



Crown Duct Roll, Crown Duct Slab, and Crown Duct Slab Plus

Description

Crown Duct Roll is a strong, flexible roll of non-combustible, glass mineral wool with a bright class 'O' aluminium foil facing on one side.

Crown Duct Slab and Crown Duct Slab Plus are both strong, rigid slabs of non-combustible, glass mineral wool with a bright class 'O' reinforced aluminium foil facing on one side. Crown Duct Slab Plus has the better thermal conductivity and higher density.

Product Data

Thickness (mm)	Thermal conductivity (W/mK)	Thermal resistance (m ² K/W)	Nominal Density (kg/m ³)	Length (m)	Width (mm)	Area per pack (m ²)	Slabs per pack
Crown Duct Roll							
50	0.033	1.50	28	9.00	1200	10.80	–
40	0.033	1.20	28	12.00	1200	14.40	–
30	0.033	0.90	28	15.00	1200	18.00	–
25	0.033	0.75	28	18.00	1200	21.60	–
Crown Duct Slab							
50	0.032	1.55	32	1.2	600	5.76	8
40	0.032	1.25	32	1.2	600	7.20	10
25	0.032	0.75	32	1.2	600	11.52	16
Crown Duct Slab Plus							
50	0.030	1.65	48	1.2	600	5.04	7
40	0.030	1.30	48	1.2	600	6.48	9
30	0.030	1.00	48	1.2	600	8.64	12
25	0.030	0.80	48	1.2	600	10.08	14

All dimensions are nominal

Performance

Thermal

Crown Duct Roll has a thermal conductivity of 0.033 W/mK at 10°C.

Crown Duct Slab has a thermal conductivity of 0.032 W/mK at 10°C

Crown Duct Slab Plus has a thermal conductivity of 0.030 W/mK at 10°C – see table overleaf.

Benefits

- Excellent thermal, acoustic and fire performance
- Easy to handle and install



The facings provide a bright, washable surface and a high level of vapour resistance.

Application

Crown Duct Roll, Crown Duct Slab and Crown Duct Slab Plus are used for the thermal and acoustic insulation of ductwork in heating, ventilating and air-conditioning systems

Crown Duct Roll is suitable for all shapes of ductwork including:

- Round, oval and flat-oval ductwork
- Square and rectangular ductwork

Crown Duct Slab is used for the general insulation of square or rectangular ducts and equipment and is suitable for insulating cold water storage and feed and expansion tanks.

Crown Duct Slab Plus is particularly suitable for the thermal and acoustic insulation of square or rectangular ducts and equipment operating up to 230°C. In combination with suitable cladding, it provides an excellent basis for noise breakout treatment from ductwork.

Standards

The mineral wool of Crown Duct Roll, Crown Duct Slab and Crown Duct Slab Plus is a non-combustible inorganic glass wool, defined as mineral wool in BS 3533: 1981 and is manufactured in accordance with BSI Quality Assurance Standard BS EN ISO 9001: 2000

Operating Temperatures

Crown Duct Roll, Crown Duct Slab and Crown Duct Slab Plus can be used up to continuous operating temperatures of 230°C and down to cryogenic

Thermal conductivity

Mean temperature °C	Duct Roll (W/mK)	Thermal conductivity	
		Duct Slab (W/mK)	Duct Slab Plus (W/mK)
10	0.033	0.032	0.030
25	0.035	0.034	0.032
50	0.039	0.038	0.035
75	0.046	0.042	0.039
100	0.052	0.047	0.044
125	0.059	0.053	0.049

Note: Tested in accordance with BS 874: 1973 (1980).

temperatures provided that a 100% vapour barrier is maintained. The surface temperature of the facing should not exceed 80°C.

Durability

Crown Duct Roll, Crown Duct Slab and Crown Duct Slab Plus are rot proof, do not sustain vermin and will not encourage the growth of fungi, mould or bacteria. Crown Duct Roll, Crown Duct Slab and Crown Duct Slab Plus are odourless and non-hygroscopic.

Vapour Resistance and Condensation

Crown Duct Roll, Crown Duct Slab and Crown Duct Slab Plus are both faced with a bright class 'O' aluminium foil facing, which acts as a vapour control layer.

Fire Performance

The base glass mineral wool of Crown Duct Roll, Crown Duct Slab and Crown Duct Slab Plus is non-combustible to BS 476: Part 4: 1970 (1984) and Class 1 surface spread of flame to BS 476: Part 7: 1997. The glass mineral wool and the foil

facing comply with the Class 'O' requirements of the Building Regulations when tested to BS 476: Part 6: 1989 and Part 7: 1997.

Environmental

Crown Duct Roll, Crown Duct Slab and Crown Duct Slab Plus 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.

Crown Duct Roll, Crown Duct Slab and Crown Duct Slab Plus's manufacture has a low impact on the environment and is classified as Zero ODP and Zero GWP.

Handling and Storage

Crown Duct Roll, Crown Duct Slab and Crown Duct Slab Plus are easy to handle and install, being lightweight and easily cut to size.

Crown Duct Roll, Crown Duct Slab and Crown Duct Slab Plus 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. Installation instructions are on every pack.

Crown Duct Roll, Crown Duct Slab and Crown Duct Slab Plus should not be left permanently exposed to the elements.

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