

REFERENCES

Abbaszadeh S, L.Zagreus, D.Lehrer and C.Huizenga. (2006). Occupant satisfaction with Indoor Environmental Quality in Green Buildings. *Proceedings of Healthy Buildings , Vol. III*, 365-370.

Altan H., I. Ward, J. Mohelnikova and F. Vajkay. (2009). An internal assessment of the thermal comfort and daylighting conditions of a naturally ventilated building with an active glazed facade in a temperate climate. *Energy and Buildings 41* , 36-50.

Amanjeet Singh, Matt Syal, Sue C. Grady and Sinem Korkmaz. (2010). Effets of Green Buildings on Employee Health and Productivity. *American Journal of Public Health* , e1-e4.

Anup, S. (2010, December 18). *Global Issues; Energy Security*. Retrieved December 23, 2010, from <http://www.globalissues.com/article/595/energy-security>

Barlex, J. M. (2006). *Guide to Post Occupancy Evaluation*. London: HEFCE/AUDE.

Jayasinghe Chinthana and Thishan Jayasinghe. (2009). *Sustainable Design of Built Environment*. Colombo: Eco-Ceylon (Pvt)Ltd.



Electronic Theses & Dissertations
www.lib.mrt.ac.lk

Brenda and Robert Vale. (1991). *Green Architecture*. London: Thames and Hudson.

Cartner, D. (1981). *Psychology for Architects*. Appiled Science Publications.

Chul Kawang Noh, Jae Soo Jang and Myung Do Oh. (2005). Thermal Comfort and Indoor Air Quality in the lecture room with 4-way cassette air conditioner and mixing ventilation system. *Building and Environment* , n.p.

Clarke, A. (1999). A Practical use of key success factors to improve the effectiveness of Project management. *International Journal of Project Management* , Vol.17 (No.3), 139-145.

ecomii. (n.d, n.d n.d). *Green Building*. Retrieved January 22, 2011, from <http://www.ecomii.com/ecopedia/green-building>

F. F. Council (2001). *Learning from our buildings; A state-of-the- Practice Summery of Post-occupany evaluation*. Washington, D.C: National Academy Press.

Fellows R. and Liu. (2003). *Research methods for construction*. Oxford: Blackwell Publishing.

Gelbspan, R. (2005). *Boiling Point*. n.p: Basic Books.

Gennusa Maria Lo, Antonino Nucara, Gianfrance Rizzo and Gianluca Scaccianoce. (2005). The Calculation of the mean radinat tempaerature of a sujet exposed to the solar radation - a generalized algorithm. *Building and Evironment* , 367-375.

Haizenga C, S.Abbaszadeh, L.Zagreus and E. Arens. (2006). Air Quality & Thermal Comfort in office buildings; resulats of a large Indoor Environmental Quality survey. *Proceedings of Healthy Buildings* , 393-397.

Hansen Shirley J. and H.E. Burroughs. (2004). *Managing Indoor Air Quality* (3rd Edition ed.). Georgia: Fairmount Press.

 University of Moratuwa, Sri Lanka.
Electronic Theses & Dissertations
www.lib.mru.ac.lk
Health & Safety Executives, (2010, December 10). *What is Thermal Comfort*. Retrieved Januray 2, 2011, from <http://www.hse.gov.uk/temperature/thermal/explained.htm>

Healthy Heating. (2010, December 24). Retrieved January 23, 2011, from <http://www.healthyheating.com>

Heeragen, H. J. (2000). Green Buildings, Organizational Success and Occupant Productivity. *Building Reserch and Information* , Vol 28 (5), 353-367.

Heerwagen J.and L.Zagreus. (2005). *The Human Factors of Sustainable Building Design: Post Occupancy Evaluation of the Philip Mrill Environmantal Center*. UC Berkeley: Center for the Built Environment.

Holm, F. H. (2003, November 3rd - 5th). *Towards a sustainble built environment prepared for climate change?* Retrieved Januray 21, 2011, from Inter-Jurisdictional Regulatory Collabaration Committee web site:
<http://www.irssbuildingregulations.org/pdf/3-05pdf>

Jayasinghe, M. T. (2003). *Energy efficient houses for tropical climates*. Colombo: McBolon Polymer Pvt Ltd.

Kadiragamar, R. (Sep-Nov 1995). In Search of a Green Achitecture. *SLIA Journal Volume 101* , 14.

MAS Holdings, (2010, November 18), *MAS Holdings; changing perspectives*. Retrieved December 28, 2010, from <http://www.masholdings.com>

M & S, (n.d., n.d. n.d.), *Marks & Spencer ; Plan A*. Retrieved December 26, 2010, from <http://www.plana.marksandspencer.com>

M&S, (2008, April 25), *Press Releases; M & S supports opening of eco-factory in Sri Lanka*. Retrieved December 28, 2010, from http://www.corporate.marksandspencer.com/investors/press_release/international

National Research Council , Canada, (2005, October). *Indoor Air Quality and Thermal Comfor in open-paln offices*. Retrieved Januray 28, 2011, from <http://www.iec.nrc-cnrc.gc.ca/pubs/ctus/64-eh.html>



University of Moratuwa, Sri Lanka.
Electronic Theses & Dissertations
www.lib.mrt.ac.lk

Matjaz, P. (2006). Thermodynamical analysis of human thermal comfort. *Energy 31* , 732-743.

Owen, P. K. (1997). *An Introduction to Global Environmental Issues*. Oxon: Routledge.

Murcutt, G, (2000), *Touch this earth lightly*, Duffy & Snellgrove

Oseland, A. N. (2007). *British Council for Offices Guide to Post-Occupancy Evaluation*. London: BCO.

Owen, P.K.T and Lewis A, (1997), *An Introduction to Global Environmental Issues*, Oxon:Routledge

Ozdeniz Mesut B and Polat Hancer. (2005). Suitable roof constructions for warm climates - Gazimagusa Case. *Energy and Buildings* , 643-649.

Peter, S. (2008). Fresh Perspective. In H. (Lanka)Ltd, *Clothing Factory in Sri Lanka - MAS Intimates Thrulie* (p. 81). Colombo: n.p.

PEW Center, (2009, November 2). *Climate Change 101: understanding & responding to Global Climate Change*. Retrieved December 21, 2010, from PEW Center Web site: [http://www.pewclimate.org/docuploads/climate 101-complete-jan09.pdf](http://www.pewclimate.org/docuploads/climate%20101-complete-jan09.pdf)

POE. (n.d, n.d n.d). *Defining Post Occupancy Evaluation*. Retrieved January 22, 2011, from <http://www.postoccupancyevaluation.com>

Preiser, W. F. (2001). The Evolution of Post-Occupancy Evaluation: Towards Building Performance and Universal Design Evaluation. F. F. Council, *Learning from our buildings* (pp. 9-22). United States: National Academy Press.

Preiser W F E, H Z Rabinowitz and E T White. (1988). *Post Occupancy Evaluation*. New York: Van Nostrand Reinhold.

