

THE ® EVOLUTION

CREATE
INNOVATE
LEAD

TEJAS BORJA
Unique since 1899

This information dossier is an introduction to the transformation of our way of clay roof tile manufacturing. A major event in the roofing sector that will give a surprising twist to the design of roof coverings in the world of architecture.

Exclusive processes and innovative solutions for architects, builders and installers.

Open your eyes to a world of possibilities still not discovered. Unleash your creativity. Now, your projects can become unique.

It's THE REVOLUTION.

C R E A T E
I N N O V A T E
L E A D



THE [®]EVOLUTION
of the ceramic tile sector

March 2018



INNOVATIONS PREVIEW

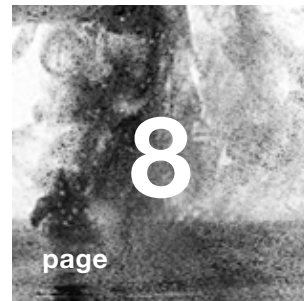
THE [®]EVOLUTION
of the ceramic tile sector



We're going to change the world, five things that make us unique.



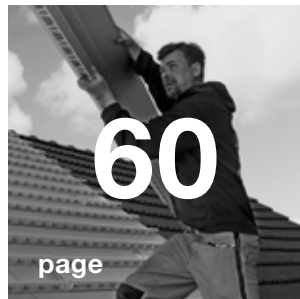
A revolution, in manufacture, decoration and installation.



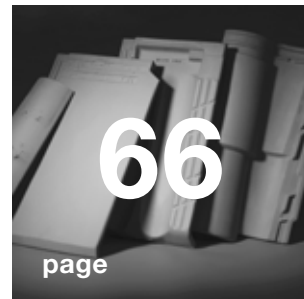
BorjaJET, we're the first to exploit Inkjet technology.



New formats, constructive solutions for cutting-edge architecture.



BorjaTHERM, our new SATE system for sloping roofs.



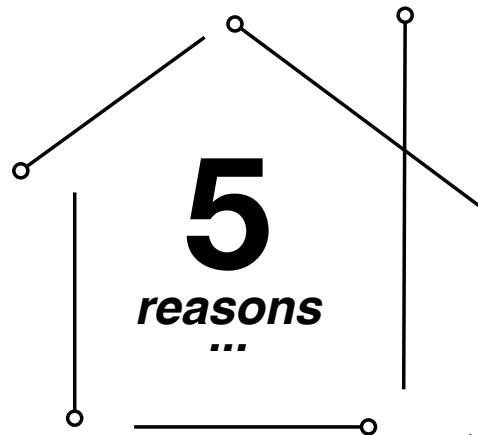
Detailed list of available finishes and formats.

THE ® EVOLUTION
of the ceramic tile sector

The exclusive use of
**DIGITAL INKJET
TECHNOLOGY**
in ceramic
tile decoration.

The new
**LARGEST
CERAMIC TILE**
in the world:
FLAT-5XL®

Innovative
**QUALITY
CONTROLS**
applied to each
and every tile.



Tiles with a
**PROVEN
GUARANTEE**
which can still be found on
roofs after installation over
a century ago.

The use of
**ROLLER
KILNS**
in our production
systems.

... why **the design** of
sloping roofs
is now limitless.



AREAS OF INNOVATION

6

THE [®]EVOLUTION
of the ceramic tile sector

Continual investment in sustainable manufacturing processes and technological innovation have resulted in improvements in our working methods in two main areas:

QUALITY STANDARDS



We classify our quality standards in 4 new categories according to the manufacturing process used to give our products their excellent definition and flatness.

We denote these categories using icons depicting the exterior profiles which define them.

FINISHING TECHNIQUES



We classify our finishing techniques in 3 new categories according to the technique used. We denote these categories with icons using a colour-filled circle as we are talking about the exterior finish of our products.



Borja **EXTREM**

Exclusive to Tejas Borja, a roller kiln manufacturing process using ceramic clay with very low water absorption, less than 3%, to produce large tiles.



Borja **JET**

New Inkjet technology, the digital printing system allows us to create finishes never used before in the sector.



Borja **TECH**

Plaster moulds and H-cassette production. More compact clay. Very low absorption and extremely strong.



Borja **LINE**

Aged and monochrome, obtained through the application of engobes and ceramic deposits.



Borja **CLASS**

Manufacturing using high-quality, very fine, red sintered clay. Very low absorption and extremely strong.



Borja **DECOR**

Finishes obtained through double firing, glosses and glazes which prevent premature ageing.



Borja JET

A new dimension in
ceramic tile decoration
and design.





Innovative world **EXCLUSIVE** from Tejas Borja

After an intensive research and development process, Tejas Borja is the first company in the sector to use Inkjet printing in the industrial production of ceramic tiles.

BorjaJET gives excellent definition in the reproduction of all types of effects never achieved before on tile, enabling the fusion of the richness of natural materials with the technical properties of ceramic tiles.

Using this technological revolution we are able to make tiles with a wide variety of finishes such as slates, woods, stones, marbles and oxides. The result is a truly original product.

A computer workstation is shown on a dark desk. On the left, a monitor displays a software interface with various data points and charts. In front of the monitor is a silver Logitech keyboard. To the right of the keyboard, a large, rectangular tile sample is laid out on the desk. The tile has a complex, marbled pattern in shades of brown, orange, and purple. A red horizontal bar is overlaid on the tile, containing the text 'CREATING THE FIFTH FACADE'.

CREATING THE FIFTH FACADE

10

**We unite the charm of the
traditional with the benefits of
Inkjet technology.**

T H E ® E V O L U T I O N
of the ceramic tile sector



BorjaJET

Five generations ago we began a long trip around the world. During all these years we visited incredible places and were where nobody had arrived in search of the pure essence of the nature.

We knew incredible people and wonderful places, magic, with soul.

We learnt where sensitivity it's born and what makes us tremble with our emotions.

We found... The essence for our new collection.



Ceramic
SLATE



Ceramic
STONE



Ceramic
CEMENT



Ceramic
MARBRE



Ceramic
WOOD



Ceramic
OXIDE



Ceramic
COTTO

ALWAYS SEARCHING OUR INSPIRATION
TO BE ABLE TO INSPIRE YOU



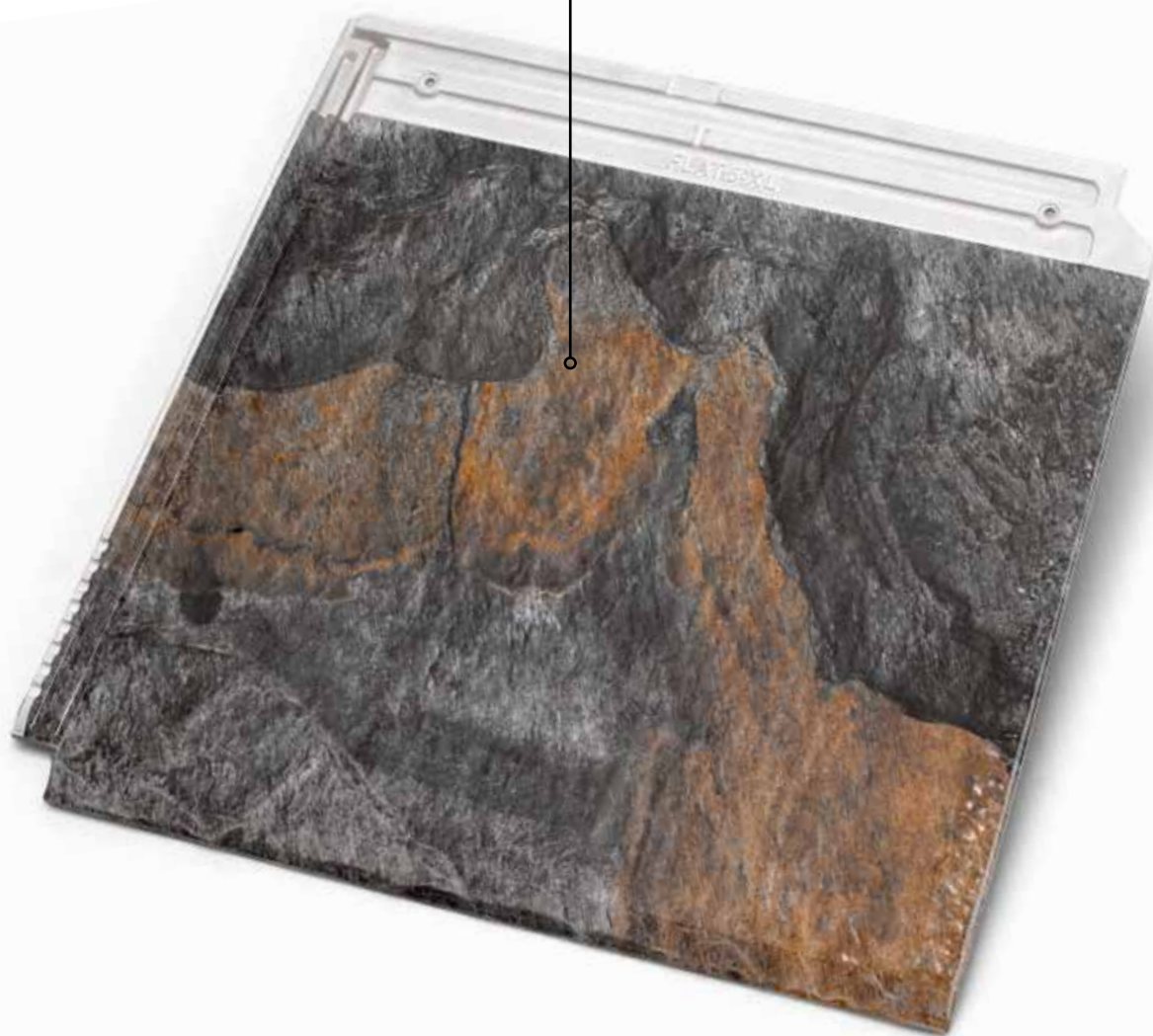
Beautiful textures
and colours taken
from the best
quarries around
the world.

