



March 2010

# Earthwool® Universal Slabs Performance

# For multiple applications

#### **Description**

Earthwool Universal Slabs are rock mineral wool slabs, available in a range of densities from 33 to 200 kg/m<sup>3</sup>. The standard products are supplied un-faced, but slabs can also be manufactured with a factory applied foil or tissue facing, they are also available in a water repellent grade.

#### **Application**

Earthwool Universal Slabs are used for a wide range of thermal and acoustic insulation applications in buildings, building services and industry.

#### **Standards**

Earthwool Universal Slabs are made from non-combustible inorganic rock mineral wool, defined as mineral wool in BS 3533:1981 and are manufactured to a Quality Assurance system which complies with BS EN ISO 9001:2000 and Product Standard EN 13162.

#### **Thermal**

The thermal conductivity of Earthwool Universal Slabs varies with density from 0.035 to 0.037W/mK.

Earthwool Universal Slabs are classified as Euroclass A1 to BS EN ISO 13501-1.

## **Benefits**

- Wide range of densities
- Non-combustible
- Excellent thermal and acoustic properties







# Earthwool® Universal Slabs

#### **Durability**

Earthwool Universal Slabs are odourless, non-hygroscopic, rot proof, do not sustain vermin and will not encourage the growth of fungi, mould or bacteria.

#### Fire performance

Earthwool Universal Slabs are classified as non-combustible to BS 476:Part 4:1970 (1984) and Euroclass A1, Class 1 Surface Spread of Flame to BS 476:Part 7:1997 and Class 'O' to the Building Regulations.

#### Moisture resistance

When exposed to 90% relative humidity at 20°C, Earthwool Universal Slabs absorb less than 0.004% of moisture. Earthwool Universal Slabs are non-wicking when tested to BS 2972:1989:Section 12.

#### Vapour resistance - resistivity

Earthwool Universal Slabs offer negligible resistance to the passage of water vapour and have a vapour resistivity of 7.00MNs/g.m.

### **Operating temperatures**

Earthwool Universal Slabs can be used up to continuous operating temperatures of 850°C, dependent on density.

#### **Environmental**

Earthwool Universal Slabs are free from CFCs, HCFCs and any other material with ozone depletion potential in their manufacture and content and represent no known threat to the environment. Earthwool Universal Slab's manufacture has a low impact on the environment and is classified as Zero ODP and Zero GWP.

#### Handling and storage

Earthwool Universal Slabs are easy to handle and install, being lightweight and easily cut to size, where necessary. Earthwool Universal Slabs are supplied in polythene packs which are designed for short term protection only. For longer term protection on site, the product should either be stored indoors, or under cover and off the ground. Earthwool Universal Slabs should not be left permanently exposed to the elements.

Knauf Insulation mineral wool products with ECOSE® Technology benefit from a formaldehyde-free binder made from rapidly renewable bio-based materials instead of petroleum-based chemicals which is up to 70% less energy intensive. The technology has been developed for Knauf Insulation's glass and rock mineral wool products, enhancing their environmental credentials without affecting the thermal, acoustic or fire performance. Insulation products made with ECOSE® Technology contain no dye or artificial colours – the colour is completely natural.



# Earthwool® Universal Slab

	Thickness	Thermal conductivity	Thermal resistance	Length	Width	Slabs per pack	Area per pac
	(mm)	(W/mK)	(m²K/W)	(mm)	(mm)		(m²)
	100	0.037	2.70	1200	600	5	3.60
	70	0.037	1.85	1200	600	8	5.76
RS33	60	0.037	1.60	1200	600	8	5.76
~	50	0.037	1.35	1200	600	10	7.20
	40	0.037	1.05	1200	600	12	8.64
	100	0.035	2.85	1200	600	5	3.60
	75	0.035	2.10	1200	600	6	4.32
	60	0.035	1.70	1200	600	8	5.76
RS45	50	0.035	1.40	1200	600	10	7.20
~	40	0.035	1.10	1200	600	12	8.64
	30	0.035	0.85	1200	600	16	11.52
	25	0.035	0.70	1200	600	20	14.40
	100	0.035	2.85	1200	600	4	2.88
	75	0.035	2.10	1200	600	6	4.32
	60	0.035	1.70	1200	600	7	5.04
RS60	50	0.035	1.40	1200	600	9	6.48
~	40	0.035	1.10	1200	600	12	8.64
	30	0.035	0.85	1200	600	14	10.08
	25	0.035	0.70	1200	600	18	12.96
	100	0.035	2.85	1200	600	3	2.16
	75	0.035	2.10	1200	600	4	2.88
RS80	60	0.035	1.70	1200	600	5	3.60
2	50	0.035	1.40	1200	600	6	4.32
	40	0.035	1.10	1200	600	8	5.76
	100	0.035	2.85	1200	600	3	2.16
	75	0.035	2.10	1200	600	4	2.88
	60	0.035	1.70	1200	600	5	3.60
RS100	50	0.035	1.40	1200	600	6	4.32
8	40	0.035	1.10	1200	600	7	5.04
	30	0.035	0.85	1200	600	10	7.20
	25	0.035	0.70	1200	600	12	8.64
RS1 28	50	0.035	1.40	1200	600	4	2.88
낊	100	0.035	2.85	1200	600	2	1.44
	75	0.035	2.10	1200	600	3	2.16
RS140	50	0.035	1.40	1200	600	4	2.88
RS	40	0.035	1.10	1200	600	5	3.60
-	30	0.035	0.85	1200	600	7	5.04
RS200	50	0.036	1.35	1200	600	3	2.16

## **Knauf Insulation Ltd**

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