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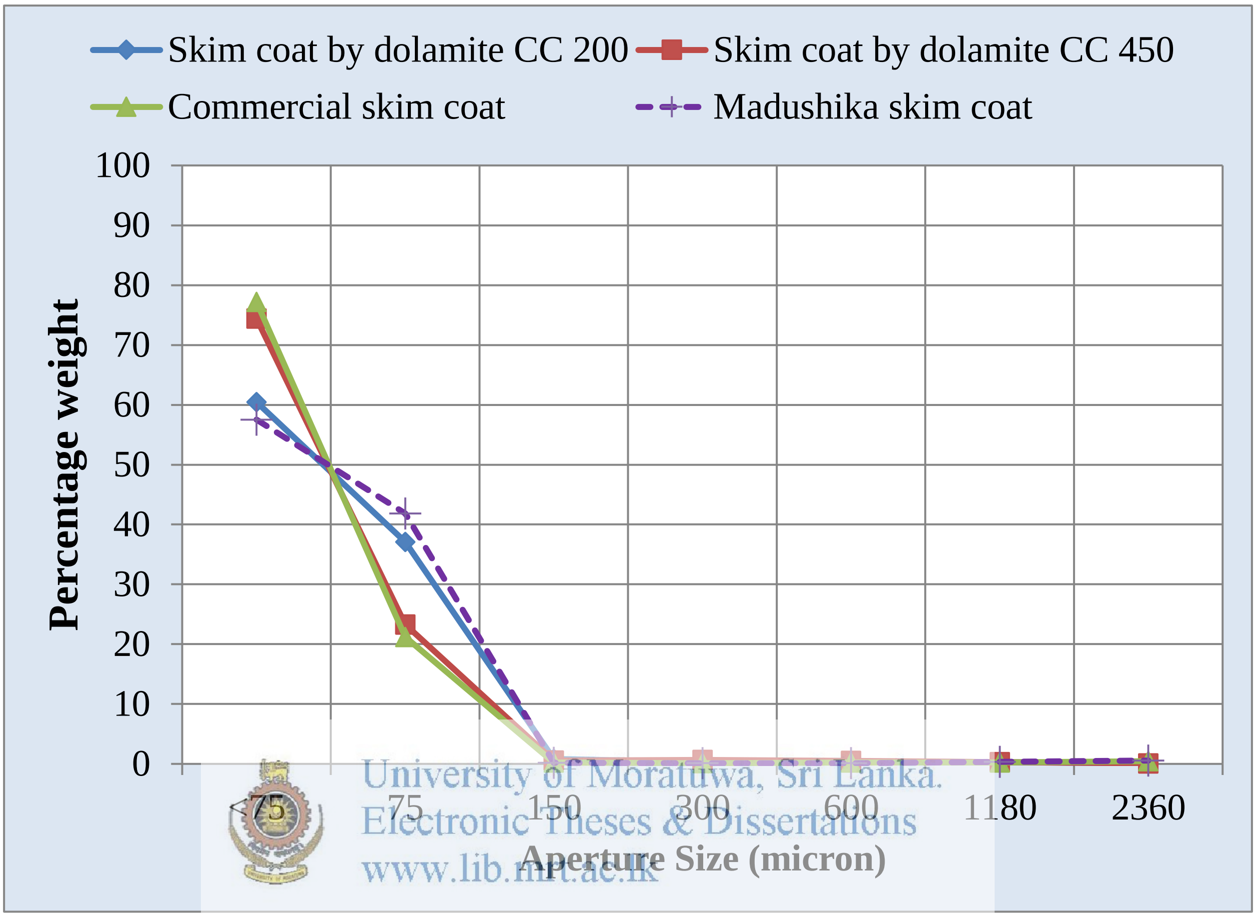
Appendix A – Particle size distribution of different skim coat types



Appendix B – Comparison between formulations for criteria based on the comments of Plasterer 1

