Substance	Specific gravity	Avg density, lb per cu ft
Rubble Masonry		
Limestone	2 0–2 7	147
Sandstone	1 9–2 5	137
Bluestone	2 2–2 5	147
Marble	2 8–2 7	156
Dry Rubble Masonry		
Granite, syenite, gneiss	1 9–2 8	130
Limestone, marble	1 9–2 1	125
Sandstone, bluestone	1 8–1 9	110
Brick Masonry		
Hard brick	1 8–2.8	128
Medium brick	1 6–2 0	112
Soft brick	1 4–1 9	103
Sand-lime brick	1 4–2 2	112
Concrete Masonry		
Cement, stone, sand	2 2–2 4	144
Cement, slag, etc.	1 9–2 8	130
Cement, cinder, etc.	1 5–1 7	100
Various Building Mat'ls		
Ashes, cinders	0 64–0 72	40–45
Cement, portland, loose	1 5	94
Portland cement	3 1–3 2	196
Lime, gypsum, loose	0 85–1 00	53–64
Mortar, lime, set	1 4–1 9	103
Mortar, portland cement	2 08–2 25	94
Slags, bank slag	1 1–1 2	135
Slags, bank screenings	1 5–1 9	67–72
Slags, machine slag	1 5	98–117
Slags, slag sand	0 8–0 9	96
		49–55
Earth, etc., Excavated		
Clay, dry	1 0	63
Clay, damp, plastic	1 76	110
Clay and gravel, dry	1 6	100
Earth, dry, loose	1 2	76
Earth, dry, packed	1 5	95
Earth, moist, loose	1 3	78
Earth, moist, packed	1 6	96
Earth, mud, flowing	1 7	108
Earth, mud, packed	1 8	115
Riprap, limestone	1.3–1 4	80–88
Riprap, sandstone	1 4	90
Riprap, shale	1 7	105
Sand, gravel, dry, loose	1 4–1 7	90–105
Sand, gravel, dry, packed	1 6–1 9	100–120
Sand, gravel, wet	1 89–2 16	126
Excavations in Water		
Sand or gravel	0 96	60
Sand or gravel and clay	1 00	65
Clay	1 28	80
River mud	1 44	90
Soil	1 12	70
Stone riprap	1 00	65

Substance	Specific gravity	Avg density, lb per cu ft
Minerals		
Asbestos	2 1–2 8	153
Barytes	4 50	281
Basalt	2 7–3.2	184
Bauxite	2 55	159
Bluestone	2 5–2 6	159
Borax	1.7–1 8	109
Chalk	1.8–2 8	143
Clay, marl	1 8–2.6	137
Dolomite	2 9	181
Feldspar, orthoclase	2.5–2 7	162
Gneiss	2 7–2 9	175
Granite	2 6–2 7	165
Greenstone, trap	2 8–3 2	187
Gypsum, alabaster	2.3–2 8	159
Hornblende	3 0	187
Limestone	2.1–2 86	165
Marble	2.6–2 86	170
Magnesite	3 0	187
Phosphate rock, apatite	3 2	200
Porphyry	2 6–2 9	172
Pumice, natural	0 37–0 90	40
Quartz, flint	2 5–2 8	165
Sandstone	2.0–2 6	143
Serpentine	2.7–2 8	171
Shale, slate	2.6–2 9	172
Soapstone, talc	2 6–2 8	169
Syenite	2.6–2 7	165
Stone, Quarried, Piled		
Basalt, granite, gneiss	1 5	98
Limestone, marble, quartz	1 5	95
Sandstone	1 3	82
Shale	1 5	92
Greenstone, hornblend	1 7	107
Bituminous Substances		
Asphaltum	1 1–1 5	81
Coal, anthracite	1 4–1 8	97
Coal, bituminous	1 2–1 5	84
Coal, lignite	1 1–1 4	78
Coal, peat, turf, dry	0 65–0 85	47
Coal, charcoal, pine	0 28–0 44	28
Coal, charcoal, oak	0.47–0 57	33
Coal coke	1 0–1 4	75
Graphite	1 64–2 7	135
Paraffin	0 87–0 91	56
Petroleum	0 87	54
Petroleum, refined (kerosene)	0 78–0 82	50
Petroleum, benzene	0 78–0 75	46
Petroleum, gasoline	0 70–0 75	45
Pitch	1 07–1 15	69
Tar, bituminous	1 20	75
Coal and Coke, Piled		
Coal, anthracite	0 75–0 93	47–58
Coal, bituminous, lignite	0 84–0 87	40–54
Coal, peat, turf	0 32–0 42	20–26
Coal, charcoal	0 16–0 28	10–14
Coal, coke	0 37–0 51	23–32

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