

## Chapter 10

### List of References

- [1] ACI Committee 544, "State-of-the-Art Report on Fiber Reinforced Concrete", (544-IR), American Concrete Institute, Detroit/USA, 1982, 22 PP.
- [2] Edgington, J.; Hannant, D. J.; and Williams, R. I. T., "Steel Fiber Reinforced Concrete", Current Paper No. CP69/74, Building Research Establishment, Garston, Watford, July 1974, 17 PP.
- [3] Hanna, A. N, "Steel Fiber Reinforced Concrete Properties and Resurfacing Applications", Research and Development Bulletin (RD049.01P), Portland Cement Institute Association, Illinois/USA, 1977, 18 PP.
- [4] Schrader, E. K., "Fiber Reinforced Concrete Pavements and Slabs (A State-of-the-Art Report)" Proceedings, Steel Fiber Concrete US-Sweden Joint Seminar (NSF-STU), Swedish Cement and Concrete Research Institute, Stockholm /Sweden, June 1985, PP. 109-131.
- [5] Wallis, S., "Steel Fiber (Development in South Africa)" Concrete Technology, tunnels & tunneling, South Africa, March 1995, PP. 22-24.
- [6] Soroushian, P.; and Bayasi, Z., "Fiber-Type effects on the Performance of Steel Fiber Reinforced Concrete" ACI Material Journal, Vol. 88, No.2, March-April 1991, PP. 129-134.
- [7] Ramakrishnan, V., "Steel Fiber Reinforced Shotcrete (A state-of-the-Art Report)", Proceedings, Steel Fiber Concrete US-Sweden Joint Seminar (NSF-STU), Swedish Cement and Concrete Research Institute, Stockholm/ Sweden, June 1985, PP. 7-22.
- [8] ACI Committee 544, "Guide for Specifying Proportioning Mixing Placing and Finishing Steel Fiber Reinforced Concrete", ACI Material Journal, Vol. 90, No. 1, January-February 1993, PP. 94-101.
- [9] Vandewalle, M., "The Use of the Steel Fiber Reinforced Concrete In Heavy Duty Port Pavements", Proceedings 6<sup>th</sup> International Symposium on Concrete Roads, Madrid/ Spain, October 1990, PP. 121-128.
- [10] Association of Concrete Industrial Flooring Contractors, "Steel Fiber Reinforced Concrete Industrial Ground Floor: An Introductory Guide" Concrete ACIFC, Vol. 33, No.10, Leamington Spa/ UK, November-December 1999, 12 PP.
- [11] Bekeart N.V., "Steel Fiber Reinforced Industrial Floor (design in Accordance with the Concrete Society TR34)", Dramix manual, 1998, 44 PP.

[12] Packard, R.G.; and Ray, G.K., "Performance of Fiber-Reinforced Concrete Pavements", International Symposium, American Concrete Institute, Detroit/USA, 1984, PP. 325-349.

[13] Vondran, G. L., "Applications of Steel Fiber Reinforced Concrete", Concrete international, American Concrete Institute, Vol. 13, No. 11, November 1991, PP. 44-49.

[14] Nordin, A.; and Skarendahl, A., "Steel Fiber Concrete- development and Use by Ekebro AB", Proceedings, Steel Fiber Concrete US-Sweden Joint Seminar (NSF-STU), Swedish Cement and Concrete Research Institute, Stockholm/ Sweden, June 1985, PP. 143-157.

[15] Annual Book of American Society for Testing Material, "Concrete and Aggregate", Vol. 04.02, ASTM West Conshohocken/ USA, 1998.

[16] Johnston, C. D., "Toughness of Steel Fiber Reinforced Concrete", Proceedings, Steel Fiber Concrete US-Sweden Joint Seminar (NSF-STU), Swedish Cement and Concrete Research Institute, Stockholm/ Sweden, June 1985, PP. 333-360.

