Square Feet
CERAMICS

Square Feet Ceramics

Office No.: 25 & 26 Ceramic Plaza-2, First Floor,
8-A, National Highway Morbi-363 642. (Guj) INDIA

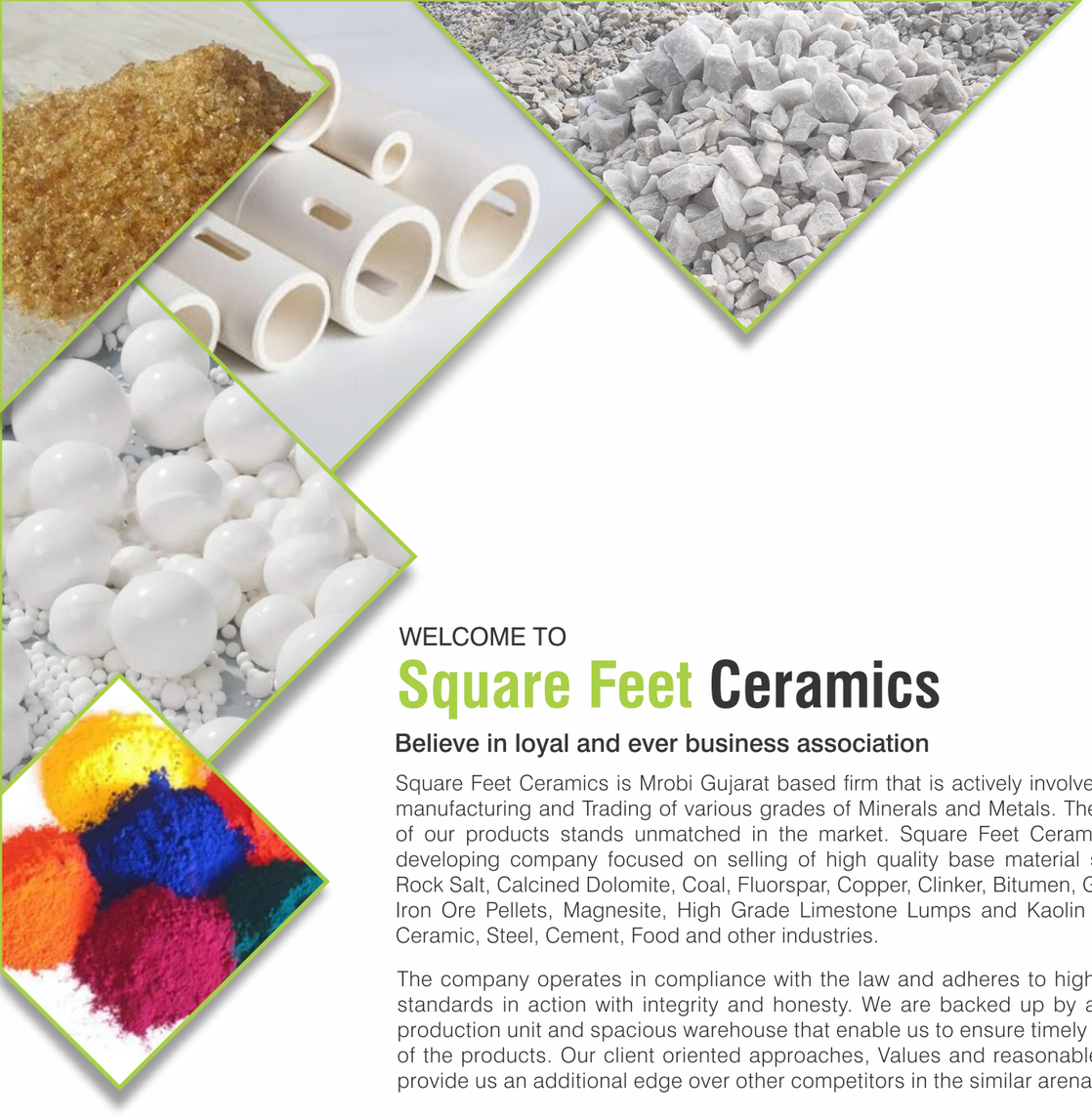
+91 98673 85100 / +91 99254 74185

info@squarefeetceramics.com

www.squarefeetceramics.com

Square Feet
CERAMICS

Believe in loyal and ever Business Association



WELCOME TO

Square Feet Ceramics

Believe in loyal and ever business association

Square Feet Ceramics is Mrobi Gujarat based firm that is actively involved in the manufacturing and Trading of various grades of Minerals and Metals. The quality of our products stands unmatched in the market. Square Feet Ceramics is a developing company focused on selling of high quality base material such as Rock Salt, Calcined Dolomite, Coal, Fluorspar, Copper, Clinker, Bitumen, Gypsum, Iron Ore Pellets, Magnesite, High Grade Limestone Lumps and Kaolin used in Ceramic, Steel, Cement, Food and other industries.

