Royal Porcelain Pvt Ltd Ouality Assuarance Dept



### **GLAZED VITRIFIED TILES**

### DESIGN QUALIFYING REPORT

### DIGITAL PRINTING GLAZED VITRIFIED MARBLE COLLECTION

SIZE 1000X1000 CODE & NAME

# SATIN MATT COLLECTION

# **FEATURES**

Smooth matt surface with more natural colour intimates natural beauty of stone. That is reproduction of ancient tiles with value added features of glazed vitrified. The tiles has been produced on flat surface giving natural colour spectrum with good hardness

#### DIMENTION & SURFACE QUALITY

|   |    | Description of the Test     | Test Method | International Specification | Royal Porcelain Value       |
|---|----|-----------------------------|-------------|-----------------------------|-----------------------------|
| 1 |    | Length & Width (Average)    | ISO 10545.2 | Set by Manufacture          | 1000 mmX1000 mm (Squared)   |
| 1 |    | Deviation in Length & Width | ISO 10545.2 | ± 0.6 %                     | Max ± 0.30%                 |
| 2 |    | Thickness (Average)         | ISO 10545.2 | Set by Manufacture          | 10.0 mm                     |
|   |    | Deviation in Thickness      | ISO 10545.2 | ± 10 %                      | Max ± 3.0 %                 |
| 3 | Ö  | Straightness of Sides       | ISO 10545.2 | ± 0.5 % (Max 2 mm)          | 0.2 % (Max) (1.0 mm)        |
| 4 | Ú  | Rectangularity              | ISO 10545.2 | ± 0.6 % (Max 4 mm)          | Rectified (Diagonal ±0.3mm) |
| 5 | >  | Surface Flatness            | ISO 10545.2 | ± 0.5 % (Max 2 mm)          | 0.3 % (Max) (1.8 mm)        |
| 6 | •: | Surface Quality             | ISO 10545.2 | Min 95 %                    | Min 95 %                    |
|   | •  | •                           |             | •                           | *                           |

#### PHYSICAL PROPERTIES

| 7  | <b>%</b> . | Water Absorption by mass (Average) | ISO 10545.3  | < 0.5 %                | 0.2% (Max 0.3 %)             |
|----|------------|------------------------------------|--------------|------------------------|------------------------------|
| 8  | <b>→</b>   | Modulus of Rupture                 | ISO 10545.4  | > 27 N/mm <sup>2</sup> | 32.0 N/mm <sup>2</sup>       |
| 9  | 0          | Abrasive Resistance (Maximum)      | ISO 10545.7  | Set by Manufacture     | Class III (1500 revolutions) |
| 10 | **         | Moh's Scale Hardness               | EN 101       | Set by Manufacture     | 6.0 – 6.5                    |
| 11 | Ů          | Density                            | ISO 10545.3  | > 2.0 g/cc             | 2.4 g/c                      |
| 12 | *          | Colour Resistance to light         | ISO 10545.16 | Resistance             | Resistance                   |

#### THERMAL PROPERTIES

| 13 | $\overline{\longleftrightarrow}$ | Thermal Expansion           | ISO 10545.8  | < 90.0 X 10 <sup>-7</sup> °C <sup>-1</sup> | 74.0 X 10 <sup>-7</sup> °C <sup>-1</sup> |
|----|----------------------------------|-----------------------------|--------------|--|--|
| 14 | <b>6</b>                         | Moisture Expansion          | ISO 10545.10 | Nil  | Nil                                      |
| 15 | **                               | Resistance to Thermal Shock | ISO 10545.9  | Min 10 Cycle                               | Resistant                                |
| 16 | <b>\$</b>                        | Resistance to Crazing       | ISO 10545.11 | Min 4 Cycle                                | Resistant                                |
| 17 | 辮                                | Frost Resistance            | ISO 10545.12 | Resistance                                 | Resistant                                |

#### CHEMICAL PROPERTIES

| 18 | L | Chemical Resistance  | ISO 10545.13 | Min Class B   | Resistance |
|----|---|----------------------|--------------|---------------|------------|
| 19 | S | Resistance to Stains | ISO 10545.14 | Min Class III | Class V    |

# RANDOMNESS & DISPLAY OF THE TILES

20 Display of Tiles At least 2 tiles should be properly displayed to express random effect

### APPLICATIONS

Product features are medium abrasion resistance with significant scratch hardness . Therefore it is suitable for flooring in semi traffic areas like shops, verandas etc as well as for domestic use. Also it is not suitable for wet areas since the smooth surface may be slippery.

| Prepared by:- | Manager - QA, R &D | Date             | 01 – October 2024 |
|---------------|--------------------|------------------|-------------------|
| Revision No.  |                    | Date of Revision |                   |