[17] Gopalaratnam, V. S.; Shah, S. P.; Batson, G. B.; Criswell, M. E.; Ramakrishnan, V.; and Wecharatana, M., "Fracture Toughness of Fiber Reinforced Concrete", ACI Material Journal, Vol. 88, No. 4, July-August 1991, PP. 339-353.

[18] Chen, L.; Mindess; Morgan, D. R.; Shah, S. P.; Johnston, C. D.; and Pigeon, M., "Comparative Toughness Testing of Fiber Reinforced Concrete", ACI Publications, Detroit/USA, 1995, SP.155-3, PP. 41-75.

[19] Snyder, M. J.; and Lankard, D. R., "Factors Affecting the Flexural Strength of Steel Fibrous Concrete", ACI Journal, Proceedings Vol. 69, No. 2, February 1972, PP. 96-100.

[20] Perrie, B. D., "The Effect of Steel Fiber Reinforcement on the Behaviour and Structural Properties of Concrete" Study Notes: Prepared for the Post Graduate Course in Behaviour of Structural Material at the University of Witwatersrand /South Africa, 1985, 11 PP.

[21] Neville, A. M.; and Brooks, J. J., "Concrete Technology", Longman Group/UK, 1998, PP. 195-200.

[22] Batson, G.; Ball, C.; Bailey, L.; Landers, E.; and Hooks, J., "Flexural Fatigue Strength of Steel Fiber Reinforced Concrete Beams", ACI Journal, Proceedings vol. 69, No. 11, November 1972, PP. 673-677.

[23] Ramakrishnan, V.; Wu, G. Y.; and Hosalli, G., "Flexural Fatigue Strength, Endurance Limit, and Impact Strength of Fiber Reinforced Concretes", Transportation Research Record 1226, 1989, PP. 17-24.

- [24] Johnston, C. D.; and Zemp, W. R., "Flexural Fatigue Performance of Steel Fiber Reinforced Concrete- Influence of Fiber Content, Aspect Ratio, and Type", *ACI Material Journal*, Vol. 88, No. 4, July-August 1991, PP. 374-383.
- [25] Hsu, T. T. C., "Fatigue of Plain Concrete", *ACI Journal*, Vol. 78, No. 4, July-August 1981, PP. 292-305.
- [26] Schrader, E. K., "Design Methods for Pavements", *International Symposium, American Concrete Institute, Detroit/USA, 1984*, PP. 198-212.
- [27] Bernard, E. S.; and Ayton, G., "The Performance of Steel Fiber Reinforced Concrete in Pavements", *18<sup>th</sup> Biennial Conference (Concrete 97), Concrete Institute of Australia, Adelaide/ Australia, May 1997*, PP. 221-230.
- [28] Morgan, D. R.; and Mowat, D. N., "A Comparative Evaluation of Plain, Mesh and Steel Fiber Reinforced Concrete", *International Symposium, American Concrete Institute, Detroit/USA, 1984*, PP. 305-318.
- [29] Lankard, D. R.; and Newell, J. K., "Preparation of Highly Reinforced Steel Fiber Reinforced Concrete Composites", *International Symposium, American Concrete Institute, Detroit/USA, 1984*, PP. 287-304.
- [30] Fibresteel, "Fibercrete Properties and Pavement Design", *Technical Manual, No. CI/SfB, Australian Wire Industry, Five Dock/ Australia, November 1981*, 46 PP.
- [31] Gopalarantnam, V. S.; and Shah, S. P., "Strength, Deformation and Fracture Toughness of Fiber Cement Composites at Different Rates of Flexural Loading", *Proceedings, Steel Fiber Concrete US-Sweden Joint Seminar (NSF-STU), Swedish Cement and Concrete Research Institute, Stockholm/ Sweden, June 1985*, PP. 299-331.
- [32] Bantia, N.; Chokri, K.; and Trottier, J.F., "Impact Tests on Cement-Based Fiber Reinforced Composites", *ACI Publications, Detroit/USA, 1995*, SP.155-9, PP. 171-188.
- [33] Raju, N. K.; Basavarajaiah, B.S.; and Rao, K. J., "Compressive Strength and Bearing Strength of Steel Fiber Reinforced Concrete", *Indian Concrete Journal*, Vol. 51, No. 6, June 1977, PP. 183-188.
- [34] Burgess, I.C., "Steel Fiber Reinforced Concrete: A Viable Pavement Material", *Proceedings, Symposium on Exploiting the Innovative Potential of Concrete, Concrete Society of Southern Africa, Johannesburg/ South Africa, September 1992*, 15 PP.
- [35] Khaloo, A. R.; and Kim, N., "Influence of Concrete and Fiber Characteristics on Behaviour of Steel Fiber Reinforced Concrete Under Direct Shear", *ACI Materials Journal*, Vol.94, No. 4, November-December 1997, PP. 592-601.

