

# 2010 Minerals Yearbook

STONE, DIMENSION [ADVANCE RELEASE]

### STONE, DIMENSION

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Domestic survey data and tables were prepared by Glenn W. Walker, statistical assistant.

U.S. production of dimension stone in 2010 was estimated to be 1.67 million metric tons (Mt) valued at \$323 million, which was a 3% increase in tonnage and a slight decrease in value compared with those of 2009 (table 1). Exports increased in value by 13% to \$54.5 million, and imports for consumption increased in value by 11%\* to \$1.5\* billion. The value of apparent consumption was estimated to be \$1.8\* billion in 2010, which was a 12%\* increase compared with that of 2009. World dimension stone production, including the United States, was estimated to be approximately 107 Mt in 2009, the last year for which data were available. Trade data in this report are from the U.S. Census Bureau. All percentages in the report were computed using unrounded data.

In recent years, most dimension stone has been used in construction applications, with the largest portions being sold or used as ashlars and partially squared pieces, curbing, flagstone, and rough block for building and construction. Monumental stone, another major type, includes memorials of various kinds.

Dimension stone is a natural rock material quarried for the purpose of obtaining blocks or slabs that meet specifications as to size (width, length, and thickness) and shape. Color, grain texture and pattern, and surface finish of the stone also are normal requirements by both customers and the stone industry. Durability (a time measure of the ability of dimension stone to endure and maintain its essential and distinctive characteristics), strength, and the ability of the stone to take a polish are other important selection criteria.

Although various igneous, metamorphic, and sedimentary rocks are used as dimension stone, the principal rock types are granite, limestone, marble, sandstone, and slate. Other varieties of dimension stone that are normally considered to be special minor types include alabaster (massive gypsum) and soapstone (massive talc). A more detailed discussion describing specific types of dimension stone can be found in the 2007 dimension stone Minerals Yearbook chapter.

#### **Production**

Dimension stone production data for the United States are derived by the U.S. Geological Survey (USGS) from a voluntary canvass of U.S. quarry producers of rough and dressed dimension stone. Of the 237 dimension stone-producing operations included in the survey for 2010, 173 (53%) responded, which represented 58% of the tonnage; the remaining tonnage was estimated based on prior years' reporting and on employment data provided by the Mine Safety and Health Administration (MSHA).

Data in this report cover rough crude quarried stone, irregular-shaped and rectangular blocks, and more highly

processed stone. A number of other terms also are used to describe further processing, such as "worked," "dressed," "finished," and "manufactured." These and other terms used by the dimension stone industry describe such features as the mineral composition of the rock, the shape of the product, the method of finishing a stone, and the type of finish applied. No adjustments are made in the data to account for the sometimes substantial losses in processing rough stone into dressed stone. Sold or used data are considered to be equivalent to production because changes in stocks are not surveyed.

In October, Rock of Ages Corp. was purchased by Swenson Granite Co. for about \$38.9 million (Reuters, 2010). In November, the Yule Marble Quarry in Marble, CO, resumed operations after a 10-month closure that was the result of the recession and escalating transportation costs. The quarry reopened after Polycor Inc. sold the underground quarry to Enrico Locati Luciani of Carrara, Italy, in October (KOAA Colorado Springs News, 2011).

In 2010, granite accounted for 699,000 metric tons (t) (42%) of the total domestic dimension stone production of 1.67 Mt, followed by limestone (27%), miscellaneous stone (14%), sandstone (14%), marble (2%), and slate (1%). Granite accounted for about \$118 million (36%) of the \$323 million total domestic production value, followed by limestone (32%), miscellaneous (14%), sandstone (10%), slate (4%), and marble (4%).

Production of dimension stone was reported in 37 States. Leading producer States were, in descending order by tonnage, Georgia, Texas, Indiana, and Wisconsin. These States accounted for about 46% of domestic production. Leading producer States were, in descending order by value, Texas, Indiana, New York, Georgia, and Wisconsin. These States contributed about 50% of the value of domestic production (table 3).

The top five producing companies were Champlain Stone, Ltd. in New York, Cold Spring Granite Co. in Minnesota, Dixie Quarries Inc. in Georgia, Mezger Enterprises Inc. in Texas, and Victor Oolitic Stone Co. in Indiana. These companies produced about 35% of domestic production in tonnage and about 21% of production value. The leading 14 companies accounted for 58% of total domestically produced tonnage and 44% of the value.

Rough stone blocks split or cut from a quarry face are transported to processing plants that typically are located at the quarry site, at least for preliminary sizing. Further dressing, which includes final sizing and finishing operations, such as decorating, edging, and polishing, also may be done at the quarry site.

*Granite*.—Dimension granite was produced by 44 companies operating 69 quarries in 15 States. Production was 699,000 t valued at \$118 million. Granite production tonnage increased by 49% and the value increased by about 6% compared with those

<sup>\*</sup>Correction posted on April 5, 2012.

of 2009. The top five producing States were, in descending order by tonnage, Georgia, Massachusetts, North Carolina, Vermont, and New York. The leading producer State, Georgia, accounted for 35% of the tonnage and 14% of the value of U.S. granite production (table 4).

