



SUPER INSULATING BRICKS

		ISOLMOS 450	ISOLMOS 550	AW 500	AB-45	AB-50	AB-55	AB-60	AB-70
Classification ISO 2245 : 2006		85-L	85-L	85-L	90-L	90-L	95-L	100-L	100-L
Density ISO 5016 : 1997	Kg/m ³	425	500	500	450	500	550	600	700
Max service temperature	°C	900	900	900	950	950	1000	1050	1050
Cold crushing strength ISO 8895 : 2006	MPa	1.3	2.5	1.8	1.8	2.5	3.5	4.5	6.0
Permanent Linear Change ISO 2477:2005 12h @Temp.	% °C	> -1.0 850	> -1.0 850	> -1.0 850	> -1.0 900	-0.5 900	-0.5 950	-0.5 1000	-0.5 1000
Thermal Conductivity ASTM C 182-88:2009									
Mean T. 200°C	W/m°C	0.10	0.12	0.13	0.12	0.13	0.14	0.16	0.18
Mean T. 400°C		0.12	0.14	0.15	0.14	0.15	0.16	0.18	0.20
Mean T. 600°C		0.14	0.16	0.18	0.16	0.17	0.18	0.20	0.22
Mean T. 800°C						0.21	0.23	0.25	
Chemical Analysis XRF									
SiO ₂	%	65.0	65.0	67.5	64.5	64.5	64.0	63.4	62.7
Al ₂ O ₃		15.0	15.0	22.5	17.3	17.5	17.6	18.0	18.5
TiO ₂		0.5	0.5	1.1	0.6	0.6	0.6	0.6	0.6
Fe ₂ O ₃		3.5	3.5	2.0	3.3	3.1	3.5	3.5	3.5
CaO		7.5	7.5	0.9	5.5	5.9	5.9	6.6	6.8
MgO		1.3	1.3	0.8	1.6	1.6	1.6	1.6	1.6
K ₂ O		5.0	5.0	2.9	3.8	3.6	3.6	3.6	3.6
Na ₂ O		1.1	1.1	1.4	1.9	1.7	1.7	1.2	1.2
P ₂ O ₅		0.5	0.5	0.9	tr	tr	tr	tr	tr
Thermal Expansion 20 to 750 °C EN 821-1 : 1995	%	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Refractoriness ISO 528 : 1983	°C	1140	1140	1400	1200	1200	1200	1200	1200
Refractoriness Under Load, T05 Load: 0.05 MPa ISO 1893 : 2008	°C	810	810	860	890	890	960	960	990
Total Porosity ISO 5016 : 1997	%	82	80	80	82	80	78	76	72
Dimensional Tolerances (Standard squares)									
Machined (all dimensions)	mm	± 1.0	± 1.0	± 1.0	± 1.0	± 1.0	± 1.0	± 1.0	± 1.0
Trimmed (length)		± 2.0		± 2.0	± 2.0	± 2.0	± 2.0	± 2.0	
(width)		± 2.0		± 2.0	± 2.0	± 2.0	± 2.0	± 2.0	
(thickness)		± 1.5		± 1.5	± 1.5	± 1.5	± 1.5	± 1.5	
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The above physical and chemical properties of Insulating Brick represent values obtained on standard squares in accordance with accepted test methods and are subject to normal manufacturing variations. This information is supplied as a technical service and may change without notice. Results should not be used for specification purposes, unless agreed with seller.