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2018 Minerals Yearbook

STONE, DIMENSION [ADVANCE RELEASE]

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Stone, Dimension

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U.S. production of dimension stone in 2018 was estimated to be 2.66 million metric tons (Mt) valued at $437 million, which was an 8% decrease in tonnage and a 3% decrease in value compared with production in 2017. Exports increased slightly in value to $69.5 million, and imports for consumption decreased slightly in value to $2.09 billion. The value of apparent consumption was estimated to be $2.46 billion in 2018, slightly less than that in 2017 (table 1). Trade data in this report are from the U.S. Census Bureau. All percentages in the report were calculated using unrounded data.

Dimension stone is 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 from 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 minor varieties of dimension stone that are normally considered to be specialty types include alabaster (massive gypsum) and soapstone (massive talc). A more detailed discussion describing specific types of dimension stone can be found in the 2017 U.S. Geological Survey (USGS) Minerals Yearbook, volume I, Metals and Minerals.

Throughout history, various civilizations have used dimension stone as a building material. With the advent of modern construction materials and techniques (such as reinforced concrete), the use of dimension stone for framework and structural support in buildings has diminished. In recent years, most dimension stone has been used in construction applications and for renovation and restoration, with the largest portions being sold or used as ashlars (rectangular or square-cut stone used for building purposes) and masonry and partially squared pieces, curbing, flagstone, and rough block for building and construction. The major nonconstruction application is monumental stone, which includes memorials of various kinds.

Architects, builders, and quarriers have important roles in the selection of appropriate dimension-stone types for specific end uses. Most dimension-stone types are not isotropic (possessing physical properties that are uniform in all directions), particularly sedimentary rocks (Smith, 1999, p. 360). Therefore, extensive testing of the physical properties of a stone are important in order to select the stone for the most appropriate end use. For example, ashlars must possess color variability and sustainability as well as weathering resistance, and solid-stone masonry bridge piers must possess compressive strength and abrasion and weathering resistance (Smith, 1999, p. 361).

[1]Deceased.

Legislation and Government Program

One of the most important issues affecting the dimension stone industry has been the potential effect of crystalline silica on human health. The understanding of the regulations, the implementation of the measurements and actions taken to mitigate exposure to crystalline silica, and the appreciation of the effect of such exposure on the future of many industries remain central to an ongoing debate. On March 23, 2016, the Occupational Safety and Health Administration (OSHA) issued a final ruling on permissible occupational exposure limits to respirable crystalline silica. By issuing the ruling, OSHA amended its existing standards for occupational exposure to respirable crystalline silica. The final rule established a new permissible exposure limit of 50 micrograms of respirable crystalline silica per cubic meter of air as an 8-hour time-weighted average in all industries covered by the rule. The final rule was made effective on June 23, 2016. Phased implementation of the new regulations was scheduled to take effect from 2017 through 2021 (Occupational Safety and Health Administration, 2016, p. 16286, 16288). On August 22, 2018, OSHA announced that frequently asked questions and training videos on OSHA's standard for respirable crystalline silica in construction were available online. Developed in cooperation with industry and labor organizations, the frequently asked questions and training videos provide employers and workers with guidance on OSHA's standard. The training videos instruct users on methods for controlling exposure to silica dust when performing common construction tasks or using construction equipment (Occupational Safety and Health Administration, 2018).

Production

Data on the production of dimension stone in the United States were derived by the USGS from a voluntary canvass of U.S. quarry producers of rough and dressed dimension stone. Of the 250 dimension-stone-producing operations included in the survey for 2018, 97 (39%) responded, which represented 40% of the tonnage; the remaining tonnage was estimated based on prior years' reporting and (or) employment data provided by the Mine Safety and Health Administration.

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 any given year, commercial and residential construction accounts for a significant portion of the consumption of dimension stone of all types. In 2018, sales of new homes nationwide decreased slightly compared to the previous year. In addition, sales of existing homes decreased by about 3% in 2018 compared to 2017, likely causing a slowing of residential and commercial renovation and refurbishment activity (National Association of Home Builders, 2019).

In 2018, limestone accounted for 1.33 Mt (50%) of the 2.66 Mt total quantity of domestic dimension stone production, followed by sandstone (20%), granite (18%), miscellaneous stone (8%), marble (2%), and slate (2%). By value, limestone accounted for $196 million (45%) of the $437 million total domestic production value, followed by granite (25%), sandstone (11%), miscellaneous stone (9%), slate (5%), and marble (4%) (table 2).

