FRONTIER20

2025
EDITION

LANDMARK
CERAMICS

LANDMARK
CERAMICS

A new landmark in the porcelain industry

Landmark Ceramics is an American company, based in Tennessee that has set out to research, manufacture and sell top quality porcelain ceramics in North America. Technological innovation, market presence, attention to detail, the welfare of people and the environment, efficient service and a thorough product range make Landmark a new benchmark in the North American market for those who are looking for a reliable partner for any building and architecture project using US made top quality porcelain material.

FRONTIER20

_Frontier20 is a porcelain pavers collection perfectly suited for outdoor applications. The market's demand for a stain-proof, slip-resistant, chemical resistant, no maintenance product led to the development of a revolutionary aesthetically superior product, enough versatility for exteriors as well as interiors.
Combining the highest level of quality control and technology with state-of-the-art equipment, age-old practices have been revitalized to offer a superior industry leading product.
Frontier20 offers a dimension never seen before to your outdoor living area.

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LEARN MORE ABOUT

PERFORMANCE, FUNCTIONALITY AND AESTHETICS: ALL IN 20MM.

_**Frontier20 porcelain pavers** are inheritantly slip resistant and impervious to chemicals, salt, fading, or scratching.
Free your self from having to commit to yearly sealing practices.
Your Frontier20 will never fade or need sealing!
Simply pressure wash your way to a newly installed look any time you want. Moss and mold also won't be an issue, they too can easily be cleaned off without fear of streaking. The ultra realistic surface of Frontier20 is physically bound and can not fade or be removed.
Frontier20 is Freedom!

PROJECT
FLOOR DESIGN
Frontier20 African Beige - 24"x48"
Frontier20 African Beige - 12"x48"
Frontier20 African Beige - 24"x24"
Frontier20 African Beige - 12"x24"
Frontier20 African Beige Stair Tread - 12"x24"
Frontier20 African Beige Riser - 8"x24"
Frontier20 Soul Walnut - 12"x48"

20MM THICKNESS PORCELAIN PAVERS

EASY TO INSTALL

EASY TO KEEP CLEAN

Mild environmentally friendly detergents can be used when cleaning your porcelain pavers. Pressure washers up to 1500 PSI may be used without fear of etching or striping.

ANTISLIP

The structure and texture of the porcelain paver reduce the risk of slipperiness.

RESISTANT TO MOSS AND MOLDING

Landmark Frontier20 is so dense that mold and mildew are not able to establish themselves in a permanent way making removal very easy and simple.

EASY TO REPLACE AND REMOVE

When not mortared down or installed with adhesive Landmark's Frontier20 can be easily removed and repositioned in a new area.

DRIVE OVER*

When properly installed over concrete, Landmark Frontier20 porcelain pavers are suitable for light residential vehicular traffic.

(*) When installed over reinforced concrete (4" minimum) using a thinset mortar suitable for porcelain paver.

STAIN RESISTANT

Landmark's Frontier20 porcelain pavers are virtually nonporous. Due to the baked on glazing process nothing can be absorbed including stains.

RESISTANT TO THERMAL SHOCK

Landmark's porcelain pavers are baked at temperatures up to 2300 degrees F which in turn causes a very strong molecular bond making for a very dense material. Due to its density it become very inert allowing for extreme and sudden temperature changes in the range of - 60 F +140 F.

SCRATCH RESISTANT

Landmark Frontier20 porcelain pavers are extremely hard with an equally hard surface making them virtually scratch proof.

FADE RESISTANT

Landmarks Frontier20 baked on graphics are created using ingredients that are completely unaffected by the sun ensuring enjoyment of your porcelain paving investment for many years to come.

FROST RESISTANT

Landmark Frontier20 porcelain pavers are so dense that frost and or freezing temperatures do not affect it.

RESISTANT TO SALTS

Landmark Frontier20 porcelain pavers are completely unaffected by use of salts.

RESISTANT TO ACID AND CHEMICALS

Landmark Frontier20 is made with inert ingredients that do not react or accept acids and or chemicals allowing you to make environmentally friendly cleaning decisions!

ECO-FRIENDLY

Landmark Frontier20 porcelain pavers are produced in our environmentally friendly complex following the strictest state and federal regulations. Because of Landmarks environment friendly commitment, we can incorporate up to 20% recycled content in our USA made porcelain pavers.

NO SEALING NEEDED

No sealers are needed because Landmark Frontier20 is so dense virtually nothing can stick to it!

SAVING OVER TIME

Low maintenance cost.

20MM THICKNESS PORCELAIN PAVERS

FOR RESIDENTIAL.

- → Walkways
- → Driveways
- → Courtyards
- → Paths on grass or gravel
- → Garages
- → Patios and porches
- → Terraces and balconies
- → Access ramps
- → Verandas
- → Outdoor pools

PROJECT
FLOOR DESIGN
Frontier20 Michelangelo Extra White - 24"x48"
Frontier20 Michelangelo Extra White - 12"x48"
Frontier20 Michelangelo Extra White - 24"x24"
Frontier20 Michelangelo Extra White - 12"x24"
Frontier20 Michelangelo Extra White Stair Tread - 12"x24"
Frontier20 Michelangelo Extra White Riser - 8"x24"
WALL DESIGN
Veneer World Alpine Alaska - 6"x24"

20MM THICKNESS PORCELAIN PAVERS

FOR PUBLIC SPACES.

- → Public outdoor areas
- → Swimming pools
- → Outdoor restaurants
- → Outdoor bars
- → Wellness centres
- → Urban design
- → Safety passages
- → Outdoor pavements and squares

PROJECT
FLOOR DESIGN
Frontier20 Star Grey - 24"x48"
Frontier20 Star Grey - 12"x48"
Frontier20 Star Grey - 24"x24"
Frontier20 Star Grey - 12"x24"
Frontier20 Star Grey - 12"x12"
Frontier20 Star Grey Grip Stair Tread - 12"x48"
Frontier20 Star Grey Riser - 6"x48"
FIRE PIT DESIGN
Frontier20 Star Grey - 12"x48"

CONTINUITY IN & OUT.

_Combining the Frontier20 line of products with the standard thickness product lines offers **high-level design flexibility and customization**, allowing designers and architects to easily transition inside design into outdoor beauty, functionality and performance.

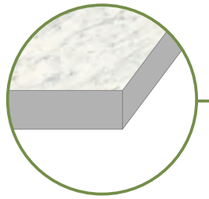
PROJECT
OUTDOOR FLOOR DESIGN
Frontier20 Montauk White - 24"x48"
Frontier20 Montauk Grey - 24"x48"
INDOOR FLOOR DESIGN
Essence Refined Montauk White Grip - 12"x24"
POOL FLOOR DESIGN
Essence Refined Montauk White Grip - 12"x24"
OUTDOOR WALL DESIGN
Veneer World Pro Ledgestone Ridge White - 6"x24"
Veneer World Atelier Combed Montauk White - 12"x24"
INDOOR WALL DESIGN
Essence Refined Montauk White Mosaic A - 12"x12"

20MM THICKNESS PORCELAIN PAVERS

_Landmark Ceramics provides matching solutions for indoors and outdoors, combining products from the Frontier20 catalog with items from traditional thickness collections.

Continuity of style allows architects and designers to easily transition from inside beauty to outdoor functionality.

INDOOR PORCELAIN TILE



9 mm

OUTDOOR PORCELAIN PAVER

20mm

VERSATILE MATCHING SOLUTIONS.

20MM THICKNESS PORCELAIN PAVERS

COMPLETE LAYING VERSATILITY.

_The Frontier20 product line is so simply perfect, elegant and functional, that the challenge of installation is not "How can I install Frontier20?" but rather, **"Where else do I want to install Frontier20?"**. Frontier20 may be installed using the traditional mortared bed, the more modern over sand and limestone, to the eco friendly permeable method, or even the budget conscious elevated deck or pedestal application.

PROJECT
OUTDOOR FLOOR DESIGN
Frontier 20 Travertine Cross Cut Country Classic - 12"x12" - 12"x24" - 24"x24"
OUTDOOR WALL DESIGN
Veneer World Pro Ledgestone Ridge Beige - 6"x24"
OUTDOOR POOL DESIGN
Frontier20 Travertine Cross Cut Country Classic Trim Pieces

01

DRY LAYING.

A way of laying pavers that allows you to **support plates** directly onto grass, gravel or sand.

01.1 ON GRASS

01.2 ON GRAVEL

01.3 ON SAND

02

INSTALLATION OVER REINFORCED CONCRETE*.

A way of laying pavers that allows you to create **perfectly stable surfaces** of incredible resistance.

* When installed over reinforced concrete (4" minimum) using a thinset/thickset mortar suitable for porcelain paver.

03

INSTALLATION OVER DECKING.

Traditional deck made with wood and porcelain pavers.

04

RAISED FLOORS.

Slabs matched with a support structure for raised high-performing floors that also leaves sufficient room for **under-floor inspection.**

01
DRY LAYING.

The surface in 20mm thickness can be laid onto the substrate **without adhesives,** lending itself to applications onto **grass, gravel and sand.** Sought-after ambiance in the home come to life quickly with **incredible ease and simplicity.**

ADVANTAGES.

- RAPID
- MODIFIABLE
- REUSABLE
- EASY TO CARRY THROUGH
- REDUCES ADHESIVES COSTS
- QUICK TO INSTALL

- READY TO USE

LOCATIONS.

- PRIVATE GARDENS
- PATIOS
- WALKWAYS
- PUBLIC PARKS AND GARDENS
- OUTDOOR COMMERCIAL AREAS
- BEACH RESORTS

DRY LAYING ON GRASS

PROJECT
OUTDOOR FLOOR DESIGN
Frontier 20 Travertine Select Cross Cut Pearl - 24"x24"
OUTDOOR WALL DESIGN
Veneer World Atelier Bamboo Vein Cut Pearl - 12"x24"
OUTDOOR POOL DESIGN
Frontier20 Travertine Select Cross Cut Pearl Trim Pieces

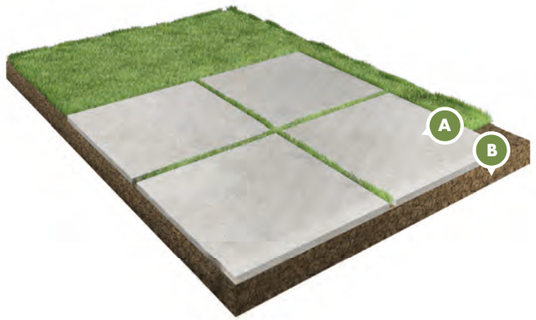
01.1 DRY LAYING

ON GRASS.

DRY LAY OVER GRASS
(PEDESTRIAN FOOT TRAFFIC)

PRACTICAL INSTALLATION
Follow the drawing below.

- Cut grass in desired area as short as possible. remove any debris.
- Using a landscape rake scratch up top 1 inch of soil and level.
- Insure sub grade is graded to a 1" in 10' slope and that it is pitched away from any building.

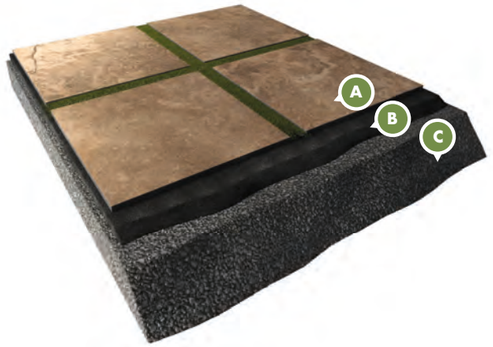


- **A** FRONTIER20 PORCELAIN 3/4" NOMINAL (20MM) PAVERS
- **B** BARE SOIL IS BEST. SCRATCH AND LAYEL WITH A RAKE

DRY LAY OVER GRASS ON COMPACTED ROAD BASE INSTALLATION
(PEDESTRIAN FOOT TRAFFIC)

PRACTICAL INSTALLATION
Follow the drawing below.

- Compacted base road is composed of ¾ compacted gravel.
- Sand bed course poured onto compacted gravel and screed to have smooth surface.



- **A** FRONTIER20 PORCELAIN ¾" NOMINAL (20MM) PAVERS.
- **B** 1" SAND BEDDING COURSE SCREED WITH SMOOTH SURFACE.
- **C** COMPACTED ROAD.

The stratigraphic images are just an example of the type of application and technical features of Frontier20. Landmark Ceramics recommends to refer to the specific norms valid in the various countries to carry out a state-of-the-art installation. Download Landmark Frontier20 Installation guide from outdoor.landmarkceramics.com for practical installation information.

PROJECT
FLOOR DESIGN
Frontier20 Travertine Cross Cut White - 24"x24"

01.2 DRY LAYING

ON GRAVEL.

PERMEABLE APPLICATION
(PEDESTRIAN FOOT TRAFFIC)

PRACTICAL INSTALLATION
Follow the drawing below.

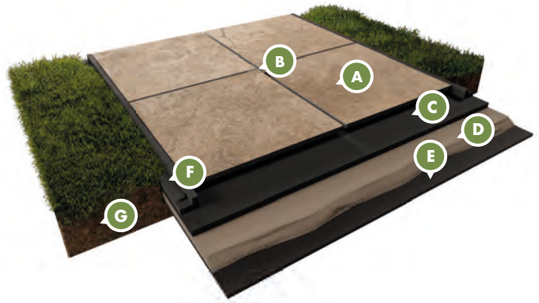
- The required edge restraint system for this installation has a vertical height of 2" (5 cm) as shown in the drawing.
- Insure that pavement is constructed with a 1" in 10' and that it is pitched away from any building.
- Insure the $^{3}/_{16}$" (4 mm) spacers are installed between all pavers, in order to prevent pavers from touching each other (and potentially chipping) and to allow better water drainage.

- A FRONTIER20 PORCELAIN 3/4" NOMINAL (20MM) PAVERS
- B COARSENESS OF GRAVEL 2" - 8 S' AND 9 S' (1/2" + LESS)
- C COARSENESS OF GRAVEL 4" - #57 (3/4")
- D COARSENESS OF GRAVEL 6" - 3 S'- 4 S' IF DESIRED
- E FILTER FABRIC

INSTALLATION WITH HIGH DENSITY PANELS
(PEDESTRIAN FOOT TRAFFIC)

PRACTICAL INSTALLATION
Follow the drawing below.

- The edge restraint system is 0.75 " - 1" height profile.
- Attach the edge restraint into the panel.
- Lay fabric directly on top of the substrate to contain sand.
- Install panel onto sand bed course 1".
- Insure the $^{3}/_{16}$" (4 mm) spacers are installed between all pavers, in order to prevent pavers from touching each other (and potentially chipping) and to allow better water drainage.



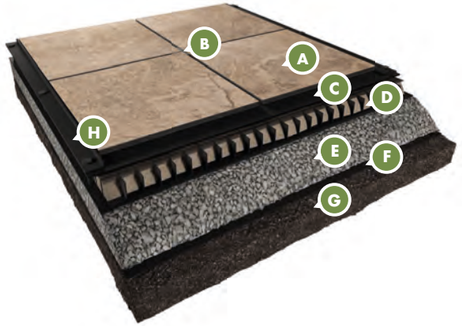
- A FRONTIER20 PORCELAIN 3/4" NOMINAL (20MM) PAVERS
- B SPACERS
- C HIGH DENSITY PANELS
- D SAND 1/2" - 1"
- E FILTER FABRIC
- F 1' INCH PERIPHERAL ANCHOR
- G SUBSTRATE

WARNING:
Please remember that high density panel can reduce the heat dispersion accumulated by pavers exposed to direct sun or any other source of heat. For this reason we recommend to contact Landmark Ceramics at outdoor.landmarkceramics.com/contact.php for any questions you might have.

INSTALLATION WITH GRATE FULFILLED WITH SAND OVER COARSE
(PEDESTRIAN FOOT TRAFFIC)

PRACTICAL INSTALLATION
Follow the drawing below.

- Paver joints have to be swept with polymeric tile sand.
- Please ensure that grate has to be filled with drainable sand.
- Depth of coarse aggregate has to be approximately 50% of traditional excavation vertical extent.



- A FRONTIER20 PORCELAIN 3/4" NOMINAL (20MM) PAVERS
- B SPACERS
- C FILTER FABRIC
- D GRATE SYSTEM FILLED WITH DRAINABLE SAND
- E COARSE AGGREGATE (67 OR 57)
- F ADDITIONAL FILTER FABRIC IF NEEDED
- G SUBSTRATE
- H 1' INCH PERIPHERAL ANCHOR

Insure the plastic 3/16" (4 mm) spacers are installed at all corners of the installed pavers, in order to prevent pavers from touching each other (and potentially chipping) and to allow better water drainage.

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01.3 DRY LAYING

ON SAND.

TYPICAL FLEXIBLE BASE INSTALLATION
(PEDESTRIAN FOOT TRAFFIC)

PRACTICAL INSTALLATION
Follow the drawing below.

- Base material is to be over dug 6" to 8" beyond the edge of the pavement.
- The required edge restraint system is a low profile edge restraint with a vertical height of 1.5"" (4 cm) as shown in the drawing.
- Insure that pavement is constructed with a 1" in 10' slope that it is pitched away from any building.
- Insure the plastic $^{3}/_{16}$" (4 mm) spacers are installed at all corners of the installed pavers, in order to prevent pavers from touching each other (and potentially chipping) and to allow better water drainage.

- A FRONTIER20 PORCELAIN 3/4" NOMINAL (20MM) PAVERS
- B 3/4" UNCOMPACTED BEDDING SAND
- C 4-6" CRUSHER RUN/ROAD BASE
- D FILTER FABRIC

OVER SAND BASE INSTALLATION
(PEDESTRIAN FOOT TRAFFIC)

PRACTICAL INSTALLATION
Follow the drawing below.

- Filter fabric is recommended as it allows water to pass but not the particles of sand.
- 2-4" of a compactable sand is recommended. You can go with more however it will not offer any distinct advantage. Going with less than 2" may offer a less desirable effect as it will tend to hold more water and become "mushy" when super saturated.
- The use of an edge restraint is ideal but not necessary. It becomes more necessary if your desired paving area is above the surrounding native soil, as it will help aid in the minimization of sand migration or erosion.
- Insure the plastic $^{3}/_{16}$" (4 mm) spacers are installed at all corners of the installed pavers, in order to prevent pavers from touching each other (and potentially chipping) and to allow better water drainage.

- A FRONTIER20 PORCELAIN 3/4" NOMINAL (20MM) PAVERS
- B APPROX. 4" OF BEDDING SAND
- C FILTER FABRIC

SAND SET OVER CONCRETE
(PEDESTRIAN FOOT TRAFFIC)

PRACTICAL INSTALLATION
Follow the drawing below.

- The edge restraint system is 1 ½" - 2" height profile.
- Ensure edge restraint into the concrete base made.
- Lay fabric directly on top of the concrete to contain sand and fold it up the front of the edging.
- Insure that pavement is constructed with a 1" in 10' and that it is pitched away from any building.
- Insure the $^{3}/_{16}$" (4 mm) spacers are installed between all pavers, in order to prevent pavers from touching each other (and potentially chipping) and to allow better water drainage.

- A FRONTIER20 PORCELAIN 3/4" NOMINAL (20MM) PAVERS
- B SAND BEDDING COURSE 1"
- C FILTER FABRIC
- D EXISTING OR NEW CONCRETE 4" MINIMUM
- E ½" - 1" INCH DRAINAGE HOLES DRILLED 24 INCH ON CENTER
- F PERIPHERAL RESTRAINT SYSTEM

Insure the plastic 3/16" (4 mm) spacers are installed at all corners of the installed pavers, in order to prevent pavers from touching each other (and potentially chipping) and to allow better water drainage.

The stratigraphic images are just an example of the type of application and technical features of Frontier20. Landmark Ceramics recommends to refer to the specific norms valid in the various countries to carry out a state-of-the-art installation. Download Landmark Frontier20 Installation guide from outdoor.landmarkceramics.com for practical installation information.

02

INSTALLATION OVER REINFORCED CONCRETE*.

ADVANTAGES.

- LONG TERM DURABILITY
- READILY ACCESSIBLE SURFACES
- ABLE TO WITHSTAND PEDESTRIAN AND LIGHT VEHICULAR TRAFFIC

_The Frontier20 may also be installed with traditional methods using thinset/thickset mortar appropriate for use with porcelain paver. In a short 24 hours your floor will be ready for foot traffic. This method offers the most stable and most durable floor covering that is able to withstand foot traffic up to light vehicular traffic.

* It is recommended installation over 4" minimum thick reinforced concrete, using a thinset/thickset mortar suitable for porcelain paver.

LOCATIONS.

- YARDS
- PORCHES
- TERRACES
- RAMPS
- GARAGES
- PARKING AREAS
- CYCLE TRACKS
- PAVEMENTS
- SQUARES

INSTALLATION OVER REINFORCED CONCRETE

THIN SET MORTAR APPLICATION OVER REINFORCED CONCRETE

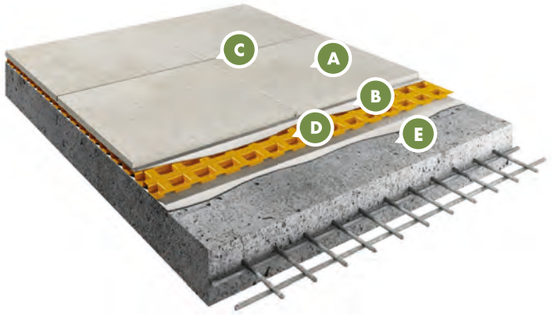
PRACTICAL INSTALLATION

Follow the drawing below.

- Insure that pavement is constructed with approximately 2 degree slope and that it is sloped away from any building.
- Please consult your paver supply distributor for thin set mortar suitable for porcelain paver as well as for inside or external usage.
- For cementitious adhesive and grout installation, refer to the manufacturer's technical instructions and specifically as they relate to outdoor installations.
- For concrete foundation slabs that are not large enough to require contraction/control joints, a minimum $^{3}/_{16}$" (4 mm) grout joint is acceptable, but for larger concrete foundation slabs that do require contraction/control joints, the control joint width should be a $^{3}/_{8}$" (1 cm). It is absolutely imperative that all contraction/control joints be located in the joint line of installed porcelain pavers and not beneath a paver.

CAUTION: if a porcelain paver is installed over a control joint, the paver will reflectively crack along the contraction/control joint beneath it.

Utilization of an uncoupling membrane can help minimize the potential issue.



- A FRONTIER20 PORCELAIN 3/4" NOMINAL (20MM) PAVERS
- B THINSET
- C 3/16" MINIMUM GROUT JOINT
- D UNCOUPLING MEMBRANE
- E EXISTING OR NEW CONCRETE (REINFORCED). 4" MINIMUM

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03

INSTALLATION OVER DECKING.

_Landmark Ceramic's Frontier20 combined with a **grate system** allows porcelain paving to be utilized in conjunction with an existing or new construction **wood deck structure**. As long as the wooden deck structure is constructed soundly and according to local codes, the honeycomb plastic grate is installed as the substrate for the porcelain paver. This system is **highly innovative and functional** for the design of contemporary outdoor spaces.

ADVANTAGES.

- ANTISLIP FROST RESISTANT
- RESISTANT TO THERMAL SHOCK
- SAFETY
- EASY TO MAINTAIN
- DURABLE OVER TIME
- HIGH END LOOK
- NEVER HAVING TO STAIN DECK BOARDS AGAIN
- NO SCREW OR NAILS STICKING UP
- NO WOOD SPLINTERS

LOCATIONS.

- PRIVATE GARDENS
- OUTDOOR ELEVATED WALKWAYS
- DECK PATIOS
- DECK GAZEBOS

INSTALLATION OVER DECKING

INSTALLATION OVER DECKING

(PEDESTRIAN FOOT TRAFFIC)

PRACTICAL INSTALLATION

Follow the drawing below.

- Deck joists must be "sound" and in good condition as well as constructed in accordance with local codes.
- Deck joists must be spaced 16" on center.
- Top of joists must be flat to one another.
- Grates will span 2 joists and be fastened using weather proof screws.
- Stagger grates 1/3rd, 1/4th or 1/2 as shown.
- Outdoor fabrics varies in thickness. Multiple layers may be needed to reduce acoustics.
- The use of porcelain paver spacers are recommended. 1/8th inch joints are the minimum recommendation.
- Silicon or a neutral colored adhesive may be applied to spacers to help reduce porcelain paver movement.
- Porcelain paver joints may be filled or left open, depending on desired drainage.
- Insure the 3/16" (4 mm) spacers are installed between all pavers, in order to prevent pavers from touching each other (and potentially chipping) and to allow better water drainage.

- A FRONTIER20 PORCELAIN 3/4" NOMINAL (20MM) PAVERS
- B OUTDOOR FABRIC OR SOUND INSULATING MATTRESS
- C HONEYCOMB PLASTIC GRATE
- D DECK JOISTS

Insure the plastic 3/16" (4 mm) spacers are installed at all corners of the installed pavers, in order to prevent pavers from touching each other (and potentially chipping) and to allow better water drainage.

The stratigraphic images are just an example of the type of application and technical features of Frontier20. Landmark Ceramics recommends to refer to the specific norms valid in the various countries to carry out a state-of-the-art installation. Download Landmark Frontier20 Installation guide from outdoor.landmarkceramics.com for practical installation information.

04 RAISED FLOORS.

_In combination with a suitable structure the **Frontier20 porcelain paver** in 20mm thickness lend themselves perfectly to floors with a **suspended installation.** The adjustable stand means being able to create an air space under the floor in which to lay electrical conduit or plumbing.
The raised flooring system is easy to manage, allows you to configure the underlying wiring or plumbing systems based on specific needs and also to change its configuration any time a new look is needed.

ADVANTAGES.

- LEVEL OFF UNEVEN SURFACES
- ALLOWS YOU TO HIDE UNSIGHTLY PIPES AND PLANTS WIRES AND ELECTRICAL CONDUIT
- EASY MAINTENANCE
- ALLOWS FOR WATER DRAINAGE
- RESISTANT TO THERMAL EXPANSION
- PROVIDES THERMAL AND ACOUSTIC INSULATION
- NO NEED FOR ADHESIVES
- REDUCES LABOUR COSTS

LOCATIONS.

- PATIOS
- GAZEBOS
- FACILITY AREAS OF COMMERCIAL VENUES
- ROOF TOPS

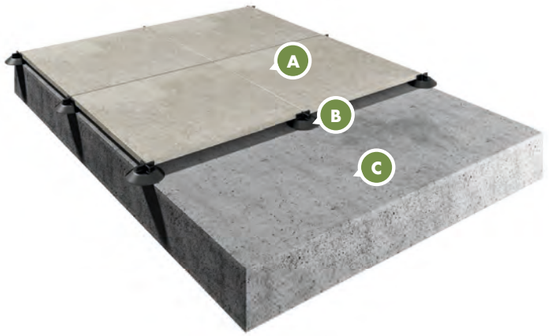
LOW HEIGHT SUPPORTS (UP TO ¾" - 20MM) PEDESTAL INSTALLATION OVER EXISTING SUBSTRATE

(PEDESTRIAN FOOT TRAFFIC)

PRACTICAL INSTALLATION

Follow the drawing below.

- Ensure concrete slab is in stable condition and has a 1" in 10' slope to divert water away from structure.
- Ensure spacer tabs are intact in the corners where the porcelain pavers might come to contact.



- A FRONTIER20 PORCELAIN 3/4" NOMINAL (20MM) PAVERS
- B PEDESTAL
- C EXISTING SLAB OR SUBSTRATE

INSTALLATION OVER LOW HEIGHT SUPPORTS (UP TO ¾" - 20MM) PEDESTAL ON CONCRETE

(PEDESTRIAN FOOT TRAFFIC)

PRACTICAL INSTALLATION

Follow the drawing below.

- Make sure the concrete slab is properly built and smooth and has 1 ½ - 2 degree pitch and that it is pitched away from any building.
- Plastic ¾" pedestal support must be placed and installed all corners of the pavers.

- A FRONTIER20 PORCELAIN 3/4" NOMINAL (20MM) PAVERS
- B PEDESTAL
- C CONCRETE BASE
- D SUBSTRATE

Insure the plastic 3/16" (4 mm) spacers are installed at all corners of the installed pavers, in order to prevent pavers from touching each other (and potentially chipping) and to allow better water drainage.

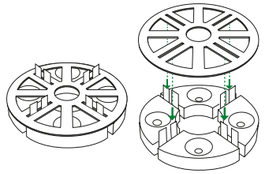
The stratigraphic images are just an example of the type of application and technical features of Frontier20. Landmark Ceramics recommends to refer to the specific norms valid in the various countries to carry out a state-of-the-art installation. Download Landmark Frontier20 Installation guide from outdoor.landmarkceramics.com for practical installation information.

RAISED FLOORS
INSTALLATION SYSTEM.

LOW HEIGHT SUPPORTS.

System made up of disks of variable thickness. Utilize for low height installation (up to 3/4”).

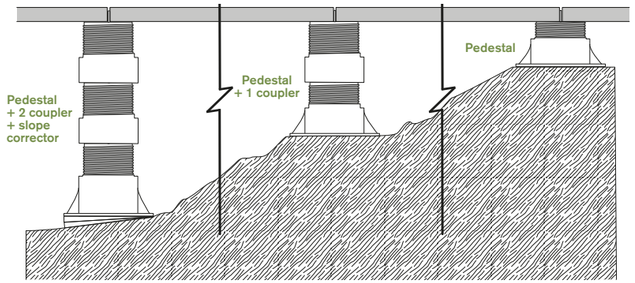
	AVAILABLE HEIGHT			
	1/8”	1/4”	1/2”	3/4”
Shim	1/8”			



ADJUSTABLE HEIGHT SUPPORTS.

System made up of adjustable height pedestal (from 1 1/4” to 16”).

	AVAILABLE HEIGHT			
	$1^1/_4$” - 2”	2” - 3”	3” - $4^3/_4$”	$4^3/_4$” - $7^3/_4$”
Coupler	add up 4” each			
Slope corrector	0” - 1” per foot slope			



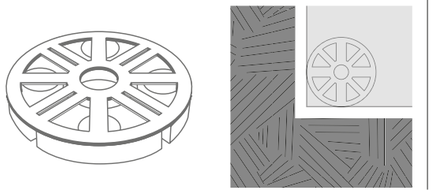
RAISED FLOORS
INSTALLATION SYSTEM.

20MM THICKNESS PORCELAIN PAVERS

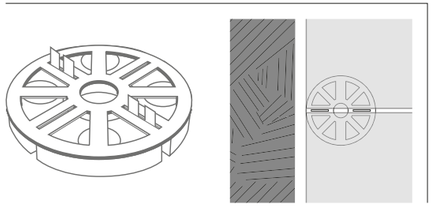
WARNINGS.

It is recommended to carry out raised installation onto a solid, resistant substrate with the correct inclination to guarantee water drainage.
Support come equipped with four spacers that allow for the creation of grout lines between pavers. For a correct installation against walls or corners, it is necessary to keep the supports distant from the wall and remove 2 or 4 spacers as showed in the picture below.
Landmark Ceramics recommends to strictly follow the instructions for the raised installation of Frontier20.
Failure to comply with these recommendations may lead to improper use of the product and could cause serious property damage or injury.
For further information and recommendations concerning the installation systems please refer to our website at
https://outdoor.landmarkceramics.com.

