

ABOUT CEMENT TILES

Cement tiles are said to be appeared since 19th in Spain and very soon, they were exhibited in France. Right after that they became very popular in Europe, then America and were considered a high-end floor covering later on. They had been used in thousands of landmark public buildings and palaces around the world. Cement tiles are made by hand one at a time using mineral pigments, cement, a mold and a hydraulic press machine. Colorful patterns of cement can be customized; They are expected to have slight imperfections which give them character and depth. All of those aspects have made special cement tiles with luxury building material. Nowadays, they are known throughout the worldwide as "Encaustic Handmade cement tile" and used in either interior or exterior area.

Very soon right after being found, In 1858, French came to Vietnam, they also brought techniques and equipment to produce cement tiles in Vietnam. Being handmade products, labors play the most important factor of production while Vietnamese people are always acknowledged, clever, skilled and hard-working. Therefore, Encaustic Handmade Cement Tiles could be known as the tradition of Vietnam. People can easily find in Vietnam many hundred-year houses or buildings or palaces, villas with floor remaining luxury beauties such as Ho Chi Minh Post office, Saigon Notre-Name Cathedral

A good cement tile is a compact, waterproof and very durable. During the production, only the best natural materials are used. These are mechanically compressed with pressure. The different mechanically compressed with high pressure. The different patterns are made by manually applying the different color one by one in a hand-coper mold, which is also hand-made. It is very careful and skilled process, and that can only be performed by highly trained professionals. The manufacturer of tiles is decisive for the final quality of the tile.

The build-up Cement tiles are made up of two different layers. This can be seen best if you look at the side of the tile.

First layer:

The wear layer/color layer or the view. This is a fine mixture of white cement, crushed white marble (natural) pigments. The quality of this layer provides the abrasion resistance, and the color and brightness of the tile.

The layer is approximately 3mm thick, and should be impregnated several times after the tile has been glued. The final product has a natural lively feel and is very durable

Second layer:

This layer, which consists of a mortar of cement and fine sand, is the basis of the product and strengthens the first layer. The second layer ensures that the entire tile can withstand high pressure. Both layers are compressed in a special cement tile, press into one single tile. The second layer is about 12 mm thick.

VIETNAM LOTUS TILES

Vietnam Lotus Tile Joint Stock Company is origin from a traditional family enterprise with a history

+ From 1980-1990: Mr. Vu Van Kha was a trader of construction materials and learned profession from French workers that came to Vietnam for making encaustic cement tiles to build Christian churches in Bui Chu diocese of Nam Dinh city



- + From 1990-2006: Mr. Vu Van Kha taught profession for resident at Tung Nhi village Truc Thang commune Truc Ninh district Nam Dinh province.
- + From 2005-2013: With the diversified development of new types of ceramic tiles. This has made people less choice of tiles.
- + From 2014 to present: Two sons, Mr. Vu Van Thuyen and Mr. Vu Van Kiem, inherited the profession from his father, have studied to improve techniques and fine arts, named brand "Vietnam Lotus Tiles", The product has been much popular in the domestic market and exported to many countries around the world.

Up to now, Vietnam Lotus Tiles have become a high-class cement tiles manufacturing company:

- Family business with the secrets passed down by his father.
- Manufactory with a production capacity of over 10,000m2 of cement tiles per month and meet large orders in the shortest time;
- A range of high quality tiles is very diverse in shape, size, color with the number up to 1,500 different patterns;
- An international quality management system ISO 9001: 2016;



PRODUCTION PROCESS

Step 1:

Preparing divider moulds and colours

First of all, we prepare divider moulds based on the pattern chosen by our customers.

(*) At this step, if our customers want to have a new pattern that is not available in our existing range, we will be able to create new divider mould for new design. This should be done at an additional cost.

Colours will be mixed according to our customers' colour choice. We have a standard range of 75 colours for our customers to choose from. Our customers only need to specify the codes of colours to be used for the chosen patterns.

(*) At this step, if our customers want to have a new colour that is not available in our existing range, we will be able to test new colour. This





Step 2:
Placing divider mould into steel mould

Steel mould is prepared and divider mould which creates the tile design will be placed inside the steel mould.

Step 3: Pouring colours into the mould as the first layer

A liquid mixture consisting of white cement, natural marble powder, colour pigment, and additives (to be mixed to the right colour) is poured by hand into the divider frame. Different liquid mixtures will be needed to create different colours in one tile.

