

Welcome to the 2nd Annual

Energy Design Concepts

FEBRUARY 18-19, 2025

Duluth Entertainment Convention Center (DECC)

Hosted by:



Presented by:



**Building science education
focused on the core principles
of energy efficient building and
responsible design.**



2025 Energy Design Concepts



Thank you for joining us for the second annual Energy Design Concepts, an evolution of the Energy Design Conference hosted by Minnesota Power. We are excited to continue this yearly tradition with a more focused agenda, keeping energy efficiency best practices and technologies at the forefront.

Looking ahead, we aim to expand our educational offerings to other parts of our service territory. Additionally, we are eager to partner with and support other educational initiatives in our region. Please see the next page for more information and examples of upcoming events. We look forward to continuing this new chapter of the Energy Design Conference and are grateful for your participation this year.

Enjoy your time at Energy Design Concepts!

General Conference Information

- We are pleased to offer complimentary wireless service to our attendees.
- **Network: EDC 2025**
No password needed
- If you are seeking Continuing Education Credits (CEUs), you must be present the entire session in order to receive credit. Partial credit will not be given.
- Please wear your name tag during the entire event.
- Please be courteous and silence your computer notifications and cell phone during all sessions.



Stay current with
updates and educational
opportunities by signing up
for the EDC mailing list here:

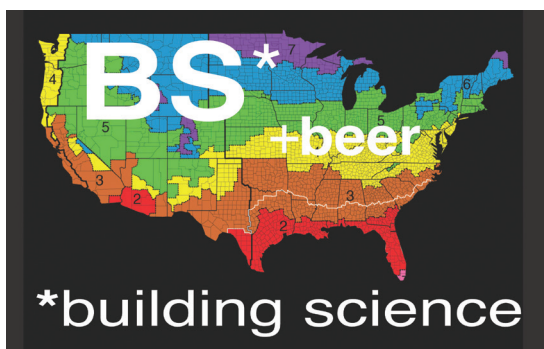




Join us for an Evening Reception

Tuesday, February 18, 2025, 4:30pm-7:00pm

We invite you to join us for an evening reception after the first day of training. This will be a great opportunity to network with fellow attendees, share insights, and unwind after a day of learning. We look forward to seeing you at the reception in the 3rd floor foyer of Harborside Ballroom.



Upcoming BS + Beer Events

BS + (building science and beer) is a grassroots, community driven group who meets once a month to discuss various topics in building and building science. If buildings and building science are of interest to you we invite you to join us at our next meeting! If you'd like to be added to the email list please email ferncustomcarpentry@gmail.com.

Meetings are hosted in the Skyroom (upstairs) at *At Sara's Table* on Chester Creek (1902 E 8th St Duluth, MN 55812).

Save these dates in 2025!

March 6, 2025	May 1, 2025	July 17, 2025
April 17, 2025	June 12, 2025	



2025 EEBA High Performance Home Builder Summit September 17-19, 2025 | St. Paul, MN

At the EEBA High Performance Home Builder Summit, we bring together the best in residential construction – high-performance builders committed to sustainability and excellence, alongside the industry's most innovative manufacturers showcasing products and technologies designed to improve the performance, comfort, and efficiency of homes.

This is more than just an event; it's where industry leaders come together to network, learn, and lead the future of high-performance home building.

Join us September 17–19, 2025, in Saint Paul, MN, for three days packed with educational sessions and networking events! Visit summit.eeba.org to register and learn more.



7:30am Registration/Coffee/
Light Refreshments

8:30am *How to Build a Zero
Energy Ready Home
Course Begins**

10:00-10:15am Morning Break*

12:00-1:00pm Lunch Break

2:30-2:45pm Afternoon Break*

4:30pm *How to Build a Zero
Energy Ready Home
Course Ends**

4:30-7:00pm Evening Social &
Networking

**Exact presentation and break times are
subject to change*

Learning Objectives:

- Learn the trends and building science principles that are driving the U.S. housing market toward zero energy homes.
- Be able to identify and understand the specific requirements to qualify a Zero Energy Ready Home (ZER) under the DOE program.
- Identify building materials, systems and processes that can be used to meet the ZER requirements in a cost-effective way.
- Learn about incentives, marketing and sales messages that can help promote ZER homes for builders.

