

Stone

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This 1997 review on stone has been abbreviated to mainly include statistical tables.

The volume of all types of stone shipped in Canada in 1997 was about 94 Mt based on preliminary figures, which is about 2% higher than in 1996. The reported value of total shipments in 1997 was about \$618 million, about 4% higher than the previous year. Shipments served a very wide range of end uses related to dimension stone, chemical and metallurgical grades of stone, pulverized stone, and crushed stone.

Additional detailed information on regular aggregates, including crushed stone and sand and gravel, as well as on lightweight aggregates, including expanded shales/clays, perlite, vermiculite and pumice, is included in a separate chapter entitled *Mineral Aggregates*.

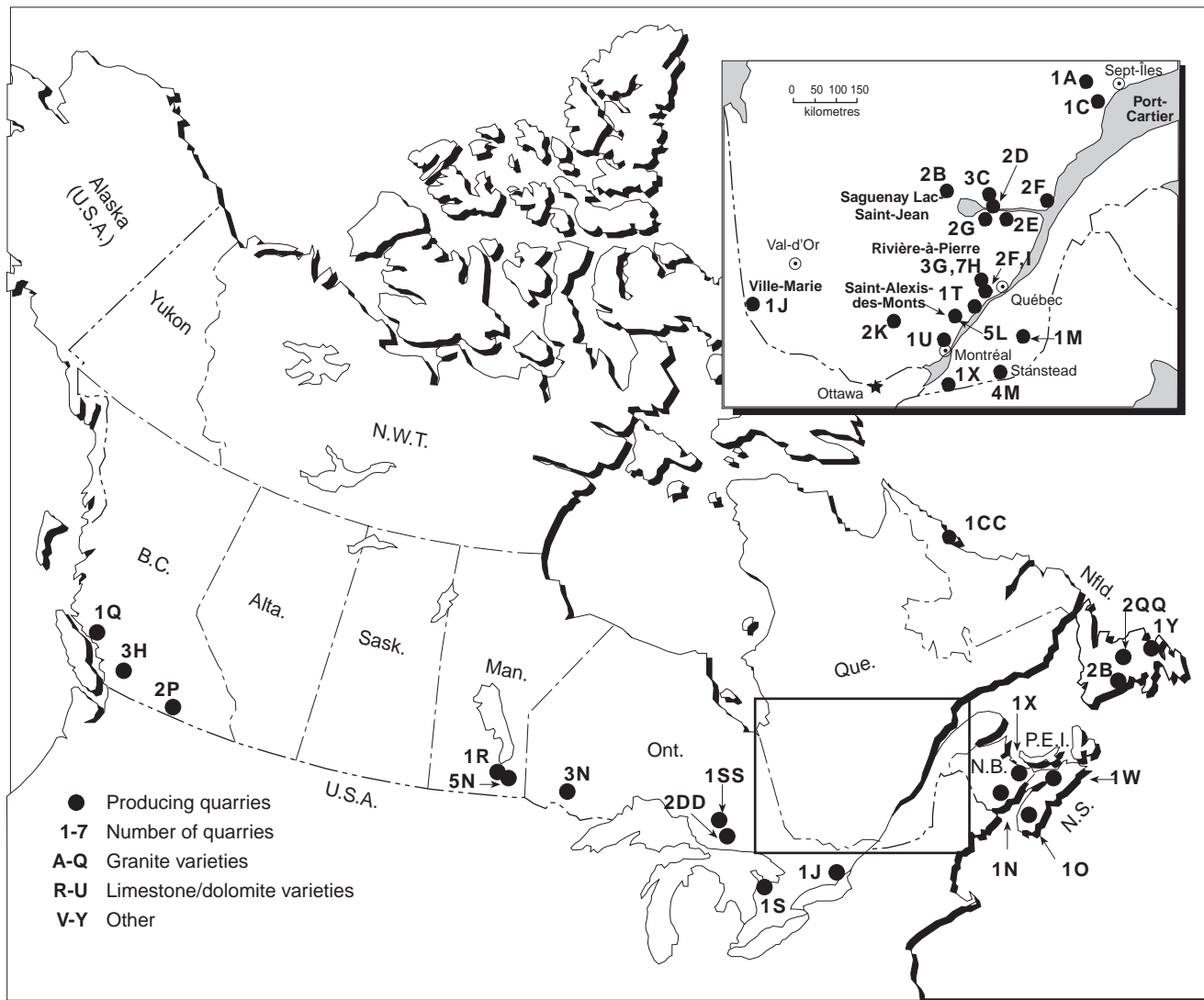
Dimension or ornamental stone relates to a variety of rock types that can be cut, shaped or simply selected for a broad range of construction/engineering, architectural or monumental requirements. The types of stone available are dependent on local geology, but mainly include granite, limestone, marble, sandstone and slate, as summarized in Tables 3 to 8 inclusive. The term "granite," as commercially applied, includes true granite, granodiorite, gneiss, and other medium-to coarse-grained igneous rocks. However, "black granite" includes anorthosite and other dark-coloured igneous rocks. Limestone and marble are often confused, marble being the metamorphosed equivalent of the former and usually including both dolomitic and calcitic varieties. As an industrial term, marble is used for recrystallized calcareous rock capable of taking a polish.

It is expected that growth in the use of dimensional stone will continue in 1998/99 based on the positive outlook for the economy, new expenditures for office

buildings, and the increased awareness of natural stone. Slate is becoming more important in world markets for its natural unpolished appearance, its non-slippery and multi-coloured durable surfaces, and its relatively low price.

