

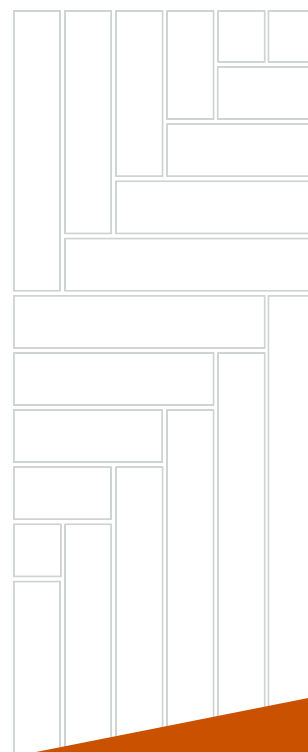
Installation Guide

Reference: IG-APT-1021



Atria 2cm External Porcelain Tiles

20mm Thick Italian Manufactured Porcelain Tiles



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Installation options

The installation options below offer a range of ideal solutions for outdoor areas needing high technical performance and good resistance features.

The 20mm thickness of Atria Tiles, together with the conventional adhesive laying method, allows users to create sturdy tiling which can withstand the weight of traffic of all kinds, as well as parked cars.

Atria Tiles also fit perfectly with Raaft Support Structures when used to create raised flooring, which can overcome uneven surface issues and provide room for housing plumbing and electrical services.

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or email technical@raaft.co

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General information

These instructions are designed to help you install Atria Tiles properly, safely and economically.

Cutting Atria Procelain Tiles

This is to be done with a diamond blade wet tile cutter and tool safety guides should be strictly adhered to at all times, most importantly face and hand protection.

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 I weight of the consignment this may be palletised. Until the point of installation the tiles should be stored fully packed in a dry environment.

Disposal

Waste material may be disposed of with commercial waste. Larger quantities may be disposed of with bulk waste or taken directly to an appropriate waste disposal site. If in doubt, please contact your city and/or municipal administration to discuss appropriate methods of disposal.

Cleaning and care

Atria Tiles are easy to clean and resistant to most chemicals. They are UV stable and have a porosity of 0.01%.

We recommend that porcelain tile products should have a cleaning program in place to ensure the product keeps a relatively clean facial appearance. We would suggest this takes place once or twice a year although this can vary depending on the severity of the environment concerned.

Cleaning can be carried out using a high pressure cleaner with a fan-shaped beam at a distance of at least 20cm, in a lengthwise profile direction. Alternatively, tiles may be scrubbed using mild all-purpose cleaner and water.

To keep tiled areas clean on a day-to-day basis we recommend regular sweeping followed by rinsing and brushing with water, a soft brush and a mild all-purpose cleaner or suds.



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Important information

Tile breakage

A ceramic tile may fracture on impact if a heavy object falls on it from any significant height. Therefore we recommend you check the specific intended use before starting the installation and in certain conditions reinforcing must be applied to the back of the tiles.

Failure to comply with these recommendations may lead to improper use of the product and could cause serious damage or injury. Support Structure System does not accept any liability caused by improper use or defective installation.

Warning: Wind uplift can cause loose-laid porcelain tiles to lift and move

All roofs are subjected to the effects of wind uplift as the wind moves across them. The effects of this will depend upon a number of factors including location, height, size, roof shape and relationship to the surrounding area. In extreme cases 2cm thick porcelain tiles have been lifted and propelled over a balustrade. It is therefore critical that a roof is analyzed by a certified wind consultant and any concerns addressed with the necessary wind resistant solutions. For more information, Raaft Ltd does provide anti wind up-lift solutions to solve wind up-lift challenges. Please speak to our technical team for more info: technical@raaft.co

Ground and sub-base suitability

The ground must be stable and properly compacted. If the ground is not sufficiently stable, this may lead to instability and potential damages to the construction and persons or property thereon.