Champlain Stone Ltd., Cold Spring Granite Co., Dixie Quarries Inc., Swenson Granite Co. LLC, and Williams Stone Co. Inc., which were the leading producers, accounted for 71% of U.S. granite production by tonnage and 62% of U.S. granite production by value.

Limestone.—Dimension limestone was produced by 42 companies from 47 quarries in 12 States. Production decreased in 2010 by about 17% to 454,000 t from 548,000 t in 2009. The value decreased by 2% to \$104 million in 2010 from \$106 million in 2009. The top four producing States were, in descending order by tonnage, Texas, Indiana, Kansas, and Minnesota which combined produced 90% of the U.S. tonnage and 94% of the value (table 5). Buechel Stone Corp., Eden Stone Co. Inc., Higgins Stone Co. Inc., Mezger Enterprises, and Victor Oolitic Stone Co., which were the leading producers, accounted for about 74% of all U.S. limestone tonnage and about 41% of the value.

Sandstone.—Dimension sandstone was produced by 55 companies that operated 68 quarries in 18 States. Production decreased by 8% to 228,000 t in 2010 from 248,000 t in 2009. The value decreased by 9% to \$33.2 million in 2010 from \$36.7 million in 2009. The top five producing States were, in descending order by tonnage, Arizona, Oklahoma, Pennsylvania, Ohio, and New York (table 6).

Briar Hill Stone Co., Cornerstone Materials LLC, Drake Stone Products Inc., Harley Gray Stone Co., and Jude Stone Quarry Inc., which were the leading producers, accounted for about 43% of the tonnage and 38% of the value of domestic production.

*Marble.*—Marble was mined by three companies that operated four quarries in three States. Production tonnage decreased by 12% in 2010 to 31,100 t valued at \$12.1 million from 35,300 t valued at \$12.8 million in 2009 (table 10). Georgia was the leading producing State, followed by Vermont and Tennessee. The leading producers were Georgia Marble Co. (a subsidiary of Polycor Inc.) and Vermont Quarries Corp.

*Slate.*—Slate was produced by 18 companies that operated 19 quarries in 7 States. Production increased by 6% to 22,900 t in 2010 from 21,600 t in 2009. The value increased slightly to \$14.2 million in 2010 from \$14 million in 2009 (table 12). The top producing States were Vermont, Virginia, and North Carolina. The leading producers were Buckingham Slate Co., Newmont Slate Co., Inc., and Western Slate Inc.

#### Consumption

For the purposes of this report, apparent consumption is calculated to be production plus imports for consumption minus exports; changes in industry stocks are not considered because such data are not available. Value data are used in the apparent consumption calculation because tonnage data are not available for imports and exports. Overall, the value of apparent consumption of dimension stone in the United States was

estimated to be \$1.8\* billion in 2010; this was a 12%\* increase compared with that of 2009.

Rough stone represented about 63% of the tonnage and 42% of the value of all dimension stone sold or used by domestic producers, which included exports. The leading uses of rough stone, by tonnage, were in irregular-shaped stone (45%), and in building and construction (36%). Dressed stone represented 37% by tonnage and 58% by value of the total stone sold or used. The leading uses within dressed stone, by tonnage, were in curbing (26%); ashlars and partially squared pieces (23%); and flagging (18%) (table 7).

Uses for the different varieties of dimension stone varied considerably. The major uses of granite sold or used in 2010, by tonnage, were in irregular-shaped stone (37%), curbing (22%), rough blocks for building and construction (15%), and monumental rough stone (13%) (table 8). Primary uses of limestone, by tonnage, were in rough blocks for building and construction (37%), and in dressed stone for ashlars and partially squared pieces (24%) (table 9). The primary use of marble, by tonnage, was in rough stone, other uses (including slabs and blocks, flagging, monumental, panels and veneer, ashlars and partially squared pieces, tile, and unlisted uses) (81%) (table 10). Primary uses of sandstone, by tonnage, were in dressed stone for flagging (35%), and in rough blocks for building and construction (25%) (table 11). Dimension slate sold or used by producers in the United States in 2010, by tonnage, was principally for roofing (81%), flagging (10%), and flooring (4%) (table 12).

#### **Prices**

The average 2010 value for dimension stone was \$193 per metric ton, a 4% decrease from that of 2009 based on the USGS canvass data. The average unit values for different types of dimension stone were granite, \$168 per ton; limestone, \$230 per ton; marble, \$388 per ton; sandstone, \$145 per ton; and slate, \$621 per ton. Available price data show considerable variation. Prices are substantially different not only for the kind of stone, but also for the appearance of the same kind of stone. Color, grain structure, and finish contribute significantly to price and marketability.

#### **Foreign Trade**

*Exports.*—In 2010, the value of total exports of dimension stone increased by 13% in value to \$54.5 million compared with that of 2009; granite accounted for 56% of the export value. The largest share of granite was exported to China (table 13). Although unreported, a significant amount of U.S. granite processed overseas was probably exported back to the U.S. market.

