



An Italian tile **made in the USA** An Italian tile **made in the USA** An Italian tile **made in the USA** An Italian tile **made in the USA**



OUTDOOR  
#2 cm

OUTDOOR 1 1 colors

## FLORIM USA presents **Outdoor**

The **new 2cm thick paving system** for exterior floor coverings: an **innovative porcelain concept** that offers a blend of design, versatility, performance, simplicity of installation and eco-sustainability.

Our 2cm porcelain tiles are specifically made for outdoor installations, **a material with high technical and visual performance.**

The final product is obtained by fusing quartz, clay, and feldspar into a single material which fired at temperatures ranging from 1200-1300 degrees C. thus creating a tile with **unmatchable mechanical characteristics that will never fade, stain, corrode, suffer from molds or moss and can withstand frost damage.**

**Exceptionally durable and easy to maintain,** this new exterior grade porcelain tile also presents an incredible benefit for the environment, **outdoing** the characteristics of both traditional concrete and natural or manufactured stone products.





stone multicolor 24"x24"





stone moon white 24"x24"





wood tobacco 24"x24"





flagstone gold 24"x24"





stone miami white 24"x24"





stone manhattan grey 24"x24"





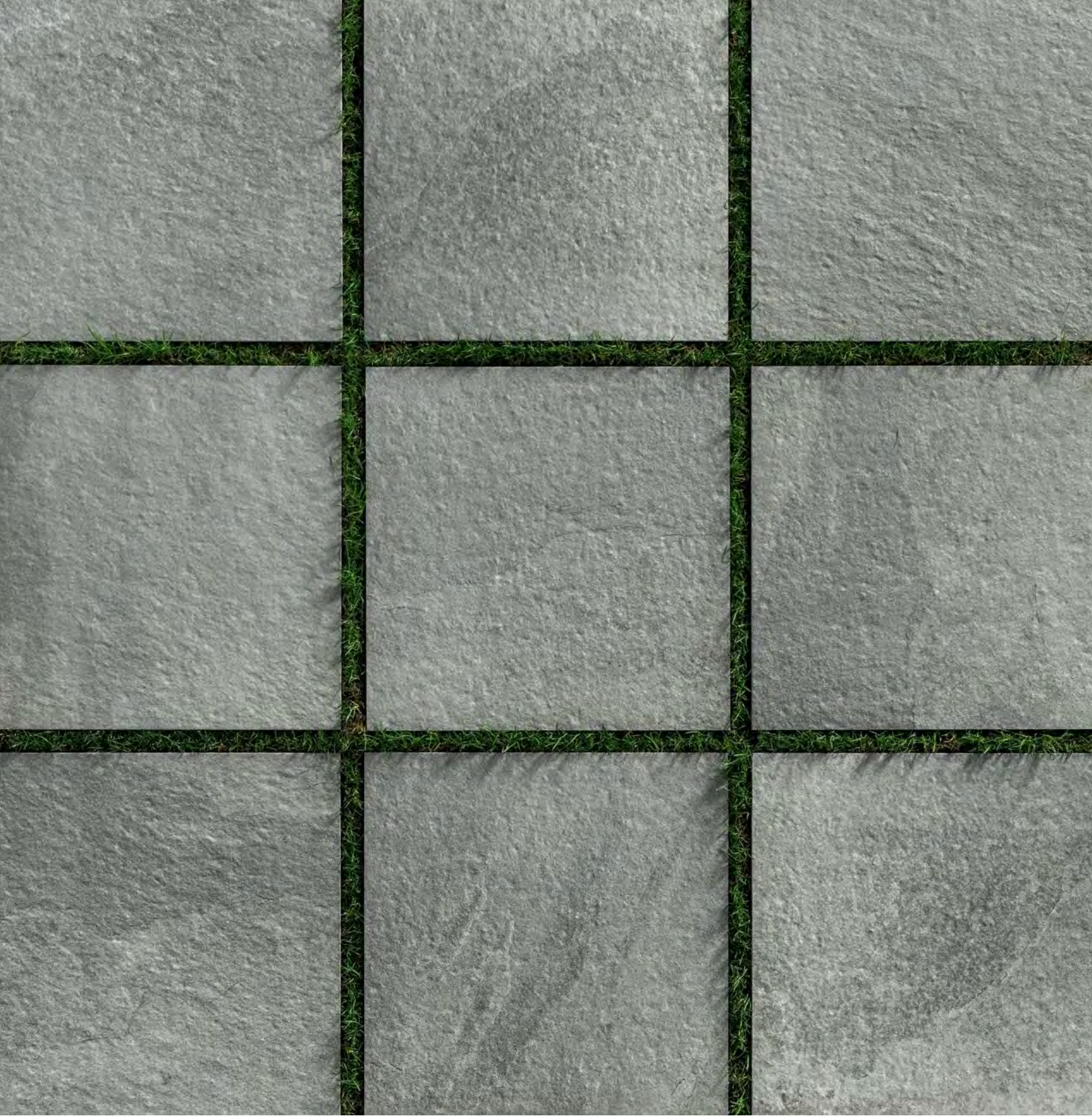
wood honey 24"x24"





