# REFERENCES

Abayakoon, S.B.S. (1998), "Seismic response of low lying areas in Colombo, Sri Lanka", Engineer, Journal of institution of Engineers Sri Lanka, Vol xxviii, No – 2, pp 29 – 36.

AGO (2002), Understanding the Greenhouse Science, Australian Greenhouse Office, Canberra, Australia, pp 20. http://www.greenhouse. gov.au.

Allard, F. (1998), Natural Ventilation in Buildings: A Design Handbook, James & James, London.

Al-Sallal, K.A. (2003), "Comparison between polystyrene and fiberglass roof insulation in warm and cold climates", Renewable Energy, Vol 28, pp 603–611.

American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE) (2001), Handbook of Fundamentals, Atlanta, GA, USA.



Al-Jabri, K.S., Hago, A.W., Al-Nuaimi, A.S., Al-Saidy, A.H. (2005), "Concrete blocks for thermal insulation in hot climate", Cement and Concrete Research, Vol 35, pp 1472– 1479.

Al-Homoud, M.S. (2005), "Performance characteristics and practical applications of common building thermal insulation materials", Building and Environment, Vol 40, pp 353–366.

Ashrae (2001), *Ashrae Handbook of Fundamentals, American Society of Heating*, Refrigerating and Air-Conditioning Engineers, Inc., Atlanta, USA.

ASHRAE Standard 55—thermal environmental conditions for human occupancy, ASHRAE Inc., 1992, Atlanta.

Attalage, R.A., Wijetunge, P.D.C.(1997), ''Energy conservation potential in the commercial sector in Sri Lanka'', Proceedings of symposium at Open University of Sri Lanka – Ann Energy Policy for Sri Lanka", Our Engineering Technology, Vol. 3, No. 1, pp. 47-53.

Bastide, A., Lauret, P., Franc¸ Garde, O., Boyer, H. (2006), "Building energy efficiency and thermal comfort in tropical climates Presentation of a numerical approach for predicting the percentage of well-ventilated living spaces in buildings using natural ventilation", Energy and Buildings, Vol 38, pp 1093–1103.

Bindon, Human Adaptability, http://www.as.ua.edu, Retrieved 25 November 2007 from the World Wide.

Berdahl, P., Bretz, S.E. (1997), "Preliminary survey of the solar reflectance of cool roofing materials", Energy and Buildings, Vol 25, pp149–158.

Bourbia, F., Awbi, H.B. (2004), "Building cluster and shading in urban canyon for hot dry climate", Renewable Energy Vol 29, pp 249–262.



Budaiwi, I. ,Abdou, A., Al Homoud, M. (2002), "Variations of Thermal Conductivity of Insulation Materials Under Different Operating Temperatures: Impact on Envelope-Induced Cooling Load", Journal of Architectural Engineering, Vol 8, Issue 4, pp 125-132.

Budaiwi, I.M. ( 2007), "An approach to investigate and remedy thermal-comfort problems in buildings", Building and Environment, Vol 42, pp 2124-2131.

Building regulations (1985), City of Colombo Development Plan, Volume II, Colombo Municipal council.

Butala, V., Novak, P. (1999), "Energy consumption and potential energy savings in old school buildings", Energy and Buildings, Vol 29, pp 241-246.

Ceylon electricity board, Statistical Digest, 2006.

Chandrakeerthy, S.R.De S., Sivaprakasapillai, P., Cooray M.L.N., Dewasurendra, K.W. (1984), "Roof Attachments for Cyclone Proof Buildings", Engineer, pp16-26.

Cheng, V., Ng, E., Givoni, B. (2005), "Effect of envelope colour and thermal mass on indoor temperatures in hot humid climate", Solar Energy, Vol 78, pp 528–534.

Christensen, B., NASA Strategy For Urban Heat island NYC, www.technovelgy.com.

De Dear, R.J., Brager, G.S. (2002), "Thermal comfort in naturally ventilated buildings: revisions to ASHRAE Standard 55", Energy and Buildings, Vol 34, pp 549–561.

Demand side management (2002), http://www.ceb.lk/DSM/, Celyone electricity board.

Dias, W.P.S. (1994), "Influence of surface finish on sorptivity of concrete", ASCE Journal of Materials Civil Engineering, Vol 6-2.



Dias, W.P.S. (1991), "Specifying for concrete durability: Part 1- a critical review, Engineer, The Journal of the Institute of Engineer", Sri Lanka, Vol XIX, pp 51-63.

Dimoudi, A., Nikolopoulou, M. (2003), "Vegitation in the urban environment:microclimatic analysis and benefits", Energy and Buildings, Vol 35, pp 69-76.