Ceramic **Slate**

The Ceramic Slate series enhances the beauty of slate with amazing definition and shades.

We create our ceramic slates by researching natural slates from the largest quarries in Great Britain and Spain.

Ceramic slate tiles give the same feeling as natural slate but create traffic-safe roofs with lower maintenance needs.



Borja**J**ET



Ceramic

Slate





NEPAL



Black



Orange

DUBLIN

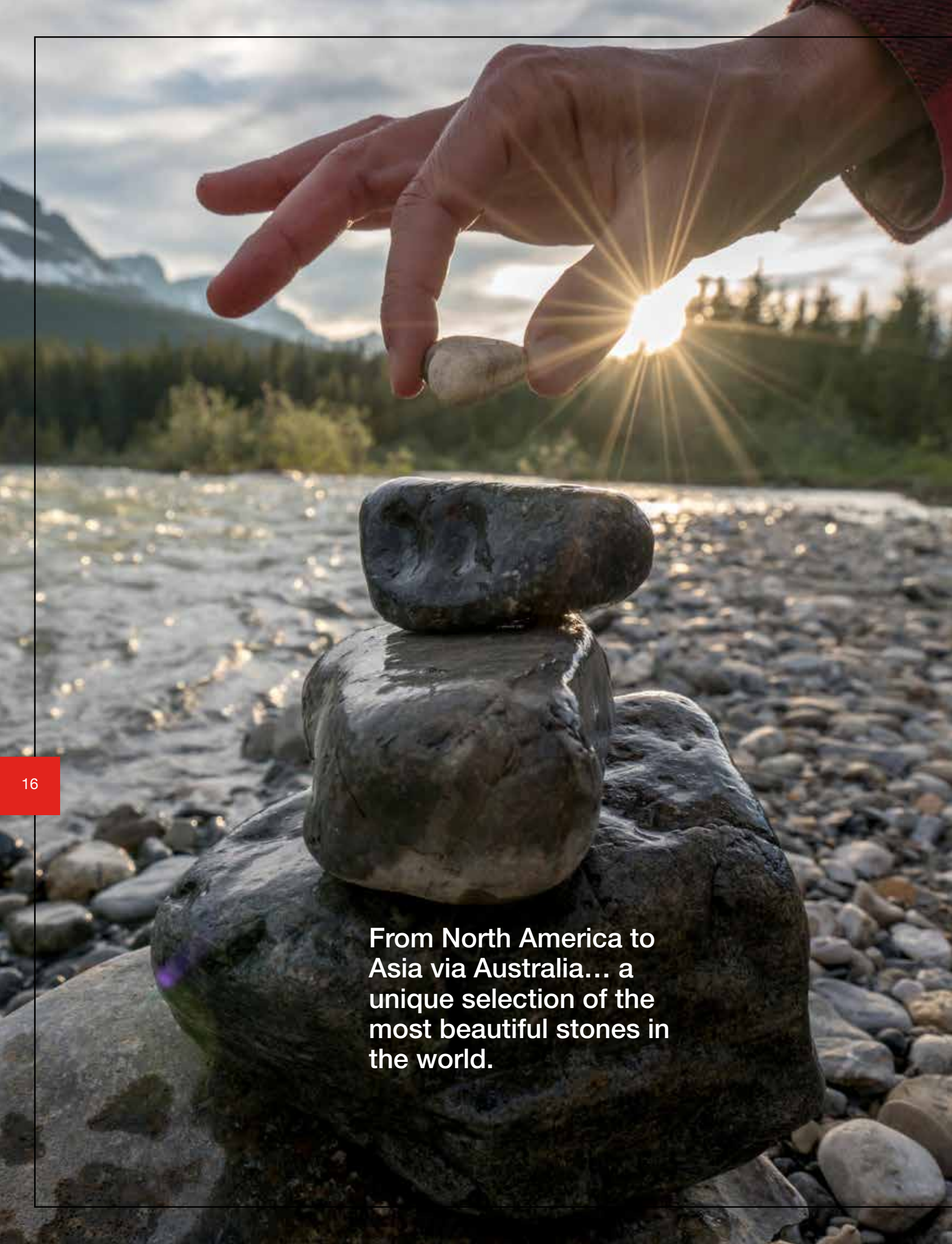


Grey

PARIS



Ocre



From North America to Asia via Australia... a unique selection of the most beautiful stones in the world.

Ceramic **Stone**

Since ancient times stone has been one of the most-used construction materials.

Builders have tried to capture the essence of their times in stone.

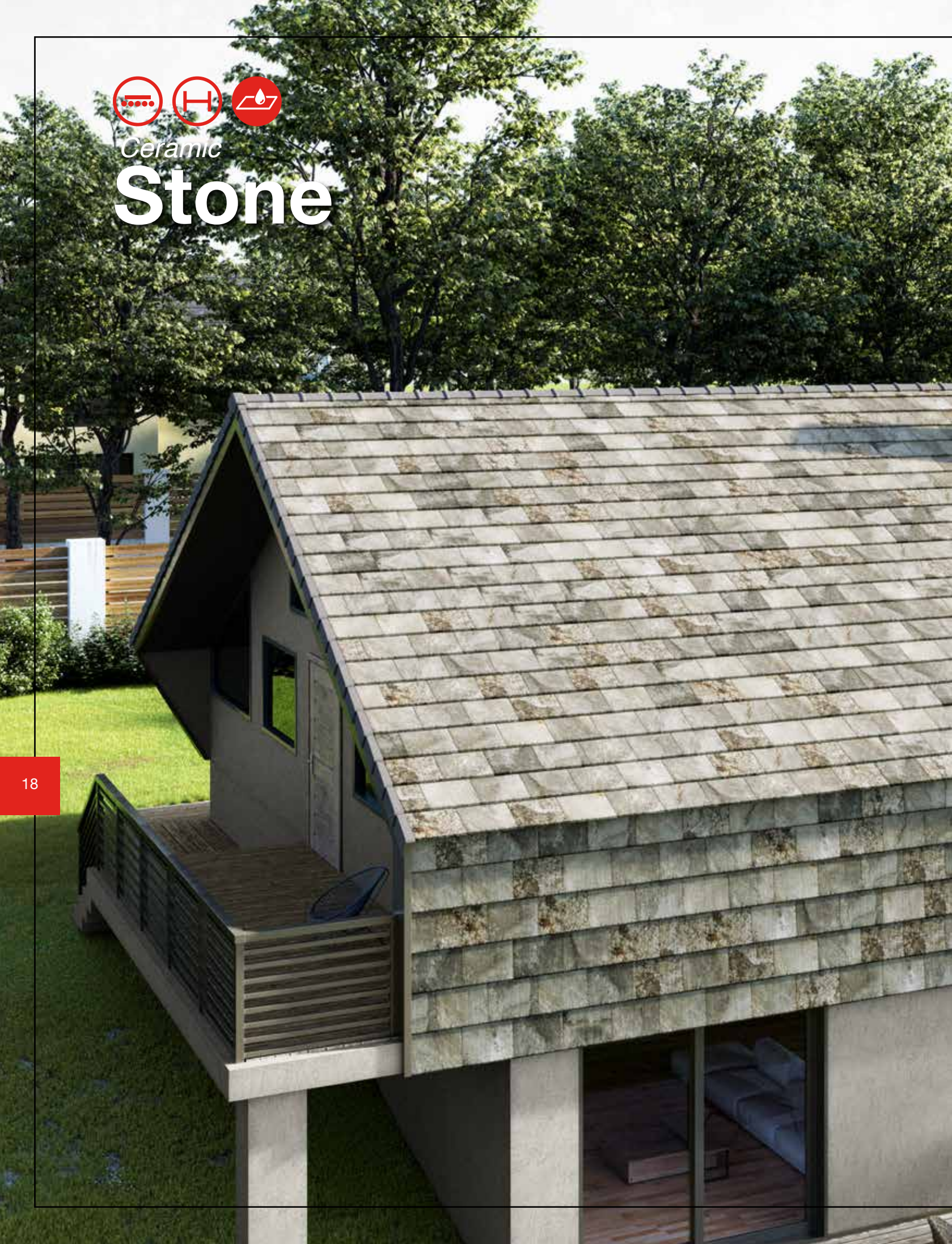
Today stone is most commonly used for cladding, but with the Ceramic Stone series it's possible to create a ceramic roof with the colours of natural stone.



