

**UNITED STATES TARIFF COMMISSION**

**CERAMIC FLOOR AND WALL TILE: CERTAIN WORKERS  
OF THE CAMBRIDGE TILE MFG. CO.,  
CINCINNATI, OHIO**

**Report to the President  
on Investigation No. TEA-W-11  
Under Section 301(c)(2) of the Trade Expansion Act of 1962**



**TC Publication 318  
Washington, D. C.  
March 1970**

**UNITED STATES TARIFF COMMISSION**

**Glenn W. Sutton, *Chairman***

**Penelope H. Thunberg**

**Bruce E. Clubb**

**Will E. Leonard, Jr.**

**Herschel D. Newsom**

**George M. Moore**

**Kenneth R. Mason, *Secretary***

-----

**Address all communications to  
United States Tariff Commission  
Washington, D. C. 20436**

-----

# C O N T E N T S

	<u>Page</u>
Introduction-----	1
Finding of the Commission-----	2
Considerations supporting the Commission's finding:	
Views of Chairman Sutton and Commissioners Leonard and Newsom-----	2
Views of Commissioner Thunberg-----	7
Dissenting opinion of Commissioners Clubb and Moore-----	13
Information obtained in the investigation:	
U.S. tariff treatment-----	A1
Description and uses-----	A5
U.S. consumption-----	A8
U.S. imports-----	A9
U.S. sales and inventories-----	A12
Prices of domestic and imported tile:	
Prices in the mid-1960's-----	A13
Prices in the latter 1960's-----	A15
Prices received by the Cambridge Tile Mfg. Co.-----	A17
The Cambridge Tile Mfg. Co. operations, production, and sales-----	A18
Employment-----	A18
Profit-and-loss experience-----	A19
Statistical tables-----	A20

Note.--The whole of the Commission's report to the President may not be made public since it contains certain information that would result in the disclosure of the operations of an individual concern. This published report is the same as the report to the President, except that the above-mentioned information has been omitted. Such omissions are indicated by asterisks.

TABLES

	<u>Page</u>
1. Ceramic floor and wall tile: U.S. rates of duty in the Tariff Schedules of the United States (TSUS), effective August 31, 1963-----	A20
2. Ceramic floor and wall tiles: U.S. rates of duty under the Tariff Act of 1930, as modified prior to August 31, 1963-----	A21
3. Ceramic floor and wall tile (except quarry tile): U.S. producers' shipments, imports for consumption, exports of domestic merchandise, and apparent consumption, 1955-69-----	A22
4. Ceramic mosaic tile: U.S. producers' shipments, imports for consumption, exports of domestic merchandise, and apparent consumption, by types, 1955-69-----	A23
5. Glazed ceramic wall tile (except mosaic): U.S. producers' shipments, imports for consumption, exports of domestic merchandise, and apparent consumption, 1955-69-----	A24
6. Ceramic floor and wall tile (except quarry tile): U.S. apparent consumption, by types, 1965-69-----	A25
7. Ceramic floor and wall tile (except quarry tile): Indexes of domestic shipments, imports for consumption, apparent consumption, and domestic construction activity, 1965-69-----	A26
8. Ceramic mosaic tile: U.S. imports for consumption, by principal sources, 1965-69-----	A27
9. Glazed ceramic wall tile (except mosaic): U.S. imports for consumption, by principal sources, 1965-69-----	A28

REPORT TO THE PRESIDENT

U.S. Tariff Commission  
March 20, 1970

To the President:

In accordance with section 301(f)(1) of the Trade Expansion Act of 1962 (76 Stat. 885), the U.S. Tariff Commission herein reports the results of its investigation TEA-W-11 under section 301(c)(2) of the act. On January 19, 1970, a petition for the investigation was filed by the United Glass and Ceramic Workers of North America, AFL-CIO, on behalf of the production and maintenance workers of the Cambridge Tile Mfg. Co., Cincinnati, Ohio. The investigation was instituted on that date for the purpose of determining whether, as a result in major part of concessions granted under trade agreements, articles like or directly competitive with ceramic floor and wall tile produced by the Cambridge Tile Mfg. Co. are being imported into the United States in such increased quantities as to cause, or threaten to cause, the unemployment or underemployment of a significant number or proportion of the workers of such manufacturing company.

Public notice of the investigation was given in the Federal Register (35 F.R. 997, January 23, 1970). No public hearing was requested and none was held.

## Finding of the Commission

On the basis of its investigation, the Commission finds (Commissioners Clubb and Moore dissenting) <sup>1/</sup> that articles like or directly competitive with ceramic floor and wall tile produced by the Cambridge Tile Mfg. Co., Cincinnati, Ohio, are not, as a result in major part of concessions granted under trade agreements, being imported into the United States in such increased quantities as to cause, or threaten to cause, unemployment or underemployment of a significant number or proportion of the workers of such company.

Considerations Supporting the  
Commission's FindingViews of Chairman Sutton and  
Commissioners Leonard and Newsom

Our determination is in the negative for the reason that the conditions imposed by section 301(c)(2) of the Trade Expansion Act (TEA) have not been satisfied. Before an affirmative determination could be made in this investigation, it would have to be established in our investigation that each of the following conditions has been met:

- (1) imports of ceramic tile are increasing;
- (2) the increased imports are in major part the result of concessions granted under trade agreements;

---

<sup>1/</sup> The dissenting opinion of Commissioners Clubb and Moore are set forth beginning on page 13.

- (3) a significant number or portion of the workers of the Cambridge Tile Mfg. Co. are unemployed or underemployed or are threatened with unemployment or underemployment; and
- (4) the increased imports resulting from trade-agreement concessions are the major factor causing or threatening to cause the unemployment or underemployment.

If any one of these conditions is not met, an affirmative determination is not possible.

There can be no doubt that in this investigation conditions (1) and (3) have been satisfied. By any standard of measure, it is clear that ceramic tile is being imported in increasing quantities. Likewise, it is clear that a significant number or proportion of the workers of the Cambridge Tile Mfg. Co. are unemployed or underemployed. However, as is explained below, we are unable to conclude that the increased imports of ceramic tile are "in major part" the result of concessions granted under trade agreements (condition (2)).

Trade-agreement concessions have not been the only causal factor involved in the increased imports of ceramic tile. The increased imports have also been induced by a variety of other interrelated causes. The difficulties inherent in sorting out these causes and arriving at some judgment as to their respective weights does not permit us to ignore them or give them short shrift in carrying out our statutory responsibility.

Certain observations about increased imports are in order: imports increased from 11 million square feet in 1955 to 47 million square feet in 1959, and supplied an average of 11 percent of

domestic consumption; during 1960-64 imports increased from 64 million to 132 million square feet, and supplied 28 percent of consumption; imports increased irregularly between 1965 and 1969 from 135 million to 159 million square feet, and supplied 35 percent of U.S. consumption. We observe that the greatest increase in imports as a percentage of domestic consumption occurred many years after the granting of tariff concessions in 1948, 1951, and 1956.

