**FELT MATS**

**KNAUF INSULATION POWER-TEK FM 620 ALU**

**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 a have glass fibre reinforced aluminium foil on one side.

**Description:**

Mineral wool felt mat, with low binder content and a glass fibre reinforced aluminium foil on one side. 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 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

0,067 W/(mK) at 200 °C

0,094 W/(mK) at 300 °C

0,130 W/(mK) at 400 °C

0,173 W/(mK) at 500 °C

0,228 W/(mK) at 600 °C

The maximum service temperature is measured according to EN 14706 and shall be minimum
620 °C.

4. Chemicals

AS quality, according to EN 13468: content of chlorides less than 10 ppm.

5. Dimensional tolerances

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

6. Other requirements

Water vapour diffusion resistance, according to EN 12086: Sd ≥ 200 m.

Water absorption, according to EN 1609: maximum 1 kg/m².

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

Longitudinal air flow resistance, according to EN 29053: ≥ 20 kPa∙s/m²

**EN designation code:**

MW-EN14303-T2-ST(+)620-WS1-MV2-CL10

**Standard Dimensions:**

Felt mat length shall be: from 3000 mm to 10000 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.

**FELT MATS**

**KNAUF INSULATION POWER-TEK FM 640 ALU**

**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 a have glass fibre reinforced aluminium foil on one side.

**Description:**

Mineral wool felt mat, with low binder content and a glass fibre reinforced aluminium foil on one side. 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

0,062 W/(mK) at 200 °C

0,084 W/(mK) at 300 °C

0,112 W/(mK) at 400 °C

0,146 W/(mK) at 500 °C

0,190 W/(mK) at 600 °C

0,211 W/(mK) at 640 °C

The maximum service temperature is measured according to EN 14706 and shall be minimum
640 °C.

4. Chemicals

AS quality, according to EN 13468: content of chlorides less than 10 ppm.

5. Dimensional tolerances

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

6. Other certifications

Keymark, RAL.

7. Other requirements

Water vapour diffusion resistance, according to EN 12086: Sd ≥ 200 m.

Water absorption, according to EN 1609: 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-MV2-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.

**FELT MATS**

**KNAUF INSULATION POWER-TEK FM 660 ALU**

**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 a have glass fibre reinforced aluminium foil on one side.

**Description:**

Mineral wool felt mat, with low binder content and a glass fibre reinforced aluminium foil on one side. 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

0,060 W/(mK) at 200 °C

0,079 W/(mK) at 300 °C

0,102 W/(mK) at 400 °C

0,131 W/(mK) at 500 °C

0,166 W/(mK) at 600 °C

0,190 W/(mK) at 660 °C

The maximum service temperature is measured according to EN 14706 and shall be minimum
660 °C.

4. Chemicals

AS quality, according to EN 13468: content of chlorides less than 10 ppm.

5. Dimensional tolerances

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

6. Other certifications

Keymark, RAL.

7. Other requirements

Water vapour diffusion resistance, according to EN 12086: Sd ≥ 200 m.

Water absorption, according to EN 1609: maximum 1 kg/m².

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

Longitudinal air flow resistance, according to EN 29053: ≥ 50 kPa∙s/m²

**EN designation code:**

MW-EN14303-T2-ST(+)660-WS1-MV2-CL10

**Standard Dimensions:**

Felt mat length shall be: from 2000 mm to 7000 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.