

# High Alumina Castables

Hi-performance products from



PARTICULARS	RECAST A	RECAST 80	RECAST K	RECAST C	RECAST A SUPER	RECAST K SUPER	RECAST C SUPER	RECAST HA	RECAST HA PLUS	THERMO PATCH EXCEL
<b>GENERAL PROPERTIES</b>										
Service Temp°C (Max)	1750	1700	1600	1500	1700	1550	1500	1800	1850	1600
Grain Size (MM) (Max.)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Water Required to Mix (%)	8 - 10	9 - 11	9 - 11	10 - 12	8 - 10	9 - 11	10 - 12	8 - 10	8 - 10	10 - 12
Reversible Thermal Expansion	0.80	0.85	0.60	0.55	0.8	0.6	0.55	0.9	0.9	0.8
<b>PHYSICAL PROPERTIES</b>										
Bulk Density (gm/cc) (Dried at 110°C)(Min.)	2.8	2.65	2.20	2.1	2.75	2.0	2.0	2.75	2.75	2.75
<b>Cold Crushing Strength (kgf/cm<sup>2</sup>)</b>										
1 Day	250	250	200	200	300	250	200	250	200	350
110°C	650	550	400	380	900	500	400	600	400	950
1100°C	400	375	300	250	450	350	275	400	300	600
1500°C	650	500	550	500	700	600	500	700	700	700
<b>MOR, Kg/Cm<sup>2</sup></b>										
110°C	95	80	65	65	105	65	65	100	75	120
1100°C	45	40	30	30	60	30	30	50	35	75
1500°C	110	100	90	85	115	90	85	120	90	130
<b>THERMAL PROPERTIES</b>										
Refractoriness°C (Min)	1800	1750	1680	1650	1750	1680	1650	+1900	+1900	+1750
<b>Permanent Linear Change (%) (Max)</b>										
800°C	-0.06	-0.08	-0.12	-0.06	-0.6	-0.12	-0.06	-0.05	-0.05	-0.05
1100°C	-0.12	-0.15	-0.19	-0.12	-0.12	-0.19	-0.12	-0.08	-0.08	-0.12
1500°C	-0.08	-0.90	-1.20	-0.85	-0.6	-1.20	-0.85	-0.30	-0.20	-0.60
<b>Thermal Conductivity (Kcal/hr/m°C)</b>										
400°F/3 Hrs	1.10	1.05	0.80	0.75	1.15	0.80	0.70	1.00	1.00	1.15
600°F/3 Hrs	1.18	1.10	0.85	0.85	1.20	0.85	0.75	1.15	1.15	1.22
800°F/3 Hrs	1.25	1.15	0.95	0.85	1.30	0.95	0.80	1.20	1.20	1.32
<b>CHEMICAL PROPERTIES (%)</b>										
Al <sub>2</sub> O <sub>3</sub> (Min)	90	85	60	50	88	60	50	94	96	
Fe <sub>2</sub> O <sub>3</sub> (Max)	0.8	1.2	1.0	1.5	0.70	1.0	1.4	0.3	0.3	0.7
<b>Application Guidelines</b>										
Mixer Placement	P	P	P	P	P	P	P	P	P	P
Water/Mix Temperature °C	V/T	V/T	V/T	V/T	V/T	V/T	V/T	V/T	V/T	V/T
Mixing Time (Min.): Dry/Wet	20 ± 5	20 ± 5	20 ± 5	20 ± 5	20 ± 5	20 ± 5	20 ± 5	20 ± 5	20 ± 5	20 ± 5
	2/5	2/5	2/5	2/5	2/5	2/5	2/5	2/5	2/5	2/5

**Note :** 1. Above are average typical test data subject to reasonable variations.  
2. Tested as per **BIS 10570: 1983**.

3. Type of Mixer VAM with 33RPM  
4. P: Preferred, V - Vibration, T - Tamping