

EARTH

OUTDOOR 



TILEOPTIMA
THE ULTIMATE HOSPITALITY SOURCE



EARTH / MANHATTAN GREY p.6



EARTH / MULTICOLOR p.10



EARTH / MOON WHITE p.14



EARTH / MIAMI WHITE p.18

EARTH



EARTH / LIGHT GREY p.22



EARTH / DARK GREY p.26

colors

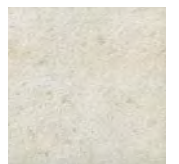
EARTH / MANHATTAN GREY



EARTH / MULTICOLOR



EARTH / MOON WHITE



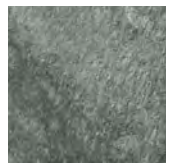
EARTH / MIAMI WHITE



EARTH / LIGHT GREY



EARTH / DARK GREY



EARTH

Drawing inspiration from the Dolomites in Northeastern Italy, Earth, one of the three lines in our Outdoor collection, offers the classic beauty and variation of natural stone and the unparalleled durability of porcelain. Earth is perfect for designers and consumers who admire the elegant look of naturally occurring stone like that of the Dolomites. The beautiful organic qualities of Earth were inspired by the mountains, rivers, and valleys of the Trentino region and create a natural effortless style in any outdoor setting. Calming earthy tones and textures make this line a versatile choice for a variety of outdoor installations. From clean whites to warm greys and browns, Earth embodies a natural warm feel that is unsurpassed. With the ability to mimic virtually any stone, our 2CM pavers provide essentially endless possibilities.





The functional, yet elegant, Outdoor 2CM collection ties together your indoor and outdoor spaces with ease. From the garden to the swimming pool; From stairways to driveways, our system offers a wide array of colors, surfaces and combinations.

