

# MATERIAL DATA SHEET



Data sheet No.  
NORMATON BS/02

Date  
2013-05-23

Grade	<b><i>NORMATON BS</i></b>
Product group	<b><i>FIRECLAY BRICKS</i></b>
Application	<i>Structural lining of heating units</i>
Remarks	-

Chemical analysis	Declared value	Typical value	Unit	Standard
$Al_2O_3$	32,0	35,0	%	PN EN ISO 12677 PN-85/H-04154
$Fe_2O_3$	3,00	2,50	%	

Properties	Declared value	Typical value	Unit	Standard
Bulk density	1,95	2,00	g/cm <sup>3</sup>	PN EN 993-1
Apparent porosity	23	20	%	PN EN 993-1
Cold crushing strength	20	25	N/mm <sup>2</sup>	PN EN 993-5

Additional informations	Declared value	Typical value	Unit	Standard
Refractoriness	-	31	SC	PN EN 993-12
Refractoriness under the load $t_{0,6}$	-	1320	°C	PN-69/H-04178
Thermal conductivity				PN EN 993-15
800°C	-	1,30	W/mK	
1100°C	-	1,40	W/mK	
Linear thermal expansion				PN EN 993-19
800°C	-	0,40	%	
1100°C	-	0,60	%	
Linear after-contraction or after-expansion				PN EN 993-10
1350°C/2h	-	+/- 0,2	%	
Thermal shock resistance at 950°C (water changes)	-	8	n	DIN 51068-1

Product data sheet represent typical average values obtained in accordance with generally accepted, standardized testing methods conducted under controlled conditions. Declared values correspond to mechanically pressed, standard bricks (NF1, NF2) and cannot be unconditionally transferred to other formats. Products properties may be subjected to fluctuations typical of the manufacturing process. PCO reserves the right to modify technical data sheet at any time without prior notice.

**Polska Ceramika Ogniotrwała „ŻARÓW” S.A.**

Ul. Hutnicza, 58-130 ŻARÓW (POLAND) tel: +48 74 856 26 00 fax.: (+48 74) 858 04 65 e-mail: [pco@pco.pl](mailto:pco@pco.pl)