The company operates in compliance with the law and adheres to high ethical standards in action with integrity and honesty. We are backed up by a strong production unit and spacious warehouse that enable us to ensure timely delivery of the products. Our client oriented approaches, Values and reasonable prices provide us an additional edge over other competitors in the similar arena.

Square Feet Ceramic is a Mrobi Gujarat based firm that is actively involved in the manufacturing of various grades of Frits. The quality of our products stands unmatched in the market. Square Feet is a developing manufacturing company focused on selling high quality base material such Feldspar Powder, Quartz, Ceramic Frits , Kaolin, Gypsum, Sods Ash, Ceramic Roller, Alumina Balls,Ceramic Stain, Digital Inks, Zirconium Silicate, G.V.T Compound, G.V.T & P.G.V.T Vitrified Tiles, and Other Minerals.

The company operates in compliance with the law and adheres to high ethical standards in action with integrity and honesty. We are backed up by a strong production unit and spacious warehouse that enable us to ensure timely delivery of the products. Our client oriented approaches, Values and reasonable prices provide us an additional edge over other competitors in the similar arena.

Square Feet strongly emphasizes on quality control. We have the most accurate and reliable testing instruments required to test the material and maintain its standards. Qualified and efficient technicians are employed to complement the available highly sophisticated laboratory and equipment's. Our technical team is closely working with our customer to understand their requirement and delight them by providing customized products in all ranges.

Square Feet CERAMICS

Our presence In India

Sodium Feldspar

Preface:

We bring forth Sodium Feldspar in different grades, by keeping in mind the diverse market demands. We keep all the requisite arrangements for quick and safe shipping of Sodium Feldspar anywhere all over the world.

Square Feet owns 2 Sodium Feldspar mines in order to get sodium feldspar from Lower Na2O content to Higher Na2O content. Mines are located in areas where a variety of feldspar grade is available.

Square Feet caters to Ceramic, Glaze, Pottery, Frits, Glass, Vitrified Pipes & Porcelain Industry.

Higher Grade Sodium Feldspar

LV : 27659-00002

Lower Grade Sodium Feldspar

LV : 27659-00003

Physical Composition		
Contents	Sodium Feldspar (Higher Grade)	Sodium Feldspar (Lower Grade)
Fineness	Lumps	Lumps
Brightness	85%	82%
Fired Shrinkage	13.76	12.96
Water Absorption.	N.A.	N.A.
Moisture at 105 degreeC	N.A.	N.A.
Oil Absorption	N.A.	N.A.
PH Value	N.A.	N.A.
Moh's Hardness	N.A.	N.A.
Specific Gravity	N.A.	N.A.
Tapped Bulk Density (gms/ml)	N.A.	N.A.
Matter Sol. In water	N.A.	N.A.
Color Spectrometry		
"L" Value	79.60	75.60
"a" Value	0.55	0.15
"b" Value	6.10	3.10
Chemical Composition		
SiO2	72.170%	69.74%
MgO	0.100%	0.100%
Al2O3	16.580%	18.200%
CaO	1.520%	0.550%
Fe2O3	0.090%	0.080%
TiO2	0.075%	0.075%
Na2O	10.030%	7.290%
K2O	0.490%	1.720%
LOI	0.480%	0.370%

Quartz

Preface:

Quartz from Square Feet is highly renowned for their quality & pricing. Square Feet owns multiple mining and processing facilities to produce various qualities of Quartz. We offer quartz in Lumps, Powder & Grits.

Quartz from our mines are supplied to Ceramic, Frit, Glass, Solar Panels, Composite quartz Industry. Other than industrial use, quartzite slabs are being used aesthetically used in Interior designing and for Elevation too.