Production of dimension stone was reported in 33 States. Leading producer States, in descending order by tonnage, were Texas, Wisconsin, Indiana, Georgia, and Vermont. These States accounted for 68% of domestic production. Leading producer States, in descending order by value, were Texas, Wisconsin, Indiana, Vermont, and Minnesota. These States contributed 58% of the value of domestic production (table 3).

The top five producing companies in the United States were Gordon Stone Co. in Texas; Mezger Enterprises, Inc. in Texas; Texas Stone Quarries in Texas; Buechel Stone Corp. in Wisconsin; and Swenson Granite Works in New Hampshire and Vermont. These companies accounted for 22% of the total tonnage and 10% of the total value. The leading 15 producing companies accounted for 43% of total domestically produced tonnage and 33% of production 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.

In October 2018, Canada's Polycor Inc., the largest producer of natural stone in North America, completed a merger with Indiana Limestone Co. A leading dimensional limestone quarrier and building products producer, Indiana Limestone Co. is headquartered in Bloomington, IN. All plants and quarries continued to operate as normal, with both Polycor Inc.'s and Indiana Limestone Co.'s management teams leading their respective business operations moving forward (Polycor Inc., 2018).

Granite.—Dimension granite was produced by 39 companies operating 54 quarries in 17 States. Production in 2018 was 484,000 metric tons (t) valued at $108 million (table 4). Granite production tonnage decreased by 8% and the value decreased by 6% compared with 2017. The top producing States, in descending order by tonnage, were Georgia and Vermont, which accounted for 42% of the tonnage and 20% of the value of U.S. granite production. Champlain Stone Ltd., Crystal Blue Quarries, Inc., Swenson Granite Works, Vermont Stone Sales, Inc., and Williams Stone Co. Inc. were the leading producers and accounted for 32% of U.S. granite production by tonnage and 20% by value.

Limestone.—Dimension limestone was produced by 78 companies from 90 quarries in 17 States. Production decreased slightly in 2018 to 1.33 Mt from 1.36 Mt in 2017 (table 5). The value decreased by 4% to $196 million in 2018 from $205 million in 2017. The top five producing States, in descending order of tonnage, were Texas, Indiana, Wisconsin, Missouri, and Tennessee, which combined produced 89% of U.S. tonnage and 88% of the value. Buechel Stone, Indiana Limestone Co., Mezger Enterprises, RLF Salado Quarries, LLC, and Texas Stone Quarries were the leading producers and accounted for 35% of U.S. limestone tonnage and 28% of the value.

Marble.—Marble was mined by five companies that operated five quarries in four States. Production tonnage decreased slightly in 2018 to 55,900 t valued at $19.2 million from 56,100 t valued at $17.5 million in 2017 (table 10). Colorado was the leading producing State by tonnage, followed by Vermont, Tennessee, and Georgia. The leading producers were Colorado Stone Quarries, Inc. and Vermont Quarries Corp.

Sandstone.—Dimension sandstone was produced by 50 companies that operated 55 quarries in 14 States. Production tonnage decreased by 25% to 519,000 t in 2018 from 693,000 t in 2017 (table 6). The production value decreased by 14% to $48.8 million in 2018 from $56.9 million in 2017. The top five producing States, in descending order of tonnage, were Texas, Pennsylvania, Arizona, Oklahoma, and New York and accounted for 83% of U.S. tonnage and 73% of value. Cleveland Quarries, Cobra Stone Inc., Gordon Stone Co., Harley Gray Stone Co., and MBK Associates LLC were the leading producers and accounted for 60% of the tonnage and 32% of the value of domestic production.

Slate.—Slate was produced by 14 companies that operated 14 quarries in six States. Production increased by 12% to 55,300 t in 2018 from 49,500 t in 2017 (table 12). The value increased by 10% to $24 million in 2018 from $21.8 million in 2017. The top-producing States by tonnage were Idaho, Vermont, and Montana and accounted for 87% of U.S. tonnage and 85% of value. The leading producers were Montana Rockworks Inc., Quarry Slate Industries Inc., and Scrivanich Natural Stone.

Consumption

For the purposes of this report, apparent consumption is defined as production plus imports for consumption minus exports. Value data are used in the apparent consumption calculation because tonnage data are not available for all imports and exports. Overall, the value of apparent consumption of dimension stone in the United States was estimated to be $2.46 billion in 2018, slightly less than that in 2017 (table 1).

In 2018, rough stone represented 54% of the tonnage and 47% 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 as rough blocks in building and construction (53%) and irregular-shaped stone (35%). Dressed stone represented 46% by tonnage and 53% by value of the total dimension stone sold or used in the United States. The leading uses within dressed stone, by tonnage, were in ashlars and

partially squared pieces (41%), slabs and blocks for building and construction (12%), curbing (11%), and flagging (11%) (table 7).

