

KLIMA

INNOVATION AND SUSTAINABILITY

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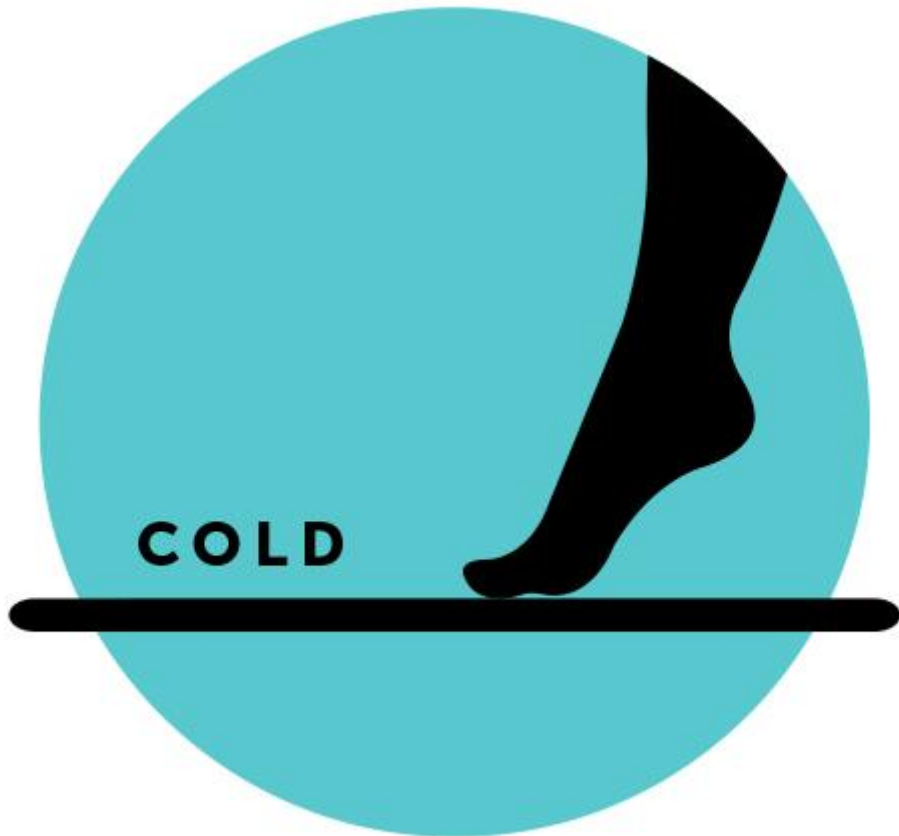
- Heat Adaptive Tiles
- Cool Roof Tiles

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- Heat Adaptive Tiles

- Klima is a new generation Vittrified Tiles that, thanks to special materials, is able to absorb and repel heat according to individual needs.
- Suitable for both indoor and outdoor applications, for flooring or external walls.
- It achieves maximum comfort with minimum energy impact.

OUTDOOR FLOORING



When installed on outdoor flooring, Klima repels the heat from sunlight, resisting high temperatures.

Even with significant sun exposure, the surface is not burning hot and floor remains cool and pleasant to walk on with bare feet.

INDOOR FLOORING



When applied on indoor flooring, Klima retains room heat and releases it over the entire surface, producing a warmer feel than a standard floor.

Ideal for surfaces that provide a wood-like effect, imparting a warmth and a comfort to be experienced.

AMBIENT TEMPERATURE



On External Ventilated Façade or Cladding, during summers, Klima will not allow the heat to transfer inside the building from outside. Also, during Winters, Klima will not allow the heat to dissipate outside the building, thus maintaining the ambient temperature of the building.

Klima helps limit heat dispersion while maintaining a steady indoor temperature. An innovative solution that helps reduce room energy demands.

