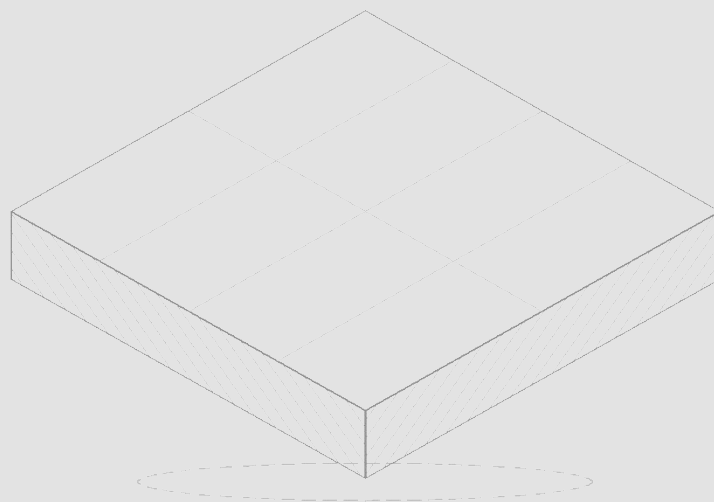


► **ATRIA® 20MM PORCELAIN TILES**

Technical data sheet



Reference:

DS-APT-0423

INTRODUCTION

Atria® 20mm porcelain tiles combine high-performance engineering with an extensive choice of stone, concrete and natural-stone-effect finishes, purpose-built for the Raafit® terrace system. This datasheet sets out the full range of colours and sizes, packaging and weight data, technical performance results, and installation and maintenance guidance.

This document is organised into the following sections:

- Available Sizes & Colours – product code and size reference tables
- Packaging & Weights
- Technical Performance – slip resistance, load testing and material characteristics
- Installation, Care & Handling
- Accessories – the Venice clip
- Wind Performance – wind uplift and step dimensions
- Appendix – colour swatches

AVAILABLE SIZES & COLOURS

STONE

RANGE	COLOUR	300×600	600×600	450×900	600×900	600×1200	1000×1000	1200×1200	1200×2400
Alba	Avorio	-	-	-	-	-	411008	-	-
Alba	Grey	-	-	-	-	-	411009	-	-
Alba	White	-	-	-	-	-	411007	-	-
Asti	Carbon	-	410010	-	-	410015	—	-	-
Asti	Mushroom	-	410011	-	-	410016	—	-	-
Asti	Smoke	-	410012	-	-	410017	—	-	-
Asti	Talc	-	410013	-	-	410018	—	-	-
Asti	Taupe	-	410014	-	-	410019	—	-	-
Cortona	Cotto	-	-	-	-	-	411010	-	-
Cortona	Sand	-	-	-	-	-	411011	-	-
Ferrara	Beige	-	-	-	-	-	411002	-	-
Ferrara	Grey	-	-	-	-	-	411003	-	-
Ferrara	White	-	-	-	-	-	411001	-	-
Florence	Graphite	-	402013	402011	-	-	-	402015	402018
Florence	Millstone	-	402014	402010	-	-	-	402016	402020
Florence	Silver	-	402030	402025	-	-	-	402017	402022
Modena	Ivory	407021*	*	-	-	407023	-	-	-
Modena	Smoke	407022*	*	-	-	407025	-	-	-
Modena	String	407020*	*	-	-	407024	-	-	-
Modica	Silver	-	415013	-	-	-	-	-	-
Novara	Ashen	-	-	-	461107	-	-	-	-
Novara	Cameo	-	-	-	461101	-	-	-	-
Novara	Ember	-	-	-	461104	-	-	-	-
Novara	Slate	-	-	-	461110	-	-	-	-
Padua	Grey	-	-	-	-	417012	-	417013	-
Roma	Lead	-	404027	404014	-	404017	-	404038	404042
Roma	Natural	-	404029	404015	-	404018	-	404039	-
Sorrento	Beige	-	419015	-	-	-	-	419016	-
Sorrento	Grey	-	419017	-	-	-	-	419018	-
Sorrento	Ivory	-	419019	-	-	-	-	419020	-

