

Mineral Industry Surveys

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GYPSUM IN THE FOURTH QUARTER 2022

Producers mined 6.13 million metric tons (Mt) of gypsum in the fourth quarter of 2022, 4% more than that in the third quarter of 2022 and 19% more than that in the fourth quarter of 2021. The total production of mined gypsum in 2022 was 23.0 Mt, which was 8% more than that in 2021. Synthetic gypsum used was estimated to be 3.25 Mt in the fourth quarter of 2022, which was unchanged from that in the third quarter of 2022, and unchanged from that in the fourth quarter of 2021. During the fourth quarter of 2022, synthetic gypsum accounted for approximately 29% of the 11.2-Mt total supply of gypsum in the United States. Total synthetic gypsum used in 2022 was estimated to be 13.0 Mt, which was unchanged from that in 2021 (table 1). Both mined and synthetic gypsum are used as raw material for wallboard. The wallboard industry is the leading domestic consumer of gypsum.

Calcined gypsum production during the fourth quarter of 2022 was 4.86 Mt, which was slightly more than that in the third quarter of 2022 and 11% more than that in the fourth quarter of 2021 (table 1). Sales of board products were 3.85 Mt, equivalent to approximately 630 million square meters (6.78 billion square feet), 6% less than those in the third quarter of 2022 and 7% more than those in the fourth quarter of 2021 (table 2). The total supply of calcined gypsum for 2022 was 18.7 Mt, which was essentially unchanged from the total annual supply of calcined gypsum for 2021 (table 1).

Sales of uncalcined gypsum in the fourth quarter of 2022, primarily for portland cement and agricultural uses, were estimated to be 5.23 Mt, unchanged from those in the third quarter of 2022 and the fourth quarter of 2021. Total estimated sales of uncalcined gypsum in 2022 were 20.9 Mt, which were unchanged from those in 2021 (table 2).

The occurrence of quarterly fluctuations is not unusual in the production and consumption of gypsum, synthetic gypsum, and calcined gypsum. These variances are often the result of differences in weather conditions, which can impede or encourage construction activities, coupled with market demands that are often driven by residential and commercial building activity.

According to the U.S. Census Bureau, imports of crude gypsum in the fourth quarter of 2022 were 1.78 Mt (table 3), 8% more than those in the third quarter of 2022 and 20% more than those in the fourth quarter of 2021. Spain was the leading source with 34% of total crude imports, followed by Canada with 31% and Mexico with 27%. Total crude gypsum imports in 2022 were 6.89 Mt, 6% more than those in 2021.

According to the U.S. Census Bureau, gypsum wallboard imports for the fourth quarter of 2022 were 207,000 t, equivalent to about 23.0 million square meters (248 million square feet). These imports were 3% more than those in the third quarter of 2022 and 23% more than those in the fourth quarter of 2021. Mexico was the source of 90% of wallboard imports, followed by Canada with 10%. Total wallboard imports in 2022 were 815,000 t, 18% more than those in 2021.

Wallboard exports to 30 countries or localities in the fourth quarter of 2022 were 153,000 t, equivalent to 17.0 million square meters (182 million square feet). These were slightly less than those in the third quarter of 2022 and 11% more than those in the fourth quarter of 2021. Most wallboard exports were shipped to Canada, which accounted for 91% of the total. Wallboard exports in 2022 were 627,000 t, 8% less than those in 2021.

Changes in wallboard import and export data are frequently amplified as a result of relatively small quantities of traded material.

All percentages in this report were calculated based on unrounded data.

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TABLE 1
GYPSUM SUPPLY^{1,2}

(Metric tons)

	2021		2022				
	4th quarter	1st quarter– 4th quarter	1st quarter	2d quarter	3d quarter	4th quarter	1st quarter– 4th quarter
Crude:							
Mined ³	5,170,000	21,300,000	5,380,000 ^r	5,640,000 ^r	5,880,000 ^r	6,130,000	23,000,000
Imported ⁴	1,480,000	6,520,000	1,420,000	2,040,000	1,640,000	1,780,000	6,890,000
Synthetic gypsum ⁵	3,250,000	13,000,000	3,250,000	3,250,000	3,250,000	3,250,000	13,000,000
Total supply	9,900,000	40,800,000	10,100,000 ^r	10,900,000 ^r	10,800,000 ^r	11,200,000	42,900,000
Crude, exported ⁴	10,100	41,700	8,830	12,400	8,650	8,960	38,800
Consumption	9,890,000	40,700,000	10,000,000 ^r	10,900,000 ^r	10,800,000 ^r	11,200,000	42,900,000
Calcined:							
Produced	4,380,000	18,600,000	4,260,000	4,750,000	4,820,000	4,860,000	18,700,000
Imported ⁶	4,760	25,700	5,550	8,350	7,340	7,940	29,200
Total supply	4,380,000	18,700,000	4,260,000	4,760,000	4,830,000	4,860,000	18,700,000
Exported ⁶	25,200	99,000	24,900	25,500	27,400	27,200	105,000
Consumption	4,360,000	18,600,000	4,240,000	4,730,000	4,800,000	4,840,000	18,600,000

^rRevised.