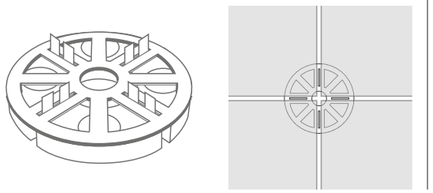
Wall corner



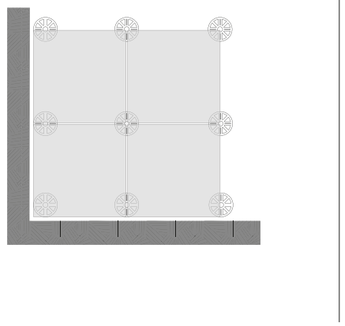
Wall border



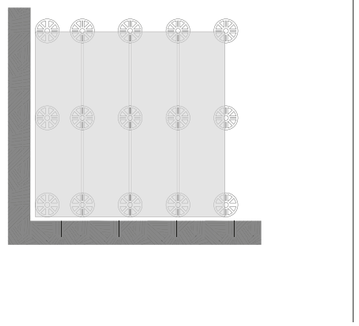
Floor center



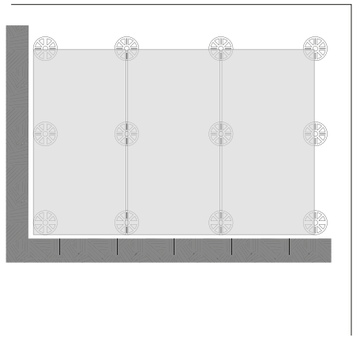
24”x24” - 12”x24” - 12”x12”



12”x48”



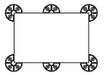
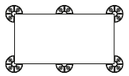
24”x48”



RAISED FLOORS
INSTALLATION SYSTEM.

WARNINGS.

Landmark products are made using the best technology available, and their technical performances match or exceed requirements from both ASTM and ISO standards for porcelain products.
Nevertheless, if the application of the 20 mm slabs requires the ceramic product used in structural installations, the project engineer and/or customer must carefully assess the project requirements with regard to the technical specifications of the slabs.
To prevent the risk of damage or injury, the manufacturer recommends:
• With regard to a raised floor installation a ceramic slab may fracture on impact if a heavy object falls on it. Therefore, the manufacturer recommends checking the specific intended use before starting the installation and:
1) As far as supports requirements, comply with the table for raised installation provided below.
2) In all installations on pedestals higher than 3/4", reinforcing must be applied on the back of the slabs (double fiberglass mesh) supplied and applied by the manufacturer.

SUPPORTS REQUIREMENTS			
	SIZE	UP TO 3/4" (20MM)	ABOVE 3/4" (20MM)
	12"x12" (300x300 mm)	4 supports 0,32 pcs/sq ft	Please contact Landmark Ceramics
	12"x24" (600x300 mm)	4 supports 0,32 pcs/sq ft	Please contact Landmark Ceramics
	24"x24" (600x600 mm)	4 supports 0,32 pcs/sq ft	Please contact Landmark Ceramics
	24"x36" (600x900 mm)	6 supports 0,32 pcs/sq ft	Please contact Landmark Ceramics
	12"x48" (300x1200 mm)	6 supports 0,65 pcs/sq ft	Please contact Landmark Ceramics
	24"x48" (600x1200 mm)	6 supports 0,65 pcs/sq ft	Please contact Landmark Ceramics

• With reference to any dry installation system of flooring above the ground level, the manufacturer recommends to comply with local regulations and conditions of use with regard to wind-load, loadbearing, seismic events, etc.
• Outdoor pavings installed unglued above the ground level are subject to the action of the wind, with the risk, in some cases, of becoming airborne. The manufacturer recommends to require the assistance of a qualified professional in order to check the suitability of the installation system above the ground adopted, in accordance with the local laws and regulations and the conditions of use.

NOTE

For any detail and technical specification concerning the double fiberglass mesh, please contact Landmark Ceramics. Landmark is responsible only if it supplies the whole system (paver + double fiber mesh). Landmark cannot be held responsible for reinforcing systems not supplied by Landmark.
In case of breakage, paver must be replaced immediately.

PORCELAIN PAVERS OTHER WARNINGS

Outdoor pavings installed unglued above the ground level are subject to the action of the wind, with the risk, in some cases, of becoming airborne. The manufacturer recommends to require the assistance of a qualified professional in order to check the suitability of the installation system above the ground adopted, in accordance with the local laws and regulations and the conditions of use. Failure to do so could result in serious injury or property damage.

If the application of the 20 mm slabs requires the ceramic product used in structural installations, the project engineer and/or customer must carefully assess the project requirements with regard to the technical specifications of the slabs. With reference to a raised floor installation: a ceramic slab may fracture on impact if a heavy object falls on it from any significant height. Therefore to prevent the risk of damage or injury, Landmark recommends to check the specific intended use before starting the installation and to follow table for raised installation provided below. In certain conditions, reinforcing must be applied on the back of the slabs (double fiberglass mesh) supplied and applied by the Landmark. With reference to any dry installation system of flooring above the ground level: Landmark recommends to comply with local regulations and conditions of use with regard to wind- load, loadbearing, seismic events, etc. Failure to comply with these recommendations may lead to improper use of the product and could cause serious damage or injury. Failure to adhere to Landmark's instructions for installation of slabs on raised pedestal systems may result in serious injury.

For further information and recommendations concerning the installation systems please refer to https://outdoor.landmarkceramics.com website.

All the information provided in this document can be subject to change. Please refer to our websites (https://www.lcusa.com and https://outdoor.landmarkceramics.com) for the latest, most accurate and up-to-date information.

RECOMMENDATIONS FOR THE INSTALLATION, ORDINARY CLEANING AND MAINTENANCE OF FRONTIER20

Landmark Ceramics recommends carrying out the procedures for the ordinary cleaning of Frontier20 floor surfaces using water and commercially available neutral detergents: the inclination of the surface and the space between adjacent slabs for dry-system installation favour the natural flow of water. However, it is important to take into consideration that any type of floor surface is subject to the surface tension effect of liquids: it is the same property of water that gives the tendency to transform into spherical droplets and which cause the curved top surface of a glass full of water. The surface tension can obstacle the complete drainage of water and cause a temporary stagnation of liquid on the slab edges. In order to avoid this problem, Landmark Ceramics recommends ensuring adequate inclination of the surface during installation so as to encourage the flow of water between adjacent slabs. Please remember in any case that, in view of the distinctive advantages of porcelain stoneware, Frontier20 absorbs practically no water, which makes it highly frost-proof. This may lead to localised water pooling, mainly on the edges of the pavers, independently of the manner and quality of the laying. Laying is also recommended with a minimum gap of 4 mm (5/32"). Should liquid deposit on the surface, it is recommended to push it towards grout lines using a brush or remove it with a wet and dry vacuum cleaner.

Backing with double fiberglass mesh.

RAISED FLOORS INSTALLATION SYSTEM.

Landmark Ceramic's Frontier20 tile combined with a **tongue-and-groove track-and-pedestal system** allows porcelain paving to be used as a raised floor or rooftop flooring system without fear of shatter, wind uplift, or wobbling tiles. This system is **one-of-a-kind** and functional for the design of any outdoor rooftop or raised floor space. Utilizing the 12' tongue-and-groove tracks with grooved edge tiles allowed for an extremely fast installation while also ensuring no tile movement, wind lift, or uneven joints. Turn-key installation quotes available for volume projects.

ADVANTAGES.

- ADJUSTABLE PEDESTAL INSTALLATION
- NO WOBBLE, MOVEMENT, UNEVEN JOINTS OR LIPPAGE
- NO GROUT, MORTAR OR SAND
- FAST INSTALL VIA TONGUE & GROOVE TRACKS

LOCATIONS.

- LARGE COMMERCIAL SURFACES
- ROOFTOPS
- BALCONIES
- RESIDENTIAL DECKS
- AMENITY DECKS

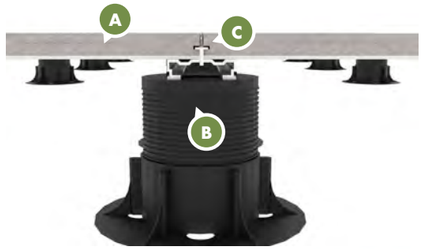
INSTALLATION WITH TRACKS AND PEDESTAL

(Pedestrian Foot Traffic) TILE PEDESTAL SYSTEM
WEIGHS 10.5 LB/SF INCLUDING PORCELAIN PAVER

PRACTICAL INSTALLATION

Follow the drawing below.

- Verify the roof waterproofing surface is at least 2 5/8" below any clearance obstructions. Verify drainage.
- Click 12' tongue and groove track onto pedestal tops. Pedestals spaced 30" on center under track.
- The 12' aluminum track provides straight and level lines for faster and more precise installation of the tile row.
- Adjust pedestals as needed for heights and slope, resulting in level tile floor when complete.
- Fit grooved / kerfed edge of tile into tongue of track. Snug all tiles into track for perfect self-spacing 1/8" drainage gaps.
- Repeat steps above until completed.



A REINFORCED PORCELAIN TILE
B TONGUE & GROOVE L-TRACK
C TONGUE & GROOVE T-TRACK
D THREADED PEDESTAL

INSTALLATION OVER JOIST FRAMING.

20MM THICKNESS PORCELAIN PAVERS

Landmark Ceramic's Frontier20 tile combined with a **joist framed system** allows porcelain paving to be utilized with an existing or new construction **deck structure**. As long as the deck structure is constructed according to local codes (16" on center pressure treated lumber, for example), this decking application's reinforced porcelain tiles over tongue and groove aluminum tracks can be easily installed. This system is **one-of-a-kind and functional** for the design of any outdoor space.

ADVANTAGES.

- TONGUE & GROOVE INSTALLATION
- NO GROUT, MORTAR OR SAND
- EASILY INSTALLED BY EXPERIENCED CREW
- INSTALLED ON CONVENTIONAL CODE FRAMING
- NO WOBBLE, MOVEMENT OR LIPPAGE

LOCATIONS.

- RESIDENTIAL OR COMMERCIAL FRAMED DECKS
- OUTDOOR STAIRS
- COORDINATING PATIOS OR INTERIOR SPACES
- BALCONIES, LOW SLOPE FLAT ROOFS, PEDESTAL AREAS

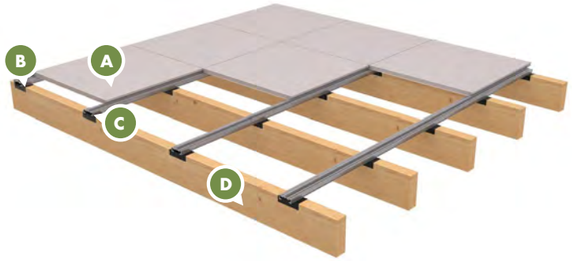
INSTALLATION OVER JOIST FRAMED DECKING

(Pedestrian Foot Traffic) TILE DECK SYSTEM WEIGHS 10-15 LBS/SF

PRACTICAL INSTALLATION

Follow the drawing below.

- Verify the deck frame is at least 1 5/8" below the adjoining doorway thresholds, or any other obstructions.
- Use the aluminum track to verify the deck is squared and flat. Shim any surface that is crowned.
- Place the protective butyl tape at all points where the deck and track will meet.
- Lay a single-sided L-Track to your starting edge. Ensure the first L-Track is parallel to the dwelling wall.
- Pre-drill holes into the L-Track at all points where the deck and aluminum framing will meet.
- Secure the L-Track to the joist with stainless screws.
- Place approximately a quarter-sized dab of adhesive onto the tracks where all four corners of the tile will sit.
- Place a row of tile at the designated location between both tracks.
- Use a rubber mallet or dead blow hammer to slide the tile and T-Track toward your previous track until all tile grooves are seated and the two tracks are snug and parallel.
- Pre-drill holes into the exposed side of the T-Track at all points where the deck and framing will meet. Secure the T-Track with stainless screws.
- Repeat steps above until complete: Place the T-Track 1/2" wider than the width of your tile away from the previous track. Place adhesive dab, place tile, and set with mallet or dead blow hammer until seated, snug, and parallel.



A REINFORCED PORCELAIN TILE
B TONGUE ENGROOVE L-TRACK
C TONGUE ENGROOVE T-TRACK
D DECK JOISTS

TRIM TILES TO LANDSCAPE THE OUTDOORS.

_**Frontier20** includes a complete range of **special trim pieces** to seamlessly complete and accentuate the landscaping of outdoor spaces. The trim tiles represent the ideal solution for the planning of outdoor spaces, **commercially or residentially.** The special trims feature coordinated aesthetics to match those of the **Landmark porcelain paver**, for projects that demand **total visual continuity.**

DESTINATION OF USE.

→ **STAIRS**
→ **POOLS**
→ **WALL COVERS**

PROJECT
FLOOR DESIGN
Frontier20 Silver Quartz - 24"x24"
Frontier20 Silver Quartz Linear Cover Drain Set - 24"x24"
Frontier20 Silver Quartz Coping - 24"x12"
Frontier20 Silver Quartz Coping Corner - 24"x12"
Frontier20 Silver Quartz Stair Tread - 24"x12"
Frontier20 Silver Quartz Stair Tread Grip - 24"x12"
Frontier20 Silver Quartz Riser - 24"x8"
Frontier20 Silver Quartz Cover - 24"x12"
Frontier20 Silver Quartz End Cover - 24"x12"

20MM THICKNESS PORCELAIN PAVERS

STAIRS WITH AN IN-DEMAND AESTHETIC THAT IS ALSO HIGH PERFORMING.

SYSTEM.

- STAIR TREAD
- GRIP STAIR TREAD
- RISER

ADVANTAGES.

- RESISTANCE TO SALTS
- RESISTANCE TO CHEMICALS
- TECHNICAL PERFORMANCE
- ANTI-SLIP
- VISUAL CONTINUITY TO THE OUTDOOR FLOOR

RISER

48"x6" | 24"x8"

20mm

GRIP STAIR TREAD

48"x12" | 24"x12" 20mm

Rectified | Bullnose

STAIR TREAD

48"x12" | 24"x12" 20mm

Rectified | Bullnose

20MM THICKNESS PORCELAIN PAVERS

COMFORT AND STYLE FOR SWIMMING POOL AREAS.

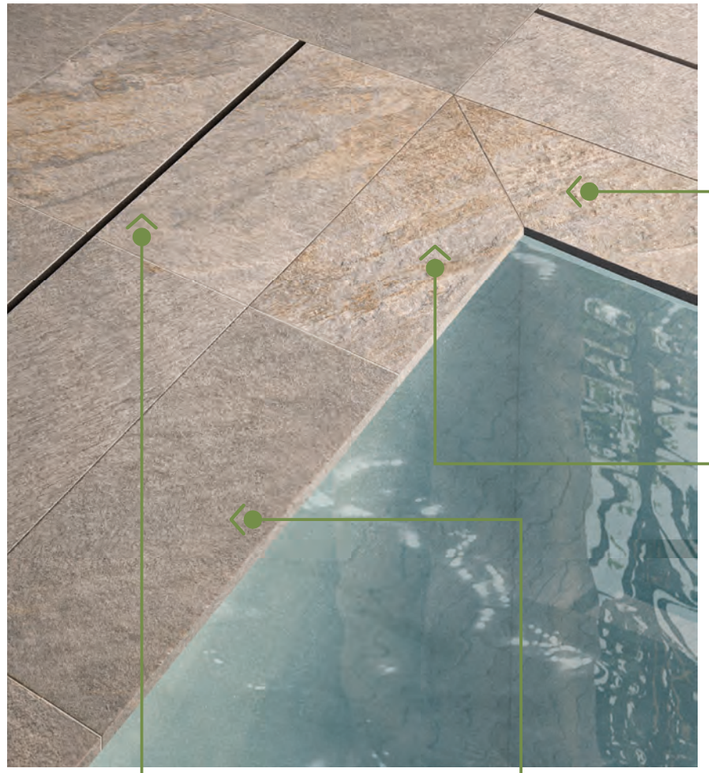
SYSTEM.

- LINEAR COVER DRAIN SET
- COPING
- COPING CORNER

ADVANTAGES.

- RESISTANCE TO SALTS
- RESISTANCE TO CHEMICALS
- ANTI-SLIPPERINESS
- DURABILITY
- EASY TO CLEAN
- VISUAL CONTINUITY TO THE OUTDOOR FLOOR

* The Linear Cover Drain Set is made-up of two pieces, each having a further beveled and polished edge. The two pieces are studied to be laid with the beveled and polished edges facing each other in order to create an open joint. See pages 45, 46 for more details.



COPING CORNER RIGHT

48"x12" | 24"x12" — 20mm

Rectified | Bullnose

COPING CORNER LEFT

48"x12" | 24"x12" — 20mm

Rectified | Bullnose

LINEAR COVER DRAIN SET*

48"x12" | 24"x12" — 20mm

COPING

48"x12" | 24"x12" — 20mm

Rectified | Bullnose

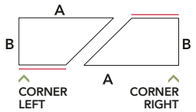
L SHAPE: A SLEEK, MODERN TWIST FOR POOLS AND STAIRS.

SYSTEM.

- L SHAPE MITERED EDGE
- L SHAPE CORNER CLOSURE

ADVANTAGES.

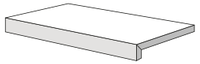
- RESISTANCE TO SALTS
- RESISTANCE TO CHEMICALS
- TECHNICAL PERFORMANCE
- ANTI-SLIP
- VISUAL CONTINUITY TO THE OUTDOOR FLOOR



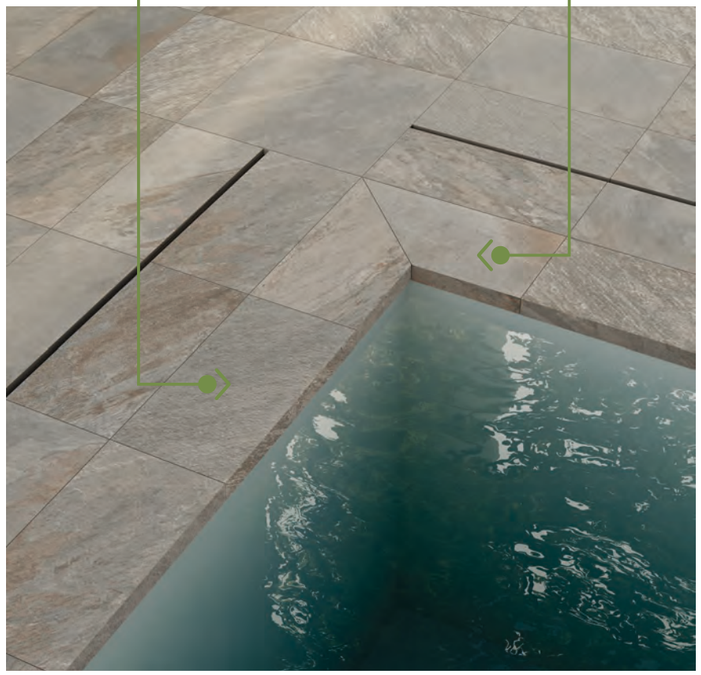
L SHAPE 45° CORNER

24"x12" 20mm

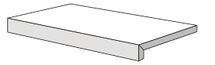
L SHAPE MITERED EDGE



24"x12"
20mm

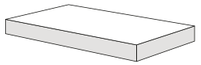


L SHAPE MITERED EDGE

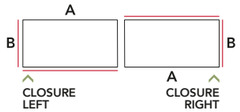


24"x12"
20mm

L SHAPE 2 SIDE CORNER CLOSURE



24"x12" 20mm



WALL COVERS: PROTECTION FROM WATER AND VISUAL CONTINUITY.

SYSTEM.

- COVER
- END-COVER

ADVANTAGES.

- ANTI-DETERIORATION
- EASY TO CLEAN
- PROTECTS THE WALL FROM WATER INFILTRATION

* Both Cover and End-Cover have dripstone and undecorated borders.

COVER *

12"x24"

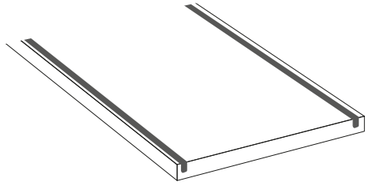
20mm

END COVER *

12"x24"

20mm

DRIPSTONE



20 MM THICKNESS PORCELAIN PAVERS

A COMPLETE PROJECT FOR EVERY NEED.

_**Frontier20** is a complete project for any design need, specially developed by Landmark for contemporary outdoor spaces. The extent of the range makes it possible to design outdoor environments with looks that are always new, and to play with surfaces inspired by different materials.

ADVANTAGES.

01 **WIDE LOOKS RANGE**
02 **A WIDE RANGE OF SIZES**
03 **AMERICAN STONES**
04 **LANDMARK DESIGN PROJECT**
05 **FRONTIER20 DECO**

PROJECT
FLOOR DESIGN
Frontier20 Travertine Cross Cut Silver - 24"x24"
WALL DESIGN
Frontier20 Travertine Cross Cut Silver - 24"x24"
COUNTER
Frontier20 Travertine Cross Cut Silver - 24"x24"

01
WIDE LOOKS RANGE.

BLUESTONE DESIGN PROJECT

THERMAL BLUESTONE BLUE SELECT
V2 AMERICANSTONE

BLUESTONE BLUE SELECT
V2 AMERICANSTONE

THERMAL BLUESTONE FULL COLOR
V3 AMERICANSTONE

BLUESTONE FULL COLOR
V4 AMERICANSTONE

INDIANA SALEM DESIGN PROJECT

INDIANA BUFF SELECT
V2 AMERICANSTONE

INDIANA GREY SELECT
V2 AMERICANSTONE

INDIANA VARIEGATED
V3 AMERICANSTONE

LIMESTONE LOOK

LIMESTONE
V2 AMERICANSTONE

SLATE LOOK

VINTAGE SLAB
V2 AMERICANSTONE

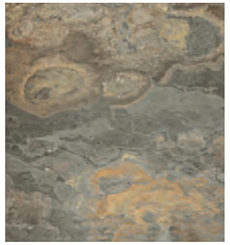
SLATE DESIGN PROJECT

MONTAUK WHITE
V2 AMERICANSTONE

MONTAUK GREY
V2 AMERICANSTONE

MONTAUK BLACK
V2 AMERICANSTONE

SLATE DESIGN PROJECT


CALIFORNIA GOLD
V4 AMERICANSTONE

RUSTIC GOLD
V4 AMERICANSTONE

MARIPOSA SLATE
V4 AMERICANSTONE

01

WIDE LOOKS RANGE.

TRAVERTINE DESIGN PROJECT

TRAVERTINE
CROSS CUT WHITE
V2 AMERICANSTONE

TRAVERTINE
CROSS CUT SILVER
V2 AMERICANSTONE

TRAVERTINE
CROSS CUT CREAM
V2 AMERICANSTONE

TRAVERTINE DESIGN PROJECT

TRAVERTINE
VEIN CUT BEIGE
V2 AMERICANSTONE

TRAVERTINE
VEIN CUT GREY
V2 AMERICANSTONE

TRAVERTINE SELECT
CROSS CUT PEARL
V2 AMERICANSTONE

TRAVERTINE SELECT
CROSS CUT BEIGE
V2 AMERICANSTONE

TRAVERTINE DESIGN PROJECT

TRAVERTINE
CROSS CUT COUNTRY CLASSIC
V4 AMERICANSTONE

TRAVERTINE
CROSS CUT PHILADELPHIA
V4 AMERICANSTONE

TRAVERTINE
CROSS CUT SCABAS
V4 AMERICANSTONE

PROJECT
OUTDOOR FLOOR DESIGN
Frontier 20 Travertine Select Cross Cut Pearl - 24"x24"
OUTDOOR POOL DESIGN
Frontier20 Travertine Select Cross Cut Pearl Trim Pieces

20MM THICKNESS PORCELAIN PAVERS

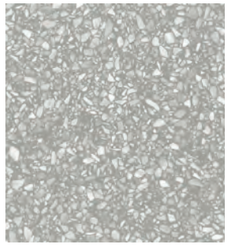
01

WIDE LOOKS RANGE.

TERRAZZO LOOK

DIAMOND WHITE

V2



FASHION GREY

V2

CONCRETE LOOK

FREEDOM WHITE

V2

PASSION SILVER

V2

SIMPLY GREY

V1

LIMESTONE LOOK

INTERNATIONAL WHITE

V2

MINIMALIST GREIGE

V2

QUARTZITE DESIGN PROJECT

ARCTIC WHITE

V2

AFRICAN BEIGE

V2

STAR GREY

V2

QUARTZ LOOK

BARGE GOLD

V3

SILVER QUARTZ

V3

STONE LOOK

SKY

V2

DESERT

V2

ABSOLUTE

V2

COSMOS

V2

STONE LOOK

WHITE AVENUE

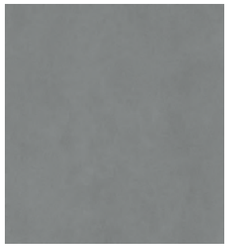
V2

ARTISTIC BEIGE

V2

COSMOPOLITAN ASH

V2



FASHION BLACK

V2

STONE LOOK

NATURAL IVORY

V2

MODERN GREY

V2

MARBLE LOOK

MICHELANGELO EXTRA WHITE

V2

01
WIDE LOOKS RANGE.

WOOD LOOK

WALNUT

V3

PEPPER

V3

WOOD LOOK

SOUL WALNUT

V2

SOUL GREY

V2

ESSENCE GREY

V2

ESSENCE BROWN

V2

PROJECT
OUTDOOR FLOOR DESIGN
Frontier20 Essence Brown - 12"x48"
Frontier20 Essence Brown Stair Tread - 12"x48"
Frontier20 Essence Brown Coping Corner - 12"x48"
Frontier20 Essence Brown Riser - 6"x48"

02

A WIDE RANGE OF DIFFERENT SIZES.

DIFFERENT SIZES, GREATER FREEDOM.

_Frontier20 is characterized by a wide range of sizes from the small **12”x12”** and **12”x24”** up to the bigger **24”x36”** and **24”x48”**, from the classic **24”x24”** to the refined **12”x48”** plank size. Frontier20 ensures freedom in every design project.

24″x48″

12″x48″

24″x24″

12″x24″

12″x12″

24″x36″

PROJECT
OUTDOOR FLOOR DESIGN
Frontier20 Limestone - 24"x48"
Frontier20 Limestone - 12"x48"
Frontier20 Limestone - 12"x12"
Frontier20 Limestone Grip Stair Tread - 12"x48"
Frontier20 Limestone Riser - 6"x48"
WALL DESIGN
Veneer World Pro Ledgestone Alpine Alaska - 6"x24"
Frontier20 Limestone Wall Cover - 12"x24"
FLOWER BEDS DESIGN
Veneer World Pro Ledgestone Ridge Black - 6"x24"

03 AMERICANSTONE ★

THE AMERICAN SOUL OF THE REAL AMERICAN STONES.

_Unlike natural stone, American Stone is uniform in thickness and consistent in size, affording the most in design flexibility and cost saving installation. American Stone is extremely durable, will never fade, impervious to chemicals or salts, can be easily cleaned without harsh chemicals and never needs sealed. **Landmark's American Stone is freedom.**

PROJECT
OUTDOOR FLOOR DESIGN
Frontier 20 Travertine Select Cross Cut Pearl - 24"x24"
OUTDOOR POOL DESIGN
Frontier20 Travertine Select Cross Cut Pearl Linear Cover Drain Set - 24"x11.63"
Frontier20 Travertine Select Cross Cut Pearl Coping Rectified - 12"x24"

PROJECT
FLOOR DESIGN
Frontier20 Bluestone Blue Select - 24"x24"
Frontier20 Bluestone Blue Select Linear Cover Drain Set - 24"x24"

_**Frontier20 American Stone** is a collection of some of the most regionally popular natural stones from across the nation. Elegant Bluestone from the North East and iconic and classic Indiana Limestone select from the Midwest in buff, grey, and variegated colorations. Lastly the three renowned Pacific multicolor Slates and the North East monochrome deep refined Slates. The American Stone range also includes prestigious CrossCurt and VeinCut Travertine distinguished by the timeless beauty and appeal of the original material. Naturally inspired colors that are rich, sophisticated, and bold enough to make a statement yet versatile enough to seamlessly blend your home's interior charm with your outdoor living area.

PROJECT
OUTDOOR FLOOR DESIGN
Frontier20 Montauk Grey - 12"x12" - 24"x48"
Frontier20 Montauk Black - 24"x48" - 12"x48" - 12"x24" - 12"x12"
WALL DESIGN
Veneer World Atelier Combed Essence Montauk Grey - 12"x24"
Veneer World Pro Ledgestone Ridge Grey - 6"x24"

04

DESIGN PROJECT.

_**Landmark Design Project** is the newest, unique and most distinctive concept developed by Landmark. Every Design Project takes root from the study of a prestigious and popular natural stone, widely used in North America for both indoor and outdoor applications.
The ultimate goal is to provide a deep and complete interpretation of that stone using porcelain technology. The reference stone is studied in depth in terms of colors, textures, finishes and sizes, with the ambitious goal to blend them into a complete and unique porcelain design project, able to match and exceed the design and application options offered by the natural stone.
Every design project is an integrated solution perfectly balanced to design outdoor floors and walls with a stunning and elegant total stone-effect look inspired by American premium natural stones.
All the items belonging to a Design Projects can be blended, allowing designers to adopt the same concept everywhere, boundlessly playing with different sizes, colors, finishes and creative patterns, as well as unique and eye-catching walls proposal and In&Out solutions.

PROJECT
OUTDOOR FLOOR DESIGN
Frontier20 Montauk White - 24"x48"
Frontier20 Montauk White Grip Stair Tread - 12"x48"
Frontier20 Montauk White Riser - 6"x48"
Frontier20 Montauk Grey - 24"x48"
FLOWER BEDS DESIGN
Veneer World Pro Ledgestone Ridge White - 6"x24"
INDOOR FLOOR DESIGN
Essence Refined Montauk White Grip - 12"x24"
SQUARE FIREPIT DESIGN
Veneer World Pro Ledgestone Ridge White - 6"x24"
OUTDOOR WALL DESIGN
Veneer World Pro Ledgestone Ridge White - 6"x24"
Veneer World Atelier Combed Montauk White - 12"x24"

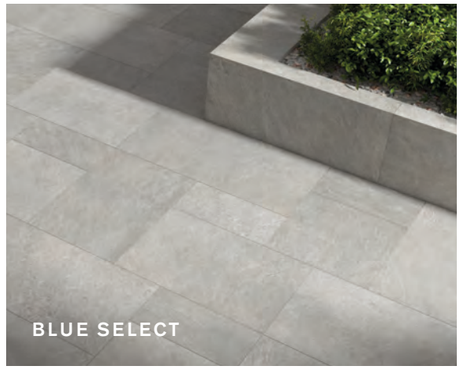
04.1 BLUESTONE DESIGN PROJECT.

PROJECT
OUTDOOR FLOOR DESIGN
Frontier20 Thermal Bluestone Full Color - 24"x24"
Frontier20 Thermal Bluestone Full Color Coping - 24"x12"
Frontier20 Thermal Bluestone Full Color Coping Corner - 24"x12"
Frontier20 Full Color Bluestone Cobblestone Multisize - 24"x24"

04.1

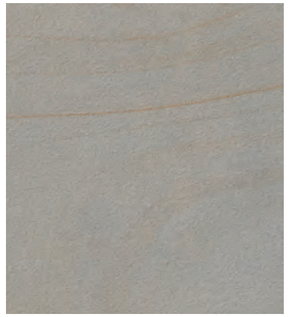
BLUESTONE DESIGN PROJECT. REDEFINE TRADITIONS.

_Bluestone Design Project is a premium line inspired by the finest Pennsylvania native Bluestone, widely used for prestigious projects all over North America. A highly versatile outdoor collection with infinite combinations of colors, sizes, veneers, trim pieces, finishes, and coordinated tiles designed to meet the demands of Total Look outdoor project.