stone dark grey 24"x24"





stone light grey 24"x24"





wood cherry 24"x24"





flagstone red 24"x24"



# OUTDOOR 11 colors

FINE PORCELAIN STONEWARE - RECTIFIED  
SPECIAL ORDER ONLY

FINE PORCELAIN STONEWARE - PRESSED

24"x24"



1096342 stone multicolor  
1096343 stone dark grey  
1096344 stone light grey  
1096348 stone manhattan grey  
1096349 stone miami white  
1096350 stone moon white  
1096351 flagstone red  
1096352 flagstone gold  
1096347 wood honey  
1096346 wood cherry  
1096345 wood tobacco

24"x24"



1096505 stone multicolor  
1096506 stone dark grey  
1096507 stone light grey  
1096508 stone manhattan grey  
1096509 stone miami white  
1096510 stone moon white  
1096520 flagstone red  
1096521 flagstone gold  
1096517 wood honey  
1096516 wood cherry  
1096515 wood tobacco





# OUTDOOR TECHNICAL ADVANTAGES

A durable new alternative to pavers; Florim USA's outdoor tile can be used in a variety of applications. These 2 cm thick porcelain stoneware slabs are created by atomizing high quality clays, quartzes and metal oxides pressed at 400kg/cm<sup>2</sup>, and then slowly firing them in a 2,192 °F kiln.

D-COF > 0,42 WET

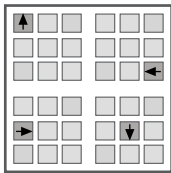
**HC**  
HEAVY  
COMMERCIAL



FROST RESISTANT



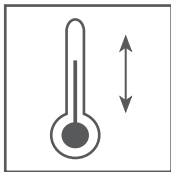
ANTI SLIP



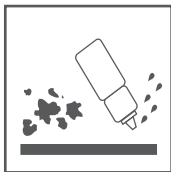
REMOVABLE



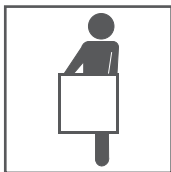
HIGH STATIC LOAD  
RESISTANCE



THERMAL SHOCK  
RESISTANT



IMPERVIOUS TO ATTACK  
BY CHEMICALS OR MOLD



EASY TO INSTALL



EASY TO CLEAN



**PROGRESS THAT TOUCHES PEOPLE AND INVESTS IN THE ENTIRE SOCIETY**

As an active member of the U.S. Green Building Council, Florim promotes awareness in the American community of a greener tomorrow by encouraging the use of building solutions inspired by environmentally friendly practices. Using Florim products in building projects will contribute to the attainment of scores and points required for LEED certification (Leadership in Energy and Environmental Design).

