



MOSAIC TILES.

IS IT:

Product

Technology

Equipment

APPLICABLE FOR:

Restoration

Rehabilitation

New Construction

APPLICABLE ON:

1. Foundations and underground structures

2. Vertical structures

3. Horizontal structures and vertical connections

4. Roof and terraces

5. Façade and building envelope

6. Finishes and completion elements

7. Integrated services

8. General strategies for building recovery

Related companies: HUGUET MALLORCA; MOSAICS MARTÍ, ESCOFET

DESCRIPTION

Traditional cement tiles with contemporary formats and design. Innovation on the use of traditional materials for rehabilitation pavements.

The tiles are handmade, with their own personality and a very good ageing. Over the years various companies have introduced technical and aesthetic improvements to the pieces in order to achieve a balance between craftsmanship and the qualities and functionalities that are essential for the modern times.

WHY TO USE

- To reproduce and replace broken or damaged tiles.
- For new floorings but with a traditional look.
- For new floorings maintaining traditional techniques but with a contemporary design twist

HOW TO USE AND APPLY

The manufacturing process is characterized by the use of a variety of metal moldes to apply colours, which are then fixed in the cement with the use of a hydraulic press. No heat treatment is involved. The craftsman prepares a paste with water, marble dust, white cement, sand and pigments. Over this comes another two layers of cement and sand, and then everything is pressed together. Because the colours are set in the cement until a depth of 4 to 5 mm, the decoration of the tiles does not fade with the years. Hydraulic tiles require storage for up to 6 months in order to complete the cement drying and hydration process.

Base paving:

- In the case of not having a sanitary slab, and in order to avoid subsequent leaks of moisture, the insulation must be carried out with plastic material or conventional concrete floor insulation. The pavement should be 3 to 4 cm thick of concrete, consisting of 3 parts of sand, 3 parts of crushed stone mix and 1 part of Portland cement.
- Prepare a perfectly levelled concrete floor and wait for it to dry before laying the tiles.

- In new construction buildings where there is a sanitary floor, this isolation will not be necessary.

Laying the hydraulic tile:

- Place the hydraulic tile on a well-leveled, clean and dry surface. A wet base will cause limestone stains to appear on the surface of the tile.
- Apply flexible tile adhesive cement (preferably white and fast setting) on the floor and spread with a trowel with teeth. Apply tile adhesive to the underside of the tile in the same way ("double gluing"). Place the pieces and level them carefully, trying to avoid any protrusions, then the pieces cannot be lowered.
- A joint of 1 to 2 mm must be left between pieces, using "plastic crosspieces" to obtain the indicated joint space.
- The corresponding expansion joints must be left in the flooring.

****ATTENTION:** It is recommended to cover the material with clean polyethylene foam once installed to protect it from the industrialists still working on site. Avoid cardboard as it could stain the piece.

Waterproofing treatment:

When the pavement is completely dry, it is convenient to apply a waterproofing treatment. This waterproofing reduces the porosity of the pieces, protecting them from stains and minimizing the absorption of water, coffee or oils, as well as other liquids that could stain the piece.

- Before applying the grout on the pavement, it is advisable to apply a first coat of waterproofing on the clean and dry surface (before being waterproofed, the pieces must evaporate the water from the installation). Apply a thin layer of sealer with the help of a brush or foam roller (if applied in excess, the remains of unabsorbed product would leave stains on the surface of the piece).
- After 24 hours of the application of the waterproofing, the corresponding grout must be applied to the hydraulic tiles. When the pavement is totally clean of any rest of grout or dirt that could remain in the superficial part, apply a second coat of waterproofing product. After 24 hours make the third and last coat.

****ATTENTION:** Use a neutral product that does not alter the toning of the material. It is recommended to do a test on a loose piece before applying the treatment to the entire floor.

