

DATASHEET: SHARADAA VELCRETE RC – 105

PRODUCT DATA SHEET	VELCRETE RC-105
PRODUCT CHARECTERISTICS	
Bond	Ultrafine
Aggregate	Andalusite
Type of Setting	Hydraulic
Service Temp °C (Max)	1650
Grain Size (mm)	8
Chemical Properties	
Al ₂ O ₃	58
Fe ₂ O ₃	1
Physical Properties	
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
Thermal Properties	
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
Installation inputs	
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

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

Thermal Properties	
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
Installation inputs	
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

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

Physical Properties	
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
Thermal Properties	
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
Installation inputs	
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

PRODUCT DATA SHEET	VELCRETE RC-103
PRODUCT CHARECTERISTICS	
Bond	Ultra fine
Aggregate	Sintered Mullite
Type of Setting	Hydraulic
Service Temp °C (Max)	1600
Grain Size (mm)	10
Chemical Properties	
Al ₂ O ₃	60
Fe ₂ O ₃	1.2
Physical Properties	
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
Thermal Properties	
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
Installation inputs	
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

PRODUCT DATA SHEET	VELCRETE RC-104
PRODUCT CHARECTERISTICS	
Bond	Ultra fine
Aggregate	Cal. Bauxite
Type of Setting	Hydraulic
Service Temp °C (Max)	1600
Grain Size (mm)	10
Chemical Properties	
Al ₂ O ₃	77
Fe ₂ O ₃	1.5
Physical Properties	
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
Thermal Properties	
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
Installation inputs	
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

PRODUCT DATA SHEET	VELCRETE RC-101
PRODUCT CHARECTERISTICS	
Bond	Ultra fine
Aggregate	Cal. Clay
Type of Setting	Hydraulic
Service Temp °C (Max)	1600
Grain Size (mm)	10
Chemical Properties	
Al ₂ O ₃	46
Fe ₂ O ₃	1
Physical Properties	
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
Thermal Properties	
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
Installation inputs	
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