Physical Composition			
Contents	Quartz	Quartz	Quartz
Natural Appearance	Snow White	Super Semi	Snow White
Fineness	Pink Lumps	Lumps	325# (44 Microns)
Whiteness	98%	95%	93.70%
Fired Shrinkage @1220	N.A.	N.A.	N.A.
Water Absorption (%)	N.A.	N.A.	N.A.
Water Plasticity (%)	N.A.	N.A.	N.A.
Dry MOR (Kg/cm2)	N.A.	N.A.	N.A.
Fired MOR (Kg/cm2)	N.A.	N.A.	N.A.
Moisture at 105 degreeC	N.A.	N.A.	N.A.
Oil Absorption	N.A.	N.A.	N.A.
PH Value	N.A.	N.A.	N.A.
Moh's Hardness	N.A.	N.A.	N.A.
Specific Gravity	N.A.	N.A.	N.A.
Tapped Bulk Density (gms/ml)	N.A.	N.A.	N.A.
Matter Sol. In water	N.A.	N.A.	N.A.
Color Spectrometry			
"L" Value	± 1	93± 1	95.84± 1
"a" Value	0.35	0.85	0.35
"b" Value	3.00	4.00	3.00
Chemical Composition			
SiO2	99.72	99.18	99.90
MgO	BDL	0.01	0.02
Al2O3	0.08	0.35	0.022
CaO	0.02	0.06	0.09
Fe2O3	0.03	0.09	0.0041
TiO2	N.A.	N.A.	N.A.
Na2O	0.02	0.03	0.006
K2O	0.01	0.02	0.004
LOI	0.10	0.21	0.12

Ceramic Frits

Preface:

Frits are generally used for, Glaze preparation.The Ceramic industries are the major consumer of the Frit, they are using about 90-94% in their compositions.

Technical Specification

Code	Type	Techno logy	SiO_2	Al_2O_3	B_2O_3	Na_2O	K_2O	CaO	MgO	ZnO	ZrO_2	TiO_2	Fe_2O_3	COE/ 10-7 K
TR-1	TR GLOSSY	DFF	59 - 61	7.5 - 9.5	7 - 9	0.6 - 2.6	4.25 - 6.25	12 - 14	0.5 - 2.5	1.1 - 3.1	-	-	00 - 0.1	62.60
103L	TR GLOSSY	DFF	60 - 62	7.2 - 9.2	7.5 - 9.5	0.5 - 2.5	3.5 - 5.5	11 - 13	0.4 - 2.4	1.6 - 3.6	-	-	00 - 0.1	59.80
TR-50	TR GLOSSY	DFF	57.8 - 59.8	7.5 - 9.5	8 - 10	0.3 - 2.3	3.8 - 5.8	11.25 -13.25	0.5 - 1.5	3.2 - 5.2	-	-	00 - 0.1	60.40
TR-205	TR GLOSSY	DFF	60.5 - 62.5	7.0 - 9.0	6.5 - 8.5	0.5 - 2.5	3.6 - 5.6	10.25-12.25	0.25 -1.25	4 - 6	-	-	00 - 0.1	60.70
TR-033	TR GLOSSY	DFF	58 - 60	7.25 - 9.25	7.2 - 9.2	0.3 - 2.3	3.9 - 5.9	11.5 - 13.5	0.25 -1.25	4 - 6	-	-	00 - 0.1	62.10
OP-69	OP GLOSSY	DFF	52.2-54.2	5.5 - 7.5	6.5 - 8.5	0.5 - 2.5	3 - 5	7.5 - 9.5	1 - 3	6.2 – 8.2	8.5 - 10.5	-	00 - 0.1	57.40
OP-6909	OP GLOSSY	DFF	48.5 - 50.5	5.8 - 7.8	7 - 9	0.3 - 2.3	3.2 -5.2	7 - 9	08 - 2.8	7.5 - 9.5	9 -11	-	00 - 0.1	62.40
OP-99	OP GLOSSY	DFF	52 - 54	6.5 - 8.5	11 - 13	0.4 - 2.4	3.6 - 5.6	9.5 - 11.5	1.1-3.1	0.5 -1.5	7 - 9	-	00 - 0.1	62.40
OP-96	OP GLOSSY	DFF	53.8 - 55.8	5.5 - 7.5	8.5 - 10.5	1.5 - 3.5	2.25 - 4.25	8.8 -10.8	1.51-3.51	1.25 - 3.25	8 - 10	-	00 - 0.1	68.00
OP-4591	OP GLOSSY	DFF	60 - 62	3.5 - 5.5	7.9 - 9.9	1.0 - 2.25	1.0 -3.0	11.8 -13.8	1.5 -3.5	0.8 - 2.8	2.2 - 4.2	-	00 - 0.1	68.50
OP-100	OP GLOSSY	DFF	53.8 - 55.8	7 - 9	8 - 10	1.25 -3.25	3.25 -5.25	10.2 -12.2	1.3 -3.3	-	8 - 10	-	00 - 0.1	64.10
OP-003A	OP ENGOBE	DFF	55.0 58.0	5.0 - 7.0	3.5 -5.5	0.5 - 1.5	5.0 -7.0	15.0 - 20.0	1.5 - 3.5	-	-	5.0 - 7.0	00 - 0.1	70.10

