

**DATASHEET: SHARADAA VELCRETE RC – 105**

<b>PRODUCT DATA SHEET</b>	<b>VELCRETE RC-105</b>
<b>PRODUCT CHARECTERISTICS</b>	
Bond	Ultrafine
Aggregate	Andalusite
Type of Setting	Hydraulic
Service Temp °C (Max)	1650
Grain Size (mm)	8
<b>Chemical Properties</b>	
Al <sub>2</sub> O <sub>3</sub>	58
Fe <sub>2</sub> O <sub>3</sub>	1
<b>Physical Properties</b>	
Bulk Density After Drying at 110C (gm/cc)	2.7
Cold Crushing Strength (MPa)	
110C	100
1000C	80
1400C	100
Cold MOR (Mpa)	
110C	20
1000C	16
1400C	20
<b>Thermal Properties</b>	
Thermal Conductivity (Kcal/hr/m/C )	
600C Hot Face	1.7

Hot MOR (Mpa) At 1100C	20
Thermal Expansion (%) At 1100C	0.9
Permanent Linear Change (%) (Max)	
At 1650°C	+1.0
Thermal Shock Resistance	Excellent
<b>Installation inputs</b>	
Storage	Under Covered Shed

Shelf Life	6 Months
Installation Method	Roding / Vibration
Water %	5 - 6
Setting Time	6 Hrs
Machinery Required	Paddle Or Concrete
Material Required per M3	2700 Kg
Form demoulding time	8 Hrs
Water Curing after demoulding	24 Hrs
Temperature of mix	20 - 25
Heat Curing	Refer Chart
Application area	Tip casting & Burner Pipe

**DATASHEET: SHARADAA VELCRETE RC – 108**

<b>PRODUCT DATA SHEET</b>	<b>VELCRETE RC-108</b>
<b>PRODUCT CHARECTERISTICS</b>	
Bond	Ultrafine
Aggregate	Andalusite+Cal.Bauxite
Type of Setting	Hydraulic
Service Temp °C (Max)	1700
Grain Size (mm)	10
<b>Chemical Properties</b>	
Al <sub>2</sub> O <sub>3</sub>	68
Fe <sub>2</sub> O <sub>3</sub>	1.2
<b>Physical Properties</b>	
Bulk Density After Drying at 110C (gm/cc)	2.8
<b>Cold Crushing Strength (MPa)</b>	
110C	120
1000C	100
1400C	120
<b>Cold MOR (Mpa)</b>	
110C	24
1000C	20
1400C	24

<b>Thermal Properties</b>	
Thermal Conductivity (Kcal/hr/m/C )	
600C Hot Face	1.8

Hot MOR (Mpa) At 1100C	25
Thermal Expansion (%) At 1100C	1.0
Permanent Linear Change (%) (Max)	
PLC Value @1700°C	+1.0
Resistance to Accretion	Excellent
<b>Installation inputs</b>	
Storage	Under Covered Shed
Shelf Life	6 Months
Installation Method	Roding / Vibration
Water %	5 - 6
Setting Time	4 Hrs
Machinery Required	Paddle Or Concrete
Material Required per M3	2800 Kg
Form demoulding time	4 Hrs
Water Curing after demoulding	24 Hrs
Temperature of mix	20 - 25
Heat Curing	Refer Chart
Application area	DRI 5 – 7 ZONE

**DATASHEET: SHARADAA VELCRETE RC – 108**

<b>PRODUCT DATA SHEET</b>	<b>VELCRETE RC-108</b>
<b>PRODUCT CHARECTERISTICS</b>	
Bond	Ultrafine
Aggregate	Andalusite+Cal.Bauxite
Type of Setting	Hydraulic
Service Temp °C (Max)	1700
Grain Size (mm)	10
<b>Chemical Properties</b>	
Al <sub>2</sub> O <sub>3</sub>	68
Fe <sub>2</sub> O <sub>3</sub>	1.2

<b>Physical Properties</b>	
Bulk Density After Drying at 110°C (gm/cc)	2.8
Cold Crushing Strength (MPa)	
110°C	120
1000°C	100
1400°C	120
Cold MOR (Mpa)	
110°C	24
1000°C	20
1400°C	24
<b>Thermal Properties</b>	
Thermal Conductivity (Kcal/hr/m/C )	
600C Hot Face	1.8

Hot MOR (Mpa) At 1100C	25
Thermal Expansion (%) At 1100C	1.0
Permanent Linear Change (%) (Max)	
PLC Value @1700°C	+1.0
Resistance to Accretion	Excellent
<b>Installation inputs</b>	
Storage	Under Covered Shed
Shelf Life	6 Months
Installation Method	Roding / Vibration
Water %	5 - 6
Setting Time	4 Hrs
Machinery Required	Paddle Or Concrete
Material Required per M3	2800 Kg
Form demoulding time	4 Hrs
Water Curing after demoulding	24 Hrs
Temperature of mix	20 - 25
Heat Curing	Refer Chart
Application area	DRI 5 – 7 ZONE

