

Rongsheng FireClay Refractory Bricks Physical and Chemical Index Tables

1. Technique Data of FireCaly Refractory Brick

Item	Specification		
	PN-42	PN-40	PN-35
Al ₂ O ₃ %	≥42	≥40	≥35
Fe ₂ O ₃ %	≤2.0	≤2.0	≤2.5
Apparent Porosity %	≤20	≤24	≤26
Bulk Density g/cm ³	2.1~2.25	2.05~2.2	1.95~2.1
CCS MPa	≥45	≥35	≥30
0.2MPa RUL °C	≥1400	≥1350	≥1320
PLC %	-0.4~0.1 1400°C × 2h	-0.4~0.1 1350°C × 2h	-0.4~0.1 1300°C × 2h

2. Technique Data of Low-Porosity Clay Brick

Item	Specification			
	ZMN-45	ZMN-42	ZMN-42L	ZMN-40
Al ₂ O ₃ %	≥45	≥42	≥42	≥42
Fe ₂ O ₃ %	≤1.2	≤1.5	≤1.8	≤1.7
P ₂ O ₅ %	/	/	≥5	/
Apparent Porosity, %	≤12	≤15	≤14	≤17
CCS, MPa	≥80	≥70	≥70	≥55
0.2MPa RUL, °C	≥1500	≥1460	≥1450	≥1420
PLC, %	1450°C × 3h -0.2~0.1	1450°C × 3h -0.2~0.1	1450°C × 3h -0.2~0.1	1400°C × 2h -0.4~0

3. Technique Data of Low-Creep Clay Brick

Item	Specification			
	DRN-128	DRN-125	DRN-120	DRN-115
Al ₂ O ₃ %	≥45	≥45	≥42	≥40
Fe ₂ O ₃ %	≤1.5	≤1.5	≤1.8	≤1.9
Apparent Porosity, %	≤15	≤20	≤20	≤22
CCS, MPa	≥60	≥45	≥35	≥35
0.2MPa Creep Rate, %	1280°C × 25h ≤0.25	1250°C × 50h ≤0.8	1200°C × 50h ≤0.8	1150°C × 50h ≤0.8
PLC, %	1400°C × 2h -0.3~0.1		1350°C × 2h -0.4~0.1	1300°C × 2h -0.4~0.1

4. Technique Data of Lightweight Clay Brick

Item	Specification						
	NG1.5	NG 1.3	NG 1.2	NG1.0	NG0.8	NG0.6	NG0.5
Bulk Density g/c m ³	≤1.5	≤1. 3	≤1. 2	≤1.0	≤0.8	≤0.6	≤0.5
CCS, MPa	≥6	≥5	≥4. 5	≥3.5	≥2.5	≥1.3	≥1.0
PLC, %	-2~1						
	1400℃× 12h	1350℃×1 2h	1300℃× 12h	1250℃× 12h	1200℃× 12h	1150℃× 12h	
Thermal Conducti vity W/(m·K) 350±25℃	≤0.65	≤0. 55	≤0. 50	≤0.40	≤0.35	≤0.25	≤0.23