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INTERLOCKING TILE WITH GRANULATED POROUS SURFACE

FIELD OF INVENTION

This invention relates generally to the field of indoor and outdoor floorings and to interlocking tile in particular.

INTERLOCKING TILE WITH GRANULATED POROUS SURFACE

BACKGROUND OF THE INVENTION

Homogenous tile, ceramic tile, marble, granite, timber are some of the many tiles that have non-porous surfaces and not able to be interlocked together. These require cement mortar or strong adhesive to install onto the floor.

Some plastic or rubber tiles use a skeletal format, which comprises of tiny to large holes or openings to allow water to pass through and some have interlocking features.

Some other tiles even use timber strips to lay over plastic or rubber skeletal frames and may also incorporate interlocking mechanism. These are not porous but water do seep through in between the gaps of adjacent strips.

OBJECT OF THE INVENTION

The primary object of this invention is to achieve a tile that has a granulated surface that is both porous and drier. The surface porosity is achieved by the air gaps within the compacted granules. The surface dryness is achieved by the raised platform provided by the skeletal frame with multiple legs at the underside to prevent water stagnation between the granules.

The second objective is to have a firm and strong tile made possible by a binding agent to bind the granules together and held in shape by the skeletal frame with a base and raised edges. The raised edges also provided the additional protection against wear and tear at the sides and corners of the granulated surface.

Another objective is to provide an anti-slip property for the tile by incorporating an anti-slip materials affix into an anti-slip holder at the base of the tile.

Yet another objective is to provide a firmed assembly and ease of disassembling of the multiple adjacent tiles with an interlocking mechanism comprising of interlocking rings and hooks.

Another objective is a tile with high anti-slip surface property for use in wet environment, which is accomplished by the granules bonded together by binding agent. The porosity of this granulated surface allows water to drain away quickly thereby improving the slip resistance of the surface even with continuous addition of water onto the surface.

Other objects, features and advantages of the invention will become apparent from the detailed description that follows.

SUMMARY OF THE INVENTION

This invention is a porous tile with granulated surface and a skeletal frame that permits water to flow through easily. The granulated surface is formed by granules bonded together with a binding agent to form a firm surface and are held in place within the skeletal frame by raised edges.

In this invention, the granulated surface is also raised slightly by a series of legs. This invention also has an anti-slip material at the base, and affixed within the anti-slip holder.

This invention also has interlocking rings and hooks and by joining the hooks of one invention to the rings of another invention, it can cover a greater floor area.

BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1 shows the top view of the invention. The granules are compacted and leveled with a metal trowel to form a flat surface indicated in 1a, these granules are held within the square frame by the raised edges indicated in 1b.

The interlocking feature of the frame is provided by the rings and hooks as indicated in 1c and 1d, respectively.

Figure 2 shows the cross-sectional view of the invention. As indicated in 2a, the granules are compacted and leveled within the frame and terminated at the edges as indicated in 2b. The granules are prevented from dropping by the base of the frame as indicated by 2c. The drainage openings as indicated in 2d allow water to easily flow down. The frame is supported and raised above ground by multiple legs as indicated in 2e. The anti-slip material holder indicated by 2f is to hold the anti-slip material in place indicated by 2g.

Figure 3 shows the bottom view of the invention. The drainage openings are clearly visible as indicated by 3a. The anti-slip material indicated by 3b is affixed into the holder indicated by 3c.

DESCRIPTION OF THE EMBODIMENTS OF THE INVENTION

An important embodiment of the invention is the porous surface made possible by granules held together by binding agent.

Another embodiment is a strong and firm surface formed by the compacted granules held together by binding agents onto a skeletal frame.

Yet another embodiment is the raised legs that allow water to flow freely and keeping the granulated surface drier. The raised legs also allow the running of wires beneath. Another embodiment is the ease of installing the granulated surface and a stronger edge made possible by the raised edges of the frame, which also prevent granules from chipping off at its sides and its corners.

Another important embodiment is the anti-slip capability provided by the anti-slip materials at the base of the frame held in place by the anti-slip holder.

Yet another embodiment is the interlocking capability provided by the interlocking rings and hooks around the tile edges.

With only a few embodiments of the invention being described and illustrated, it is to be understood that many changes, modifications and variations could be made to the present invention without departing from the scope or spirit of the invention as set forth in the appended claims.

CLAIMS

1. A tile made up of compacted granules that are bonded together with binding agent and leveled with a trowel over an interlocking frame with multiple legs and with raised edge around the perimeter of the frame where in the improvement is a compacted and firm solid surface that is also porous by allowing water to flow in between granules and facilitate vertical water drainage via raised legs resulting in a drier granulated surfaces held in shaped by the frame and raised edges with the latter forming the terminating kerbs that prevents the granules from dropping off and providing strength and wear resistance at the edges and the interlocking mechanism allowing multiple tiles to be assembled firmly together and also easily disassembled.
2. In conjunction with claim 1, an anti-slip material mounted at the base of the frame wherein the improvement is an increase of friction between the tile and the floor as provided by the anti-slip material resulting in a tile with a better hold onto the floor.