Grouting:

- Once the pieces have been placed, allow at least 24 hours to elapse before filling the joints with flowable cement-joint paste. Excess material should be wiped off immediately with a damp cloth. Acids should not be used to remove excess cement or to clean the tiles as they could be damaged.
- Once the whole installation process is finished, in some cases and during a certain period of time, it is possible to observe the appearance of some white stains (efflorescence) produced by the solidification of salts contained in the water. This behavior is quite common in this type of material. The stains will disappear as the pavement is washed with water and neutral soap.

Material Finishing and Maintenance:

- Use only water and neutral soap for cleaning.
- Do not use strong detergents, acids or alkaline detergents. These could irreversibly damage the parts. For optimal preservation of your hydraulic tile, it is recommended to scrub the floor once a month.

TECHNICAL CHARACTERISTICS

20x20 cm and 25x25 cm Cement Tiles with natural pigments.

RECOMMENDATIONS AND OTHER INFORMATION

Once installed, the flooring cannot be walked upon for several days, and it requires regular maintenance to keep it in optimal state.

Recommendations for laying hydraulic flooring:

First of all, it is important that, when installing indoors, a waxing system is applied to prevent any oil or water stain from affecting its appearance. This recommendation is especially relevant in kitchens.

In the case that the installation of hydraulic tiles is made in outdoor environments such as terraces or patios, it is essential to use a sealant that protects the tile from inclement weather, such as rain or sunlight in summer, when they are much more intense.

Finally, in places with a more humid environment such as bathrooms, in addition to applying a sealer with a waterproofing effect, it is advisable to apply a special sealer whose main composition is acrylic-based.

The use of sealant in hydraulic tile installation:

The sealer is a substance that helps to improve the appearance of the tiles, but above all it improves their protection against the absorption of difficult stains, minimizing their porosity, but without altering their original appearance.

When applying the sealer it is very important that the surface is completely dry and clean. The best way to do this is with the help of a roller, which allows easier access to more complicated places. The key to achieve that the sealer fulfills its function of protecting the tile consists of applying the exact measure, since in case of applying an excess of product, stains could be left.

As last advice it is worth mentioning that before applying the sealer it is advisable to test on a small piece of tile to observe the reaction. From that point on, we will be able to carry out the sealing procedure safely.

These treatments ensure a better conservation of the hydraulic tiles that will keep their colors and brightness for much longer.

Hydraulic tiles also have low resistance to stains and aggressions of a chemical nature.

NOTE: Given the great success of the hydraulic mosaic in recent years, the ceramic industry has started the production of ceramic pieces that copy the traditional design of the hydraulic mosaic. These are completely different materials, which offer different performances and their installation must also be done with different procedures.

EXAMPLES

The use of this type of paving in rehabilitation works is very widespread, both in residential buildings and in public places such as bars, restaurants, hotels, etc...

See some examples in Figures 4 and 5.



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WEBSITE OF THE COMPANY

<https://huguetmallorca.com/en/>

<https://mosaicsmarti.com/en/>



IMAGES AND CAPTIONS

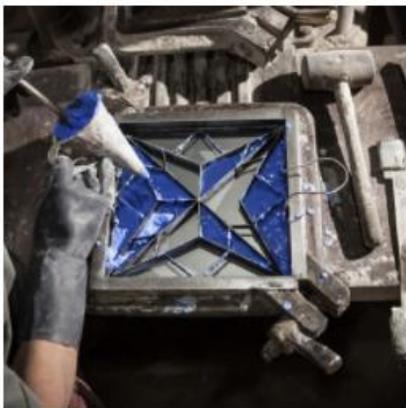


Fig.1: The current manufacturing process of the hydraulic mosaic remains completely handmade and the most important innovations are made in the design and visual compositions of the same. ©HUGUET



Fig.2: The process of laying the hydraulic mosaic must be very careful and requires a precise organization in order to respect the overall design that is intended as a result of the union of the different pieces. ©J.R. Rosell

