



COTTOD'ESTE  
Nuove Superfici

**kerlite**<sup>®</sup>  
GENERAL **BOOK AND REFERENCES**

## OUR GROUP: PANARIAGROUP

PANARIAGROUP. THROUGHOUT TIME AND AROUND THE WORLD, CERAMIC EXCELLENCE

To excel in the world of high quality ceramics means knowing how to continuously create highly technological products and how to enhance them through the utmost attention to aesthetics and detail. Panariagroup has always adhered to the highest standards of excellence, combining its history of skilful artisan craftsmanship with cutting edge technology. This approach is intrinsically linked to a fundamental commitment to always act and operate responsibly. With over 40 years of experience, Panariagroup is an international company with a strong Italian soul and an extensive sales network with 8 brands in over 130 countries all over the world.



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# BEAUTY IN CERAMICS

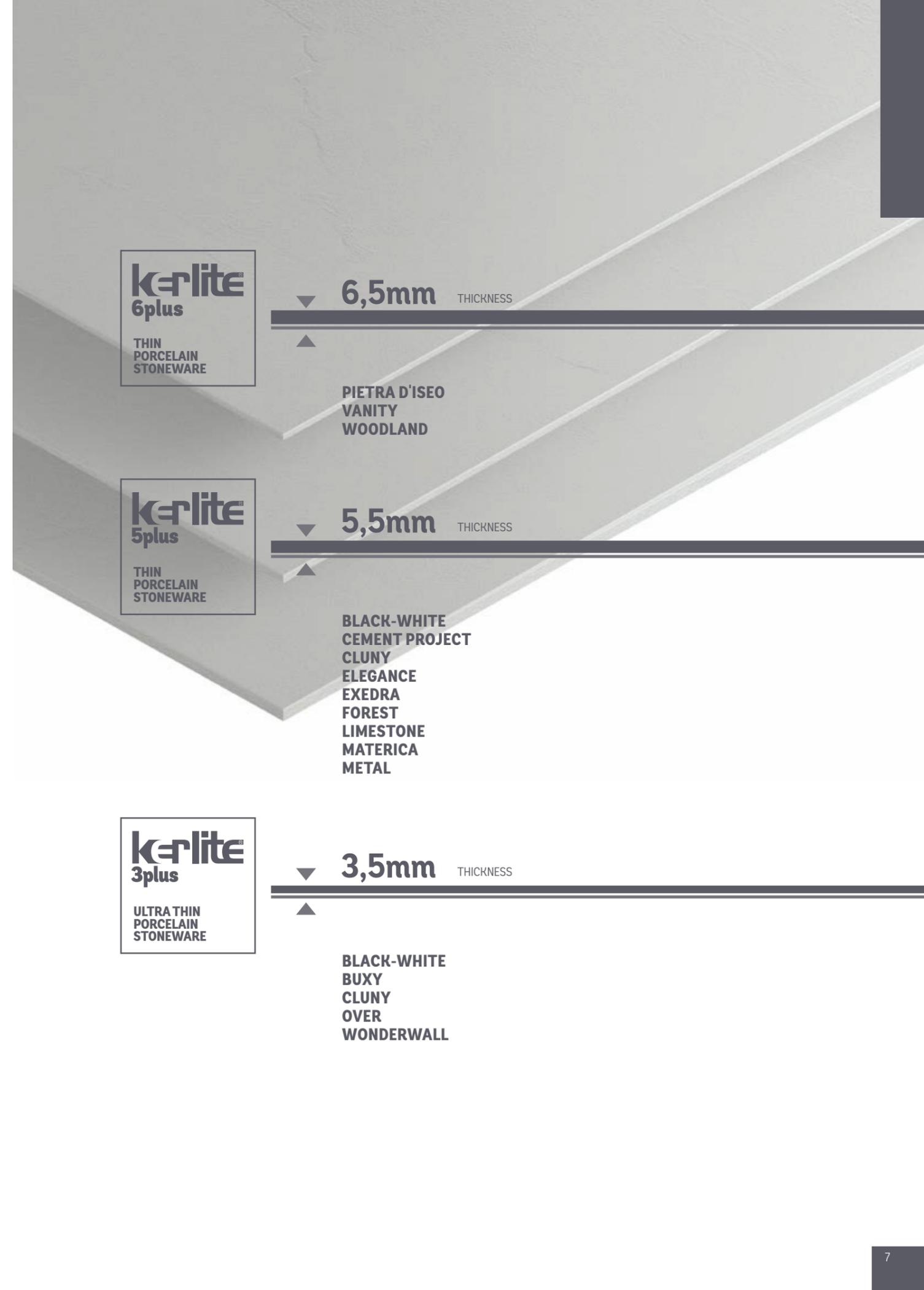


THE NEW SURFACE  
FOR ARCHITECTURE

Cotto d'Este has distinguished itself as one of the most prestigious names in the field of ceramics. Our creations recall beauty, quality and prestige and are the result of our passionate and continuous aesthetic research. Rather than a mission, searching for beauty is a vocation, an imperative that has allowed us to attain a high level of excellence, as attested by the confidence placed in our creations by architects and interior designers all over the world.

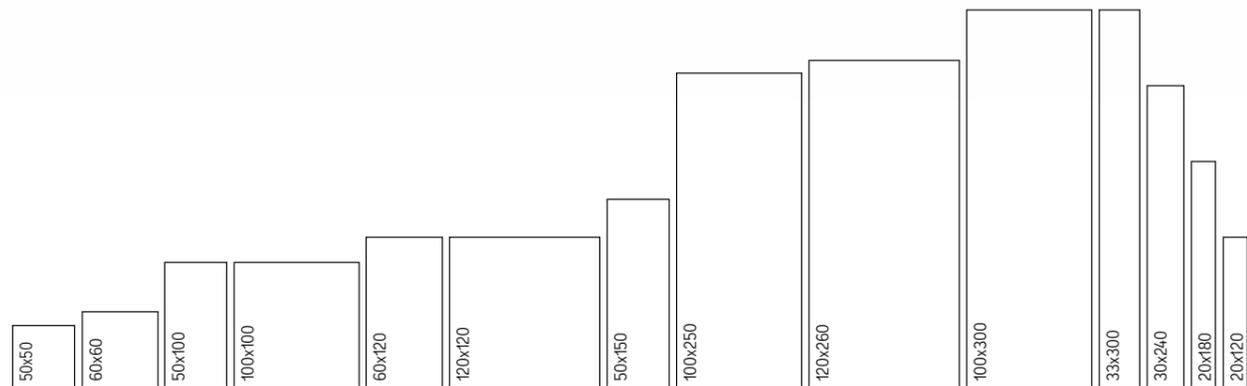
## SLABS PRESSED ON CONTINUOUS BELTS AND NOT TILES MADE WITH CONVENTIONAL DIES

Kerlite is ultrathin porcelain stoneware based on a new concept, where maximum versatility and ease-of-use are the strong points. Resistant and light, flat and flexible, simple to cut, drill and install, and easy to sanitise too. Developed to fulfil the aesthetic needs of architecture and contemporary design, Kerlite introduces the era of global tiling: not only floors and walls but also furniture and furnishings, doors, kitchens and work tops.





Reinforced with fibreglass on the rear side



**Ideal for flooring and wall cladding** both for new buildings and for renovation, including projects with tiling laid on pre-existing floor:

**Kerlite 3plus**  
3,5mm

Ideal in residential and light commercial spaces.

**Kerlite 5plus**  
5,5mm

Ideal in residential and commercial spaces including those subjected to heavy traffic.

**Kerlite 6plus**  
6,5mm

**kerlite®**

# SUPERIOR QUALITY THIN CERAMIC SLABS

**Large-sized laminated porcelain stoneware reinforced with fibreglass:** a light, resistant and versatile product for new design perspectives in the world of architecture and housing.

**Highest standards in quality and performance**

Thanks to the use of the best raw materials

**Highly compact and elastic slabs**

Thanks to a unique pressing process

**Excellent aesthetic look of the products**

Thanks to exclusive surface processing technologies

**Extraordinary added resistance**

Thanks to the reinforcing fibreglass mesh

**Highly eco-friendly**

Less raw materials used, lower water and energy consumption and lower CO<sub>2</sub> emissions



METAL IRON | 5,5mm | 100x100cm / 39"x39"



**LARGE**  
A range of slabs with sizes up to 3 x 1 metres. The perfection of the slabs allows for installation with joints of only 1 mm.



**THIN AND LIGHT**  
Slabs of Kerlite are particularly thin and light.

**GUARANTEED FOR 20 YEARS**  
The beauty and extraordinary quality of our floors are values that resist time: resistance of surfaces to wear and frost is guaranteed for 20 years.



**FLAT AND RESISTANT**  
The innovative production process of Kerlite, which is pressed on a continuous belt, allows us to produce perfectly flat and compact slabs. Pressed at a force of 15,000 tons, Kerlite 5plus resists breaking loads of up to 1200 Newton.

**ANTIMICROBIAL SURFACE**  
The technology used in PROTECT products, based on silver ions blocks the metabolism of bacteria, eliminating them and preventing their proliferation. Unlike other technologies, such as those based on the use of Titanium Dioxide, the protective shield is always active, day and night, with or without sunlight and it does not need UV rays for activation..

**EASY TO CLEAN**  
Kerlite is non-absorbent, easy to clean and resists acid, stains and pollution.  
**EASY TO INSTALL**  
Thin and light, easy to cut and drill, processing time reduced by 40% with respect to traditional tile.

**ECO-FRIENDLY**  
An ecocompatible production process: minus 70% on consumption of raw materials and water and minus 50% on natural gas; Emissions of CO<sub>2</sub> that are 20 times lower with respect to the thresholds of Italian laws, as envisaged by the Kyoto Protocol.



# INTENDED USES



Installation must be performed in compliance with the standards published on the Kerlite Technical Manual.

	<b>FLOOR INSTALLATION</b> For new buildings and refurbishing with installation on existing floors.	<b>3plus</b>	<b>5plus</b>	<b>6plus</b>
<b>INTERIORS</b>	<b>Residential</b> (kitchens, bathrooms, living rooms, common apartment block areas and any other residential environment).	● except: WONDERWALL (Items decorated with cold digital technology)*	●	●
	<b>Light commercial</b> (offices, offices open to the general public, waiting rooms, shops, bathrooms, restaurant dining rooms, car showrooms, bars, cinemas, surgeries/clinics).	● except: OVER SOFT - WONDERWALL (Items decorated with cold digital technology)*	● except: GLOSSY (EXEDRA - ULTRAWHITE)	●
	<b>Heavy duty commercial</b> (public areas of shopping centres, hotel halls, canteens, fast food restaurants, clubs, hospitals) with the exception of areas subject to heavy loads (e.g. trolleys with hard wheels).		● except: SILK (EXEDRA - ELEGANCE) - GLOSSY (EXEDRA - ULTRAWHITE)	● except: VANITY
<b>EXTERIORS</b>	Upon condition that surfaces are sheltered (e.g. loggias, covered balconies, etc.) and made totally impervious. The use of sizes that are not larger than 100x100 cm is recommended.	● except: WONDERWALL (Items decorated with cold digital technology)*	●	● except: VANITY
	<b>WALL INSTALLATION</b> For new buildings and refurbishing with installation on existing floors.			
<b>INTERIORS</b>	Any residential and commercial area where holes and/or cuts are not necessary.	●	●	●
	Any residential and commercial area where holes and/or cuts are necessary.	●	●	●
<b>EXTERIORS</b>	On concrete or plaster supports, where corner cuts and large sizes are necessary.	● except: WONDERWALL (Items decorated with cold digital technology)*	●	●
	<b>SPECIAL USES</b>			
<b>VENTILATED FACADES, THERMAL INSULATION CLADDING SYSTEMS, TILING FOR SWIMMING POOLS, FOR FURNITURE SURFACES.</b>	Depending on project specifications and in combination with the construction systems recommended by Cotto d'Este and approved by the Installation Supervisor.	● except: WONDERWALL (Items decorated with cold digital technology)*	●	●

## LEGEND



### 3Plus (3.5mm)

BLACK&WHITE	naturale	naturale	
BUXY	naturale/lux	naturale/lux	
CLUNY	naturale	naturale	
OVER	naturale/soft	naturale	
WONDERWALL	matrix	matrix	

### 5Plus (5.5mm)

BLACK&WHITE	glossy/silk	glossy/silk	
CEMENT PROJECT	cem/work	cem/work	cem/work
CLUNY	layé	layé	layé
ELEGANCE	silk	silk	silk
EXEDRA	silk/glossy	silk/glossy	
FOREST	naturale	naturale	naturale
LIMESTONE	natural	natural	natural
MATERICA	naturale	naturale	naturale
METAL	naturale	naturale	naturale

### 6Plus (6.5mm)

PIETRA D'ISEO	naturale	naturale	naturale
VANITY	glossy/touch	glossy/touch	
WOODLAND	naturale	naturale	naturale

**Residential:** Kitchens, bathrooms, living rooms and other residential environments

**Light commercial:** Offices, offices open to the general public, waiting rooms, shops, public bathrooms, common apartment block areas, restaurant dining rooms, car showrooms, bars, cinemas, surgeries/clinics, hotel rooms and bathrooms. In areas subjected to forced traffic, it is not advisable to use products with the GLOSSY/TOUCH finishes.

**Intensive commercial:** Common areas of shopping centres, hotel foyers, canteens, fast food restaurants, dance clubs, hospitals, schools, museums, places of worship, airports, stations.

#### NOTE

The GLOSSY/TOUCH finishes are recommended, as well as for wall cladding, also for flooring in residential or light commercial areas that are not subjected to heavy traffic, where anti-slip characteristics are not required. The occasional presence of small inconsistencies or little spots on the surface is to be considered a characteristic of the material and of its unique production process. If the product is laid in direct contact with external environments, it is recommended to use protective solutions to reduce the formation of scratches. In areas that are subjected to heavy concentrated loads it is not recommended to use low thickness products.

# green mission

## OUR COMMITMENT TOWARDS ECOCOMPATIBLE PRODUCTION

### FOR A PLANET THAT LIVES

Cotto d'Este has a green heart. Along with our passion for beauty, we cultivate an inborn sensitivity for the environment. Our company has made excellence its mission. We know that this implies concern for the environment and for protection of our planet. Our commitment is effective and binding and is the result of practical choices. Our target is a highly eco-compatible production process that is recognised at an international level by the most preminent environmental certification bodies. How do the beauty and quality of our products gain added value? They are the result of respect for our planet. A planet that lives.



The continuous search for excellence has led Cotto d'Este to invest in the latest technology. Amongst the many advantages, the latter has permitted us to reduce emission of gas into the atmosphere to the minimum levels possible: at least ten times lower than the strict thresholds of Italian laws. Emission levels also fulfil the requirements of the Kyoto Protocol for reduction of GHG.



By means of extremely modern plant, Cotto d'Este can convey the heat produced during the tile firing stage to the equipment used for preparing mixtures. By doing so, the consumption of natural gas is reduced by at least 25%.



All discarded green material - i.e. green material that does not fulfil our high standards of quality - is recycled. Since this material is not fired, it can be fed back into the initial stages of the production process hence reducing the amount of raw materials needed. Fired rejects that cannot be fed back into the production cycle, since they would adversely affect the characteristics of the mixture, are recycled externally. In other words, they are used for the production of bricks or road substrates thus reducing the natural materials generally used for these purposes.



The tile production process calls for a significant amount of water. To save such an important resource, Cotto d'Este recycles all the water employed during the production cycle. This reduces the consumption of water by 60%. Furthermore, the water used during the production process is in no manner disposed of in the environment.



All materials used for packing our products (cardboard boxes, plastic, wooden pallets, etc.) can be recycled. As a further environmental guarantee for the forests of countries importing our products, all our pallets are made without bark (in accordance to the IPPC / FAO ISPM 15 standard).



Apart from keeping a constant control on the work environment, Cotto d'Este invests in training courses for staff concerning the environmental and safety aspects of the production activities. We promote the reduction of noise levels both inside and outside our factories, as established by the laws in force.



To continuously improve its policy, Cotto d'Este periodically checks its entire environmental protection package by means of Environmental Audits performed by independent certifying bodies and by qualified in-house personnel.

