



## Ted J. Kesik

### CURRICULUM VITAE

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Ted Kesik is a professor of building science in the John H. Daniels Faculty of Architecture, Landscape and Design at the University of Toronto. Professor Kesik, a native of Sudbury, Ontario, completed his undergraduate studies in civil engineering at the University of Ottawa in 1983, followed by graduate studies at the University of Toronto from 1983 to 1992. In 1986 he was licensed as a professional engineer and has maintained practice in the areas of building science, building systems integration and landscape infrastructure. Dr. Kesik joined the Daniels Faculty in 1999 where he now teaches in the Architecture and Landscape programs, conducting research and supervising graduate students.

Professor Kesik's research interests include building envelope performance and durability, life cycle assessment, solar buildings and sustainability. Currently, Dr. Kesik is concluding his final segment of research within the Solar Buildings Research Network, a 5-year, \$6.2 million collaborative between 11 Canadian universities funded by the Natural Sciences and Engineering Research Council. Professor Kesik is the author of a comprehensive cost-benefit study of the *Toronto Green Standard* and also co-authored the *Tower Renewal Guidelines* as part of a collaborative research project examining building envelope retrofits of 1960s to 1980s concrete high-rise apartment buildings. He is also affiliated with urban sustainability research projects being conducted through the University of Toronto's Cities Centre. Most recently, Dr. Kesik helped form a team at the Centre for Landscape Research that is establishing a photovoltaic/green roof testing laboratory and protocol to optimize the performance of these symbiotic technologies. Dr. Kesik continues to practice as a consulting engineer to leading architectural offices and progressive government agencies. He is also involved in the development and delivery of continuing education for architects and engineers. Professor Kesik is actively involved in technical organizations and is the author of numerous books, studies, reports and articles related to his areas of research and professional practice.

### Honours and Awards

- *Governor General's Medal in Architecture* (Sustainability Consultant), French River Visitor Centre, Parks Ontario, in collaboration with Baird Sampson Neuert Architects Inc., 2010.
- *Federation of Canadian Municipalities Sustainable Community Awards* (Sustainability and Peer Review Consultant), Newmarket Eco-Homes: Canada's First Occupied Neighbourhood of LEED® Platinum Homes, in collaboration with Baird Sampson Neuert Architects Inc., 2010.
- *Governor General's Medal in Architecture* (Sustainability Consultant), Erindale Hall, University of Toronto at Mississauga, in collaboration with Baird Sampson Neuert Architects Inc., 2006.
- *Canadian Architect Award of Excellence* (Sustainability Consultant), Thomas L. Wells Public School, Toronto District School Board, in collaboration with Baird Sampson Neuert Architects Inc., December 2005.
- *Canadian Architect Award of Excellence* (Sustainability Consultant), French River Visitor Centre, Parks Ontario, in collaboration with Baird Sampson Neuert Architects Inc., December 2005.
- *Canadian Architect Award of Excellence* (Sustainability Consultant), S.W.A.M.P. House, Sauble Beach, Ontario, in collaboration with Velikov + Thun Building Studio, December 2005.
- *Governor General's Medal in Architecture* (Sustainability Consultant), Fleck Residence (Weathering Steel House), in collaboration with Shim-Sutcliffe Architects, Toronto, 2004.
- *Finalist* (Team Member), *St. Mark's Coptic Village International Design Competition*, in collaboration with Ivan Saleff Architect, July 2003.
- *Canadian Architect Award of Excellence* (Sustainability Consultant), Erindale Hall, University of Toronto at Mississauga, in collaboration with Baird Sampson Neuert Architects Inc., December 2002.
- *CSA Certificate of Appreciation* (Codes Development), presented by Pat Keindel, President, Standards, November 2001.
- *3rd Place Award* (Team Member), Erindale College, University of Toronto, *Student Centre Competition*, University of Toronto/OAA, with Daniel Cusimano, Ivan Saleff and Joseph Campitelli, December 1996.
- *R-2000 Certificate of Appreciation*, presented by Hon. Marcel Masse, Minister of Energy Mines and Resources, 1989.