Uses for the different varieties of dimension stone varied considerably. Primary uses of granite sold or used in 2018, by tonnage, were in curbing (26%), monumental rough stone (20%), rough blocks for building and construction (20%), and in other dressed stone (12%) (table 8). Primary uses of limestone, by tonnage, were in rough blocks for building and construction (36%), ashlars and partially squared pieces (24%), and irregular-shaped stone (19%) (table 9). The primary use of marble, by tonnage, was in other dressed stone (41%) (table 10). Primary uses of sandstone, by tonnage, were in irregular-shaped stone (38%), rough blocks for building and construction (20%), and flagging (14%) (table 11). Primary uses of slate sold or used by producers in the United States in 2018, by tonnage, were in flagging (63%) and roofing (32%) (table 12).

Prices

The average 2018 value as reported by domestic producers for dimension stone was $164 per metric ton, a 4% increase from that in 2017 based on the USGS canvass data. The average unit values for various types of dimension stone were granite, $224 per metric ton; limestone, $147 per metric ton; marble, $343 per metric ton; sandstone, $94 per metric ton; and slate, $434 per metric ton (table 2). Available price data show considerable variation. Prices are substantially different not only for the type of stone but also for the appearance of the same type of stone. Color, grain structure, and finish contribute significantly to price and marketability.

Foreign Trade

Exports.—In 2018, the value of total exports of dimension stone increased slightly to $69.5 million compared with that in 2017; various types of marble accounted for 46% of the export value (table 13). The largest share of marble was exported to Canada. Although unreported, a significant quantity of U.S. marble processed overseas probably was exported back to the U.S. market.

Imports.—The value of imports for consumption of dimension stone decreased slightly in 2018 to $2.09 billion (tables 1, 15–17). Brazil continued to be the leading source of imported granite in 2018, accounting for 42% by value. China, which was a major source of granite, accounted for 25% of granite imports by value. Other important import sources of granite included India (18%) and Italy (7%) (table 15). In 2018, Turkey remained the leading source of rough and dressed marble imports to the United States and accounted for about 35% by tonnage (table 16). Additionally, Turkey accounted for 16% of the total value of rough and dressed marble of United States imports in 2018. In 2018, China remained a leading source of rough and dressed marble imports and accounted for about 23% by tonnage and 28% by value. Italy continued to be a major source of rough and dressed marble imports and accounted for 13% by tonnage and 31% by value. In 2018, Italy again had the highest total value of rough and dressed marble imports to the United States (tables 16, 17). Duties on imported dimension stone are listed in table 14.

Outlook

The decrease in U.S. apparent consumption, by value, of dimension stone in 2018 was likely the result of slowing activity in both new commercial and residential construction, as well as less activity in the home remodeling and renovation market. The trend in these activities may continue in 2019.

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TABLE 1
SALIENT U.S. DIMENSION STONE STATISTICS[1]

(Thousand metric tons and thousand dollars)

	2014	2015	2016	2017	2018
Sold or used by producers:					
Quantity	2,660 r	2,700 r	2,960 r	2,880 r	2,660
Value	467,000 r	469,000 r	448,000 r	453,000 r	437,000
Exports, value	70,300	74,900	65,300 r	68,800 r	69,500
Imports for consumption, value	2,250,000 r	2,350,000 r	2,180,000 r	2,120,000 r	2,090,000
Apparent consumption, value[2]	2,640,000 r	2,740,000 r	2,560,000	2,510,000 r	2,460,000

rRevised.
[1]Table includes data available through April 16, 2020. Data are rounded to no more than three significant digits.
[2]Equals value of sold or used by producers plus imports for consumption minus exports.

TABLE 2
DIMENSION STONE SOLD OR USED BY PRODUCERS IN
THE UNITED STATES, BY TYPE[1, 2]

	2017		2018	
Type	Quantity (metric tons)	Value (thousands)	Quantity (metric tons)	Value (thousands)
Granite	526,000 r	$115,000 r	484,000	$108,000
Limestone	1,360,000	205,000	1,330,000	196,000
Marble	56,100	17,500	55,900	19,200
Sandstone	693,000 r	56,900 r	519,000	48,800
Slate	49,500 r	21,800 r	55,300	24,000
Miscellaneous stone[3]	197,000	36,600	209,000	40,300
Total	2,880,000 r	453,000 r	2,660,000	437,000

rRevised.
[1]Table includes data available through April 16, 2020. Data are rounded to no more than three significant digits; may not add to totals shown.
[2]Does not include American Samoa, Guam, Puerto Rico, and the U.S. Virgin Islands.
[3]Includes any other type of stone used as building stone and commercial stone that does not fit other listed categories.

