**HIGH TEMPERATURE BOARDS**

**KNAUF INSULATION POWER-TEK BD 680 ALU**

**Type of Insulation:**

Mineral wool high temperature board for the insulation of vessel walls, columns, power plant boilers, furnaces, flue gas ducts.

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

**Facing:**

The board shall a have glass fibre reinforced aluminium foil on one side.

**Description:**

Board for high temperature applications with a glass fibre reinforced aluminium foil on one side. The mineral wool board 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 board 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

0,045 W/(mK) at 100°C

0,059 W/(mK) at 200 °C

0,075 W/(mK) at 300 °C

0,096 W/(mK) at 400 °C

0,121 W/(mK) at 500 °C

0,153 W/(mK) at 600 °C

0,180 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 T5, according to EN 14303.

7. Other certifications

RAL

6. Other requirements

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

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: ≥ 30 kPa∙s/m²

**EN designation code:**

MW-EN14303-T5-ST(+)680-WS1-MV2-CL10

**Standard Dimensions:**

High temperature board length shall be 1000 mm.

High temperature board width shall be 600 mm.

High temperature board thickness shall be: 20, 30, 40, 50, 60, 70, 80, 90, 100 mm (maximum possible thickness 200 mm).