1. SWIMMING POOL

2. SUNDECK

3. TERRACE

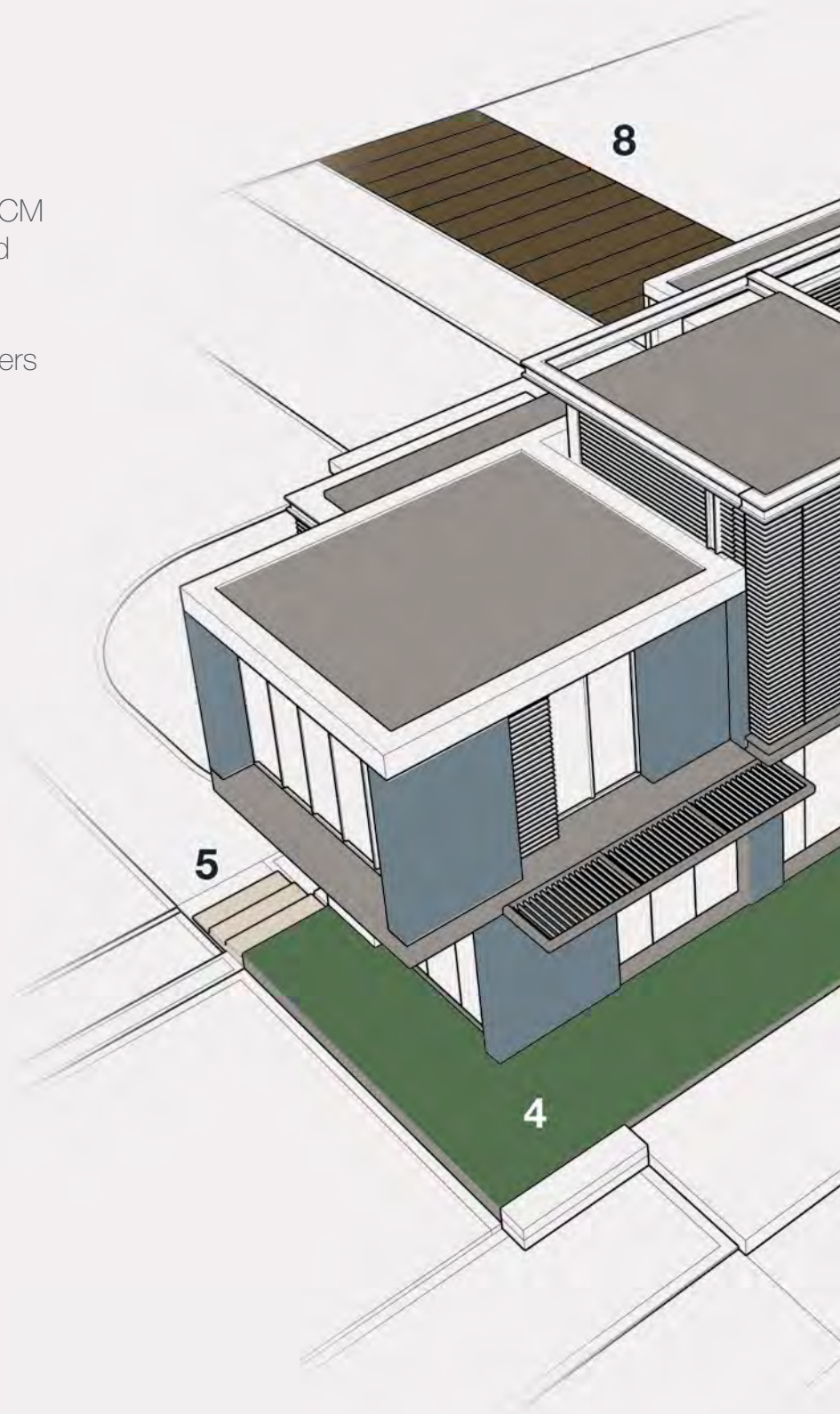
4. PATH

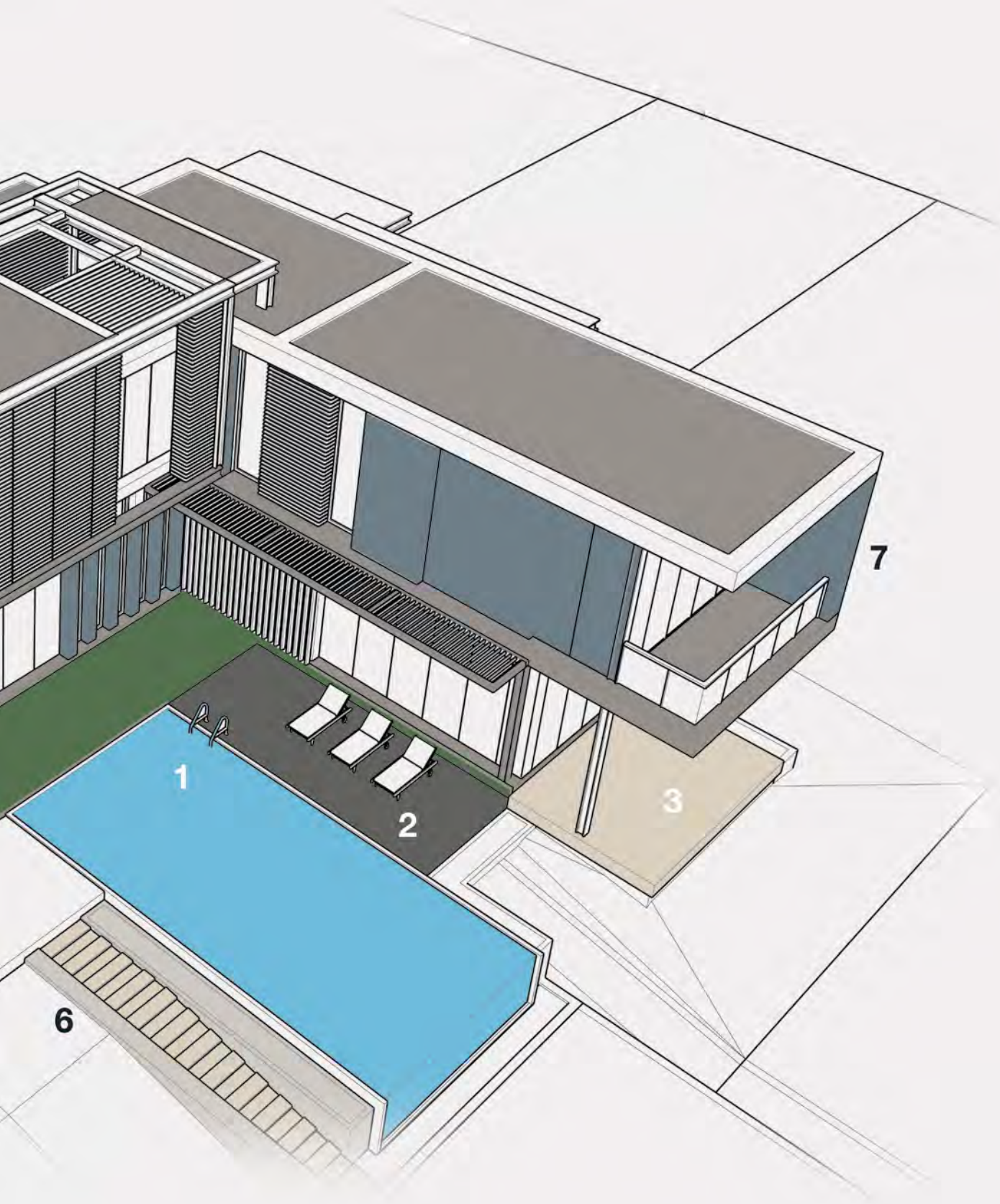
5. STAIRS

6. HANDRAIL

7. WALL

8. DRIVEWAY





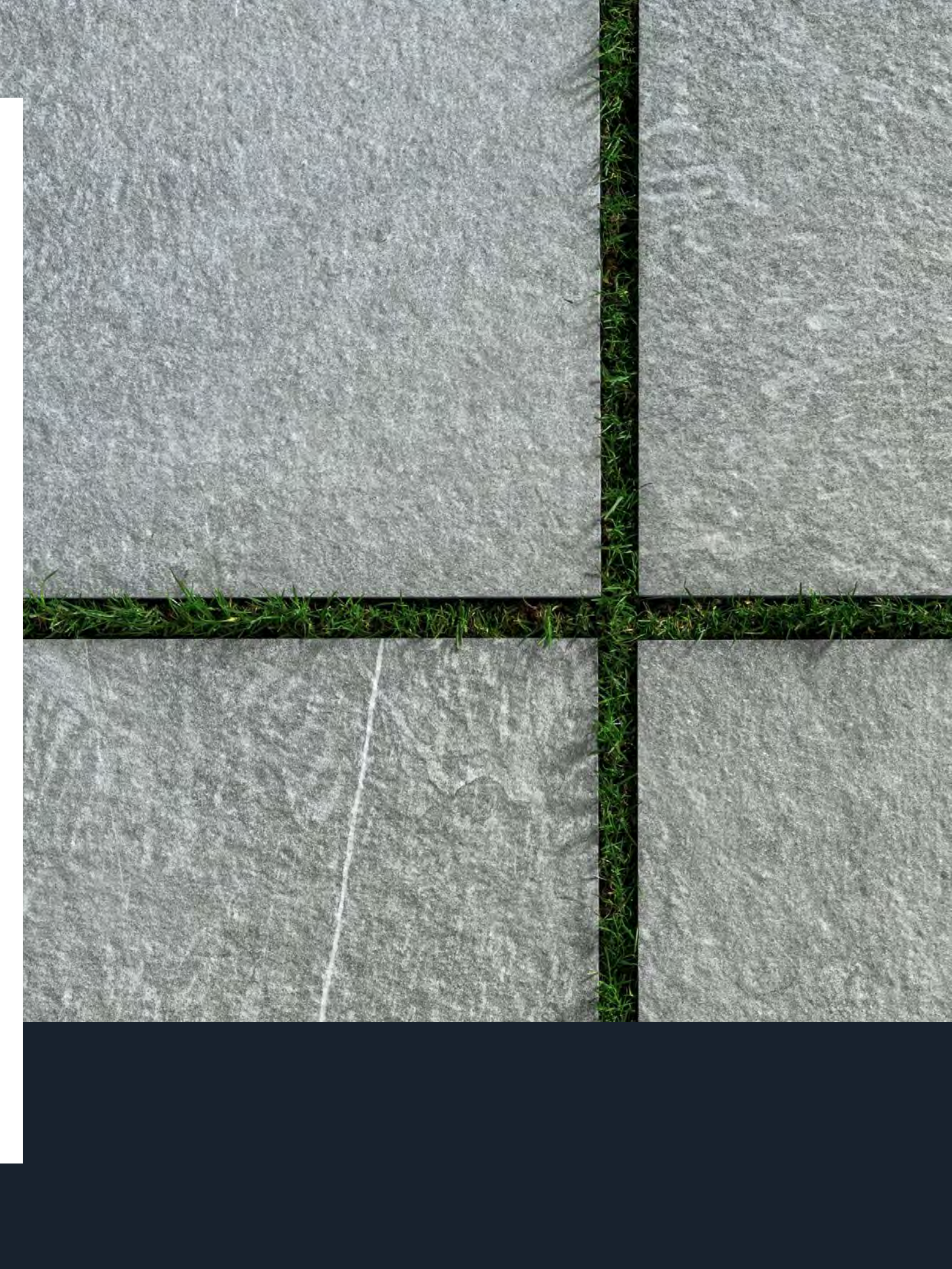
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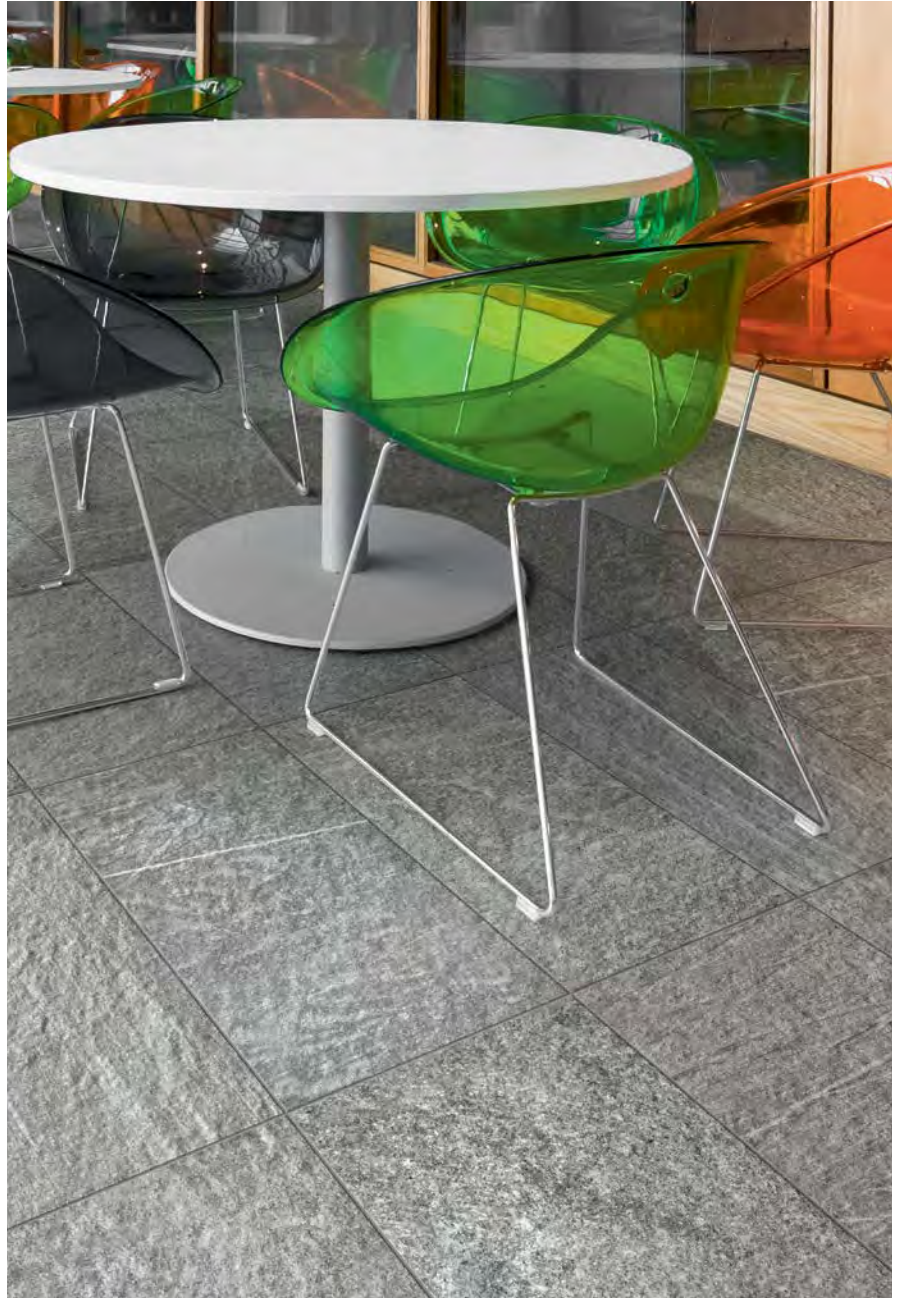