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

State	2017		2018	
	Quantity (metric tons)	Value (thousands)	Quantity (metric tons)	Value (thousands)
Alabama	W	W	W	W
Arizona	W	$5,470	45,300	$4,960
Arkansas	W	W	11,800	1,500
California	19,000	6,890	17,600	6,300
Colorado	29,800	W	28,500	W
Connecticut	17,800 r	4,120 r	17,000	3,880
Georgia	132,000 r	13,400 r	138,000	12,700
Idaho	52,200	8,260	68,200	10,900
Illinois	W	W	W	W
Indiana	223,000	38,900	198,000	33,500
Kansas	W	W	W	W
Maine	W	W	W	W
Maryland	8,810	2,070	10,400	2,250
Massachusetts	W	W	W	W
Michigan	W	W	W	W
Minnesota	60,500	21,400	56,000	19,800
Missouri	57,600 r	14,500 r	60,700	14,900
Montana	W	4,620	W	W
Nevada	W	W	W	W
New Hampshire	W	W	W	W
New Mexico	W	W	W	W
New York	84,400	13,900	74,500	13,700
North Carolina	84,400	14,600	33,200	17,900
Ohio	W	W	W	W
Oklahoma	55,000	7,260	60,400	5,620
Pennsylvania	59,600 r	6,600	48,200	7,340
South Dakota	W	W	W	W
Tennessee	45,700	8,530	42,300	8,340
Texas	1,330,000	142,000	1,130,000	126,000
Utah	3,770	470	3,700	501
Vermont	106,000 r	28,300 r	105,000	27,500
Virginia	14,100 r	8,360 r	14,200	8,440
Washington	W	W	W	W
Wisconsin	201,000 r	36,700 r	233,000	47,000
Other	296,000 r	66,500 r	265,000	64,200
Total	2,880,000 r	453,000 r	2,660,000	437,000

rRevised. W Withheld to avoid disclosing company proprietary data; included in "Other."
[1]Table includes data available through April 16, 2020. Data are rounded to no more than three significant digits; may not add to totals shown.

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

State	2017 Quantity (metric tons)	2017 Value (thousands)	2018 Quantity (metric tons)	2018 Value (thousands)
Georgia	122,000 r	$11,400 r	127,000	$10,600
Vermont	67,500 r	11,200 r	75,100	10,800
Other[2]	336,000 r	92,400 r	282,000	86,700
Total	526,000 r	115,000 r	484,000	108,000

rRevised.
[1]Table includes data available through April 16, 2020. Data are rounded to no more than three significant digits; may not add to totals shown.
[2]Includes California, Connecticut, Maine, Maryland, Massachusetts, Minnesota, Missouri, New Hampshire, New York, North Carolina, Oklahoma, South Dakota, Texas, Virginia, and Wisconsin.

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

State	2017 Quantity (metric tons)	2017 Value (thousands)	2018 Quantity (metric tons)	2018 Value (thousands)
Alabama	6,400	$1,150	13,300	$2,380
Arkansas	526	53	472	47
California	W	W	W	W
Colorado	W	W	4,540	320
Connecticut	5,900	1,300	5,260	1,160
Idaho	17,100	1,440	W	W
Indiana	223,000	38,900	198,000	33,500
Kansas	W	W	W	W
Minnesota	41,900	11,900	40,200	11,300
Missouri	46,400 r	7,830 r	50,000	8,390
New York	22,000	3,760	15,500	2,650
Oklahoma	19,100	1,560	30,100	2,480
Tennessee	28,700	4,990	24,700	4,750
Texas	821,000	107,000	782,000	96,300
Utah	1,860	195	1,180	122
Virginia	2,090	828	2,270	900
Wisconsin	113,000	22,300	134,000	29,100
Other[2]	7,180 r	1,580 r	32,200	3,130
Total	1,360,000	205,000	1,330,000	196,000

rRevised. W Withheld to avoid disclosing company proprietary data; included in "Other."
[1]Table includes data available through April 16, 2020. Data are rounded to no more than three significant digits; may not add to totals shown.
[2]Includes California (2017, 2018), Colorado (2017), Idaho (2018), and Kansas (2017, 2018).