For almost 15 years the domestic ceramic tile producers have been concerned about increasing imports of tile. During this period of time numerous investigations have been made by the Tariff Commission and other agencies of the U.S. Government. <sup>1/</sup> From the cumulative data amassed in the course of these investigations, it will be observed that the increased imports of ceramic tile are almost exclusively a phenomenon of the postwar resurgence and growth of Japanese industry.

During the past five years it has been the oft-repeated position of U.S. producers that their problems with imported tile do not stem from the tariff level or past trade-agreement concessions. Rather, it is said that these problems have arisen because the Japanese manufacturers and exporters, in concert with U.S. importers and

---

<sup>1/</sup> Tariff Commission investigations: Inv. No. TEA-W-5 (1963), TEA-W-6 (1967), and TEA-F-4 (1964); sec. 337, Tariff Act of 1930, as amended (1966); and sec. 332, Tariff Act of 1930, as amended (1966) (Inv. No. 332-50). Investigations by other agencies: Civil investigation by the Department of Justice, instituted in 1966; Treasury Department dumping complaints, Japanese ceramic wall tile (1965), and the United Kingdom ceramic wall tile (1969).



distributors, have systematically engaged in the use of restrictive distribution and pricing practices designed to capture the U.S. market. The Tariff Commission in the course of one of its investigations--instituted in October of 1966 at the request of the Committee on Ways and Means of the U.S. House of Representatives and placed in an inactive status in October 1968 without formal findings at the request of the Committee--received testimony and documentary evidence relating to these allegations. While the Commission is unable at this time to treat conclusively with the substance of all these allegations, it is possible to arrive at conclusions on certain important aspects thereof.

One of the practices complained of by domestic producers was that of the dumping of wall tile. A dumping complaint was filed in December 1965 with the Treasury Department under the provisions of the Anti-dumping Act of 1921, as amended. In this case, it is significant that (1) the Treasury found that the purchase price was lower than the adjusted home market price in a majority of the comparisons made, and (2) that the Treasury terminated its investigation only after assurances were given that no future sales would be made at less than fair value. From this and other information in the Commission's possession, we are satisfied that price discrimination was an extremely significant factor in the Japanese ability to obtain quickly so large a share of the U.S. tile market.

The investigations with respect to ceramic tile also produced evidence of the existence of other economic factors favorable to the Japanese in their penetration of the U.S. tile market. The

evidence unmistakably shows that the Japanese tile producers organized to maximize their exports to the United States through the establishment and maintenance of quantity and price controls. These controls varied from time to time and until 1966 were voluntary in nature. In 1966, however, as an outgrowth of the Treasury dumping investigation of wall tile and on the basis of informal negotiations with the U.S. Government, the Japanese government imposed mandatory quantitative controls on exports of wall and floor tile to the United States and minimum export prices on exports of wall tile to the United States. It is apparent to us that the imposition of these controls has resulted in the United Kingdom and Mexico, former major suppliers, regaining a significant share of the U.S. domestic wall tile market.

In addition, the Commission's investigations have shown the practice of the Japanese utilizing common sales agents in the United States as part of the distribution and sales arrangement and also the practice of Japanese producers granting rebates to certain U.S. purchasers.

Under the circumstances, we are satisfied that restrictive practices practiced by the Japanese far outweigh in importance the impact of the aggregate of duty concessions on ceramic tile as a causative factor in inducing increased imports thereof. Therefore, since condition (2) is not satisfied, we must perforce make a negative determination under section 301(c)(2) of the Trade Expansion Act.

Views of Commissioner Thunberg

On January 19, 1970, the Executive Secretary of the Stone, Glass and Clay Coordinating Committee of the United Glass and Ceramic Workers of North America (AFL-CIO-CLC) filed a petition under section 301(a)(2) of the Trade Expansion Act of 1962 on behalf of the workers at Cambridge Tile Manufacturing Co. In late 1969, Cambridge Tile laid off some 300 production and related workers, about three-fourths of its work force. It is alleged that this sharp reduction in employment has been caused by the inability of Cambridge Tile to compete in the marketplace because of increased imports brought about by past concessions. Accordingly, the petitioners request adjustment assistance for unemployed workers as provided for in section 301(c)(2) of the Trade Expansion Act.

An examination of the evidence developed in this investigation leads to the conclusion that one of the conditions imposed by the statute for adjustment assistance is not satisfied. The statute obliges me to find that each of the following conditions has been met:

- (1) imports are increasing;
- (2) the increased imports are in major part the result of concessions granted under trade agreements;
- (3) the workers producing like or directly competitive articles are unemployed or underemployed or are threatened with unemployment or underemployment; and

(4) the increased imports resulting from trade-agreement concessions are the major factor causing or threatening to cause the unemployment or underemployment.

Finding that condition (2) has not been satisfied, I have not proceeded further.

Imports of ceramic tile increased dramatically starting in the midfifties. Imports in the first half of the decade were (in millions of square feet):

1950-----	1.8	1953-----	3.8
1951-----	6.4	1954-----	5.3
1952-----	4.0	1955-----	16.2

Between 1955 and 1960, imports increased by 47 million square feet, representing an average annual increase of 31.6 percent. From 1960 to 1965 the absolute growth in imports was even more dramatic, amounting to 73 million square feet, but representing average annual growth of 16.6 percent.

During 1965-69, the increase in imports declined to only 23 million square feet, both because of the weak housing market in the United States and the institution of effective export controls by the Japanese industry and government. Nevertheless the average growth of imports in this period was 4.0 percent per annum.

The largest concessions under the reciprocal trade-agreement program were made before 1950. By the third round of GATT negotiations, in June 1951, duty rates on tile had been halved from the rates in the Tariff Act of 1930. Subsequently there was a

15 percent reduction at the fourth round in 1956 which was phased in steps of 5 percent over the 2-year period, 1956-58. There have been no duty reductions since that time.

The ad valorem equivalents of the former rates of duty for mosaic tile and wall tile for selected years are (in percent):

	<u>Mosaic</u>	<u>Wall</u>
1950-----	28.5	25.1
1955-----	27.1	25.9
1960-----	24.3	22.5
1963 to present-----	24.5	22.5

The reduction in duties (ad valorem equivalent) from 1950 to the present was 14 percent for mosaic tile and 10 percent for wall tile. Yet imports of tile grew by almost 300 percent during 1955-60, by more than 100 percent between 1960-65, or by more than 700 percent for the entire 10-year period 1955-65. I believe that it would be wholly unrealistic to conclude that this phenomenal increase in imports has been caused in major part by the relatively small decrease in duties since 1950. <sup>1/</sup>

Even going back to 1930 and considering the 57.5 percent reduction in duties on tile since that date, my finding would not be different. Fifty percent reductions in duty rates have by no means been rare in tariff bargaining. The Congress authorized reductions

---

<sup>1/</sup> The ad valorem equivalents are used here only to indicate the approximate duty reductions. Large variations in the ad valorem equivalents can occur depending on the composition of the trade, and these variations in turn would affect the indicated duty reductions. However, if the error in duty reductions calculated above is as much as 50 percent in either direction, the range in duty reductions from 1950 to 1963 would be only 7 to 21 percent for mosaic tile and only 5 to 15 percent for wall tile. This range of duty reductions would not materially affect my conclusion.

up to 50 percent for the first round of tariff negotiations at the GATT, as it did for the sixth round, the Kennedy Round. Although the overall average reduction in both cases was less than 50 percent, reductions for many individual items were as high as 50 percent. Such reductions, however, did not lead to import growth rates of 25 percent per year for the commodities affected. Rather, such reductions typically led to much more moderate import growth. In the case of tile imports, a return to statutory rates would involve more than doubling actual duties currently levied on both mosaic and wall tile, but in neither case would such a duty increase equal the amount of the price differentials prevailing between domestic and imported tile. I conclude therefore that imports in the years 1950-1969 would not have been enormously reduced but for the duty reductions that have occurred since 1930, and that some factor or group of factors other than the tariff concessions are necessary to explain in major part the increase in imports.

