

# Pumica K









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Vermiculite is the basic material for Pumica. This light, incombustible insulation grain is exfoliated at high temperatures (about 900°C) under controlled conditions. The product is mixed with various inorganic binding agents, pressed into the required shape and size and ceramically bonded in a furnace. This mica-like fire-resistant, acoustic and thermally insulating granular material is chemically neutral, does not contain asbestos or other fibres and is entirely environmentally friendly.

Density*	400	500	600	700
Thermal conductivity	$\lambda_{_{10}} = 0,11$ W/(mK)	$\lambda_{10} = 0,125$ W/(mK)	$\lambda_{10} = 0,14$ W/(mK)	$\begin{array}{l} \lambda_{_{10}}=0,17\\ \text{W/(mK)} \end{array}$
Pressure strength	0,8 N/mm <sup>2</sup>	1,2 N/mm <sup>2</sup>	1,9 N/mm²	2,2 N/mm <sup>2</sup>
Bending strength	0,2 N/mm <sup>2</sup>			
Specific heat capacity	C=838 J/kgK	C=838 J/kgK	C=838 J/kgK	C=838 J/kgK
Maximum operating temperature	1100 °C	1100 °C	1100 °C	1100 °C
Melting point	about 1315 °C	about 1315 °C	about 1315 °C	about 1315 °C
Smoke index	0	0	0	0
(NEN 6066)	0	0	0	0
Burning behaviour (NEN 6064)	incombustible	incombustible	incombustible	incombustible
(NEN 6066) Burning behaviour	0 incombustible	0 incombustible	0 incombustible	0 incombustible

\* weights can vary ±10%.

Technical specifications of Pumica K

#### **Applications of Pumica K**

The product can be used for various purposes, including covering for floor or roof beams, column covering, covering of suspenders, tie rods and round columns, but it can also be used as insulation in heaters, boilers or fireplaces, for example.

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Insulation materials







Pumica can be finished with one of the following attractive/chip-proof finishes: steel plate, blue plastering/ready to wallpaper, fine sanding or spack (spray), tiling, plywood/chipboard or technical/functional.

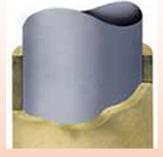
Pumice K delivery range		
Nominal width	500/ 600 mm	
Nominal length	700/ 1000/ 1200 mm	
Nominal thickness	12/ 14/ 16/ 18/ 20/ 25/ 30/ 35/ 40 -100 mm	
Other sizes are available on request.		
Sizes of dishes and shapes on request. Custom specifications possible.		

#### **Test reports**

- B.83.674 of December 1983 TNO:
- IBMB: 3429/ 3681 of October 1992
- Firto: TE 4846/ 6811 of February 1984
- UL: R 13200 of April 1988

### **Calculate insulation thickness**

The required insulation thickness of Pumica K depends on the required fireresistance in minutes, the permitted or calculated critical steel temperature as well as the ratio factor of the steel surface to the steel content (F/A factor). If required, we can calculate the required insulation thickness for you.





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