## Academic Degrees

1992	Ph.D.	Department of Civil Engineering, University of Toronto
1986	M.A.Sc.	Department of Civil Engineering, University of Toronto
1983	B.A.Sc. (cum laude)	Department of Civil Engineering, University of Ottawa

## Teaching and Research Appointments

01/1999 to Present	Associate Professor	Faculty of Architecture Landscape and Design, University of Toronto
07/2003 to 06/2004	Associate Dean	Faculty of Architecture Landscape and Design, University of Toronto
09/1990 to 12/1991	Visiting Lecturer	Ontario College of Art and Design (Environmental Design)
12/1998 to 09/1989	Professor	Department of Architectural Science, Ryerson University
1983 -1986	Research Engineer	Centre for Building Science, University of Toronto

## Academic and Professional Affiliations

- Member, Association of Professional Engineers of Ontario (1986)
- Member, American Society of Heating, Refrigeration and Air-Conditioning Engineers (1990)
- Member, Board of Directors, International Building Performance Simulation Association Canada (IBPSA Canada)

## Praxis

### 2011

- Sustainability Consultant, *Stage 3 RFP: New School of Architecture, Laurentian University*, Sudbury, Ontario, on behalf of Levitt Goodman Architects.
- Sustainability Consultant, *Churchill Public School*, Toronto District School Board, on behalf of Baird Sampson Neuert Architects.

### 2010

- Sustainability Consultant, *Kipling Acres Healthcare Facility*, Toronto, Ontario, on behalf of Montgomery Sisam Architects.
- Building Envelope and Sustainability Consultant, *Sisters of St. Joseph Residence*, Toronto, on behalf of Shim Sutcliffe Architects.
- Sustainability Consultant, *Mission 2050: Agricultural Research Facility*, University of Guelph, on behalf of Baird Sampson Neuert Architects.

### 2009

- Principal Researcher, *Tower Renewal Guidelines*, on behalf of City of Toronto, Toronto Atmospheric Fund and Canada Mortgage and Housing Corporation.
- Sustainability and Systems Integration Consultant, *Mining Building, University of Toronto – Interdisciplinary Design Studios, Lassonde Mineral Engineering Program*, on behalf of Baird Sampson Neuert Architects.
- Sustainability Consultant, *West Donlands Housing Project, Toronto Community Housing* on behalf of Baird Sampson Neuert Architects.

### 2008

- Principal Researcher, *Toronto Green Development Standard Cost-Benefit Study*, on behalf of the City of Toronto, Federation of Canadian Municipalities, and Ontario Centres of Excellence.
- Sustainability Consultant, *Ronald McDonald House*, Toronto, Ontario, on behalf of Montgomery Sisam Architects.
- Sustainability Consultant, *Net Zero Impact Sustainability Workshop*, on behalf of the City of Toronto Energy Efficiency Office.
- Systems Integration Consultant, *Bet Ha'am Synagogue*, Portland, Maine, on behalf of Shim Sutcliffe Architects.
- Systems Integration Consultant, *Lowbeer Peachey Residence*, Peterborough, Ontario, on behalf of Baird Sampson Neuert Architects.

### 2007

- Nathan Phillips Square Design Competition (Sustainability Consultant), in collaboration with Baird Sampson Neuert Architects Inc.
- Sustainability Consultant, *Mike Weir Winery*, Niagara on the Lake, on behalf of Shim Sutcliffe Architects.
- Systems Integration Consultant, *David Bowie Residence*, Woodstock, NY, on behalf of Shim Sutcliffe Architects.
- Systems Integration Consultant, *West Donlands Housing Project*, Toronto Community Housing Corporation, on behalf of Baird Sampson Neuert Architects.

### 2006

- Consultant, *Economic Assessment of Basement System Insulation Options*, for Canada Mortgage and Housing Corporation.
- Sustainability Consultant, *Design Review Committee and Advisory Committee for Regent Park Phase 1 Development*, Toronto Community Housing Corporation.
- Sustainability Consultant, *Environmental Dairy 2050*, on behalf of University of Guelph in collaboration with Baird Sampson Neuert Architects Inc.
- Building Envelope Consultant, *Integral House (Dr. James Steward Residence)*, on behalf of Shim Sutcliffe Architects.

## 2005

- Sustainability Consultant, *Technical Review for the Regent Park Phase 1 Design Competition*, Toronto Community Housing Corporation.
- Design Consultant, *9 Hillholme Road Residence*, Toronto, Ontario, in collaboration with Ivan Saleff Architect.
- Sustainability Consultant, *Façade Futures: A Preliminary Review of Issues Facing the EIFS Industry in Canada*, on behalf of EIFS Council of Canada.