Sizes



Heat Adaptive Vitrified Tiles



Coral Stone 600x1200

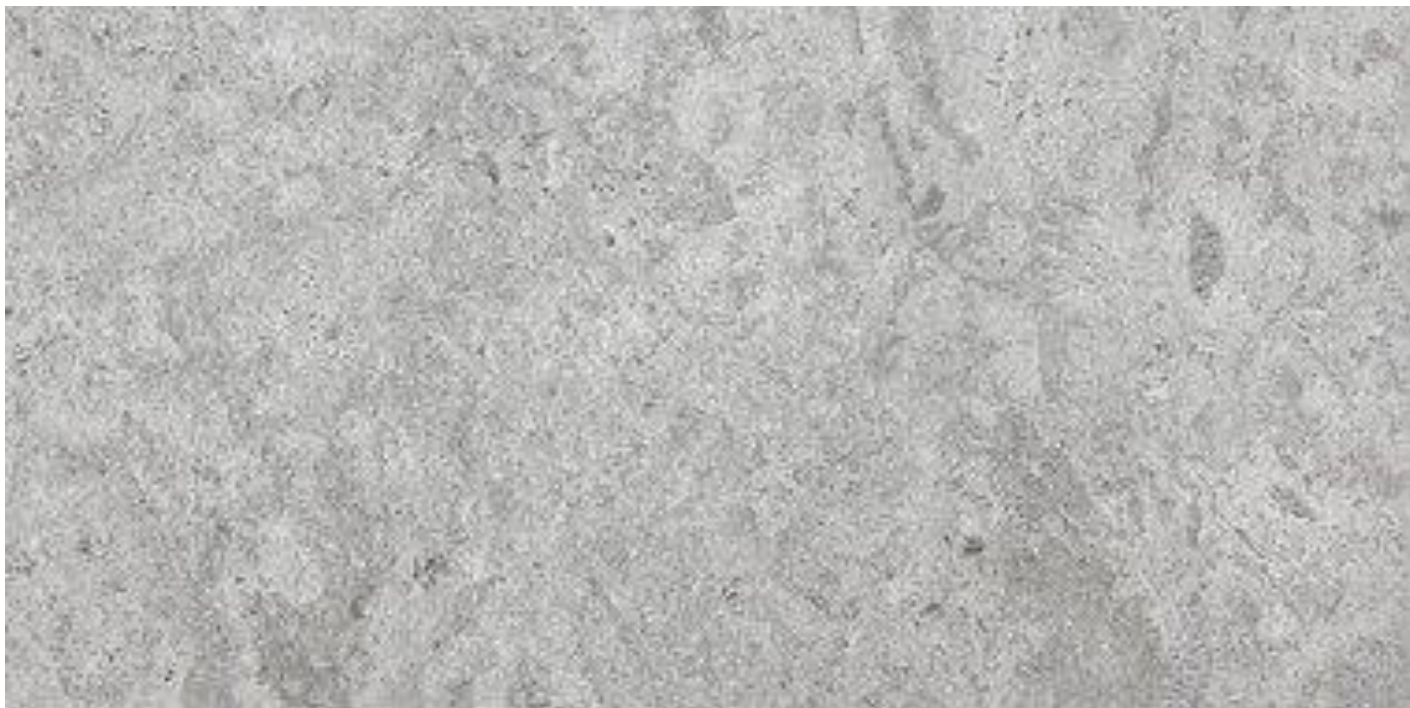
Heat Adaptive Vitrified Tiles



Coral Stone Beige 600x1200



Heat Adaptive Vitrified Tiles



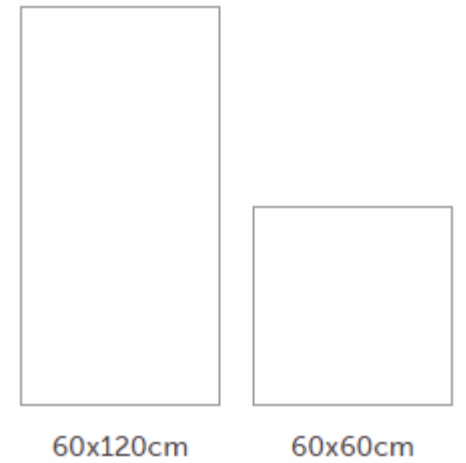
Coral Stone Grey 600x1200



Heat Adaptive Vitrified Tiles



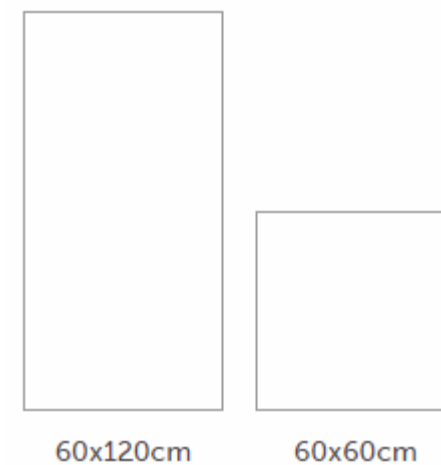
Coral Stone Ivory 600x1200



Heat Adaptive Vitrified Tiles



Coral Stone Light Grey 600x1200



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Heat Adaptive Vitrified Tiles



