

# TECHNICAL SPECIFICATIONS

Description	Standard Test	Measurement Unit	ISO Standard Requirement	NIRO GRANITE
Length & Width	ISO 10545 -2	mm	±0.6% Max	±0.30% Max
Thickness	ISO 10545 -2	mm	±5.0% Max	±5.0% Max
Sides Straightness	ISO 10545 -2	mm	±0.5% Max	±0.25% Max
Rectangularity	ISO 10545 -2	mm	±0.5% Max	±0.25% Max
Flatness: a) Centre Curvature	ISO 10545 -2	mm	±0.5% Max	±0.20% Max / Max 2.0mm
b) Edge Curvature	ISO 10545 -2	mm	±0.5% Max	±0.20% Max / Max 2.0mm
c) Warpage	ISO 10545 -2	mm	±0.5% Max	±0.20% Max / Max 2.0mm
Surface Quality	ISO 10545 -2	One Major Area of Tiles	≥ 95% free from visible defect	Comply
Water Absorption	ISO 10545 -3	Mass	≤0.5%	≤0.20%
Breaking Strength	ISO 10545 -4	N	≥ 1300 N	≥ 1300 N
Modulus of Rupture	ISO 10545 -4	N/mm <sup>2</sup>	≥ 35 N/mm <sup>2</sup> Individual ≥ 32 N/mm <sup>2</sup>	≥ 35 N/mm <sup>2</sup> Individual ≥ 32 N/mm <sup>2</sup>
Abrasion Resistance				
a) Deep Abrasion for unglazed tiles	ISO 10545 -6	mm <sup>3</sup>	≤ 175 mm <sup>3</sup>	≤ 160 mm <sup>3</sup>
b) Surfaces Abrasion for glazed tiles	ISO 10545 -7	Visual Check	Manuf. to state abrasion class, cycle and passed	≥ PEI 3 (Dependent on product type )*
Crazing Test (glazed tiles)	ISO 10545 -11	Visual Check	No Sign of Crazing	No Sign of Crazing
Frost Resistance	ISO 10545 -12	Visual Check	Required	No Visible Crack
Chemical Resistance				
a) Low concentrations	ISO 10545 -13	Visual Check	Manuf. to State	Class A Class B (For Polished Tile)
b) Household chemicals and swimming pool salts	ISO 10545 -13	Visual Check	≥ Class B	Class A Class B (For Polished Tile)
Stain Resistance				
a) For unglazed tiles	ISO 10545 -14	Visual Check	Manuf. to State	≥ Class 3
b) For glazed tiles	ISO 10545 -14	Visual Check	≥ Class 3	≥ Class 3
Slip Resistance (Excluding Polished, Lappato and Matt Satin Finishing)	AS/NZS 4586 App. A	P0 to P5	Manuf. to State	Wet Pendulum ≥ P2 (Dependent on product type )*

The technical specifications is only for rectified tiles. \* Refer to test report for specific test result.

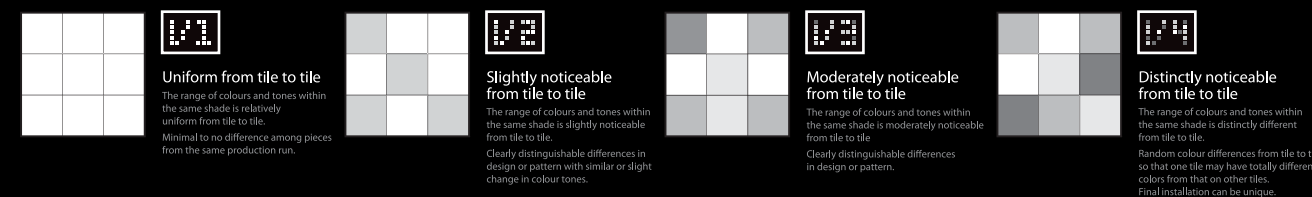
Each different tiles series are produced to meet different performance requirements. For specific product technical performance, please request from Niro Granite sales team or their agent or distributor.

Colour Variations: Since the colour reproduction in this printed piece will vary from the actual tile colours, final selection should be made from tile samples. Colour, shade and glaze variations may exist due to the inherent characteristics of porcelain tile.