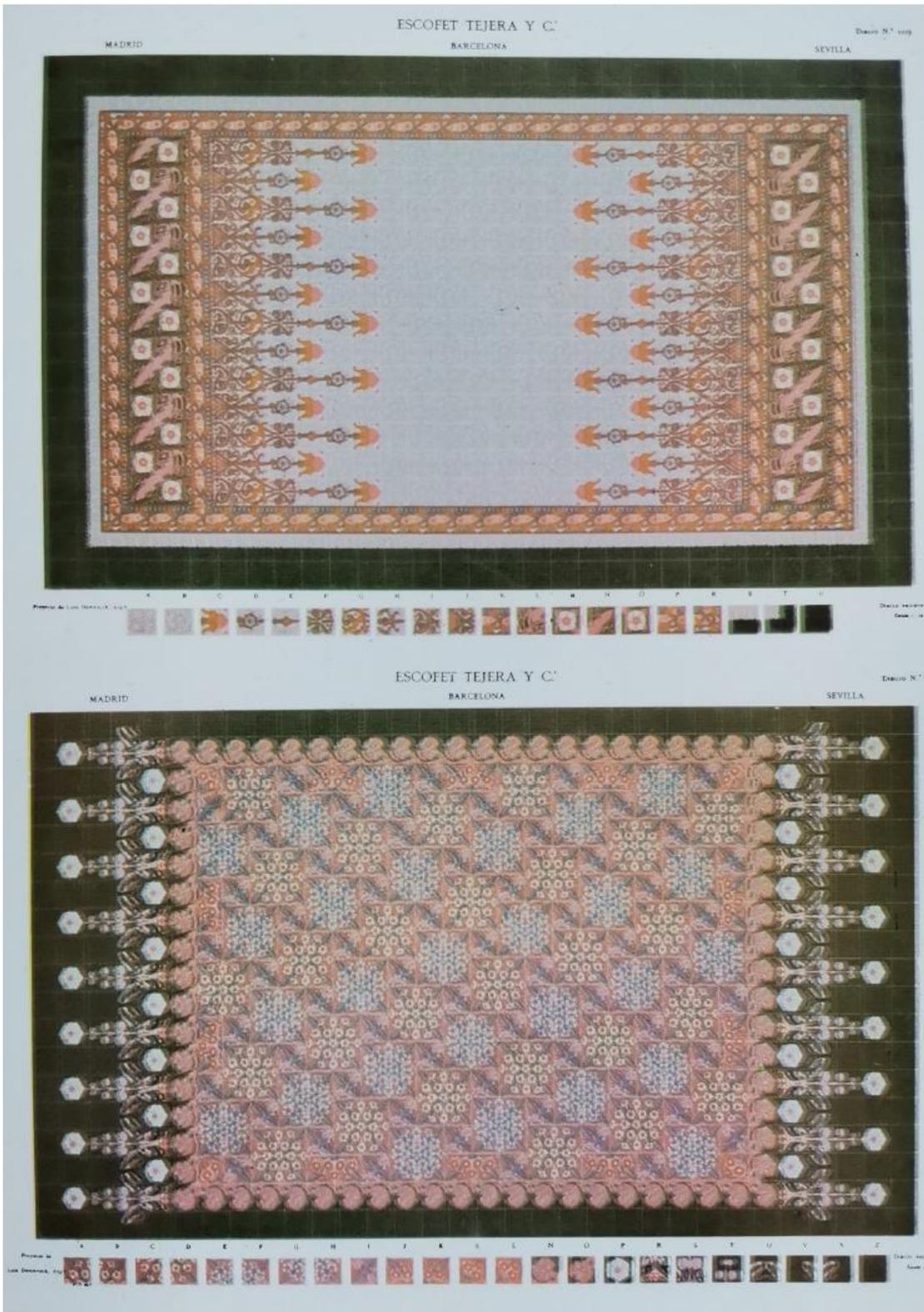


Fig.3: The combination of different pieces makes it possible to create authentic decorated carpets on the floor, as shown in the manufacturers' catalogs at the beginning of the 20th century. ©Escofet

