butech

raised access flooring



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Raised Access Flooring

The Raised Access Flooring (RAF) is a system that was born from the need to hide the large number of installations such as telephone and electricity wiring, piping, air conditioning, etc... that are located in work areas, technical rooms, etc...

These installations are hidden under the system, as a "technical plenum" has been created with immediate and easy accessibility. It also lets us carry all the installations neatly.

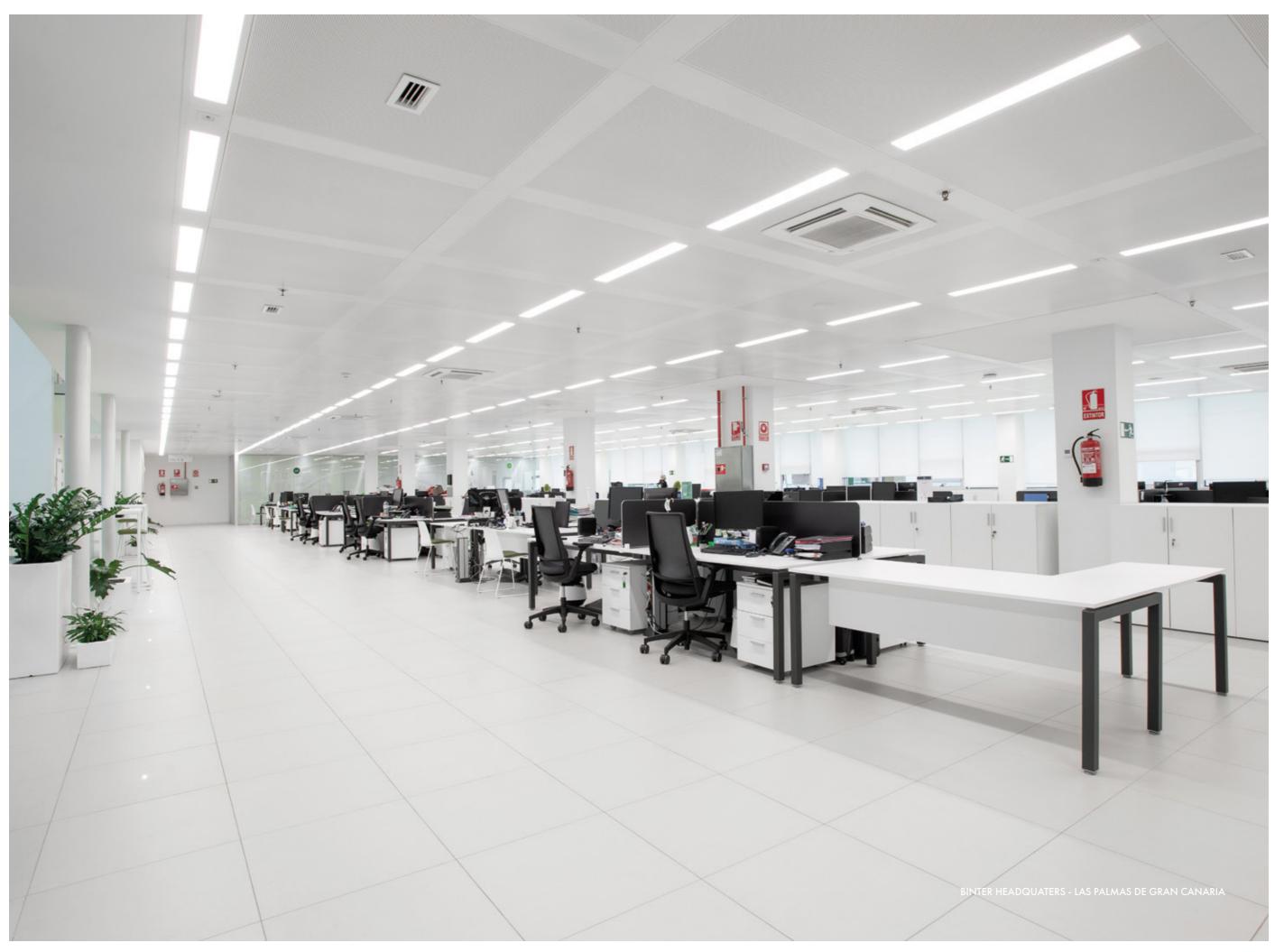


System application areas

The use of raised access floor is highly recommended in those areas where there are a larg e number of elements running under the floor, with the advantage of having an easy and immediate accessibility.

Commercial applications: offices, libraries, museums, schools, shopping centres, etc.

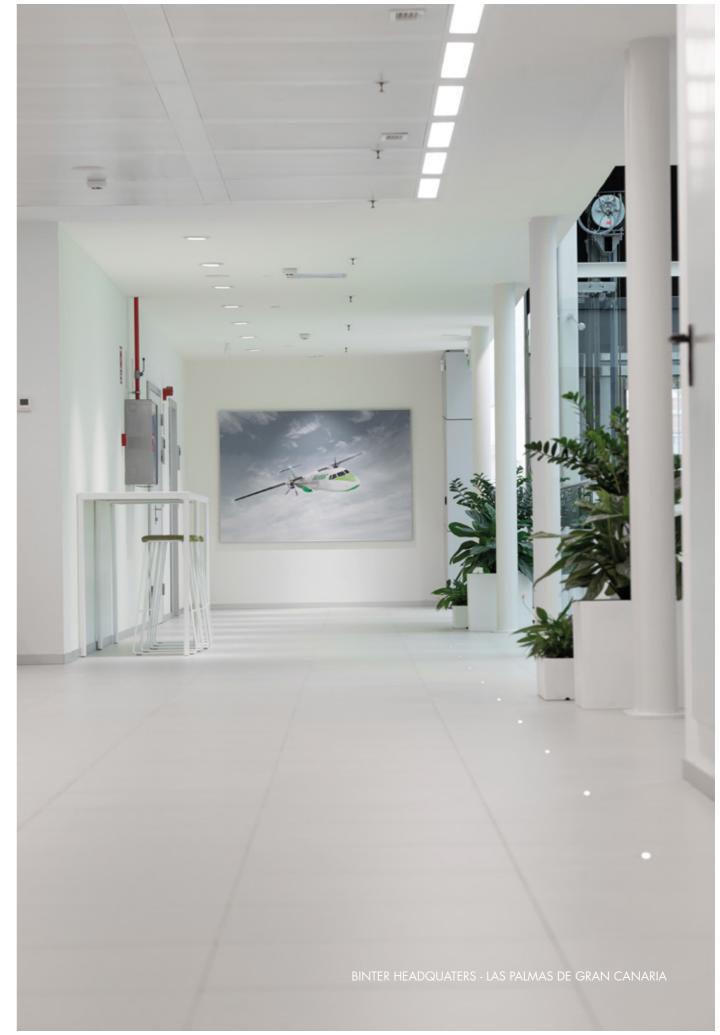
Technical applications: telecommunications/electricity plants, control rooms, laboratories, data centres, etc.





- Ability to hide away all types of ugly and dangerous cables, pipes etc under the floor.
 Improved installation efficiency in comparison to conventional floors (installation rate of about 40 m²/day).
 Easy to take with you when relocating offices.
 Option of rerouting services following installation of floor.
 Clean installation without the use of cement, avoiding the production of debris, dust, pains at

- noise, etc.





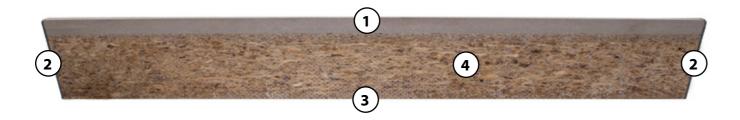
Advantages over other raised access floor systems

- Able to withstand a high mechanical load.
- The potential for combining different structures, as required in each particular case.
 It has an excellent reaction to fire under laboratory testing.

- It has very low dimensional tolerances, which allow for a perfect exchange of panels.
 Cores made of high-performance materials with very high densities.
 Compliance with UNE EN ISO 9001, guaranteeing quality controls during each stage of the manufacturing process.
- On the top surface, any 60 x 60 ceramic tile by Porcelanosa or other non-ceramic coverings (plastic laminate, linoleum, vinyl, granite, aluminium, steel, carpet, parquet etc) can be used.
- The pieces are protected by a plastic material edging, in order to prevent the tiles from
- A wide range of complementary products to ensure a good finish.

Panels with chipboard core

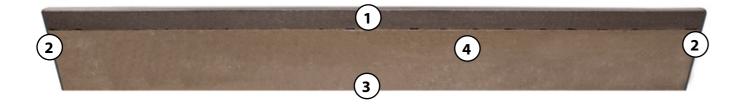
They are made of chipboard with a high-performance resin binder. Available in a thickness of 38mm, they feature an aluminum, galvanized steel or plastic lower covering, thus offering slightly different properties to suit each individual case. The panels have a plastic surround to prevent the edges from breaking.



- 1. Covering piece
- 2. Edging.
- 3. Lower covering.
- 4. Wood core.

Panels with calcium sulfate core

It consists of a mineral soul of a single layer based on calcium sulfate of high density. Available in 30 mm thicknesses and with lower coating of aluminum or galvanized steel. As in the wood panels, the perimeter of all the panels has a plastic surround to prevent the edges from breaking.



- 1. Covering piece
- Edging.
- 3. Lower covering.
- 4. Calcium sulfate core.

Panel with ceramic core

Formed by a core of high-density inert and inorganic material. Available in thickness of 15 mm. As in the wood and sulphate panels, the perimeter of all panels is trimmed with plastic in order to prevent parts from peeling. Ideal material for wet areas and/or humid areas as it is non-absorbent (water absorption of 0.05%).



- 1. Covering piece
- 2. Edging.
- 3. Ceramic core.