## 2004

- Sustainability Consultant, *Thomas L. Wells Public School*, Toronto Board of Education, in collaboration with Baird Sampson Neuert Architects Inc.
- Design Consultant, *Bet Ha'am Synagogue*, Portland, Maine in collaboration with Shim-Sutcliffe Architects.

## 2003

- Systems Integration Consultant, *LightSpace*, 2003 City Spaces Exhibit, Interior Design Show, Toronto, February 13 –16, 2003 in collaboration with Baird Sampson Neuert Architects Inc.
- Design Consultant, *Integral House* (Stewart Residence), Toronto, Ontario on behalf of Shim-Sutcliffe Architects.

## 2002

- Design Consultant, *New Prayer Space*, Adrian Dominican Sisters, Adrian, Michigan, on behalf of Shim-Sutcliffe Architects.
- Design Consultant, *Tollkeeper's Cottage*, Toronto Historical Board, on behalf of Dunker Associates Architects and Planners.
- Design Consultant, *Penzo Residence Landscape*, Toronto, Ontario on behalf of Elias + Associates Landscape Architects.
- Sustainability Consultant, for Johnson Chou Design (WorkPlaySleep.01) and Kathryn Walter (2-4-6 Felt Armchair Prototype), *New Landscape: Design Transforms Canadian Furniture*, Design Exchange, January 29 - May 31, 2002.

## 2001

- Design Consultant, *French River Interpretive Centre*, Parks Ontario, on behalf of Baird Sampson Neuert Architects Inc.
- Design Consultant, *University of Toronto at Mississauga Phase VII Residence*, on behalf of Baird Sampson Neuert Architects Inc.
- Design Consultant, *University of Toronto at Scarborough Residence*, on behalf of Montgomery Sisam Associates Inc. Architects, in joint venture with Baird Sampson Neuert Architects Inc.
- Design Consultant, *Chicago Housing Authority Competition: Mixed-Income Housing for the ABLA Community*, on behalf of Shim-Sutcliffe Architects.
- Design Consultant, *'Motherboard House'* (suburban intensification retrofit with extendable renewable energy upgrades), North York, Ontario on behalf of Ivan Saleff Architect.
- Consultant, *Sustainability Options: Building Condition, Energy and Sustainability Assessment for Toronto District School Board, 155 College Street, Toronto ON* in collaboration with Baird Sampson Neuert Architects Inc.
- Consultant, *Performance Guidelines for Basement Systems and Materials*, Institute for Research in Construction, National Research Council Canada.

## 2000

- Consultant, *Sustainable Technologies Supporting the City of Windsor's Central Riverfront Implementation Plan*, Green Municipal Enabling Fund (GMEF) Application, on behalf of City of Windsor.
- Site Drainage Consultant, *2 Lismore Road*, Toronto, Ontario, Shim Sutcliffe Architects, Toronto.
- Consultant, *Economic Assessment of Basement Systems*, on behalf of Institute for Research in Construction, National Research Council of Canada, Ottawa.
- Consultant, *B149 Codes Interactive CD-ROM Project* (interactive features development for CSA's first "smart" standard), CSA International, Toronto.

## 1999

- Design Consultant, *Fleck Residence*, on behalf of Shim-Sutcliffe Architects, Toronto.
- Design Consultant, *Misery Bay Interpretive Station, Manitoulin Island, Ontario*, on behalf of Dunker Associates Architect.
- Systems Integration Consultant, *Massey College, University of Toronto*, on behalf of Shim-Sutcliffe Architects, Toronto.

## 1998

- Design Consultant, *Island Home, Toronto, Ontario*, on behalf of Dunker Associates Architect.
- Environmental Consultant, *Finnish Pavilion Competition, Expo 2000, Hanover, Germany*, on behalf of Dunker Associates Architect, Toronto, Ontario.
- Consultant, *Feasibility of Innovative Basement Insulation Technologies: A Review of Existing Applications and Opportunities for Innovation*, for OC Celfortec Inc.
- Consultant, *CodeBord™ Air Barrier System Installation Manual*, for OC Celfortec Inc., Division of Owens Corning.