### OUR ENVIRONMENTAL CERTIFICATIONS



ISO 14001



EMAS Stabilimento di FIORANO (MO)

EMAS



LEED



CE

All environmental certificates, declarations of conformity and environmental declarations can be found on the Cotto d'Este web site.



( )

P R ( ) T E C T

## TO LIVE HEALTHY, SAFE AND SECURE

The exclusive Panariagroup technology for antimicrobial floor and wall coverings with the highest performance

**POWERFUL ACTION**  
eliminates microbes and prevents their reproduction



**CONTINUOUS PROTECTION**  
always active, 24 hours a day, with and without sunlight



**ETERNAL EFFECTIVENESS**  
thanks to the technology permanently integrated into the product



**GUARANTEED QUALITY**  
by the partnership with  
**MICROBAN**



[protect.panariagroup.it](http://protect.panariagroup.it)



## THE LANGUAGE OF WOOD

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Wood talks to our heart. The colour of fibre, the pattern of veins and the pleasure of touch are a direct and timeless language. The wood selected by Cotto d'Este and collected in two well-structured collections talks about life and relations to give shape to warm environments that are elegantly simple, in the balance between tradition and modernity.

NOCE RETT. |  5,5 mm | 33x300 cm 13" x118"



# F O R E S T

## ESSENCE OF WOOD

### COLOURS



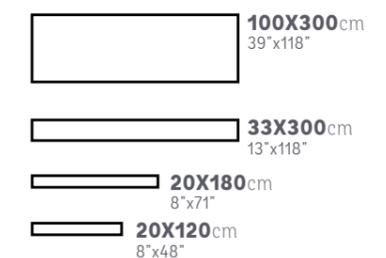
### FINISHING

**RECTIFIED**

### THICKNESS



### SIZES



ROVERE RETT. | ➡ 5.5 mm | 20x180cm / 8"x71" - 20x120cm / 8"x48"

SLIP RESISTANCE



R10

DESHADING



V3 Acero, Noce  
V4 Cembro, Rovere

DEEP ABRASION RESISTANCE



175 mm<sup>3</sup>  
Average Value

TREAD MARK VISIBILITY



A Noce, Cembro  
B Acero, Rovere

CLEANING EASINESS



1 Noce, Cembro  
2 Acero, Rovere

ANTIMICROBIAL SURFACE

**PROTECT**  
ANTIMICROBIAL

COTTO D'ESTE GUARANTEE



20 YEARS  
RESIDENTIAL AND PUBLIC









# W O O D L A N D

ELEGANCE OF NATURE

### COLOURS



### FINISHING

**RECTIFIED**

### THICKNESS

**kerlite 6plus**

### SURFACE

**Soft Wild**

### SIZES



WALDEN WILD | 6.5 mm | 30x240cm / 12"x96"

- SLIP RESISTANCE
- DESHADING
- DEEP ABRASION RESISTANCE
- TREAD MARK VISIBILITY
- CLEANING EASINESS
- ANTIMICROBIAL SURFACE

R9 SOFT R10 WILD	V2 SOFT V3 WILD	175 mm <sup>3</sup> Average Value	A	1	<b>PR( )TECT</b> ANTIMICROBIAL
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COTTO D'ESTE GUARANTEE

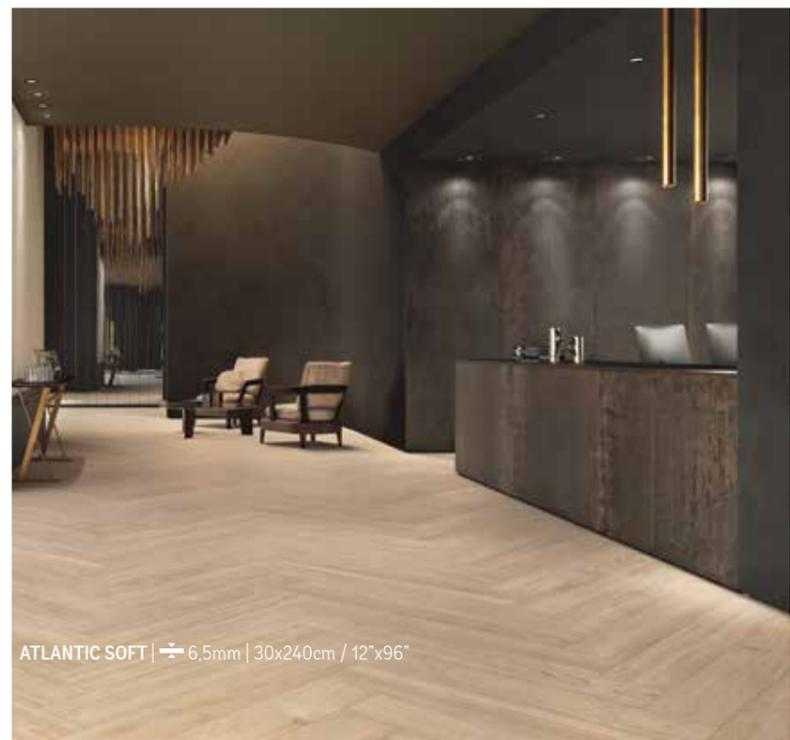




TROPICAL SOFT | 6.5mm | 20x120cm / 8"x48"



EBONY SOFT | 6.5mm | 20x120cm / 8"x48"



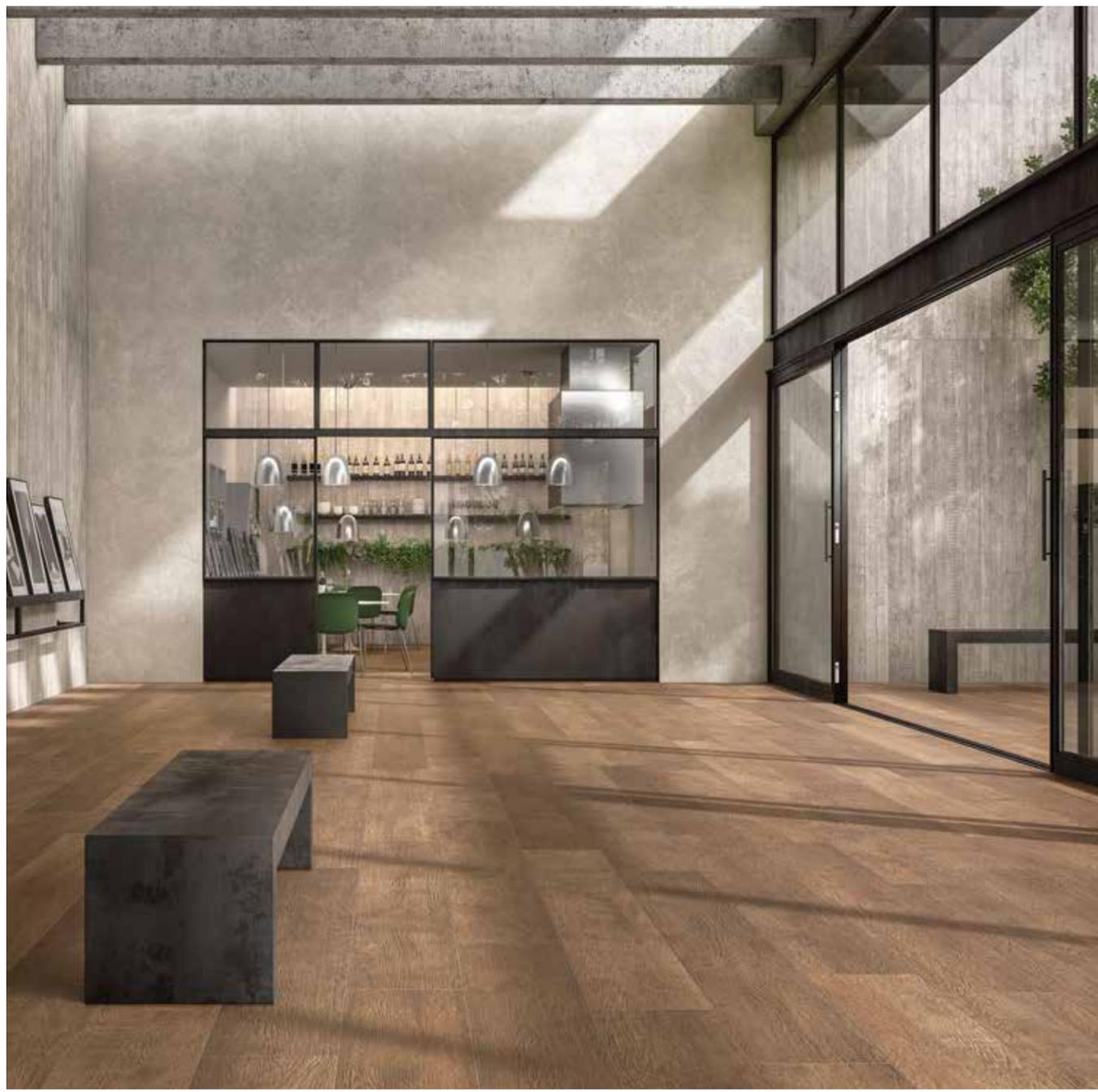
ATLANTIC SOFT | 6.5mm | 30x240cm / 12"x96"



BOREAL SOFT | ➔ 6,5mm | 30x240cm / 12"x96"



TEAK SOFT | ➔ 6,5mm | 30x240cm / 12"x96"



GROVE WILD | 6,5mm | 30x240cm / 12"x96"



## THE TWO SOULS OF ARCHITECTURE

If rock is the bone structure of the world, stone and marble are the two souls of human architecture. As inspiration for its creations, Cotto d'Este has selected the most beautiful stone and marble in the world: elegant and modern marble, with soft and delicate tones, veined or marbled surfaces, with a silky sheen; modern and minimalist stone, with a particularly striking depth-effect due to the inclusion of accurately selected and refined minerals in the body. Marble and stone presented as Kerlite ultrathin porcelain stoneware, made more precious still by the passion for beauty that distinguishes Cotto d'Este. A wide range of finishes and surfaces that combine beauty with practicality and easy cleaning, in accordance to the tradition of the best Italian ceramics.



PERLE | 3.5 mm | 100x100 cm / 39"x39"

# B U X Y

## NATURAL SPIRIT

### COLOURS



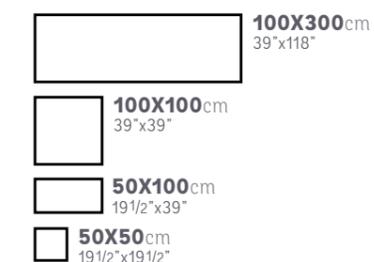
### FINISHING

RECTIFIED

### THICKNESS



### SIZES



SLIP RESISTANCE



R10

DESHADING



V2

DEEP ABRASION RESISTANCE



175 mm<sup>3</sup>  
Average Value

TREAD MARK VISIBILITY



A Caramel, Perle, Noisette, Cendre  
B Corail Blanc, Amande

CLEANING EASINESS



1

COTTO D'ESTE GUARANTEE



20 YEARS  
RESIDENTIAL AND PUBLIC



CARAMEL | 3.5mm | 100x100cm / 39"x39"



Wall: NOISETTE | 3.5mm | 100x300cm / 39"x118"



CENDRE | 3.5mm | 100x300cm / 39"x118"



BOURGOGNE NATURALE | 3,5mm | 100x300cm / 39"x118"

# C L U N Y

## ESPRIT NATUREL

### COLOURS



ARGEROT



AUVERGNE



CHAMPAGNE



BOURGOGNE

### FINISHING

#### RECTIFIED

#### THICKNESS

#### SURFACE

#### SIZES

**kerlite** 5plus  **Layé**

**100X300cm**  
39"x118"  
only argerot,  
champagne

**100X100cm**  
39"x39"  
only argerot,  
champagne

**kerlite** 3plus  **Naturale (P)**

**100X300cm**  
39"x118"

**100X100cm**  
39"x39"

SLIP RESISTANCE

DESHADING

DEEP ABRASION RESISTANCE

TREAD MARK VISIBILITY

CLEANING EASINESS

ANTIMICROBIAL SURFACE

COTTO D'ESTE GUARANTEE



**PROTECT**  
ANTIMICROBIAL - 3PLUS



20 YEARS  
RESIDENTIAL AND PUBLIC



Cluny is available in two surfaces: NATURALE (3plus) opaque and structured,  
LAYE' (5plus) carved with deep scratch-like etching.





CHAMPAGNE LAYE' RETT. | ± 5,5mm | 100x300cm / 39"x118"



CLUNY



VIA TORNABUONI | 5,5 mm | 100x300cm / 39"x118"

# E L E G A N C E

## SUPERIOR CLASS

### COLOURS



VIA CONDOTTI



VIA MONTENAPOLEONE



VIA FARINI



VIA TORNABUONI

### FINISHING

RECTIFIED

### THICKNESS

kerlite 5plus



### SURFACE

Silk

### SIZES

100X300cm  
39"x118"

100X100cm  
39"x39"

DESHADING

DEEP ABRASION RESISTANCE

TREAD MARK VISIBILITY

CLEANING EASINESS

ANTIMICROBIAL SURFACE

COTTO D'ESTE GUARANTEE



V2



175 mm<sup>3</sup>  
Average Value



B



2

PR( )TECT  
ANTIMICROBIAL



10 YEARS  
RESIDENTIAL AND PUBLIC



VIA TORNABUONI | ➤ 5,5mm | 100x100cm / 39"x39"



VIA FARINI | ➤ 5,5mm | 100x300cm / 39"x118"

VIA MONTENAPOLEONE | ➤ 5,5mm | 100x300cm / 39"x118"





CALACATTA GLOSSY RETT. | 5,5 mm | 100x300 cm / 39"x118"

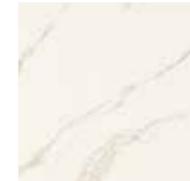
# E X E D R A

## LUXURY STONE

### COLOURS



ONYX EXTRA



CALACATTA



ESTREMOZ



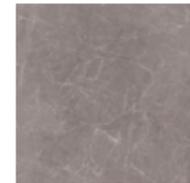
MARFIL



TRAVERTINO



RIVERSTONE



RAIN GREY

### FINISHING

#### RECTIFIED

#### THICKNESS

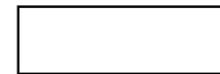
kerlite  
5plus



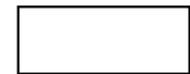
#### SURFACE

Silk  
Glossy

#### SIZES



100X300cm  
39"x118"



100X250cm  
39"x98"



100X100cm  
39"x39"



50X100cm  
19 1/2"x39"

DESHADING

DEEP ABRASION RESISTANCE

TREAD MARK VISIBILITY

CLEANING EASINESS

ANTIMICROBIAL SURFACE

COTTO D'ESTE GUARANTEE



V2



175 mm<sup>3</sup>  
Average Value



B



2

PROTECT  
ANTIMICROBIAL



10 YEARS  
RESIDENTIAL Glossy  
RESIDENTIAL AND PUBLIC Silk

20th  
Main Hall











Floor: SLATE NATURAL | 5,5mm | 100x300cm / 39"x118" - Wall: CLAY NATURAL | 5,5mm | 100x300cm / 39"x118"

# L I M E S T O N E

## STONE SURFACE

### COLOURS



CLAY



AMBER



OYSTER



SLATE

### FINISHING

#### RECTIFIED

### THICKNESS

### SURFACE

### SIZES

**kerlite** 5plus **Natural**

**100X300cm**  
39"x118"

**100X250cm**  
39"x98"

**100X100cm**  
39"x39"

**50X100cm**  
19 1/2"x39"

SLIP RESISTANCE

DESHADING

DEEP ABRASION RESISTANCE

TREAD MARK VISIBILITY

CLEANING EASINESS

ANTIMICROBIAL SURFACE

COTTO D'ESTE GUARANTEE



R10



V2



175 mm<sup>3</sup>  
Average Value



B



2

**PROTECT**  
ANTIMICROBIAL



20 YEARS  
RESIDENTIAL AND PUBLIC



SLATE NATURAL | 5,5mm | 100x300cm / 39"x118"



CLAY NATURAL | 5,5mm | 100x300cm / 39"x118"

