

## Construction and Demolition Debris Weight to Volume Conversion

Note: These numbers are used throughout this training

	Volume	Weight (pounds)	Weight (tons)
Trash <sup>2</sup>			
Residential waste (uncompacted at curb)	1 cubic yard	150 – 300	.075 – .15
Commercial-industrial waste (uncompacted)	1 cubic yard	300 – 600	.15 – .30
Mixed Waste <sup>1</sup>	1 cubic yard	350	.175
Asphalt <sup>3</sup>	1 square yard 1 inch thick	110 - 115	0.055 – 0.057
Asphalt <sup>3</sup>	1 cubic yard	4,050 – 4,140	2.025 – 2.07
Cans & Bottles <sup>2</sup>			
Aluminum cans (whole)	1 cubic yard	50 – 75	.025 – .038
Glass bottles (whole bottles)	1 cubic yard	500 – 700	.25 – .35
Plastic bottles (soda bottles)	1 cubic yard	30 – 40	.015 – .02
Corrugated Cardboard <sup>1</sup>			
Uncompacted	1 cubic yard	50 – 150	.025 – .075
Compacted	1 cubic yard	300 – 500	.15 – .25
Concrete <sup>4</sup>	1 cubic yard	4,050	2
Rubble <sup>1</sup>	1 cubic yard	1,400	.7
Drywall <sup>1</sup>	1 cubic yard	500	.25
Scrap Metal <sup>1</sup> (loose light iron sheet metal)	1 cubic yard	1,000	.5
Wood – pallets <sup>2</sup>	1 cubic yard	286	.143
Wood – pallets <sup>2</sup> (Each)	1 Unit	30 – 50	.015 – .025
Scrap Wood <sup>1</sup>	1 cubic yard	300	.15

1 US Green Building Council. "LEED Reference Guide for Green Building Design and Construction 2009 Edition, Section 6- Calculations, Table 2- Solid Waste Conversion Factors. Page 360.

2 US Environmental Protection Agency. "Measuring Recycling. A Guide for State and Local Governments." September 1997 Appendix B. Standard Volume-to-Weight Conversion Factors pp. 59 – 62. W [www.epa.gov/epawaste/conservation/tools/recmeas/docs/guide\\_b.pdf](http://www.epa.gov/epawaste/conservation/tools/recmeas/docs/guide_b.pdf)

3 Asphalt Pavement Association of Michigan (4,050 lbs/yd<sup>3</sup>) and LEED EB v. 2.0 Reference Guide (p. 256) Table 2 Volume to Weight Conversions (115 lbs per yd<sup>2</sup> or 4,140 lbs per yd<sup>3</sup>).

4 Reade Advanced Materials, Providence RI 401.433.7000 [www.reade.com/Particle\\_Briefings/spec\\_gra2.html](http://www.reade.com/Particle_Briefings/spec_gra2.html)

What WasteCap Resource Solutions uses:

Material	Volume	Weight (pounds)	Weight (tons)	Cubic Yards Per Ton
Trash	1 cubic yard	350	.175	5.71
Cans & Bottles	1 cubic yard	50	.025	40
Cardboard	1 cubic yard	100	.05	20
Asphalt	1 cubic yard	4,140	2.07	0.48
Rubble	1 cubic yard	1,400	.7	1.43
Drywall	1 cubic yard	500	.25	4
Scrap Metal	1 cubic yard	1,000	.5	2
Scrap Wood	1 cubic yard	300	.15	6.66