The Japanese economy has provided the bulk of imports of floor and wall tile. Several factors combined to bring about the large increase in exports of tile from Japan to the United States. The market for tile in the United States expanded greatly after 1950 in response to a high level of construction. Japanese tile makers, producing quality products at a relatively low cost, have obtained an increasing share of this market. In particular, the Japanese have produced glazed mosaic tile at a cost sufficiently low to create an entirely new market for this product in the United States.

I consider it significant that meaningful comparisons of prices for domestic and imported glazed mosaic tile are not possible (see page A16 of factual report).

Japanese tile manufacturers and exporters have acted together to control the competition in Japan and to expand the volume of their exports to the United States. As early as 1958, the Japanese tile manufacturers and exporters agreed voluntarily to adhere to "lowest standard prices" (check prices) on mosaic tile and wall tile for export to the United States. The Ministry for International Trade and Industry (MITI) was requested to enforce the check prices. MITI found that in the first half of 1960 almost one-third of the industry was invoicing tile at an average 25 percent below the check prices. Voluntary quotas were established for exports of unglazed mosaic tile in 1960 and for glazed mosaic tile in 1962, but were so administered by the industry that they not only did not hinder exports but in fact promoted them.

In April 1966, following the filing of a dumping complaint on imports of wall tile from Japan, the Japan Pottery Exporters Association (JPEA) set an overall voluntary quota of 34 million square feet of wall tile to be exported to the United States from April 1, 1966 to March 31, 1967. JPEA also set suggested minimum export prices to the United States. In October 1966, MITI imposed mandatory quotas on both glazed and unglazed mosaic tile for export to the United States and Canada, and made mandatory JPEA's voluntary quota and minimum prices on exports of wall tile to the United States. These

recent restrictions appear to have been effective in limiting exports and are partially responsible for the reduced rate of import growth since 1965, as noted above.

In summary I believe that the entire series of tariff reductions since 1930 in timing and relative importance was not capable of explaining the enormous expansion of imports, and therefore the increased imports were not in major part the result of concessions granted under trade agreements. The import growth appears to have been caused by product differentiation and by the concerted efforts by Japanese producers to maximize exports, through the use of a variety of more or less orthodox trade practices.



## Dissenting Opinion of Commissioners Clubb and Moore

This investigation relates to a group of workers at the Cambridge Tile Mfg. Co., who have petitioned for adjustment assistance under the provisions of the Trade Expansion Act of 1962. We find that the criteria set forth in section 301(c)(2) of that Act have been met: (1) The relevant imports have increased; (2) the increase is attributable in major part to trade-agreement concessions; (3) the workers concerned are unemployed; and (4) the increased imports were the major factor causing such unemployment.

Increased imports

The first statutory requirement is that imports must have increased. U.S. imports of ceramic mosaic and wall tile--the products like or directly competitive with the articles produced by the petitioning workers--were at a record level in 1969. Entries of such tile in that year amounted to 159 million square feet, compared with 47 million square feet a decade earlier (table 3). Indeed, the growth in annual imports of ceramic mosaic and wall tile has been almost uninterrupted in the period since World War II. The first of the requirements has been met.

In major part

The second statutory requirement is that the increased imports must result in major part from concessions granted under trade agreements. As we have stated in previous decisions, 1/ in order to

---

1/ Buttweid Pipe, Inv. No. TEA-W-8 (1969) at 8-11, and Transmission Towers and Parts, Inv. No. TEA-W-9 and TEA-W-10 (1969) at 10-11.

determine whether this requirement has been met, we need only ask whether imports of the product concerned would be at substantially their present level had it not been for the aggregate trade-agreement concessions granted thereon since 1934. <sup>1/</sup> If they would not, then the increased imports have been a result in major part of the concessions.

The pre-trade-agreement (statutory) rates of duty on ceramic mosaic and wall tile were 10 cents per square foot, but not less than 50 percent nor more than 70 percent ad valorem for tile valued at not more than 40 cents per square foot, and 60 percent ad valorem for tile valued at more than 40 cents per square foot. When the Tariff Schedules of the United States (TSUS) was adopted in 1963, the column 2 rates were set at 55 percent ad valorem; such rates thus became the statutory rates for purposes of action under the Trade Expansion Act. The current rates of duty applicable to U.S. imports of ceramic mosaic and wall tile are 24.5 percent on mosaic tile and 22.5 percent on other such tile. Based on information obtained in the investigation, the difference between the present duty and the 55-percent rate at current market prices amounted to 7 cents per square foot for the typical mosaic tile and 8 cents per square foot for the typical wall tile imported into the United States.

In the major metropolitan areas of the United States, where the great bulk of the imported tile is marketed, the price competition between imported and domestic tile has been severe. In 1969 the

---

<sup>1/</sup> An earlier finding by Commissioners Fenn and Talbot relies on the same reason. National Tile & Mfg. Co., Inv. No. TEA-F-5 (1964) at 21.

prices of wall tile quoted by domestic manufacturers to distributors in the New York City area were from 5 to 7 cents higher than the delivered cost of imported wall tile, although frequently the domestic manufacturers negotiated reductions in prices to approximately the delivered cost of the imported tile in order to make sales. Although price is not the only factor influencing sales of wall tile, it is clear that the volume of imports would not have been at the high level they reached if the duty had been about 8 cents per square foot higher than it was. We have reached a similar conclusion with respect to mosaic tile, although the price margins between the imported and domestic mosaic tile generally are greater than those of wall tile, and the price competition has been less severe. In view of the foregoing, we have found that the second statutory requirement has been satisfied.

#### Underemployment or unemployment

The third requirement is that the petitioners must be underemployed or unemployed or both. The Cambridge Tile Mfg. Co. operates one manufacturing plant. The great bulk of its output has consisted of wall and mosaic tile (chiefly the former). In the fall of 1969, when the company discontinued production of two of its three major tile lines, employment of production and related workers declined greatly. Ninety-nine such workers were employed at the close of 1969, while 382 workers had been employed at the beginning of the year. Thus, the third statutory requirement has been met.

Major factor

As the final requirement, the concession-generated imports must be the major factor in causing the underemployment or unemployment of the workers concerned. As the majority (5-1) explained in the affirmative findings in the Buttweld Pipe and Transmission Towers and Parts decisions, this requirement is met if the unemployment would not have occurred had it not been for the increased imports.