THERMAL BLUESTONE BLUE SELECT

BLUESTONE BLUE SELECT

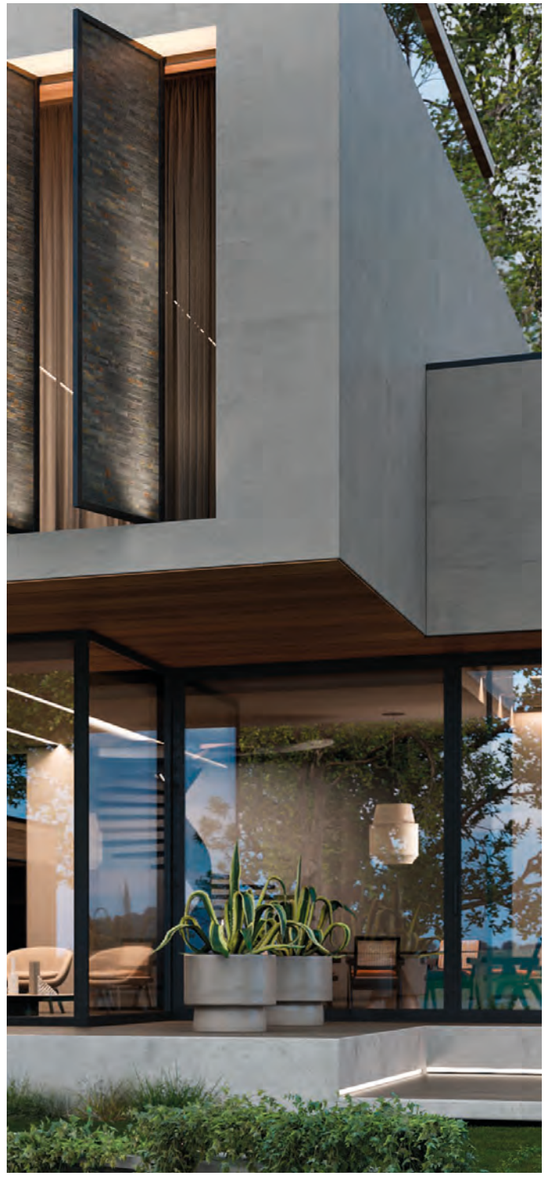


THERMAL BLUESTONE FULL COLOR

BLUESTONE FULL COLOR

04.1 **BLUESTONE DESIGN PROJECT.**

COLORS AND DESIGN.



04.1 BLUESTONE DESIGN PROJECT.

HIGH-TIER FINISH.

_**The Bluestone Design Project** comes with the most refined and prestigious finishes available with the Pennsylvania stone.

THERMAL

Achieved through a meticulous process of high-grade flaming and brushing, the soft textured surface of neutral gray hues offers a welcoming touch.

NATURAL (CLEFT)

Emphasizing the stone's distinctive layered structure, the traditional natural split-stone finish brings out a timeless charm.

04.1 BLUESTONE DESIGN PROJECT.

FLOOR AND WALL.

_**Bluestone Design Project** offers a wide range of limitless combinations not only for flooring but also for wall cladding, thanks to the prestigious and decorative Porcelain Veneer line, available in a refined and modern version, the **Pro Ledgestone**.

An extraordinary project with endless combinations for your **Bluestone Total Look Project**.

04.1 BLUESTONE DESIGN PROJECT.

COORDINATED PORCELAIN TILES

PORCELAIN TILES - 9mm thickness

FOR IN&OUT APPLICATIONS AND OUTDOOR WALLS

Rectified Monocaliber

3 colors in 9mm colored body porcelain, all rectified and monocaliber, ranging from 12”x24” to 24”x48” size, to complete your project by transitioning the same Bluestone look to both indoor and outdoor walls as well as to both residential and commercial floors.

	Bluestone Blue Select	Bluestone Full Color	Bluestone Thermal Blue Select
24”x48” MATT ≑ 0.35” / 9 mm	●		●
12”x24” MATT ≑ 0.35”	●	●	●
12”x12” MOSAIC A ≑ 0.35”	●	●	●
12”x10” MOSAIC D ≑ 0.35”	●	●	●
3”x24” BULLNOSE	●	●	●
6”x12” COVE BASE	Vision Concrete	Vision Concrete	Vision Concrete

PROJECT
INDOOR FLOOR DESIGN
Bluestone Thermal Blue Select - 24”x48”
Bluestone Thermal Blue Select Mosaic D - 12”x10”

20MM THICKNESS PORCELAIN PAVERS

04.2 QUARTZITE DESIGN PROJECT.

PROJECT

OUTDOOR FLOOR DESIGN
Frontier20 Arctic White - 24"x48"
Frontier20 Arctic White - 12"x48"
Frontier20 Arctic White - 24"x24"
Frontier20 Arctic White - 12"x24"
Frontier20 Arctic White - 12"x12"
Frontier20 Arctic White Grip Stair Tread Rectified - 12"x24"
Frontier20 Arctic White Riser Rectified - 6"x24"
OUTDOOR POOL DESIGN
Frontier20 Arctic White Linear Cover Drain Set - 24"x11.63"
Frontier20 Arctic White Coping Rectified - 12"x24"
WALL DESIGN
Veneer World Pro Ledgestone Ridge Black - 6"x24"
Veneer World Pro Ledgestone Bluestone Tumbled - 6"x24"
Vision Concrete - 24"x48"
Vision Concrete - 24"x24"
Vision Concrete - 12"x24"
FLOWER BED WALL DESIGN
Veneer World Pro Ledgestone Tumbled - 6"x24"

04.2 QUARTZITE DESIGN PROJECT.

A TRIBUTE TO ONE OF THE MOST AUTHENTIC AND ICONIC STONES.

_**QDP, Quartzite Design Project**, represents our tribute to the Quartzite natural stone. A stone deeply and widely used in architecture and now reinterpreted and proposed in porcelain, for 360° application whether in residential or commercial areas, for both indoor and outdoor, and for floors and walls.

_With its contemporary interpretation of the granular texture of the quartzite stone, Quartzite Design Project is ideal for outdoor spaces thanks to the Porcelain Pavers, Porcelain Veneers and Porcelain Grip Tiles offering. But exterior is not the only possible application. In fact, **QDP is perfect for indoor or In&Out transitional applications too**, thanks to the Porcelain Tiles offering, belonging to our Explore collection and available in 9mm thickness.

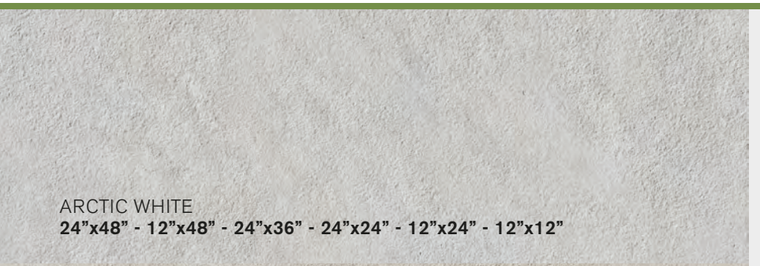
_Quartzite Design Project is a **stone effect with a strong character and chromatic richness** that celebrates all the beauty of this superior natural looking architectural stone.

PROJECT
FLOOR DESIGN
Frontier20 African Beige - 24"x48"
Frontier20 African Beige - 12"x48"
Frontier20 African Beige - 24"x24"
Frontier20 African Beige - 12"x24"
Frontier20 African Beige Stair Tread - 12"x24"
Frontier20 Soul Walnut - 12"x48"

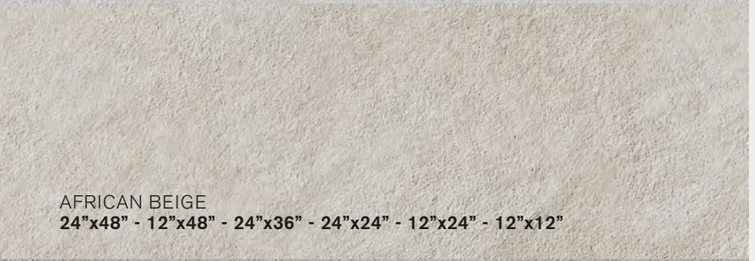
04.2 QUARTZITE DESIGN PROJECT.

THE QUARTZITE WORLD IN YOUR HAND.

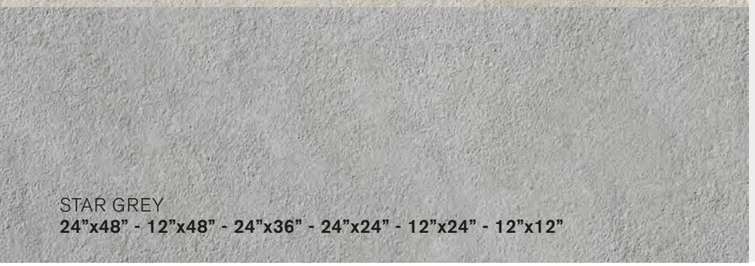
_The Quartzite Design Project offers endless possibilities to every project, thanks to its broad selection of surfaces, sizes and thicknesses. The project is composed and designed to fit every surface with unquestionable appeal, and embraces 4 different product categories: Porcelain Pavers, Porcelain Veneers, Porcelain Grip Tiles and Porcelain Tiles.



ARCTIC WHITE
24”x48” - 12”x48” - 24”x36” - 24”x24” - 12”x24” - 12”x12”



AFRICAN BEIGE
24”x48” - 12”x48” - 24”x36” - 24”x24” - 12”x24” - 12”x12”



STAR GREY
24”x48” - 12”x48” - 24”x36” - 24”x24” - 12”x24” - 12”x12”

PORCELAIN PAVERS

3 colors, available in 20mm thickness within Frontier20 range, ideal for 360° outdoor applications with outstanding technical performances and a wide size offering, from 12”x12” to 24”x48”.

PROJECT
FLOOR DESIGN
Frontier20 Star Grey - 24”x48”
Frontier20 Star Grey - 12”x48”
Frontier20 Star Grey - 24”x24”
Frontier20 Star Grey - 12”x24”
Frontier20 Star Grey - 12”x12”
FIRE PIT DESIGN
Frontier20 Star Grey - 12”x48”

VENEER WORLD

04.2 QUARTZITE DESIGN PROJECT.

URBAN LEDGESTONE

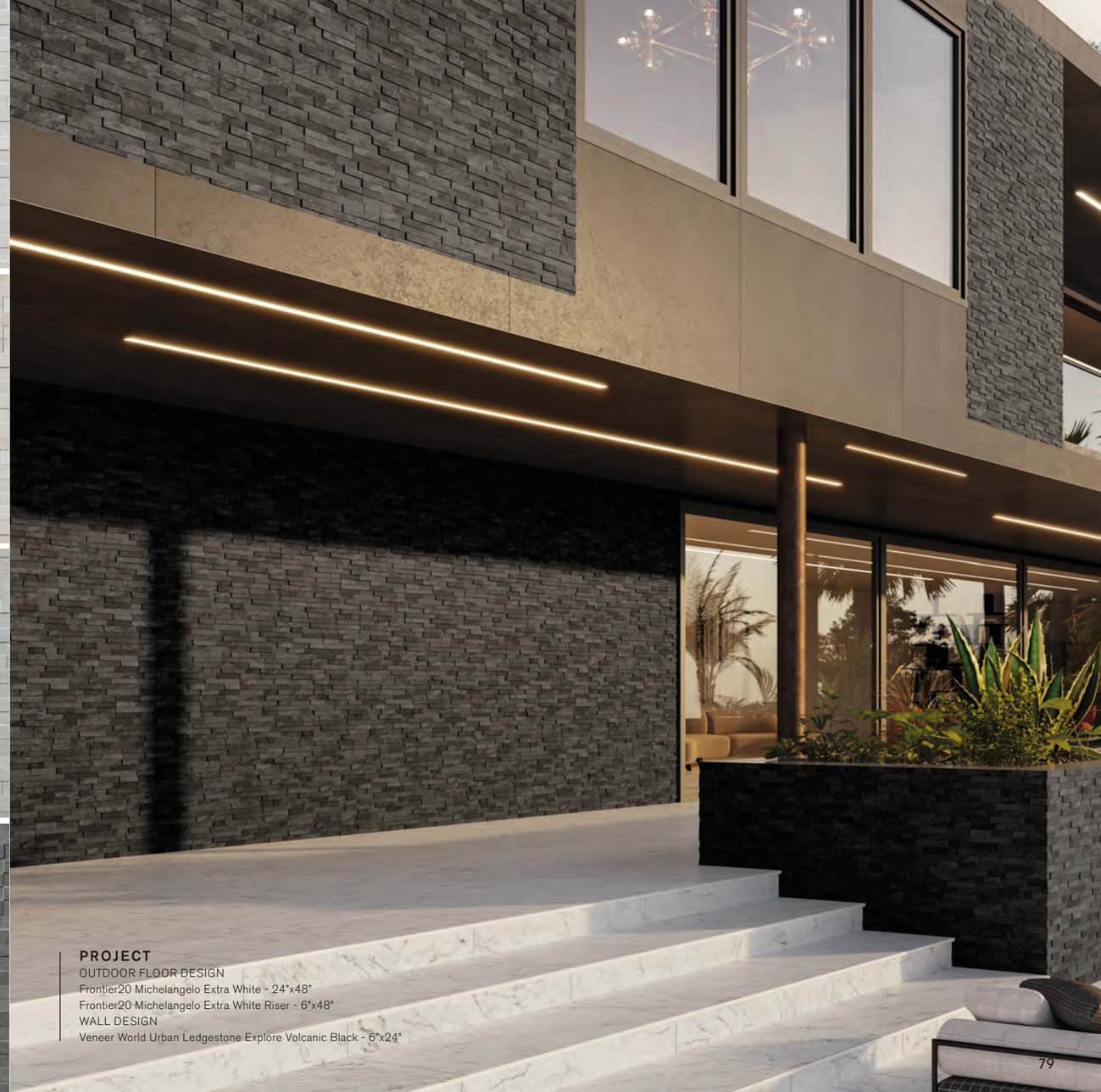
PORCELAIN VENEERS

4 color proposal to decorate every wall both indoor or outdoor with the same authentic and rich look of the best natural quartzite stones, by blending the tradition of the veneers, a modern Urban Ledgestone shape and the remarkable performance of porcelain.

_**Urban** is the Porcelain Veneer proposal for whoever is looking for a clean, neat and modern design.

Made of listels regular and uniform in height, characterized by a smooth and refined surface finish, Urban is intended for wall compositions to fit any contemporary architectural environments where the tradition of stone veneers meets the elegance of a clean look.

Each veneer is composed by the assembling of same size pieces with a 3D relief to create vibrant and new decorative wall surfaces.



PROJECT
OUTDOOR FLOOR DESIGN
Frontier20 Michelangelo Extra White - 24"x48"
Frontier20 Michelangelo Extra White Riser - 6"x48"
WALL DESIGN
Veneer World Urban Ledgestone Explore Volcanic Black - 6"x24"

04.2 QUARTZITE DESIGN PROJECT.

GRIP TILES

PORCELAIN GRIP TILES - 9mm thickness

COLORED BODY PORCELAIN GRIP TILES

Rectified Monocaliber

4 colors offered in 9mm thickness that fit every outdoor installation over concrete or indoor application, wherever an outstanding slip resistance is needed.

EXPLORE ARCTIC WHITE GRIP

Available size

0.35″
9mm

12″x24″

V2

EXPLORE AFRICAN BEIGE GRIP

Available size

0.35″
9mm

24″x48″ 12″x24″

V2

EXPLORE STAR GREY GRIP

Available size

0.35″
9mm

24″x48″ 12″x24″

V2

EXPLORE EVEREST DARK GRIP

Available size

0.35″
9mm

12″x24″

V2

04.2 QUARTZITE DESIGN PROJECT.

COORDINATED PORCELAIN TILES

PORCELAIN TILES - 9mm thickness

FOR IN&OUT APPLICATIONS AND OUTDOOR WALLS

Rectified Monocaliber

5 colors in 9mm colored body porcelain, all rectified and monocaliber, ranging from 12”x24” to 24”x48” size, to complete your project by transitioning the same quartzite look to both indoor and outdoor walls as well as on both residential and commercial floors.

	Explore Arctic White	Explore African Beige	Explore Star Grey	Explore Everest Dark	Explore Volcanic Black
24″x48″ MATT 0.35″ / 9 mm	●	●	●		
24″x24″ MATT 0.35″	●	●	●		
12″x24″ MATT 0.35″	●	●	●	●	●
12″x12″ MOSAIC A 0.35″	●	●	●		
12″x10″ MOSAIC D 0.35″	●	●	●		
3″x24″ BULLNOSE	●	●	●	●	●
6″x12″ COVE BASE	Vision Color Star White	Vision Dove	Vision Concrete	Vision Concrete	Vision Concrete

20MM THICKNESS PORCELAIN PAVERS

04.3

TRAVERTINE DESIGN PROJECT.

PROJECT
OUTDOOR FLOOR DESIGN
Frontier 20 Travertine Vein Cut Beige - 24"x48"
OUTDOOR WALL DESIGN
Veneer World Pro Ledgestone Ridge Grey - 6"x24"
Trail Vein Cut Beige - 24"x48"
PLANTER BOX
Frontier 20 Travertine Vein Cut Beige - 24"x48"

04.3

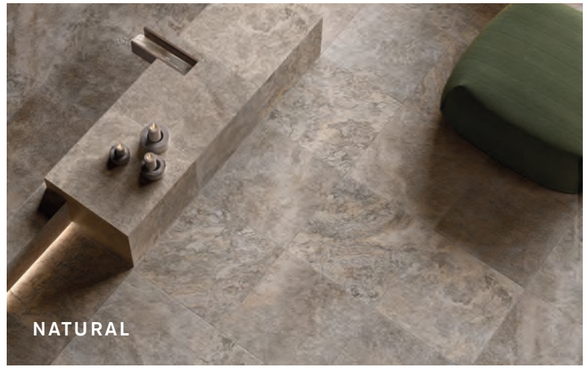
TRAVERTINE DESIGN PROJECT. MEET THE AMERICAN LOOK.

_Travertine Design Project is Landmark's tribute to a cornerstone material in architectural history, cherished for its elegance, intricate textures, and lasting resistance.

A porcelain pavers-based reinterpretation of Travertine in multiple sizes, available in two distinctive aesthetics: Cross Cut and Vein Cut.

Cross Cut captures the stone's natural essence, with a cloud-like pattern, created by cutting against the directional vein, delivering a vibrant look.

Vein Cut emphasizes linear veining across the surface, displaying the classic beauty of Travertine with a contemporary tone-on-tone structure.



TRAVERTINE CROSS CUT WHITE

TRAVERTINE CROSS CUT SILVER

TRAVERTINE CROSS CUT CREAM

04.3

TRAVERTINE DESIGN PROJECT.

COLORS AND DESIGN.

TRAVERTINE SELECT CROSS CUT PEARL

TRAVERTINE SELECT CROSS CUT BEIGE

TRAVERTINE VEIN CUT BEIGE

TRAVERTINE VEIN CUT GREY

TRAVERTINE CROSS CUT COUNTRY CLASSIC

TRAVERTINE CROSS CUT PHILADELPHIA

TRAVERTINE CROSS CUT SCABAS

VENEER WORLD

04.3 TRAVERTINE DESIGN PROJECT.

ATELIER BAMBOO

PORCELAIN VENEERS

_With innovative designs inspired by hand-crafted stone engraving, Veneer Atelier Bamboo transforms walls with three-dimensional horizontal slats of varying sizes, adding dynamic depth to indoor and outdoor walls.

PROJECT
OUTDOOR FLOOR DESIGN
Frontier 20 Travertine Select Cross Cut Pearl - 24"x24"
OUTDOOR WALL DESIGN
Veneer World Atelier Bamboo Vein Cut Pearl - 12"x24"

04.3 TRAVERTINE DESIGN PROJECT.

GRIP TILES

PORCELAIN GRIP TILES - 9mm thickness

COLORED BODY PORCELAIN GRIP TILES

Rectified Monocaliber

4 colors offered in 9mm thickness that fit every outdoor installation over concrete or indoor application, wherever an outstanding slip resistance is needed.

CROSS CUT PEARL GRIP

Available size

0.35"
9mm

24"x48"

V2

CROSS CUT BEIGE GRIP

Available size

0.35"
9mm

24"x48"

V2

VEIN CUT PEARL GRIP

Available size

0.35"
9mm

12"x24"

V2

VEIN CUT BEIGE GRIP

Available size

0.35"
9mm

12"x24"

V2

PROJECT
FLOOR DESIGN
Trail Cross Cut Beige Grip - 24"x48"
WALL DESIGN
Veneer World Atelier Bamboo Vein Cut Beige - 12"x24"
Trail Cross Cut Beige Mosaic J - 12"x12"
Trail Cross Cut Beige - 12"x24"

SIZES 24"x48" / 24"x24" / 12"x24" / 12"x12"/ 12"x10"/ 3"x24"/ 6"x12"

MATT FINISH

04.3 TRAVERTINE DESIGN PROJECT.

COORDINATED PORCELAIN TILES

PORCELAIN TILES - 9mm thickness

FOR IN&OUT APPLICATIONS AND OUTDOOR WALLS

Rectified Monocaliber

7 colors in 9mm colored body porcelain, all rectified and monocaliber, ranging from 12"x24" to 24"x48" size, to complete your project by transitioning the same slate look to both indoor and outdoor walls as well as on both residential and commercial floors.

	Trail Cross Cut Pearl	Trail Cross Cut Grey	Trail Cross Cut Ivory	Trail Cross Cut Beige	Trail Vein Cut Pearl	Trail Vein Cut Grey	Trail Vein Cut Ivory	Trail Vein Cut Beige		Trail Cross Cut Scabas	Trail Cross Cut Philadelphia	Trail Cross Cut Country Classic
24"x48" MATT ≠ 0.35" / 9 mm	●	●	●	●	●	●	●	●				
12"x24" MATT ≠ 0.35"	●	●	●	●	●	●	●	●		●	●	●
12"x12" MOSAIC B ≠ 0.35"	●	●	●	●	●	●	●	●		●	●	●
12"x12" MOSAIC J ≠ 0.35"	●	●	●	●						●	●	●
12"x10" HERRINGBONE ≠ 0.35"					●	●	●	●				
3"x24" BULLNOSE	●	●	●	●	●	●	●	●		●	●	●
6"x12" COVE BASE	Vision Pearl	Vision Pearl	Vision Dove	Vision Dove	Vision Pearl	Vision Pearl	Vision Dove	Vision Dove		Vision Dove	Vision Dove	Vision Dove

04.4

INDIANA SALEM DESIGN PROJECT.

PROJECT

OUTDOOR FLOOR DESIGN
Frontier20 Indiana Variegated - 24"x24"
Frontier20 Indiana Variegated - 12"x24"
Frontier20 Essence Brown - 12"x48"

WALL DESIGN
Veneer World Atelier Dynamic Indiana Buff Select - 12"x24"

FIREPIT WALL DESIGN
Veneer World Atelier Dynamic Indiana Buff Select - 12"x24"

FLOWER BED WALL DESIGN
Frontier20 Indiana Variegated - 24"x24"

04.4 INDIANA SALEM DESIGN PROJECT.

THE UTMOST ICON OF AMERICAN ARCHITECTURE.

_**Indiana Salem Design Project** is Landmark's porcelain interpretation of Indiana Limestone, a natural stone also known as Salem stone and commonly found in Indiana. As with every freestone, it shows no splitting or direction in its highest select grade version.

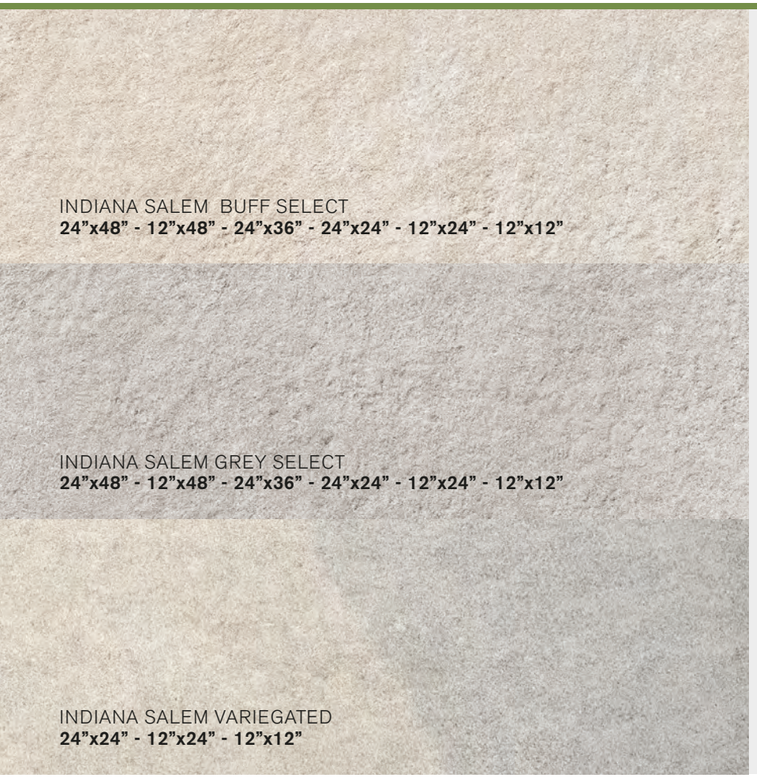
The aesthetic natural characteristics of Indiana Limestone is now combined with higher performances of resistance and durability of the best porcelain material.
This refined and graceful natural material has been used for many American buildings and can be considered an icon of modern and postmodern American architecture.

PROJECT
OUTDOOR FLOOR DESIGN
Frontier20 Indiana Buff Select - 24"x48"
WALL DESIGN
Veneer World Atelier Groove S Indiana Buff Select - 12"x24"
FIREPIT / FLOWER BED WALL DESIGN
Veneer World Atelier Groove S Indiana Buff Select - 12"x24"

04.4 INDIANA SALEM DESIGN PROJECT.

COLORS AND FINISHES

_With Indiana Salem, Landmark reproduces the timeless beauty and the evergreen style of Indiana limestone in multiple colors and different finishes: from refined and non-slip surfaces ideal for any outdoor setting to tooled finishes, perfect for stunning and decorative wall applications.



INDIANA SALEM BUFF SELECT
24”x48” - 12”x48” - 24”x36” - 24”x24” - 12”x24” - 12”x12”

INDIANA SALEM GREY SELECT
24”x48” - 12”x48” - 24”x36” - 24”x24” - 12”x24” - 12”x12”

INDIANA SALEM VARIEGATED
24”x24” - 12”x24” - 12”x12”

PORCELAIN PAVERS

Buff Select
Warm and light creamy color with brownish reflexes on a very fine and refined grainy surface.

Grey Select
Same refined grainy surface, characterized by ecru hue with light grey to bluish shades.

Variegated
While the degree of texture can vary from a fine- to a coarse-grain, this color includes a significative variation from piece to piece, alternating pieces that are full grey or full buff with more variegated ones, that include both grey and buff colors within the same piece.

PROJECT
FLOOR DESIGN
Frontier20 Indiana Grey Select - 24”x48”
Frontier20 Indiana Grey Select - 24”x36”
Frontier20 Indiana Grey Select - 24”x24”
Frontier20 Indiana Grey Select - 12”x24”
WALL DESIGN
Veneer World Atelier Groove S Indiana Buff Select - 12”x24”
Veneer World Atelier Groove L Indiana Grey Select - 12”x24”

VENEER WORLD

04.4 INDIANA SALEM DESIGN PROJECT.

ATELIER.

_Porcelain Veneers Atelier: The collection is also enriched with three tooled finishes suited for walls (both indoor and outdoor) and available in Buff and Grey colors:

Atelier Groove S: scratched finish that blends the elegance of natural stone with a 3D surface effect. The brushed and hammered embossed texture creates special plays of light and shadow, along with surface scratches, enhancing the decorative added value of the product.

Atelier Groove L: same scratched finish as Groove S, but with a larger gap among scratches, that elevates natural inspiration through an innovative technology to create a simple and elegant decoration.

Atelier Dynamic: elaborated finish with multiple geometries on the surface, able to offer a contemporary solution that reserves the natural touch of the stone, characterized by micro lines running along the undulating dunes of the surface.

These finishes will make your project stand out by adding a special touch and decorative spirit to vertical installations such as walls and facades.

PROJECT
OUTDOOR FLOOR DESIGN
Frontier20 Artistic Beige - 24"x24"
WALL DESIGN
Veneer World Atelier Groove L Indiana Buff Select - 12"x24"
Veneer World Atelier Groove S Indiana Grey Select - 12"x24"

04.5 SLATE DESIGN PROJECT.

PROJECT

OUTDOOR FLOOR DESIGN
Frontier20 Rustic Gold - 24"x24" - 12"x24" - 12"x12"
OUTDOOR WALL DESIGN
Frontier20 Rustic Gold - 24"x24"
Veneer World Pro Ledgestone Canyon Rock - 6"x24"

04.5 SLATE DESIGN PROJECT.

THE AUTHENTIC AMERICAN LOOK.

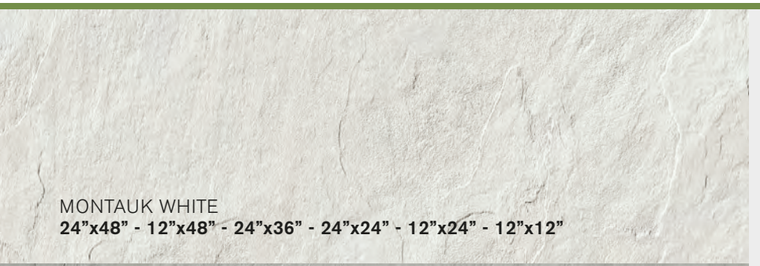
_**Slate Design Project** is Landmark's porcelain look inspired by natural slate, a sedimentary rock widely used in American architecture. The collection features two distinct surface personalities: one characterized by tone-on-tone graphics, and the other with intricate patterns and rich contrasting color backgrounds. Both are ideal for floors and walls, outdoor and indoor spaces, whether residential and commercial.

_**Combining beauty,** rich textures, and a distinctive appearance with the superior performance of porcelain, Slate Design Project offers a broad range of solutions for any surface, both floors and walls, indoor as well as outdoor, including refined transitional In&Out applications.

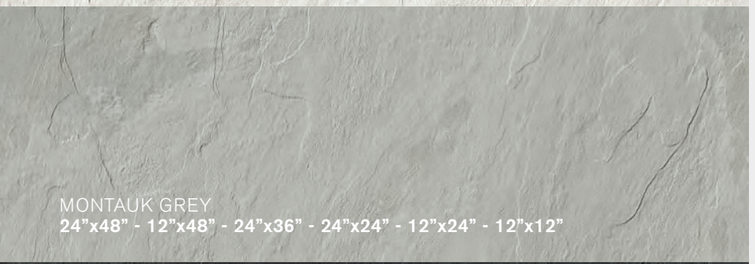
PROJECT
OUTDOOR FLOOR DESIGN
Frontier20 Montauk Grey - 12"x12" - 24"x48"
Frontier20 Montauk Black - 24"x48" - 12"x48" - 12"x24" - 12"x12"
WALL DESIGN
Veneer World Atelier Combed Essence Montauk Grey - 12"x24"
Veneer World Atelier Combed Essence Montauk Black - 12"x24"
Veneer World Pro Ledgestone Ridge Grey - 6"x24"
FIREPIT DESIGN
Veneer World Pro Ledgestone Ridge Grey - 6"x24"

04.5 SLATE DESIGN PROJECT.

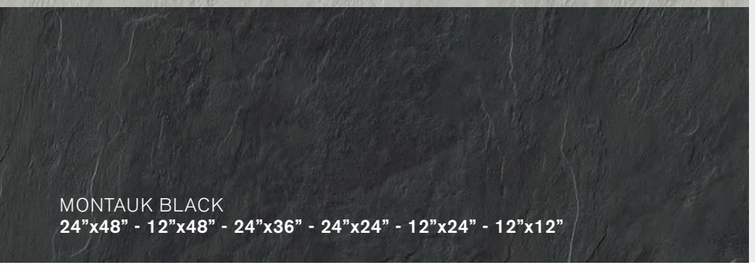
COLORS AND FINISHES.



