MADE IN ITALY. MADE TO EXCEL.

KLIF

Since its founding in 1891, Acme Brick has continually advanced the art and science of providing affordable, sustainable, enduring, and beautiful product choices for America's homeowners, builders, contractors, institutions, and businesses.

Acme Brick Tile & Stone traces its roots back to 1964 and is a leader in providing builders, architects, designers, and contractors with a wide range of excellent products. At more than 50 locations across 13 states, Acme Brick Tile & Stone, offers distinctive products of superior quality, sourced from around the world and delivered with impeccable service – and at many locations, in-house design assistance. Our customers include builders, architects, designers, contractors, and DIY homeowners.

In ways large and small, Acme Brick associates work hard to provide building materials that are as good for the environment as it is for the people who build with it.

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STONE LOOK

COLOURED BODY
PORCELAIN TILES

WHITE-BODY
WALL TILES

WHITE-BODY
WALL TILES

THE PUREST EXPRESSION OF MATTER

CERAMIC AND PORCELAIN TILES: THE SAFE CHOICE.

- IT DOES NOT BURN
- IT LOVES THE ENVIRONMENT
- ZERO PVC
- SAFE
- ZERO VOCS
- RECYCLABLE
- VERSATILE
- LONG LASTING
- RESISTANT
- HYGIENIC

PURE
STRENGTH

FORWARD TO/THE ORIGINS

The decisive elegance of stone comes to life in a collection inspired by beola stone of Val d'Ossola. Placed in the center of the environment the surfaces become the focus with a great visual power that reflects your tastes.

POWERFUL ELEGANCE

Contemporary architecture takes its inspiration from nature and goes further, making it the focal point of the spaces. Klif reinterprets the decisive elegance of stone to give life to spaces of solid expressiveness, where you can feel in harmony with the environment.

DELICATE STRENGTH

Realism is one of the strong points of the surface, which reproduces faithfully the veins and shading typical of beola stone. Surface roughness and quartz crystals create the same sparkling effects as natural stone.

NATURAL FORCE

NATURE ON STAGE

In the most spectacular spaces of contemporary architecture, the earthy surface of the stone effect creates a background full of atmosphere designed to accommodate your style.
Beauty takes center stage.

OPEN TO NATURE

Klif

NATURE AS ARCHITECTURE

The stone effect expresses the beauty of living in spaces that foster a relationship with the environment, where the dialog between indoors and outdoors is always open.

A DELICATE FORCE

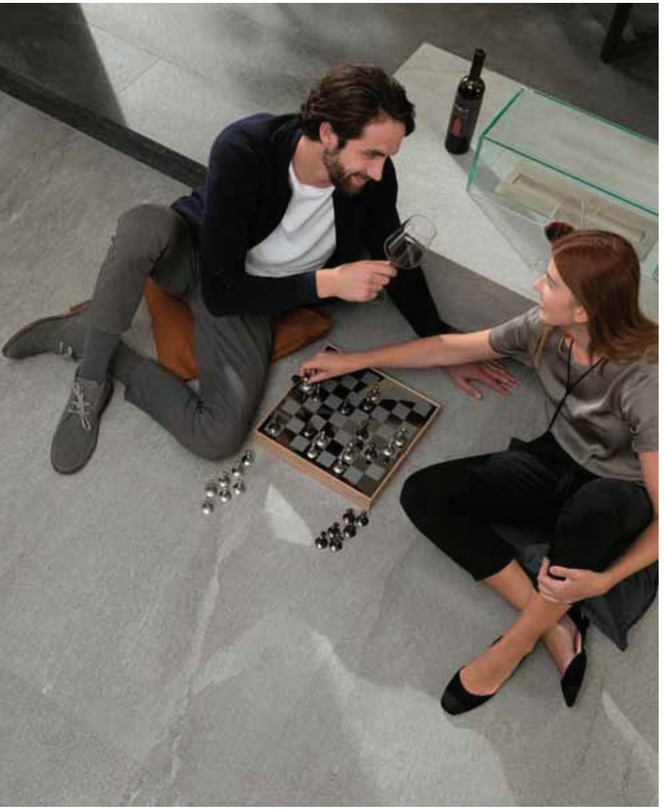
In contemporary architecture with rigorous style, the play of contrasts between light and dark surfaces defines architectural volumes and the various functional areas, designing the spaces of your everyday life.

PORCELAIN TILES /
KLIF Grey 75x150 cm - 29 1/2"x59"
KLIF Dark 75x150 cm - 29 1/2"x59"
KLIF Dark Scalino 75 37,5x75 cm - 14 3/4"x29 1/2"
KLIF Silver Brick 37,5x75 cm - 14 3/4"x29 1/2"

OUTDOOR PAVING
KLIF Silver ✠ 20mm 45x90 cm - 17 3/4"x35 3/8"

-
ARBOR Cognac 18,5x150 cm - 7 1/4"x59"

STRONG AND DELICATE AT THE SAME TIME



GENUINE/IMPRINTING

Klif's microstructure reproduces the look of a split-stone surface with extreme precision.

