

DIMENSION STONE

By Jim F. Lemons, Jr.

Dimension stone consists of quarried blocks or large pieces of rock including granite, marble, limestone, sandstone, and slate. These stones are cut into panels, slabs or other shapes for primary use in building and construction, in monuments, and in curbing. The most prominent required qualities of dimension stone are strength, toughness, hardness, and resistance to environmental damage. Color and grain structure contribute largely to price and marketability.

U.S. stone production data are developed by the U.S. Geological Survey from a voluntary survey of U.S. producers of rough and finished dimension stone. Of the 278 dimension stone operations surveyed for 1995, including those that were idle, 209, 75% responded, representing 81% of the estimated value shown in table 1. (*See table 1.*) In comparison with 1994, total domestic stone production for 1995 decreased 3% to 1.16 million metric tons valued at \$233 million. Exports of dimension stone decreased slightly in value to \$51.8 million. The value of dimension stone imports for consumption increased 8.6% to \$478 million, equivalent to double the value of domestic production. (*See table 2.*)

Production

Blocks cut or split from a quarry face are typically transported to processing plants often located at the site, for final sizing and finishing operations. Stone finishing may include polishing, edging, and decorating the final stone products. Recent developments in quarry and processing technology include techniques for making very thin natural stone products.

Of the total dimension stone production in 1995, 42% was granite; 31% was limestone; 13% was sandstone; 3% was marble; 3% was slate; and 8% was miscellaneous stone. Four States, Georgia, Indiana, Vermont, and Wisconsin, had dimension stone production exceeding 100,000 metric tons. These four States represent 45% of total domestic production. (*See table 3.*)

Leading producing companies in terms of tonnage were Cold Spring Granite Co., principally in California, Minnesota, South Dakota, and Texas; Rock of Ages Corp. in New Hampshire and Vermont; Fletcher Granite Co., Inc. in Massachusetts and New Hampshire; Indiana Limestone Co., Inc. in Indiana, and Halquist Stone Co., Inc. in Wisconsin.

Granite.—Dimension granite includes all coarse-grained igneous rocks. Production in 1995 remained comparable with 1994 levels at 495,000 tons with a 15% increase of value to \$104 million. Granite was produced by 42 companies at 80 quarries in 19 States. Georgia continued to be the leading State, producing 25% of the U.S. total. Cold Spring Granite, Rock of Ages, Fletcher Granite Co., and McCannon Granite Co. were

the leading producers and accounted for 56% of U.S. production. (*See table 4.*)

Limestone.—Dimension limestone includes bituminous, dolomitic, and siliceous limestones. Production in 1995 remained comparable with 1994 levels at 363,000 tons with a 5% increase in value to \$61 million. It was produced by 29 companies at 39 quarries in 13 States. Indiana, the leading State, produced 172,000 tons in 1994, with Wisconsin, as the second largest producer and Kansas as the third largest. (*See table 5.*)

Sandstone.—Dimension sandstone includes calcareous- and siliceous-cemented sandstones or conglomerates. Quartzite, which also is included, may be described as any siliceous-cemented sandstone. In 1995, the U.S. total for sandstone decreased by 16% from 1994 levels to 145,000 tons valued at \$17.2 million. Dimension sandstone was produced by 29 companies at 50 quarries in 15 States. Leading producing States were New York and Pennsylvania. (*See table 6.*)

Consumption

Production during the year was assumed to equal consumption, since no separate accounting is made of changes in industry stocks. Rough stone represented 51% by tonnage and 32% by value of the dimension stone market. The largest uses of rough stone were in building and construction (48%) and monumental (24%). Dressed stone represented 49% of the total consumed tonnage. The largest uses of dressed stone market share were in ashlar and partially squared pieces at 24%, curbing at 22%, flagging at 18%, and monumental at 9%. (*See table 7.*)