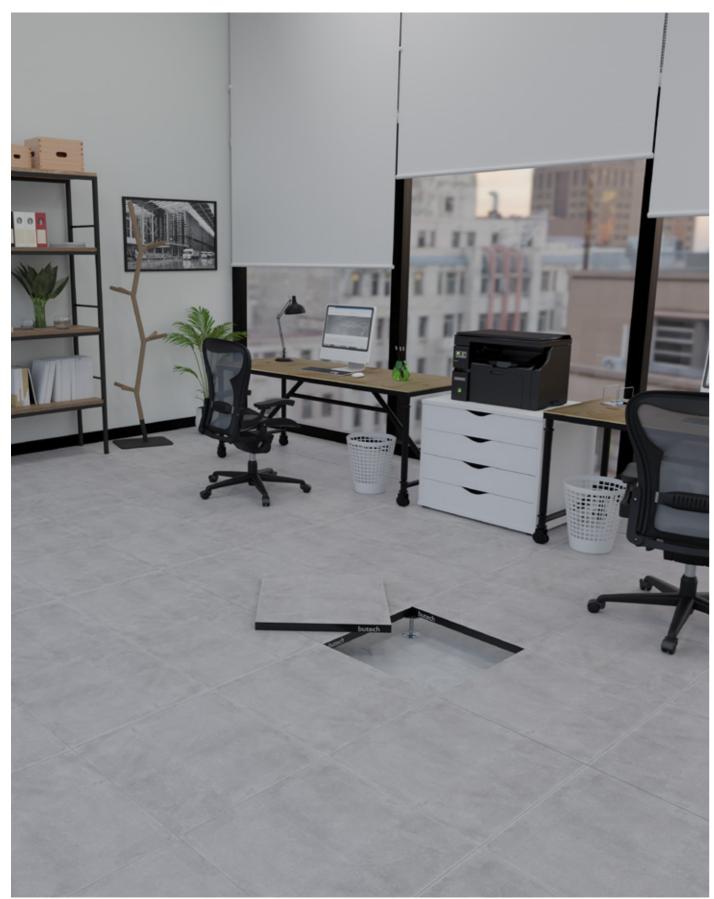




Available panel formats

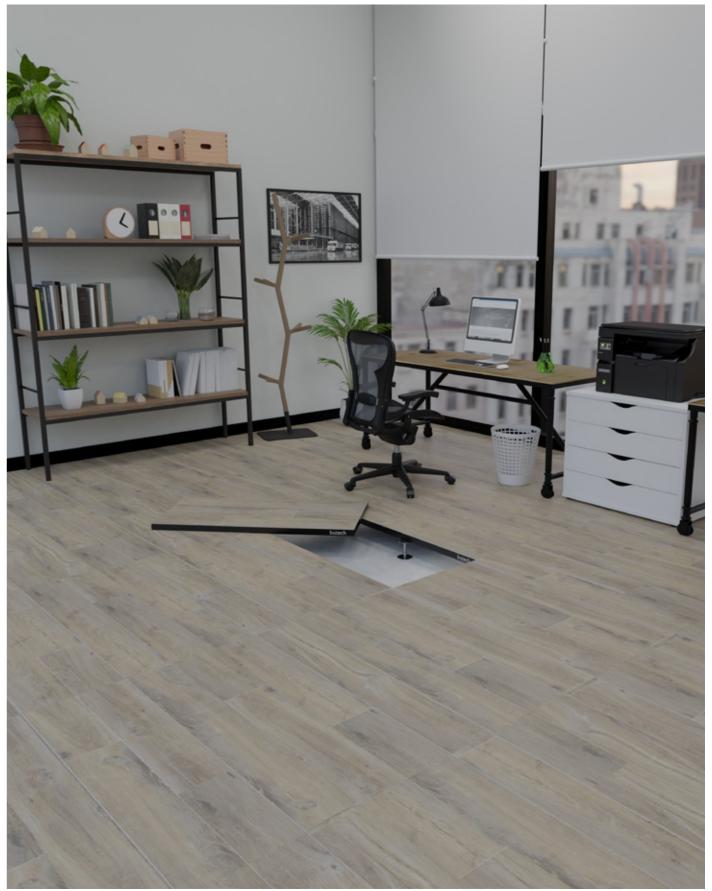
Format $60 \times 60 \text{ cm}$

Available in porcelain finish (any $59,6 \times 59,6 \text{cm}$ floor tile from PORCELANOSA Group) or non-ceramic, such as vinyl, plastic laminate, carpet, linoleum, etc.



Format 58 x 120 cm

Porcelain finish. Each panel contains 3 PAR-KER tiles (format 19,3 x 120 cm) from PORCELANOSA Group.





Structure

The structure is made up of pedestals and stringers, which support the floor covering and ensure the necessary height and

Pedestals

100% galvanised steel structure. This pedestals dictate the floor height according to the project requirements. Each pedestal incorporates a series of plastic noise-reduction heads fitted floor. They are covered with special noise-reduction strips. with four positioning lugs.

One of the main advantages of the pedestal system is that it is fitted with a 14 mm threaded bolt that can be adjusted to accommodate different floor height requirements.

Stringers

Like the pedestals, the stringers are made entirely of galvanised steel. Their main function is to increase the strength of the





From the point of view of performance, it presents a high resistance to bending vertical load and / or eccentric, thanks to a screwed bolt M16 section, a tube of diameter 20 mm of thickness of 2 mm, internally calibrated to obtain a coupling with smaller tolerances and therefore less spaces and a direct connection between the screwed bolt of the disc base and tube, without need of interposing deformable plastic elements.

Depending on the configuration of both the panel and the structure, we can achieve a resistance to static loads up to 4.400 kg/m^2 .



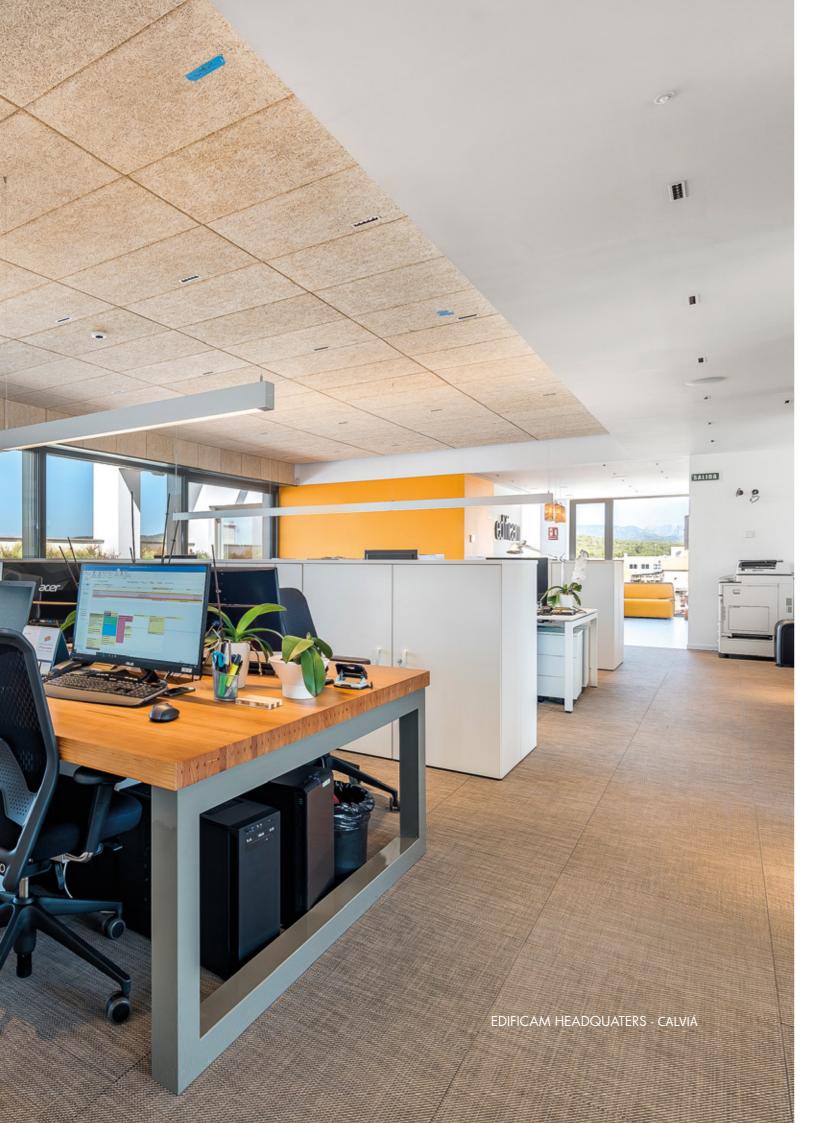


How to quote an outdoor RAF

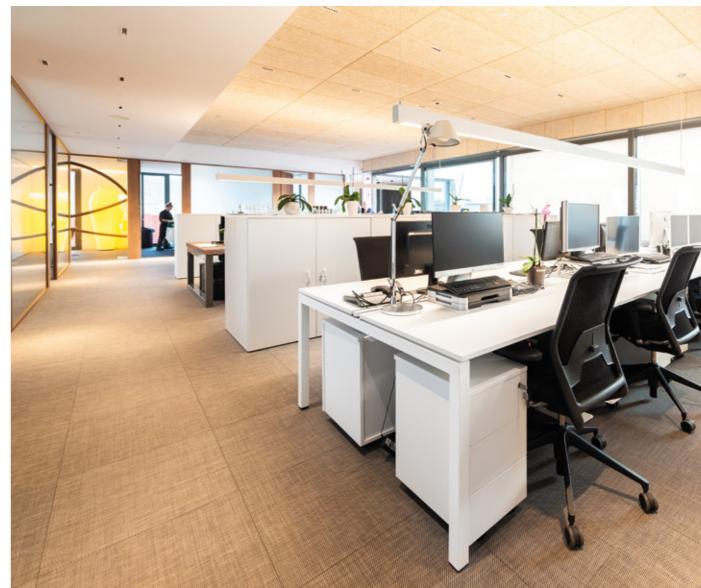
Information needed

- Provide plans (with dimensions)
 Tile and size to be used
 Perimeter heights (to the desired height of the deck with panel included)
 Drain locations
 Drain heights (to the desired height of the deck with panel included)
 Threshold heights (to the desired height of the deck with panel included)
 Desired tile pattern

Once this information is received, butech will provide with pricing for different installation options with different pedestals layouts under the panel, depending on the breaking load required. A drawing with a complete layout is also supplied.



