



ENCAUSTIC HANDMADE CEMENT TILES

FROM VIETNAM





STORY ABOUT CEMENT TILES

Cement tiles are said to be appeared since 19th century 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 hands, one at a time, using mineral pigments, cement, a mold and a hydraulic press machine; Colorful patterns of cement tiles can be customized; They are expected to have slight imperfections which give them character and depth...All of those aspects have made cement tiles special luxury building material. Nowadays, they are known throughtout worldwide as “Encaustic Handmade cement tile” and used in either interior or exterior areas.



Very soon right after being found, In 1858, French came to Vietnam, they also brought techniques and equipments to produce cement tiles to Vietnam. Being handmade products, labors play the most important factor of this production while Vietnamese people are always acknowledged clever, skilled and hardworking. 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 floors remaining luxury beauties such as Hochiminh Post office, Saigon Notre-Dame Cathedral..

Encaustic Handmade Cement tiles are made of natural materials with 3 layers:

- The first layer (or colored and patterned layer) is about 3-4 mm of thickness including pigments and friendly environmental additive to make colors sustainable and sharp as well as waterproof. This additive also protects tiles from stains caused by coffee, tea or other strong-stained factors.
- The second layer (very fine dried powder made from cement and filtered sand) is just about 1mm to make first layer dried enough to guarantee the beauty of patterns and colors on top without any defect.
- The third layer (grey) is hydraulically pressed to surface of tile being a part to strengthen the tiles from the ordinary materials such as cement, aggregate and fine sand. It is about 10mm thick

We do not use clay like ceramic or terracotta, so no agricultural land is consumed during the production.

Besides, they're also produced under traditional way of manufacturing by our high skilled crafters who have been handcrafting cement tiles for generations.



Nowadays, Encaustic Handmade Cement tiles have often been using in high grade and luxury buildings, restaurants, hotels or even in cottages in countrysides to create antique and unique looks.



HOW TO MAKE

VIBM
ĐỘ XÂY DỰNG
VIỆN VẬT LIỆU XÂY DỰNG
 VILAS 003 - ISO9001:2005 - TRUNG TÂM KIỂM ĐỊNH VẬT LIỆU XÂY DỰNG
 VIET NAM INSTITUTE FOR BUILDING MATERIALS (VIBM)
 VILAS 003 - ISO9001:2005 - INSPECTION CENTER FOR BUILDING MATERIALS
 Địa chỉ (Address): 235 Nguyễn Trãi, Thanh Xuân, Hà Nội
 Điện thoại (Tel): 04 38522116; Fax: 04 38511112; E-mail: info@vibm.com.vn; Website: www.vibm.vn

PHIẾU KẾT QUẢ THỬ NGHIỆM
 TEST REPORT
 Số (No): 4574.../VLXD-TKGD

1. Cơ quan gửi mẫu (Client): Công ty cổ phần EUREKA VIỆT NAM
 2. Loại mẫu (Type of sample): Gạch xi măng lát nền (Concrete floor tile)
 3. Ký hiệu mẫu (Mark of sample): Gạch lát xi măng
 4. Số phiếu kế hoạch (Req. No): 1882RCHPT
 5. Ngày nhận mẫu (Date of received sample): 28/11/2011

KẾT QUẢ THỬ NGHIỆM
 TEST RESULT

STT (No)	Tên chỉ tiêu (Characteristics)	Đơn vị (Units)	Kết quả (Results)	Phương pháp thử (Test methods)
1	Độ hút nước (Water absorption)	%	7,6	TCVN 6355-3-08
2	Chỉ trọng uốn gãy (Breaking strength)	daN/m ²	162	TCVN 6065-1:95
3	Độ mài mòn (Abrasion)	g/cm ²	0,39	TCVN 6063-1:95
4	Độ chịu va đập xung kích (Impact resistance)	đơn	> 30	TCVN 6065-1:95

Hà Nội, ngày (Date): 01/12/2011

Cán bộ phân tích (Tested by): Lê Ngọc Bích

Vị trí Văn phòng: PTN VILAS 003 - Trung tâm Kiểm định VLXD
 VILAS 003 - Inspection Center for BM

Chú ý (Notes):
 - Mẫu thử không mang tên Viện Vật liệu xây dựng. Xin cơ quan gửi mẫu và tài liệu kèm theo báo cáo thử nghiệm yêu cầu của khách hàng ghi rõ tên Công ty nhận thử nghiệm và Viện Vật liệu xây dựng.
 - Kết quả thử nghiệm chỉ có giá trị với mẫu thử STT không đánh dấu (*) được pháp thử PTN VILAS 003. (The test report valid for sample only. The test result is valid for sample only.)
 - Không được sao chép thông tin, hình ảnh này để phát hành bất kỳ tài liệu nào. (This test report can be reproduced, except in full.)

Step 1: Testing colors and preparing divider molds and pressing molds based on orders.

Step 2: Insert divider mold into pressing mold. Then pouring the prepared colors into the pattern divider chambers as designs

Step 3: The pattern divider to be removed and then the first coat will be covered with another two layers of dried mortars and humidified one as basement

Step 4: Put whole mold into hydraulic pressing machine for a while.

