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SPRING TRAINING 2026
Advanced Building Science
April 19-21, 2026 • Mono, ON

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Amid a historic housing crisis, we collectively possess the expertise to utilize practical building science to enhance efficiency, reduce carbon emissions, and improve resiliency while promoting affordability and access to housing for Canadians. Through applied ingenuity and building science, we can elevate construction quality and occupant satisfaction, lower build costs, and streamline the regulatory and permit application process. We invite you to join us at the Advanced Building Science Spring Camp 2026 (our 12th year!) to reimagine the future, assess new codes and standards challenges, and reinforce partnerships.

Gord Cooke, Andy Oding, & Mark Rosen

SUNDAY, APRIL 19

7:00-10:00 PM — **Meet & Greet Hospitality + Registration**

MONDAY, APRIL 20

7:00-8:00 AM — **Breakfast** - Restaurant 85 (for those staying at Hockley)

8:00-8:30 AM — **Welcome** - Gord, Andy, Mark, Rachel

9:15-10:15 AM — **Applying Building Science to Get it Right Now and Forever (Part 1)**
Dr. John Straube returns to building science camp with a special take on the science that identifies costly defects before they happen – now and in the future. This leading forensic building scientist, will present the most prevalent and costly defects and how they relate to creating resilient structures that weather gracefully.

10:15-10:30 AM — **Break**

10:30 AM-12:15 PM — **Applying Building Science to Get it Right Now and Forever (Part 2)**
Dr. John Straube – Continued

12:15-1:15 PM — **Lunch**

1:15–2:30 PM — **We Talk About Thermal Comfort – Now Let's Apply It to Our Homes**
Robert B., Alexis M., and Tracy A. apply ASHRAE 55 Thermal Comfort analysis to an actual home in various Canadian Climate Zones. You will be participating in groups to apply engineering principles and tools to a REAL HOUSE in your climate ZONE! Where to start. How to do it. What tools to use

2:30–3:15 PM — **Low Load Homes (Efficient or Small) Challenges and Solutions**
Gord and guests will tackle practical HVAC solutions to the challenges of traditional forced air systems in homes with ever lower heating and cooling loads. There are alternative solutions. Let's look at what the future designs might look like.

3:15–3:30PM — **Break**

3:30-4:30 PM — **Resilience, Carbon & Retrofits**
Carbon reduction, climate resilience, and high-performance retrofits are rapidly reshaping the residential sector. Join Sonja W., Dan S., Lynne S., and Aidan B. for updates from three key initiatives: the Resilient Homes Task Force, the Emissions and Resilience Working Group, and the Towards Net Zero Renovations project. Discover the latest developments and what they mean for the future of housing in Canada.

4:30–5:00 PM — **Canadian Wood Council Guide**
Mass timber buildings are transforming the way we build – but with new materials come new challenges. This session will explore how moisture risks develop in mass timber construction and how to take a proactive approach to moisture management. You will get practical insights into effective protection strategies for safe and timely moisture management plans.

5:00 PM — **Wrap-Up** - Gord, Andy, Mark, Rachel

6:30 PM — **Supper**

7:30-9:00 PM — **Open Mic: Building Science Unplugged**

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TUESDAY, APRIL 21

7:00-8:00 AM — **Breakfast** - Restaurant 85 (for those staying at Hockley)

8:00-8:15 AM — **Welcome Back** - Gord, Andy, Mark, Rachel

8:15–9:45 AM — **How Robots Might Build Your Next Home**
What can Canada's construction industry learn from a leading global lab in architecture & robotics? Dr. Loveridge will highlight innovative research at ETH, where robotics & digital fabrication are reshaping how buildings are designed & built. Tyler B. will share Canadian insights already transforming construction & what the next wave of innovation could mean for the industry.

9:45-10:00 AM — **Break**

10:00–11:00 AM — **Electrification and Grid Loads: We're Making Progress!**
Finally getting the electrification/grid thing figured out. New research, electrification codes and technology that brings the complexity and cost of grid-ready homes down (and how to apply it with your contractors, community designers and utility partners) with Miyoko O. and Wil B.