Proshansky M.H, H.W Ittelason and G.H. Rivin. (1970). *Environmental Psychology; man and his physical settings*. New York: Holt

Pyke Chris, T. J. (2007, September 10). *Adapting to Climate Change through Neighbourhood Design*. Retrieved December 23, 2010, from CTG Energetics Web site: <http://www.ctg-net.com/content/upload.pdf>

Rachel, C. (1962). *Silent Spring*. Boston: Houghton Mifflin.

Radely, Y. (2010, November 17). *Yours M & S; How we do Business Report 2010*. Retrieved December 26, 2010, from Marks & Spencer web site: <http://www.plana.marksandspencer.com/media/pdf/planA-2010>

Rohracher Harald Michale Ornetzeder. (2002). Green Buildings in Context: Improving Social Learning Processes between Users and Producers. *Built Environment*, Vol 28, 73-84.

Sri Lanka Sustainable Energy Authority. (2008). *Code of Practice on Energy Efficient Buildings in Sri Lanka*. Colombo: SEA.

The Canadian Center for Occupational Health & Safety, C. (2007, October 23). *Thermal Comfort for Office work*. Retrieved January 02, 2011, from http://www.ccohs.ca/oshanswers/phys_agents/thermal_comfort.html

The Energy and Resources Institute, (2006, July 24). *Adaption to climate change in the context of Sustainable Development*. Retrieved January 20, 2011, from The Energy and Resources Institute web site: http://www.un.org/esa/susdev/sdissues/energy/op/new-delhi_workshop_adaption_paper.pdf

The Global Development Research Center, C. (2011, January 5). *Sustainable Development*. Retrieved January 7, 2011, from <http://www.gdrc.org/susdev/definition.html>
The International Union for Conservation of Nature. (2011, January 3). Retrieved January 7, 2011, from <http://www.iucn.org>

The White House Council, *The White House Council on Environmental Quality; Progress report of the support of a National Climate Change Adaption Strategy*. (2010, October 14). Retrieved December 23, 2010, from The White House Council Web site: <http://www.whitehouse.gov/sites/default/files/microsites/ceq/interagency-climate-change-adaption-progress-report.pdf>



Electronic Theses & Dissertations

www.lib.mrt.ac.lk

Then, D. S. (2002). *Best Value in Construction*. Blackwell Publishing.

Thompson, A. (1990). *Architectural design procedures*. London: Edward Arnold.

Towards Sustainability. (2000, n.d n.d). Retrieved January 7, 2011, from <http://www.towards-sustainability.co.uk/issues/built.index>

USGBC. (2002). *Green Building Rating System for new construction and major renovation (LEED-NC): Version 2.1*. n.p: n.p.

USGBC. (2010, October 21). *LEED 2009 for New Construction & Major Renovations*. Retrieved December 31, 2010, from U.S. Green Building Council Web site: <http://www.usgbc.org/showfile>

USGBC. (2005). *LEED for New Construction Version 2.2*. Washington DC: U.S. Green Building Council.

Vale, Brenda and Robert Vale. (1991). *Towards a Green Architecture*. London: RIBA Publications Ltd.

Vera Straka and Mila Aleksic. (2009). Post Occupancy Evaluation: Three schools from Greater Toronto. *PLEA 2009 - 26th Conference on Passive and Low Energy Architecture*. Quebec.

Victor, P. (1971). *Design of the Real World*. New York: Thames and Hudson.

Victor, P. (1995). *Ecology and Ethics in Design and Architecture*. New York: Thames and Hudson Ltd.

Warren L. Paul, Peter A. Taylor. (2008). A comparison of occupant comfort and satisfaction between a green building and a conventional building. *Building and Environment* , 1858-1870.

Weerasinghe, H. (2008, May 18). *Green Apparel*. Retrieved December 28, 2010, from <http://www.lankabusinessonline.com/fullstory>



University of Moratuwa, Sri Lanka.
Electronic Theses & Dissertations
www.lib.mrt.ac.lk

Zosia Brown, Raymond J. Cole, John Robinson and Hadi Dowlatabadi. (2010). Evaluating user experience in green buildings in relation to workplace culture and context. *Facilities* , 225-238

APPENDICES

Appendix I

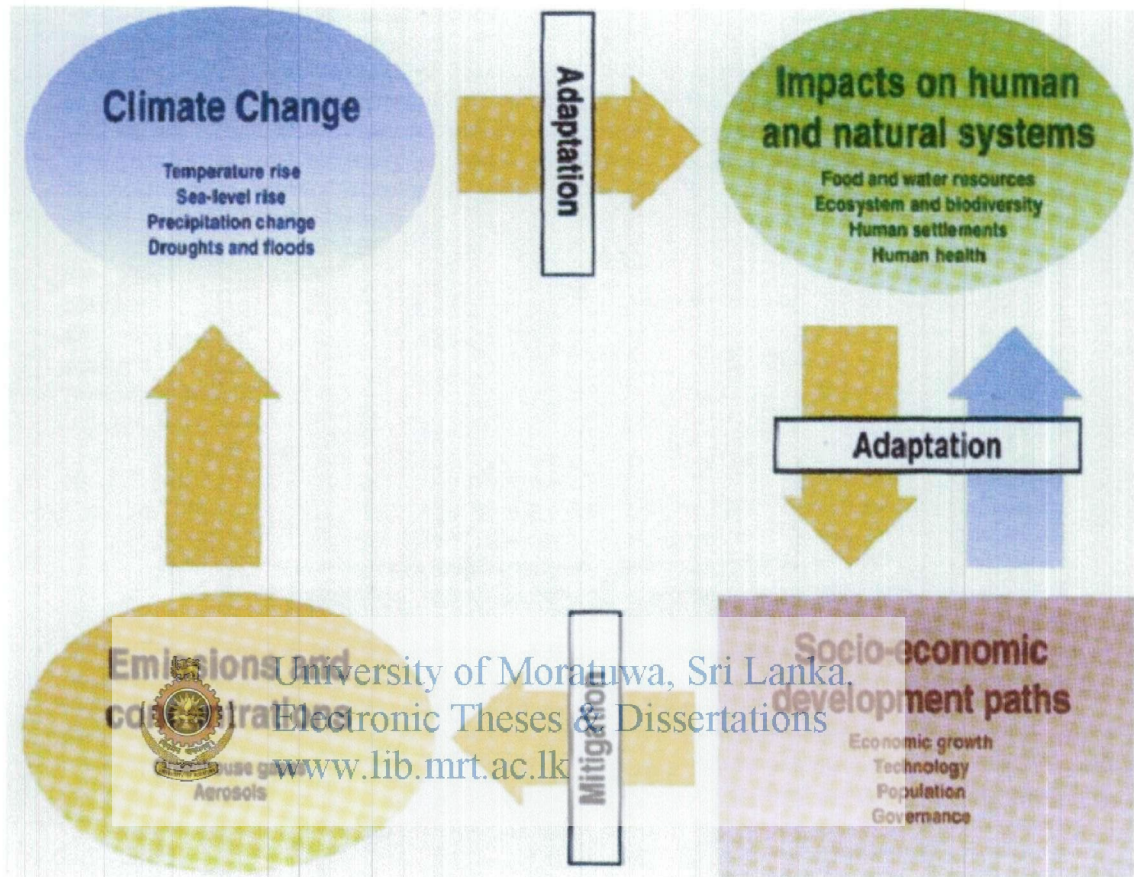


Figure 2.1: Climate change: an integrated framework

Source: <http://www.un.org> (2011)