Granite.—Primary uses of the 1995 reported consumption of granite by weight (495,000 tons) were in monumental applications (rough stone 27% and dressed stone 9%), rough blocks for construction 20%, and dressed stone used in curbing 25%. (*See table 8.*)

Limestone.—Primary uses of the 1995 reported consumption of limestone by weight (363,000 tons) were in rough blocks for building and construction 41%, and dressed stone for ashlar and partially squared pieces 17%. (*See table 9.*)

Marble.—Dimension marble includes certain hard limestones, travertines, and any other calcareous stone that can be polished. Marble sold or used in the United States in 1995 increased 9% in tonnage to 39,600 tons, and 2% in value to \$21.1 million, from 1994. Marble was produced by 7 companies at 13 quarries in 6 States and Puerto Rico. (*See table 10.*)

Sandstone.—Primary uses of the 1995 reported consumption of sandstone by weight (145,000 tons) were in dressed stone for

flagging 44%, and dressed stone for ashlar and partially squared pieces 17%. (See table 11.)

Slate.—Slate is a fine grained metamorphic rock derived from shale, siltstone, or claystone. Shale is composed mostly of original clay minerals, and cleavage is parallel to the bedding. Dimension slate sold or used by producers in the United States in 1995 remained comparable with 1994. Slate was produced by 17 companies at 25 quarries in 8 States. Forty three percent of the slate was used for roofing. (See table 12.)

Two major dimension stone projects completed this year were the Denver International Airport and the Korean War Veterans Memorial. The Denver Airport included almost 20,000 square feet of 2-centimeter-thick cut-to-size marble slabs from the Colorado Yule quarry. This quarry was reopened in 1990 after being closed for almost 50 years. Previously this quarry had supplied marble for the exterior of the Lincoln Memorial and the Tomb of the Unknown Soldier in Washington, DC. The Korean War Veterans Memorial was dedicated in July 1995. The memorial consists of a 164 foot long reflective wall made from 41 panels of Cold Spring granite etched with thousands of photographic images. A total of 2,000 square meters (22,000 square feet) of Academy black granite quarried in Clovis, CA was supplied for the wall and the polished inscription paver.

Prices

The average 1995 price for dimension stone increased to \$203 per ton from \$183 in 1994.

Foreign Trade

Exports.—Exports of dimension stone decreased slightly in value to \$51.8 million. The primary export was granite principally to Italy. (See table 13.)

Imports.—Imports for consumption of dimension stone increased 8% in value to \$476 million, mostly because of increases in imports of major granite categories of dimension stone. (See tables 13, 14, 15, and 16.) Italy remains a principal supplier of granite. Other principal suppliers of granite are Brazil, Canada, and India. Brazilian granites have become very popular in residential markets. India greens are popular in kitchen countertops. China is a relatively new country in the U.S. granite market. Low pricing has allowed their strong entry into U.S. markets.¹

Current Research and Technology

In 1995, the dimension stone industry moved into the computer age in areas of fabrication and marketing. Computerized design is becoming more prominent in the industry with the use of etching and contour cutting of memorials stones. Images such as those on the Korean War Veterans Memorial can be produced using computer-assisted laser etching of the stone. Computerized wire saws are now able to cut complex hearts, animals, and other abstract representations on monuments. In addition, many companies and leading trade journals have developed web sites. These sites allow designers to view and select stone from color representations of the stone shown on computerized images.

Outlook

Industry experts believe North American firms are more likely to be successful in the 1990's when a large portion of their sales are in fast-growing niche markets: granite and marble in kitchens and bathrooms, limestone in landscaping stone and ledges, hand-carved or worked stone in custom built houses, and perhaps, limestone tiles. The trend is continuing for the use of "natural stone" to provide a rustic earthy setting. This includes acid-washed stone and other stones that are harder to take a polish. Annual growth rates through this decade have been projected to be 2.6% for granite; 3.7% for limestone; 3.8 to 5% for slate and 2.0 to 4.5% for marble.²

¹ Dimension Stone. V. 11, No.7, July 1995, p. 14.

