

## REFERENCES

- A. Shayan, A. Xu, Performance and properties of structural concrete made with recycled concrete aggregate, *Materials Journal* 100(5) (2003) 371-380. 4
- AASHTO, Standard Method of Test for Flexural Strength of Concrete (Using Simple Beam with Third-Point Loading) AASHTO T 97, American Association of State Highway and Transportation Officials, Washington, DC, 2002.
- ASTM, Standard practice for making and curing concrete test specimens in the laboratory, ASTM C192, West Conshohocken, PA, 2016.
- ASTM, Standard specification for concrete aggregates, ASTM C33, West Conshohocken, PA, 2016.
- ASTM, Standard test method for compressive strength of cylindrical concrete specimens, ASTM C39, West Conshohocken, PA, 2016.
- ASTM, Standard test methods for time of setting of Concrete Mixture by Penetration Resistance, ASTM C403, West Conshohocken, PA, 2013.
- Atahan, A. O., & Yücel, A. Ö. (2012). Crumb rubber in concrete: Static and dynamic evaluation. *Construction and building materials*, 36, 617-622.
- B. Akcay, M.A. Tasdemir, Mechanical behaviour and fibre dispersion of hybrid steel fibre reinforced self-compacting concrete, *Construction and Building Materials* 28(1) (2012) 287-293.
- B. Çomak, A. Bideci, Ö. Salli Bideci, Effects of hemp fibers on characteristics of cement based mortar, *Construction and Building Materials* 169 (2018) 794-799.
- B. Poletanovic, I. Janotka, M. Janek, M. Bacuvcik, I. Merta, Influence of the NaOH-treated hemp fibres on the properties of fly-ash based alkali-activated mortars prior and after wet/dry cycles, *Construction and Building Materials* 309 (2021) 125072
- Bledzki, A. K. and Gassan, J., Composites reinforced with cellulose based fibres. *Prog. Polym. Sci.*, 1999, 24, 221–274.

- Budget allocation for top 9 ministries in fiscal year 2022, (2021, May 14). The Nation Thailand. <https://www.nationthailand.com/in-focus/40000874>
- C. Qian, P. Stroeven, Development of hybrid polypropylene-steel fibre-reinforced concrete, *Cement and concrete research* 30(1) (2000) 63-69.
- C. Su, H. Lin, Mechanical performances of steel fiber reinforced high strength concrete disc under cyclic loading, *Construction and Building Materials* 146 (2017) 276-282.
- D. Sedan, C. Pagnoux, A. Smith, T. Chotard, Mechanical properties of hemp fibre reinforced cement: Influence of the fibre/matrix interaction, *Journal of the European Ceramic Society* 28(1)(2008)183-192.
- D.-I. Chang, W.-K. Chai, Flexural fracture and fatigue behavior of steel-fiber-reinforced concrete structures, *Nuclear Engineering and Design* 156(1) (1995) 201-207.
- DOH, Standards for highway construction, DH-S309/2544. 1996, Thailand Department of Highways, Bangkok, Thailand, 1996.
- E. Awwad, M. Mabsout, B. Hamad, M.T. Farran, H. Khatib, Studies on fiber-reinforced concrete using industrial hemp fibers, *Construction and Building Materials* 35 (2012) 710-717.
- E.A. Awwad, B. Hamad, M. Mabsout, H. Khatib, Sustainable concrete using hemp fibres, *Proceedings of the Institution of Civil Engineers - Construction Materials* 166(1) (2013) 45-5310.1680/coma.11.00006
- Frigione, M., Recycling of PET bottles as fine aggregate in concrete. *Waste management*, 2010. 30(6): p. 1101-1106.
- G. Huang, K. Yang, Y.Sun, Z. Lu, X.Zhang, L.Zuo, Y. Feng, R. Qian, Y. Qi, Y. Ji, Z. Xu, Influence of NaOH content on the alkali conversion mechanism in MSWI bottom ash alkali activated mortars, *Construction and Building Materials* 248 (2020) 118582.

- G. Sabih, R.A. Tarefder, Characterizing strength and thermal properties of concrete for implementation of pavement mechanistic-empirical design in New Mexico, *Transportation Geotechnics* 15 (2018) 20-28.
- Guo, S., Dai, Q., Si, R., Sun, X., & Lu, C. (2017). Evaluation of properties and performance of rubber-modified concrete for recycling of waste scrap tire. *Journal of Cleaner Production*, 148, 681-689.
- H. Ceylan, B. Coree, K. Gopalakrishnan, Design of rigid pavements in Iowa using the mechanistic-empirical pavement design guide, *Baltic Journal of Road and Bridge Engineering* 3(4) (2008) 219.
- Islam, M. J., Meherier, M. S., & Islam, A. R. (2016). Effects of waste PET as coarse aggregate on the fresh and harden properties of concrete. *Construction and Building materials*, 125, 946-951.
- J.A. Barros, V.M. Cunha, A.F. Ribeiro, J. Antunes, Post-cracking behaviour of steel fibre reinforced concrete, *Materials and Structures* 38(1) (2005) 47-56.
- K. Ramadevi, S.D. Shri, Flexural behaviour of hemp fiber reinforced concrete beams, *ARPN Journal of Engineering and Applied Sciences* 10 (2015) 1819-6608.
- K.V. Krishna, J.V. Rao, Experimental study on behavior of fiber reinforced concrete for rigid pavements, *IOSR Journal of Mechanical and Civil Engineering* 11(4) (2014) 49-53.
- Lohaus, L. and S. Anders, Ductility and Fatigue Behaviour of Polymer-Modified and Fibre-Reinforced High-Performance Concrete, in *Advances in Construction Materials 2007*. 2007, Springer. p. 165-172.
- M. Behera, S.K. Bhattacharyya, A.K. Minocha, R. Deoliya, S. Maiti, Recycled aggregate from C&D waste & its use in concrete – A breakthrough towards sustainability in construction sector, *Construction and Building Materials* 62 (2014) 501-516.
- M. Usman, S.H. Farooq, M. Umair, A. Hanif, Axial compressive behavior of confined steel fiber reinforced high strength concrete, *Construction and Building Materials* 230 (2020) 117043.