Project Checklist

Sustainable Sites

14 Possible Points

<input checked="" type="checkbox"/>	Prereq 1	Erosion & Sedimentation Control	Required
<input type="checkbox"/>	Credit 1	Site Selection	1
<input type="checkbox"/>	Credit 2	Urban Redevelopment	1
<input type="checkbox"/>	Credit 3	Brownfield Redevelopment	1
<input type="checkbox"/>	Credit 4.1	Alternative Transportation , Public Transportation Access	1
<input type="checkbox"/>	Credit 4.2	Alternative Transportation , Bicycle Storage & Changing Rooms	1
<input type="checkbox"/>	Credit 4.3	Alternative Transportation , Alternative Fuel Vehicles	1
<input type="checkbox"/>	Credit 4.4	Alternative Transportation , Parking Capacity	1
<input type="checkbox"/>	Credit 5.1	Reduced Site Disturbance , Protect or Restore Open Space	1
<input type="checkbox"/>	Credit 5.2	Reduced Site Disturbance , Development Footprint	1
<input type="checkbox"/>	Credit 6.1	Stormwater Management , Rate and Quantity	1
<input type="checkbox"/>	Credit 6.2	Stormwater Management , Treatment	1
<input type="checkbox"/>	Credit 7.1	Heat Island Effect , Non-Roof	1
<input type="checkbox"/>	Credit 7.2	Heat Island Effect , Roof	1
<input type="checkbox"/>	Credit 8	Light Pollution Reduction	1

Water Efficiency

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<input type="checkbox"/>	Prereq 1	Water Efficient Landscaping , No Irrigation	1
<input type="checkbox"/>	Credit 1.2	Water Efficient Landscaping , No Irrigation	1
<input type="checkbox"/>	Credit 2	Innovative Wastewater Technologies	1
<input type="checkbox"/>	Credit 3.1	Water Use Reduction , 20% Reduction	1
<input type="checkbox"/>	Credit 3.2	Water Use Reduction , 10% Reduction	1

Energy & Atmosphere

17 Possible Points

<input checked="" type="checkbox"/>	Prereq 1	Fundamental Building Systems Commissioning	Required
<input checked="" type="checkbox"/>	Prereq 2	Minimum Energy Performance	Required
<input checked="" type="checkbox"/>	Prereq 3	CFC Reduction in HVAC&R Equipment	Required
<input type="checkbox"/>	Credit 1	Optimize Energy Performance	1-10
<input type="checkbox"/>	Credit 2.1	Renewable Energy , 5%	1
<input type="checkbox"/>	Credit 2.2	Renewable Energy , 10%	1
<input type="checkbox"/>	Credit 2.3	Renewable Energy , 20%	1
<input type="checkbox"/>	Credit 3	Additional Commissioning	1
<input type="checkbox"/>	Credit 4	Ozone Depletion	1
<input type="checkbox"/>	Credit 5	Measurement & Verification	1
<input type="checkbox"/>	Credit 6	Green Power	1

Figure 2.2: LEED 2009 for New Construction and Major Renovations Project Checklist..cond..

Source: <http://www.usgbc.org>, 2010



Materials & Resources

13 Possible Points

Y	Prereq 1	Storage & Collection of Recyclables	Required
<input type="checkbox"/>	Credit 1.1	Building Reuse, Maintain 75% of Existing Shell	1
<input type="checkbox"/>	Credit 1.2	Building Reuse, Maintain 100% of Shell	1
<input type="checkbox"/>	Credit 1.3	Building Reuse, Maintain 100% Shell & 50% Non-Shell	1
<input type="checkbox"/>	Credit 2.1	Construction Waste Management, Divert 50%	1
<input type="checkbox"/>	Credit 2.2	Construction Waste Management, Divert 75%	1
<input type="checkbox"/>	Credit 3.1	Resource Reuse, Specify 5%	1
<input type="checkbox"/>	Credit 3.2	Resource Reuse, Specify 10%	1
<input type="checkbox"/>	Credit 4.1	Recycled Content, Specify 5% (p.c. + 1/2 p.i.)	1
<input type="checkbox"/>	Credit 4.2	Recycled Content, Specify 10% (p.c. + 1/2 p.i.)	1
<input type="checkbox"/>	Credit 5.1	Local/Regional Materials, 20% Manufactured Locally	1
<input type="checkbox"/>	Credit 5.2	Local/Regional Materials, of 20% in MRC5.1, 50% Harvested Locally	1
<input type="checkbox"/>	Credit 6	Rapidly Renewable Materials	1
<input type="checkbox"/>	Credit 7	Certified Wood	1

Indoor Environmental Quality

15 Possible Points

Y	Prereq 1	Minimum IAQ Performance	Required
<input type="checkbox"/>	Prereq 2	Environmental Tobacco Smoke (ETS) Control	Required
<input type="checkbox"/>	Credit 1	Carbon Dioxide (CO ₂) Monitoring	1
<input type="checkbox"/>	Credit 2	Ventilation Effectiveness	1
<input type="checkbox"/>	Credit 3.1	Construction IAQ Management Plan, During Construction	1
<input type="checkbox"/>	Credit 3.2	Construction IAQ Management Plan, Before Occupancy	1
<input type="checkbox"/>	Credit 4.1	Low-Emitting Materials, Carpet	1
<input type="checkbox"/>	Credit 4.2	Low-Emitting Materials, Composite Wood	1
<input type="checkbox"/>	Credit 5	Indoor Chemical & Pollutant Source Control	1
<input type="checkbox"/>	Credit 6.1	Controllability of Systems, Perimeter	1
<input type="checkbox"/>	Credit 6.2	Controllability of Systems, Non-Perimeter	1
<input type="checkbox"/>	Credit 7.1	Thermal Comfort, Comply with ASHRAE 55-1992	1
<input type="checkbox"/>	Credit 7.2	Thermal Comfort, Permanent Monitoring System	1
<input type="checkbox"/>	Credit 8.1	Daylight & Views, Daylight 75% of Spaces	1
<input type="checkbox"/>	Credit 8.2	Daylight & Views, Views for 90% of Spaces	1



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Innovation & Design Process

5 Possible Points

<input type="checkbox"/>	Credit 1.1	Innovation in Design	1
<input type="checkbox"/>	Credit 1.2	Innovation in Design	1
<input type="checkbox"/>	Credit 1.3	Innovation in Design	1
<input type="checkbox"/>	Credit 1.4	Innovation in Design	1
<input type="checkbox"/>	Credit 2	LEED™ Accredited Professional	1

Project Totals

69 Possible Points

Certified 26-32 points Silver 33-38 points Gold 39-51 points Platinum 52-69 points

U.S. Green Building Council

Figure 2.2: LEED 2009 for New Construction and Major Renovations Project Checklist