**A COMMITMENT TO THE DEVELOPMENT OF PRODUCTS FOR RESPONSIBLE AND SUSTAINABLE BUILDING**

Florim offers products containing recycled material. The adoption of ecologically compatible production systems emerges from Italian designs produced in the U.S.A.

**TECHNICAL DEVELOPMENT THAT RESPECTS THE NATURAL ENVIRONMENT**

Florim is committed to eco-sustainable projects, as reflected in avant-garde production processes that minimize the impact on the environment.



LEED



Environment  
PRIORITY ONE



## LAYING ON GRASS:



### LAYING ON GRASS:

(gardens, gazebos, entrance footpaths, perimeter areas of private swimming pools)

The materials can be laid easily on grass; the system can also be removed and repositioned, thereby allowing maximum flexibility in laying as it can be installed either with a minimum joint, or with a joint of 1 cm and over (Japanese joint).

### Advice for installation:

- Remove the underlying soil in the area where you want to place the slab, to a thickness of around 5-6 cm.
- Apply an evenly graded gravel bed into the area you have cleared, to a thickness of around 3-4 cm, and compact the base layer.
- Rest the ceramic slab on the gravel bed and tap with a rubber hammer to eliminate any unevenness.

### Warnings:

Check that the surface of the slab is level with the surface of the grass, in order to avoid damage when the grass is mowed mechanically. The system cannot be used in cases where motor vehicles and/or high dynamic loads transit.

### COLOCACIÓN SOBRE CÉSPED:

(jardines, quioscos, caminos de acceso, zonas periféricas de piscinas privadas)

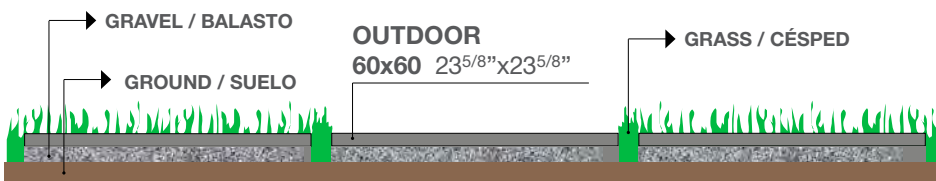
El material puede ser instalado fácilmente sobre el césped; además, el sistema puede ser retirado y colocado en otro sitio, ofreciendo así la máxima flexibilidad de aplicación y permitiendo su colocación ya sea con una junta mínima o con una junta de 1 cm o superior (paso japonés).

### Consejos para la instalación:

- Quite aproximadamente 5-6 cm de tierra debajo de la zona en la que se prevé apoyar la losa.
- Aplique en la zona excavada un lecho de balasto de granulometría constante, con un espesor de aproximadamente 3 o 4 cm, y compacte el fondo.
- Apoye la losa cerámica sobre el lecho de balasto y golpee con un martillo de goma para eliminar eventuales desniveles.

### Advertencias:

Verifique que el nivel de la losa coincida con el del césped, para evitar daños durante el corte de este último. Este sistema no se puede utilizar en caso de paso de vehículos o de cargas dinámicas elevadas.





## LAYING ON GRAVEL AND SAND:



### LAYING ON GRAVEL AND SAND:

(courtyards, terraces, floor slabs, patios, pedestrian walkways, perimeter areas of private swimming pools)

The materials can be laid easily on sand or gravel; the system is also easy to remove and reposition, thereby allowing maximum creativity in laying the materials;

the system can also be applied either with minimum joint or with the slabs arranged with a joint of at least 1 cm between the slabs

- Level and compact the surface of the supporting layer (sand or gravel)
- Lay the ceramic slab on the gravel or sand bed
- Tap with rubber hammer to eliminate any unevenness.
- Fill the joints between the slabs with gravel or sand to give the surface greater stability

### Warnings:

Check that the surface of the slab is level with the surface of the gravel layer in order to avoid movements of the slab or damage through impact from the side.

The system cannot be used in cases where motor vehicles and/or high dynamic loads transit.

