

# アフフマ



venture

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# **Limitless sensations**

When hands meet earth and soil, they reactivate the deep bond that binds us to nature. Unique sensations are born, exploiting the potential of creativity through refined craftsmanship.

Combined with the fine and elegant structure of linen, these sensations create a new material, to allow the sensibility of designers to express with free and natural breath.

A material that finds in the many colors of the earth, a design that is capable to reconcile variety and organicity, knowing no limits of expression.

# **Touching earth**

Terrælino was born from the inspiration to create a symbiosis between earth and linen, a primitive element and a refined fabric.

Natural materials that enrich each other, brought together by the craftsmanship of the designer searching for a new kind of surface.

Skilled hands caress grains of earth and perceive their intimate essence. Strengthened by this tactile knowledge, they shape delicate textures, recalling the ethereal lightness of linen.

The result is a warm and vivid material, defined in five colors referring to the earth and four colors inspired by fruits and spices.

A material devised to inspire professionals and welcome any application.

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# Terrælino

# **Empowering colors**

Our designers have patiently and methodically studied many types of earths, looking for the best combinations of color and texture.

At the end of this work, we have selected nine colors, each a synthesis between visual perception and emotional feeling.

Colors that evoke the manual dexterity and human touch that created them. New materials at the service of those looking for a contemporary way of interpreting design.



Gesso (Chalk White)

Calce (Limestone)

Sabbia (Sand)

Argilla (Grey Clay)

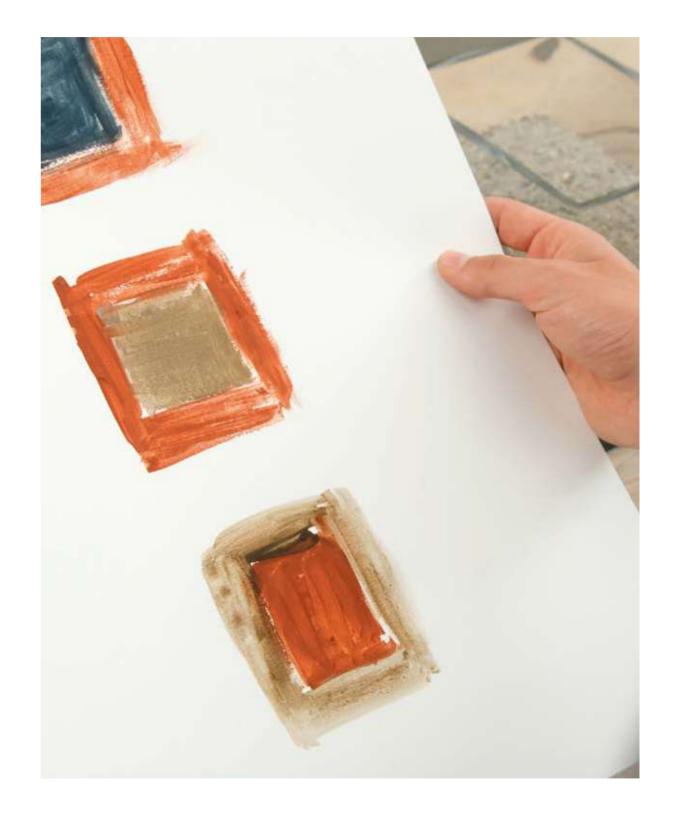
Fango (Brown Clay)

Pepe (Black Pepper)

Melograno (Pomegranate)

Menta (Mint Leaf)

Ginepro (Juniper Berry)