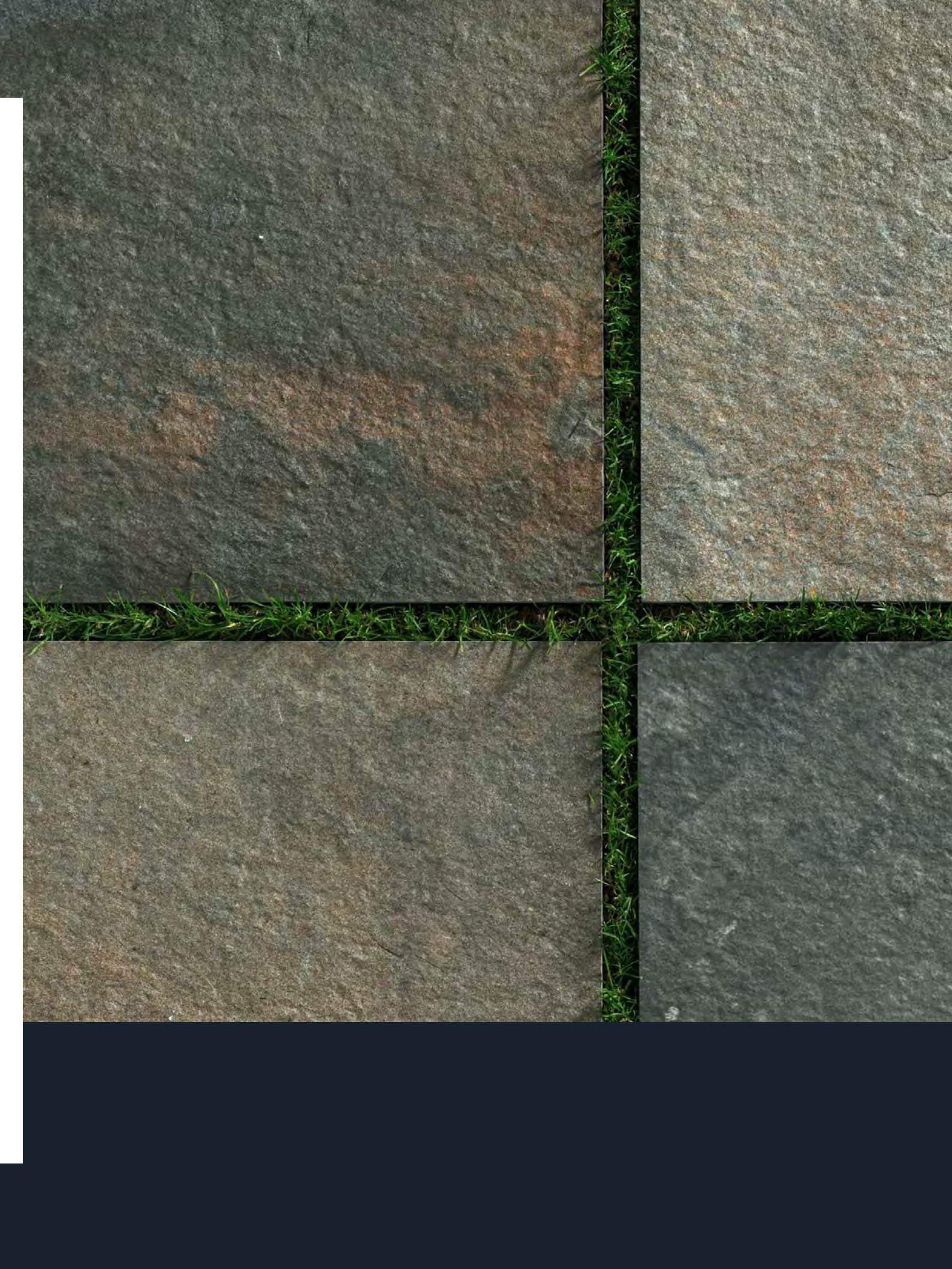


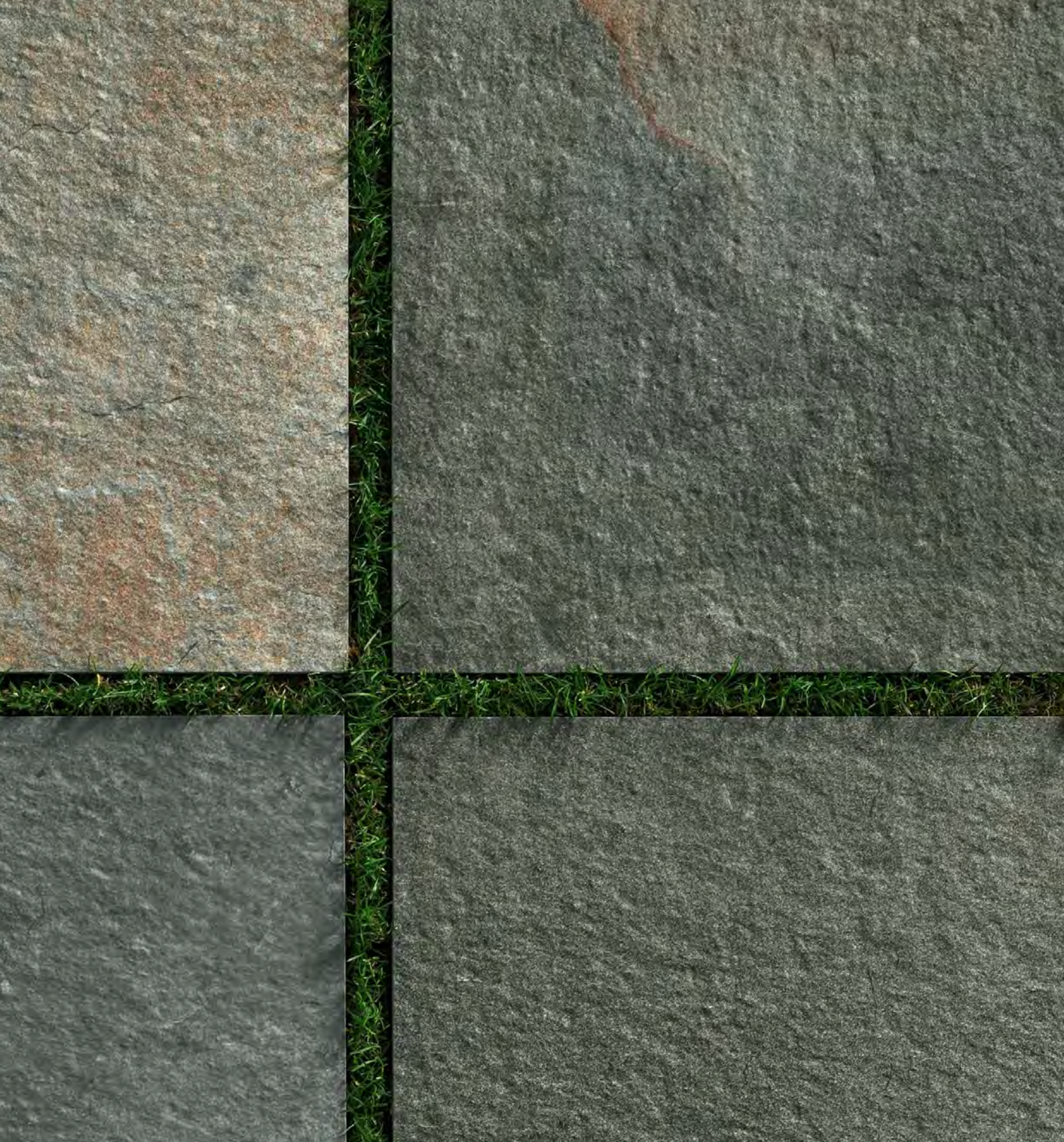
EARTH / MANHATTAN

EARTH





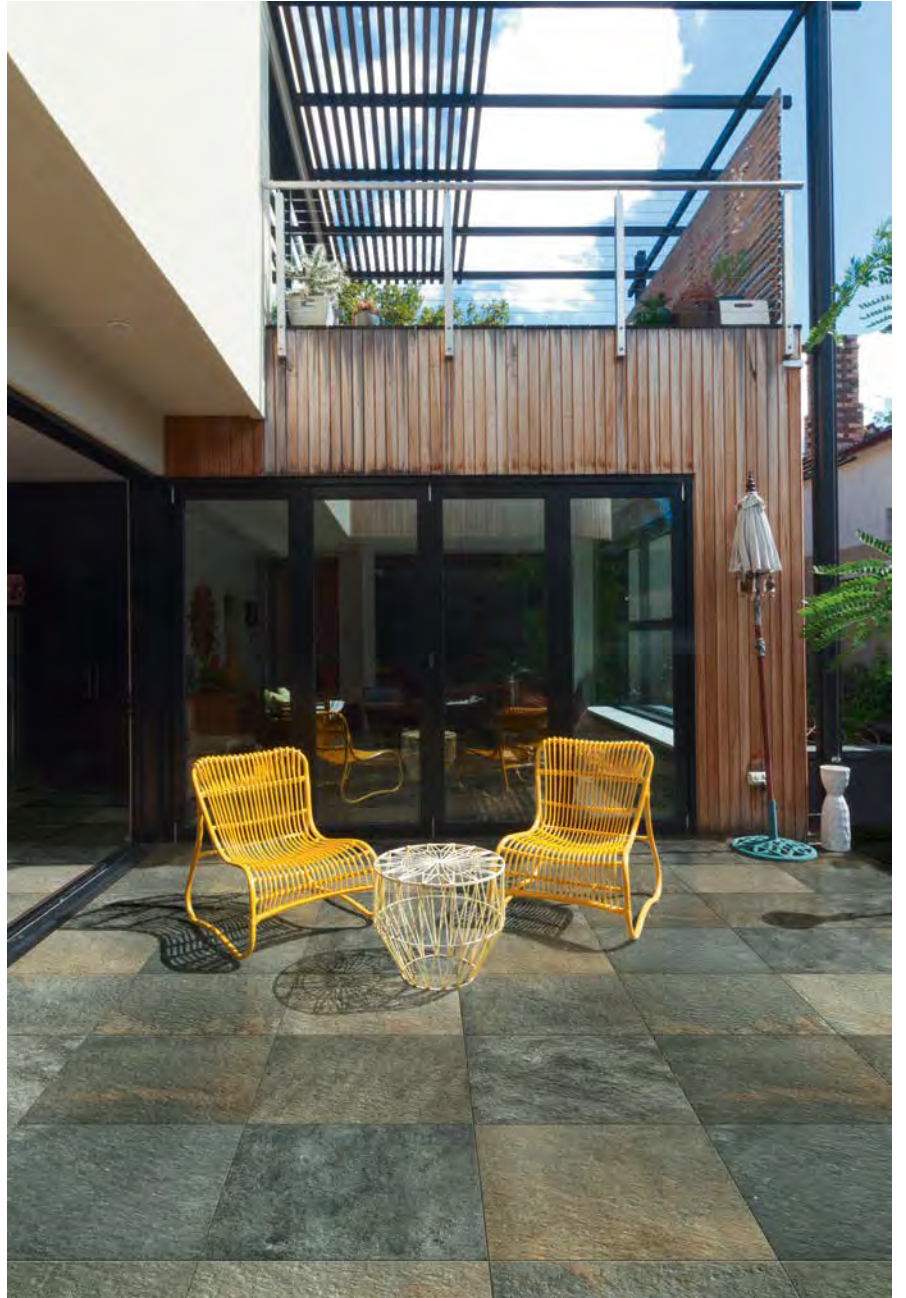


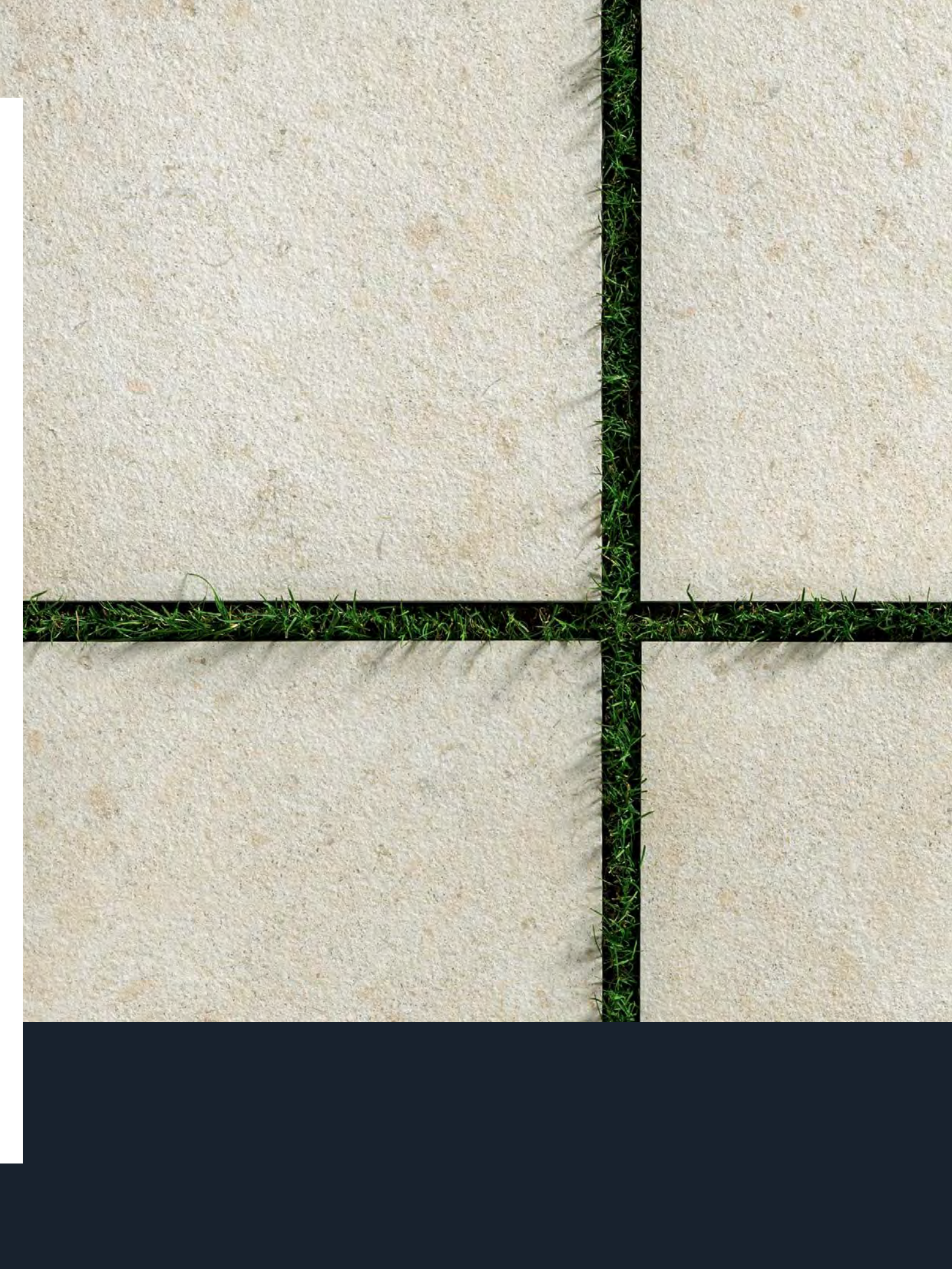


EARTH / MULTICOLOR

EARTH









EARTH / MOON WHITE



12"x24". 24"x24" / MOON WHITE



Moon White completes this pool area with a classic, sophisticated style that will leave a lasting impression.



