

# **CLASSIFICATION OF FIRE RESISTANCE PERFORMANCE ACCORDING TO EN 13501-2:2007+A1:2009 OF A ROLLING SHUTTER TYPE METACON RGS EI (1) 120 MOUNTED ON A WALL**

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**Notified Body No:** 1234

**Product name:** Rolling shutter Metacon RGS EI (1) 120 mounted on a wall

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## 1. Introduction

This classification report defines the classification, according to the procedures given in EN 13501-2:2007+A1:2009, assigned to a Rolling shutter Metacon RGS EI (1) 120 mounted on a wall.

## 2. Details of classified product

### 2.1 General

## 3. Test report & test result in support of classification

### 3.1 Test report

Name of Laboratory	Name of sponsor	Test report No.	Test method
Efectis Nederland BV Centre for Fire Safety	Metacon BV	2012-Efectis-R0282	EN 1634-1:2008

### 3.2 Test results

#### 3.2.1 Test report 2011- Efectis-R0282

	rolling shutter mounted on the exposed side of the wall	rolling shutter mounted on the non-exposed side of the wall
Integrity, (E)  – Cotton pad – Gap gauges Ø 6 mm Ø 25 mm – Flames longer than 10 sec.	133 minutes  135 minutes no failure 135 minutes no failure 133 minutes	180 minutes no failure  180 minutes no failure 180 minutes no failure 180 minutes no failure
Thermal insulation, (I)  – Average temperature rise – Maximum temperature rise I <sub>1</sub> – Maximum temperature rise I <sub>2</sub>	135 minutes no failure 135 minutes no failure 135 minutes no failure	176 minutes 175 minutes 175 minutes
Heat radiation, (W)	135 minutes no failure	180 minutes no failure

## **4. Classification and field of application**

### **4.1 Reference of classification**

This classification has been carried out in accordance with clause 7 of EN 13501-2:2007+A1:2009.

### **4.2 Classification**

The fire resistance of a Rolling shutter Metacon RGS EI (1) 120 mounted on a wall:

#### **Fire resistance classification:**

*Rolling shutter Metacon RGS EI (1) 120 mounted on a wall on the exposed side*

**E120, EI<sub>1</sub>120, EI<sub>2</sub>120, EW60**

*Rolling shutter Metacon RGS EI (1) 120 mounted on a wall on the non-exposed side*

**E180, EI<sub>1</sub>120, EI<sub>2</sub>120, EW60**

### **4.3 Field of application**

The conclusions in chapter 4 apply exclusively to door/frame structure types mounted in an aerated concrete wall which are equivalent in detail, including fittings/furniture and materials used as the tested structure and that also comply with the following conditions:

#### **4.3.1 Specific restrictions on materials and construction**

- The dimensions of metal wrap around frames may be increased to accommodate increased supporting construction thickness. The thickness of the metal may also be increased by up to 25 %.
- The type of metal shall not be changed from that tested.

#### **4.3.2 Decorative finishes**

- Since according to expectations a paint finishing layer does not contribute to the fire behaviour, applying a paint coating to the door surface is allowed.
- Decorative laminates and wood veneers with a maximum thickness of 1.5 mm may be added to the surfaces, but not the edges.

#### **4.3.3 Fixings**

- The number of fixings to attach the frame to the support structure may be increased but not decreased. The centre to centre distance between the fastenings may be reduced but not increased.

#### **4.3.4 Hardware**

- The number of locks may be increased but not decreased.

#### **4.3.5 Permissible size variations**

- For EI<sub>1</sub>120 and EI<sub>2</sub>120 classification the dimensions of the rolling shutter may be enlarged with the following percentages:
  - 30% in height;
  - 10% in width.

#### **4.3.6 Other changes**

- The relative position of movement restrictors will remain the same for smaller rolling shutters than that tested, or any change in the distance between them will be limited to the same percentage reduction as the decrease of the specimen size.
- The metal thickness of side guides and barrel carrying end plates may be increased by up to 50 % but it shall not be reduced beyond metal industry tolerances.
- The clearance between the end of the shutter laths and the inside faces of the guides shall be increased in proportion to the increase in width of the laths. The tightness (overlap) between the shutter curtain and the vertical guides shall not be reduced for size decreases, but shall be increased proportionally for the increase in width.