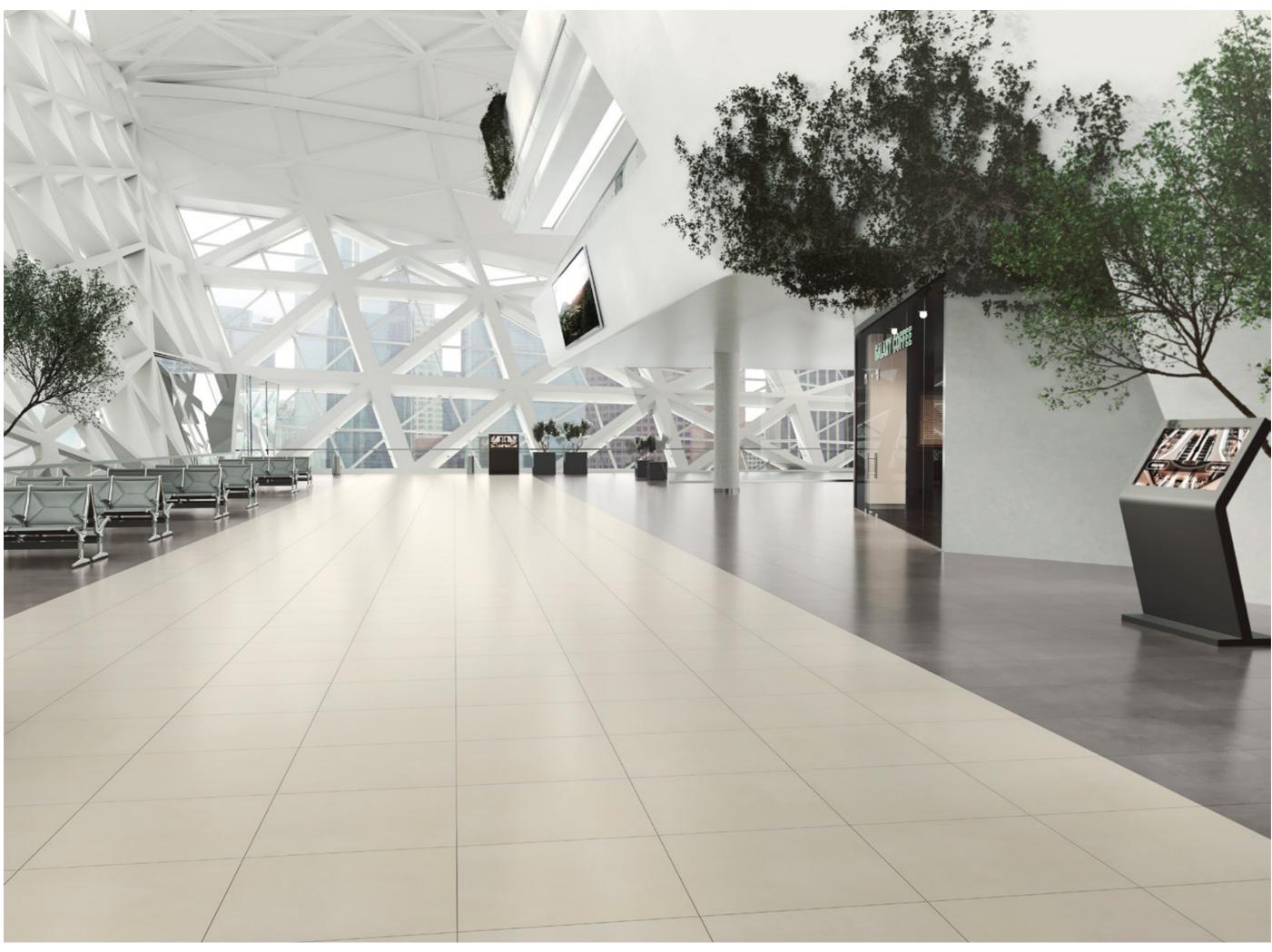








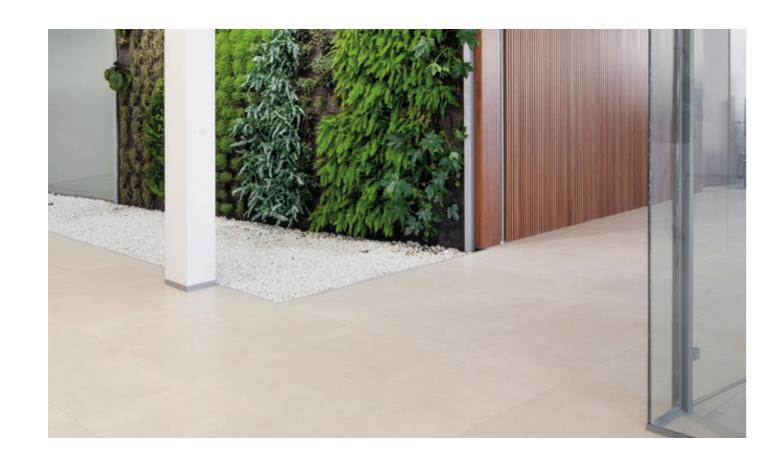
















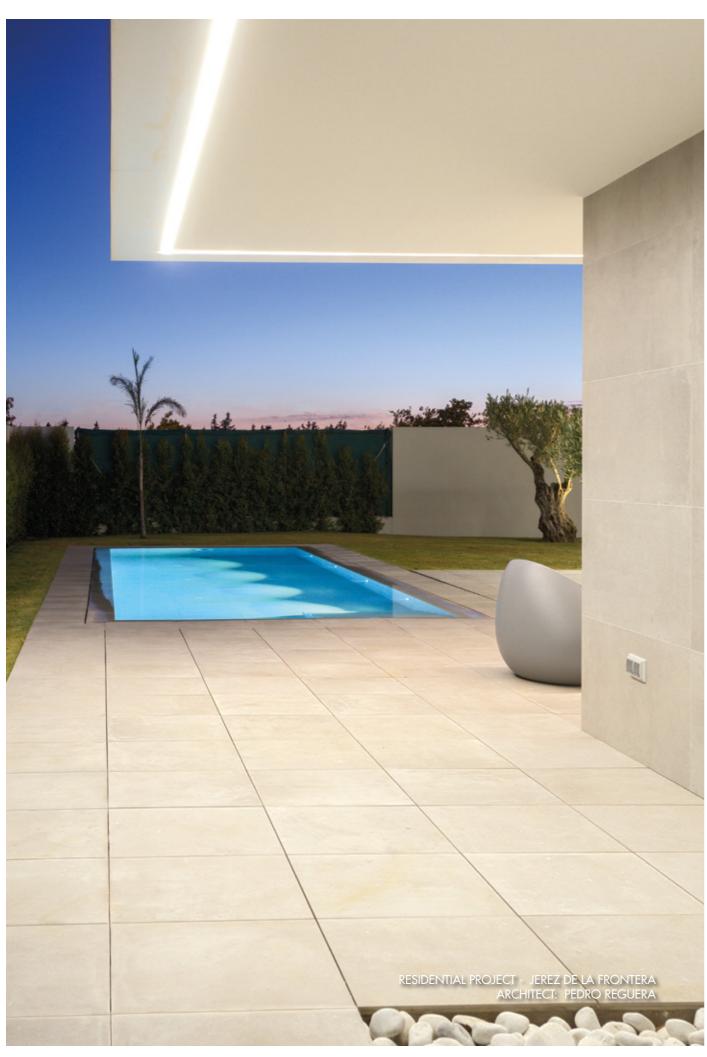


Raised Access Flooring outdoor

The raised access flooring Outdoor (RAFx) system for terraces has been specially created to solve the aesthetic problem that exists with the slopes in terraces and to hide elements under the floor.

By building a completely flat floor over the existing terrace floor, these slopes are conveniently hidden underneath.

Height deviations are offset with heightadjustable plots and any accumulated water is drained through open joints on the newly paved surface and then channelled down the terrace's waterproofed slopes to the drain.

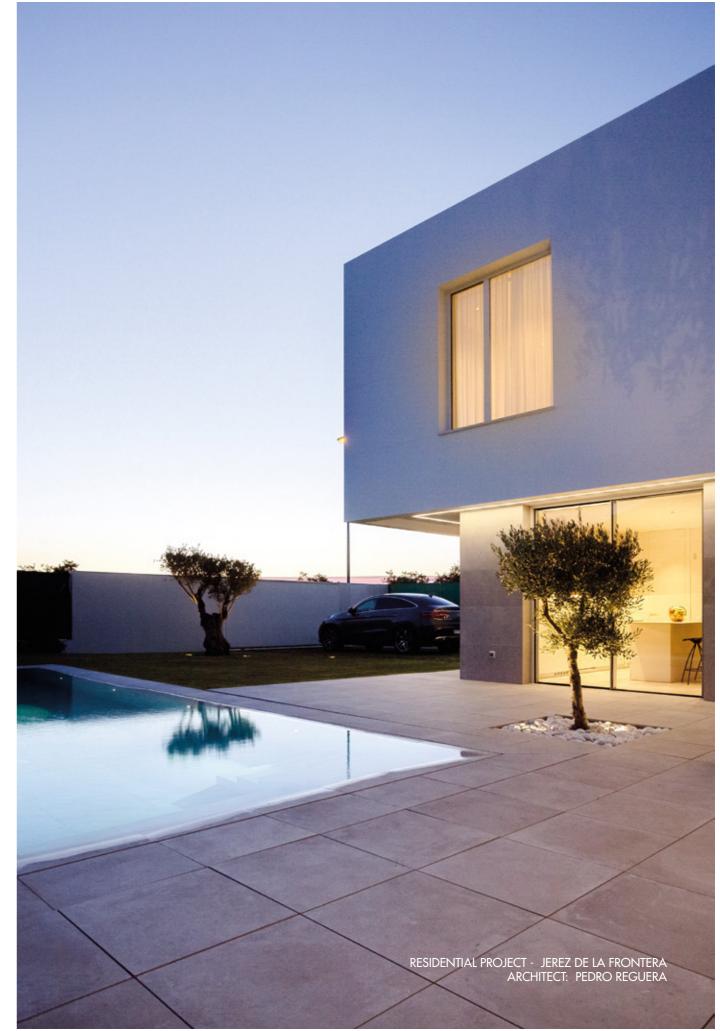


System application areas

The use of raised access floor is highly recommended in those areas where there are a large number of elements running under the floor, with the advantage of having an easy and immediate accessibility.



- Ability to hide away all types of ugly and dangerous cables, pipes etc under the floor.
- Improved installation efficiency in comparison to conventional floors (installation rate of about 40 m²/day).
- Option of rerouting services following installation of floor.
- Clean installation without the use of cement, avoiding the production of debris, dust, noise, etc.





Advantages of Raised Access Flooringoutdoor

- The system can be used to create a flat paved surface over sloping masonry floors with height deviations of up to 3%. Any height deviations over 2% will need to be corrected with mortar or with wedges.
- The creation of an air void under the newly paved surface generates a continuous flow of air through the pavement joints, which prevents the build-up of condensation and also produces an insulation layer.
- The under floor void, can also be used to house cables, pipes, etc.
- Easy to access this space under the floor (do not use P-404 to bond tiles and plots in areas where you need to access the services underneath and be able to have space to work on it).
- The plenum created by the floor elevation reduces the level of noise on the lower floor.
- The system is quick to install as the tiles and supports are installed at the same time.
- Advantages of PORCELANOSA Grupo pavement: Easy to clean, low dimensional tolerances, wide variety of finishes, hardness, etc.



The outdoor RAF is a type of over-raised pavement with special ceramic tiles that are arranged on plastic PVC plots of adjustable height, so that a hollow space is determined between the support and the floor tiles.

The elements that make up this system are as follow:

Panels for outdoor RAF

There are two types of Outdoor RAF panels:

Double piece: two porcelain tiles from PORCELANOSA Grupo are adhered together with hot melt moisture reactive adhesive.

20mm thick porcelain tile: produced by PORCELANOSA Grupo or Butech.