- M.K. Lee, B.I.G. Barr, An overview of the fatigue behaviour of plain and fibre reinforced concrete, *Cement and Concrete Composites* 26(4) (2004) 299-305.
- Md. Safiuddin, U. J. Alengaramb, Md. A. Salamb, M. Z. Jumaatb, F. F. Jaafarb, H. B. Saadb, Properties of High-Workability Concrete with Recycled Concrete Aggregate, *Materials Research* 2011; 14(2) 248-255
- O. Gencil, O. Yavuz Bayraktar, G. Kaplan, A. Benli, G. Martínez-Barrera, W. Brostow, M. Tek, B. Bodur, Characteristics of hemp fibre reinforced foam concretes with fly ash and Taguchi optimization, *Construction and Building Materials* 294 (2021) 123607.
- P. Rossi, E. Parant, Damage mechanisms analysis of a multi-scale fibre reinforced cement-based composite subjected to impact and fatigue loading conditions, *Cement and Concrete Research* 38(3) (2008) 413-421.
- P.C. Perdikaris, A.M. Calomino, A. Chudnovsky, Effect of Fatigue on Fracture Toughness of Concrete, *Journal of Engineering Mechanics* 112(8) (1986) 776-791.
- Park, Y., Abolmaali, A., Kim, Y. H., & Ghahremannejad, M. (2016). Compressive strength of fly ash-based geopolymer concrete with crumb rubber partially replacing sand. *Construction and Building Materials*, 118, 43-51.
- R. Chan, M.A. Santana, A.M. Oda, R.C. Paniguel, L.B. Vieira, A.D. Figueiredo, I. Galobardes, Analysis of potential use of fibre reinforced recycled aggregate concrete for sustainable pavements, *Journal of Cleaner Production* 218 (2019) 183-191.
- S. Allin, *Building with hemp*, SeedPress2005.
- S. Nagataki, A. Gokce, T. Saeki, Effects of recycled aggregate characteristics on performance parameters of recycled aggregate concrete, *Special Publication* 192 (2000) 53-72.
- S.R. Maitra, K.S. Reddy, L.S. Ramachandra, Numerical investigation of fatigue characteristics of concrete pavement, *International Journal of Fracture* 189(2) (2014) 181-193.

- Saikia, N., & De Brito, J. (2012). Use of plastic waste as aggregate in cement mortar and concrete preparation: A review. *Construction and Building Materials*, 34, 385-401.
- Sharifa, H. A. and Ansell, M.P., The effect of alkalization and fibre alignment on the mechanical and thermal properties of kenaf and hemp bast fibre composites. *Compos. Sci. Technol.*, 2004, 64, 1219–1238.
- Suddeepong, A., Buritatum, A., Hoy, M., Horpibulsuk, S., Takaikaew, T., Horpibulsuk, J., & Arulrajah, A. (2022). Natural Rubber Latex–Modified Concrete Pavements: Evaluation and Design Approach. *Journal of Materials in Civil Engineering*, 34(9), 04022215.
- T. Officials, Mechanistic-empirical pavement design guide: a manual of practice, AASHTO2008.
- T. Ponikiewski, J. Katzer, Properties of fresh SCC mix reinforced by different types of steel and polymer fibre, *Construction and Building Materials* 62 (2014) 96-101.
- V.C. Li, T. Matsumoto, Fatigue crack growth analysis of fiber reinforced concrete with effect of interfacial bond degradation, *Cement and Concrete Composites* 20(5) (1998) 339-351.
- Wille, K., S. El-Tawil, and A.E. Naaman, Properties of strain hardening ultra high performance fiber reinforced concrete (UHP-FRC) under direct tensile loading. *Cement and Concrete Composites*, 2014. 48: p. 53-66.
- Yaowarat, T., Suddeepong, A., Hoy, M., Horpibulsuk, S., Takaikaew, T., Vichitcholchai, N., ... & Chinkulkijniwat, A. (2021). Improvement of flexural strength of concrete pavements using natural rubber latex. *Construction and Building Materials*, 282, 122704.
- Youssif, O., Mills, J. E., & Hassanli, R. (2016). Assessment of the mechanical performance of crumb rubber concrete. *Construction and Building Materials*, 125, 175-183.

- Z. Li, L. Wang, X. Wang, Compressive and flexural properties of hemp fiber reinforced concrete, *Fibers and Polymers* 5(3) (2004) 187-197.
- Z. Li, X. Wang, L. Wang, Properties of hemp fibre reinforced concrete composites, *Composites Part A: Applied Science and Manufacturing* 37(3) (2006) 497-505.