CASARAGA

TERRAZZO FULLBODY TILES

6 0 0 x 1 2 0 0 m m

casa
FULLBODY TILES

The category of homogeneous products, 'Full Body', is widely appreciated by Architects and Interior Designers due to its versatile uses and applications. ‘CASA RAGA’ is our most exciting series of homogeneous products yet.

The beauty of ‘CASA RAGA' is the result of innovative and exclusive technology, ‘Hybrid+'. This technology is first of its kind in India, which is equipped with the newest digital micro nano polished system, with this extraordinary technology, we have created six ‘CASA RAGA designs using coloured clay powder and clay flakes throughout the body without using any conventional liquid ink or glaze on the surface. For the convenience of choice, all six designs are available in Diamond surface.

Designed Exclusively For
SIGNATURE SEGMENT

CASARAGA
COLLECTION

COSINESS
OF RICHNESS

It is well established amongst the Architectures and Interior Designers that every now and then, we at Casa bring new innovative full body products to the table. Inspired by the scattered and grainy terrains the Raga Series from Casa revives the classic full body design of salt and pepper featuring a sprinkled flakes design that stays timeless.

Here we are again, going a step closer to the richness. With the first-of-its-kind, CASA RAGA Collection is made with Diamond Surface - Micro Nano Polished System.

CASA RAGA consist of 6 extraordinary colors separated into one surface according to their visual appeal.