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

State	2017 Quantity (metric tons)	2017 Value (thousands)	2018 Quantity (metric tons)	2018 Value (thousands)
Arizona	W	W	40,600	$4,280
Arkansas	W	W	11,300	1,450
Colorado	10,500	$1,970	5,330	1,100
Kansas	138	29	347	74
Maryland	2,730	680	W	W
Michigan	10,400	891	10,700	909
Nevada	9,980	1,340	8,160	1,100
New York	19,700	1,700	13,700	1,930
Ohio	W	W	W	W
Oklahoma	27,900	5,040	19,700	2,240
Pennsylvania	52,900 r	3,970	42,100	4,840
Tennessee	W	W	5,810	582
Texas	476,000	27,400	316,000	22,600
Washington	27	13	--	--
Wisconsin	687	W	861	W
Other[2]	82,100 r	13,800 r	44,900	7,720
Total	693,000 r	56,900 r	519,000	48,800

rRevised. W Withheld to avoid disclosing company proprietary data; included in "Other."
-- Zero.
[1]Table includes data available through April 16, 2020. Data are rounded to no more than three significant digits; may not add to totals shown.
[2]Includes Arizona (2017), Arkansas (2017), Maryland (2018), Ohio (2017, 2018), Tennessee (2017), and Wisconsin (2017, 2018).

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

Use	2017 Quantity (metric tons)	2017 Value (thousands)	2018 Quantity (metric tons)	2018 Value (thousands)
Rough stone:				
Rough blocks for building and construction	840,000 r	$133,000 r	761,000	$125,000
Irregular-shaped stone	618,000 r	42,900 r	498,000	45,700
Monumental	113,000	19,300 r	114,000	19,700
Other[2]	80,000 r	11,700 r	66,800	16,400
Dressed stone:				
Ashlars and partially squared pieces	545,000 r	97,000 r	504,000	88,200
Slabs and blocks for building and construction	144,000 r	30,700 r	146,000	26,900
Monumental	28,500 r	13,400 r	34,500	12,400
Curbing	133,000 r	28,900 r	128,000	20,400
Flagging	164,000 r	15,200 r	128,000	12,500
Flagging (slate)	20,200 r	4,300 r	34,800	8,130
Panels and veneer	89,000	21,200	106,000	30,700
Roofing slate	26,000 r	16,600 r	17,700	14,400
Flooring slate	611 r	565 r	755	1,000
Tile, all dimensions	18,500	3,760	13,700	3,030
Other[3]	55,900 r	14,000 r	105,000	12,700
Total	2,880,000 r	453,000 r	2,660,000	437,000

rRevised.
[1]Table includes data available through April 16, 2020. Data are rounded to no more than three significant digits; may not add to totals shown.
[2]Includes flagging stone, exports, uses not specified, and uses not listed.
[3]Includes blackboards, exports, structural and sanitary, uses not specified, and uses not listed.

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

Use	2017 Quantity (metric tons)	2017 Value (thousands)	2018 Quantity (metric tons)	2018 Value (thousands)
Rough stone:				
Rough blocks for building and construction	106,000 r	$27,600 r	96,700	$26,200
Irregular-shaped stone	66,500 r	1,960 r	30,800	2,000
Monumental	103,000	17,200 r	98,600	15,300
Other[2]	4,110	1,350 r	1,730	673
Dressed stone:				
Ashlars and partially squared pieces	29,400 r	10,700 r	35,500	11,700
Slabs and blocks for building and construction	14,700	4,200	11,500	2,800
Monumental	18,800 r	11,000 r	23,500	10,400
Curbing	133,000 r	28,900 r	128,000	20,300
Other[3]	50,000 r	12,000 r	57,700	18,700
Total	526,000 r	115,000 r	484,000	108,000

rRevised.
[1]Table includes data available through April 16, 2020. Data are rounded to no more than three significant digits; may not add to totals shown.
[2]Includes exports and uses not listed.
[3]Includes flagging, panels and veneer, tile, uses not specified, and uses not listed.

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

Use	2017 Quantity (metric tons)	2017 Value (thousands)	2018 Quantity (metric tons)	2018 Value (thousands)
Rough stone:				
Rough blocks for building and construction	514,000 r	$75,500 r	480,000	$71,600
Irregular-shaped stone	260,000	32,100	259,000	36,000
Other[2]	15,900	1,780	27,200	5,020
Dressed stone:				
Ashlars and partially squared pieces	357,000	58,300	326,000	48,100
Slabs and blocks for building and construction	94,900	17,900	75,400	17,400
Flagging	21,800	2,920	13,400	2,370
Panels and veneer	44,100	5,930 r	51,600	7,030
Other[3]	48,400	10,500	102,000	8,970
Total	1,360,000	205,000	1,330,000	196,000

rRevised.
[1]Table includes data available through April 16, 2020. Data are rounded to no more than three significant digits; may not add to totals shown.
[2]Includes exports, monumental, and uses not listed.
[3]Includes curbing limestone, monumental, tile, uses not specified, and uses not listed.

