

TECHNICAL DATA SHEET



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TECHNICAL DATA SHEET

Stone

| RANGE | | PRODUCT CODE & SIZES | | | | | | |
|----------|-----------|----------------------|---------|---------|----------|-----------|-----------|---------|
| | COLOUR | 600x600 | 450x900 | 600x900 | 600x1200 | 1200x1200 | 1200x2400 | 300x600 |
| | Carbon | 410010 | - | - | 410015 | - | - | - |
| | Mushroom | 410011 | - | - | 410016 | - | - | - |
| Asti | Smoke | 410012 | - | - | 410017 | - | - | - |
| | Talc | 410013 | - | - | 410018 | - | - | - |
| | Taupe | 410014 | - | - | 410019 | - | - | - |
| | Graphite | 402013 | 402011 | - | - | 402015 | 402018 | - |
| Florence | Millstone | 402014 | 402010 | - | - | 402016 | 402020 | - |
| | Silver | 402030 | 402025 | - | - | 402017 | 402022 | - |
| | Ivory | * | - | - | 407023 | - | - | 407021* |
| Modena | Smoke | * | - | - | 407025 | - | - | 407022* |
| | String | * | - | - | 407024 | - | - | 407020* |
| N.4 P | Pewter | 415012 | - | - | - | - | - | - |
| Modica | Silver | 415013 | - | - | - | - | - | - |
| | Ashen | - | - | 461107 | - | - | - | - |
| N.1 | Cameo | - | - | 461101 | - | - | - | - |
| Novara | Ember | - | - | 461104 | - | - | - | - |
| | Slate | - | - | 461110 | - | - | - | - |
| | Copper | 404025 | 404016 | - | - | - | - | - |
| _ | Earth | 404026 | 404013 | - | - | - | - | - |
| Roma | Lead | 404027 | 404014 | - | 404017 | 404038 | 404042 | - |
| | Natural | 404029 | 404015 | - | 404018 | 404039 | - | - |
| | Charcoal | 408025 | 408028 | - | - | - | - | - |
| Taranto | Hessian | 408024 | 408029 | - | - | - | - | - |
| | Steel | 408023 | 408026 | - | - | - | - | - |
| | Pearl | 419005* | - | - | 419001 | - | - | - |
| | Ivory | 419006* | - | - | 419002 | - | - | - |
| Lucca | Beige | 419007* | - | - | 419003 | - | - | - |
| | Grey | 419008* | - | - | 419004 | - | - | - |

^{*} On request

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Concrete

| DANIOE | | PRODUCT CODE & SIZES | | | | |
|--------|------------|----------------------|---------|---------|-----------|--|
| RANGE | COLOUR | 300x600 | 600x600 | 900x900 | 1200x1200 | |
| | Cloud | 416023* | 416010 | Ŧ | 416014 | |
| Davis | Ochre | 416017* | 416011 | Ŧ | - | |
| Pavia | Urban | 416018* | 416012 | Ŧ | 416015 | |
| | Shadow | 416019* | 416013 | - | - | |
| | Anthracite | - | 406011 | 406018 | 406021 | |
| Venice | Beige | Ŧ | 406012 | 406015 | - | |
| | Grey | Ŧ | 406013 | 406016 | 406019 | |
| | Mocha | - | 406014 | 406017 | 406020 | |

^{*} On request

Terrazzo

| RANGE | COLOUR | PRODUCT CODE & SIZES | | |
|-------|---------|----------------------|-----------|--|
| RANGE | COLOOR | 600x600 1200x120 | 1200x1200 | |
| Padua | Thunder | 417010 | 417011 | |

For LRV ratings please reach out to a member of the team.

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Packaging and weights

| TILE SIZE | | BOX SPECIFICATION | | | PALLET SPECIFICATION | | |
|-------------|-----------|-------------------|-------------|------------|----------------------|----------------|---------------|
| | THICKNESS | PIECES/ BOX | SQM/ BOX | Kg/ BOX | TILES/ PALLET | SQM/ PALLET | Kg/ PALLET |
| 300 x 1200 | 20mm | 2 | 0.72 | ≅33.05 | 72 | 25.92 | ≅12O3 |
| 600 x 600 | 20mm | 2 | 0.72 | ≅30.70 | 60 | 21.60 | ≅934 |
| 450 x 900 | 20mm | 2 | 0.81 | ≅37.4O | 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 |
| 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 and weights

| TILE SIZE | ACTUAL RECTIFIED SIZE | M2/TILE | KG/TILE |
|------------|-----------------------|---------|---------|
| 600 x 600 | 596 x 596 | 0.3600 | ≤16.53 |
| 600 x 900 | 596 x 895 | 0.5400 | ≤24.25 |
| 300 x 1200 | 297 x 1195 | 0.3600 | ≤16.53 |
| 600 x 1200 | 596 x 1195 | 0.7200 | ≤33.77 |

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Slip resistance

| TECHNICAL FEATURES | SPECIFICATION | VALUES REQUIRED | ATRIA° VALUES |
|---------------------------------|---------------|-----------------------|---------------|
| 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 |
| Pendumul test value (PTV) - wet | BS EN 14231 | 36+ | 65 |

Uniformly distributed load (UDL) testing TO BS EN 1991-1-1:2002

| | LOAD VALUE |
|---|-------------------|
| Raaft Preventa System incorporating Atria Porcelain Tiles | 30.36 kN/m² (kPa) |
| Raaft Preventa System incorporating Farrino Porcelain Tiles | 30.03 kN/m² (kPa) |