Table B.1 – Comparison of each formulation for No dust surface

Formulation number	1	2	3	4	5	6	7	8	Eigen Values
1	1/1	1/3	1/3	1/3	1/3	1/3	1/3	1/2	0.0476
2	3/1	1/1	1/1	1/1	1/1	1/1	1/1	3/2	0.1429
3	3/1	1/1	1/1	1/1	1/1	1/1	1/1	3/2	0.1429
4	3/1	1/1	1/1	1/1	1/1	1/1	1/1	3/2	0.1429
5	3/1	1/1	1/1	1/1	1/1	1/1	1/1	3/2	0.1429
6	3/1	1/1	1/1	1/1	1/1	1/1	1/1	3/2	0.1429
7	3/1	1/1	1/1	1/1	1/1	1/1	1/1	3/2	0.1429
8	2/1	2/3	2/3	2/3	2/3	2/3	2/3	1/1	0.0952

Table B.2 – Comparison of each formulation for Low air bubbles after applying

Formulation number	1	2	3	4	5	6	7	8	Eigen Values
1	1/1	4/2	4/1	4/4	4/4	4/4	4/3	1/1	0.1538
2	1/2	1/1	2/1	1/2	1/2	1/2	2/3	1/2	0.0769
3	1/4	1/2	1/1	1/4	1/4	1/4	1/3	1/4	0.0385
4	1/1	2/1	4/1	1/1	1/1	1/1	4/3	1/1	0.1538
5	1/1	2/1	4/1	1/1	1/1	1/1	4/3	1/1	0.1538
6	1/1	2/1	4/1	1/1	1/1	1/1	4/3	1/1	0.1538
7	3/4	3/2	3/1	3/4	3/4	3/4	1/1	3/4	0.1154
8	1/1	2/1	4/1	1/1	1/1	1/1	4/3	1/1	0.1538

Table B.3 – Comparison of each formulation for Long setting time

Formulation number	1	2	3	4	5	6	7	8	Eigen Values
1	1/1	1/3	1/7	1/4	1/8	1/5	1/2	1/6	0.0278
2	3/1	1/1	3/7	3/4	3/8	3/5	3/2	1/2	0.0833
3	7/1	7/3	1/1	7/4	7/8	7/5	7/2	7/6	0.1944
4	4/1	4/3	4/7	1/1	1/2	4/5	2/1	2/3	0.1111
5	8/1	8/3	8/7	2/1	1/1	8/5	4/1	4/3	0.2222
6	5/1	5/3	5/7	5/4	5/8	1/1	5/2	5/6	0.1389
7	2/1	2/3	2/7	1/2	1/4	2/5	1/1	1/3	0.0556
8	6/1	2/1	6/7	3/2	3/4	6/5	3/1	1/1	0.1667

Table B.4 – Comparison of each formulation for Ease of Trimming

Formulation number	1	2	3	4	5	6	7	8	Eigen Values
1	1/1	1/3	1/4	1/5	1/4	1/4	1/4	1/2	0.0393
2	3/1	1/1	3/4	3/5	3/4	3/4	3/4	3/2	0.1180
3	4/1	4/3	1/1	4/5	1/1	1/1	1/1	1/2	0.1418
4	5/1	5/3	5/4	1/1	5/4	5/4	5/4	5/2	0.1967
5	4/1	4/3	1/1	4/5	1/1	1/1	1/1	1/2	0.1418
6	4/1	4/3	1/1	4/5	1/1	1/1	1/1	1/2	0.1418
7	4/1	4/3	1/1	4/5	1/1	1/1	1/1	1/2	0.1418
8	2/1	2/3	1/2	2/5	1/2	1/2	1/2	1/1	0.0787

Table B.5 – Comparison of each formulation for Good workability

Formulation number	1	2	3	4	5	6	7	8	Eigen Values
1	1/1	1/1	3/4	3/4	3/4	3/2	3/1	3/4	0.1223
2	1/1	1/1	3/4	3/4	3/4	3/2	3/1	3/4	0.1223
3	4/3	4/3	1/1	1/1	1/1	2/1	4/1	1/1	0.1631
4	4/3	4/3	1/1	1/1	1/1	2/1	4/1	1/1	0.1631
5	4/3	4/3	1/1	1/1	1/1	2/1	4/1	1/1	0.1631
6	2/3	2/3	1/2	1/2	1/2	1/1	2/1	1/2	0.0816
7	1/3	1/3	1/4	1/4	1/4	1/2	1/1	1/4	0.0408
8	4/3	4/3	1/1	1/1	1/1	2/1	1/4	1/1	0.1437