Notes: (1) For definitions and valuation of mineral production, shipments and trade, please refer to Chapter 65. (2) Information in this review was current as of February 1, 1998.

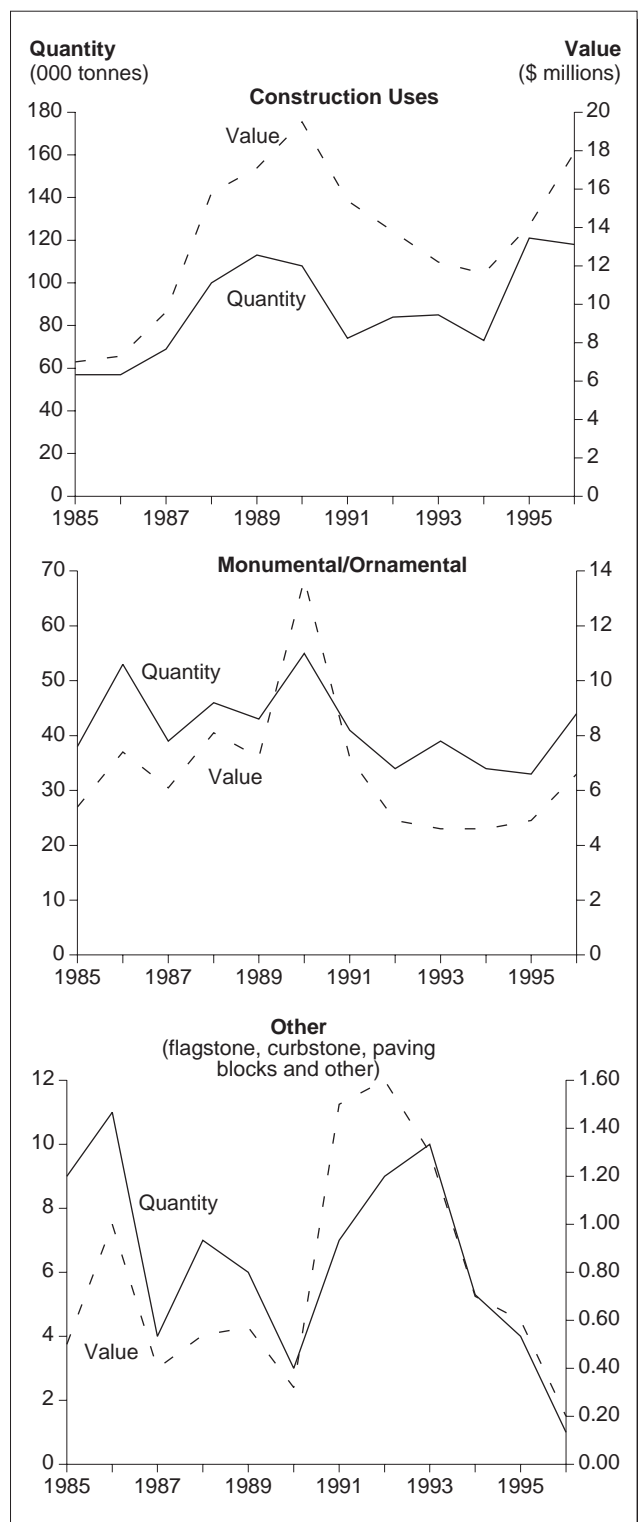
Figure 1
Canada, Architectural and Monumental/Ornamental Stone-Producing Centres, 1996



- | | | | |
|----|--|----|---|
| A | Fine-grained pinkish-grey banded gneiss | P | Coarse coral pink granite |
| B | Medium-grained pink granite | Q | Medium-grained blue-grey granite |
| C | Coarse-grained black anorthosite | QQ | Medium-grained gabbro |
| CC | Medium-grained "Reflect blue" anorthosite | R | Light-coloured mottled dolomitic limestone (Tyndall) |
| D | Medium-grained black gabbroic anorthosite | S | Fine-medium crystalline blue-grey to buff marble/dolostone (Arriscraft) |
| DD | Blue-grey, and black and white anorthosite | SS | Fine-grained, multicoloured pre-Cambrian marble |
| E | Medium-grained pinkish-grey quartz monzonite | T | Medium-grained light brownish-grey limestone (Deschambault) |
| F | Fine-grained pink granitic gneiss | U | Medium-grained blue-grey limestone (Chazy) |
| G | Coarse-grained green charnockite | V | Medium-grained olive sandstone |
| H | Coarse-grained pink-grey or brown-grey granite | W | Fine-medium-grained olive-brown and blue-grey sandstone |
| I | Medium-grained grey dioritic gneiss | X | Fine-medium-grained white to buff sandstone (Potsdam) |
| J | Medium-grained red granite | Y | Very fine-grained varicoloured slate |
| K | Fine-grained pink aplite | | |
| L | Coarse-grained brown or red quartz monzonite | | |
| M | Medium-grained grey granite | | |
| N | Medium-grained pink, brown or gold granites | | |
| O | Fine-grained blue-grey granite | | |