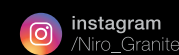


Due to the low porosity of porcelain tiles, an Improved High Performance Cementitious adhesive in accordance to BS EN 12004 & ISO 13007-1 is highly recommended for proper installation. Products that meet this standard are available amongst leading adhesive manufacturers. Please seek expert advice from adhesive manufacturers for proper selection and application.

## SHADE VARIATION



PASSIONATE ABOUT LIFE



www.nirogranite.com

170922

# i'pietra

Touch of nature  
the defined digital collection



# i'pietra

Indulging to the atmosphere of nature, Niro Granite unleashes l'Pietra, the stone designed collection that is crafted through the brilliance of the digital printing technology. The l'Pietra series is truly a unique one as each design emulates the distinct patterns and colour of the original stone to create a one colour per design collection.

Obtainable in Borgogna White, Java Crema, Beola Grey, Alpine Grey and Riviera Black, each of the colours exclusively manifest the distinctive stone design. In the surfaces of matt, lappato and structured, this sagely refined stone designs ignites the touch of nature in any architectural concept and space.

# 7

## COLOURS

BORGOGNA WHITE  
BEOLA GREY  
ALPINE GREY  
ALPINE IVORY  
ALPINE CHARCOAL  
ALPINE WHITE  
RIVIERA BLACK

# 3

## FORMATS


60x120cm  