²Taylor, H. A., Jr. Stone Report: United States 1995 and 2000, Dimension Stone, v. 11, No. 10, Oct. 1995, pp. 48-50, 64.

OTHER SOURCES OF INFORMATION

U. S. Geological Survey Publications

Lawrence, Robert A., 1973, Construction Stone, in Brobst, D.A., and Pratt, W.P., United States Mineral Resources: U.S. Geological Survey Professional Paper 820, pp. 157-162.
Stone (dimension)—Ch. in Mineral Commodity Summaries, annual.

Other Sources

Dimensional Stone.
Industrial Minerals (United Kingdom).
Stone Industries (United Kingdom).
Stone World.

TABLE 1
SALIENT U.S. DIMENSION STONE STATISTICS 1/

(Thousand metric tons and thousand dollars)

	1991	1992	1993	1994	1995
<u>Sold or used by producers:</u>					
Quantity 2/	1,160	1,140	1,280	1,190	1,160
Value 2/	\$211,000	\$198,000	\$226,000	\$218,000	\$233,000
Exports (value)	\$64,900	\$54,900	\$52,700	\$53,000	\$51,800
Imports for consumption (value)	\$475,000	\$404,000	\$398,000	\$440,000	\$478,000

1/ Data are rounded to three significant digits.

2/ Includes Puerto Rico.

TABLE 2
U.S. IMPORT DUTIES ON DIMENSION STONE

Tariff item	HTS. No.	Most favored nation (MFN)	Non-MFN
		Jan. 1, 1996	Jan. 1, 1996
Slate: Rough blocks or slabs	2514.00.0000	3% ad valorem	25% ad valorem.
Rough blocks or slabs of marble, travertine, and other calcareous monumental or building stone	2515.00.0000		
<u>Marble and travertine:</u>			
Crude or roughly trimmed	2515.11.0000	\$2.77 per cubic meter	\$22.95 per cubic meter.
Marble, merely cut	2515.12.0010	1.7% ad valorem	13% ad valorem.
Travertine, merely cut	2515.12.0020	5.4% ad valorem	50% ad valorem.
Other calcareous stone alabaster	2515.20.0000	5.4% ad valorem	50% ad valorem.
Rough blocks or slabs of granite, porphyry, basalt, sandstone, and other monumental or building stone	2516.00.0000		
<u>Granite:</u>			
Crude or roughly trimmed	2516.11.0000	Free	\$8.83 per cubic meter.
Merely cut	2516.12.0000	3.9% ad valorem	60% ad valorem.
<u>Sandstone:</u>			
Crude or roughly trimmed	2516.21.0000	Free	\$5.30 per cubic meter.
Merely cut	2516.22.0000	5.4% ad valorem	50% ad valorem.
Other monumental or building stone	2516.90.0000	5.4% ad valorem	50% ad valorem.
Setts, curbstones, and flagstones	6801.00.0000	3.9% ad valorem	60% ad valorem.
Worked monumental or building stone	6802.00.0000		
Tiles and cubes under 7centimeters square, granules	6802.10.0000	6.5% ad valorem	40% ad valorem.
<u>Other stone and articles with a flat or even surface:</u>			
<u>Marble, travertine, and alabaster:</u>			
Travertine	6802.21.1000	5.6% ad valorem	50% ad valorem.
Other	6802.21.5000	2.1% ad valorem	13% ad valorem.
Other calcareous stone	6802.22.0000	5.8% ad valorem	50% ad valorem.
Granite	6802.23.0000	4.1% ad valorem	60% ad valorem.
Other stone	6802.29.0000	7.2% ad valorem	30% ad valorem.
<u>Other:</u>			
<u>Marble, travertine, and alabaster:</u>			
<u>Marble:</u>			
Slabs	6802.91.0500	2.7% ad valorem	15% ad valorem.
Other	6802.91.1500	5.8% ad valorem	50% ad valorem.
<u>Travertine:</u>			
Articles of subheading 6802.21.1000 that have been dressed or polished, but not further worked	6802.91.2000	5.6% ad valorem	50% ad valorem.
Other	6802.91.2500	5% ad valorem	40% ad valorem.
Alabaster	6802.91.3000	5.2% ad valorem	50% ad valorem.
Other calcareous stone	6802.92.0000	5.8% ad valorem	50% ad valorem.
Granite	6802.93.0000	4.1% ad valorem	60% ad valorem.
Other stone	6802.99.0000	6.5% ad valorem	40% ad valorem.
<u>Worked slate and articles:</u>			
Roofing slate	6803.00.0010	5.9% ad valorem	25% ad valorem.
Other	6803.00.0050	3% ad valorem	25% ad valorem.

