

# Tuesday, February 26

Please see the following pages for detailed course descriptions.

	Harborside 204	Harborside 302	French River	Harborside 304
	<b>Remodeling</b>	<b>Solar</b>	<b>High Performance</b>	<b>HVAC</b>
	6:30–7:00 am • Early Session Registration			
7–8:15 am	Asbestos—Yes, It's Still Around. <i>Bob Rogalla and Nate Cox, Lake States Environmental, Ltd.</i>	Introduction to Solar Energy <i>Paul Helstrom, Minnesota Power</i>		
	7:30–8:30 am • Registration • Exhibit Hall Opens			
8:30–10 am	Houses That Work for Existing Homes: Remodeling for Energy Efficiency—Part 1: The Basics <i>Gord Cooke, EEBA</i>	Advancements in Solar Electric Design and Equipment <i>Christopher LaForge, Great Northern Solar</i>	What is Green Building? (And Why Should I Care?) <i>Rachel Wagner, through design</i>	Ventilation: Best Practices for Tight Houses in Cold Climates <i>Patrick Huelman, University of Minnesota</i>
	10:00–10:30 am • Break • Exhibits			
10:30 am–12 pm	Houses That Work for Existing Homes: Remodeling for Energy Efficiency—Part 2: Common Remodel Projects & Opportunities for Energy Efficiency Upgrades <i>Gord Cooke, EEBA</i>	Renewable Energy (RE) Systems and the National Electrical Code (NEC)—Critical Changes in 2019 <i>Christopher LaForge, Great Northern Solar; David Shaffer, MnSEIA; Laura Hannah, Fresh Energy</i>	Afton Passive House, An ICF Super Efficient Home: A Case Study <i>Barb and Michael Morehead, PHIUS homeowners; Jay Roettger, Bluff City Builders Inc.; Samuel Bontrager, Building Foundry</i>	Whole House, Balanced Ventilation: Providing Healthy, Comfortable and Energy Efficient Solutions <i>John Rockwell, Zehnder America</i>
	12:00–1:00 pm • Lunch • Exhibits			
1–2:30 pm	Houses That Work for Existing Homes: Remodeling for Energy Efficiency—Part 3: Common Remodel Projects Continued & Avoiding Pitfalls & Unintended Consequences <i>Gord Cooke, EEBA</i>	The Many Scales of Solar Electricity and Energy Storage—301 <i>Christopher LaForge, Great Northern Solar</i>	Zero Energy Ready Home: Are You On Board? Why or Why Not? <i>Brian Wimmer, Rochester Area Habitat for Humanity</i>	Designing with Heat Pumps in Cold Climates <i>Bruce Harley, Bruce Harley Energy Consulting</i>
	2:30–3:00 pm • Break • Exhibits			
3–4:30 pm	Houses That Work for Existing Homes: Remodeling for Energy Efficiency—Part 4: Evaluating Energy Efficiency Opportunities & the Economics of Energy Efficiency Upgrades <i>Gord Cooke, EEBA</i>	Electric Cars are Coming! What Should Real Estate Owners and Building Industry Professionals Know About Charging? <i>Jukka Kukkonen, PlugInConnect</i>	Resilient Adaptation of Sustainable Buildings <i>Richard Graves and Liz Kutschke, University of Minnesota, Center For Sustainable Building Research</i>	
	4:30–6:30 pm • Reception • Door Prizes • Refreshments • Exhibits			

## CREDITS

Complete seven hours of your MN Builder credit CEU requirements per day. **You must attend the 7:00 a.m. session to receive all seven credits.**

Not all sessions qualify for credits; please see the Continuing Education Credit Guide provided in your registration packet to be sure you attend classes approved for continuing education by your educational authority.

# Wednesday, February 27

	Harborside 204	Harborside 302	French River	Harborside 304
	<b>Houses That Work</b>	<b>Potluck</b>	<b>Advanced</b>	<b>Code</b>
	6:30–7:00 am • Early Session Registration			
7–8:15 am	Practical Methods of Conducting Lead-Safe Remodeling, Repair and Painting Activities <i>Bob Rogalla, and Nate Cox, Lake States Environmental, Ltd.</i>		Recommended Window Installation in High Performance Walls <i>Erick Filby and Eric Klein, Marvin Windows and Doors</i>	State of MN—Energy Code HVAC Review: Findings from the Field <i>Mike Wilson, Dakota Supply Group</i>
	7:30–8:30 am • Registration • Exhibit Hall Opens			
8:30–10 am	Advanced Houses That Work—Part 1: Advanced Building Science <i>Gord Cooke, EEBA</i>	Foundation Failures and Successes <i>Bill McAnally, McAnally Consulting</i>	6 Layers: A Framework for More Sustainable Building <i>Rachel Wagner, through design</i>	Residential Energy Code Mechanical Provisions <i>Donald Sivigny, State of MN Department of Labor &amp; Industry</i>
	10:00–10:30 am • Break • Exhibits			
10:30 am–12 pm	Advanced Houses That Work—Part 2: Foundations and Windows <i>Gord Cooke, EEBA</i>	Achieving Superior Energy Efficiency in Commercial and Multi-Family Buildings through Passive House <i>Chloe Bendistis, The Sheward Partnership, LLC Elizabeth Turner, Precipitate</i>	Zeroing In: The Path to Net Zero Energy May Not Be What You Think! <i>Patrick Huelman, University of Minnesota</i>	
	12:00–1:00 pm • Lunch • Exhibits			
1–2:30 pm	Advanced Houses That Work—Part 3: Walls and Roofs <i>Gord Cooke, EEBA</i>	Performance Glazing and Building Envelope Optimization <i>Ken Modeen, Marvin Windows and Doors</i>	The Passive House Building Energy Standard in a Very Cold Climate <i>Tim Eian, TE Studio, Ltd.</i>	Energy Code Compliance and Update <i>Ben Rabe, Fresh Energy</i>
	2:30–3:00 pm • Break • Exhibits			
3–4:30 pm	Advanced Houses That Work—Part 4: Mechanical Systems <i>Gord Cooke, EEBA</i>	Healthy Housing: Building and Remodeling for Wellness and Efficiency <i>Jodi Slick, Ecolibrium3</i>	Moisture and Water Control — 3 Methods to Evaluate the Risk of Your Wall Assemblies <i>Rolf Jacobson, Center for Sustainable Building Research, University of Minnesota</i>	Q&A with the Experts <i>Tim Eian, TE Studio, Ltd. Bill McAnally, McAnally Consulting Doug Manthey, Energy Plus Conservation Technologies</i>