Permissible loads

Atria Tiles have a breaking strength of >1500N and a breaking load class of U11 and T11. Further information can be found in the Atria 20mm Porcelain Tiles Data Sheet (DS-APT-XXXX). Misapplication may lead to damage to property or person. Please consult with an authorized stress analyst to check suitability of proposed application.

Installation of Atria Tiles should be completed in compliance with all Health and Safety regulations pertaining to the application.



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RaafT Support Structure components

Adjustable Pedestals

Adjustable decking and paving support pads. Our range of height adjustable paving pedestals are easy to use and engineered for high performance. While they have been designed to complement the Atria external flooring systems, they also work with other types of decking and paving.

Fire-rated Adjustable Pedestals

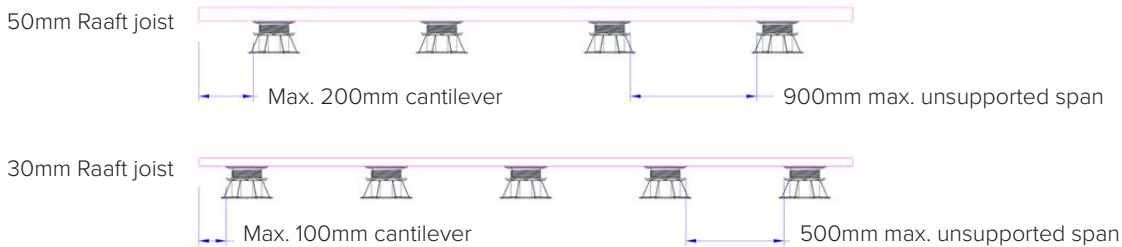
Adjustable steel pedestals for supporting RaafT aluminium joist. The robust Preventa steel pedestals are simple to install and will provide the ideal support for the Preventa Class A Fire-Rated modular terrace system.

RaafT Aluminium Joists

Aluminium substructure joists. Aluminium substructure joists provide a platform for Atria paving and other surfaces. The rails reduce the need for pedestals which greatly increases the speed of installation.



Maximum unsupported spans



Accessories



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Installing on the RaafT Support Structure System

Layout Pedestals

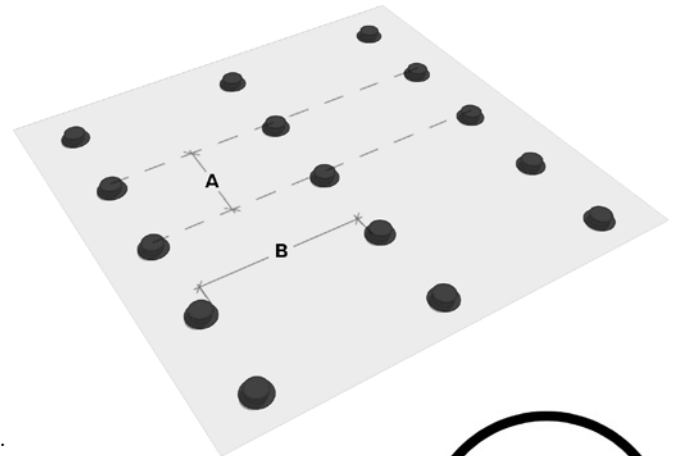
Ensure dimension A matches centres required for Atria tile.

Ensure dimension B meets the requirements of the chosen joist:

30mm Joist - 500mm maximum unsupported span between pedestals

50mm Joist - 900mm maximum unsupported span between pedestals

Both Joist sizes can cantilever a maximum of 300mm.



Lay Joists

Join Joists where required using Joist Connectors. Position Joists onto pedestals, check levels and secure using the Joist Locking Piece or Bearer Holder.



Optional stage (Install noggins)

For small areas noggins can be installed at both ends of each Joist using 90° Connector Clips, as shown below. For larger areas, install noggins at one end of each joist, if required.