The recent problems afflicting the Cambridge Tile Mfg. Co. have been closely associated with the increased imports of tile sold in the United States at highly competitive prices. The sharp price competition affected particularly Cambridge's wall tile output which in recent years has represented about three-fifths of the company's total business. For a number of years the company produced an economy line of wall tile which it offered at prices nearly a fifth below those of its prestige line. In an effort to compete more effectively with low-priced imported tile, the company made a substantial investment early in 1969 seeking to reduce the cost of producing its prestige wall tile. These efforts proved unsuccessful because of the contemporaneous growth of imports. Major layoffs of tile workers followed. We conclude that, had imported tile not been available in increased quantities at low prices, the company would not have had to close down two of its three tile production lines.

The circumstances affecting the workers at the Cambridge Tile Mfg. Co. are the type envisaged by the adjustment assistance provisions of the Trade Expansion Act. We find that the petitioners have met the criteria of that Act, and we believe they are entitled to adjustment assistance as provided by that Act.

APPENDIX



## Information Obtained in the Investigation

U.S. tariff treatment

Ceramic mosaic tiles, which are currently classified under the Tariff Schedules of the United States (TSUS) item 532.21, are dutiable at 24.5 percent ad valorem; other (than mosaic) glazed ceramic floor and wall tiles (hereinafter referred to as wall tile and currently classified under item 532.24) are dutiable at 22.5 percent ad valorem. These rates were established by the TSUS, effective August 31, 1963 (table 1), and represented the average ad valorem equivalents of the four different rates that had been applicable to such tiles prior to the coming into effect of the TSUS.

Before the TSUS entered into force, ceramic floor and wall tiles had been classified under paragraph 202 of the Tariff Act of 1930 (table 2). Such tiles valued not over 40 cents per square foot had been dutiable at  $4\frac{1}{4}$  cents per square foot but not less than 21 percent nor more than 30 percent ad valorem; such tiles valued over 40 cents per square foot had been dutiable at  $25\frac{1}{2}$  percent ad valorem. These rates resulted from duty reductions, granted under trade agreements, from the statutory rates of 10 cents per square foot but not less than 50 percent nor more than 70 percent ad valorem on tiles valued not over 40 cents, and from 60 percent ad valorem on tiles valued over 40 cents per square foot.

The initial major tariff concession applicable to ceramic floor and wall tiles, amounting to a reduction of 50 percent in the rates applicable to wall tiles was granted in the Mexican Trade Agreement, effective January 30, 1943; this concession was terminated, effective January 1, 1951, but the rate of duty of 30 percent ad valorem for wall tiles valued at more than 40 cents per square foot continued in effect pursuant to a 1948 concession granted under the General Agreements on Tariffs and Trade (GATT). The minimum rate applicable to wall tiles valued at not more than 40 cents per square foot was increased from 25 percent to 30 percent, rather than to the statutory rate of 50 percent, in accordance with a 1948 GATT concession. The rates of duty on ceramic mosaic tiles valued at not more than 28-4/7 cents per square foot were 7 cents per square foot but not less than 35 percent nor more than 40 percent ad valorem from January 1, 1948, to June 6, 1951. These rates were established to avoid increasing the Cuban margin of preference. The rate of duty applicable to mosaic tiles valued over 28-4/7 cents, but not over 33-1/3 cents per square foot was 10 cents per square foot (the statutory rate). The rate of duty applicable to such tiles valued over 33-1/3 cents but not more than 40 cents per square foot was 30 percent ad valorem from January 1, 1948, to June 6, 1951, in accordance with a 1948 GATT concession. The rate applicable to such tiles valued over 40 cents per square foot was 30 percent ad valorem in accordance with a 1948



GATT concession. Effective June 6, 1951, additional concessions under GATT resulted in rates applicable to mosaic tiles and wall tiles valued at not more than 40 cents per square foot of one-half the Tariff Act rates. Further concessions were granted in 1956 resulting in these rates and the rate for such tiles valued at more than 40 cents per square foot being reduced by about 15 percent in three annual stages, the final stage becoming effective June 30, 1958. No concessions were granted on ceramic mosaic tiles and wall tiles in the Kennedy Round tariff negotiations.

The current rates of duty applicable to ceramic mosaic and wall tiles are considerably lower than the statutory rate. In terms of the amounts of duty per square foot, the current and statutory rates of duty were as follows (in cents per square foot, based on imports in 1969):

<u>Item</u>	<u>Current rate</u>	<u>Statutory rate</u>
Mosaic tiles:		
Glazed-----	5.8	13.0
Other-----	4.8	10.8
Wall tiles-----	5.5	13.6

The ad valorem equivalents of these former compound rates of duty, for mosaic tile and wall tile during years 1947-63, are shown as follows (in percent):

<u>Year</u>	<u>Mosaic tile</u> <sup>1/</sup>	<u>Wall tile</u>
1947-----	36.6	27.2
1948-----	26.8	26.3
1949-----	27.2	29.2
1950-----	28.5	25.1
1951-----	<u>2/</u> 36.5	<u>2/</u> 36.3
1952-----	28.8	26.0
1953-----	28.3	26.1
1954-----	29.0	26.2
1955-----	27.1	25.9
1956-----	26.5	25.2
1957-----	26.1	23.7
1958-----	25.2	23.3
1959-----	24.3	22.8
1960-----	24.3	22.5
1961-----	23.6	22.6
1962-----	22.8	22.7
1963 <u>3/</u> -----	23.2	22.9

1/ Includes all imports reported in official statistics as ceramic mosaic tile and, prior to 1962, includes imports reported under the category "other unglazed tile." Imports in this "other" category before 1962, were largely mosaic tile.

2/ The termination of the Mexican Trade Agreement, effective Jan. 1, 1951, resulted in higher rates of duty being applied to "other unglazed tile" and wall tile during the period Jan. 1-June 5, 1951.

3/ Effective Aug. 31, 1963, the TSUS established ad valorem rates of duty for ceramic mosaic tile (24.5 percent) and for ceramic wall tile (22.5 percent).

Description and uses

Both industry practice and U.S. tariff treatment distinguish three major types of ceramic floor and wall tile: Unglazed or glazed mosaic tile (tile having a facial area of less than 6 square inches); glazed wall tile (glazed tile having a facial area of 6 square inches or more); and quarry and other paving tile (unglazed tile having a facial area of 6 square inches or more).

The Cambridge Tile Mfg. Co., the employer of the petitioning workers, is one of the major U.S. producers of mosaic tile and wall tile.

\* \* \* \* \*

Mosaic tile, whether glazed or unglazed, has a thickness of about one-fourth inch; it is usually produced in rectangular shapes which are fitted together to form various designs. The colors of glazed mosaic tile are put into the glaze coating, whereas the colors of unglazed mosaic tile are mixed throughout the body of the

tile. In recent years the demand for mosaic tile in many colors and textures has increased, requiring more glazed mosaic tile; glazed tile lends itself to more pleasing variations than does the unglazed tile. Nearly all mosaic tile is sold mounted in patterns on sheets usually 1 x 2 feet. Mosaic tile is either "face-mounted," i.e., mounted on paper cemented to the face of the tile with a water-soluble adhesive, or "back-mounted," i.e., mounted permanently on material cemented to the back of the tile. Back-mounted tile, which comprises the greater part of mosaic tile consumed, is usually sold at higher prices than is the face-mounted tile, because its production requires costlier mounting materials and more labor. Nevertheless, the cost saving which back-mounted tile affords the contractor when installing the tile generally exceeds the additional charge for back-mounting.

