

Tuesday, February 21

Complete seven hours of your MN Builder credit CEU requirements per day (pending approval from the Minnesota Department of Labor and Industry). **You must attend the 7:00 a.m. session to receive all seven credits.**

	Solar	Next Level Savings	Race to the Top	HVAC	Old to New	Building Science—High Performance Housing—EEBA Houses That Work™
		6:30–7:00 am • Early Session Registration			6:30–7:00 am • Early Session Registration	
7:00–8:15 am	The Form and Function of Solar Energy in Cold Climates <i>Jason Edens, Rural Renewable Energy Alliance (RREAL)</i>			Asbestos—Yes, It's Still Around <i>Bob Rogalla, Lake States Environmental, Ltd.</i>	Building Clean—Do You Know What You're Putting in Your Houses? A Discussion on Energy-Efficient Products <i>Dale Reckman, BlueGreen Alliance</i>	
		7:30–8:30 am • Registration • Exhibit Hall Opens			7:30–8:30 am • Registration • Exhibit Hall Opens	
8:30–10:00 am	Renewable Energy Systems and the NEC—2017 Update (Part 1 of 2) <i>Chris Laforge, Great Northern Solar</i>	Steam vs. Hot Water Boiler Systems: Pros and Cons <i>Matt Kiemen, Ryan Company Inc.</i>	Beyond Code Programs That Give You and Your Customer the Edge (Part 1 of 4) <i>Patrick Huelman, University of Minnesota; Marilou Cheple, Marilou Cheple Consulting; Rachel Wagner, Wagner Zaun Architecture; Michael Resch, Residential Science Resources</i>	What You Need to Know About Residential Furnaces, Air Conditioners and Heat Pumps if You're NOT an HVAC Professional <i>Scott Pigg, Seventhwave</i>	EV Charging Strategies <i>Jukka Kukkonen, PlugInConnect</i>	EEBA Houses That Work™ (Part 1 of 4) <i>Justin Wilson, Construction Instruction, Inc.</i>
		10:00–10:30 am • Break • Exhibits			10:00–10:30 am • Break • Exhibits	
10:30 am–12:00 pm	Renewable Energy Systems and the National Electrical Code (NEC)—2017 Update (Part 2 of 2) <i>Chris Laforge, Great Northern Solar</i>	Saving Energy In Existing Multifamily Buildings <i>Daniel May, Center for Energy and Environment (CEE)</i>	Beyond Code Programs That Give You and Your Customer the Edge (Part 2 of 4) <i>Patrick Huelman, University of Minnesota; Marilou Cheple, Marilou Cheple Consulting; Rachel Wagner, Wagner Zaun Architecture; Michael Resch, Residential Science Resources</i>	Balanced Ventilation Strategies for Cold Climate Housing <i>Mike Wilson, Dakota Supply Group</i>	Hearth Products 101 For Today's Builders <i>Rodger Holland, Holland & Hearth; Michael Norby, Brownstone Distributing; Peter Solac, Woodland Stoves and Fireplaces</i>	EEBA Houses That Work™ (Part 2 of 4) <i>Justin Wilson, Construction Instruction, Inc.</i>
		12:00–1:00 pm • Lunch • Exhibits			12:00–1:00 pm • Lunch • Exhibits	
1:00–2:30 pm	Incorporating Solar into Residential New Construction <i>Jack Kluempke, Minnesota Department of Commerce</i>	Pre- and Post-Retrofit Assessments and Inspections <i>Bill McAnally, McAnally Consulting</i>	Beyond Code Programs That Give You and Your Customer the Edge (Part 3 of 4) <i>Patrick Huelman, University of Minnesota; Marilou Cheple, Marilou Cheple Consulting; Rachel Wagner, Wagner Zaun Architecture; Michael Resch, Residential Science Resources</i>	Slab on Grade Construction: Meeting the MN Energy Code Shell and HVAC Requirements <i>Mike Wilson, Dakota Supply Group</i>	The Internet of Things (IOT)—The Nexus of Technologies in the Home and Business <i>Chris Laforge, Great Northern Solar</i>	EEBA Houses That Work™ (Part 3 of 4) <i>Justin Wilson, Construction Instruction, Inc.</i>
		2:30–3:00 pm • Break • Exhibits			2:30–3:00 pm • Break • Exhibits	
3:00–4:30 pm	Solar Electric and Energy Storage—Hartley Nature Center Project—A Case Study <i>Chris Laforge, Great Northern Solar</i>	Breaking Down Barriers to Multifamily Energy Efficiency: Data and Financing <i>Billy Weber, University of Minnesota; Virginia Rutter, Eutectics; Drew Quirk, Xcel Energy</i>	Beyond Code Programs That Give You and Your Customer the Edge (Part 4 of 4) <i>Patrick Huelman, University of Minnesota; Marilou Cheple, Marilou Cheple Consulting; Rachel Wagner, Wagner Zaun Architecture; Michael Resch, Residential Science Resources</i>	Keeping Ground Source Heat Pump Systems on the Table <i>Ed Lohrenz, GEOptimize Inc.</i>	Heating and Cooling a Minnesota Home with a SkyTherm (roof pond) North <i>Kitrina Stratton, SunWindLight</i>	EEBA Houses That Work™ (Part 4 of 4) <i>Justin Wilson, Construction Instruction, Inc.</i>
		4:30–6:00 pm • Reception • Door Prizes • Refreshments • Exhibits			4:30–6:00 pm • Reception • Door Prizes • Refreshments • Exhibits	