MONTAUK WHITE
24”x48” - 12”x48” - 24”x36” - 24”x24” - 12”x24” - 12”x12”



MONTAUK GREY
24”x48” - 12”x48” - 24”x36” - 24”x24” - 12”x24” - 12”x12”



MONTAUK BLACK
24”x48” - 12”x48” - 24”x36” - 24”x24” - 12”x24” - 12”x12”

PORCELAIN PAVERS

Montauk White
A bright light-toned surface with warm white and ivory hues that mimic the soul of American Slate on a soft split stone surface.

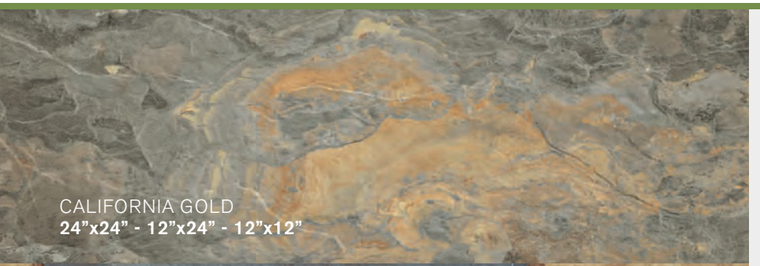
Montauk Grey
A lighter gray shade inspired by sedimentary rock, playing in between the Vermont Slate and the Pennsylvania Blue, providing a durable and resistant surface.

Montauk Black
An authentic reproduction of the darkest slate of the Northeast region of New York and Vermont, with eye-catching colors and subtle variations.

PROJECT
OUTDOOR FLOOR DESIGN
Frontier 20 - Montauk White - 24"x48"
Frontier 20 - Montauk Grey - 24"x48"
FLOWER BEDS DESIGN
Veneer World Pro Ledgestone Ridge White - 6"x24"
OUTDOOR WALL DESIGN
Veneer World Atelier Combed Montauk White - 12"x24"

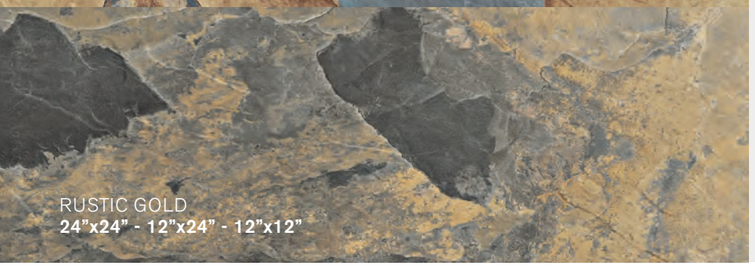
04.5 SLATE DESIGN PROJECT.

COLORS AND FINISHES.



CALIFORNIA GOLD
24”x24” - 12”x24” - 12”x12”

MARIPOSA SLATE
24”x24”



RUSTIC GOLD
24”x24” - 12”x24” - 12”x12”

PORCELAIN PAVERS

California Gold
A timeless natural slate look, with brilliant hints of rust and gold, set against a wide array of base charcoal field colors.

Mariposa Slate
An authentic reproduction of the slate from Yosemite Valley. Gold, red, and brown hues melt in the deep black to bring an authentic and traditional look into contemporary and bold architectural projects.

Rustic Gold
A unique blend of colors with a captivating mix of dark grays, various shades of beige, rust and gold, lively oranges, shimmering golds, and rich browns.

PROJECT
OUTDOOR FLOOR DESIGN
Frontier20 Rustic Gold - 24"x24" - 12"x24" - 12"x12"
OUTDOOR WALL DESIGN
Frontier20 Rustic Gold - 24"x24"
Veneer World Pro Ledgestone Canyon Rock - 6"x24"

VENEER WORLD

04.5 SLATE DESIGN PROJECT.

ATELIER COMBED

PORCELAIN VENEERS

_Atelier Combed is defined by bold linear striations that evoke the appearance of geometric parallel scratches. Atelier Combed embellish walls with a distinctive and elegant appearance, thanks to the decorative impact resulting from both pronounced linear striations and the play of shadow and light filtering through the grooves.

A proposal of 3 colors to decorate every outdoor and indoor walls with the look of the authentic natural slate look, bringing the tradition of handcrafted tooled surface into every outdoor and indoor project.

PROJECT
OUTDOOR FLOOR DESIGN
Frontier20 Montauk Black - 12"x48" - 12"x12'
WALL DESIGN
Veneer World Atelier Combed Essence Montauk Black - 12"x24"
FIREPIT DESIGN
Veneer World Pro Ledgestone Ridge Grey - 6"x24"

04.5 SLATE DESIGN PROJECT.

GRIP TILES

PORCELAIN GRIP TILES - 9mm thickness

COLORED BODY PORCELAIN GRIP TILES

Rectified Monocaliber

3 colors offered in 9mm thickness that fit every outdoor installation over concrete or indoor application, wherever an outstanding slip resistance is needed.

MONTAUK WHITE GRIP

Available size

0.35″
9mm

12″x24″

V2

MONTAUK BLACK GRIP

Available size

0.35″
9mm

24″x48″ 12″x24″

V2

MONTAUK GREY GRIP

Available size

0.35″
9mm

24″x48″

V2

04.5 SLATE DESIGN PROJECT.

COORDINATED PORCELAIN TILES

PORCELAIN TILES - 9mm thickness

FOR IN&OUT APPLICATIONS AND OUTDOOR WALLS

Rectified Monocaliber

6 colors in 9mm colored body porcelain, all rectified and monocaliber, ranging from 12”x24” to 24”x48” size, to complete your project by transitioning the same slate look to both indoor and outdoor walls as well as on both residential and commercial floors.

	Essence Montauk White	Essence Montauk Grey	Essence Montauk Dark	Essence Montauk Black	Essence California Gold	Essence Rustic Gold	Essence Mariposa Slate
24″x48″ MATT 0.35″ / 9 mm	●	●		●			
12″x24″ MATT 0.35″	●	●	●	●	●	●	●
3″x12″ MATT 0.35″	●	●	●	●	●	●	●
12″x12″ MOSAIC A 0.35″	●	●	●	●	●	●	●
12″x12″ MOSAIC H 0.35″					●	●	●
12″x10″ MOSAIC D 0.35″	●	●	●	●			
8″x10″ MOSAIC 0.35″ CHEVRON 3D	●	●		●			
3″x24″ BULLNOSE	●	●	●	●	●	●	●
6″x12″ COVE BASE	Vision Color Star White	Vision Pearl	Vision Dark	Vision Color Star Black	Vision Dark	Vision Dark	Vision Dark

20MM THICKNESS PORCELAIN PAVERS

04.6

DESIGN WORK PROJECT.

DESIGN WORK LANDMARK

04.6 DESIGN WORK PROJECT.

THE ULTIMATE DESIGNER TOOL.

_Perfect continuity. Design Work is a major project composed of 6 porcelain tile collections in standard thickness, two 20mm Porcelain Pavers looks, Mosaics and Porcelain Veneers. A tool to design freely unique spaces.

The 20mm proposal of Design Work is composed of two different looks in 20mm: a Minimal Stone and a Terrazzo look, for outdoor application further enriched by 3 Frontier20 - Deco proposals and with matching porcelain tiles of the Elite and Masterplan collection for a seamless look transition.

In addition to that the minimal look, stone and Masterplan collection matches with 3 multicolor porcelain veneer for decorative wall application.

PROJECT WITHOUT LIMITS.

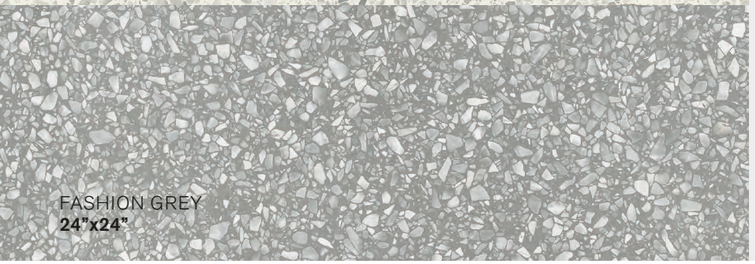
_Design Work is the ultimate tool to successfully face all designer's challenges. A complete surface system made to combine and mix contemporary looks such as Minimal Stone and Terrazzo look in 20mm along with Porcelain Veneers and Grip Tiles in 9mm.
All of those options can also be integrated with indoor 9mm Landmark collection such as Masterplan, Elite, Vision, Vision color, Feeling and Soul for a total porcelain project with no limit to creativity.

04.6 DESIGN WORK PROJECT.

REFINED SOLUTIONS FOR OUTDOOR LIFE.

_Frontier20 Porcelain Pavers are a perfect solution for landscaping outdoor spaces. The high performance guarantees superior performance: stain-resistant, anti-slip, chemical resistant, maintenance-free product has led to the development of a revolutionary aesthetically superior product, versatile enough for outdoors as well as indoors.

DIAMOND WHITE
24”x24”



FASHION GREY
24”x24”

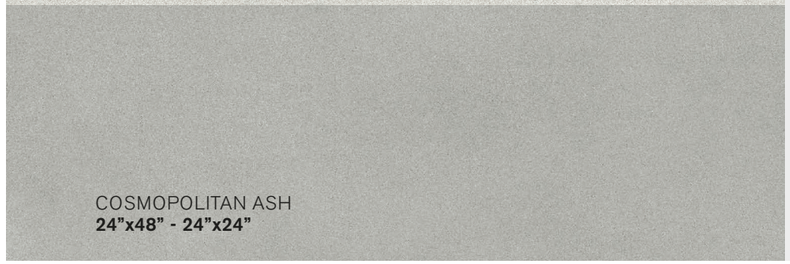
PORCELAIN PAVERS

Porcelain Paver surfaces available in two neutral colors combine refined aesthetics with superior performance. Thanks to their square sizes of 24x24” with a thickness of 20 mm, they allow high versatility in outdoor spaces.

ARTISTIC BEIGE
24”x24”

FASHION BLACK
24”x48” - 24”x24”

WHITE AVENUE
24”x48” - 24”x24”



COSMOPOLITAN ASH
24”x48” - 24”x24”

PORCELAIN PAVERS

The Minimal Stone look is available in 2 modular sizes and 4 different contemporary colors. It can be combined with all the surfaces of the Frontier20 range, giving life to always original outdoor environments.

VENEER WORLD

04.6 DESIGN WORK PROJECT.

URBAN LEDGESTONE

PORCELAIN VENEERS

3 color offers meet all aesthetic needs and allows you to decorate the walls with a look in line with the latest trends in architecture and interior design.
With the Porcelain Veneers Urban Ledgestone, tradition meets contemporary opening new frontiers in the design of outdoor spaces.

_**Urban Ledgestone** is Porcelain Veneer made with listels of the same height, laid horizontally to design an elegant geometric pattern.
Inspired by natural quartzite stones, the surface reproduces the water saw cut used with real stone veneers, ensuring an authentic look. Each veneer is made by assembling pieces of the same size with a 3D relief that gives dynamism to the entire wall.

PROJECT
WALL DESIGN
Veneer World Urban Ledgestone Ash Mix - 6"x24"

04.6 DESIGN WORK PROJECT.

GRIP TILES

PORCELAIN GRIP TILES - 9mm thickness

COLORED BODY PORCELAIN GRIP TILES

Rectified Monocaliber

Grip Tiles guarantee the highest level of safety. Thanks to the non-slip finish they are the ideal solution for residential and commercial spaces where high safety standards are required.

MASTERPLAN WHITE AVENUE GRIP

Available size

12"x24"

0.35"
9mm

V2

MASTERPLAN PRECIOUS IVORY GRIP

Available size

12"x24"

0.35"
9mm

V2

MASTERPLAN COSMOPOLITAN ASH GRIP

Available size

12"x24"

0.35"
9mm

V2

PROJECT
FLOOR DESIGN
Masterplan Precious Ivory - 24"x48"
Masterplan Precious Ivory Grip - 12"x24"
Masterplan Artistic Beige Mosaic A - 12"x12"
Feeling Honey - 8"x40"
WALL DESIGN
Masterplan Artistic Beige Mosaic A - 12"x12"
Feeling Honey - 8"x40"

04.6 DESIGN WORK PROJECT.

COORDINATED PORCELAIN TILES

PORCELAIN TILES - 9mm thickness

FOR IN&OUT APPLICATIONS AND OUTDOOR WALLS

Rectified Monocaliber

A wide range of sizes available in many neutral colors allows total freedom. The different surfaces can be combined with each other to design external walls and create in & out stylistic and chromatic continuity.

	Masterplan White Avenue	Masterplan Precious Ivory	Masterplan Artistic Beige	Masterplan Cosm. Ash	Masterplan Metro Grey	Masterplan Fashion Black	Elite Diamond White	Elite Oyster Beige	Elite Fashion Grey	Elite Precious Black
24"x48" MATT ≑ 0.35/9 mm	●	●		●						
24"x24" MATT ≑ 0.35"							●	●	●	
12"x24" MATT ≑ 0.35"	●	●	●	●	●	●	●	●	●	●
12"x10" MOSAIC D ≑ 0.35"		●			●					
13.7"x12" MOSAIC G ≑ 0.35"		●			●					

04.6 DESIGN WORK PROJECT.

COORDINATED BULLNOSE AND COVE BASE
FROM VISION, VISION COLOR AND MASTERPLAN COLLECTIONS

	Elite Diamond White	Elite Oyster Beige	Elite Fashion Grey	Elite Precious Black
3"x24" BULLNOSE	Vision Dove Vision Color Star White Masterplan White Avenue	Vision Dove Vision Color Star White Masterplan Precious Ivory Masterplan White Avenue	Vision Concrete Vision Color Star White Masterplan Cosmopolitan Ash	Vision Concrete Vision Dark Vision Color Star White Vision Color Star Black Masterplan Fashion Black
6"x12" COVE BASE	Vision Dove Vision Color Star White	Vision Dove Vision Color Star White	Vision Concrete Vision Color Star White	Vision Concrete Vision Dark Vision Color Star White Vision Color Star Black

COORDINATED BULLNOSE AND COVE BASE
FROM VISION AND VISION COLOR COLLECTIONS

	Masterplan White Avenue	Masterplan Precious Ivory	Masterplan Artistic Beige	Masterplan Cosm. Ash	Masterplan Metro Grey	Masterplan Fashion Black
3"x24" BULLNOSE	●	●	●	●	●	●
6"x12" COVE BASE	Vision Concrete Vision Color Star White	Vision Dove Vision Color Star White	Vision Dove Vision Color Star White	Vision Concrete Vision Color Star White	Vision Concrete Vision Color Star White	Vision Concrete Vision Color Star White Vision Color Star Black

20 MM THICKNESS PORCELAIN PAVERS

05

FRONTIER20 - DECO.

DESIGN WORK LANDMARK

PROJECT

OUTDOOR FLOOR DESIGN

Frontier20 Diamond White - 24"x24"

Frontier20 Patchwork Ash - 24"x24"

OUTDOOR WALL DESIGN

Veneer World Urban Ledgestone White Mix - 6"x24"

POOL DESIGN

Frontier20 Fashion Grey - 24"x24"

05 FRONTIER20 - DECO.

GEOMETRIC DECORATIONS.

_Frontier20 offers a fashionable solution for floor decoration: Patchwork combines different geometric shapes into a new pattern to create an original eye-catching composition in outdoor spaces. A range of contemporary Porcelain Pavers that carry the ultimate trends in architecture and landscaping design.

The high quality of Landmark porcelain guarantees high performance in any context. Patchwork resists thermal shocks, scratches, bumps, and maintains its colors unchanged over time. Thanks to its extreme versatility, it guarantees a decorative solution that can be combined with all the surfaces of the F20 range, to give an outstanding look to any outdoor space, such as balcony or terrace.

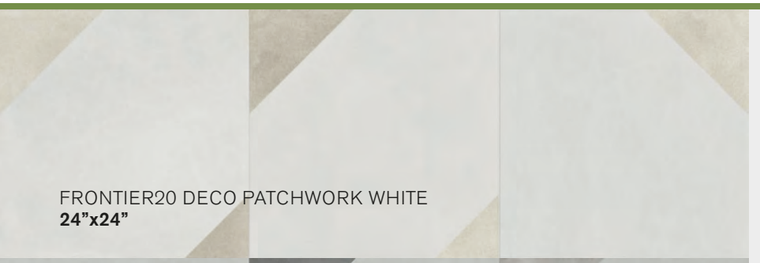
PROJECT

OUTDOOR FLOOR DESIGN
Frontier20 Patchwork Mix - 24"x24"
WALL DESIGN
Masterplan Precious Ivory - 24"x48'

05 FRONTIER20 - DECO.

NEUTRAL MATCHING COLORS.

_Patchwork is available in 3 different light patterns enriched with neutral contrasting shades that can be combined with each other, increasing design freedom. The modular size 24”x24” allows multi-laying patterns to meet every need.



FRONTIER20 DECO PATCHWORK WHITE
24”x24”

MATCHES WITH

- White Avenue
- Precious Ivory
- Artistic Beige

FRONTIER20 DECO PATCHWORK ASH
24”x24”

MATCHES WITH

- Metro Grey
- Fashion Black
- Cosm. Ash

FRONTIER20 DECO PATCHWORK MIX
24”x24”

MATCHES WITH

- White Avenue
- Artistic Beige
- Cosm. Ash
- Fashion Black

PROJECT
OUTDOOR FLOOR DESIGN
Frontier20 Fashion Grey - 24”x24”
Frontier20 Patchwork White - 24”x24”
OUTDOOR WALL DESIGN
Veneer World Urban Ledgestone Ash Mix - 6”x24”
COUNTER AND BENCHES
Frontier20 Diamond White - 24”x24”

M.P.D.

MULTI PATTERN DESIGN

_**The Multi Pattern Design** (M.P.D.) is a project designed to allow combination of multiple size patterns and therefore develop creative and original outdoor design solutions. M.P.D. project is available in three different versions:

- **M.P.D. Big**: allows multiple big size patterns made by using 6 formats (24”x48”, 12”x48”, 24”x36”, 24”x24”, 12”x24”, 12”x12”).
- **M.P.D. Small**: combines 12”x12”, 12”x24” and 24”x24” formats to create smaller size patterns.
- **M.P.D. Mini**: combines 9”x9” and 9”x18” to create refined and precious patterns.

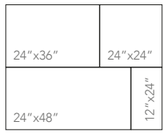
PROJECT
OUTDOOR FLOOR DESIGN
Frontier20 Star Grey - 24”x48”
Frontier20 Star Grey - 12”x48”
Frontier20 Star Grey - 24”x24”
Frontier20 Star Grey - 12”x24”
Frontier20 Star Grey - 12”x12”
Frontier20 Arctic White - 12”x48”

M.P.D. MULTI PATTERN DESIGN BIG

M.P.D. BIG ONE*

Module percentage

24″x48″ = 40%
24″x24″ = 20%
24″x36″ + 12″x24″
(MIX) = 40% **



Available colors

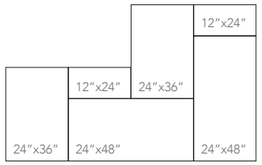
- Bluestone Blue Select
- Bluestone Full color
- Travertine Cross Cut White
- Travertine Cross Cut Cream
- Travertine Cross Cut Silver
- Limestone
- Michelangelo Extra White
- Arctic White
- African Beige
- Star Grey
- Indiana Buff Select
- Indiana Grey Select
- Montauk White
- Montauk Grey
- Montauk Black

* Modular products with 6 mm joint (approx 1/4″).
** NOTE: The 24″x36″ and 12″x24″ sizes (MIX) are palletized together on the same single pallet containing the correct percentages of each size.

M.P.D. BIG TWO*

Module percentage

24″x48″ = 50%
24″x36″ + 12″x24″
(MIX) = 50% **



Available colors

- Bluestone Blue Select
- Bluestone Full color
- Travertine Cross Cut White
- Travertine Cross Cut Cream
- Travertine Cross Cut Silver
- Limestone
- Michelangelo Extra White
- Arctic White
- African Beige
- Star Grey
- Indiana Buff Select
- Indiana Grey Select
- Montauk White
- Montauk Grey
- Montauk Black

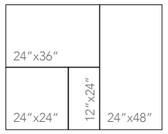
* Modular products with 6 mm joint (approx 1/4″).
** NOTE: The 24″x36″ and 12″x24″ sizes (MIX) are palletized together on the same single pallet containing the correct percentages of each size.

M.P.D. MULTI PATTERN DESIGN BIG

M.P.D. BIG THREE*

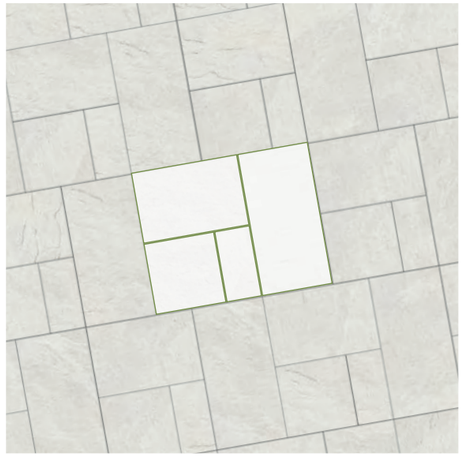
Module percentage

24”x48” = 40%
24”x24” = 20%
24”x36” + 12”x24”
(MIX) = 40% **



Available colors

- Bluestone Blue Select
- Bluestone Full color
- Travertine Cross Cut White
- Travertine Cross Cut Cream
- Travertine Cross Cut Silver
- Limestone
- Michelangelo Extra White
- Arctic White
- African Beige
- Star Grey
- Indiana Buff Select
- Indiana Grey Select
- Montauk White
- Montauk Grey
- Montauk Black

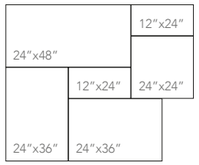


* Modular products with 6 mm joint (approx 1/4”).
** NOTE: The 24”x36” and 12”x24” sizes (MIX) are palletized together on the same single pallet containing the correct percentages of each size.

M.P.D. BIG FOUR*

Module percentage

24”x48” = 28.6%
24”x24” = 14.3%
24”x36” + 12”x24” (MIX) = 57.1% **



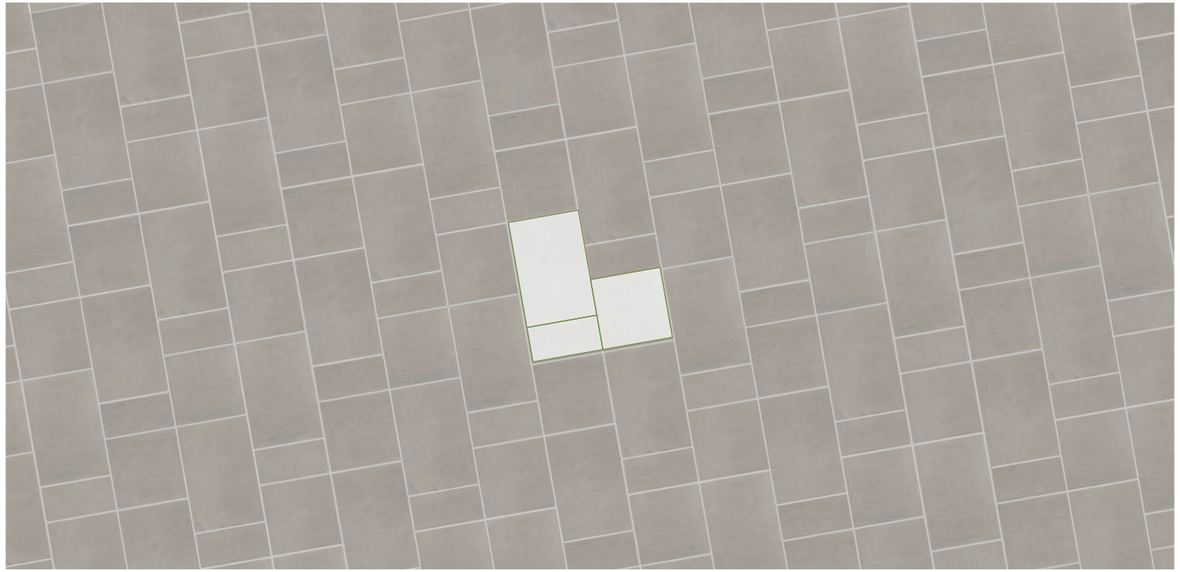
Available colors

- Bluestone Blue Select
- Bluestone Full color
- Travertine Cross Cut White
- Travertine Cross Cut Cream
- Travertine Cross Cut Silver
- Limestone
- Michelangelo Extra White
- Arctic White
- African Beige
- Star Grey
- Indiana Buff Select
- Indiana Grey Select
- Montauk White
- Montauk Grey
- Montauk Black

* Modular products with 6 mm joint (approx 1/4”).
** NOTE: The 24”x36” and 12”x24” sizes (MIX) are palletized together on the same single pallet containing the correct percentages of each size.

M.P.D. MULTI PATTERN DESIGN BIG

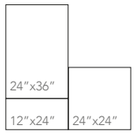
M.P.D. BIG FIVE*



Module percentage

% HP1
24”x24” = 33%
24”x36” + 12”x24” (MIX) = 67% **

% HP2
24”x36”= 50%
24”x24” = 33%
12”x24”= 17%



Available colors HP1

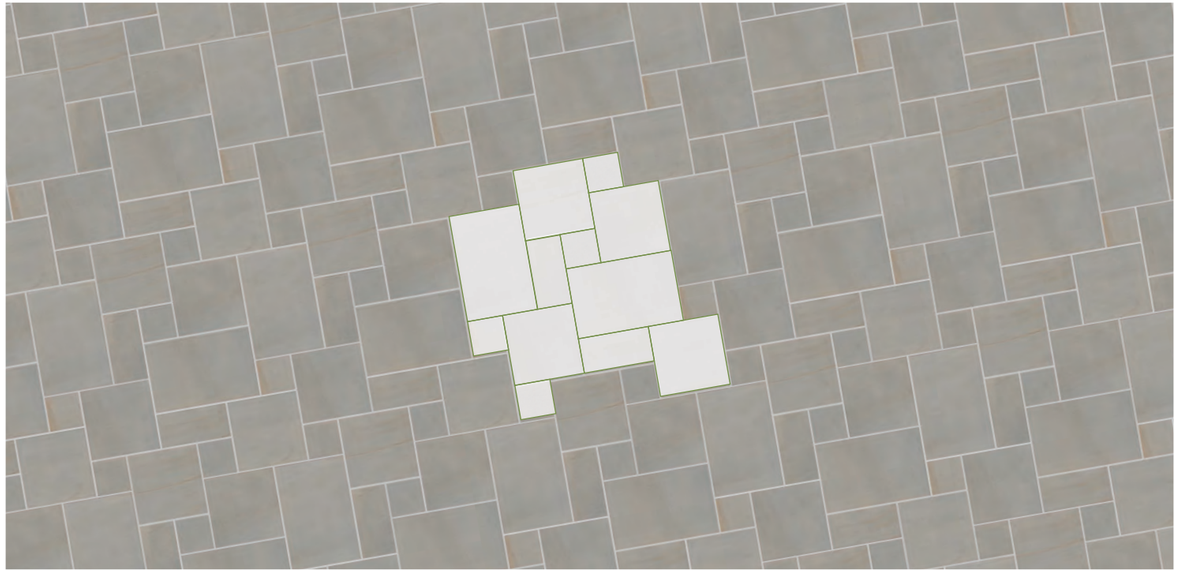
- Bluestone Blue Select
- Bluestone Full color
- Travertine Cross Cut White
- Travertine Cross Cut Cream
- Travertine Cross Cut Silver
- Limestone
- Michelangelo Extra White
- Arctic White
- African Beige
- Star Grey
- Indiana Buff Select
- Indiana Grey Select
- Montauk White
- Montauk Grey
- Montauk Black

Available colors HP2

- Thermal Bluestone Blue Select
- Thermal Bluestone Full Color

* Modular products with 6 mm joint (approx 1/4”).
** NOTE: The 24”x36” and 12”x24” sizes (MIX) are palletized together on the same single pallet containing the correct percentages of each size.

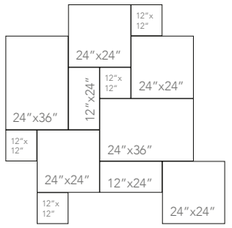
M.P.D. BIG SIX*



Module percentage

% HP1
24”x24” = 45%
12”x12”= 11%
24”x36” + 12”x24” (MIX) = 44% **

% HP2
24”x36”= 33%
24”x24” = 45%
12”x24”= 11%
12”x12”= 11%



Available colors HP1

- Bluestone Blue Select
- Bluestone Full color
- Travertine Cross Cut White
- Travertine Cross Cut Cream
- Travertine Cross Cut Silver
- Limestone
- Michelangelo Extra White
- Arctic White
- African Beige
- Star Grey
- Indiana Buff Select
- Indiana Grey Select
- Montauk White
- Montauk Grey
- Montauk Black

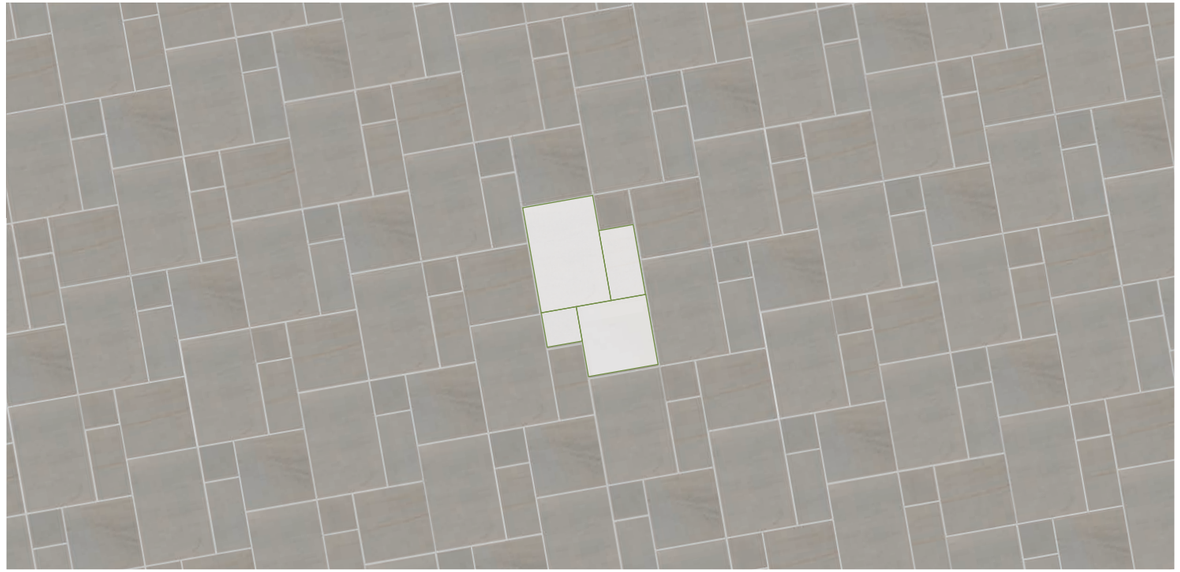
Available colors HP2

- Thermal Bluestone Blue Select
- Thermal Bluestone Full Color

* Modular products with 6 mm joint (approx 1/4”).
** NOTE: The 24”x36” and 12”x24” sizes (MIX) are palletized together on the same single pallet containing the correct percentages of each size.