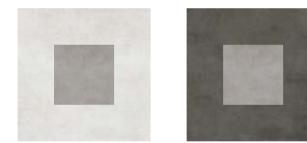


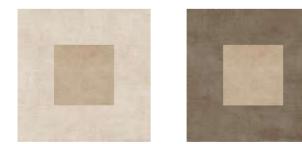
# **Infinite combinations**

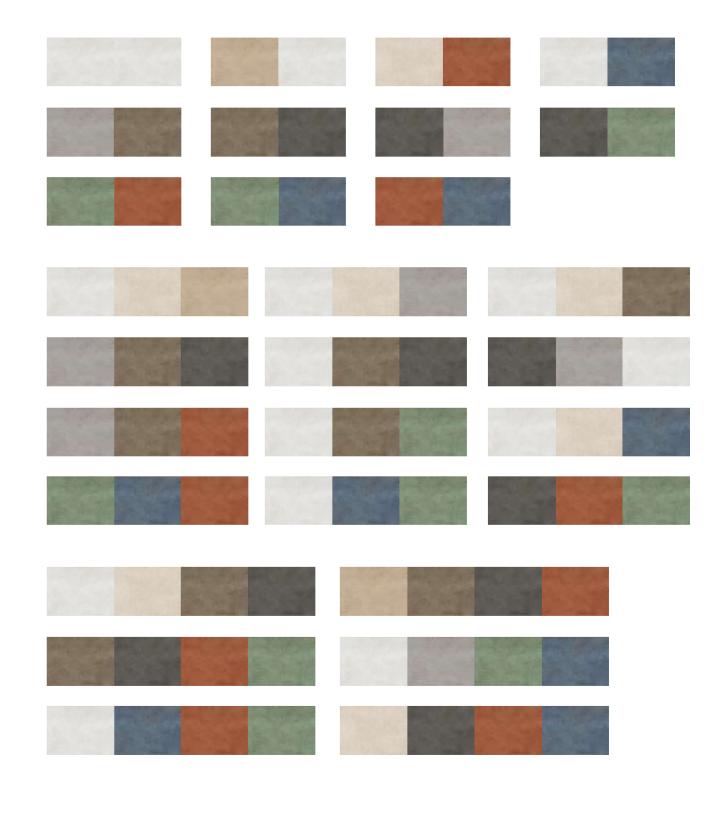
The theory of colors tells us about the rules of analogy and complementarity, about how color emerges from hue when tint, tone and shade come into play. It also tells how our perception of a colored surface varies depending on the other colors that are associated with it.

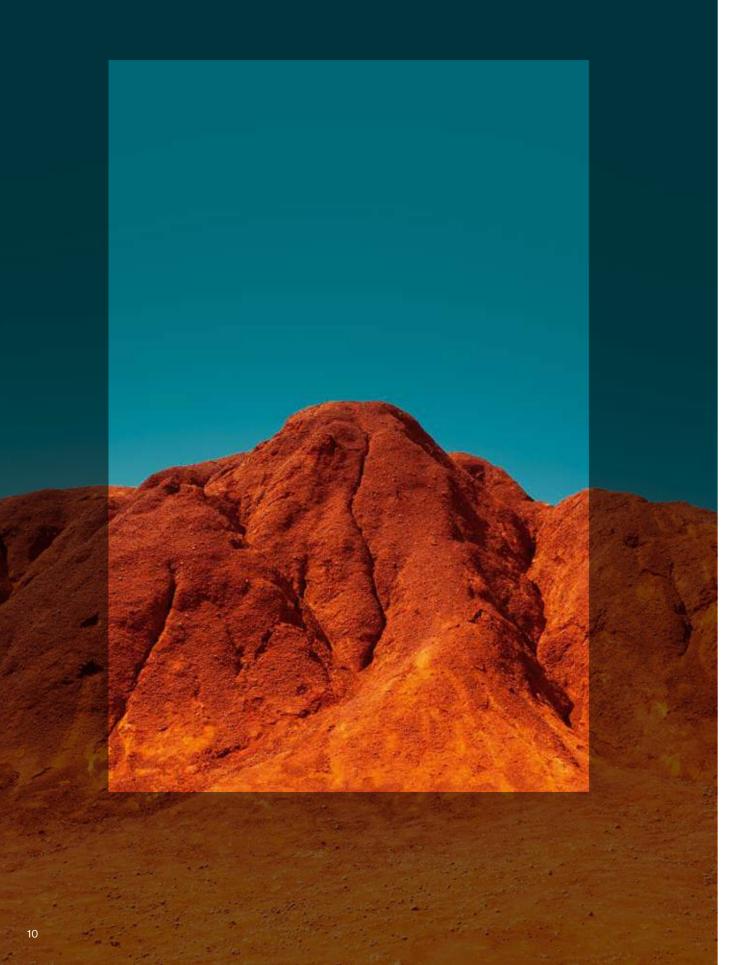
This is what we have considered in the design of Terrælino. The result is an organic set of colors, that can stand by themselves or that can be harmonically blended in infinite combinations.

