

## **REFERENCES**

### **CODE AND SPECIFICATION**

- [1] IS 456: 2000, “Plain and Reinforced Concrete-Code of Practice”, Forth Revision, Bureau of Indian Standards (BIS 2000), Fifth Reprint August 2002.
- [2] IS 10262 (2009): Guidelines for Concrete Mix Design Proportioning
- [3] IS 516 (1959): Method of Tests for Strength of Concrete
- [4] IS 1786:2008 High Strength Deformed Steel Bars and Wire for Concrete Reinforcement Specification.
- [5] ACI 318-95 American Concrete Institute Building Code Requirement for Structural Concrete.
- [6] CSA 23.3-04 Design of Concrete Structures, Canadian Standard Association (CSA).
- [7] Eurocode 2 Design of Concrete Structures part 1-1 BS EN 1992 1-1:2004

### **BOOKS**

- [8] Zednek P Bazant and Jaime Planas, “Fracture and Size Effect in Concrete and Other Quasibrittle Material”.
- [9] Harry G Harris, Gajanan M Sabnis, “Structural Modelling and Experimental Techniques”.
- [10] Kong, F. K., “Reinforced Concrete Deep Beams”, First Edition, Blackie and Son Ltd., Glasgow And London, Published by Van Nostrand Reinhold, New York, June 1990.

### **THESIS**

- [11] Robins P. J., “R. C. Deep Beams Studied Experimentally and By the Finite Element Method”, PhD Thesis, University of Nottingham, October 1971.
- [12] S. N. Patel and S. K. Damle, “Behaviour of Reinforced Concrete Deep Beams in Flexure and Shear”, PhD Thesis, Faculty of Technology & Engineering,

The M.S.University of Baroda, December 1976.

- [13] Joshi. N. C., “Micro Mechanical Measurement of Shear Parameters for RCC Moderate Deep Beams Across Its Width and Depth”, Faculty of Technology & Engineering, The M.S.University of Baroda, July 2004.
- [14] Nirvank d. Dave, “Study of Shear Parameters of Moderate Deep Beams with Polypropylene fibres Without Stirrups”, ME Thesis, MSU Baroda, October-2010.
- [15] Ashish J. Chaudhari, “Influence of Size Effect on Failure Characteristics of RCC Moderate Deep Beam with And Without Fibre For  $L/D=2$ ”, ME Thesis, MSU Baroda, July-2015.
- [16] Dhruv B. Partiwala, “Investigation into Shear Response of RCC And Fibrous Moderate Deep Beam with Respect to Size Effect For  $L/D = 2$ ”, ME Thesis, MSU Baroda, June-2015.
- [17] Suhag R Patel ,“ Structural Response Of Size Effect On Shear Strength Of Moderate Deep Beam For  $L/D =3$ ” Me Thesis , The M. S. University Of Baroda, July 2017.

## **RESEARCH PAPERS**

- [18] Kani, G.N.J., "Basic Facts Concerning Shear Failure ". ACI Journal, V. 63, pp. 675-692, June 1966
- [19] Kani, G.N.J., "How Safe Are Our Large Reinforced Concrete Beams?". ACI Journal, V. 64, pp. 128-141, March 1967.
- [20] P. Gergely and L.A. Lutz, “Maximum Crack Width in Reinforced Concrete Flexural Members Causes Mechanism and Control of Cracking in Concrete”, American Concrete Institute, pp. 87-117, 1968.
- [21] Edward G. Nawy, “Crack Control in Reinforced Concrete Structures”, ACI J. Proc. Vol.65 No.10, pp. 825-836, 1968.
- [22] Zdenek P. Bazant and JinKeun Kim, "Size Effect in Shear Failure of Longitudinally Reinforced Beams ". ACI Journal, V. 81, pp. 456-468. September-October 1984.
- [23] Bazant, Z. P., and Sun, Hsu-Huei, "Size Effect in Diagonal Shear Failure:

- Influence of Aggregate Size and Stirrups ". ACI Materials Journal, V. 84, No.4, pp. 259-272, July-August 1987.
- [24] Byung Hwan Oh and Young Jin Kang, "New Formulas for Maximum Crack width and crack spacing in Reinforced Concrete Flexural Members", V-84-S-10, pp 103-112, March April 1987.
  - [25] Zdenek P. Bazant, and Mohammad T. Kazemi, "Size Effect on Diagonal Shear Failure of Beams Without Stirrups". ACI Structural Journal, V. 88, No.3, pp. 268-276, May-June 1991.
  - [26] Kim. Jin-Keun. and Park. Yon-Dong, "Shear Strength of Reinforced High Strength Concrete Beams without Web Reinforcement ". Magazine of Concrete Research, V. 46, No. 166, pp. 7-16, March 1994.
  - [27] Jinkeunkim and Yon Dong Park, "Prediction of Shear Strength of Reinforced Concrete Beams Without Web Reinforcement", ACI Material so Journal, Vol 93, pp 213-222, May-June 1996.
  - [28] Madhusudan Khuntia, Bozidar Stojadinovic and Subhash C. Goel, "Shear Strength of Normal and High-Strength Fiber Reinforced Concrete Beams Without Stirrups" ACI Structural Journal, vol. 96 S-31, pp. 282-289, March April 1999.
  - [29] Robert J Frosch, "Another Look at Cracking and Crack Control in Reinforced Concrete" ACI Structural Journal vol 96 S-49, pp 437-442, May June 1999.
  - [30] Shyhjiann Hwang, Wen Yao Lu and Hung Jen Lee, "Shear Strength Prediction for Deep Beams." ACI Structural Journal Vol 97, pp 367-376, May June 2000.
  - [31] Keun-Hyeok Yang, Heon-Soo Chung, Eun-Taik Lee, Hee-Chang Eun, "Shear Characteristics of High-Strength Concrete Deep Beams Without Shear Reinforcements", Engineering Structures, V. 25, pp. 1343-1352, April 2003.
  - [32] K. H. Yang, H. S. Chung, E. T. Lee, and H. C. Eun, "Shear Characteristics of High-Strength Concrete Deep Beams Without Shear Reinforcements," Engineering Structures, vol. 25, pp. 1343-1352, 2003.
  - [33] Tan, K. H., Cheng, G. H., "Size Effect on Shear Strength of Deep Beams: Investigation with Strut-And-Tie Model", ASCE Journal of Structural Engineering, pp 673-685, May 2006.

- [34] Zhang, Ning, Tan, Kang-Hai, "Size Effect in RC Deep Beam: Experimental Investigation and STM Verification", *Engineering Structures*, V. 29, pp 3241-3254, October 2007.
- [35] M. Nehdi, H. El Chabib and A. Aly Saïd, "Proposed Shear Design Equations For FRP-Reinforced Concrete Beams Based on Genetic Algorithms Approach", *ASCE-Journal of Materials in Civil Engineering*, December 2007.
- [36] G. A. Rao, K. Kunal, and R. Eligehausen, "Shear Strength of RC Deep Beams," *Clim. Chang. 2013 - Phys. Sci. Basis*, vol. 2, pp. 1-30, 2007.
- [37] M.Zakaria, T. Ueda, A. Wu and L. Meng, "Experimental Investigation on Shear Cracking Behaviour in Reinforced Concrete Beams with Shear Reinforcement", *J. Advance concrete Technical*, Vol. 7, No.1 pp. 79-96, 2009.
- [38] R. Sundaresan and G. A. Rao, "Evaluation of Size Effect on Shear Strength of Reinforced Concrete Deep Beams Using Refine Strut-And-Tie Model," *Korea Concr. Inst.*, vol. 37, no. February, pp. 978-89, 2010.
- [39] Y. Tanaka, T. Shimomura, and M. Watanabe, "Role of Diagonal Tension Crack in Size Effect of Shear Strength of Deep Beams," no. 1, pp196-206, 2010.
- [40] Qiang Yu and Zdeněk P. Bažant, "Can Stirrups Suppress Size Effect on Shear Strength of RC Beams?", *ASCE Journal of Structural Engineering*, pp. 607-617, May 2011.
- [41] G APPA RAO AND R SUNDARESAN, "Evaluation of Size Effect on Shear Strength of Reinforced Concrete Deep Beams Using Refined Strut-And-Tie Model", *Indian Academy of Science*, Vol. 37, Part – 1, pp. 89-105, February 2012
- [42] Robert Machial, M. Shahria Alam, Ahmad Rteil, "Revisiting the Shear Design Equations for Concrete Beams Reinforced with FRP Rebar and Stirrup", *Materials and Structures*, November 2012.
- [43] S.M. Allam, M.S. Shoukry, G.E. Rashad, and A.S. Hassan, "Crack Width Evaluation for Flexural RC Members" *Alexandria Eng Journal*, Vol. 51, No.3 pp. 211-220, 2012.
- [44] Boyan I. Mihaylov, Evan C. Bentz, and Michael P. Collins, "Two-Parameter Kinematic Theory for Shear Behaviour of Deep Beams". *ACI Structural*

Journal, V. 110, No. 3, pp. 447–455, May-June 2013.