**DATASHEET: SHARADAA VELCRETE RC – 103**

<b>PRODUCT DATA SHEET</b>	<b>VELCRETE RC-103</b>
<b>PRODUCT CHARECTERISTICS</b>	
Bond	Ultra fine
Aggregate	Sintered Mullite
Type of Setting	Hydraulic
Service Temp °C (Max)	1600
Grain Size (mm)	10
<b>Chemical Properties</b>	
Al <sub>2</sub> O <sub>3</sub>	60
Fe <sub>2</sub> O <sub>3</sub>	1.2
<b>Physical Properties</b>	
Bulk Density After Drying at 110C (gm/cc)	2.50
Cold Crushing Strength (MPa)	
110C	90
1000C	65
1400C	90
Cold MOR (Mpa)	
110C	18
1000C	13
1400C	18
<b>Thermal Properties</b>	
Thermal Conductivity (Kcal/hr/m/C )	
600C Hot Face	1.4

Hot MOR (Mpa) At 1100C	15
Thermal Expansion (%) At 1100C	0.9
Permanent Linear Change (%) (Max)	
At 1600°C	-0.7
Thermal Shock Resistance	Excellent
Porosity at 1300C	16 -18
<b>Installation inputs</b>	
Storage	Under Covered Shed

Shelf Life	6 Months
Installation Method	Roding / Vibration
Water %	6 – 7
Setting Time	4 Hrs
Machinery Required	Paddle Or Concrete
Material Required per M3	2500 Kg
Form demoulding time	4 - 8 Hrs
Water Curing after demoulding	24 Hrs
Temperature of mix	20 - 25
Heat Curing	Refer Chart

#### DATASHEET: SHARADAA VELCRETE RC – 104

<b>PRODUCT DATA SHEET</b>	<b>VELCRETE RC-104</b>
<b>PRODUCT CHARECTERISTICS</b>	
Bond	Ultra fine
Aggregate	Cal. Bauxite
Type of Setting	Hydraulic
Service Temp °C (Max)	1600
Grain Size (mm)	10
<b>Chemical Properties</b>	
Al <sub>2</sub> O <sub>3</sub>	77
Fe <sub>2</sub> O <sub>3</sub>	1.5
<b>Physical Properties</b>	
Bulk Density After Drying at 110C (gm/cc)	2.80
Cold Crushing Strength (MPa)	
110C	120
1000C	90
1400C	120
Cold MOR (Mpa)	
110C	24
1000C	18
1400C	24
<b>Thermal Properties</b>	
Thermal Conductivity (Kcal/hr/m/C )	

600C Hot Face	1.9
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Hot MOR (Mpa) At 1100C	20
Thermal Expansion (%) At 1100C	1.1
Permanent Linear Change (%) (Max)	
At 1600°C	-0.5
Abrasion Resistance	Excellent
Porosity at 1300C	16 -18
<b>Installation inputs</b>	
Storage	Under Covered Shed
Shelf Life	6 Months
Installation Method	Roding / Vibration
Water %	5 – 6
Setting Time	4 Hrs
Machinery Required	Paddle Or Concrete
Material Required per M3	2700 Kg
Form demoulding time	4 – 8 Hrs
Water Curing after demoulding	24 Hrs
Temperature of mix	20 - 25
Heat Curing	Refer Chart

#### DATASHEET: SHARADAA VELCRETE RC – 101

<b>PRODUCT DATA SHEET</b>	<b>VELCRETE RC-101</b>
<b>PRODUCT CHARACTERISTICS</b>	
Bond	Ultra fine
Aggregate	Cal. Clay
Type of Setting	Hydraulic
Service Temp °C (Max)	1600
Grain Size (mm)	10
<b>Chemical Properties</b>	
Al <sub>2</sub> O <sub>3</sub>	46
Fe <sub>2</sub> O <sub>3</sub>	1
<b>Physical Properties</b>	
Bulk Density After Drying at 110C (gm/cc)	2.30

Cold Crushing Strength (MPa)	
110C	80
1000C	60
1400C	80
Cold MOR (Mpa)	
110C	20
1000C	15
1400C	20
<b>Thermal Properties</b>	
Thermal Conductivity (Kcal/hr/m/C )	
600C Hot Face	1.0

Hot MOR (Mpa) At 1100C	15
Thermal Expansion (%) At 1100C	0.9
Permanent Linear Change (%) (Max)	
At 1600°C	-0.9
Thermal Shock Resistance	Excellent
Porosity at 1300C	16
<b>Installation inputs</b>	
Storage	Under Covered Shed
Shelf Life	6 Months
Installation Method	Roding / Vibration
Water %	6 – 7
Setting Time	4 Hrs
Machinery Required	Paddle Or Concrete
Material Required per M3	2250 Kg
Form demoulding time	4 Hrs
Water Curing after demoulding	24 Hrs
Temperature of mix	20 - 25
Heat Curing	Refer Chart
Application area	Burner Blocks