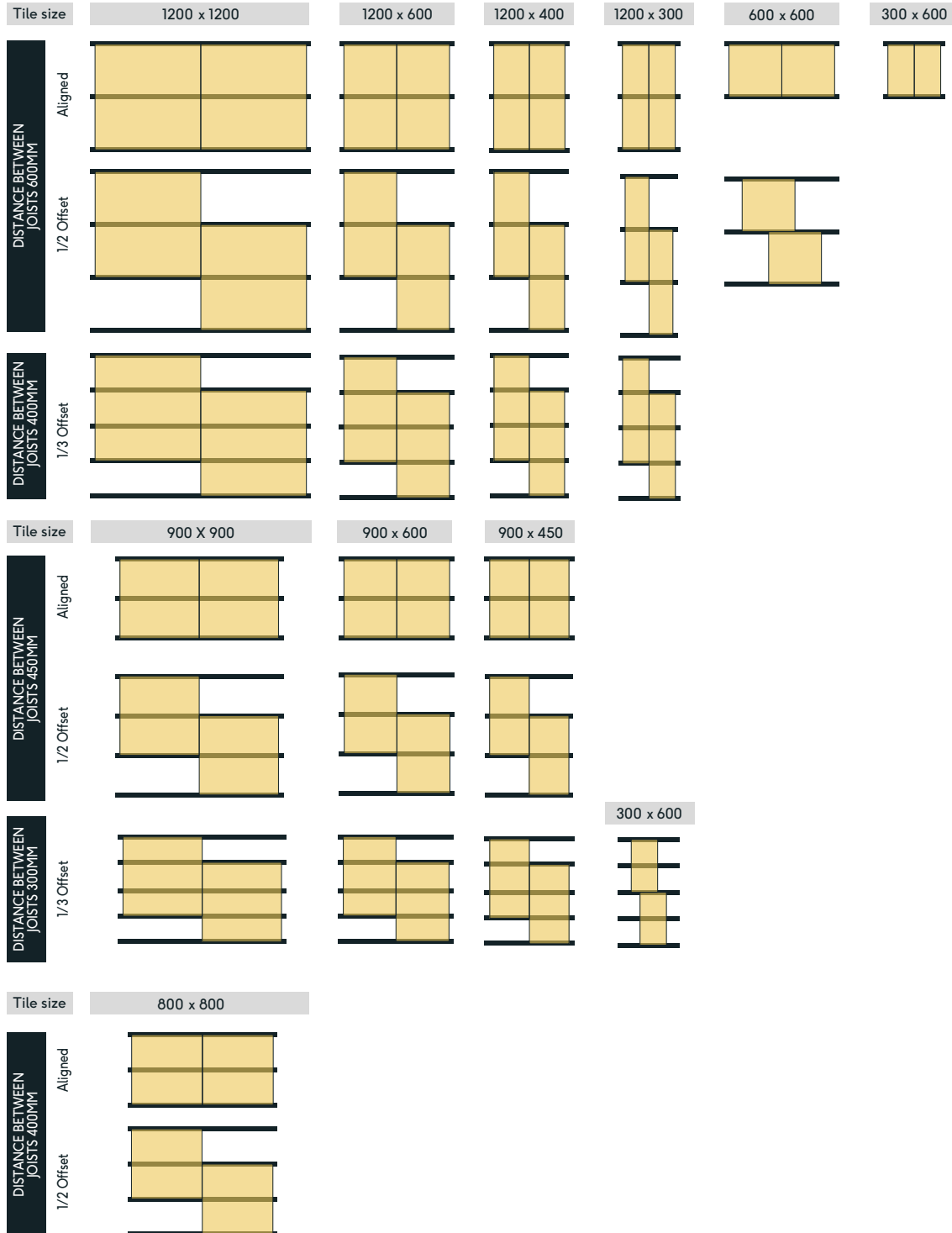


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Installing directly on Adjustable Pedestals only

The Raaft Adjustable Pedestals are designed for raised tile laying and can be used on various surfaces. They provide a cavity for services to be concealed, improve heat and sound insulation and facilitate rapid surface drainage whilst allowing waterproofing and services to remain accessible.

