

IFB Refractories SAS

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Product Definition

Insulating Bricks & Slabs

Product : **RL13-11**

Other names : **HR RL13-11, IR10**

Maximum Classified Temperature : **1350°C**

Mark on the brick : RL13-11

Ref date : 2017-B

Brand Code : 7405

Description : Very good mechanical resistance, and very good resistance under charge at high temperature.

Properties :	Standards	Units	Average μ	Std. Dev. σ	Limits	
					Tl (low)	Th (high)
Classification	ISO 2245		135			
	ASTM C155					
Bulk density	ISO 5016	g/cm ³	1,06	0,05		1,18
Cold Crushing Strength (// to extrusion or et 90° to pressing direction)	ISO 8895	Mpa	9	1,2	6,5	
Permanent Linear Change 12h at 1350°C	ISO 2477	%	-0,5		-1,8	
Chemical Analysis :	XRF	%				
	Al ₂ O ₃		36		34	
	SiO ₂		57			
	Fe ₂ O ₃		1,3			1,6
	TiO ₂		1			1,5
	CaO+MgO		0,6			1
	Na ₂ O+K ₂ O		4			4,9
Thermal Conductivity :	ASTM C182	W/m.K				
(through 114mm dimension)	200°C		0,28			0,36
	400°C		0,34			0,43
	600°C		0,38			0,47
	800°C		0,42			0,52
	1000°C		0,45			0,56
	1200°C					
Reversible Thermal Expansion : (20°C to 1000°C)	NF B40 308	%	0,5			
Pyroscopic Cone Equivalent :	ISO 528	°C	1730			

Dimensional tolerances:		Standard Pieces		Non-Standard Pieces
		N : Not machined	Length	S : $\pm 2.5\%$, R : $\pm 0.5\%$, mini $\pm 1.5\text{mm}$
S : Surfaced	Width	S : $\pm 2.5\%$, R : $\pm 0.5\%$, mini $\pm 1.5\text{mm}$		
R : 6 faces machined	Thickness	S : $\pm 1.5\text{mm}$, R : $\pm 0.5\%$, mini $\pm 1.5\text{mm}$		
	Squaring	1mm / 100mm		

Other Information :	
Recommended mortar	C 1400S or H C : Heat set S : Dry / Powder
	RL 13S or H RL : Air set H : Ready to Use
Manufacturing Plant	PRF : Bricks and slabs 6 faces machined

Physical properties are based on averages of routine quality controls carried out from bricks 230 x 114 x 64 mm or 230 x 114 x 76 mm. Averages and standard deviations are indicative values, limits (Tl and Th) are guaranteed values.

Tests frequency, sampling, and acceptance values for our products are detailed in our C.T.C/Q.P.D. (Document n°8030)