TABLE 3
DIMENSION STONE SOLD OR USED BY PRODUCERS IN THE UNITED STATES, 1/ BY STATE 2/

State	1994		1995	
	Quantity (metric tons)	Value (thousands)	Quantity (metric tons)	Value (thousands)
California	22,300	\$5,640	27,300	\$6,660
Colorado	7,030	\$1,270	17,800	\$2,640
Georgia 3/	188,000	17,800	125,000	13,800
Indiana 3/	173,000	25,800	172,000	31,400
Kansas 3/	23,700	1,730	19,800	1,810
Maryland	20,800	1,700	20,700	2,260
Massachusetts	57,300	9,600	77,600	14,600
New Hampshire	22,500	3,820	23,000	6,290
New York	32,100	8,860	32,800	8,440
North Carolina 3/	41,200	14,500	41,100	15,400
Oklahoma 3/	3,980	1,250	9,170	2,350
Pennsylvania	57,200	12,100	57,600	12,300
Vermont	87,100	28,700	100,000	28,700
Wisconsin	118,000	14,900	128,000	14,500
Other 4/	337,000	70,100	308,000	72,000
Total	1,190,000	218,000	1,160,000	233,000

1/ Includes Puerto Rico.

2/ Data are rounded to three significant digits; may not add to totals shown.

3/ Totals only include Georgia granite, Indiana limestone, Kansas limestone, North Carolina granite and Oklahoma granite and limestone (1994); other stone included with "Other."

4/ Includes data for Alabama, Arizona, Arkansas, Connecticut, Idaho, Illinois (1994), Iowa, Maine, Michigan, Minnesota, Missouri, Montana, New Mexico, South Carolina, Tennessee, Texas, Washington, and West Virginia.

TABLE 4
DIMENSION GRANITE SOLD OR USED BY PRODUCERS
IN THE UNITED STATES, BY STATE 1/

State	1994		1995	
	Quantity (metric tons)	Value (thousands)	Quantity (metric tons)	Value (thousands)
Georgia	188,000	\$17,800	125,000	\$13,800
Massachusetts	57,300	9,600	77,600	14,600
New Hampshire	22,500	3,820	23,000	6,290
North Carolina	37,800	13,300	41,100	15,400
Oklahoma	2,280	1,110	6,960	2,180
Pennsylvania	10,600	2,900	8,050	2,670
Vermont	55,100	11,500	W	W
Wisconsin	3,320	2,910	W	W
Other 2/	122,000	27,700	214,000	49,200
Total	499,000	90,700	495,000	104,000

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

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Includes California, Colorado, Connecticut, Maine, Minnesota, Missouri, New York, South Carolina, South Dakota, Texas, and Virginia.

