

## DAFTAR PUSTAKA

- Al-Majidi, M., Lampropoulos, A., & Cundy, A. B. (2016). Effect of Alkaline Activator , Water , Superplasticiser and Slag Contents on the Compressive Strength and Workability of Slag - Fly Ash Based Geopolymer Mortar Cured Under Ambient Temperature. *World Journal of Engineering and Technology*, 10(3), 24–29.
- Aleem, M. I. A., & Arumairaj, P. D. (2012). GEOPOLYMER CONCRETE- A REVIEW. *International Journal of Engineering Sciences & Emerging Technologies*, 1(2), 118–122.
- Antoni, A., Purwantoro, A. A. T., Suyanto, W. S. P. D., & Hardjito, D. (2020). Fresh and Hardened Properties of High Calcium Fly Ash-Based Geopolymer Matrix with High Dosage of Borax. *Iranian Journal of Science and Technology, Transactions of Civil Engineering*, 44, 535–543.
- Antoni, Halim, J. G., Kusuma, O. C., & Hardjito, D. (2017). Optimizing Polycarboxylate Based Superplasticizer Dosage with Different Cement Type. *Procedia Engineering*, 171, 752–759.
- ASTM Standard C127. (2001). Standard Test Method for Specific Gravity and Water Absorption of Coarse Aggregate. *American Society of Testing Materials*, 1–6.
- ASTM Standard C128. (2007). Standard Test Method for Density, Relative Density (Specific Gravity), and Absorption of Fine Aggregate. *American Society of Testing Materials*, 1–5.
- ASTM Standard C136. (2014). Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates. *ASTM International, West Conshohocken, PA*, 5.
- ASTM Standard C150. (2016). Standard Specification for Portland Cement. *ASTM International, West Conshohocken, PA*, 10.
- ASTM Standard C191. (2008). Standard Test Methods for Time of Setting of Hydraulic Cement by Vicat Needle. *ASTM International, West Conshohocken, PA*, 8.

- ASTM Standard C33. (2019). Standard Specification for Concrete Aggregates. *ASTM International, West Conshohocken, PA, i(C)*, 11.
- ASTM Standard C618. (2019). Standard Specification for Coal Fly Ash and Raw or Calcined Natural Pozzolan for Use. *American Society of Testing Materials*, 3–6.
- ASTM Standard E1621. (2013). Standard guide for elemental analysis by wavelength dispersive X-Ray fluorescence spectrometry. *American Society of Testing Materials*, 1–9.
- Badan Standarisasi Nasional Indonesia. (1990). Metode Pengujian Kadar Air Agregat (SNI 03-1971-1990). *Standar Nasional Indonesia*, 13.
- Badan Standarisasi Nasional Indonesia. (1996). Metode Pengujian Jumlah Bahan dalam Agregat yang Lolos Saringan No. 200 (0,075 mm) (SNI 03-4142-1996). *Standar Nasional Indonesia*, 6.
- Badan Standarisasi Nasional Indonesia. (2002). Metode Pengambilan Contoh dan Pengujian Abu Terbang atau Pozolan Alam Sebagai Mineral Pencampur dalam Beton Semen Portland (SNI 03-6863-2002). *Standar Nasional Indonesia*, 16.
- Badan Standarisasi Nasional Indonesia. (2014). Spesifikasi abu terbang batubara dan pozzolan alam mentah atau yang telah dikalsinasi untuk digunakan dalam beton (SNI 2460:2014). *Standar Nasional Indonesia*, 16.
- Badan Standarisasi Nasional Indonesia. (2019). Persyaratan Beton Struktural untuk Bangunan Gedung (SNI 2847-2019). *Standar Nasional Indonesia*, 720.
- Bureau of Indian Standard. (1990). Ordinary Portland Cement, 33 Grade-Specification (IS-269-1989). *Indian Standard*, 17.
- Davidovits, J. (2002). 30 Years of Successes and Failures in Geopolymer Applications . Market Trends and Potential Breakthroughs . *Geopolymer 2002 Conference*, 1–16.
- Davidovits, J. (2013). Geopolymer Cement. *Geopolymer Science and Technics*, 1–

11.