Point load tests TO BS EN 1991-1-1:2002

| | MEAN LOAD VALUE |
|---|-----------------|
| Raaft Preventa System incorporating Atria Porcelain Tiles | 7.02 kN*** |
| Raaft Preventa System incorporating Farrino Porcelain Tiles | 6.32 kN*** |

^{***} Prior to failure by way of the tile cracking

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Regularity characteristics

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

Structural characteristics

| TECHNICAL FEATURES | SPECIFICATION | VALUES REQUIRED | ATRIA® VALUES |
|--------------------|-------------------|-----------------|---------------|
| Makes all counting | UN EN ISO 10545-3 | ≤0.5% | ≤0.1% |
| Water absorption | ASTM C373 | | In accordance |
| Breaking strength | UN EN ISO 10545-4 | ≥1300N | ≥10,000N |
| Modulus of rupture | UN EN ISO 10545-4 | ≥35mm³ | Compliant |

Surface characteristics

| TECHNICAL FEATURES | SPECIFICATION | VALUES REQUIRED | ATRIA® VALUES |
|-----------------------------|-------------------|-----------------|---------------|
| Resistance to deep abrasion | UN EN ISO 10545-6 | ≤175mm³ | ≤155mm³ |

Thermal and hygrometric characteristics

| TECHNICAL FEATURES | SPECIFICATION | VALUES REQUIRED | ATRIA® VALUES |
|---|--------------------|-----------------------|-----------------------|
| Coefficient of linear thermal expansion | UN EN ISO 10545-8 | Test method available | Test method available |
| Thermal shock resistance | UN EN ISO 10545-9 | Resistant | Compliant |
| Frost resistance | UN EN ISO 10545-12 | Resistant | Compliant |

Chemical characteristics

| TECHNICAL FEATURES | SPECIFICATION | VALUES REQUIRED | ATRIA® VALUES |
|---------------------|--------------------|-----------------|---------------|
| Chemical resistance | UN EN ISO 10545-13 | Resistant | Compliant |
| Stain resistance | UN EN ISO 10545-14 | Resistant | Compliant |

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LUCCA



Ivory





Grey



NOVARA



Slate



Ember



Ashen Cameo

Concrete

VENICE



Beige



Grey





Anthracite Mocha

PAVIA









ASTI





Smoke







Mushroom

MODENA







String

Terrazzo

PADUA



Thunder

TARANTO







Steel Hessian

Granite effect

VERONA



Grey

FLORENCE

Charcoal











Taupe

MODICA



Pewter



ROMA







Natural Copper

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Installation information

Refer to the install guide for further information.

Sustainability

Atria® porcelain tiles are made by pressing and baking a mix of natural minerals and clays. This process creates strong and long-lasting tiles. Unlike many other materials, these tiles are eco-friendly. They don't soak up harmful chemicals or release contaminants. They're also easy to clean without needing strong chemicals.

Product maintenance

Our Atria® tiles are easy to clean and resist most chemicals. They're UV stable and only have 0.01% porosity. It's a good idea to clean them once or twice a year, depending on local weather conditions. Use a high-pressure cleaner from at least 20cm away or scrub with a mild all-purpose cleaner and water. For daily cleaning, just sweep regularly and rinse with water, a soft brush, and a mild cleaner or suds.

Protective equipment

- a) Good strong safety boots/shoes to protect the feet.
- b) Protective eyewear such as safety glasses.
- c) Strong gloves to protect the hands.
- d) If using loud cutting equipment then ear plugs or defenders should be worn.

Storage and handling

In preparation for delivery, Atria® tiles are securely packed into cardboard boxes to ensure no movement during transit.

Depending on the size and weight of the consignment they may be palletised. Until the point of installation, the tiles should be stored fully packed in a dry environment.

Fire rated

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

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Accessories

Venice clip

Our product stemmed from valuable feedback received from a domestic building grappling with water pooling issues on their porcelain tiles. After meticulous contemplation and design efforts spanning several months, the solution was crafted.

The predicament of water pooling takes on greater significance with the introduction of new materials to the UK market. Despite tiles boasting ratings of R11 or higher, the accumulation of water transforms into ice during winter, prompting the exclusion of porcelain from specifications on roof terraces nationwide.

Enter our innovative product, poised to address this challenge effectively. Raaft® now offers a solution enabling water drainage from tiles within a precise 1-hour timeframe, aligning seamlessly with NHBC 9.1.15 guidelines. According to these standards, standing water post-rain should neither exceed 5mm in depth nor cover an area surpassing $1m^2$.

We prioritise subtlety, employing transparent materials potentially matching Raaft[®]'s specified tiles. The Venice clip is designed to break the surface tension of the tile, similar to a grout joint where porcelain tiles are installed on cement. When porcelain is installed onto a loose laid system the joints are exposed which means the files fill with water due to surface tension.

The product is flush to the surface reducing the chances of feet being caught.

During installation, especially in wind uplift scenarios, our design incorporates a clip securely inserted into the groove. This not only ensures a snug fit but also acts as a protective 'buffer' between tiles, facilitating removal and reinstallation without compromising structural integrity.



Venice Clip Push – this item serves as a universal solution for all porcelain within the ${\sf RAAFT}^{\circ}$ collection.



Venice Clip Uplift

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Wind uplift

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





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