UL-EU CERTIFICATE

Certificate No. Page **Date of Issue**

UL-EU-01099-CPR 1/42018-11-16

Certificate Holder

Knauf Sp. Z o.o. ul. Światowa 25 02-229 Warsaw Poland

Manufacturer

A/003

Certified Product Type

Fire Stop - Fire Damper

Product Trade Name Trademark **Rating/Classification**

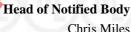
in othe Knauf FP Damper N/A See Appendix

4705

2028-11-15

EU

Expiry date



This is to certify that representative samples of the Certified Product listed above have been investigated by Underwriters Laboratories to the Standard(s) indicated on this Certificate, in accordance with the UL Global Services Agreement and the UL-EU Mark Service Terms and Conditions ("Agreement"). The Certificate Holder is entitled to use the UL-EU Mark for the Certified Produu listed on the certificate and manufactured at the production sile(s) listed, in accordance with the terms of the Agreement. Only those products bearing the UL-EU Mark for Europe should be considered as being covered by UL's UL-EU Mark Service. This Certificate shall remain valid through the Expiration date, unless a Standard identified on this Certificate is amended or with drawn prior to that date or there is a non-compliance with the Agreement. uct



Chris Miles

Appendix UL-EU CERTIFICATE

Certificate No. Page Date of Issue UL-EU-01099-CPR 2/4 2018-11-16

This certificate relates to the use of Knauf FP Damper for preventing fire and smoke spreading from one fire compartment to another through the air ductwork system which may penetrate fire separating walls and floors.

The Knauf FP Damper briefly comprises a circular or rectangular galvanised steel shell, containing a number of perforated steel fins and closed on both faces with a steel mesh grille. The interior of the shell and both sides of the fins are lined with an intumescent sheet material.

The detailed scope is given in page 3 of this Certificate. This shows the damper sizes, configurations and acceptable substrates to provide fire resistance periods of up to 180 minutes. All dampers are symetrical and therefore may be exposed from either side $(i \leftrightarrow 0)$.

The products are certificated on the basis of:

- i) Inspection and surveillance of factory production control by UL
- ii) Fire resistance test data in accordance with EN 1366-12: 2014
- iii) Durability and Servicability as defined in ETAG 026-2

The Intumescent inlay of the Knauf FP Damper has demonstrated durability class of Z_2 (Evaluated against the requirements of ETAG 026-2) - intended for use at internal conditions with humidity classes other than Z_1 , excluding temperatures below 0°C.

27-CP-F0855 Issue: 1.0



Appendix UL-EU CERTIFICATE

Certificate No.

UL UL-EU-01099-CPR

Page

Date of Issue

2018-11-16

3/4

| Seal around damper | Minimum Seal Thickness (mm) | Maximum damper size (mm) | Damper length through the element/coaming to both faces (mm) | Number of intumescent Lined Fins | Coaming insulation – Local Interrupted (LI) | Fire Re (mi | esistance ins.) EI |
|-------------------------------------------------------------------------------------|--------------------------------------|--------------------------------|--------------------------------------------------------------------------|----------------------------------------|---------------------------------------------------------------------|----------------|--------------------------|
| 2 x 50 mm Knauf FPC panel 1-S or for small gaps options 1-3 below | 100 | 100 Ø | 100/200 | 3 | Min. 30mm thick Rockwool Alu Mat, Min. 200 mm long to both sides | | |
| | | 125 Ø | | 3 | | | \geq |
| | | 160 Ø | | 5 | | | |
| | | 200 Ø | | 7 | | 120 | 120 |
| | | 250 Ø | | 7 | | | |
| | | 315 Ø | | 9 | | 1 - 1 - 1 | |
| | | 400 Ø | | 13 | | | |
| | | 500 Ø | 300/500 | 15 | Min. 30mm thick Rockwool Alu Mat, Min. 500 mm long to both sides | 90 | 60 |
| | | 630 Ø | | 19 | | | |
| | | 800 Ø | | 25 | | | |
| | | 1250 Ø | | 40 | | | |
| | | 1000 x 600 | | 19 | | 120 | 120 |
| | | 1700 x 1500 | | 39 | | 90 | 90 |

| Knauf FP Damper: Fire Dampers in Concrete Floors Min. 150 mm thick | | | | | | | | | | | |
|-------------------------------------------------------------------------------------------------------|--------------------------------------|----------------------------------------------------|-------------------------------------------------------------------------|----------------------------------------|-----------------------------------------------------------------------|-------------------------|-----|--|--|--|--|
| Seal around damper | Minimum Seal Thickness (mm) | Maximum damper size (mm) | Damper length through the element/coaming to top faces (mm) | Number of intumescent Lined Fins | Coaming insulation – Local Interrupted (LI) | Fire Resistance (mins.) | | | | | |
| | | | | | | Е | EI | | | | |
| 100 mm Knauf FPM - fire protection mortar or for small gaps options 1-3 below | 100 | 100 Ø 125 Ø 200 Ø 250 Ø 315 Ø 400 Ø | 200/200 | 3 3 5 7 7 9 13 | Min. 30mm thick Rockwool Alu Mat, Min. 150 mm long to top side | 180 | 120 | | | | |
| | | 1000 x 600 | 200/500 | 21 | Min. 30mm thick Rockwool Alu Mat, Min. 500 mm long to the top side | 90 | 60 | | | | |
| | | 500 Ø 630 Ø 800 Ø 1000 Ø 1000 x 1000 | 300/500 | 15 19 25 32 | | 90 | 90 | | | | |

Small seal options:

- 1. Gaps less than 10 mm between damper and supporting element (wall or floor) may be sealed with 15 mm Ø Knauf FP Putty to both faces.
- 2. Gaps of 10-30 mm between damper and wall may be sealed with 12.5 mm deep Knauf FPA Acrylic sealant to both faces, backed with 12.5 mm Stonewool (min 33 kg/m³).
- 3. Gaps of 10-30 mm between damper and floor may be sealed with 15 mm deep Knauf FPA Acrylic sealant to both faces, backed with 25 mm Stonewool (min 33 kg/m³).

27-CP-F0855 Issue: 1.0



Appendix UL-EU Certificate

Certification Mark Certificate No. Page Date of Issue

UL-EU mark UL-EU-01099-CPR 4/4 2018-11-16

The UL-EU Mark, as displayed below, shall appear on certified products only. Minimum size is not specified, as long as the Mark is legible. The following is suggested.

The minimum height of the registered trademark symbol ® shall be 1 mm. When the overall diameter of the UL-EU Mark is less than 9.5 mm, the trademark symbol may be omitted if it is not legible to the naked eye.

The UL-EU Mark may appear on a label, nameplate, or may be cast, stamped or molded into the product. When appearing on a label or nameplate, the Manufacturer's name or trademark along with a model number are also required on that same label or nameplate. If cast, stamped or molded, the Manufacturer's name or trademark and model number shall also appear elsewhere on the product.

All content shall be in accordance with the details provided on this UL-EU Certificate.

PROCUREMENT

The Production site may reproduce the Mark or obtain it from a UL authorized supplier. The list of UL authorized suppliers can be found on UL's online directory at www.ul.com.

27-CP-F0855 Issue: 1.0

