



# Technical Specifications

## ABNT NBR ISO 13006

Dry-pressed ceramic tiles with low water absorption  $E_v \leq 0,5\%$  Group BIa

## Mineral Grafite

Line Mineral

Tipology	Code	
<b>Porcelain Tile</b>	<b>209719E</b>	
Size (cm)	Thickness (mm)	Work Size (cm)
<b>90X90</b>	<b>8.00</b>	<b>89,85X89,85</b>
Edge	Surface	Tonality Variation
<b>Rectified</b>	<b>External</b>	<b>V1</b>

### Physical Property

Physical Property	Test Standards	Results
Water Absorption (%)	ISO 10545-3	0,5
Modulus of Breaking Strength (N/mm <sup>2</sup> )	ISO 10545-4	35
Breaking Load (N)	ISO 10545-4	1500
Moisture Expansion (mm/m)	ISO 10545-10	0,1
Resistance to Deep Abrasion (mm <sup>3</sup> )	ISO 10545-6	170
Frost Resistance	ISO 10545-12	RESIST
Resistance to Thermal Shock	ISO 10545-9	RESIST

### Chemical Property

#### Resistance to Staining

Chemical Property	Test Standards	Results
Unglazed Tiles	ISO 10545-14	5

#### Resistance to Chemicals

Resistance to low concentrations of acids and alkalis	ISO 10545-13	LA
Resistance to household chemicals and swimming pool salts	ISO 10545-13	A

## Coefficient of Friction

Dry Surface
Wet Surface
Wet Surface

## Test Standards

ABNT NBR 16919
ABNT NBR 16919
ANSI A326.3

## Results

0,7
0,6
0,6

## Dimensions and surface quality

Length and width (mm)
Width (mm)
Thickness (mm)
Straightness of sides (mm)
Rectangularity (mm)
Surface flatness (mm)
Surface quality (%)

## Test Standards

ISO 10545-2
ISO 10545-2
ISO 10545-2
ISO 10545-2
ISO 10545-2
ISO 10545-2
ISO 10545-2

## Results

± 1,00
± 1,00
± 0,40
± 0,80
± 1,50
± 1,8 mm
≥ 95

## Local of Use

IU - Industrial and Urban | RE - Residential | FA - Facade

## Settlement

Dry Internal Walls Joint
Wet Internal Walls Joint
External Walls Joint - Facade
Floor joint

## Recomendado

1,5 mm
1,5 mm
1,5 mm
1,5 mm

Reaction with fire: Ceramic coatings are sintered at high temperatures and therefore do not present in their final composition organic or volatile compounds of any nature, classifying them as Class I - non-combustible.

# Portobello

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