60x60cm  
30x60cm

# 3

## FINISHINGS

MATT  
LAPPATO  
STRUCTURED



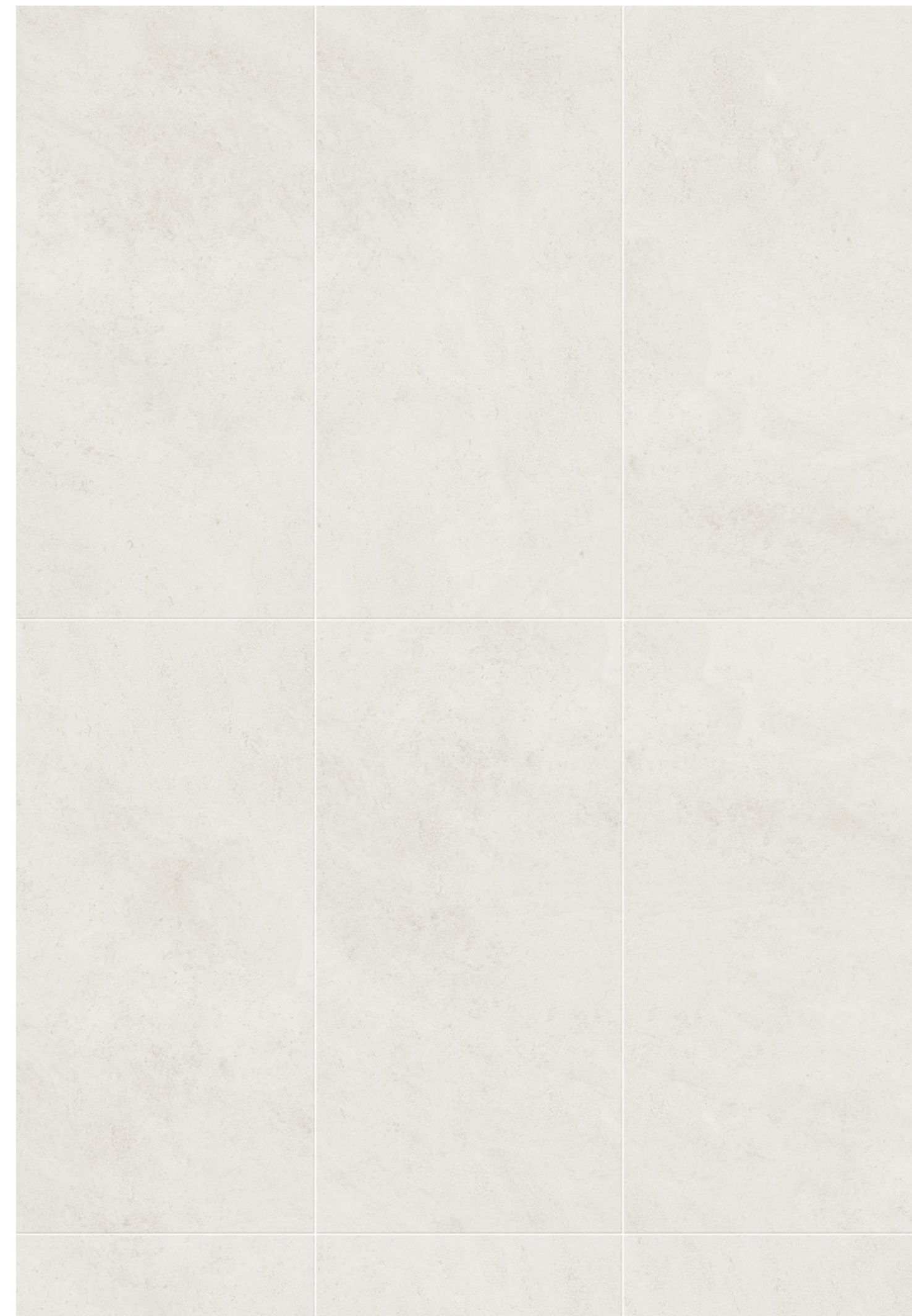


Roused by the enthrallment of soft calcareous stone, Borgogna White unveils the fascination of the North France legacy. This speckle white colour manifested the inheritance of the natural resources characteristics that kindles the calm soothing sensation, yet with the evocation of elegance.

GIP01

BORGOGNA  
WHITE

**i'pietra**





GIP01 BORGOGNA WHITE 60x60cm+30x60cm MATT


# BORGOGNA WHITE

GIP01

MATT & LAPPATO

60x120cm · 60x60cm · 30x60cm





Beola Grey, the creative masterpiece inspired by the Italy's igneous granite stone, epitomizes the true beauty of nature. With the resemblance similar to the sedimentary rock in Italy, be prepared to unfilled the pure anciently sensation of nature to your space.

GIP03  
BEOLA  
GREY

**i'pietra**





GIP03 BEOLA GREY 60x60cm+30x60cm MATT


# BEOLA GREY

MATT, LAPPATO & STRUCTURED

60x120cm · 60x60cm · 30x60cm

GIP03





Galvanized by the robust and vigorous stone in North of Italy, Alpine Grey distinctively fills with the manifestation of the masculine characteristic yet completely liquidated the artistic exquisiteness appearance that defines the Swiss Alps. It does not evoke a strong emotion as the uniqueness of Alpine Grey emulates a natural slate at your home.

