

WAC 296-17A-3501 Classification 3501.

3501-00 Brick or clay products, N.O.C: Manufacturing

Applies to:

Businesses engaged in manufacturing brick or clay products not covered by another classification (N.O.C.).

Clay is any earth that forms a paste when added to water and hardens when heated, and is widely used in making bricks and other products as described below.

Brick is a molded rectangular block of clay, baked by the sun or in a kiln until hard.

Products manufactured include, but are not limited to:

- Building or paving bricks;
- Drainage tiles;
- Glazed or unglazed sewer pipes, drain pipes, or conduits;
- Roofing tiles;
- Wall copings;
- Similar products, which are generally for industrial or construction use;
- Similar products made of earthenware; a variety of coarse, porous baked clay; are included in this classification.

Work activities and processes to make bricks include:

- Clay is broken up by dry-pan grinders;
- After grinding, the particles pass through any one of several types of screens used for separating and grading;
- The mixture is fed through a pug mill to be cut and mixed then mixed with water to the desired consistency;
- After tempering, the pug mill extrudes a column of clay through a die, which shapes and determines the dimensions of the brick;
- A rotating wire cutter slices the column into proper thicknesses;
- Bricks are either machine molded or hand molded;
- "Green" bricks must be dried by sun and air, or in natural gas or electric-fired regulated kilns prior to firing;
- Firing dehydrates, oxidizes, and vitrifies the bricks.

Work activities and processes to make other clay products include:

- Clay is mixed with sand or shale, ground in a mixing machine and water is added;
- The liquid substance is mechanically poured into standard or specially shaped molds;
- All products are dried by natural warm air or steam heat;
- After removal from the molds, products are baked in kilns;
- If glazing is desired, salt is added to the kiln; the salt vaporizes and coats the products;
- To produce a greater degree of concentration, pressing or repressing operations may be performed, usually with hydraulic presses, subsequent to the actual formation of the products.

Exclusions:

- Worker hours engaged in the production of raw materials are reported separately in the applicable mining, quarrying or excavation classification;
- Worker hours engaged in installation or erection of any products manufactured by establishments in this classification are reported separately in the classification applicable to the type of construction or installation work being performed;

- Manufacturing household or decorative pottery items, including tile, is classified in 3503;
- Manufacturing statuary and ornamental items from concrete or plaster is classified in 3509.

Special note: Clays are generally mined by the open-pit method. After clay has been extracted, it may be stockpiled inside for use during inclement weather. In most cases, the manufacturing of brick takes place alongside the extraction site. Clay is delivered to the manufacturing site only when clay of a different characteristic is needed to blend with the "home" clay.

3501-01 Refractory products: Manufacturing

Applies to:

Businesses engaged in manufacturing refractory products.

Refractory clays are resistant to heat. Refractory materials, such as alumina, silica, and magnesite, dolomite, bauxite, do not significantly deform or change chemically in high temperatures.

Products manufactured from refractory clays with or without other refractory materials include, but are not limited to:

- Boiler or stoker tiles;
- Crucibles;
- Enameled bricks;
- Fireproofing tile or bricks;
- Flue lining;
- Kiln part;
- Retorts;
- Roofing tile.

Usually all types of refractory products are produced in the same plant.

Work activities and processes include, but are not limited to:

- Clay and other materials are ground, screened and mixed with water in a mixing machine;
- The partly fluid substance is poured into molds to form the product;
- After removal of the forms, items are kiln dried;
- Enamels are vitreous coatings produced from solutions of chemicals, salt, lead oxide or tin, into which the brick is dipped;
- Enameled brick requires two or three kiln burns.

Exclusions:

- Worker hours engaged in production of raw materials are reported separately in the applicable mining, quarrying or excavation classification;
- Worker hours engaged in installation or erection of any products manufactured by establishments in this classification are reported separately in the classification applicable to the type of construction or installation work being performed;
- Manufacturing household or decorative pottery items, including tile, is classified in 3503;
- Manufacturing statuary and ornamental items from plaster or concrete is classified in 3509.

[Statutory Authority: RCW 51.04.020 and 51.16.035. WSR 24-23-081, s 296-17A-3501, filed 11/19/24, effective 1/1/25. WSR 07-01-014, recodified as § 296-17A-3501, filed 12/8/06, effective 12/8/06. Statutory Authority: RCW 51.16.035. WSR 98-18-042, § 296-17-586, filed 8/28/98,

effective 10/1/98; WSR 96-12-039, § 296-17-586, filed 5/31/96, effective 7/1/96; WSR 85-24-032 (Order 85-33), § 296-17-586, filed 11/27/85, effective 1/1/86; WSR 83-24-017 (Order 83-36), § 296-17-586, filed 11/30/83, effective 1/1/84; WSR 82-24-047 (Order 82-38), § 296-17-586, filed 11/29/82, effective 1/1/83; Order 73-22, § 296-17-586, filed 11/9/73, effective 1/1/74.]