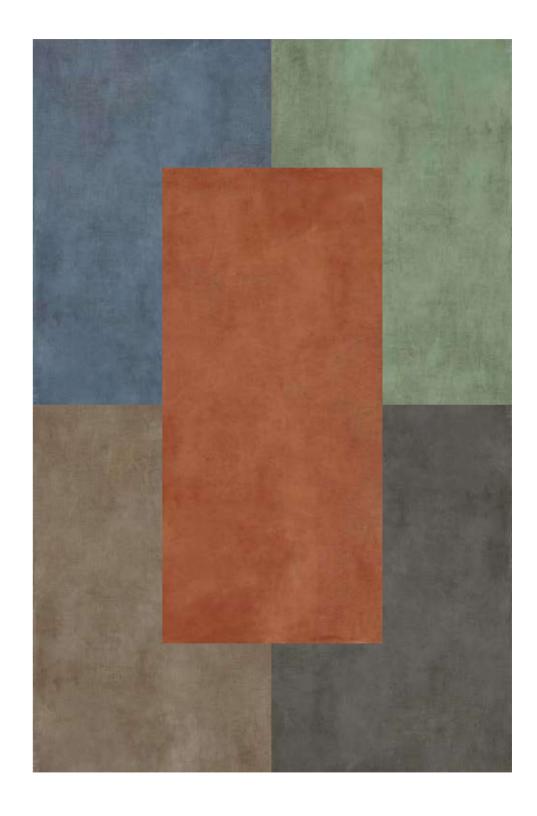
A wide range of options for interior and exterior applications, in residential, commercial, work or public spaces.