M.P.D. MULTI PATTERN DESIGN BIG

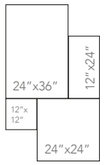
M.P.D. BIG SEVEN*



Module percentage

% HP1
24”x24” = 31%
12”x12”= 8%
24”x36” + 12”x24” (MIX) = 61% **

% HP2
24”x36”= 46%
24”x24” = 31%
12”x24”= 15%
12”x12”= 8%



Available colors HP1

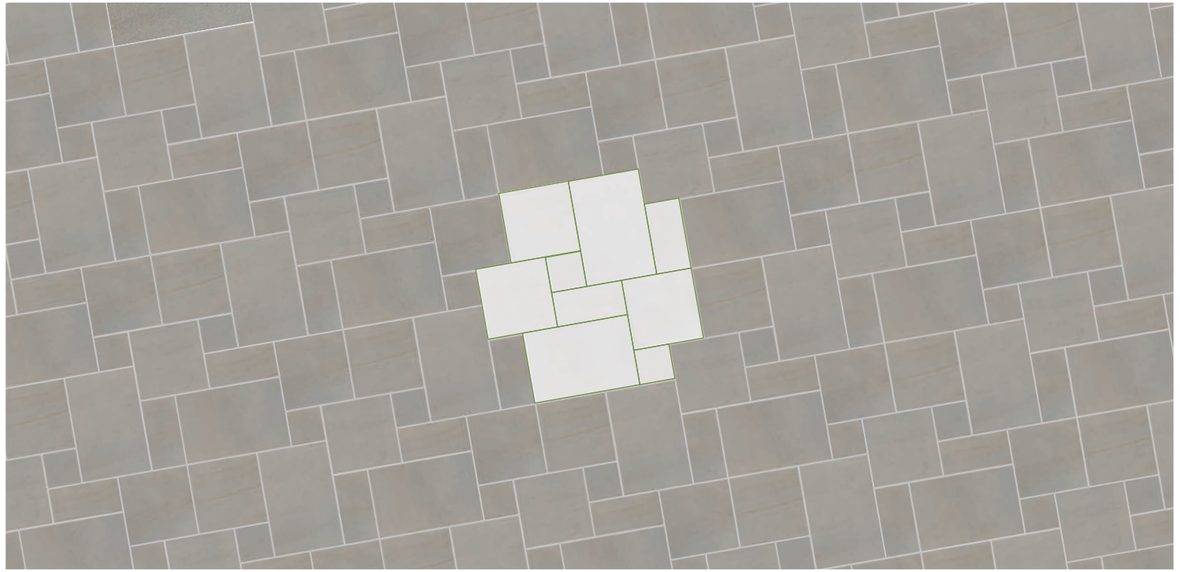
- Bluestone Blue Select
- Bluestone Full color
- Travertine Cross Cut White
- Travertine Cross Cut Cream
- Travertine Cross Cut Silver
- Limestone
- Michelangelo Extra White
- Arctic White
- African Beige
- Star Grey
- Indiana Buff Select
- Indiana Grey Select
- Montauk White
- Montauk Grey
- Montauk Black

Available colors HP2

- Thermal Bluestone Blue Select
- Thermal Bluestone Full Color

* Modular products with 6 mm joint (approx 1/4”).
** NOTE: The 24”x36” and 12”x24” sizes (MIX) are palletized together on the same single pallet containing the correct percentages of each size.

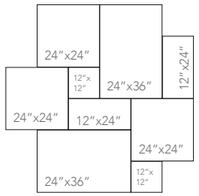
M.P.D. BIG EIGHT*



Module percentage

% HP1
24”x24” = 40%
12”x12”= 7%
24”x36” + 12”x24” (MIX) = 53% **

% HP2
24”x36”= 40%
24”x24” = 40%
12”x24”= 13%
12”x12”= 7%



Available colors HP1

- Bluestone Blue Select
- Bluestone Full color
- Travertine Cross Cut White
- Travertine Cross Cut Cream
- Travertine Cross Cut Silver
- Limestone
- Michelangelo Extra White
- Arctic White
- African Beige
- Star Grey
- Indiana Buff Select
- Indiana Grey Select
- Montauk White
- Montauk Grey
- Montauk Black

Available colors HP2

- Thermal Bluestone Blue Select
- Thermal Bluestone Full Color

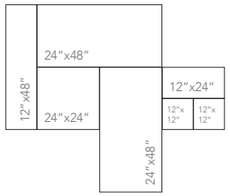
* Modular products with 6 mm joint (approx 1/4”).
** NOTE: The 24”x36” and 12”x24” sizes (MIX) are palletized together on the same single pallet containing the correct percentages of each size.

M.P.D. MULTI PATTERN DESIGN BIG

M.P.D. BIG NINE*

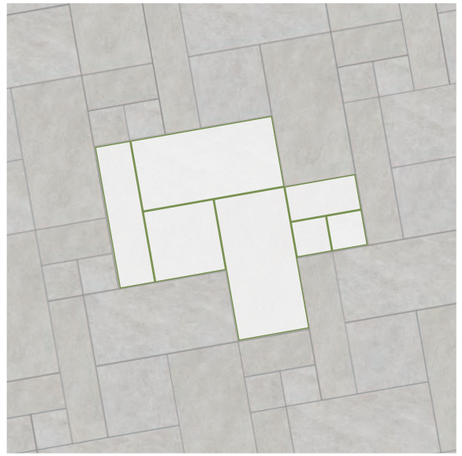
Module percentage

24″x48″= 58%
12″x48″= 14%
24″x24″ = 14%
12″x24″ = 7%
12″x12″= 7%



Available colors

- Bluestone Blue Select
- Bluestone Full color
- Travertine Cross Cut White
- Travertine Cross Cut Cream
- Travertine Cross Cut Silver
- Limestone
- Michelangelo Extra White
- Arctic White
- African Beige
- Star Grey
- Indiana Buff Select
- Indiana Grey Select
- Montauk White
- Montauk Grey
- Montauk Black

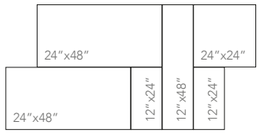


* Modular products with 6 mm joint (approx 1/4″).

M.P.D. BIG TEN*

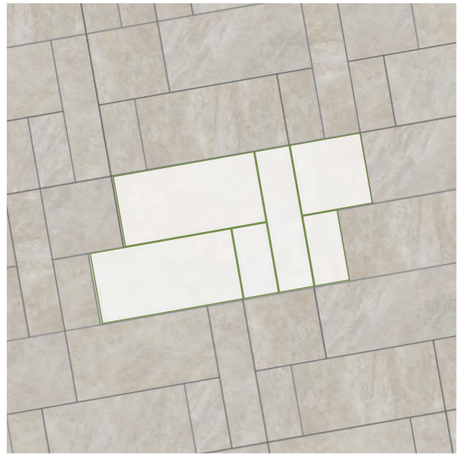
Module percentage

24″x48″= 58%
12″x48″= 14%
24″x24″= 14%
12″x24″= 14%



Available colors

- Bluestone Blue Select
- Bluestone Full color
- Travertine Cross Cut White
- Travertine Cross Cut Cream
- Travertine Cross Cut Silver
- Limestone
- Michelangelo Extra White
- Arctic White
- African Beige
- Star Grey
- Indiana Buff Select
- Indiana Grey Select
- White Avenue
- Cosmopolitan Ash
- Fashion Black
- Montauk White
- Montauk Grey
- Montauk Black

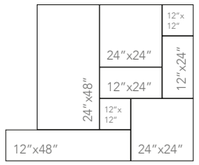


* Modular products with 6 mm joint (approx 1/4″).

M.P.D. BIG ELEVEN*

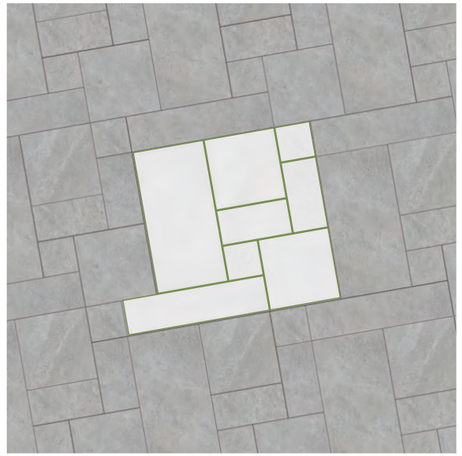
Module percentage

24″x48″= 31%
12″x48″= 15%
24″x24″ = 31%
12″x24″= 15%
12″x12″= 8%



Available colors

- Bluestone Blue Select
- Bluestone Full color
- Travertine Cross Cut White
- Travertine Cross Cut Cream
- Travertine Cross Cut Silver
- Limestone
- Michelangelo Extra White
- Arctic White
- African Beige
- Star Grey
- Indiana Buff Select
- Indiana Grey Select
- Montauk White
- Montauk Grey
- Montauk Black

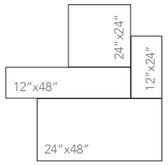


* Modular products with 6 mm joint (approx 1/4″).

M.P.D. BIG TWELVE*

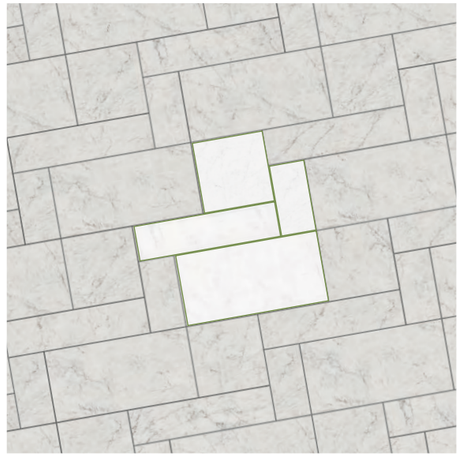
Module percentage

24″x48″= 22%
12″x48″= 45%
24″x24″= 22%
12″x24″= 11%



Available colors

- Bluestone Blue Select
- Bluestone Full color
- Travertine Cross Cut White
- Travertine Cross Cut Cream
- Travertine Cross Cut Silver
- Limestone
- Michelangelo Extra White
- Arctic White
- African Beige
- Star Grey
- Vintage Slab
- Indiana Buff Select
- Indiana Grey Select
- Montauk White
- Montauk Grey
- Montauk Black



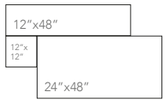
* Modular products with 6 mm joint (approx 1/4″).

M.P.D. MULTI PATTERN DESIGN BIG

M.P.D. BIG THIRTEEN*

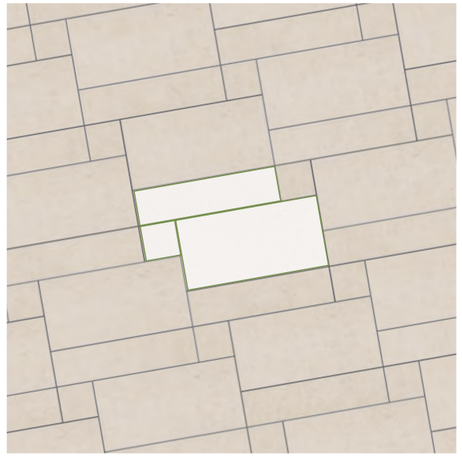
Module percentage

24”x48” = 62%
12”x48” = 30%
12”x12” = 8%



Available colors

- Bluestone Blue Select
- Bluestone Full color
- Travertine Cross Cut White
- Travertine Cross Cut Cream
- Travertine Cross Cut Silver
- Limestone
- Michelangelo Extra White
- Arctic White
- African Beige
- Star Grey
- Indiana Buff Select
- Indiana Grey Select
- Montauk White
- Montauk Grey
- Montauk Black

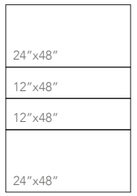


* Modular products with 6 mm joint (approx 1/4”).

M.P.D. BIG FOURTEEN*

Module percentage

24”x48” = 67%
12”x48” = 33%



Available colors

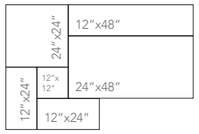
- Bluestone Blue Select
- Bluestone Full color
- Travertine Cross Cut White
- Travertine Cross Cut Cream
- Travertine Cross Cut Silver
- Limestone
- Michelangelo Extra White
- Arctic White
- African Beige
- Star Grey
- Indiana Buff Select
- Indiana Grey Select
- White Avenue
- Cosmopolitan Ash
- Fashion Black
- Montauk White
- Montauk Grey
- Montauk Black

* Modular products with 6 mm joint (approx 1/4”).

M.P.D. BIG FIFTEEN*

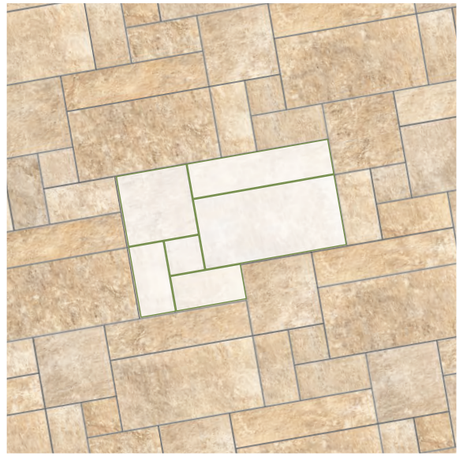
Module percentage

24″x48″= 38%
12″x48″= 19%
24″x24″= 19%
12″x24″= 19%
12″x12″= 5%



Available colors

- Bluestone Blue Select
- Bluestone Full color
- Travertine Cross Cut White
- Travertine Cross Cut Cream
- Travertine Cross Cut Silver
- Limestone
- Michelangelo Extra White
- Arctic White
- African Beige
- Star Grey
- Indiana Buff Select
- Indiana Grey Select
- Montauk White
- Montauk Grey
- Montauk Black

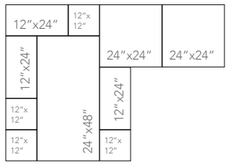


* Modular products with 6 mm joint (approx 1/4″).

M.P.D. BIG SIXTEEN*

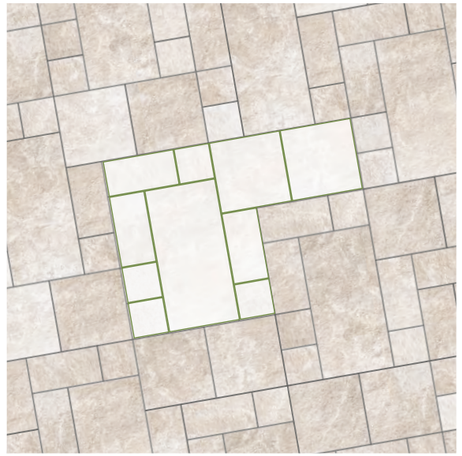
Module percentage

24″x48″= 31%
24″x24″= 31%
12″x24″= 23%
12″x12″= 15%



Available colors

- Bluestone Blue Select
- Bluestone Full color
- Travertine Cross Cut White
- Travertine Cross Cut Cream
- Travertine Cross Cut Silver
- Limestone
- Michelangelo Extra White
- Arctic White
- African Beige
- Star Grey
- Indiana Buff Select
- Indiana Grey Select
- Montauk White
- Montauk Grey
- Montauk Black



* Modular products with 6 mm joint (approx 1/4″).

M.P.D. MULTI PATTERN DESIGN BIG

M.P.D. BIG SEVENTEEN*

Module percentage

24”x48”= 33,5%
12”x48”= 33,5%
24”x24”= 17%
12”x24”= 8%
12”x12”= 8%

Available colors

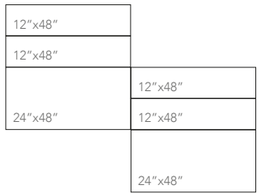
- Bluestone Blue Select
- Bluestone Full color
- Travertine Cross Cut White
- Travertine Cross Cut Cream
- Travertine Cross Cut Silver
- Limestone
- Michelangelo Extra White
- Arctic White
- African Beige
- Star Grey
- Indiana Buff Select
- Indiana Grey Select
- Montauk White
- Montauk Grey
- Montauk Black

* Modular products with 6 mm joint (approx 1/4”).

M.P.D. BIG EIGHTEEN*

Module percentage

24”x48”= 50%
12”x48”= 50%



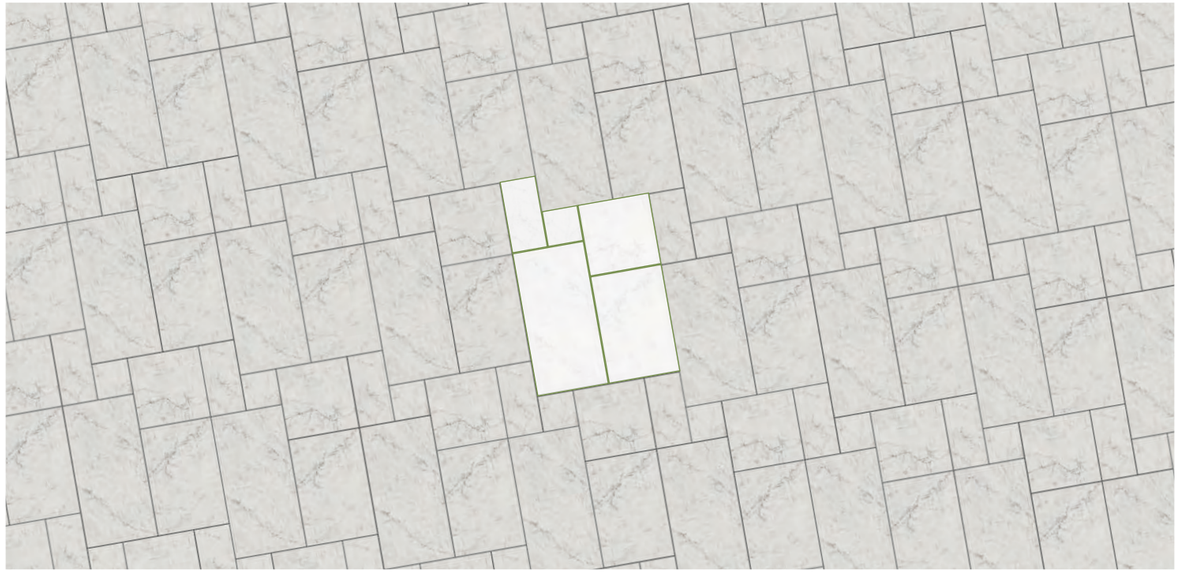
Available colors

- Bluestone Blue Select
- Bluestone Full color
- Travertine Cross Cut White
- Travertine Cross Cut Cream
- Travertine Cross Cut Silver
- Limestone
- Michelangelo Extra White
- Arctic White
- African Beige
- Star Grey
- Indiana Buff Select
- Indiana Grey Select
- Montauk White
- Montauk Grey
- Montauk Black

* Modular products with 6 mm joint (approx 1/4”).

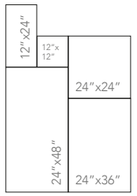
M.P.D. MULTI PATTERN DESIGN BIG

M.P.D. BIG NINETEEN*



Module percentage

24″x48″ = 38%
24″x24″ = 19%
12″x12″ = 5%
24″x36″ + 12″x24″ (MIX) = 38% **

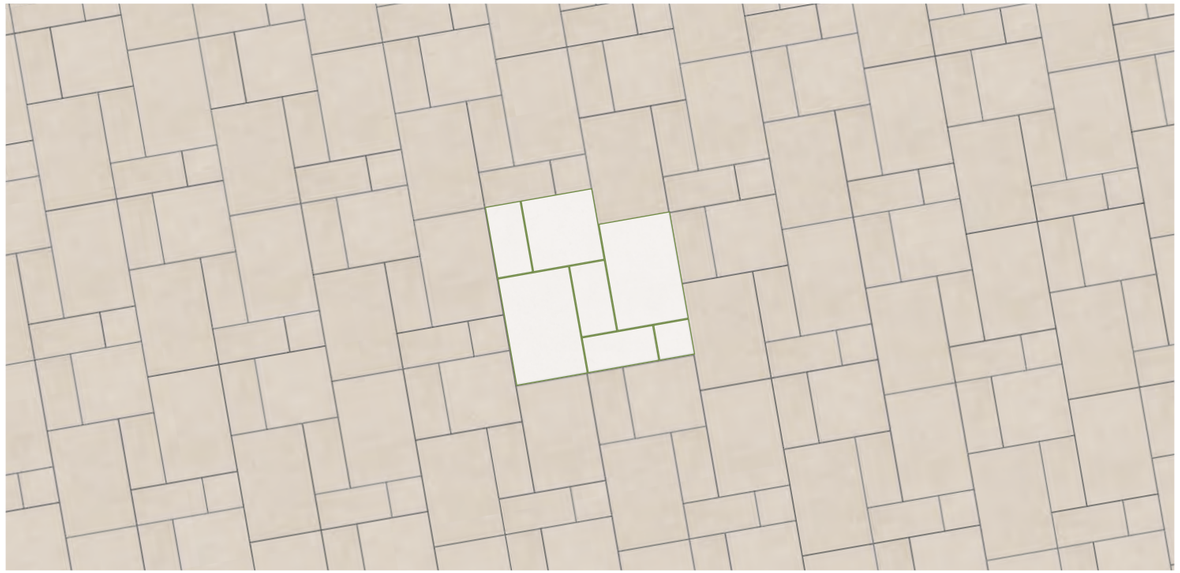


Available colors

- Bluestone Blue Select
- Bluestone Full color
- Travertine Cross Cut White
- Travertine Cross Cut Cream
- Travertine Cross Cut Silver
- Limestone
- Michelangelo Extra White
- Arctic White
- African Beige
- Star Grey
- Indiana Buff Select
- Indiana Grey Select
- Montauk White
- Montauk Grey
- Montauk Black

* Modular products with 6 mm joint (approx 1/4″).
** NOTE: The 24″x36″ and 12″x24″ sizes (MIX) are palletized together on the same single pallet containing the correct percentages of each size.

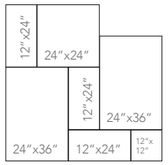
M.P.D. BIG TWENTY*



Module percentage

% HP1
24″x24″ = 18%
12″x12″ = 4%
24″x36″ + 12″x24″ (MIX) = 78% **

% HP2
24″x36″= 52%
24″x24″ = 18%
12″x24″= 26%
12″x12″= 4%



Available colors HP1

- Bluestone Blue Select
- Bluestone Full color
- Travertine Cross Cut White
- Travertine Cross Cut Cream
- Travertine Cross Cut Silver
- Limestone
- Michelangelo Extra White
- Arctic White
- African Beige
- Star Grey
- Indiana Buff Select
- Indiana Grey Select
- Montauk White
- Montauk Grey
- Montauk Black

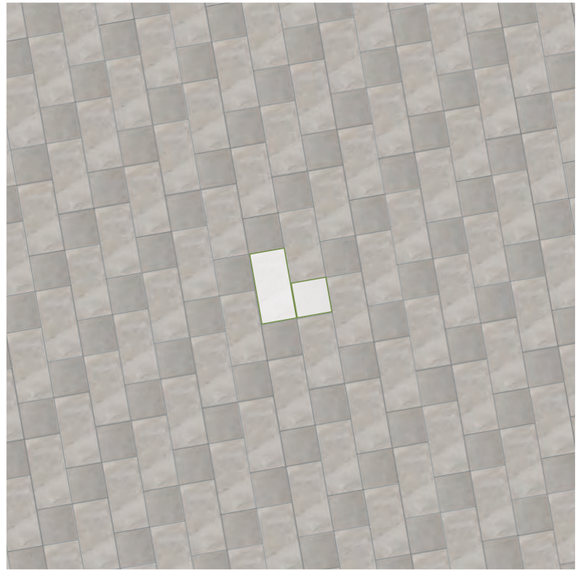
Available colors HP2

- Thermal Bluestone Blue Select
- Thermal Bluestone Full Color

* Modular products with 6 mm joint (approx 1/4″).
** NOTE: The 24″x36″ and 12″x24″ sizes (MIX) are palletized together on the same single pallet containing the correct percentages of each size.

M.P.D. MULTI PATTERN DESIGN SMALL

M.P.D. SMALL ONE*



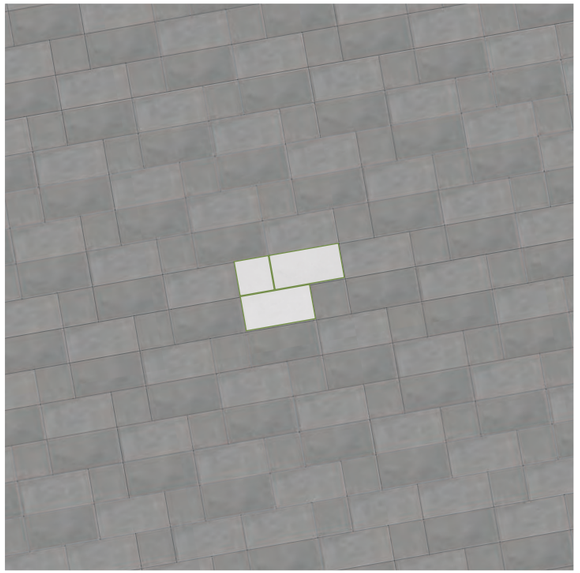
Module percentage

12”x24” = 67%
12”x12” = 33%

Available colors

- Bluestone Blue Select
- Bluestone Full color
- Thermal Bluestone Blue Select
- Thermal Bluestone Full Color
- Travertine Cross Cut White
- Travertine Cross Cut Cream
- Travertine Cross Cut Silver
- Limestone
- Michelangelo Extra White
- Arctic White
- African Beige
- Star Grey
- Indiana Buff Select
- Indiana Grey Select
- Indiana Variegated
- California Gold
- Rustic Gold
- Montauk White
- Montauk Grey
- Montauk Black
- Travertine Cross Cut Scabas
- Travertine Cross Cut Philadelphia
- Travertine Cross Cut Country Classic

M.P.D. SMALL TWO*



Module percentage

12”x24” = 80%
12”x12” = 20%

Available colors

- Bluestone Blue Select
- Bluestone Full color
- Thermal Bluestone Blue Select
- Thermal Bluestone Full Color
- Travertine Cross Cut White
- Travertine Cross Cut Cream
- Travertine Cross Cut Silver
- Limestone
- Michelangelo Extra White
- Arctic White
- African Beige
- Star Grey
- Indiana Buff Select
- Indiana Grey Select
- Indiana Variegated
- California Gold
- Rustic Gold
- Montauk White
- Montauk Grey
- Montauk Black
- Travertine Cross Cut Scabas
- Travertine Cross Cut Philadelphia
- Travertine Cross Cut Country Classic

M.P.D. SMALL THREE*

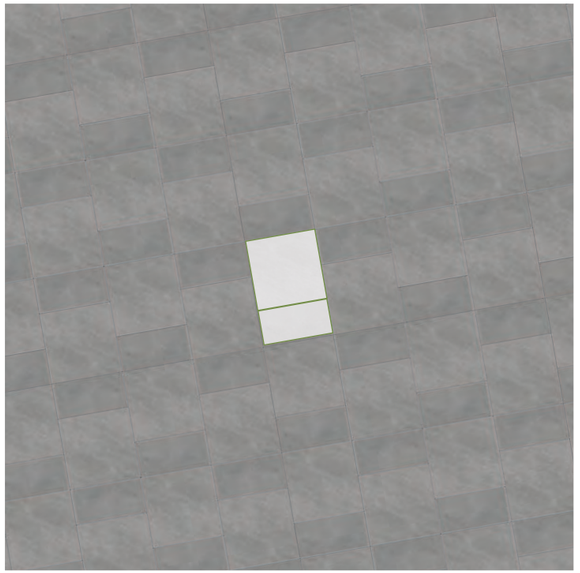
Module percentage

24”x24” = 50%
12”x24” = 50%

Available colors

- Bluestone Blue Select
- Bluestone Full color
- Thermal Bluestone Blue Select
- Thermal Bluestone Full Color
- Travertine Cross Cut White
- Travertine Cross Cut Cream
- Travertine Cross Cut Silver
- Limestone
- Michelangelo Extra White
- Arctic White
- African Beige
- Star Grey
- Vintage Slab
- Barge Gold
- Silver Quartz
- Diamond White
- Fashion Grey
- Indiana Buff Select
- Indiana Grey Select
- Indiana Variegated
- California Gold
- Rustic Gold
- Montauk White
- Montauk Grey
- Montauk Black
- Travertine Cross Cut Scabas
- Travertine Cross Cut Philadelphia
- Travertine Cross Cut Country Classic

M.P.D. SMALL FOUR*



Module percentage

24”x24” = 67%
12”x24” = 33%

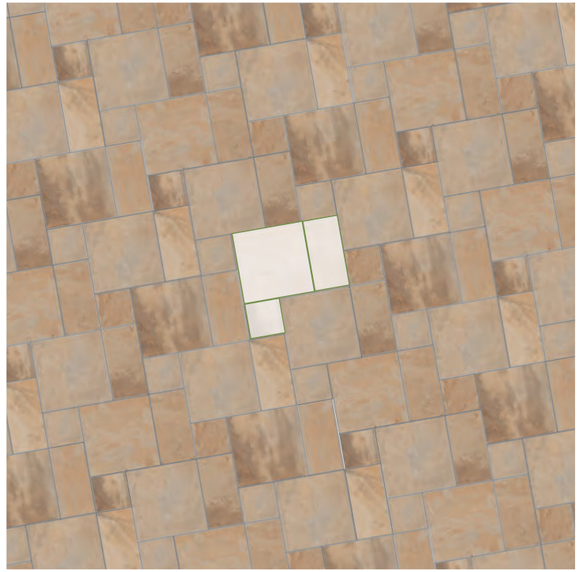
Available colors

- Bluestone Blue Select
- Bluestone Full color
- Thermal Bluestone Blue Select
- Thermal Bluestone Full Color
- Travertine Cross Cut White
- Travertine Cross Cut Cream
- Travertine Cross Cut Silver
- Limestone
- Michelangelo Extra White
- Arctic White
- African Beige
- Star Grey
- Vintage Slab
- Barge Gold
- Silver Quartz
- Diamond White
- Fashion Grey
- Indiana Buff Select
- Indiana Grey Select
- Indiana Variegated
- California Gold
- Rustic Gold
- Montauk White
- Montauk Grey
- Montauk Black
- Travertine Cross Cut Scabas
- Travertine Cross Cut Philadelphia
- Travertine Cross Cut Country Classic

* Modular products with 6 mm joint (approx 1/4”).

M.P.D. MULTI PATTERN DESIGN SMALL

M.P.D. SMALL FIVE*



Module percentage

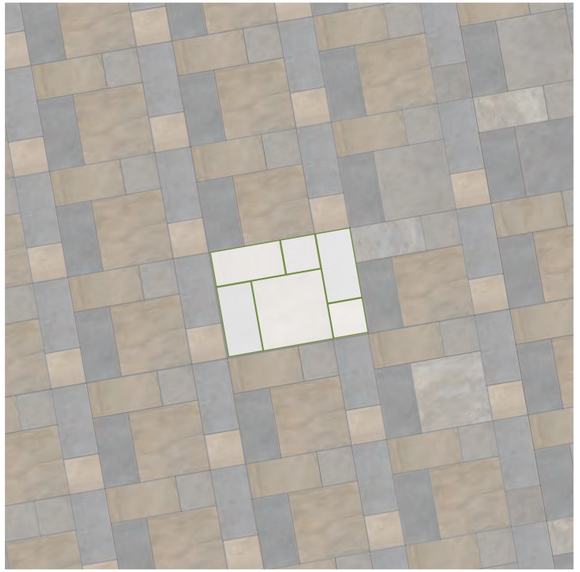
24”x24” = 57%
12”x24” = 29%
12”x12” = 14%

Available colors

- Bluestone Blue Select
- Bluestone Full color
- Thermal Bluestone Blue Select
- Thermal Bluestone Full Color
- Travertine Cross Cut White
- Travertine Cross Cut Cream
- Travertine Cross Cut Silver
- Limestone
- Michelangelo Extra White
- Arctic White
- African Beige
- Star Grey
- Indiana Buff Select
- Indiana Grey Select
- Indiana Variegated
- California Gold
- Rustic Gold
- Montauk White
- Montauk Grey
- Montauk Black
- Travertine Cross Cut Scabas
- Travertine Cross Cut Philadelphia
- Travertine Cross Cut Country Classic

* Modular products with 6 mm joint (approx 1/4”).

