**FELT MATS**

**KNAUF INSULATION POWER-TEK FM 640**

**Type of Insulation:**

Mineral wool felt mat for the insulation of piping, elbows and fittings, non-regular units and for fill material of mattresses.

The felt mat must have certifications and CE marking in accordance with EN 14303.

**Facing:**

The felt mat shall have no own facing.

**Description:**

Mineral wool felt mat, with low binder content. The mineral wool felt 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 felt mat 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

0,046 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

0,212 W/(mK) at 600 °C

0,239 W/(mK) at 640 °C

The maximum service temperature is measured according to EN ISO 18097 and shall be minimum
640 °C.

4. Chemicals

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

5. Density

Density will be 80 kg/m³, according to EN ISO 29470.

6. Dimensional tolerances

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

7. Other certifications

Keymark, 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: ≥ 40 kPa∙s/m²

**EN designation code:**

MW-EN14303-T2-ST(+)640-WS1-CL10

**Standard Dimensions:**

Felt mat length shall be: from 2000 mm to 8000 mm, depending on the thickness.

Felt mat width shall be 500 or 1000 mm.

Felt mat thickness shall be: 30, 40, 50, 60, 80, 100 mm.