Borja**J**ET



Ceramic
Stone





AUSTIN



Grey

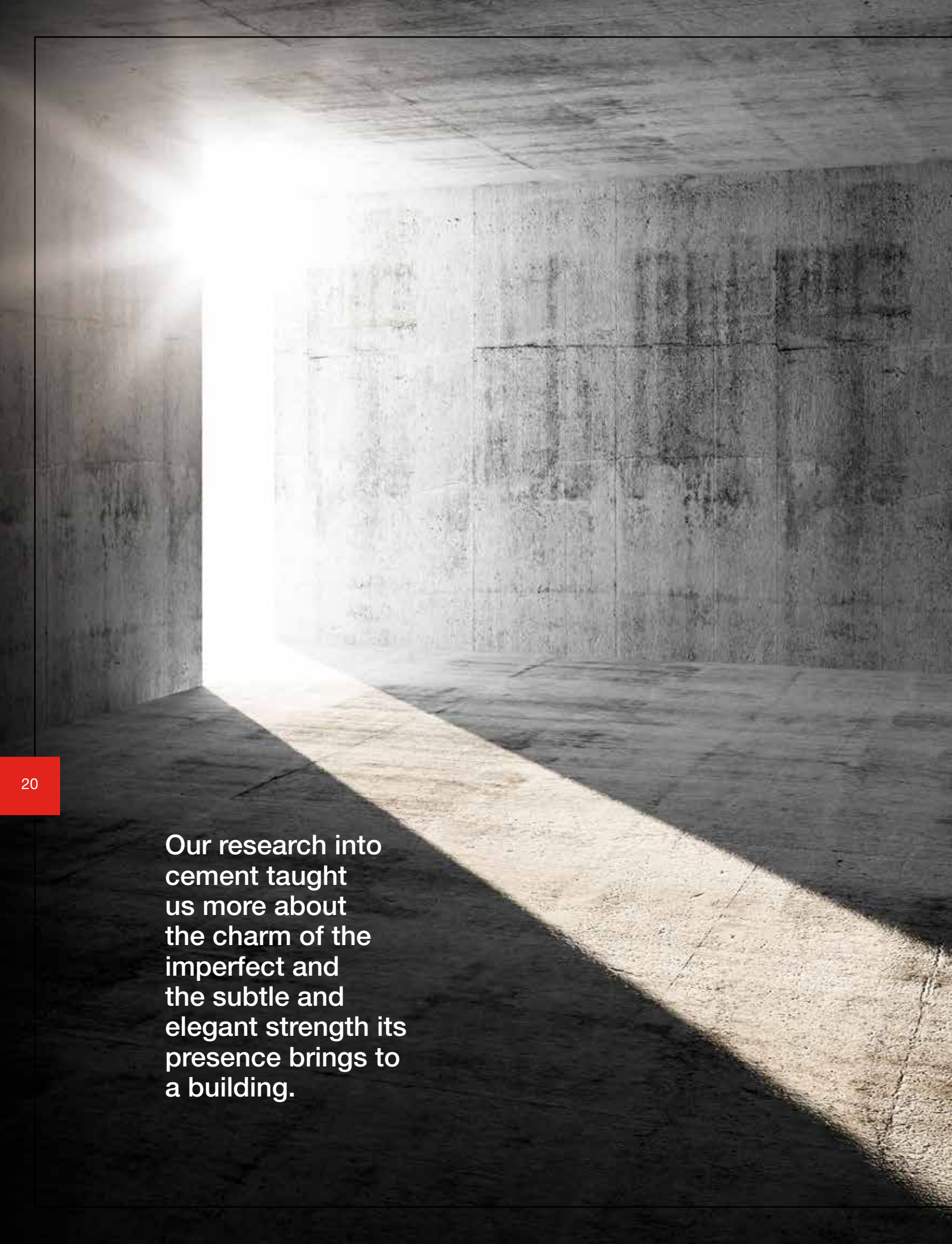
DENVER



Gold



Iris

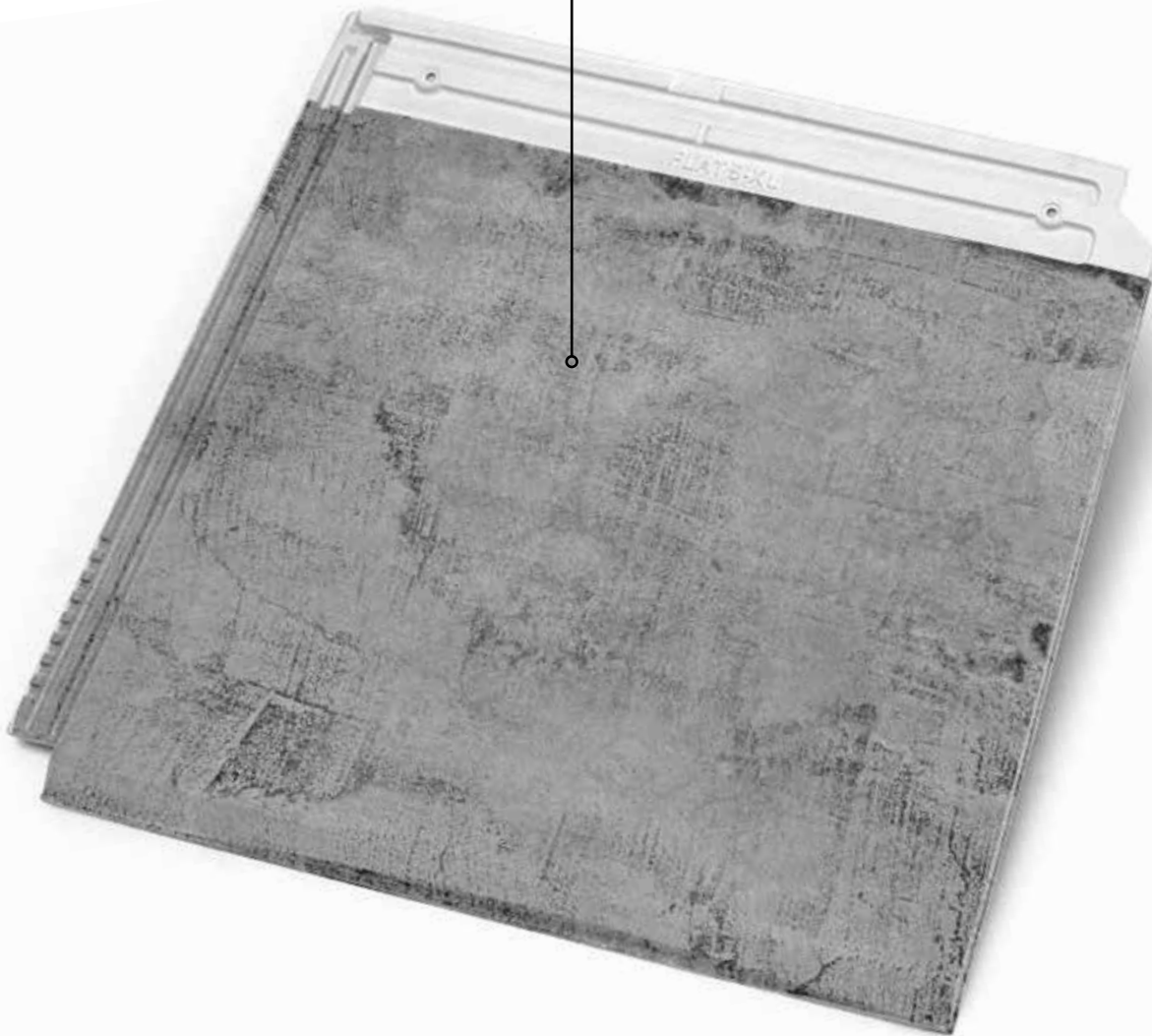


Our research into cement taught us more about the charm of the imperfect and the subtle and elegant strength its presence brings to a building.

Ceramic **Cement**

The latest trends in architecture tend towards a style of construction using basic materials. Without ornament and with a timeless style.

The Ceramic Cement series offers a way to achieve this industrial aesthetic without having to renounce the functionality of tile.



Borja**JET**



Ceramic

Cement






SIDNEY



Graphite



We synthesize the character of this material in search of its essence, present throughout the history of art.

Ceramic **Marble**

With the Ceramic Marble series we can bring the unique appearance of marble to sloping roofs, with the added benefit of no environmental, structural or installation barriers.

A series offering incomparable quality, natural appearance and colour effects with great aesthetic value.

We source our samples from quarries in Tuscany, South America, India and the Iberian Peninsula to obtain a selection of designs.