M.P.D. SMALL SIX*



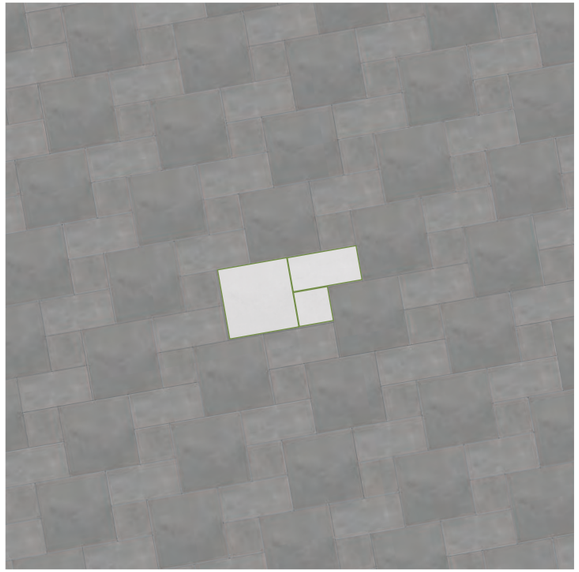
Module percentage

24”x24” = 33%
12”x24” = 50%
12”x12” = 17%

Available colors

- Bluestone Blue Select
- Bluestone Full color
- Thermal Bluestone Blue Select
- Thermal Bluestone Full Color
- Travertine Cross Cut White
- Travertine Cross Cut Cream
- Travertine Cross Cut Silver
- Limestone
- Michelangelo Extra White
- Arctic White
- African Beige
- Star Grey
- Indiana Buff Select
- Indiana Grey Select
- Indiana Variegated
- California Gold
- Rustic Gold
- Montauk White
- Montauk Grey
- Montauk Black
- Travertine Cross Cut Scabas
- Travertine Cross Cut Philadelphia
- Travertine Cross Cut Country Classic

M.P.D. SMALL SEVEN*



Module percentage

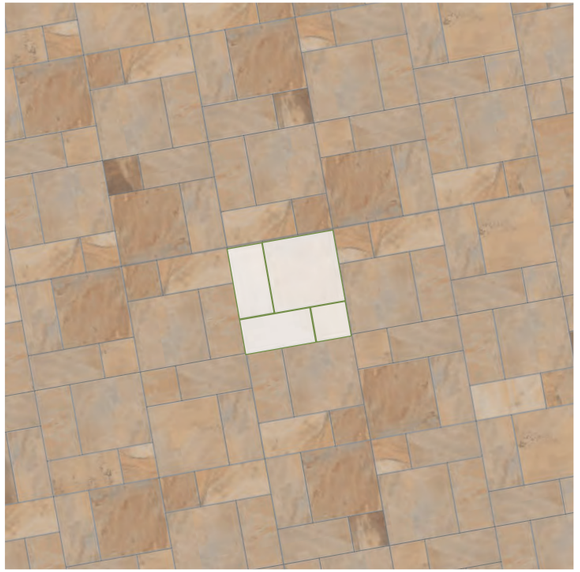
24”x24” = 57%
12”x24” = 29%
12”x12” = 14%

Available colors

- Bluestone Blue Select
- Bluestone Full color
- Thermal Bluestone Blue Select
- Thermal Bluestone Full Color
- Travertine Cross Cut White
- Travertine Cross Cut Cream
- Travertine Cross Cut Silver
- Limestone
- Michelangelo Extra White
- Arctic White
- African Beige
- Star Grey
- Indiana Buff Select
- Indiana Grey Select
- Indiana Variegated
- California Gold
- Rustic Gold
- Montauk White
- Montauk Grey
- Montauk Black
- Travertine Cross Cut Scabas
- Travertine Cross Cut Philadelphia
- Travertine Cross Cut Country Classic

* Modular products with 6 mm joint (approx 1/4”).

M.P.D. SMALL EIGHT*



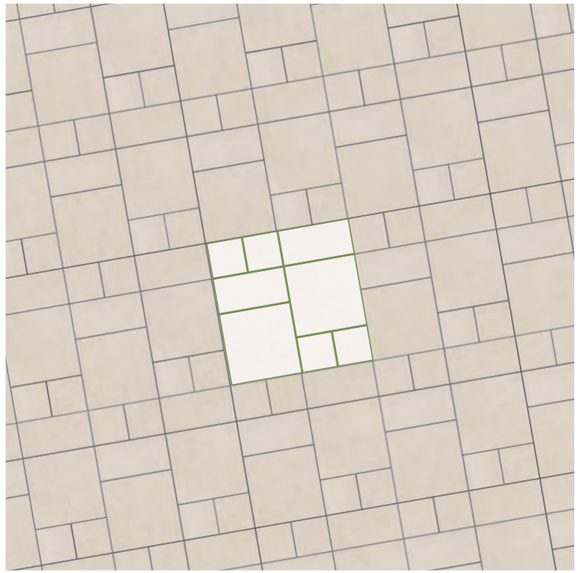
Module percentage

24”x24” = 44%
12”x24” = 45%
12”x12” = 11%

Available colors

- Bluestone Blue Select
- Bluestone Full color
- Thermal Bluestone Blue Select
- Thermal Bluestone Full Color
- Travertine Cross Cut White
- Travertine Cross Cut Cream
- Travertine Cross Cut Silver
- Limestone
- Michelangelo Extra White
- Arctic White
- African Beige
- Star Grey
- Indiana Buff Select
- Indiana Grey Select
- Indiana Variegated
- California Gold
- Rustic Gold
- Montauk White
- Montauk Grey
- Montauk Black
- Travertine Cross Cut Scabas
- Travertine Cross Cut Philadelphia
- Travertine Cross Cut Country Classic

M.P.D. SMALL NINE*



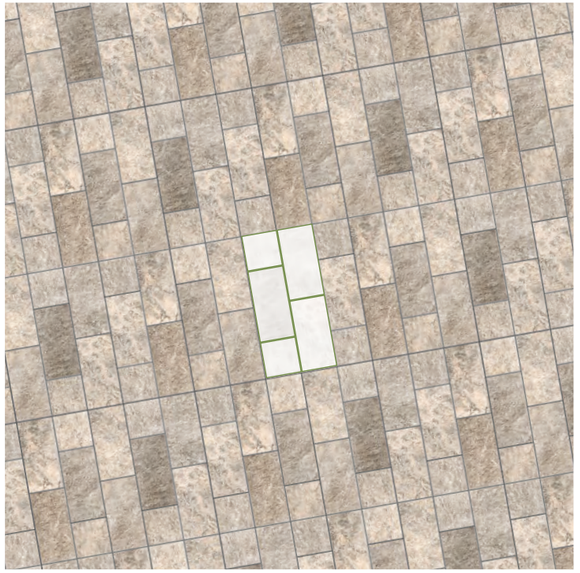
Module percentage

24”x24” = 50%
12”x24” = 25%
12”x12” = 25%

Available colors

- Bluestone Blue Select
- Bluestone Full color
- Thermal Bluestone Blue Select
- Thermal Bluestone Full Color
- Travertine Cross Cut White
- Travertine Cross Cut Cream
- Travertine Cross Cut Silver
- Limestone
- Michelangelo Extra White
- Arctic White
- African Beige
- Star Grey
- Indiana Buff Select
- Indiana Grey Select
- Indiana Variegated
- California Gold
- Rustic Gold
- Montauk White
- Montauk Grey
- Montauk Black
- Travertine Cross Cut Scabas
- Travertine Cross Cut Philadelphia
- Travertine Cross Cut Country Classic

M.P.D. SMALL TEN*



Module percentage

12”x24” = 75%
12”x12” = 25%

Available colors

- Bluestone Blue Select
- Bluestone Full color
- Thermal Bluestone Blue Select
- Thermal Bluestone Full Color
- Travertine Cross Cut White
- Travertine Cross Cut Cream
- Travertine Cross Cut Silver
- Limestone
- Michelangelo Extra White
- Arctic White
- African Beige
- Star Grey
- Indiana Buff Select
- Indiana Grey Select
- Indiana Variegated
- California Gold
- Rustic Gold
- Montauk White
- Montauk Grey
- Montauk Black
- Travertine Cross Cut Scabas
- Travertine Cross Cut Philadelphia
- Travertine Cross Cut Country Classic

* Modular products with 6 mm joint (approx 1/4”).

PROJECT
OUTDOOR FLOOR DESIGN
Frontier20 Travertine Cross Cut Silver - 24”x24”
Frontier20 Travertine Cross Cut Silver - 12”x24”
WALL DESIGN
Brick World Soho Black - 3”x12”

FRONTIER20
SHAPES

Think, combine, create.

_Frontier20 Shapes empowers you to design distinctive patterns for any outdoor space. Choose from a range of shapes, sizes, and colors to achieve the perfect balance of aesthetics and functionality. And enjoy the benefits of superior performance, easy maintenance, and long lasting beauty.

PROJECT
SHAPE: Rhombus
SIZE: BIG 11"x20" Pattern: 01
COLOR: Limestone + Arctic White + Absolute
DINNER TABLE
Limestone 24"x24"

Outdoor spaces reimagined

Frontier20 Shapes is the innovative project by Landmark Ceramics that offers a comprehensive range of **solutions to design and decorate outdoor floors,** both in commercial architectures and residential contexts. Explore a wide selection of **shapes, sizes, patterns and colors, obtained with our 20mm Porcelain Pavers range**, and open doors to a range of patterns, allowing you to convey personality, character, and undeniable flair in your project.

Frontier20 Shapes is the appearance of creativity:

Innovative and creative shapes

+

Unparalleled color selection

+

Endless pattern combinations

+

Porcelain Pavers Superior Performance

=

Complete freedom

Peak performance

EASY TO KEEP CLEAN

RESISTANT TO THERMAL SHOCK

FROST RESISTANCE

ANTISLIP

SCRATCH RESISTANT

RESISTANT TO MOSS AND MOLDING

FADE RESISTANCE

STAIN RESISTANT

RESISTANT TO SALTS

RESISTANT TO ACID AND CHEMICALS

ECO FRIENDLY

NO SEALING NEEDED

SAVING OVER TIME

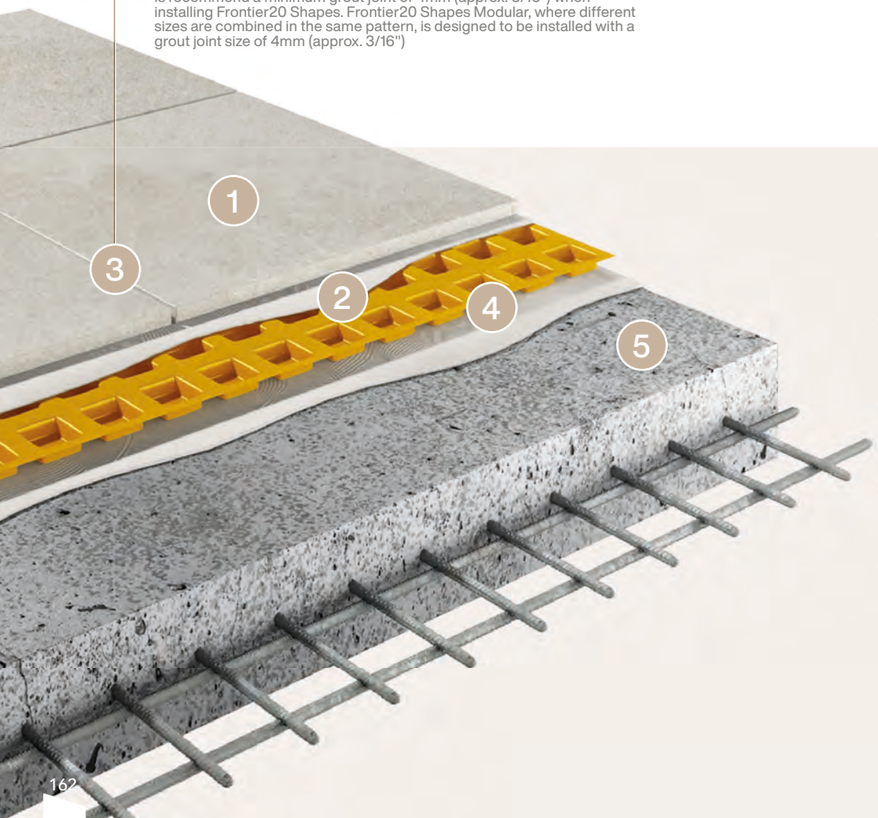
Frontier20 Shapes isn't just about aesthetics, it's about the **highest performance: a smart solution for long-lasting beauty**. Crafted from Landmark 20mm Porcelain Pavers, its surfaces are resistant, and built to endure heavy foot traffic, extreme weather, scratch, acid, and chemicals. But technical features go beyond durability. Frontier20 Shapes is healthy and eco-friendly, because it is free of plastic, formaldehyde, PVC, and VOC, doesn't produce smoke if exposed to fire, is inhospitable to bacteria, dust mites, fungi, mold, and requires low-maintenance cleaning.

Traditional installation

Get an exclusive look and all the ease of application. The versatility of Frontier20 Shapes makes design easy for pathways, walkways, courtyards, and outdoor spaces. Simply **follow the traditional installation** method using thinset/thickset mortar appropriate for use with porcelain pavers. This method offers the most stable and most durable floor covering that is able to withstand traffic within 24 hours.

4mm (approx. 3/16") minimum grout joint

Is recommend a minimum grout joint of 4mm (approx. 3/16") when installing Frontier20 Shapes. Frontier20 Shapes Modular, where different sizes are combined in the same pattern, is designed to be installed with a grout joint size of 4mm (approx. 3/16")



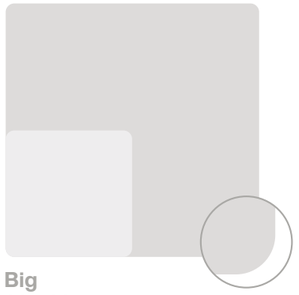
1. FRONTIER20 SHAPES PORCELAIN 3/4" NOMINAL (20MM) PAVERS
2. THINSET
3. 4mm (approx. 3/16") MINIMUM GROUT JOINT
4. UNCOUPLING MEMBRANE
5. EXISTING OR NEW CONCRETE

PROJECT
SHAPE: Trapezoid
SIZE: BIG 10"x24" Pattern: 3B
COLOR: Michelangelo Extra White

Shapes & sizes

Frontier20 Shapes offers a numerous **variety of Shapes and Sizes: Modular** is an offering made up of modular standard pavers with rounded corners. Creative aims to offer new design solutions to allow any professional to express their creativity on all outdoor projects. **Both Modular and Creative are available in the Big and Small sizes**. Finally, **Plank** to allow any professional even more pattern options to easily characterize any type of outdoor surface.

Modular (with rounded edges)



Big
23"x23"
Small
11 1/2"x11 1/2"

Big
15"x23"
Small
7 3/4"x11 1/2"

Big
11 1/2"x23"
Small
5 3/4"x11 1/2"

Big
7 3/4"x23"
Small
3 4/5"x11 1/2"

Big
5 3/4"x23"

Plank

6"x24"

Creative

Diamond

Big 23"x23"
Small 11"x11"

Hexagon

Big 20"x24"
Small 10"x11"

Kite

Big 23"x23"
Small 12"x12"

Peacock

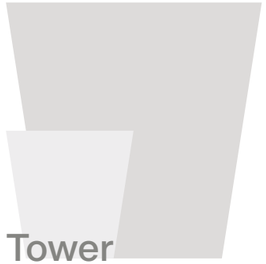
Big 20"x23"
Small 9"x10"

Rhombus

Big 11"x20"
Small 8"x15"

Ruby

Big 11"x23"
Small 5"x11"



Tower

Big 23"x23"
Small 11"x11"

Trapezoid

Big 10"x24"
Small 5"x11"

Turtle

Big 20"x27"
Small 10"x13"

Pattern combinations

Choose a shape and bring forth **over fifty different patterns**. The modularity of Shapes surfaces ensures **countless combinations**. Standard pavers in both Big and Small formats can be seamlessly combined, expanding compositional possibilities.

For a comprehensive list of available pattern combinations visit **lcusa.com/fr20shapes**

MODULAR

PLANK

DIAMOND

HEXAGON

KITE

PEACOCK

RHOMBUS

RUBY

TOWER

TRAPEZOID

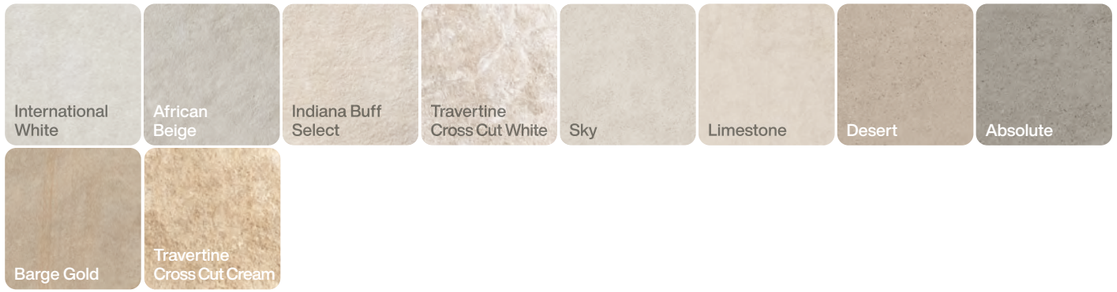
TURTLE

Color range

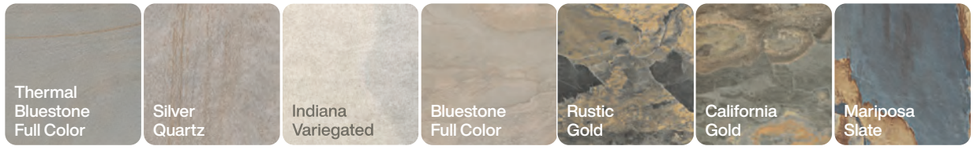
Unleash your creative vision with a **color palette from the Frontier20 range**. Add a vibration, choosing a combination from three chromatic harmonies: Cold, bright tones for a refreshing atmosphere; Warm and dusty hues for a welcoming environment; and Raw, textured surfaces for a unique and architectural look.

Cold urban contemporary subtle cosmopolitan

Warm natural soft cozy soothing earthy

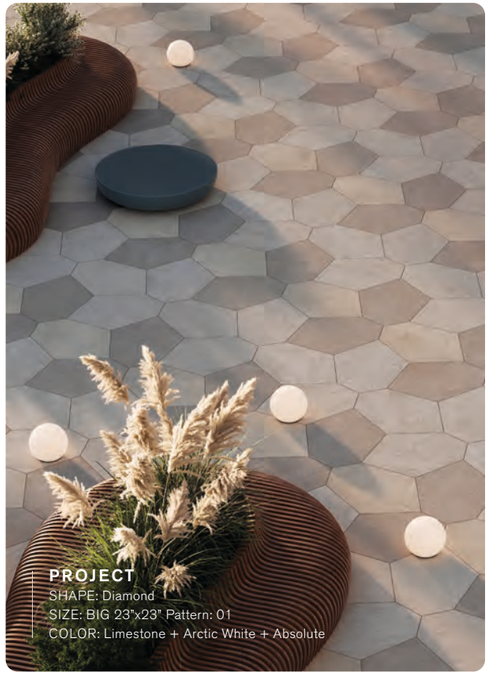


Raw textured rugged gravel variegated



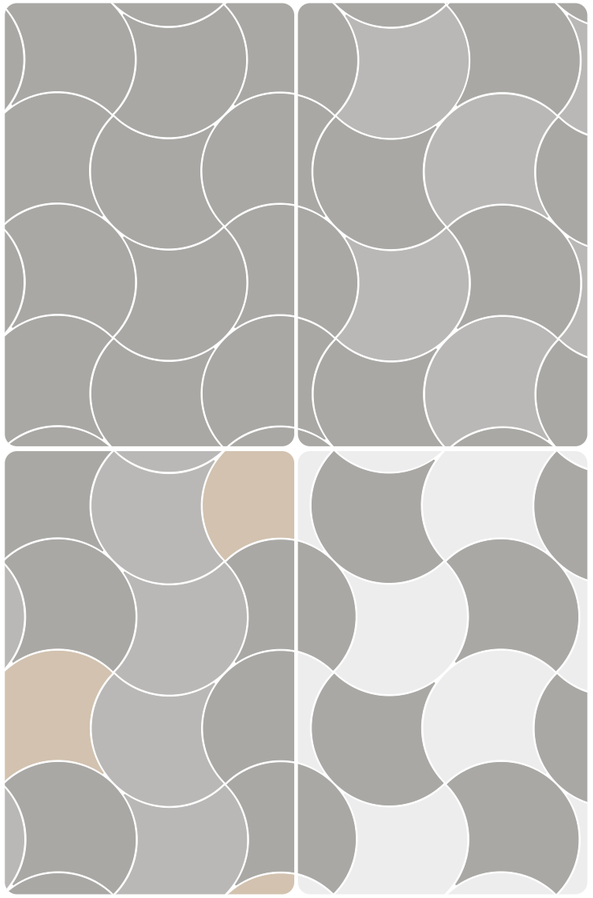
Vibrations

The extensive color range expands pairing possibilities. Achieve **monochromatic surfaces** or mix textures and create **soft matching** with cold colors or **contrasting combinations** with warmer shades. For a truly unique touch, blend cold and warm tones to design **distinctive color accents**, providing a refined movement to the environment.



Mono
Monochrome

Soft
Soft matching



Accent
Chromatic accent

Contrast
Contrasting combination

Grouts

Grout enhances outdoor uniqueness, maintaining essential qualities like strength and safety.

Choose from a range of **distinctive grout options for each color combination**, from light to dark shades. You can pick a shade that complements the floor or a contrasting tone to emphasize the lines between each tile.

		Mapei							Laticrete						
		01 Alabaster	105 Driftwood	27 Silver	09 Gris	79 Cocoa	47 Charcoal	10 Black	88 Silver Shadow	78 Sterling Silver	22 Midnight Black	39 Mushroom	66 Chestnut Brown	35 Mocha	06 Dusty Grey
Cold	Freedom White	○		●				●	○	●	●				
	Montauk White	○		●				●	○	●	●				
	Natural Ivory	○		●				●	○	●	●				
	Michelangelo Extra White	○		●				●	○	●	●				
	Minimalist Greige	○		●				●	○	●	●				
	Indiana Grey Select	○		●				●	○	●	●				
	Modern Grey	○		●				●	○	●	●				
	Arctic White	○		●				●	○	●	●				
	Cosmopolitan Ash	○		●				●	○	●	●				
	Montauk Grey	○		●				●	○	●	●				
	Bluestone Blue Select	○		●				●	○	●	●				
	Simply Grey	○		●				●	○	●	●				
	Cosmos	○		●				●	○	●	●				
	Montauk Black	○		●				●	○	●	●				
Warm	International White		●				●	●			●	○		●	
	African Beige		●				●	●			●	○		●	
	Indiana Buff Select		●				●	●			●	○		●	
	Travertine Cross Cut White		●				●	●			●	○		●	
	Sky		●				●	●			●	○		●	
	Limestone		●				●	●			●	○		●	
	Absolute		●				●	●			●	○		●	
	Desert		●				●	●			●	○		●	
	Barge Gold		●				●	●			●	○		●	
	Travertine Cross Cut Cream		●				●	●			●	○		●	
Raw	Thermal Bluestone Full Color		●		●	●							●		●
	Silver Quartz		●		●	●							●		●
	Indiana Variegated		●		●	●							●		●
	Bluestone Full Color		●		●	●							●		●
	Rustic Gold		●		●	●							●		●
	California Gold		●		●	●							●		●
	Mariposa Slate		●		●	●							●		●

How it works

1 Choose a shape

Modular

Plank

Diamond

Hexagon

Kite

Peacock

Rhombus

Ruby

Tower

Trapezoid

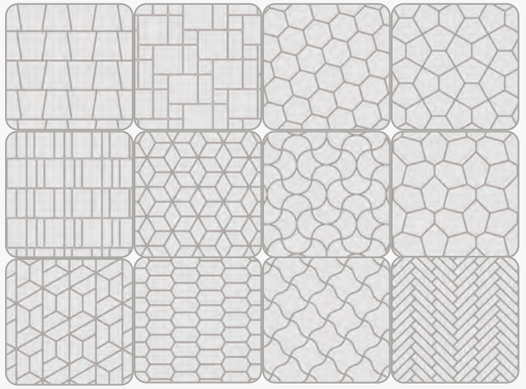
Turtle

Now that you have explored Frontier20 Shapes in detail, here's how it works. Follow the steps below to breathe life into exceptional outdoor flooring spaces.

2 Select a size

Small | Big

3 Choose a pattern

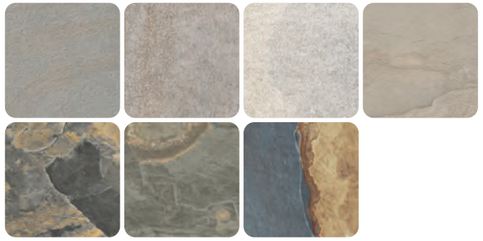


4 Pick your colors

Cold

Warm

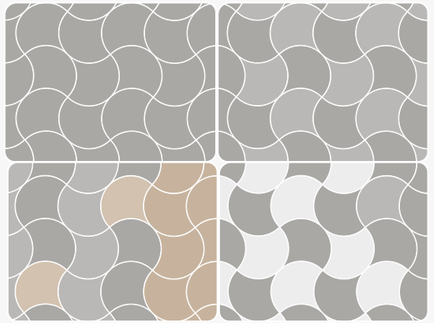
Raw



5 Select a vibration

Mono

Soft



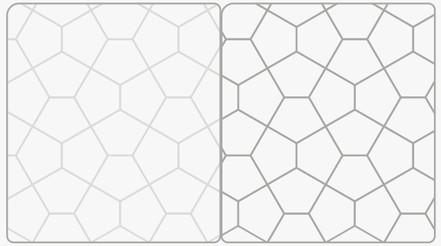
Accent

Contrast

6 Add grout

Matching

Contrast



PROJECT
SHAPE: Diamond
SIZE: BIG 23"x23" Pattern: 01
COLOR: Limestone + Arctic White + Absolute

PROJECT
SHAPE: Modular
SIZE: 15"x23"-7 3/4"x23"-5 3/4"x23" Pattern: 01
COLOR: Cosmos + Natural Ivory
POOL WALL TILES
Frontier20 Natural Ivory Linear Cover Drain Set 12"x24"

PROJECT
SHAPE: Peacock
SIZE: SMALL 9"x10" BIG 20"x23" Pattern: 03A
COLOR: Full Color Blueselect
STEP DESIGN
Frontier20 Full Color Blueselect Trim Pieces
FIREPLACE
Veneer World Pro Ledgestone Bluestone Full Color 6"x24"

PROJECT
SHAPE: Diamond
SIZE: BIG 23"x23" Pattern: 01
COLOR: Limestone + Arctic White + Absolute

PRODUCT RANGE.

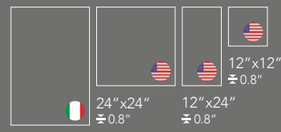
PROJECT
OUTDOOR FLOOR DESIGN
Frontier20 California Gold - 24"x24" - 12"x24" - 12"x12"
Frontier20 California Gold Trim Pieces
WALL DESIGN
Veneer World Pro Ledgestone Alpine Alaska - 6"x24"

BLUESTONE DESIGN PROJECT

THERMAL BLUESTONE BLUE SELECT

AMERICANSTONE

Available sizes



24"x36"
±0.8"

24"x24"
±0.8"

12"x24"
±0.8"

12"x12"
±0.8"

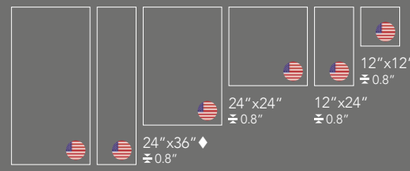
Color shading

V2

BLUESTONE BLUE SELECT

AMERICANSTONE

Available sizes



24"x48"
±0.8"

12"x48"
±0.8"

24"x36"♦
±0.8"

24"x24"
±0.8"

12"x24"
±0.8"

12"x12"
±0.8"

Color shading

V2

The color of pavers printed in this catalog may differ from actual pavers. Paver color reproductions in this catalog are representative only. Slight tone and shade variations are inherent in porcelain pavers. Before selecting a color, we recommend that you contact your local representative, who will provide you with a sample piece of the requested paver.

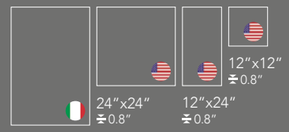
This porcelain paver product is manufactured with a V2/V3/V4 shade variation. Remember that the amount of color as well as the texture of each piece may vary from paver to paver. Inspect the product immediately upon delivery and select pavers from many boxes during installation to minimize and blend any possible color difference.

BLUESTONE DESIGN PROJECT

THERMAL BLUESTONE FULL COLOR

AMERICANSTONE

Available sizes



24"x36"
±0.8"

24"x24"
±0.8"

12"x24"
±0.8"

12"x12"
±0.8"

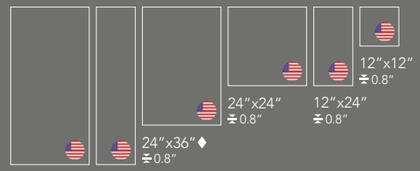
Color shading

V3

BLUESTONE FULL COLOR

AMERICANSTONE

Available sizes



24"x48"
±0.8"

12"x48"
±0.8"

24"x36"♦
±0.8"

24"x24"
±0.8"

12"x24"
±0.8"

12"x12"
±0.8"

Color shading

V4

Color Shading

V1	V2	V3	V4
UNIFORM APPEARANCE	SLIGHT VARIATION	MODERATE VARIATION	SUBSTANTIAL VARIATION

FRONTIER20

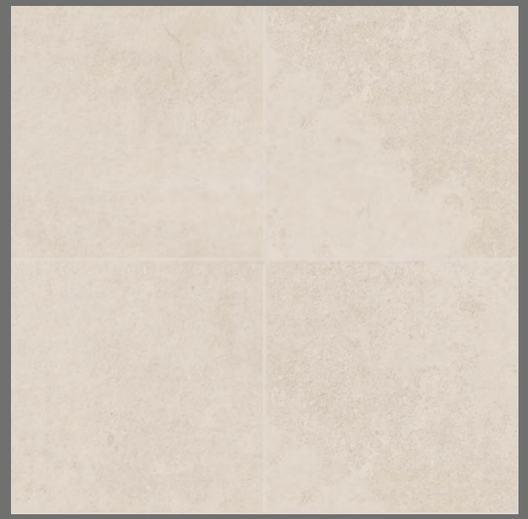
AMERICANSTONE

COLORED BODY PORCELAIN PAVERS - Rectified Monocaliber

LIMESTONE LOOK

LIMESTONE

AMERICANSTONE



Available sizes

24"x48"
0.8"

12"x48"
0.8"

24"x36" ♦
0.8"

24"x24"
0.8"

12"x24"
0.8"

12"x12"
0.8"

Color shading

V2

♦ NOTE: 24"x36" is sold as mix (24"x36" + 12"x24") along with 12"x24". The two sizes are palletized on the same pallet and sold together.