TRUE BEAUTY

The material reproduces the unique characteristics of beola stone with extreme realism: the banded structure, the surface covered by soft veins and the quartz crystals that illuminate the shades of gray.

● Durable over time.

● Frost and thermal shock resistant.

REDEFINING THE STONE EFFECT

The 20 mm outdoor pavers have superior technical properties that make it possible to design coordinated interior and exterior spaces that guarantee visual continuity.

Thanks to its intensely natural inspiration, the characteristic beauty of beola stone lends itself to wellness and hospitality spaces.

WALL TILES /
KLIF Silver 40x80 cm - 15³/₄"x31¹/₂"
KLIF 3D Row Silver 40x80 cm - 15³/₄"x31¹/₂"
KLIF 3D Silver Corner 1,4x40 cm - ⁵/₈"x15³/₄"
KLIF Silver Corner 1,4x40 cm - ⁵/₈"x15³/₄"
KLIF Silver Corner A.E. 1,4x1,4 cm - ⁵/₈"x⁵/₈"

PORCELAIN TILES /
KLIF Silver 75x150 cm - 29¹/₂"x59"
-
ARBOR Tobacco 18,5x150 cm - 7¹/₄"x59"

TIMELESS AMBIENCE

FEELING GOOD

ROUGH/ELEGANCE

The rough elegance of the chiseled texture of 3D Wall Row adds three-dimensionality to the sink area, emphasizing the style of the curtain wall.

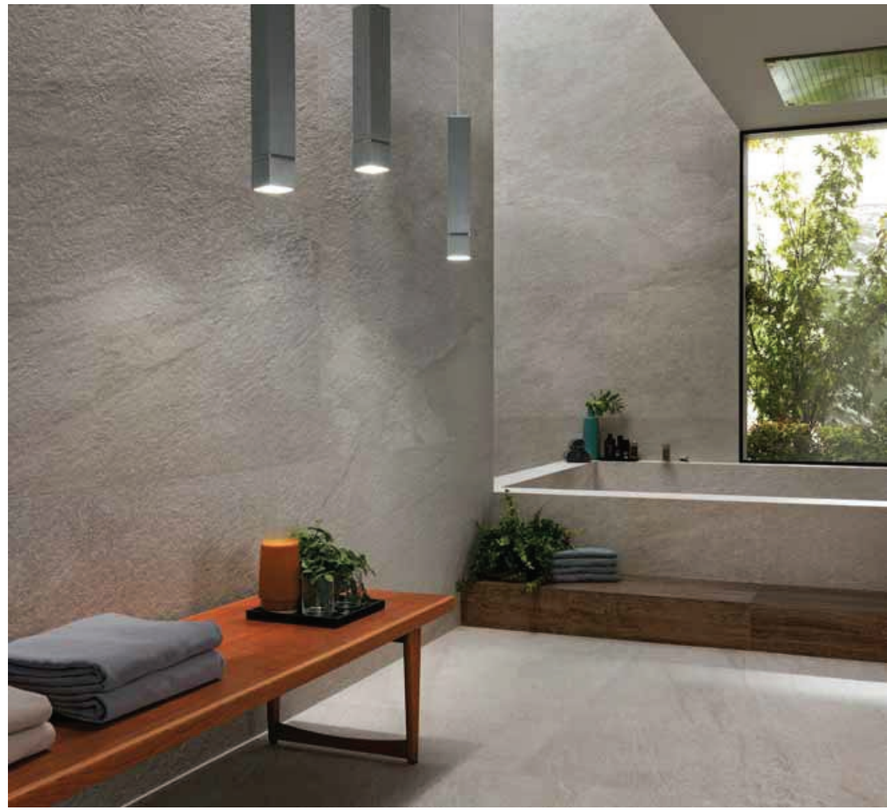
● **The three-dimensional structure of the surface makes the material realistic and natural.**

The rough expressiveness of hand-chiseled stone is brought to life in a contemporary manner in the texture of 3D Row.

● **Water resistance makes it ideal for wet areas in wellness centers and spas.**

INSPIRED BY WELLNESS

Klif's earthy porcelain surface is the ideal solution for spa environments: on a conceptual level it recalls the beauty of stone, and from a practical point of view it ensures maximum safety.



KLIF SILVER

The beauty of split stone is enhanced by the great reliability of porcelain tiles.

EVERYWHERE WITH STYLE

The outdoor pavers reflect the unique character and colors of the indoor tiles, creating a visual continuity that provides balance to prestigious architectural solutions.

BEAUTY AND PRESTIGE

PORCELAIN TILES / OUTDOOR PAVING
KLIF Grey ✣ **20mm** 90x90 cm - 35⁵/₈x35⁵/₈"

NO LIMITS/TO DESIGN

With four shades and seven formats, including the new 90x90 cm with a thickness of 20 mm, the extensive, versatile range offers unlimited design possibilities.

DESIGNED FOR OUTDOOR

The 20 mm thick formats and the anti-slip Grip finish make it possible to design environments with total visual continuity between the inside and outside, for a final effect with great impact.

