

# VERMICULITE HD 1200

## Technical specification



Application temperature	°C	1100
Bulk density	kg/m <sup>3</sup>	1200
Modulus of Rupture	N/mm <sup>2</sup>	6.5
Cold Crushing Strength	N/mm <sup>2</sup>	10.5
Linear Reheat Shrinkage (1100°C/12h)	%	< 2.0
Thermal Expansion, linear (20 – 800°)	%	0.71
Fire protection behaviour		non-combustible
Thermal Conductivity		
200°C	W/mK	0.31
400°C	W/mK	0.32
600°C	W/mK	0.33
Chemische Analyse (RFA)		
SiO <sub>2</sub>		65
Al <sub>2</sub> O <sub>3</sub>		10
Fe <sub>2</sub> O <sub>3</sub>	%	4.5
MgO		12
K <sub>2</sub> O		7.5
Standard size (L x W)	mm	1000 x 610
Thickness	mm	20 – 80

Vermiculite HD 1200 boards are based on the well known mineral Vermiculite, which is related to mica. Mixed with different binders and shaped under high pressure this product is used in all refractory applications, where high mechanical strength in combination with low thermal conductivity is asked for.

HD stands for „high density“ and describes the very high density and the excellent edge strength of this product.

### Application fields:

Industrial furnace construction, fireplaces and stoves, wood burning boilers, aluminium smelting, glass processing.

- (1) We are able to supply special formats and special thicknesses on request. We will be pleased to manufacture stampings, milled parts or cuttings according to your drawings.
- (2) With tiles especially, the classification temperature is not to be equated with the maximum application temperature, in particular when physical conditions such as tensile or pressure loads are involved. For applications as high-temperature insulation, lower temperatures must always be applied. In these cases, the Engineering department of our company will offer assistance and support.
- (3) Heat transmission calculations for this material can be requested from our Engineering department.

**The information contained in this publication serves only for purposes of clarification, and is not intended to form the basis of contractual obligations.**

Further information and advice on specific details of the products described can be obtained in writing from Techno-Physik Eng. GmbH (Germany). The Techno-Physik Group is consistently running product development programmes and reserves the right to modify product specifications at any time without notice. The customer/user is thus always obliged to ensure that the material from Techno-Physik Eng. GmbH is suitable for his specific purposes. The specified values are average figures determined from current production and are intended only for information. Warranty claims cannot be derived from these figures. We recommend that you should always test the material for your application.

Sales via any company in the Techno-Physik Group are subject to the General Terms and Conditions of Sale of the respective company, a copy of which is available on request.