### COLOCACIÓN SOBRE BALASTO Y ARENA:

(patios, terrazas, buhardillas, pasos peatonales, zonas perimétricas de piscina privadas)

El material puede ser instalado fácilmente sobre arena o balasto;

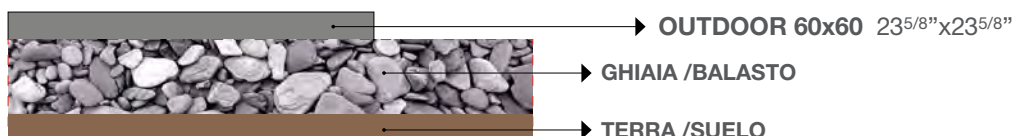
además, el sistema puede ser retirado y colocado en otro sitio, permitiendo así máxima creatividad en la utilización del material; la colocación se puede realizar con una junta mínima o disponiendo las losas con una junta de al menos 1 cm.

- Uniformice y compacte el nivel de la superficie de apoyo (arena o balasto).
- Apoye la losa cerámica sobre el lecho de balasto o arena.
- Golpee con un martillo de goma para eliminar eventuales desniveles.
- Rellene las juntas entre las losas con balasto o arena para dar mayor estabilidad a la superficie.

### Advertencias:

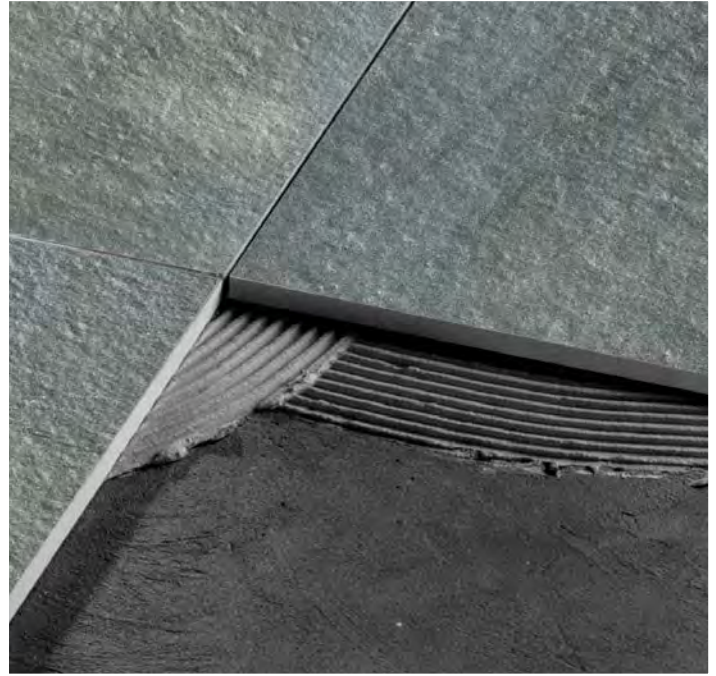
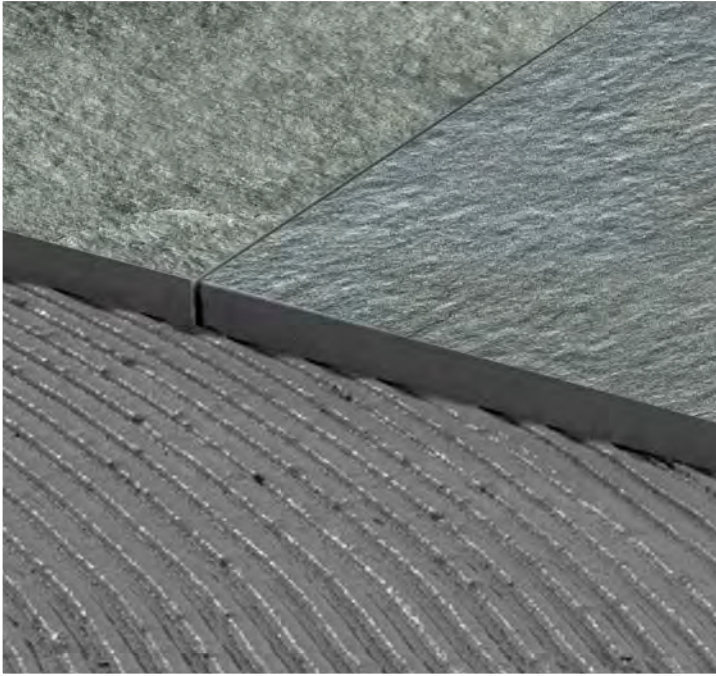
Verifique que el nivel de la losa coincida con el de la capa de balasto, para evitar los desplazamientos de la losa y los daños provocados por los golpes laterales.