11:05–11:15 AM — **The Future from Our Friends & Housing Program Developers in Ottawa**
As building codes & environmental priorities shift, so do high performance housing programs. Tracey K. will provide insight into the federal plan for housing performance programs, industry outreach & collaboration opportunities.

11:20–11:45 AM — **Embodied Carbon & the Homebuilding Industry: Are We Still Moving Ahead?**
The 2030 National Building Code plans to release the parameters around embodied carbon in homes for the first time. How do we prepare? What advocacy & technology are needed? Brought to you by Chris M. & Alexis M.

11:45 AM-12:15 PM — **Panel: A Thought-Provoking NAIMA Study Stirs Up a Good Debate!**
Does a "Carbon Debt Approach" make sense? Let's have the experts offer their thoughts BEFORE we formulate the 2030 NBC/NECB Embodied Carbon metrics with Gary S., Chris M., Mark R., Natasha J. and Alexis M.

12:15–1:30 PM — **Lunch**

1:30–2:30 PM — **Hygrothermal Geek-Out: Moving Past the Dew Point Discussion**
Dew point analysis has been used to assess condensation risk in wood-framed walls, but it overlooks important factors. Trevor T. will explore the nuances of moisture performance in greater detail illustrating these concepts using hygrothermal modeling & monitoring of wall and roof systems in cold climates.

2:30–2:45 PM — **Break**

2:45–3:15 PM — **A presentation of stunning luxury homes and the building science challenges they present.**
We're fortunate to have local architects show us what they've been working on. You'll recognize & appreciate the challenges and help explore solutions.

3:15–4:00 PM — **Phase Change Materials Are Now in Canadian Homes!**
Energy & thermal storage technologies are ready to be applied NOW, enhancing grid load leveling, heat pump operation, hot water service & much more. Learn the basics in preparation for applying this new tech with Michael R.

4:00-4:15 PM — **Wrap-Up** - Gord, Andy, Mark, Rachel

Aidan Brookson, MASc
Research Director, Volta Research Inc.

Dan Sandink
Senior Director, Resilience Programs, ICLR

Gary Sharp
President & Consultant, Sharp Home Technologies

Lynne Strickland
Director, Initiatives, Net Zero Housing, Canadian Home Builders' Association National

Robert Bean, P.Eng.
ASHRAE Fellow and Distinguished Lecturer

Sonja Winkelmann, EP
Senior Director, Net Zero Energy Housing, CHBA

Tyler Bennett, P.Eng.
Senior Manager, Planning & Operations, Stelumar

Wil Beardmore
President & Founder, Bluewater Energy

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Andrew Oding, MEA, BSSO, RASDT

Vice President, Building Knowledge Canada

Andrew brings insightful and real-life practicality to building science principles and their in-field applications. As a recognized building science trainer by the Government of Canada-Office of Energy Efficiency, Building Science Specialist, and HVAC designer and commissioner, Andrew is working closely with the development of new building codes and advanced building programs across North America.

Gord Cooke, P.Eng.

President, Building Knowledge Canada

Few professionals in Ontario can match Gord Cooke's broad knowledge of the inner workings of a house. Highly regarded in the Ontario homebuilding industry, Gord is a professional engineer, trainer, author, educator, and industry consultant with over 35 years of experience in the low- and high-rise residential building and renovation industry.

Mark Rosen, AIBC, OAA, M.ARCH, CACEA MEA

Director of Building Science, Building Knowledge Canada

Mark is a well-known professional architect, Registered Energy Advisor, and building science consultant and is a partner and the Director of Building Science at BKC. Mark has always been passionate about creating buildings that perform exceptionally well. He has helped develop software tools, sits on several advisory boards, and continues to actively lead the industry toward positive change.

Alexis Minniti, MASc, P.Eng.

Sustainability Specialist & Carbon Lead, Building Science Services, Building Knowledge Canada

Alexis Minniti is a Sustainability Specialist at Building Knowledge Canada focused on building science and sustainable construction practices. She leads carbon modeling using the MCE2 tool and works with national builders on decarbonization strategies. Alexis recently earned her Master's in Civil Engineering from the University of Waterloo.