- [36] Ashour, S. A.; Hasanain, G. S.; and Wafa, F. F., "Shear Strength Behaviour of High-Strength Fiber Reinforced Concrete Beams", ACI Structural Journal, Vol. 89, No.2, March-April 1992, PP. 176-183.
- [37] Jindal, R. L., " Shear and Moment Capacities of Steel Fiber Reinforced Concrete Beams", International Symposium, American Concrete Institute, Detroit/USA, 1984, PP. 1-16.
- [38] Grondziel, M., " Restoration of Concrete Floors with Steel-Fiber Concrete for Aircraft at Frankfurt Airport – West Germany", International Conference on Recent Developments in Fiber Reinforced Cements and Concrete, London/ UK, September 1989, PP.610-619.
- [39] The British Concrete Society, " Concrete Industrial Ground Floors: A Guide to Their Design and Construction", Technical Report No.34 (TR34), 2<sup>nd</sup> Edition, February 1995.
- [40] Armelin, H. S.; and Helene, P., " Physical and Mechanical Properties of Steel Fiber Reinforced Dry-Mix Shotcrete", ACI Materials Journal, Vol. 92, No. 3, May-June 1995, PP. 258-267.
- [41] Alexander, M. G., "A Simple Bending Test for Elastic and Rupture Moduli for Plain Concrete and Mortar", Concrete/Beton, South Africa, Vol. 9, No. 27, 1982, PP.18-24.
- [42] Beckett, D., " Thickness Design of Concrete Industrial Ground Floors", Concrete Journal, Vol. 29, No. 4, August 1995, PP. 21-23.
- [43] Kaushik, S. K.; and Vasan, R. M., " Performance Evaluation of SFRC Pavements", Proceedings of 4<sup>th</sup> International Symposium Held by RILEM, University of Sheffield/ UK, July 1992, PP. 883-887.
- [44] Banthia, N.; Azzabi, M.; and Pigeon, M., "Restrained Shrinkage Tests on Fiber Reinforced Cementitious Composites", ACI Publications, Detroit/USA, 1995, SP.155-7, PP. 136-151.
- [45] Balguru, P., " Contribution of Fibers to Crack Reduction of Cement Composites During the Initial and Final Setting Period", ACI Materials Journal, Vol. 91, No. 3, May-June 1994, PP. 280-288.
- [46] Grzybowski, M.; and Shah, S. P., " Shrinkage Cracking of Fiber Reinforced Concrete" ACI Materials Journal, Vol. 87, No. 2, March-April 1990, PP. 138-148.
- [47] Chern, J-C.; and Young, C-H., " Study of Factors Influencing Drying Shrinkage of Steel Fiber Reinforced Concrete", ACI Materials Journal, Vol. 87, No. 2, March April 1990, PP. 123-129.



[48] Hassani, A.; and Mohammed, S., "The Study of the Mean Time Drying Shrinkage Behaviour of Steel Fiber Reinforced Concrete Pavements", 8<sup>th</sup> International Symposium on Concrete Roads, Theme II, Progress in Concrete Road Materials and in the Construction Process, Lisbon/ Portugal, September 1998, PP. 216-224.