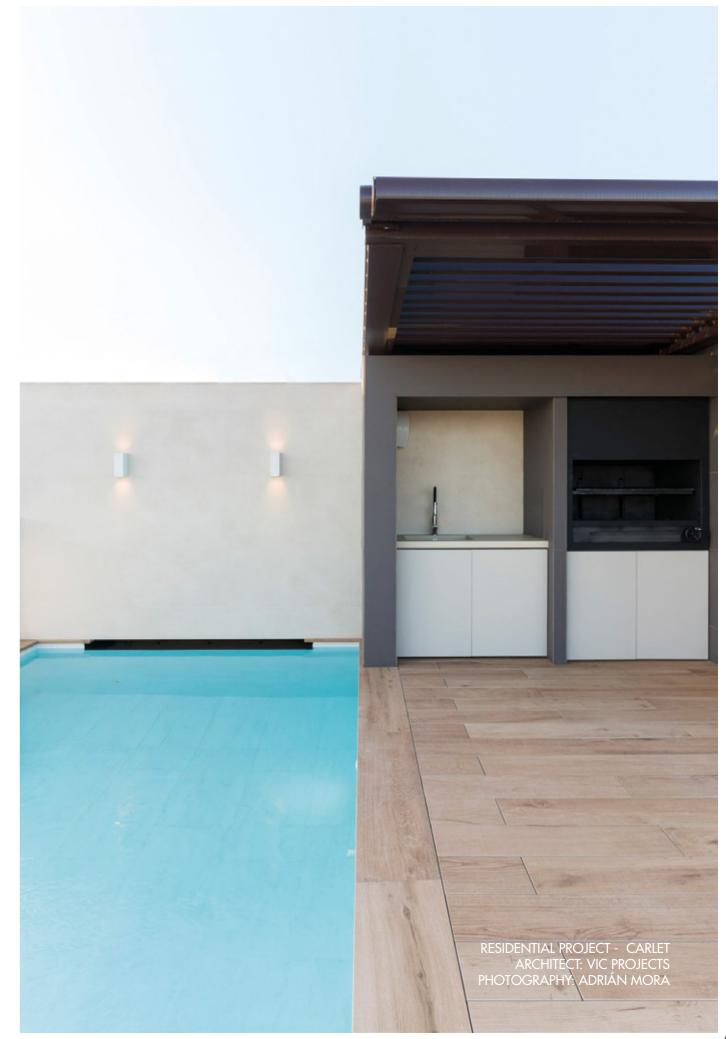
Outdoor RAF structure

Three types of pedestals are available:

Fixed Plot: a non-adjustable pedestal for the lowest heights. Available in 10, 15 and 20 mm

Normal, Ultra Plot: adjustable pedestals for heights higher than 25 mm. Recommended for plank formats Stem: Adjustable height rod that allows adapting height of the plot to the needs of the pavement over-raised.

Plot N: stronger pedestals for the most demanding situations





These pedestals, made of weatherproof plastic, support the Outdoor RAF panels, determine the system height and set the joint thickness between the panels. These elements consist of the following parts:

Base: with a large diameter that distributes the weight of the system on the substrate

Stem: adjustable height that allows adapting the height of the pedestals to the needs of the

Head: where the Outdoor RAF panels are laid, with 4 spacers which determine a joint width of 4mm

Butech also supplies the materials needed for the installation of this system:

P-404: polyurethane adhesive to fix the structure to the substrate.

5mm Flexible wedges: to absorb imperfections of the slab or to compensate more pronounced slopes.

Polyurethane foam: to adjust the perimeter panels so that the system is perfectly tight

Optional

Levelling key for Plot N: to adjust the pedestal height once the panels have been placed, allowing the compensation of different levels. **SAP:** 100236951

The total height of the plot can be adjusted for different adjustable heights.







System accessories

End profile for RAFx

Butech's top profile is a solution to hide the aesthetic inconvenience that occurs when a step has to be made with the Raised Floor. This profile, in addition to hiding the edge of the ceramic piece, allows us to anchor a vertical piece to the plot to hide the body of the plots*

Made of aluminum, and with a length of 1200mm, it can be used in thickened tiles (SAP: 100280081) with a 20mm depth, and in double-piece tiles (SAP: 100290783) with a 23mm depth. For a correct clamping of the vertical piece from its lower part, several units of the Lower Clip (SAP: 100253748) will be necessary.

*Option valid only for Plot N





System accessories

Vertical Enclosure Clip

Made of the highest stainless steel quality, and essential to finish a floor with no perimeter wall or enclosure.

These clips have two components: upper clip, fixed to the pedestal head, and lower clip, which goes on a previously cut pedestal base.

The perimeter panels are easily installed with these clips.

For a correct installation, the pedestal base has to be cut as shown in the images.

Only compatible with Plot N.





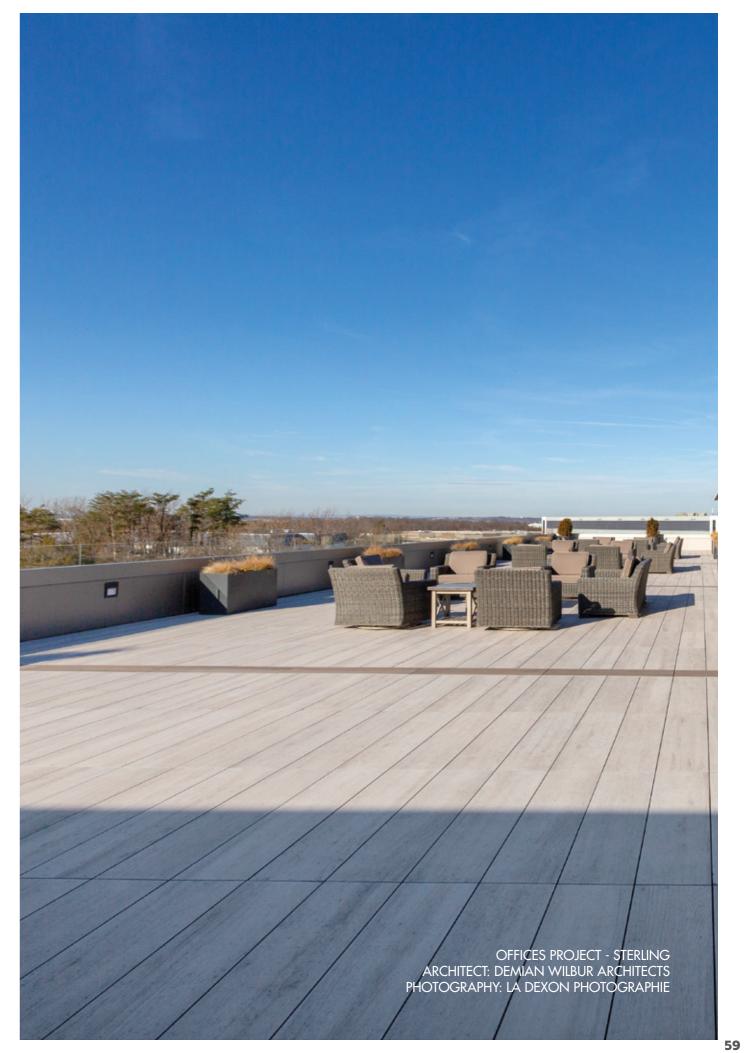
Plots non adjustables (Basic Plot)

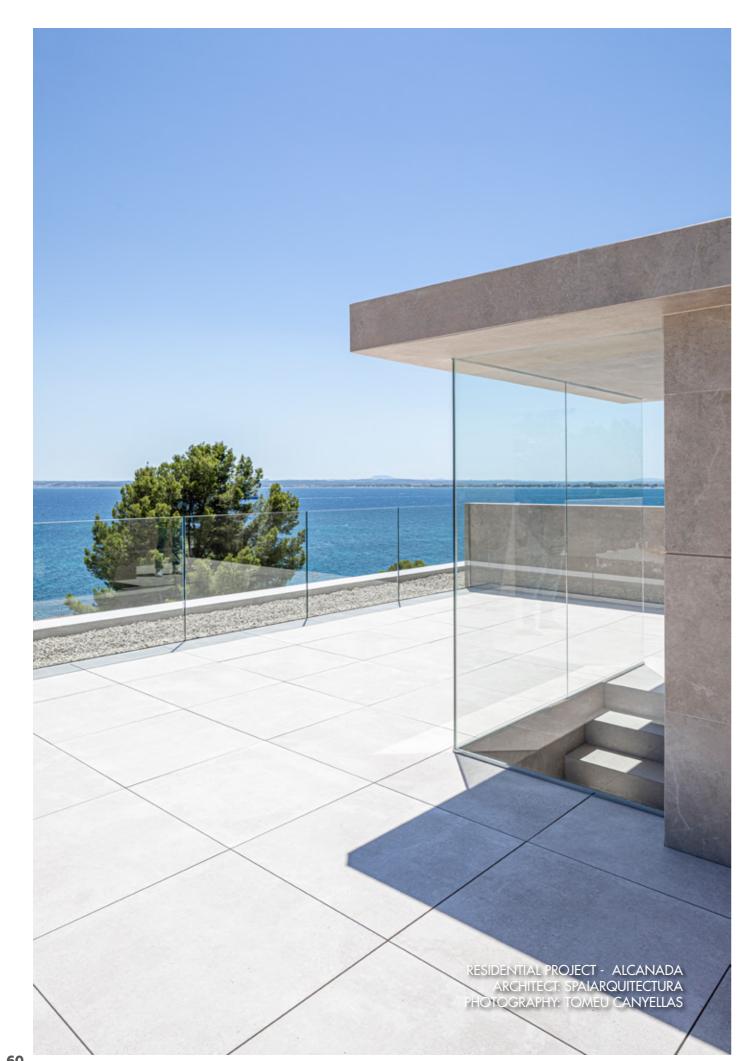
Туре	Non adjustable - pilled up
Material	Polypropylene with mineral load
Colour	Black
Compression resistance	8.000 kg/unit approximately
Dimensions	100 x 100 mm and 0 115 mm
Heights	10 mm 15 mm 20 mm
Separation between tiles	4 mm











Plots adjustables (Normal Plot)

Туре	Adjustable
Material	Polypropylene with mineral load
Colour	Black
Compression resistance	750 kg/unit approximately
Dimensions	Lower support base 0 150 mm Upper head 0 92 mm
Thread type	Double trapezoidal thread
Heights	Minimum 25 mm Maximum 670 mm
Slopes	From flat to 2 %
Separation between tiles	4 mm





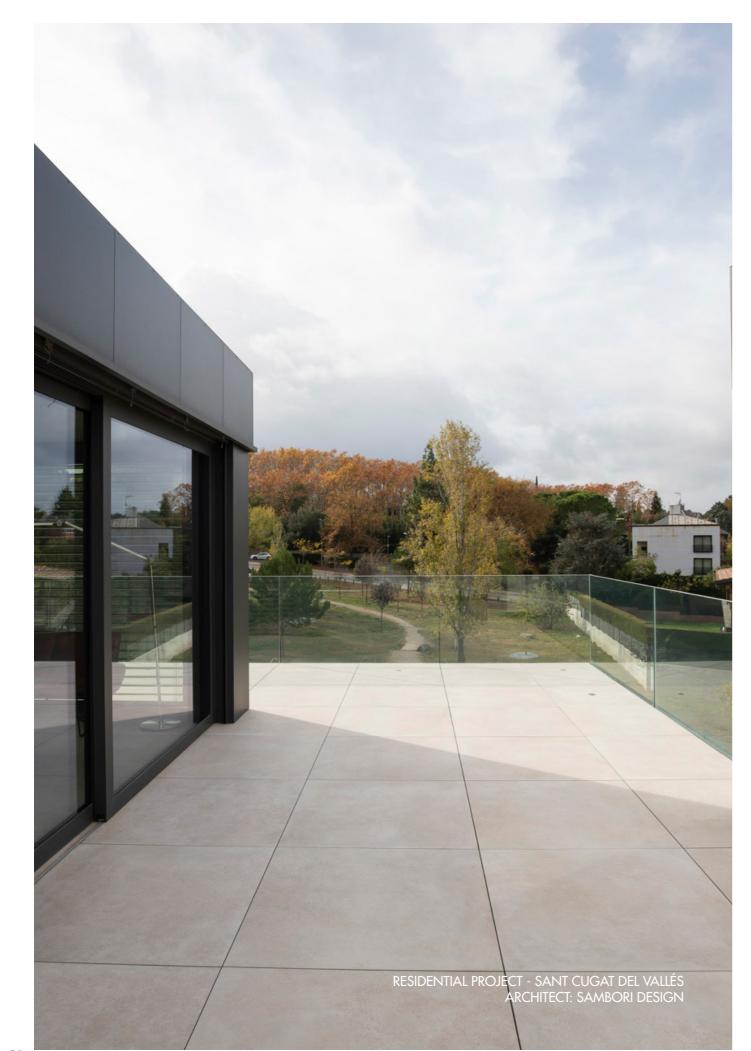


Plots adjustables (Ultra Plot)

