**BOARDS**

**KNAUF INSULATION THERMO-TEK BD 050 VWS**

**Type of Insulation:**

Mineral wool board for the insulation of air ducts, air conditioning systems and sound absorbers.

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

**Facing:**

The board shall have a white colour glass veil facing on one side.

**Description:**

Mineral wool board with a black colour glass veil facing on one side. The board shall have a biological – derived binder, e.g. Ecose Technology, without the addition of formaldehyde to enable an improvement of the indoor air quality.

**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:

0,035 W/(mK) a 10 °C

0,039 W/(mK) a 40 °C

0,041 W/(mK) a 50 °C

0,048 W/(mK) a 100 °C

0,058 W/(mK) a 150 °C

0,071 W/(mK) a 200 °C

0,088 W/(mK) a 250 °C

The maximum service temperature and shall be minimum 250 °C, EN ISO 18097.

4. Acoustics

The practical sound absorption coefficient αp for thickness 30 mm shall be according to EN 11654:

0,10 at 125 Hz

0,35 at 250 Hz

0,75 at 500 Hz

0,95 at 1000 Hz

1,00 at 2000 Hz

1,00 at 4000 Hz

The practical sound absorption coefficient αp for thickness 50 mm shall be according to EN 11654:

0,20 at 125 Hz

0,65 at 250 Hz

0,95 at 500 Hz

1,00 at 1000 Hz

1,00 at 2000 Hz

1,00 at 4000 Hz

The sound absorption class for thickness 50 mm shall be according to EN 11654– class A.

5. Chemicals

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

6. Density

Density shall be 50 kg/m³, according to EN ISO 29470.

7. Dimensional tolerances

The dimensional tolerances class shall be T5, according to EN 14303.

8. Other certifications

RAL certification; M1 classification.

9. Other requirements

Water vapour diffusion resistance coefficient, 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: ≥ 10 kPa∙s/m².

**EN designation code:**

MW-EN14303-T5-ST(+)250-WS1-CL10

**Standard Dimensions:**

Board length shall be 1000 mm.

Board width shall be 600 mm.

Board thickness shall be: 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, 140, 150, 160, 170, 180, 190, 200, 210, 220, 230, 240, 250, 255 mm.