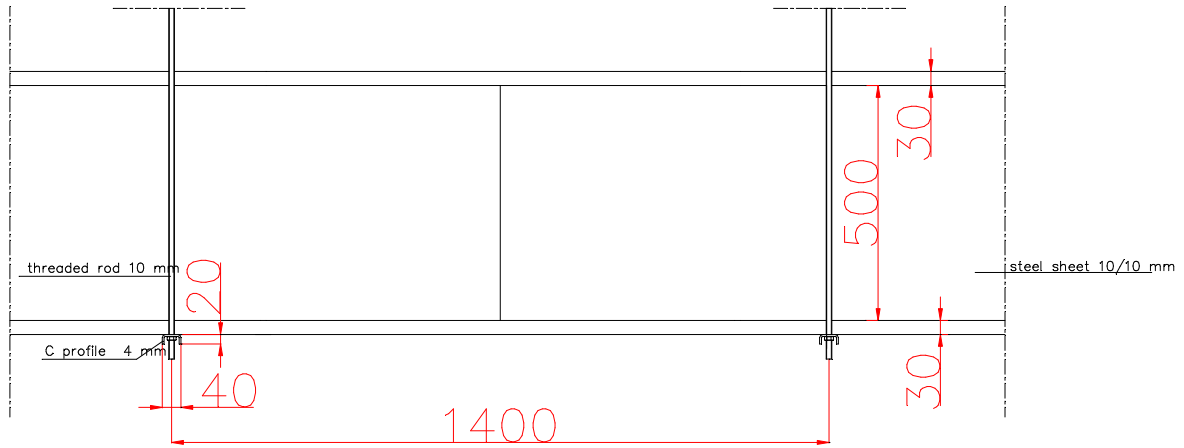


## 2. Horizontally orientated rectangular duct Type A assembly

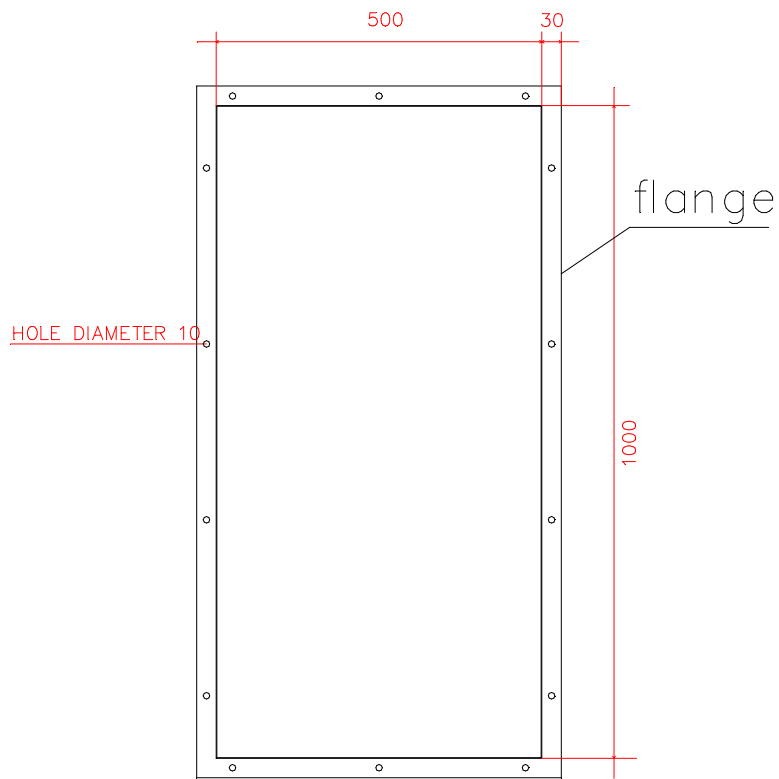


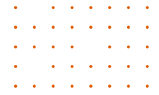


DETAIL OF THE SUSPENSION

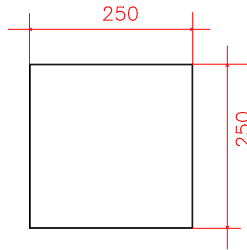


SECTION A : A

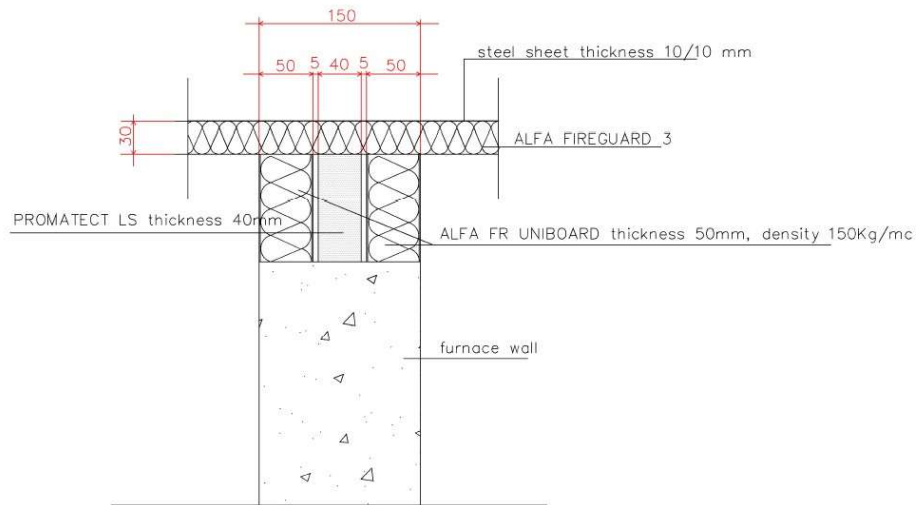