Este sistema no se puede utilizar en caso de paso de vehículos o de cargas dinámicas elevadas.





## GLUEING WITH ADHESIVE:



### GLUEING WITH ADHESIVE:

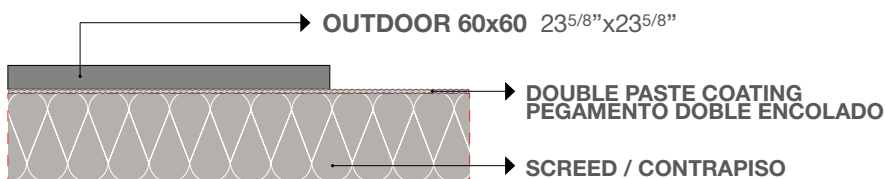
(environments subject to high static loads, pavements, courtyards, urban furnishing, vehicle access roads, garages, external anti-slip flooring, pools, wellness areas, industrial areas)

There are no special instructions other than those for lower-thickness ceramic materials; we would remind you that it is always worthwhile checking the consistency and flatness of the bed before carrying out glueing of the slab. For laying in environments that are subject to strong static or dynamic loads we recommend glueing with Class C2 improved adhesives and double coating (on the bed and on the back of the slab); If several sizes of tile are being laid in combination, remember that Florim provides for modularity of its products with 3 mm joints.

### APLICACIÓN CON ADHESIVO:

(ambientes sometidos a elevadas cargas estáticas, aceras, patios, mobiliario urbano, caminos de acceso para vehículos, garajes, pavimentos exteriores antideslizantes, piscinas, áreas de bienestar o industriales)

No se requieren técnicas particulares con respecto a los materiales cerámicos de menor espesor; se recuerda que, antes de proceder el encolado de la losa, siempre es conveniente realizar una verificación de la consistencia y planitud del contrapiso. Para la colocación en ambientes sometidos a elevadas cargas estáticas o dinámicas, se recomienda el encolado con adhesivos optimizados clase C2 y doble capa de adhesivo (en el contrapiso y en la parte posterior de la losa). En caso de colocación de varios formatos combinados, se recuerda que Florim prevé la modularidad de sus productos con una junta de 3 mm.





## LAYING AS A FLOATING FLOOR:



### LAYING AS A FLOATING FLOOR:

(terraces, floor slabs, balconies, outdoor environments subject to pedestrian traffic)

There are currently no regulations governing requirements for ceramic material used as **SELF-SUPPORTING RAISED FLOORING** in outdoor environments.

With the desire to give technical instructions for use in this way, Florim has subjected its ceramic slabs to the harmonised tests required by EN 1339 standard (technical regulation on CONCRETE FLOORING SLABS). From the results of tests carried out, the OUTDOOR material exceeds the requirements laid down by EN 1339 standard for use as outdoor flooring.

**For greater safety and protection of the user, Florim requires a maximum overlay height of 10 cm.**

### Laying instructions:

Check that the underlayer is flat, compact, rigid and suitable for supporting the weight of the floor without becoming distorted. Choose the supports that are suitable for use.

Provide for suitable sloping of the ground surface to obtain the correct drainage of rain water. The system cannot be used in cases where high dynamic loads transit.