6 COLORS

1 SURFACE

1 SIZE

casa FULLBODY TILES

RAGA BARLEY

RAGA BIANCO

RAGA GREY

RAGA NERO

RAGA WHITE

RAGA COCOA

COLOUR PALETTE
DIAMOND SURFACE

CASARAGA

TERRAZZO FULLBODY TILES

FLOOR : RAGA BIANCO

SCAN FOR

- 360° Visual
- Walkthrough
- Tiles Image

RAGA BIANCO

Category	: **Basic**
Surface	: **Diamond**
Size	: **600x1200mm**

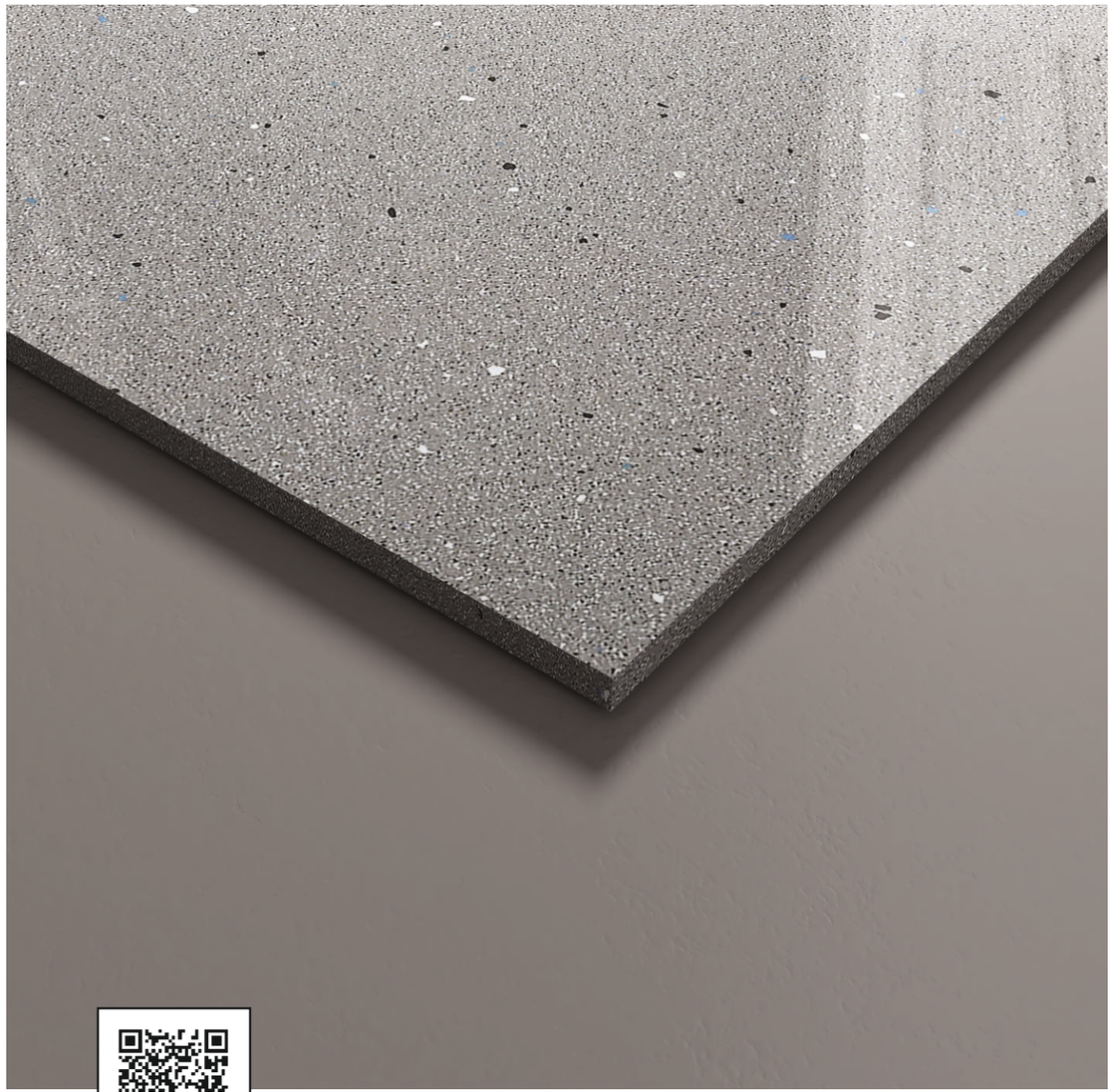
CASARAGA

TERRAZZO FULLBODY TILES

CASARAGA

TERRAZZO FULLBODY TILES

WALL : RAGA GREY
FLOOR : RAGA GREY



SCAN FOR

- 360° Visual
- Walkthrough
- Tiles Image

RAGA GREY

Category	: **Basic**
Surface	: **Diamond**
Size	: **600x1200mm**

CASARAGA

TERRAZZO FULLBODY TILES

CASARAGA
TERRAZZO FULLBODY TILES