Giovanni, A. (2022). PENGARUH GLASS FIBER PADA KUAT TEKAN BETON NORMAL DAN BETON GEOPOLIMER AKIBAT SUHU TINGGI. In *Universitas Pelita Harapan*. Universitas Pelita Harapan.

Helvaci, C. (2005). *Borates*. January 2004, 510–521.

Ilg, M., & Plank, J. (2019). Synthesis and Properties of a Polycarboxylate Superplasticizer with a Jellyfish-Like Structure Comprising Hyperbranched Polyglycerols. *Industrial and Engineering Chemistry Research*, 58(29), 12913–12926.

Jang, J. G., Lee, N. K., & Lee, H. K. (2014). Fresh and hardened properties of alkali-activated fly ash/slag pastes with superplasticizers. *Construction and Building Materials*, 50, 169–176.

Jenkins, A., Kratochvil, P., Stepto, R., & Suter, U. (1996). Glossary of basic terms in polymer science. *Pure and Applied Chemistry*, 68(8), 1591–1595.

Kahlenberg, V. (2010). Structural chemistry of anhydrous sodium silicates - A review. *Chimia*, 64(10), 716–722.

Laskar, M. S., & Talukdar, S. (2018). Influence of Superplasticizer and Alkali Activator Concentration on Slag-Flyash Based Geopolymer. *Urbanization Challenges in Emerging Economies: Resilience and Sustainability of Infrastructure*, July 2019, 330–337.

Liu, H., Sanjayan, J. G., & Bu, Y. (2017). The application of sodium hydroxide and anhydrous borax as composite activator of class F fly ash for extending setting time. *Fuel*, 206, 534–540.

MacKenzie, K. J. D., Nicholson, Murray, B. J., Fletcher R.A., D.R.M., B., & M., S. (2005). Novel geopolymer materials containing borate structural units. *World Congress Geopolymer 2005, January 2005*, 31–33.

National Center for Biotechnology Information. (2022). *PubChem Compound Summary for CID 16211214, Borax*. Diakses 16 November 2022.

<https://pubchem.ncbi.nlm.nih.gov/compound/cep-33779>

- Nematollahi, B., & Sanjayan, J. (2014). Effect of different superplasticizers and activator combinations on workability and strength of fly ash based geopolymer. *Materials and Design*, 57, 667–672.
- Nurrudin, M. F., Haruna, S., Mohammed, B. S., & Sha'aban, I. G. (2018). Methods of curing geopolymer concrete: A review. *International Journal of ADVANCED AND APPLIED SCIENCES*, 5(1), 31–36.
- Oderji, S. Y., Chen, B., Shakya, C., Ahmad, M. R., & Shah, S. F. A. (2019). Influence of superplasticizers and retarders on the workability and strength of one-part alkali-activated fly ash/slag binders cured at room temperature. *Construction and Building Materials*, 229.
- Poling, B. E., Thomson, G. H., Friend, D. G., Rowley, R. L., & Wilding, W. V. (2007). Perry's Chemical Engineers' Handbook. In *Perry's Chemical Engineers' Handbook* (8th ed.). The McGraw-Hill Companies.
- Pusat Penelitian dan Pengembangan Jalan dan Jembatan. (2016). *Kesalahan Umum Pada Pekerjaan Beton* (Y. Hardiana & N. R. N. Suarni (eds.); 2nd ed.). Kementerian Pekerjaan Umum dan Perumahan Rakyat.
- Sha, S., Wang, M., Shi, C., & Xiao, Y. (2020). Influence of the structures of polycarboxylate superplasticizer on its performance in cement-based materials-A review. *Construction and Building Materials*, 233, 117257.
- Valqui, M. (2021). *Steric Hindrance*. ChemTalk. Diakses 6 Januari 2023. <https://chemistrytalk.org/steric-hindrance/>
- Wirahara, R. S. (2022). Perencanaan Geopolymer Concrete Mutu Tinggi Berbasis Fly Ash. *Universitas Pelita Harapan*.
- Wisniak, J. (2005). Borax, boric acid, and boron - From exotic to commodity. *Indian Journal of Chemical Technology*, 12(4), 488–500.