

DAFTAR PUSTAKA

- Mehta, P. K., & Monteiro, P. J. M. (2014). *Concrete: Microstructure, Properties, and Materials* (4th ed.). McGraw-Hill Education.
- Mindess, S., Young, J. F., & Darwin, D. (2003). *Concrete* (2nd ed.). Prentice Hall.
- Neville, A. M. (2011). *Properties of Concrete* (5th ed.). Pearson Education Limited.
- Neville, A. M., & Brooks, J. J. (2010). *Concrete Technology* (2nd ed.). Pearson.
- Madandoust, Rahmat, & Ghavidel, Reza (2013). Mechanical properties of concrete containing waste glass powder and rice husk ash. *Biosystems Engineering*, 116(2), 113-119, ISSN 1537-5110, Elsevier BV, <https://doi.org/10.1016/j.biosystemseng.2013.07.006>
- Sugiyono. (2017). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Bandung: Alfabeta.
- Sakr, K. (2006). Effects of silica fume and rice husk ash on the properties of heavy weight concrete. *Journal of Materials in Civil Engineering*, 18(3), 367-376. [https://doi.org/10.1061/\(ASCE\)0899-1561\(2006\)18:3\(367\)](https://doi.org/10.1061/(ASCE)0899-1561(2006)18:3(367))
- Gupta, M., Ahirwar, R. R., & Sahu, A. K. (2021). Effect of rice husk ash, silica fume & GGBFS on compressive strength of performance-based concrete. *Materials Today: Proceedings*, 55, 234–239. <https://doi.org/10.1016/j.matpr.2021.06.343>
- Bayraktar, O. Y., Çitoğlu, G. S., Belgin, Ç. M., Çetin, S., & Çetin, M. (2019). Investigation of effect of brick dust and silica fume on the properties of Portland cement mortar. *Fresenius Environmental Bulletin*, 28(11), 7823–7832
- Ren, H., & Wang, S. (2024). Study on compressive strength of cement mortar containing rice husk ash and silica fume under freeze-thaw cycles. *International Research Journal of Engineering and Technology*, 12(3), 500–504
- Zou, Z., Provoost, S., & Gruyaert, E. (2024). Utilization of waste brick powder as a partial replacement of Portland cement in mortars. *Sustainability*, 16(2), 624. <https://doi.org/10.3390/su16020624>
- Bahri, S., & Mahmud, H. B. (2013). Rice husk ash – an alternative material to silica fume for production of 100 MPa mortar. *Electronic Journal of Structural Engineering*, 13(2), 31–35.
- ACI Committee 212. (2010). *Report on Chemical Admixtures for Concrete*.
- ACI Committee 232. (2003). *Use of Natural Pozzolans in Concrete*.
- Amin, M., Mohammed, B. S., Liew, M. S., & Jameel, M. (2021). Potential use of brick waste as pozzolan material. *Construction and Building Materials*, 278, 122362.
- ASTM C109/C109M-21. (2021). *Standard Test Method for Compressive Strength of Hydraulic Cement Mortars*.
- ASTM C270. *Standart Spesification for Mortar for Unit Masonry*.
- Chindapasirt, P., Rukzon, S., & Sirivivatnanon, V. (2007). Resistance to chloride penetration of blended Portland cement mortar containing palm oil fuel ash, rice husk ash and fly ash. *Construction and Building Materials*, 22(5), 932–938.



Givi, A. N., Rashid, S. A., Aziz, F. N., & Salleh, M. A. M. (2010). Contribution of rice husk ash to the properties of mortar and concrete: A review. *Journal of American Science*, 6(3), 157–165.

Mardani-Aghabaglou, A., Tuyan, M., & Ramyar, K. (2013). Mechanical and durability performance of self-consolidating concretes incorporating ground clay brick powder. *Construction and Building Materials*, 44, 440–449.

SNI 03-2834-2000. *Tata Cara Pembuatan Rencana Campuran Beton Normal*.

SNI 03-6882-2002. *Spesifikasi Mortar untuk Pekerjaan Pasangan*.