## LIMESTONE



# PIETRA D'ISEO

DECORATIVE STONE

COLOURS



**CEPPO**

FINISHING

**RECTIFIED**

THICKNESS



SIZES

-  **120X260**cm  
48"x102"
-  **120X120**cm  
48"x48"
-  **60X120**cm  
24"x48"
-  **60X60**cm  
24"x24"

CEPPO | 6.5mm | 120x120cm / 48"x48"

SLIP RESISTANCE      DESHADING      DEEP ABRASION RESISTANCE      TREAD MARK VISIBILITY      CLEANING EASINESS      ANTIMICROBIAL SURFACE

 R10     
  V2     
  175 mm<sup>3</sup> Average Value     
  A     
  1     
 **PROTECT**  
ANTIMICROBIAL

COTTO D'ESTE GUARANTEE

 20 ANNI YEARS  
 20 YEARS RESIDENTIAL AND PUBLIC

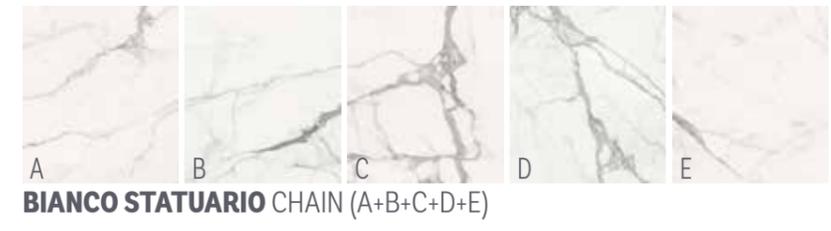
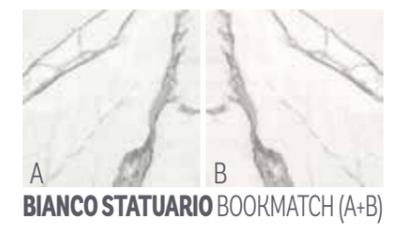




# V A N I T Y

## LUXURY MARBLE

### COLOURS



### FINISHING

#### RECTIFIED

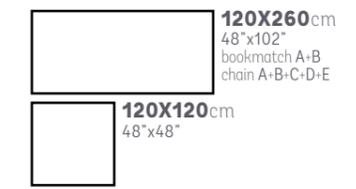
#### THICKNESS



#### SURFACE

Glossy Touch

#### SIZES



Floor: BIANCO LUCE GLOSSY | 6,5mm | 120x120cm / 48"x48" - Wall: BIANCO STATUARIO GLOSSY | 6,5mm | 120x260cm / 48"x102"

- DESADING
- DEEP ABRASION RESISTANCE
- TREAD MARK VISIBILITY
- CLEANING EASINESS
- ANTIMICROBIAL SURFACE
- COTTO D'ESTE GUARANTEE

V2
 175 mm<sup>3</sup> Average Value
 B
 2
 **PROTECT**
 10 YEARS RESIDENTIAL









## METROPOLITAN SURFACES

Designed for metropolitan environments, the Over and Materica series turn essentiality into a style, in line with the trends of contemporary minimalism. Surfaces inspired by hand-smoothed plaster and large polished concrete surfaces to create clear-cut and rigorous spaces that maintain a truly personal touch. Apparently monochrome, at a closer glance Materica reveals a subtle light-and-shade effect, which is a result of the waves recapturing the texture of hand-smoothed surfaces.



Floor: METAL, IRON | 5.5 mm | 100x100 cm 39"x39"  
 Wall: COLOR-30 WORK | 5.5 mm | 100x300 cm 39"x118" - Ceiling: COLOR-10 WORK | 5.5 mm | 100x300 cm 39"x118"

# CEMENT PROJECT

## URBAN SPACE

### COLOURS



COLOR-10 WORK



COLOR-20 WORK



COLOR-30 WORK



COLOR-10 CEM



COLOR-20 CEM



COLOR-30 CEM

### FINISHING

#### RECTIFIED

THICKNESS	SURFACE	SIZES
	<b>Work</b>	<b>100X300cm</b> 39"x118"
		<b>50X150cm</b> 19 1/2"x59"
	<b>Cem</b>	<b>100X300cm</b> 39"x118"
		<b>100X100cm</b> 39"x39"

SLIP RESISTANCE

DESHADING

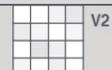
DEEP ABRASION RESISTANCE

TREAD MARK VISIBILITY

CLEANING EASINESS

ANTIMICROBIAL SURFACE

COTTO D'ESTE GUARANTEE



**PROTECT**  
ANTIMICROBIAL





Wall: COLOR-20 CEM | 5,5 mm | 100x300 cm 39"x118"



Floor: COLOR-20 CEM | 5,5 mm | 100x300 cm 39"x118"  
Wall: COLOR-20 CEM | 5,5 mm | 100x300 cm 39"x118" - Ceiling: COLOR-20 WORK | 5,5 mm | 50x150 cm 13<sup>3</sup>/<sub>8</sub>"x59"



BEST ESTER  
CLASSIC HOTEL







# M A T E R I C A

## NATURAL COLORS

### COLOURS



**BIANCO**



**AVORIO**



**TORTORA**



**CEMENTO**



**ARDESIA**

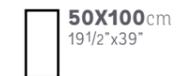
### FINISHING

#### RECTIFIED

### THICKNESS



### SIZES



CEMENTO RETT. | 5,5 mm | 100x100 cm / 39"x39"

SLIP RESISTANCE



R9

DESHADING



V1

DEEP ABRASION RESISTANCE



175 mm<sup>3</sup>  
Average Value

TREAD MARK VISIBILITY



B Ardesia, Cemento  
C Tortora, Bianco, Avorio

CLEANING EASINESS



2

ANTIMICROBIAL SURFACE

**PR( )TECT**  
ANTIMICROBIAL

COTTO D'ESTE GUARANTEE



20 YEARS  
RESIDENTIAL AND PUBLIC







Floor and wall: OFFICE NATURALE |  $\pm$  3,5mm | 100x100cm / 39"x39" - Table: ROAD NATURALE |  $\pm$  3,5mm | 100x300cm / 39"x118"

# O V E R

## THE URBAN SKIN

### COLOURS



### FINISHING

#### RECTIFIED

THICKNESS	SURFACE	SIZES
	<b>Naturale</b>	<b>100X300cm</b> 39"x118"
		<b>100X100cm</b> 39"x39"
		<b>50X100cm</b> 19 1/2"x39"
		<b>50X50cm</b> 19 1/2"x19 1/2"
	<b>Soft</b>	<b>100X300cm</b> 39"x118"
		<b>100X100cm</b> 39"x39"

- SLIP RESISTANCE
- DESHADING
- DEEP ABRASION RESISTANCE
- TREAD MARK VISIBILITY
- CLEANING EASINESS
- COTTO D'ESTE GUARANTEE

<b>R9 Naturale</b>	<b>V2</b>	<b>175 mm<sup>3</sup></b> Average Value	<b>A Naturale</b> <b>B Soft (Road)</b> <b>C Soft (Openspace, Office, Loft)</b>	<b>1 Naturale</b> <b>2 Soft (Road)</b> <b>3 Soft (Openspace, Office, Loft)</b>	<b>20 YEARS</b> RESIDENTIAL AND PUBLIC <b>Naturale</b> RESIDENTIAL <b>Soft (Road)</b>	<b>10 YEARS</b> PUBLIC <b>Soft (Road)</b> RESIDENTIAL <b>Soft (Openspace, Office, Loft)</b>
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LOFT NATURALE | 3,5mm | 100x100cm / 39"x39"



OVER

OPENSACE NATURALE | 3,5mm | 100x100cm / 39"x39"



# Soft

MATT AND SOFT. This matt and soft surface, which is so pleasant to touch, is obtained using diamond brushes with different grain sizes.

LOFT SOFT | ➡ 3,5mm | 100x100cm / 39"x39"

OVER



ROAD SOFT | ➡ 3,5mm | 100x100cm / 39"x39"



## RIGOUR AND ELEGANCE

---

The depth of black and the brightness of white; the realistic crude sheet effect of Iron and the intense rust-coloured Corten. Solid colours, elegant and authentic, alongside three metallic surfaces perfectly in keeping with the trends of contemporary architecture, highlighted by the large size and versatility of Kerlite.

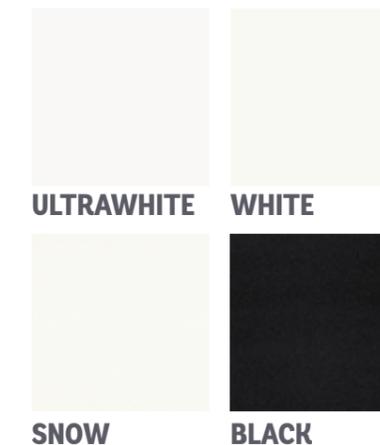


ULTRAWHITE GLOSSY | 5.5 mm | 100x100 cm / 39"x39"

# BLACK - WHITE

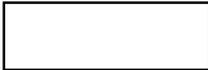
## ABSOLUTE STYLE

### COLOURS



### FINISHING

#### RECTIFIED

THICKNESS	SURFACE	SIZES
<b>kerlite</b> 3plus  		 <b>100X300cm</b> 39"x118" black, snow, white
		 <b>100X100cm</b> 39"x39" black, snow, white
		 <b>50X100cm</b> 19 1/2"x39" black, snow, white
<b>kerlite</b> 5plus  	<b>Glossy</b> Silk ( P )	 <b>100X300cm</b> 39"x118" black, ultrawhite
		 <b>100X100cm</b> 39"x39" black, ultrawhite
		 <b>50X100cm</b> 19 1/2"x39" black, ultrawhite

DESHADING

DEEP ABRASION RESISTANCE

TREAD MARK VISIBILITY

CLEANING EASINESS

ANTIMICROBIAL SURFACE

COTTO D'ESTE GUARANTEE



**PROTECT**  
ANTIMICROBIAL - 5plus





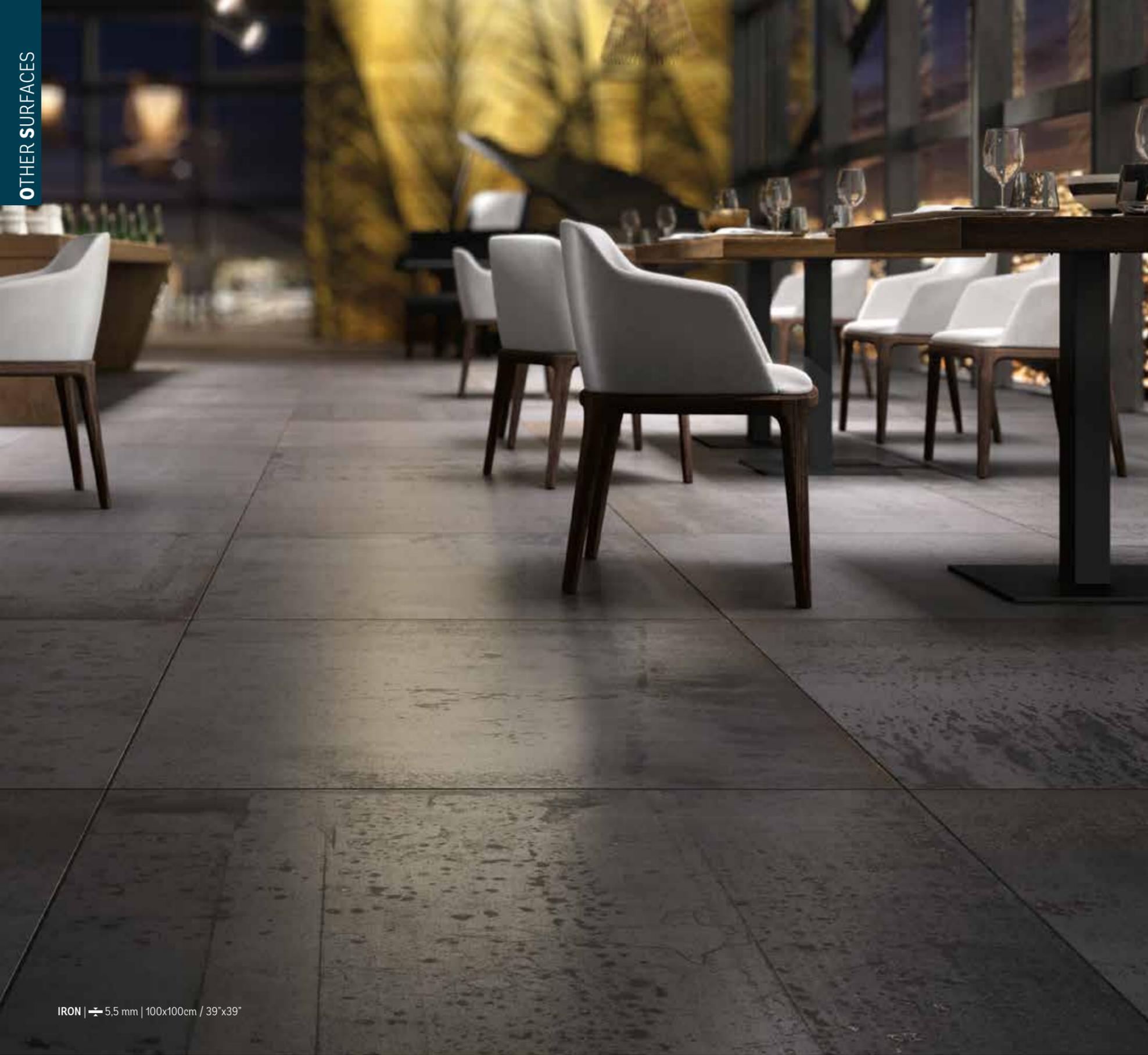


Floor: WHITE | ➔ 3,5mm | 100x100cm / 39"x39"  
Wall: WHITE | ➔ 3,5mm | 100x100cm / 39"x39"



ULTRAWHITE | ➔ 5,5mm | 100x100cm / 39"x39"

BLACK - WHITE

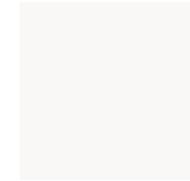


IRON | 5.5 mm | 100x100cm / 39"x39"

# M E T A L L

## METALLIC SLABS

### COLOURS



IRIDIUM



CORTEN



IRON

### FINISHING

RECTIFIED

### THICKNESS



### SIZES



SLIP RESISTANCE

DESHADING

DEEP ABRASION RESISTANCE

TREAD MARK VISIBILITY

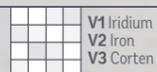
CLEANING EASINESS

ANTIMICROBIAL SURFACE

COTTO D'ESTE GUARANTEE



R9 Corten, Iridium



V1 Iridium  
V2 Iron  
V3 Corten



175 mm<sup>3</sup>  
Average Value



A Iron, Iridium  
B Corten



1 Iron, Iridium  
2 Corten

**PROTECT**  
ANTIMICROBIAL



20 YEARS  
RESIDENTIAL



10 YEARS  
PUBLIC



CORTEN | 5,5mm | 100x300cm / 39"x118"



CORTEN | 5,5mm | 100x300cm / 39"x118"

METAL



Wall: VENICE | ± 3.5mm | 100x300cm / 39"x118"

# W O N D E R W A L L

## KERLITE ART

COLOURS



PARETE E PAVIMENTO  
WALL AND FLOOR



PARETE E PAVIMENTO  
WALL AND FLOOR

**MATRIX**

**RITMI**

**FREESTYLE**

**SKETCH**



**LOTUS**



**COLOR BALLE**



**SCRIPT**



**VENICE**



**DREAM**



**JUNGLE**



**FRAME**



**ZEN**

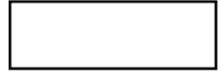
FINISHING

**RECTIFIED**

THICKNESS



SIZES



**100X300cm**  
39"x118"



**100X100cm**  
39"x39"  
**(Matrix)**

DESHADING

DEEP ABRASION RESISTANCE

TREAD MARK VISIBILITY

CLEANING EASINESS

ANTIMICROBIAL SURFACE

COTTO D'ESTE GUARANTEE



175 mm<sup>3</sup> Matrix, Ritmi  
Average Value



A Matrix, Ritmi



1 Matrix, Ritmi

**PROTECT** Matrix Ritmi  
ANTIMICROBIAL



**20 YEARS**  
Matrix, Ritmi



Wall: **FRAME** | 3,5mm | 100x300cm / 39"x118"  
Floor: **PIETRA D'ISEO** | 6,5mm | 120x120cm / 48"x48"



