The National Institute of Public Health



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Centre of Occupational Health National reference laboratory for dust and microclimate in work environment

Opinion No. 1.6/13/16/2

Hygienic assessment of Smoke Extraction dampers

Expertise No.: EX 131083, SZÚ/03013/2013

Purchaser of Opinion: Mandík a.s., Dobříšská 550, 267 24 Hostomice

Manufacturer: Mandík a.s.

Assessed products: **Dampers type series SEDM A SEDS**

Used documents:

1) Technical base documents and photo documentation owned by company Mandík a.s., www.mandik.cz

- 2) Technical base documents for actuating components used for Damper
- 3) List of material Nonflammable PROMAT products (fire resistant board Promatect, meshes Promaglaf, seals Promaseal)
- 4) Safety sheet and Declaration of Conformity for product VINYL-FLEX (plastic safety avers)
- 5) List of material for GUMEX s.r.o. (rubber products sealing systems)
- 6) Protocol PAVUS PK1-01-07-094-C-0 for rubber mixture 51068 and List of material and certificate ITC Zlín No. 10 0481 V/ITC for silicone mixture 51067, manufacturer SicoRubena s.r.o.
- 7) Certification PAVUS, AO 216 No. S-216/C5a/2010/0204 for INTUMES products (Promaseal fiberglass gasket of fire resistance shutters and dampers)
- 8) ČSN EN 13053+A1 Ventilation of buildings Air-handling units Evaluation and realization of units, elements and parts
- 9) EN 13779 Ventilation for non-residential buildings Performance requirements for ventilation and room-conditioning systems
- 10) VDI 6022-1 Ventilation and indoor air quality Hygiene requirements for ventilation and air-conditioning systems and units
- 11) VDI 3803 Air-conditioning, System requirements
- 12) VDI 2167-1 Building services in hospitals Heating, ventilation and air-conditioning
- 13) DIN 1946-4 Air-conditioning systems in Hospital

Product Description:

In meaning of types – Rectangular Smoke Extraction Dampers, with axially situated Fire Blade with possibility of 90° rotation inside the compact damper casing. Casings of the SEDS dampers is made of Galvanized (carbon, or stainless steel). Damper blade is made of non-flammable asbestos free calcium silicate boards Promatect-H with inserted silicone, or rubber sealing tape.

Casings of the SEDM dampers is made of non-flammable asbestos free calcium silicate boards Promatect-MS. Damper blade is made of non-flammable asbestos free calcium silicate boards Promatect-H with inserted silicone, or rubber sealing tape.

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Dampers are equipped by actuating mechanism.

In case of above mentioned Dampers installed into HVAC systems no dangerous, hazardous or risky substances are released to surrounding environment, microbiological contamination is not possible.

Conclusion:

On the base of materials, documents and samples overhanded by Producer (MANDÍK, a.s., Dobříšská 550, 26724, Hostomice, Czech Republic) related with fullscope of produced dampers type series SEDM and SEDS we can declare that MANDÍK, a.s.

Fulfills all the hygienic requirements

given by applicable EN laws, regulations and norms. Named Dampers are suitable for use form hygienic and environmental point of view with respect to their material, constructional and operational design. Named Dampers are usable in all environments and don't affect Health by any meaning.

Ing. Zuzana Mathauserová
Head of National Microclima and Safe&Health laboratory

10.10.2013