TABLE 5
DIMENSION LIMESTONE SOLD OR USED BY PRODUCERS IN THE
UNITED STATES, BY STATE 1/

State	1994		1995	
	Quantity (metric tons)	Value (thousands)	Quantity (metric tons)	Value (thousands)
Indiana	173,000	\$25,800	172,000	\$31,400
Kansas	23,700	1,730	19,800	1,810
Oklahoma	1,700	146	2,220	176
Wisconsin	114,000	12,000	120,000	11,600
Other 2/	52,900	18,800	48,800	16,200
Total	366,000	58,500	363,000	61,200

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Includes Alabama, Arkansas, California, Iowa, Minnesota, New Mexico, Ohio, Texas, and Utah.

TABLE 6
DIMENSION SANDSTONE SOLD OR USED BY PRODUCERS IN THE
UNITED STATES, BY STATE 1/

State	1994		1995	
	Quantity (metric tons)	Value (thousands)	Quantity (metric tons)	Value (thousands)
New York	21,800	\$6,200	26,100	\$6,300
Pennsylvania	25,300	3,560	22,900	3,320
Other 2/	125,000	5,850	95,800	7,540
Total	172,000	15,600	145,000	17,200

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Includes Alabama, Arizona, Arkansas, California, Colorado, Kansas, Michigan, North Carolina, Ohio, Oklahoma, Utah, West Virginia, and Wisconsin (1995).

TABLE 7
DIMENSION STONE SOLD OR USED BY PRODUCERS IN THE
UNITED STATES, 1/ BY USE 2/

Use	1994		1995	
	Quantity (metric tons)	Value (thousands)	Quantity (metric tons)	Value (thousands)
Rough stone:				
Rough blocks for building and construction	339,000	\$37,300	287,000	\$31,200
Irregular-shaped stone	134,000	8,060	99,300	9,360
Monumental	189,000	23,100	141,000	20,600
Other 3/	40,300	8,030	66,300	13,500
Dressed stone:				
Ashlars and partially squared pieces	145,000	34,200	135,000	26,200
Slabs and blocks for building and construction	32,700	17,000	30,800	16,000
Monumental	31,900	21,800	50,300	27,100
Curbing	97,200	18,600	126,000	26,300
Flagging	80,300	9,110	99,300	9,290
Flagging (slate)	7,200	1,650	5,460	713
Roofing slate	14,600	12,100	14,300	11,200
Structural and sanitary	4,860	4,290	5,480	4,550
Flooring slate	4,750	2,850	4,530	2,030
Other 3/	70,800	20,000	99,800	36,300
Total	1,190,000	218,000	1,160,000	233,000

1/ Includes Puerto Rico.

2/ Data are rounded to three significant digits; may not add to totals shown.

3/ Includes uses not specified and exports of rough stone (1995).

TABLE 8
DIMENSION GRANITE SOLD OR USED BY PRODUCERS IN THE
UNITED STATES, BY USE 1/

Use	1994		1995	
	Quantity (metric tons)	Value (thousands)	Quantity (metric tons)	Value (thousands)
Rough stone:				
Rough blocks for building and construction	131,000	\$19,500	100,000	\$13,900
Irregular-shaped stone 2/	16,400	3,500	43,900	7,720
Monumental	185,000	22,000	136,000	19,400
Dressed stone:				
Ashlars and partially squared pieces	22,700	7,550	32,800	9,180
Slabs and blocks for building and construction	2,310	917	830	664
Monumental	26,300	12,600	45,600	18,100
Curbing	97,100	18,500	122,000	25,800
Other 3/	18,000	6,120	13,600	9,270
Total	499,000	90,700	495,000	104,000

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Includes rubble (1994), minor amount of uses not specified, and exports of rough stone (1995).

3/ Includes stone used for flagging, paving block, and unspecified uses for dressed stone.