Туре	Adjustable
Material	Polypropylene with mineral load
Colour	Black
Compression resistance	1.000 kg/unit approximately
Dimensions	100/130: Lower support base 0 150 mm Upper head 0 92 mm Rest of the heights: Lower support base 0 160 mm Upper head 0 140 mm
Thread type	Double trapezoidal thread
Heights	Minimum 100 mm Maximum 670 mm
Slopes	From flat to 2 $\%$
Separation between tiles	4 mm







Plots adjustables (Plot N)

Туре	Adjustable
Material	Polypropylene with mineral load
Colour	Black
Compression resistance	2.800 kg/unit approximately
Dimensions	Lower support base 0 205 mm Upper head 0 150 mm
Thread type	Double trapezoidal thread
Heights	Minimum 30 mm Maximum 670 mm
Slopes	From flat to 3 %
Separation between tiles	4 mm



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Porcelain Paver

THIC'KER 20 MM

The advances in manufacturing techniques and new landmark frontier technology brought the possibility of producing porcelain tiles in a much greater thickness as traditionally, enabling these tiles to be used for exterior structural paving applications. Our high performance 3/4'' thick tiles offer an extraordinary load-bearing strength and hard-wearing resistance combined with an outstanding aesthetic appearance and anti-slip finish. They are ideal for any commercial or residential project and suitable for rooftops, terraces, patios, decks, balconies, etc.

THIC'KER 20 MM

Porcelain Paver

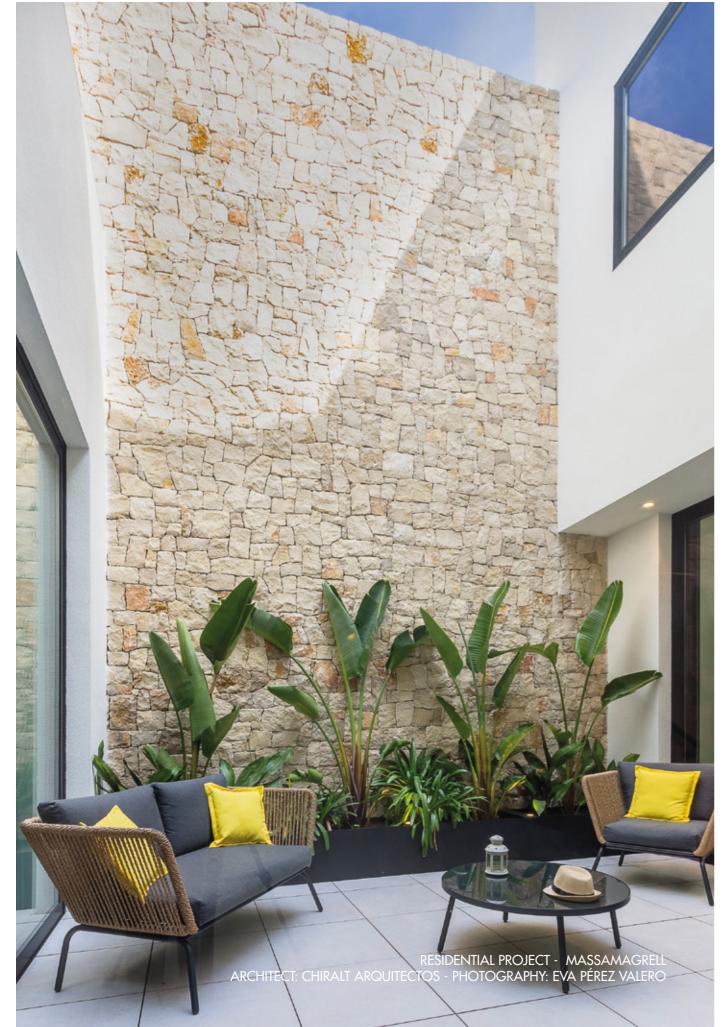
Double Porcelain Tile

This exclusive and unique product is the ultimate solution for outdoor raised floor projects providing trendsetting cuttingedge designs of unparalleled beauty and refinement. These double pieces are available in same size, color and finish than most of our porcelain tiles which enables the possibility of creating unbroken visual continuity between outdoor and indoor spaces in any residential or commercial project. Given its extreme wear and weather resistance, it is the perfect alternative to wood and stone that will remain absolutely unchanged over time.

A 10,5mm or thicker anti-slip tile must be chosen.

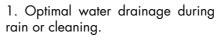


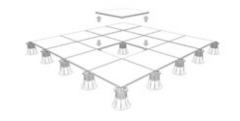




Advantages



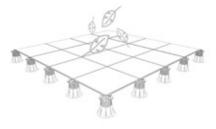




2. Panels can be lifted anytime, granting permanent access to the subfloor.



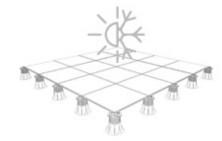
3. Elements such as pipes are completely hidden under the panels.



4. Light system compared to the typical concrete pavers system.



5. Great acoustic insulation



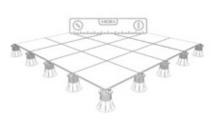
6. Good thermal insulation created by the air chamber between the raised access floor surface and the roof.



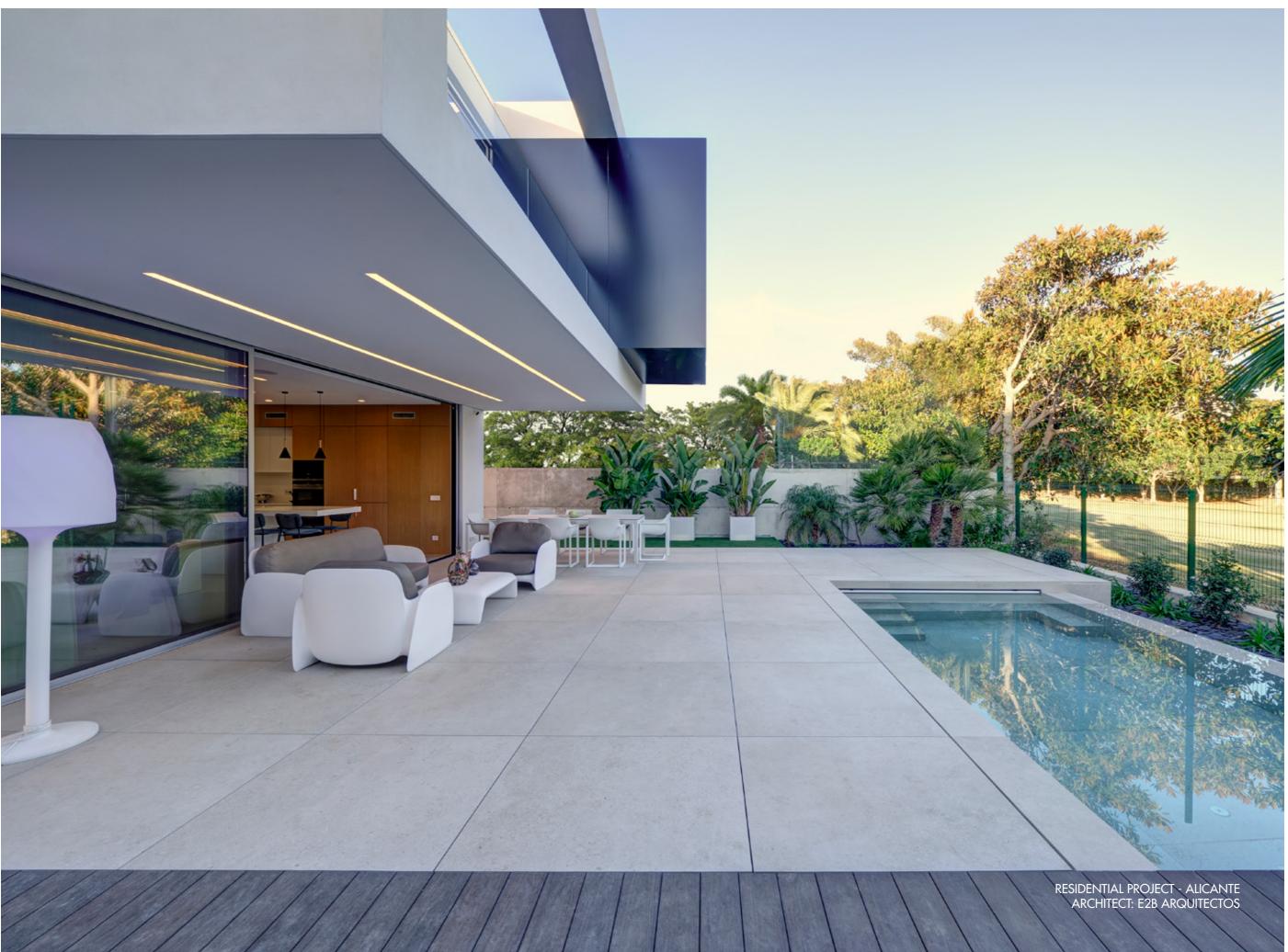
 $7.\ \mbox{No}\ \mbox{need}$ for expansion joints.