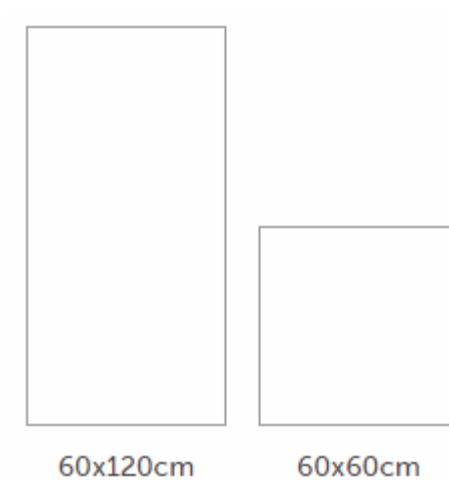
RAK
CERAMICS

Salento 600x1200

Heat Adaptive Vitrified Tiles



Salento Beige 600x1200



Heat Adaptive Vitrified Tiles



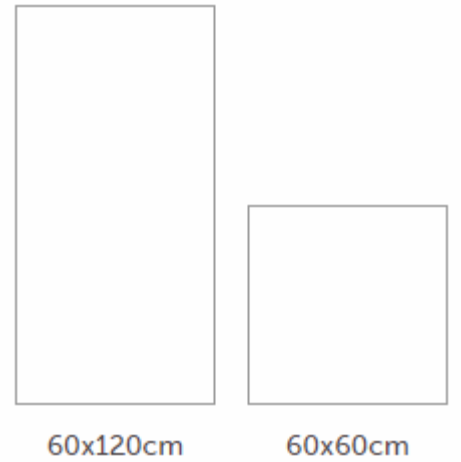
Salento Brown 600x1200



Heat Adaptive Vitrified Tiles



Salento Grey 600x1200





CENTRO DI RICERCA E SPERIMENTAZIONE
PER L'INDUSTRIA CERAMICA

Bologna, 30/09/2022

*RAK Ceramics Distribution
Europe S.r.l.*

*Via Ferrari Carazzoli, 21
41042 Fiorano Modenese (MO)*

RESULTS:

Convective Coefficient ($W m^{-2} K^{-1}$)	Mean Value of Initial SRI
5 (low-wind conditions)	83
12 (medium-wind conditions)	85
30 (high-wind conditions)	85

Mean value of Initial Solar Reflectance, ρ	0.71
Mean Value of Initial Thermal Emissivity, ϵ	0.81

Eng. Barbara Mazzanti
Technical verification



p. Prof. Maria Chiara Bignozzi
DIRECTOR



----- End of report -----

KLIMA

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- Cool Roof Tiles -10mm Thickness

Sizes



30x30cm

What is Cool Roof ?

- KLIMA cool roof is a new generation ceramic that thanks to special materials, is able to repel heat. A cool roof is one that reflects most of the incident sunlight and efficiently emits some of the absorbed radiation back into the atmosphere, instead of conducting it to the building below.
- As a result the roof literally stays cooler, with lower surface temperatures, keeping the building at a cooler and more constant temperature. This helps to achieve maximum comfort with minimum energy impact.
- These roofs have higher solar reflectance than a typical roof surface.

Salient Features

- It has an astonishing Solar Reflective Index (SRI) value greater than 90.
- It is an antiskid tile having slip resistance R10, which is non-slippery and safe to walk on.
- These roofs have higher solar reflectance than a typical roof surface.

Applications

- Building roofs, Balconies, Exterior façade cladding, Pavements

Benefits

- Reducing the temperature by 10 to 15 degree Celsius as compared to outdoors.
- Reduce global warming and save electricity
- Better indoor comfort
- Minimize load on cooling appliances.