● **Slip-resistant even when water is present on the surface.**

PORCELAIN TILES /
KLIF Grey Grip 37.5x75 cm - 14¾"x29½"
OUTDOOR PAVING
KLIF Grey ± 20mm 45x90 cm - 17¾"x35⅜"
KLIF Grey ± 20mm Round 45x90 cm - 17¾"x35⅜"
KLIF Grey ± 20mm Round Ang.Sx 45x90 cm - 17¾"x35⅜"
KLIF Grey ± 20mm Round Ang.Dx 45x90 cm - 17¾"x35⅜"
KLIF Grey ± 20mm Elemento L Angolare 33x33 cm - 13"x13"
KLIF Grey ± 20mm Alzata 20x90 cm - 7⅞"x35⅜"

SPECIAL SOLUTIONS FOR DREAMY SPACES

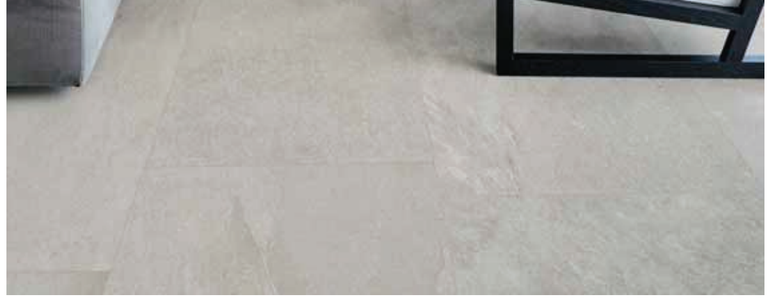
The range includes an array of special pieces for the pool, intended for exclusive architectural projects with a strong visual impact.

● **Resistant to scratching and wear.**

PORCELAIN TILES /
KLIF Grey 75x150 cm - 29 1/2"x59"
OUTDOOR PAVING
KLIF Grey ± 20mm 45x90 cm - 17 3/4"x35 1/2"

Combining beauty, practicality, and extreme versatility, the stone-inspired collection opens up new perspectives of design.

A PRESTIGIOUS CHOICE



FEELING BALANCED

The white-body wall tiles reveal the deep inspiration of natural stone without sacrificing the properties of ceramics, thus guaranteeing easy cleaning and removal of stains.

WALL TILES /
KLIF White 40x80 cm - 15³/₄"x31¹/₂"
KLIF 3D Row White 40x80 cm - 15³/₄"x31¹/₂"
KLIF White Corner 1.4x40 - ³/₄"x15³/₄"
KLIF 3D White Corner 1.4x40 - ³/₄"x15³/₄"

PORCELAIN TILES /
KLIF White 37.5x75 cm - 14³/₄"x29¹/₂"
KLIF Silver Triangles 28.5x33 cm - 11¹/₄"x13"
KLIF Silver Brick 37.5x75 cm - 14³/₄"x29¹/₂"

OUTDOOR PAVING
KLIF Silver ≑ 20mm 45x90 cm - 17¹/₄"x35¹/₂"
-
ARBOR Natural 18.5x150 cm - 7¹/₄"x59"

PRISTINE ELEGANCE

THE ENERGY OF NATURE

The sculptural three-dimensional ceramic wall reflects the beautiful look of the chiseled texture.

● Easy to clean
micro-textured surface.

The white-body wall tiles perfectly combine the functionality of ceramics with the original beauty of the stone effect.

● **A high resistance to water and humidity makes porcelain tiles inert to the action of mold and fungi.**

FREEDOM OF EXPRESSION

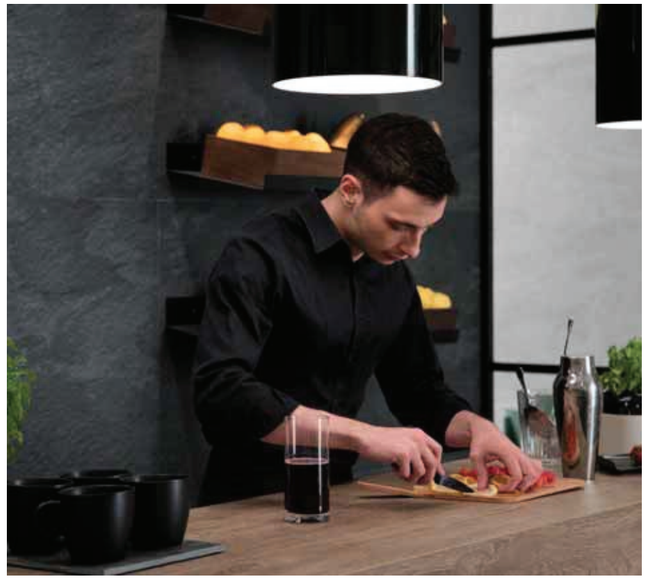
A modern interpretation of cut decorations, the Triangles mosaic underscores the appeal of stone with its refined and balanced geometry.

FEELING BALANCED

The innate elegance of beola stone allows the design of environments characterized by pure and essential beauty, an expression of a strong and rigorous personality.

