REFERENCES

ACPA JP001P, 1997, Concrete Pavement Rehabilitation: Guide to Load Transfer Restoration, Federal Highway Administration (FHWA) / American Concrete Pavement Association (ACPA), FHWA-SA-97-103.

Advisory Circular on "Airport Pavement Design and Evaluation", U.S. Department of Transportation, Federal Aviation Evaluation, AC no: 150/5320-6E

Al-Dallal S. and zein M., (1986), Measurement of Solar Spectrum in Bahrain, Prospect in the Arab World, Second Arab international solar conference, Bahrain. 87-90

Almudaiheem J.A., "An Improved Model to Predict the Ultimate Drying Shrinkage of Concrete", Magazine of concrete research, 1992, 44, No. 159, June,

81 - 85

University of Moratuwa, Sri Lanka. Electronic Theses & Dissertations

American Concrete Institute. Prediction of creep, shrinkage and temperature effects in concrete structures. American Concrete Institute, Detroit, 1992, ACI 299R-92, ACI COMMITTEE 209, p. 7.

American Association of State Highway and Transportation Officials (AASHTO), 1993, AASHTO Guide for Design of Pavement Structures. AASHTO, Washington, D.C.

Bazant Z. P. and Baweja S. Creep and shrinkage prediction for analysis and design of concrete structures—Model B3. Materials and Structures. 1995, RILEM, Paris, Vol. 28, 357–365, 415–430, 488–495.

Bazant Z. P., Improved predictions model for time-dependent deformations of concrete. Part 1: shrinkage. Materials and Structures, 1991, 24, No. 143, 957–967.

Brink A.C., Horak E., Visser A.T., "Improvement of Aggregate Interlock Equation Used in Mechanistic Design Software", International Journal of Concrete Pavements (IJCP), Vol 1, No 1, Dec 2005. Electronic journal.

BS 8110: Part 2: Structural use of concrete: Code of practice for special circumstances. British Standards Institution (BSI), Milton Keynes, 1985.

Brynn Schaffner, (2010). Climate. Retrieved 10 29, 2009, from blueplanetbiomes.org: http://www.blueplanetbiomes.org/climate.htm

Carlson R.W., "Drying Shrinkage of Concrete as Affected by Many Factors", Proc, ASTM, 1939, 38, Part 2, 419 -437 University of Moratuwa, Sri Lanka.

Electronic Theses & Dissertations

Choubane, B., and Tia, M.M. (1992). It Nonlinear temperature gradient effect on maximumwarping stresses in rigid pavements." 71st Ann. Mtg. of Transp. Res. Board, Transp. Res. Rec. No. 1370, Transportation Research Board, Washington, D.C., 11-19.

Colley, B.E., and Humphrey, H.A., "Aggregate Interlockat Joints in Concrete Pavements," HighwayResearch Record No. 189, Highway Research Board, National Research Council, Washington, D.C., 1967.

Comite' Euro-International Du Be'ton. Structural concrete textbook on behavior, design and performance. Updated knowledge of the CEB/FIP Model Code 90. FIP bulletin 2, Federation International du Beton, Lausanne, 1999, pp. 37–52.

Concrete Pavement Rehabilitation –Guide for Load Transfer Restoration, Publication no- FHWA-SA-97-103, ACPA JP001P Concrete Pavements with Un-doweled Joints for Light Traffic Facilities, ACPA publication no. IS405.01P

Darter, M. I., Becker, J.M., Snyder, M.B., Smith, R.E., 1985, "Portland Cement Concrete Pavement Evaluation(COPES)," National Cooperative Highway ResearchReport 277, Transportation Research Board, Washington, D.C.

Darter M. I. and Barenberg E. J., 1977, Design of zero maintenance plain concrete pavement, vol. II-Design Manual, FHWA-RD-77-112, Federal Highway Administration, Washington, DC.

Fwa T. F., (2006). The Hand Book of Highway Engineering. New York: Taylor & Francis Group, LLC.