#### **4.3.7 Support structure**

- The rolling shutter built on to a standard rigid support construction as specified in EN 1363-1 can be applied to a door set mounted in the same manner in a wall provided with a density of at least  $650 \pm 200 \text{ kg/m}^3$  and a minimum wall thickness of 200 mm.

## **5. Limitations**

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

**SIGNED**



P.W.M. Kortekaas

**APPROVED**



S. Lutz

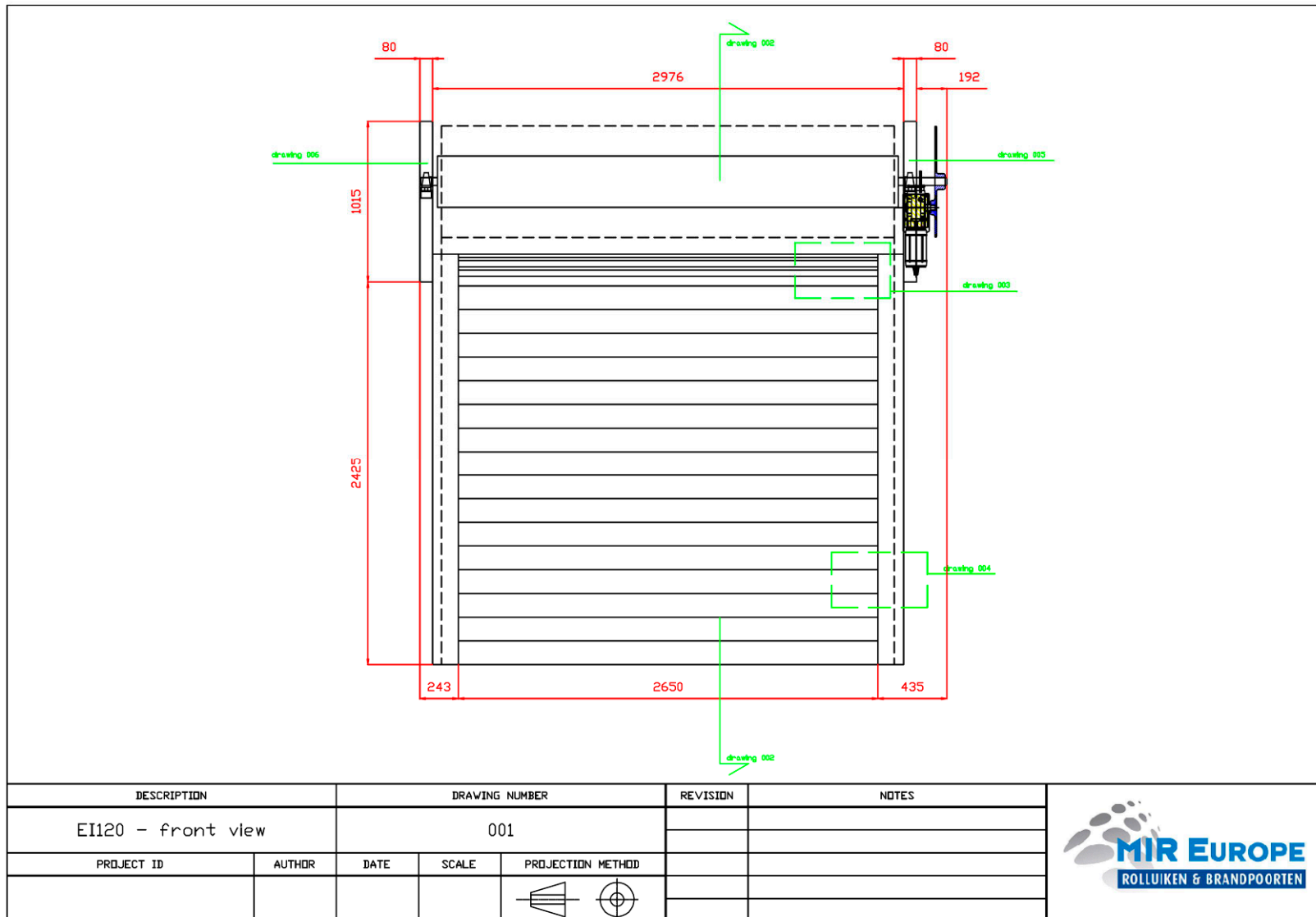


Figure 1: front view

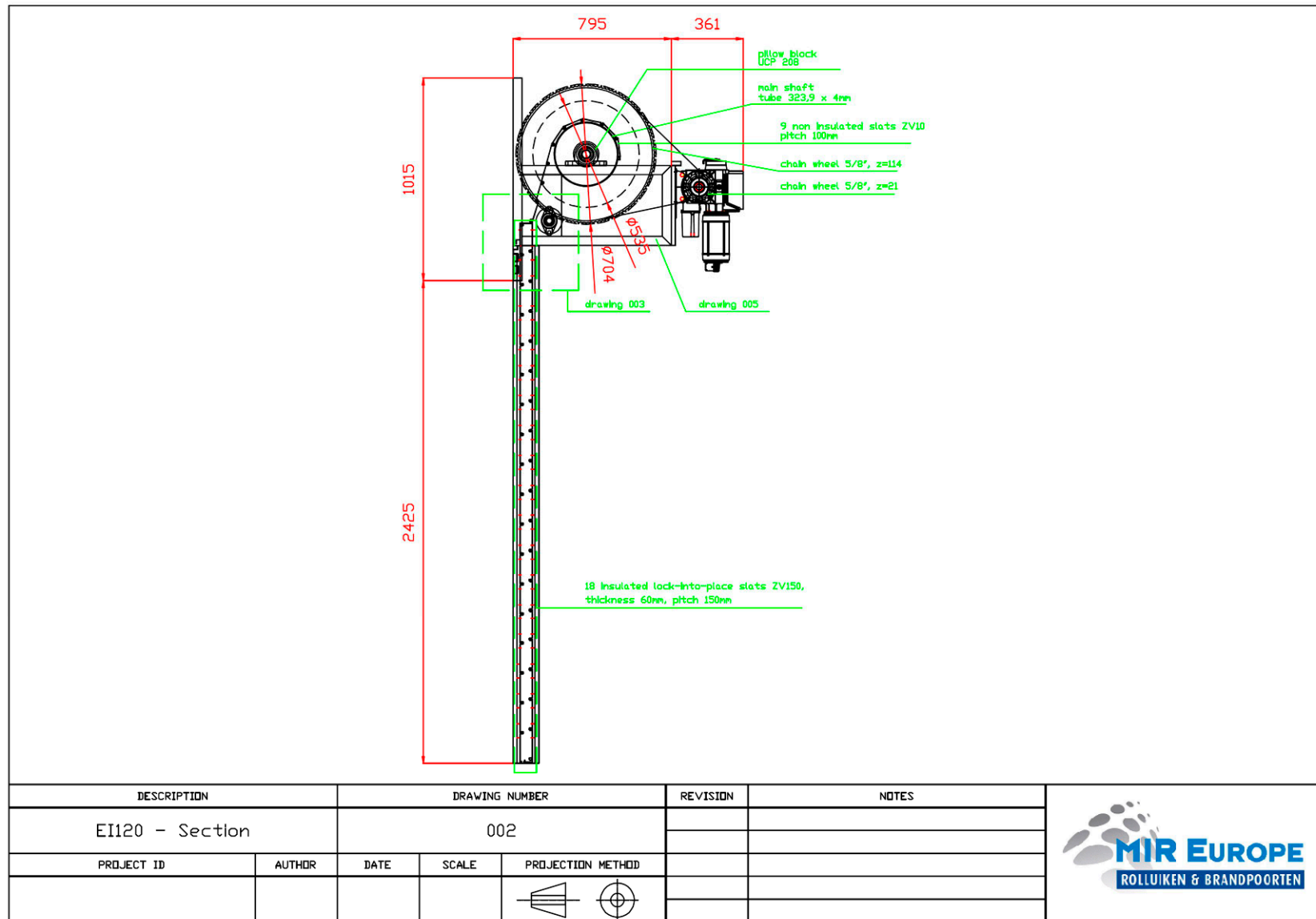


Figure 2: vertical section