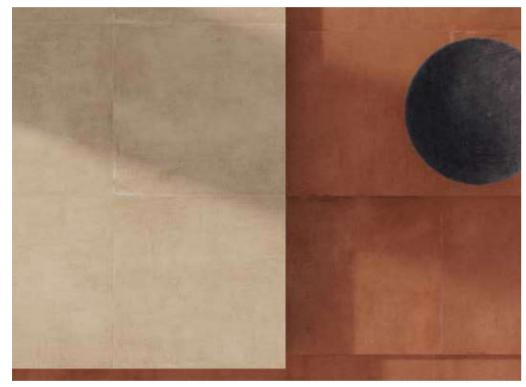




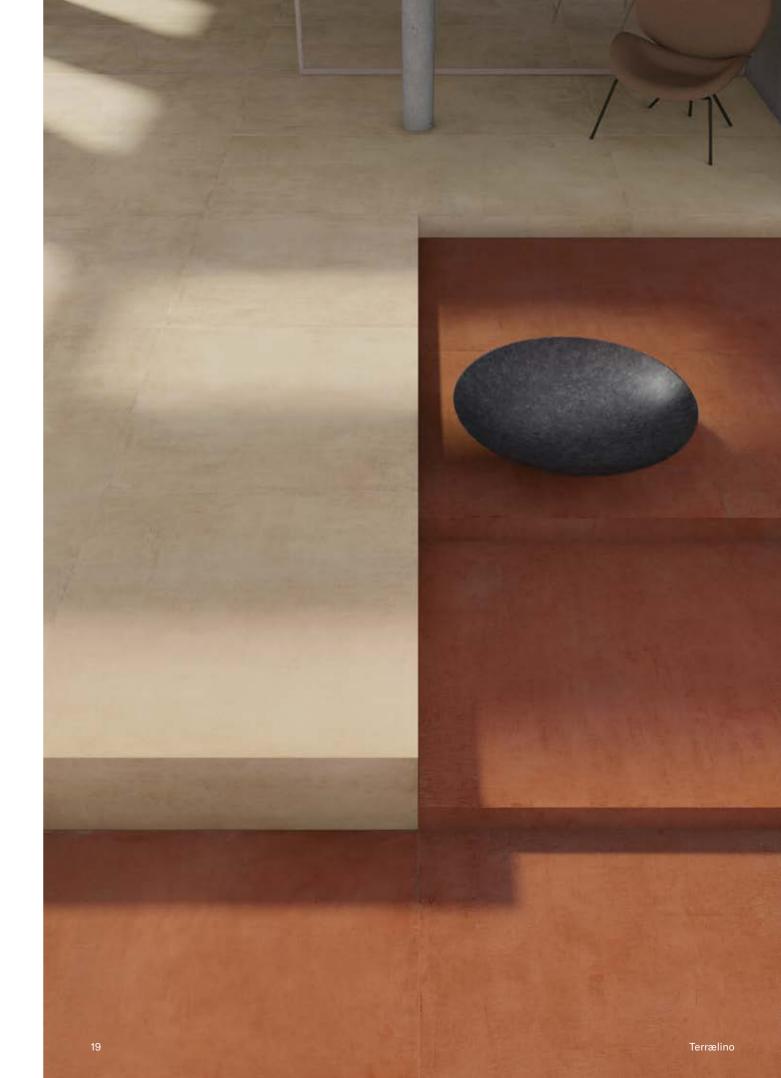








Floor: Terrælino Sabbia 120x240 cm, Melograno 120x120 cm





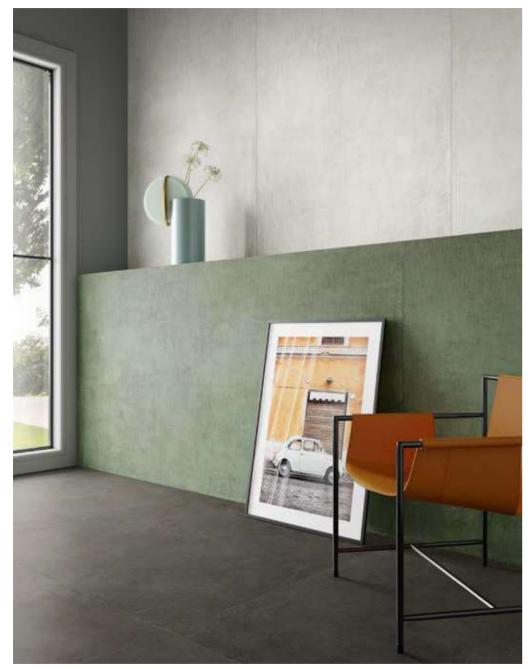




Wall: Terrælino Fango 120x240 cm Floor: Terrælino Calce 120x120 cm







Wall: Terrælino Menta 120x120 cm, Gesso 120x240 cm Floor: Terrælino Pepe 120x120 cm







Wall: Terrælino Pepe 120x240 cm Floor: Terrælino Gesso 120x120 cm





Terrælino

Wall: Terrælino Fango, Ginepro 120x240 cm, Melograno, Ginepro 60x120 cm Floor: Terrælino Sabbia 120x120 cm

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Wall: Terrælino Fango, Ginepro 120x240 cm, Melograno, Ginepro 60x120 cm Floor: Terrælino Sabbia 120x120 cm





Wall: Terrælino Calce 120x240 cm Floor: Terrælino Fango, Melograno 120x120 cm



Floor: Terrælino Fango, Melograno 120x120 cm



### 9 Colors

Full body-colored porcelain stoneware (International standard) | Vitrified stoneware (Indian standard). Rectified | 9 mm thickness



Calce (Limestone)



Argilla (Grey Clay)



Melograno (Pomegranate)





Fango (Brown Clay)





### Ginepro (Juniper Berry)



### **1** Surface: naturale

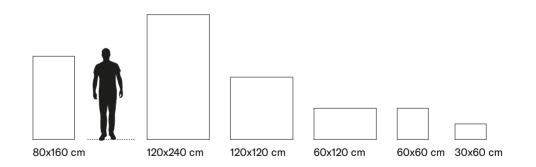
Naturale refers to R10 finish. R9, R11, R12 finishes on request.





### 6 Sizes

120x240 cm | 120x120 cm | 80x160 cm | 60x120 cm | 60x60 cm | 30x60 cm



Article		Size (cm)	Item code
	Gesso	120x240 120x120 60x120 80x160 60x60 30x60	F14TRLAONRO F12TRLAONRO F62TRLAONRO F86TRLAONRO F60TRNAONRO F36TRLAONRO
	Calce	120x240 120x120 60x120 80x160 60x60 30x60	F14TRLB1NRO F12TRLB1NRO F62TRLB1NRO F86TRLB1NRO F60TRNB1NRO F36TRLB1NRO
	Sabbia	120x240 120x120 60x120 80x160 60x60 30x60	F14TRLBONRO F12TRLBONRO F62TRLBONRO F86TRLBONRO F60TRNBONRO F36TRLBONRO
	Argilla	120x240 120x120 60x120 80x160 60x60 30x60	F14TRLGONRO F12TRLGONRO F62TRLGONRO F86TRLGONRO F60TRNGONRO F36TRLGONRO
	Fango	120x240 120x120 60x120 80x160 60x60 30x60	F14TRLFONRO F12TRLFONRO F62TRLFONRO F86TRLFONRO F60TRNFONRO F36TRLFONRO
	Рере	120x240 120x120 60x120 80x160 60x60 30x60	F14TRLKONRO F12TRLKONRO F62TRLKONRO F86TRLKONRO F60TRNKONRO F36TRLKONRO