WALL : RAGA BARLEY
FLOOR : RAGA BARLEY

SCAN FOR

- 360° Visual
- Walkthrough
- Tiles Image

RAGA BARLEY

Category	: **Basic**
Surface	: **Diamond**
Size	: **600x1200mm**

CASARAGA

TERRAZZO FULLBODY TILES

CASARAGA

TERRAZZO FULLBODY TILES

FLOOR : RAGA WHITE

SCAN FOR

- 360° Visual
- Walkthrough
- Tiles Image

RAGA WHITE

Category	: **Basic**
Surface	: **Diamond**
Size	: **600x1200mm**

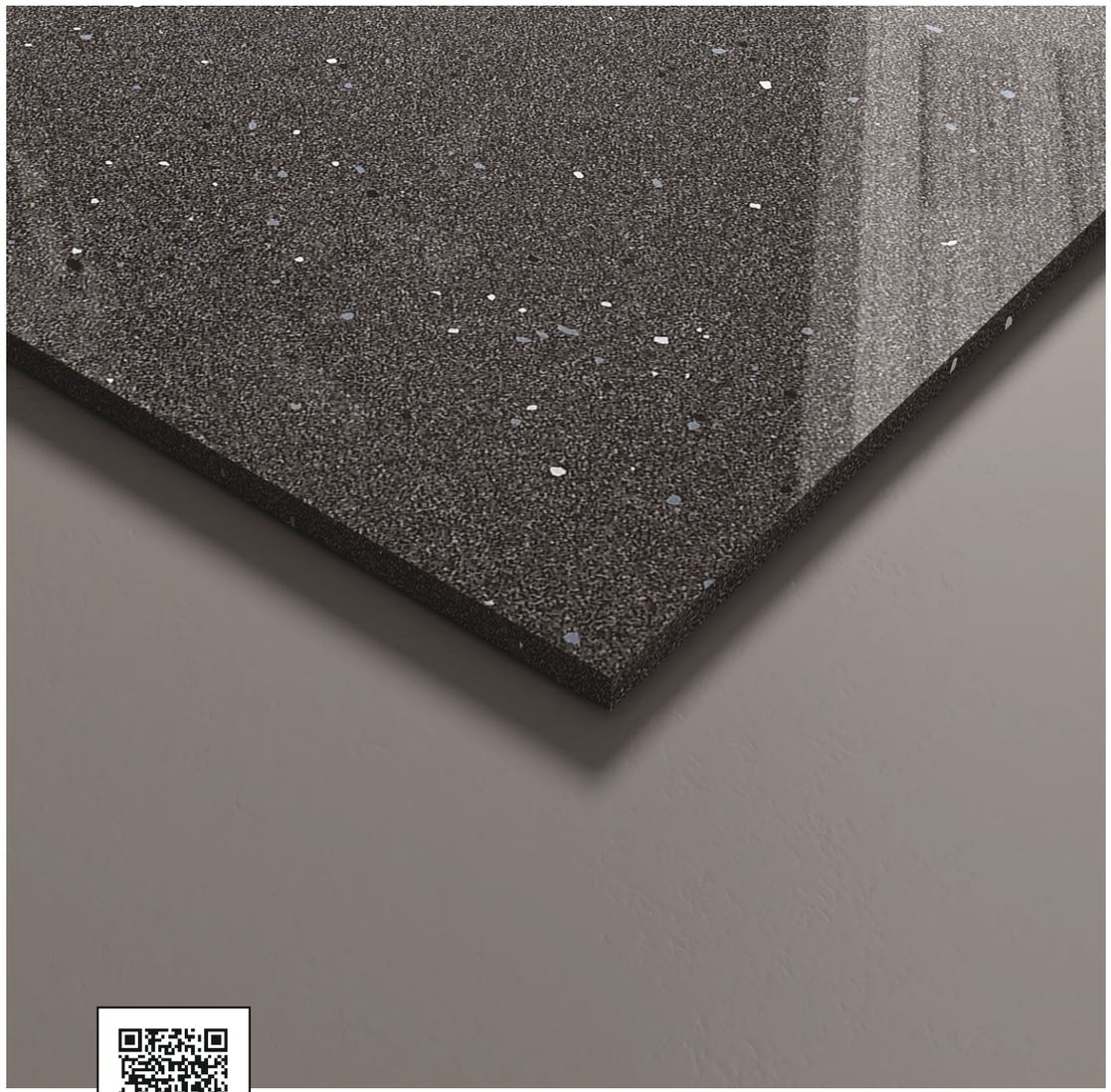
CASARAGA

TERRAZZO FULLBODY TILES

CASARAGA

TERRAZZO FULLBODY TILES

FLOOR : RAGA NERO



SCAN FOR

- 360° Visual
- Walkthrough
- Tiles Image

RAGA NERO

Category	: **Basic**
Surface	: **Diamond**
Size	: **600x1200mm**

CASARAGA

TERRAZZO FULLBODY TILES