Wall: **DREAM** | 3,5mm | 100x300cm / 39"x118"  
Floor: **BIANCO LUCE GLOSSY** | 6,5mm | 120x120cm / 48"x48"

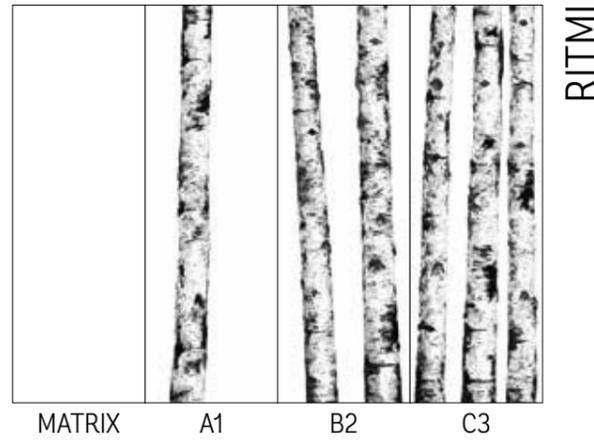


Wall: **JUNGLE** | 3,5mm | 100x300cm / 39"x118"  
Floor: **DARK BROWN GLOSSY** | 6,5mm | 120x260cm / 48"x102"

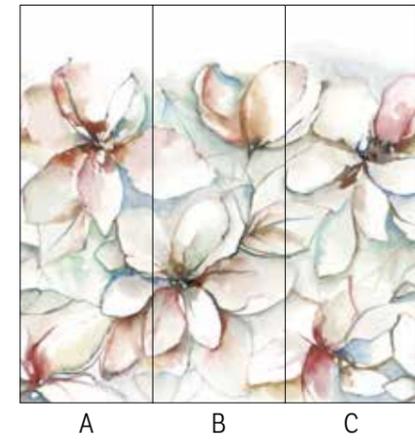
WONDERWALL



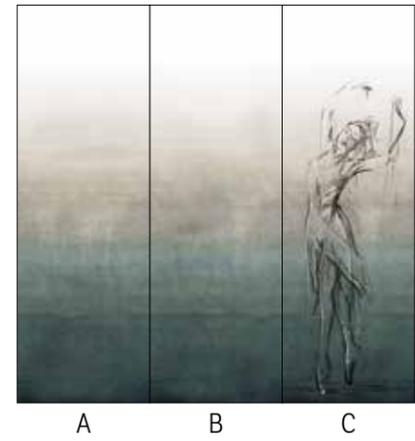
Wall: ZEN | ➤ 3,5mm | 100x300cm / 39"x118"  
Floor: DARK BROWN TOUCH | ➤ 6,5mm | 120x120cm / 48"x48"



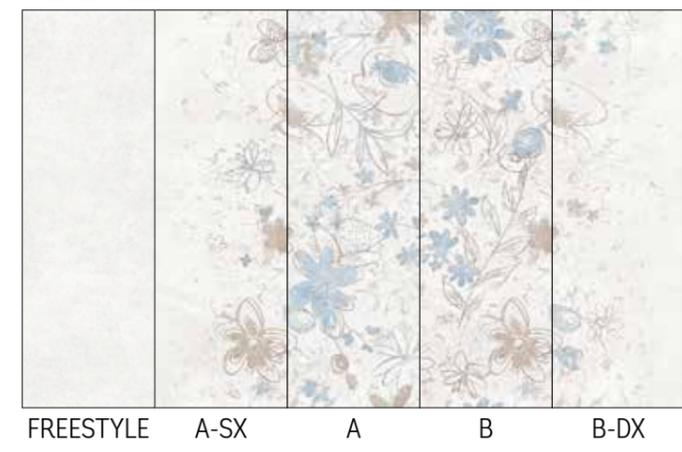
RITMI



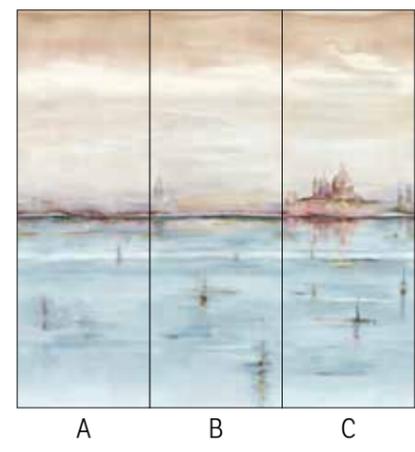
LOTUS



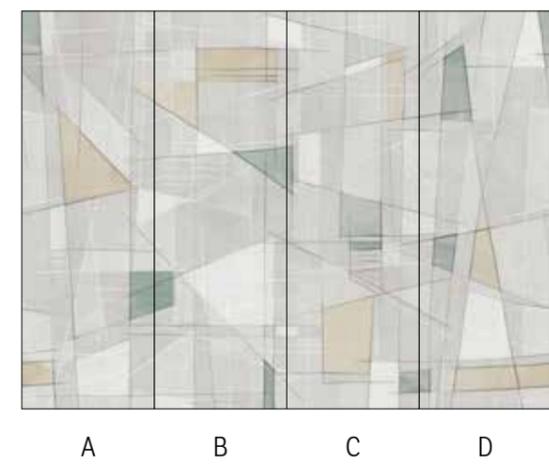
COLOR BALLETT



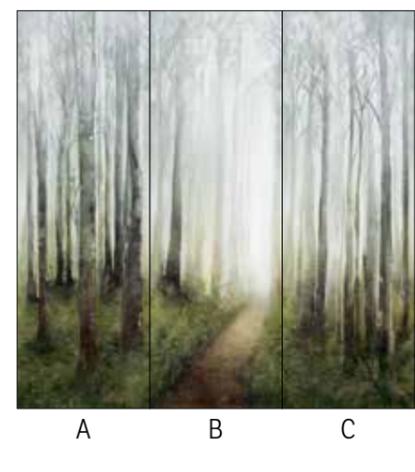
SKETCH



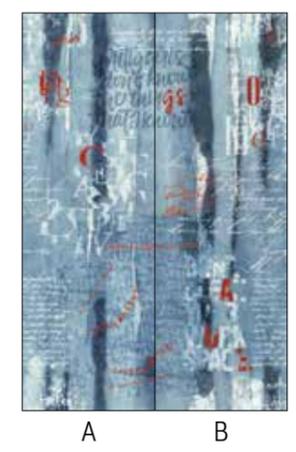
VENICE



FRAME



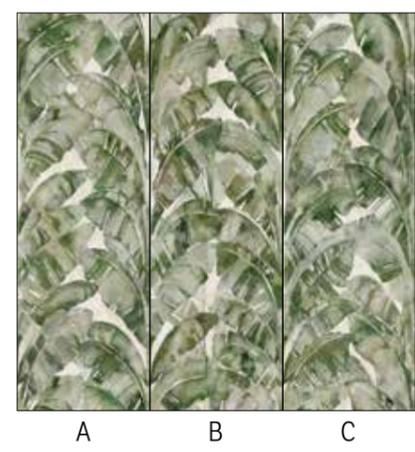
DREAM



SCRIPT



ZEN



JUNGLE

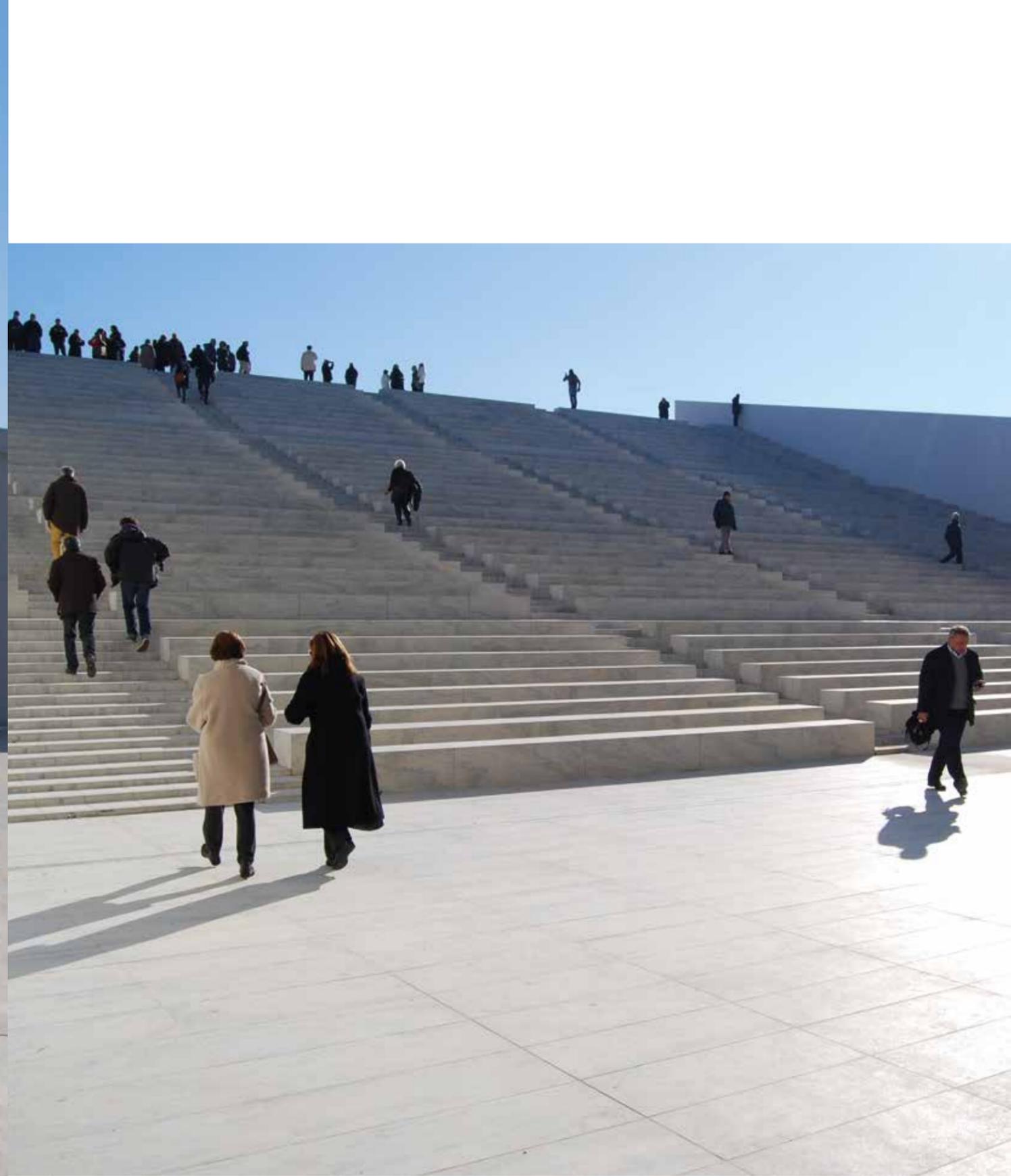


# REFERENCES

## FLORENCE NEW OPERA HOUSE

Year: 2011  
Location: Florence, Italy  
Design: ABDR Architetti Associati  
Product: custom made Kerlite Cipollino 50x150cm  
Laying system: adhesive





## PALMIERI ELEMENTARY SCHOOL

Year: 2011  
Location: Magreta di Formigine (MO), Italy  
Design: Alessandro Malavolti Architect, Laura Reggiani  
Engineer, Claudio Tavoni Engineer  
Product: Kerlite Colors Sand 20x100cm  
Laying system: ventilated facade



## ERMENEGILDO ZEGNA HEADQUARTER

Year: 2008

Location: Milan, Italy

Design: Antonio Citterio and Partners with Beretta Associati

Product: Kerlite Buxy Cendre 100x300cm

Laying system: ventilated facade



## REALE GROUP HEADQUARTERS

Year: 2016  
Location: Torino, Italy  
Design: Iotti + Pavarani Architetti  
Product: custom made 100x300cm  
Laying system: ventilated facade



**PÉCS ZOO**

Year: 2016  
Location: Pécs, Hungary  
Design: : NARA STÚDIO  
Product: : Kerlite Buxy Corail Blanc 100x300cm  
Laying system: : adhesive



## HOME CLUB RESIDENCE HOTEL

Year: 2008  
Location: Cosenza, Italy  
Design: Emilio Polillo Engineer  
Product: Kerlite Colors Sand/Night 40x100cm  
Laying system: adhesive



## NOX RESTAURANT

Year: 2011

Location: Salzburg, Austria

Design: Jürgen Matzer Architect

Product: Kerlite Colors Snow 100x300cm

Laying system: adhesive



## CVJETNI COMMERCIAL AND RESIDENTIAL CENTRE

Year: 2012

Location: Zagreb, Croatia

Design: Boris Pedrecca Architect

Product: Kerlite Buxy Caramel 16 different sizes

Laying system: ventilated facade



## INTERNATIONAL BUSINESS CENTER

Year:

Location: Moscow, Russia

Design: Zao Gorproject

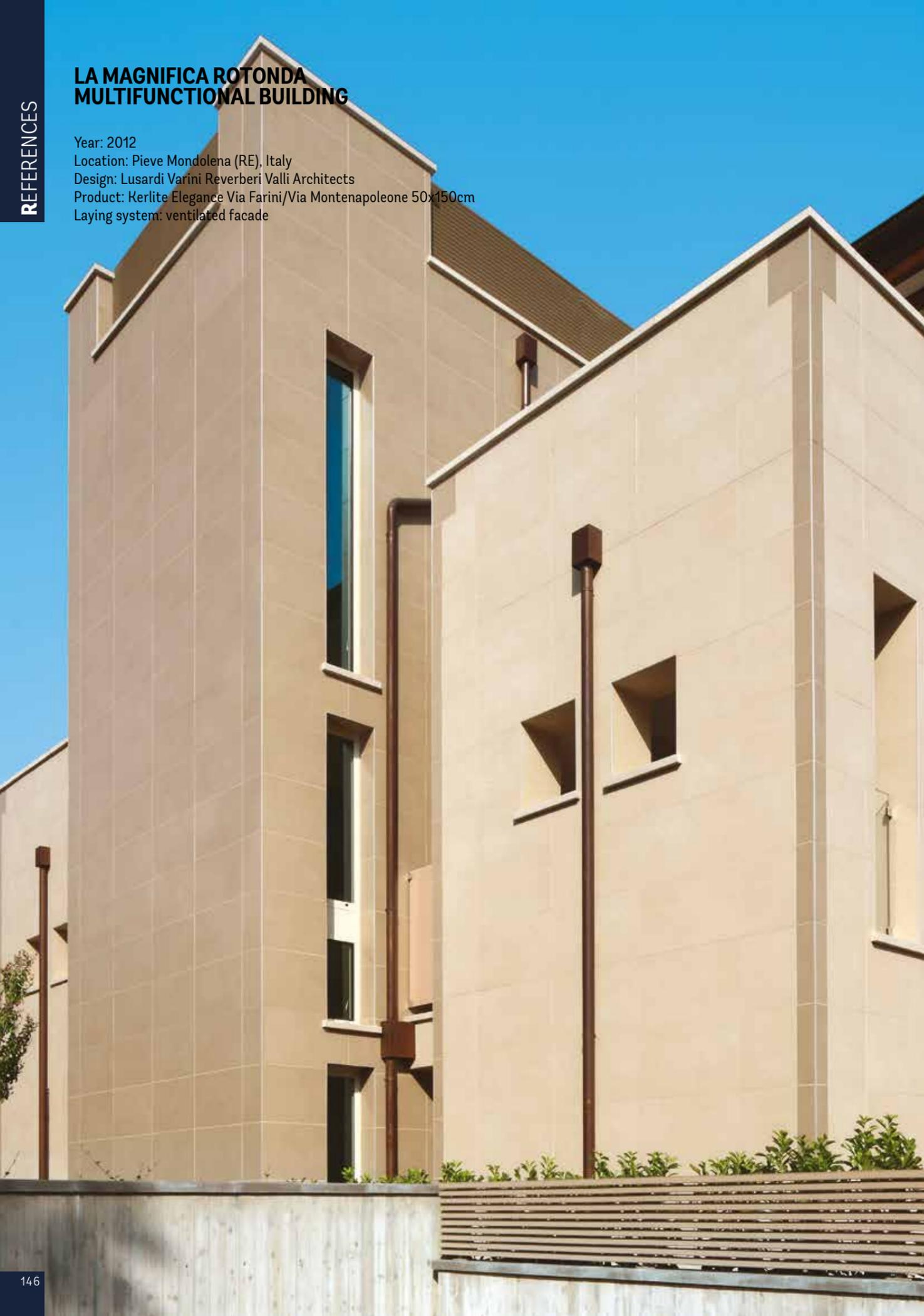
Product: Kerlite Exedra Travertino multisizes