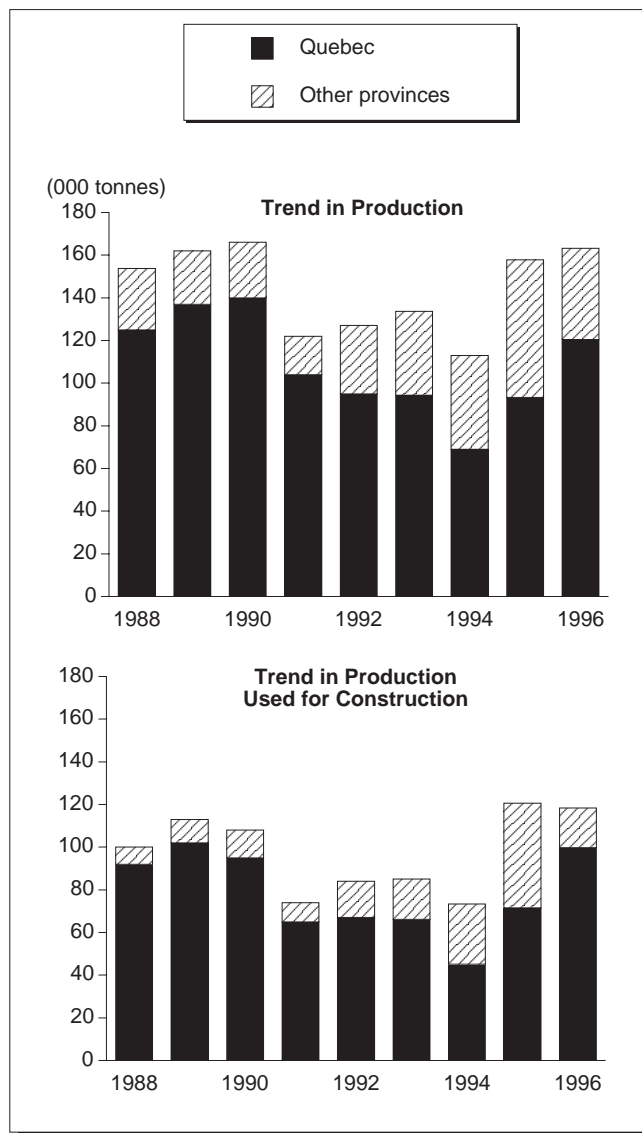
Source: Mainly provincial departments of Mines and Energy.

Figure 2
Canada, Production of Rough Granite
(Sold and Used by Producers), 1985-96



Sources: Natural Resources Canada; Statistics Canada.

Figure 3
Canada, Trends in Production of Rough Granite,
1988-96



Sources: Natural Resources Canada; Quebec Ministry of Natural Resources.

TARIFFS

Item No.	Description	Canada			United States
		MFN	GPT	USA	Canada
2514.00	Slate, whether or not roughly trimmed or merely cut, by sawing or otherwise, into blocks or slabs of a rectangular (including square) shape				
2514.00.10	Merely cut, by sawing or otherwise, into blocks or slabs of a rectangular (including square) shape	3.5%	Free	Free	Free
2514.00.90	Other	Free	Free	Free	Free
25.15	Marble, travertine, ecaussine and other calcareous monumental or building stone of an apparent specific gravity of 2.5 or more, and alabaster, whether or not roughly trimmed or merely cut, by sawing or otherwise, into blocks or slabs of a rectangular (including square) shape				
2515.11.00	Marble and travertine: Crude or roughly trimmed	Free	Free	Free	Free
2515.12.00	Merely cut, by sawing or otherwise, into blocks or slabs of a rectangular (including square) shape	Free	Free	Free	Free
2515.20	Ecaussine and other calcareous monumental or building stone; alabaster				
2515.20.10	Crude or roughly trimmed	Free	Free	Free	Free
2515.20.20	Merely cut, by sawing or otherwise, into blocks or slabs of a rectangular (including square) shape	3.5%	Free	Free	Free
25.16	Granite, porphyry, basalt, sandstone and other monumental or building stone, whether or not roughly trimmed or merely cut, by sawing or otherwise, into blocks or slabs of a rectangular (including square) shape				
2516.11.00	Granite: Crude or roughly trimmed	Free	Free	Free	Free
2516.12	Merely cut, by sawing or otherwise, into blocks or slabs of a rectangular (including square) shape	Free-3.5%	Free	Free	Free
2516.21.00	Sandstone: Crude or roughly trimmed	Free	Free	Free	Free
2516.22.00	Merely cut, by sawing or otherwise, into blocks or slabs of a rectangular (including square) shape	3.5%	Free	Free	Free
2516.90	Other monumental or building stone				
2516.90.10	Crude or roughly trimmed	Free	Free	Free	Free
2516.90.20	Merely cut, by sawing or otherwise, into blocks or slabs of a rectangular (including square) shape	3.5%	Free	Free	Free
25.17	Pebbles, gravel, broken or crushed stone, of a kind commonly used for concrete aggregates, for road metalling or for railway or other ballast, shingle and flint, whether or not heat-treated; macadam of slag, dross or similar industrial waste, whether or not incorporating the materials cited in the first part of the heading; tarred macadam, granules, chippings and powder, of stones of heading nos. 25.15 or 25.16, whether or not heat-treated				
2517.10.00	Pebbles, gravel, broken or crushed stone, of a kind commonly used for concrete aggregates for road metalling or for railway or other ballast, shingle and flint, whether or not heat-treated	Free	Free	Free	Free
2517.20.00	Macadam of slag, dross or similar industrial waste, whether or not incorporating the materials cited in subheading no. 2517.10	Free	Free	Free	Free
2517.30.00	Tarred macadam	6.5%	Free	Free	Free

TARIFFS (cont'd)