### COLOCACIÓN FLOTANTE:

(terraces, buhardillas, balcones, ambientes exteriores sometidos a tránsito peatonal)

Actualmente no existen normas que establezcan requisitos para el material cerámico utilizado como **PAVIMENTO ELEVADO AUTOPORTANTE** en ambientes exteriores.

Con el objetivo de dar indicaciones técnicas para esta aplicación, Florim ha sometido sus losas cerámicas a las pruebas armonizadas previstas por la norma EN 1339 (normativa técnica sobre las LOSAS DE HORMIGÓN PARA PAVIMENTOS).

Las pruebas realizadas revelan que el material OUTDOOR supera los requisitos previstos por la norma EN 1339 para su utilización en pavimentos exteriores.

**Para garantizar una mayor seguridad y tutela del usuario, Florim sugiere establecer una altura máxima de 10 cm.**

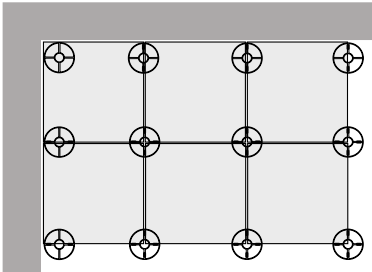
### Indicaciones de colocación:

Verifique que la base sea plana, compacta, rígida y adecuada para soportar el peso del pavimento, sin deformarse. Elija soportes adecuados para el uso. Establezca una adecuada pendiente de la superficie transitable para garantizar el correcto drenaje del agua pluvial. Este sistema no puede ser utilizado en caso de elevadas cargas dinámicas.

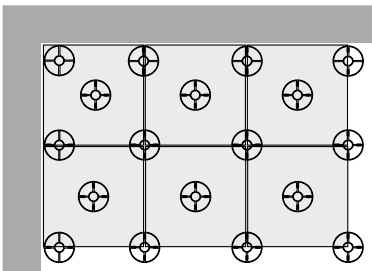


## ESEMPIO DI APPLICAZIONE Strutture di supporto

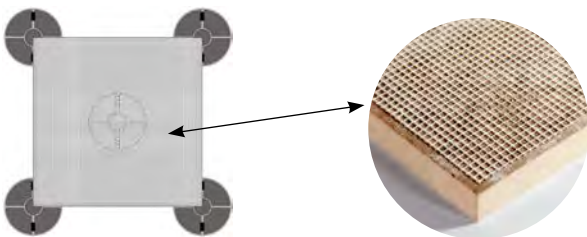
APPLICATION EXAMPLE Support structures / EJEMPLO DE APLICACIÓN Estructura de soporte



In the case of flooring for public use or where there are high loads, Florim recommends the adoption of additional supports under the slab, as in the diagram below / En caso de pavimentos de uso público o en presencia de cargas elevadas, Florim recomienda la utilización de soportes adicionales debajo de la losa, tal como se muestra en el esquema adjunto.



If a raised height of over 10 cm is required, Florim recommends glueing foil or mesh to the back for safety and adding supports under the slab, as in the diagram below. / Si se requiere una altura superior a 10 cm, Florim recomienda pegar una lámina o una red de seguridad en la parte posterior, y utilizar soportes adicionales debajo de la losa, tal como se muestra en el siguiente esquema.












For the specifics on use of raised systems visit the site [www.florimusa.com](http://www.florimusa.com) / Para las especificaciones de empleo de los sistemas sobreelevados consulte el sitio web [www.florimusa.com](http://www.florimusa.com)

Ceramic tiles undergo a compacting thermal treatment that ensures resistance and durability. The low level of water absorption makes the slabs frost resistant. This could result in superficial water stagnations even if materials are installed in a workmanlike manner. / Las baldosas cerámicas se someten a un tratamiento de compactación térmica que asegura resistencia y durabilidad. La baja absorción de agua hace que las baldosas resistan al hielo. Esto podría resultar en estancamientos superficiales de agua, incluso si los materiales están instalados según las reglas del arte.