For sloped surfaces a Base Slope and Top Slope Corrector is available that can compensate for slopes up to 10%.



ADJUSTABLE SUPPORT

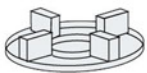


ADJUSTABLE SUPPORT WITH SLOPE CORRECTOR

Support Structure layout

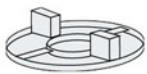
For laying near walls or corners two or all four spacers on the pre-scored tab must be broken off. When laying near corners, the Support Structures must be moved away from the wall and positioned inside the perimeter of the slab as shown below.

Tab Removal



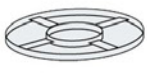
(A)

Remove 0 tabs.
For laying tiles away from walls and corners.



(B)

Remove 2 tabs.
For laying tiles along walls.



(C)

Remove 4 tabs.
For laying tiles at corners.



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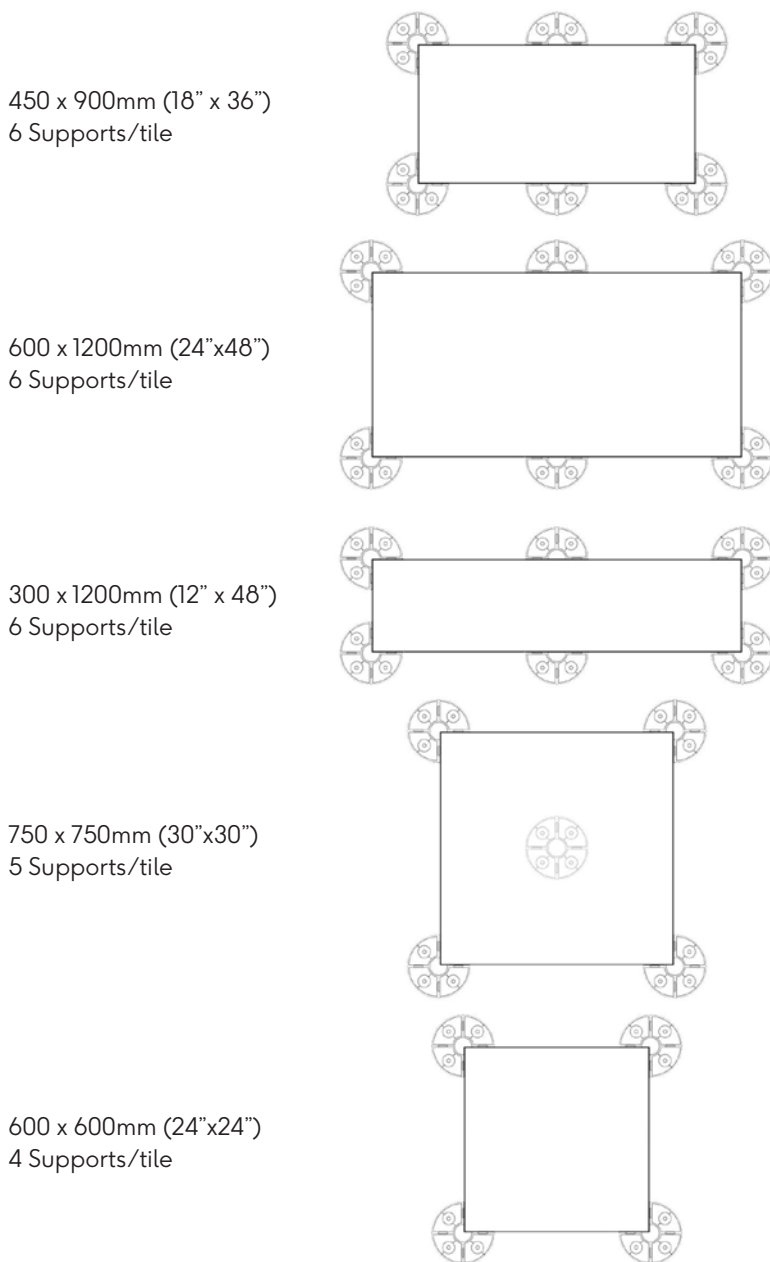
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Pedestal only laying guidelines

Please refer to the information below regarding Support Structure numbers and spacing when laying Atria Tiles. The amount of supports per tile will vary depending on application and tile layout design.



