### The National Institute of Public Health



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Centre of Occupational Health

National Reference Laboratory for Dust and Microclimate

In Work Environment

# Assessment report No. 1.6/pos/21/19b

## Hygienic assessment of ventilation components - Smoke extraction dampers

Expertise No.:

SZÚ/11893/2021, EX 2011304

Customer:

Mandík a.s., Dobříšská 550, 267 24 Hostomice

Manufacturer:

Mandík a.s., Dobříšská 550, 267 24 Hostomice Type range of smoke extraction dampers SEDM-L

Assessed products: Documents used:

Technical documents and photographic documentation of Mandík a.s., www.mandik.cz
 Certificates and Material sheets – PROMAT a GUMEX products

• Declaration of Performance PM/SEDM-L/01/21/1

• Technical specifications 146/20

Certificate Of Constancy Of Performance 1391-CPR-20/0009

Opinion SZÚ 1.6/pos/19/19b

- Certificate PAVUS a.s. rubber compound and linear sealing of fire dampers
- Certificate ITC Zlín silicon compound
- VDI 6022-1 Hygiene and Hygiene Inspections of HVAC Systems
- VDI 2167-1 Building services in hospitals Heating, ventilation and air-conditioning
- DIN 1946-4 Ventilation in buildings and rooms of health care.
- ČSN EN 13053+A1 Ventilation for buildings Air handling units Rating and performance for units, components and sections
- VDI 3803 Blatt 1 Air-conditioning Structural and technical principles Central airconditioning systems
- ČSN EN 13053 Větrání budov Vzduchotechnické jednotky Hodnocení
  a provedení jednotek, prvků a částí (Ventilation for buildings Air handling units Rating
  and performance for units, components and sections)

#### Product description:

Type range of rectangular multi-blade extraction dampers. The damper body and blades are from Promatect H or Promatect MST fire protection material. Sealing of the blades (after closing) is realized using silicon gasket together with thermoexpandable Promaseal tape on graphite basis. Connecting parts are from zinc galvanized steel, stainless steel, or from a mild steel zinc galvanized after welding; plane bearings are from brass. The dampers are controlled by actuators. For the dampers installed in the ducts or fire separation barriers, there are no emissions from the materials used to the air flow that could contaminate the air; no micro-bacterial contamination or spread of such contamination occurs.

#### **Conclusion:**

Based on the mentioned documentation we conclude that smoke extraction dampers SEDM-L fulfill all hygienic requirements applicable to ventilation components including the requirements of VDI 6022-1, VDI 2167-1, VDI 3803 Blatt 1, DIN 1946-4 and ČSN EN 13053.

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