Article		Size (cm)	Item code
	Melograno	120x240 120x120 60x120 80x160 60x60 30x60	F14TRLCONRO F12TRLCONRO F62TRLCONRO F86TRLCONRO F60TRNCONRO F36TRLCONRO
	Menta	120x240 120x120 60x120 80x160 60x60 30x60	F14TRLEONRO F12TRLEONRO F62TRLEONRO F86TRLEONRO F60TRNEONRO F36TRLEONRO
	Ginepro	120x240 120x120 60x120 80x160 60x60 30x60	F14TRLLONRO F12TRLLONRO F62TRLLONRO F86TRLLONRO F60TRNLONRO F36TRLLONRO

### **Destinations of use**

Naturale and Matt surfaces



COMMERCIAL LIGHT TRAFFIC





### installation suggestions

A 2 mm joint is recommended for optimal aesthetics taking advantage of the tiles caliber in multi-sized applications. Both cement and epoxy grout can be used; grout-design color matching advisable for optimal aesthetics. It is not recommended to use grouting with colored pigments in contrast with the color of the tiles.

## Essence

### POWERED BY YOUR NEEDS

Complementarity is the main value we make available to our customers. Because they need reliable, advanced and stylistically refined technological solutions, and our long experience in the design field allows us to master these aspects with great responsiveness.

But at the same time, they are always driven by the ambition to embody new intuitions, and with the utmost propensity to listen, combined with an innate curiosity, we always try to **capture these needs and translate them into innovative ideas**.

In contemporary markets, solidity and flexibility are no longer antithetical: designers, builders and final consumers are looking for interlocutors who, like us, have the right strength to **offer certainties**. But they also have the necessary dynamism to constantly feed innovation processes, and thanks to **our innate propensity to experiment** with new paths, we are able to meet these needs too.

Everywhere in the world, beauty is an indispensable value and is the main source of inspiration for architects and designers. This is why we work hard to translate **Italian creativity**, the result of an unmistakable history and lifestyle with centuries of history behind it, into beautiful products, **excellent from an aesthetic, qualitative and technical** point of view.

Equally indispensable, finally, is the need for transparent, open and dialogue-based relations. Aware of this, we devote great importance to the **care of relationships** with our interlocutors, also through a meticulous culture of service that goes hand in hand with that of production.

Because our work can only be said to be finished when **our customers** fully satisfy their aspirations and **achieve their goals**.







# **Focus on quality**

Parameters of physical & chemical quality ISO 13006 Annex G

Though the main focus of customers is on aesthetics, physical features and chemical properties of slabs and tiles are very important for the eventual result of any surface installation and, in the end, for customer's satisfaction.

Physical features are important for the ease and quality of installation and for some aspects of durability, in particular with slabs and large size tiles, that cannot be installed properly if their geometry is not perfect and that might break if not flexible enough (contrary to conventional belief, a slab is more robust if flexible rather than rigid).

### The key physical features are:

 The sharpness and regularity of geometrical dimensions, as well as the overall surface quality (for whose assessment that goes well beyond ISO norms)

 The physical properties that affect installation and durability.

Chemical properties are important for maintenance and other aspects of surface durability, as they determine resistance to stain and acids, as well as cleanability.

### **Usage-Related Performance Properties**

Usage-related features are important for maintenance and other aspects of **surface and body durability**, as they determine the surface performance such as its resistance to traffic, stains and acids, as well as cleanability and slip resistance. **Dimension and surface characteristics** Geometrical characteristics of products are important for the ease and quality of installation:

 Precise dimensions are important in particular for large size slabs (above 60x120 cm), that cannot be installed properly if their geometry is not perfect

- Flatness is important in particular for small sizes (below or equal 60x120 cm) as high quality slabs flex and naturally adjust to the floor (a perfectly flat floor can be easily installed following Installation Procedure for large slabs)

Intrinsic Physical Characteristics

Physical properties of slabs are important for the durability of the surface, both indoor and outdoor (floors and façades):

 Very low water absorption is key to avoid penetration of humidity and chemicals that may create stains, deteriorate the surface or cause breakages of the body

- High breaking strength and modulus of rupture are important to sustain weight in flooring applications and to resist high wind load pressure in façades

 The superior physical performance of slabs using high quality body and proper sinterization is a key advantage compared to natural stone.