*Imports.*—The value of imports for consumption of dimension stone types increased by 11%\* in 2010 to \$1.5\* billion (table 1). Brazil was the leading source of imported granite in 2010, accounting for 43%\* by value. China, which continued to be a major source of granite, accounted for 22% of granite imports by value. Other important granite import sources included India (14%) and Italy (13%) (table 14). In 2010, China

<sup>\*</sup> Correction posted on April 5, 2012.

continued to be a major source of rough and dressed marble imports and accounted for 29% by tonnage and 25% by value. Additionally, Italy was a major source of rough and dressed marble imports and accounted for 20% by tonnage and 32% by value (tables 15–16). Duties on imported dimension stone are listed in table 2.

#### **World Review**

World dimension stone production, including the United States, was estimated to be approximately 107 Mt in 2009, the last year for which data were available. Although there was probably some small-scale production in the majority of the world's nations, dimension stone was produced and officially reported in about 29 countries. The top five producing countries in 2009 were, in descending order by tonnage, China, India, Turkey, Iran, and Italy, and these countries accounted for about 71% of the world's production. Global production of dimension stone was unchanged in 2009 compared with that of 2008. The United States ranked 10th in world production of dimension stone in 2009 (Napoli, 2011, p. 51).

#### Outlook

U.S. apparent consumption, production, exports, and imports of dimension stone all increased in 2010, but at different rates. Increases in U.S. imports and apparent consumption, coupled with increased activity from domestic stone installation businesses, indicate that residential and commercial improvement and refurbishment experienced increased activity. Industry observers anticipate slow growth in the global dimension stone industry in the near term (Napoli, 2011).

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 $\label{eq:table 1} {\sf TABLE~1}$  SALIENT U.S. DIMENSION STONE STATISTICS  $^1$ 

(Thousand metric tons and thousand dollars)

	2006	2007	2008	2009	2010
Sold or used by producers:					_
Quantity	1,850	1,920	1,800	1,620	1,670
Value	334,000	346,000	326,000	328,000	323,000
Exports, value	76,000	74,300	65,700	48,300	54,500
Imports for consumption, value	2,500,000	2,540,000	2,150,000	1,350,000	1,500,000 *

<sup>&</sup>lt;sup>1</sup>Data are rounded to no more than three significant digits.

<sup>\*</sup>Correction posted on April 5, 2012.

## $\label{eq:table 2} {\sf U.S.\,IMPORT\,DUTIES\,ON\,DIMENSION\,STONE}$

		NTR, <sup>2</sup>	Non-NTR, <sup>2</sup>
Tariff item	HTS <sup>1</sup> code	January 1, 2010	January 1, 2010
Slate, rough blocks or slabs	2514.00.0000	Free	25% ad valorem.
Rough blocks or slabs of marble, travertine, other calcareous			
monumental or building stone:	2515.00.0000		
Marble and travertine:			
Crude or roughly trimmed	2515.11.0000	Free	\$22.95 per cubic meter.
Marble, merely cut	2515.12.1000	do.	13% ad valorem.
Travertine, merely cut	2515.12.2000	3.0% ad valorem	50% ad valorem.
Other calcareous stone alabaster	2515.20.0000	do.	Do.
Rough blocks or slabs of granite, porphyry, basalt, sandstone,			
other monumental or building stone:	2516.00.0000		
Granite:			
Crude or roughly trimmed	2516.11.0000	Free	\$8.83 per cubic meter.
Merely cut	2516.12.0000	2.8% ad valorem	60% ad valorem.
Sandstone:			
Crude or roughly trimmed	2516.20.1000	Free	\$5.30 per cubic meter.
Merely cut	2516.20.2000	3.0% ad valorem	50% ad valorem.
Other monumental or building stone	2516.90.0000	do.	Do.
Setts, curbstones, flagstones	6801.00.0000	2.8% ad valorem	60% ad valorem.
Worked monumental or building stone:	6802.00.0000		
Tiles and cubes under 7 centimeters square, granules	6802.10.0000	4.8% ad valorem	40% ad valorem.
Other stone and articles with a flat or even surface:			
Marble, travertine, and alabaster:	6802.21.0000		
Travertine	6802.21.1000	4.2% ad valorem	50% ad valorem.
Other	6802.21.5000	1.9% ad valorem	13% ad valorem.
Granite	6802.23.0000	3.7% ad valorem	60% ad valorem.
Other calcareous stone	6802.29.1000	4.9% ad valorem	50% ad valorem.
Other stone	6802.29.9000	6.0% ad valorem	30% ad valorem.
Other:			
Marble, travertine, and alabaster:	6802.91.0000		
Marble:			
Slabs	6802.91.0500	2.5% ad valorem	15% ad valorem.
Other	6802.91.1500	4.9% ad valorem	50% ad valorem.
Travertine:			
Travertine articles of subheading 6802.21.1000 that have	=		
been dressed or polished, but not further worked	6802.91.2000	4.2% ad valorem	50% ad valorem.
Other	6802.91.2500	3.7% ad valorem	40% ad valorem.
Alabaster	6802.91.3000	4.7% ad valorem	50% ad valorem.
Other calcareous stone	6802.92.0000	4.9% ad valorem	Do.
Granite	6802.93.0000	3.7% ad valorem	60% ad valorem.
Other stone	6802.99.0000	6.5% ad valorem	40% ad valorem.
Worked slate and articles:	6803.00.0000		
Roofing slate	6803.00.1000	3.3% ad valorem	25% ad valorem.
Other	6803.00.5000	Free	Do.
Other Do., do. Ditto.	6803.00.5000	Free	Do.