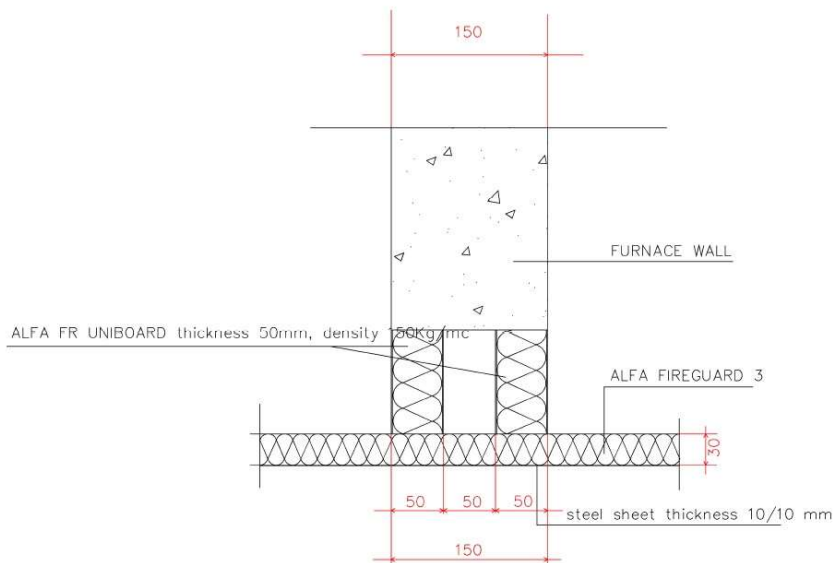
### SECTION B : B

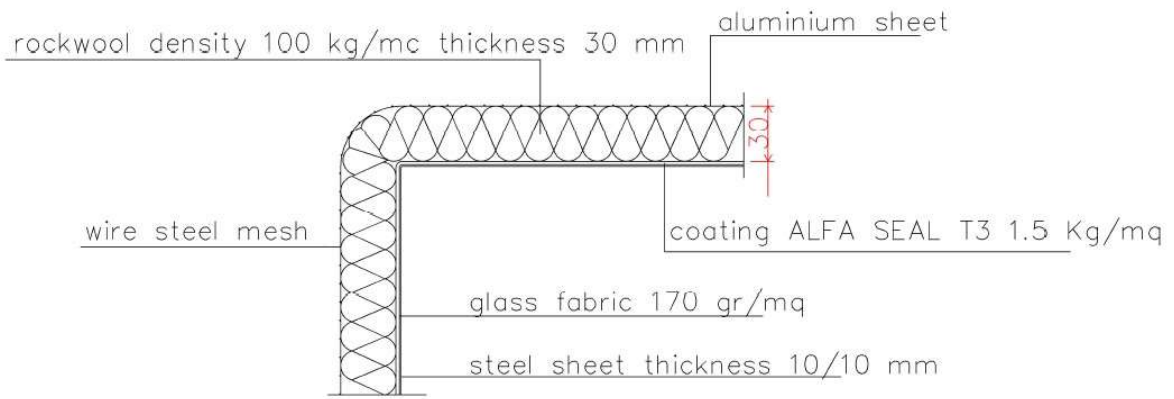


### LOWER SEAL DETAIL



### TOP AND SIDE SEALING DETAIL

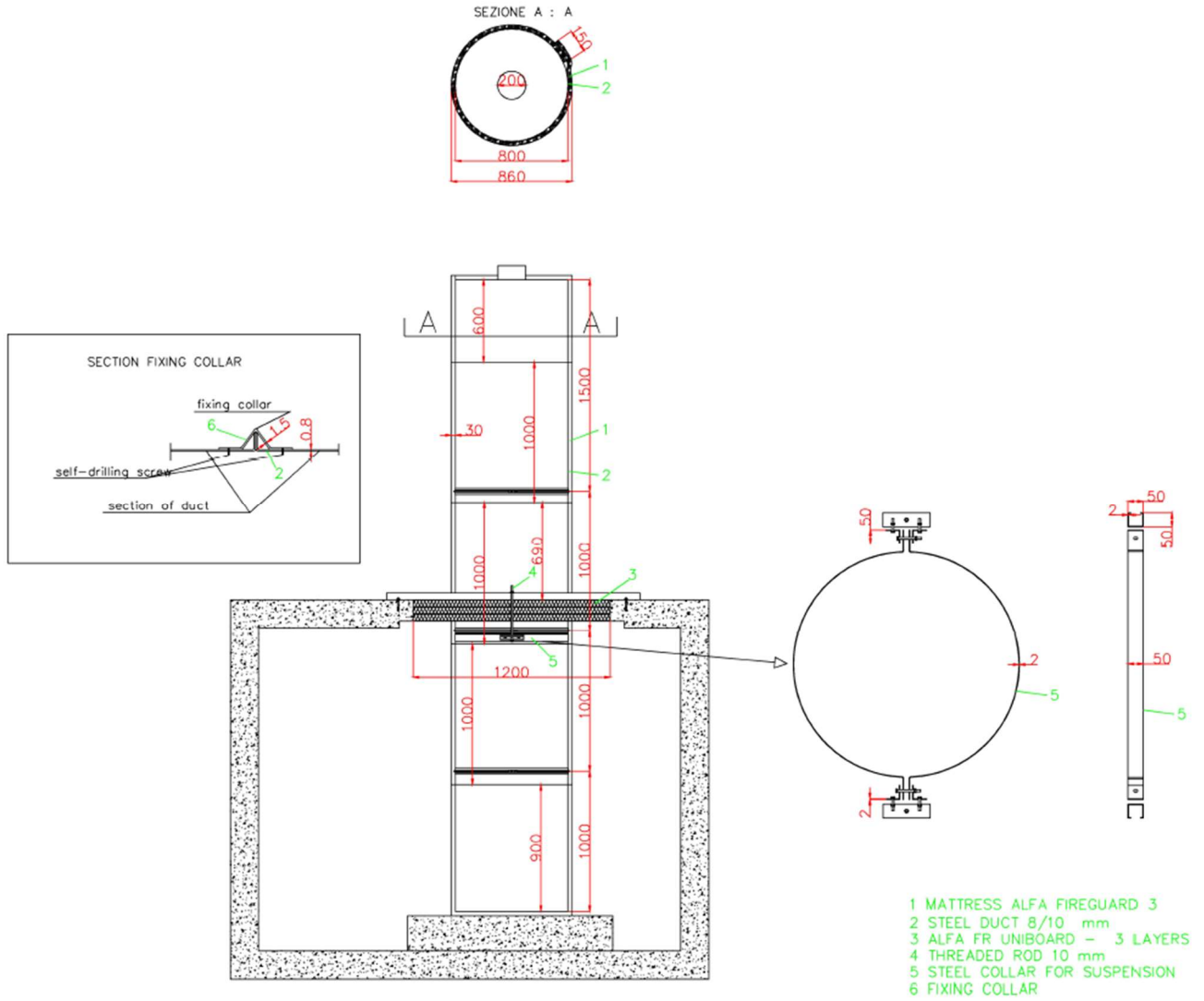




DETAIL FIXING FLANGE

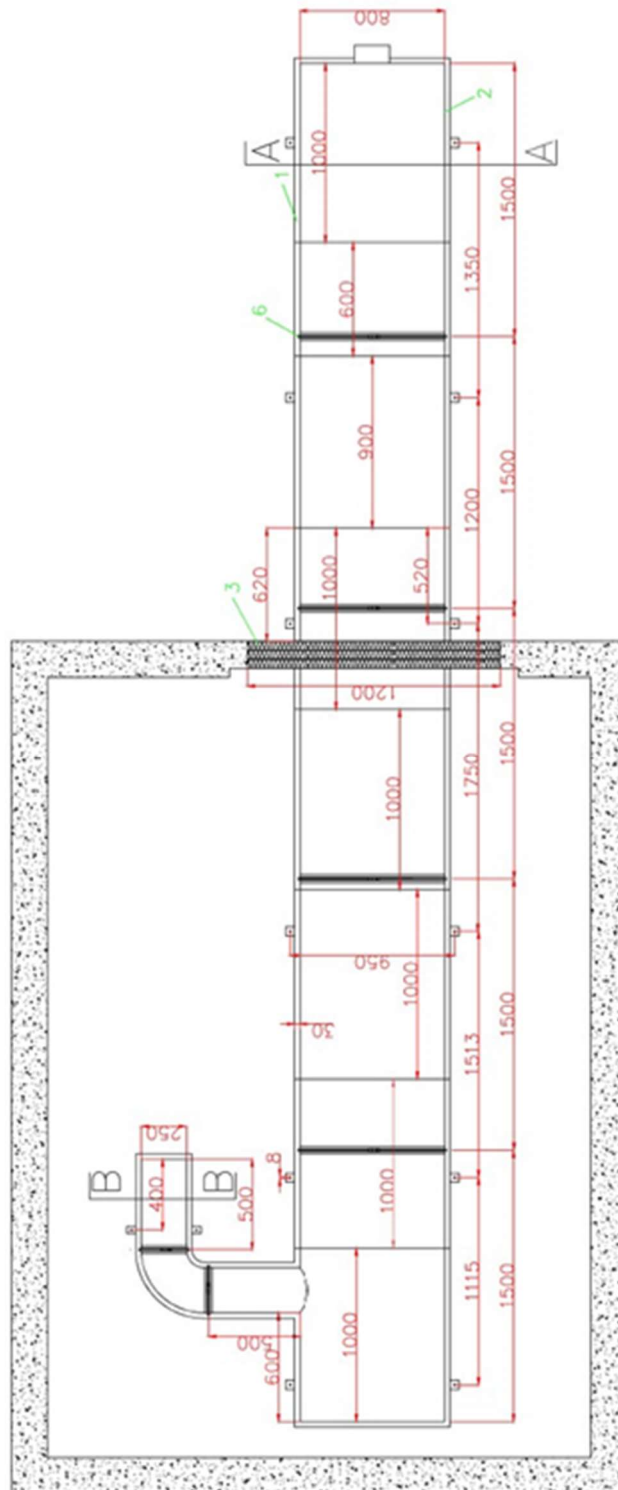