# **Packaging & shipping**

Packaging & delivery

Packaging is a fundamental element of customer service, being aimed at allowing maximum use of space/weight available and to minimize the risk of breakages, even on bumpy roads.

**Our** packaging standards are based on carefully designed box and pallet packaging for the optimal load of trucks and containers.

That is very important when large tiles format are to be delivered and our Logistics Department has devised a number of packaging system depending on product sizes and means of transport, including Euro-size pallets and metal A-frames.

Though shipping usually takes place under the customer's responsibility, we are fully committed to help clients manage this activity in the best possible way.

Our Customer Service Department works with clients and logistic companies to arrange for shipments and to guarantee that loading and unloading procedures are properly carried out, in particular at destination. Slabs & large size tiles



Standard size tiles



Pallet weight (Kg)

2347,00

1510,00

1582,00

1003,00

1077,00

943,00

A-Frame

Standard europallet

### Packaging info

Shipments to domestic markets (India)

Nominal Size cm	Thickness mm	Pcs. x box	Sq. mt x box	Weight x box (Kg)
120x240	9	1	2,87	61,00
120x120	9	2	2,87	60,00
80x160	9	2	2,55	54,00
60x120	9	2	1,43	30,00
60x60	9	4	1,43	31,00
30x60	9	6	1,07	23,00

Nominal Size cm	Thickness mm	Pcs. x box	Sq. mt x box	Weight x box (Kg)	Box x pallet	Sq. mt x pallet
120x240	9	1	2,87	61,00	37	106,30
120x120	9	2	2,87	60,00	24	68,88
80x160	9	2	2,55	54,00	28	71,40
60x120	9	2	1,43	30,00	32	45,82
60x60	9	4	1,43	31,00	34	48,69
30x60	9	6	1,07	23,00	40	42,72

Size						
Nominal Size cm	Actual Size cm					
120x240	119,8x239,8					
120x120	119,8x119,8					
80x160	79,8x159,8					
60x120	59,8x119,8					
60x60	59,8x59,8					
30x60	29,8x59,8					

Tiles are packaged in a random manner and company cannot guarantee the type of faces inside each package.

# Installation guidelines

### 1. Handling



- To prevent breakage, we recommended to keep all Large Format Tiles in their original packaging during handling.
- Tiles measuring 60x120 cm or less can be handled by hand.
- To handle Large Format Tiles, we recommend to use lifting tools with a sufficient load capacity.
- The use of forklift is recommended; however, it has to be equipped with following fork details:
  - minimum length of 1.2 m if the crates are handled resting on the long side
  - minimum length of 2.1 m if the crates are handled resting on the short side
- It is recommended that you handle the A Frame individually.

### 2. Cutting



 When cutting Large Format Tiles, we recommend to use professional dry cutters. Using other tools may lead to uneven cuts or breakage of the material. It is recommended to check the cutter blade before any cut. A damaged blade increases the risk of damaging.

### 3. Background



- Prepare a screed with a perfectly flat, dry, compact, dust-free surface, with no cracks or other visible damage.
- The ideal height difference should be no more than 3 mm, measured using a 2 m spirit level
- In case of slightly cracked or non-solid screed, it is recommended to use as crack preventing mat between substrate & slab. Screed should have suitable hardness and mechanical resistance to stresses due to the final uses. It should be prepared

using perimeter bands & all structural expansion joints as necessary.

- Moisture of the screed must be ≤ 4%.
  It should be according to BS 8204-1-2003 or
- DIN 18560 standards.

