

1.2 Dense Refractory Brick: Grade H-01

Flue/Head wall Essential properties and characteristics for grade H-01			
Properties	UNIT	Value	
Refractoriness Under Load T0.5 EN ISO 1893	°C	≥ 1480	
Bulk Density EN 993-1	g/cm3	≥2.3	
Apparent Porosity EN 993-1	%	13 ≤ AP ≤ 17	
Cold Crushing Strength EN 993-5	N/mm2	≥45	
Thermal Shock Resistance DIN 51068, water quenching	No. of Cycles	≥15	
Creep at 1280°C, 0.2 N/mm2 ASTM C288 – 87 / EN ISO 12676	V15-25 %/h Dmax till 25 h %	≤0.005 ≤0.3	
Disintegration in CO Atmosphere Unfired sample, testing 200 h at 500°C ASTM C288 – 87 / EN ISO 12676	Classification	A&B	
Chemical Analysis EN ISO 21587-2, EN ISO 21587-3, EN ISO 12677			
Al2O3	wt%	46 ≤ Al2O3 ≤52	
Fe2O3		≤ 1.1	
CaO + MgO		≤0.6	
Na2O + K2O		≤0.6	
TiO2		≤ 1.4	
SiO2		47-50	
Thermal Conductivity ASTM C202-93	W/mK	400°C	1.2-1.6
		800°C	1.4-1.8
		1200°C	1.7-2.1
Thermal Expansion 20°C – 1000°C EN 993-19	%	0.5-0.7	
Hot Modules of Rupture at 1300°C EN 993-7	MPa	6-10	

L(mm)	W(mm)	H(mm)	V(dm3)	NO.	Drawing		PCS	Grade	type	Wight (Kg)
434	110	111	4.6	103	ZN	235203	23501	H-01	F3	259,451
453	108	111	4.71	161	ZN	247414	229	H-01	E7	2,589
316	107	111	3.26	108	ZN	235221	16451	H-01	F8	128,713
316	216	111	6.58	109	ZN	235222	27026	H-01	F9	426,795
540	107	111	5.57	105	ZN	235212	31727	H-01	F5	424,127
540	216	111	11.24	106	ZN	235213	36720	H-01	F6	990,559
540	216	111	10.42	107	ZN	235217	7344	H-01	F7	183,659
658	108	111	6.78	149	ZN	235782	1959	H-01	H9	31,877
							144,957			2,447,770