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

Use	2017 Quantity (metric tons)	2017 Value (thousands)	2018 Quantity (metric tons)	2018 Value (thousands)
Rough stone, rough blocks for building and construction	24,800	$5,200	21,400	$3,460
Dressed stone[2]	11,600	3,000	11,800	3,010
Other[2, 3]	19,800	9,300	22,700	12,700
Total	56,100	17,500	55,900	19,200

[1]Table includes data available through April 16, 2020. Data are rounded to no more than three significant digits; may not add to totals shown.
[2]Includes slabs and blocks, flagging, monumental, panels and veneer, ashlars and partially squared pieces, tile, and uses not listed.
[3]Includes monumental stone, exports, uses not specified, and uses not listed.

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

Use	2017 Quantity (metric tons)	2017 Value (thousands)	2018 Quantity (metric tons)	2018 Value (thousands)
Rough stone:				
Rough blocks for building and construction	120,000 r	$16,500	106,000	$15,300
Irregular-shaped stone	277,000	6,410	197,000	5,630
Other[2]	50,300	1,310	2,220	486
Dressed stone:				
Ashlars and partially squared pieces	87,500 r	13,700	65,700	12,200
Flagging	106,000	6,800	74,400	3,670
Panels and veneer	9,610	3,900	10,100	1,790
Slabs and blocks for building and construction	22,700 r	3,630 r	50,600	4,650
Other[3]	19,000	4,600	12,700	5,170
Total	693,000 r	56,900 r	519,000	48,800

rRevised.
[1]Table includes data available through April 16, 2020. Data are rounded to no more than three significant digits; may not add to totals shown.
[2]Includes exports, monumental, and uses not specified.
[3]Includes tile, curbing, exports, uses not specified, and uses not listed.

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

Use	2017 Quantity (metric tons)	2017 Value (thousands)	2018 Quantity (metric tons)	2018 Value (thousands)
Flagging	20,200 r	$4,300 r	34,800	$8,130
Roofing	26,000 r	16,600 r	17,700	14,400
Flooring	611 r	565 r	755	1,000
Other[2]	2,700 r	338 r	2,020	445
Total	49,500 r	21,800 r	55,300	24,000

rRevised.
[1]Table includes data available through April 16, 2020. Data are rounded to no more than three significant digits; may not add to totals shown.
[2]Includes structural and sanitary purposes, uses not specified, and uses not listed.

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

(Thousand metric tons and thousand dollars)

Type	2017 Quantity	2017 Value	2018 Quantity	2018 Value	Major destination in 2018, by value
Marble, travertine, alabaster worked[2]	82	9,810 r	88	9,120	Canada, 56%.
Marble, travertine, crude or roughly trimmed	15	15,000 r	18	18,000	Italy, 90%.
Marble, travertine, merely cut, by sawing or otherwise[3]	5 r	3,940 r	5	4,890	Canada, 30%.
Granite, crude or roughly trimmed	38	13,400 r	39	12,600	China, 60%.
Granite, merely cut by sawing or otherwise[3]	26	8,680 r	22	6,550	Canada, 69%.
Slate, worked and articles of slate	NA	2,550	NA	2,420	Canada, 52%.
Slate, whether or not roughly trimmed or merely cut[3]	2	456	13	1,600	China, 80%.
Other calcareous monumental or building stone; alabaster[4]	20 r	8,460 r	19	7,460	Canada, 91%.
Other monumental or building stone[5]	21 r	6,460 r	21	6,890	Canada, 76%.
Total	XX	68,800 r	XX	69,500	

rRevised. NA Not available. XX Not applicable.
[1]Table includes data available through April 16, 2020. Data are rounded to no more than three significant digits; may not add to totals shown.
[2]Further worked than simply cut with a flat surface.
[3]Blocks or slabs.
[4]Crude, roughly trimmed, or merely cut into blocks or slabs. Other than marble and travertine.
[5]Crude, roughly trimmed, or merely cut into blocks or slabs. Other than calcareous stone and alabaster, granite, sandstone, slate, dolomite, quartzite, and steatite.

Source: U.S. Census Bureau.

TABLE 14
U.S. IMPORT DUTIES ON DIMENSION STONE[1]

Tariff item	HTS[2] code	NTR,[3] January 1, 2018	Non-NTR,[3] January 1, 2018
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	do.	$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	Do.
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.

Do., do. Ditto.
[1]Table includes data available through April 16, 2020.
[2]Harmonized Tariff Schedule of the United States.
[3]Normal trade relations.

