

Peril Production s. r. o Svitavská 500 678 01 Blansko, Czech Republic	PERIL	Product sheet PERIL 01/2008
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Description: PERIL are shaped insulating products with a very low bulk density. They are notable for their outstanding thermal properties and easy workability. PERIL products conform to all ecological standards, and regarding their chemical nature they present no risk to health and safety.

Use: PERIL special shaped bricks are intended to be used for secondary lining of all thermal aggregates, such as furnace and kiln equipment and facilities for ceramics industry and porcelain production, for chemical and petrochemical industries, for insulation of melting tanks and pools found in glassworks, for insulation of power station heat installation units, for insulation employed in steel works, metallurgy, for blast furnaces, air heaters, coking plants, for non-ferrous metal heat-treatment equipment, for insulation of equipment found in annealing shops, hardening shops and in other metallurgical processing sections, for insulation of heat installation units found in cement and lime works, incinerators and crematories. Finally, they can also be used in building industry being a suitable and convenient material for stove-, fireplace- and kiln-builders.

It is recommended that the products are bound with suitable fine refractory cement or laid dry into the interlayer in the furnace lining. The PERIL shaped products are designed for use as non-supporting masonry.

Quality range: PERIL 25, PERIL 35, PERIL 45, PERIL 55, PERIL 65, PERIL 75, PERIL 105

<i>Property:</i>	<i>Guaranteed value</i>							<i>Testing procedure:</i>	
	Peril 25	Peril 35	Peril 45	Peril 55	Peril 65	Peril 75	Peril 105		
Classification temperature (°C)	750	750	750	750	900	1100	1250	EN 1402-6	
Bulk density (kg/m ³)	max. 250	max. 350	max. 450	max. 550	max. 650	max. 750	max. 1050	EN 1094-4	
Cold crushing strength (MPa)	min. 0,6	min. 1,0	min. 1,8	min. 2,2	min. 2,8	min. 3,0	min. 4,0	EN ISO 8895	
<i>Normal value</i>									
Thermal conductivity (W/mK)	50°C	0,072	0,082	0,100	0,155	0,190	0,217	0,249	EN 993-14
	300°C	0,095	0,105	0,130	0,185	0,217	0,251	0,321	
	600°C	0,130	0,140	0,160	0,205	0,233	0,294	0,434	
	750°C	0,160	0,170	0,190	0,240	0,260	0,342	0,557	
	800°C	-	-	-	-	0,273	0,357	0,595	
	900°C	-	-	-	-	0,317	-	-	
	1000°C	-	-	-	-	-	0,427	0,811	
	1100°C	-	-	-	-	-	0,497	0,990	
Chemical composition (%)	SiO ₂	52,8		50,0		49,0	44,3	34,0	ENV 955-4
	Al ₂ O ₃	9,2		16,0		18,0	22,5	33,0	
	TiO ₂	0,2		0,1		0,6	0,4	0,1	
	Fe ₂ O ₃	2,2		2,9		2,5	2,1	2,5	
	CaO	21,2		15,0		16,0	17,9	15,0	
	MgO	0,6		1,0		1,0	0,4	1,0	
	K ₂ O	3,2		3,5		3,0	2,1	3,5	
	Na ₂ O	1,5		1,5		1,0	0,9	1,5	
The loss by annealing	7,6		9,0		7,5	8,1	9,0		
Humidity (%)	7					9		EN 1402-3	

Sizes and shapes: According to the basic product shape range.
 / NF 1 230 x 114 x 10–100 mm
 / NF 2 250 x 124 x 10–100 mm
 / C 22 220 x 110 x 10–100 mm
 / wedge 2H6 (K6)
 /slabe 609,6 x 406,4 x 25–60 mm

Dimension tolerances: A tolerance of ± 1mm applies to all dimensions.

Packaging: The products are placed on the pallets (each 4th layer interlaid by a carton board, fixed by a strip and provided with shrink foil. Pallet edges under the strips are reinforced by pressed paper edge pieces 5 mm thick, namely all the pallet length and width. The identification sheet is attached to each pallet, under the foil on both the long and the short side.

Storing: The products should be stored in dry warehouses at a moderate temperature (min. +5°C).