Source: <http://www.usgbc.org>, 2010

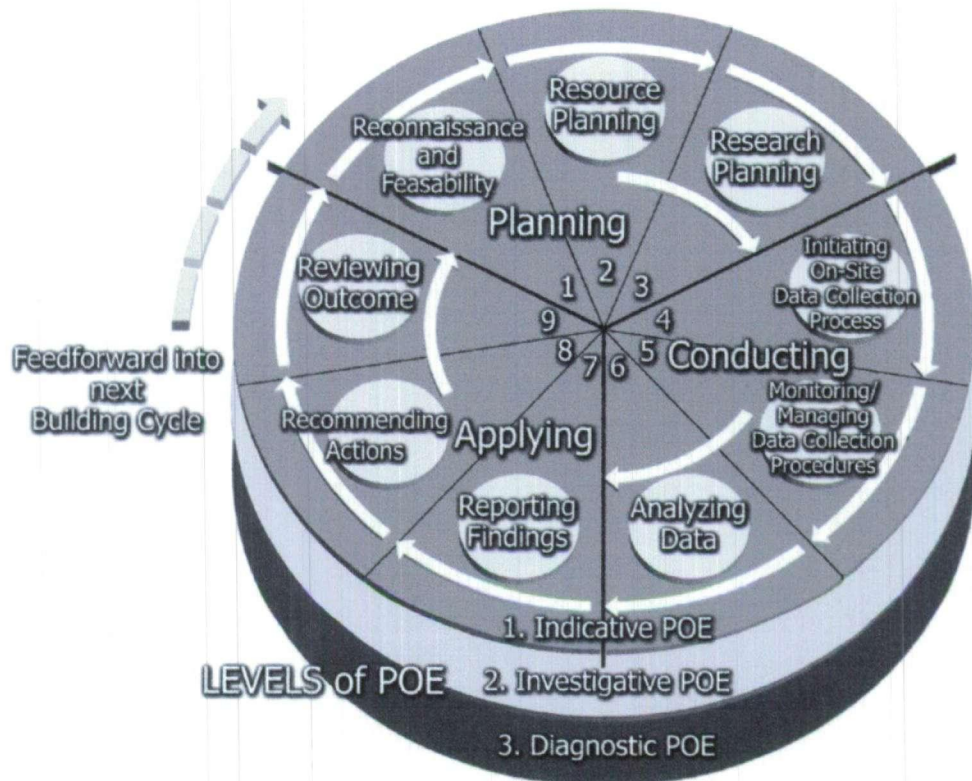


Figure 2.3: Post-occupancy evaluation: evolving performance criteria.
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 Source: Preiser (2001)
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Figure 2.4: Six elements of Indoor Environmental Quality
 Source: <http://www.healthyheating.com>, (2011)

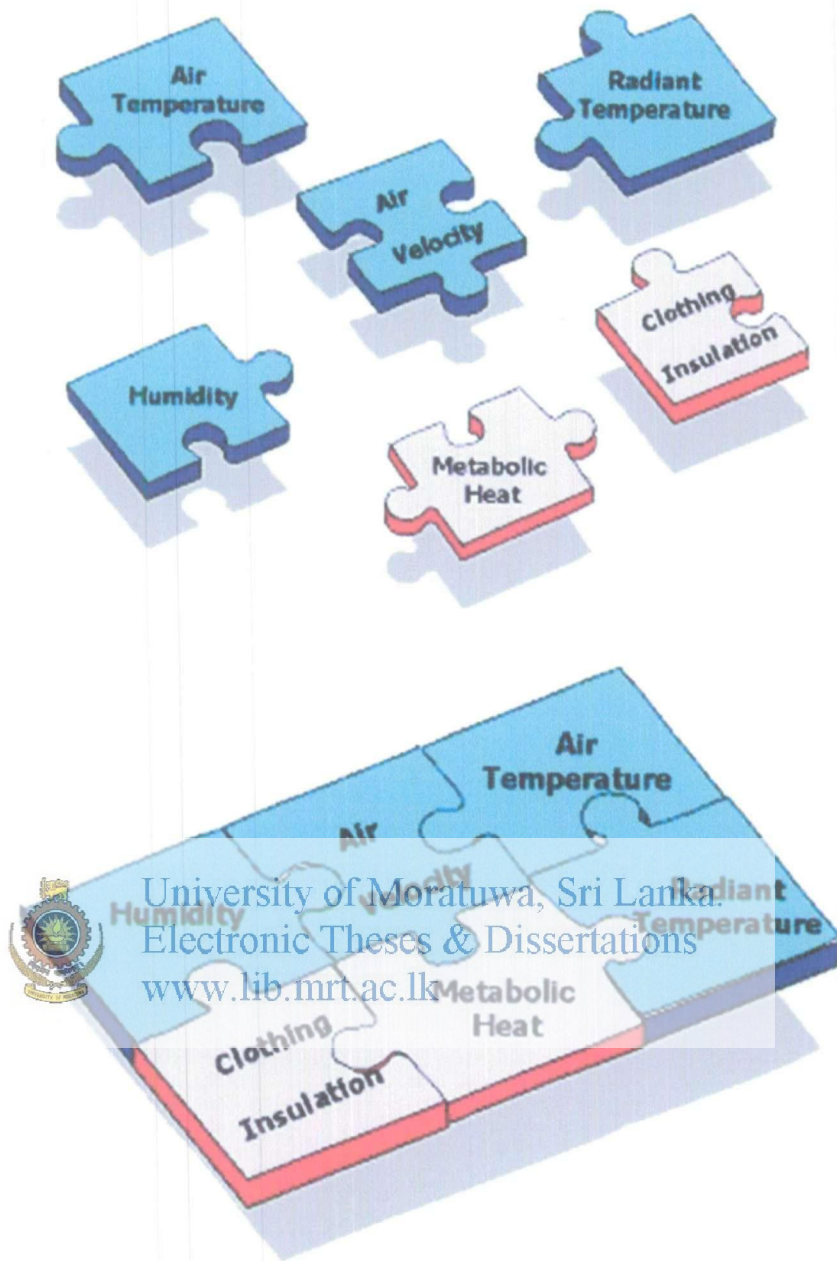


Figure 2.5: the six factors effecting Thermal Comfort

Source: <http://www.hse.gov.uk>

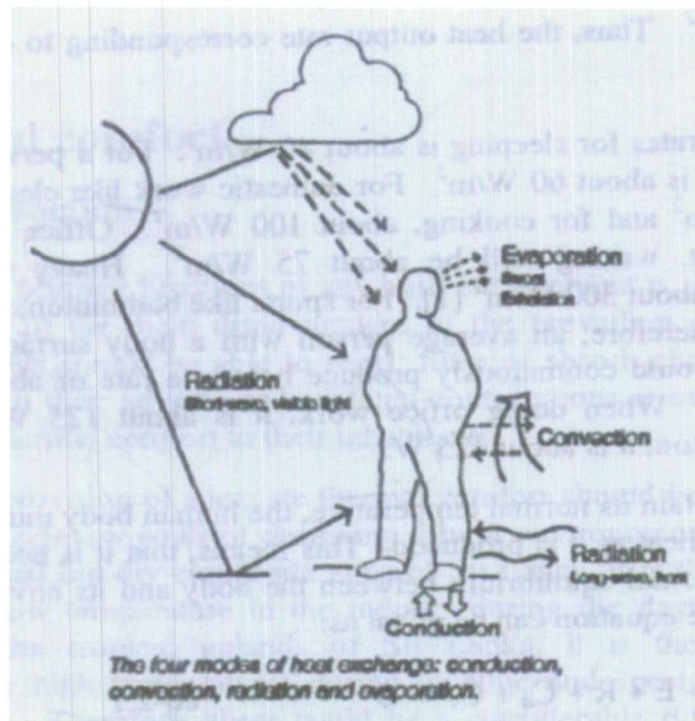


Figure 2.6: Modes of heat exchange between human body and the environment

Source: Jayasinghe (2003)