RANGE	COLOUR	300×600	600×600	450×900	600×900	600×1200	1000×1000	1200×1200	1200×2400
Sorrento	Silver	-	419021	-	-	-	-	419022	-
Tivoli Cross	Ivory	-	-	-	-	-	-	412001	-
Tivoli Cross	Pearl	-	-	-	-	-	-	412002	-
Tivoli Cross	Walnut	-	-	-	-	-	-	412003	-
Tivoli Cross	White	-	-	-	-	-	-	413004	-
Tivoli Vein	Ivory	-	-	-	-	412005	-	-	-
Tivoli Vein	Pearl	-	-	-	-	412006	-	-	-
Tivoli Vein	Walnut	-	-	-	-	412007	-	-	-
Tivoli Vein	White	-	-	-	-	412008	-	-	-
Umbria	Beige	-	419001	-	-	419008	-	-	-
Umbria	Clay	-	419002	-	-	419009	-	-	-
Umbria	Grey	-	419003	-	-	419010	-	-	-
Umbria	Iron	-	419004	-	-	419011	-	-	-
Umbria	Ivory	-	419005	-	-	419012	-	-	-
Umbria	Silver	-	419006	-	-	419013	-	-	-
Umbria	White	-	419007	-	-	419014	-	-	-

* On request. — Not available in this size.

CONCRETE

RANGE	COLOUR	300×600	600×600	900×900	1000×1000	1200×1200
Arezzo	Beige	-	-	-	411005	-
Arezzo	Grey	-	-	-	411006	-
Arezzo	White	-	-	-	411004	-
Venice	Anthracite	-	406011	406018	-	406021
Venice	Beige	-	406012	406015	-	-
Venice	Grey	-	406013	406016	406019	406019
Venice	Mocha	-	406014	406017	406020	406020

* On request. — Not available in this size.

NATURALS

RANGE	COLOUR	300×600	600×600	600×900	600×1200
Basalt	Flamed Black	431006	431004	431005	-
Basalt	Flamed Grey	431003	431001	431002	-
Granite	Verona Grey	430003	430001	430002	-
Granite	Verona White	430006	430004	430005	-
Limestone	Brushed Portland Beige	432009	432007	432008	-
Limestone	Brushed Portland White	432006	432004	432005	-
Limestone	La Rochelle Etched	432003	432001	432002	-
Sandstone	Beige	—	434001	434002	434003
Sandstone	Terrazzo	435001	435002	—	—
Slate	Slate Grey	433003	433001	433002	-
Slate	Slate Rustic	433006	433004	433005	-

For LRV (Light Reflectance Value) ratings, please contact a member of the team.

PACKAGING & WEIGHTS

TILE SIZE (mm)	THICKNESS	PIECES/BOX	m ² /BOX	kg/BOX	TILES/PALLET	m ² /PALLET	kg/PALLET
300 x 600	20mm	2	0.36	≅15.35	70	25.20	≅1075
300 x 1200	20mm	2	0.72	≅33.05	72	25.92	≅1203
600 x 600	20mm	2	0.72	≅30.70	60	21.60	≅934
450 x 900	20mm	2	0.81	≅37.40	54	21.87	≅1028
600 x 900	20mm	2	1.08	≅48.50	48	25.92	≅1182
600 x 1200	20mm	1	0.72	≅33.77	35	25.20	≅1202
900 x 900	20mm	1	0.81	≅38.00	36	14.58	≅699
1000 x 1000	20mm	1	1.00	≅46.60	25	25.00	≅1165
1200 x 1200	20mm	1	1.43	≅67.10	20	28.56	≅1377
1200 x 2400	20mm	1	2.86	≅134.20	9	25.70	≅1303

WORKING SIZE & WEIGHTS

TILE SIZE (mm)	ACTUAL RECTIFIED SIZE (mm)	m ² /TILE	kg/TILE
300 x 600	297 x 596	0.1800	≤8.27
300 x 1200	297 x 1195	0.3600	≤16.53
600 x 600	596 x 596	0.3600	≤16.53

► Find out more or request a sample
sales@kinleysystems.com
 or visit [kinleysystems.com](https://www.kinleysystems.com)

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Ref: DS-APT-0423 Last update: September 2026

TILE SIZE (mm)	ACTUAL RECTIFIED SIZE (mm)	m ² /TILE	kg/TILE
450 x 900	446 x 895	0.4050	≤18.70
600 x 900	596 x 895	0.5400	≤24.25
600 x 1200	596 x 1195	0.7200	≤33.77
1000 x 1000	997 x 997	1.0000	≤46.60
1200 x 2400	1195 x 2395	2.8800	≤134.20