Doulos, L., Santamouris, M., Livada, I. (2004), "Passive cooling of outdoor urban spaces. The role of materials", Solar Energy, Vol 77, pp 231–249.

Durability: Stands up to natures forces, http://www.concretethinker.com, Retrieved 21 April 2008 from the World Wide.

Ekanayake, J., Jayawarna, T.N.D., Jenkins, N. (2002), "Sustainable electricity system for Sri Lanka", Tyndall Centre for Climate Change Research.

Fairey, P.W. (1994), "Passive Cooling and Human Comfort, Florida solar energy centre publication", DN-5.

Fanger, P.O. (1972), "Conditions for thermal comfort a review, in: Proceedings of the Symposium on Thermal Comfort and Moderate Heat Stress (article in CIB W45)", Building Research Establishment, UK, pp 3–15.

Filippin, C. (2000), "Bench marking the energy efficiency and greenhouse gases emissions of school buildings in central Argentina", Building and Environment, Vol 35, pp 407-414.

Feriadi, H., Wong, N.H. (2004), "Thermal comfort for naturally ventilated houses in Indonesia Energy and Buildings", Vol 36, pp 614–626.



Fernando, W.J.N., and Ratnasiri, J. (1997), ''Greenhouse emissions from the energy sector and options for mitigation'', Our Engineering Technology, Vol. 3 No. 1, pp. 77-83.

Fordham, M. (2000), "Natural ventilation, Renewable Energy", Vol 19, pp 17-37.

Gmbh, Z., "Planning guide: the green roof", 6th ed., Germany, 2000.

Gray, V. (2000), "The Surface Temperature Record", New Zealand, www.john-daly.com/graytemp/surftemp.htm.

Grundstrom, K., Johansson, E., Rosenlund, H. (1999), ''A more agreeable climate in Moroccan housing areas'', Swedish Building Research, pp. 10-12.

Gitay, H., Suarez, A., Watson, R.T., Dokken, D.J. (2002), "Climate change and Biodiversity", Intergovernmental panel on climate change.

Hassid, S., Santamouris, M., Papanikolaou, N., Linardi, A. , Klitsikas, N. , Georgakis, C., Assimakopoulosb, D.N. (2000), "The effect of the Athens heat island on air conditioning load", Energy and Buildings , Vol 32, pp131–141.

Hickman, W.P. (1999), System Incorporated. Eco-roof system. USA, Retrieved 20 November 2001, http://www.ecoroofsystems.com/cost.html, Retrieved 15 January 2008 from the World Wide.

Holmes, M.J., Hacker, J.N. (2007), "Climate change, thermal comfort and energy: Meeting the design challenges of the 21st century", Energy and Buildings, Vol 39, pp 802-814.

Huang, M.J., Eames, P.C., Hewitt, N.J. (2006), "The application of a validated numerical model to predict the energy conservation potential of using phase change materials in the fabric of a building", Solar Energy Materials and Solar Cells, Vol13, pp 1951-1960.

Hui, S.C.M. (2000), www.ace.mmu.ac.uk, Retrieved 07 February 2008 from the World Wide.



http://www.concretethinker.com, Retrieved 21 April 2008 from the World Wide.

IS: 875 part-3 (1987), Code of practice for design loads for buildings and structures, Burean of Indian standereds, New Dilli, India.

Jayasinghe, M.T.R., Attalage, R.A., Jayawardena, A.I. (2002), "Thermal comfort in proposed three-storey passive houses for warm humid climates", Energy for Sustainable Development, Vol VI, No. 1, pp 63-73.

Jayasinghe, M.T.R., Attalage, R.A (1997), "Minimisation of energy use in commercial sector", Proceedings of symposium at Open University of Sri Lanka – An Energy Policy for Sri Lanka, OUR Engineering Technology, Vol: 3, No: 1, pp 131 – 137.

Jayasinghe, M.T.R. (2003), Energy Efficient Houses for Tropical Climates, MacBolon Polymer, Sri Lanka, 180 p.

Jayasinghe, M.T.R., Maharachchi, D.P.K. (1998), "Use of reinforced brickwork for crack free load bearing construction", Proceedings, Recearch for Industry -1998, Engineering Research Unit, University of Moratuwa, pp 38-51.

Jayasinghe, M.T.R., Jayawardane, A.I., Priyanvada, A.K.M. (2003), "Roof orientation, roofing materials and roof surface colour: their influence on indoor thermal comfort", Energy for Sustainable Development- The Journal of the International Energy Initiative, Vol: VII, No. 1, March, pp 16-27.