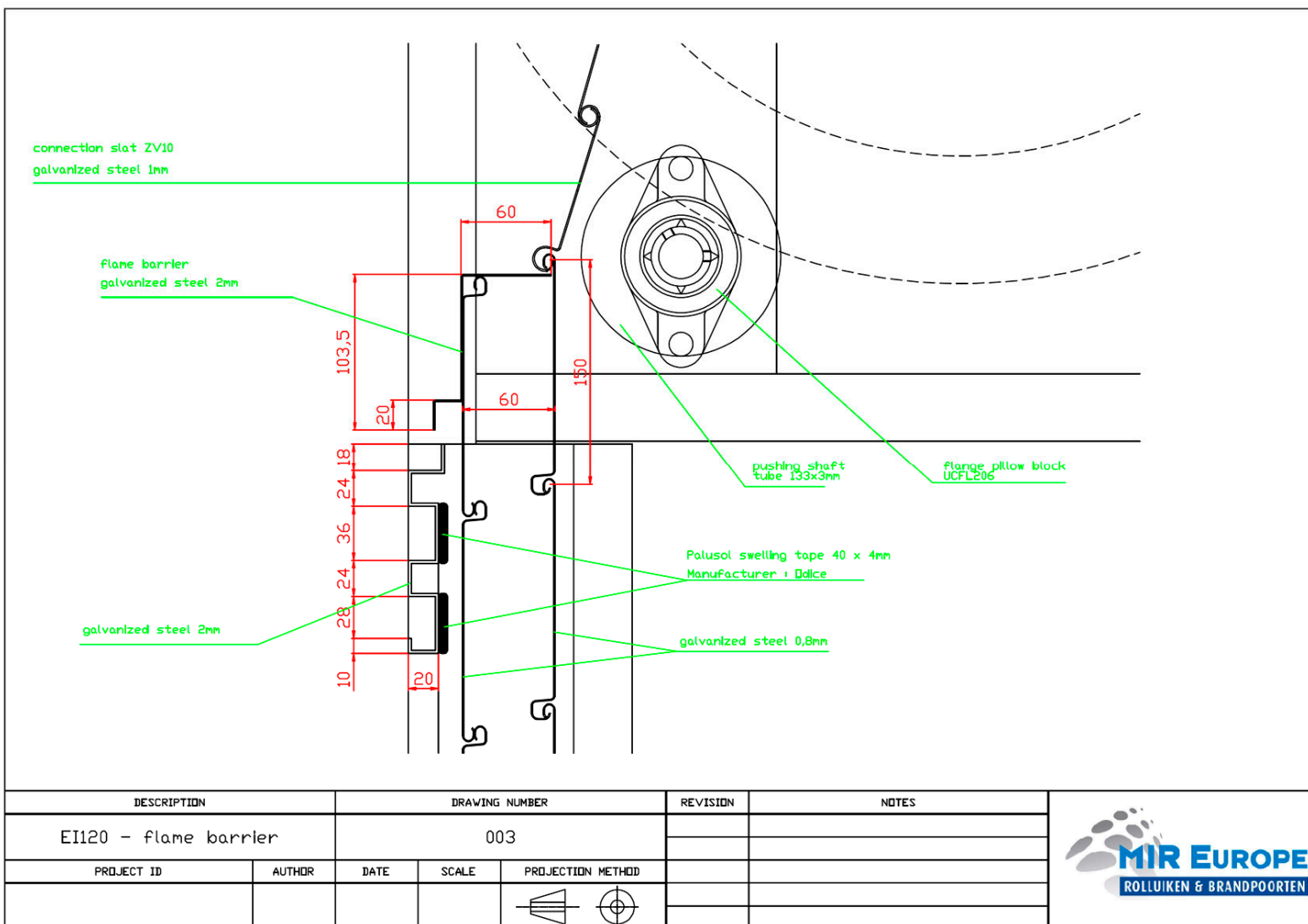


Figure 3: flame barrier

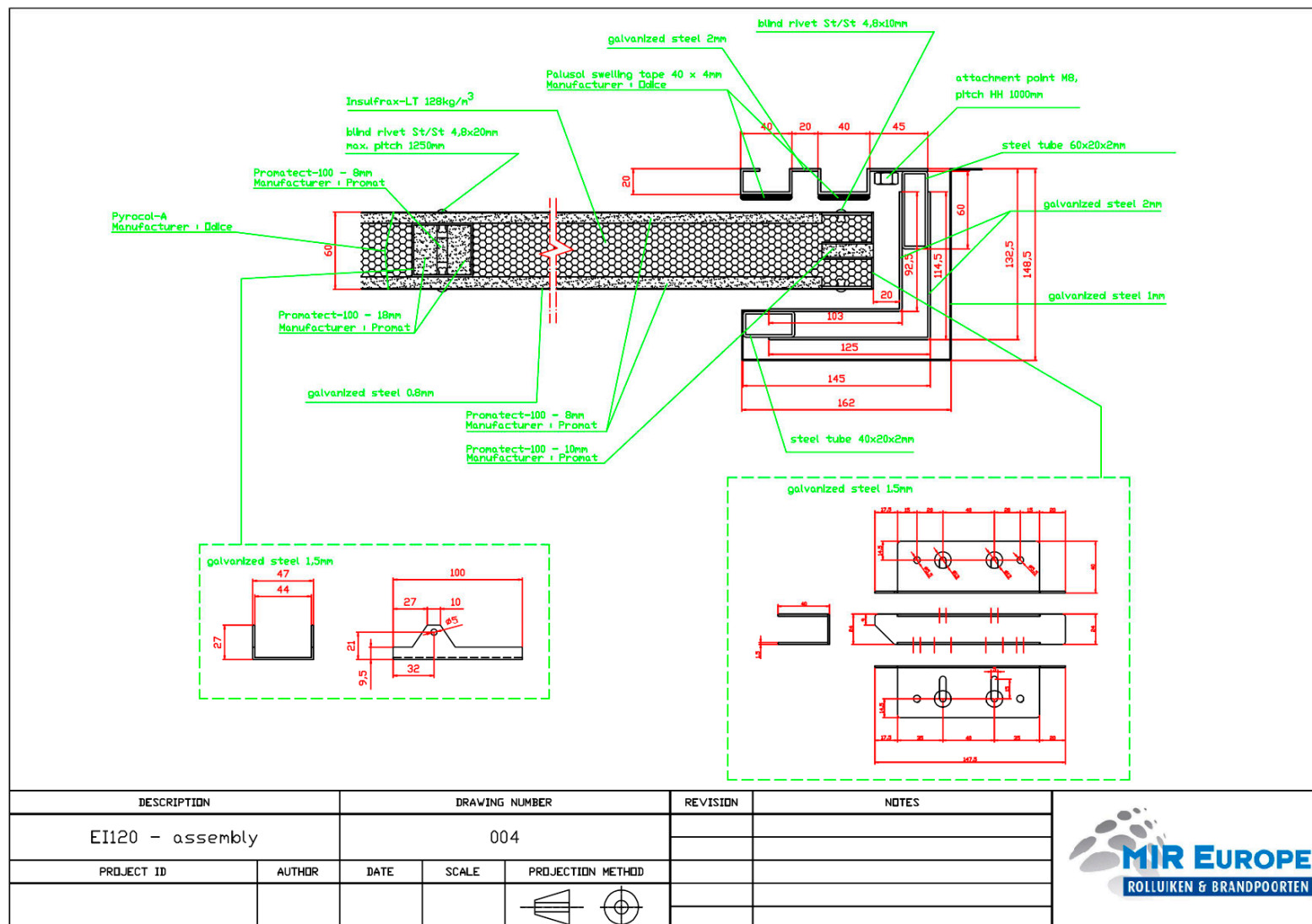


Figure 4: assembly