TECHNICAL PERFORMANCE

SLIP RESISTANCE

TECHNICAL FEATURE	SPECIFICATION	VALUE REQUIRED	ATRIA® VALUE
Dynamic slider	BCRA	Test method available	>0.4
Static slider	ASTM C1028	Test method available	-
Inclined platform	DIN 51130	Test method available	R11
Pendulum test value (PTV) – dry	BS EN 14231	36+	72
Pendulum test value (PTV) – wet	BS EN 14231	36+	65

UNIFORMLY DISTRIBUTED LOAD (UDL) TESTING – TO BS EN 1991-1-1:2002

SYSTEM	LOAD VALUE
Raafat Preventa System incorporating Atria Porcelain Tiles	30.36 kN/m ² (kPa)
Raafat Preventa System incorporating Farrino Porcelain Tiles	30.03 kN/m ² (kPa)

POINT LOAD TESTS – TO BS EN 1991-1-1:2002

SYSTEM	MEAN LOAD VALUE
Raafat Preventa System incorporating Atria Porcelain Tiles	7.02 kN †
Raafat Preventa System incorporating Farrino Porcelain Tiles	6.32 kN †

† Prior to failure by way of the tile cracking.

REGULARITY CHARACTERISTICS

TECHNICAL FEATURE	SPECIFICATION	VALUE REQUIRED	ATRIA® VALUE
Length and width	UNI EN ISO 10545-2	±0.3% / ±1mm	Compliant
Thickness	UNI EN ISO 10545-2	±5.0% / ±0.5mm	Compliant
Squareness	UNI EN ISO 10545-2	±0.3% / ±1.5mm	Compliant
Straightness of sides	UNI EN ISO 10545-2	±0.3% / ±0.8mm	Compliant
Surface flatness	UNI EN ISO 10545-2	±0.4% / ±1.8mm	Compliant

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STRUCTURAL CHARACTERISTICS

TECHNICAL FEATURE	SPECIFICATION	VALUE REQUIRED	ATRIA® VALUE
Water absorption	UNE EN ISO 10545-3	≤0.5%	≤0.1%
Water absorption	ASTM C373	-	In accordance
Breaking strength	UNE EN ISO 10545-4	>1300N	>10,000N
Modulus of rupture	UNE EN ISO 10545-4	≥35mm ³	Compliant

SURFACE CHARACTERISTICS

TECHNICAL FEATURE	SPECIFICATION	VALUE REQUIRED	ATRIA® VALUE
Resistance to deep abrasion	UNE EN ISO 10545-6	≤175mm ³	≤155mm ³

THERMAL & HYGROMETRIC CHARACTERISTICS

TECHNICAL FEATURE	SPECIFICATION	VALUE REQUIRED	ATRIA® VALUE
Coefficient of linear thermal expansion	UNE EN ISO 10545-8	Test method available	Test method available
Thermal shock resistance	UNE EN ISO 10545-9	Resistant	Compliant
Frost resistance	UNE EN ISO 10545-12	Resistant	Compliant

CHEMICAL CHARACTERISTICS

TECHNICAL FEATURE	SPECIFICATION	VALUE REQUIRED	ATRIA® VALUE
Chemical resistance	UNE EN ISO 10545-13	Resistant	Compliant
Stain resistance	UNE EN ISO 10545-14	Resistant	Compliant

INSTALLATION, CARE & HANDLING

INSTALLATION INFORMATION

Refer to the Raaft® install guide for full installation instructions.

SUSTAINABILITY

Atria® porcelain tiles are made by pressing and baking a mix of natural minerals and clays, creating a strong, long-lasting tile. Unlike many other paving materials, Atria® tiles are eco-friendly: they do not absorb harmful chemicals or release contaminants, and they can be kept clean without the need for strong chemicals.

STORAGE & HANDLING

For delivery, Atria® tiles are securely packed into cardboard boxes to prevent movement in transit. Depending on the size and weight of the consignment, tiles may be palletised. Until installation, tiles should be stored fully packed in a dry environment.

FIRE RATING

Fire rated in accordance with BS EN 13501-1 to achieve a BROOF(t4) classification. Consult our certification documents for verification.

PRODUCT MAINTENANCE

Atria® tiles are easy to clean, resist most chemicals, are UV stable, and have a porosity of only 0.01%. We recommend cleaning once or twice a year, depending on local weather conditions, using a high-pressure cleaner held at least 20cm from the surface, or by scrubbing with a mild all-purpose cleaner and water. For day-to-day care, sweep regularly and rinse with water, a soft brush, and a mild cleaner or suds.