Item No.	Description	Canada		USA	United States
		MFN	GPT		Canada
	Granules, chippings and powder, of stones of heading nos. 25.15 or 25.16, whether or not heat-treated:				
2517.41.00	Of marble	Free	Free	Free	Free
2517.49	Other				
2517.49.10	Limestone roofing granules	Free	Free	Free	Free
2517.49.90	Other	Free	Free	Free	Free
6801.00.00	Setts, curbstones and flagstones of natural stone (except slate)	3.5%	Free	Free	Free
68.02	Worked monumental or building stone (except slate) and articles thereof, other than goods of heading no. 68.01; mosaic cubes and the like, of natural stone (including slate), whether or not on a backing; artificially coloured granules, chippings and powder, of natural stone (including slate)				
6802.10	Tiles, cubes and similar articles, whether or not rectangular (including square), the largest surface area of which is capable of being enclosed in a square which is less than 7 cm; artificially coloured granules, chippings and powder				
6802.10.10	Roofing granules, artificially coloured	Free	Free	Free	Free
6802.10.90	Other	8%	5%	Free	Free
	Other monumental or building stone and articles thereof, simply cut or sawn, with a flat or even surface:				
6802.21.00	Marble, travertine and alabaster	3.5%	Free	Free	Free
6802.22.00	Other calcareous stone	5%	Free	Free	Free
6802.23.00	Granite	3.5%	Free	Free	Free
6802.29.00	Other stone	5%	Free	Free	Free
	Other:				
6802.91.00	Marble, travertine and alabaster	6%	Free	Free	Free
6802.92.00	Other calcareous stone	6.5%	3%	Free	Free
6802.93.00	Granite	6.5%	6.5%	Free	Free
6802.99.00	Other stone	6.5%	6.5%	Free	Free
6803.00	Worked slate and articles of slate or of agglomerated slate				
6803.00.10	Roofing slate; slate for use in the manufacture of billiard tables	Free	Free	Free	Free
6803.00.90	Other	6.5%	6.5%	Free	Free
68.04	Millstones, grindstones, grinding wheels and the like, without frameworks, for grinding, sharpening, polishing, trueing or cutting, hand sharpening or polishing stones, and parts thereof, of natural stone, of agglomerated natural or artificial abrasives, or of ceramics, with or without parts of other materials				
6804.10.00	Millstones and grindstones for milling, grinding or pulping	6.5%	Free	Free	Free
6804.23.00	Of natural stone	6.5%	Free	Free	Free

Sources: Customs Tariff, effective January 1998, Revenue Canada; Harmonized Tariff Schedule of the United States, 1998.

TABLE 1. CANADA, STONE EXPORTS AND IMPORTS, 1995-97

Item No.	1995		1996		1997P		
	(tonnes)	(\$000)	(tonnes)	(\$000)	(tonnes)	(\$000)	
EXPORTS							
2514.00	Slate, whether or not roughly trimmed or merely cut, etc.	112	124	145	143	145	236
2515.11	Marble and travertine, crude or roughly trimmed	134	61	635	332	125	59
2515.12	Marble and travertine, merely cut, by sawing or otherwise, into blocks, etc.	74	40	51	34	77	55
		(cubic metres)		(cubic metres)		(cubic metres)	
2516.11	Granite, crude or roughly trimmed	33 199	16 683	36 397	19 627	40 230	13 216
		(tonnes)		(tonnes)		(tonnes)	
2516.12	Granite, merely cut, by sawing or otherwise, into blocks, etc.	4 563	1 259	3 765	1 321	6 195	1 600
		(cubic metres)		(cubic metres)		(cubic metres)	
2516.21	Sandstone, crude or roughly trimmed	237	123	10	3	957	145
		(tonnes)		(tonnes)		(tonnes)	
2516.22	Sandstone, merely cut, by sawing or otherwise, into blocks, etc.	4	15	27	40	150	54
2516.90	Monumental or building stone, n.e.s.	2 508	336	7 442	1 370	8 533	1 757
2517.10	Pebbles, gravel, broken or crushed stone used for aggregates, etc.	2 615 724	21 180	2 745 623	20 079	3 218 755	25 484
2517.41	Marble granules, chipping and powder of 25.15 or 25.16, heat-treated or not	80 406	8 824	31 778	3 556	137 228	19 001
2517.49	Granules, chippings and powder, n.e.s. of 25.15 or 25.16, heat-treated or not	180 397	655	113 179	697	1 465	138
6801.00	Setts, curbstones and flagstones of natural stone (except slate)	..	101	..	289	..	446
6802.10	Tiles, etc., rectangular or square not more than 7 cm, etc., artificially coloured granules, chippings and powder	..	275	..	1 749	..	1 705
6802.21	Monumental or building stone, cut or sawn, flat or even, marble, travertine and alabaster	..	60	..	17	..	134
6802.22	Monumental or building stone, cut or sawn, flat or even, other calcareous stone	..	28	..	318	..	129
6802.23	Monumental or building stone, cut or sawn, flat or even, granite	..	3 007	..	2 373	..	2 684
6802.29	Monumental or building stone, cut or sawn, flat or even, n.e.s.	..	292	..	359	..	727
6802.91	Worked monumental or building stone, n.e.s., marble, travertine or alabaster	..	2 521	..	1 411	..	1 615
6802.92	Worked monumental or building stone, n.e.s., calcareous stone, n.e.s.	..	145	..	305	..	860
6802.93.10	Worked building stone of granite	5 053	5 650	2 382	3 977	8 694	14 453
6802.93.90	Worked monumental or building stone, n.e.s., granite	18 916	22 423	89 606	32 098	23 465	30 605
6802.99	Worked monumental or building stone, n.e.s.	..	8 221	..	11 345	..	14 972
6803.00	Worked slate and articles of slate or agglomerated slate	..	3 765	..	4 341	..	4 163
6804.10	Millstones and grindstones for milling, grinding or pulping	..	5 513	..	5 939	..	4 911
6804.23	Millstones, grindstones, etc., of natural stone	..	2 786	..	1 366	..	3 207