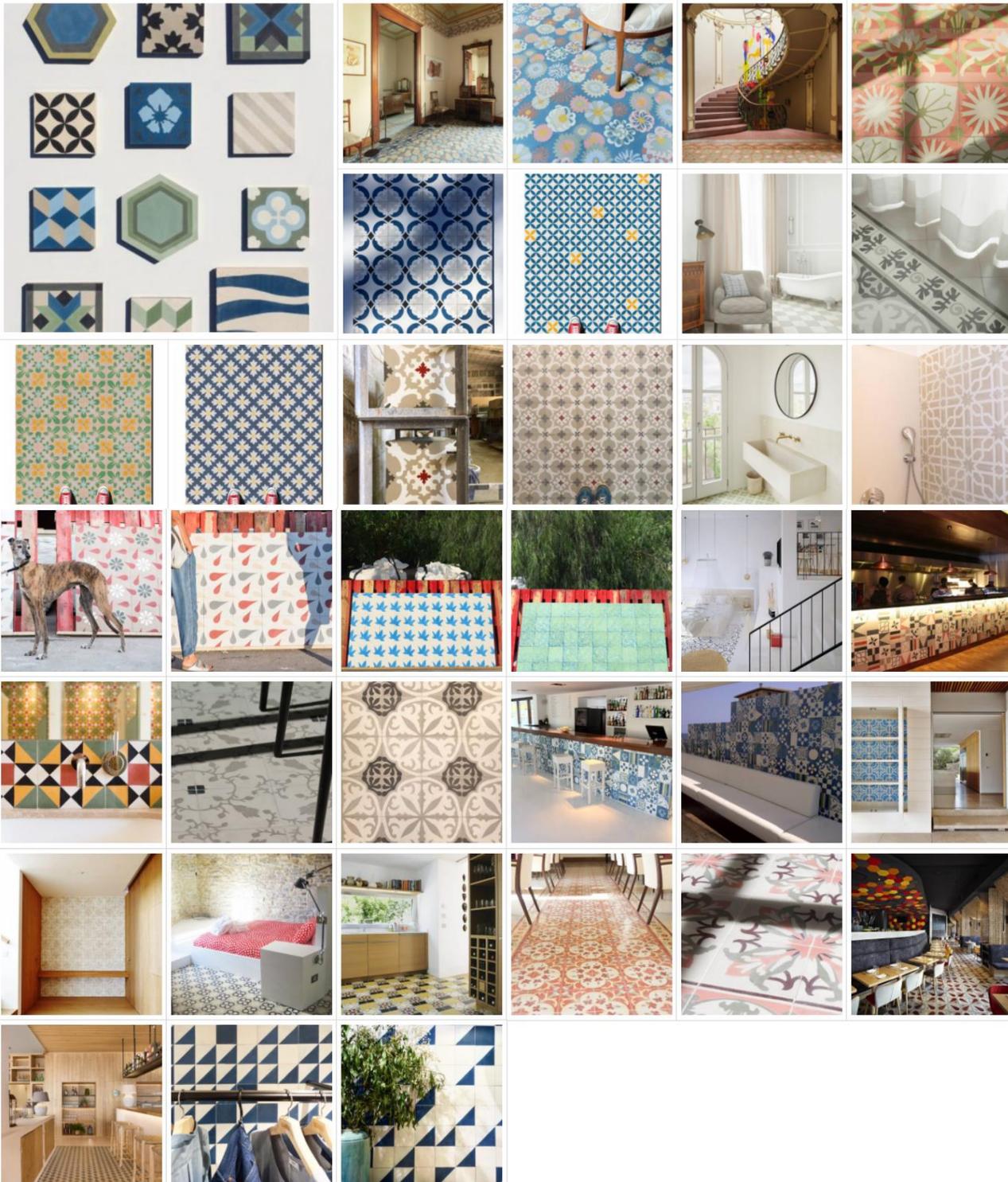


Fig.4: This mosaic of images shows the great diversity of designs that can be manufactured with this material. Some respond to reproduction requirements of antique models, for the restoration of existing pavements, and others offer contemporary models designed by current artists. Huguet Mallorca Products. ©HUGUET