Do., do. Ditto.

<sup>&</sup>lt;sup>1</sup>Harmonized Tariff Schedule of the United States.

<sup>&</sup>lt;sup>2</sup>Normal trade relations.

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	200	)9	20	10
	Quantity	Value	Quantity	Value
State	(metric tons)	(thousands)	(metric tons)	(thousands)
Alabama	4,020	\$1,460	W	W
Arizona	94,500	13,800	81,400	\$11,700
Arkansas	18,300	2,360	19,800	1,600
California	24,500	6,100	26,100	6,940
Colorado	9,610 <sup>r</sup>	3,040 <sup>r</sup>	7,530	1,740
Georgia	148,000 <sup>r</sup>	15,800 <sup>r</sup>	264,000	25,500
Idaho	25,200	3,370	25,100	3,520
Indiana	206,000	41,500	173,000	31,400
Kansas	29,200	4,650	46,600	4,720
Maine	5,800	1,300	8,000	1,250
Maryland	W	W	7,560	1,630
Massachusetts	43,800	6,130	73,300	21,700
Minnesota	25,100	16,700	34,700	15,400
Montana	W	W	11,000	2,950
New Hampshire	34,800	4,880	W	W
New Mexico	32,300	986	W	W
New York	98,600 <sup>r</sup>	28,400 <sup>r</sup>	95,600	26,000
North Carolina	66,500 <sup>r</sup>	23,400 <sup>r</sup>	63,000	21,800
Ohio	25,800	4,790	25,100	4,440
Oklahoma	35,700 <sup>r</sup>	4,400 <sup>r</sup>	29,700	2,750
Pennsylvania	36,700	9,500	25,200	5,860
South Carolina	3,390	401	W	W
Texas	236,000	42,000	195,000	57,000
Utah	8,700	844	8,700	674
Vermont	108,000	30,000	68,400	21,900
Virginia	W	W	13,700	3,920
Wisconsin	207,000	29,800	144,000	2,320
Other <sup>2</sup>	94,600	33,400	223,000	46,300
Total	1,620,000	328,000	1,670,000	323,000

<sup>&</sup>lt;sup>r</sup>Revised. W Withheld to avoid disclosing company proprietary data; included in "Other."

South Carolina (2010), South Dakota, Tennessee, Virginia (2009), Washington, West Virginia, and Wyoming.

 $<sup>^{1}\</sup>mathrm{Data}$  are rounded to no more than three significant digits; may not add to totals shown.

<sup>&</sup>lt;sup>2</sup>Includes Alabama (2010), Connecticut, Illinois, Maryland (2009), Michigan, Missouri, Montana (2009), Nevada, New Hampshire (2010), New Mexico (2010),

TABLE 4  $\mbox{DIMENSION GRANITE SOLD OR USED BY PRODUCERS IN } \\ \mbox{THE UNITED STATES, BY STATE}^1$ 

	200	19	20	10
	Quantity	Value	Quantity	Value
State	(metric tons)	(thousands)	(metric tons)	(thousands)
California	13,300	\$3,330	14,700	\$4,230
Georgia	135,000 <sup>r</sup>	10,200 <sup>r</sup>	244,000	16,900
Maine	5,800	1,300	8,000	1,250
Massachusetts	34,900	4,760	69,600	20,600
New Hampshire	34,800	4,880	W	W
New York	W	W	28,900	13,100
North Carolina	54,300 <sup>r</sup>	22,100 r	52,800	20,800
South Carolina	3,390	401	W	W
Vermont	82,000	19,100	41,400	9,390
Other <sup>2</sup>	105,000	45,300	239,000	31,500
Total	469,000	111,000	699,000	118,000

<sup>&</sup>lt;sup>r</sup>Revised. W Withheld to avoid disclosing company proprietary data; included in "Other."

TABLE 5

DIMENSION LIMESTONE SOLD OR USED BY PRODUCERS IN

THE UNITED STATES, BY STATE<sup>1</sup>

	20	09	2010		
	Quantity	Value	Quantity	Value	
State	(metric tons)	(thousands)	(metric tons)	(thousands)	
Arkansas	885	\$98	W	W	
Indiana	206,000	41,500	173,000	\$31,400	
Kansas	W	W	45,500	4,540	
Minnesota	W	W	9,740	7,340	
Texas	223,000	39,500	182,000	54,500	
Wisconsin	49,100	4,730	W	W	
Other <sup>2</sup>	69,200	20,400	44,000	6,600	
Total	548,000	106,000	454,000	104,000	

W Withheld to avoid disclosing company proprietary data; included in "Other."

<sup>&</sup>lt;sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown

<sup>&</sup>lt;sup>2</sup>Includes Maryland, Minnesota, Missouri, New Hampshire (2009), New York (2009), Oklahoma, South Carolina (2009), South Dakota, Texas, Virginia, and Wisconsin.

<sup>&</sup>lt;sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>&</sup>lt;sup>2</sup>Includes Alabama, Arkansas (2010), California, Illinois, Kansas (2009), Maryland, Minnesota (2009), New York, Ohio, Pennsylvania, and Wisconsin.