Currently most wall tile is produced by the one-fire process, that is, the pressed tile body is sprayed with glazing materials and fired. In the older two-fire process, the pressed tile body is fired and then sprayed with glazing materials and refired at a lower temperature. Wall tile, which is nearly always installed singly, is usually about 5/16-inch thick and 4-1/4 inches square.

Nearly all mosaic tile and wall tile consumed in the United States is installed as a surfacing material in building construction, either on floors, or interior or exterior walls, or counter tops, columns, and the like. Mosaic tile is used primarily as a

floor-surfacing material where resistance to wear and/or moisture are important. In recent years, however, the use of such tile on bathroom walls as a replacement for wall tile and on interior and exterior walls as a medium of architectural expression has increased. Wall tile is limited to interior use--mainly on walls; recently, however, crystalline-glazed wall tile <sup>1/</sup> has been used in substantial amounts on residential bathroom floors.

Ceramic mosaic tile and wall tile compete not only with one another but also with unglazed tile other than mosaic as well as with nonceramic materials. The nonceramic materials which are most competitive with mosaic tile are homogeneous vinyl and vinyl asbestos. Other competing materials include steel, aluminum, and hardboard sheets, enameled with simulated tile designs. The chief alternatives to wall tile are waterproof fabric and paper and enamel. Although all of these products are less expensive than the ceramic tile, ceramic tile is the more durable. The introduction of new patterns and glaze effects, moreover, has contributed materially to making ceramic tile competitive with alternative materials.

---

<sup>1/</sup> Wall tiles are made with three distinct surfaces: (1) bright-glazed, a smooth and glossy surface; (2) matte-glazed, a non-reflective surface that is not as slippery (smooth) as bright-glazed; and (3) crystalline-glazed, a textured surface that does not show scratches, and is not as slippery as the other types.

U.S. consumption

Annual U.S. consumption of floor and wall tile increased irregularly from 228 million square feet in 1955 to 396 million square feet in 1964, an annual average increase of 6.3 percent. During this period consumption of mosaic tile increased from 41 million square feet to 104 million square feet, an annual average increase of 10.9 percent; consumption of wall tile increased from 187 million square feet to 292 million square feet, an annual average increase of 4.5 percent. In 1964 consumption of mosaic tile accounted for 26 percent of total consumption of floor and wall tile compared with 18 percent in 1955.

U.S. consumption of floor and wall tile was slightly higher in 1965 than in 1964, then declined in 1966 and 1967, amounting to 341 million square feet in the latter year. Such consumption increased in 1968 and 1969, amounting to 413 million square feet in 1969 (table 3). Annual consumption of unglazed mosaic tile declined from 50 million square feet in 1965 to 43 million square feet in 1968, then increased to 46 million square feet in 1969. Consumption of glazed mosaic tile fluctuated between 39 million and 52 million square feet between 1965 and 1968, then increased to 65 million square feet in 1969 (table 4). Consumption of wall tile declined from 297 million square feet in 1965 to 258 million square feet in 1967, then increased, amounting to 302 million square feet in 1969

(table 5). Wall tile accounted for about 75 percent of total consumption in each year (table 6).

The overall upward trend in annual consumption from 1955 to date resulted from several factors: (1) extensive promotional efforts by domestic tile producers; (2) increase in the number of bathrooms per housing unit; (3) increased use of tile as an architectural medium on both interior and exterior walls; (4) development of simpler installation methods in the mid-1950's; and (5) increased availability of imported tile, principally from Japan. The declines in consumption in 1957, 1960-61, and 1966-67 were accounted for partly by the declines in housing starts and new residential construction in those years (table 7).

#### U.S. imports

Since the middle 1950's, annual U.S. imports of floor and wall tile have increased greatly. Such imports totaled 16 million square feet in 1955, 63 million feet in 1960, 135 million feet in 1965, and 159 million feet in 1969. As a percent of apparent consumption, imports rose from an annual average of 11 percent during 1955-59 to 35 percent during 1965-69 (table 3).

As noted earlier, the floor and wall tile market in the United States may be divided into two broad sectors--wall tile and mosaic tile. The impact of imports upon the two sectors of the U.S. tile market has been different. Imports of wall tile have supplied a

smaller share of the U.S. wall tile market than that supplied by imported mosaic tile to the U.S. mosaic tile market. During the 5-year period 1965-69, imports of wall tile, expressed as a percent of U.S. wall tile consumption, ranged from a low of 21 percent in 1967 to a high of 29 percent in 1968 (table 5). On the other hand, in the same 5-year period, imports of mosaic tile, as a percent of domestic mosaic tile consumption, increased from 63 to 68 percent. When distinction is made between unglazed and glazed mosaics, additional trade patterns emerge. During the same 5-year period, imported unglazed mosaic tile decreased from 34 to 26 percent in 1967 and 1968 and increased in 1969 to 28 percent of apparent U.S. consumption, while imported glazed mosaic tile rose from 93 to 97 percent of consumption (table 4). Imports of glazed mosaic tile have virtually dominated a growing separate and distinct market and also compete with other types of tile and with nonceramic floor and wall coverings.

Although Japan is overwhelmingly the most important supplier of floor and wall tile to the U.S. market, its share of the quantity of U.S. wall tile imports during 1965-69 decreased--from 71 percent in 1965 to 49 percent in 1969 (table 9). During this period, the United Kingdom increased its quantity share of U.S. imports of wall tile from 10 percent in 1965 to 24 percent in 1969; Italy, correspondingly, from 5 percent to 6 percent. Japan supplies virtually all U.S. imports of mosaic tile (table 8).



Although imported floor and wall tile are sold widely throughout the United States, a large share is marketed in large metropolitan areas. While such areas are estimated to have received nearly 40 percent of domestic tile shipments in 1966, they are also estimated to have been the market for about 80 percent of imported tile shipments.

An examination of the weighted average prices received by domestic producers and importers <sup>1/</sup> indicates that imported tile was lower priced than domestic tile in the U.S. market. In 1966 the weighted average price of domestic unglazed mosaic tile was 45 cents per square foot compared with 29 cents per square foot for imported Japanese tile; the price for standard grade domestic wall tile was 40 cents per square foot compared with 30 cents per square foot for Japanese wall tile. However, in the large metropolitan areas where the bulk of the imported tile has been sold, the price-spread has not been so pronounced. (See the later section on prices of domestic and imported tile.)

In past years, importers have had to cope with several problems. Most importers have had to anticipate their demands several months in advance. Generally the Japanese producers manufacture tile only against firm orders. Also, Japanese producers generally accept

---

<sup>1/</sup> Prices charged U.S. importers by Japanese manufacturers and exporters were not available because Japanese suppliers resorted to rebates, allowances, and other discount pricing practices. The effect of these practices was not reflected in official import statistics.

orders only when accompanied by letters of credit, inhibiting operations by small importers.