TABLE 1 (cont'd)

Item No.		1995		1996		1997p	
		(tonnes)	(\$000)	(tonnes)	(\$000)	(tonnes)	(\$000)
IMPORTS							
2514.00	Slate, whether or not roughly trimmed or merely cut, etc.	3 713	851	3 852	839	3 412	1 216
2515.11	Marble and travertine, crude or roughly trimmed	1 863	623	2 464	606	1 629	697
2515.12	Marble and travertine, merely cut, by sawing or otherwise, into blocks, etc.	1 345	1 255	1 022	506	710	550
2516.11	Granite, crude or roughly trimmed	38 228	9 491	46 627	12 889	50 123	14 435
2516.12	Granite, merely cut, by sawing or otherwise, into blocks, etc.	2 871	1 893	6 909	2 489	4 530	1 688
2516.21	Sandstone, crude or roughly trimmed	2 467	473	6 414	946	4 977	696
2516.22	Sandstone, merely cut, by sawing or otherwise, into blocks, etc.	4 990	1 158	5 125	1 180	4 887	1 350
2516.90	Monumental or building stone, n.e.s.	6 627	1 279	9 034	1 608	5 576	1 337
2517.10	Pebbles, gravel, broken or crushed stone used for aggregates, etc.	1 217 268	10 994	3 325 862	16 615	3 279 233	17 296
2517.41	Marble granules, chipping and powder of 25.15 or 25.16, heat-treated or not	77 847	10 513	68 470	9 729	78 453	12 611
2517.49	Granules, chippings and powder, n.e.s. of 25.15 or 25.16, heat-treated or not	266 064	3 533	215 304	2 952	77 767	1 968
6801.00	Setts, curbstones and flagstones of natural stone (except slate)	..	484	..	472	..	636
6802.10	Tiles, etc., rectangular or square not more than 7 cm, etc., artificially coloured granules, chippings and powder	..	4 540	..	319	..	366
6802.21	Monumental or building stone, cut or sawn, flat or even, marble, travertine and alabaster	..	5 718	..	6 323	..	8 096
6802.22	Monumental or building stone, cut or sawn, flat or even, other calcareous stone	..	272	..	354	..	264
6802.23.10	Granite, cut or sawn flat or even, bulding stone	2 769	3 253	1 878	2 011	2 086	2 897
6802.23.20	Granite, cut or sawn flat or even, monumental	160	168	347	526	453	555
6802.23.90	Granite, cut or sawn flat or even, granite other	6 202	5 459	5 396	6 158	4 388	5 616
6802.29	Monumental or building stone, cut or sawn, flat or even, n.e.s.	..	358	..	312	..	501
6802.91	Worked monumental or building stone, n.e.s., marble, travertine or alabaster	..	13 916	..	14 315	..	15 595
6802.92	Worked monumental or building stone, n.e.s., calcareous stone, n.e.s.	..	302	..	582	..	1 388
6802.93.10	Worked building stone of granite	2 069	2 882	1 715	2 520	1 586	2 324
6802.93.20	Worked monumental stone of granite, monuments, bases and markets finished	1 673	1 885	969	1 109	988	1 214
6802.93.90	Worked monumental or building stone, n.e.s., granite	7 832	7 450	4 914	7 319	4 195	6 844
6802.99	Worked monumental or building stone, n.e.s.	..	889	..	1 519	..	1 761
6803.00	Worked slate and articles of slate or agglomerated slate	..	6 019	..	4 764	..	7 387
6804.10	Millstones and grindstones for milling, grinding or pulping	..	1 718	..	1 976	..	1 866
6804.23	Millstones, grindstones, etc., of natural stone	..	12 947	..	1 574	..	857

Source: Statistics Canada.

.. Not available or not applicable; n.e.s. Not elsewhere specified; p Preliminary.

TABLE 2. CANADA, TOTAL PRODUCTION OF STONE, 1995-97

	1995		1996		1997 ^p	
	(000 t)	(\$000)	(000 t)	(\$000)	(000 t)	(\$000)
BY PROVINCE¹						
Newfoundland	1 097	9 812	1 195	12 007	2 370	22 125
Nova Scotia	7 233	39 255	6 260	35 726	5 947	35 508
New Brunswick	3 892	22 153	4 691	23 539	3 843	17 876
Quebec	32 803	197 725	30 583	191 916	28 618	181 965
Ontario	41 683	252 409	39 620	267 710	42 300	288 312
Manitoba	3 551	15 020	3 298	14 422	4 100	17 445
Alberta	466	4 494	549	6 174	572	6 780
British Columbia	7 204	45 942	6 050	39 483	6 273	46 701
Northwest Territories and Yukon	649	4 447	203	1 195	205	947
Total	98 578	591 255	92 449	592 172	94 230	617 660
BY USE²						
Dimensional stone						
Rough	238	26 042	232	28 853	..	..
Monumental and ornamental stone (n.f.)	43	5 147	53	7 111	..	..
Other (flagstone, curbstone, paving blocks, etc.)	40	2 810	39	3 327	..	..
Lining open-hearth furnaces	-	-	-	-	..	..
Chemical and metallurgical						
Cement plants, Canada	14 953	49 880	14 390	44 589	..	..
Cement plants, foreign	1 648	7 386	1 725	7 477	..	..
Flux in iron and steel furnaces	307	2 380	297	2 178	..	..
Flux in nonferrous smelters	181	1 501	164	915	..	..
Glass factories	146	2 860	146	2 700	..	..
Lime plants, Canada	3 473	25 222	4 828	27 045	..	..
Lime plants, foreign	347	2 216	115	700	..	..
Pulp and paper mills	130	1 449	134	1 558	..	..
Sugar refineries	20	284	16	68	..	..
Other chemical uses	1 028	6 318	1 570	9 638	..	..
Pulverized stone						
Whiting	37	2 920	40	2 879	..	..
Asphalt filler	190	630	139	198	..	..
Dusting coal mines	5	291	4	233	..	..
Agricultural purposes and fertilizer plants	1 109	16 272	946	15 545	..	..
Other uses	739	23 362	847	26 949	..	..
Miscellaneous stone						
Manufacture of artificial stone	29	224	465	2 182	..	..
Roofing granules	473	13 616	487	22 609	..	..
Poultry grit	55	1 210	133	1 595	..	..
Stucco dash	18	2 015	19	3 201	..	..
Terrazzo chips	4	404	4	365	..	..
Rock wool	1	25	4	29	..	..
Rubble and riprap	1 259	6 417	1 163	6 057	..	..
Other uses	1 519	9 748	1 416	11 443	..	..
Crushed stone for						
Concrete aggregate	9 345	50 782	9 803	56 521	..	..
Asphalt aggregate	11 589	67 055	10 681	60 754	..	..
Road metal	39 731	196 619	36 480	189 602	..	..
Railroad ballast (includes traprock)	1 478	12 515	1 393	11 090	..	..
Other uses	27 459	130 944	24 675	119 843	..	..
Total	117 595	668 546	112 409	667 254	..	..