Laying system: ventilated facade



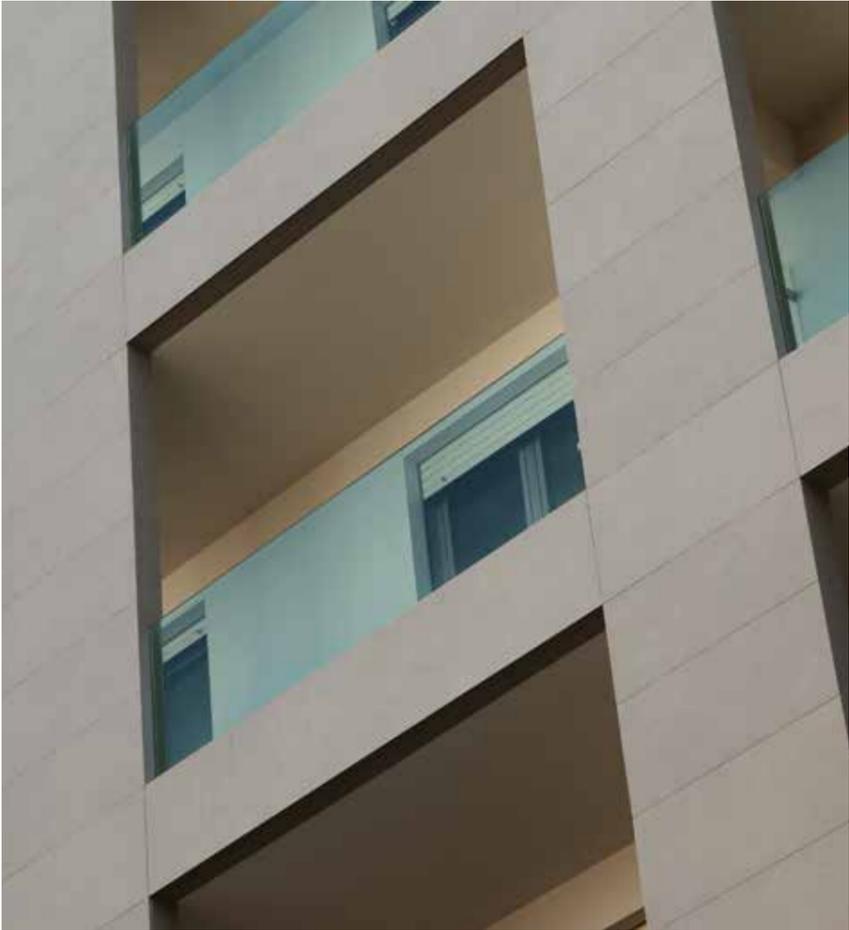
## LA MAGNIFICA ROTONDA MULTIFUNCTIONAL BUILDING

Year: 2012  
Location: Pieve Mondolena (RE), Italy  
Design: Lusardi Varini Reverberi Valli Architects  
Product: Kerlite Elegance Via Farini/Via Montenapoleone 50x150cm  
Laying system: ventilated facade



# RESIDENTIAL BUILDING

Year: 2011  
Location: Andria (BT), Italy  
Design: Giovanni di Bari Engineer and Donato Leonetti Studio  
Product: Kerlite Buxy Perle 50x300cm and Colors Snow 50x300cm  
Laying system: adhesive



## PRIVATE HOUSE

Year: 2008

Location: Vitoria-Gasteiz, Spain

Design: Ignazio Ojarzabal Architect

Product: Kerlite Colors Snow 100x300cm

Laying system: adhesive



## NUMBER A1 VAR TUNNEL

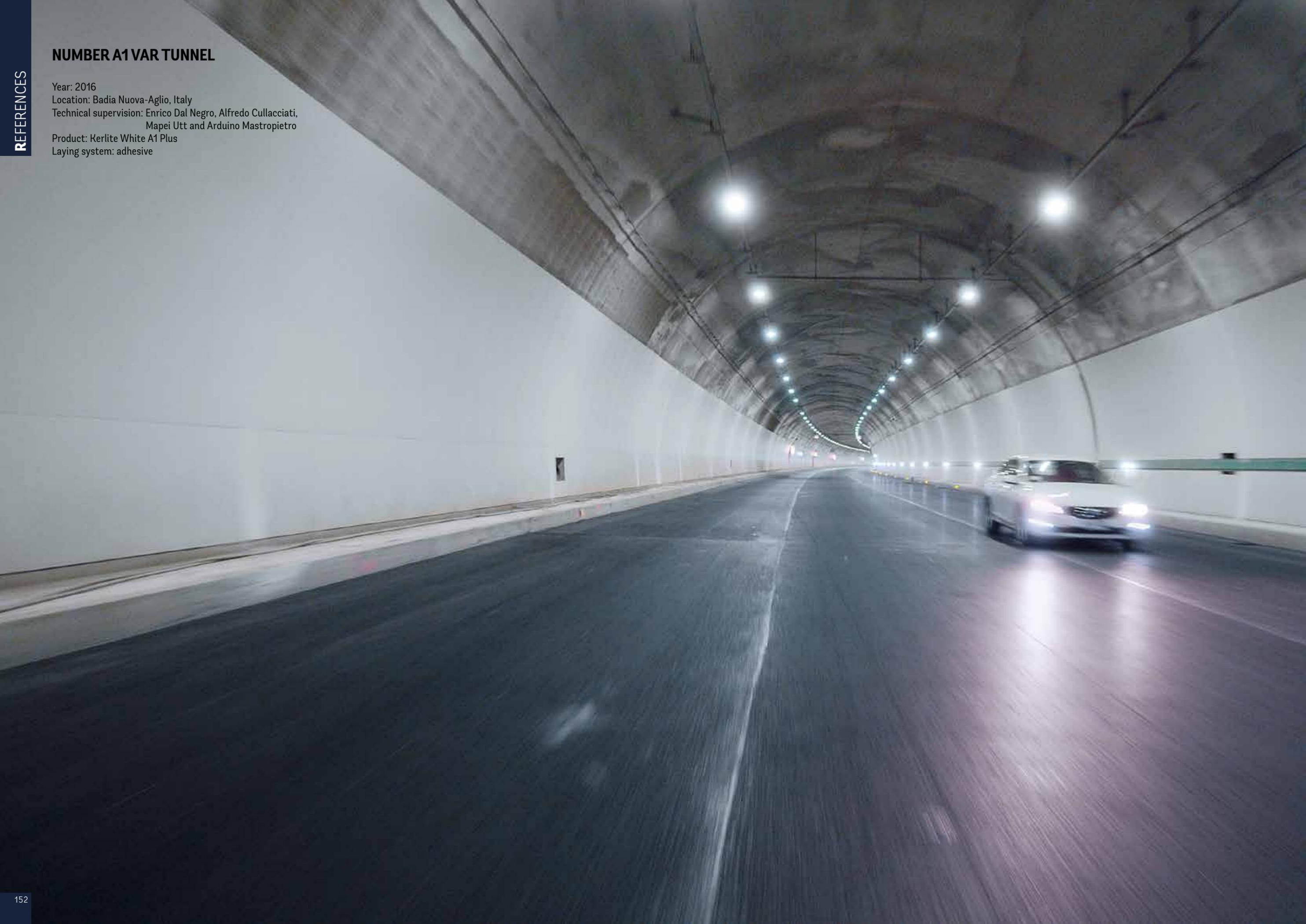
Year: 2016

Location: Badia Nuova-Aglio, Italy

Technical supervision: Enrico Dal Negro, Alfredo Cullacciati,  
Mapei Utt and Arduino Mastropietro

Product: Kerlite White A1 Plus

Laying system: adhesive



## NEW HIGH-SPEED BOLOGNA CENTRAL STATION

Year: 2013  
Location: Bologna, Italy  
Design: Adrea Maffei Architects, Arata Isozaki & Associates,  
M+T & Partners, Arup Italia  
Product: Kerlite Over Office  
Laying system: adhesive



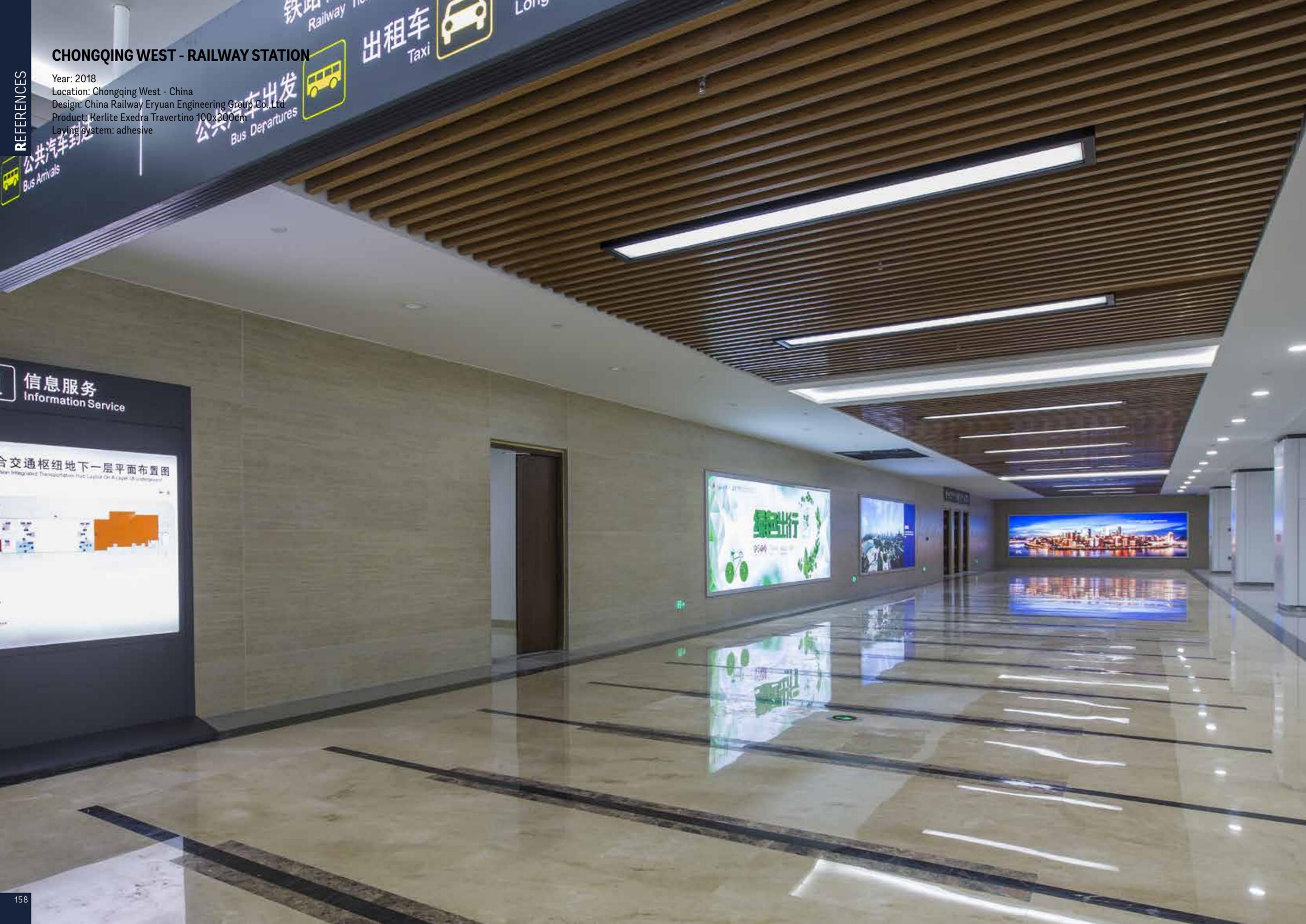
## ART WEST, THE UNIVERSITY OF MELBOURNE

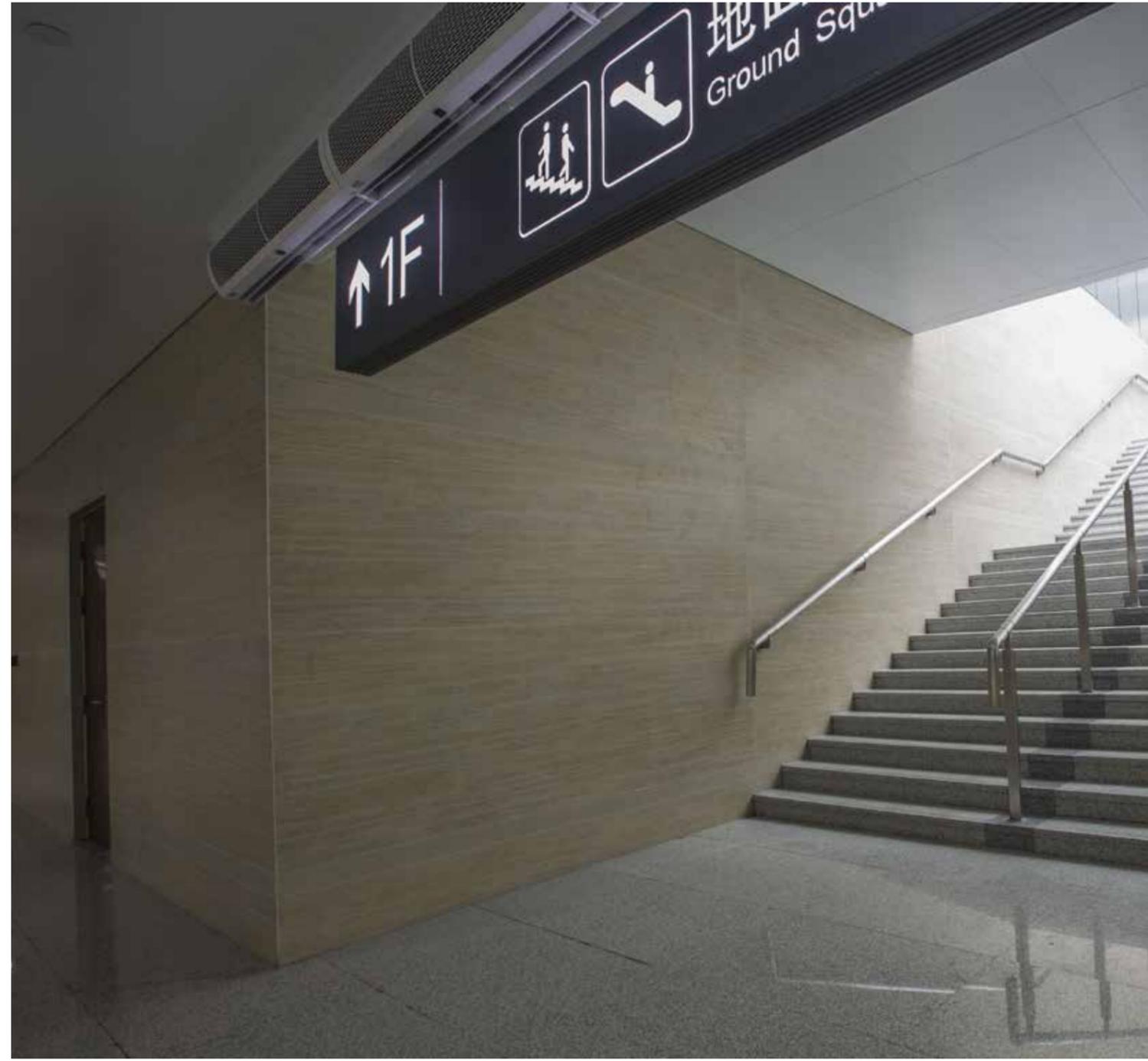
Year: 2016  
 Location: Melbourne, Australia  
 Design: Architectus, Arm Architecture  
 Product: Kerlite Metal Iron 100x300cm  
 Laying system: adhesive