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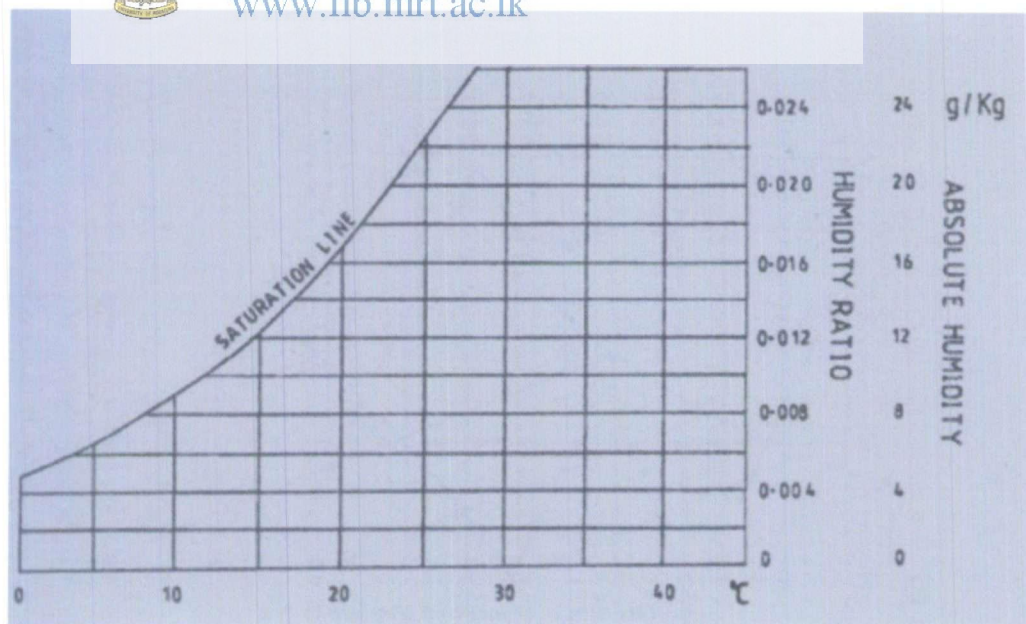
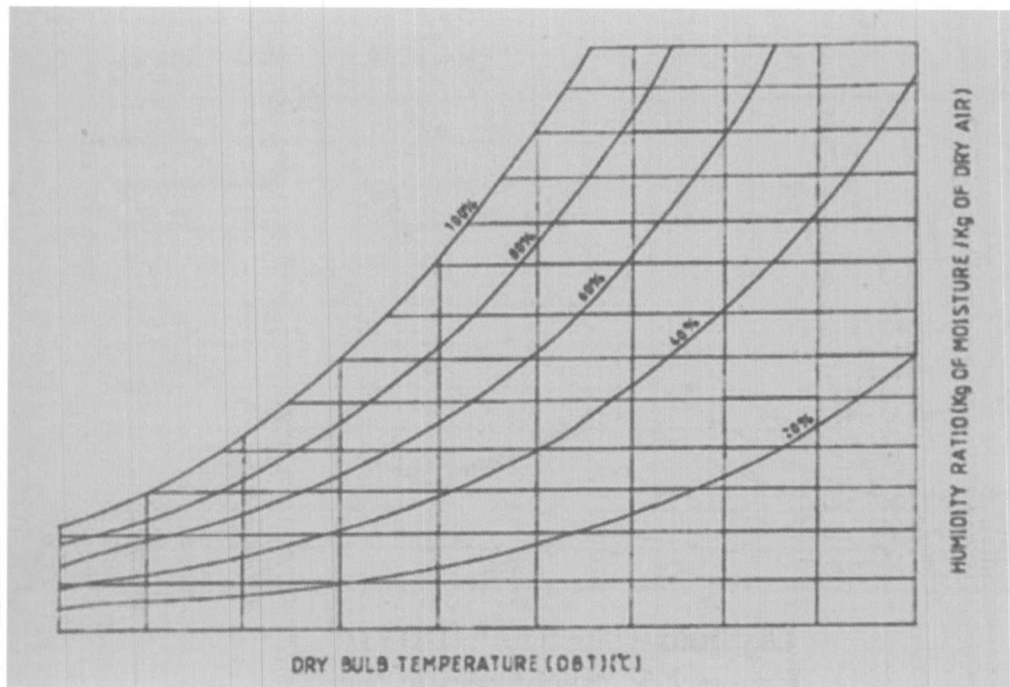


Figure 2.7: Dry bulb temperature and humidity ratio

Source: Jayasinghe and Jayasinghe (2009)



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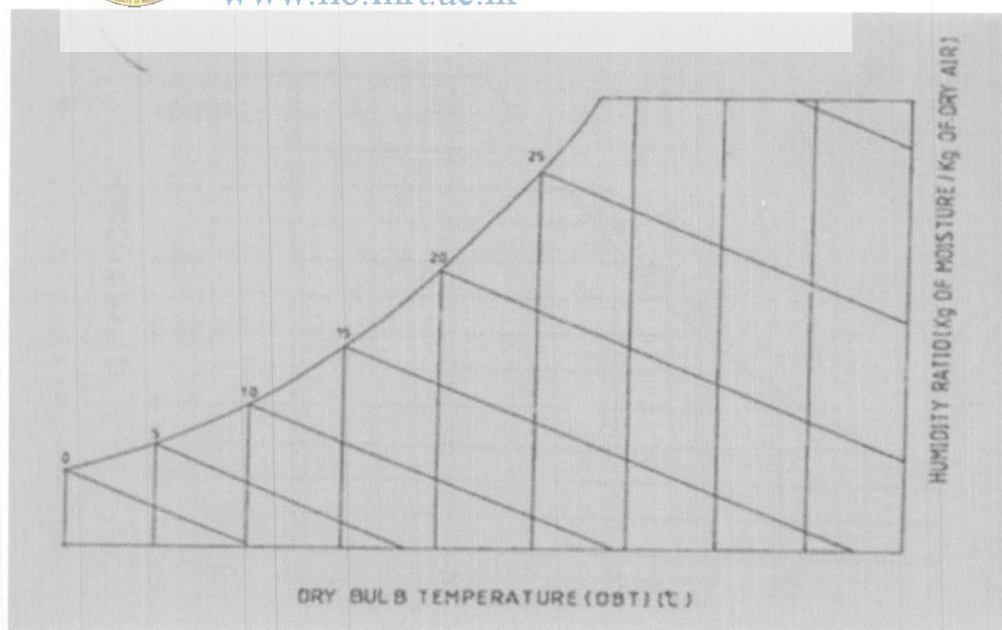


Figure 2.9: Wet bulb temperature represented by inclined line

Source: Jayasinghe and Jayasinghe (2009)