FHWA, 1990, Concrete Payement Joints, Technical Advisory T5040.30, Federal University of Moratuwa, Sri Lanka. Highway Administration: New 30r Theses & Dissertations www.lib.mrt.ac.lk

FHWA, 2003, Evaluation of Joint and Crack Load Transfer - Final Report, U.S. Department of Transportation, Federal Highway Administration.

Gardner N. J. and Lockman M. J. Design provisions for drying shrinkage and creep of normal strength concrete. ACI Materials Journal, 2001, Vol. 98, No. 2, 159–167.

Gayani J.K.U., 2010, Master's thesis, "RIGID PAVEMENT DESIGN WITH RECYCLED CONCRETE AGGREGATE FOR LOW VOLUME ROADS"

Helmers, J.I. and Marks, V.J., "30 Year Report, Performance of Various Thicknesses of Portland Cement Concrete Pavement," Project HR-9, Iowa Highway Research Board, Iowa Department of Transportation, July 1981.



Hsieh C, Qin C, Ryder E. Development of computer modeling for prediction of temperature distribution inside concrete pavements. Report FL/DOT/SO/90-374. Mechanical Engineering Department, University of Florida, Gainesville, 1989. p. 32–59.

Hudson, S.W., McCullough, B.F., and Carmichael,R.F. (1987). Surface Design and Rehabilitation Guidelines for Low-Volume Roads. Report No. FHWA/TS-87-225, Federal Highway Administration, Washington, D.C., 228 pp.

Ioannides, A.M. and Korovesis, G.T. (1990). 'Aggregate Interlock: A Pure-Shear Load Transfer Mechanism." Transportation Research Record, No 1286, TRB National Research Council, National Academy Press, Washington D.C., pp 14-24.

Jayasinghe C. and Jayasinghe T., 2009, Sustainable Design of Built Environments, Colombo, Eco Ceylon (Pvt.) Limited. University of Moratuwa, Sri Lanka.

Electronic Theses & Dissertations

Jun Zhang and Victor Why. If Influence lbf supporting base characteristics on shrinkage-induced stresses in concrete pavements". Journal of Transportation Engineering, Vol. 127, No. 6, November/December, 2001.

Korbus, L. and E.J. Barenberg (1979). Longitudinal Joint Systems in Slip-Formed Rigid Pavements-Volume IV. Final Report No. DOT/FAA/RD-79/4, Federal Aviation Administration, U.S. Department of Transportation.

Löfsjögård M., "Investigation of the Optimum Time for Cutting Joints in Concrete Roads", 7th International Conference on Concrete Pavements, Orlando, September 9-13, 2001, pp. 525-537.

Mang Tia, Chung-Lung Wu, Byron E. Ruth, David Bloomquist, Bouzid Choubane, 1989, Field Evaluation of Rigid Pavements for the Development of a

79

Rigid Pavement Design System – Phase IV, Dept. of Civil Engineering, College of Engineering, University of Florida.

Mirambell, E. (1990). "Temperature and stress distributions in plain concrete pavementsunder thermal and mechanical loads." Proc., 2nd Int. Workshop on Designand Rehabilitation of Concrete Pavements, Sigiienza, Spain, 121-135.

Neville, A.M. (1996). Properties of concrete. 4th edition. New York: John Wiley & Sons, Inc.

O'Flaherty C.A.,(2002). Highways.4th ed., Burlington, Butterworth-Heinemann publications

Okamoto, P.A., P.J. Nussbaum, K.D. Smith, M.I. Darter, T.P. Wilson, C.L. Wu, and S.D. Tayabji. 1991. Guidelines for Timing Contraction Joint Sawing and Earliest Loading for Concrete Pavements, Volume I, Final Report, Report No. University of Moratuwa, Sri Lanka. FHWA-RD-91 FHWA-tWashington, D.& Dissertations www.lib.mrt.ac.lk

PCA, (2010), Highways, Retrieved 22-11-2010, from cement.org: http://www.cement.org/pavements/pv_cp_highways.asp

PCC Pavements for Low-Volume Roads and City Streets, National Cooperative Highway Research Program Synthesis 27, Transportation Research Board, 1975.