TABLE 9
DIMENSION LIMESTONE SOLD OR USED BY PRODUCERS IN THE
UNITED STATES, BY USE 1/

Use	1994		1995	
	Quantity (metric tons)	Value (thousands)	Quantity (metric tons)	Value (thousands)
Rough stone:				
Rough blocks for building and construction	154,000	\$12,700	148,000	\$13,200
Irregular-shaped stone 2/	27,900	1,830	43,700	5,440
Dressed stone:				
Ashlars and partially squared pieces	86,700	22,000	62,300	12,300
Slabs and blocks for building and construction	21,600	9,010	20,700	8,280
Flagging	23,300	2,880	25,100	2,210
Other 3/	52,400	10,100	63,300	19,800
Total	366,000	58,500	363,000	61,200

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Includes exports of rough stone (1995) and uses not specified.

3/ Includes dressed monumental, curbing, and unspecified uses for dressed stone.

TABLE 10
DIMENSION MARBLE SOLD OR USED BY PRODUCERS IN THE
UNITED STATES, 1/ BY USE 2/

Use	1994		1995	
	Quantity (metric tons)	Value (thousands)	Quantity (metric tons)	Value (thousands)
Rough stone:				
Rough blocks for building and construction	17,300	\$2,940	W	W
Other 3/	5,710	1,250	18,500	4,430
Dressed stone:				
Ashlars and partially squared pieces	3,560	683	3,110	504
Slabs and blocks for building and construction	4,760	6,620	5,430	6,500
Other 4/	4,950	9,250	12,500	9,700
Total	36,300	20,700	39,600	21,100

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

1/ Includes Puerto Rico.

2/ Data are rounded to three significant digits; may not add to totals shown.

3/ Includes rubble, irregular shaped stone, monumental stone, export of rough stone (1995), and unspecified uses.

4/ Includes stone used for monumental purposes, a small amount of flagging, and unspecified.

TABLE 11
DIMENSION SANDSTONE SOLD OR USED BY PRODUCERS IN THE
UNITED STATES, BY USE 1/

Use	1994		1995	
	Quantity (metric tons)	Value (thousands)	Quantity (metric tons)	Value (thousands)
Rough stone:				
Rough blocks for building and construction	19,800	\$1,080	14,200	\$779
Irregular-shaped stone 2/	78,000	3,580	33,700	3,330
Other 3/	W	W	--	--
Dressed stone:				
Ashlars and partially squared pieces	19,700	2,280	24,300	2,720
Slabs and blocks for building and construction	4,080	466	1,950	420
Flagging	44,000	4,850	64,200	6,060
Other 4/	6,180	3,350	6,400	3,820
Total	172,000	15,600	145,000	17,200

W Withheld to avoid disclosing company proprietary data.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Includes rubble.

3/ Includes uses not specified.

4/ Includes dressed monumental, curbing, and unspecified uses for dressed stone.

TABLE 12
DIMENSION SLATE SOLD OR USED BY PRODUCERS IN THE
UNITED STATES, BY USE 1/

Use	1994		1995	
	Quantity (metric tons)	Value (thousands)	Quantity (metric tons)	Value (thousands)
Flagging	7,230	\$1,650	5,620	\$733
Roofing	14,600	12,100	15,300	12,100
Structural and sanitary purposes	4,880	4,290	5,480	4,550
Flooring	4,770	2,850	4,580	2,030
Other 2/	3,740	2,270	4,680	2,230
Total	35,200	23,200	35,600	21,600

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Includes a minor amount of slate used for billiard tabletops, blackboard, school slates, and unspecified uses.

TABLE 13
U.S. EXPORTS OF DIMENSION STONE, BY TYPE 1/

(Thousand metric tons and thousand dollars)