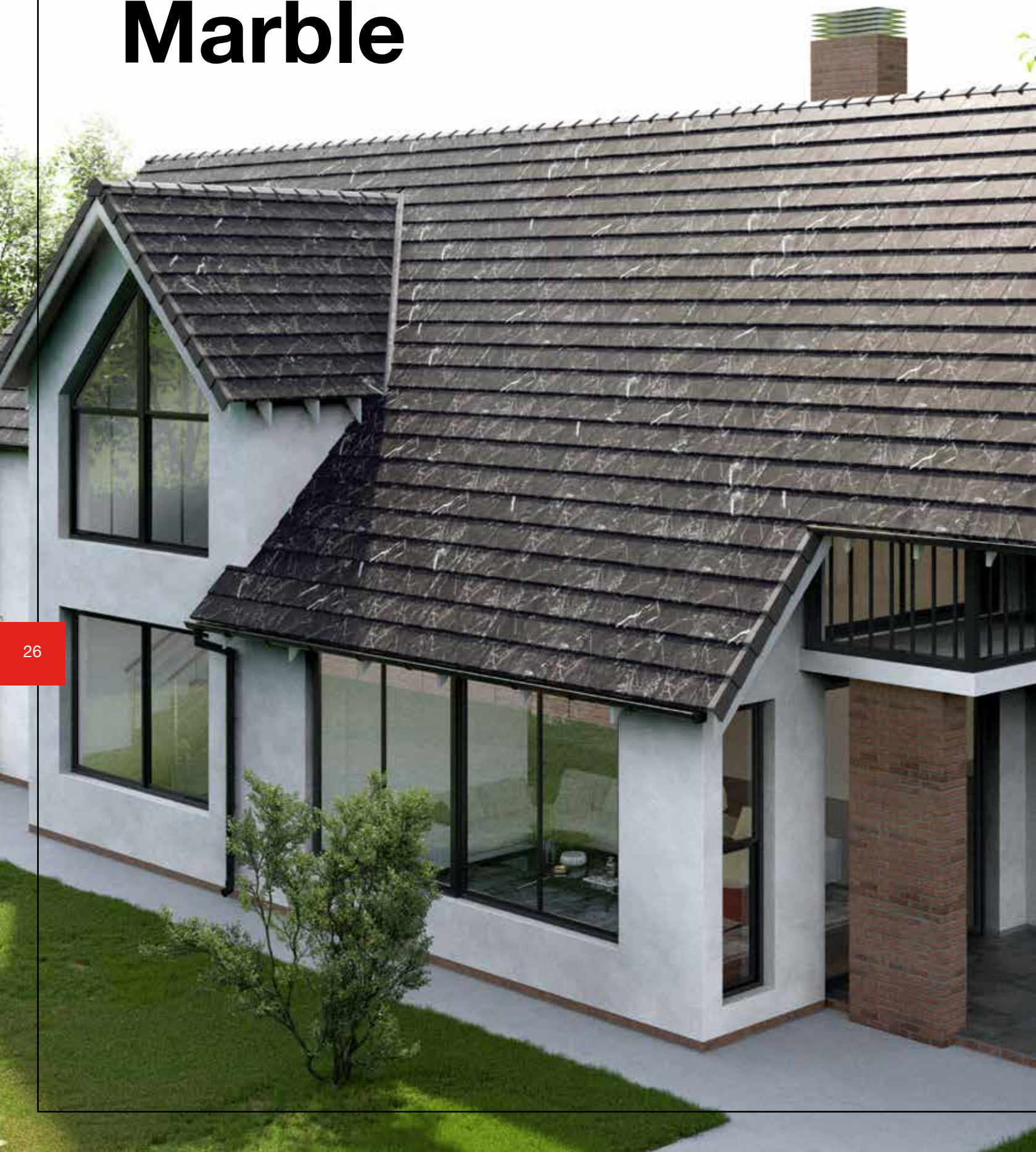


Borja**J**ET



Ceramic

Marble





ROMA



Dark



We capture the sensation given by the noblest woods to preserve their natural beauty, created by the passing of time.

Ceramic **Wood**

Tradition and technology come together to offer the best of both worlds.

The quality and texture given by the appearance of wood together with the properties and benefits of ceramic.

The total fire resistance of ceramic tiles removes limits on their installation and means they can be used on any roof to eliminate fire risk.



Borja**J**ET



Ceramic

Wood






TORONTO



Oak



We discover metals
full of history so we
can tell you about it
through our finishes.

Ceramic **Oxide**

The aesthetic of weathering steel and oxidised metal evokes an industrial and avant-garde architectural style which can now be achieved with ceramic tiles. An ideal product to overcome the limits of metal in contact with the roof structure in sloping roofs.

The range of colours available in the Ceramic Oxide collection, in brown and orange tones, has been designed to reproduce different textures and degrees of oxidation.