CEPT Research & Development Foundation,
Test Report for Solar Reflectance Index (SRI)



TC-7020

ULR-TC702019000000153F

Report No: CRDF/RPT/SRI/464

Report Date: 1st October 2019

2.1.2 Results of the measurement:

Solar Direct Reflectance

a Bianco

Sample name	Sample ID	Measurement 1	Measurement 2	Measurement 3	Average
Klima Bianco	SRI/09/19/1465	0.7715	0.7714	0.7714	0.7714

Emissivity

Sample name	Sample ID	Measurement 1	Measurement 2	Measurement 3	Average
Klima Bianco	SRI/09/19/1465	0.860	0.861	0.861	0.861

Solar Reflectance Index (SRI) under different wind conditions

Sample name	Sample ID	Solar Reflectance Index (SRI)		
		Low Wind($h_c=5 \text{ W m}^{-2} \text{ K}^{-1}$)	Medium Wind($h_c=12 \text{ W m}^{-2} \text{ K}^{-1}$)	High Wind($h_c=30 \text{ W m}^{-2} \text{ K}^{-1}$)
Klima Bianco	SRI/09/19/1465	95	95	96

Surface Temperature (T_s) under different wind conditions

Sample name	Sample ID	Surface Temperature ($^{\circ}\text{C}$)		
		Low Wind($h_c=5 \text{ W m}^{-2} \text{ K}^{-1}$)	Medium Wind($h_c=12 \text{ W m}^{-2} \text{ K}^{-1}$)	High Wind($h_c=30 \text{ W m}^{-2} \text{ K}^{-1}$)
Klima Bianco	SRI/09/19/1465	52.2	46.4	41.7

NATIONAL CERA LAB
CERAMIC LABORATORY

Shop No. 16, 17, Ground Floor, Dariyalal Plaza, Nr. Argil Ceramic, 8-A, N/H, Morbi - 363 642 (Guj.) INDIA. Ph. : 02822 244049, Mo. : 98252 62649, 96622 97005, 98257 99418
E-mail : nationalceralab@rediffmail.com

As per all Countries Export report of Wall, Floor, Vitrified Tiles & Sanitary Wares

Ref. No. _____ Date : _____

NC/Unglazed Parking Tile /DIN/RAMP/07/012/2021-22 Issue Date July. 24. 2021

Receive date of test sample 21.07.2021

Issue to
M/s R.A.K. CERAMICS INDIA PRIVATE LIMITED
12, Dhanraj Chambers, 1st Floor, C/o. Hari Krishna Glaze Centre
8A N.H., Nera Kuber Cinema , Morbi; Gujarat; India

SAMPLE DESCRIPTION & NAME Unglazed Parking Tiles "First Grade", Nominal size 300x300x9.5 mm mm (Rectified) as submitted by the party. Sample not drawn by National Cera Lab.

Design Name - KALIMA BLANCO

TEST DESIRED: ISO 13006 : 2018 (Group B I a) ANNEX - G

1 CO-EFFICIENT OF FRICTION (ANTI SLIP TEST) "RAMP TEST"


Note Party submitted sample size 300x300 mm four and 300x200mm four sample Tiles.


CO-EFFICIENT OF FRICTION (ANTI SLIP TEST) "RAMP TEST"


TEST METHOD As per Standard DIN 51130 : 2014 - 2 & ISO 10545 - 17

STANDARD LIMIT	CORRECTED MEAN OVERALL ACCEPTANCE ANGLE	SLIP RESISTANCE CLASS
S - I 5.7° - 11.7°	6° UP TO 10°	R 9
S - II 14.3° - 20.3°	OVER 10° UP TO 19°	R 10
	OVER 19° UP TO 27°	R 11
S - III 24.3° - 30.3°	OVER 27° UP TO 35°	R 12
	OVER 35°	R 13

Sr No	Sample Name	Measured Value	Average Value	Class
1	300x300x9.5 mm Unglazed Parking Tiles	(1) 9.9° ,(2) 10.2° ,(3) 10.5° (4) 10.8°	10.4°	R 10

Verify by Nimesh J. Kavar  For National Cera Lab
Testing Engineer

Name of Authorised signatory : J.M. Kavar 
Designation of signatory : Technical Manager


24/7/2021

Thank You