Type	1994		1995		Major destination 2/ in 1995, (percent)
	Quantity	Value	Quantity	Value	
Marble, travertine, alabaster worked	18	\$3,130	27	\$3,770	Mexico, 28%.
Marble, travertine - crude or roughly trimmed	2	531	3	879	Canada, 52%.
Marble, travertine - merely cut, by sawing or otherwise	22	2,540	19	1,620	Thailand, 23%.
Granite, crude or roughly trimmed	97	22,000	124	24,300	Italy, 41%.
Granite, merely cut by sawing or otherwise	65	14,100	34	10,300	Italy, 32%.
Granite, dressed, worked	8	7,530	5	5,900	Korea, Republic of, 35%.
Sandstone, crude or roughly trimmed	1	207	2	398	Canada, 53%.
Sandstone, merely cut, by sawing or otherwise	6	1,130	4	931	Canada, 85%.
Slate, worked and articles of slate	NA	6,090	NA	5,520	Belize, 38%.
Slate, whether or not roughly trimmed or merely cut	NA	760	NA	443	Canada, 69%.
Other calcareous monumental or building stone; alabaster	3	1,240	4	1,570	Taiwan, 36%.
Other monumental or building stone	8	1,270	10	2,070	Canada, 45%.
Total	XX	53,000	XX	51,800	

NA Not available. XX Not applicable.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ By value.

Source : Bureau of the Census.

TABLE 14
U.S. IMPORTS FOR CONSUMPTION OF DIMENSION GRANITE, BY COUNTRY 1/

(Thousand dollars)

Country	Rough granite 2/	Dressed granite articles	Dressed worked granite						Total worked	Total dressed
			Not cut to size	Cut to size						
				Max 1.5 cm	1.5-10 cm	Monumental Min 10 cm	Building Min 10 cm	Other		
1994:										
Argentina	26	225	51	22	141	--	36	51	301	526
Brazil	294	1,380	5,770	1,230	6,530	287	160	3,810	17,800	19,200
Canada	3,460	1,590	1,370	60	3,400	2,220	1,070	3,690	11,800	13,400
China	169	543	268	825	321	50	226	1,500	3,190	3,740
Finland	12	28	20	--	20	4	--	20	70	100
India	1,450	2,140	2,090	2,920	5,760	3,350	1,440	4,600	20,100	22,300
Italy	729	2,970	11,000	2,560	13,800	70	1,920	19,400	48,900	51,800
Japan	55	44	--	--	20	--	--	102	127	171
Mexico	52	22	20	60	502	--	30	158	765	787
Norway	156	--	10	40	20	40	--	--	117	117
Portugal	799	--	40	--	50	--	44	20	151	151
Saudi Arabia	129	2	352	30	80	--	--	--	464	466
South Africa	839	264	116	151	113	80	169	250	885	1,150
Spain	70	485	1,090	659	3,410	--	175	1,090	6,420	6,910
Other	577	289	429	552	499	--	--	748	2,230	2,520
Total	8,810	9,980	22,700	9,120	34,700	6,120	5,270	35,500	113,000	123,000
1995:										
Argentina	29	142	82	59	119	--	--	172	432	574
Brazil	316	1,870	5,460	754	6,760	18	476	3,760	17,200	19,100
Canada	3,020	1,200	3,220	474	2,360	3,420	1,700	5,800	17,000	18,200
China	383	955	645	939	347	118	388	1,540	3,980	4,940
Finland	37	2	--	--	9	4	31	71	115	117
India	1,580	3,120	2,400	3,180	7,940	3,050	2,610	2,740	21,900	25,000
Italy	1,050	5,410	9,460	2,660	14,400	107	1,830	21,600	50,100	55,500
Japan	--	37	9	--	--	--	9	185	203	240
Mexico	9	30	63	72	547	--	2	6	690	720
Norway	190	6	--	--	74	15	5	--	94	100
Portugal	--	53	19	--	20	--	--	29	68	121
Saudi Arabia	26	176	334	19	220	--	16	57	646	822
South Africa	992	92	26	188	61	--	189	482	946	1,040
Spain	7	379	1,460	955	2,140	33	206	1,330	6,120	6,500
Other	557	627	467	701	413	66	302	758	2,710	3,330
Total	8,200	13,900	23,600	9,520	35,400	6,830	7,770	38,500	122,000	136,000

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Includes crude or roughly trimmed, and merely cut by sawing or otherwise.

Sources: Bureau of the Census.