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This porcelain paver product is manufactured with a V2 shade variation. Remember that the amount of color as well as the texture of each piece may vary from paver to paver. Inspect the product immediately upon delivery and select pavers from many boxes during installation to minimize and blend any possible color difference.

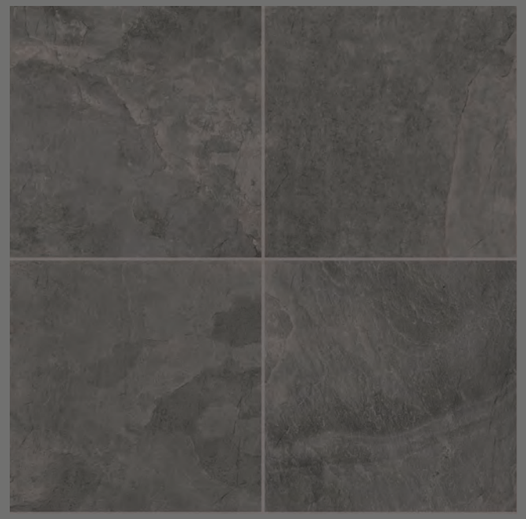
AMERICANSTONE

20MM THICKNESS PORCELAIN PAVERS

SLATE LOOK

VINTAGE SLAB

AMERICANSTONE



Available sizes

24"x24"
0.8"

12"x24"
0.8"

Color shading

V2

Color Shading

V1	V2	V3	V4
UNIFORM APPEARANCE	SLIGHT VARIATION	MODERATE VARIATION	SUBSTANTIAL VARIATION

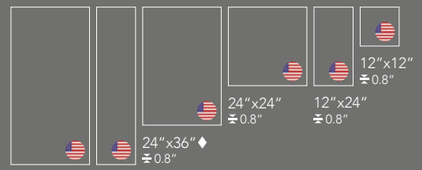
COLORED BODY PORCELAIN PAVERS - Rectified Monocaliber

SLATE DESIGN PROJECT

MONTAUK WHITE

AMERICANSTONE

Available sizes

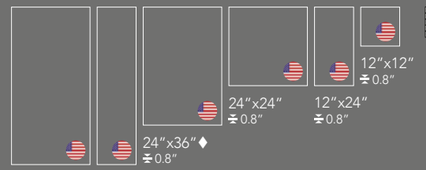


Color shading

MONTAUK GREY

AMERICANSTONE

Available sizes



Color shading

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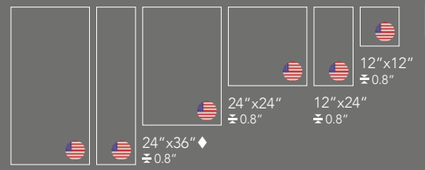
SLATE DESIGN PROJECT

MONTAUK BLACK

AMERICANSTONE

Available sizes



Color shading

Color Shading

♦ NOTE: 24"x36" is sold as mix (24"x36" + 12"x24") along with 12"x24". The two sizes are palletized on the same pallet and sold together.

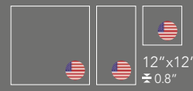
COLORED BODY PORCELAIN PAVERS - Rectified Monocaliber

SLATE DESIGN PROJECT

CALIFORNIA GOLD

AMERICANSTONE

Available sizes



24"x24"
0.8"

12"x24"
0.8"

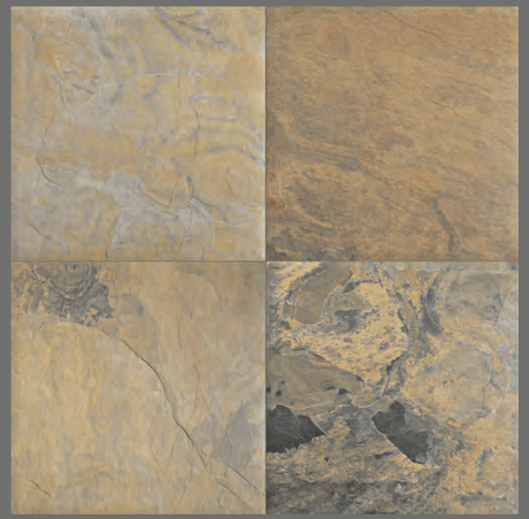
12"x12"
0.8"

Color shading

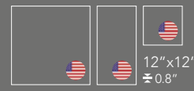
V4

RUSTIC GOLD

AMERICANSTONE



Available sizes



24"x24"
0.8"

12"x24"
0.8"

12"x12"
0.8"

Color shading

V4

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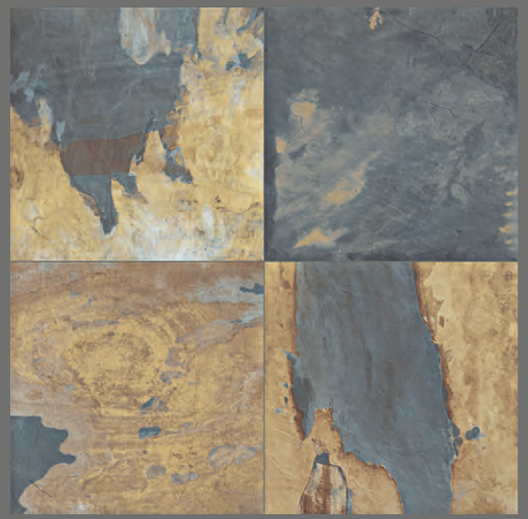
SLATE DESIGN PROJECT

MARIPOSA SLATE

AMERICANSTONE



Available sizes

24"x24"
0.8"

Color shading

V2

PROJECT
OUTDOOR FLOOR DESIGN
Frontier20 California Gold - 24"x24" - 12"x24" - 12"x12"
Frontier20 California Gold Trim Pieces
WALL DESIGN
Essence Vibrant California Gold - 3"x12"

Color Shading

V1	V2	V3	V4
UNIFORM APPEARANCE	SLIGHT VARIATION	MODERATE VARIATION	SUBSTANTIAL VARIATION

NOTE: 24"x36" is sold as mix (24"x36" + 12"x24") along with 12"x24". The two sizes are palletized on the same pallet and sold together.

COLORED BODY PORCELAIN PAVERS - Rectified Monocaliber

TRAVERTINE DESIGN PROJECT

TRAVERTINE SELECT CROSS CUT PEARL

AMERICANSTONE

Available sizes

24"x24"
0.8"

Color shading

V2

TRAVERTINE SELECT CROSS CUT BEIGE

AMERICANSTONE

Available sizes

24"x24"
0.8"

Color shading

V2

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TRAVERTINE DESIGN PROJECT

TRAVERTINE VEIN CUT GREY

AMERICANSTONE

Available sizes

24"x48"
0.8"

Color shading

V2

TRAVERTINE VEIN CUT BEIGE

AMERICANSTONE

Available sizes

24"x48"
0.8"

Color shading

V2

Color Shading

V1	V2	V3	V4
UNIFORM APPEARANCE	SLIGHT VARIATION	MODERATE VARIATION	SUBSTANTIAL VARIATION

COLORED BODY PORCELAIN PAVERS - Rectified Monocaliber

TRAVERTINE DESIGN PROJECT

TRAVERTINE CROSS CUT SCABAS

AMERICANSTONE

Available sizes

24"x24" ≠0.8"

12"x24" ≠0.8"

12"x12" ≠0.8"

Color shading

V4

TRAVERTINE CROSS CUT PHILADELPHIA

AMERICANSTONE

Available sizes

24"x24" ≠0.8"

12"x24" ≠0.8"

12"x12" ≠0.8"

Color shading

V4

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TRAVERTINE DESIGN PROJECT

TRAVERTINE CROSS CUT COUNTRY CLASSIC

AMERICANSTONE

Available sizes

24"x24" ≠0.8"

12"x24" ≠0.8"

12"x12" ≠0.8"

Color shading

V4

PROJECT
OUTDOOR FLOOR DESIGN
Frontier 20 Travertine Cross Cut Country Classic - 12"x12" - 12"x24" - 24"x24"
OUTDOOR POOL DESIGN
Frontier20 Travertine Cross Cut Country Classic Trim Pieces

Color Shading

V1	V2	V3	V4
UNIFORM APPEARANCE	SLIGHT VARIATION	MODERATE VARIATION	SUBSTANTIAL VARIATION

♦ NOTE: 24"x36" is sold as mix (24"x36" + 12"x24") along with 12"x24". The two sizes are palletized on the same pallet and sold together.

FRONTIER20

AMERICANSTONE

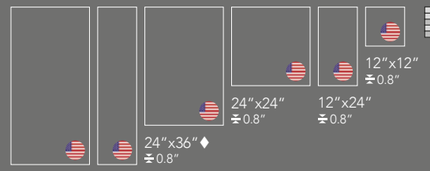
COLORED BODY PORCELAIN PAVERS - Rectified Monocaliber

TRAVERTINE DESIGN PROJECT

TRAVERTINE CROSS CUT WHITE AMERICANSTONE

Available sizes

Color shading

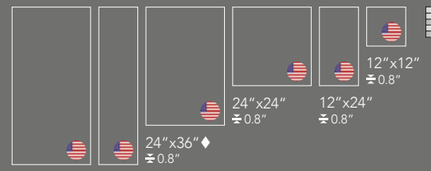


V2

TRAVERTINE CROSS CUT SILVER AMERICANSTONE

Available sizes

Color shading



V2

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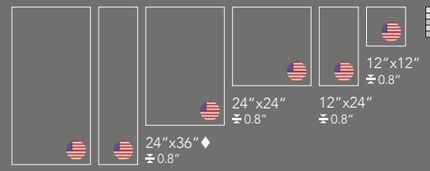
TRAVERTINE DESIGN PROJECT

TRAVERTINE CROSS CUT CREAM AMERICANSTONE

Available sizes

Color shading



V2

PROJECT
OUTDOOR FLOOR DESIGN
Frontier20 Travertine Cross Cut Cream - 24"x48" - 12"x48" - 24"x24" - 12"x24" - 12"x12"
Frontier20 Travertine Cross Cut Cream Stair Tread - 12"x48"
Frontier20 Travertine Cross Cut Cream Riser - 6"x48"

Color Shading

♦ NOTE: 24"x36" is sold as mix (24"x36" + 12"x24") along with 12"x24". The two sizes are palletized on the same pallet and sold together.

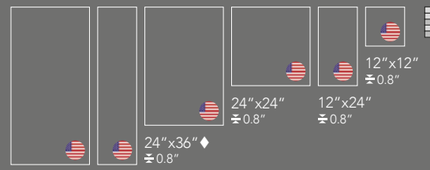
COLORED BODY PORCELAIN PAVERS - Rectified Monocaliber

INDIANA SALEM DESIGN PROJECT

INDIANA BUFF SELECT

AMERICANSTONE

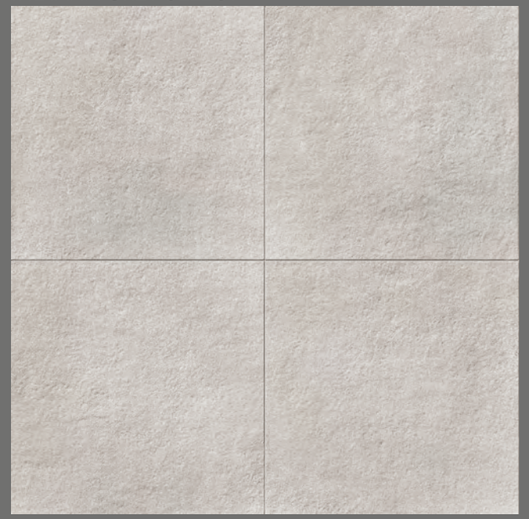
Available sizes



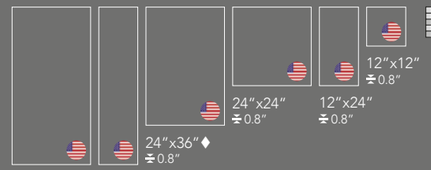
Color shading

INDIANA GREY SELECT

AMERICANSTONE



Available sizes



Color shading

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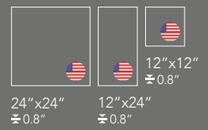
This porcelain paver product is manufactured with a V2/V3 shade variation. Remember that the amount of color as well as the texture of each piece may vary from paver to paver. Inspect the product immediately upon delivery and select pavers from many boxes during installation to minimize and blend any possible color difference.

INDIANA SALEM DESIGN PROJECT

INDIANA VARIEGATED

AMERICANSTONE

Available sizes



Color shading

Color Shading

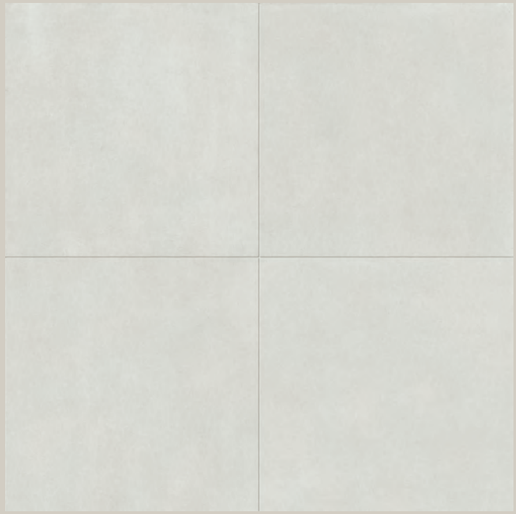
♦ NOTE: 24"x36" is sold as mix (24"x36" + 12"x24") along with 12"x24". The two sizes are palletized on the same pallet and sold together.

FRONTIER20

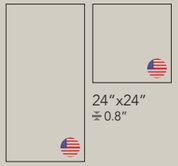
COLORED BODY PORCELAIN PAVERS - Rectified Monocaliber

STONE LOOK

WHITE AVENUE



Available size



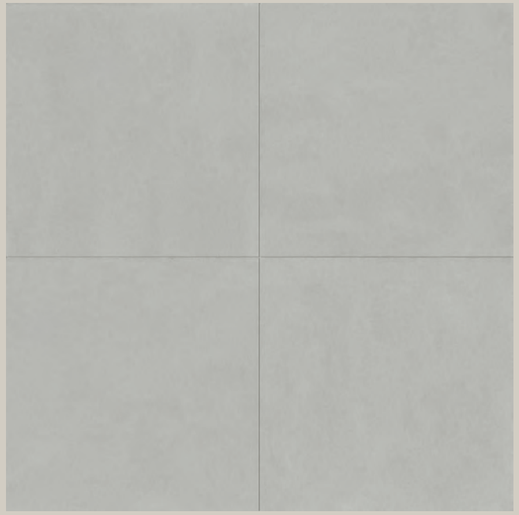
24"x24"
0.8"

24"x48"
0.8"

Color shading

V2

COSMOPOLITAN ASH



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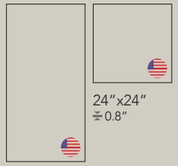

24"x24"
0.8"

24"x48"
0.8"

Color shading

V2

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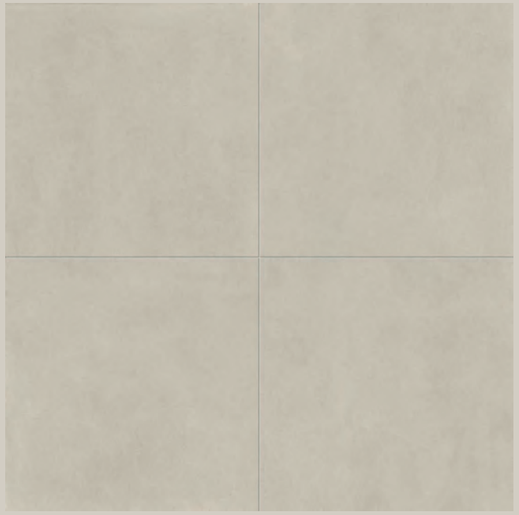
STONE LOOK

ARTISTIC BEIGE



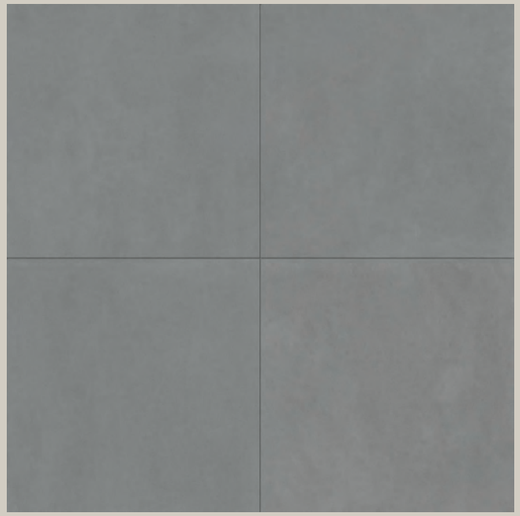
Available size

24"x24"
0.8"

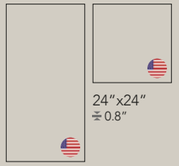
Color shading

V2

FASHION BLACK



Available size



24"x24"
0.8"

24"x48"
0.8"

Color shading

V2

Color Shading

V1	V2	V3	V4
UNIFORM APPEARANCE	SLIGHT VARIATION	MODERATE VARIATION	SUBSTANTIAL VARIATION

FRONTIER20

COLORED BODY PORCELAIN PAVERS - Rectified Monocaliber

TERRAZZO LOOK

DIAMOND WHITE

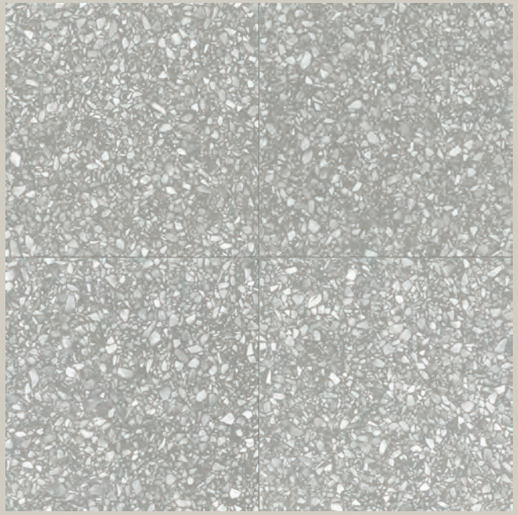
Available size

24"x24"
0.8"

Color shading

V2

FASHION GREY



Available size

24"x24"
0.8"

Color shading

V2

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Color Shading

V1	V2	V3	V4
UNIFORM APPEARANCE	SLIGHT VARIATION	MODERATE VARIATION	SUBSTANTIAL VARIATION

PROJECT
OUTDOOR FLOOR DESIGN
Frontier20 Diamond White - 24"x24"
Frontier20 Fashion Grey - 24"x24"
Frontier20 Diamond White / Fashion Grey Stair Tread Rectified - 12"x24"
OUTDOOR WALL DESIGN
Veneer World Urban Ledgestone White Mix - 6"x24"
Elite Fashion Grey - 24"x24"

FRONTIER20 - DECO

COLORED BODY PORCELAIN PAVERS - Rectified Monocaliber

STONE LOOK

PATCHWORK WHITE

Available size

24"x24"
0.8"

Matches with

White Avenue
Precious Ivory
Artistic Beige

Color shading

V3

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This porcelain paver product is manufactured with a V3 shade variation. Remember that the amount of color as well as the texture of each piece may vary from paver to paver. Inspect the product immediately upon delivery and select pavers from many boxes during installation to minimize and blend any possible color difference.

STONE LOOK

PATCHWORK ASH

Available size

24"x24"
0.8"

Matches with

Metro Grey
Fashion Black
Cosm. Ash

Color shading

V3

Color Shading

V1	V2	V3	V4
UNIFORM APPEARANCE	SLIGHT VARIATION	MODERATE VARIATION	SUBSTANTIAL VARIATION

FRONTIER20 - DECO

COLORED BODY PORCELAIN PAVERS - Rectified Monocaliber

STONE LOOK

PATCHWORK MIX

Available size

24"x24"
0.8"

Matches with

White Avenue
Artistic Beige
Cosm. Ash
Fashion Black

Color shading

V3

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Color Shading

V1	V2	V3	V4
UNIFORM APPEARANCE	SLIGHT VARIATION	MODERATE VARIATION	SUBSTANTIAL VARIATION

PROJECT
OUTDOOR FLOOR DESIGN
Frontier20 Patchwork Mix - 24"x24"
WALL DESIGN
Masterplan Precious Ivory - 24"x48'

COLORED BODY PORCELAIN PAVERS - Rectified Monocaliber

QUARTZITE DESIGN PROJECT

ARCTIC WHITE

Available sizes

24"x48" ±0.8"
12"x48" ±0.8"
24"x36"♦ ±0.8"
24"x24" ±0.8"
12"x24" ±0.8"
12"x12" ±0.8"

Color shading

V2

AFRICAN BEIGE

Available sizes

24"x48" ±0.8"
12"x48" ±0.8"
24"x36"♦ ±0.8"
24"x24" ±0.8"
12"x24" ±0.8"
12"x12" ±0.8"

Color shading

V2

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This porcelain paver product is manufactured with a V2 shade variation. Remember that the amount of color as well as the texture of each piece may vary from paver to paver. Inspect the product immediately upon delivery and select pavers from many boxes during installation to minimize and blend any possible color difference.

QUARTZITE DESIGN PROJECT

STAR GREY

Available sizes

24"x48" ±0.8"
12"x48" ±0.8"
24"x36"♦ ±0.8"
24"x24" ±0.8"
12"x24" ±0.8"
12"x12" ±0.8"

Color shading

V2

Color Shading

V1	V2	V3	V4
UNIFORM APPEARANCE	SLIGHT VARIATION	MODERATE VARIATION	SUBSTANTIAL VARIATION

♦ NOTE: 24"x36" is sold as mix (24"x36" + 12"x24") along with 12"x24". The two sizes are palletized on the same pallet and sold together.

COLORED BODY PORCELAIN PAVERS - Rectified Monocaliber

QUARTZ LOOK

BARGE GOLD

Available sizes

24"x24" 0.8"

12"x24" 0.8"

Color shading

V3

SILVER QUARTZ

Available sizes

24"x24" 0.8"

12"x24" 0.8"

Color shading

V3

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This porcelain paver product is manufactured with a V2/V3 shade variation. Remember that the amount of color as well as the texture of each piece may vary from paver to paver. Inspect the product immediately upon delivery and select pavers from many boxes during installation to minimize and blend any possible color difference.

STONE LOOK

NATURAL IVORY

Available size

24"x24" 0.8"

Color shading

V2

MODERN GREY

Available size

24"x24" 0.8"

Color shading

V2

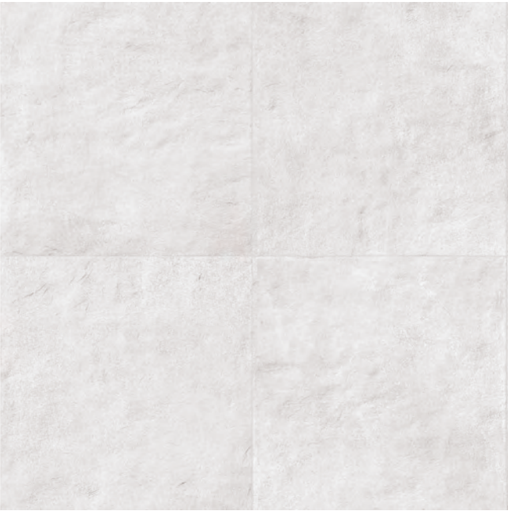
Color Shading

V1	V2	V3	V4
UNIFORM APPEARANCE	SLIGHT VARIATION	MODERATE VARIATION	SUBSTANTIAL VARIATION

COLORED BODY PORCELAIN PAVERS - Rectified Monocaliber

CONCRETE LOOK

FREEDOM WHITE



Available size

24"x24"
0.8"

Color shading

V2

PASSION SILVER

Available size

24"x24"
0.8"

Color shading

V2

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This porcelain paver product is manufactured with a V1/V2 shade variation. Remember that the amount of color as well as the texture of each piece may vary from paver to paver. Inspect the product immediately upon delivery and select pavers from many boxes during installation to minimize and blend any possible color difference.

CONCRETE LOOK

SIMPLY GREY

Available sizes

24"x24"
0.8"

Color shading

V1

Color Shading

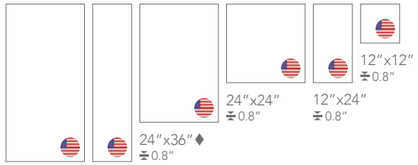
V1	V2	V3	V4
UNIFORM APPEARANCE	SLIGHT VARIATION	MODERATE VARIATION	SUBSTANTIAL VARIATION

COLORED BODY PORCELAIN PAVERS - Rectified Monocaliber

MARBLE LOOK

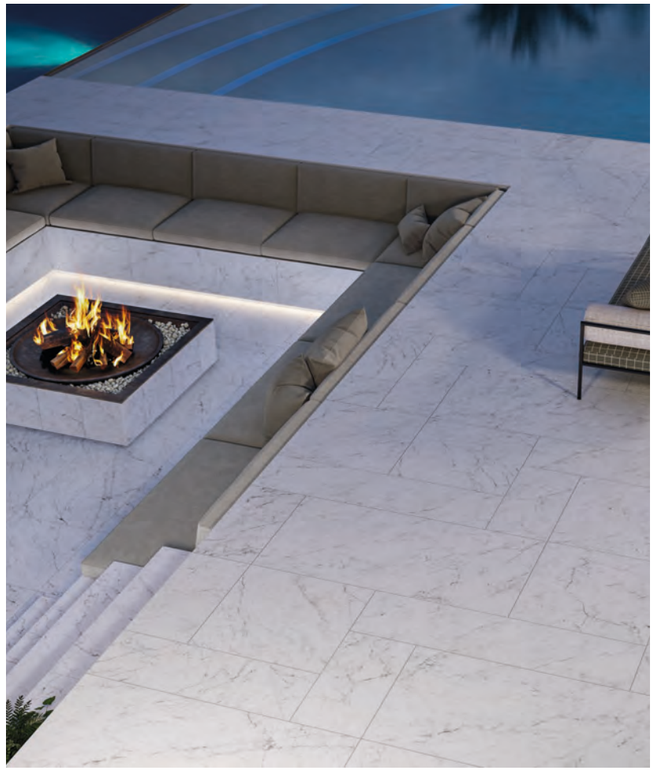
MICHELANGELO EXTRA WHITE

Available sizes



Color shading

V2



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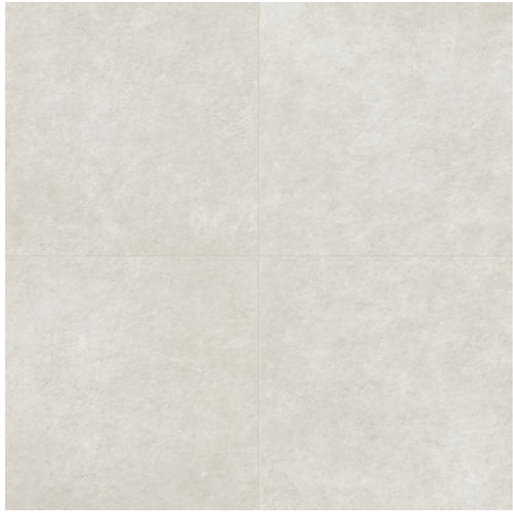
LIMESTONE LOOK

INTERNATIONAL WHITE

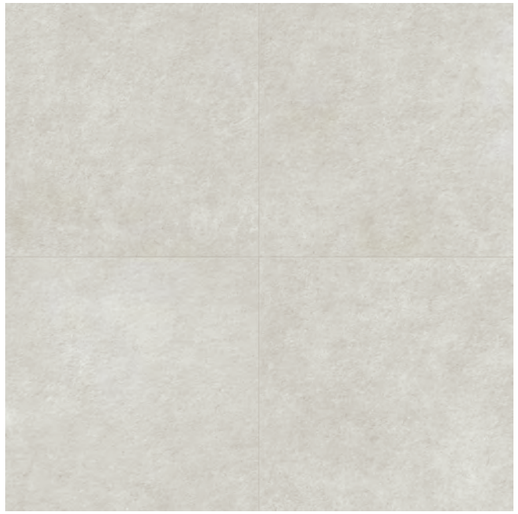


Available size

Color shading

V2

MINIMALIST GREIGE



Available size

Color shading

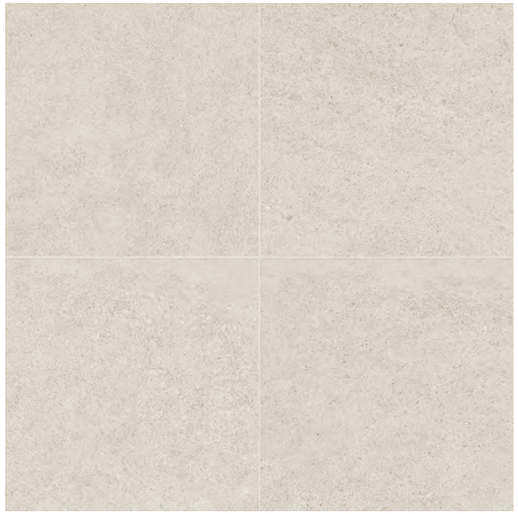
V2

Color Shading

COLORED BODY PORCELAIN PAVERS - Rectified Monocaliber

STONE LOOK

SKY



Available size

24"x24"
0.8"

Color shading

V2

DESERT

Available size

24"x24"
0.8"

Color shading

V2

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STONE LOOK

ABSOLUTE

Available size

24"x24"
0.8"

Color shading

V2

COSMOS

Available size

24"x24"
0.8"

Color shading

V2

Color Shading

V1	V2	V3	V4
UNIFORM APPEARANCE	SLIGHT VARIATION	MODERATE VARIATION	SUBSTANTIAL VARIATION

COLORED BODY PORCELAIN PAVERS - Rectified Monocaliber

WOOD LOOK

SOUL WALNUT

Available size

12"x48"
0.8"

Color shading

V2

SOUL GREY

Available size

12"x48"
0.8"

Color shading

V2

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This porcelain paver product is manufactured with a V2 shade variation. Remember that the amount of color as well as the texture of each piece may vary from paver to paver. Inspect the product immediately upon delivery and select pavers from many boxes during installation to minimize and blend any possible color difference.

WOOD LOOK

ESSENCE GREY

Available size

12"x48"
0.8"

Color shading

V2

ESSENCE BROWN

Available size

12"x48"
0.8"

Color shading

V2

Color Shading

V1	V2	V3	V4
UNIFORM APPEARANCE	SLIGHT VARIATION	MODERATE VARIATION	SUBSTANTIAL VARIATION

FRONTIER20

COLORED BODY PORCELAIN PAVERS - Rectified Monocaliber

WOOD LOOK

WALNUT

Available size

24"x24"
0.8"

Color shading

V3

PEPPER

Available size

24"x24"
0.8"

Color shading

V3

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This porcelain paver product is manufactured with a V3 shade variation. Remember that the amount of color as well as the texture of each piece may vary from paver to paver. Inspect the product immediately upon delivery and select pavers from many boxes during installation to minimize and blend any possible color difference.

Color Shading

V1	V2	V3	V4
UNIFORM APPEARANCE	SLIGHT VARIATION	MODERATE VARIATION	SUBSTANTIAL VARIATION

PROJECT
OUTDOOR FLOOR DESIGN
Frontier20 Essence Grey - 12"x48"

INSTALLATION INFORMATION AND RECOMMENDATIONS.

ADDITIONAL RECOMMENDATIONS FOR THE INSTALLATION, ORDINARY CLEANING AND MAINTENANCE.