[49] Mangat, P. S.; and Azari, M. M., "Shrinkage of Steel Fiber Reinforced Cement Composites", Materials and Structures, 1988, PP. 163-171.

[50] Ong, K. C. G.; and Paramasivam, P., "Crack of Steel Fiber Reinforced Mortar Due to Restrained Shrinkage", International Symposium, American Concrete Institute, Detroit/USA, 1984, PP. 179-187.

[51] Mangat, P. S.; and Azari, M. M., "Compression Creep Behaviour of Steel Fiber Reinforced Cement Composites", Materials and Structure, Vol. 19, No. 113, 1986, PP. 361-369.

[52] Kosa, K.; and Naaman, A. E., "Corrosion of Steel Fiber Reinforced Concrete", ACI Materials Journal, Vol. 87, No. 1, January-February 1990, PP. 27-37.

[53] Sanjuan, M. A.; Moragues, A.; Bacle, B.; and Andrade, C., "Durability of Steel Fiber Reinforced Concrete When Held in Sewage Water", 5<sup>th</sup> International Conference 'Durability of Building Materials and Components', Brighton/UK, November 1990, PP.681-689.

[54] Schupack, M., "Durability of SFRC Exposed to Severe Environments", Proceedings, Steel Fiber Concrete US-Sweden Joint Seminar (NSF-STU), Swedish Cement and Concrete Research Institute, Stockholm/ Sweden, June 1985, PP. 479-496.

[55] Cook, D. J.; and Uher, C., "The Thermal Conductivity of Fiber-Reinforced Concrete", Cement and Concrete Research, Vol. 4, No. 4, July 1974, PP.497-509.

[56] Frazier Parker, Jr.; and Rice, J. L., "Steel Fibrous Concrete For Airport Pavements", International Conference on Concrete Pavement Design, Purdue University, Indiana/USA, February 1977, PP. 541-555.

[57] Raghavendra, N.; Kulshrestha, H. K.; and Lal, R., "Fiber Reinforced Concrete for Airfield Pavements", Indian Concrete Journal, Vol.59, No. 3, March 1985, PP.64-67.

[58] Spires, J. W.; Romualdi, J. P.; and Pichumani, R., "Analysis of Steel-Fiber Reinforced Concrete Warehouse Floor Slabs", ACI Journal, December 1977, PP. 616-622.

[59] Rolling, R. S., "Corps of Engineers Design Procedure for Rigid Airfield Pavements", 2<sup>nd</sup> International Conference on Concrete Pavement Design, Purdue University, Indiana/ USA, April 1981, PP. 185-198.



- [60] Huang, Y. H., "Pavement Analysis and Design", Prentice-Hall, New Jersey/USA, 1993.
- [61] Schrader, E. K.; and Lankard, D. R., "Inspection and Analysis of Curl in Steel Fiber Reinforced Concrete Airfield Pavements", Bekaert Steel Wire Publications, Pennsylvania/USA, April 1983, 9 PP.
- [62] South African Department of Transport, "Concrete Pavement Design and Construction", Manual M10, 2<sup>nd</sup> Draft, Pretoria/ South Africa, 1997.
- [63] Verhoeven, K., "Thin Overlays of Steel Fiber Reinforced Concrete and Continuously Reinforced Concrete: State of the Art in Belgium", 4<sup>th</sup> International Conference on Concrete Pavement Design and Rehabilitation, Purdue University, Indiana/USA, April 1989, PP. 205-219.
- [64] Hoff, G. C., "Use of Steel Fiber Reinforced Concrete in Bridge Decks and Pavements", Proceedings, Steel Fiber Concrete US-Sweden Joint Seminar (NSF-STU), Swedish Cement and Concrete Research Institute, Stockholm/ Sweden, June 1985, PP. 67-108.
- [65] Johnston, C. D., "Steel Fiber Reinforced Concrete Pavement Trial", Concrete International, December 1984, PP. 39-43.
- [66] Addis, B. J., "Fulton's Concrete Technology" Portland Cement Institute, Midrand/ South Africa, 6<sup>th</sup> Edition, 1986.
- [67] Stock, A. F., "Concrete Pavements", Elsevier Science Publishing, New York/USA, 1988.
- [68] Gehring, D., "Steel Fiber Concrete Saves A \$ 1m" International Construction, March 1982, PP. 19.
- [69] Kukreja, C. B.; Kaushik, S. K.; Kanchi, M. B.; and Jain, O. P., "Economics and Applications of Steel Fiber Reinforced Concrete", Indian Concrete Journal, Vol.58, No.3, August 1984, PP. 202-206.
- [70] Dramix Publications, "Why Dramix Steel Fiber Reinforced Concrete for Floors" N.V. Bekaert, South Africa.
- [71] Westergaard, H. M., 'Stresses in Concrete Pavements Computed by Theoretical Analysis' Public Roads, Vol. 7, No. 2, April 1926, PP. 25-35.
- [72] Meyerhof, G. G., "Load Carrying Capacity of Concrete Pavements", Journal of the Soil Mechanics and Foundations Division, Proceedings of the American Society of Civil Engineers, June 1962, PP. 89-116.
- [73] Falkner, H.; Huang, Z.; and Teutsch, M., "Comparative Study of Plain and Steel Fiber Reinforced Concrete Ground Slabs", Concrete International, January 1995, PP. 45-51.