TABLE 15
U.S. IMPORTS FOR CONSUMPTION OF DIMENSION GRANITE, BY COUNTRY OR LOCALITY[1]

(Thousand dollars)

Country or locality	Rough granite[2]	Dressed								
		Simply cut[3]	Worked granite						Total worked	Total dressed
			Not cut to size[4]	Cut to size[5]						
				Maximum 1.5 centimeters	1.5–7.5 centimeters	Minimum 7.5 centimeters		Other		
						Monumental	Building			
2017:										
Argentina	--	--	--	--	210	--	--	186	396	396
Brazil	806 r	837 r	97,900 r	521 r	299,000	133	1,080	52,300	451,000 r	452,000 r
Canada	4,990	912	241	571	3,320 r	9,600	4,380	2,600 r	20,700	21,600
China	1,080 r	12,300	8,660	3,700	104,000	21,400	8,630 r	80,800 r	227,000	239,000
Finland	--	--	--	--	11	--	--	--	11	11
India	1,040 r	1,950 r	18,900 r	1,110 r	107,000	16,600 r	1,050 r	22,800 r	168,000 r	170,000
Italy	88 r	1,090 r	8,090 r	316	54,700	452	2,220	14,100	79,900	81,000 r
Japan	--	3	--	21	23	10	46	50	149 r	152 r
Mexico	--	105	15	3	185	3	27	34	267	372
Norway	54	--	--	--	--	5	--	10	15	15
Portugal	10	3	22	--	247	--	44	267	580	583
Saudi Arabia	--	--	192	--	760	--	--	55	1,010	1,010
South Africa	1,520 r	27	317	--	2,430	--	48	764	3,560	3,590
Spain	--	119	4,560	121	24,700	25	384	4,450 r	34,200 r	34,400 r
United Kingdom	105 r	11	--	--	41	--	--	41	82	93
Zimbabwe	--	--	--	--	28	--	--	--	28	28
Other	525	845 r	683	132	2,630	145 r	132 r	989 r	4,710 r	5,550
Total	10,200 r	18,200 r	140,000	6,490 r	600,000 r	48,400 r	18,000 r	179,000	992,000 r	1,010,000
2018:										
Argentina	--	--	--	--	97	--	--	--	97	97
Brazil	736	880	91,000	343	230,000	181	1,230	59,600	382,000	383,000
Canada	4,120	1,190	80	458	3,650	9,580	4,330	2,700	20,800	22,000
China	1,020	12,400	8,880	2,580	89,900	23,700	8,840	83,000	217,000	229,000
Finland	--	--	--	--	--	--	--	2	2	2
India	1,010	2,800	19,900	1,010	97,400	17,200	1,550	22,200	159,000	162,000
Italy	66	1,080	5,240	296	42,900	58	2,710	11,100	62,300	63,400
Japan	--	--	--	--	2	5	28	105	140	140
Mexico	8	27	6	--	82	--	--	26	115	142
Norway	50	--	--	--	--	--	--	--	--	--
Portugal	--	61	25	--	383	--	32	888	1,330	1,390
Saudi Arabia	18	--	141	--	304	--	--	114	559	559
South Africa	1,290	11	123	--	1,890	--	84	544	2,640	2,650
Spain	--	318	5,940	473	26	26	237	4,210	10,900	11,200
United Kingdom	--	59	8	--	2	2	18	127	157	216
Other	481	396	1,080	59	26,500	222	18	1,960	29,800	30,200
Total	8,800	19,200	132,000	5,220	493,000	50,900	19,100	187,000	887,000	906,000

rRevised. -- Zero.

[1]Table includes data available through April 16, 2020. Data are rounded to no more than three significant digits; may not add to totals shown.

[2]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.

[3]Simply cut with a flat even surface; HTS code 6802.23.0000.

[4]Only one face worked more than simply cut; HTS code 6802.93.0010.

[5]One or more faces worked more than simply cut.

Source: U.S. Census Bureau.