Borja**J**ET



Ceramic

Oxide

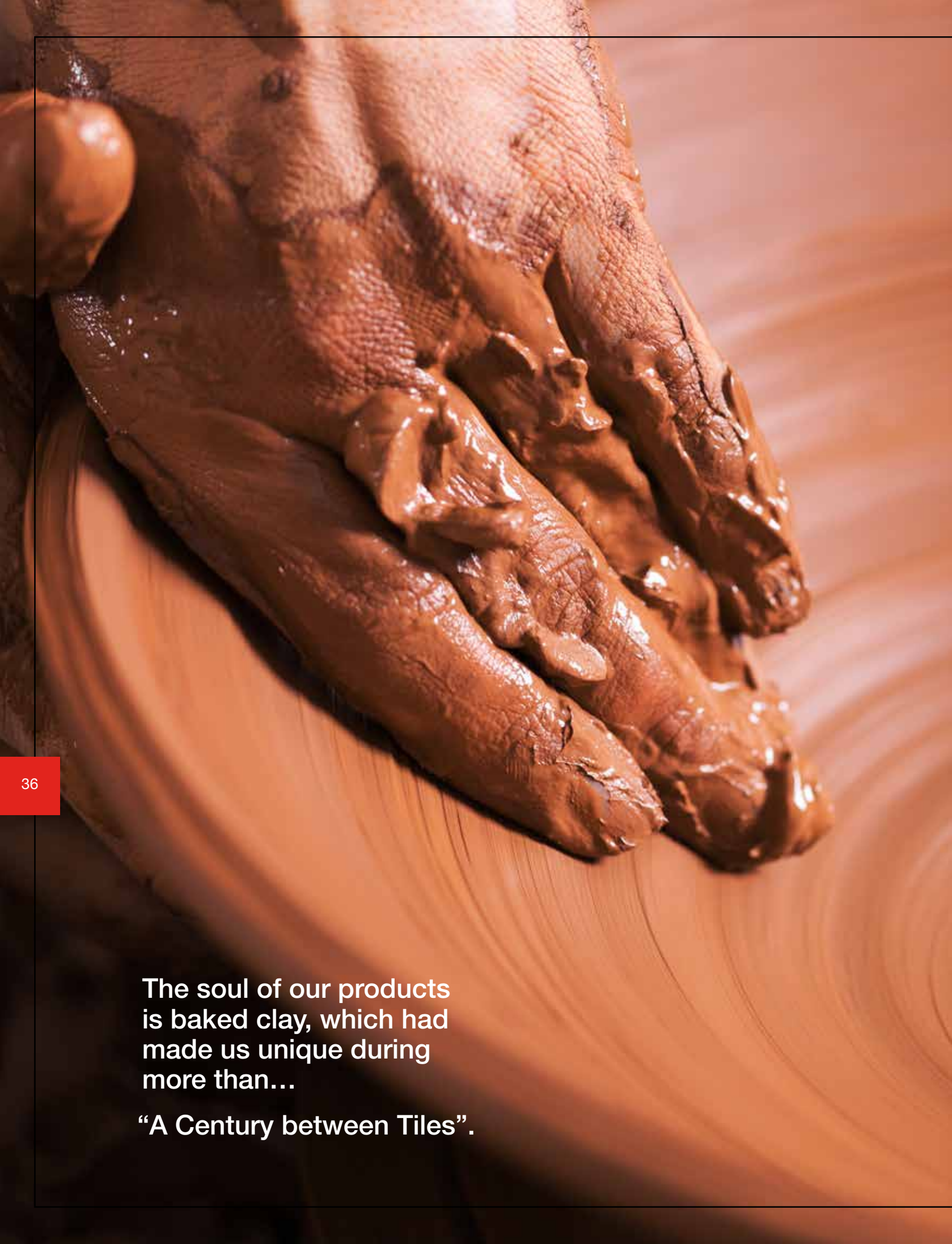




TOKYO



Copper



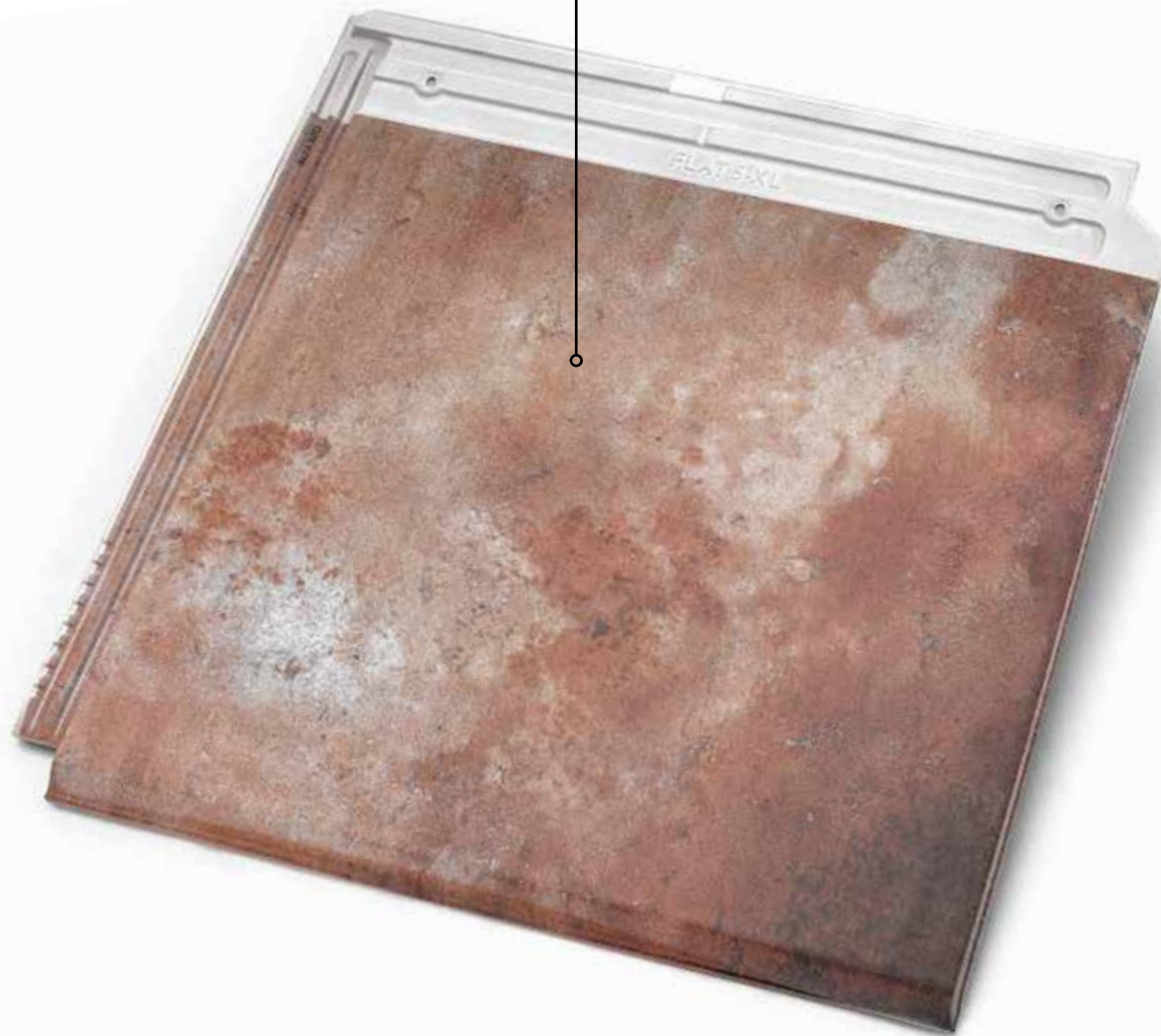
The soul of our products is baked clay, which had made us unique during more than...

“A Century between Tiles”.

Ceramic **Cotto**

Being leading experts in this material means we know that the appearance of a ceramic tile depends on many factors, allowing us to obtain a range of colours and very specific shades.

If we add to this the ageing effect caused by the passing of time we obtain the Ceramic Cotto series.



Borja**J**ET



Ceramic

Cotto





IBIZA



Pink



NEW FORMATS

40

**Constructive solutions applied to
sloping roof architecture**

THE [®]EVOLUTION
of the ceramic tile sector

FLAT-5XL®

THE LARGEST
CERAMIC TILE
IN THE WORLD



FLAT-10 Tech

TECHNICA-10

TB-10 Tech

FLAT-5XL®

THE LARGEST
CERAMIC TILE
IN THE WORLD



THE ® EVOLUTION

Available in
EXCLUSIVE FINISHES
pages 10-39



Borja JET



EXCLUSIVE to Tejas Borja

We are pleased to debut the largest ceramic tile on the market: unique in the sector and perfectly flat.

Its versatility means it can be used for both sloping roofs and facades.

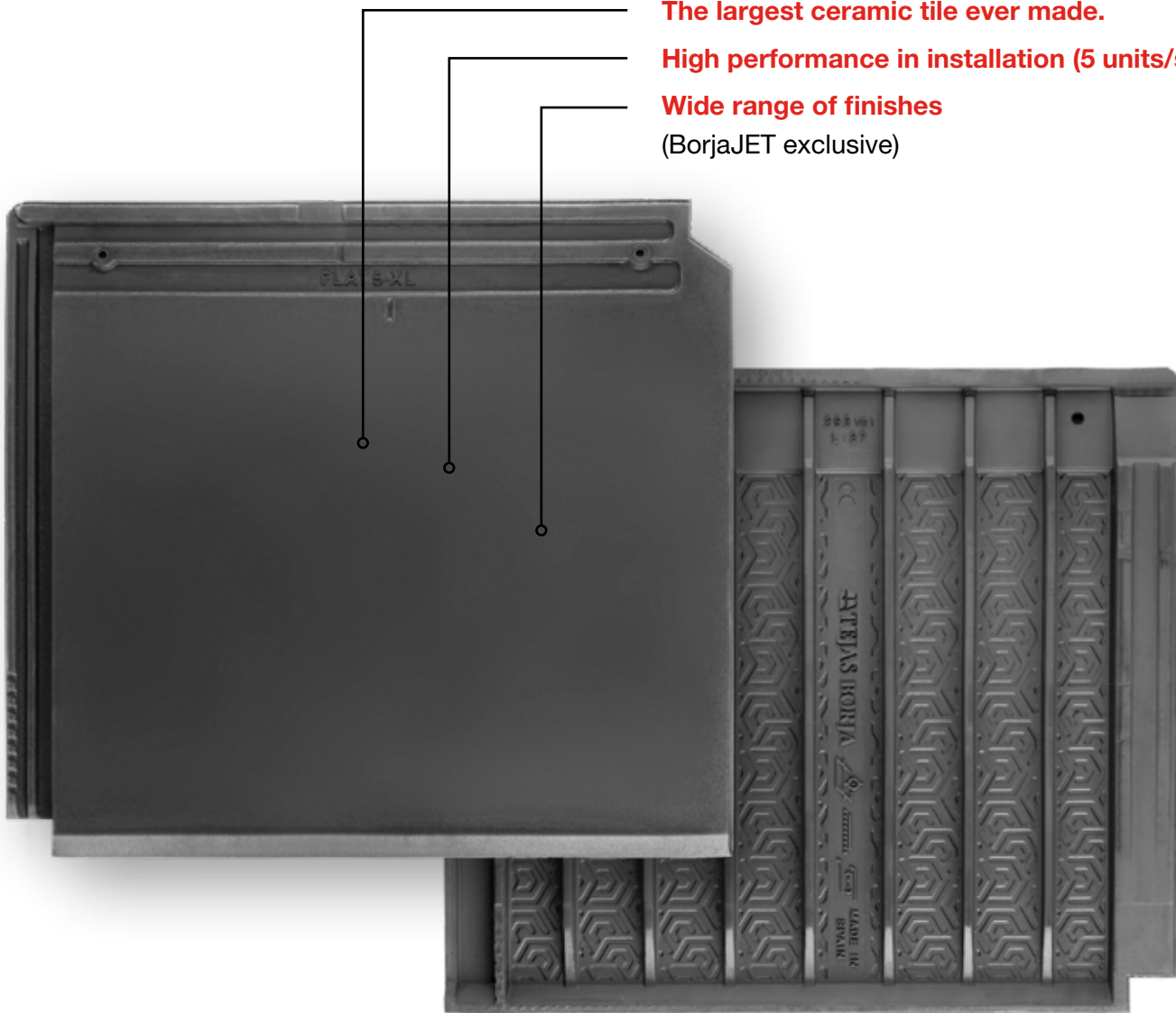
® PATENTED MODEL

FLAT-5XL

FLAT-5XL[®]

The FLAT-5XL[®] is another example of the innovation, development and improvement of our products which, together with our exclusive BorjaJET finishing technology, can make architects' impossible dreams a reality.

The largest ceramic tile ever made.
High performance in installation (5 units/sq.m.)
Wide range of finishes
 (BorjaJET exclusive)



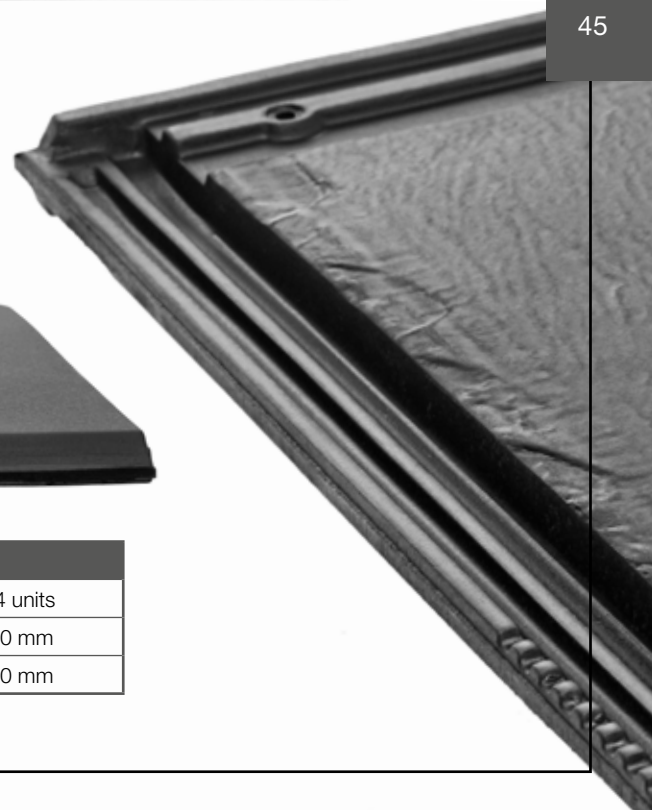
Maximum
Surface Flatness



Minimum
Slope 35%



Longitudinal Overlap
50 mm



Characteristics	
Width	510 mm
Length	457 mm
Weight	6.55 kg/tile

Installation	
Tiles /sq. m.	5,4 units
Minimum batten spacing	340 mm
Maximum batten spacing	390 mm



FLAT-10 Tech

46

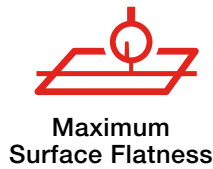
A new generation of flat tiles now lighter and with greater definition. Its new deeper joins make this format the perfect choice for all kinds of projects. They can be used on any of the 5 continents in both sloping roofs and facades.