TABLE 15
U.S. IMPORTS FOR CONSUMPTION OF MAJOR CATEGORIES OF DIMENSION MARBLE AND OTHER CALCAREOUS STONE,
BY COUNTRY 1/

Country	Dressed marble slabs		Dressed marble - other		Dressed marble and other calcareous stone 2/		Rough marble 3/	
	Quantity (metric tons)	Value (thousands)	Quantity (metric tons)	Value (thousands)	Quantity (metric tons)	Value (thousands)	Quantity (metric tons)	Value (thousands)
1994:								
China	1,140	696	2,670	2,060	2,000	1,720	114	89
France	125	150	211	414	9,060	10,200	4	4
Greece	4,730	5,200	3,980	4,290	4,140	4,640	118	83
India	616	610	925	934	411	282	2	4
Italy	25,200	24,800	36,900	34,400	32,400	27,000	779	966
Mexico	1,340	1,290	1,590	1,290	6,620	6,610	52	35
Portugal	940	981	1,260	1,090	6,560	4,440	24	24
Spain	3,270	2,470	5,870	5,630	27,900	23,400	20	8
Other	11,100	9,500	9,610	12,800	12,700	7,250	242	351
Total	48,500	45,600	63,100	62,900	102,000	85,500	1,360	1,560
1995:								
China	1,350	932	2,880	2,720	1,710	1,520	358	158
France	119	138	104	154	11,200	15,000	35	38
Greece	4,180	4,970	3,520	3,750	3,940	4,170	2	3
India	1,170	828	1,230	1,310	469	389	83	115
Italy	23,700	22,700	37,000	35,200	31,800	29,500	1,110	1,000
Mexico	766	769	2,680	2,120	6,300	5,400	74	67
Portugal	1,180	1,100	1,280	1,120	6,470	4,670	--	--
Spain	3,730	3,480	7,740	7,800	28,700	28,000	268	135
Other	11,100	8,600	8,270	12,700	44,900	8,980	349	466
Total	47,300	43,500	64,700	66,800	136,000	97,600	2,280	1,990

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ HTS No. 6802.92.0000: The material from Italy is almost all marble; from France, is both limestone and marble; from Spain is almost all marble; and from Mexico, is both limestone and marble.

3/ Merely cut by sawing or otherwise.

Source: Bureau of the Census as modified by the U.S. Geological Survey.

TABLE 16
U.S. IMPORTS FOR CONSUMPTION OF DIMENSION STONE, BY TYPE 1/

Type		1994		1995		Major source 2/ for 1995, (percent)
		Quantity	Value (thousands)	Quantity	Value (thousands)	
Calcareous stone-other 3/	metric tons	72,600	\$6,590	48,700	\$5,920	Italy, 28%.
Marble, travertine, alabaster, and other	do.	3,540	3,170	6,150	4,200	Italy, 57%.
Sandstone, merely cut, by sawing or otherwise	do.	151	148	261	268	India, 40%.
Slate, roofing	million square feet	8	3,290	8	3,730	Spain, 27%.
Slate, whether or not roughly trimmed or merely cut	do.	2,790	1,630	2,280	832	Italy, 37%.
Slate, worked and articles of slate, and other	do.	NA	22,700	NA	25,900	Italy, 40%.
Stone, worked monumental or building stone-other	metric tons	52,100	55,600	64,300	60,400	Italy, 29%.
Travertine, monumental or building stone and articles thereof	do.	6,650	3,530	6,320	4,180	Italy, 64%.
Travertine, worked monumental or building stone	do.	13,100	10,600	17,100	13,000	Italy, 74%.
Other monumental or building stone	do.	14,700	3,090	20,700	4,650	South Africa, 47%.
Other stone-monumental or building stone-articles thereof	do.	3,410	1,780	2,760	1,300	Mexico, 38%.

NA Not available.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ By value.

3/ HTS No. 6802.22.0000.

Source: Bureau of the Census.