Kaolin

Preface:

Kaolin, a versatile and widely used mineral, holds immense significance in various industries. Its unique properties make it a valuable raw material for ceramics, paper, paints, coatings, plastics, rubber, and more.

Physical Properties

Description	Kaolin Powder	
	Ind	Mix
Dry MOR (Kg/cm2)	6.9	-
Shrinkage%	0.05	10.29
Loss on Ignition%	3.7	2.92
Fired MOR Kg/Cm2	55	-
Water Absorption%	16.2	-
Residue(200#)	0.36	-
*L	95.37	86.89
*a	0.74	1.65
*b	3.58	6.44
Temperature C	1202/1212	
Cycle min	45	

Chemical Analysis

Sio_2%	78.2
AL_2O_3%	15
Fe_2O_3%	0.32
CaO%	0.45
MgO%	0.39
NA_2O%	0.25
K_2O%	0.7
Loss on ignition%	3.5

Understanding Kaolin

Kaolin, also known as china clay, is a soft white clay mineral composed primarily of kaolinite. It is formed through the weathering of aluminum silicate minerals such as feldspar. The resulting clay deposits are rich in kaolin and can be found in various parts of the world, including India

Applications of Kaolin

Ceramics and Porcelain

Kaolin is widely used in the ceramics industry, particularly in the production of porcelain. Its high plasticity and low shrinkage make it an ideal component for shaping and molding. Additionally, kaolin improves the mechanical strength and enhances the fired color of ceramic products.

Paper and Paperboard

In the paper industry, kaolin is utilized as a coating and filler material to improve printability and opacity. The fine particle size of kaolin helps create a smooth surface, enhancing the print quality and reducing ink absorption. Moreover, kaolin imparts brightness and whiteness to paper, making it ideal for high-quality printing applications.

Paints and Coatings

Kaolin plays a crucial role in the production of paints, coatings, and adhesives. Its unique particle structure provides excellent suspension properties, leading to improved coverage and reduced settling. Kaolin also contributes to the stability, durability, and weather resistance of paint formulations.

Plastics and Rubber

In the plastics and rubber industries, kaolin acts as a reinforcing filler. Its incorporation enhances the mechanical properties, such as tensile strength and impact resistance, of plastic and rubber compounds. Kaolin also improves dimensional stability and electrical insulation in these applications.

Zirconium Silicate

APPLICATONS

Zirconium Silicate is used in ceramic glazes, optical glass, heat resistance porcelain and zircon refractories. Use of Zirconium Silicate results in high opacity, craze resistance and colour stability for glazes used in tiles, sanitaryware and earthenware.

HYGIENE

Material Safety Data Sheet is available on request.

PACKING

The Standard packaging is 25 kg polythene lined multi-wall HPDE woven sacks. Special packing according to customer requirement can be arranged on request.

ZR-1

TYPICAL CHEMICAL PROPERTIES

Composition		ZR-1
Zirconium Silicate	ZrSiO4	97.00%
Zirconia + Hafnia	ZrO2	63.00%
Silica	SiO2	33.10%
Alumina	Al2O	00.94%
Ferric Oxide	Fe2O	00.09%
Titania	TiO	00.15%

ZR-5

TYPICAL CHEMICAL PROPERTIES

Composition		ZR-5
Zirconium Silicate	ZrSiO4	97.00%
Zirconia + Hafnia	ZrO2	64.00%
Silica	SiO2	34.10%
Alumina	Al2O	00.50%
Ferric Oxide	Fe2O	00.09%
Titania	TiO	00.15%