More recently, to increase availability, the larger importers have established warehouse facilities in which standard items are stocked. In recent years several companies have made arrangements with Japanese trading companies to buy tile on a credit basis.

U.S. sales and inventories <sup>1/</sup>

Annual U.S. shipments of domestically-produced mosaic tile fluctuated within narrow limits between years 1955 and 1964; annual shipments of wall tile, however, increased irregularly during this period. Since 1964, as indicated in the following tabulation, annual shipments of mosaic tile have been static while those for wall tile declined from 1965 to 1967, but then increased in 1968 and 1969 (in millions of square feet):

<u>Year</u>	<u>Mosaic tile</u>	<u>Wall tile</u>
1965-----	37	226
1966-----	35	217
1967-----	35	204
1968-----	34	215
1969-----	36	219

Yearend inventories of mosaic tile held by U.S. producers, as a percent of annual sales, increased from 31 percent in 1963 to

---

<sup>1/</sup> Annual U.S. exports are estimated at 1 million square feet.

36 percent in 1966; yearend inventories of wall tile increased from 19 percent of annual sales in 1963 to 24 percent in 1966. <sup>1/</sup> The expansion in inventory during this period reflected, in part, the attempt by producers to provide quicker delivery of an increasing variety of types, designs, and colors of ceramic tile. Many firms scrap part of their inventories each year, primarily owing to the obsolescence of the tile.

\* \* \* \* \*

Prices of domestic and imported tile <sup>2/</sup>

Prices in the mid-1960's.--Competition between imported and domestic floor and wall tile has been most intense in the large metropolitan areas along the East Coast. In 1966 nearly 40 percent of total domestic tile output and 80 percent of the imported tile was sold in the 25 metropolitan areas having the greatest amount of housing construction during 1964-65. These 25 areas used about half of all floor and wall tile consumed in the United States in 1966; about 48 percent of the floor and wall tile consumed was domestic and 52 percent, imported. Outside of these 25 areas, 86 percent of the floor and wall tile consumed was domestic and the remainder, imported.

---

<sup>1/</sup> Comparable data on inventories for more recent years are not available.

<sup>2/</sup> Extensive price data on ceramic tile are available to the Commission only for the years 1963-66; price data for 1967-69 are in less detail.

The prices of domestic tile in the United States have been higher than the prices of comparable tile imported from Japan. In 1966 the average prices to distributors <sup>1/</sup> of unglazed white mosaic tile were 44.1 and 28.6 cents per square foot for domestic and imported Japanese tile, respectively (a difference of 15.5 cents); prices of glazed mosaic tile were 52.3 and 32.0 cents, respectively (a difference of 20.3 cents); and those of standard glazed wall tile, 40.0 and 29.1 cents, respectively (a difference of 10.9 cents). Thus, in terms of percentages, prices of domestic tile were 54 percent higher than imported tile for white unglazed mosaic, 63 percent higher for glazed mosaic, and 37 percent higher for wall tile.

The differences between average prices to U.S. distributors for domestic and Japanese mosaic tile in 1966 were 7.3 cents per square foot higher for white unglazed and 2.7 cents per square foot higher for glazed than in 1963. Conversely, the spread between average prices to distributors for domestic and imported standard glazed wall tile was 1.8 cents narrower in 1966 than in 1963, indicating increasingly intense price competition for the available market.

Average prices for both glazed and unglazed mosaic tile from Japan were about 7 cents per square foot (some 20 percent) lower in

---

<sup>1/</sup> Average prices to contractors--who generally function as the second level of tile distribution--range from 3 to 10 cents per square foot higher than average prices to distributors.

1966 than in 1963. The average price for imported standard wall tile was 1.3 cents (4 percent) lower in 1966 than in 1963. Average prices of domestic floor and wall tile (except white unglazed mosaic) were from 4 to 7 percent lower in 1966 than in 1963; for white unglazed mosaic it was 3 percent higher.

Installed floor and wall tile is largely indistinguishable to the ultimate consumer as to the country of origin or the particular manufacturer, and such consumers are not the primary objectives in marketing. Domestic producers direct their promotional and selling efforts largely towards architects, builders, tile contractors, and distributors of tile. Importers generally compete for sales on the basis of price, and their promotional effort is minimal.

Prices in the latter 1960's.--In 1969 the actual domestic prices received for standard-grade white and colored wall tile in most U.S. areas were slightly--possibly 5 percent--higher than during 1966-67. However, domestic prices in New York City and some other metropolitan areas in 1969 were quite unstable; many domestic producers sold at prices necessary to meet those of competitors. Thus, although the quoted large-quantity price in 1969 to distributors for domestic white wall tile in the New York City area may have been about 38 cents per square foot, frequently the negotiated domestic price approximated the delivered cost of 31 to 33 cents for Japanese wall tile to importer-distributors in that market area.

Available information indicates that the national average price to distributors for domestic bright glazed flat wall tile of standard grade was in the vicinity of 42 to 43 cents per square foot in 1969, compared with 40 cents in 1966; to contractors, the comparable price in 1969 was 49 to 50 cents, unchanged from 1966. <sup>1/</sup> It appears that the distributor-contractor price spread was, on the average, some 2 cents less than in 1966, indicating that contractors were increasingly successful in negotiating favorable prices.

For grades of domestic wall tile other than standard, prices were highly variable from company to company, area to area, and even job to job.

Meaningful comparisons of prices for domestic and imported glazed mosaic tile are not possible because much of the imported mosaics are unlike the domestic mosaics.

A knowledgeable industry source compiled data showing that the average U.S. price of 1" x 1" unglazed, white mosaic tile sold to distributors by domestic producers was 51 cents per square foot in 1968 and 52 cents in 1969, compared with 43 cents in 1963 and 44 cents in 1966. Such average prices for the unglazed mosaic tile are estimated to be some 10 to 15 cents higher than prices for comparable imported unglazed mosaic tile.

---

<sup>1/</sup> Both domestic and imported wall tile are sold largely through distributors and contractors. Many distributors of imported tile are direct importers.

Data respecting average prices to distributors for imported wall tile are not available. Importers and distributors contacted during the investigation reported, however, that such prices probably were from 1 to 3 cents per square foot higher for tile from Japan in most markets in 1969 than in 1966, and 1 to 3 cents lower for tile from the United Kingdom. As a result, British wall tile has been frequently lower in price than the Japanese in certain areas. For instance, in New York City the large-quantity, distributor price (i.e., landed, duty-paid) for white wall tile reportedly was 29 to 31 cents for British and 31 to 33 cents for Japanese. In most other sections of the country, prices were several cents higher than in New York City. All or nearly all imported wall tile is of standard grade.

Importers and distributors of imported glazed ceramic mosaic tile were in accord that prices of such products have increased 10 to 20 percent in the past 3 years. Such a situation would not be unexpected, inasmuch as imports are dominant in a market that includes only small amounts of the much higher priced domestic article.

Prices received by the Cambridge Tile Mfg. Co.--

\* \* \* \* \*

The Cambridge Tile Mfg. Co.  
operations, production, and sales

The company operates one manufacturing establishment located in an industrial suburb of Cincinnati, Ohio. The company has no other holdings or interests in other companies. For business reasons, operations had been divided into the following four product divisions: (1) one-fire wall tile (Camtile); (2) two-fire wall tile (Suntile); (3) ceramic mosaic tile; and (4) miscellaneous nontile products (adhesives used for ceramic tile installation, and plastic floor covering materials and installations). Production facilities are located in two principal buildings.