PORCELAIN TILES /
KLIF Dark 75x150 cm - 29 1/2"x59"
KLIF Silver 75x150 cm - 29 1/2"x59"
KLIF Dark Brick 3D 28x55 cm - 11"x21 5/8"
KLIF Silver Brick 3D 28x55 cm - 11"x21 5/8"
-
ARBOR Cognac 18,5x150 cm - 7 1/4"x59"

SURROUNDED BY NATURE



- The surface guarantees high resistance to stains.

INFINITE BEAUTY

The beauty of stone from Val d'Ossola returns to life in an extremely reliable and durable material that guarantees maximum resistance to stains and wear.

● **Hygienic: does not absorb dirt and is easy to clean.**

KLIF DARK

The earthy vigor of the surface is softened by the delicate movement of the veins within.

● **Impact and wear resistant: suitable for commercial venues.**

A PERFECT *SYNTHESIS*

Combining the decisive appeal of stone with the characteristic reliability of porcelain tiles, Klif is the perfect synthesis of beauty and practicality.

TIMELESS ELEGANCE

Elegant stone-effect porcelain tile surfaces meet spectacular three-dimensional ceramic walls, whose refined sculptural impact is rich in light and shadows.

The beauty of stone is rendered contemporary to become a refined floor and wall covering, capable of creating spaces that are both rigorous and enveloping.

WALL TILES /
KLIF 3D Row White 40x80 cm - 15¾"x31½"

PORCELAIN TILES /
KLIF Grey 75x150 cm - 29½"x59"
KLIF Grey 37,5x75 cm - 14¾"x29½"
KLIF White Brick 3D 28x55 cm - 11"x21⅝"
-
ARBOR Cognac 18,5x150 cm - 7½"x59"

NATURAL WELCOME

EXTREME VERSATILITY

THE DIMENSION OF LIGHT

With its linear cut and the expressiveness of the chiseled texture, 3D Row gives the walls a contemporary look.

WELCOME TO THE ELEGANCE

The earthy aspect of stone creates an evocative environment in contemporary spaces, proving to be an appropriate choice even for reception areas.

KLIF

Porcelain tiles

COLOURED BODY PORCELAIN TILES - RECTIFIED MONOCALIBER

Sizes and surfaces

MATTE

75x150 cm - 29 1/2"x59"	⧗ 9,5 mm
75x75 cm - 29 1/2"x29 1/2"	⧗ 9,5 mm
37,5x75 cm - 14 3/4"x29 1/2"	⧗ 9,5 mm

R10 A+B — HEAVY TRAFFIC

GRIP

37,5x75 cm - 14 3/4"x29 1/2"	⧗ 9,5 mm

R11 A+B+C — HEAVY TRAFFIC

OUTDOOR PAVING

90x90 cm - 35 3/8"x35 3/8"	⧗ 20 mm ✖
45x90 cm - 17 3/4"x35 3/8"	⧗ 20 mm ✖
60x60 cm - 23 5/8"x23 5/8"	⧗ 20 mm ✖

R11 A+B+C — HEAVY TRAFFIC

Available in
✖ **Silver, Grey, Dark**

Porcelain tiles ⧗ 20 mm

Color-shading

White, Sliver,
Grey, Dark

V3 MODERATE VARIATION

KLIF
Porcelain tile decors

Klif White Mosaico
30x30 cm - 11$^{3}/_{4}$"x11$^{3}/_{4}$"

Klif Silver Mosaico
30x30 cm - 11$^{3}/_{4}$"x11$^{3}/_{4}$"

Klif Grey Mosaico
30x30 cm - 11$^{3}/_{4}$"x11$^{3}/_{4}$"

Klif Dark Mosaico
30x30 cm - 11$^{3}/_{4}$"x11$^{3}/_{4}$"

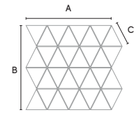
4,8x4,8 cm
1$^{7}/_{8}$"x1$^{7}/_{8}$"

Klif White Triangles
28,5x33 cm - 11$^{1}/_{4}$"x13"

Klif Silver Triangles
28,5x33 cm - 11$^{1}/_{4}$"x13"

Klif Grey Triangles
28,5x33 cm - 11$^{1}/_{4}$"x13"

Klif Dark Triangles
28,5x33 cm - 11$^{1}/_{4}$"x13"



A 32,8 cm - 13"
B 28,5 cm - 11$^{1}/_{4}$"
C 7,9 cm - 3$^{1}/_{8}$"

KLIF
Porcelain tile decors

Klif White Brick
37,5x75 cm - 14$^{3}/_{4}$"x29$^{1}/_{2}$"

Klif Silver Brick
37,5x75 cm - 14$^{3}/_{4}$"x29$^{1}/_{2}$"

Klif Grey Brick
37,5x75 cm - 14$^{3}/_{4}$"x29$^{1}/_{2}$"

Klif Dark Brick
37,5x75 cm - 14$^{3}/_{4}$"x29$^{1}/_{2}$"

A 74,8 cm - 29$^{1}/_{2}$"
B 37,4 cm - 14$^{3}/_{4}$"