Sources: Natural Resources Canada; Statistics Canada.

.. Not available; n.f. Not finished or dressed; ^p Preliminary.¹ Data exclude stone used in the Canadian cement and lime industries. ² Data include stone used in the Canadian cement and lime industries.

Note: Numbers may not add to totals due to rounding.

TABLE 3. CANADA, PRODUCTION OF LIMESTONE, 1995-97

	1995		1996		1997P	
	(000 t)	(\$000)	(000 t)	(\$000)	(000 t)	(\$000)
BY PROVINCE¹						
Newfoundland	753	4 027	609	3 515	1 093	8 755
Nova Scotia	160	2 887	189	3 707	220	4 450
New Brunswick	538	6 878	490	6 568	400	4 871
Quebec	22 849	119 819	21 572	115 167	20 591	112 194
Ontario	39 965	212 111	37 805	213 842	39 893	222 304
Manitoba	3 188	13 058	2 846	11 315	3 127	12 633
Alberta	397	3 696	503	5 429	532	6 031
British Columbia	3 464	22 009	2 960	21 094	3 191	23 124
Northwest Territories and Yukon	61	301	18	50	35	42
Total	71 376	384 785	66 993	380 685	69 081	394 403
BY USE²						
Dimensional stone						
Rough	55	3 416	50	2 371	..	..
Monumental and ornamental stone (n.f.)	8	212	7	521	..	..
Other (flagstone, curbstone, paving blocks, etc.)	24	1 637	28	2 567	..	..
Lining, open-hearth furnaces	-	-	-	-	..	..
Chemical and metallurgical						
Cement plants, Canada	14 625	48 963	14 127	43 856	..	..
Cement plants, foreign	1 648	7 386	1 725	7 477	..	..
Flux in iron and steel furnaces	307	2 380	297	2 178	..	..
Flux in nonferrous smelters	181	1 501	164	915	..	..
Glass factories	146	2 860	146	2 700	..	..
Lime plants, Canada	3 473	25 222	4 828	27 045	..	..
Lime plants, foreign	347	2 216	115	700	..	..
Pulp and paper mills	130	1 449	134	1 558	..	..
Sugar refineries	20	284	16	68	..	..
Other chemical uses	436	4 130	711	6 564	..	..
Pulverized stone						
Whiting	37	2 920	40	2 879	..	..
Asphalt filler	130	581	36	140	..	..
Dusting, coal mines	5	291	4	233	..	..
Agricultural purposes and fertilizer plants	1 097	16 117	942	15 463	..	..
Other uses	130	2 412	162	3 847	..	..
Miscellaneous stone						
Manufacture of artificial stone	3	32	461	2 095	..	..
Roofing granules	120	1 388	117	898	..	..
Poultry grit	54	1 105	132	1 488	..	..
Stucco dash	18	1 981	18	3 158	..	..
Rock wool	1	25	4	29	..	..
Rubble and riprap	927	4 902	601	3 898	..	..
Other uses	1 016	7 487	1 196	10 316	..	..
Crushed stone for						
Concrete aggregate	6 666	36 924	7 552	42 657	..	..
Asphalt aggregate	6 483	36 533	5 845	30 027	..	..
Road metal	30 736	150 706	28 554	150 707	..	..
Railroad ballast	127	643	133	745	..	..
Other uses	20 524	93 268	17 687	84 860	..	..
Total	89 474	458 971	85 830	451 959	..	..

Sources: Natural Resources Canada; Statistics Canada.

- Nil; .. Not available; n.f. Not finished or dressed; P Preliminary.

¹ Data exclude stone used in the Canadian cement and lime industries. ² Data include stone used in the Canadian cement and lime industries.

Note: Numbers may not add to totals due to rounding.