CASARAGA

TERRAZZO FULLBODY TILES

WALL : RAGA COCOA & RAGA BIANCO
FLOOR : RAGA COCOA

SCAN FOR
- 360° Visual
- Walkthrough
- Tiles Image

RAGA COCOA

Category	: Basic
Surface	: Diamond
Size	: 600x1200mm

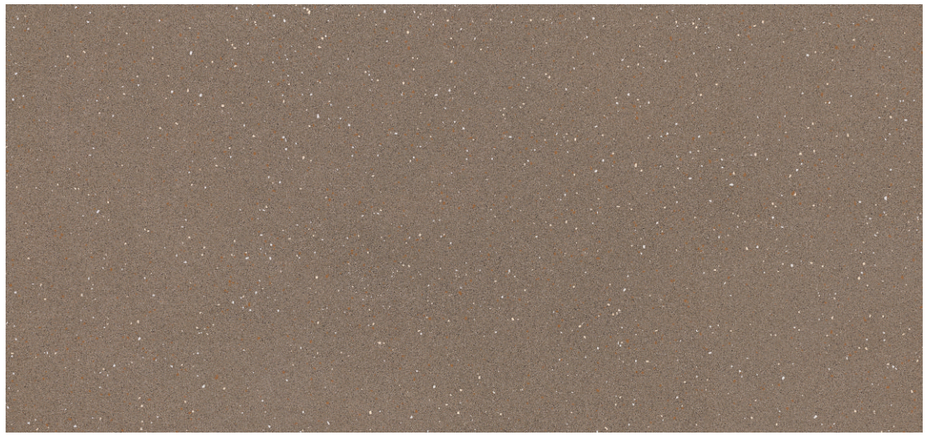
CASARAGA
TERRAZZO FULLBODY TILES

RAGA BIANCO

Category : Light

RAGA GREY

Category : Light

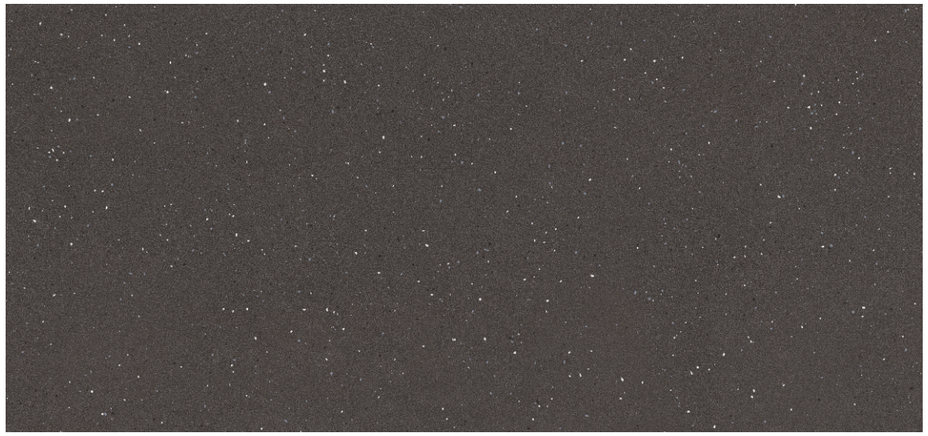


RAGA BARLEY

Category : Light

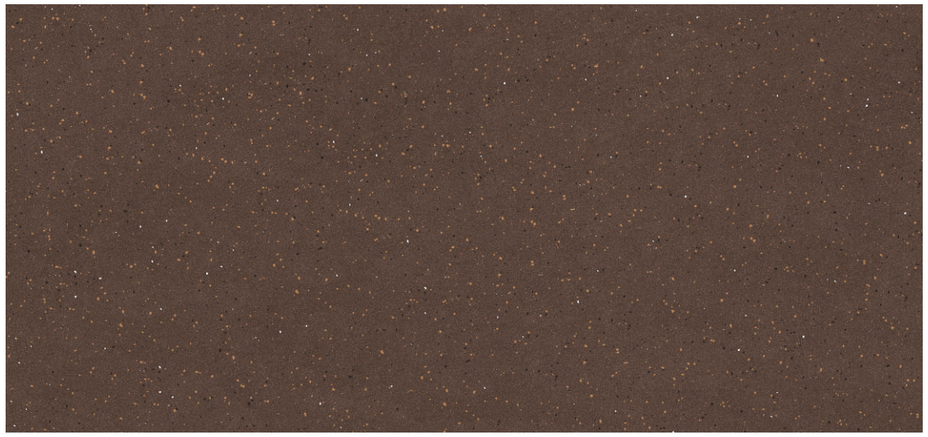
RAGA WHITE

Category : Dark



RAGA NERO

Category : Dark



RAGA COCOA

Category : Dark

COMMONLY AFFECTED STAINS GUIDANCE

For highly aggressive cleaning caused by some common food and substances, follow the table below.