PROTECTIVE EQUIPMENT

- Sturdy safety boots or shoes to protect the feet.
- Protective eyewear, such as safety glasses.
- Strong gloves to protect the hands.
- Ear plugs or defenders when using loud cutting equipment.

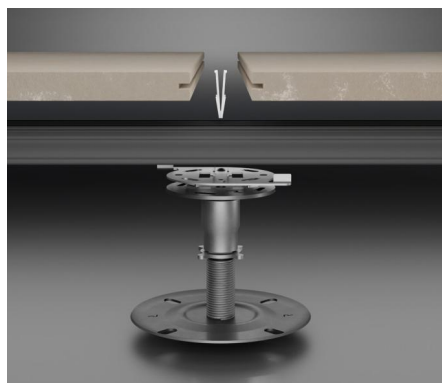
ACCESSORIES

VENICE CLIP

This product was developed in response to feedback from a domestic building experiencing water-pooling issues on its porcelain tiles. Following several months of design and testing, the Venice clip was created to solve the problem.

Water pooling has become a more significant issue as new materials enter the UK market. Even where tiles carry an R11 (or higher) rating, pooled water can freeze in winter, which is why porcelain is often excluded from specifications for roof terraces nationwide.

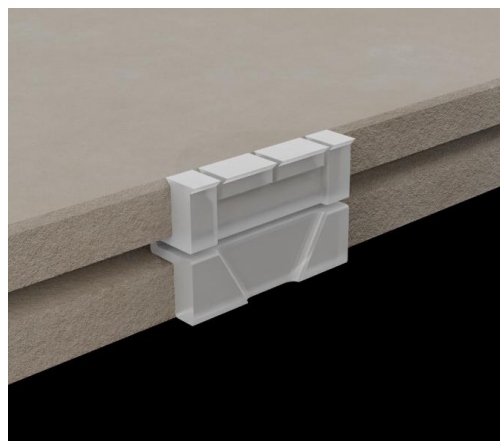
The Venice clip addresses this directly. Raaft® now offers a solution that drains water from tiles within a precise one-hour timeframe, in line with NHBC 9.1.15 guidance, which states that standing water after rainfall should not exceed 5mm in depth or cover an area greater than 1m².



Venice Clip Push – this item serves as a universal solution for all porcelain within the Raaft® collection.

The clip is designed to be discreet, using transparent materials that can be matched to Raaft's specified tiles. It works by breaking the surface tension of the tile in the same way a grout joint does where porcelain is bonded to cement. On a loose-laid system the joints are exposed, so without this feature the joints would otherwise fill with water due to surface tension.

The clip sits flush with the surface, reducing the risk of catching underfoot. During installation – particularly in wind-uplift scenarios – the clip is secured into the groove, ensuring a snug fit while also acting as a protective buffer between tiles. This allows tiles to be removed and reinstalled without compromising structural integrity.



Venice Clip Uplift

WIND PERFORMANCE

WIND UPLIFT

This product has been tested and complies with BS EN 1991-1-4:2005+A1:2010. Please consult our certification documents for verification.

STEP DIMENSIONS

Standard step dimensions: 900 × 450 × 150mm and 1200 × 450 × 150mm.

Please contact us if different sizes are required.

APPENDIX – COLOUR SWATCHES

Swatches are provided as a visual guide only. Actual product colour and finish may vary; please request a physical sample before specifying.

