

Quick reference chart of mix ratios for preparation of lab specimens with Renolith 2.0 admixture

Mix dry mass	Binder ratio (e.g. cement)	Aggregate / soil mass	Binder mass	Total Liquids mass @10% OMC	Total Liquids mass @15% OMC	Renolith 2.0 mass (@5% binder)	Diluted Renolith 2.0 @9:1 - mass
g	%	g	g	g	g	g	g
100	2%	98	2	10	15	0.1	1
200	2%	196	4	20	30	0.2	2
500	2%	490	10	50	75	0.5	5
1000	2%	980	20	100	150	1	10
2000	2%	1960	40	200	300	2	20
100	2.5%	97.5	2.5	10	15	0.125	1.25
200	2.5%	195	5	20	30	0.25	2.5
500	2.5%	487.5	12.5	50	75	0.625	6.25
1000	2.5%	975	25	100	150	1.25	12.5
2000	2.5%	1950	50	200	300	2.5	25
100	3%	97	3	10	15	0.15	1.5
200	3%	194	6	20	30	0.3	3
500	3%	485	15	50	75	0.75	7.5
1000	3%	970	30	100	150	1.5	15
2000	3%	1940	60	200	300	3	30
100	3.5%	96.5	3.5	10	15	0.175	1.75
200	3.5%	193	7	20	30	0.35	3.5
500	3.5%	482.5	17.5	50	75	0.875	8.75
1000	3.5%	965	35	100	150	1.75	17.5
2000	3.5%	1930	70	200	300	3.5	35
100	4%	96	4	10	15	0.2	2
200	4%	192	8	20	30	0.4	4
500	4%	480	20	50	75	1	10
1000	4%	960	40	100	150	2	20
2000	4%	1920	80	200	300	4	40
100	4.5%	95.5	4.5	10	15	0.225	2.25
200	4.5%	191	9	20	30	0.45	4.5
500	4.5%	477.5	22.5	50	75	1.125	11.25
1000	4.5%	955	45	100	150	2.25	22.5
2000	4.5%	1910	90	200	300	4.5	45
100	5%	95	5	10	15	0.25	2.5
200	5%	190	10	20	30	0.5	5
500	5%	475	25	50	75	1.25	12.5
1000	5%	950	50	100	150	2.5	25
2000	5%	1900	100	200	300	5	50
100	5.5%	94.5	5.5	10	15	0.275	2.75
200	5.5%	189	11	20	30	0.55	5.5
500	5.5%	472.5	27.5	50	75	1.375	13.75
1000	5.5%	945	55	100	150	2.75	27.5
2000	5.5%	1890	110	200	300	5.5	55

Please refer to the **Renolith 2.0 Sample Kit Instructions** at <https://renolith.com.au/sample/> for further details

Mix dry mass	Binder ratio (e.g. cement)	Aggregate / soil mass	Binder mass	Total Liquids mass @10% OMC	Total Liquids mass @15% OMC	Renolith 2.0 mass (@5% binder)	Diluted Renolith 2.0 @9:1 - mass
g	%	g	g	g	g	g	g
100	8%	92	8	10	15	0.4	4
200	8%	184	16	20	30	0.8	8
500	8%	460	40	50	75	2	20
1000	8%	920	80	100	150	4	40
2000	8%	1840	160	200	300	8	80
100	10%	90	10	10	15	0.5	5
200	10%	180	20	20	30	1	10
500	10%	450	50	50	75	2.5	25
1000	10%	900	100	100	150	5	50
2000	10%	1800	200	200	300	10	100
100	12%	88	12	10	15	0.6	6
200	12%	176	24	20	30	1.2	12
500	12%	440	60	50	75	3	30
1000	12%	880	120	100	150	6	60
2000	12%	1760	240	200	300	12	120
100	15%	85	15	10	15	0.75	7.5
200	15%	170	30	20	30	1.5	15
500	15%	425	75	50	75	3.75	37.5
1000	15%	850	150	100	150	7.5	75
2000	15%	1700	300	200	300	15	150
100	20%	80	20	10	15	1	10
200	20%	160	40	20	30	2	20
500	20%	400	100	50	75	5	50
1000	20%	800	200	100	150	10	100
2000	20%	1600	400	200	300	20	200

**Purpose**  
This sheet provides a quick reference chart of mix ratios for preparation of lab specimens

**Notes**  
Concrete: typical cement range is 10%-15%  
Bound materials: VicRoads S307.053 allows 1.5% to 5.5% binder, depending upon application. With Renolith 2.0 admixture, a higher binder content can be used with little risk of cracking.  
"Total Liquids" = Water + Renolith 2.0 admix. Liquid content is per manufacturer's specification (concrete), or ~OMC (soil mix). Typical OMC is ~8%-16% for sands and gravels; higher for silts & clays.  
Small doses of Renolith 2.0 admix can be hard to measure accurately. Consider making a 9:1 dilution. Eg. 90g water + 10g admix = 100g of 9:1 dilution