Klif White Brick 3D
28x55cm - 11"x21$^{5}/_{8}$"

Klif Silver Brick 3D
28x55cm - 11"x21$^{5}/_{8}$"

Klif Grey Brick 3D
28x55cm - 11"x21$^{5}/_{8}$"

Klif Dark Brick 3D
28x55cm - 11"x21$^{5}/_{8}$"

A 18x2,1 cm - 7$^{1}/_{8}$"x$^{1}/_{8}$"
B 37x2,9 cm - 14$^{5}/_{8}$"x1$^{1}/_{8}$"
C 37x4,2 cm - 14$^{5}/_{8}$"x1$^{5}/_{8}$"
D 37x2,1 cm - 14$^{5}/_{8}$"x$^{1}/_{8}$"
E 18x2,9 cm - 7$^{1}/_{8}$"x1$^{1}/_{8}$"
F 18x4,2 cm - 7$^{1}/_{8}$"x1$^{5}/_{8}$"

KLIF
Wall tiles

WHITEBODY WALL TILES - RECTIFIED MONOCALIBER

Sizes and surfaces

MATTE
40x80 cm - 15 3/4"x31 1/2" **8,5 mm**

MATTE
3D Row 40x80 cm - 15 3/4"x31 1/2" **10 mm**

Klif White
40x80 cm - 15 3/4"x31 1/2"

Klif 3D Row White
40x80 cm - 15 3/4"x31 1/2"

Klif Silver
40x80 cm - 15 3/4"x31 1/2"

Klif 3D Row Silver
40x80 cm - 15 3/4"x31 1/2"

Klif Grey
40x80 cm - 15 3/4"x31 1/2"

Klif 3D Row Grey
40x80 cm - 15 3/4"x31 1/2"

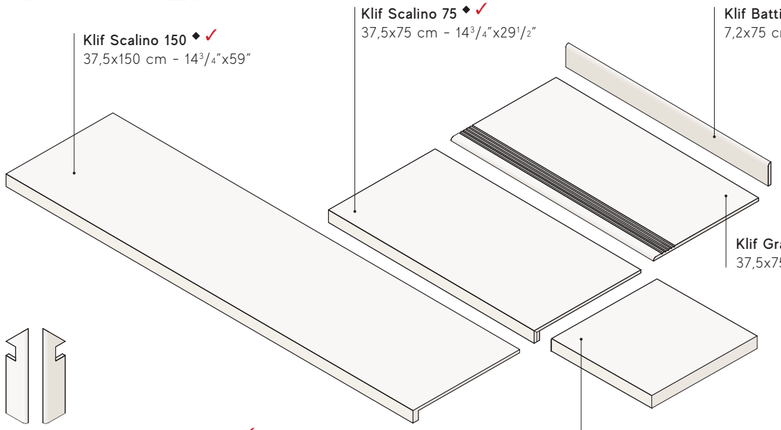
Color-shading

White, Sliver, Grey

V2 SLIGHT VARIATION

KLIF
Porcelain trim tiles

INDOOR TRIM TILES



Klif Scalino 150 ◆ ✓
37,5x150 cm - 14³/₄"x59"

Klif Scalino 75 ◆ ✓
37,5x75 cm - 14³/₄"x29¹/₂"

Klif Battiscopa ◆
7,2x75 cm - 2⁷/₈"x29¹/₂"

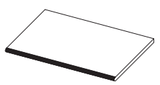
Klif Gradino ◆ ✓
37,5x75 cm - 14³/₄"x29¹/₂"

Klif Battiscopa Sagomato Sx/Dx ◆ ✓
7,2x30 cm - 2⁷/₈"x11³/₄"

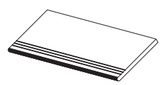
Klif Scalino Angolare ◆ ✓
37,5x75 cm - 14³/₄"x29¹/₂"

Available in:
◆ All colors
✓ These parts are supplied to order

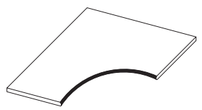
OUTDOOR TRIM TILES ≚ **20 mm**



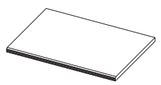
Klif Round ✖ ✓◆
30x60 cm - 11³/₄"x23⁵/₈"
45x90 cm - 17³/₄"x35³/₈"
60x60 cm - 23⁵/₈"x23⁵/₈"



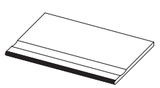
Klif Gradino Round ✖ ✓◆
30x60 cm - 11³/₄"x23⁵/₈"



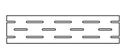
Klif Curve 60 ✖ ✓
60x60 cm - 23⁵/₈"x23⁵/₈"



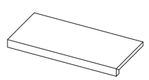
Klif Smussato ✖ ✓
30x60 cm - 11³/₄"x23⁵/₈"



Klif Bordo Piscina ✖ ✓◆
30x60 cm - 11³/₄"x23⁵/₈"



Klif Griglia ✖ ✓◆
20x60 cm - 7⁷/₈"x23⁵/₈"
15x60 cm - 5⁷/₈"x23⁵/₈"