Psychrometric Chart

SI (metric) units
Barometric Pressure 101.325 kPa (Sea level)
based on data from
Carrier Corporation Cat No 794-001, dated 1975



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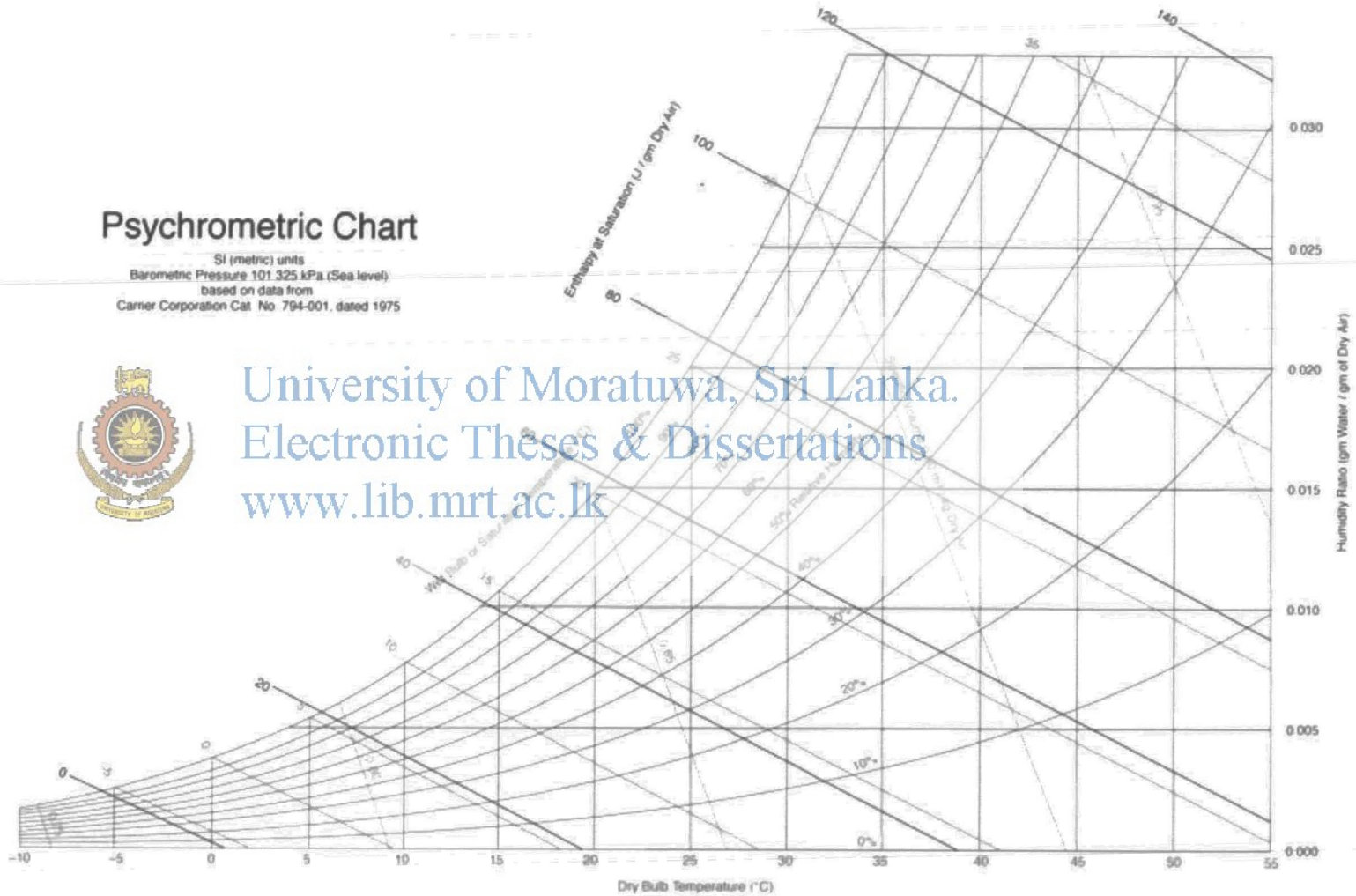


Figure 2.10: Psychrometric Chart
Source: <http://www.av8n.com/physics/axes.htm>

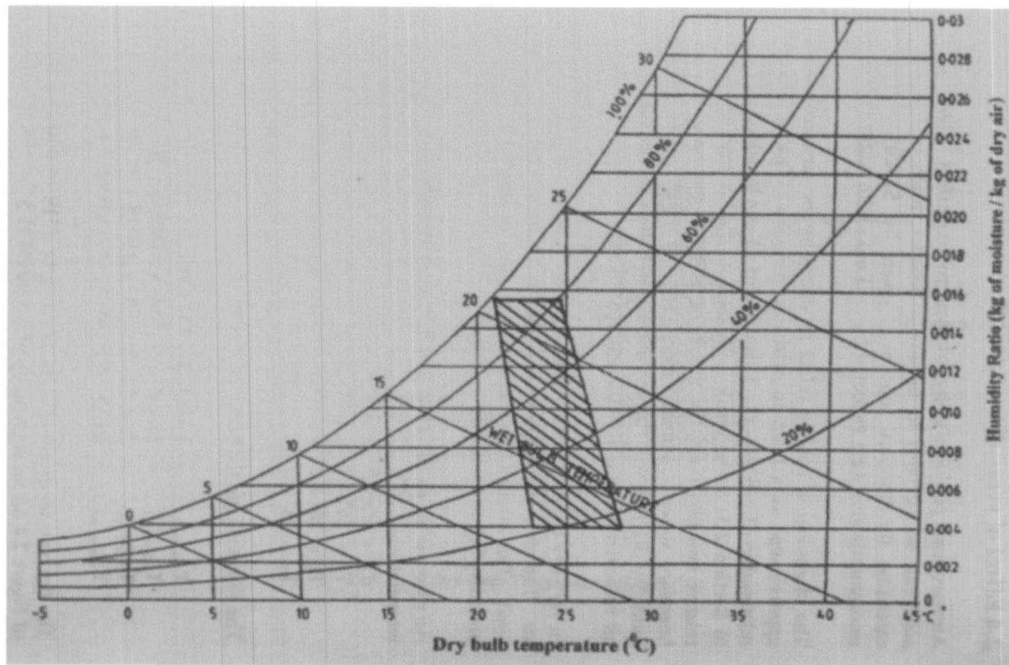


Figure 2.11: Psychrometric Chart with basic Comfort zone for high altitude of Sri Lanka