Here is an illustration of pouring 3 different colors for a tile. The first color is white, then blue and lastly black.

Pouring liquid colour into mould and divider mould is a



very important task which requires the worker to have the right skill and experience



Step 4:

Taking out divider mould from steel mould

Divider mould is taken out from steel mould, leaving a layer with design on the surface of mould.



Making next layers

The second layer is a very fine and dry mixture consisting of grey cement and fine sand is put on top of the first layer. The second layer is very thin and has the function of absorbing water from the first layer.

Applying a mixture of sand and cement as the third layer (back layer) till the required thickness of tile is achieved



Step 6:

Pressing by hydraulic pressing machine

All the materials will be pressed by hydraulic pressing machine. Moisture from the liquid colored layer will be absorbed through the dry back layers. Tiles will be pressed twice to have a good strength





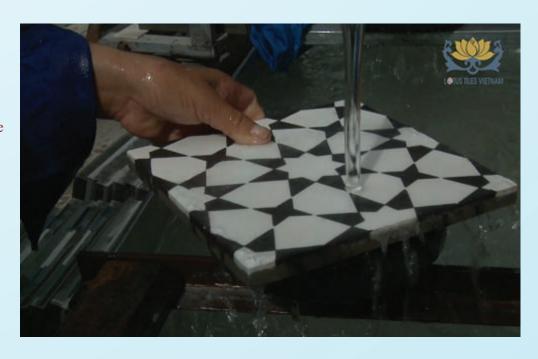
Step 7:

Forming tile and taking out tile from the mould

Tile has been formed and taken out of the mould. Now, we can see a beautiful tile with pattern and colors.

Step 8: Curing tile

After the forming stage comes the curing stage.
Tiles will be cured under water and then placed on racks for curing at room temperature.



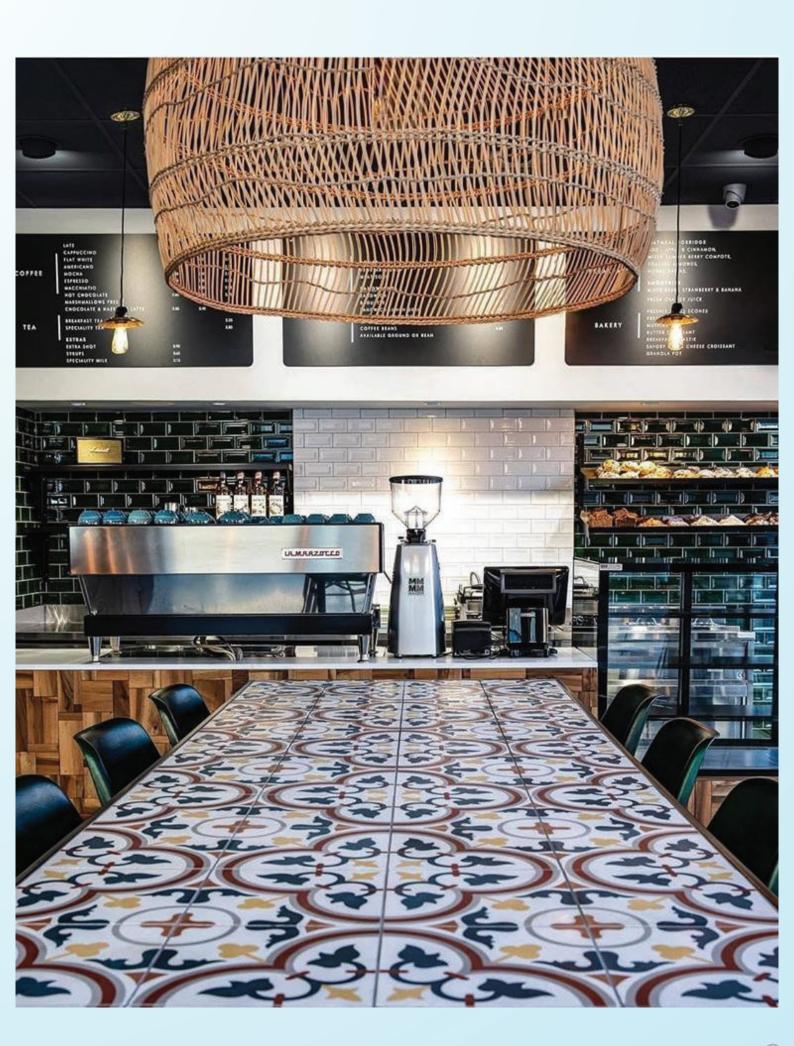
Step 9:

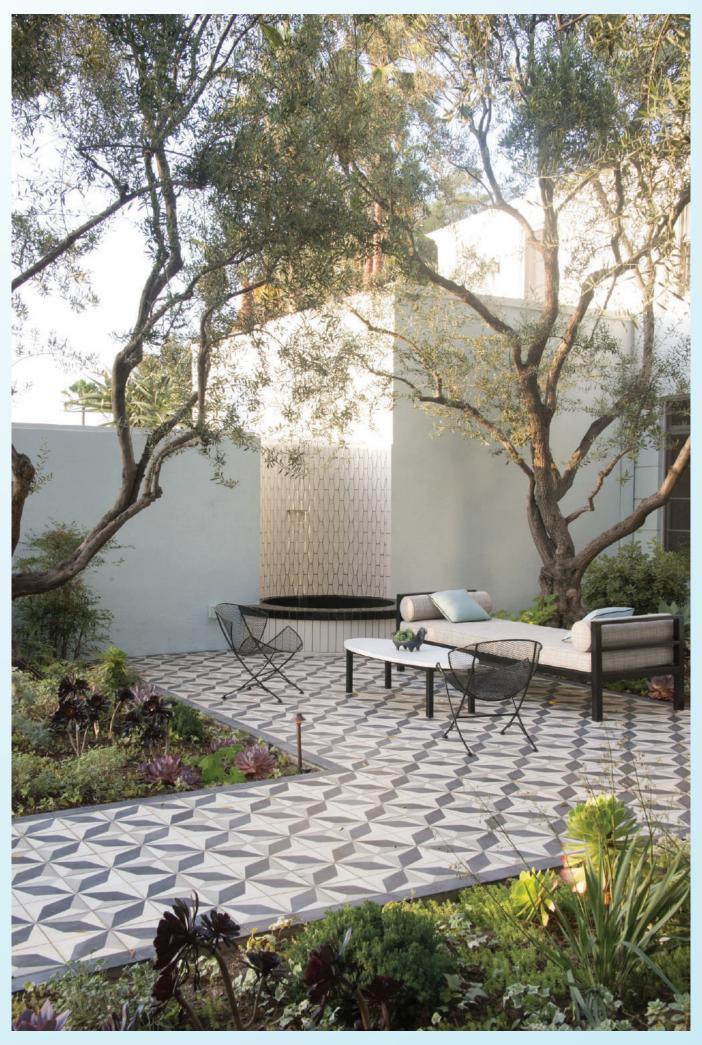
Coating with sealer and checking quality

After tiles are dried completely, they will be treated with sealer to perfect surface of tiles and go through serious quality control by checking piece by piece to carefully select really good tiles before packaging and palletizing.







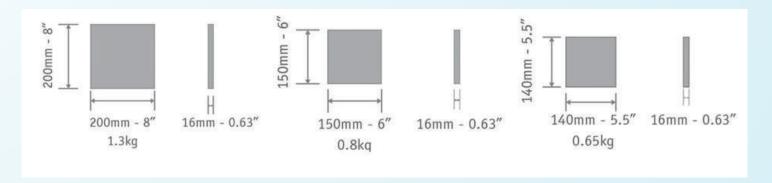




Introduction about Shapes, Sizes, and Colors of our encaustic cement tiles

Shapes and Sizes: We have different shapes of Square in size of,

14 x 14 x 1,5(cm), 15 x 15 x 1,5(cm), 20 x 20 x 1,5(cm)





Colors: we have the gallery of upto 100 colors, we can match almost any colors. Getting a custom color will take a bit of time and an additional cost

Notice: we can make custom cement tile designs. This requires making a custom "new divider mold". We have the best artisans for making custom divider mold in-house and can create divider molds for almost any designs from our customers. Getting a custom cement tile design will take a bit longer and there is an additional cos

SQUARE TILES



LT 001 (2)



LT 001 (3)



LT 001 (4)



LT 002 (3)



LT 008



LT 016 (1)



LT 013 (2)





LT 013 (3)



LT 017



LT 020



LT 021



LT 067

LT 063 (2)