Klif Elemento L SP ✖ ✓◆
20x60 cm - 7⁷/₈"x23⁵/₈"
33x90 cm - 13"x35³/₈"

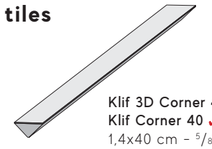
Klif Top ✖ ✓
30x60 cm - 11³/₄"x23⁵/₈"

Klif Alzata ✖ ✓
20x90 cm - 7⁷/₈"x35³/₈"

Klif Elemento L Grip ◆ ✓
15x75 H.4 cm
5⁷/₈"x29¹/₂" H. 1⁵/₈"

Available in:
✖ Silver, Grey, Dark
✓ Right/left angular elements are available

Wall trim tiles



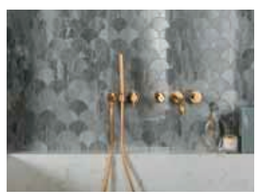
Klif 3D Corner 40 3
Klif Corner 40 ✓
1,4x40 cm - ⁵/₈"x15³/₄" ●

Klif Corner A.E. ✓
1,4x1,4 cm - ⁵/₈"x⁵/₈" ●

Available in:
● White, Silver, Grey
✓ These parts are supplied to order

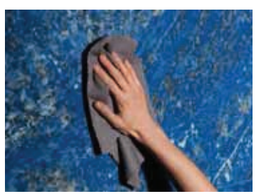
WALL TILES ADDITIONAL BENEFITS

Ease of installation



Cuts, holes, and bevels are easily made and reduce the time it takes to lay the white body tiles.

Extremely easy to clean



White body ceramic tiles can be cleaned with a simple passage of hot water or neutral detergent.

While porcelain tiles are ideal for use on the floor, thanks to their hardness and extreme durability, the light weight and workability of white body tiles make them ideal for use on walls: cuts and holes can be made quickly and easily, reducing installation time and costs.

CERAMIC AND PORCELAIN TILES: A SAFE CHOICE

RESISTANCE AND DURATION

Easy to maintain

Porcelain tiles do not require any special maintenance.

UV Resistant

Porcelain tiles maintain their colors even when exposed to continuous, direct sunlight or in contact with atmospheric agents or smog.

Scratch resistant

Porcelain tiles do not splinter, break or get damaged.

Easy to clean

Porcelain tiles are easy to clean.

Stain resistant

Porcelain tiles are waterproof, no liquid can damage the surface.

Resistant to chemicals

Porcelain tiles do not stain and resist the most aggressive chemical agents.

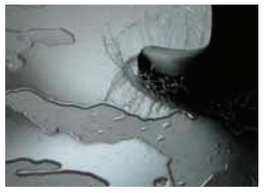
Resistant to acids

Porcelain tiles are resistant to acids found in food and cleaning products.

Resistant to thermal shock

A porcelain tile floor will not change as a result of sharp temperature fluctuations.

Waterproof



Porcelain tiles are completely non-porous and therefore are not damaged by water or humidity.

Frost resistant

Porcelain tiles are frost resistant and therefore are not damaged by low temperatures.

HEALTH

Zero VOCS

Porcelain tiles are intrinsically inorganic and do not emit volatile organic compounds (VOC).

Zero PVC

Porcelain tiles contain no PVC, plastics or petroleum derivatives.

Zero allergens

Porcelain tiles are inhospitable for mites, bacteria, fungi, molds and other irritants.

Zero formaldehyde

Porcelain tiles do not contain formaldehyde.

Prevent bacterial growth

Porcelain tiles are completely hygienic and inhospitable for bacteria, mites, molds and fungi.

ENVIRONMENT

Energy efficiency

The high thermal inertia of porcelain tiles moderates the changes in temperature of the rooms, favoring energy savings.

Ecological

Porcelain tiles have a low environmental impact at all stages of their production, from the raw materials to disposal and recycling.

Recycling and re-use

Porcelain tiles are made with recycled materials, last a long time, and can be re-used because they retain their original appearance.

Ideal for floor heating systems

Porcelain tiles can be effectively combined with floor heating systems.

SAFETY

Non-slip

Porcelain tile surfaces can be made with an abrasive surface grit that can increase traction and reduce the risk of slipping.

Fire resistant

Porcelain tiles are not flammable, reduce the spread of flames, do not burn, and do not emit toxic fumes.

Heat resistant

Porcelain tiles do not change shape at high temperatures.