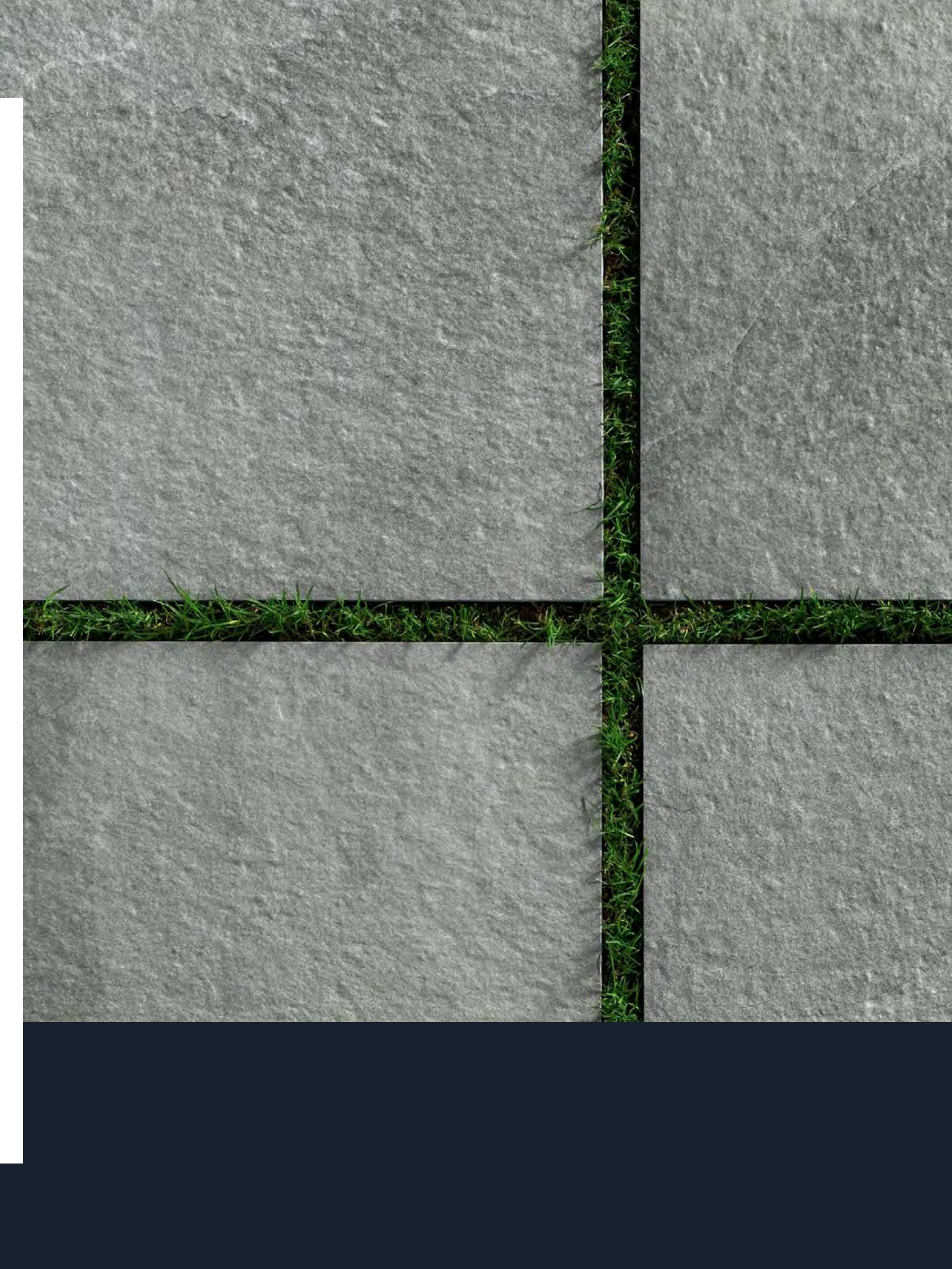


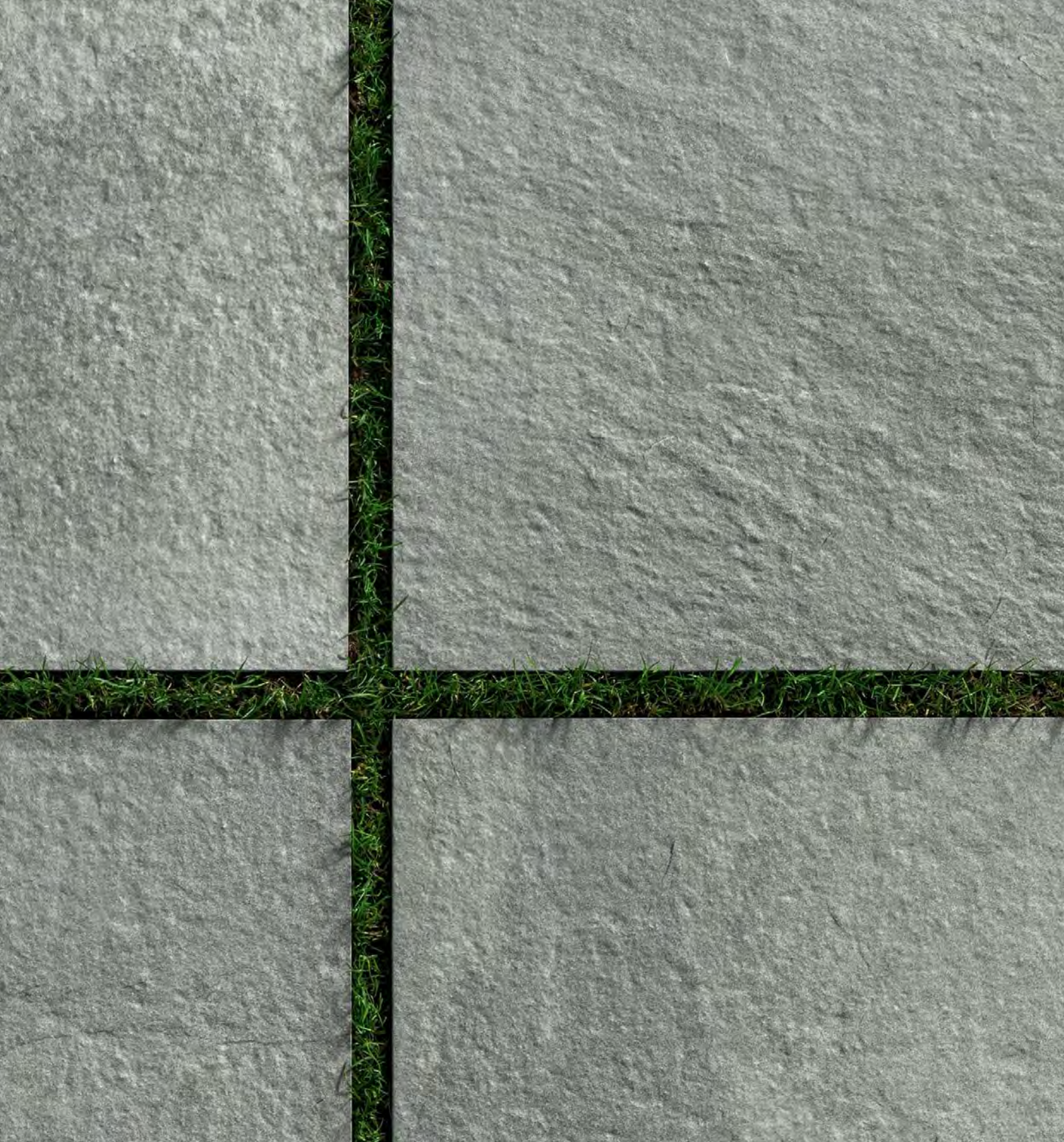
EARTH / MIAMI WHITE



12"x24". 24"x24" / MIAMI WHITE







EARTH / LIGHT GREY

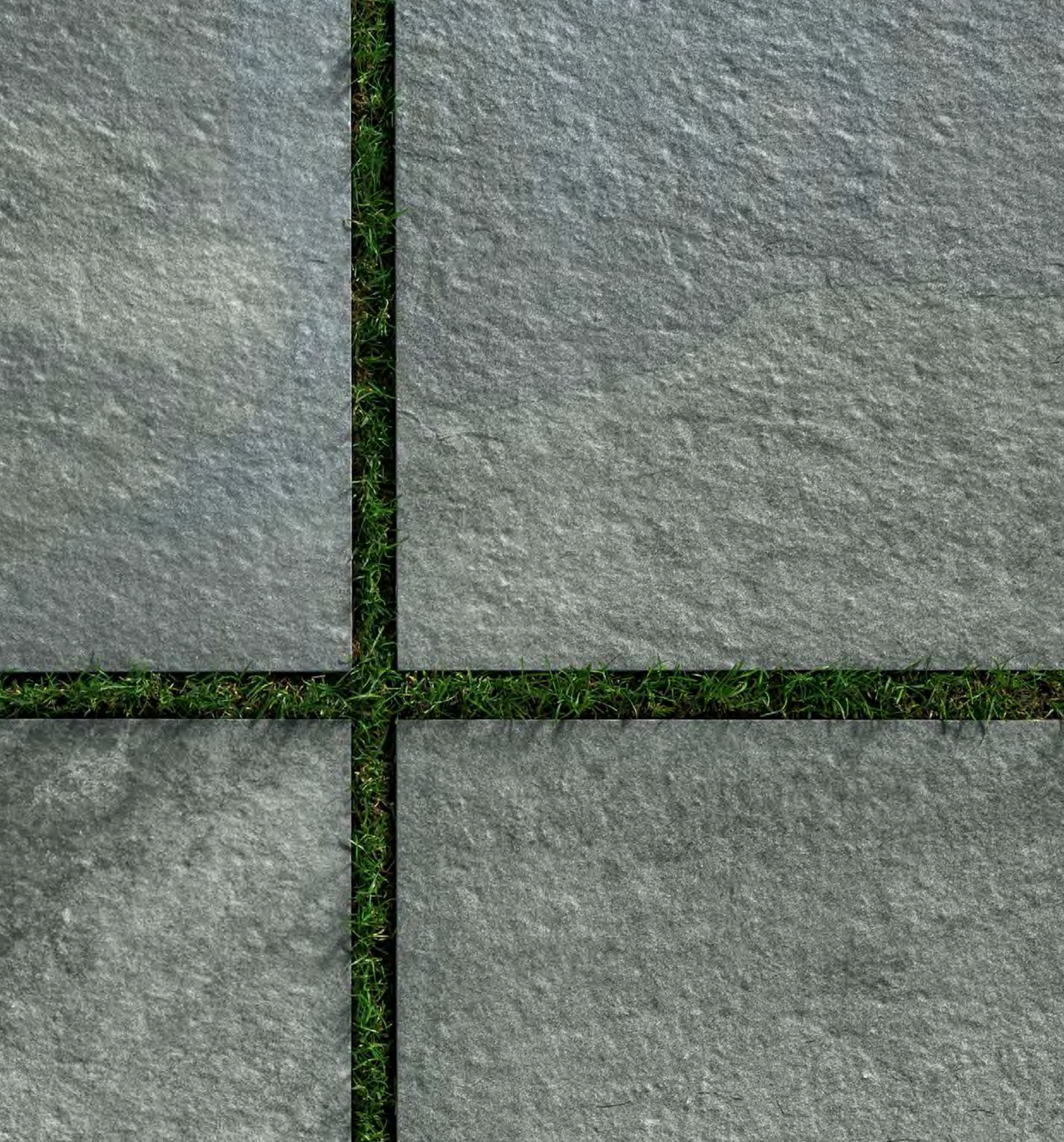
EARTH





24"x24" / LIGHT GREY





EARTH / **DARK GREY**



24"x24" / DARK GREY



SIZES & SHADE VARIATION

30 |

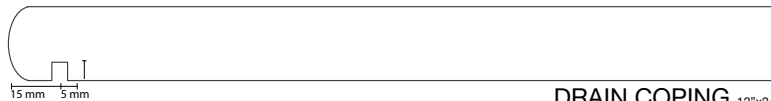
coping:

Radius: 10mm Diameter: 20mm



COPING 12"x24"

- 1100271 Manhattan Grey
- 1100268 Multicolor
- 1100273 Moon White
- 1100272 Miami White
- 1100270 Light Grey
- 1100269 Dark Grey



DRAIN COPING 12"x24"

- 1100282 Manhattan Grey
- 1100279 Multicolor
- 1100284 Moon White
- 1100283 Miami White
- 1100281 Light Grey
- 1100280 Dark Grey



DRAIN COPING \ STAIR TREAD 12"x24"

- 1100293 Manhattan Grey
- 1100290 Multicolor
- 1100295 Moon White
- 1100294 Miami White
- 1100292 Light Grey
- 1100291 Dark Grey



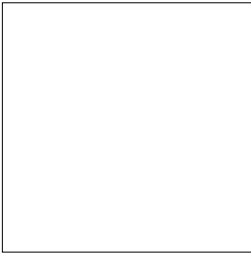
COPING \ STAIR TREAD 12"x24"

- 1100304 Manhattan Grey
- 1100301 Multicolor
- 1100306 Moon White
- 1100305 Miami White
- 1100303 Light Grey
- 1100302 Dark Grey



sizes:

24"x24" Rectified



- 1096348 Manhattan Grey
- 1096342 Multicolor
- 1096350 Moon White
- 1096349 Miami White
- 1096344 Light Grey
- 1096343 Dark Grey

12"x24" Rectified



- 1099600 Manhattan Grey
- 1099597 Multicolor
- 1099602 Moon White
- 1099601 Miami White
- 1099599 Light Grey
- 1099598 Dark Grey

Colors shown may vary from actual product.
Final selection should be made from actual product samples.



V1

UNIFORM APPEARANCE

Differences among pieces from the same production run are minimal.



V2

SLIGHT VARIATION

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



V3

MODERATE VARIATION

While the colors present on a single piece of tile will be indicative of the colors to be expected on the other tiles, the amount of colors on each piece will vary significantly.



V4

SUBSTANTIAL VARIATION

Random color differences from tile to tile, so that one tile may have totally different colors from that on other tiles. Thus, the final installation will be unique.

technical specifications

	SPECS	TEST METHOD	REFERENCE VALUE	DECLARED VALUE
	Static coefficient of friction	ASTM - C 1028	> 0.60 dry and wet	> 0.60 dry and wet
	Dynamic coefficient of friction (section 9.6 ANSIA 137.1 2012)	DCOF Acutest	> 0.42 wet	> 0.42 wet
	Resistance to freeze	ASTM - C 1026	required	Resistant
	Frost resistance	ISO - 10545-12	As reported	Resistant
	Chemical resistance	ASTM - C 650	As reported	Not affected
	Resistance to domestic chemicals and additives for swimming pools	ISO - 10545-13	UB minimum	UA
	Resistance to low concentrations of acids and alkali	ISO - 10545-14	See manufacturer's declaration	ULA
	Resistance to high concentrations of acids and alkali	ISO - 10545-15	See manufacturer's declaration	UHA
	Resistance to staining	ASTM - C 1378	As reported	Not affected
		ISO - 10545-14	-	4
	Maximum straightness deviation, in %, in relation to the corresponding production dimensions	ASTM - C 485	±0.75% (±1.8 mm)	±10%
		ISO - 10545-2	±0,5% (±1,5 mm)	±10%
	Admitted deviation, in %, of the average thickness of each tile from the production dimensions	ASTM - C 499	± 1.2 mm	±0.5%
		ISO - 10545-2	±0,5% (±0,5 mm)	±0.5%
	Length 7 width: admitted deviation, in % of the average size of each tile from the production dimensions	ASTM - C 499	±0.5 % (±2.0 mm)	± 0.15 %
		ISO - 10545-2	±0,6 % (±2 mm)	± 0.15 %
	Amount of water absorbed, in percentage	ASTM - C 373	≤ 0.5%	≤ 0.5%
		ISO - 10545-3	≤ 0.5%	≤ 0.5%
	Breaking strength in N (thickness > = 7,5 mm)	ASTM - C 648	≥ 2500 LBF Average	≥ 3000 LBF Individual
		ISO - 10545-4	≥ 1300 Newton	> 13000
	Resistance to deep abrasion of unglazed tiles	ASTM - C 1243	< 175 mm 3	< 150
		ISO - 10545-6	< 175 mm 3	< 150
	Thermal shock resistance	ASTM - C 484	-	Meets the requirement
		ISO - 10545-9	-	Resistant

packaging

SIZES	METRIC (CM)	THICKNESS (CM)	PIECES PER BOX	SQ. FT PER BOX	WEIGHT PER BOX	BOXES PER PALLET	UOM PER PALLET	WEIGHT PER PALLET*
FIELD TILES								
24"x24" RECTIFIED	60x60	2 cm	2	8	76	36	288	2,736
12"x24" RECTIFIED	30x60	2 cm	4	8	73.6	40	320	2,944
COPING								
12"x24" COPING	30x60	2 cm	4	8	73.6	40	160 pcs	2,944
12"x24" STAIR TREAD COPING	30x60	2 cm	4	8	73.6	40	160 pcs	2,944
12"x24" DRAIN COPING	30x60	2 cm	4	8	73.6	40	160 pcs	2,944
12"x24" DRAIN COPING WITH STAIR TREAD	30x60	2 cm	4	8	73.6	40	160 pcs	2,944

* WEIGHT PER PALLET DOES NOT INCLUDE PALLET WEIGHT ITSELF.

ALL OTHER SIZES WILL BE PACKAGED AS ORDERED.

PLEASE CONTACT MILESTONE CUSTOMER SERVICE AT 1-877-356-7461 FOR PACKAGING INFORMATION.

MINIMUM GROUT SIZE RECOMMENDED = 5 MM (OR APPROX. 3/16") IF STAGGERED TILE PLACEMENT, WE RECOMMEND USING A 30% OFFSET. IF SPECIFIED BRICK PATTERN WITH 1/2 PATTERN MANDATORY, A BIGGER GROUT IS RECOMMENDED TO HIDE IMPERFECTIONS OF INSTALLATION (MINIMUM 1/4").

LAYING SYSTEMS

DIRECT INSTALLATION

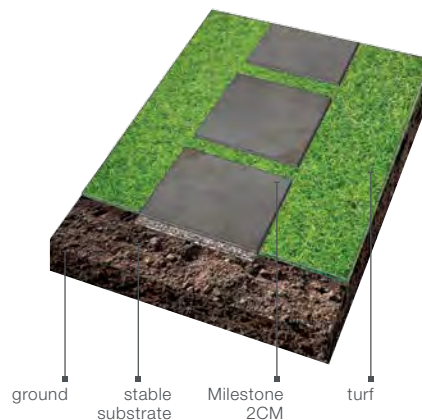
The Milestone 2CM porcelain tile can be easily positioned on grass, removed and repositioned, allowing maximum flexibility in creating different configurations. Milestone 2CM porcelain tiles can be installed either with a minimum joint, or with a 1/2" joint or larger (called Japanese joint).

Installation steps

Remove 2" of soil in the area where you want to place the 2CM tiles;

Apply and compact evenly 1" of gravel into the area you have cleared;

Directly lay the Milestone porcelain tile on the gravel bed and tap it with a rubber hammer to eliminate any unevenness.