Jayawardane, A.I., Jayasinghe, M.T.R. , Attalage, R. A. ( 2001), "Concepts for sustainable residential developments for urban and sub-urban areas in Sri Lanka", Engineer, Journal of Institution of Institution of Engineers, Sri Lanka, Vol: xxxiv, No: 2, pp 63-77.



Jelondz, D., Spasokukotskiy, K. , Ruser, H. (2001), Concept and realization of an EIB based automated room climate control, EIB Conference, Technical University Munich.

Johansson, E. (2006), "Influence of urban geometry on outdoor thermal comfort in a hot dry climate: A study in Fez", Morocco, Building and Environment , Vol 41, pp 1326–1338.

Katz, M.B. (2000), "Sri Lanka - India Intraplate Tectonics - Precambrian to Present", Gondwana Research, Vol 3, No. 1, pp 3-5.

Kariyawasam, P.L.G. (1999), ''Wind power to generate electricity'', Sri Lanka Engineering News, Institution of Engineers, Sri Lanka, Vol. 1, No. 34, pp. 1- 8.

Khudhair, A.M., Farid, M.M. (2004), "A review on energy conservation in building applications with thermal storage by latent heat using phase change materials", Energy Conversion and Management, Vol 45, pp 263–275.

Kosareo, L., Ries, R. (2007), "Comparative environmental life cycle assessment of green roofs", Building and Environment, Vol 42, pp 2606–2613.

Kolokotroni, M. , Perera, M.D.A.E.S., Azzi, D., Virk, G. S. (2001), "An investigation of passive ventilation cooling and control strategies for an educational building", Applied Thermal Engineering, Vol 21, pp 183-199.

Krausse, B, Cook, M, Lomas, K. (2007), "Environmental performance of a naturally ventilated city centre library",Energy and Buildings, Vol 39, Issue 7, pp 792-801.

Kumar, R., Kaushik, S.C. (2005), "Performance evaluation of green roof and shading for thermal protection of buildings", Building and Environment, Vol 40, pp1505–1511.

Kurn, D.K., bretz, S.E., Akbari (1994), "The potential for reducing urban air temperatures and energy consumption through vegetative cooling", Proceedings of the 1994 Summer Study on Energy Effects in Buildings, Pacific Grove, Califonia.



Liping, W., Hien, W.N. (2007), "The impacts of ventilation strategies and facade on indoor thermal environment for naturally ventilated residential buildings in Singapore", Building and Environment, Vol 42, pp 4006-4015.

Luxmoore, D.A., Jayasinghe, M.T.R., Mahendran, M. (2005), "Mitigating temperature increases in high lot density sub-tropical residential developments", Energy and Buildings Vol 37, pp 1212–1224.

Macks, K.J., Murray, F.J., Wittenoom, R.A. ( 1979), Technical assistance to Sri Lanka on cyclone resistant construction, Australian Development assistance bureau, Department housing and construction., vol. 3 Part6.

Mallik, F.H. (1996), "Thermal comfort and building designing in the tropical climates", Energy and Buildings, Vol 23, pp 161-167.

McMarlin, R.M. (1997), *Green roofs: not your garden-variety amenity*, Facilities Design and Management.

Meier, A.K. (1991), "Strategic landscaping and air-conditioning savings: a literature review", Energy and Buildings, Vol 15–16, pp 479–486.

Mui, K.W.H, Chan, W.T.D. (2003), "Adaptive comfort temperature model of air-conditioned building in Hong Kong", Building and Environment , Vol 8, pp 837 – 852

Nahar, N.M., Sharma, P., Purohit, M.M. (2003), "Performance of different passive techniques for cooling of buildings in arid regions", Building and Environment, Vol 38, pp 109 – 116.

National accounts of Sri Lanka, 2004.

National Parks Board. Sky greenery, Singapore, World Wide Web: http://www.nparks.gov.sg/gardencity/skyrise.shtml, Retrieved 20 September 2003 from the World Wide.



Osmundson, T. ( 1999), "Roof gardens: history, design, and construction", New York: W.W. Norton & Company Ltd.

Ozdeniz, M.B., Hancer, P. (2005), "Suitable roof constructions for warm climates-Gazimagusa case", Energy and Buildings, Vol 37, pp 643–649.

Patterson M.( 1998), "What colour green?", Buildings,Vol 92, pp 82.

Peck, S.W., Callaghan, C., Kuhn M.E. , Grass, B. (1999), "Greenbacks from green roofs: forging a new industry in Canada. Status Report prepared for Canada Mortgage and Housing Corporation", Peck & Associates.