Source: Jayasinghe (2003)
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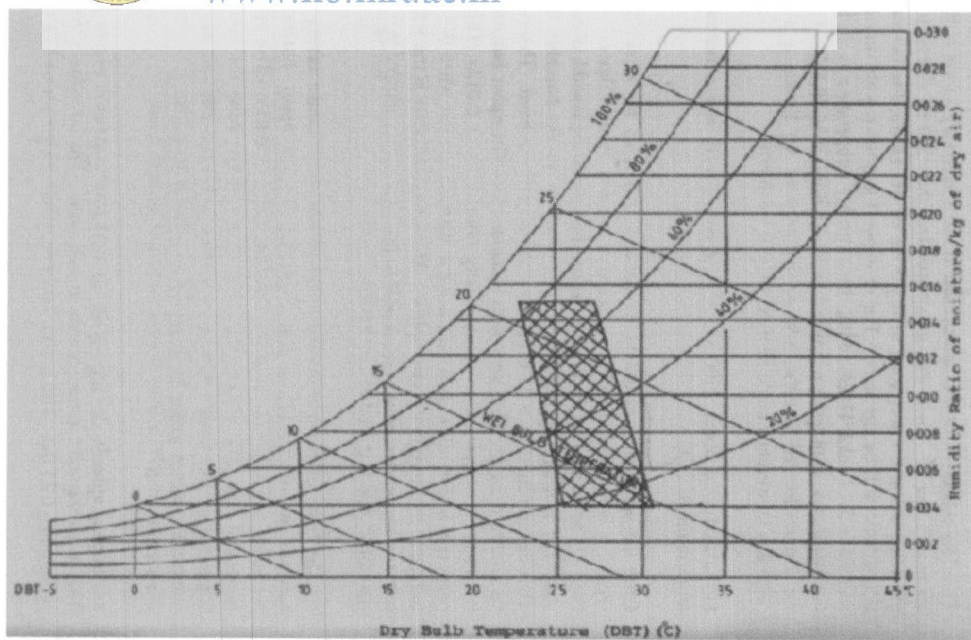


Figure 2.12: Psychrometric Chart with basic comfort zone for low altitude of Sri Lanka

Source : Jayasinghe (2003)

Appendix II

Examples of acceptable operative temperature ranges based on comfort zone diagrams in ASHRAE Standard-55-2004		
Conditions	Acceptable operative temperatures	
	°C	°F
Summer (clothing insulation = 0.5 clo)		
Relative humidity 30%	24.5 - 28	76 - 82
Relative humidity 60%	23 - 25.5	74 - 78
Winter (clothing insulation = 1.0 clo)		
Relative humidity 30%	20.5 25.5	69 - 78
Relative humidity 60%	20 - 24	68 - 75

Table 2.1: Acceptable temperature ranges for relative humidity levels of 30% and 60%

Source: <http://www.ccohs.ca> (2011)

Meteorological station	Mean Annual temperature °C	Neutrality temperature °C	Altitude (h) above mean sea level (m)
Ratmalana	28.6	26.5	h < 100
Anuradhapura	28.1	26.3	h < 100
Bandarawela	20.2	23.9	1400 < h < 1600
Badulla	24.3	25.1	600 < h < 700
Batticallo	28.6	26.5	h < 100
Colombo	26.9	25.9	h < 100
Galle	28.0	26.3	h < 100
Hambantota	27.4	26.1	h < 100
Katunayaka	27.4	26.1	h < 100
Katugastota	25.2	25.4	400 < h < 500
Kurunegala	28.0	26.3	h < 100
Nuwaraeliya	16.9	22.8	1800 < h < 2000
Puttlam	28.9	26.6	h < 100
Ratnapura	28.8	26.5	100 < h < 200
Trincomalle	30.0	26.9	h < 100
Vavunia	27.8	26.2	h < 100

Table 2.2: Annual mean temperature and neutrality temperature for various towns in Sri Lanka

Source: Jayasinghe (2003)

Appendix III

INDOOR AIR QUALITY QUESTIONNAIRE

1. General Information

- 1.1 Age -
- 1.2 Gender -
- 1.3 Job Title -
- 1.4 Department -
- 1.5 Type of working space - Cubicle / Partitioned / Semi partitioned/ Open plan
- 1.6 Usual working hours -
- 1.7 No of years in MAS -

2. State your level of satisfaction on followings:

Please give your short explanation if you're not very satisfied on any of following aspects. Use space shown as ** to state your short explanation.

	Indoor Environmental quality Aspects	Very Satisfied	Satisfied	Neutral	Dissatisfied	Very dissatisfied
2.1	General satisfaction on building					
	**	University of Moratuwa, Sri Lanka. Electronic Theses & Dissertations www.lib.mrt.ac.lk				
2.2	General satisfaction on building					
	**					
2.3	Overall ventilation					
	**					
2.4	Thermal comfort					
	**					
2.5	Level of artificial lighting					
	**					
2.6	Level of natural lighting					
	**					
2.7	Views					
	**					

Sample of English media questionnaire of primary study
for higher ranks of the organization..... cond

2.8	Acoustic Quality					
	**					
2.9	Office furniture					
	Machinery					
	Equipments					
	**					
2.10	Finishing Material used					
	Wall paints					
	Carpets					
	Hard flooring					
	Wood finishing					
	**					
2.11	Cleaness and maintenance					
	**					
2.12	Attention & concentration to work					
	**					
2.13	Attitude & cooperation					
	**					
2.14	Interactive behaviors					
	**					
2.15	Well being					
	**					



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Can you offer any other comments or observations that may be helpful in determining the environmental condition of your workplace?

.....

.....

.....

Thank you for your kind cooperation.....

Sample of English medium questionnaire of primary study
 for higher ranks of the organization

Appendix IV

අභ්‍යන්තර පාරිසරික තත්ව සමීක්ෂණය

(1) පොදුගලික ප්‍රශ්න

- 1.1 වයස :
- 1.2 ස්ත්‍රී/පුරුෂ භාවය :
- 1.3 රැකියාව :
- 1.4 අංශය :
- 1.5 රැකියාවේ නිසි ලදීද? :
- 1.6 මෙම ආයතනයේ කොපමණ කාලයක්ද? :

(2) පහත සඳහන් කරුණු වලට සිංහල භාෂාවෙන් පමණක් පිළිතුරු සපයන්න.
 ඔබගේ සඳහන් සම්පූර්ණ සඳහා ඉහත සඳහන් කරුණු වලට පිළිතුරු සපයන්න. ** ඇති ස්ථානයේ පමණක් පිළිතුරු සපයන්න.

	අභ්‍යන්තර පාරිසරික තත්ව	ඉතාමත් අහඹුදායකයි	අහඹුදායකයි	මධ්‍යස්ථයි	අහඹුදායකයි	ඉතාමත් අහඹුදායකයි
2.1	පොදු සැලසුම් කටයුතු					
	**					
2.2	රැකියාවේ නිසි ලදීද? කාලයක් තිස්සේ					
	**					
2.3	විනාශය					
	**					
2.4	උල්ලස්වීම					
	**					
2.5	විදුලි සහිත ආලෝක තත්වය					
	**					
2.6	ස්වභාවික ආලෝකය					
	**					
2.7	ස්වභාවික වේගය වීදුරු හැනවීමේ සුදුසුකම්					
	**					
2.8	විවිධ වර්ගයේ සවිද්‍ය					

Sample of Sinhala media questionnaire of primary study for operators of the production floors.....cond