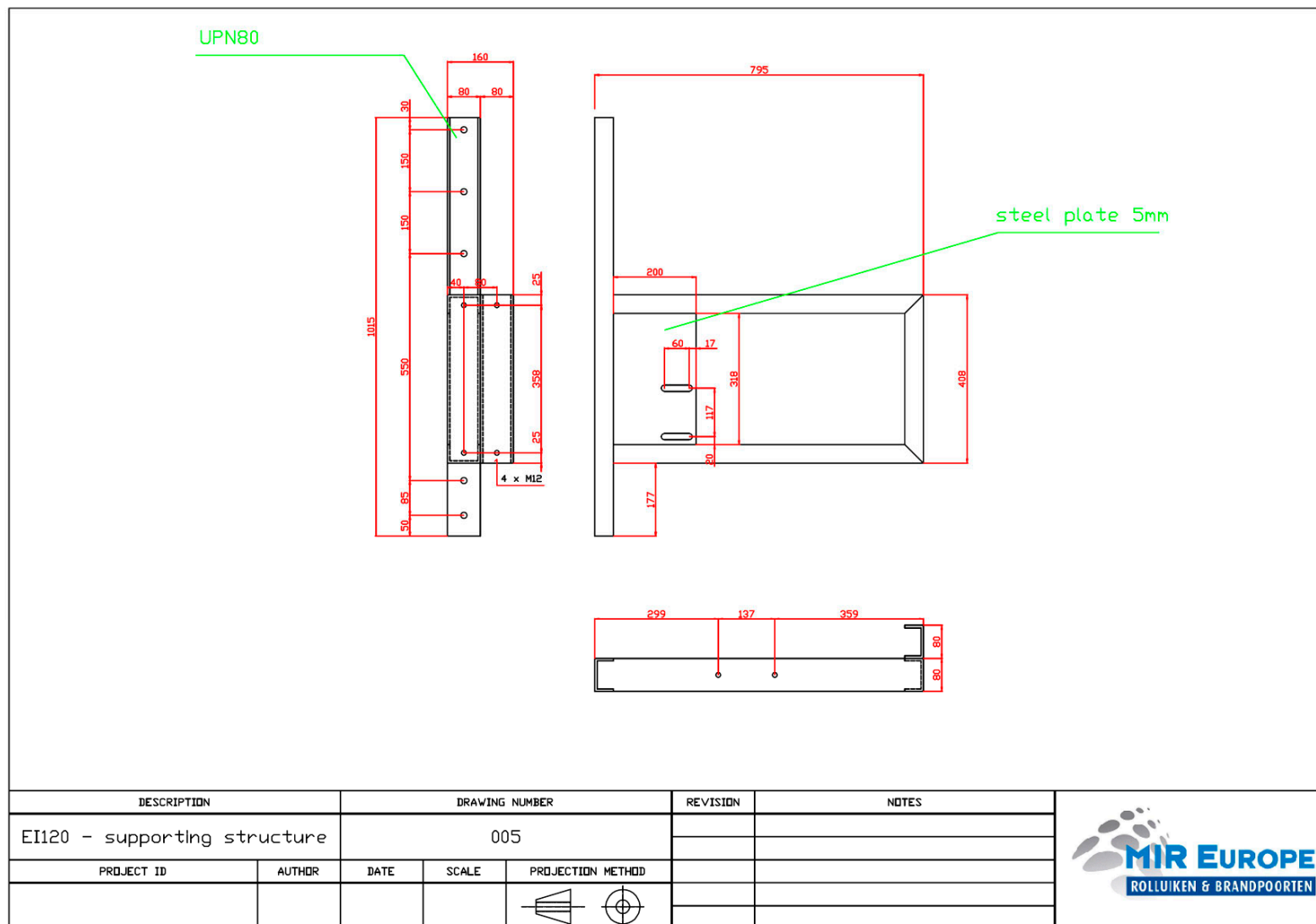


Figure 5: support structure main shaft

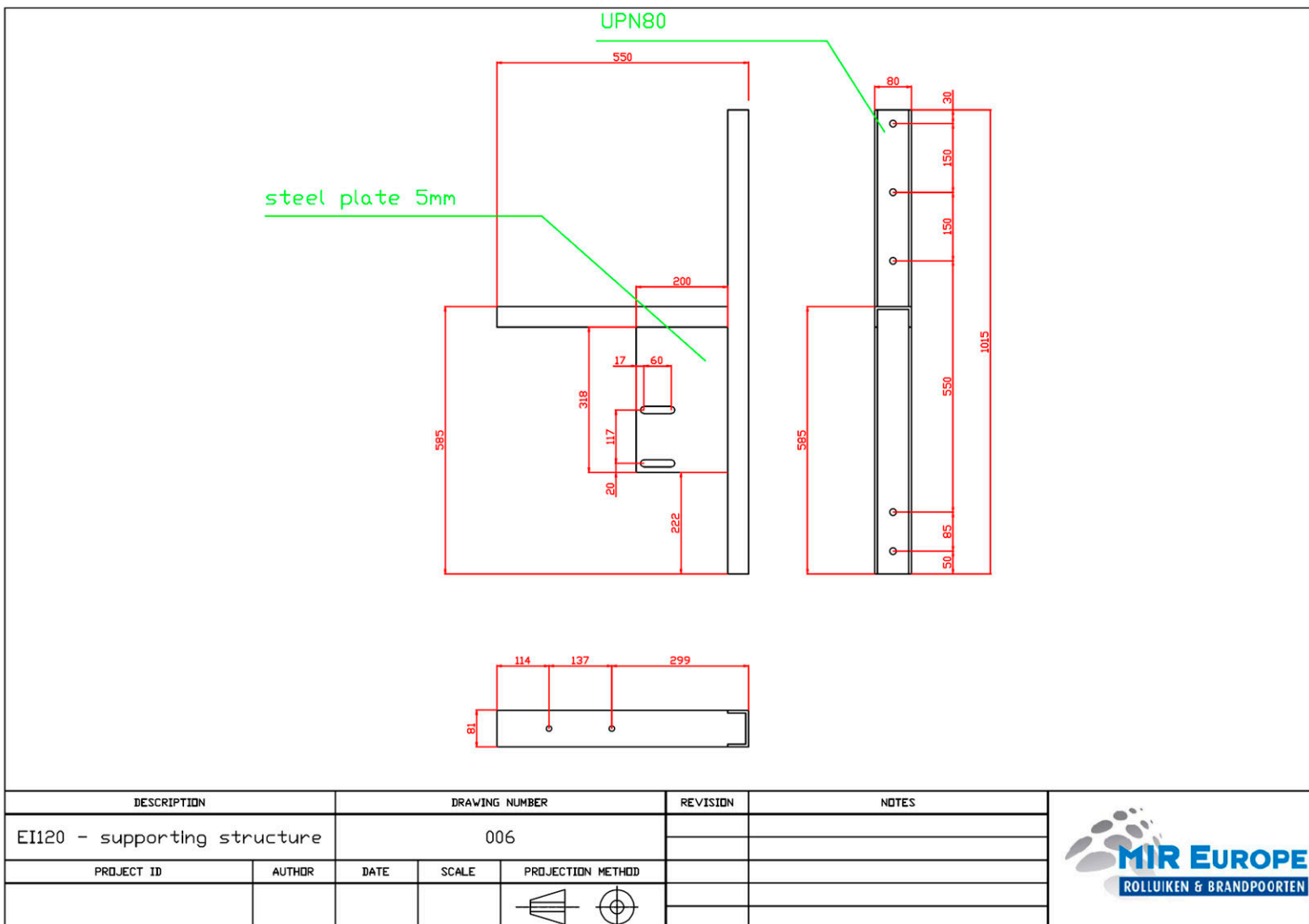


Figure 6: support structure main shaft