Combined with BorjaJET finishes they give a singular character to any architectural design.

 BorjaTECH



Perfect, deep fit
 Large format - 10 units per sq. m.
 Exclusive BorjaJET finishes
 Lightweight



Characteristics	
Width	285 mm
Length	475 mm
Weight	3.5 kg/tile

Installation	
Tiles /s.q. m.	9,9 units
Minimum batten spacing	365 mm
Maximum batten spacing	400 mm

Finishes FLAT-10 Tech

NATURE



Red



Moss Red

AND ...



Borja JET

Available in
EXCLUSIVE FINISHES
on pages 10-39



PLAIN COLOUR



Leon



Light Grey



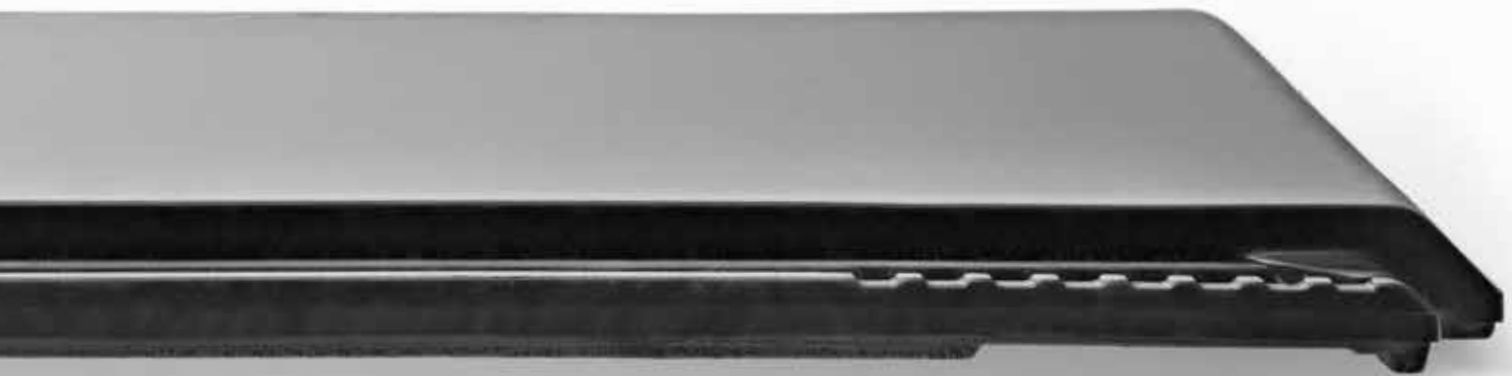
Mid Grey



Graphite



Chocolate





TECHNICA-10

50

Innovative flat tile in a Marseilles style.
Safer and technologically up-to-date.
The most versatile format on the market.
A combination of tradition and technology
to make all kinds of projects possible, from
the most avant-garde to the most classic.

 BorjaTECH



Deep channel, extremely watertight
Great definition
Easy to install



Easy to install



Minimum Slope 35%



Longitudinal Overlap 50 mm



Characteristics	
Width	262 mm
Length	471 mm
Weight	3.5 kg/tile

Instalación	
Tejas /s.q. m.	10,7 units
Minimum batten spacing	370 mm
Maximum batten spacing	420 mm

Finishes TECHNICA-10

NATURE



Red



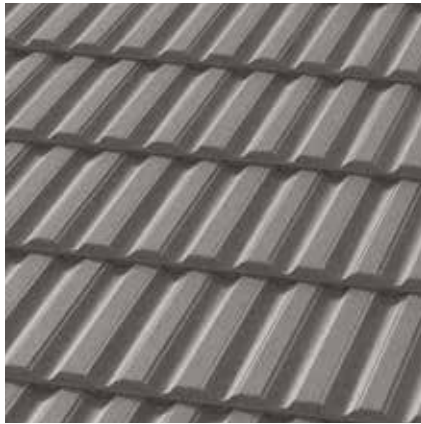
Moss Red



PLAIN COLOUR



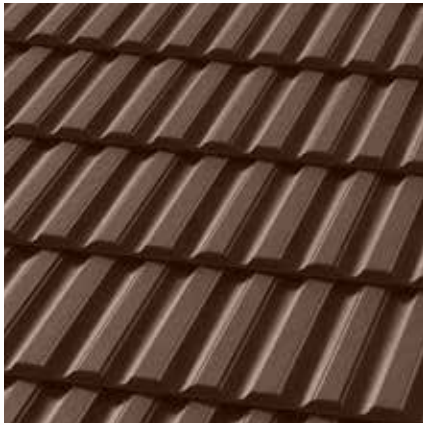
Light Grey



Mid Grey



Graphite



Chocolate



Technological evolution in the large-size mixed tile format. We have made improvements in the manufacturing and development process to give the tile even greater definition and make it completely watertight. Ideal for architectural projects anywhere in the world.



TB-10 Tech



Adapts to various batten spacings
 Longitudinal and transverse double fit
 Curved tile aesthetic



Easy to install



Minimum Slope 30%



Longitudinal Overlap 25 mm



Characteristics	
Width	282 mm
Length	475 mm
Weight	3.6 kg/tile

Installation	
Tiles /s.q. m.	10,4 units
Minimum batten spacing	390 mm
Maximum batten spacing	410 mm

Finishes TB-10 Tech

NATURE



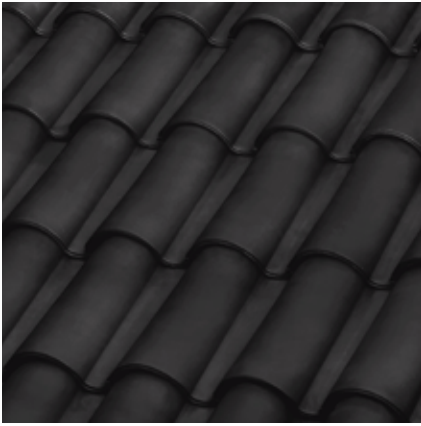
Moss Red

CENTENARIA®



Centenaria

PLAIN COLOUR



Graphite



Chocolate



Accessories



Angular Ridge



Angular Hip Starter



Angular 3 Ways



Angular 4 Ways



Universal Straight End Cap



Bretagna 2 Ridge



Circular Ridge



Circular Hip Starter



Circular 3 Ways



Circular 4 Ways



Circular Straight End Cap



Circular Curved End Cap



Cover+ Ridge



Cover+ Hip Starter



Cover+ 3 Ways



Cover+ 4 Ways



Cover+ Straight End Cap



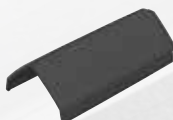
Cover+ Curved End Cap



Bretagna 2 Hip Starter



Bretagna 2 Straight End Cap



Angular 100° Ridge



Angular 100° Hip Starter



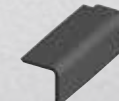
Angular 100° Straight End Cap



Under Ridge



Flat Straight Edges (Left/Right)



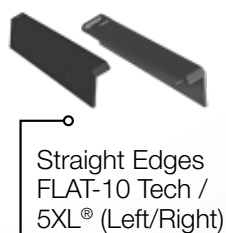
Angular Edge



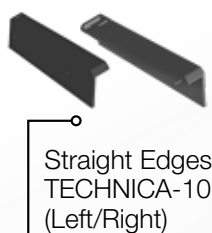
Straight Edge (Left/Right)



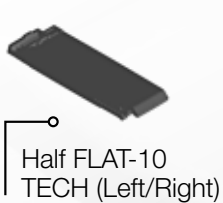
Curved Edge (Left/Right)



Straight Edges
FLAT-10 Tech /
5XL® (Left/Right)



Straight Edges
TECHNICA-10
(Left/Right)



Half FLAT-10
TECH (Left/Right)



Half FLAT-5XL®
(Left/Right)



Half
TECHNICA-10
(Left/Right)



Half
TB-10
TECH



TB-10 TECH
Tile and a Half



FLAT-10 TECH
Ventilation



FLAT-5XL®
Ventilation



TECHNICA-10
Ventilation



TB-10 TECH
Ventilation



FLAT-10 TECH
Chimney
Carrier



FLAT-5XL®
Chimney
Carrier



TECHNICA-10
Chimney
Carrier



TB-10 TECH
Chimney
Carrier



Universal
Ventilation Cap



Chimney
d.140



Chimney
d.130



Ask for colours availability of accessories. Some of the accessories for BorjaJET roof tiles are available in plain colours.

BORJATHERM®

Thermal insulated roofing **SYSTEM**





Maximum insulation

The brand new Tejas Borja SARKING SYSTEM is a complete solution for external insulated pitched roofs, designed for use both in repairing and refurbishing roofs on old buildings or creating new projects.

BORJATHERM panels are light-weight and easy handling, although to very easy to install. These panels make unnecessary most of the products which used to be essential for the construction of a ventilated roof because the panel itself, installed directly onto the rafters, beams or inclined slabs, performs all the functions of these products in one.