Step 5: The tiles to be removed from molds carefully by the craftsman

Step 6: After 24h of curing in clean open air areas, tiles will be dipped into water tanks.

Step 7: The tiles will be cleaned and taken out to cooling rooms and put on drying racks for 3-4 days for being dried enough (less than 17% humidity) before waxing and packing in carton boxes for loading. A serious quality control on every piece will be conducted in this step.



INSTALLATION

The installation process is very simple and rapid to accomplish. However, great care should be taken so as not to damage tile surfaces and edges during installation process.

- a) The tiles should be laid on perfect flat surfaces. Leave a joint of 1-2mm between tiles in installation. After you prepare the concrete cover, the tiles retain almost 2cm height altogether.
- b) The tiles can be installed by using either glue/adhesive or thin mortar layer bed. To have a good adherence of floors:
 - Submerge tiles in a water basin before the installation
 - It is necessary to trowel glue or mortar on both surface of leveled surface and at back of tiles by using a toothed paint scraper
- c) Laying tiles must be carefully handled to avoid of chipping out on edges. After laying the tiles, level tiles on floors by hands or rubber hammer and construction ruler.
- d) The exceeding adhesive cement on tile surfaces or edges has to be immediately cleaned on the surface with humid cloths. Otherwise such kind of stains will be very difficult to be removed later on.
- e) Leave the floors untouched and protected until the mortar to be dried naturally enough before grouting.
- f) Fulfill the joints by grouting liquid. Color of this liquid should be white for the most suitable in any case. Other colors can be used on owner preference. Remove all excessive grouting materials before it is dried.
- g) Wash the floors with soap and clean water and leave floors dried completely, then apply suitable penetrating sealer from qualified manufacturers to have the most expecting floor finishes. It is strongly suggested to test sealer with one single tile before apply the whole floor.
- h) Depending on traffic frequency, repeat this sealing process every 6-12 months.

TIPS

- Encaustic cement tile is handmade product and made from natural materials so the tiles are subject to contain color variations. It is necessary to check tiles randomly before installation to have better distribution of tiles between laying areas to achieve the most uniform floors.
- There will be some calcareous spots on tile surfaces as character of cement tiles to be naturally caused by reaction between chemical factors in cement and water. Those spots will be disappeared automatically from 1 to 2 months afterward of using
- Don't leave any space among the squares.
Adjust the squares to form the design well
- A good leveling of your ground will facilitate its polishing.

AVAILABLE PATTERNS/SHAPES

- Patterned tiles
- Patterned tiles in Terrazzo finishes
- Patterned tiles in Engraved finishes
- Patchwork
- Skirting-boards
- Octagonal shape
- Hexagonal shape
- Triangle shape
- Customized Patterns/shapes

AVAILABLE SIZES

- 30x30x2.0cm
- 20x20x1.4cm
- 17x17x1.4cm
- 15x15x1.4cm
- 14x14x1.4cm
- 10x10x1.4cm
- 5x5x1.4cm
- 20x10x1.4cm
- 30x10x1.4cm
- Customized Sizes

PATTERNED CEMENT TILES

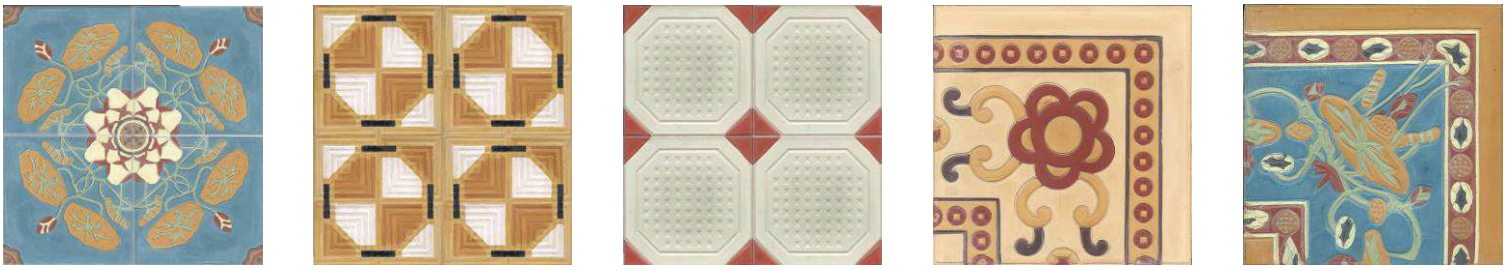
There are hundreds of available patterns after long tradition of making cement tile in Vietnam. Besides, all other patterns and colors can be customized

Encaustic handmade cement tiles with normal finishes:



And hundreds of other patterns more...