- [45] Ahmed. B. Shuraim, “Behaviour and Shear Design Provisions of Reinforced Concrete D-Region Beams,” J. King Saud Univ. – Engineering Sciences, vol. 25, no. 1, pp. 65–74, 2013.
- [46] Guray Arslan, “Shear Strength of Steel fibre Reinforced Concrete (SFRC) Slender Beams”, KSCE Journal of Civil Engineering, pp 587-594, 2014
- [47] David B. Birrcher, Robin G. Tuchscherer, Matt Huizinga, and Oguzhan Bayrak, “Depth Effect in Deep Beams”, ACI Structural Journal, V. 111, No. 4, pp. 731-740, July –August 2014.
- [48] Dipti Ranjan Sahoo and Abhimanyu Sharma, “Effect of Steel fibre Content on Behaviour of Concrete Beams with And Without Stirrups”, ACI Structural Journal, V. 111, No. 5, pp. 1157-1164, September – October 2014.
- [49] Shoaib, A. S. Lubell, and V. S. Bindiganavile, “Shear Response of Lightweight Steel Fiber Reinforced Concrete Members Without Stirrups,” Mater. Struct. Constr., vol. 48, no. 10, pp. 3141–3157, 2015.
- [50] H. Narendra, “Analytical Methods to Estimate the Crack Width in RC Beams” International Journal Innov. Res. Sci Eng. Tech., vol. 4 No.7, pp. 6519-6530, 2015.
- [51] Ofanime A. Harry and Iflok. E. Ekop, “A Comparative Analysis of Codes Prediction of Shear Resistance in Beams Without Shear Reinforcement,” American Journal of Civil Engineering and Architecture, vol. 4, No. 1, pp. 39–43, 2016.
- [52] A.K. El-Sayed and A. B. Shuraim, “Size Effect on Shear Resistance of High Strength Concrete Deep Beams,” Mater. Struct. Constr., vol. 49, no. 5, pp. 1871–1882, 2016.
- [53] Kenji Kosha, Satoshi Uchida, T. Sutomu Nishioka and Horoshiko Bayashi, “Size Effect on The Shear Strength of RC Deep Beams.”
- [54] B. Hu and Y. F. Wu, “Quantification of Shear Cracking in Reinforced Concrete Beams”, Engineering Structures, vol. 147, pp 666-678, 2017.
- [55] Haui Chen, Wei Jian Yi, Zhongguo John Ma, “Shear Size Effect in Simply Supported RC Deep Beams” Engineering Structures 182, pp 268-278, 2019.

- [56] Fausto Minelli, Antonio Conforti, Estefanía Cuenca, Giovanni Plizzari “Are Steel Fibres Able To Mitigate Or Eliminate Size Effect In Shear??”,Material And structures, DOI 10.1617/s1527-013-0072-y,16 April 2013
- [57] Guray Arslan, Riza Secer Orkun Keskin,Mehdi Ozturk, “Shear Behaviour Of Polypropylene Fiber Reinforced-Concrete Beams Without Stirrups”
- [58] R . Narayanan and I.Y.S. Darwish, “Fiber Concrete Deep Beams In Shear,”ACI Struct.J., Vol. 85, no. 2, pp. 141-149,1988
- [59] S.R. Salib and G. Abdel-Sayed, “ Prediction Of Crack Width For Fiber Reinforced Polymer-Reinforced Concrete Beams,” ACI struct J., Vol. 101, no. 4, pp 532-536,2004
- [60] V. Bindiganavile and N. Banthia, “ Polymer And Steel Fiber-Reinforced Cementitious Composites Under Impact Loading – Part 1 : Bond-Slip Response, “ACI mater. J., Vol. 98, no.1,pp. 17-24,2001
- [61] S.H. Chowdhury and Y.C.Loo, “ A New Formula For Prediction Of Crack Width In Reinforced And Partially Prestressed Concrete Beams,” Adv. Struct. Eng., vol. 4, no.2,pp. 101-110,2002.
- [62] A.I.Ramdan,A.G., and A. Abd-Elshafy,”Statistical Prediction Equations For RC Deep Beam Without Stirrups,” 1st GeoMeast Int. Congr. Exhib., pp. 42-54, 2018
- [63] K.S.Ismil, M. Guadagnini, and K.Pilakoutas,”Shear Behaviour Of Reinforced Concrete Deep Beams,” ACI Struct. J., vol. 114, no. 1,pp.87-99,2017
- [64] Job Thomas, S. Ramadass, ”Parametric Study Of Shear Strength Of Concrete Beams Reinforced With Reinforced With FRP Bars”, The Institution of Engineers ( India) 2016.
- [65] Xuehui AN Koichi MAEKAWA and Hjime OKAMURA, “ Numerical Simulation of Size effect in Shear Strength of RC Beams.” JSCE- Materials , Concrete Structure and Pavements , V-35 ,May -1997.