Table B.6 – Comparison of each formulation for No sand paper marks

Formulation number	1	2	3	4	5	6	7	8	Eigen Values
1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	2/1	0.1333
2	1/1	1/1	1/1	1/1	1/1	1/1	1/1	2/1	0.1333
3	1/1	1/1	1/1	1/1	1/1	1/1	1/1	2/1	0.1333
4	1/1	1/1	1/1	1/1	1/1	1/1	1/1	2/1	0.1333
5	1/1	1/1	1/1	1/1	1/1	1/1	1/1	2/1	0.1333
6	1/1	1/1	1/1	1/1	1/1	1/1	1/1	2/1	0.1333
7	1/1	1/1	1/1	1/1	1/1	1/1	1/1	2/1	0.1333
8	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/1	0.0667

Table B.7 – Comparison of each formulation for Low agglomerates

Formulation number	1	2	3	4	5	6	7	8	Eigen Values
1	1/1	1/1	1/1	1/1	4/3	2/1	4/1	1/1	0.1538
2	1/1	1/1	1/1	1/1	4/3	2/1	4/1	1/1	0.1538
3	1/1	1/1	1/1	1/1	4/3	2/1	4/1	1/1	0.1538
4	1/1	1/1	1/1	1/1	4/3	2/1	4/1	1/1	0.1538
5	3/4	3/4	3/4	3/4	1/1	3/2	3/1	3/4	0.1154
6	1/2	1/2	1/2	1/2	2/3	1/1	2/1	1/2	0.0769
7	1/4	1/4	1/4	1/4	1/3	1/2	1/1	1/4	0.0385
8	1/1	1/1	1/1	1/1	4/3	2/1	4/1	1/1	0.1538

Table B.8 – Comparison of each formulation for Low trimming dust

Formulation number	1	2	3	4	5	6	7	8	Eigen Values
1	1/1	1/3	1/4	1/6	1/5	1/8	1/7	1/2	0.0258
2	3/1	1/1	3/4	3/6	3/5	3/8	3/7	3/2	0.0774
3	4/1	4/3	1/1	2/3	4/5	1/2	4/1	2/1	0.1745
4	6/1	2/1	3/2	1/1	6/5	3/4	6/7	3/1	0.1548
5	5/1	5/3	5/4	5/6	1/1	5/8	5/7	5/2	0.1290
6	8/1	8/3	2/1	4/3	8/5	1/1	8/7	4/1	0.2064
7	7/1	7/3	7/4	7/6	7/5	7/8	1/1	7/2	0.1806
8	2/1	2/3	1/2	1/3	2/5	1/4	2/7	1/1	0.0516

Table B.9 – Comparison of each formulation for Good flowability during mixing

Formulation number	1	2	3	4	5	6	7	8	Eigen Values
1	1/1	5/4	5/4	5/4	5/3	5/2	5/1	5/4	0.1852
2	4/5	1/1	1/1	1/1	4/3	2/1	4/1	1/1	0.1481
3	4/5	1/1	1/1	1/1	4/3	2/1	4/1	1/1	0.1481
4	4/5	1/1	1/1	1/1	4/3	2/1	4/1	1/1	0.1481
5	3/5	3/4	3/4	3/4	1/1	3/2	3/1	3/4	0.1111
6	2/5	1/2	1/2	1/2	2/3	1/1	2/1	1/2	0.0741
7	1/5	1/4	1/4	1/4	1/3	1/2	1/1	1/4	0.0370
8	4/5	1/1	1/1	1/1	4/3	2/1	4/1	1/1	0.1481

