

Structures and Building and Construction and Manufacturing Components and Supplies UNSPSC CODE : 30000000												
Structural building products UNSPSC CODE : 301300000												
Bricks UNSPSC CODE : 30131600												
Commodity : Fire Bricks UNSPSC CODE : 30131610 Selling Unit : Piece												
S.No.	Parameters	Type	Value 1	Value 2	Value 3	Value 4	Validation	Unit	M	F	G	Demand aggregation
Grade												
1	Grade	CH	Grade-A (Suitable for temperature up to 1500°C)	Grade-B (Suitable for temperature up to 1250°C)	Grade-C (Suitable for temperature up to 850°C)				√	√	√	
Physical Requirements												
2	Pyrometric cone equivalent, Min	CH	1640°C	1717°C	NA				√	√	√	
3	Bulk density, g/cm ² , Max	N	0.75	0.9	1				√	√		
4	Apparent porosity, percent, Min		60	65					√	√		
5	Cold crushing strength, kgf/cm ² , Min		7	15	20				√	√		
6	Permanent change after reheating for 12 h, Max at 1500°C	CH	(-1.5 percent at 1250°C)	(-1.5 percent at 850°C)	(-2.0 percent)				√	√		
7	Thermal conductivity at 600°C w/mk at hot face, Max	N	0.28	0.35	0.52				√	√		
8	The bricks shall conform to the requirements given above. If required, the bricks shall be tested for refractoriness under load in accordance with the method given in IS 1528 (Part 2) except that a load of 0.5 kgf/cm ² shall be applied instead of 2 kgf/cm ² In that case the test requirements shall be as agreed to between the purchaser and the manufacturer	CH	YES						√			

General Requirements											
9	a) General requirements for the supply of the bricks shall be as laid down in IS 1387 b) The bricks shall be compact, of homogeneous texture and free from cracks, voids, pink or black cores and other flaws. They shall have sufficient mechanical strength and no soft corners	CH	YES						v		
Tolerances of Size											
10	Variations from specified dimensions, covering both warpage and shrinkage, shall be allowed to the extent of ± 2 percent or ± 1 mm, whichever is greater	CH	YES						v		
Chemical Composition											
11	If required by the purchaser, when the bricks are to be used in direct contact with the heating elements or for a specific atmosphere in the furnace, the iron oxide content, shall be not more than 1 percent when determined in accordance with IS 1527	EN	YES						v		

Sampling											
12	Representative samples shall be drawn according to the scheme of sampling given in IS 1528 (Part 1)	CH	YES						v		
Marking and Labelling											
13	The bricks and/or their wrappers shall be suitably marked with the manufacturer's name or trade-mark, and type	CH	YES						v		
14	The refractory bricks may also be marked with the Standard Mark	CH	YES						v		
Certification											
15	Conforming to IS:2042 (Latest)	CH	YES						v		
16	Whether ISI Marked	CH	YES	NO					v	v	
17	CM/L Number (Must declare if ISI Marked)	CH	YES						v		
Test Report Details											
18	Availability of Test Report from Central Govt/ State Govt/NABL/ILAC accredited lab(hint: Must be declared)	CH	Yes	No					v	v	
19	Test Report to be furnished to the Buyer on demand(Must be declared, write NA if Test Report is not available)	CH	Yes	NA					v	v	