STONE & CONCRETE

ALBA



Avorio

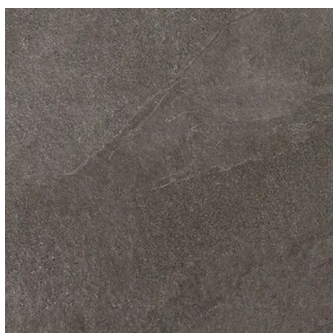


Grey



White

ASTI



Carbon



Mushroom



Smoke



Talc



Taupe

CORTONA



Cotto

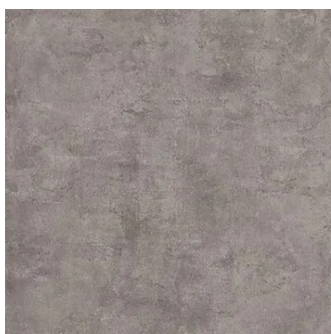


Sand

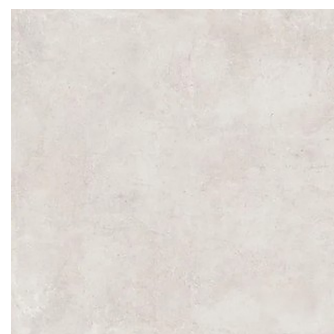
FERRARA



Beige



Grey



White

FLORENCE



Graphite

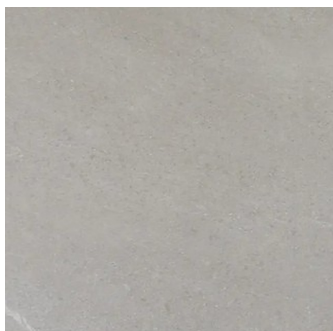


Millstone

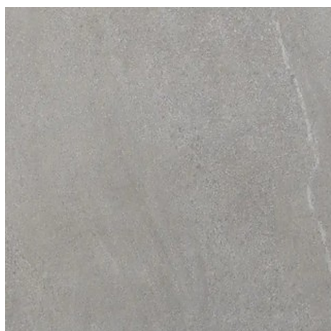


Silver

MODENA



Ivory

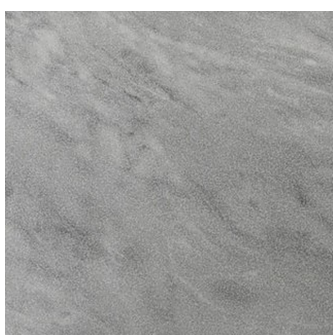


Smoke



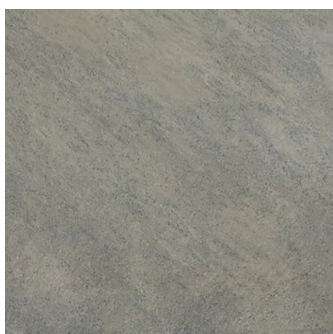
String

MODICA



Silver

NOVARA



Ashen



Cameo



Ember



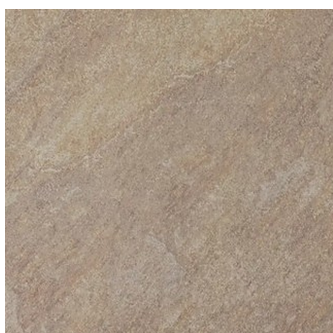
Slate

PADUA



Grey

ROMA



Lead



Natural

SORRENTO



Beige



Grey



Ivory



Silver

TIVOLI CROSS



Ivory



Pearl



Walnut



White

TIVOLI VEIN



Ivory



Pearl



Walnut



White

UMBRIA



Beige



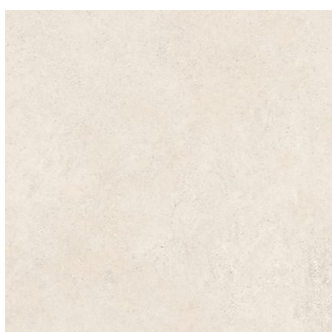
Clay



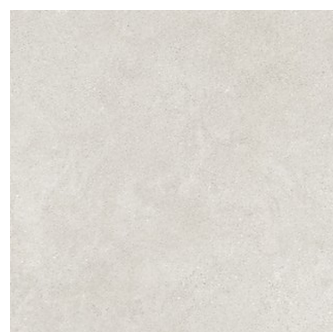
Grey



