

REFERENCES

- Akadiri, P.O., Chinyio, E.A., Olomolaiye, P.O., 2012. Design of a sustainable building: A conceptual framework for implementing sustainability in the building sector. *Buildings* 2, 126–152. <https://doi.org/10.3390/buildings2020126>
- Allwood, J.M., Cullen, J.M., Milford, R.L., 2010. Options for achieving a 50% cut in industrial carbon emissions by 2050. *Environ. Sci. Technol.* 44, 1888–1894. <https://doi.org/10.1021/es902909k>
- Arooz, F.R., Halwatura, R.U., 2018. Mud-concrete block (MCB): mix design & durability characteristics. *Case Stud. Constr. Mater.* 8, 39–50. <https://doi.org/10.1016/j.cscm.2017.12.004>
- Arooz, R., 2019. In-situ Mud-Concrete as a material for load-bearing walls and sustainable building practices.
- Block, P., DeJong, M., Davis, L., Ochsendorf, J., 2010. Tile vaulted systems for low-cost construction in Africa. *ATDF J.* 7.
- Bolay, J.-C., 2020. Convolved Urban Planning. pp. 83–119. https://doi.org/10.1007/978-3-030-28419-0_4
- Chilton, J., Chuang, C.C., 2017. Rooted in Nature: Aesthetics, Geometry and Structure in the Shells of Heinz Isler. *Nexus Netw. J.* 19, 763–785. <https://doi.org/10.1007/s00004-017-0357-5>
- Dick, G., 2019. Green Building Materials [WWW Document]. URL <https://www.calrecycle.ca.gov/greenbuilding/materials> (accessed 6.10.21).
- EN 1991-1-1: Eurocode 1: Actions on structures - Part 1-1: General actions - Densities, self-weight, imposed loads for buildings, 1991.
- Fay, R., Raniga, U.I., 2000. Life-cycle energy analysis of buildings: A case study. *Build. Res. Inf.* 28, 31–41. <https://doi.org/10.1080/096132100369073>
- Foraboschi, P., Mercanzin, M., Trabucco, D., 2014. Sustainable structural design of tall buildings based on embodied energy. *Energy Build.* 68, 254–269. <https://doi.org/10.1016/j.enbuild.2013.09.003>

- Froeschle, L.M., 1999. Environmental Assessment and Specification of Green Building Materials. *Constr. Specif.*
- Galabada, H., Halwatura, R.U., 2019. A preliminary study on the use of soil as a floor finishing material, in: 2019 From Innovation to Impact, FITI 2019. Institute of Electrical and Electronics Engineers Inc. <https://doi.org/10.1109/FITI49428.2019.9037635>
- Gibbons, O.P., Orr, J.J., 2020. How to calculate Embodied Carbon.
- Guggemos, A.A., Horvath, A., 2006. Decision-Support Tool for Assessing the Environmental Effects of Constructing Commercial Buildings. *J. Archit. Eng.* 12, 187–195. [https://doi.org/10.1061/\(asce\)1076-0431\(2006\)12:4\(187\)](https://doi.org/10.1061/(asce)1076-0431(2006)12:4(187))
- Hammond, G.P., Jones, C.I., 2008. Embodied energy and carbon in construction materials. *Proc. Inst. Civ. Eng. Energy* 161, 87–98. <https://doi.org/10.1680/ener.2008.161.2.87>
- Hawkins, W., 2019. Thin-shell concrete floors for sustainable buildings. Dr. Thesis.
- IEA, 2008. Energy Technology Perspectives 2018: Scenarios & Strategies to 2050 [WWW Document]. URL <https://www.iea.org/topics/energy-technology-perspectives> (accessed 7.4.21).
- IS 6332 (1984): Code of practice for construction of floor and roofs using precast doubly-curved shell units, 2000.
- Jayasinghe, C., 2011. Embodied energy of alternative building materials and their impact on life cycle cost parameters. *Int. Conf. Struct. Eng. Constr. Manag.* December 16-18, 2011, Kandy, Sri Lanka 1–20. <https://doi.org/10.13140/RG.2.1.4852.2321>
- Jayasinghe, R.R., Nanayakkara, K.I., Arooz, F.R., Halwatura, R.U., 2019. Catalan Vault Inspired Earthen Slab System for Houses in Sri Lanka: Form-Finding.
- Leung, N., 2018. The Nature of Gridshell Form Finding – WeWantToLearn.net [WWW Document]. URL <https://wewanttolearn.wordpress.com/2018/03/13/the-nature-of-gridshell-form-finding/> (accessed 9.18.21).