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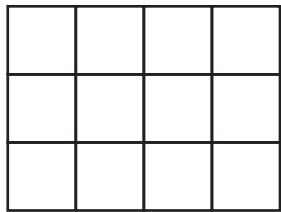
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Laying onto screed with adhesive (Ground floor)

Laying 20mm tiles on screed with adhesive creates an exceptionally hard-wearing surface which can withstand both moving and parked vehicles. Ideal for heavily frequented city areas, such as pedestrian squares, pavements, or cycle paths.

Selecting the joint style

A closed joint (A) is recommended when laying on screed.

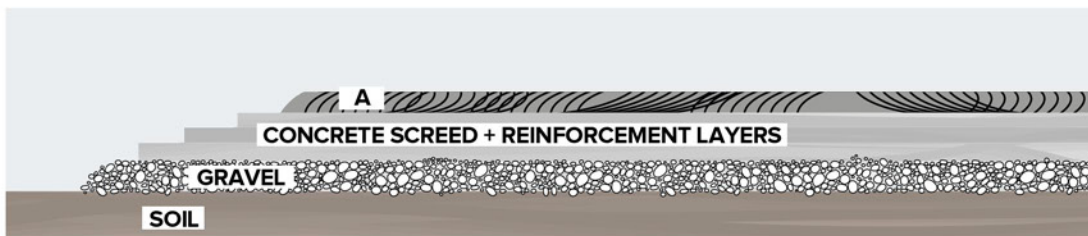


Tools Required

- ✓ Rubber mallet
- ✓ Cutting equipment
- ✓ Spirit level
- ✓ Tape measure
- ✓ String line

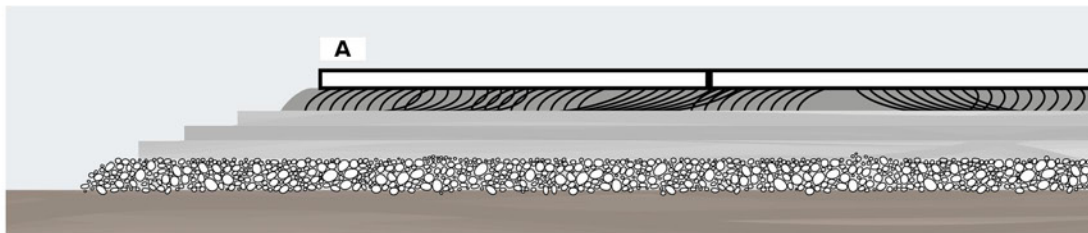
Preparing the laying area

Typical concrete screed build-up shown below. Apply adhesive to screed (A).



Laying the tiles

Lay the tiles (A) and then strike their surface with a rubber mallet to ensure even bedding .



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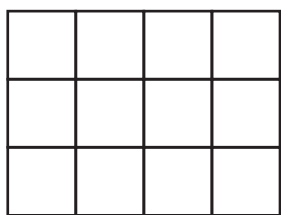
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Laying onto screed with adhesive (Podium level)

Laying 20mm tiles on screed with adhesive creates an exceptionally hard-wearing surface which is suitable for flat roofs expecting heavy use.

Selecting the joint style

A closed joint (A) is recommended when laying on screed.