TABLE 6 DIMENSION SANDSTONE SOLD OR USED BY PRODUCERS IN THE UNITED STATES, BY STATE  $^{\rm 1}$ 

	200	)9	20	2010		
	Quantity	Value	Quantity	Value		
State	(metric tons)	(thousands)	(metric tons)	(thousands)		
Arizona	94,500	\$13,800	81,400	\$11,700		
Arkansas	17,400	2,260	9,860	1,470		
Colorado	W	W	7,530	1,740		
New York	15,900	3,350	12,400	2,200		
Ohio	20,900	4,540	17,200	4,100		
Oklahoma	23,500 <sup>r</sup>	3,060 <sup>r</sup>	29,700	2,750		
Pennsylvania	19,300	2,370	18,100	3,770		
Other <sup>2</sup>	56,800 r	7,260 <sup>r</sup>	52,000	5,430		
Total	248,000	36,700	228,000	33,200		

<sup>&</sup>lt;sup>r</sup>Revised. W Withheld to avoid disclosing company proprietary data; included in "Other."

 ${\it TABLE~7}$  DIMENSION STONE SOLD OR USED BY PRODUCERS IN THE UNITED STATES, BY USE  $^{\rm l}$ 

	20	09	20	2010	
	Quantity	Value	Quantity	Value	
Use	(metric tons)	(thousands)	(metric tons)	(thousands)	
Rough stone:					
Rough blocks for building and construction	402,000	\$64,900	378,000	\$66,800	
Irregular-shaped stone	259,000	27,800	475,000	25,300	
Monumental	164,000	30,600	113,000	22,900	
Other <sup>2</sup>	26,900	7,310	89,500	19,400	
Dressed stone:	_				
Ashlars and partially squared pieces	185,000	42,200	144,000	30,500	
Slabs and blocks for building and construction	66,500	22,000	58,800	36,700	
Monumental	26,900	12,800	25,600	10,900	
Curbing	145,000	19,300	162,000	32,400	
Flagging	115,000	14,900	108,000	13,600	
Flagging (slate)	3,640	2,270	2,380	903	
Panels and veneer	W	W	43,500	36,400	
Roofing slate	15,800	9,160	18,700	11,300	
Flooring slate	640	933	1,180	1,920	
Tile, all dimensions	W	W	2,200	2,050	
Other <sup>3</sup>	206,000	73,700	48,000	12,200	
Total	1,620,000	328,000	1,670,000	323,000	

W Withheld to avoid disclosing company proprietary data; included in "Other."

<sup>&</sup>lt;sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>&</sup>lt;sup>2</sup>Includes California, Colorado (2009), Idaho, Kansas, Michigan, North Carolina, Texas, Utah, West Virginia, and Wisconsin.

<sup>&</sup>lt;sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>&</sup>lt;sup>2</sup>Includes flagging stone, exports, uses not specified, and uses not listed.

<sup>&</sup>lt;sup>3</sup>Includes panels and veneer, blackboards, exports, uses not specified, structural and sanitary, and uses not listed.

 ${\it TABLE~8}$  DIMENSION GRANITE SOLD OR USED BY PRODUCERS IN THE UNITED STATES, BY  ${\it USE}^{\it l}$ 

	200	09	2010	
	Quantity	Value	Quantity	Value
Use	(metric tons)	(thousands)	(metric tons)	(thousands)
Rough stone:				
Rough blocks for building and construction	84,000	\$16,600	103,000	\$26,500
Irregular-shaped stone	13,800	1,060	261,000	756
Monumental	133,000	24,100	93,700	15,800
Other <sup>2</sup>	33,600	6,310	38,000	7,440
Dressed stone:	_			
Ashlars and partially squared pieces	12,100	3,910	8,630	2,550
Slabs and blocks for building and construction	920	1,090	1,200	883
Monumental	26,900	12,700	25,500	10,900
Curbing	138,000	18,500	154,000	31,600
Other <sup>3</sup>	27,100	27,000	14,300	21,300
Total	469,000	111,000	699,000	118,000

<sup>&</sup>lt;sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

 ${\it TABLE 9}$  DIMENSION LIMESTONE SOLD OR USED BY PRODUCERS IN THE UNITED STATES, BY USE  $^{\rm l}$ 

	20	09	20	10
	Quantity	Value	Quantity	Value
Use	(metric tons)	(thousands)	(metric tons)	(thousands)
Rough stone:				
Rough blocks for building and construction	200,000	\$33,500	170,000	\$27,100
Irregular-shaped stone	115,000	10,100	101,000	8,810
Other <sup>2</sup>	4,790	1,820	10,400	4,930
Dressed stone:	_			
Ashlars and partially squared pieces	133,000	28,200	107,000	19,800
Slabs and blocks for building and construction	28,600	10,100	25,400	25,300
Flagging	11,100	2,170	5,910	1,190
Panels veneer	W	W	21,700	12,100
Other <sup>3</sup>	55,300	20,500	12,100	5,200
Total	548,000	106,000	454,000	104,000

W Withheld to avoid disclosing company proprietary data; included in "Other."

<sup>&</sup>lt;sup>2</sup>Includes exports and uses not listed.

<sup>&</sup>lt;sup>3</sup>Includes panels and veneer, tile, uses not specified, and uses not listed.