## 1997

- Design Consultant, *Clouston Ravine Schools*, Toronto, Ontario for Michael Kirkland, Architect.
- Design Consultant, *Pirk Residence*, Collingwood, Ontario for Dunker Associates Architect.
- Design Consultant, *Drs. Cusimano Residence*, North York, Ontario for Daniel Cusimano, Architect.
- Consultant, *Fuel Safety Handbook*, for International Approval Service Canada Inc. (Canadian Gas Association).
- Consultant, *Development of Performance Guidelines for Basement Envelope Systems and Materials*, Institute for Research in Construction, National Research Council Canada.

## 1996

- Consultant, *Residential Heat Loss and Heat Gain Calculations*, for Heating, Refrigerating and Air-Conditioning Institute of Canada.
- Consultant, *Canadian Wood-Frame House Construction*, for Canada Mortgage and Housing Corporation.
- Consultant, *IAS Venting Handbook*, for International Approval Service Canada Inc. (Canadian Gas Association).
- Design Consultant, *Guy Coulombe Residence*, Fruitvale, British Columbia with Ivan Saleft Architect.
- Consultant, *Towards Healthy Home Renovations*, with Reid/Foster Associates for Canada Mortgage and Housing Corporation.

## 1995

- Consultant, *Implications of Adopting the National Energy Code for Housing in Ontario*, for Ontario Hydro, Ontario Ministry of Housing, Ontario Ministry of Environment and Energy, the Ontario Natural Gas Association, and CMHC.
- Consultant, *Housing Energy Design with HOT2000 Applications*, for Natural Resources Canada and CHBA.
- Consultant, *CGA 8149 Gas and Propane Appliance Installation Code Handbook, (2<sup>nd</sup> Edition, M95)* for Canadian Gas Approvals Inc.
- Design Consultant, *Dunker Residence*, on behalf of Klaus Dunker, Architect.

## 1994

- Consultant, *Gas Appliance Selection*, for the Ontario Natural Gas Association.
- Consultant, *Assessment of ONHWP Priorities and CMHC Builders' Series Technical Materials*, for the ONHWP and CMHC.
- Consultant, *RFP Development for the Green Home Assessment Software Program*, for the Ontario Ministry of Environment and Energy.
- Consultant, *Builder Technical Training Program*, for the ONHWP and CMHC.
- Consultant, *1994 Housing Energy Profiles*, for Ontario Hydro.
- Consultant, *R-2000 Work Simplification Project*, for Natural Resources Canada and CHBA.
- Consultant, *Environmental Program for YMCA PineCrest Facility*, on behalf of John Hix and Janis Kravis, Architects.

### **1993**

- Consultant, Ontario New Home Warranty Program 1990 Building Code Seminars, *Speaking in Code 2*, with REIC for Ontario New Home Warranty Program.
- Consultant, *Code and Construction Guide for Housing*, 2nd Edition for the Ontario New Home Warranty Program and the Ontario Ministry of Housing.
- Consultant, *Study of Substandard Building Material Imports*, with Clayton Research for Department of Industry and Trade Canada.
- Consultant, *Study of Alternatives to Full Height Basement Insulation*, for the Ontario Ministry of Housing.
- Consultant, *B149 Natural Gas and Propane Appliance Installation Codes Handbook*, for the Canadian Gas Association.

### **1992**

- Consultant, *Green Builder Practices in North America and Northern Europe*, for the Ontario New Home Warranty Program.
- Consultant, *Review of CAN/CSA-F326-M91 Residential Mechanical Ventilation Systems*, for the Ontario Ministry of Housing.
- Consultant, *Study of Residential Ventilation*, on behalf of the Ontario New Home Warranty Program, the Ontario Ministry of Housing, CMHC, Ontario Hydro and the Ontario Ministry of Energy.

### **1991**

- Consultant, *1991 Energy Impact and Cost Effectiveness of Energy Efficiency Improvements in Housing in Ontario*, for The Ontario Ministry of Energy.
- Consultant, *Study of Supplemental Electric Basement Heating*, for Ontario Hydro.

### **1990**

- Mechanical Designer, *Stolar Residence*, Short Hills, New Jersey.
- Consultant, *Code and Construction Guide for Housing*, for the Ontario New Home Warranty Program and the Ministry of Housing.
- Consultant, *Speaking in Code*, Ontario New Home Warranty Program 1990 Building Code Seminars, with REIC for Ontario New Home Warranty Program.