### 4. Laying with adhesives



- We recommend laying with this technique, which should be carried out by suitably qualified workers with appropriate equipment.
- While choosing the adhesive, we recommend you to bear in mind the following: type of Large Format Tiles (group to which they belong and size), type of surface to be tiled and intended use of room.
- It is recommended to have dry laying before final laying. Direction of tiles can be checked through punches (on the back of tiles).
- Adhesive should be applied on the floor as well as on backside of tiles with 3-4 mm thickness.
- To make corrections, we recommend you to check the material before the adhesive dries
- Adhesive will vary depend on the surface so follow manufacturer recommendation. Cementitious Adhesive (C2 Category C2TES1) is recommended.
- Apply the adhesive onto the back of the slab with a 3mm trowel and should be well distributed on corners & edges.
- It must be spread over in one direction only. Ideally it should be spread towards shortest direction of the tile.
- Spread the adhesive for one tile (pc) onto the floor substrate using a 15mm U-notch or a 10mm V-notch trowel and following the same direction as previously applied to the back of the slab. Adhesive should have 100% contact with tiles/substrate to avoid hollow sounding.
- It is recommended to start from the centre of the slabs and then move towards the edges.
- Tap the slab with a rubber mallet for a complete fixing ensuring the air is expelled.
- It is recommended to handle slabs with appropriate equipment.

### 5. Joints



- Deciding where to position the joints is also a part of the work which should be entrusted to qualified workers.
- The joints must be positioned:
  - on structural connections (structural joints)
  - between the wall and the floor (perimeter joints)
    between one tile and another (laving joints or gaps)
  - between the the and another haying joints of gaps)
     between tiles and other materials
- (e.g. pairings between ceramic, linoleum, or wood).
- A 2 mm joint spacer is suggested for all sizes.
- For Large Format Tiles, a 2 mm joint is strongly recommended, as well as proper positioning of spacers on floor sides.
- With help of 2 mm spacer & thanks to a 0.8 caliber (meaning that a 120x240 cm minimal size actually measures 119.8x239.8 cm), different sized tiles can be used within a single floor pattern, while still achieving perfect laying.

### 6. Use of tile leveling system during the installation



- For optimum surface performances, it is strongly recommended to use a tile leveling system.
- This solution also acts as a spacer for joints, thus contributing to make the installation more accurate.

### 7. Grouting



- We recommend you to use grout with the same color as the product.
- We recommend you to wait for the adhesive to dry completely before grouting the joints.
- We also advise you to ensure there is no adhesive or dust in the joints.
- Apply the grout using rubber trowel.
- Both cement & epoxy grout can be used. It is not recommended to use grouting with colored pigments in contrast with color of tiles.
- We recommend you to grout no more than 4-5 square metres of tiling at a time. This applies in particular when laying textured, non-slip and polished tiles.
- You are advised to remove all excess grout from the tile surface while the grout is still wet, working in diagonal movements. This applies in particular to tiles laid in outdoor areas.
- Use a damp sponge and perfectly clean water to thoroughly clean the entire tiled surface and the joints.
- We then recommend that you dry the surface with a damp cloth.
- Considering how quickly epoxy grouts set, if these are used, we recommend you to clean the excess grout off immediately with a sponge and plenty of water.
- On the day after grouting, you should give the laid tiles a second cleaning with alkaline detergents.

### 8. Cleaning after laying



- Thorough initial cleaning is essential to ensure the tiles a long-lasting appearance over time. It should not be carried out until at least 4 to 5 days after laying and grouting but no later than 10 days afterwards.
- For washing, we advise you to use an acid-based product, diluted according to the instructions provided by the manufacturer. However, we advise against the use of products containing hydrofluoric acid or derivatives thereof.
- It is a good idea to use a piece of unlaid tile, or a hidden part of the laid tiles, to check the resistance of the ceramic surface to the acid. This applies in particular when laying honed or polished tiles.
- When you start washing, it is worthwhile soaking the tiled surface first of all, focusing in particular on the joints. The acid solution must be left to work for no more than two minutes and must never be left to dry.
- To remove the acid solution, one of the following methods should be used: single-brush machine equipped with a non-abrasive disc, a wet vacuum, or washing by hand. After removing the solution, we recommend you rinse the tiled surface thoroughly.
- In the event that machines are used, we suggest that you finish off the job by hand in the harder to reach spots, such as the corners of the walls.

### 9. Ordinary cleaning and care of surfaces



- For ordinary cleaning, simply wash with warm water and cloths and/or soft sponges. If necessary, neutral detergents can also be used. If you have non-neutral detergents, remember to test their effects on a piece of an unlaid tile or on a hidden part of the tiled surface.
- Abrasive cleaners should not be used on glossy and/ or polished tiles; this kind of detergent can be used on tiles with matt surfaces though; In the event, you should still test the effects on a piece of an unlaid tile or on a hidden part of the tiled surface.
- We also advise against the use of soaps, waxes, or rinse aids.
- To remove traces of grease or oil on the surfaces, we suggest you use detergents with organic or alkaline solvents (pH> 9), rinsing properly at the end.
- In large areas, appropriate industrial washer-dryers can be used, taking care to finish off drying by hand where necessary.
- Abrasive tools (such as metal pads or rigid brushes) should not be used on tiled surfaces.
- After Installation of the floor, it should be properly covered with suitable material in order to prevent tiles from damage or scratches because of on-site processing. It is also important not to drag heavy objects across the surface to avoid scratches.