PLUS

- EASY TO INSTALL AND REMOVE
- QUICK WATER DRAINAGE KEEPING THE GROUND UNCHANGED
- IDEAL TO CREATE CONTINUITY BETWEEN INDOOR AND OUTDOOR FLOORING

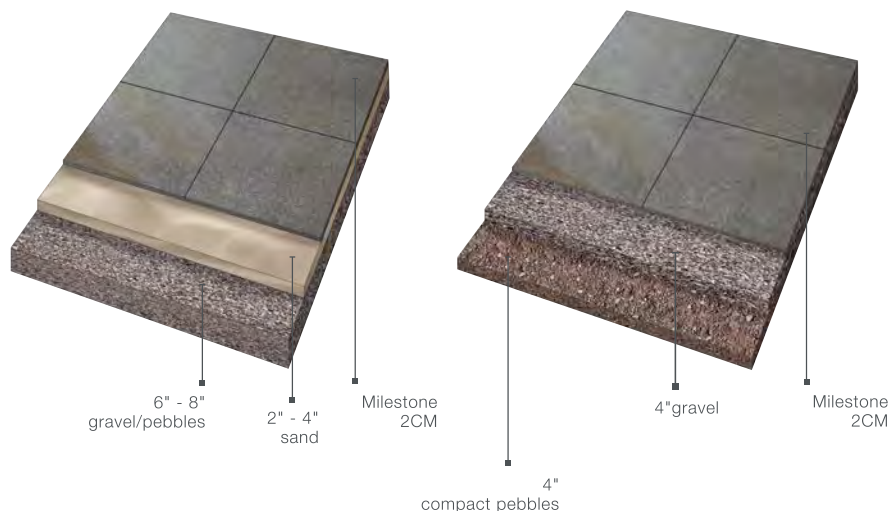
LAYING ON GRAVEL AND SAND

Installation steps

Level and compact the surface (sand or gravel);

Position the Milestone 2CM porcelain tile on the gravel/sand bed;

Tap the tiles with a rubber hammer to eliminate any unevenness and fill the joints between the tiles with gravel/sand to add stability to the surface.



PLUS

- EASY TO INSTALL AND REMOVE
- QUICK WATER DRAINAGE KEEPING THE GROUND UNCHANGED
- IDEAL WHERE IT ISN'T POSSIBLE TO LAY PERMANENT FLOORING
- EXHIBITIONS AND EVENTS

ADHESIVE INSTALLATION

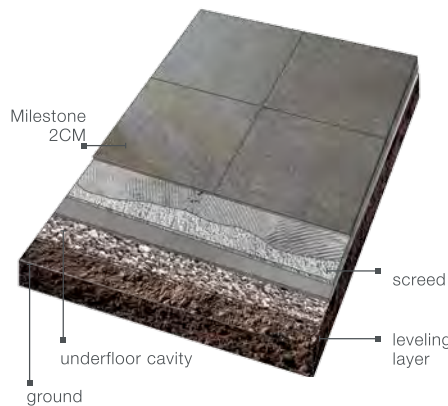
DRAINING SCREED

It is ideal for garden and courtyard flooring because it ensures that water is drained correctly, using the special glues.

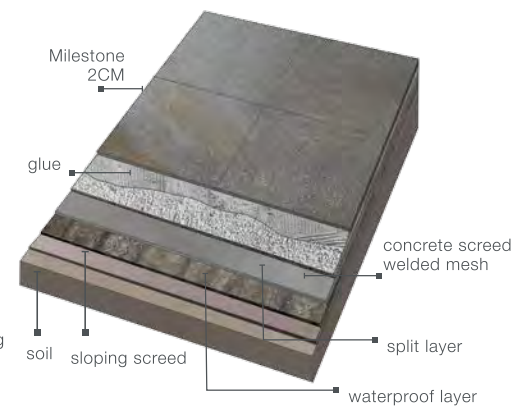
VEHICLE TRANSIT PAVEMENT

It is ideal for parking lots and garage ramps, thanks to the extremely high resistance of ceramic surface to dynamic and concentrate loads.

DRAINING



DRIVE FLOOR

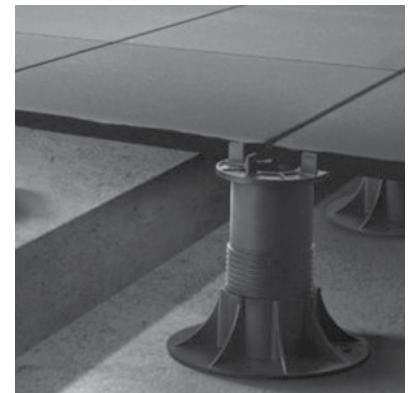


PLUS

- HIGH RESISTANCE TO DYNAMIC AND CONCENTRATE LOADS
- IDEAL TO CREATE CONTINUITY BETWEEN PEDESTRIAN AREAS AND VEHICLE ACCESSIBLE AREAS, USING THE SAME MATERIAL.

INSTALLATION ON RAISED SYSTEMS

Mainly, there are three raised floor systems that the customers can adopt to install the Milestone 2CM porcelain tiles: fixed support, adjustable support, and self-leveling support.



Installation steps

Ensure that the area where the raised system will be installed is flat, compact, rigid, and make sure it can support the weight of the new floor;

Choose the raised floor system that best suits your use. Remember that the raised floor has to be installed to provide adequate drainage of rain water.

*Rectified tiles are required for pedestal installations

Warnings: these systems cannot be used when high dynamic loads transit in the area.

PLUS

- FROM THE AESTHETIC POINT OF VIEW, IT ENSURES FLOORING WITH A SINGLE GRADIENT, WITHOUT ANY VISIBLE WATER DRAINING ELEMENTS
- THE SMALL GAP BETWEEN ONE SLAB AND ANOTHER ALLOWS A QUICK WATER DRAINAGE, IT IS EASY TO CLEAN
- LOWER LOAD BEARING ON ATTICS AND BALCONIES AS THE LAST LAYER OF CONCRETE AND GLUE IS NOT NECESSARY
- FROST-PROOF, IT ABSORBS THE THERMAL EXPANSIONS OF THE CONCRETE SUBSTRATE, THE DIRECT CAUSE OF TRADITIONAL OUTDOOR FLOORING SUBSIDENCES
- THE GAP BETWEEN THE SLAB AND THE CONCRETE SUBSTRATE FOSTERS EXCELLENT THERMAL INSULATION
- BEST ACOUSTIC INSULATION
- HIDDEN BUT EASY TO INSPECT PIPES
- SPEED OF INSTALLATION
- RECYCLABLE
- VALUE FOR MONEY SOLUTION IN TERMS OF LAYING AND MAINTENANCE, LASTS VIRTUALLY FOREVER

LAYING ON GRAVEL AND SAND

GENERAL INDICATIONS

SUBSTRATE

Level the substrate and compact it with care before proceeding with installation consisting of resting the slabs on the substrate

It is advisable to lay a separating cloth (geotextile) to stabilize the substrate in order to limit any washing away along the gaps / joints between the pavers and to minimize the growth of weeds.

SPACERS BETWEEN PAVERS

When laying porcelain pavers by resting them directly on the substrate, they must never be laid so that they touch each other, as this would drastically increase the risk of chipping caused by micro-movements while the pavers are setting into place. 1/6" joints are recommended for pressed material.

CUTS AND HOLES

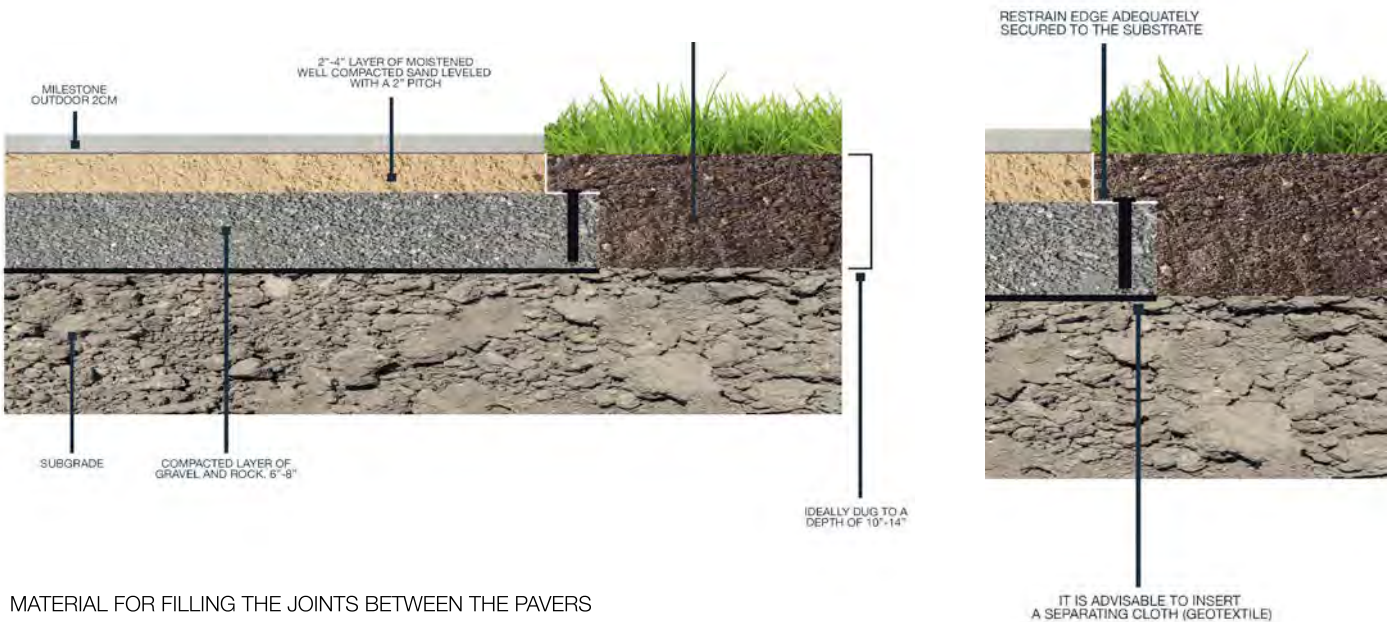
- It is possible to cut the material in both damp or dry conditions.
- It is essential to use ONLY approved cutting wheels (continuous edge) for porcelain stoneware.
- To make holes in the slabs, use diamond drill bits for porcelain stoneware.