6

functions in one unique roof system

- 1 Flat supporting structure
- 2 Vapour barrier
- 3 Thermal insulation layer
- 4 Waterproof membrane
- 5 Counter battens
- 6 Tile Fixing battens





MAXIMUM ENERGY
EFFICIENCY TO THE ROOF

complete solution for external insulated
lightweight pitched roofs

THE [®]EVOLUTION
of the ceramic tile sector

The advantages



Maximum Insulation without thermal bridges.



Optimal roof waterproofing.



Quick and easy to install.



Insulation without losing space.



More economical than other systems.



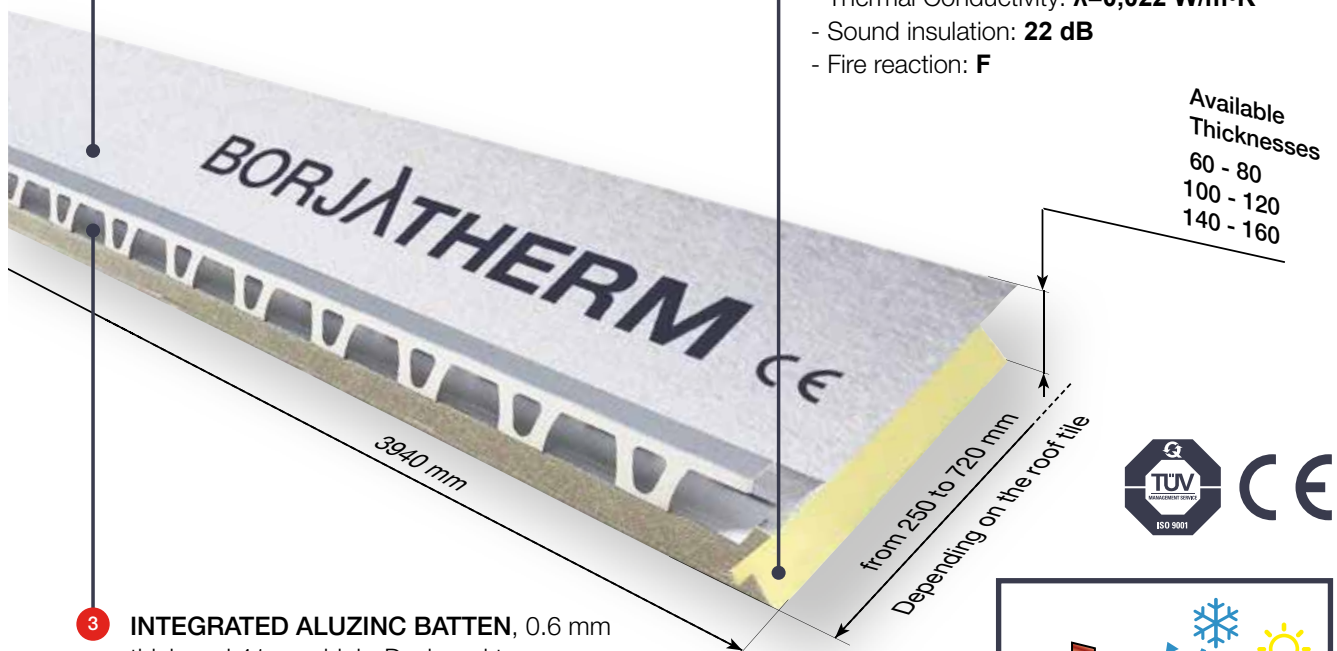
Excellent roof ventilation.

1 EMBOSSED ALUMINIUM Foil protecting the four faces of the panels. Its purpose is to protect the insulating material, form a vapour barrier and provide an additional layer of waterproofing in the roof.

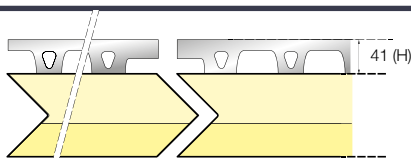
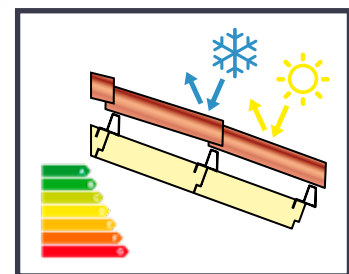
2 THERMAL INSULATION made from rigid expanded polyurethane:

- Density: **39 kg/m³**
- Thermal Conductivity: **$\lambda=0,022 \text{ W/m}\cdot\text{K}$**
- Sound insulation: **22 dB**
- Fire reaction: **F**

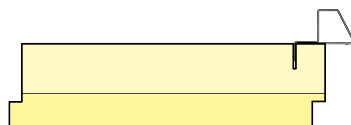
Available Thicknesses
60 - 80
100 - 120
140 - 160



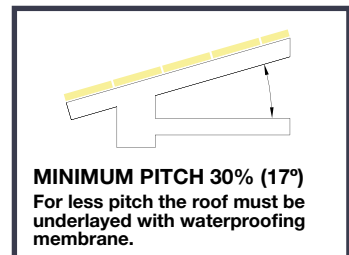
3 INTEGRATED ALUZINC BATTEN, 0.6 mm thick and 41 mm high. Designed to ensure the tiles are fixed correctly and to create a roof ventilation greater than 200 cm² per meter thanks to the wide perforations in the profile.



TRANSVERSAL FITTING



LONGITUDINAL FITTING



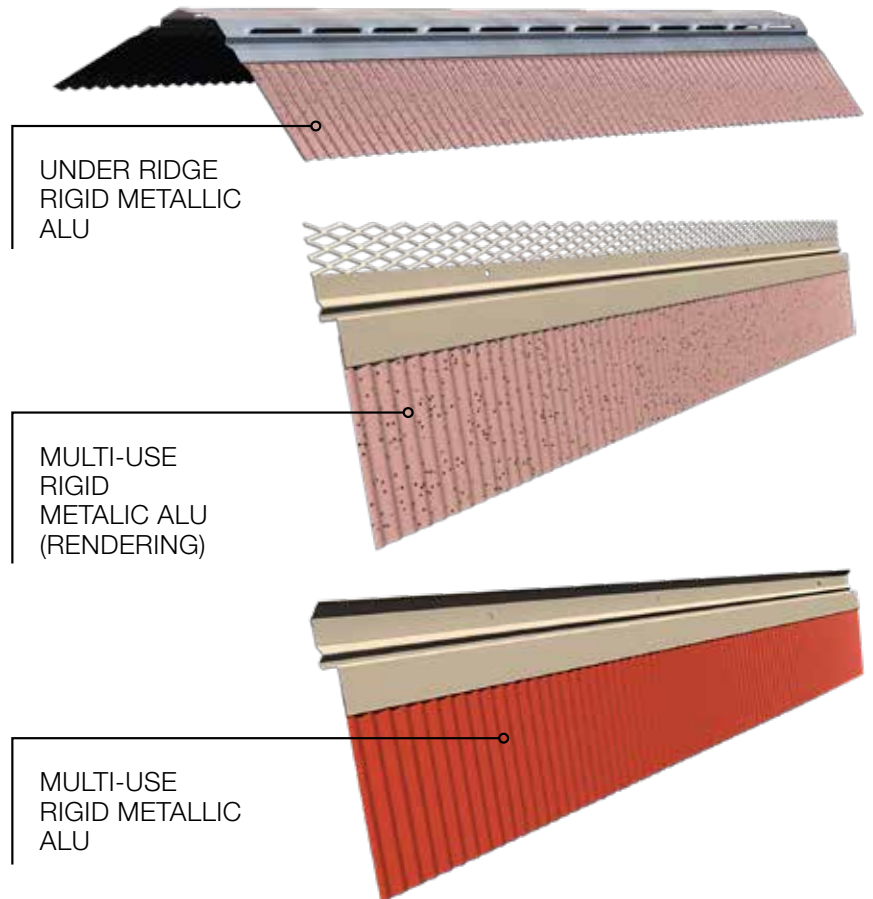
MINIMUM PITCH 30% (17°)
For less pitch the roof must be underlaid with waterproofing membrane.

ACCESSORIES

Innovative

METALIC ACCESSORIES

Our new range of metallic accessories makes it very simple to install ventilated ridges and joins between the roof and vertical walls, whether they are to be rendered with mortar or installed onto the finished wall. This range of high performance accessories is made with fine materials which are highly durable. We also offer thick butyl tape to fix the accessories correctly to the tiles.



LOW PITCH WATERPROOF MEMBRANE

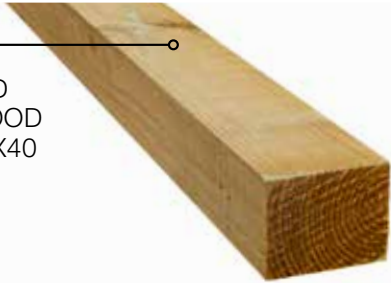
For roofs with pitches lower than those required by regulations or the technical specifications of the product, a bitumen self-adhesive waterproof membrane is also installed, without the need to use heat in the installation. This membrane is self-sealing for small holes made by nails or screws and is easy to shape to finish joins in the roof.