SR. NO.	SUBSTANCES	NANO TREATED SURFACE	REGULAR SURFACE
A. DOMESTIC AREA			
1	GREEN VEGETABLE STAIN	WET COTTON CLOTH	MILD DETERGENT
2	FRUIT STAIN	WET COTTON CLOTH	MILD DETERGENT
3	DAL-SAMBHAR	WET COTTON CLOTH	CITRIC ACID/NIMBU
4	CURRY	WET COTTON CLOTH	CITRIC ACID/NIMBU
5	TOMATO SAUCE	WET COTTON CLOTH	CITRIC ACID/NIMBU
6	SOYA SAUCE	WET COTTON CLOTH	MILD DETERGENT/CITRIC ACID/NIMBU
7	EDIBLE OIL	WET COTTON CLOTH	BAKING SODA/MILD DETERGENT/ACETONE#/TURPENTINE#
8	SINDUR OIL MIX	WET COTTON CLOTH	BAKING SODA/MILD DETERGENT/ACETONE#/TURPENTINE#
9	GHEE	WET COTTON CLOTH	BAKING SODA/MILD DETERGENT/ACETONE#/TURPENTINE#
10	COLD DRINKS	WET COTTON CLOTH	MILD DETERGENT/HOUSEHOLD CLEANER
11	TEA	WET COTTON CLOTH	MILD DETERGENT/HOUSEHOLD CLEANER/STRONG ALKALINE SOLUTION
12	COFFEE	WET COTTON CLOTH	MILD DETERGENT/HOUSEHOLD CLEANER/STRONG ALKALINE SOLUTION
13	WAX	WET COTTON CLOTH	PAINT REMOVER
14	LEAD PENCIL	WET COTTON CLOTH	PLAIN WATER/HYDROCHLORIC ACID
15	SKETCH PEN	WET COTTON CLOTH	HOUSEHOLD DETERGENT
16	NORMAL COLOUR PENCIL	WET COTTON CLOTH	HOUSEHOLD DETERGENT
17	WAX PENCIL	WET COTTON CLOTH	PAINT REMOVER
18	WATER COLOUR	WET COTTON CLOTH	PLAIN WATER
19	MARKER	WET COTTON CLOTH	DILUTE SULPHURIC ACID#/TOLUENE#/XYLENE#
20	NAIL POLISH	NAIL POLISH REMOVER	NAIL POLISH REMOVER
21	SHOE POLISH LIQUID	WET COTTON CLOTH	HOUSEHOLD DETERGENT
22	CHERRY SHOE POLISH	WET COTTON CLOTH	WET COTTON CLOTH
23	HAIR DYE	DILUTE NITRIC ACID	DILUTE NITRIC ACID
24	HAIR MEHENDI	DILUTE HYDROCHLORIC ACID	DILUTE HYDROCHLORIC ACID
25	LIPSTICKS	WET COTTON CLOTH	HYDROGEN PEROXIDE/HOUSEHOLD CLEANER
26	BLUE INK	WET COTTON CLOTH	ACETONE#/TURPENTINE#/TRICHLOROETHYLENE#
27	BLACK INK	WET COTTON CLOTH	ACETONE#/TURPENTINE#/TRICHLOROETHYLENE#
28	HAND MEHENDI	WET COTTON CLOTH	DILUTE HYDROCHLORIC ACID
29	TURMERIC	WET COTTON CLOTH	MILD DETERGENT
30	GLUE	WET COTTON CLOTH	ACETONE#/TURPENTINE#
31	UJALA	WET COTTON CLOTH	ACETONE#/TURPENTINE#/TRICHLOROETHYLENE#
32	TOMATO KETCHUP	WET COTTON CLOTH	CITRIC ACID/NIMBU
33	OLIVE OIL	WET COTTON CLOTH	BAKING SODA/MILD DETERGENT/ACETONE#/TURPENTINE#
34	MUSTARD OIL	WET COTTON CLOTH	BAKING SODA/MILD DETERGENT/ACETONE#/TURPENTINE#
B. HOTEL/FAST FOOD/CAFÉ HOUSE ETC			
1	DAL	WET COTTON CLOTH	CITRIC ACID/NIMBU
2	CURRY	WET COTTON CLOTH	CITRIC ACID/NIMBU
3	TURMERIC	WET COTTON CLOTH	MILD DETERGENT
4	CHILLI	WET COTTON CLOTH	MILD DETERGENT
5	EDIBLE OIL	WET COTTON CLOTH	BAKING SODA/MILD DETERGENT/ACETONE#/TURPENTINE#
6	PICKLE	WET COTTON CLOTH	CITRIC ACID/NIMBU
7	TOMATO SAUCE	WET COTTON CLOTH	CITRIC ACID/NIMBU
8	CHILLI SAUCE	WET COTTON CLOTH	BAKING SODA/MILD DETERGENT
9	SOYA SAUCE	WET COTTON CLOTH	MILD DETERGENT/CITRIC ACID/NIMBU
10	COLD DRINKS	WET COTTON CLOTH	MILD DETERGENT
11	FRUIT STAIN	WET COTTON CLOTH	MILD DETERGENT
12	WINE/ALCOHOL	WET COTTON CLOTH	MILD DETERGENT
13	TEA	WET COTTON CLOTH	MILD DETERGENT/HOUSEHOLD CLEANER
14	COFFEE	WET COTTON CLOTH	MILD DETERGENT/HOUSEHOLD CLEANER
15	ICE CREAM	WET COTTON CLOTH	MILD DETERGENT/HOUSEHOLD CLEANER
16	CIGARETTE END	WET COTTON CLOTH	HYDROCHLORIC ACID