### **1989**

- Consultant, *Residential Energy Profiles Study, Semi-Detached and Row Housing Units*, for Ontario Ministry of Energy.
- Consultant, *Functional Specifications for Extending HOT-2000 Heating/Cooling Load Analysis Capabilities*, for Energy Mines and Resources Canada.
- Mechanical Designer, *Shane Baghai Residence*, Toronto, Ontario.

### **1988**

- Consultant, *Costing and Estimating*, Renovation Contractors' Seminar for the Canada Mortgage and Housing Corporation.
- Consultant, *An Assessment of the Diffusion of R-2000 Technology to Homebuilding in Canada*, with Clayton Research Associates Limited for the Canadian Home Builders' Association.

## SCHOLARLY AND PROFESSIONAL WORK

### Books (including Technical Guides and Handbooks)

- Kesik, Ted and Ivan Saleff. *Tower Renewal Guidelines*, University of Toronto Press, October 2009. (<http://www.daniels.utoronto.ca/trg>)
- Kesik, T. *Natural Gas and Propane Installation Code Handbook* (B149.1HB-05), CSA International, Toronto, January 2005.
- Kesik, T. *Homeowner's Inspection Checklist*, Canada Mortgage and Housing Corporation, November 2000.
- Kesik, T. *Natural Gas and Propane Installation Code Handbook* (B149.1HB-00), CSA International, Toronto, January 2000.
- Lio, M., T. Kesik, et. al. *Code and Construction Guide for Housing* (3<sup>rd</sup> Edition) Ontario Ministry of Housing and Ontario New Home Warranty Program, 1998.
- Kesik, T. *Fuel Safety Handbook*, International Approval Services Canada Inc. (Canadian Gas Association), 1997.
- Kesik, T. and Michael Lio. *Canadian Wood-Frame House Construction* (First Combined Imperial/Metric Edition), Canada Mortgage and Housing Corporation, Ottawa, 1997. [Published in English, French, German, Russian, Spanish and Cantonese.]
- Kesik, T. and M. Lio. (Habitechnica), *Housing Energy Design with HOT2000 Applications*, Federal Panel on Energy R&D, Natural Resources Canada, Ottawa, 1995.
- Kesik, T. and M. Lio. (Habitechnica), *CGA B149 Natural Gas and Propane Appliance Installation Code Handbook* (M95 Edition), CGA Approvals Inc., 1995.
- Andzans, I. and T. Kesik (editors). *International Granite Sculpture Symposium Canada 1994*, Uga Drava, Scarborough, Ontario, 1994.
- Lio, M. and T. Kesik. (Habitechnica), *Code and Construction Guide for Housing* (2<sup>nd</sup> Edition), Ontario Ministry of Housing and Ontario New Home Warranty Program, 1993.
- Kesik, T. and M. Lio. (Habitechnica), *CGA B149 Natural Gas and Propane Appliance Installation Code Handbook* (M91 Edition), CGA Approvals Inc., 1993.
- Kesik, T. and M. Lio. (Habitechnica), *Code and Construction Guide for Housing*, Ontario Ministry of Housing and Ontario New Home Warranty Program, 1991.