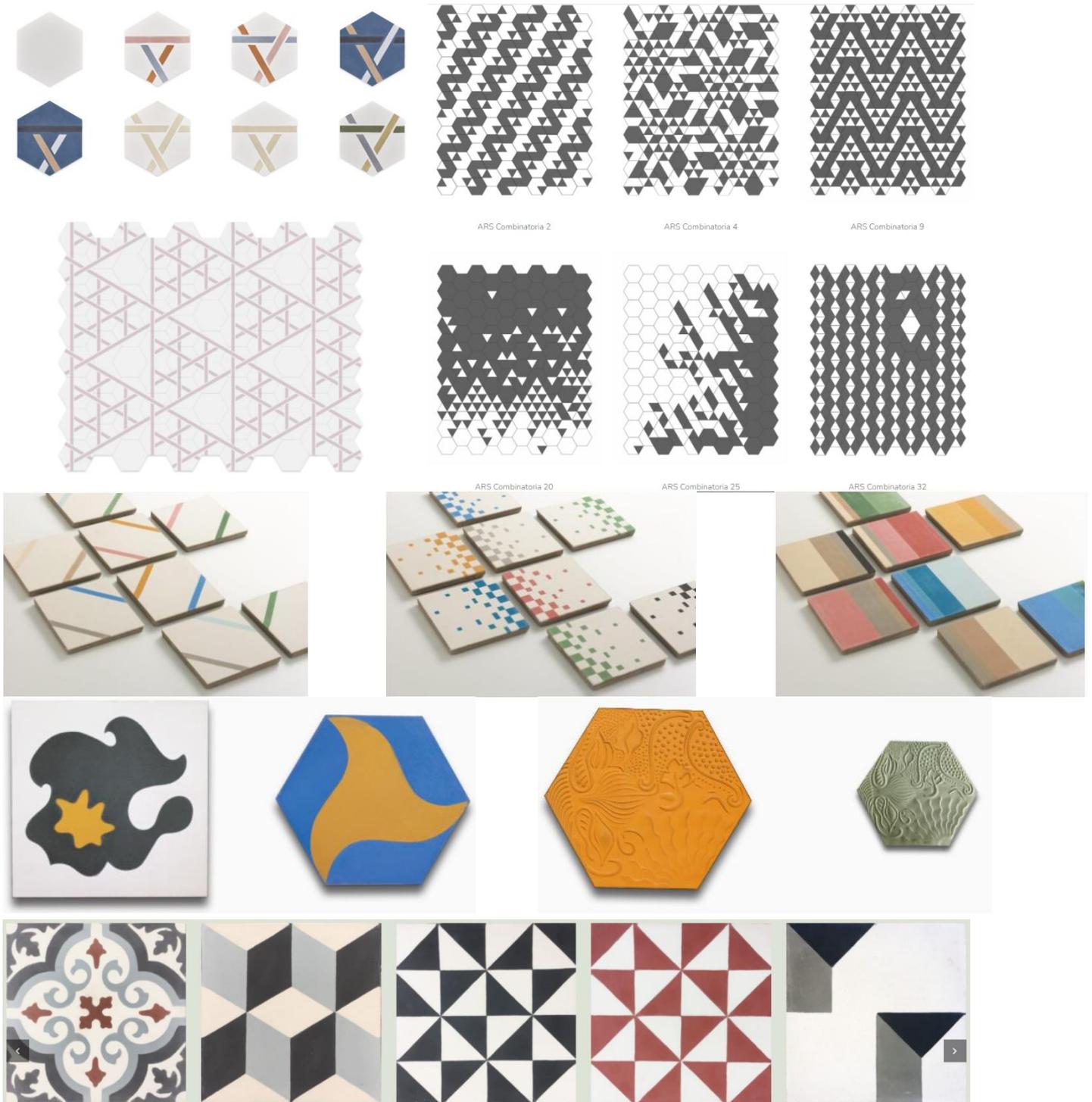


Fig.5: This mosaic of images shows the great diversity of designs that can be manufactured with this material. Some respond to requirements for the reproduction of antique models, for the restoration of existing pavements, and others offer contemporary models designed by current artists. Products of Mosaics Martí. ©MOSAICS MARTÍ