TABLE 4. CANADA, PRODUCTION OF MARBLE,¹ 1995-97

	1995		1996		1997 ^p	
	(000 t)	(\$000)	(000 t)	(\$000)	(000 t)	(\$000)
BY PROVINCE						
Quebec	602	9 250	502	9 844	527	10 426
Ontario	388	16 427	416	17 909	692	31 049
British Columbia	. . .	19	-	-	7	136
Total	990	25 697	918	27 753	1 226	41 611
BY USE						
Dimensional stone						
Rough	6	483	14	1 003	..	..
Monumental and ornamental stone (n.f.)	-	-	-	-	..	..
Other (flagstone, curbstone, paving, blocks, etc.)	-	-	-	-	..	..
Chemical process stone						
Glass factories	-	-	-	-	..	..
Pulverized stone						
Agricultural purposes and fertilizer plants	12	156	4	82	..	..
Other uses	452	20 014	499	21 958	..	..
Miscellaneous stone						
Roofing granules	-	-	-	-	..	..
Poultry grit	. . .	5	. . .	5	..	..
Stucco dash	-	-	-	-	..	..
Terrazzo chips	4	404	4	365	..	..
Rubble and riprap	. . .	9	. . .	9	..	..
Other uses	10	592	13	642	..	..
Crushed stone for						
Concrete aggregate	20	178	140	1 603	..	..
Asphalt aggregate	72	384	51	307	..	..
Road metal	196	951	47	285	..	..
Other uses	216	2 521	145	1 495	..	..
Total	990	25 697	918	27 753	..	..

Sources: Natural Resources Canada; Statistics Canada.

- Nil; . . Not available; . . . Amount too small to be expressed; n.f. Not finished or dressed; ^p Preliminary.¹ Marble refers to a commercial definition that may also include limestone, travertine and greenstone (serpentinite or amphibole).

Note: Numbers may not add to totals due to rounding.

TABLE 5. CANADA, PRODUCTION OF GRANITE, 1995-97

	1995		1996		1997 ^P	
	(000 t)	(\$000)	(000 t)	(\$000)	(000 t)	(\$000)
BY PROVINCE¹						
Newfoundland	239	1 807	487	4 975	940	9 692
Nova Scotia	6 043	30 826	4 963	25 866	4 626	24 210
New Brunswick	3 255	14 808	4 137	16 623	3 420	12 877
Quebec	7 109	52 971	6 283	52 534	5 833	48 152
Ontario	1 308	22 301	1 390	34 565	1 704	33 305
Manitoba	179	1 851	287	2 993	813	4 695
British Columbia	2 283	16 913	3 080	18 286	3 059	23 287
Northwest Territories and Yukon	568	4 102	156	1 083	115	830
Total	20 982	145 580	20 782	156 925	20 511	157 047
BY USE²						
Dimensional stone						
Rough	121	14 100	118	17 880	..	..
Monumental and ornamental stone (n.f.)	33	4 900	44	6 559	..	..
Other (flagstone, curbstone, paving blocks, etc.)	4	597	1	170	..	..
Chemical and metallurgical						
Cement plants, Canadian	5	30	-	-	..	..
Pulverized stone						
Asphalt filler	60	49	103	58	..	..
Agricultural purposes and fertilizer plants	-	-	-	-	..	..
Other	10	51	46	230	..	..
Miscellaneous stone						
Artificial stone	26	192	-	-	..	..
Roofing granules	349	12 132	370	21 711	..	..
Poultry grit	1	101	1	102	..	..
Stucco dash	...	34	1	43	..	..
Terrazzo chips	-	-	-	-	..	..
Rock wool	-	-	-	-	..	..
Rubble and riprap	267	1 251	490	1 946	..	..
Other uses	294	1 479	32	322	..	..
Crushed stone for						
Concrete aggregate	1 755	8 881	1 944	11 402	..	..
Asphalt aggregate	4 622	26 964	4 182	26 802	..	..
Road metal	7 277	37 294	7 005	33 858	..	..
Railroad ballast (includes traprock)	1 331	11 811	1 215	10 169	..	..
Other uses	4 832	25 764	5 231	25 672	..	..
Total	20 987	145 610	20 782	156 925	..	..

Sources: Natural Resources Canada; Statistics Canada.

- Nil; .. Not available; ... Amount too small to be expressed; n.f. Not finished or dressed; ^P Preliminary.¹ Data exclude stone used in the Canadian cement and lime industries. ² Data include stone used in the Canadian cement and lime industries.

Notes: Numbers may not add to totals due to rounding. Data include shipments by producers regardless of industrial classification. Granite includes all igneous rock.

TABLE 6. CANADA, PRODUCTION OF SANDSTONE, 1995-97

	1995		1996		1997 ^p	
	(000 t)	(\$000)	(000 t)	(\$000)	(000 t)	(\$000)
BY PROVINCE¹						
Newfoundland	102	478	96	517	335	1 679
Nova Scotia	997	5 412	1 092	6 061	1 079	6 782
New Brunswick	15	46	..	29	—	—
Quebec	1 675	13 454	1 776	12 055	1 440	10 067
Ontario	22	1 569	8	1 395	11	1 655
Alberta	10	697	5	677	5	690
Total	2 821	21 657	2 978	20 734	2 870	20 872
BY USE²						
Dimensional stone						
Rough	53	4 566	46	4 599	..	..
Monumental and ornamental stone (n.f.)	3	33	3	30	..	..
Other (flagstone, curbstone, paving blocks, etc.)	11	576	10	591	..	..
Chemical process stone						
Cement plants, Canadian	22	90	18	84	..	..
Pulverized stone						
Other	147	885	141	914	..	..
Miscellaneous stone						
Artificial stone	—	—	4	87	..	..
Roofing granules	5	94	—	—	..	..
Rubble and riprap	44	211	41	128	..	..
Other	9	45	10	49	..	..
Crushed stone for						
Concrete aggregate	196	1 440	164	838	..	..
Asphalt aggregate	412	3 175	511	3 202	..	..
Road metal	1 217	6 395	679	3 653	..	..
Railroad ballast	20	62	45	177	..	..
Other uses	706	4 177	1 323	6 468	..	..
Total	2 843	21 748	2 996	20 819	..	..