TABLE 16
U.S. IMPORTS FOR CONSUMPTION OF MAJOR CATEGORIES OF DIMENSION MARBLE AND OTHER CALCAREOUS STONE, BY COUNTRY OR LOCALITY[1]

	Dressed							
	Marble, slabs[2]		Marble, other[3]		Other calcareous stone[4]		Rough marble[5]	
Country or locality	Quantity (metric tons)	Value (thousands)	Quantity (metric tons)	Value (thousands)	Quantity (metric tons)	Value (thousands)	Quantity (metric tons)	Value (thousands)
2017:								
Brazil	34,200 r	$34,300 r	789 r	$646 r	1,240 r	$1,330 r	373	$194
Canada	249 r	375 r	987 r	5,280 r	24,300	17,800	7	51
China	96,600 r	70,200	91,400	158,000	32,500	25,400	878	797
Egypt	1,360	831	2,880	1,380	1,650	723	308	70
France	227	810	205 r	553 r	5,800	9,000	55	55
Greece	7,300 r	11,100	6,660 r	12,500	1,350	1,860	24	9
India	62,900	35,500	16,100	26,500	4,550	2,400	74	67
Israel	1,370	1,880	383	762	1,920	2,070	--	--
Italy	94,700 r	219,000	24,800	71,200 r	9,970	21,000	787	1,980
Lebanon	8	4	78 r	67 r	782 r	2,030 r	--	--
Mexico	630	494	4,580	3,950	4,360	5,040	16	8
Portugal	1,580	2,580	1,530	2,910	12,400	13,400	--	--
Spain	12,500 r	12,300	5,910 r	6,480 r	5,940	5,240	8	12
Taiwan	374	633	1,890	4,640	43	91	25	36
Turkey	90,000 r	54,000 r	137,000	81,800 r	24,900 r	13,600 r	246	174
Other	6,700 r	6,980 r	9,750 r	13,600	17,300	17,100	141	185
Total	411,000 r	451,000	305,000	390,000 r	149,000	138,000	2,940	3,630
2018:								
Brazil	33,700	31,400	508	661	1,120	1,030	6	3
Canada	674	450	1,260	6,550	14,700	5,000	19	41
China	73,400	77,600	105,000	191,000	30,100	30,300	585	671
Egypt	1,870	966	2,580	1,400	1,530	833	1,520	398
France	203	669	330	1,460	4,420	6,140	1	5
Greece	7,530	13,300	5,970	14,200	619	1,070	--	--
India	72,500	37,500	17,800	30,300	3,370	2,010	280	152
Israel	597	924	336	594	2,880	3,540	--	--
Italy	80,200	216,000	27,400	87,300	8,810	26,600	472	1,070
Lebanon	43	45	30	227	316	1,660	--	--
Mexico	2,250	1,240	4,590	3,410	4,500	4,740	77	23
Portugal	1,530	2,410	1,360	2,360	14,300	15,700	--	--
Spain	9,090	9,530	5,990	7,460	4,620	5,440	38	258
Taiwan	773	988	2,670	4,990	13	40	7	21
Turkey	145,000	67,900	138,000	86,100	26,900	13,600	419	322
Other	5,600	6,680	8,750	14,600	14,600	13,800	517	367
Total	435,000	467,000	322,000	452,000	133,000	132,000	3,940	3,330

rRevised. -- Zero.

[1]Table includes data available through April 16, 2020. Data are rounded to no more than three significant digits; may not add to totals shown.

[2]Worked more than simply cut with a flat surface; Harmonized Tariff Schedule of the United States (HTS) code 6802.91.0500.

[3]Merely cut by sawing or otherwise.

[4]Worked more than simply cut with a flat surface, other than marble and travertine; HTS code 6802.92.0000.

[5]Simply cut by sawing or otherwise into rectangular blocks or slabs; HTS code 2515.12.1000.

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

TABLE 17
U.S. IMPORTS FOR CONSUMPTION OF DIMENSION STONE, BY TYPE[1]

Type		2017 Quantity	2017 Value (thousands)	2018 Quantity	2018 Value (thousands)	Major source for 2018, by value
Marble and alabaster[2]	metric tons	27,700	$30,900 r	35,400	$37,100	Italy, 27%.
Slate, roofing	million square feet	741,000	8,490 r	735,000	8,810	Spain, 55%.
Slate, roughly trimmed or simply cut[3]	do.	8,640	4,040	8,170	4,140	China, 53%.
Slate, worked and articles of slate, and other[4]	do.	NA	48,800	NA	50,400	China, 52%.
Travertine, monumental or building stone and articles thereof[5]	do.	22,900	15,000 r	13,900	13,100	Italy, 40%.
Travertine, worked monumental or building stone[6]	do.	15,600	11,200	12,900	10,500	Turkey, 40%.

rRevised. do. Ditto. NA Not available.
[1]Table includes data available through April 16, 2020. Data are rounded to no more than three significant digits.
[2]Simply cut with a flat surface.
[3]Rectangular blocks or slabs.
[4]Other than roofing, including agglomerated slate.
[5]Simply cut with a flat surface, other than tiles and granules.
[6]Dressed or polished but not further worked.

Source: U.S. Census Bureau.