<sup>&</sup>lt;sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>&</sup>lt;sup>2</sup>Includes exports, monumental, and uses not listed.

<sup>&</sup>lt;sup>3</sup>Includes curbing limestone, panels and veneer, tile, uses not specified, and uses not listed.

 ${\it TABLE~10}$  DIMENSION MARBLE SOLD OR USED BY PRODUCERS IN THE UNITED STATES, BY USE  $^{1,2}$ 

	20	2009		10
	Quantity	Value	Quantity	Value
Use	(metric tons)	(thousands)	(metric tons)	(thousands)
Rough stone:				
Rough blocks for building and construction	9,610	\$1,640	W	W
Other <sup>3</sup>	14,500	5,910	25,300	\$8,460
Dressed stone <sup>3</sup>	11,200	5,260	W	W
Total	35,300	12,800	31,100	12,100

 $<sup>^{1}\</sup>mathrm{Data}$  are rounded to no more than three significant digits; may not add to totals shown.

 ${\it TABLE~11}$  DIMENSION SANDSTONE SOLD OR USED BY PRODUCERS IN THE UNITED STATES, BY USE  $^{\rm l}$ 

	200	2009		0
	Quantity	Value	Quantity	Value
Use	(metric tons)	(thousands)	(metric tons)	(thousands)
Rough stone:				
Rough blocks for building and construction	67,100	\$6,890	57,800	\$5,940
Irregular-shaped stone	37,800	5,590	25,100	2,910
Other <sup>2</sup>	17,000	3,270	20,400	4,240
Dressed stone:	<del>-</del>			
Ashlars and partially squared pieces	21,400	4,080	18,800	3,870
Flagging	79,200	9,360	80,900	9,180
Panels and veneer	6,280	1,370	5,710	1,790
Slabs and blocks for building and construction	3,880	871	2,910	1,280
Other <sup>3</sup>	15,700	5,220	16,600	3,990
Total	248,000	36,700	228,000	33,200

<sup>&</sup>lt;sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

 ${\it TABLE~12}$  DIMENSION SLATE SOLD OR USED BY PRODUCERS IN THE UNITED STATES, BY  ${\it USE}^{\rm l}$ 

	20	09	2010		
	Quantity	Value	Quantity	Value	
Use	(metric tons)	(thousands)	(metric tons)	(thousands)	
Flagging	3,640	\$2,270	2,380	\$903	
Roofing	15,800	9,160	18,700	11,300	
Flooring	640	933	1,010	1,470	
Other <sup>2</sup>	1,600	1,620	873	613	
Total	21,600	14,000	22,900	14,200	

<sup>&</sup>lt;sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>&</sup>lt;sup>2</sup>Includes monumental stone, uses not specified, and uses not listed.

<sup>&</sup>lt;sup>3</sup>Includes slabs and blocks, flagging, monumental, panels and veneer, ashlars and partially squared pieces, tile, and uses not listed.

<sup>&</sup>lt;sup>2</sup>Includes flagging stone and uses not listed.

<sup>&</sup>lt;sup>3</sup>Includes tile, curbing, exports, uses not specified, and uses not listed.

<sup>&</sup>lt;sup>2</sup>Includes structural and sanitary purposes, uses not specified, and uses not listed.

# $\label{eq:table 13} \text{U.S. EXPORTS OF DIMENSION STONE, BY TYPE}^{\,1}$

(Thousand metric tons and thousand dollars)

	2009		2010		Major destination	
Туре	Quantity	Value	Quantity	Value	in 2010 <sup>2</sup>	
Marble, travertine, alabaster worked <sup>3</sup>	43	5,580	51	7,830	Canada, 37%.	
Marble, travertine, crude or roughly trimmed	2	1,250	1	429	Bahamas, 19%.	
Marble, travertine, merely cut, by sawing or otherwise <sup>4</sup>	4	2,010	2	1,650	Canada, 19%.	
Granite, crude or roughly trimmed	67	20,800	77	25,200	China, 69%.	
Granite, merely cut by sawing or otherwise <sup>4</sup>	8	3,310	19	5,420	China, 67%.	
Sandstone, crude or roughly trimmed	NA	NA	NA	NA	NA.	
Sandstone, merely cut, by sawing or otherwise <sup>4</sup>	NA	NA	NA	NA	NA.	
Slate, worked and articles of slate	NA	4,340	NA	2,850	Canada, 73%.	
Slate, whether or not roughly trimmed or merely cut <sup>4</sup>	NA	789	NA	475	Latvia, 37%.	
Other calcareous monumental or building stone; alabaster <sup>5</sup>	22	6,290	28	7,600	Canada, 89%.	
Other monumental or building stone <sup>6</sup>	15	3,870	17	3,040	Canada, 78%.	
Total	XX	48,300	XX	54,500		

NA Not available. XX Not applicable.

Source: U.S. Census Bureau.

<sup>&</sup>lt;sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>&</sup>lt;sup>2</sup>By value

<sup>&</sup>lt;sup>3</sup>Further worked than simply cut with a flat surface.

<sup>&</sup>lt;sup>4</sup>Blocks or slabs.