Landmark Ceramics recommends carrying out the procedures for the ordinary cleaning of Frontier20 floor surfaces using water and commercially available neutral detergents: the inclination of the surface and the space between adjacent slabs for dry-system installation favor the natural flow of water. However, it is important to take into consideration that any type of floor surface is subject to the surface tension effect of liquids: it is the same property of water that gives the tendency to transform into spherical droplets and which cause the curved top surface of a glass full of water. The surface tension can obstacle the complete drainage of water and cause a temporary stagnation of liquid on the slab edges. In order to avoid this problem, Landmark Ceramics recommends ensuring adequate inclination of the surface during installation so as to encourage the flow of water between adjacent slabs. Please remember in any case that, in view of the distinctive advantages of porcelain stoneware, Frontier20 absorbs practically no water, which makes it highly frost-proof. This may lead to localized water pooling, mainly on the edges of the pavers, independently of the manner and quality of the laying. Laying is also recommended with a minimum gap of 4 mm (5/32"). Should liquid deposit on the surface, it is recommended to push it towards grout lines using a brush or remove it with a wet and dry vacuum cleaner.

Specific details and instructions are given for each of the following installation options. Different climates and geographical locations will affect the thickness of the base. Depending on the location, contractors will lay the standard base thickness to install porcelain pavers for the needs of the area. When installing porcelain pavers, the bedding course sand must be pre-compacted and then struck off with a screed to the required thickness as shown in the drawings. Before the laying of the porcelain pavers, the sand layer underneath must be pre-compacted. The sand layer needs a 5 to 6% moisture content to insure a smooth strike off finish. **Compacting dry sand will not give the desired results.**

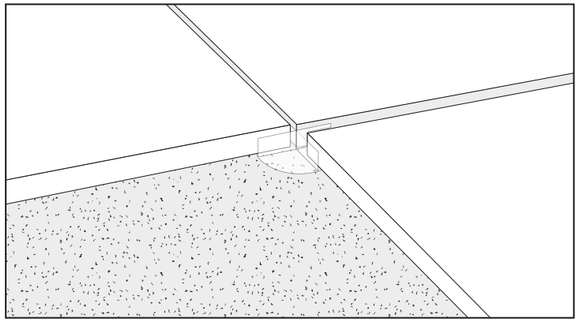
- ➔ Only use a paver saw with a wet cut porcelain blade to wet cut porcelain pavers.
- ➔ Before installing your porcelain pavers in sand set installations, pre-compact and strike off your sand leveling course.
- ➔ Plastic $^{3}/_{16}$" (4 mm) spacers must always be used to install pavers on sand set and permeable installations.
- ➔ Never install pavers with porcelain to porcelain contact.
- ➔ The use of plate compactors is not recommended to be used on the porcelain pavers.

PORCELAIN PAVERS JOINT FILLING.

When installing porcelain paver on sand set base, fill the 4 mm (approx. 3/16") paver joints with these options:

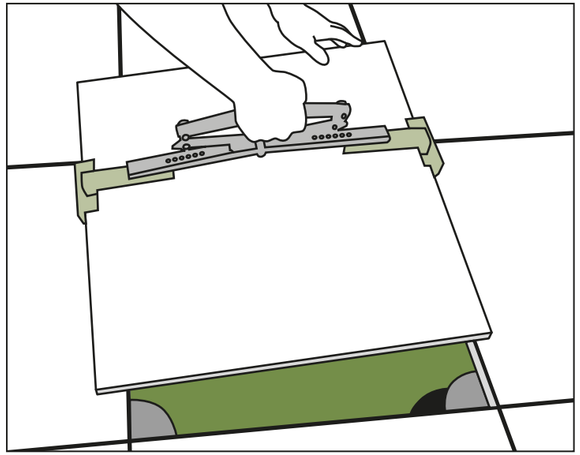
Traditional sand
Fill the open joints with traditional dry sand until completely filled. Sweep any excess sand off the pavers. Refilling of the joints with sand may be needed in the future due to wind and rain erosion.

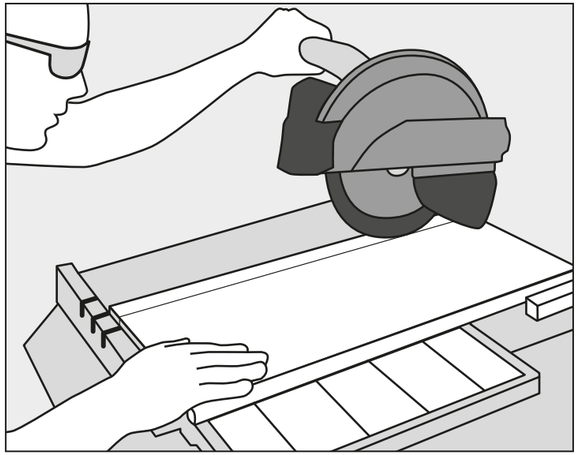
Polymeric sand
Polymeric sand is a blend of polymers which harden when subjected to moisture. Sweep the sand into the open joints until completely filled. All excess sand and dust must be swept from the surface. Use a blower for the final dust removal to make certain all excess sand is removed. Any residual sand or dust can result in staining of the surface. Once the filling of the joints and the cleaning of the surface is complete, mist the pavement with water which activates the polymer and cures the mixture.



HANDLING AND SPECIALTY TOOLS.

Porcelain paver pallets are shipped with a very strong plastic covering and the individual units are packaged in protective cardboard boxes. The protective cardboard boxes guard them from the possibility of chipping. The handling of multiple loose stones can result in damaging or chipping of the pavers. Protect any un-used boxed pavers from the elements once the plastic shipping cover is removed. This insures the integrity of the protective cardboard boxes. Wet cut paver saw is used to cut paver accurately and cleanly to fit around edges and corners.
The saw must be equipped with a diamond blade manufactured for wet cutting porcelain and designed to safely cut a 24" (60 cm) length porcelain paver. A paver clamp to easily handle the installation and removal of pavers. Gloves are highly recommended while handling and installing porcelain slabs to protect the hands from injury. Notched trowels and grout float tools for cementitious adhesive and grout Installation. Follow the adhesive and grout manufacturer's recommendations to select the appropriate tools needed for application.





IMPORTANT NOTE: LEGAL DISCLAIMER
The nominal measurements include 4 mm (approx $^{3}/_{16}$") for product spacers which are sold separately. Although extreme care has been taken to ensure the accuracy of all measurements set forth herein, manufacturer assumes no liability relating thereto.

IMPORTANT NOTES:
1. Use the manufacturer's instructions when choosing polymeric sand for your project.
2. The use of cement blended sand and polymeric sand can reduce plant growth and insect infiltration within the joint infill material.
3. Whether using traditional sand or a cemented blended sand, ensure the gradation of the sand is fine enough to pass through and fill the joints.

PORCELAIN PAVERS CUTTING GUIDE.

LINEAR CUT.

The videos linked below show how to properly cut thick porcelain pavers (porcelain tiles with 20 mm thickness) currently used for outdoor installations. Cutting these porcelain thick pavers is very different than cutting standard thickness tiles. The extreme hardness of the material, combined with its thickness, are the main factors that will put cutting tools to the test. Based on the experience of many professional tile installers, what often happens is that the basic blades make one or two good cuts on very thick tiles and then lose their cutting power. This causes the diamond blade to be so ruined that it can't even be recovered with common abrasive stones. Many tile and brick installers have found a first solution for this: using segmented blades to cut these thicker tiles. These are more aggressive blades that easily cut this type of ceramics leaving though a very poor cutting finish. There is then the need to spend time after each cut to finish the cut edge of the tile, especially if it is going to be laid in a position that leaves that edge visible after installation. It is important that the cut is made using a professional wet saw cutting machine and that is it made by pushing (or pulling, depending on how the cutting saw is built) the blade parallel to the plane from the beginning of the cut, applying a horizontal force (**figure 1 and 2**) to the trolley while avoiding to push (or pull) with excessive force. **Please note that the cut has to be performed at once with one passage. It is very important to pull down the blade without touching the tile and then pull/push the disc to cut the entire paver all at once.**

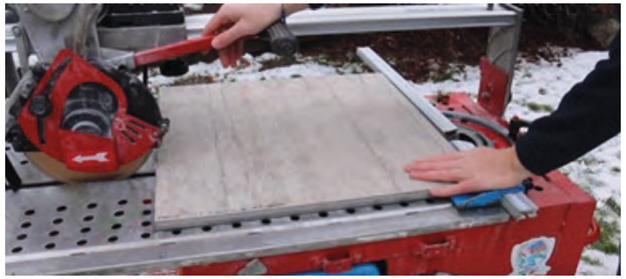


FIGURE 1

FIGURE 2

It is not recommended (**figure 3**) to carry out the cut by applying a force perpendicular to the side of the cutting plane (basically pushing down the saw into the tile). In fact, performing a vertical cut could affect the internal tensions of the product and lead to tile breakage.

FIGURE 3

Another cutting method consists in making a groove about 2 / 3mm deep (**figure 4**) by applying a very light force perpendicular to the paver surface first and then making the final cut at once with one passage, as above reported in **figure 1 and 2**.

FIGURE 4

In both cases, it is always recommended to use high quality disc blades and to perform the revitalization operations of the latter whenever necessary to achieve a proper cut.
Landmark Ceramics recommends using a high quality blade specific for porcelain and revive it often. By using a low quality blade, or a blade not specifically made for porcelain, it might need to be revived 2 or even 3 times during the same cut. This can lead to extra costs related to the use of many diamond abrasive stones or, even worse, it can significantly increase the likelihood of breaking the paver during the cutting process.
During cutting, Landmark Ceramics always recommends the use of abundant water before, during, and after the cutting phases to minimize the presence or dispersion of ceramic powder and to cool down the blade.
Once the cut has been completed, Landmark Ceramics recommends to clean the newly cut surface with water, in order to remove all the dust from the paver created by the cutting operation.

Please find below some links to videos of 20 mm porcelain pavers cutting:
https://www.youtube.com/watch?time_continue=2&v=rCK48yu8qV4
https://www.youtube.com/watch?time_continue=3&v=A231KShJnww
https://www.youtube.com/watch?v=G6FVJz08ajA
https://www.youtube.com/watch?v=FSMNtwxiLRI

PORCELAIN PAVERS CUTTING GUIDE.

DRILLING HOLES WITH CORE BITS.

The creation of holes in traditional 9/10mm thick porcelain tile is a common practice, but it is very delicate and requires experience and technique. This is even more true for 20mm thick porcelain paver, being this pArcticular tile thicker and more resistant.
To carry out this specific cut, it is recommended to use drills or grinders together with high quality core bits for porcelain tile and paver.
The use of low quality core bits could cause numerous breakages, together with an extremely accelerated wear of the tool due to the resistance of the 20mm porcelain stoneware.
First of all, it is suggested to place the tile on a rigid support that absorbs the vibrations generated by the work (for example a panel of wood or regenerated rubber on a wooden panel).

After positioning the drill with the core bit in the desired position (remember to check that the drill is not in hammer mode) it is crucial to mark the exact point with a pencil, then proceed to place the core bit by tilting it slightly on the paver (**figure 5**).

FIGURE 5

FIGURE 6

Do not place the core bit perpendicularly (**figure 6**) to the paver surface as it could lead to the breakage of the paver itself.

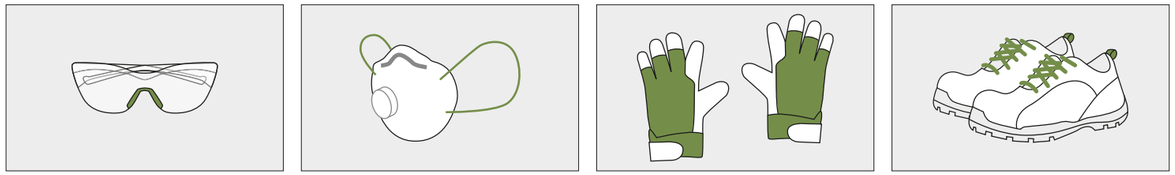
Once the core bit is in place and already moving, gently (and without pushing too much) make a continual and constant oscillatory movement until the hole from top to bottom thorough the paver is complete (**figure 5**).
Landmark Ceramics recommendation is to use a high quality core bit specific for porcelain.
By using a low quality core bit, or a core bit not specific for porcelain, the likelihood of breaking the paver during drilling operation could increase.
During drilling, Landmark Ceramics always recommends the use of abundant water before, during, and after the drilling phase to minimize the presence or dispersion of ceramic powder and to cool down the cutter.
Once the hole has been made, Landmark Ceramics recommends to clean the hole with water, in order to remove all the dust from the surface of the paver created by the drilling.
It is also possible, whenever needed, to adjust the shape of the hole created with specific tools that soften the cut made by milling eventual sharp/irregular edges of the hole.
These tools are always made with artificial diamonds and should be specific for porcelain tiles and pavers.

Please find below a link to a video of 20 mm porcelain pavers drilling:
https://www.youtube.com/watch?v=SVwzk894qdI

GENERAL RECOMMENDATIONS.

Landmark Ceramics recommends using high quality tools and blades, specifically designed for porcelain. This is because 20mm thick porcelain is very strong and compact and does not behave, during cutting and drilling operations, like traditional thickness porcelain.
During cutting and/or drilling, Landmark Ceramics always recommends the use of abundant water before, during and after the drilling phases to minimize the presence or dispersion of ceramic powder and to cool the blade/core bit.
Landmark Ceramics also recommends to use certified wet or suction tools to reduce and minimize the dispersion of ceramic powder.
Once the necessary operations are finished, it is very important to clean the surface of the tile from the dust to prevent it from being trapped by the filler needed for the joints.

Landmark Ceramics always recommends the use of safety glasses, mask, gloves and steel toe shoes.



CLEANING INFORMATION
FOR PORCELAIN PAVERS INSTALLED OVER CONCRETE.

PORCELAIN PRODUCTS CARE AND MAINTENANCE

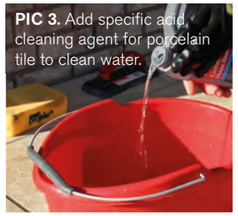
After any thin set installation of porcelain tile and pavers over concrete, best practices require to perform, after grouting, a first acid deep cleaning. For more information on how to perform a correct first cleaning after grouting, as well as on the right cleaning products to use, and ordinary maintenance of porcelain tiles and pavers once installed, we strongly recommend to refer to our Landmark cleaning guide. Alternatively, you can also see paragraph A, B and C here under. Failing to follow these instructions could lead to maintenance issues, most of the times derived from grout residues left on the surface of the tiles/pavers which create a film on the tiles/pavers surface itself that tends to retain dirt. If that occurs, the only way to possibly solve the issue is to perform a deep floor cleaning, using acid-based cleaners specific for porcelain and following a specific cleaning procedure described here under (See paragraph D). Please note that from time to time, depending on the type (cement-based vs epoxy), quantity and aging of the grout residue left on the tile/pavers surface, it could be really hard or even impossible to fully recover from the problem. That is why Landmark Ceramics highly suggests a first acid deep cleaning right after installing and grouting the tiles/pavers.

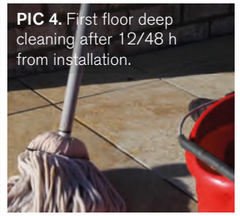
A) FIRST FLOOR DEEP CLEANING AFTER INSTALLATION

After Grouting the Joints (pic. 1) It is important to remove the excess grout with a sponge and clear water (pic. 2). After 12/48 hours, the grout in the joints will have "set up" / hardened significantly. There will be a noticeable residual "haze". Typically, a diluted acid cleaner specifically for removing "Grout Haze", combined with a soft scrubbing pad will remove the majority if not all the "Haze". Change your acid/water solution frequently for best results. It is also recommended to keep a bucket of clean water to remove the acid/water solution. It is recommended to keep and use clean dry towels to help remove as much residual water and keep the floor as dry as possible. Please refer to the cleaning chemical company's suggested methods and dilution rates. (pic. 3). For areas with excess grout or grout that becomes adhered to the face of the tile, further cleaning with an Acid/ Water Solution may be necessary. Please refer to the Cleaning Chemical Company's instructions as not all acids or chemicals are the same. The excess grout residue (pic. 4-5) must be removed so that it does not dry and stick on the surface. It is necessary to change the cleaning water frequently and rinse well. Care must be taken on inlayed, polished and especially Anti Slip products similar to Frontier20. The use of a floor-washing machine combined with the use of a diluted acid detergent helps reach the spaces between adjacent tiles and clean them properly. If such a cleaning procedure is not carried out, or if such cleaning is carried out too late, the grout residue creates an absorbent film, which holds dirt, making the surface difficult to clean: in this case, Landmark Ceramics will not be liable for any damage caused to the surface.

PIC 1. Fill joint with grout.

PIC 2. Remove excess grout with clean water.


PIC 3. Add specific acid cleaning agent for porcelain tile to clean water.


PIC 4. First floor deep cleaning after 12/48 h from installation.

PIC 5. Removal of excess grout residues with hard brush.

B) DAY TO DAY CLEANING

After the post-laying cleaning operation has been thoroughly carried out, as far day to day cleaning we strongly advise against the use of waxes, oily soaps, impregnating products and various treatments (water and oil repellent) on the porcelain stoneware product, as their application is unnecessary. As is often the case in certain off the shelf detergents, they contain waxes and gloss inducing additives which, after various washes, can deposit a bright coat on the floor. Sometimes, even one drop of foods such as Coca Cola, water, wine etc. ...) is sufficient to eliminate this coat, restoring the tile's original appearance, a stain effect is produced in certain zones. In these cases, the floor must be de-waxed, using products to de-wax the applied waxes, following the producer's instructions. For films left by soap, lime scale, dirt, use an acid detergent, suitably diluted in water (read the product instructions carefully). It is also important to point out that Hydrofluoric acid (HF) and its derivatives can irredeemably damage porcelain stoneware. For routine cleaning, Landmark recommends the use of bleach or ammonia, suitably diluted in water; for polished porcelain stoneware, dry the floor after washing to prevent unsightly smudges. TIP: Since rinsing well with plenty of clean water is a fundamental part of the day to day cleaning procedure, Landmark advises against the use of products which state that they "do not need rinsing"

CLEANING AGENTS.

TYPE OF STAIN	SOLUTION	DETERGENTS	MANUFACTURER
INORGANIC STAINS			
		DETERGENT WITH AN ACID BASIS *	
Cement Carbon Calcium Efflorescence Chalk Metallic residues Rust Cement-based grout Colored grout Wall paint	Acid	**DETERDEK** or similar	UNITED STATES > Fila Chemicals USA, Corp.10800 N.W. 21st Street #170 Miami, FL 33172 USA Tel. +1-305-513-0708 email filausa@filasolutions.com
		KERANET (liquid) or similar	MAPEI Americas Headquarters 1144 E. Newport Center Drive Deerfield Beach, Florida 33442
ORGANIC STAINS			
		LIMITED FOAM TYPE PRODUCT **	
Coca Cola Ice Cream Coffee Wine Beer Animal fats Vegetable fats Mustard Mayonnaise Ketchup Jam Linseed oil Lipstick Wax	Alkaline and neutral	**PS87** or similar	UNITED STATES > Fila Chemicals USA, Corp.10800 N.W. 21st Street #170 Miami, FL 33172 USA Tel. +1-305-513-0708 email filausa@filasolutions.com
		FILACLEANER or similar	UNITED STATES > Fila Chemicals USA, Corp.10800 N.W. 21st Street #170 Miami, FL 33172 USA Tel. +1-305-513-0708 email filausa@filasolutions.com
		Ammonium	Universal
RESIDUAL RINGS of organic nature	Saline solution	Sodium hypochloride (bleach for white laundry)	Universal
Silicone oils Machine Oil Resins and glazes Coal and natural rubber Encres et feutres		**FILASOLV** or similar	UNITED STATES > Fila Chemicals USA, Corp.10800 N.W. 21st Street #170 Miami, FL 33172 USA Tel. +1-305-513-0708 email filausa@filasolutions.com
		Aceton	Universal
		NITRO - THINNER	Universal
		TURPENTINE	Universal
		TRICHLORETHYLENE	Universal
Tire		**CIF AMMONIACAL**	Universal
		HAND CLEANSER	Universal
Silicone and chewin-gum		**Ice+scraper**	

N.B. When using the above products, the instructions on the package should be followed.
* **Detergent with an acid base:** a detergent with an acid basis, specifically recommended after bath floor or wall installation, for the decalcioficant cleaning and the regular maintenance.
** **Limited foam type product:** a limited foam type product degreasing and general cleaning, suitable for all types of stains but especially for remove of vegetable and animals fats.

CLEANING INFORMATION
FOR PORCELAIN PAVERS INSTALLED OVER CONCRETE.

C) EXTRAORDINARY CLEANING

In the case of particular and/or particularly stubborn stains, we recommend using specific detergents as those indicated in chart here under reported. It should furthermore not be forgotten that the removal of any type of stain is easier when the stain is still fresh. It is always important to test the detergents on a small area before applying to the entire surface, particularly in the case of porcelain stoneware with a lapped or polished finish

D) FLOOR DEEP CLEANING RECCOMANDATIONS TO BE USED IN CASE OF GROUT RESIDUES LEFT ON TILE/PAVERS SURFACE

1. Preliminary Cleaning Procedure: To begin with, it is important to clean the floor with a traditional detergent (Some examples of suitable detergents you can consider are Deterdek from Fila, Keranet from Mapei) and rinse thoroughly in order to remove any dirt that is present on the tile/pavers aside from the grout left on them. This should be done carefully by following these steps:

I. Clean the floor with water to remove dust and residues
II. Apply an abundant quantity of detergent (such as the one pictured below) to clean the floor, following instructions provided on the detergent's bottle and making sure that, during the entire cleaning process, the detergent does not get in contact with grass or water of nearby swimming pools (if any)
III. Brush strongly to remove the dirt (using a scotch-brite, ideally a motor-brush with scotch brite for big surfaces)
IV. Rinse well with running water (it is recommend to use a vacuum cleaner to avoid burning the grass)
V. Once well rinsed, dry the surface

2. Acidic Cleaning Procedure: Perform the acid cleaning procedure as indicated in the guide provided in the link above, hereunder summarized:

I. Apply a professional acidic cleaner for grout haze on the floor. Some examples of suitable acidic cleaners you can consider are DETERDEK from Fila, KERANET from Mapei, or professional acidic cleaners like the one pictured below:
II. Apply an abundant quantity of acidic cleaner on the entire floor, following instructions provided on the cleaner's bottle (for a better result, do not dilute with water), and making sure that, during the entire cleaning process, the cleaner (since it is an acid-based cleaner) does not get in contact with grass or water of nearby swimming pools (if any)
III. Once applied, leave the product on the floor for about 20-30 minutes.
IV. Brush strongly to remove the dirt (using a scotch brite, ideally a motor-brush with scotch brite for big surfaces). It is very important to apply a strong and prolonged mechanical action (tile by tile) on the floor while brushing. Please note that cleaning without a strong mechanical action (e.g. cleaning using a simple mop) is going to be useless and ineffective.
V. Rinse the floor, making sure everything is absorbed, so that nothing will get in contact with grass or swimming pool water
VI. Repeat everything from point "2.i" as many times as necessary to achieve the desired result
VII. Dry the floor's surface

E) ADDITIONAL NOTES & RECCOMANDATIONS

1. Please note that if the grouting was done well before the time of attempted cleaning, the grout residue left on the tile surface would have had time to settle and mature. In this case:

- It is particularly important, during the acid cleaning process, to let the acid settle in on the floor for a few minutes before brushing, so that the acid can soften the grout.
- It is also crucial to brush the tiles using the right tools and to apply on the floor a strong and prolonged mechanical action (tile by tile).
- It is very likely that a single deep acid cleaning will not be sufficient. In this case, it will be necessary to repeat the operation several times in order to eliminate all the grout residues. Keep in mind that the grout residue might not be immediately visible when the floor is clean, but can only be seen when the grout gets dirty. Therefore, even if the floor may appear clean after the first deep cleaning process, it could still have grout residue left on the surface of tile/pavers, that will get visible once they'll get dirty again. If that is the case, it will be necessary to repeat the deep cleaning procedure more than once until reaching a satisfactory result.

2. While performing the deep cleaning process, please be aware of any surrounding grass (making sure that the acid cleaner does not get in contact with it).
3. In case a deep cleaning is needed around a pool, make sure that during the entire cleaning process the acid cleaner does not get in contact with the water of the swimming pool.
4. Never use sealers of any kind on the surface of the porcelain tiles and pavers. Sealers are unnecessary and, furthermore, sealing will change the D.C.O.F. (Dynamic Co-efficient of Friction) of the pavers, resulting in a surface that will become more slippery. Furthermore, since Porcelain has such a low absorption rate, the sealer will unlikely stick and will most likely come off over time.
5. Bright colored products, in particular white and extra-white tiles, are very delicate and, although for all intent and purpose are hygienically clean, However, they can get dirty more easily than darker tiles. It is therefore necessary to remember that these particular products require careful regular maintenance.

WARNINGS

The above suggestions are a result of research, laboratory tests and several years' experience. However, the cleaning features of the materials may vary significantly according to the different installation methods, conditions of use, types of surface and destination. As a general rule, the higher the anti-slip values of the tiles are, the greater cleaning inconveniences may arise. The professional operator in charge of maintenance and cleaning shall always check the surface condition before proceeding with any cleaning and/or maintenance operation (we would suggest to test some tiles before installation). Landmark Ceramics declines any liability with reference to cleaning and maintenance operations in case of heavy conditions of use (such as mechanical workshop or spaces presenting oily residues or tire marks), bad installation work or wrong cleaning operations. It is agreed that Landmark Ceramics shall not be liable for any event, damage or defect due to wrong installation of the tiles, faulty cleaning and maintenance operations or inadequate choice of the type of material to be laid or of the adhesives used in a certain destination of use.

PORCELAIN PAVERS: ADDITIONAL RECOMMENDATIONS FOR THE INSTALLATION, ORDINARY CLEANING AND MAINTENANCE.

Landmark Ceramics recommends carrying out the procedures for the ordinary cleaning of Frontier20 floor surfaces using water and commercially available neutral detergents: the inclination of the surface and the space between adjacent slabs for dry-system installation favor the natural flow of water. However, it is important to take into consideration that any type of floor surface is subject to the surface tension effect of liquids: it is the same property of water that gives the tendency to transform into spherical droplets and which cause the curved top surface of a glass full of water. The surface tension can obstacle the complete drainage of water and cause a temporary stagnation of liquid on the slab edges. In order to avoid this problem, Landmark Ceramics recommends ensuring adequate inclination of the surface during installation so as to encourage the flow of water between adjacent slabs. Please remember in any case that, in view of the distinctive advantages of porcelain stoneware, Frontier20 absorbs practically no water, which makes it highly frost-proof. This may lead to localized water pooling, mainly on the edges of the pavers, independently of the manner and quality of the laying. Laying is also recommended with a minimum gap of 4 mm (5/32"). Should liquid deposit on the surface, it is recommended to push it towards grout lines using a brush or remove it with a wet and dry vacuum cleaner.

PERFORMANCE COMPARISON PORCELAIN PAVERS VS. COMPETITOR OUTDOOR PAVING MATERIALS

FEATURES	LANDMARK FRONTIER20 PORCELAIN PAVERS	WOOD PAVERS	CLAY BRICK	CIP (CAST IN PLACE) CONCRETE	CONCRETE PAVERS	NATURAL STONE
Stainable	**No**	Yes	Yes (Highly)	Yes	Yes	Yes (Highly)
Freeze Thaw Proof	**Yes**	No	No	No	No	No
Salt Resistant	**Yes**	No	Salt Will Degrade	No	No	No
Acid Resistant	**Yes**	No	Acid Will Burn	No	No	No
Scratch Resistant	**Highly**	No	Somewhat	No	No	No
Moisture Absorption	**< 0,5%**	Highly Varried	5%	5%	5-10%	≥ 5%
Easy To Repair	**Yes**	Yes	No	Can Not	No	No
Uv Resistant	**Unaffected**	No	Yes	If Sealed	Yes/No	Unaffected
Needs Sealed	**Never**	Yes	Recommended	Recommended	Recommended	Recommended
Pressure Washer Safe	**> 1500 PSI**	No	Not Recommended	> 1500 PSI	No	No
Environmentally Friendly	**Facility 98% Green**	Many Exotic Rainforest Species	No	Large Carbon Foot Print	Possible Fly Ash Content	Mined Or Imported
Recycled Content	**5% In Each Paver**	No	Not Possible	Not Possible	If Possible Less Than 5%	Not Possible

PORCELAIN PAVER PERFORMANCE DATA (20 mm)

PHYSICAL PROPERTIES	TEST ASTM	NORTH AMERICAN STANDARD A137.3*	RESULTS
Water absorption *	C373	≤ 0.5%	COMPLY WITH ANSI A137.3
DCOF Average dynamic coefficient of friction **	ANSI A.326.3	As reported	EW - Exterior, Wet
Skid Resistance	EN 16165 (EX DIN 51097)	-	A+B+C
	EN 16165 (EX DIN 51130)		R11
Resistance to freeze/thaw cycling *	C1026	As reported	RESISTANT
Resistance to thermal shock	C484	As reported	RESISTANT
Warpage (edge)	C485	Warpage ± 0.4% or ± 0.05 in	COMPLY WITH ANSI A137.3
Warpage (diagonal)	C485	Warpage ± 0.4% or ± 0.07 in	COMPLY WITH ANSI A137.3
Wedging	C502	± 0.25% or ± 0.03 in	COMPLY WITH ANSI A137.3
Chemical resistance	C650	As reported	UNAFFECTED
Resistance to stain	C1378	As reported	UNAFFECTED
Thickness	C499	Range: 0.04 in	COMPLY WITH ANSI A137.3
Breaking strength	C1050	2000 lbf	COMPLY WITH ANSI A137.3
Module of Rupture	C1050	5000 psi	COMPLY WITH ANSI A137.3

* Average values referred to our production and related to the matt finish of the product.
** As far as values relating to the matt finish of the product and to tests carried out by certified external laboratories whose results are available upon request at Headoffice, we are willing to check the lot you are interested in purchasing.
- Be sure to use pavers belonging to the same caliber.
- Test results are available on request.
- The information provided can be subject to change. Please refer to one of our websites (**lcusa.com** or **outdoor.landmarkceramics.com**) for the latest, most accurate and up-to-date information.

WARNINGS.

- Outdoor pavings installed unglued above the ground level are subject to the action of the wind, with the risk, in some cases, of becoming airborne.The manufacturer recommends to require the assistance of a qualified professional in order to check the suitability of the installation system above the ground adopted, in accordance with the local laws and regulations and the conditions of use. Failure to do so could result in serious injury or property damage.
- If the application of the 20 mm slabs requires the ceramic product used in structural installations, the project engineer and/or customer must carefully assess the project requirements with regard to the technical specifications of the slabs. to prevent the risk of damage or injury, the manufacturer recommends: with regard to a raised floor installation a ceramic slab may fracture on impact if a heavy object falls on it from any significant height. therefore the manufacturer recommends to check the specific intended use before starting the installation and to follow table for raised installation provided below. in certain conditions, reinforcing must be applied on the back of the slabs (double fiberglass mesh) supplied and applied by the manufacturer; with reference to any dry installation system of flooring above the ground level, the manufacturer recommends to comply with local regulations and conditions of use with regard to wind-load, loadbearing, seismic events, etc. Failure to comply with these recommendations may lead to improper use of the product and could cause serious damage or injury. Failure to adhere to the manufacturer's instructions for installation of slabs on raised pedestal systems may result in serious injury.
- For further information and recommendations concerning the installation systems please refer to **outdoor.landmarkceramics.com** website.

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