Table B.10 – Comparison of each formulation for Low unmixed dry lumps

Formulation number	1	2	3	4	5	6	7	8	Eigen Values
1	1/1	1/1	5/4	5/4	5/3	5/2	5/1	1/1	0.1724
2	1/1	1/1	5/4	5/4	5/3	5/2	5/1	1/1	0.1724
3	4/5	4/5	1/1	1/1	4/3	2/1	4/1	4/5	0.1379
4	4/5	4/5	1/1	1/1	4/3	2/1	4/1	4/5	0.1379
5	3/5	3/5	3/4	3/4	1/1	3/2	3/1	3/5	0.1034
6	2/5	2/5	1/2	1/2	2/3	1/1	2/1	2/5	0.0690
7	1/5	1/5	1/4	1/4	1/3	1/2	1/1	1/5	0.0345
8	1/1	1/1	5/4	5/4	5/3	5/2	5/1	1/1	0.1724

Table B.11 – Comparison of each formulation for Soft and uniform paste

Formulation number	1	2	3	4	5	6	7	8	Eigen Values
1	1/1	1/1	1/1	1/1	1/1	3/2	3/1	1/1	0.1429
2	1/1	1/1	1/1	1/1	1/1	3/2	3/1	1/1	0.1429
3	1/1	1/1	1/1	1/1	1/1	3/2	3/1	1/1	0.1429
4	1/1	1/1	1/1	1/1	1/1	3/2	3/1	1/1	0.1429
5	1/1	1/1	1/1	1/1	1/1	3/2	3/1	1/1	0.1429
6	2/3	2/3	2/3	2/3	2/3	1/1	2/1	2/3	0.0952
7	1/3	1/3	1/3	1/3	1/3	1/2	1/1	1/3	0.0476
8	1/1	1/1	1/1	1/1	1/1	3/2	3/1	1/1	0.1429

Appendix C – M3 matrices for the comments of Plasterers 2,3 and 4

Plasterer 2

Cr 1	Cr 2	Cr 3	Cr 4	Cr 5	Cr 6	Cr 7	Cr 8	Cr 9	Cr 10	Cr 11	Cr 12
0.1579	0.0000	0.1818	0.1625	0.0833	0.1000	0.0000	0.0000	0.1111	0.0556	0.0000	0.0000
0.1579	0.0000	0.1818	0.1343	0.0833	0.1000	0.0000	0.0000	0.2222	0.1111	0.0000	0.0000
0.1579	0.0000	0.0909	0.1791	0.1667	0.2000	0.0000	0.0000	0.2222	0.1667	0.0000	0.0000
0.1579	0.0000	0.1818	0.2239	0.1667	0.2000	0.0000	0.0000	0.1852	0.1667	0.0000	0.0000
0.2105	0.0000	0.1818	0.2107	0.1667	0.1500	0.0000	0.0000	0.1481	0.1667	0.0000	0.0000
0.1053	0.0000	0.0455	0.0448	0.1667	0.2000	0.0000	0.0000	0.0741	0.1667	0.0000	0.0000
0.0526	0.0000	0.1364	0.0448	0.1667	0.0500	0.0000	0.0000	0.0370	0.1667	0.0000	0.0000

Plasterer 3

Cr 1	Cr 2	Cr 3	Cr 4	Cr 5	Cr 6	Cr 7	Cr 8	Cr 9	Cr 10	Cr 11	Cr 12
0.1818	0.0000	0.1429	0.0588	0.0833	0.0526	0.0000	0.1669	0.0500	0.0455	0.2265	0.1667
0.1818	0.0000	0.1429	0.1176	0.0833	0.0526	0.0000	0.1669	0.1501	0.0909	0.2265	0.1667
0.1818	0.0000	0.1429	0.1765	0.1667	0.2105	0.0000	0.1669	0.2328	0.1818	0.1466	0.1667
0.1818	0.0000	0.1429	0.2941	0.1667	0.2105	0.0000	0.1669	0.1873	0.1818	0.1466	0.1667
0.0909	0.0000	0.1429	0.2353	0.1667	0.1579	0.0000	0.1353	0.1423	0.1818	0.1133	0.1667
0.1364	0.0000	0.1429	0.0588	0.1667	0.2105	0.0000	0.1294	0.1409	0.1818	0.0838	0.0833
0.0455	0.0000	0.1429	0.0588	0.1667	0.1053	0.0000	0.0676	0.0966	0.1364	0.0566	0.0833