\* \* \* \* \*

Employment

\* \* \* \* \*



Profit-and-loss experience

\* \* \* \* \*

Table 1.--Ceramic floor and wall tile: U.S. rates of duty in the  
 Tariff Schedules of the United States (TSUS), effective August 31,  
 1963 1/

TSUS item	Description	Rate of duty <u>2/</u>	
		1	2
	Ceramic tiles:		
	Floor and wall tiles:		
532.21	Mosaic tiles-----	24.5% ad val.	55% ad val.
	Other:		
532.24	Glazed-----	22.5% ad val.	55% ad val.

1/ The Tariff Schedules of the United States (TSUS) simplified the tariff treatment for ceramic floor and wall tile by eliminating the proliferation of rate provisions under par. 202(a) of the Tariff Act of 1930, as amended.

2/ The rates in col. 1 apply to all products except (a) Philippine articles, which receive preferential treatment, (b) products of most Communist-controlled countries, which are dutiable at the rates shown in col. 2, and (c) certain products of insular possessions.

Table 2.--Ceramic floor and wall tiles: U.S. rates of duty under the Tariff Act of 1930, as modified prior to August 31, 1963

(Cents per square foot; percent ad valorem)			
Tariff paragraph and description	Tariff Act of 1930		
	Statutory rate <sup>1/</sup>	Trade-agreement modification	
		Rate	Effective date and basis of change <sup>2/</sup>
Par. 202(a):			
Tiles, unglazed, glazed, ornamented, hand painted, enameled, vitrified, semivitrified, decorated, encaustic, ceramic mosaic, flint, spar, embossed, gold decorated, grooved or corrugated, and all other earthen tiles and tiling by whatever name known (except pill tiles, quarries or quarry tiles, and tiles wholly or in part of cement):			
Floor and wall tiles:			
Valued at not more than 40¢ per sq. ft.	10¢ sq. ft.; 50% min.; 70% max.	5¢ sq. ft.; 25% min.; 35% max. <sup>3/4/</sup>	1/30/43; Mex.
		10¢ sq. ft.; 30% min.; 70% max. <sup>5/</sup>	1/1/48; GATT.
		5¢ sq. ft.; 25% min.; 35% max.	6/6/51; GATT.
		4-3/4¢ sq. ft.; 23-1/2% min.; 33% max.	6/30/56; GATT.
		4-1/2¢ sq. ft.; 22-1/2% min.; 31-1/2% max.	6/30/57; GATT.
		4-1/4¢ sq. ft.; 21% min.; 30% max.	6/30/58; GATT.
Valued at more than 40¢ per sq. ft.	60%	26¢ sq. ft.; 30% min.; 60% max. <sup>3/6/</sup>	1/1/39; U.K.
		30% <sup>3/4/</sup>	1/30/43; Mex.
		30%	1/1/48; GATT.
		28-1/2%	6/30/56; GATT.
		27%	6/30/57; GATT.
		25-1/2%	6/30/58; GATT.

<sup>1/</sup> Originally provided for in the Tariff Act of 1930. This rate applied to products of Communist-dominated countries or areas designated by the President in accordance with sec. 5 of the Trade Agreements Extension Act of 1951, as amended.

<sup>2/</sup> The date shown represents that of the trade agreement in which the modified rate was effected; GATT refers to the General Agreement on Tariffs and Trade.

<sup>3/</sup> Not applicable to mosaic tile.

<sup>4/</sup> Terminated; effective Jan. 1, 1951.

<sup>5/</sup> The rate of duty on ceramic mosaic tiles valued at not more than 28-4/7 cents per square foot was 7 cents per square foot but not less than 35 percent or more than 49 percent ad valorem from Jan. 1, 1948, to June 6, 1951. This rate was established to avoid increasing the Cuban margin of preference.

<sup>6/</sup> Applicable to glazed clay tile.

Table 3.--Ceramic floor and wall tile (except quarry tile): U.S. producers' shipments, imports for consumption, exports of domestic merchandise, and apparent consumption, 1955-69

(In millions of square feet)

Year	Ship- ments <sup>1/</sup>	Imports	Exports	Apparent consump- tion	Ratio (percent) of imports to consumption
1955-----	218	16	6	228	7
1956-----	215	23	6	232	10
1957-----	189	17	5	201	8
1958-----	198	24	4	217	11
1959-----	232	47	3	276	17
1960-----	211	63	1	273	23
1961-----	204	64	2	266	24
1962-----	226	83	2	307	27
1963-----	249	104	1	351	30
1964-----	265	132	1	396	33
1965-----	263	135	1	397	34
1966-----	252	127	1	379	34
1967-----	239	<sup>2/</sup> 103	1	341	30
1968-----	249	<sup>2/</sup> 147	1	395	37
1969-----	255	<sup>3/</sup> 159	1	413	38

<sup>1/</sup> Data for 1955-67 compiled from reports to the Tariff Commission by domestic producers, except data for wall tile (glazed ceramic tile other than mosaic) in 1955-62 which is partly estimated.

<sup>2/</sup> Data adjusted to compensate for incorrect quantities reported for the imports from Italy.

<sup>3/</sup> Adjusted; subject to revision.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

Note.--Because of rounding, figures may not add to the totals shown.

Table 4.--Ceramic mosaic tile: U.S. producers' shipments, imports for consumption, exports of domestic merchandise, and apparent consumption, by types, 1955-69

(In millions of square feet)					
Year	Shipments <sup>1/</sup>	Imports <sup>2/</sup>	Exports <sup>3/</sup>	Apparent consumption	Ratio (percent) of imports to consumption
Unglazed					
1955	33	<sup>4/</sup>	-	<sup>4/</sup>	<sup>4/</sup>
1956	34	<sup>4/</sup>	-	<sup>4/</sup>	<sup>4/</sup>
1957	32	6	-	37	15
1958	33	9	-	41	22
1959	36	17	-	53	33
1960	31	17	-	48	36
1961	32	13	-	45	29
1962	34	17	-	50	33
1963	34	17	-	51	34
1964	34	24	-	57	41
1965	33	17	-	50	34
1966	32	16	-	47	33
1967	32	12	-	44	26
1968	32	11	-	43	26
1969	33	13	-	46	28
Glazed					
1955	3	<sup>4/</sup>	-	<sup>4/</sup>	<sup>4/</sup>
1956	3	<sup>4/</sup>	-	<sup>4/</sup>	<sup>4/</sup>
1957	3	2	-	5	44
1958	3	4	-	6	55
1959	4	8	-	11	68
1960	4	11	-	15	75
1961	4	12	-	16	78
1962	4	21	-	25	85
1963	4	32	-	36	89
1964	4	43	-	46	92
1965	4	47	-	50	93
1966	3	48	-	51	94
1967	2	37	-	39	94
1968	2	50	-	52	96
1969	2	62	-	65	97
Total, unglazed and glazed					
1955	36	5	-	41	12
1956	37	9	-	46	20
1957	34	8	-	42	18
1958	36	12	-	48	26
1959	39	25	-	64	39
1960	35	28	-	63	45
1961	35	25	-	61	42
1962	38	37	-	75	50
1963	38	50	-	87	57
1964	38	66	-	104	64
1965	37	64	-	100	63
1966	35	64	-	99	65
1967	35	48	-	83	58
1968	34	61	-	95	64
1969	36	75	-	111	68

<sup>1/</sup> Data for 1955-67 compiled from reports to the Tariff Commission by domestic producers.

