

LAMPIRAN

Mahasiswa : 2020091039 - FERDI SALAM **Pembimbing Proposal** : 08.0720.019 - Prof., Ir., Dr.-Ing. Harianto Hardjasaputra

Tidak ada data percakapan

Sesi / Bahasan : ke-8 / Melaksanakan penulisan kesimpulan dan saran untuk laporan skripsi

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Lampiran B Tabel Tinjauan Pustaka

Lampiran B Tabel Tinjauan Pustakan 1

Sumber (H.Hardjasaputra, 2020) Study of mechanical properties of fly ash based geopolymere concrete

No	Material	NaOH Molarity						
		2M	4M	6M	8M	12M	16M	
5	NaOH	NaOH (kg)	4.41	8.37	11.98	15.30	19.01	23.82
		Water (kg)	55.23	51.40	47.91	44.69	34.68	29.95
		Total (kg)	2278.75	2283.51	2287.87	2291.87	2386.18	2390.01

Sumber (Agustinus Agus Setiawan, 2023) Emobodied Carbon dioxide of fly ash based geopolymere concrete

Material	Normal concrete (kg/m ³) [15]	Geopolymer Concrete 6M (kg/m ³) [13]	Carbon Factor A1-A3 (kg CO ₂ e/kg)	Embodied Carbon Normal concrete (kg)	Embodied Carbon Geopolymer Concrete (kg)
NaOH	0	11.98	1.915	0	22.942
Na ₂ SiO ₃	0	179.66	0.6813	0	122.402
Semen	612.9	0	0.82	502.58	0.000
Air	190	47.91	0	0	0
Curing			39.97	0	39.97
			Total	552.22	242.87

Sumber (Jo et al., 2004) Journal of the Korea Concrete Institute

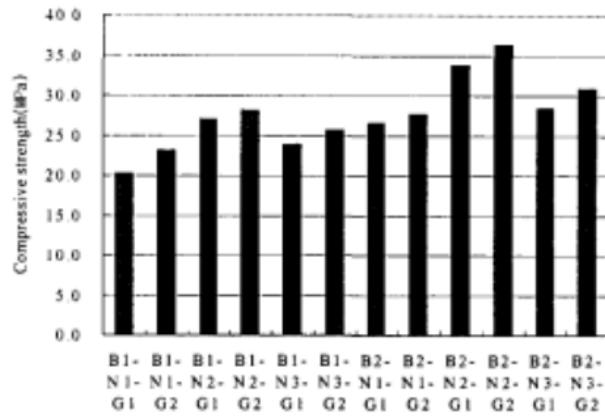
Table 2 Mixture proportions and compressive strength of coal ash (unit : percentage about coal ash amount)

Type	Fly ash : bottom ash	NaOH (%)	Water glass (%)	Compressive strength (MPa)
B1-N1-G1	5:5	5	10	20.3
B1-N1-G2			15	23.1
B1-N2-G1		10	10	27.1
B1-N2-G2			15	28.1
B1-N3-G1		15	10	23.9
B1-N3-G2			15	25.7
B2-N1-G1	6:4	5	10	26.6
B2-N1-G2			15	27.6
B2-N2-G1		10	10	33.8
B2-N2-G2			15	36.4
B2-N3-G1		15	10	28.4
B2-N3-G2			15	30.9

* Cement(10%), MnO₂(5%)

Curing method : 144 hr air curing(18 ℃) after 24 hr moist curing(50 ℃)

Sumber (Jo et al., 2004) Journal of the Korea Concrete Institute



sumber:(Adhitya et al., 2023) Journal of Cleaner Production

Table 3. Water absorption values for different types of aggregates.

Sample	Water Absorption (%)		
	Pelletization	Crusher	Natural
Sample 1	11.85	8.22	4.30
Sample 2	10.98	8.75	4.12
Sample 3	11.47	8.47	3.92
Sample 4	11.66	8.09	4.28
Sample 5	12.14	8.32	4.25
Average	11.62	8.37	4.17
Standard Deviation	0.43	0.25	0.16

Table 4. Los Angeles test results.

Sample	Los Angeles test results (%)		
	Pelletization	Crusher	Natural
Sample 1	27.86	25.69	25.68
Sample 2	26.71	26.71	22.16
Sample 3	27.40	25.54	24.26
Sample 4	26.88	26.46	24.85
Sample 5	27.82	25.51	23.32
Average	27.33	25.98	24.05
Standard Deviation	0.53	0.56	1.36

Table 2. Bulk Specific Gravity values for different types of aggregates

Sample	Bulk Specific Gravity		
	Pelletization	Crusher	Natural
Sample 1	1.651	1.852	2.850
Sample 2	1.879	1.830	3.057
Sample 3	1.738	1.907	3.048
Sample 4	1.850	1.786	2.927
Sample 5	1.760	1.912	2.896
Average	1.776	1.857	2.957
Standard Deviation	0.091	0.053	0.093

Lampiran C Dokumentasi Penelitian

Lampiran C Dokumentasi Penelitian 1