# CHONGQING WEST - RAILWAY STATION

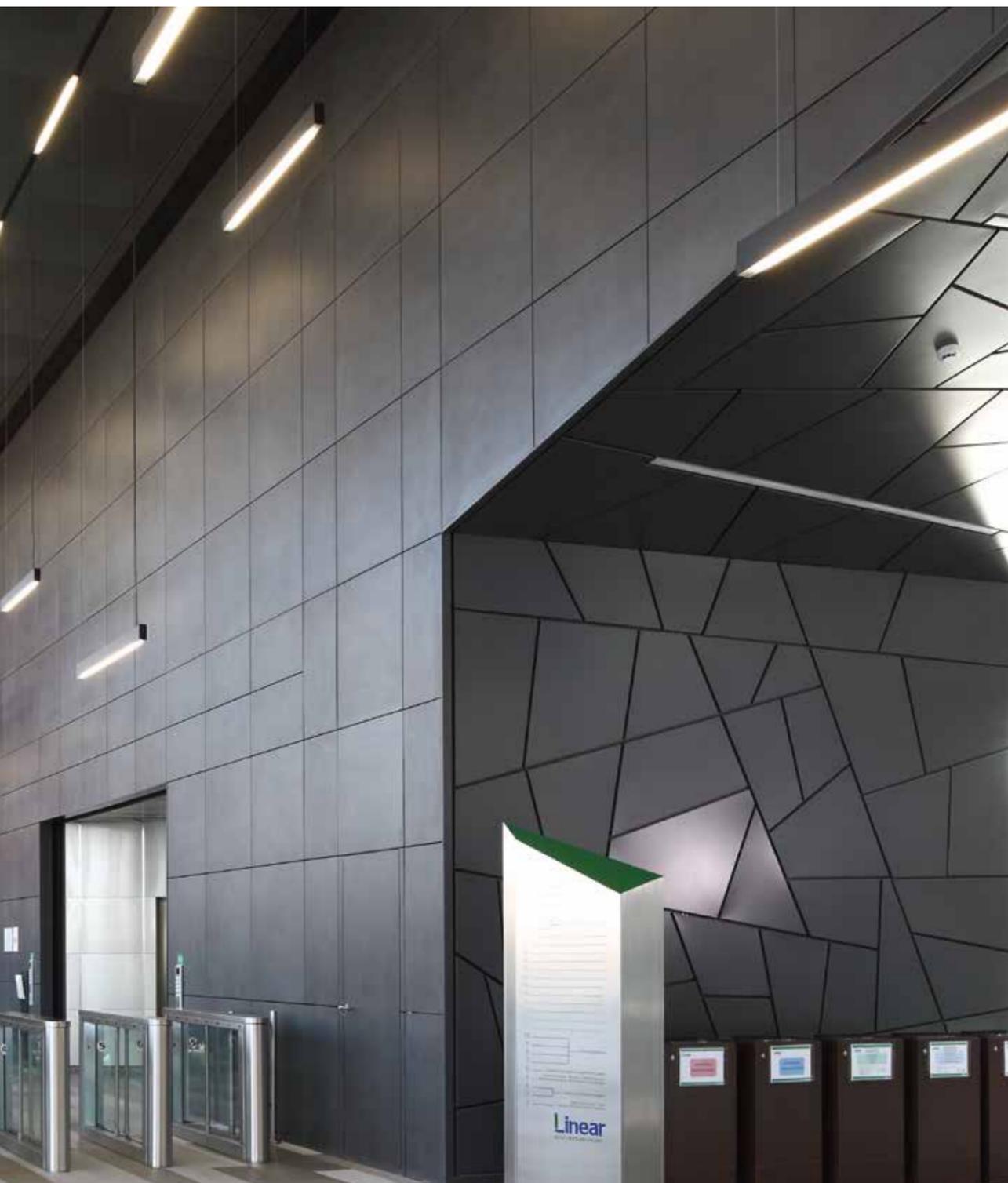
Year: 2018  
Location: Chongqing West - China  
Design: China Railway Eryuan Engineering Group Co., Ltd  
Product: Kerlite Exedra Travertino 100x300cm  
Laying system: adhesive





## UNIPOL TOWER

Year: 2012  
Location: Bologna, Italy  
Design: Open Project  
Product: Kerlite Over Road/Office  
Laying system: adhesive



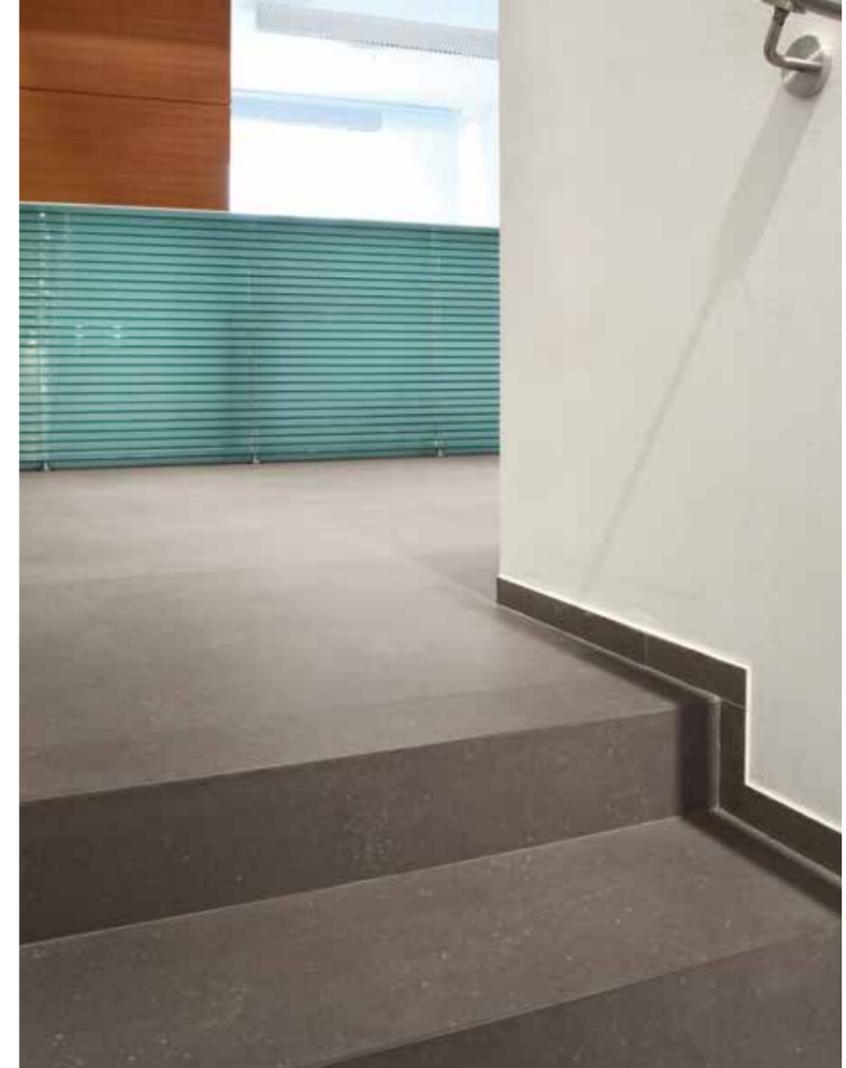
**AMERICAN EXPRESS AGENCY**

Year: 2012  
Location: Rome, Italy  
Design: 967 Architetti Associati  
Product: Kerlite Buxy Perle 100x200cm  
Laying system: adhesive



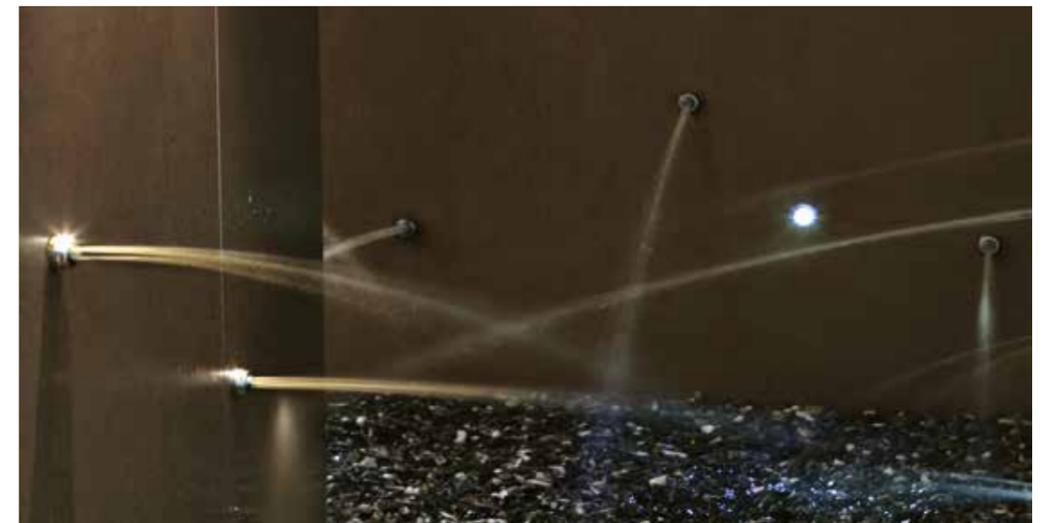
**MOSHEN & ASSOCIATI LAW FIRM**

Year: 2009  
Location: Bergamo, Italy  
Design: Giacomo Bonaldi Architect  
Product: Kerlite Buxy Cendre/Amande 100x300cm/100x100cm  
Laying system: adhesive



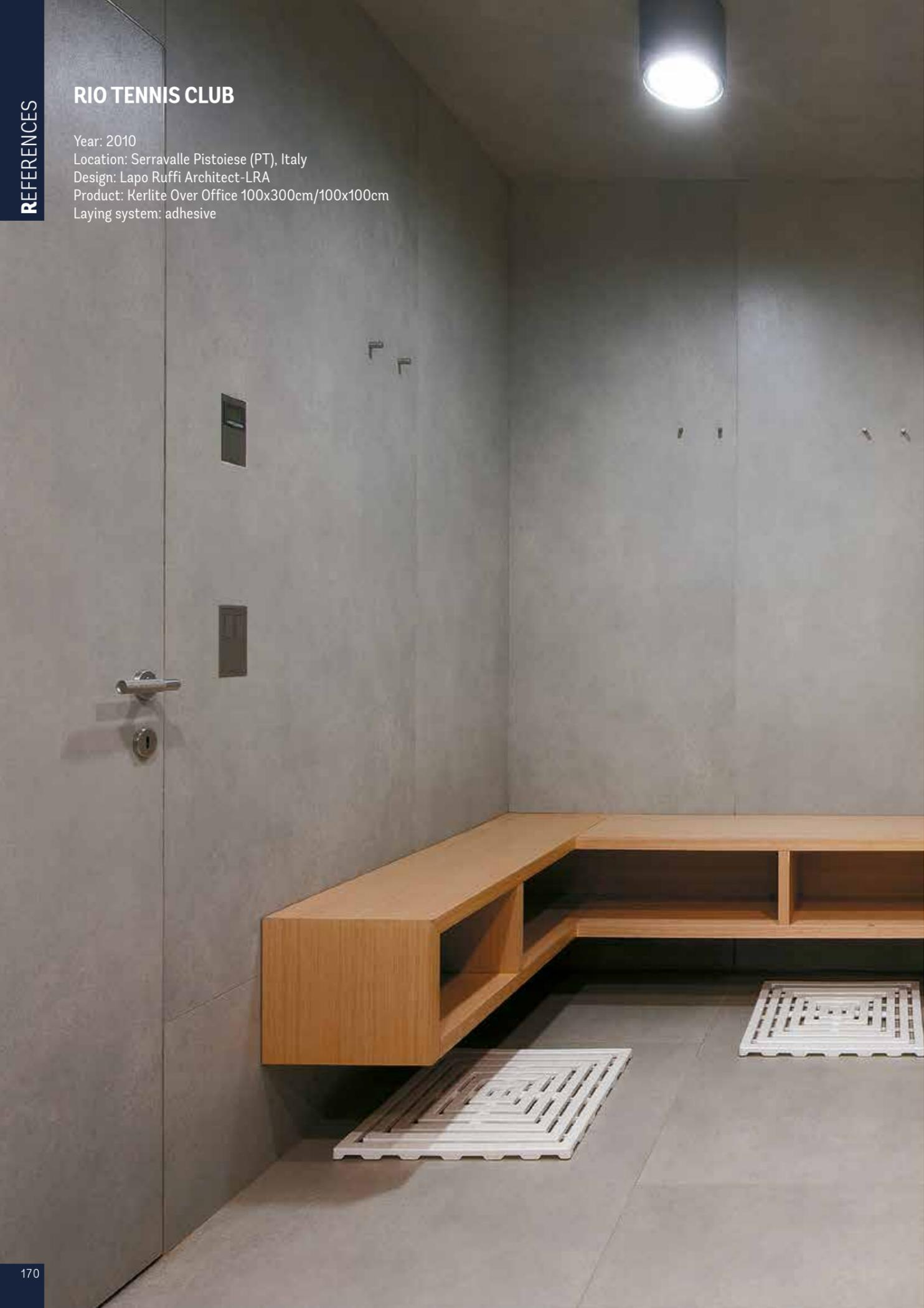
## ALBIR PLAYA HOTEL SPA

Year: 2008  
Location: Alicante, Spain  
Design: CODESPA-Benidorm  
Product: Kerlite Buxy Noisette 100x300cm/100x100cm  
Laying system: adhesive



**RIO TENNIS CLUB**

Year: 2010  
Location: Serravalle Pistoiese (PT), Italy  
Design: Lapo Ruffi Architect-LRA  
Product: Kerlite Over Office 100x300cm/100x100cm  
Laying system: adhesive



## PRIVATE HOUSE

Year: 2012  
Location: Zoagli (GE), Italy  
Design: Stefania Garibotto Architect, Chiara Viale Architect, Bruno Caroni Architect  
Product: Kerlite Elegance Via Tornabuoni 100x100cm  
Laying system: adhesive



## PRIVATE HOUSE

Year: 2012

Location: Osijek, Croatia

Design: Sirran Project

Product: Kerlite Buxy Caramel/Cendre/Perle

Laying system: adhesive



# VENTILATED FACADE SYSTEM

## Ventilated facade with hidden anchors

### - LUNA SLOT SYSTEM

In partnership with DALLERA

#### Mechanical bonding

With slots on the horizontal edge of the tiles where the fixing hooks connected to the supporting structure are inserted

- Formats: up to 300x100 cm  
- Type: KERLITE double-layer



### - GEOS SYSTEM

In partnership with GEOS ITALY

#### Mechanical bonding

With slots at the back of the tile, in which metal profiles are inserted which fix the tile to the bearing structure

- Formats: up to 300x100 cm  
- Type: KERLITE 5PLUS



### - PROGEST SYSTEM

In partnership with PROGEST

#### Structurally adhered bonding

By structurally binding metal profiles on the back of the tiles, which are then secured mechanically to the bearing structure

- Formats: up to 300x100 cm  
- Type: KERLITE 5PLUS



### - LUNA VISTA SYSTEM

In partnership with DALLERA

#### Mechanical bonding

With camouflaged hooks on the horizontal edge of the tiles, used to fix the tiles to the supporting structure

- Formats: up to 300x100 cm  
- Type: KERLITE 3PLUS - 5PLUS



### - VENERE SORMONTATO SYSTEM

In partnership with DALLERA

#### Mechanical bonding

With camouflaged hooks on the horizontal edge of the overlapping tiles, used to fix the tiles to the supporting structure

Formats: up to 300x50 cm  
- Type: KERLITE 3PLUS - 5PLUS



### - SIRIO SYSTEM

In partnership with DALLERA

#### Mechanical bonding

With holes drilled through the tiles in which camouflaged bolts are inserted and screwed to the bearing structure

- Formats: up to 300x100 cm  
- Type: KERLITE 3PLUS - 5PLUS



# TECHNICAL CHARACTERISTICS

## SLIP RESISTANCE



### DIN 51130

In this test, an operator stands on a surface covered with tiles for testing. The surface, initially horizontal, is gradually tilted until the moment when the operator starts to slip. The angle of tilt of the surface when slipping starts provides the rating.