¹Includes data from the Gypsum Association.

²Data are rounded to no more than three significant digits; may not add to totals shown.

³Includes estimated data.

⁴Import and export data are for “Gypsum; anhydrite,” Harmonized Tariff Schedule 2520.10.0000.

⁵Estimated, based on American Coal Ash Association data for FGD gypsum used.

⁶Import and export data are for “Plaster,” Harmonized Tariff Schedule 2520.20.0000.

TABLE 2
GYPSUM SOLD OR USED BY PRODUCERS, BY USE^{1,2}

(Metric tons, unless otherwise specified)

	2021		2022				
	4th quarter	1st quarter– 4th quarter	1st quarter	2d quarter	3d quarter	4th quarter	1st quarter– 4th quarter
Uncalcined: ^{6, 3}							
Portland and masonry cement	1,350,000	5,400,000	1,350,000	1,350,000	1,350,000	1,350,000	5,400,000
Agriculture and other ⁴	3,880,000	15,500,000	3,880,000	3,880,000	3,880,000	3,880,000	15,500,000
Total	5,230,000	20,900,000	5,230,000	5,230,000	5,230,000	5,230,000	20,900,000
Calcined:							
Board products ⁵	3,610,000 ^r	15,500,000 ^r	3,820,000 ^r	4,180,000 ^r	4,100,000 ^r	3,850,000	16,000,000
Plaster	17,600	76,000	17,600	21,800	19,100	17,100	75,600
Total	3,630,000 ^r	15,600,000 ^r	3,840,000 ^r	4,200,000 ^r	4,120,000 ^r	3,870,000	16,000,000
Board products: (thousand square feet) ⁶							
Regular board	3,740,000	15,500,000	3,950,000	4,290,000	4,220,000	3,850,000	16,300,000
Type X board	1,830,000	8,130,000	1,950,000	2,190,000	2,120,000	2,030,000	8,290,000
Other	840,000	3,620,000	874,000	925,000	921,000	903,000	3,620,000
Total supply	6,410,000	27,300,000	6,770,000	7,400,000	7,270,000	6,780,000	28,200,000

^rEstimated. ^rRevised.

¹Includes data from the Gypsum Association.

²Data are rounded to no more than three significant digits; may not add to totals shown.

³Does not include synthetic gypsum from electric powerplants.

⁴Includes gypsum used for infrastructure purposes, unspecified uses, and estimated under-reported amount.

⁵Includes weight of paper and other materials.

⁶One square meter equals 10.78 square feet.

TABLE 3
CRUDE GYPSUM IMPORTED FOR CONSUMPTION^{1, 2}

(Metric tons)

Country or locality	2021		2022				
	4th quarter	1st quarter– 4th quarter	1st quarter	2d quarter	3d quarter	4th quarter	1st quarter– 4th quarter
Belgium	17	68	--	--	--	--	--
Brazil	--	--	--	--	15	--	15
Canada	391,000	1,850,000	408,000	657,000	501,000	557,000	2,120,000
China	103	667	133	131	466	91	821
Dominican Republic	--	--	7,500	19,400	--	7,520	34,400
France	--	--	--	--	--	10	10
Germany	18	36	--	18	3	21	42
India	--	--	--	--	--	2,840	2,840
Malaysia	--	--	--	--	--	9	9
Mexico	551,000	2,300,000	366,000	566,000	585,000	479,000	2,000,000
Morocco	327	751	171	144	288	320	923
Spain	446,000	2,130,000	589,000	769,000	537,000	611,000	2,510,000
Taiwan	--	--	--	2	--	2	4
Thailand	--	10	10	45	48	--	103
Turkey	90,900	246,000	53,000	29,500	20,300	123,000	225,000
United Kingdom	19	30	5	20	91	--	116
Other	12	121	--	1	--	--	1
Total	1,480,000	6,520,000	1,420,000	2,040,000	1,640,000	1,780,000	6,890,000

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²May include revisions to previously published data.

