

"This heading covers ceramic flags and tiles, including quarry tiles, commonly used for paving or for facing walls, hearths, etc.

Flags and paving, hearth or wall tiles are thinner in relation to their surface dimensions than are building bricks. Whereas bricks play an essential part in constructional work, forming the very framework of the building, flags and tiles are more especially intended for fixing by cement, adhesive or by other means to the surface of existing walls, etc. They also differ from roofing tiles in that they are usually flat and do not need to be pierced or provided with nibs or otherwise shaped for interlocking and that they are designed to be placed side by side without overlapping. Flags are larger than tiles and are usually rectangular; tiles may be of other geometric shapes (hexagonal, octagonal, etc.). Tiles are mainly used for facing walls, mantelpieces, hearths, floors and paths; flags are more especially used for paving or flooring, or as hearth slabs. Both categories may made from clays or other inorganic raw materials, usually shaped by extruding or pressing at room temperature but can formed by other process, then dried and subsequently fired at temperatures sufficient to develop the required properties. ~~But~~ Types which have to withstand heavy wear are often vitrified, for example, tiles of stoneware, or porcelain (china) or of fired steatite (e.g., tiles for lining grinding mills, etc.).

The resistance to heavy wear or degree of vitrified-vitrification indicates the structure of the flag or tile. This structure is characterized by its capacity for the water absorption, per a water absorption percentage capacity that is measured by factor of porosity "E". A high level of water absorption corresponds to a porous structure ~~corresponds to a porous structure,~~ *a low level of water absorption to a compact (vitrified) structure.*

The porosity factor orThe water absorption coefficient percentage (symbol E) is defined as the change in mass percentage of water by mass after saturating the dry sample product (flag or tile) in water, divided by the dry weight.

The test method for measuring the level of percentage water absorption by ceramic tiles is standardised at ISO level under ISO standard 10545 -3 (2012). However some countries are using a different test method based on ASTM standard C373-88(20062014).

The formula for calculating the water absorption E is identical in both methods and is given by the following equation:

$E = \{(M_f - M_i) / M_i\} \times 100$ Where:

E = Water absorption expressed as a percentage

M_i = The dry mass of the specimen

M_f = The saturated mass of the specimen (this will vary depending on the method chosen)

Certain ceramic tiles are used solely for paving; unlike bricks, they are usually cubic or in the form of truncated pyramids. In practice, they are normally of stoneware or, exceptionally, of porcelain or china (e.g., flags for pedestrian crossings).

The classification of goods in this heading is therefore determined by their shape and size, rather than by their composition; thus bricks suitable for use both in building and for paving are excluded (heading 69.04).

Goods of this heading may be coloured in the mass, marbled, ribbed, channelled, fluted, glazed, etc.

Subject to the above conditions, the heading also includes:

(1) Bordering, capping, skirting, frieze, angle, corner or other fitting tile pieces employed as complementary elements for finishing off the facing, paving, etc., work, with or without rounded edges, non flator 3-dimentional, which give them the character of finishing pieces; that would be the case, in particular, for bordering, skirting, frieze, corner pieces, decorative inserts and other ceramic accessories). ~~In these cases, except decorative inserts, these pieces need to match with the other basic tiles, so their proper surface usually has the same shade or finish of the normal tiles.~~ They are generally sold by piece, single items or by linear meter.

(2) Double tiles intended for splitting before use.

(3) Terracotta cladding elements used in the building industry for exterior or interior cladding purposes, of various dimensions, with a modular structure, which are attached by, e.g., metal clips to vertical or horizontal metal profiles secured to the walls of the main structure.

(4) Mosaic cubes, whether or not on a paper or other backing, characterized by their small sizes.

On the other hand, the heading excludes :

(a) Tiles specially adapted as table mats, etc. (heading 69.11 or 69.12).

(b) Ornaments and the like of heading 69.13.

(c) Ceramic tiles specially adapted for stoves (heading 69.14).””