- $\alpha < 6^\circ$  = not classified
- $6^\circ \leq \alpha \leq 10^\circ$  = R9
- $10^\circ < \alpha \leq 19^\circ$  = R10
- $19^\circ < \alpha \leq 27^\circ$  = R11
- $27^\circ < \alpha \leq 35^\circ$  = R12
- $\alpha > 35^\circ$  = R13

### DIN 51097

The method aims to measure the tiles' suitability for laying in locations where people walk barefoot (e.g. edges of swimming-pools, showers, etc.). An operator walks barefoot over a tilting surface laid with the tiles for testing, wet with a soap and water solution. The surface is gradually tilted and the angle of tilt at which the operator starts to slip provides the tiles' rating, as shown in the table below.

$\alpha < 12^\circ$	not classified
$12^\circ \leq \alpha < 18^\circ$	A
$18^\circ \leq \alpha < 24^\circ$	B (A+B)
$\alpha \geq 24^\circ$	C (A+B+C)

### ANSI A326.3

**Dynamic Coefficient of Friction (DCOF):** Sometimes called kinetic coefficient of friction. This is the ratio of the force necessary to keep a surface already in motion sliding over another divided by the weight (or normal force) of an object. This force is a materials property of the two surfaces. DCOF is usually less than SCOF for the same materials. Contaminants such as dirt, water, soap, oil, or grease can change this value.

Unless otherwise specified, tiles suitable for interior spaces expected to be walked upon when wet shall have a wet DCOF of 0.42 or greater when tested using SLS solution. However, tiles with a DCOF of 0.42 or greater are not necessarily suitable for all projects. The specifier shall determine tiles appropriate for specific project conditions, considering by way of example, but not in limitation, type of use, traffic, expected contaminants, expected maintenance, expected wear, and manufacturers' guidelines and recommendations.

### BCRA TORTUS

English method for determining the coefficient of friction of surfaces based on the resistance opposed to the movement of a tester instrument (Tortus) that traverses the surface to be tested.

The method is based on the use of a mobile device to determine the coefficient of friction that standard materials, such as rubber and leather, have in wet or dry conditions further to contact with a certain floor covering material. As explained above, the "Tortus test" is the reference method for National legislation under paragraph 8.2.2 of Ministerial Decree 236/89, which envisages a coefficient equal to >0.40 in dry Dry Rubber and Wet Leather conditions. The friction coefficient testing machine for wet surfaces is the Digital Sliptester Floor Slide Control FSC 2000 system, which is computer-controlled.

$\leq 0,20 \mu$	Dangerous sliding
$0,20 \div 0,40 \mu$	Excessive sliding
$0,40 \div 0,75 \mu$	Satisfaction friction
$\geq 0,75 \mu$	Excellent friction

## BREAKING STRENGTH (S)



### ISO 10545-4

This parameter is used to assess the ceramic tile's capacity to withstand static and dynamic loads after laying. The standard considers the tile as a beam, placed on two rollers some distance apart, while a third roller applies a force to its centre.

The breaking strength is the weight the tile withstands before breaking. The actual breaking strength of a tile after laying is considerably higher than the value measured in the laboratory.

### ASTM C 648

The test method consists of supporting the tile on the ends of three cylindrical rods, or on three ball bearings for tiles having a facial area of 6.25 in<sup>2</sup> (40 cm<sup>2</sup>) or less, arranged in an equilateral triangle, and applying force at a definite rate to the centre of the triangular support, until the specimen breaks.

**STAIN RESISTANCE**



**ISO 10545-14**

The operating surface is subject to three staining agents, olive oil, iodine alcohol solution and chromium green in light oil; after 24 hours the surface is cleaned.

**Class 5** - stain removed with warm water running for 5 minutes;

**Class 4** - stain removed by manual cleaning with mild detergent;

**Class 3** - stain removed by mechanical cleaning with strong detergent;

**Class 2** - stain removed by dipping in suitable thinner for 24 hours;

**Class 1** - stain not removed.

**RESISTANCE TO CHEMICAL ETCHING**



**ISO 10545-13**

The method measures the chemical resistance of both glazed (GL) and unglazed (UGL) tiles, using acids (hydrochloric, citric and lactic) and bases (potassium hydroxide) at low (L) and high (H) concentration. The classification is as follows:

**DEEP ABRASION RESISTANCE**



**ISO 10545-6**

Unglazed (UGL) surfaces are subjected to the deep abrasion method; this test measures the value of material removed from the surface with an abrasive disc after 150 rotations cycles. The lower the volume removed, the more resistant the material.

**WATER ABSORPTION**



**ISO 10545-3**

A ceramic material's capacity to absorb water depends on its porosity.

Thanks to the choice quality raw materials used and the state-of-the-art production technologies, Cotto d'Este products are always outstandingly compact, meaning that their porosity values are minimal.

The value expresses the percentage water absorption by weight.

**FROST RESISTANCE**



**ISO 10545-12**

Ceramic materials laid outdoors suffer frost damage if their porosity is above a certain level. When any water absorbed freezes, it increases in volume, generating strong internal mechanical stresses which may cause the material to detach from the underlying surface.

Cotto d'Este tiles are frostproof because, thanks to their porosity value of virtually nil, they always pass the ISO 10545-12 test comprising 100 freeze/thaw cycles between -5°C and +5°C without suffering any damage.

**DIFFERENCES IN TONE**

**ANSI A137.3**

**Aesthetic classification and shade variations.** Tiles may vary in color, texture, or appearance according to the manufacturer's design for that particular tile series or product line. The following aesthetic class designations have been provided in the Table, so that the manufacturer may communicate the aesthetic characteristics of a particular tile product.

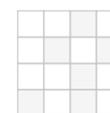


**V0**

NONE

**Very uniform appearance.**

Pieces of the same shade value are very uniform.

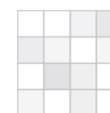


**V1**

MINOR

**Uniform appearance.**

Differences among pieces from the same production run are minimal.

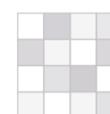


**V2**

LOW

**Slight variation.**

Clearly distinguishable differences in texture and/or pattern within similar colors.

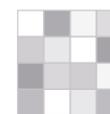


**V3**

MEDIUM

**Moderate variation.**

While the colors and or texture present on a single piece of tile will be indicative of the colors and or texture to be expected on the other tiles, the amount of colors and or texture on each piece may vary significantly. It is recommended that the range be viewed before selection.



**V4**

MAJOR

**Substantial variation.**

Random color and or texture differences from tile to tile, so that one tile may have totally different colors and or texture from that on other tiles. Thus, the final installation will be unique. It is recommended that the range be viewed before selection.

**TREAD MARK VISIBILITY**



Cotto d'Este Method

This classification specifies the visibility degree of the tread marks left on the floor after walking with shoes dirty of dust.

**A** - Tread mark not visible

**B** - Tread mark not very visible.

**C** - Tread mark very visible.

Ideal for wall installation and recommended for floor installation in residential areas only.

**CLEANING EASINESS**



Cotto d'Este Method

The method consists in classifying the easiness grade in removing general dirt by manual cleaning with mild detergent.

**Grade 1**

Very easy, no resistance of the dirt, immediate removal.

**Grade 2**

Easy, light resistance of the dirt, fast removal.

**Grade 3**

Less easy, higher resistance of the dirt, slow removal. A strong detergent is recommended. Ideal for wall installation and recommended for floor installation in residential areas only.

# TECHNICAL CHARACTERISTICS



SLIP RESISTANCE

According to:  
 ISO 13006-G (Gruppo Bla)  
 EN 14411-G (Gruppo Bla)  
 ANSI A137.3 (Back layered gauged porcelain slabs)

DIN 51130	DIN 51097	ANSI A326.3	BCR TORTUS	UNE ENV 12633	BS 7976-2
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	Laminated porcelain stoneware	Thickness 3,5 mm
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<b>BLACK-WHITE</b> (Bla UGL)	Naturale						
<b>BUXY</b> (Bla UGL)		R10				Class 1	
<b>CLUNY</b> (Bla UGL)	Naturale	R9	DCOF ≥ 0.42	μ > 0,40		Class 1	
<b>OVER</b> (Bla UGL)	Naturale						
<b>WONDERWALL</b> (Bla UGL) <sup>2</sup>	Matrix - Ritmi						
<b>WONDERWALL</b> (Bla GL) <sup>3</sup>	Freestyle - Sketch - Lotus - Script Jungle - Frame - Zen Venice - Color Ballet - Dream						

	Laminated porcelain stoneware	Thickness 5,5 mm
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<b>BLACK-WHITE</b> (Bla UGL)	Ultrawhite Glossy						
<b>CEMENT PROJECT</b> (Bla UGL)	Work - Cem	R9 Cem - R10 Work					
<b>CLUNY</b> (Bla UGL)	Layé	R10	B (A+B)	DCOF ≥ 0.42	μ > 0,40	Class 1	
<b>ELEGANCE</b> (Bla UGL)	Silk						
<b>EXEDRA</b> (Bla UGL)	Glossy			DCOF ≥ 0.42	μ > 0,40	Class 1	
	Silk						
<b>FOREST</b> (Bla UGL)		R10	B (A+B)			Class 2	PTV 36+ Wet 4S (Slider 96)
<b>LIMESTONE</b> (Bla UGL)	Natural						
<b>MATERICA</b> (Bla UGL)		R9					
<b>METAL</b> (Bla UGL)		R9 Corten, Iridium		DCOF ≥ 0.42 Corten, Iron	μ > 0,40 Corten		

	Laminated porcelain stoneware	Thickness 6,5 mm
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<b>PIETRA D'ISEO</b> (Bla UGL)	Naturale	R10		DCOF ≥ 0.42	μ > 0,40		
<b>VANITY</b> (Bla UGL)	Glossy/Touch						
<b>WOODLAND</b> (Bla UGL)	Soft/Wild	R9 Soft	B (A+B) Wild	DCOF ≥ 0.42	μ > 0,40		

<sup>1</sup> Ideal for wall installation and recommended for floor installation in residential areas only.  
<sup>2</sup> Sintered and printed using ink-jet decorations.  
<sup>3</sup> Decorated using a new cold digital printing technology on Kerlite 3plus. Intended exclusively for the cladding of interior walls; do not use as flooring or to clad exterior spaces.  
<sup>4</sup> Excluding hydrofluoric acid and derivatives.  
<sup>5</sup> Average refers to ceramic material.

DESHADING	STAIN RESISTANCE	RESISTANCE TO CHEMICAL ETCHING ***	DEEP ABRASION RESISTANCE Average value	BREAKING STRENGTH (S) Average value	BENDING STRENGTH Average value	WATER ABSORPTION Average value	FROST RESISTANCE			
ANSI A137.3	ASTM C 1378	ISO 10545-14	ASTM C 650	ISO 10545-13	ASTM C 1243 ISO 10545-6	ASTM C 1505	ASTM C 1505	ISO 10545-14	ASTM C 373 ISO 10545-3	ASTM C 1026 ISO 10545-12

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V1	A RESISTENTE RESISTANT	5 RESISTENTE RESISTANT	A RESISTENTE RESISTANT	LA-HA RESISTENTE RESISTANT	175 mm <sup>2</sup>	≥ 85 lbf	≥ 6.000 PSI	50 N/mm <sup>2</sup>	0,1%	RESISTENTE RESISTANT
	CLASS C	≥ 3								
V1	A RESISTENTE RESISTANT	5 RESISTENTE RESISTANT	CLASS C	LA-HB	**					
	*									

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V1	CLASS C	≥ 3	CLASS C	LB-HB						
V2										
	CLASS C	≥ 3	CLASS C	LB-HB	175 mm <sup>2</sup>	≥ 175 lbf	≥ 6.000 PSI	50 N/mm <sup>2</sup>	0,1%	RESISTENTE RESISTANT
V3 Acero, Noce V4 Cembro, Rovere										
V2	A RESISTENTE RESISTANT	5 RESISTENTE RESISTANT	A RESISTENTE RESISTANT	LA-HA RESISTENTE RESISTANT						
V1										
V1 Iridium V2 Iron V3 Corten										

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V2	CLASS C	5 RESISTENTE RESISTANT	A RESISTENTE RESISTANT	LA-HA RESISTENTE RESISTANT						
V2	CLASS C	≥ 3	CLASS C	LB-HB	175 mm <sup>2</sup>	≥ 175 lbf	≥ 6.000 PSI	50 N/mm <sup>2</sup>	0,1%	RESISTENTE RESISTANT
V2 Soft/V3 Wild	CLASS C	5 RESISTENTE RESISTANT		LA-HA RESISTENTE RESISTANT						

\* Class-5 resistance to food and beverage stains. Not resistant to iodine dye, methylene blue, or permanent marker.  
 \*\* This product's decoration is not scratch resistant to hard, sharp objects such as metal, stone, glass, and stoneware. Be extremely careful when handling the product during installation, making sure not to bump or slide tools or other sharp objects against the surface.  
 \*\*\* Excluding hydrofluoric acid and derivatives.

# TECHNICAL CHARACTERISTICS

According to: ISO 13006-G (Gruppo Bia) EN 14411-G (Gruppo Bia) ANSI A137.3 (Back layered gauged porcelain slabs)	FIRE REACTION		PROTECT ANTIMICROBIAL ANTIMICROBIAL SURFACE		INFORMATION ABOUT CLEANING	
	EN 13823	EN 9239-1	FLAME SPREAD ASTM EB4	TREAD MARK VISIBILITY Cotto d'Este method	CLEANING EASINESS Cotto d'Este method	

Laminated porcelain stoneware		Thickness 3,5 mm					
BLACK-WHITE		Class A2-s1, d0 (WALL)	Class A1 <sub>fl</sub> -s1 (FLOOR) Class A2 <sub>fl</sub> -s1	Class A	B	2	
BUXY					A Caramel, Perle, Noisette, Cendre B Corail Blanc, Amande	1	
CLUNY	Naturale				•	B	2
OVER	Naturale					A	1
	Soft*					B Road C* Openspace, Loft, Office	2 Road 3* Openspace, Loft, Office
WONDERWALL <sup>2</sup>	Matrix - Ritmi	•	A	1			
WONDERWALL <sup>1</sup>	Freestyle - Sketch - Lotus Script - Jungle Frame - Zen - Venice Color Ballet - Dream				Use water or generic neutral detergents or degreasers available over the counter in general stores. Do not use alcohol, acetone, or solvents in general.		

Laminated porcelain stoneware		Thickness 5,5 mm					
BLACK-WHITE	Glossy*** - Silk**	Class A2-s1, d0 (WALL)	Class A1 <sub>fl</sub> -s1 (FLOOR) Class A2 <sub>fl</sub> -s1	Class A	•	B	2
CEMENT PROJECT	Work				•	A	1
	Cem				•	B	2
CLUNY	Layé				•		
ELEGANCE	Silk**				•	A Noce, Cembro B Acero, Rovere	1 Noce, Cembro 2 Acero, Rovere
EXEDRA	Glossy*** - Silk**				•		
FOREST					•	B	2
LIMESTONE	Natural				•	B Cemento, Ardesia C Bianco, Avorio, Tortora	
MATERICA					•	A Iron, Iridium B Corten	1 Iron, Iridium 2 Corten
METAL					•		

Laminated porcelain stoneware		Thickness 6,5 mm					
PIETRA D'ISEO		Class A2-s1, d0 (WALL)	Class A1 <sub>fl</sub> -s1 (FLOOR) Class A2 <sub>fl</sub> -s1	Class A	•	A	1
VANITY	Glossy - Touch				•	B	2
WOODLAND	Soft - Wild				•	A	1

<sup>1</sup> Decorated using a new cold digital printing technology on Kerlite 3plus. Intended exclusively for the cladding of interior walls; do not use as flooring or to clad exterior spaces.  
<sup>2</sup> Sintered and printed using ink-jet decorations.