### 3. Vertically orientated circular duct Type A assembly





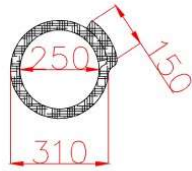
**4. Horizontally orientated circular duct Type A assembly**



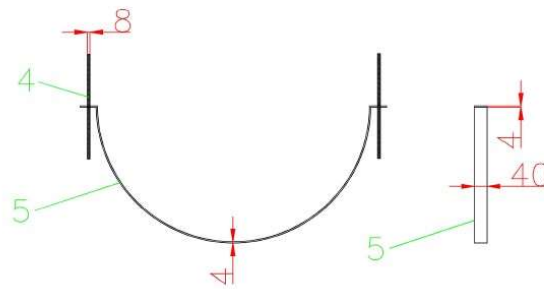
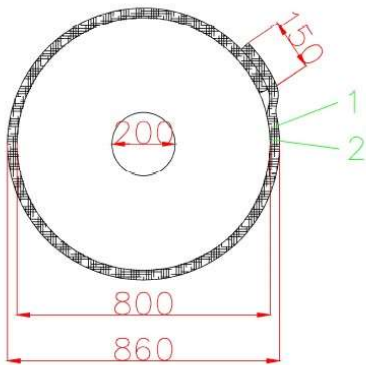
- 1 MATTRESS ALFA FIREGUARD 3
- 2 STEEL DUCT 8/10 mm
- 3 ALFA FR UNIBOARD - 3 LAYERS
- 4 THREADED ROD 8 mm
- 5 HALF STEEL COLLAR FOR SUSPENSION
- 6 FIXING COLLAR



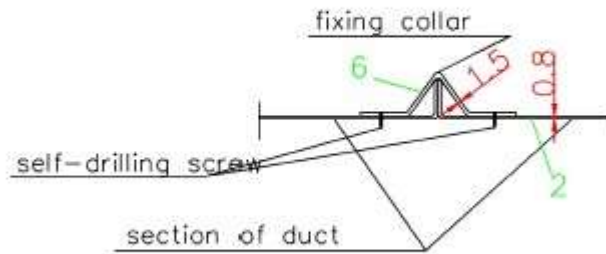
SECTION B : B



SECTION A : A



SECTION OF FIXING COLLAR



- 1 MATTRESS ALFA FIREGUARD 3
- 2 STEEL DUCT 8/10 mm
- 3 ALFA FR UNIBOARD - 3 LAYERS
- 4 THREADED ROD 8 mm
- 5 HALF STEEL COLLAR FOR SUSPENSION
- 6 FIXING COLLAR