SR. NO.	SUBSTANCES	NANO TREATED SURFACE	REGULAR SURFACE
A. DOMESTIC AREA			
1	PAINT	WET COTTON CLOTH	PAINT REMOVER/METHYLE ETHYL KETONE#/TOLUENE#
2	EPOXY/RESIN	WET COTTON CLOTH	TRICHLOROETHYLENE#/DICHLORO METHANE#
3	GLUE	WET COTTON CLOTH	ACETONE#/TURPENTINE#
4	RUST	WET COTTON CLOTH	HYDROCHLORIC ACID
5	TAR	WET COTTON CLOTH	TRICHLOROETHYLENE#/METHYLE ETHYL KETONE#
6	TYRE MARK	WET COTTON CLOTH	METHYLE ETHYL KETONE#
7	CEMENT	WET COTTON CLOTH	HYDROCHLORIC ACID
8	BLOOD	WET COTTON CLOTH	DILUTE NITRIC ACID
9	GREASE	WET COTTON CLOTH	DETERGENT
10	MOBIL OIL	WET COTTON CLOTH	DETERGENT
11	METHYLNE BLUE	WET COTTON CLOTH	PHOSPHORIC ACID#/HYDROCHLORIC ACID
12	IODINE	WET COTTON CLOTH	HYDROCHLORIC ACID
13	RED AGENT	WET COTTON CLOTH	WET COTTON CLOTH
14	GREEN AGENT	WET COTTON CLOTH	WET COTTON CLOTH
15	POTASSIUM PARMANGANET	WET COTTON CLOTH	HYDROCHLORIC ACID
16	VARNISH	WET COTTON CLOTH	ACETONE#/TURPENTINE#

HYBRID+ TECHNOLOGY

The latest Hybrid+ Sintering Technology is capable of reaching very high temperatures of up to 1225°C and above. Therefore the technical characteristics of full body tile are strengthened and amplified. The resultant product has high strength with a certain amount of elastic flexibility.

IMPACT RESISTANCE

This material has incredible strength. The MOR is 40N/mm2 (granite is 13.8N/mm2), breaking strength 2000N (at least 30% to 40% better than granite) and impact resistance of 0.55.

ZERO WATER ABSORPTION (< 0.06%)

The hybrid+ sintering at exceptionally high temperatures renders the product resistant to scratching, staining and fading because of its near zero water absorption (> 0.06%) whereas in case of granite, it is 0.15%.

STAIN RESISTANT

Low porosity makes these sintered surfaces impervious to harsh chemicals like bleach, hydrochloric acid and other cleaning agents. Sintered slabs are able to withstand extreme heat and can be spray painted with no irreversible damage to the material.

INSTALLATION PROCESS

CUTTING

- When cutting 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 damage.

BACKGROUND / BASE / SCREED

- 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 4 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 & Tiles. 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.
- It should be according to BS 8204-1-2003 or DIN 18560 standards.

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 Format Tiles, type of surface to be tiled and intended use of room.
- 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 depending on the surface so follow manufacturer recommendation.
- Apply the adhesive onto the back of the tiles with a 3-4 mm 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.
- It is recommended to start from the centre of the Tiles and then move towards the edges.
- Tap the Tiles with a rubber mallet for a complete fixing ensuring the air is expelled.
- It is recommended to handle tile with appropriate equipment.

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 (laying joints or gaps)
- Between tiles and other materials (e.g. pairings between ceramic, linoleum, or wood).
- A 4 mm joint spacer is highly recommend for casa all sizes.

USE OF TILE LEVELLING SYSTEM DURING THE INSTALLATION

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

GROUTING

- We recommend you to use grout with the same colour 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 coloured pigments in contrast with colour 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 inoutdoor 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 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.

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 hiddenpart 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.

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.