ACME BRICK

TILE & STONE

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888-265-4525

White-body wall tiles - Rectified monocaliber

Compliant with standards EN 14411 annex L group BIII
Compliant with standards ISO 13006 annex L group BIII

40x80 cm - 15³/₄"x31¹/₂" ⧗ 8,5 mm
40x80 cm - 15³/₄"x31¹/₂" ⧗ 10 mm 3D Row

Technical features	Test Method	Requirements for nominal size N			Wall tiles	
		7 cm ≤ N < 15 cm	N ≥ 15 cm			
		(mm)	(%)	(mm)		
Length and width	ISO 10545-2	± 0,75 (*)	± 0,5 (*)	± 2,0 (*)	± 0,3% ± 1,0 mm	
Thickness		± 0,5 (**)	± 10 (**)	± 0,5 (**)	± 10,0% ± 0,5 mm	
Straightness of sides		± 0,5 (***)	± 0,3 (***)	± 1,5 (***)	± 0,3% ± 0,8 mm	
Rectangularity		± 0,75 (****)	± 0,5 (****)	± 2,0 (****)	± 0,3% ± 1,5 mm	
Surface flatness	ISO 10545-2	c.c. + 0,75 - 0,50	c.c. + 0,5 - 0,3	c.c. + 2,0 - 1,5	± 0,3% ± 1,5 mm	3D Not applicable
		e.c. + 0,75 - 0,50	e.c. + 0,5 - 0,3	e.c. + 2,0 - 1,5		
		w. ± 0,75	w. ± 0,5	w. ± 2,0		
Water absorption (in% by mass)	ISO 10545-3	Average >10%. When the average > 20%, this shall be indicated. Individual value > 9%			10% < E_v ≤ 20 %	
Breaking strength	ISO 10545-4	S ≥ 600 N			S ≥ 600 N	
Modulus of rupture		R ≥ 15 N/mm²			R ≥ 15 N/mm²	
Coefficient of thermal linear expansion	ISO 10545-8	Declared value			≤ 7MK⁻¹	
Thermal shock resistance	ISO 10545-9	Pass according to EN ISO 10545-1			Resistant	
Moisture expansion (in mm/m)	ISO 10545-10	Declared value			≤ 0,06% (0,6mm/m)	
Crazing resistance	ISO 10545-11	Pass according to EN ISO 10545-1			Resistant	
Bond strength/adhesion for improved cementitious adhesives	EN 1348	Declared value			≥ 1,0 N/mm² (Class C2 - EN 12004)	
Reaction to fire	-	Class A1			A1	
Resistance to household chemicals and swimming pool salts	ISO 10545-13	Minimum Class B (GB for glazed tiles)			A	
Resistance to low concentrations of acids and alkalis		Declared Class			LA	
Resistance to high concentrations of acids and alkalis		Declared Class			HA	
Resistance to staining	ISO 10545-14	Minimum Class 3			5	
Release of dangerous substances: Cadmium (in mg/dm²) and Lead (in mg/dm²)	ISO 10545-15	Declared value			≤ 0,01 mg/dm² Cd ≤ 0,1 mg/dm² Pb	

(*) The permissible deviation, in % or mm, of the average size for each tile (2 or 4 sides) from work size (WS).
(**) The permissible deviation, in % or mm, of the average thickness for each tile from the work size thickness (WS).
(***) The maximum permissible deviation from straightness, in % or mm, related to the corresponding work sizes (WS).
(****) The maximum permissible deviation from rectangularity, in % or mm, related to the corresponding work sizes (WS).
c.c. The maximum permissible deviation from centre curvature, in % or mm, related to diagonal calculated from the work sizes (WS).
e.c. The maximum permissible deviation from edge curvature, in % or mm, related to the corresponding work sizes (WS).
w. The maximum permissible deviation from warpage, in % or mm, related to diagonal calculated from the work sizes (WS).

Coloured body porcelain tiles - Rectified monocaliber

Compliant with standards EN 14411 annex G group BIa
Compliant with standards ISO 13006 annex G group BIa

75x150 cm - 29¹/₂"x59" ⧗ 9,5 mm
75x75 cm - 29¹/₂"x29¹/₂" ⧗ 9,5 mm
37,5x75 cm - 14³/₄"x29¹/₂" ⧗ 9,5 mm
90x90 cm - 35³/₈"x35³/₈" ⧗ 20 mm
45x90 cm - 17³/₄"x35³/₈" ⧗ 20 mm
60x60 cm - 23⁵/₈"x23⁵/₈" ⧗ 20 mm