<sup>2/</sup> Data shown for unglazed and glazed mosaic tile for 1955-63 are estimated on the basis of data submitted to the Tariff Commission by importers.

<sup>3/</sup> Data are omitted because exports were very small during the period.

<sup>4/</sup> Not available.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

Note.--Because of rounding, figures may not add to the totals shown.

Table 5.--Glazed ceramic wall tile (except mosaic): U.S. producers' shipments, imports for consumption, exports of domestic merchandise, and apparent consumption, 1955-69

(In millions of square feet)

Year	Shipments <sup>1/</sup>	Imports	Exports	Apparent consumption	Ratio (percent) of imports to consumption
1955-----	182	11	6	187	6
1956-----	178	14	5	187	7
1957-----	155	9	4	160	6
1958-----	162	12	4	170	7
1959-----	193	22	2	213	10
1960-----	176	35	1	210	17
1961-----	169	39	2	206	19
1962-----	188	46	1	233	20
1963-----	211	54	1	264	20
1964-----	227	66	1	292	23
1965-----	226	72	1	297	24
1966-----	217	64	1	280	23
1967-----	204	<sup>2/</sup> 55	1	258	21
1968-----	215	<sup>2/</sup> 86	1	300	29
1969-----	219	<sup>3/</sup> 84	1	302	28

<sup>1/</sup> Data for 1955-62 partly estimated. Data for 1963-67 compiled from reports to the Tariff Commission by domestic producers.

<sup>2/</sup> Data adjusted to compensate for incorrect quantities reported for the imports from Italy.

<sup>3/</sup> Adjusted; subject to revision.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

Note.--Because of rounding, figures may not add to the totals shown.

Table 6.--Ceramic floor and wall tile (except quarry tile):  
U.S. apparent consumption, by types, 1965-69

Year	Mosaic tile			Wall tile	Total tile
	Unglazed	Glazed	Total		
Quantity (million square feet)					
1965-----	50	50	100	297	397
1966-----	47	51	99	280	379
1967-----	44	39	83	258	341
1968-----	43	52	95	300	395
1969-----	46	65	111	302	413
Percent of total tile					
1965-----	12	13	25	75	100
1966-----	12	14	26	74	100
1967-----	13	11	24	76	100
1968-----	11	13	24	76	100
1969-----	11	16	27	73	100

Source: Compiled from official statistics of the U.S. Department of Commerce.

Note.--Because of rounding, figures may not add to the totals shown.

Table 7.--Ceramic floor and wall tile (except quarry tile): Indexes of domestic shipments, imports for consumption, apparent consumption, and domestic construction activity, 1965-69

(1957-59=100)

Year	Domestic shipments 1/		Imports 1/		Apparent consumption 1/		Domestic construction			
	Mosaic tile	Wall tile	Mosaic tile	Wall tile	Mosaic tile	Wall tile	Housing starts 2/	New residential construction 3/	Bathroom sanitary ware 4/	
1965	102	133	428	514	197	164	108	109		122
1966	97	128	427	457	193	155	85	97		116
1967	96	120	324	393	162	143	94	92		114
1968	94	126	408	614	185	166	110	106		135
1969	98	129	505	629	217	169	5/ 107	5/ 107		5/6/ 148

1/ Index based on quantity data.

2/ Based on the number of all nonfarm public and private housing starts.

3/ Based on the value of nonfarm private and public residential dwelling units including hotels and motels put in place, adjusted to constant dollars.

4/ Based on the quantity of shipments of flush tanks.

5/ Preliminary; not for publication.

6/ Based on 9 months.

Source: Compiled from official statistics of the U.S. Department of Commerce and from data supplied to the Tariff Commission by the domestic producers of ceramic floor and wall tile.



Table 8.--Ceramic mosaic tile: U.S. imports for consumption,  
by principal sources, 1965-69

Year	Japan	Mexico	United Kingdom	Italy	All other	Total
Quantity (1,000 square feet)						
1965	63,352	1	13	217	81	63,664
1966	63,236	3	19	214	170	63,642
1967	47,679	43	48	130	399	48,299
1968	60,330	2	114	154	241	60,841
1969	74,144	18	254	392	437	75,245
Value (1,000 dollars)						
1965	12,800	1/	3	68	27	12,898
1966	12,617	2	9	50	30	12,708
1967	9,339	3	17	46	63	9,468
1968	12,201	2	33	36	42	12,314
1969	16,972	15	67	70	94	17,218
Unit value (cents per square foot)						
1965	20.2	-	23.1	31.3	33.3	20.3
1966	20.0	66.7	47.4	23.4	17.6	20.0
1967	19.6	6.6	35.1	35.7	15.8	19.6
1968	20.2	78.8	28.6	23.5	17.4	20.2
1969	22.9	84.4	26.3	17.9	21.6	22.9

1/ Less than \$500.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table 9.--Glazed ceramic wall tile (except mosaic): U.S. imports for consumption, by principal sources, 1965-69

Year	Japan	Mexico	United Kingdom	Italy	All other	Total
Quantity (1,000 square feet)						
1965	50,702	9,811	7,050	3,316	660	71,538
1966	43,555	9,211	8,414	2,076	440	63,696
1967	34,115	9,021	8,520	<sup>1/</sup> 2,809	538	<sup>1/</sup> 54,997
1968	48,251	12,244	18,535	<sup>1/</sup> 3,963	2,870	<sup>1/</sup> 85,863
1969	41,151	11,315	20,287	<sup>2/</sup> 4,776	6,763	<sup>2/</sup> 84,292
Value (1,000 dollars)						
1965	9,460	2,743	1,904	735	227	15,069
1966	8,358	2,634	2,293	667	208	14,160
1967	6,982	2,519	2,218	786	272	12,777
1968	10,357	3,527	4,399	972	537	19,792
1969	9,494	3,655	5,138	1,250	1,237	20,774
Unit value (cents per square foot)						
1965	18.7	28.0	27.0	22.2	34.4	21.1
1966	19.2	28.6	27.3	32.1	47.3	22.2
1967	20.5	27.9	26.0	28.0	50.5	23.2
1968	21.5	28.8	23.7	24.5	18.7	23.0
1969	23.1	32.3	25.3	<sup>2/</sup> 26.2	18.3	<sup>2/</sup> 24.6

<sup>1/</sup> Data adjusted to compensate for incorrect quantities reported for the imports from Italy.

<sup>2/</sup> Adjusted; subject to revision.

Source: Compiled from official statistics of the Department of Commerce, except as noted.

Note.--Because of rounding, figures may not add to the totals shown.

\* \* \* \* \*