### Refereed Papers

- O'Brien, W., A. Athienitis and T. Kesik (2010). *Parametric analysis to support the integrated design and performance modeling of net-zero energy houses*. ASHRAE Transactions. (In press.)
- O'Brien, W., C. Kennedy, A. Athienitis and T. Kesik (2010). *The relationship between net energy use and the urban density of solar buildings*. Environment and Planning: B 37(6): 1002-1021.
- O'Brien, W., Athienitis, A. Kesik, T. 2010. *Thermal zoning and interzonal airflow in the design and simulation of solar houses: a sensitivity analysis*. Journal of Building Performance Simulation. (In press.)
- O'Brien, W., K. Kapsis, A. K. Athienitis and T. Kesik (2010). *Methodology for quantifying the performance implications of intelligent shade control in existing buildings in an urban context*. SimBuild 2010. New York, NY.
- O'Brien, W., A. K. Athienitis and T. Kesik (2010). *Implementation of a management system for multiple design concepts and their performance in a solar house design tool*. eSim 2010. Winnipeg, MB.
- O'Brien, W., A. Athienitis and T. Kesik (2009). *The development of solar house design tool*. 11th International Building Performance Simulation Association (IBPSA) Conference Glasgow, Scotland, July 27-30, 2009.
- O'Brien, W., A. Athienitis and T. Kesik (2009). *The methodology and development of a solar house design tool*. 4th Canadian Solar Buildings Conference, Toronto, ON, June 25-27.
- O'Brien, W., A. Athienitis and T. Kesik (2009). *Roofs as extended solar collectors: practical issues and design methodology*. 12th Canadian Conference on Building Science and Technology, Montreal, QC, May 6-8, 2009.
- O'Brien, W., A. Athienitis and T. Kesik (2008). *Sensitivity Analysis for a Passive Solar House Energy Model*. International Solar Energy Society - Asia Pacific (ISES-AP) Conference Sydney, Australia, Nov. 25-27, 2008.
- O'Brien, W., T. Kesik and A. Athienitis. *The Use of Solar Design Days in a Passive Solar House Conceptual Design Tool*. 3<sup>rd</sup> Canadian Solar Buildings Conference, Fredericton, N.B., August 20-22, 2008.
- Kesik, T. and Luke Stern. *Representation of Performance Indicators for the Conceptual Design of Passive Solar Houses*. eSim 2008 Building Performance Simulation Conference, Quebec City, May 21-22, 2008.
- Kesik, T. *Cost Effective Levels of Thermal Insulation for Basements in Canadian Housing*. 11th Canadian Conference on Building Science and Technology, Banff, Alberta, March 2007.

- Athienitis, A.K., T. Kesik, I.B-Morrison, M. Noguchi, A. Tzempelikos, R. Charron, P. Karava, R. Zmeureanu, J. Love, S. Harrison, Y. Poissant. *Development of Requirements for a Solar Building Conceptual Design Tool*. Canadian Solar Buildings Conference, Montreal, August 20-24, 2004, pp.21-28.
- Kesik, T., D. De Rose and S. Melnichuk. *Hygrothermal Performance Classification Methodology for Wood-Frame Wall Assemblies*. eSim 2006 Conference, University of Toronto, Toronto ON, May 4-5, 2006.
- Kesik, T. *Assessing Sustainability Strategies for Institutional Facilities Using EE4 Screening Tool*. 9th International Building Performance Simulation Conference, Montreal PQ, August 15-18, 2005.
- Kesik, T. and Ivan Saleff. *Differential Durability, Building Life Cycle and Sustainability*. 10th Canadian Building Science & Technology Conference, Ottawa ON, May 12 & 13, 2005.
- Kesik, T. and Ivan Saleff. *Growing a New Skin: The Architectural Challenges of Building Envelope Retrofits*. Proceedings of the 2004 ACSA Northeast Regional Meeting, Syracuse University, Syracuse NY, October 29-31, 2004.
- Kesik, T. and Jose Chavez. *Optimizing the Performance and Sustainability of Institutional Facilities in a Prevailing Cold Climate*. PLEA2004 Proceedings: The 21st Conference on Passive and Low Energy Architecture, Eindhoven, Netherlands, 19 - 22 September 2004.
- Kesik, T. and David De Rose. *Development of a Wall Performance Classification System*, CIB World Building Congress 2004, Toronto ON, May 2 – 7, 2004.
- Kesik, T. and Mark Simpson. *Thermal Performance of Attached Sunspaces for Canadian Houses*, eSim 2002 Conference on Building Simulation, 12-13 September, 2002, Concordia University, Montreal PQ.
- Kesik, T. *Differential Durability and the Life Cycle of Buildings*. ARCC/EAAE 2002 International Conference on Research, 22-25 May, 2002, McGill University, Montreal, PQ.
- Kesik, T. *Durability Is Only Skin Deep*. Association of Collegiate Schools of Architecture (ACSA) 2001 Technology Conference (SKINS: Where Design and Technology Meet), July 12-16, 2001, Austin TX.
- Kesik, T. *Environmental Separator Performance Matrix Methodology*. Proceedings of the International Conference on Building Envelope Systems and Technologies (ICBEST 2001), National Research Council Canada, Institute for Research in Construction, June 27-29,2001, Ottawa ON, Vol. 2, pp. 133-138.
- Kesik, T. and M. Lio. *HOT2.XP: EnerGuide for Houses and the New Housing Market*, Proceedings eSim 2001: Canadian Conference on Building Energy Simulation, Natural Resources Canada, June 13 & 14, 2001, Ottawa ON, pp. 125-131.
- Kesik, T., Swinton, M., Bomberg, M.T., Kumaran, M.K., Maref, W., Normandin, N. *Cost Effective Basement Wall Drainage Alternatives Employing External Insulation Basement Systems (EIBS)*, Proceedings 8th Conference on Building Science and Technology, February 22 & 23, 2001, Toronto ON, pp. 376-392.
- Kesik, T. and G. Papp. *Utilization of High Performance Windows and Glazing for Passive Solar Heating of Houses*, 1998 CSME Forum, May 19-22, Ryerson Polytechnic University, Toronto ON, pp. 420-427.
- Kesik, T. *Basement System Performance*. CSCE 7th Conference on Building Science and Technology, March 20 & 21, 1997, Toronto ON, pp. 227-241.
- Kesik, T. and K.A. Selby. *A Knowledge Based Systems Approach to the Assessment of Building Performance*. Second Canadian Conference on Computing in Civil Engineering, August 5-7, 1992, Ottawa ON, pp. 469-480.
- Kesik, T. and M. Lio. *A Methodological Framework for the Development of Energy Efficient Housing Policy*, Energy Efficient Builders' Association Conference, Portland, Maine, 1988.
- Kesik, T. and K.A. Selby. *Automating Construction Estimating*, Proceedings of the Canadian Society of Civil Engineers Annual Conference, May 16-18, 1990, Hamilton ON, Vol. II, Book 1, pp. 150-160.
- Kesik, T.J., and K.A. Selby. *Toward an Integrated Approach to the Management of Construction*, Proceedings of the Canadian Society of Civil Engineers Annual Conference, May 12-16, 1986, Toronto ON, Volume 1, Session 11.