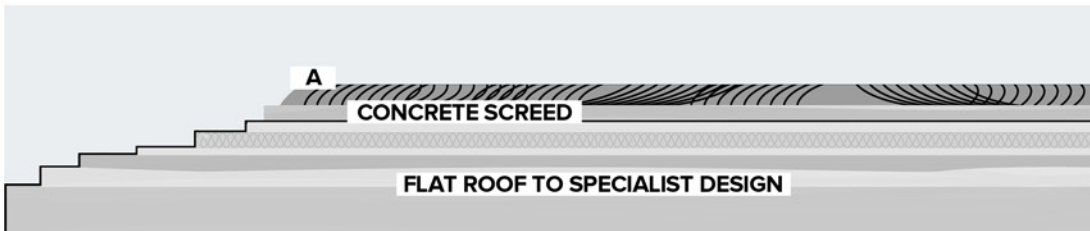
Tools Required

- ✓ Rubber mallet
- ✓ Cutting equipment
- ✓ Spirit level
- ✓ Tape measure
- ✓ String line

Preparing the laying area

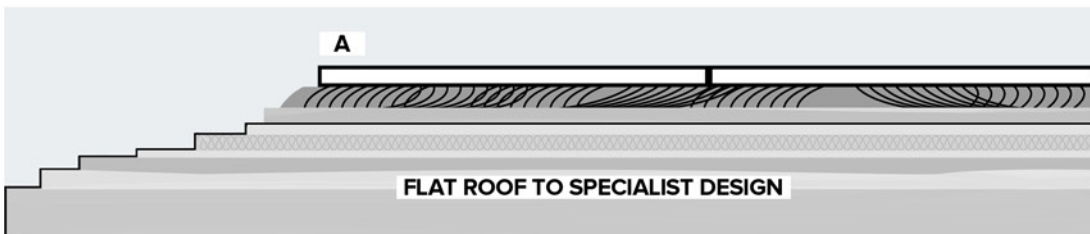
We recommend that the design and construction of the roof structure up to the concrete screed layer be carried out by specialists.

Apply adhesive to screed (A).



Laying the tiles

Lay the tiles (A) and then strike their surface with a rubber mallet to ensure even bedding.



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Handling and hazards



HEAVY SEGMENTS!

Requires two persons to lift each segment – or mechanical lifting device.



HEAVY ITEMS!

Wear steel toe protection.



DUST PARTICLES!

Wear dust mask



BE SAFE!

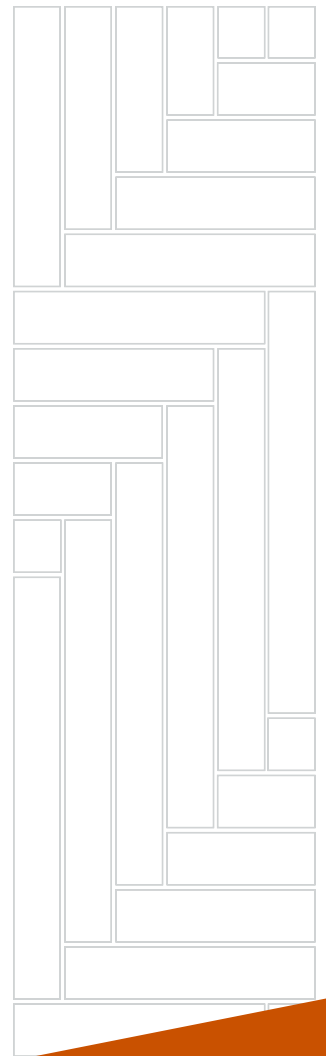
Wear high visibility clothing, hard hats, and any other PPE required on site.

DISCLAIMER

These instructions are for guidance only and the installer is responsible to use their discretion to install the products in the best possible way for their respective application. Raaft Limited will not be held liable for product failure or poor performance as a result of poor quality installation. If any errors are found in this guide please email us at technical@raaft.co.

SUPPORTING DOCUMENTS

More information on the Atria products can be found at www.raaft.co/products/porcelain-tiles.



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