Picket G., "Effect of aggregate on shrinkage of concrete and a hypothesis concerning shrinkage", Journal of American Concrete Institute, 1956, 52, No. 5, Jan, 581-590

Pihlajavaara S.E., "A review of some of the main results of a research on aging phenomena of concrete: effect of moisture concrete", Cement and concrete research, 1974, 4, 761 -771

80

Powers T .C, (1968). The properties of fresh concrete, London, John Wiley Sons, Inc

Priyantha N.A.A., 2010, Master's thesis, "Guidelines For Construction of Low Volume Concrete Roads in Sri Lanka"

Raja, Z.I. and Snyder, M.B., (1991), Factors Affecting Deterioration of Transverse Cracks in Jointed Reinforced Concrete Pavements, Transportation Research Record, 1307, pp, 162-168,

Rastrup E. Heat of hydration in concrete. Magazine of Concrete Research, 1954;6(17):79-92.

Review of Minnesota's Concrete Pavement Design, Concrete Design Task Force, Minnesota Department of Transportation, March 4, 1985.

Sargious, M. (1975): Payements and surfacing for high ways and airports. John Wileyand Sons, New Yorky N. Mb. mrt. ac.lk

Scanlon, J.M. and J.E. McDonald. 1994. Thermal Properties. In Significance of Tests and Properties of Concrete and Concrete-making Materials. Eds. P. Klieger and J.F.

Sen Z., (2008), Solar Energy Fundamentals and Modeling Techniques, Springer-Verlag London Limited.

Shanthini R., (2006), "Impact of Sri Lankan Rural Roads on Greenhouse Gas Emissions & Mitigationand Climate Change", A Report for Practical Action / ITDG, South Asia, 2006

Smith, K. D., Peshkin, D. G., Mueller, A. L., Owusu-Antwi, E., and Darter, M. I. (1991). "Evaluation of concrete pavements in the Phoenix urban corridor."

Rep.No. FHWA-AZ91-264-I, Federal Highway Administration, Washington, D.C.

Soft Technologies, 2010, Types of pavements, Retrieved 24-10-2010, from aboutcivil.com: <u>http://aboutcivil.com/types-of-pavements.html</u>

State of California, (2007), Office of Pavement Design, Retrieved 22-11-2010 from dot.ca.gov: <u>http://www.dot.ca.gov/hq/esc/Translab/OPD/JPCP-Design-</u> <u>Construction-Guide.pdf</u>.

Taheri, M. R., Zaman, M. M., and Khanna, V. (1992). "Dynamic response of concrete airport pavements to temperature induced warping." 16th South Eastern Conf. on Theoretical and Appl. Mech., II.10.17-II.10.26.

Teller, L. W., and Sutherland, E. C. (1935). "The structural design of concrete pavements, part 2: observed effects of variations in temperature and moisture on University of Moratuwa, Sri Lanka. the size, shape and stress resistance of concrete pavement slabs." *Public Roads*, 16(9), 169-197.

Teychenné, D.C, Franklin, R.E. and Erntroy, H.C. Design of normal concrete mixes. Department of the Environment. HMSO, 1975 (1988)

Walraven, J.C. (1981). Fundamental Analysis of Aggregate Interlock. Journal of the Structural Division, ASCE, 107, No. 11, Nov., 2245-2270.

Westergaard, H.M., (1928), Analysis of stresses in concrete pavements caused by variations in temperature, *Public Roads*, 7, No. 3, pp. 54–60

Yang H. Huang, 2003, Pavement Analysis and Design, Prentice Hall Inc.

Zaman, M., Taheri, M. R., and Khanna, V. (1993). "Dynamics of concrete pavementto temperature induced curling." 72nd Ann. Mtg. of Transp. Res. Board, PreprintNo. 93-0344, Transportation Research Board, Washington, D.C.



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