DO NOT USE A PLATE COMPACTOR AFTER LAYING

To avoid the risk of chipping the material, never use a plate compactor once the porcelain pavers slabs have been laid.

EDGE RESTRAINTS

When pavers are laid on draining sand or gravel, always prepare an edge restraint system to hold the substrate material used and prevent any washing away of sand or gravel, therefore keeping the paver slabs in place.



MATERIAL FOR FILLING THE JOINTS BETWEEN THE PAVERS

LAYING ON SAND

Fill the gaps with sand and eliminate the excess material. In time, wind, rain and cleaning activities may remove the sand, therefore calling for some occasional re-filling

LAYING POLYMERIC SAND OR GRAVEL

It is a composition created specifically for outdoor paving installation. It is important to use specific sand for porcelain stoneware. This sand is available in several different colors and grain sizes. Once the polymeric sand has been compacted, it will prevent the growth of weeds. Once the gaps have been filled with polymeric sand eliminate with care all the excess material. Lastly, wet the gaps between the pavers with water to activate the reaction of the polymers that will transform the sand into a compact body.

PROGRESS THAT TOUCHES AND INVESTS IN THE ENTIRE SOCIETY

As a active member of the U.S Green Building Council, Milestone spreads awareness to the entire American communities and encourages towards the use of building solutions inspired by environmentally friendly practices. Using Milestone products for project implementation, will positively contribute in obtaining scores and points required for earning the LEED certification (Leadership in Energy and Environmental Design).

A COMMITMENT TO THE DEVELOPMENT OF PRODUCTS FOR A CONSCIOUS BUILDING TRADE

Milestone offers products containing recycled material. The adoption of eco-compatible production systems is merit of Italian designs produced in the U.S.

TECHNICAL DEVELOPMENT THAT CONSIDERS THE NATURAL ENVIRONMENT

Milestone commits to the eco-compatible project and translates the same into an avant-guard production process, minimizing the negative impact on the environment.

WHY PORCELAIN?

There are many reasons to choose impervious porcelain tile over other floor coverings. It offers the largest array of design options and holds its value the longest. In a comparison between the many different flooring options, porcelain tile offers one of the most durable and least expensive options over the lifespan of the building.

Benefits of Porcelain Tile

- Impervious to water
- Easy to maintain
- Variety of design options
- Environmentally friendly
- Resistant to germs and bacteria
- Fade resistant
- Fire resistant
- Durable - best long-term value vs. other floor coverings

SUGGESTED INSTALLATIONS

PEI Class

IV

Moderate to heavy foot traffic

Recommended for all residential applications as well as medium commercial and light institutional applications.



DON'T WORRY
SHOCK CONTROL® 2.0



porcelain
tile

**SHOCK
CONTROL®**
protective
layer

SHOCK CONTROL® 2.0

THE ONLY PATENTED SYSTEM ABLE
TO PASS THE DYNAMIC LOADING TEST
FOR "HARD OBJECT IMPACT" WITH
REFERENCE TO UNI EN 12825:2003
NORM.

INSTALLATION

Installation of protective layer **SHOCK CONTROL®** is quick and easy. It can be easily applied by a single person within seconds without any tool in 4 short passages.



1 Choose the proper size of SHOCK CONTROL® considering the size of the tile and apply it on the tile's lower surface, avoiding folds and aligning the edges.



2 Starting from one side, peel the protective foil, ensuring perfect adhesion of SHOCK CONTROL® to porcelain's surface.



3 Proceed smoothly until joining adhesion on the entire surface, avoiding wrinkles or air bubbles.



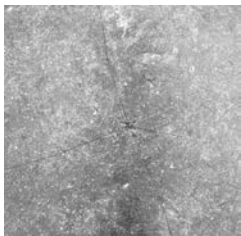
4 The tile is immediately ready to be applied on pedestals for the realization of the exterior elevated floor.

TEST

SHOCK CONTROL® is the only PATENTED system for porcelain tiles' protection, that can guarantee with its application the overcoming of the dynamic loading test for "hard object impact" with reference to UNI EN 12825:2003 norm.

SHOCK CONTROL® is the only protective reinforcing system created to be coupled with porcelain, allowing 2 cm thick porcelain tiles for outdoor raised floors to pass the dynamic loading test for hard object impact in all the three tests:

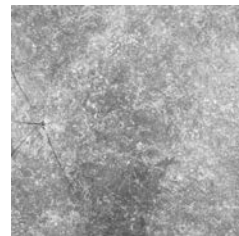
TEST PASSED	NO PORCELAIN FRAGMENT DETACHED FROM THE PANEL
Pic. 1,2	• DROP TEST IN THE MIDDLE OF THE PANEL
Pic. 3	• DROP TEST ON ONE SIDE OF THE PANEL
Pic. 4	• DROP TEST AT 7 cm ON DIAGONAL



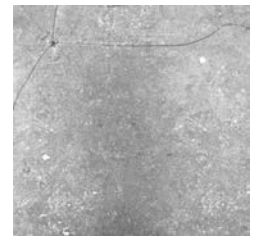
1



2



3



4

PACKAGING

	PCS/BOX	BOX/PALLET	PCS/PALLET	WEIGHT /PALLET
SHOCK CONTROL® 24"x24"	32	30	960	10,265 LBS

Application

- 1) Position SHOCK CONTROL 2.0 on the application surface;
- 2) Remove the release film from the lower face, this is divided longitudinally in two sections, in one or two steps, making sure to also remove the side selvedge of the upper surface;
- 3) To use suitable roller by applying pressure over all of the SHOCK CONTROL 2.0 surface, particularly the side & head laps to further promote adhesion.

Recommendations

- The SHOCK CONTROL 2.0 is to applied on dry clean surfaces.
- Do not apply the SHOCK CONTROL 2.0 below the 0° C.
- During the cold season for the most simple and safe application it is to use hot air generated by a burner
- The SHOCK CONTROL 2.0 has to be stocked preferably indoor in a dry and ventilated areas with temperatures higher than 15° C.
- For a perfect stuck of SHOCK CONTROL 2.0 on the back of the tile it doesn't must be left any air bubble areas in order to avoid not adherent spaces and moisture buildup.
- Do not stack SHOCK CONTROL 2.0 pallets at the warehouse to prevent adhesions between the sheets.

For further information and news we recommend to consult technical literature; our technical service is always available to study particular problems, offering the necessary assistance for optimal use.

Technical Data

Technical Characteristics	Measure Units Measure Units	Reference Norm	P			PA			Tolerance
Type of reinforcement			Single strand polyester						
Upper face finish			PE film			Mineral			
Lower face finish			Silicon release film						
Length	m	EN1848-1	15 ± 1%			10 ± 1%			
Width	m	EN1848-1	1 ± 1%						
Thickness	mm	EN1849-1	2	3	4				± 5%
Mass for unit area	kg/m²	EN1849-1				3,5	40	4,5	± 10%
Cold flexibility	°C	EN 1109	- 15			- 20			
Flow resistance	°C	EN 1110	100						
Tensile strength L / T	N / 5 cm	EN 12311-11	120/120	140/140	120/120	140/140			- 20%
Elongation at break L / T	%	EN 12311-11	35/35						-15
Tearing resistance	N								- 30%
Dimensional stability	%	EN 1107-1	-0,3						
Fire resistance		EN 13501-5	F ROOF						
Fire resistance		EN 13501-5	F						
Watertightness	kPa	EN 1928	60						
Pelage resistance on (steel) support	UEAtc 4.3.3 ASTM D 1000	N/50 mm	50						-20N
Pelage resistance on (steel) support after aged	UEAtc 4.3.3 ASTM D 1000	N/50 mm	30						-20N

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