SNI 03-6825-2002. *Metode Pengujian Kekuatan Tekan Mortar Semen Portland untuk Pekerjaan Sipil*.

SNI 1970:2008. *Cara Uji Berat Jenis dan Penyerapan Air Agregat Halus*.

SNI ASTM C136:2012. *Metode Uji untuk Analisis Saringan Agregat Halus dan Agregat Kasar (ASTM C 136-06, IDT)*.

SNI 03-6820-2002. *Spesifikasi Agregat Halus untuk Pekerjaan Adukan dan Plesteran dengan Bahan Dasar Semen*.

SNI 2816-2014. *Metode Uji Bahan Organik dalam Agregat Halus untuk Beton*.

Uddin, M. K., Islam, M. R., Hossain, M. A., & Haque, M. M. (2020). Feasibility of partial replacement of cement by waste brick powder in concrete. *Cleaner Engineering and Technology*, 1, 100008.

Creswell, J. W. (2014). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (4th ed.). SAGE Publications.

Ganesan, K., Rajagopal, K., & Thangavel, K. (2008). Rice husk ash blended cement: Assessment of optimal level of replacement for strength and permeability properties of concrete. *Construction and Building Materials*, 22(8), 1675–1683.
<https://doi.org/10.1016/j.conbuildmat.2007.06.011>

Kumar, M., Dhaka, J. S., & Kumar, R. (2016). Effect of silica fume on engineering properties of expansive soil stabilized with fly ash and lime. *Procedia Engineering*, 143, 1440–1447.

Montgomery, D. C. (2017). *Design and Analysis of Experiments* (9th ed.). John Wiley & Sons.

Rafieizonooz, M., Mirza, F. A., Salim, M. R., Hussin, M. W., & Khankhaje, E. (2017). Investigation of coal bottom ash and fly ash in concrete as replacement for sand and cement. *Construction and Building Materials*, 116, 15–24.
<https://doi.org/10.1016/j.conbuildmat.2016.04.080>

Endale, S. A., Taffese, W. Z., Vo, D.-H., & Yehualaw, M. D. (2023). *Rice Husk Ash in Concrete. Sustainability*, 15(1), Article 137.



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Pengaruh Substitusi Parsial Semen Menggunakan Abu Sekam Padi (Rice Husk Ash) dan Semen Merah Limbah

Batu Bata pada Kuat Tekan Mortar dengan Tambahkan Admixture Silica Fume

MAULA ADZKIYA Z FADHLAN, Ir. Edi Kurniadi ST.,MT.

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Ahmed, A., Ameer, S., Abbas, S., Abbass, W., Razzaq, A., Mohamed, A. M., & Mohamed, A. (2022). Effectiveness of ternary blend incorporating rice husk ash, silica fume, and cement in preparing ASR resilient concrete. *Materials*, 15, 2125.

Mansoor, S. S., Hama, S. M., & Hamdullah, D. N. (2024). Effectiveness of replacing cement partially with waste brick powder in mortar. *Journal of King Saud University – Engineering Sciences*, 36(7), 524–532.

Naceri, A., & Makhloufi Ch. H. (2009). Use of waste brick as a partial replacement of cement in mortar. *Waste Management*, 29(8), 2378–2384.

Ramasamy, V. (2012). *Compressive strength and durability properties of Rice Husk Ash concrete*. KSCCE Journal of Civil Engineering, 16(1), 93–102. <https://doi.org/10.1007/s12205-012-0779-2>

Singh, M., Munjal, P., & Thammishetti, N. (2015). *Role of water/cement ratio on strength development of cement mortar*. Case Studies in Construction Materials, 2, 35–38. <https://doi.org/10.1016/j.cscm.2015.02.002>

Yulius, R. R., Alkhaly, Y. R., & Misnayyah, (2019). *Pengaruh kombinasi mikro silika dengan abu sekam padi terhadap slump flow dan kuat tekan reactive powder concrete* (Prosiding Senastek Samudera 2019). Universitas Malikussaleh Repository.