Tracy Archer, BCIN, REA

Manager, HVAC Design Services Team, Building Knowledge Canada

Tracy brings a wide array of experiences to the BKC team, having worked as a drafter, HVAC designer and is a Certified EA. With over 15 years of professional experience, her background spans multiple stages of the building process—from contracts and estimating to permit submissions & site inspections—giving her a well-rounded understanding of what BKC's builders need. In her role as a manager, Tracy focuses on building strong client relationships and leading her team to consistently deliver work they are proud of.

KEYNOTE SPEAKERS

Dr. John Straube, Ph.D., P.Eng.

Principal, Senior Energy and Sustainability Specialist, RDH Building Science Laboratories

A prominent figure throughout North America, Dr. Straube is an influential and driving force in the industry. He has broad experience in the building industry and is considered an international expert, having been involved in the design, construction, repair, and restoration of buildings worldwide.

Dr. Russell Loveridge, NDS, M.ARCH, Ph.D.Sci

Managing Director, NCCR Digital Fabrication (Zurich, Switzerland)

Russell Loveridge is Managing Director of the Swiss National Centre of Competence in Research Digital Fabrication, with a background in engineering, architecture and advanced degrees from ETH Zurich and EPF Lausanne. He has professional experience in architecture and construction, with research focused on advanced fabrication technologies and sustainable building methods. He leads a multidisciplinary team of over 120 experts, guiding cutting-edge research at the intersection of digital design and construction.

SPEAKERS

Chris Magwood

Manager, Carbon-Free Buildings, Rocky Mountain Institute

Chris works with the Embodied Carbon Team in the Carbon Free Buildings Program at RMI. In 2019, he helped to establish Builders for Climate Action and has been leading the development of the BEAM carbon estimator tool for low rise construction. Chris has authored seven books on sustainable building and is co-editor of the Sustainable Building Essentials series from New Society Publishers.

Chris Schumacher, MASc

Principal, Senior Building Science Specialist, RDH Building Science Laboratories

Chris Schumacher is an expert in building monitoring, enclosure systems, and building systems testing. He has led monitoring design and analysis for research and demonstration projects in both laboratory and field settings worldwide. At RDH, Chris conducts field investigations and retrofit assessments, with a particular interest in historic buildings. He also supports research through RDH's Building Science Laboratories, focusing on product testing, development, and innovative solutions to industry challenges.

Michael Ridler

Owner / General Manager, Eden Energy Equipment

Michael Ridler is Owner and General Manager of Eden Energy Equipment Ltd., a leading Canadian distributor of high-efficiency HVAC and hydronics solutions. With over 20 years in the industry, he drives technical innovation, field support, and training on heat pumps, boilers, and hydronic systems, and actively elevates workforce expertise across the built environment. His insights bridge technical excellence with practical industry impact.

Miyoko Oikawa

Senior Manager, Stakeholder Liaison and Technical Services, OHBA

Miyoko Oikawa is an industry collaborator who is focused on energy reduction strategies to achieve high performance buildings. She has expertise in a wide range of project phases and is knowledgeable in areas related to construction technology, energy, sustainability, and quality assurance. She aims to create opportunities to guide the construction industry towards a more resilient future.

Natasha Jeremic, MASc, P.Eng., LEED GA, WbLCA AP

Manager, Codes and Standards - Sustainability, CWC

Natasha is a Professional Engineer dedicated to sustainability and reducing carbon in the built environment through innovative design and low-carbon materials, with experience in structural engineering and building envelope consulting. She brings a holistic approach to high-performance building design, using strong analytical and problem-solving skills to deliver practical solutions that drive meaningful change in the AEC industry.

Tracey Kutney

Deputy Director - Homes and Communities Division, NRCan

Tracey is a Professional Engineer with over 20 years of experience in the energy sector, working in the Office of Energy Efficiency at Natural Resources Canada where she leads the Housing Division and its programs, including EnerGuide and ENERGY STAR for New Homes. She also brings hands-on renovation experience, having lived primarily in older homes.

Trevor Trainor, MSc., MASc

President & Building Science Specialist, Bawating Building Science

Trevor specializes in the performance of wall and roof systems in extreme, cold climates and applies the principles of building science to Indigenous housing issues. His experience in lab and field research, hydrothermal modeling, and forensic investigations gives him a unique perspective on the development of high-performance building enclosure designs.