<sup>&</sup>lt;sup>5</sup>Crude, roughly trimmed, or merely cut into blocks or slabs. Other than marble and travertine (includes alabaster).

<sup>&</sup>lt;sup>6</sup>Crude, roughly trimmed, or merely cut into blocks or slabs. Other than calcareous stone and alabaster, granite, sandstone, slate, dolomite, quartzite, and steatite.

 $\label{table 14} \text{U.S. IMPORTS FOR CONSUMPTION OF DIMENSION GRANITE, BY COUNTRY}^{1}$ 

#### (Thousand dollars)

					Dressed					
					Worked granite	<u> </u>				
					Cut to size <sup>2</sup>					
						Monumental	Building			
	Rough	Simply	Not cut	Maximum 1.5	1.5-7.5	minimum 7.5	minimum 7.5		Total	Total
Country	granite <sup>3</sup>	cut <sup>4</sup>	to size <sup>5</sup>	centimeters	centimeters	centimeters	centimeters	Other	worked	dressed
2009:										
Argentina	192	3	83		486			21	590	593
Brazil	722	2,660	60,200	3,410	184,000	67	3,010	30,400	281,000	284,000
Canada	3,130	471	1,660	2,290	6,870	9,980	1,790	3,090	25,700	26,200
China	1,690	15,600	9,610	14,200	105,000	12,900	11,400	46,600	200,000	216,000
Finland	10				25			13	38	38
India	5,430	4,140	13,300	2,140	49,100	8,930	2,390	15,500	91,300	95,500
Italy	553	1,580	16,400	1,720	65,400		3,420	16,200	103,000	105,000
Japan	2				9		193	11	213	213
Mexico	5	181			83		10	207	300	481
Norway	230	6		12	35			16	63	69
Portugal		24	20	45	139		37	223	464	488
Saudi Arabia					166		3	29	198	198
South Africa	658	3	54		150		4	24	232	235
Spain	69	315	570	289	5,650		31	811	7,350	7,670
Zimbabwe	1,900									
Other	744	2,020	6,110	756	14,300	122	772	3,210	25,300	27,300
Total	15,300	27,000	108,000	24,800	432,000	32,000	23,100	116,000	736,000	763,000
2010:										
Argentina	43		239		534			221	994	994 *
Brazil	133	2,070	87,900	3,050	268,000		6,040	47,000	412,000	414,000
Canada	3,060	940	816	1,590	4,960	7,790	4,070	3,770	23,000	23,900
China	1,890	11,200	12,500	9,080	107,000	14,700	11,300	49,600	204,000	215,000
Finland					3		4	20	27	27
India	7,550	2,230	15,700	2,940	73,600	8,400	2,510	22,600	126,000	128,000
Italy	336	2,560	16,500	1,830	77,900	48	2,440	19,600	118,000	121,000
Japan		114						12	12	126
Mexico		158			225		6	386	617	775
Norway	336	13			115			23	138	151
Portugal		33		54	92		2	111	259	292
Saudi Arabia		14	1,820		5,430		31	343	7,620	7,630
South Africa	756	85	84		100		4	149	337	422
Spain	21	399	1,350	298	6,450		239	738	9,070	9,470
Sweden	13								*	
Zimbabwe									*	
United Kindom	410		261					62	323	323
Other	492	1,330	5,310	486	15,200	49	767	3,270	25,100	26,400
Total	15,000	21,200	142,000	19,300	559,000	31,000	27,500	148,000	927,000	949,000

<sup>--</sup> Zero.

Source: U.S. Census Bureau.

<sup>&</sup>lt;sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>&</sup>lt;sup>2</sup>One or more faces worked more than simply cut.

<sup>&</sup>lt;sup>3</sup>Normal quarry products. Includes crude or roughly trimmed and roughly cut by sawing or otherwise; Harmonized Tariff Schedule of the United States (HTS) codes 2516.11.0000, 2516.12.0030, and 2516.12.0060.

<sup>&</sup>lt;sup>4</sup>Simply cut with a flat even surface; HTS code 6802.23.0000.

<sup>&</sup>lt;sup>5</sup>Only one face worked more than simply cut; HTS code 6802.93.0010.

<sup>\*</sup>Correction posted on April 5, 2012.

 ${\it TABLE~15} \\ {\it U.S.~IMPORTS~FOR~CONSUMPTION~OF~MAJOR~CATEGORIES~OF~DIMENSION~MARBLE~AND~OTHER~CALCAREOUS} \\ {\it STONE,~BY~COUNTRY}^1$ 

