

U.S. Census Bureau  
Refractories - 2008  
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Address inquiries concerning these data to Primary Goods Industries Branch, U.S. Department of Commerce, Census Bureau, Manufacturing and Construction Division, Washington DC, 20233-6900, or call Tenzin Umstead, 301-763-1220.

These data are also available online through STAT-USA by subscription. For further information, visit <http://www.stat-usa.gov/> or call 1-800-STAT-USA.

Table 1. Value of Shipments of Refractories: 2008 to 2004  
 [Value in thousands of dollars]

Product class code	Product description	Year	Value
3271240	Clay refractories	2008	989,223
		2007	964,699
		2006	962,973
		2005	860,844
		2004	780,551
3271250	Nonclay refractories	2008	1,388,637
		2007	1,304,493
		2006	1,163,552
		2005	1,152,700
		2004	1,198,674

Table 2. Quantity and Value of Shipments of Refractories by Type: 2008 and 2007  
 [Value in thousands of dollars]

Product code	Product description	No. of cos.	Quantity shipped (unit of measure)		M bricks (1,000 9-inch equivalent)	Value of shipments
			Short tons	Metric tons		
3271240	Clay refractories	2008	(X)	(X)	(X)	989,223
		2007	(X)	(X)	(X)	964,699
3271240125	Fireclay, high alumina, and insulating brick shapes. 1/	2008	43 a/	480,345 a/	435,493 c/	101,324
		2007	a/	540,964 a/	490,446 c/	105,799
3271240135	Unshaped clay refractory bonding mortars, castable refractories, and gunning mixes. 2/, 3/	2008	34 a/	731,694 a/	663,367	(X)
		2007		736,979	668,154	(X)
3271240451	Clay and high alumina refractory raw materials. 4/	2008	11	321,140	291,154	(X)
		2007		269,511	244,344	(X)
3271240461	Clay and high alumina refractory materials. 5/	2008	9 a/	55,349 a/	50,181	(X)
		2007	c/	46,152 c/	41,842	(X) b/tr/
3271250	Nonclay refractories	2008	(X)	(X)	(X)	1,388,637
		2007	(X)	(X)	(X)	1,304,493
3271250125	Nonclay magnesite, magnesite-chrome, including high fires, burned and unburned brick, and chrome brick.	2008	10 b/	120,496 b/	109,243 a/	19,504 c/
		2007	b/	123,310 b/	111,794 a/	18,792 b/
3271250135	All other nonclay brick and shapes, including dolomite, dolomite magnesite, forsterite, pyrophyllite-zircon, carbon and graphite crucibles, retorts, stopper heads, natural graphite refractories, and molten cast.	2008	26	325,759	295,340	51,138
		2007		306,406	277,792	50,922
3271250145	Unshaped nonclay refractories basic bonding mortars made predominantly of magnesite or chrome ore, dolomite, and other nonclay mortars, made predominantly of forsterite, zircon, and silica.	2008	30	298,439	270,568	(X)
		2007		331,952	300,953	(X)
3271250256	Domestic shipments for direct use by customers as a finished refractory and all exported material. 5/	2008	14	(D)	(D)	(X)
		2007		(D)	(D)	(X)
3271250261	All other domestic shipments of nonclay refractory materials sold in lump or ground form as refractory raw material. 4/	2008	9	(D)	(D)	(X)
		2007		(D)	(D)	(X)

## Footnotes:

1/ Includes high alumina pouring pit refractories (containing 50% alumina and over), sleeves, nozzles, runners, and ladle gate parts. Excludes data for mullite and extra-high alumina refractories. These products are included in the nonclay refractories section.

2/ Includes products referred to as plastic firebrick and the less plastic materials intended for ramming into place after the addition of water (when shipped in dry form).

3/ Includes hydraulic setting castables designed for low thermal conductivity and having bulk densities as defined in ASTM classification C-401, not greater than 105 pounds/cubic foot.

4/ Includes shipments to refractory producers for reprocessing in the manufacture of brick and other refractories.

5/ Includes shipments for direct use as finished refractory products by establishments classified in manufacturing industries and excludes shipments to refractory producers for reprocessing in the manufacture of brick and other refractories. Includes all exports.

