

Technical Data Sheet

YK-23

YK-23 Insulating Firebrick is an aluminium silicate type of insulating firebrick in accordance with ASTM.

Characteristic	• • Low iron oxide • • Low thermal conductivity • • High spalling resistance
Application	• • Hot face lining • • Back up insulation • • Reducing atmosphere furnace

Classification temperature 1260° C (2300° F)

		ASTM	SPECIFICATION	AVERAGE
Bulk density	g / cm ³	Group 23	0.75max	0.65
Thermal conductivity	W / mK (kcal / m h° C)		at 350°C JIS R2616 at 400°C ISO 8894 at 600°C ISO 8894 at 800°C ISO 8894	0.18 (0.16) 0.21 (0.18) 0.24 (0.21) 0.28 (0.24)
Cold crushing strength	MPa kgf / cm ²	C 93	- -	1.5 15
Modulus of rupture	MPa kgf / cm ²	C 93	- -	0.8 8
Reheat shrinkage (° C x 24 hrs)	%	C 210 JIS R2613	1.0 max	0.20 (1230°C) 0.30 (1300°C)
(° C x 8 hrs)				

Technical Data Sheet

Thermal expansion at 1000° C	JIS R2617	-	0.46
---------------------------------	--------------	---	------

Chemical analysis - JIS R2216	%
----------------------------------	---

Al ₂ O ₃	-	40
--------------------------------	---	----

Fe ₂ O ₃	-	1.2
--------------------------------	---	-----

Dimensional tolerance - JIS R2150	mm
---	----

length	230	± 2.5	± 1.0
--------	-----	-------	-------

width	114	±2.0	± 1.0
-------	-----	------	-------

thickness	65	± 1.5	± 1.0
-----------	----	-------	-------

Recommended Mortar	RM-1300
--------------------	----------------

Standard Packing	10 pcs / pack for standard size
------------------	---------------------------------

Data are average results of standard tests which are subject to variation and should not be used as specification.