GIP04  
ALPINE  
GREY

**i'pietra**







GIP04 ALPINE GREY 60x60cm+30x60cm STRUCTURED

# ALPINE GREY

GIP04

LAPPATO & STRUCTURED

60x120cm · 60x60cm · 30x60cm





GIP4A  
ALPINE  
IVORY

**i'pietra**





GIP4A ALPINE IVORY 60x60cm LAPPATO

# ALPINE IVORY

LAPPATO & STRUCTURED\*

60x120cm · 60x60cm\* · 30x60cm\*

GIP4A





GIP4B  
ALPINE  
CHARCOAL

**i'pietra**





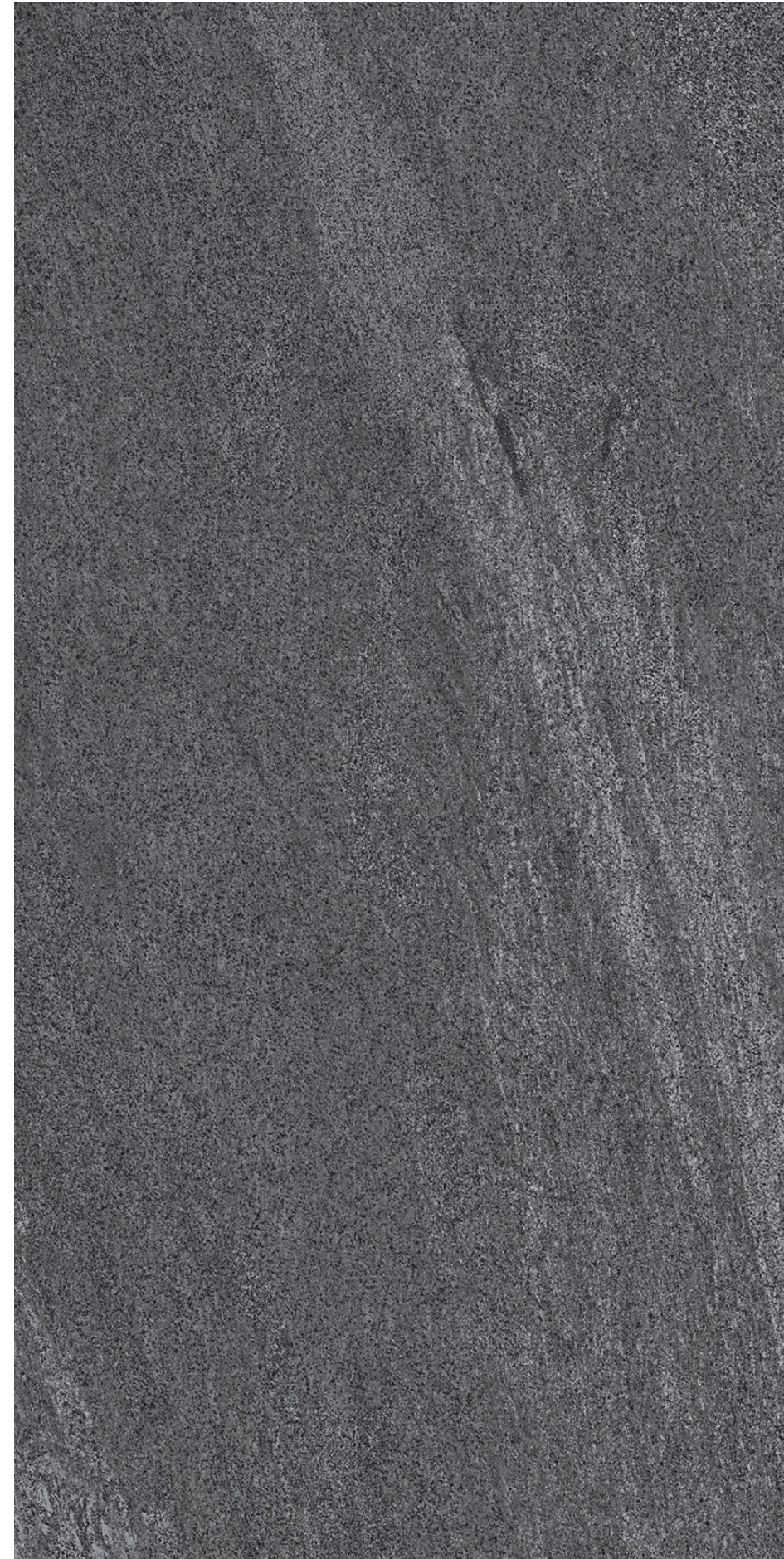
GIP4B ALPINE CHARCOAL 60x60cm STRUCTURED