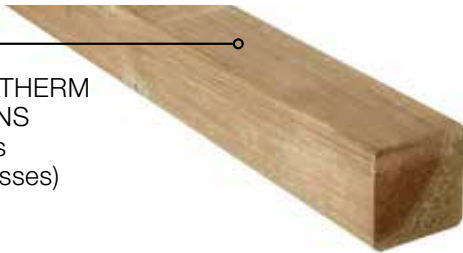
WOOD FRAMES

In addition to metallic and PVC frames, we are broadening our range with wooden battens made from pine treated to be waterproof to risk level III so they can be installed in any climate.

AUTOCLAVED
TREATED WOOD
BATTENS 30X40



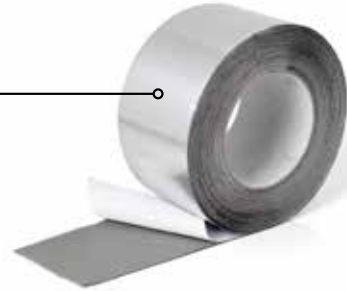
BORJATHERM
BATTENS
(Various
thicknesses)



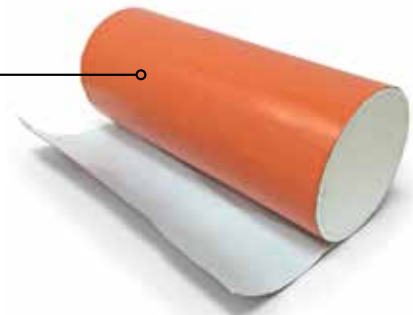
BUTYL TAPES

New adhesive tapes made from butyl rubber to seal joints in the roof. Specially designed to seal joints between under-tile bitumen sheets and joints between insulation panels in the BORJATHERM roof SATE system.

BORJATHERM
BUTYL TAPE
100 MM



BUTYL
WATERPROOF
TAPE
300 MM



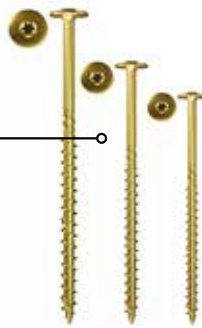
FIXINGS

To guarantee the tiles and accessories are installed correctly, the range includes various models and sizes of screws, adapted to each type of roof supporting structure. We can also study each project to define and supply the most appropriate fixings in each case. All these screws come with the latest special adhesives for roofs.

SCREW WITH
PLUG FOR
CONCRETE
(Various
sizes)



WOOD
SCREW
(Various
sizes)



PU ROOFING
FOAM
(applied with
gun)



ADHESIVE
SEALANT
(applied with
gun)

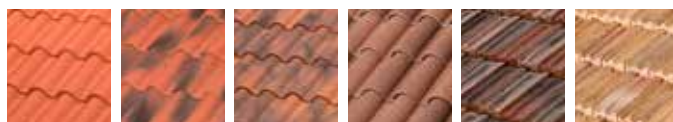


RANGE
of formats and colours



Borja LINE

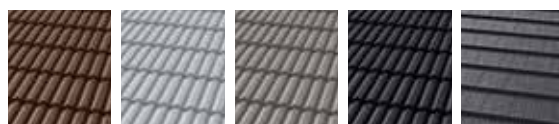
NATURE



Red Aged Red Moss Red Fosca Nortegna Litoral

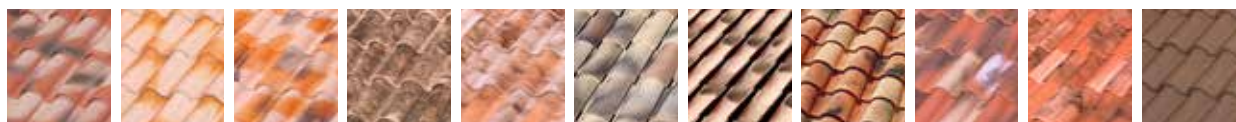
FLAT-10 Tech	●		●			
TECHNICA-10	●		●			
ALICANTINA-12	●			●	●	●
TB-10 Tech	●		●	●		
TB-12®	●	●		●		
TB-4®	●			●		
C-50.21 Celler®	●			●		
STEP CELLER 50/45	●			●		
C-45.20	●		●			
C-40.19	●	●				
C-40.15	●	●		●		
C-25.12	●					
ESCAMA	●					

PLAIN COLOUR



Chocolate Light Grey Mid Grey Graphite Leon

FLAT-10 Tech	●	●	●	●	●
TECHNICA-10	●	●	●	●	
TB-10 Tech	●			●	
TB-12®				●	
FLAT-5XL®					●



Manoir® Rosarena® Vilavella® Edetania® Lamalou® Montseny Serrania** Vilateria® Bidasoa® Castilla Brown

●		●	●	●						
●	●	●		●				●	●	●
							●			
●		●	●	●	●					●
●						●				
										●
		●								

CENTENARIA®



Ground Mediterrània® Sand Entrepins

TB-10 Tech	●		●	●
TB-12®	●	●		
C-50.21 Celler®	●	●	●	
C-40.19			●	
C-40.15	●			

Step Celler 50/45 Manoir® roof tile: Matches with Centenaria® Ground and Manoir®.

Step Celler 50/45 Serrania roof tile: Matches with Centenaria® Mediterrània®, Centenaria® Sand, Vilavella®, Edetania®, Lamalou® and Montseny.

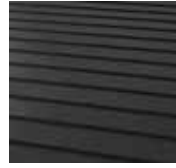
Step Celler 50/45 Fosca roof tile: Matches with Fosca and Brown.

RANGE
of formats and colours



Borja **JET**

Ceramic
SLATE



Nepal Black



Nepal Orange



Dublin Grey



Paris Ocre

Ceramic
STONE



Austin Grey



Denver Gold



Denver Iris

Ceramic
CEMENT



Sidney Ghaphite

Ceramic
OXIDE



Tokyo Copper

Ceramic
COTTO



Ibiza Pink

FLAT-5XL®



FLAT-10 Tech



Ceramic
MARBLE

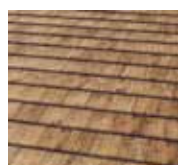


Roma Dark

FLAT-5XL®



Ceramic
WOOD

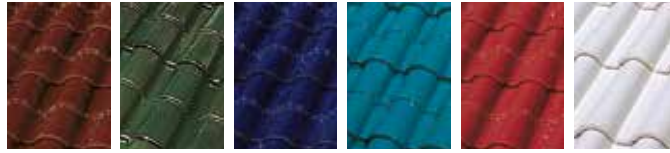


Toronto Oak

FLAT-10 Tech



GLAZED DF



Cognac Green Cobalt Blue Alicante Blue Carmin White

ALICANTINA-12	●	●	●	●	●	●
TB-12®	●	●	●	●	●	
TB-4®	●	●	●	●	●	
C-50.21 Celler®	●	●	●	●	●	
STEP CELLER 50/45	●	●	●	●	●	●
C-40.19	●	●	●	●	●	
C-40.15	●	●	●	●	●	
C-25.12	●	●	●	●	●	
ESCAMA	●	●	●	●	●	●

CRYSTAL DF



Crystal Red Elegant®

●	
●	
●	●
●	
●	
●	
●	
●	
●	

TAMIZADOS DF



Slate Grey Green Brown Blue

ALICANTINA-12	●	●	●	●	●
TB-12®	●	●	●	●	●
TB-4®	●	●	●	●	●
C-50.21 Celler®	●	●	●	●	●
STEP CELLER 50/45	●	●	●	●	●
C-40.19	●	●	●	●	●
C-40.15	●	●	●	●	●
C-25.12	●	●	●	●	●
ESCAMA	●	●	●	●	●

METALLIC DF



Cooper Lead

●	●
●	●
●	●
●	●
●	●
●	●
●	●
●	●
●	●

Ask for exclusive colours
in TB-4® roof tile
on our website:
www.tejasborja.com

IRISADOS DF: Cognac, Green and Blue

INSPIRATION DF: Ocre, Indigo and Lienzo de Mar.

White, Copper and Lead finishes are produced only on one side colour.

CRAKLE (surface crackling)

The superficial crackling can appear in some tiles with glazed application, concerning only the aesthetics and not the structure of the tiles, by what in the Standard regulation EN 1304 it is not considered to be a defect.



ENVIRONMENTAL
COMMITMENT

THE ® EVOLUTION
of the ceramic tile sector

Caring for tomorrow today

Tejas Borja's commitment to protecting the environment and improving its environmental performance is guaranteed as all the ceramic pieces and tiles the company sells are manufactured with ISO 14001:2015 certification and the ES17/21541 certificate in their facilities located in Liria-Valencia (TEJAS Y LADRILLOS DEL MEDITERRÁNEO).

Furthermore, our commitment to ensuring the continuous improvement of our environmental management systems is demonstrated by our holding an Environmental Product Declaration (EPD) in accordance with UNE-EN ISO 14025:2010, UNE-EN 15804:2012+A1:2014 for tiles and auxiliary pieces made from baked clay, verified by an independent AENOR third party and published in the Global EPD AENOR programme.



THE [®]EVOLUTION
of the ceramic tile sector

This catalogue has been published taking into account the latest rules, Codes and Guides as at February 2018. Tejas Borja S.A.U. reserves the right to change the characteristics and availability of the products and colours displayed in this catalogue without prior notice. The colours of the pieces shown may vary slightly from the originals. The settings shown in this catalogue are decorative suggestions for publicity purposes only and in real installations the fitting instructions published by Tejas Borja must be followed.

A century around tiles



RAISE
the Roof
A century around tiles



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