### **TERRÆLINO**

Quality standards All tests are carried out by italian laboratories accredited according to ISO/IEC 17025:2017 Standards according to ISO 13006: Annex G - EN 14411: Annex G. Dry - Pressed Ceramic Tiles.

	TECHNICAL FEATURE	STANDARD METHOD ISO	UNIT	REQUIREMENTS	Values			
QUALITY ITEMS				ISO 13006:2018(E) E <sub>v</sub> ≤0,5% GROUP Bla	SIZE < 1200 mm		SIZE ≥ 1200 mm (SLABS)	
					%	mm	%	mm
	Width	ISO 10545 - 2	mm	± 0,3%	± 0,1%	± 0,8 mm	± 0,1%	±1mm
	Length	ISO 10545 - 2	mm	± 0,3%	± 0,1%	± 0,8 mm	± 0,1%	± 1,2 mm
	Thickness	ISO 10545 - 2	mm	± 5,0%	± 4%	± 0,5 mm	± 4%	± 0,5 mm
DIMENSIONS AND SURFACE	Straightness of Side	ISO 10545 - 2	mm	± 0,3%	± 0,1%	± 0,8 mm	± 0,1%	±1mm
QUALITY	Rectangularity	ISO 10545 - 2	mm	± 0,3%	± 0,1%	± 1,3 mm	± 0,1%	± 1,5 mm
	Surface Flatness	ISO 10545 - 2	mm	± 0,4%	± 0,1%	± 1,8 mm	± 0,2%	±3 mm
	Surface Quality	ISO 10545 - 2	-	A minimum of 95% of the tiles are to be free from visible defects which can impair the appearance of a major area of tiles	95%			
	Water Absorption	ISO 10545 - 3	%	≤ 0,5%, Individual 0,6%	Avg. ≤ 0,08%, Individual 0,2%			
	Modulus of Rupture	ISO 10545 - 4	N/mm <sup>2</sup>	Min. 35, Individual Min. 32	Min. 42			
	Breaking Strength	ISO 10545 - 4	N	Not less than 1300	Min. 1800			
	Moisture Expansion	ISO 10545 - 10	mm/m	-	0,02			
	Surface Abrasion Resistance to surface abrasion of glazed tiles intended for use on floors	ISO 10545 - 7	Class	Minimum Class -II Report abrasion class and cycles passed	Class IV (> 2100 Cycles)			
	Mohs Hardness of surface	NA	-	-	7			
PHYSICAL	Coefficient of linear thermal expansion from ambient temperature to 100 °C	ISO 10545 - 8	K-1	As declared by the Manufacturer	6x10 <sup>-6</sup> K <sup>1</sup> max			
PROPERTIES	Thermal Shock Resistance	ISO 10545 - 9	-	As declared by the Manufacturer	No damage			
	Crazing Resistance: glazed tiles	ISO 10545 - 11	-	Required	No damage for Min. 10 Cycles			
	Bulk Density	ISO 10545 - 3	g/cc	2,2	2,2			
	Impact Resistance	ISO 10545 - 5	-	As declared by the Manufacturer	0,55			
	Frost Resistance	ISO 10545 - 12	-	As declared by the Manufacturer	No change			
	Slip Resistance	ANSI A137,1 DIN 51130		As declared by the Manufacturer	DCOF > 0,51 R-10			
	Small color differences	ISO 10545 - 16	-	Plain colored tiles only where required GL: $\Delta E < 0.75$ UGL: $\Delta E < 1.0$	No change			
CHEMICAL PROPERTIES	Resistance to staining	ISO 10545 - 14	Class	Minimum Class 3	Class 4			
	Resistance to household chemicals and swimming pool salts	ISO 10545 - 13	Class	Minimum B	Minimum A			
	Resistance to acids & alkalis	ISO 10545 - 13	Class	As declared by the Manufacturer		Minimum B		