## Major Technical Studies

- Kesik, T. and Anne Miller. *Toronto Green Development Standard Cost-Benefit Study*. Funded by City of Toronto, Federation of Canadian Municipalities and Ontario Centres of Excellence. Final Report October 2008. ([http://www.toronto.ca/planning/environment/pdf/cost\\_benefit\\_Oct2008.pdf](http://www.toronto.ca/planning/environment/pdf/cost_benefit_Oct2008.pdf))
- Kesik, T. *Economic Assessment of Basement Insulation Options*, on behalf of Canada Mortgage and Housing Corporation, Ottawa, Final Report, November 2006.
- Swinton, M. C. and T. Kesik. *Performance Guidelines for Basement Systems and Materials: Final Report*, Institute for Research in Construction, National Research Council Canada, Ottawa, October 2005. (<http://www.nrc-cnrc.gc.ca/eng/ibp/irc/rr/rr199/index.html>)

- Kesik, T. and Kathryn Seymour. *Practical Measures for the Prevention of Basement Flooding Due to Municipal Sewer Surcharge: Final Report*. Canada Mortgage and Housing Corporation, 2003. (*External Research Program Research Report*)
- Kesik, T. *Economic Assessment of Basement Systems*, Contract Report - Institute for Research in Construction, National Research Council Canada, Ottawa, March 2000.
- Kesik, T. *The Assessment and Applicability of the EnerGuide for Houses Procedures and Guidelines for the New Housing Market*, for Natural Resources Canada, Ontario Ministry of Energy, Science and Technology and EnerQuality Corporation, December 1999.
- Kesik, T. *Economic Assessment Issues Relating to Residential Basement System Performance*, Contract Report - Institute for Research in Construction, National Research Council Canada, Ottawa, 1997.
- Lio, M. and T. Kesik. *Implications of Adopting the National Energy Code for Housing in Ontario*, for Ontario Hydro, Ontario Ministry of Housing, Ontario Ministry of Environment and Energy, the Ontario Natural Gas Association, and CMHC, 1995.
- Lio M., and T. Kesik. *1991 Energy Impact and Cost Effectiveness of Energy Efficiency Improvements in Housing in Ontario*, for Ontario Ministry of Energy, 1991.
- Lio M., and T. Kesik. *An Assessment of the Diffusion of R-2000 Technology to Homebuilding in Canada*, with Clayton Research Associates Limited for the Canadian Home Builders' Association, 1988.
- Lio, M. and T. Kesik. *Study of Residential Energy Profiles*, Ontario Ministry of Energy, 1987.