# ALPINE CHARCOAL

GIP4B

LAPPATO & STRUCTURED\*

60x120cm · 60x60cm\* · 30x60cm\*





GIP4D  
ALPINE  
WHITE

**i'pietra**





GIP4D ALPINE WHITE 60x120cm MATT


# ALPINE WHITE

MATT, LAPPATO & STRUCTURED

60x120cm

GIP4D

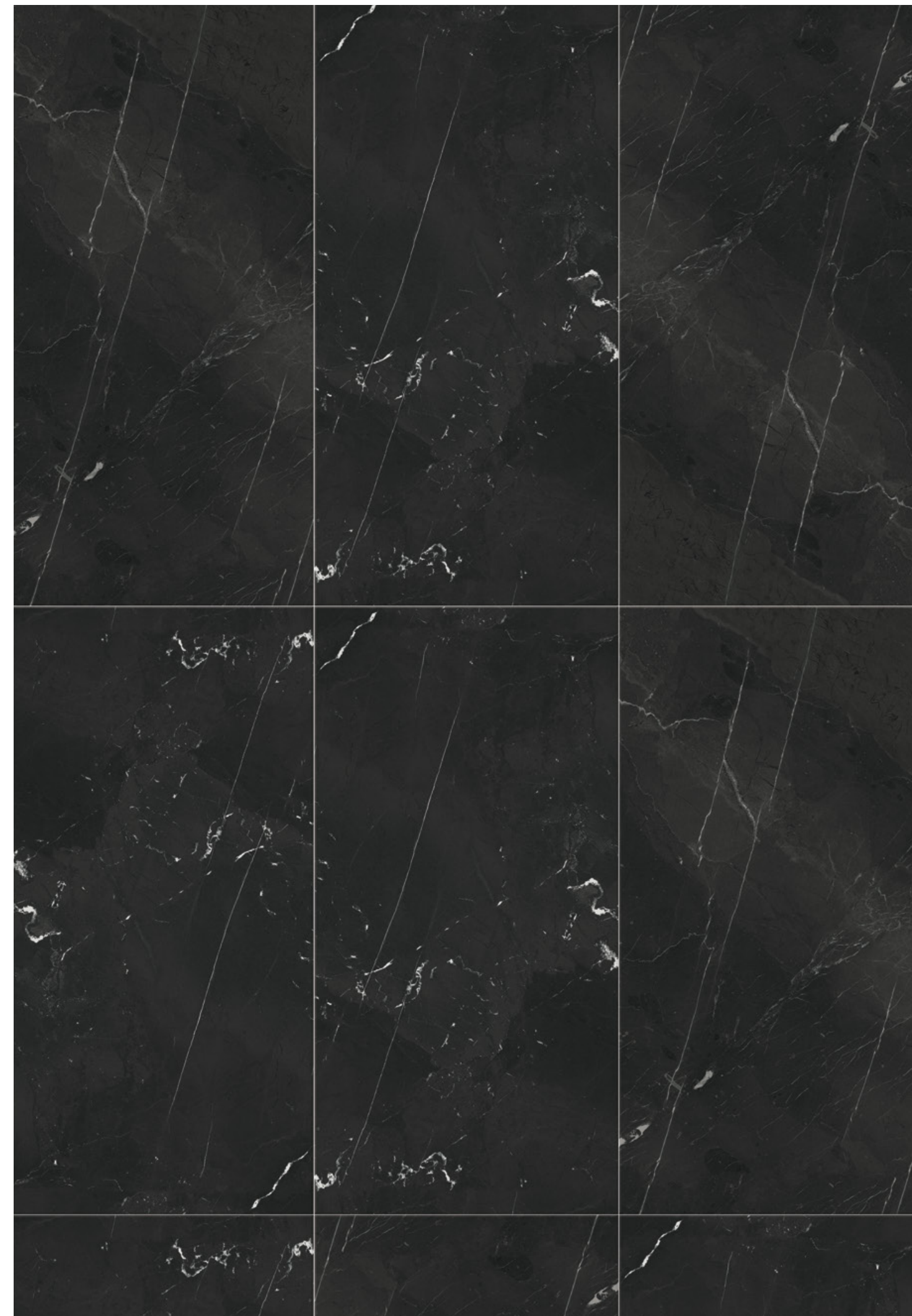




Riviera Black unfolds mystery, power and elegance to an ambience or mood. A Spanish dramatic black marble with unique presence of white veining is the supremacy of the Riviera Black Stone. Combine the Riviera Black with other collection of I'Pietra white and grey to accomplish a sophisticated design masterpiece.

GIP07  
RIVIERA  
BLACK

**i'pietra**







GIP07 RIVIERA BLACK 60x120cm+60x60cm MATT

# RIVIERA BLACK

MATT & LAPPATO

60x120cm · 60x60cm · 30x60cm\*

GIP07



# FISHBONE

MATT + LAPPATO (Mix Surface)

30x60cm\*

GIP07



MATT



LAPPATO

STRUCTURED