Plasterer 4

Cr 1	Cr 2	Cr 3	Cr 4	Cr 5	Cr 6	Cr 7	Cr 8	Cr 9	Cr 10	Cr 11	Cr 12
0.1818	0.0000	0.1429	0.0909	0.0833	0.1176	0.0000	0.1669	0.0588	0.0556	0.2265	0.1667
0.1364	0.0000	0.1429	0.0455	0.0833	0.1176	0.0000	0.1669	0.1176	0.1111	0.2265	0.1667
0.1818	0.0000	0.1429	0.1818	0.1667	0.1765	0.0000	0.1669	0.1176	0.1667	0.1466	0.1667
0.1818	0.0000	0.1429	0.1818	0.1667	0.1765	0.0000	0.1669	0.1765	0.1667	0.1466	0.1667
0.1818	0.0000	0.1429	0.1364	0.1667	0.1765	0.0000	0.1353	0.1765	0.1667	0.1133	0.1667
0.0909	0.0000	0.1429	0.1818	0.1667	0.1765	0.0000	0.1294	0.1765	0.1667	0.0838	0.0833
0.0455	0.0000	0.1429	0.1818	0.1667	0.0588	0.0000	0.0676	0.1765	0.1667	0.0566	0.0833

Appendix D – Interpolations to find the time corresponding to 2700 kg

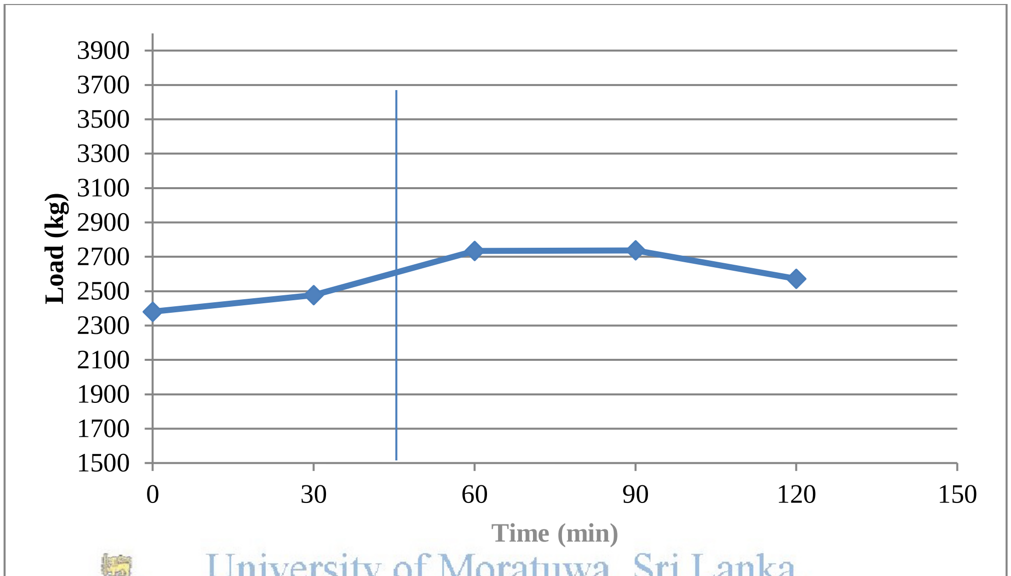


Figure D.1 – Peak load measurements of extrusion test for formulation 2 with time

Table D.1 – Interpolation to find the time at 2700 kg for formulation 2

30	2477
T=56	2700
60	2735

As applied for sample 1, time was calculated as 56 minutes.

Then for other samples also, above interpolation was done and obtained the setting time for formulation 3,4,6 and 7 as shown in the corresponding table