

Kevin D. Knight
Associate Director, Building Envelope Commissioning

Architectural Testing, Inc.
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PROFESSIONAL SUMMARY

Positions

- Architectural Testing, Inc. – Associate Director, Building Envelope Commissioning 2008 – Present
- Retro-Specs Consultants Ltd. – President 1985 - Present
- Journal of Architectural Coatings – Contributing Editor 2005 - Present
- KTA Building Services Group – Senior Consultant 2003 – 2007
- Power Plastics Ltd. – Project Manager 1983 – 1985
- Hoverking Ltd. – Partner 1979 - 1983

Building Science

- Over 20 years experience in building envelope technology, both in the field and as a researcher and trainer, with extensive experience in the development and overseeing of building envelope commissioning, inspection, and testing protocols.
- Involved in numerous commercial construction projects, with a wide range of services including design concept and plan and specification review, senior advisor, senior consultant, project manager, diagnostic review and troubleshooting.
- Instrumental in development of a generic specification for the Commissioning of Building Envelope systems.
- Co-Inventor of the Air-Sure™ Leak Detection equipment and method for testing the airtightness of construction details in single-ply membranes, both of which are Patent Registered in Canada and the United States.
- Development of airtight detailing in post and beam and thermal panel construction. This project was undertaken in conjunction with the Industrial Research Assistance Program (IRAP) of the National Research Council (NRC) to improve airtight details and junctions of components.
- Canada Mortgage and Housing Corporation (CMHC) Case Studies of Repair, Retrofit and Renovation. High humidity was causing envelope degradation and mold growth. The project was to implement cost-effective measures to mitigate these problems.

Research Projects and Papers

- Testing of Air Barrier Membranes in Wall Assemblies, Retro-Specs Consultants Ltd., (K. D. Knight, Project Manager), Canada Mortgage and Housing Corporation (CMHC), 2004.
- Air Barrier and Building Envelope Environmental Impact Study, by K. D. Knight, J. F. Sharp and B. G. Phillips, submitted to Manitoba Energy and Mines, 1997.

Technical Writing and Publications

- “Procedures for Commissioning Building Envelopes,” K. D. Knight, J. A. Runkle and B. J. Boyle, *2008 Symposium on Building Envelope Technology*, Roofing Consultants Institute (RCI), October 2008.
- White paper: “The Advantages of Proglaze ETA Pre-Engineered Air Barrier Transition Window-Wall Interface Assembly,” K. D. Knight and B. J. Boyle, Tremco Global Sealants Division, September 2008.
- “Commissioning Airtight Building Enclosures: The Importance of the Pre-Construction Phase Commissioning Process,” K. D. Knight and B. J. Boyle, *Journal of Building Enclosure Design*, Building Enclosure Technology and Environment Council (BETEC) of the National Institute of Building Sciences (NIBS), Winter 2007.
- “Commissioning the Building Envelope for Compliance with Part 5 of the National Building Code of Canada,” K. D. Knight and B. J. Boyle, *7th Edition Online Newsletter Articles*, Building Envelope Forum, January 2007.
- “Great Expectations,” Kevin D. Knight, *Journal of Architectural Coatings*, Volume 1/Number 2 April 2005, Technology Publishing Company, 2005.
- “Designing an Air Barrier for Building Envelopes,” K. D. Knight and B. J. Boyle, *SSPC 2003 Technical Presentations* (excerpt in *Journal of Protective Coatings and Linings November 2003*), SSPC Society for Protective Coatings, 2003.
- “A New Protocol for the Inspection and Testing of Building Envelope Air Barrier Systems,” K. D. Knight, B. J. Boyle, and B. G. Phillips, *Performance of Exterior Building Walls STP 1422*, American Society for Testing and Materials (ASTM), 2002.
- “Guidelines for Delivering Effective Air Barrier Systems,” K. D. Knight and B. J. Boyle, *Continuing Education for Architects*, Canada Mortgage and Housing Corporation (CMHC), 2001.
- “Quality Assurance for Building Envelope Air Barrier Systems,” K. D. Knight, B. J. Boyle and B. G. Phillips, *Buildings VIII*, American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE), 2001.
- “Air Barriers: Building Essentials,” R. Dalglish and K. Knight, *Construction Canada*, November 1999, 1999.
- “Prescriptive Testing of Air Barrier System Performance,” K. D. Knight and J. F. Sharp, *Energy Manager Conference*, 1997.



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- "Newly Developed Means of Testing Air Barriers During Construction: The Method and The Industry," K. D. Knight and M. Samuda, *Fourth Energy-Efficient New Construction Conference*, 1996.
- "Inside Story - A Guide to Air Barrier Systems," Retro-Specs Ltd., International Brotherhood of Painters & Allied Trades Local 739 and Retro-Specs Ltd., 1992.

INDUSTRY ORGANIZATIONS

- Building Environment and Thermal Envelope Council (BETEC), Board Member
- Underwriters Laboratories of Canada (ULC), Committee on Air Barrier Materials and Systems
- Air Barrier Association of America (ABAA), Founding Member
- American Society for Testing and Materials (ASTM), E6 Performance of Buildings Subcommittee Member
- Society of Protective Coatings (SSPC)
- Manitoba Building Envelope Council (MBEC)