ZR-45/63/74

TYPICAL CHEMICAL PROPERTIES

Composition		ZR-45/63/74
Zirconium Silicate	ZrSiO4	97.00%
Zirconia + Hafnia	ZrO2	64.20%
Silica	SiO2	34.10%
Alumina	Al2O	00.50%
Ferric Oxide	Fe2O	00.09%
Titania	TiO	00.15%

TYPICAL PHYSICAL PROPERTIES

Specific Gravity		4.5
Bulk Density	g.cm-3	0.8
Average Particle Diameter	Malvern d50(µm)	1.20

Gypsum

Preface:

Gypsum lump is an inorganic mineral known as CaCO2 and CoSo4.2H2o. This is the fifth non-metallic element in the earth's crust. It is found in many items we use every day, like toothpaste and shampoo. It is also used to make drywall, create molds for dinnerware and dental impressions, and to build roads and highway.

The usage of raw gypsum lump is for increasing setting time in producing cement and to reduce the salinity of the soil in agricultural lands. The properties of this product are so well known that by improving the soil, it can increase the efficiency and effectiveness of agricultural products.

In addition to building materials and cement raw materials, gypsum can also be used to many other fields such as making sulfuric acid, rubber, plastics industry, fertilizer, pesticide, paint, textile industry, foodstuff, medicine, daily chemical products, arts and crafts and culture and education.

Gypsum can be also be used as a food additive to enhance the texture of ingredients in processed foods. Gypsum is the common name for the mineral calcium sulfate. Gypsum bonds easily with water and is usually found in its natural state as hydrated calcium sulfate.

Gypsum is an ore that found in layers of limestone. Pure white rock gypsum is also known as alabaster and has been used to make carved statues and sculptures. Nearly all modern homes and buildings use gypsum in the form of wall board, also known as gypsum board, drywall or sheet rock.

In the food industry, gypsum may be used as drying agent, color enhancer, stabilizer and thickener. Pure crystalline gypsum that used in food industries pharmacy and agriculture.This type of gypsum is layered, which is obtained by the adhesion of thin sheets of calcium hydrosulfate, or in the form of silk, which is the product of the adhesion of crystalline fibers of calcium hydrosulfate.

Soda Ash Light & Dense

Soda Ash Light & Dense

Inorganic Chemicals – A broad class of substances encompassing all those that do not include carbon and its derivatives as their principal elements.

Soda ash an important raw material in the production of soaps, detergents, glass, pulp and paper, chemicals, textiles and a host of other industries.

TYPICAL CHEMICAL PROPERTIES

Chemical Composition	Unit	Acceptable Finite	Results
Sodium Carbonate (Na_2CO_3)	●●	●●	98.7 - 98.8
Sodium Chloride (NaC1)	% wt	Max 1	0.7 - 0.8
Sodium Bicarbonate ($NaHCO_3$)	% wt	Max 1 o	0.01 - 0.15
Sodium Sulfate (NmSO)	% wt	Max 0.05	0.05-0.07
mon (Tc)	P1>in	Max 30	70 - 80
Loss On Heating	% wt	Max 0.2	I.5-1.8
Moislurc			
Total Alkalinity (Na_2O)		Mii>58.0	57.73 - 57.79
Pouiing 1Jensity	g/t²m²	0.85 - 1.1	0.87 - 0.93
Mesh	% wt	<40	20-4
		40-80	40-60%
		80-140	5-10
		> I 40	<1%

Ceramic Rollers

Technical Specifications

Code	UNIT	MEGA-R75	MEGA-R80	MEGA-R85
Max Working Temp.	°C	1280	1350	1400
Al2O3 + ZrO2	%	76	81	85
Rate of water absorption	%	<=9	<=8.5	<=7.5
Bending strength	Map	>=45	>=51	>=58
Thermal Shock Resistance	/	Excellent	Excellent	Excellent
Refactory Degree	°C	>=1750	>=1800.	>=1850

Standard Sizes

Diameter(mm)	Length(mm)	Diameter(mm)	Length
65-80	3000-5000	40	2000-3500
60	2700-5000	36	2000-3300
55	2700-5000	35	2000-3200
50	2400-4600	33.7	1800-3100
45	2200-3800	32	1800-3100
42	2200-3800	16.31	1600-3100