				Dressed					
	Marble	Marble, slabs <sup>2</sup>		Marble, other <sup>3</sup>		reous stone <sup>4</sup>	Rough marble <sup>5</sup>		
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	
Country	(metric tons)	(thousands)	(metric tons)	(thousands)	(metric tons)	(thousands)	(metric tons)	(thousands)	
2009:									
Brazil	1,680	\$1,680	170	\$193	715	\$955	22	\$36	
Canada	151	438	455	1,900	9,230	5,420	1	3	
China	47,500	33,700	43,900	49,000	36,200	13,400	1,970	865	
France	37	185	185	609	5,710	10,500	3	7	
Greece	3,600	8,110	2,530	4,850	479	785			
India	3,830	3,700	2,120	3,580	3,850	2,700	6	19	
Israel	2,720	3,500	3,700	3,710	5,180	6,180			
Italy	41,600	80,100	25,800	43,500	14,600	18,500	376	481	
Lebanon	4	3	524	991	469,000	5,650	22	12	
Mexico	393	468	2,070	2,800	5,810	6,130	142	28	
Portugal	1,220	1,530	908	1,740	14,200	13,800	4	16	
Spain	18,000	17,100	14,900	17,200	12,000	11,800	448	227	
Taiwan	437	506	1,120	2,120	80	88	5	30	
Turkey	19,400	15,400	49,400	38,900	44,400	6,030	175	132	
Other	10,900	9,910	14,100	13,400	41,300	12,700	299	157	
Total	151,000	176,000	162,000	185,000	663,000	115,000	3,470	2,010	
2010:									
Brazil	1,730	1,800	104	99	809	894			
Canada	191	662	439	1,300	3,820	4,530			
China	48,900	37,300	43,300	50,000	11,200	10,800	1,800	821	
France	194	338	365	638	7,230	6,330	1	3	
Greece	2,370	4,600	1,640	3,330	440	511			
India	3,370	3,070	2,300	3,490	6,150	1,070	46	50	
Israel	1,830	2,050	2,210	2,500	5,260	4,840	1	4	
Italy	43,600	75,900	21,100	35,700	11,000	15,100	174	536	
Lebanon	1	4	127	472	202,000	2,210			
Mexico	345	282	1,900	2,770	5,800	6,370	35	21	
Portugal	906	1,330	753	1,230	9,960	9,890			
Spain	21,200	19,000	15,700	14,600	17,600	7,520	307	186	
Taiwan	369	425	1,330	2,340	98	91	3	4	
Turkey	19,400	17,100	66,500	48,500	19,800	6,260	818	106	
Other	8,770	6,980	13,700	13,100	42,400	12,700	518	381	
Total	153,000	171,000	171,000	180,000	343,000	89,100	3,710	2,110	

<sup>--</sup> Zero.

Source: U.S. Census Bureau; data adjusted by the U.S. Geological Survey.

 $<sup>^{1}\</sup>mathrm{Data}$  are rounded to no more than three significant digits; may not add to totals shown.

<sup>&</sup>lt;sup>2</sup>Worked more than simply cut with a flat surface; Harmonized Tariff Schedule of the United States (HTS) code 6802.91.0500.

<sup>&</sup>lt;sup>3</sup>Merely cut by sawing or otherwise.

<sup>&</sup>lt;sup>4</sup>Worked more than simply cut with a flat surface, other than marble and travertine; HTS code 6802.92.0000.

<sup>&</sup>lt;sup>5</sup>Simply cut by sawing or otherwise into rectangular blocks or slabs; HTS code 2515.12.1000.

 $\label{eq:table 16} \text{U.S. IMPORTS FOR CONSUMPTION OF DIMENSION STONE, BY TYPE}^1$ 

			2009	2010			
			Value		Value	Major source	
Type		Quantity	(thousands)	Quantity	(thousands)	for 2010 <sup>2</sup>	
Calcareous stone, other <sup>3</sup>	metric tons	NA	NA	NA	NA	NA.	
Marble and alabaster <sup>4</sup>	do.	12,300	\$16,000	13,000	\$16,400	China, 21%.	
Sandstone, cut, by sawing or otherwise <sup>5</sup>	do.	NA	NA	NA	NA	Italy, NA.	
Slate, roofing million	n square feet	6	5,910	6	6,360	Canada, 40%.	
Slate, roughly trimmed or simply cut <sup>5</sup>	do.	3,190	1,220	6,400	2,090	China, 64%.	
Slate, worked and articles of slate, and other <sup>6</sup>	do.	NA	56,000	NA	54,700	China, 41%.	
Travertine, monumental or building stone and articles there	eof <sup>7</sup> do.	14,600	13,000	20,300	13,900	Mexico, 31%.	
Travertine, worked monumental or building stone <sup>8</sup>	do.	21,200	16,300	28,700	18,300	China, 41%.	
Other stone, monumental or building stone <sup>9</sup>	do.	NA	NA	NA	NA	Turkey, NA.	

do. Ditto. NA Not available.

Source: U.S. Census Bureau.

<sup>&</sup>lt;sup>1</sup>Data are rounded to no more than three significant digits. Table does not include totals shown on tables 14 and 15.

<sup>&</sup>lt;sup>2</sup>By value.

<sup>&</sup>lt;sup>3</sup>Simply cut with a flat surface, other than marble, travertine, and alabaster.

<sup>&</sup>lt;sup>4</sup>Simply cut with a flat surface.

<sup>&</sup>lt;sup>5</sup>Rectangular blocks or slabs.

<sup>&</sup>lt;sup>6</sup>Other than roofing, including agglomerated slate.

<sup>&</sup>lt;sup>7</sup>Simply cut with a flat surface, other than tiles and granules.

<sup>&</sup>lt;sup>8</sup>Dressed or polished but not further worked.

<sup>&</sup>lt;sup>9</sup>Simply cut with a flat surface, other than granite, calcareous stone, alabaster, slate, dolomite, quartzite, and steatite.