LT 069





LT 272



LT 274



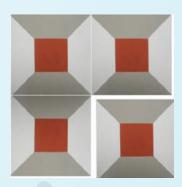
LT 283



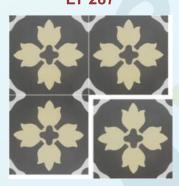
LT 287



LT 292



LT 294



LT 295



LT 298



LT 402



LT 442



LT 447





LT 457



LT 470



LT 477



LT 479



LT 482



LT 484



LT 486



LT 488



LT 491



LT 494



LT 499



LT 506



LT 507



LT 512



LT 515



LT 52V4 (1)



LT 525



LT 529 (2)



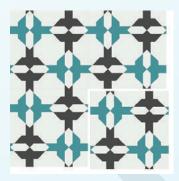
LT 537



LT 548



LT 553



LT 558



LT 572



LT 576



LT 580



LT 584



LT 161





LT 537

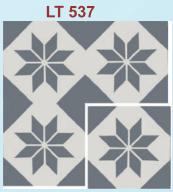




LT 083



LT 094



LT 158(5)



HEXAGON TILES



L-HT01++



L-HT06++



L-HT11++



L-HT13++



L-HT16++



L-HT34++



L-HT19++



L-HT49+



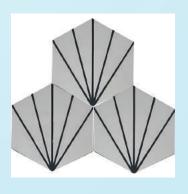
LT 911



L-HT35++



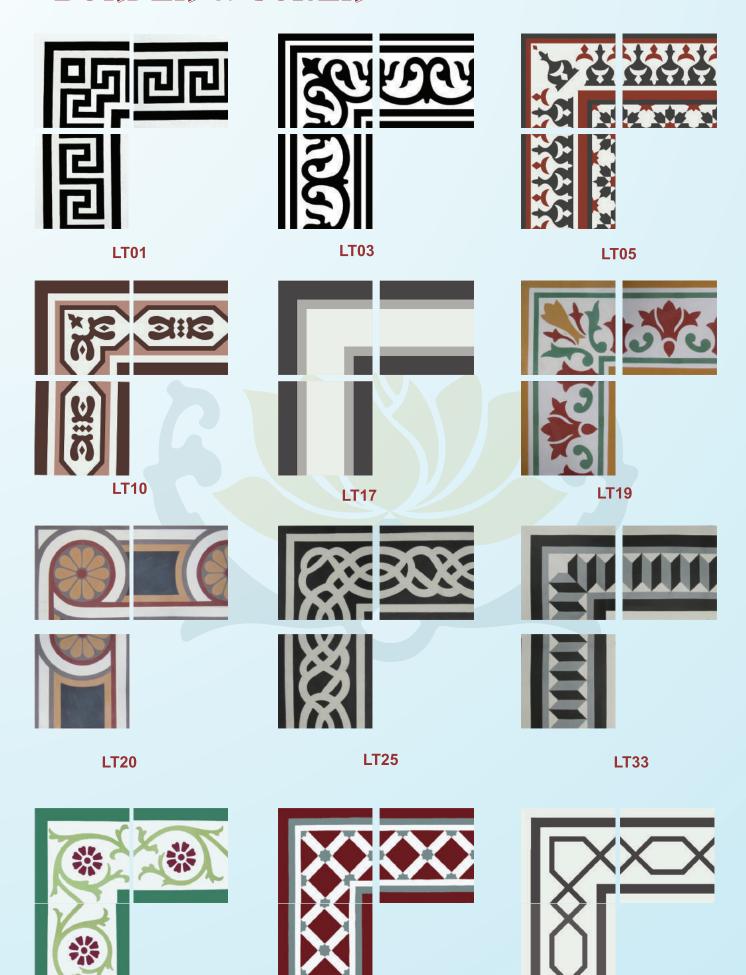
L-HT39++



L-HT41++

BORDER & CONER

LT36



LT37

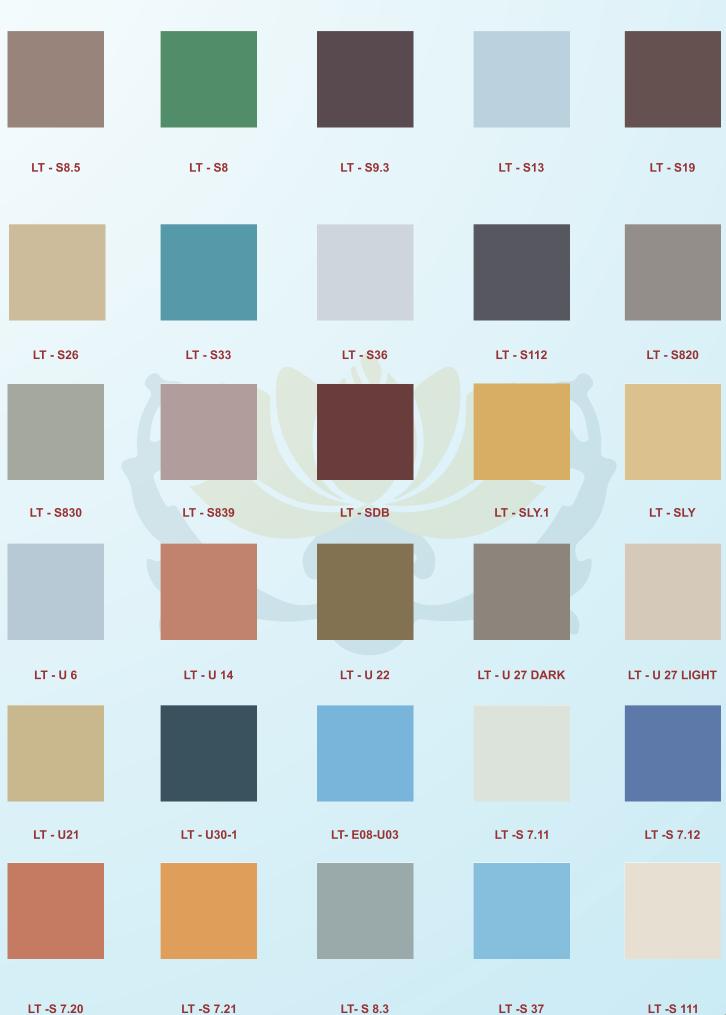
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LT15