## Other Publications

- Swinton, M.C. and T. J. Kesik. *Site Grading and Drainage to Achieve High-Performance Basements*. Construction Technology Update No. 69, Institute for Research in Construction, Ottawa, April 2008.
- Swinton, M.C. and T. J. Kesik. *Options in the Selection of Materials for Basement Construction*. Construction Technology Update No. 70, Institute for Research in Construction, Ottawa, April 2008.
- Kesik, T. and Helga Wiens. *Façade Futures: A Preliminary Review of Issues Facing the EIFS Industry in Canada*, Research Report for EIFS Council of Canada, Fall 2005.
- Kesik, T. and S. Adams. *Tile Façade Systems Feasibility Study*. Report for Arriscraft International, October 2003.
- Kesik, T. and Pierre Belanger. *Technical Brief: Washburne Avenue Garden Courts and Roosevelt Road Garden Courts, New Mixed-Income Housing for the ABLA Community*, on behalf of Shim-Sutcliffe Architects for Chicago's Design Competition for Mixed-Income Housing, June 2001.
- Kesik, T. *Sustainability Options: Building Condition, Energy and Sustainability Assessment, Toronto District School Board, 155 College Street, Toronto ON*, prepared for Baird, Sampson, Neuert Architects Inc., May 2, 2001.
- Kesik, T. *Feasibility of Innovative Basement Insulation Technologies: A Review of Existing Applications and Opportunities for Innovation*, for OC Celfortec Inc., Division of Owens Corning, March 1998.
- Kesik T. and M. Lio. *CodeBord™ Air Barrier System Installation Manual*, for OC Celfortec Inc., Division of Owens Corning, May 1998.
- Lio, M. and T. Kesik. *Residential Heat Loss and Heat Gain Calculations*, for Heating, Refrigerating and Air-Conditioning Institute of Canada, 1996.
- Kesik, T. *IAS Venting Handbook*, for International Approval Services Canada Inc. (Canadian Gas Association), 1996.
- Kesik, T. *The Simple House*, Solplan Review, Vancouver, B.C., Vol. No. 60, January 1995.
- Kesik, T. and M. Lio. *1994 Housing Energy Profiles*, for Ontario Hydro.
- Kesik, T. *Environmental Program for YMCA PineCrest Facility*, with John Hix and Janis Kravis Architects, 1994.
- Lio M., and T. Kesik. *Study of Alternatives to Full Height Basement Insulation*, Ontario Ministry of Housing, 1993.
- Lio M., and T. Kesik. *Green Builder Practices in North America and Northern Europe*, for the Ontario New Home Warranty Program, 1992.
- Lio M., and T. Kesik. *Review of CAN/CSA-F326-M91 Residential Mechanical Ventilation Systems*, for the Ontario Ministry of Housing, 1992.
- Lio M., and T. Kesik. *1991 Study of Residential Ventilation*, for Ontario New Home Warranty, Ontario Hydro, Ontario Ministry of Housing, Ontario Ministry of Energy and CMHC.
- Kesik, T. and M. Lio. *Study of Supplemental Basement Heating Practices*, for Ontario Hydro, Toronto, 1991.
- Lio M., and T. Kesik. *Residential Energy Profiles Study, Semi-Detached and Row Housing Units*, for Ontario Ministry of Energy, 1989.
- Kesik, T. and M. Lio. *Final Report and Commentary on the R-2000 Program Quality Assurance, Quality Assurance Audit and Contract Audit Procedures*, with RIS Ltd. for Energy Mines and Resources Canada, 1989.

- Kesik, T. *Functional Specifications for Extending HOT2000 Heating/Cooling Load Analysis Capabilities*, for Energy Mines and Resources Canada, 1989.
- Kesik, T. and M. Lio. *Banking on Energy Efficiency, 8 Case Studies of Energy Conservation in Major Government Facilities for the Ontario Ministry of Energy*, 1986.

## Other Media

- Kesik, T. *Enclosure Detailing*, Canadian Architect, November 2002, Volume 47, Number 11, pp. 56-57.
- Kesik, T. *Enclosure Durability*, Canadian Architect, September 2002, Volume 47, Number 9, pp. 48-49.
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[http://www.cdnarchitect.com/asf/arch\\_science\\_forum.htm](http://www.cdnarchitect.com/asf/arch_science_forum.htm)
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