8. Good mechanical resistance.



9. Flat and level finish. Slopes and drains are hidden.



How to quote an outdoor RAFx

Information needed

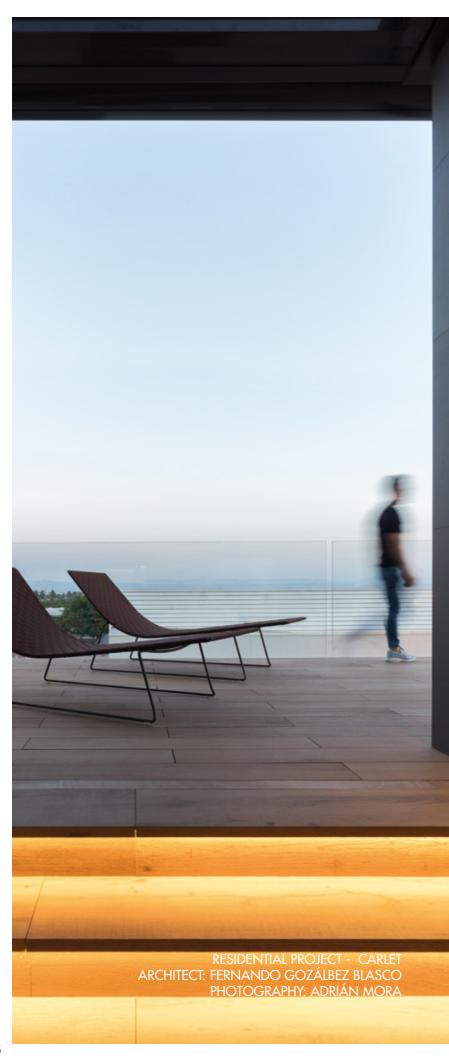
- Provide plans (with dimensions)
- Tile and size to be used
 Perimeter heights (to the desired height of the deck with panel included)
 Drain locations

- Drain heights (to the desired height of the deck with panel included)
 Threshold heights (to the desired height of the deck with panel included)
 Desired tile pattern

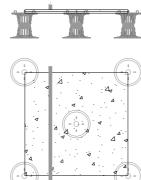
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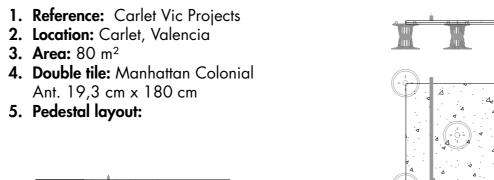


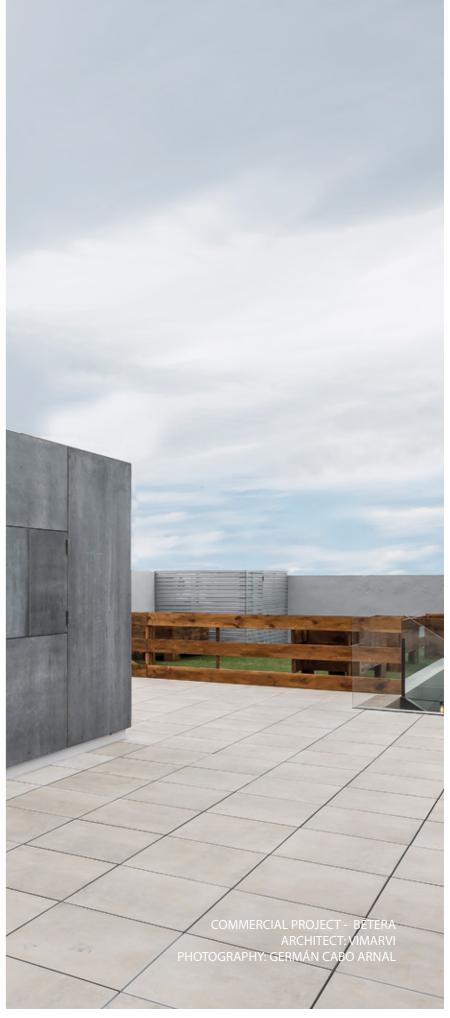
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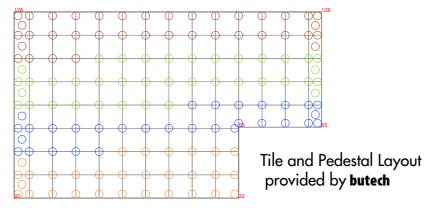
- Reference: El gordo y el flaco restaurant
 Location: Bétera (Spain)
 Area: 70 m2
 Double tile: Rox Grey Ant. 59,6 cm x 59,6 cm
 Pedestal layout:



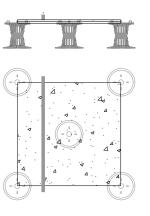


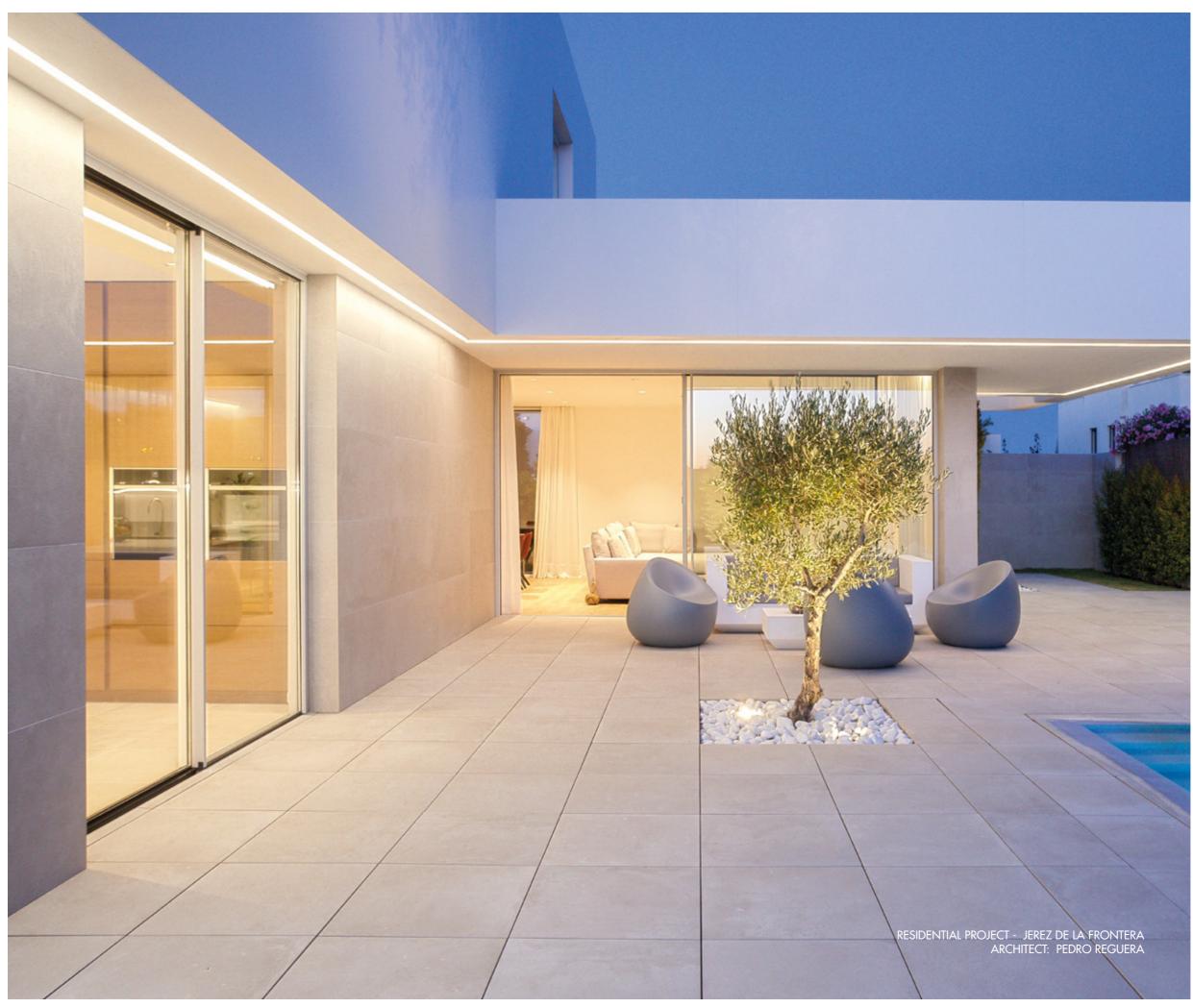




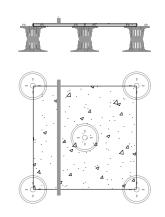


- Reference: Miller Sunken Patio
 Location: Bellevue, Washington (USA)
 Area: 34 m²
 Double tile: Krono Clay Nature 59,6 cm x 59,6 cm
 Pedestal layout:





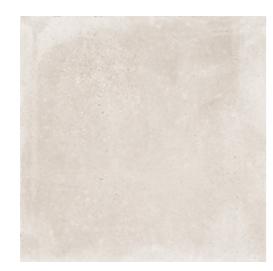
- Reference: Residential Project
 Location: Jerez de la Frontera, Cádiz
- 3. Area: 210 m²
 4. Double tile: Dover Caliza Antislip 59,6 cm x 59,6 cm
 5. Pedestal layout:





BOTTEGA

Rectified Porcellanato Tiles Concrete



BOTTEGA CALIZA ANTISLIP

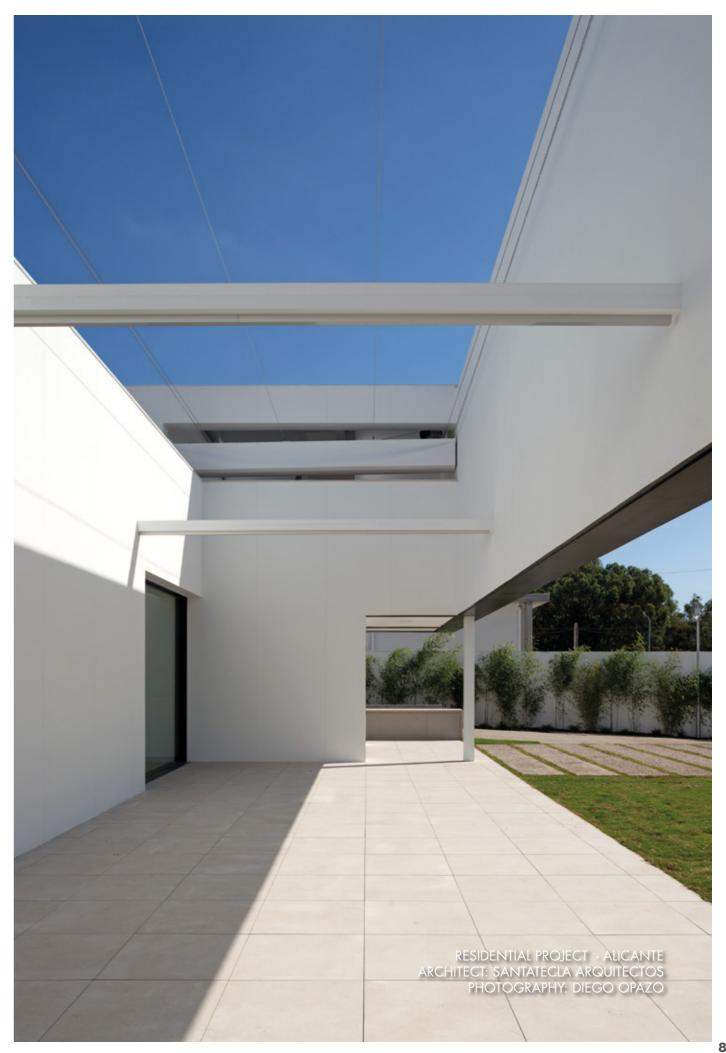
 $59,6 \times 59,6 \times 2 \text{ cm} \cdot 24'' \times 24'' \times 13/16''$ 100285287 $60 \times 120 \times 2 \text{ cm} \cdot 24'' \times 47'' \times 13/16''$ 100323742 $120 \times 120 \times 2 \text{ cm} \cdot 47'' \times 47'' \times 13/16''$ 100350765