# OUTDOOR TECHNICAL INFO

	SPEC.	TEST METHOD	REFERENCE VALUE	DECLARED VALUE
	Static coefficient of friction	ASTM - C 1028	> 0.60 dry and wet	> 0.60 dry and wet
	Dynamic coefficient of friction (sectio n 9.6 ANSIA 137.1 2012)	DCOF Acutest	> 0.42 wet	> 0.42 wet
	Resistance to freeze	ASTM - C 1026	-	Resistant
	Frost resistance	ISO - 10545-12	As reported	Resistant
	Chemical resistance	ASTM - C 650	As reported	Not affected
	Resistance to domestic chemicals and additives for swimming pools	ISO - 10545-13	UB minimum	UA
	Resistance to low concentrations of acids and alkali	ISO - 10545-14	See manufacturer's declaration	ULA
	Resistance to high concentrations of acids and alkali	ISO - 10545-15	See manufacturer's declaration	UHA
	Resistance to staining	ASTM - C 1378	As reported	Not affected
		ISO - 10545-14	-	4
	Maximum straightness deviation, in %, in relation to the corresponding production dimensions	ASTM - C 485	±0.75% (±1.8 mm)	± 0.10 %
		ISO - 10545-2	±0,5% (±1,5 mm)	± 0,10 %
	Admitted deviation, in %, of the average thickness of each tile from the production dimensions	ASTM - C 499	±1.02 mm	±0.5 %
		ISO - 10545-2	±0,5 % (±0,5 mm)	± 0,5 %
	Length and width: admitted deviation, in %, of the average size of each tile from the production dimensions	ASTM - C 499	±0.5 % (±2.0 mm)	± 0.15 %
		ISO - 10545-2	±0,6 % (±2 mm)	± 0,15 %
	Amount of water absorbed, in percentage	ASTM - C 373-88	E < 0.5%	< 0.1%
		ISO - 10545-3	E < 0.5 %	< 0,1 %
	Breaking strength in N (thickness > = 7,5 mm)	ASTM - C 648	≥ 250 LBF Average	≥ 225 LBF Individual
		ISO - 10545-4	≥ 1300 Newton	> 13000
	Resistance to deep abrasion of unglazed tiles	ASTM - C 1243-93	< 175 mm 3	< 150
		ISO - 10545-6	< 175 mm 3	< 150
	Thermal shock resistance	ASTM - C 484	-	Meets the requirement
		ISO - 10545-9	-	Resistant



# Did you know...?

<b>FLORIM USA Outdoor</b>	vs	<b>Concrete</b>
Ability to express many looks; controlled variation and quality.		Unpredictable results, color uniformity cannot be guaranteed.
Frost resistant.		Needs special treatment to resist frost.
Easy installation.		Require special installation considerations.
User friendly. Easy to clean and slip resistant.		Easy to crack, poor drainage, and increased potential for curling.
Highly resistant to chemicals, mold & mildew, salt & corrosion, and stains.		Absorbs stains easily, sealing required. Subject to scratches and wear patterns over time.
Low maintenance, enhanced durability.		More maintenance required throughout its life cycle.

<b>FLORIM USA Outdoor</b>	vs	<b>Stone</b>
Better choice for areas that see a lot of foot traffic.		Requires periodic maintenance, it needs to be sealed once a year.
Porcelain is highly versatile with nearly endless design options.		Cracking and pitting are common in natural stones.
Quick to install.		Stone requires additional labor for pre-sealing and thicker thin sets because of the irregularity of the material.
Harder and stronger.		Absorbs water, prone to stains and scratches.
More time for you, less for cleaning.		More difficult to clean, needs special products.







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300 International Blvd. Clarksville, TN 37040  
Toll free: 877 - Florim1 (356-7461)  
phone. 931 645 5100  
[www.florimusa.com](http://www.florimusa.com)