- López, D., Domènec Rodríguez, M., Palumbo Fernández, M., 2014. “Brick-topia”, the thin-tile vaulted pavilion. *Case Stud. Struct. Eng.* 2, 33–40. <https://doi.org/10.1016/j.csse.2014.09.001>
- Mansoori, M., Kalantar, N., Creasy, T., Rybkowski, Z., 2019. Adaptive wooden architecture. designing a wood composite with shape-memory behavior, in: *Digital Wood Design*. Springer, pp. 703–717. https://doi.org/10.1007/978-3-030-03676-8_27
- Menegaki, M., Damigos, D., 2018. A review on current situation and challenges of construction and demolition waste management. *Curr. Opin. Green Sustain. Chem.* 13, 8–15. <https://doi.org/10.1016/J.COGSC.2018.02.010>
- Menne, M.J., Williams, C.N., Gleason, B.E., Jared Rennie, J., Lawrimore, J.H., 2018. The Global Historical Climatology Network Monthly Temperature Dataset, Version 4. *J. Clim.* 31, 9835–9854. <https://doi.org/10.1175/JCLI-D-18-0094.1>
- Michiels, T., Adriaenssens, S., 2017. Identification of key design parameters for earthquake resistance of reinforced concrete shell structures. *Eng. Struct.* 153, 411–420. <https://doi.org/10.1016/j.engstruct.2017.10.043>
- Morianà, R.G., 2012. Gaudí’s hanging chain models: parametric design avant la lettre? – Criticalista [WWW Document]. URL <https://criticalista.com/2012/08/16/gaudis-hanging-chain-models-parametric-design-avant-la-lettre/> (accessed 6.10.21).
- Ockleston, A.J., 1958. Loading tests on reinforced concrete slabs spanning in two directions. Portland Cement Institute.
- Oval, R., Rippmann, M., Mele, T. Van, Baverel, O., Oval, R., Rippmann, M., Mele, T. Van, Baverel, O., Block, P., 2018. Patterns for Masonry Vault Design To cite this version : HAL Id : hal-01883502.
- Patnaik, R., 2018. Impact of Industrialization on Environment and Sustainable Solutions - Reflections from a South Indian Region, in: IOP Conference Series: Earth and Environmental Science. Institute of Physics Publishing, p. 12016. <https://doi.org/10.1088/1755-1315/120/1/012016>

- Pollock, S., 1999. Ancient Mesopotamia [WWW Document]. URL https://books.google.lk/books/about/Ancient_Mesopotamia.html?id=ndjc_5xhlDsC&redir_esc=y (accessed 6.10.21).
- Preston, F., Lehne, J., 2018. Making Concrete Change Innovation in Low-carbon Cement and Concrete. *Environ. Sci.*
- Rajabzadeh, S., Sassone, M., 2013. Reviving the Design of Contemporary Masonry Vaults, in: ATINER'S Conference.
- Rippmann, M., Block, P., 2012. rhino VAULT 1–12.
- Sustainable Development Goals (SDGs) and Disability [WWW Document], 2020. URL <https://www.un.org/development/desa/disabilities/about-us/sustainable-development-goals-sdgs-and-disability.html> (accessed 6.10.21).
- Udawattha, C. and, Halwatura, R., 2016. The embodied energy and life cycle costing: A case study on basic dwellings in Sri Lanka. *Natl. Green Conf. 2016 Univ. Kelaniya 18*, 1–10.
- Udawattha, C., Galabada, H., Halwatura, R., 2017. Mud concrete paving block for pedestrian pavements. *Case Stud. Constr. Mater.* 7, 249–262. <https://doi.org/10.1016/j.cscm.2017.08.005>
- Walker, P., Keable, R., Martin, J., Maniatidis, V., 2005. Rammed earth: design and construction guidelines. Watford: BRE.