# COTTO D'ESTE GUARANTEE

	RESIDENTIAL	PUBLIC	
	GUARANTEED 20 YEARS	GUARANTEED 10 YEARS	GUARANTEED 20 YEARS
		GUARANTEED 10 YEARS	

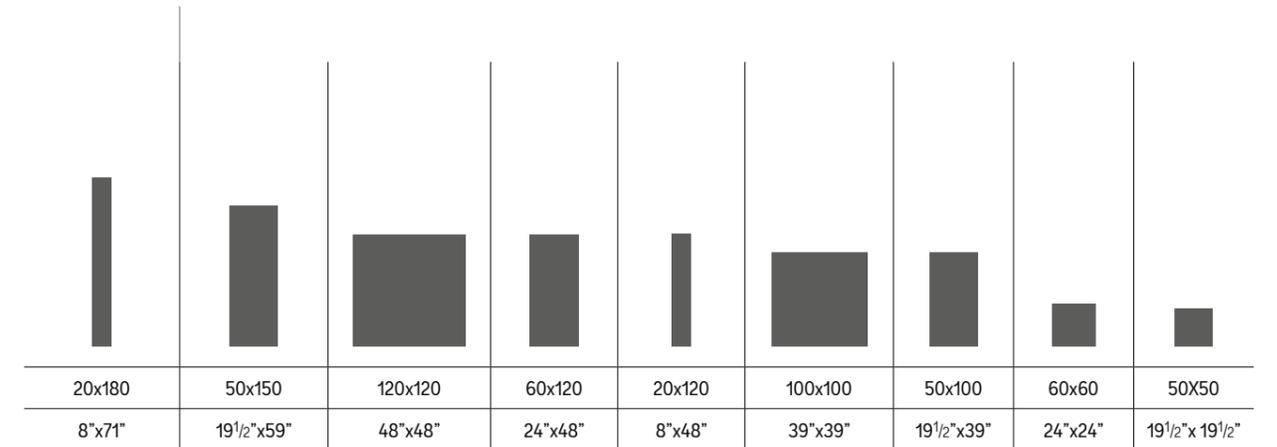
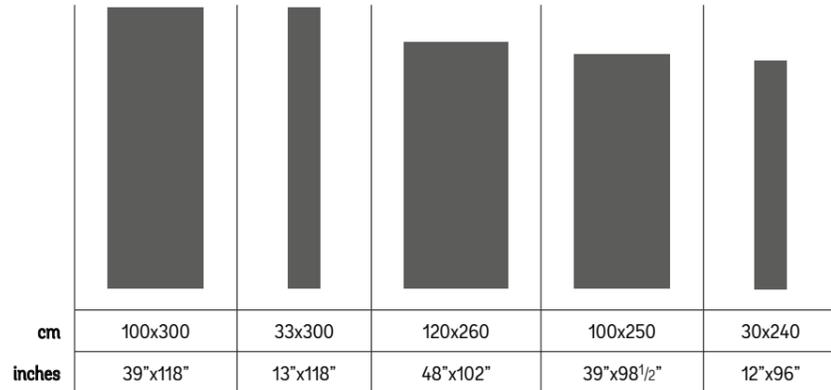
Laminated porcelain stoneware		Thickness 3,5 mm					
BLACK-WHITE		•			•		
BUXY		•		•			
CLUNY	Naturale	•		•			
OVER	Naturale	•		•			
	Soft*	• Road	• Openspace, Loft, Office		• Road		
WONDERWALL		• Matrix, Ritmi		• Matrix, Ritmi			

Laminated porcelain stoneware		Thickness 5,5 mm					
BLACK-WHITE	Glossy***	•					
	Silk**	•			•		
CEMENT PROJECT	Work - Cem	•		•			
CLUNY	Layé	•		•			
ELEGANCE	Silk**		•		•		
EXEDRA	Glossy***		•				
	Silk**		•		•		
FOREST		•		•			
LIMESTONE	Natural	•		•			
MATERICA		•		•			
METAL		•			•		

Laminated porcelain stoneware		Thickness 6,5 mm					
PIETRA D'ISEO		•		•			
VANITY	Glossy - Touch		•		•		
WOODLAND	Soft - Wild	•		•			

\* Ideal for wall installation and recommended for floor installation in residential areas only.  
\*\* Ideal for wall installation and recommended for flooring in residential and low-traffic commercial spaces.  
\*\*\* The sporadic presence of small non-uniformities or dots on the surface is to be considered characteristic of the material and of its finishing. Ideal for wall installation and recommended for floor installation in residential areas only.

# SIZES



**Kerite** Laminated porcelain stoneware Thickness 3,5 mm

<b>BLACK-WHITE</b>		•			
<b>BUXY</b>		•			
<b>CLUNY</b>	Naturale	•			
<b>OVER</b>	Naturale	•			
	Soft	•			
<b>WONDERWALL</b>		•			

**Kerite** Laminated porcelain stoneware Thickness 5,5 mm

<b>BLACK-WHITE</b>	Glossy - Silk	•			
<b>CEMENT PROJECT</b>	Work	•			
	Cem	•			
<b>CLUNY</b>	Layé	•			
<b>ELEGANCE</b>	Silk	•			
<b>EXEDRA</b>	Glossy - Silk	•		•	
<b>FOREST</b>		•	•		
<b>LIMESTONE</b>	Natural	•		•	
<b>MATERICA</b>		•		•	
<b>METAL</b>		•			

**Kerite** Laminated porcelain stoneware Thickness 6,5 mm

<b>PIETRA D'ISEO</b>				•	
<b>VANITY</b>	Glossy - Touch			•	
<b>WOODLAND</b>	Soft - Wild				•

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# CERTIFICATIONS



## EMAS

### EMAS APPROVED ENVIRONMENTAL MANAGEMENT SYSTEM OF PRODUCTION SITES

EC Regulation no. 1221/2009 of the European Parliament and of the Council introduced the EMAS eco-management and audit scheme for organisations. Cotto d'Este has obtained EMAS Registration for Fiorano Modenese (MO) production site (registration n.I-000401 on December 2005). This registration is of major importance, since it requires a proper Environmental Management System to be created, based on the continual improvement of environmental performance within organisations. The scheme is based on the creation of an open dialogue with local institutions (Agencies, Authorities, Associations, Trade Union Representatives, Schools, Press) and with the public, and it is expected that all employees will play an active part. The Environmental Statement is the end document that describes the environmental and safety aspects in the workplace, the environmental performance of the site and the environmental targets that the Company sets itself within the framework of continual improvement. The statement is validated by an Accredited Environmental Verifier, following audits carried out in the plant. Cotto d'Este is one of the very few ceramics companies to have EMAS registration which, together with ISO 14001 quality certification, bear witness to the management's utmost commitment and readiness to engage with the ethical, environmental, safety and quality issues. The Environmental Statements of all company's sites are available on the web site [www.cottodeste.it](http://www.cottodeste.it).

green mission



## UNI EN ISO 14001

### ENVIRONMENTAL CERTIFICATION FOR PRODUCTION SITES

green mission



## LEED

Cotto d'Este is a member of the U.S. Green Building Council, organisation of the USA demonstrating that a building is environmentally responsible, profitable and a healthy place to live and work. Purpose of LEED (Leadership in Energy and Environmental Design Green Building Rating System™) is assessing the environmental, social and economic sustainability of buildings on the basis of criteria such as energy efficiency, polluting emissions and the use of recycled materials. LEED supplies professionals of the building trade (designers, architects, etc.) the tools needed to calculate the impact of their buildings in terms of eco-sustainability.

green mission

### CONTRIBUTI ALL'OTTENIMENTO DI CREDITI LEED - CONTRIBUTION TO OBTAINING LEED CREDITS

#### SS CREDIT 7.1

**HEAT ISLAND EFFECT / NON ROOF (NC, CI, CS, SCHOOLS LEED Rating Systems): 1 LEED point** is granted for the use of hardscape materials with SRI $\geq$ 29. The great majority of Cotto d'Este products **do not contribute to change the energy balance of the environments where they are installed**. They do not produce any Urban Heat Island Effect, thanks to their very good physical properties, i.e. Solar Reflectance Index SRI $\geq$ 29.

#### EA CREDIT 1

**OPTIMIZE ENERGY PERFORMANCE (NC, CI, CS, SCHOOLS LEED Rating Systems)**. The Thermal conductivity  $\lambda$  of Cotto d'Este porcelain tiles is 0.75 Btu/ft h °F (1,3 Watt/m °K or 1,1 Kcal/m h °C). For this reason it is ideal for heating floor systems and external cladding. The Thermal conductivity  $\lambda$  of Cotto d'Este wall tiles is 0.4 Btu/ft h °F (0,7 Watt/m °K or 0,6 Kcal/m h °C).

#### MR CREDIT 2

**CONSTRUCTION WASTE MANAGEMENT (NC, CI, CS, SCHOOLS LEED Rating Systems): 2 LEED points** are granted if at least 75% of the weight of Raw materials – tiles and packing - will be recycled. **Cotto d'Este tiles and their packing material** (carton boxes, plastic packaging materials, wooden pallets, straps, etc.) **are 100% recyclable**. The management of the waste on the building site is also easier because the quantity of waste is very small (weight of packaging is around 2-3% of weight of total material).

#### MR CREDIT 5

**REGIONAL MATERIALS (NC, CS, SCHOOLS LEED Rating Systems): 2 LEED points** are granted if the use of local raw materials is equal to 20% of the total materials value, based on cost.

- These Credits are applicable for buildings constructed within 500 miles (804,5 km) from Cotto d'Este production site (Fiorano Modenese - MO, Italy).
- The % contribution based on cost of Cotto d'Este tiles to a single LEED project is calculated based on the geographical position of the construction site.

#### MR CREDIT 5

**REGIONAL MATERIALS (CI LEED Rating System only):**

- **1 LEED Point:** use a minimum of 20% of the combined value of construction and Division 12 (Furniture) materials and products that are manufactured regionally within a radius of 500 miles from Cotto d'Este production site (Fiorano Modenese - MO, Italy).
- **2 LEED points:** meet the previous criterion requirement and use a minimum of 10% of the combined value of construction and Division 12 (Furniture) materials and products extracted, harvested or recovered, as well as manufactured, within 500 miles of the LEED project

#### IEQ CREDIT 4.1

**LOW EMITTING MATERIALS, ADHESIVES AND SEALANTS (NC, CI, CS, SCHOOLS LEED Rating Systems): 1 LEED point** is granted if all adhesives and sealants used on the interior of the building comply with SCAQMD Rule #1168 (VOC limit of ceramic adhesives not more than 65 g/l less water).

#### IEQ CREDIT 4.3

**LOW EMITTING MATERIALS, FLOORING SYSTEMS (NC, CI, CS, SCHOOLS LEED Rating Systems): 1 LEED point** is granted if all flooring complies with the requirements indicated in IEQ Credit 4.3 Section. Cotto d'Este tiles obtain 1 LEED point because they do not contain any Volatile Organic Compounds VOC (see LEED 2009 NC, CI, CS, SCHOOLS Rating Systems).

#### IEQ CREDIT 4.6

**LOW EMITTING MATERIALS, CEILING and WALL SYSTEMS (SCHOOLS LEED Rating System only): 1 LEED point.** Cotto d'Este tiles obtain 1 LEED point because they do not contain any Volatile Organic Compounds VOC (see Addenda of LEED Reference Guide for Green Building Design and Construction, 2009 Edition).

**ID CREDIT 1**

**INNOVATION IN DESIGN: 1-5 LEED points for NC, CI and CS, 1-4 LEED points for SCHOOLS.**  
 - **“Innovation in Design”:** the main collections of Cotto d’Este have got the prestigious ecological mark ECOLABEL (CE 1980/2000), based on the product LCA (Life Cycle Assessment) and awarded by the EU only to those products with the lowest environmental impact.  
 - **“Innovation in Design”:** the main collections of Cotto d’Este have got antibacterial surfaces, that reduce bacterial presence by up to 99.9 % (ISO 22196 test method).  
 - **“Exemplary performances” MR Credit 2 - CONSTRUCTION WASTE MANAGEMENT: 1 LEED point** may be earned if at least 95% by weight of the Raw Materials - material and packing - will be recycled. Cotto d’Este tiles and their packing material (carton boxes, plastic packaging materials, wooden pallets, straps, etc..) are **100% recyclable**.  
 - **“Exemplary performances” IEQ Credit 4.6 - LOW EMITTING MATERIALS, CEILING and WALL SYSTEMS: 1 LEED point** may be earned for NC, CI, CS LEED Buildings. No traces of VOC (Volatile Organic Compounds) are present in Cotto d’Este tiles (see Addenda of LEED Reference Guide for Green Building Design and Costruction, 2009 Edition).

**RP CREDIT 1**

**REGIONAL PRIORITY (NC, CI, CS, SCHOOLS LEED Rating Systems): 1-4 LEED points.** Between 1 and 4 credits can be obtained, of the 6 Regional Priority credits identified by the USGBC regional councils and chapters, if the project has an environmental importance for the region, where it is being constructed. A database of Regional Priority credits and their geographic applicability is available on the USGBC website [www.usgbc.org](http://www.usgbc.org).

**EBOM LEED RATING SYSTEM - EXISTING BUILDINGS OPERATIONS and MAINTENANCE**

The cleaning and maintenance procedures in the present catalogue (pages 306-310) can help obtain the following LEED credits.

**SS CREDIT 7.1**

**HEAT ISLAND REDUCTION (Non roof): 1 LEED point** is granted if a maintenance program is organized, that ensures the surfaces are cleaned at least every 2 years to maintain a good reflectance.

**IEQ 3.1**

**GREEN CLEANING, HIGH PERFORMANCE CLEANING PROGRAM: 1 LEED point.**

**IEQ 3.3**

**GREEN CLEANING, PURCHASE OF SUSTAINABLE CLEANING PRODUCTS AND MATERIALS: 1 LEED point.**

**MR 3**

**SUSTAINABLE PURCHASING, FACILITY ALTERATIONS AND ADDITIONS: 1 LEED point** is granted if the purchases contain at least 10% post-consumer waste and/or 20 % pre-consumer waste material.  
 The great majority of Cotto d’Este products are produced with **40% of pre-consumer recycled materials**, as certified by a qualified external company. The certificate is available on the website [www.cottodeste.it](http://www.cottodeste.it).

- NC** = LEED 2009 for New Construction;
- CI** = LEED 2009 for Commercial Interior;
- CS** = LEED 2009 for Core and Shell Development;
- SCHOOLS** = LEED 2009 for Schools;
- EBOM** = LEED 2009 for Existing Buildings Operations and Maintenance.

The new LEED 4 cards for the Cotto d’Este collections will be available as soon as the new LEED Rating System 4 will be published by the U.S. Green Building Council.



**LEED ITALIA**



COTTO D’ESTE is a member of the **Green Building Council ITALIA**, this is an organization that promotes in Italy buildings that are environmentally friendly, profitable and healthy places to live and work in.  
 The LEED credits that can be obtained with Cotto d’Este tiles for NC 2009 Italia (New construction) are the same as the ones that can be obtained with USBGC LEED NC 2009 Rating System (please see table). The only differences are regarding credit **MR5 - REGIONAL MATERIALS** (different method of calculating the distance from the production site and raw materials from the construction site) and **IEQ 4.1 - LOW EMITTING MATERIALS, ADHESIVES AND SEALANTS** (max emissions VOC = 200 mg/m3, see GEV Emission Code EC1 ed. 03.03.2009).



**CE SECURITY MARK.**

The CE mark is the safety product certification required by EU and it is finalized to preserve the people’s health and the goods in buildings.  
 The new Regulation UEN. 305/2011 is valid from the first of July 2013. The most important news is the introduction of the Declaration Of Performance (DOP) with which the supplier communicates the safety requirements concerning own materials.  
 Cotto d’Este DOP are available on the website [www.cottodeste.it](http://www.cottodeste.it).



**Ceramics of Italy**

**The trademark of the Italian ceramic industry**

Ceramics of Italy is the institutional trademark that represents and promotes Italian ceramic industries on a worldwide level.  
 Through Panariagroup SpA, Cotto d’Este can label its products with the Ceramics of Italy trademark, which confirms their high standard of design, the use of the latest technology, concern for the environment and for safety at work and constant research for optimising the resources employed, in compliance with the highest performance standards. Ceramics of Italy embodies the will of the Italian ceramic tile industry to promote the awareness and esteem of Italian ceramic tiles amongst international users: ceramic tiles are not mere building materials but a reference point for style and creativity and for the development of a new way of living, Made in Italy.  
 Ceramics of Italy, promoted by Confindustria Ceramica, is a registered trademark of Edi.Cer. Spa, the organiser of Cersaie – the International ceramics exhibition.

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