Sources: Natural Resources Canada; Statistics Canada.

— Nil; .. Not available; n.f. Not finished or dressed; ^p Preliminary.¹ Data exclude stone used in the Canadian cement and lime industries. ² Data include stone used in the Canadian cement and lime industries.

Note: Numbers may not add to totals due to rounding.

TABLE 7. CANADA, PRODUCTION OF SHALE,¹ 1995-97

	1995		1996		1997P	
	(000 t)	(\$000)	(000 t)	(\$000)	(000 t)	(\$000)
BY PROVINCE²						
Newfoundland	4	3 500	3	3 000	2	2 000
Nova Scotia	32	130	16	93	22	66
New Brunswick	84	420	64	320	23	128
Quebec	569	2 230	449	2 316	227	1 126
Manitoba	184	111	165	114	160	117
Alberta	59	100	41	69	35	59
British Columbia	1 456	7 001	11	103	17	155
Northwest Territories and Yukon	21	44	28	62	55	75
Total	2 409	13 536	778	6 076	541	3 726
BY USE³						
Dimensional stone	4	3 500	3	3 000	..	..
Chemical and metallurgical						
Cement plants, Canadian	301	797	245	649	..	..
Other chemical uses	592	2 188	859	3 074	..	..
Miscellaneous stone						
Roofing granules	..	1	-	-	..	..
Rubble and riprap	21	44	31	76	..	..
Other uses	191	145	165	114	..	..
Crushed stone for						
Concrete aggregate	708	3 359	3	21	..	..
Asphalt aggregate	-	-	93	417	..	..
Road metal	304	1 274	194	1 099	..	..
Railway ballast	-	-	-	-	..	..
Other uses	1 181	5 214	289	1 349	..	..
Total	3 301	16 521	1 882	9 798	..	..

Sources: Natural Resources Canada; Statistics Canada.

- Nil; . . Not available; . . . Amount too small to be expressed; P Preliminary.

¹ May include slate. ² Data exclude stone used in the Canadian cement and lime industries. ³ Data include stone used in the Canadian cement and lime industries.

Note: Numbers may not add to totals due to rounding.

TABLE 8. CANADA, PRODUCTION OF STONE BY TYPES,¹ 1980, 1985 AND 1995-97

	1980		1985		1995		1996		1997P	
	(000 t)	(\$000)	(000 t)	(\$000)	(000 t)	(\$000)	(000 t)	(\$000)	(000 t)	(\$000)
Granite	39 983	140 914	17 219	95 424	20 982	145 580	20 782	156 925	20 511	157 047
Limestone	58 191	185 085	77 874	317 862	71 376	384 785	66 993	380 685	69 081	394 403
Marble	316	1 807	571	13 966	990	25 697	918	27 753	1 226	41 611
Sandstone	3 064	11 540	3 011	15 310	2 821	21 657	2 978	20 734	2 870	20 872
Shale ²	1 812	1 810	1 561	3 059	2 409	13 536	778	6 076	541	3 726
Total	103 366	341 156	100 236	445 622	98 578	591 255	92 449	592 172	94 230	617 660

Sources: Natural Resources Canada; Statistics Canada.

P Preliminary.

¹ Data exclude stone used in the Canadian cement and lime industries. ² May include slate.

Note: Numbers may not add to totals due to rounding.

TABLE 9. CANADA, ROUGH GRANITE, SUMMARY OF PRODUCTION AND TRADE, 1980 AND 1985-97

	Quantity Value	Production ¹	Imports ²	Exports ²
1980	t	81 000	24 130	5 019 ^a
	\$ millions	5.6	1.9	0.7
1985	t	104 000	34 468	12 511 ^a
	\$ millions	12.8	6.2	1.7
1986	t	121 000	33 994	18 450 ^a
	\$ millions	15.7	6.6	2.7
1987	t	112 000	46 370	37 450 ^a
	\$ millions	16.1	7.9	6.0
1988	t	153 000	46 282	86 940
	\$ millions	24.4	11.2	16.2 ^r
1989	t	162 000	52 337	107 105
	\$ millions	24.8	11.7	17.3
1990	t	166 000	46 149	79 640 ^r
	\$ millions	33.6	11.2	19.8 ^r
1991	t	122 000	35 038	91 630 ^r
	\$ millions	24.0	8.5	22.6
1992	t	127 000	44 951	94 530 ^r
	\$ millions	20.3	10.5	21.4
1993	t	134 000	41 484	88 830 ^r
	\$ millions	18.1	10.8	20.3
1994	t	112 000	35 619	95 000 ^r
	\$ millions	16.9	10.1	20.0
1995	t	158 000	41 099	94 200 ^r
	\$ millions	19.6	11.4	17.9
1996	t	163 000	53 543	97 700 ^r
	\$ millions	24.6	15.4	20.9
1997	t	130 000 ^e	54 659	65 857
	\$ millions	19.0	16.1	14.8

Sources: Natural Resources Canada; Statistics Canada.

^e Estimated; ^r Assumes a factor of 2.7 for converting cubic metres to tonnes.

^a Coded as building stone, rough (90% is considered to be granite).

¹ Includes rough stone for construction, monumental/ornamental and other uses.

² Includes codes 2516.11 (roughly trimmed block) and 2516.12 (cut block by sawing or otherwise). Some re-exports to the United States may also be involved.