**WIRED MATS**

**KNAUF INSULATION POWER-TEK WM 680 SSA**

**Type of Insulation:**

Mineral wool wired mat for the insulation of piping, boiler and tank systems, furnaces, components of waste incineration and chemical plants.

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 stainless steel wire onto stainless steel 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

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

3. Thermal

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

0,040 W/(mK) at 50 °C

0,047 W/(mK) at 100°C

0,061 W/(mK) at 200 °C

0,078 W/(mK) at 300 °C

0,098 W/(mK) at 400 °C

0,125 W/(mK) at 500 °C

0,159 W/(mK) at 600 °C

0,179 W/(mK) at 650 °C

The maximum service temperature is measured according to EN ISO 18097 and shall be minimum   
680 °C.

4. Chemicals

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

5. Density

Density will be 120 kg/m3, according to EN ISO 29470.

6. Dimensional tolerances

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

7. Other certifications

RAL

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: ≥ 65 kPa∙s/m²

**EN designation code:**

MW-EN14303-T2-ST(+)680-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 or 1000 mm.

Wired mat thickness shall be: 30, 40, 50, 60, 70, 80, 90, 100, 120 mm.