LAYING ON SCREED

LAYING ON GRASS

LAYING ON GRAVEL

LAYING ON SAND

Technical Specification

CHARACTERISTIC	TEST METHOD	STANDARD AS PER ISO13006:2018/ EN14411 Gr.BIa	STANDARD AS PER IS15622:2017 Gr.BIa	MEAN VALUE OF CASA
Regulatory Properties				
Deviation in length and width	ISO 10545-2 & IS 13630-1	± 0.30 % (±1.00mm)	± 0.10 %	± 0.10 %
Deviation in thickness	ISO 10545-2 & IS 13630-1	± 5.00 % (±0.50mm)	± 5.00 %	± 4.00 %
Straightness in side	ISO 10545-2 & IS 13630-1	± 0.30 % (±0.80mm)	± 0.10 %	± 0.10 %
Rectangularity	ISO 10545-2 & IS 13630-1	± 0.30 % (±1.50mm)	± 0.10%	± 0.10 %
Surface flatness central curvature	ISO 10545-2 & IS 13630-1	± 0.40 % (±1.80mm)	± 0.50 %	± 0.20 %
Surface flatness edge curvature	ISO 10545-2 & IS 13630-1	± 0.40 % (±1.80mm)	± 0.50 %	± 0.20 %
Surface flatness warpage	ISO 10545-2 & IS 13630-1	± 0.40 % (±1.80mm)	± 0.50 %	± 0.10 %
Surface quality	ISO 10545-2 & IS 13630-1	> 95% defects free	> 95% defects free	> 95% defects free
Glossiness	Glossmeter 60°	as per mfg.	as per mfg.	> 90°*
Structural Properties				
Water absorption	ISO 10545-3 & IS 13630-2	≤ 0.50 %	≤ 0.080 %	≤ 0.060 %
Bulk density	DIN51082 & IS 13630-2	as per mfg.	Min. 2.20 g/cc	> 2.28 gm/cc
Massive Mechanical Properties				
Modulus of rupture	ISO 10545-4 & IS 13630-6	Min. 35.0 N/mm^2	Min. 35.0 N/mm^2	Min. 40.0 N/mm^2
Breaking strength thickness	ISO 10545-4 & IS 13630-6	Min. 700.0 N	Min. 700.0 N	Min. 1000.0 N
Surface Mechanical Properties				
MOH'S hardness	BS EN 15771:2010	as per mfg.	Min. 5	Min. 4
Deep abrasion resistance	ISO 10545-6 & IS 13630-12	Max. $175mm^3$	Max. $140mm^3$	Max. $132mm^3$
Thermal Hydrometric Properties				
Moisture expansion	ISO 10545-10 & IS 13630-3	Max. 0.06%(0.6mm/m)	Max. 0.02mm/m	Max. 0.02mm/m
Thermal expansion(COE) at 100°C	ISO 10545-8 & IS 13630-4	as per mfg.	Max. 6.0 x 10-6	Max. 6.0 x 10-6
Thermal shock resistance	ISO 10545-9 & IS 13630-5	Min. 10 Cycle	Min. 10 Cycle	Min. 10 Cycle
Impact resistance(COR)	ISO 10545-5 & IS 13630-14	Min. 0.55	Min. 0.55	Min. 0.55
Frost resistance	ISO 10545-12 & IS 13630-10	as per mfg.	as per mfg.	Frost Proof
Chemical Properties				
Resistance to staining glazed	ISO 10545-14 & IS 13630-8	Min. Class 3	Min. Class 2	Min. Class 4
Resistance to household chemicals & swimming pool salts glazed	ISO 10545-13 & IS 13630-8	Min. Class UB	as per mfg.	Min. Class UB
**Resistance to low concentrate acid and alkalis glazed	ISO 10545-13 & IS 13630-8	as per mfg.	as per mfg.	Min. Class ULB
**Resistance to high concentrate acid and alkalis glazed	ISO 10545-13 & IS 13630-8	as per mfg.	as per mfg.	Min. Class UHB
Safety Properties				
Skid resistance(DCOF-DRY)##	ANSI/NFSI B101.3-2012	as per mfg.	as per mfg.	<0.30
Slip resistance[DCOF](R value)##	DIN 51130	as per mfg.	as per mfg.	R8 to R12
Fire resistance	N.A.		N.A.	Fire Proof

* Glossiness 90% with micro nano technology
** Except Hydrofluoric Acid & it's compound
# Unglazed tiles Intended for use on floor
As per customer requirement
Min. 4mm Spaces highly recommend

Packing Details

COLLECTION	SIZE	THICKNESS	PIECES / BOX	WEIGHT / BOX (APPROX.)	COVERAGE AREA / BOX
CASARAGA	600x1200mm	9mm±0.5%	2 Pieces	28.00kg	15.5 ft^2 or 1.44 mtr^2

Disclaimer:
Casa reserves the right to delete & amend either totally or partially, any of the colors, shapes, sizes, references and other technical specifications contained in this tile kit at anytime. The colors of tiles shown in this tile kit are purely illustrative to printing process. Please refer actual sample before final selection. The details of sizes, colors and references should be verified for typographical errors.

casa
FULLBODY TILES