Technical features	Test Method	Requirements for nominal size N			Porcelain tiles			
		7 cm ≤ N < 15 cm	N ≥ 15 cm		Matte	Grip	Outdoor Paving ⧗ 20 mm	
		(mm)	(%)	(mm)				
Length and width	ISO 10545-2	± 0,9 (*)	±0,6 (*)	±2,0 (*)	± 0,3% ± 1,0 mm	± 0,3% ± 1,0 mm	± 0,3% ± 1,0 mm	
Thickness		± 0,5 (**)	± 5 (**)	± 0,5 (**)	± 5,0% ± 0,5 mm	± 5,0% ± 0,5 mm	± 5,0% ± 0,5 mm	
Straightness of sides		± 0,75 (***)	± 0,5 (***)	± 1,5 (***)	± 0,3% ± 0,8 mm	± 0,3% ± 0,8 mm	± 0,3% ± 0,8 mm	
Rectangularity (Measurement only on short edges when L/l ≥ 3)		± 0,75 (****)	± 0,5 (****)	± 2,0 (****)	± 0,3% ± 1,5 mm	± 0,3% ± 1,5 mm	± 0,3% ± 1,5 mm	
Surface flatness	ISO 10545-2	c.c. ± 0,75	c.c. ± 0,5	c.c. ± 2,0	Not applicable to "strong" structures			
		e.c. ± 0,75	e.c. ± 0,5	e.c. ± 2,0				
		w. ± 0,75	w. ± 0,5	w. ± 2,0				
Water absorption (in% by mass)	ISO 10545-3	E_v ≤ 0,5% Individual Maximum 0,6%			≤ 0,1 %	≤ 0,1 %	≤ 0,1 %	
	ASTM C 373	Requirement ANSI A137.1-2017 Water absorption max ≤ 0,5%			≤ 0,5 %	≤ 0,5 %	≤ 0,5 %	
Breaking strength	ISO 10545-4	S ≥ 700N (for thickness < 7,5 mm - per spessore < 7,5 mm) S ≥ 1300N (for thickness ≥ 7,5 mm - per spessore ≥ 7,5 mm)			S ≥ 1500 N	S ≥ 1500 N	S ≥ 10000 N	
Modulus of rupture		R ≥ 35 N/mm²			R ≥ 40 N/mm²	R ≥ 40 N/mm²	R ≥ 45 N/mm²	
Bending strength and breaking load	EN 1339 Annex F	-			-	-	≥ T11 60x60 90x90	≥ U4 45x90
Impact resistance, as coefficient of restitution	ISO 10545-5	Declared value			≥ 0,55	≥ 0,55	≥ 0,55	
Mohs hardness	EN 101	-			7	8	8	
Resistance to deep abrasion of unglazed tiles (removed volume)	ISO 10545-6	≤ 175 mm³			≤ 150 mm³	≤ 150 mm³	≤ 150 mm³	
Coefficient of thermal linear expansion	ISO 10545-8	Declared value			≤ 7MK⁻¹	≤ 7MK⁻¹	≤ 7MK⁻¹	
Thermal shock resistance	ISO 10545-9	Pass according to EN ISO 10545-1			Resistant	Resistant	Resistant	
Moisture expansion (in mm/m)	ISO 10545-10	Declared value			≤ 0,01% (0,1mm/m)	≤ 0,01% (0,1mm/m)	≤ 0,01% (0,1mm/m)	
Frost resistance	ISO 10545-12	Pass according to EN ISO 10545-1			Resistant	Resistant	Resistant	
Bond strength/adhesion for improved cementitious adhesives	EN 1348	Declared value			≥ 1,0 N/mm² (Class C2 - EN 12004)	≥ 1,0 N/mm² (Class C2 - EN 12004)	≥ 1,0 N/mm² (Class C2 - EN 12004)	
Reaction to fire	-	Class A1 or $A1_{fl}$			A1 - $A1_{fl}$	A1 - $A1_{fl}$	A1 - $A1_{fl}$	
Resistance to household chemicals and swimming pool salts	ISO 10545-13	Minimum Class B			A	A	A	
Resistance to low concentrations of acids and alkalis		Declared Class			LA	LA	LA	
Resistance to high concentrations of acids and alkalis		Declared Class			HA	HA	HA	
Resistance to staining	ISO 10545-14	Declared class			5	5	5	
(1)(2) Shod Ramp Test	DIN 51130	Declared value			R10	R11	R11	
Barefoot Ramp Test	DIN 51097	Declared value			A+B	A+B+C	A+B+C	
Pendulum Friction Test	BS 7976	PTV ≥ 36 classifies the surface as "low slip risk"			≥ 36 Dry ≥ 36 Wet	≥ 36 Dry ≥ 36 Wet	≥ 36 Dry ≥ 36 Wet	
Pendulum Friction Test	AS 4586	Declared Classification of the new pedestrian surface materials according to the Pendulum Test			Class P3	Class P4	Class P4	
Pendulum Friction Test	UNE-ENV 12633	Declared value			Class C2	Class C3	Class C3	
Coefficient of friction (COF)	B.C.R.A. Rep. CEC/81	D. M. 236/89 del 14/06/89 μ >0,40 per elemento scivolante cuoio su pavimentazione asciutta μ >0,40 per elemento scivolante gomma dura su pavimentazione bagnata			> 0,40 Asciutto > 0,40 Bagnato	> 0,40 Asciutto > 0,40 Bagnato	> 0,40 Asciutto > 0,40 Bagnato	
Dynamic coefficient of friction (DCOF)	ANSI A137.1	ANSI A.137.1-2017 Requires a minimum value of 0.42 for level interior space expected to be walked upon when wet. (3)			> 0,42 Wet	> 0,42 Wet	> 0,42 Wet	

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w. The maximum permissible deviation from warpage, in % or mm, related to diagonal calculated from the work sizes (WS).
(1). Determination of slip resistance of pedestrian surfaces; it does not cover sports surfaces and road surfaces for vehicles (skidresistance).
(2). Anti-slip performance is guaranteed at the time of delivery of the product.
(3). 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."
(4). For further details, please refer to outdoor design general catalogue.
(5). Only for products with 20 mm thickness.