ආකාරයේ පරිසරිත පත්‍ර	ලබාගත් ප්‍රතිචාරයන්	පැමිණිලි	විකල්ප	සංකීර්ණ	ලබාගත් ප්‍රතිචාරයන්
2.9 මහා පාලක					
යන්ත්‍ර					
උපකරණ					
**					
2.10 ව්‍යාපෘති/ලේඛන/ලේඛන/ලේඛන/ලේඛන					
නිකුත් ආලෝක					
දිවුල්ලන්					
ව්‍යාපෘති පද ගිවිසුම්					
ලිපි පිටපත්					
**					
2.11 ව්‍යාපෘති/ලේඛන/ලේඛන/ලේඛන/ලේඛන					
**					
2.12 නිතිපතේ ඇති අවධානය					
**					
2.13 නිතිපතේ පිළිබඳ දැනුම/පිළිබඳ දැනුම/නිතිපතේ					
**					
2.14 ජීවිතයේ දෙය ඇති සම්බන්ධතාවය					
**					
2.15 නිතිපතේ අවධානය					
**					

(4) මෙහි නිතිපතේ ස්වභාවය හා බාහිර සම්පර්ශ පිළිබඳ මට්ටම පෙන්වන්න

..... මෙහි සාමාන්‍යය පිළිබඳව

Sample of Sinhala media questionnaire of primary study
for operators of the production floors

Appendix V

ආකාරීකරණ පාරිසරික පත්‍ර විමර්ශනය

- ❖ මෙම සමීක්ෂණයෙහි මූලික ආශ්‍රිත වනුයේ මෙම රැකියාව නියුතු ගොඩනැගිල්ල / කාර්ය කුල ඇති අවස්ථාවේ පරිසරයෙහි තත්වය පිළිබඳ අධ්‍යයනයක් කිරීමයි.
- ❖ මෙහිදී මෙහි උපරිම හා අවමක සහයෝගය සලාකමාපෝජන වන අතර, මෙහි පෞද්ගලිකත්වය උපරිමව ආරක්ෂා කෙරෙනු ඇත.


1. පොත් ස

පහත සඳහන් විස්තූන් පුරවන්න

- 1) මෙහි වියදම:.....
- 2) ස්ත්‍රී/පුරුෂ භාවය:.....
- 3) රැකියාව කරන අංශය:.....
- 4) මෙම ස්ථානයේ කොපමණ කාලයක් සේවයේ යෙදී ඇතිද?:.....
- 5) මෙම ස්ථානයට පෙර පවතින සේවා ස්ථානයක රැකියාවක යෙදී ඇතිද?:.....
- 6) යෙදී ඇත්නම් කොපමණ කාලයක්ද?:.....

2. පොත් ස

පහත සඳහන් කරුණු වලට 'මිඔ'(✓) හෝ 'නැහැ'(X) යන්න සලකා මගින් අදාළ ප්‍රශ්නයට ඉදිරිපයන් සපයා ඇති හැලපෙන පොත්වලට තුල යොදන්න.

- 2.1 රැකියාව කරන ගොඩනැගිල්ල/කාර්ය කුල පවතින "ජ්‍යෙෂ්ඨය" පිළිබඳ විස්තර;
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- (2.1.1) මෙම රැකියාව නියුතු කාර්ය කුල මඟින් රක්ෂායන් දැනෙයිද?
 - (2.1.2) මෙම රැකියාව නියුතු කාර්ය කුල උපකරණ, අවසන් විවිධ මෙලාවල වෙනස් වෙයිද, වෙනස් වෙයි නම් එය මඟින් දැනෙයිද?
 - (2.1.3) මෙම රැකියාව නියුතු කාර්ය කුල උණුසුම් බව හෝ සිසිල් බව අවුරුද්දෙහි විවිධ කාලවල පදිංචිකරණය සමඟ වෙනස් වෙයිද?
 - (2.1.4) එසේ වෙනස් වෙයි නම් එය මඟින් දැනෙයිද?

- 2.2 මෙම රැකියාව නියුතු ගොඩනැගිල්ල/කාර්ය කුල වාතයේ "පහතවන" පිළිබඳ විස්තර;
- (2.2.1) බාහිර පරිසරය කුල වැනි දවසට ඇතිවන පහත ස්වභාවය මෙම රැකියාව නියුතු කාර්ය කුලට දැනෙයිද?
 - (2.2.2) මෙම රැකියාව නියුතු කාර්ය කුලේ මෙම වාතයෙහි විසිලි ස්වභාවයක්, එනම් රැකියාව නියුතු මෙලාවන්හි අධික ප්‍රමාණයක් දැනෙයිද?
 - (2.2.3) එසේ නැතිනම් වාතයෙහි පහතවනක් දැනෙයිද?

- 2.3 මෙම රැකියාව නියුතු කාර්ය කුල පුළුල් වීමට පෙර පිළිබඳ විස්තර;
- (2.3.1) මෙම රැකියාව නියුතු කාර්ය කුලට හොඳින් පුළුල් වෙයිද?
 - (2.3.2) මෙම එයට කැමැතිද?
 - (2.3.3) මෙම සිතන ආකාරයට මෙම රැකියා කාර්යයට හොඳින් පිරිසිදු වාතය ලැබෙයිද?

The Sinhala media questionnaire of detail secondary questionnaire survey

Appendix VI

INDOOR AIR QUALITY QUESTIONNAIRE

The main purpose of this questionnaire is to identify the indoor environmental quality of your workplace.

During this survey we assure your privacy and we request your honest and kind cooperation.

Section 01

Please fill in the blanks

- 1.1 Age:
- 1.2 Gender:
- 1.3 Department:
- 1.4 How long have you been working in this organization:
- 1.5 Have you worked anywhere before joining to this organization:
- 1.6 If, yes please state how many years:

Section 02

Please state "Yes" (✓) or "No" (X) using the correct symbols in the given box.

2.1 Details about the "Temperature" in your working place

- 2.1.1 Do the air, inside your workplace feel warm or hot
- 2.1.2 Does the temperature in the workplace change during different time of the day and do you feel that
- 2.1.3 Do the temperature in the workplace change a lot during hot or cold seasonal variations.
- 2.1.4 If "yes", do you feel that

2.2 Details about the "Humidity" in your working place

- 2.2.1 During the rainy seasons, do you feel the moisture inside your workplace?
- 2.2.2 On days with moderate temperature, do you feel dry inside your workplace, which means do you tend to drink lot of water
- 2.2.3 Or, on days with moderate temperature, do you feel moisture inside your workplace

Appendix VI: The English translation.....cond

2.3 Details about the "Air Velocity" in your working place

- 2.3.1 Is cold or warm air blowing directly into the workspace
- 2.3.2 If "yes", do you like it
- 2.3.3 Do you think that your work place has good cross ventilation

2.4 General Details about the indoor environment about your workplace

- 2.4.1 Is work rate is more speedy in warm days, than cold days
- 2.4.2 Or, is work rate is more speedy to in cold days than warm days
- 2.4.3 Are you satisfied about the indoor environment of your workplace with respect to Temperature, Humidity and Air Velocity
- 2.4.4 Please tick your level of satisfaction in the appropriate box
 - Very satisfied
 - Satisfied
 - Neutral
 - Dissatisfied
 - Very dissatisfied



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Section 03

Please comment your ideas about your indoor environmental quality of your work place in following space.

.....
.....
.....
.....
.....

(Please fill and hand over this form by Monday (14/02/2011)
to MOS Executive, Mr. Kokila Arandara)

Thank you for your kind cooperation

The English translation