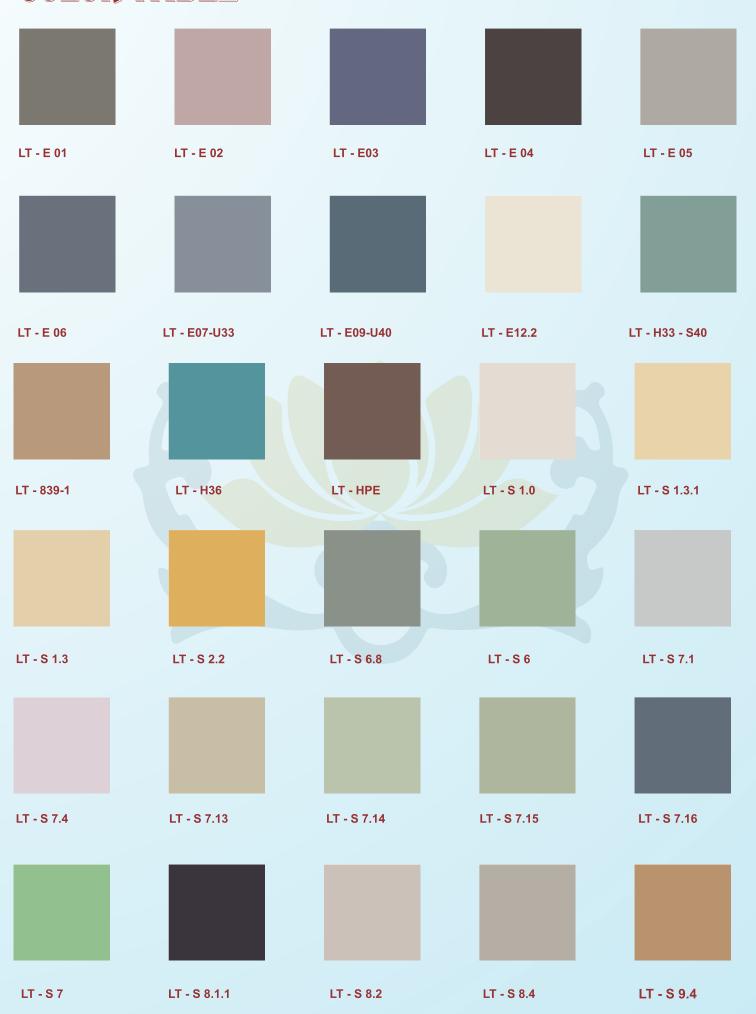


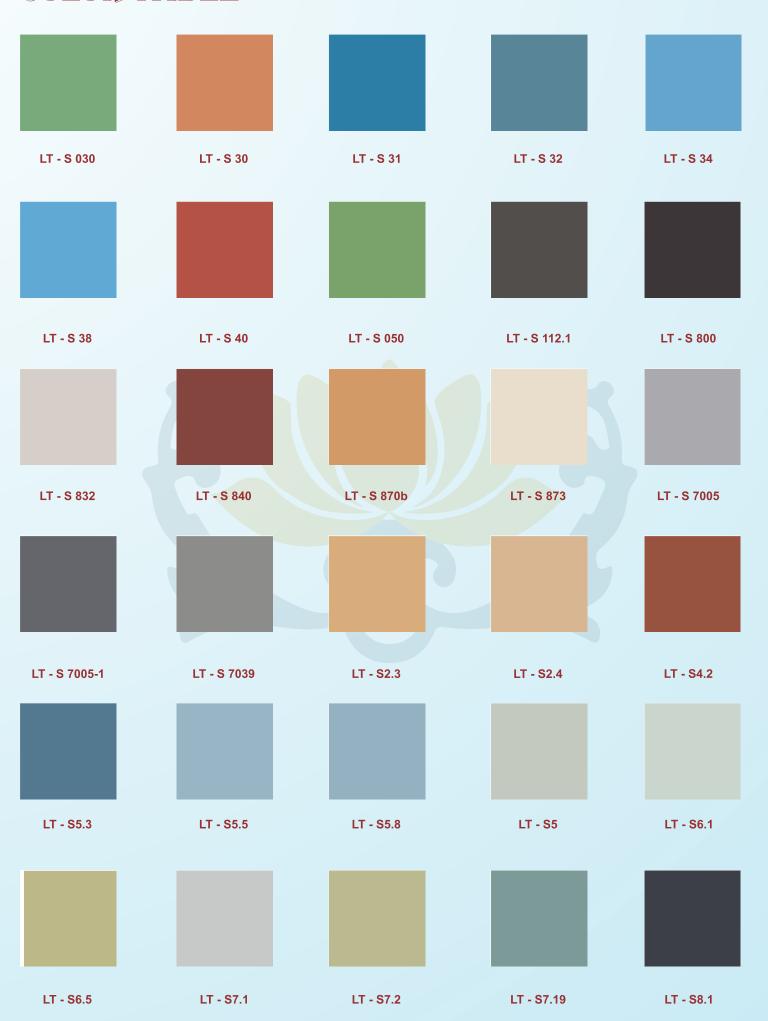






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SPECIFICATION OF CEMENT TILES

Traditional Craftmanship

Lotus cement tiles are made entirely by hand and using traditional methods. It is a unique and authentic product and therefor requires a special treatment with regards to placement and maintenance in comparison to other types of tiles. The cement tiles are produced without heat and only use environmentally friendly and durable materials. Slight deviation in the color, form, and pattern are inherent in the production of this tiles as they are all handmade. These deviations are considered normal and it is exactly these variations which give the tiles their unique characteristics. Always use Lotus impregnating- and cleaning agents to maintain the cement tiles and protect them against dirt, moisture, and weathering. The placement and treatment instructions can be found on our website.

Technical specification

- 1. Surface of tiles has a layer with one colour or multi-colour patterns. Surface of plain colour tiles must be equal and homogeneous. Patterned tiles must have sharp lines and not blurred. Minimum thickness of decorative layer is not less than 2.5mm.
- 2. Surface of tiles must be flat and without scratches. Corners must be square, edges must be without flashes. Depending on acceptable defects on appearance, cement floor tiles shall be divided into two grades as given in table 1:

Table 1

Name of defects	Allowed level	
	First grade	Second grade
Maximum tolerance of square corners in mm is not bigger than	0.5	1
Maximum of warping surface in mm is not bigger than	0.5	1
Maximum of curving edges in mm is not bigger than	0.1	0.2
Maximum of color fading, tolerances between lines and connection of patterns compared to standard samples, in mm, is not bigger than.	1	2
Breakage of facing layer, its depth is not over 1mm and its length is not over 10mm. Calculated by marks, spots is not over	1	2
Breakage of corners on facing layer is not over 3mm. Calculated by marks, spots is not over	0	1
Breakage of base layer with size is not over 10mm. Calculated by marks, spots is not over	1	2

3. Both first and second grades of cement floor tiles must meet physical standards as following

Table 2:

Name of criteria	Parameter	
Abrasion of facing layer (g/cm²) is not over	0.45	
Water absorption (%) is not over	10	
Compressive strength and impact strength, times, not less than	25 (times)	
Breaking load pressed on whole tile, daN/tile is not less than	100	
Hardness of facing layer	passed	





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