[74] Shentu, L.; Jiang, D.; and Hsu, C-T. T., "Load Carrying Capacity for Concrete Slabs on Grade", *Journal of Structural Engineering*, Vol. 123, No. 1, January 1997, PP. 95-103.

[75] Kaushik, S. K.; Vasan; and Godbole, P. N., "Analysis of Steel Fiber Reinforced Concrete Pavements Based on Infinite Element Analysis", *International Conference on Recent Developments in Fiber reinforced Cements and Concrete*, London/UK, September 1989, PP. 620-629.

[76] Beckett, D., "Comparative Tests on Plain, Fabric Reinforced and Steel Fiber Reinforced Concrete Ground Slabs", *Concrete*, Vol. 24, No. 3, March 1990, PP. 43-45.

[77] Beckett, D., "Corner and Edge Loading on Concrete Industrial Ground Floors Reinforced with Steel Fibers", *Concrete*, Vol. 33, No. 3, September 1999, PP. 22-24

[78] South African Standard: Concrete Tests, "Consistencies of Freshly Mixed Concrete: Slump Test", SABS Method 862-1: 1994.

[79] South African Standard: Concrete Tests, "Compressive Strength of Hardened Concrete", SABS Method 863: 1994.

[80] South African Standard: Concrete Tests, "Flexural Strength of Hardened Concrete", SABS Method 864: 1994.

[81] American Standard, "Test for Static Modulus of Elasticity and Poisson's Ratio of Concrete in Compression", ASTM C469-87a: 1992.

[82] South African Standard: Concrete Tests, "The Drilling, Preparation, and Testing of Concrete Cores", SABS Method 865: 1982.

[83] Beckett, D., "Thickness Design of Concrete Industrial Ground Floors", *Concrete*, Vol. 29, No. 4, July/August 1995, PP. 21-23.

[84] Ioannides, A. M.; Thompson, M. R.; and Barenberg, E. J., "Westergaard Solutions Reconsidered" *Transportation Research Records* 1043, Transportation Research Board (TRB), Washington, D. C./USA, 1985, PP. 13-23.

[85] Rao, K.S. S. and Singh S. "Concentrated Load-Carrying Capacity of Concrete Slabs on Ground", *ASCE Journal of Structural Engineering*, 112(12), PP. 2628-1645.

[86] Chen, W. F. "Plasticity in Reinforced Concrete" McGraw-Hill, New York/USA, 1<sup>st</sup> Edition, 1982, PP. 333-334.

[87] Scanfibre pamphlets, "Flooring Fiber Specification" Scancem Materials, Natal/South Africa.