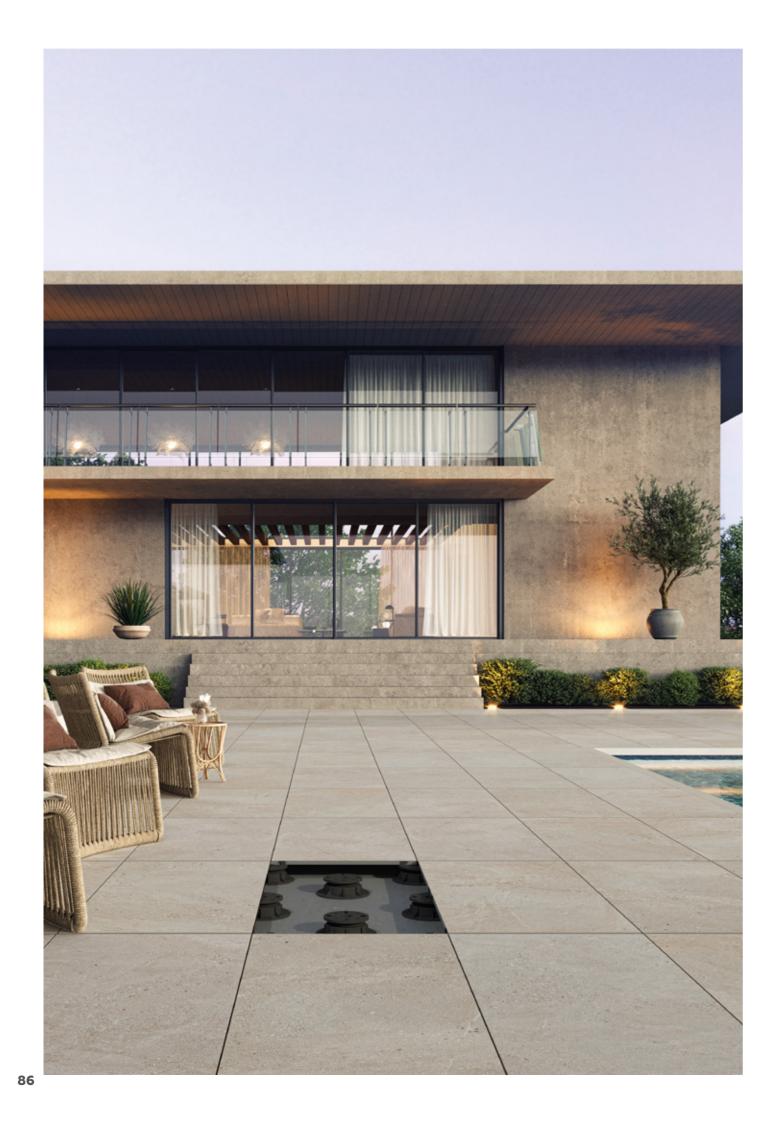


BOTTEGA ACERO ANTISLIP

 $59,6 \times 59,6 \times 2 \text{ cm} \cdot 24'' \times 24'' \times 13/16''$ 100285276 $60 \times 120 \times 2 \text{ cm} \cdot 24'' \times 47'' \times 13/16''$ 100323637 $120 \times 120 \times 2 \text{ cm} \cdot 47'' \times 47'' \times 13/16''$ 100350766

Packaging 59,6 x 59,6 · 2 PZ/CJ - 0,71 M²/CJ · 22,73 M²/PAL 60 x 120 · 1 PZ/CJ · 0,72 M²/CJ · 19,44 M²/PAL 120 x 120 · 1 PZ/CJ · 1,44M²/CJ · 25,92 M²/PAL





DURANGO

Rectified Porcellanato Tiles Stone



DURANGO BONE ANTISLIP

 $59,6 \times 59,6 \times 2 \text{ cm} \cdot 24'' \times 24'' \times 13/16''$ 100308829 $120 \times 120 \times 2 \text{ cm} \cdot 47'' \times 47'' \times 13/16''$ 100350772



DURANGO ACERO ANTISLIP

59,6 x 59,6 x 2 cm \cdot 24" x 24" x 13/16" 100308870 $60 \times 120 \times 2 \text{ cm} \cdot 24'' \times 47'' \times 13/16''$ 100323667

Packaging 59,6 x 59,6 · 2 PZ/CJ - 0,71 M²/CJ · 22,73 M²/PAL 60 x 120 · 1 PZ/CJ · 0,72 M²/CJ · 19,44 M²/PAL 120 x 120 · 1 PZ/CJ · 1,44M²/CJ · 25,92 M²/PAL

NANTES

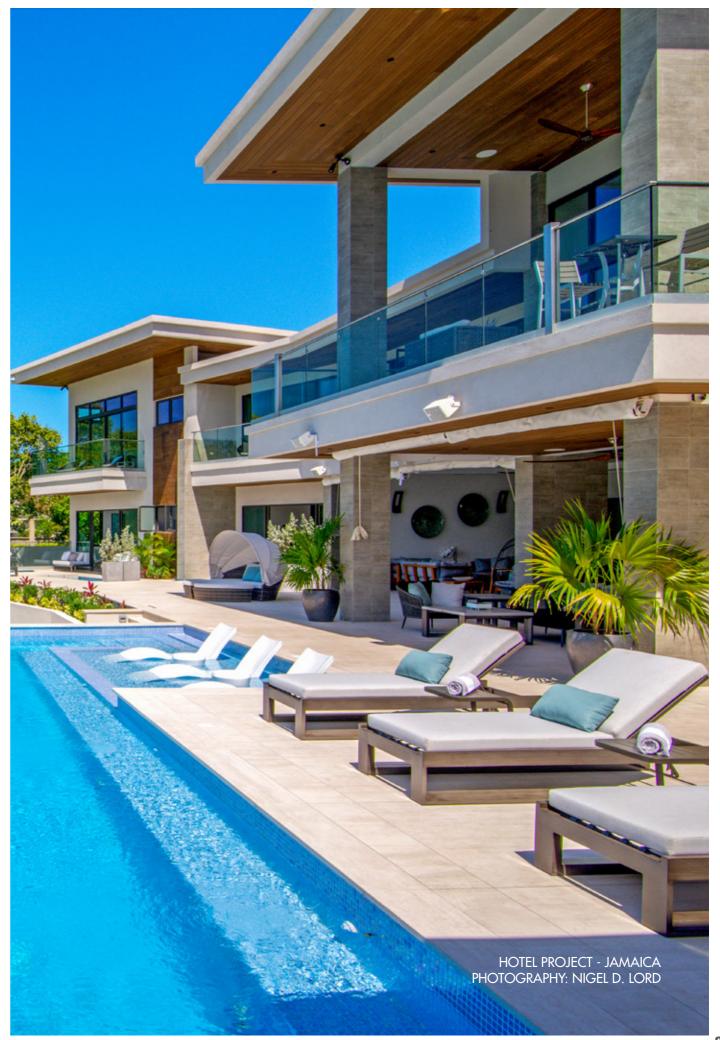
Rectified Porcellanato Tiles
Concrete

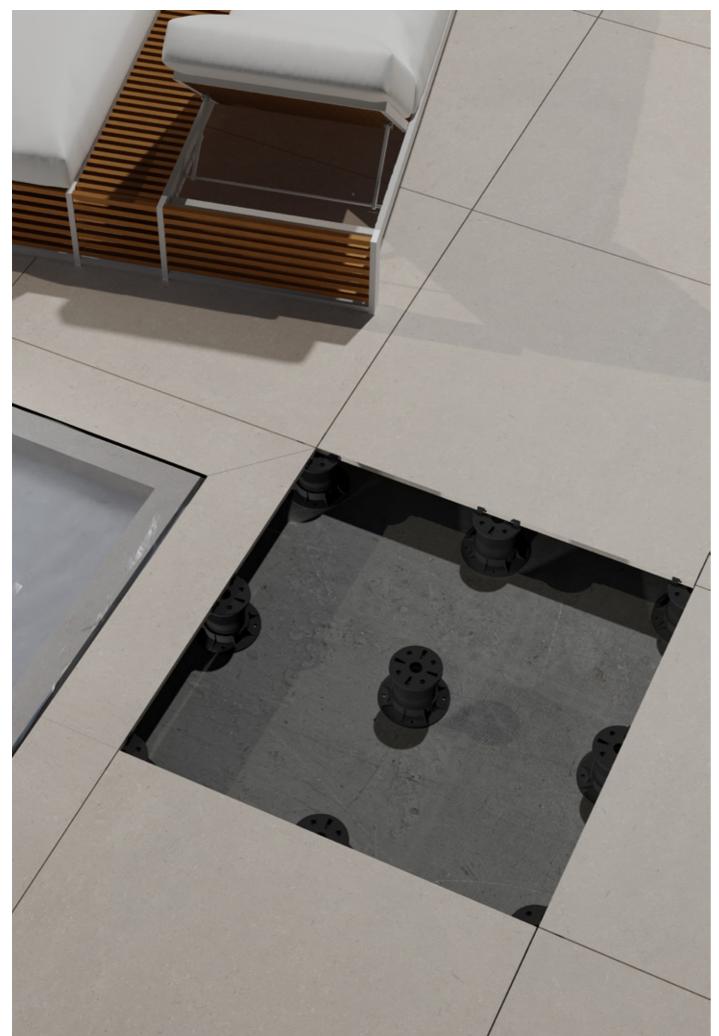


NANTES ACERO ANTISLIP

59,6 x 59,6 x 2 cm · 24" x 24" x 13/16"