Encaustic handmade cement tiles with engraved finishes



Encaustic handmade cement tiles with terrazzo finishes



Border and Corner



Skirting-boards



Specialities & Patchworks



Color pallet



EP01



EP02



EP03



EP05



EP06



EP07



EP08



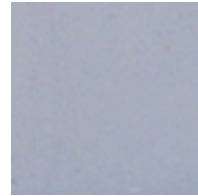
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EP11



EP12



EP13



EP14



EP15



EP16



EP17



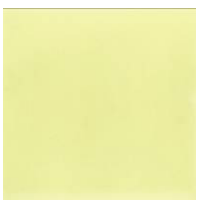
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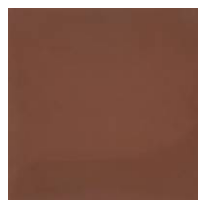
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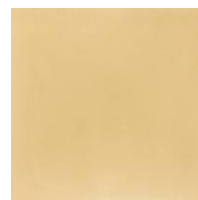
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EP24



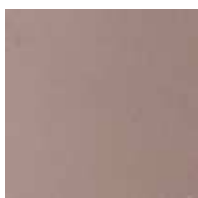
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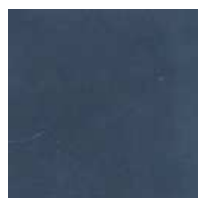
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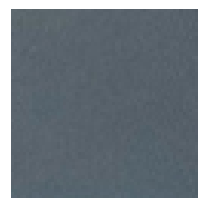
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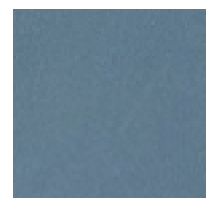
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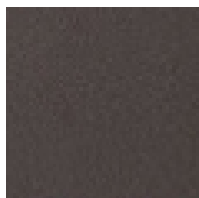
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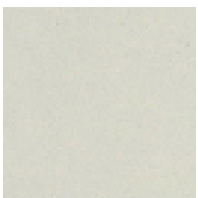
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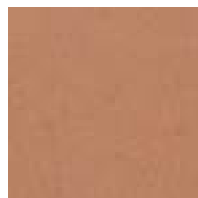
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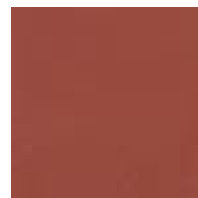
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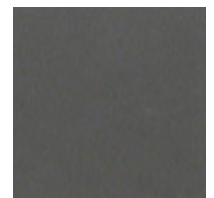
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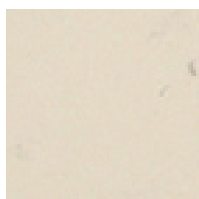
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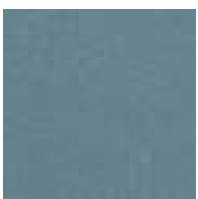
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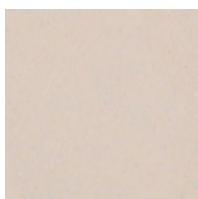
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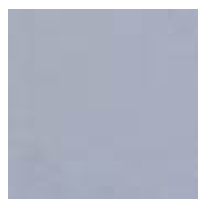
EP41



EP42



EP43



EP44



EP45

And nearly 100
colors more...

PACKING STANDARD



No	Size (cm)	Pcs per box	Boxes per pallet	Pcs per pallet	Pcs per m2
1	20 x 20 x 1.5	13	60	780	25
2	17 x 17 x 1.5	13	60	780	35
3	15 x 15 x 1.4	13	100	1,300	44
4	14 x 14 x 1.4	13	112	1,456	51
5	20 x 10 x 1.4	26	60	1,560	50
6	10 x 10 x 1.4	52	60	3,120	100
7	7 x 7 x 1.4	50	112	5,600	204

Tiles are put face to face. Between the tiles, there are white papers to protect tile surfaces.

Then, carton boxes are put into wooden pallets. Pallets will be loaded into container. Each 20 ft container can be loaded with 22-24 pallets. Actual packing will be changeable depending on real requested sizes and loading capacity which is allowed by Buyer's custom officers.

TECHNICAL SPECIFICATION

Encaustic handmade cement tiles are safely and friendly to the environment. And you can see more information as detailing tables below:

Table 01:

No	Name of defects	Allowed level	
		A1 Grade	A2 Grade
1	Maximum tolerance of square corners in mm is not bigger than	0.5	1
2	Maximum of warping surface in mm is not bigger than	0.5	1
3	Maximum of curving edges in mm is not bigger than	0.1	0.2
4	Maximum of color fading, tolerances between lines and connection of patterns compared to standard color in mm is not bigger than.	1	2
5	Breakage of facing layer, its depth is not over 0.5mm and its length is not over 2mm. Calculated by marks, spots is not over	1	2
6	Breakage of corners on facing layer is not over 2mm. Calculated by marks, spots is not over	0	2
7	Breakage of base layer with size is not over 5mm. Calculated by marks, spots is not over	1	2

Table 02:

No	Characteristics	Unit	Parameter
1	Water absorption less than	%	5
2	Breaking strength	daN/pcs	162
3	Abrasion	g/cm ²	0.39
4	Impact resistance	times	>30