Table 3. Shipments, Exports, Imports, and Apparent Consumption of Refractories by Type: 2008 and 2007  
 [Value in thousands of dollars]

Product code	Product description	Year	Manufacturers' shipments	Exports of domestic merchandise 1/ 2/ (value at port)	Imports for consumption 1/ 3/ (value at port) 4/
3271240125	Fireclay, high alumina, and insulating brick shapes.	2008	500,028	66,653	108,342
		2007	513,263	64,806	95,419
3271240135	Unshaped clay refractory bonding mortars, castable refractories, and gunning mixes.	2008	451,317	33,816	862
		2007	418,486	41,923	320
3271250125	Nonclay magnesite, magnesite-chrome, including high fires, burned and unburned brick, and chrome brick.	2008 c/	188,799	72,606	155,751
		2007 b/	187,348	69,565	131,445
3271250135	All other nonclay brick and shapes, including dolomite, dolomite magnesite, forsterite, pyrophyllite-zircon, carbon and graphite crucibles, retorts, stopper heads, natural graphite refractories, and molten cast.	2008	684,074	180,495	219,494
		2007	582,286	161,666	211,415
3271250145	Unshaped nonclay refractories basic bonding mortars made predominantly of magnesite or chrome ore, dolomite, and other nonclay mortars, made predominantly of forsterite, zircon, and silica.	2008	247,976	173,564	36,425
		2007	243,269	145,998	29,877

## Footnotes:

1/ For comparison of North American Industry Classification System (NAICS)-based product codes with Schedule B export codes and HTSUSA import codes, see Table 4.

2/ Source: Census Bureau report EM 545, U.S. Exports.

3/ Source: Census Bureau report IM 146, U.S. Imports for Consumption and General Imports.

4/ "Value at port" includes both import value and duty value.

Table 4. Comparison of North American Industry Classification System (NAICS)-Based Product Codes with Schedule B Export Codes, and HTSUSA Import Codes: 2008

Product code	Product description	Export code 1/	Import code 2/
3271240125	Fireclay, high alumina, and insulating brick shapes.	6902.20.1010 6902.20.5010 6902.90.1010 6902.90.5010 6903.90.0010	6902.20.1010 6902.20.5010 6902.90.1010 6902.90.5010 6903.90.0010
3271240135	Unshaped clay refractory bonding mortars, castable refractories, and gunning mixes.	3816.00.0010	3816.00.0010
3271250125	Nonclay magnesite, magnesite-chrome, including high fires, burned and unburned brick, and chrome brick.	6902.10.1000 6902.10.5000	6902.10.1000 6902.10.5000
3271250135	All other nonclay brick and shapes, including dolomite, dolomite magnesite, forsterite, pyrophyllite-zircon, carbon and graphite crucibles, retorts, stopper heads, natural graphite refractories, and molten cast.	6902.20.1020 6902.20.5020 6902.90.1020 6902.90.5020 6903.90.0050	6902.20.1020 6902.20.5020 6902.90.1020 6902.90.5020 6903.90.0050
3271250145	Unshaped nonclay refractories basic bonding mortars made predominantly of magnesite or chrome ore, dolomite, and other nonclay mortars, made predominantly of forsterite, zircon, and silica.	3816.00.0050	3816.00.0050

## Footnotes:

**1/** Source: 2008 edition, Harmonized System-based Schedule B, Statistical Classification of Domestic and Foreign Commodities Exported from the United States.

**2/** Source: Harmonized Tariff Schedule of the United States, Annotated (2008).

Symbols:

- (D) - Withheld to avoid disclosing data of individual companies.
- (X) - Not applicable.
- (NA) - Not available.
- r/ - Revised by 5 percent or more from previously published data.
- (n.e.c.) - Not elsewhere classified.
- (n.s.k.) - Not specified by kind.
- (nehp) - Net engine horsepower
- (btuh) - British thermal units per hour
- (pt.) Part.
- Represents zero.

Estimation symbols - Percent of estimation for each item is indicated as follows:

- a/ - 10 to 19 percent of this item has been estimated.
- b/ - 20 to 29 percent of this item has been estimated.
- c/ - 30 to 49 percent of this item has been estimated.
- (S) - Withheld because estimates did not meet publication standards

## Historical Note

The Census Bureau has collected data on refractories since 1947.

Historical Current Industrial Reports data (called Facts for Industry before 1959) may be obtained from a Federal Depository Library. To locate a Federal Depository Library in your area, please visit <http://www.gpoaccess.gov/libraries.html>.