Source: U.S. Census Bureau.

TABLE 4
CRUDE GYPSUM IN THE UNITED STATES^{1, 2}

(Metric tons)

Period	Consumption ³	Production ⁴	Imports ⁵	Exports ⁵
2021:				
4th quarter	6,640 ^r	5,170 ^r	1,480	10
1st quarter–4th quarter	27,700	21,300 ^r	6,520	42
2022:				
1st quarter	6,800 ^r	5,380 ^r	1,420	9
2d quarter	7,670 ^r	5,640 ^r	2,040	12
3d quarter	7,520 ^r	5,880 ^r	1,640	9
4th quarter	7,900	6,130	1,780	9
1st quarter–4th quarter	29,900	23,000	6,890	39

^rRevised.

¹Excludes synthetic gypsum.

²Data are rounded to no more than three significant digits; may not add to totals shown.

³Consumption calculated by adding production and imports and subtracting exports. Quarterly inventory changes are not included.

⁴Production data derived from semiannual gypsum canvasses of non-wallboard producers, annual canvass of all producers, and quarterly data provided by the Gypsum Association.

⁵Data from U.S. Census Bureau.

TABLE 5
SALES OF GYPSUM BOARD PRODUCTS, BY SALES REGIONS IN 2022^{1,2}

(Thousand square feet)³

	New England	Middle Atlantic	E. North Central	W. North Central	South Atlantic	E. South Central	W. South Central	Mountain	Pacific	Exports	Total
4th quarter:											
Veneer base	47,100	1,920	11,700	292	5,160	2	16	35	929	--	67,100
Sheathing	4,600	12,800	11,400	10,000	24,700	5,970	20,700	9,110	23,700	15,800	139,000
Regular gypsum board	54,600	253,000	382,000	241,000	1,230,000	321,000	669,000	359,000	267,000	79,100	3,850,000
Type X gypsum board	56,200	200,000	230,000	155,000	425,000	92,000	260,000	247,000	331,000	30,100	2,030,000
Liner panel	2,590	8,910	4,020	1,990	24,800	3,400	8,140	7,350	4,920	1,350	67,500
Predecorated board	322	1,390	1,630	841	2,940	882	2,620	742	1,820	251	13,400
5/16 Mobile home board	--	2,200	4,660	--	658	3,130	614	--	--	93	11,400
Water/moisture resistant board	25,700	115,000	57,000	28,000	154,000	30,700	69,000	43,600	60,800	21,100	605,000
Total	191,000	595,000	702,000	437,000	1,860,000	457,000	1,030,000	667,000	691,000	148,000	6,780,000
1st quarter-4th quarter:											
Veneer base	200,000	7,880	43,200	1,660	20,100	25	30	255	4,370	24	278,000
Sheathing	15,000	43,700	37,900	35,900	84,300	23,300	79,300	35,500	86,000	65,600	506,000
Regular gypsum board	244,000	1,100,000	1,570,000	991,000	4,860,000	1,400,000	2,980,000	1,540,000	1,310,000	306,000	16,300,000
Type X gypsum board	252,000	849,000	914,000	599,000	1,610,000	365,000	1,050,000	1,010,000	1,510,000	123,000	8,290,000
Liner panel	9,030	35,600	19,400	7,810	124,000	15,200	28,000	32,700	17,500	4,240	294,000
Predecorated board	2,190	6,570	7,690	3,710	12,700	4,110	9,770	4,080	6,350	1,460	58,600
5/16 Mobile home board	--	7,350	20,100	--	2,820	25,100	6,190	--	--	271	61,900
Water/moisture resistant board	109,000	484,000	233,000	112,000	595,000	123,000	273,000	164,000	250,000	82,000	2,420,000
Total	831,000	2,530,000	2,850,000	1,750,000	7,310,000	1,960,000	4,420,000	2,790,000	3,190,000	583,000	28,200,000

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Sales region equivalent to U.S. Census Bureau Geographic Division as follows: New England (CT, MA, ME, NH, RI, VT); Middle Atlantic (NJ, NY, PA); East North Central (IL, IN, MI, OH, WI); West North Central (IA, KS, MN, MO, ND, NE, SD); South Atlantic (DC, DE, FL, GA, MD, NC, SC, VA, WV); East South Central (AL, KY, MS, TN); West South Central (AR, LA, OK, TX); Mountain (AZ, CO, ID, MT, NM, NV, UT, WY); Pacific (AK, CA, HI, OR, WA).

³One square meter equals 10.78 square feet.

Source: Gypsum Association.