

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/cm ³	≥ 2.3
Apparent Porosity EN 993-1	%	13 ≤ AP ≤ 17
Cold Crushing Strength EN 993-5	N/mm ²	≥ 45
Thermal Shock Resistance DIN 51068, water quenching	No. of Cycles	≥ 15
Creep at 1280°C, 0.2 N/mm ² 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		
Al ₂ O ₃	wt%	46 ≤ Al ₂ O ₃ ≤ 52
Fe ₂ O ₃		≤ 1.1
CaO + MgO		≤ 0.6
Na ₂ O + K ₂ O		≤ 0.6
TiO ₂		≤ 1.4
SiO ₂		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)
216	110	111	2.29	101	ZN	235189	358975	H-01	F1	1,972,927
325	110	111	3.44	102	ZN	235201	138655	H-01	F2	1,144,736
269	107	64	1.54	104	ZN	235207	1176	H-01	F4	4,346
316	216	215	8.6	110	ZN	184622	588	H-01	F10	12,136
316	344	97	9.25	111	ZN	235225	294	H-01	F11	6,527
250	108	49	1.32	131	ZN	237363	19536	H-01	SPLIT	61,890
280	108	49	1.34	132	ZN	237368	1029	H-01	SPLIT-R	3,309
325	325	150	3.31	133	ZN	206212	2351	H-01	PI-325-190	17,661
218	108	111	2.26	141	ZN	185591	13926	H-01	H1	75,535
218	218	111	4.57	142	ZN	185512	22355	H-01	H2	245,190
328	218	111	6.88	143	ZN	185593	22591	H-01	H3	373,023
218	218	111	4.33	144	ZN	185485	682	H-01	H4	7,087
328	218	111	6.51	145	ZN	185482	551	H-01	H5	8,609
269	108	111	2.78	146	ZN	185792	515	H-01	H6	3,436
398	108	111	4.12	147	ZN	185764	515	H-01	H7	5,092
347	108	111	3.61	148	ZN	235766	12995	H-01	H8	112,589
218	169	111	3.55	150	ZN	184957	2204	H-01	H10	18,778
218	173	111	3.63	151	ZN	235853	13509	H-01	H11	117,690
279	218	111	5.85	152	ZN	185195	3770	H-01	H12	52,931
347	218	111	7.28	153	ZN	235859	13709	H-01	H13	239,524
347	218	111	6.96	154	ZN	235861	543	H-01	H14	9,070
328	108	111	3.41	155	ZN	185793	2481	H-01	E1	20,305
218	108	111	2.14	156	ZN	185783	45	H-01	E2	231
328	108	111	3.22	157	ZN	185778	131	H-01	E3	1,012
169	108	111	1.76	158	ZN	185179	376	H-01	E4	1,588
279	108	111	2.9	159	ZN	185196	49	H-01	E5	341
347	108	97	3.45	160	ZN	2477332	29	H-01	E6	240
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