Guidance for Usin

Product Type	Firing Temperature	MEGA-R75	MEGA-R80	MEGA-R85
Inner Wall tile	1030-1180	✓	✓	✓
Glazed Floor tile	1140-1200	✓	✓	✓
Vitrified & Outer wall tile	1180-1240	✓	✓	✓
Square Tile	1190-1250	-	✓	✓
Polishing Tile	1230-1250	-	✓	✓
Household Tile	-	-	✓	✓
Sanitary Ware	1200-1280	-	✓	✓

Alumina Balls

Alumina Balls

Formed by ISO-STATIC pressing
and Japanese rolling technologyHigh density and hardness
which can promote the grinding efficiencyThe main content is alumina which has no pollution to the material (such as ceramic).High whiteness can promote the ceramic body's whiteness.

BRIEF INTRODUCTION

Alumina Balls are widely used in ceramic, paints, color, cement, coating, refractory material, pharmaceutical, chemical, mine industry etc.The advantages are super hardness, high density, low wear loss, regular shape and good corrosion-resistance etc.

Technical Specifications

Performance Index/ Product	MEGA70	Mega75	Mega80	Mega80S	Mega93	Mega93S	Mega95
Bulk Density(g/cm3)	2.95-3.02	3.1-3.2	3.25-3.35	3.25-3.35	3.60-3.65	3.66-3.72	3.66-3.72
Rate of water absorption (%)	<=0.02	<=0.01	<=0.01	<=0.01	<=0.01	<=0.01	<=0.01
Color	Yellowish	Milky White	White	White	White	White	White

Ceramic Stain

WHAT IS CERAMIC STAIN ?
Ceramic Stains are metal oxides with complex inorganic structures containing transition elements that are produced by means of a controlled calcination process at high temperatures. Thermal stability, resistance and appropiate particle size provide our pigments with high colour intensity. Their easy dispersion make them optimal for any type of colouration.

HOW DO CERAMIC STAINS PROVIDE COLOUR IN THE CERAMIC?
Ceramic Stains contain matrix with colouring agent in it. The colour is formed due to dispersion of colouring agent/crystals in the glass/glaze matrix .The matrix of ceramic stain embeds the colouring agent and ensures optimum interaction with the incoming light to get the desired colour/shade in the final product. The colour providing substance has to be temperature resistant and also chemically inert in the glaze/glass melt
A full chromatic range of ceramic pigments that provide the best colour stability, high performance and homogeneity are listed below:

Ceramic Stains By Type
- Glaze Stains
- Vitrified Body Stains

Ceramic Stains By Industry
- Tiles
- Sanitaryware
- Insulator
- Potteries
- Abrasive
- Concrete
- Glass

Digital Inks

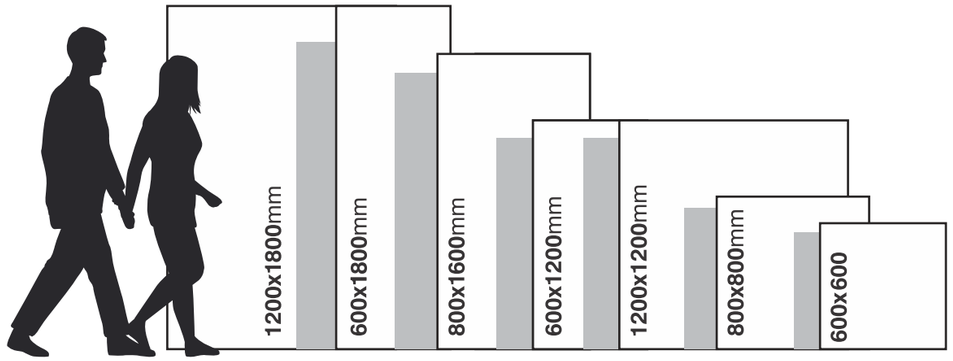
Preface:

Digital ink is a finely ground pigment suspension in a transparent liquid that is used to print high-resolution images on ceramics using inkjet printers. Digital inks are designed to withstand the high temperatures of the ceramic firing process.

Square Feet CERAMICS

GVT & PGVT VITRIFIED TILES

Porcelain Tiles ● Ceramic Tiles



1200X 1800MM

1200X 1200MM	600X 1800MM	800X 1600MM
600X 1200MM	800X 800MM	600X 600MM

Note :

Note :