Pfafferott, J.U., Herkel, S., Kalz, D. E., Zeuschner, A. (2007), "Comparison of low-energy office buildings in summer using different thermal comfort criteria", Energy and Buildings, Volume 39, pp 750-757.

Rajapaksha, I., Nagai, H., Okumiya, M. (2003), "A ventilated courtyard as a passive cooling stratey in the warm humid tropics", Renewable Energy, Vol 28, pp 1755–1778.

Ratnaweera, C., Hestnes, A.G. (1996), "Enhanced cooling in typical Sri Lankan dwellings", Energy and Buildings, Vol 23 , pp 183-190.

Rosenlund, H., "Climatic design of buildings using passive techniques", Building Issues, Vol 10, No 1, pp 26.

Saito, I., Ishihara, O., Kotayama, T. (1990), "Study of the effect of green areas on the environment in an urban area", Energy and Buildings, Vol 15-16, pp 443-446.



Scholz-Barth, K. (2000), "Green roofs: storm water management from the top down. Environmental Design & Construction Home", Retreived 25 November 2001 from http://www.edcmag.com/ CDA/ArticleInformation, January/February.

Scholz-Barth, K., "Green roofs: storm water management from the top down" Environmental Design & Construction Home, http://www.edcmag.com/CDA/ Article Information, Retrieved 25 November 2001 from the World Wide.

Simpson, J.R. ( 2002), "Improved estimates of tee-shade effects on residential energy use", Energy and Building, Vol 34, pp 1067-1076.

Sreshthaputra, A., Haberl, J., Andrews, M.J. (2004), Improving building design and operation of a Thai Buddhist temple, Energy and Buildings, Vol 36, pp 481–494.

Seasonal Climate Predictions for Sri Lanka (2003), http://iri.columbia.edu, Retrieved 21 April 2008 from the World Wide.

Szokolay, S.V. (1991), "Heating and cooling of buildings, in: H.J. Cowan (Ed.)", Handbook of Architectural Technology, Van Nostrand Reinhold, New York, pp 323–365.

Sugandhan, T. (2006), Development of guidelines for cost effective structures resistant to a multitude of disaster type with special reference to earthquakes, The institute of Engineers, A research report submitted to IESL, 36 p.

Takakura, T. , Kitade, S. , Goto, E. (2000), "Cooling effect of greenery cover over a building", Energy and Buildings, Vol 31, pp 1–6.

Taylor, P., Fuller, R.J., Luther, M.B. (2008), "Energy use and thermal comfort in a rammed earth office building", Energy and Buildings, Vol 40, pp 793-800.



Theodosiou, T.G. (2203), "Summer period analysis of the performance of a planted roof as a passive cooling technique", Energy and Buildings, Vol35, pp 909-917.

Reddy, B.V.V., Jagadish, K.S. (2003), "Embodied energy of common and alternative building", Energy and Buildings, Vol 35, pp 129–137.

The US Department of Energy (2002), Insulation fact sheet with addendum on moisture control, DOE/CE-0180, USA.

Turner, L. (2003), Climate and Architecture, Report for Honor's Section 8 of MET1010 Introduction to the Atmosphere, Florida State University.

Torrey, B.B. (2008), http://www.prb.org, Retrieved 21 April 2008 from the World Wide.

Wijewardane, S., Jayasinghe, M.T.R. (2008), "Thermal comfort temperature range for factory workers in warm humid tropical climates", Renewable Energy, Vol 33, pp 2057-2063.

Wong, N.H., Li, S. (2005), "A study of the effectiveness of passive climate control in naturally ventilated residential buildings in Singapore", Building and Environment, Vol 42, pp 1395-1405.

Wong, N.H, Chen, Y., Ong C.L, Sia, A.(2007), "Investigation of thermal benefits of rooftop garden in the tropical environment", Building and Environment; Vol 38, pp 261–70.

Wong, N.H., Tay, Su F., Wong, R., Ong, C.L., Sia, A. (2003), "Life cycle cost analysis of rooftop gardens in Singapore", Building and Environment Vol 38, pp 499 – 509.

Wong, N.H., Tan P.Y., Chen Y. (2007), "Study of thermal performance of extensive rooftop greenery systems in the tropical climate", Building and Environment, Vol 42, pp 25–54.



United States Geological Survey Earthquake Hazards Program, http://earthquake.usgs.gov., Retrieved 13 March 2008 from the World Wide.

www.arch.hku.hk, Retrieved 21 April 2008 from the World Wide.

Zhuguo Li (2006), "A new life cycle impact assessment approach for buildings", Building and Environment, Vol 41, pp 1414–1422.