**FIRE PROTECTION WIRED MATS**

**KNAUF INSULATION FIRE-TEK WM 908 GGB**

**Type of Insulation:**

Mineral wool wired mat for the fire protection and thermal insulation of round air ducts.

The wired mat must have certification and CE marking in accordance with EN 14303.

**Facing:**

The wired mat shall have aluminium foil between the mineral wool and the wired mesh.

**Description:**

Mineral wool wired mat, stitched with galvanised wire onto galvanised wire mesh and aluminium foil between the mineral wool and the wired mesh. The mineral wool wired mat shall use a mainly bio-based binder, e.g. Ecose® Technology, contain no added formaldehyde and be certified under Eurofins Gold Indoor Air Comfort quality standards or equivalent.

**Main characteristics:**

1. Eurofins Certification Indoor Air Comfort: Gold Standard

2. Fire protection

The wired mats shall be non-combustible with the following reaction to fire according to
EN 13501-1: A1.

The fire resistance class according to EN 13501-3 has to be El 30 (ve ho i↔o)-S with 60 mm insulation thickness, El 60 (ve ho i↔o)-S with 80 mm insulation, El 90 (ve ho i↔o)-S and El 120 (ve ho i↔o)-S with 100 mm insulation, for round air ducts, (fire resistance rating of 30, 60, 90 or 120 minutes for vertical and horizontal round air ducts, with fire resistance from inside and outside the duct incl. smoke leaks).

3. Thermal

The thermal conductivity λ-value shall be according to EN 12667:

0,040 W/(mK) at 50 °C

0,046 W/(mK) at 100°C

0,064 W/(mK) at 200 °C

0,088 W/(mK) at 300 °C

0,122 W/(mK) at 400 °C

0,163 W/(mK) at 500 °C

0,239 W/(mK) at 600 °C

4. Chemicals

AS quality, according to EN ISO 12624: content of chlorides less than 10 ppm.

5. Density

The density must be 80 kg/m³, according to EN ISO 29470.

6. Dimensional tolerances

The dimensional tolerances class shall be T2, according to EN 14303.

7. Additional Certifications

RAL certification

8. Other requirements

Water vapour diffusion resistance coefficient µ-value, according to EN 14303: µ= 1.

Water absorption, according to EN ISO 29767: maximum 1 kg/m².

Melting point of fibres, according to DIN 4102-17: ≥ 1000 °C.

Longitudinal air flow resistance, according to EN 29053: ≥ 40 kPa∙s/m²

**EN designation code:**

MW-EN14303-T2-WS1-CL10

**Standard Dimensions:**

Wired mat length shall be: from 2000 mm to 6000 mm, depending on the thickness.

Wired mat width shall be 500, 900 or 1000 mm.

Wired mat thickness shall be: 60, 80 mm.