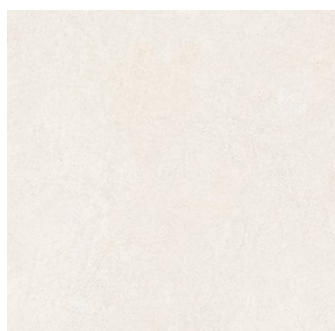
Iron



Ivory

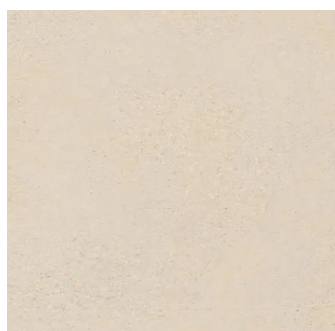


Silver

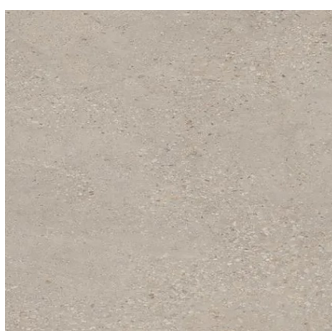


White

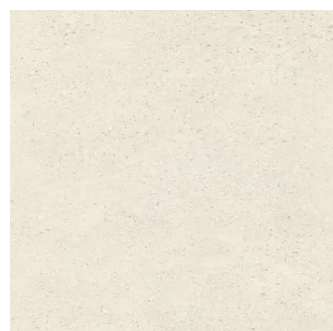
ARREZO



Beige

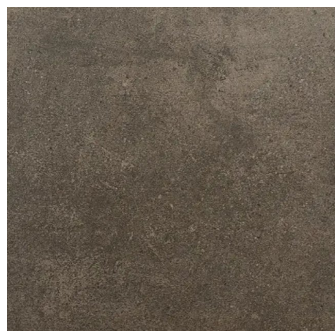


Grey



White

VENICE



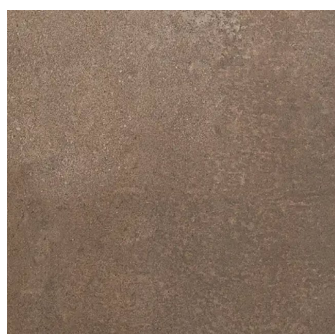
Anthracite



Beige



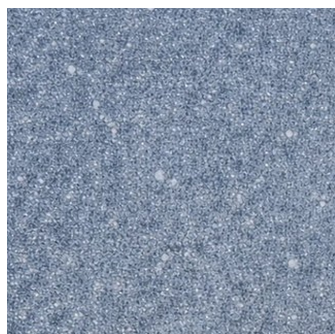
Grey



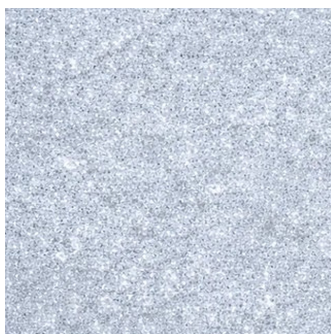
Mocha

NATURAL STONE EFFECT

BASALT

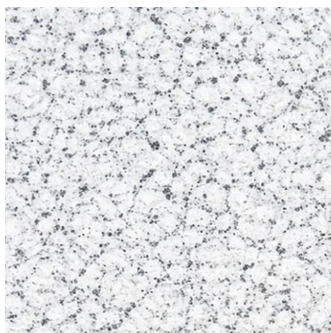
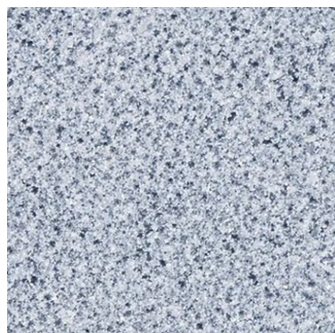


Flamed Black



Flamed Grey

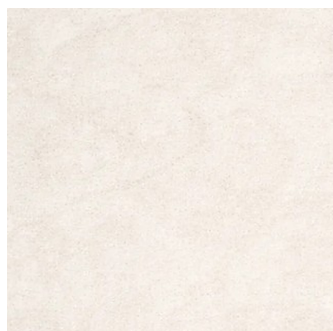
GRANITE



Verona Grey

Verona White

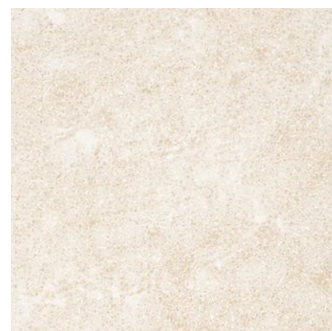
LIMESTONE



Brushed Portland Beige

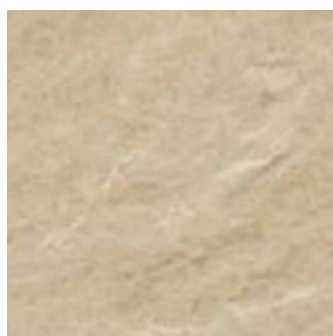


Brushed Portland White

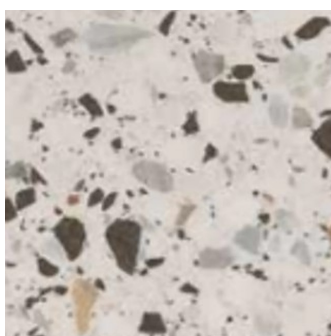


La Rochelle Etched

SANDSTONE



Beige



Terrazzo

SLATE



Slate Grey



Slate Rustic