CORAL

Rectified Porcellanato Tiles
Stone



CORAL CALIZA ANTISLIP

 $120 \times 120 \times 2 \text{ cm} \cdot 47'' \times 47'' \times 13/16''$

100350773

Packaging 120 x 120 · 2 PZ/CJ - 0,71 M²/CJ · 22,73 M²/PAL

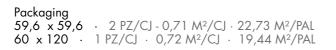
BERNA

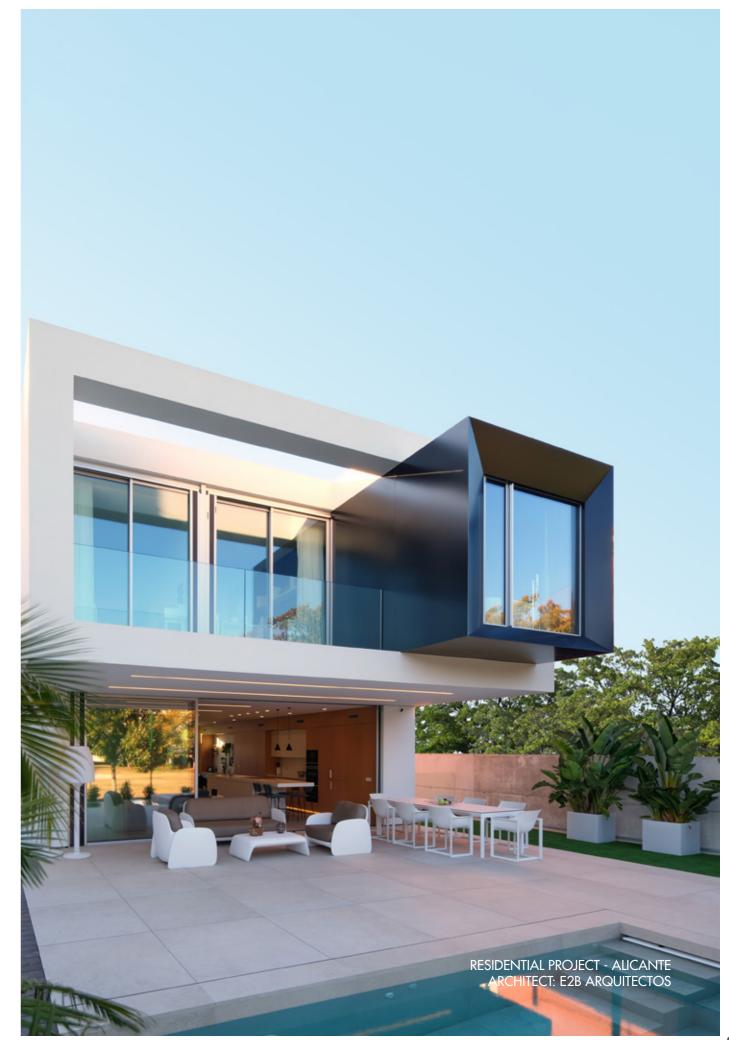
Rectified Porcellanato Tiles
Stone

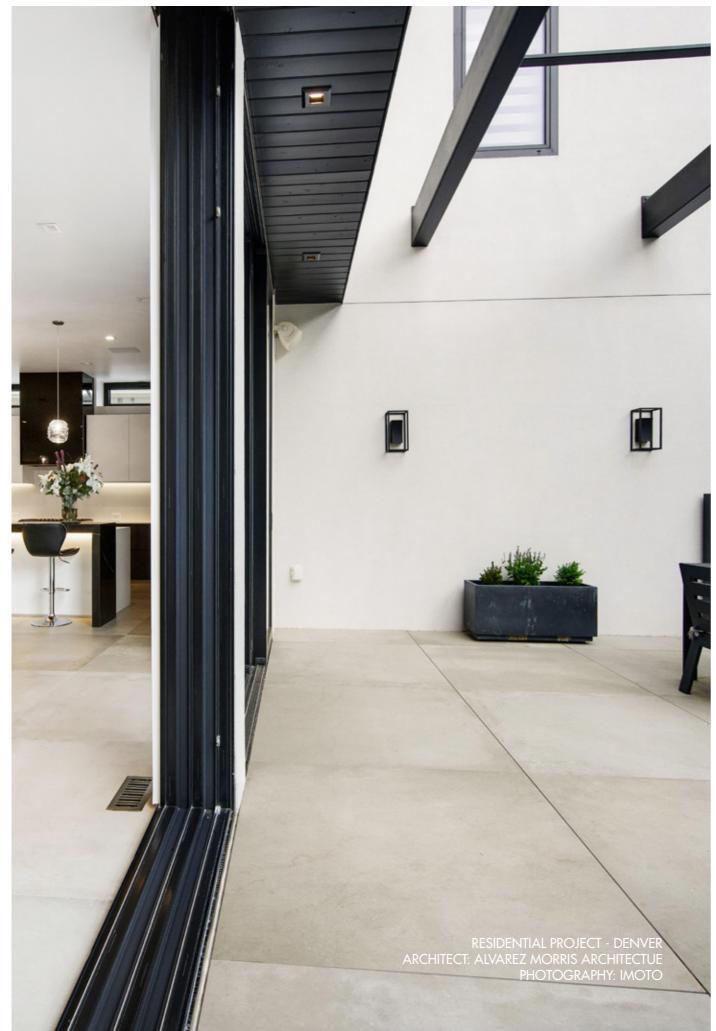


BERNA ACERO ANTISLIP

59,6 x 59,6 x 2 cm · 24" x 24" x 13/16" 100308856 60 x 120 x 2 cm · 24" x 47" x 13/16" 100323966







HARLEM

Rectified Porcellanato Tiles Concrete



HARLEM ACERO ANTISLIP

59,6 x 59,6 x 2 cm · 24" x 24" x 13/16"

100308854

Packaging 59,6 x 59,6 · 2 PZ/CJ - 0,71 M²/CJ · 22,73 M²/PAL

VELA

Rectified Porcellanato Tiles
Stone

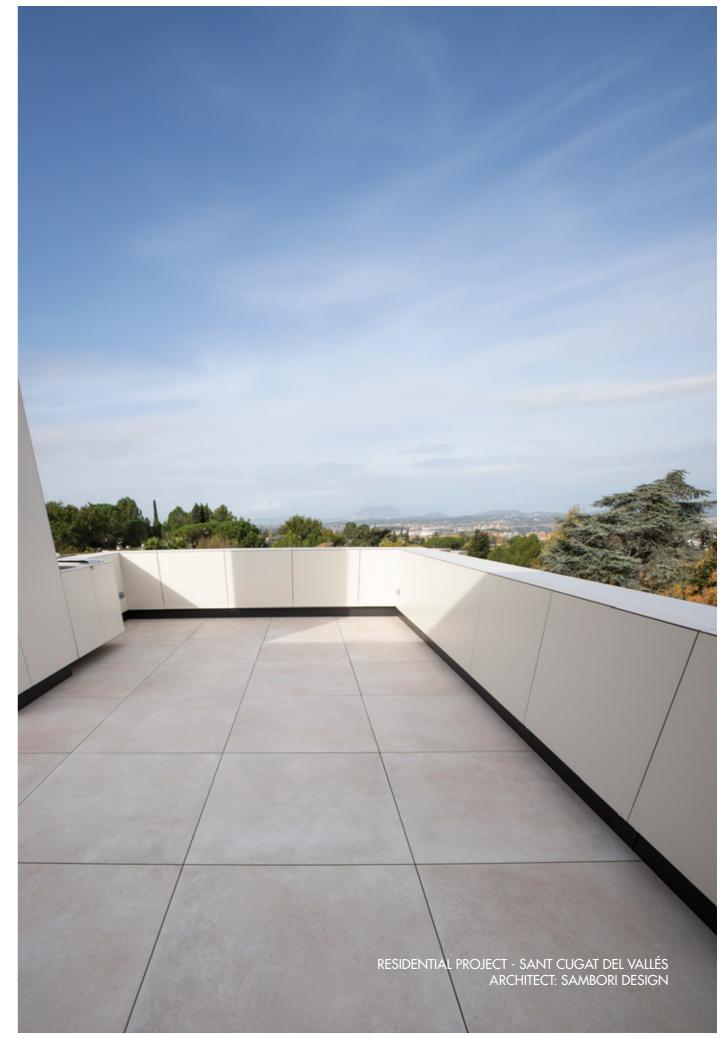


VELA NATURAL ANTISLIP

 $59,6 \times 59,6 \times 2 \text{ cm} \cdot 24'' \times 24'' \times 13/16''$

100309733









Rectified Porcellanato Tiles · Coloured Biscuit



ROX NEW COAL ANT. RECT. 59,6 x 59,6 x 2 cm · 24" x 24" x 13/16"

100167343



59,6 x 59,6 x 2 cm · 24" x 24" x 13/16"

100162534



ROX NEW BEIGE ANT. RECT. 59,6 x 59,6 x 2 cm · 24" x 24" x 13/16"

100162750

Packaging 59,6 x 59,6 · 2 PZ/CJ - 0,71 M²/CJ · 22,73 M²/PAL

RIVEN

Rectified Porcellanato Tiles Wood



RIVEN WHITE ANT. RECT.

 $29,5 \times 120 \times 2 \text{ cm} \cdot 11 \ 5/8'' \times 47 \ 1/4'' \times 25/32''$

100229792



RIVEN CREAM ANT. RECT.

29,5 cm x 120 cm x 2 cm \cdot 11 5/8" x 47 1/4" x 25/32"

100229737

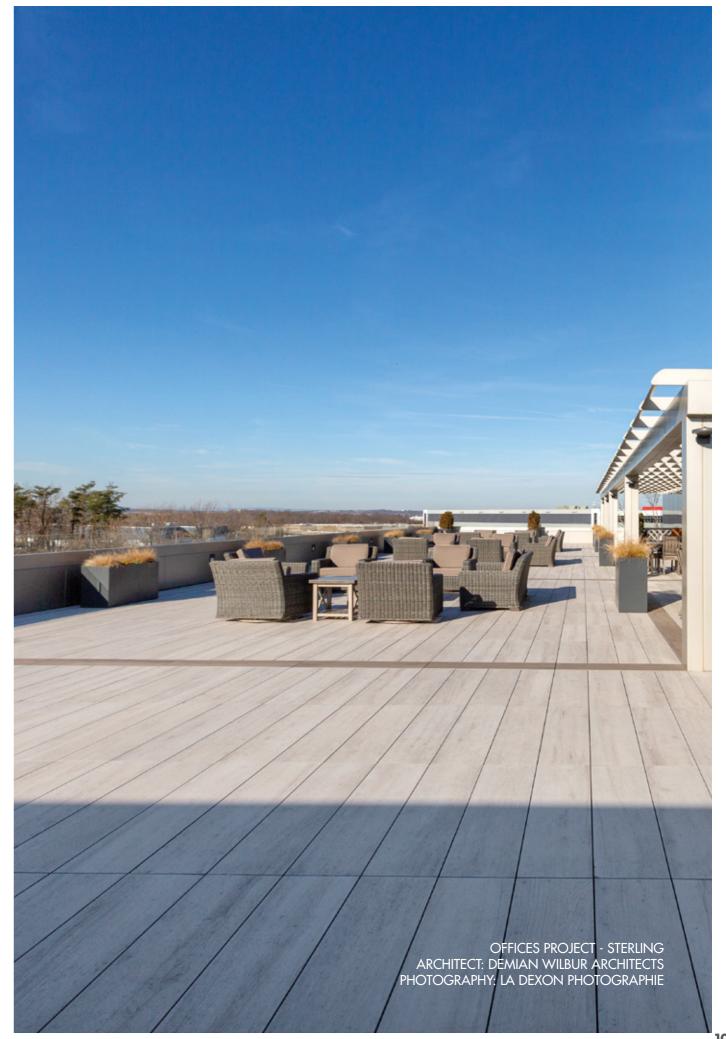


RIVEN BROWN ANT. RECT.

29,5 cm x 120 cm x 2 cm \cdot 11 5/8" x 47 1/4" x 25/32"

100229775

Packaging 29,5 x 120 · 2 PZ/CJ · 0,708 M²/CJ · 22,66 M²/PAL





TANZANIA

Rectified Porcellanato Tiles

Wood



TANZANIA WHITE ANTISLIP

11 5/8" x 47 1/4" x 25/32" · 29,5 cm x 120 cm x 2 cm

100323793



TANZANIA SILVER ANTISLIP

11 5/8" x 47 1/4" x 25/32" · 29,5 cm x 120 cm x 2 cm

100323767



TANZANIA NUT ANTISLIP

11 5/8" x 47 1/4" x 25/32" · 29,5 cm x 120 cm x 2 cm

100323785



TANZANIA ALMOND ANTISLIP

11.5/8" x 47 1/4" x 25/32" · 29,5 cm x 120 cm x 2 cm

100323765



TANZANIA NATURAL ANTISLIP

11 5/8" x 47 1/4" x 25/32" · 29,5 cm x 120 cm x 2 cm

100323766

Packaging 2 PZ/CJ · 0,708 M²/CJ · 22,66 M²/PAL

DOUBLE TILE

As an alternative to 20mm tiles, manufacturing thickened panels with any PORCELANOSA Grupo tile model is possible. The only requirement is choosing a 10mm thick tile available in anti-slip version.

Should you need more information please contact the butech technical department.





Technical book RAFx 2024

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