Wednesday, February 22

Complete seven hours of your MN Builder credit CEU requirements per day (pending approval from the Minnesota Department of Labor and Industry). **You must attend the 7:00 a.m. session to receive all seven credits.**

	High Performance Systems	Existing Homes	Affordability and High Performance	Case Studies	Tightening the Envelope
		6:30–7:00 am • Early Session Registration			6:30–7:00 am • Early Session Registration
7:00–8:15 am		Practical Methods of Conducting Lead-Safe Remodeling, Repair and Painting Activities <i>Dave Louis, Lake States Environmental, Ltd.</i>		Passive House: Commercial Projects <i>Tim Eian, TE Studio, Ltd.</i>	Recommended Window Installation <i>Eric Klein and Erick Filby, Marvin Windows and Doors</i>
		7:30–8:30 am • Registration • Exhibit Hall Opens			7:30–8:30 am • Registration • Exhibit Hall Opens
8:30–10:00 am	High-Performance Mechanical Systems for High-Performance Enclosures <i>Patrick Huelman, University of Minnesota</i>	Passive House: Residential Retrofit (EnerPHit) <i>Tim Eian, TE Studio, Ltd.</i>	Building New Homes Above the Energy Code: Rewards, Rebates, and Incentives <i>Phil Anderson, Neighborhood Energy Connection; Aaron Riendeau, St. Croix Energy Solutions, Inc.</i>	Case Study: Wrenshall Residence—A Local Architect Putting His Money Where His Mouth Is <i>Elden Lindamood, Wagner Zaun Architecture</i>	Continuous Insulation Strategies—Building the Perfect Wall in an Imperfect World <i>Dean Seibert and Ed Scherrer, InSoFast LLC</i>
		10:00–10:30 am • Break • Exhibits			10:00–10:30 am • Break • Exhibits
10:30 am–12:00 pm	Condensing Boiler Optimization <i>Ben Schoenbauer and Dave Bohac, Center for Energy and Environment (CEE); Rebecca Olson, Neighborhood Energy Connection</i>	So, Tell Me about Your Problem House <i>Paul Morin, The Energy Conservatory</i>	Building to Meet ZERH w/Multiple Layers of Foamboard: Lessons Learned <i>Brian Wimmer, Rochester Area Habitat for Humanity</i>	The Ecologists' House: Case Study of a Zero Net Energy Home in Duluth <i>Rachel Wagner, Wagner Zaun Architecture</i>	High Performance Glazing and the Building Envelope <i>Mike Florence, DUXTON Windows & Doors; Paul Kellner, Heritage Window & Door</i>
		12:00–1:00 pm • Lunch • Exhibits			12:00–1:00 pm • Lunch • Exhibits
1:00–2:30 pm	Lessons Learned from New Energy Code Testing <i>Ross Anderson, The Energy Network</i>	Under the Belly of the Beast: A Closer Look at Energy Use in Manufactured Homes <i>Jeannette LeZaks and Scott Pigg, Seventhwave</i>	Super Energy Efficient Homes Should Always Be the Goal: Case Study of An Affordable, Low Tech, High Performance Home in an Urban Environment <i>Kitrina Stratton, SunWindLight</i>	Passive House: Residential New Construction—The “Northeast Nest” <i>Tim Eian, TE Studio, Ltd.</i>	Aerosols—Seek and Seal Envelope Leaks <i>Dave Bohac, Center for Energy and Environment (CEE)</i>
		2:30–3:00 pm • Break • Exhibits			2:30–3:00 pm • Break • Exhibits
3:00–4:30 pm	Emerging Technologies for Cold Weather Residential Heating <i>Josh Quinnell and Ben Schoenbauer, Center for Energy and Environment (CEE)</i>	Pre- and Post-Retrofit Assessments and Inspections <i>Bill McAnally, McAnally Consulting</i>	When Sustainability and Affordability Meet—Lessons from a High-Performance Habitat for Humanity Neighborhood Development <i>Jim Cooper, St Croix Valley Habitat for Humanity</i>	The Clean Energy Community Awards Program: Recognizing Community Efforts <i>Terry Webster, Minnesota Department of Commerce; Patrick Shea, City of St. Cloud, MN; Fernando Nacionales, 133 Airlift Wing, MN Air National Guard; John Paulson, City of Hutchinson, MN</i>	Fundamentals of Door Installation <i>Eric Klein and Erick Filby, Marvin Windows and Doors</i>