How to Build a Zero Energy Ready Home

8:30am-4:30pm*

Presented by Aaron Smith, EEBA

Course description:

This course provides participants with a discovery of all elements of the Department of Energy Zero Energy Ready (ZER) Home program requirements and cost-effective pathways of how to meet those requirements. The course will cover the compelling trends towards high performance homes and the building science principles that support the move towards homes that will use, on average over the course of a year, only as much energy that could be produced by onsite renewable energy sources. Participants in this class will learn design principles, equipment options, emerging technologies, material selections, and construction practices that can be integrated into their building process. Case studies will be used throughout to demonstrate builders' successes with ZER homes. Strong emphasis is placed on ways to make the final product affordable for homebuyers. To this end, a wide range of alternatives that can be applied to specific climate zones and housing types will be demonstrated so that builders and designers can choose solutions that meet their market needs.

Attendees will take a Zero Ready Home test after this course.

Wednesday, February 19, 2025

7:00am	<i>MN Residential Energy Code Changes Course*</i>
8:15am	<i>Break*</i>
8:30am	<i>Employee Misclassification Law Course*</i>
9:30am	<i>Morning Break*</i>
10:00am	<i>ENERGY STAR® NextGen Certification Program Course Begins*</i>
12:00-1:00pm	<i>Lunch Break</i>
2:30pm	<i>Afternoon Break*</i>
4:00pm	<i>ENERGY STAR® NextGen Certification Program Course Ends*</i>

**Exact presentation and break times are subject to change*

MN Residential Energy Code Changes

7:00-8:15am*

Presented by Jim Rich, Certified Building Official

Course description:

This presentation will provide an overview of the latest updates and changes to the Minnesota energy code. Attendees will learn about new regulations, compliance requirements, and best practices for implementation.

The session will also highlight the impact of these changes on energy efficiency, sustainability, and building performance in Minnesota.



Learning Objectives:

By the end of the course, participants will be equipped to navigate the evolving landscape of employment classification, manage risks effectively, and ensure adherence to new regulatory standards.

Employee Misclassification Law

8:30-9:30am*

**Presented by Bill Gschwind, Minnesota
Construction Law Services**

Course description:

This comprehensive course provides an in-depth examination of the complexities surrounding employee misclassification law. Participants will gain a thorough understanding of the legal framework, including the objectives of the legislation, common pitfalls, and new regulatory changes.

Key topics include:

- » Understanding the Act: Learn about the legislative intentions and impacts from both proponents and opponents, including how the law seeks to protect workers and level the playing field without eliminating subcontracting.
- » Defining Misclassification: Explore what constitutes employee misclassification and the legal repercussions of failing to correctly classify or treat workers.
- » Penalties and Enforcement: Understand the significant fines, compensatory damages, and new powers granted to the Department of Labor and Industry (DOLI) to issue stop work orders and enforce compliance.
- » Wage Theft and Protections: Review updates on wage theft prevention, protections for construction workers, and new tests for independent contractor status.
- » Liability and Compliance: Delve into successor liability, revised independent contractor tests, and how to ensure compliance to avoid costly penalties.

Learning Objectives:

- Identify the administrative and technical requirements for achieving the ENERGY STAR NextGen Certification.
- Evaluate and select practical and cost-effective building enclosure systems appropriate for their climate zone and type of construction.
- Understand how to specify and select the critical electromechanical component requirements such as properly sized heat pumps, water heaters and electric vehicle capabilities.
- Confidently integrate the NextGen requirements into their design and building process to ensure selected projects can achieve the certification label.
- Confidently promote the clean energy benefits of NextGen labeled homes to prospective clients.

ENERGY STAR® NextGen Certification Program

10:00am-4:00pm*

Presented by Aaron Smith, EEBA

Course description:

This one-day course is focused on building to meet the new ENERGY STAR® NextGen Certification Program requirements, which offers an additional level of recognition for homes and apartments. The course will identify how to go above and beyond the core ENERGY STAR Residential New Construction Program requirements and incorporate advanced electric technologies that will help to build a clean energy future.

Throughout the course participants will learn how to optimize the energy reductions offered by practical and cost-effective building enclosure alternatives with appropriate electrically powered space conditioning and hot water heating technologies to ensure both energy and emission savings for new home buyers. This will include a thorough discussion of identifying and selecting properly sized heat pumps, water heating alternatives, electric vehicle provisions and electric cooktop and oven options.

During classroom and hands-on exercises, case studies and equipment demonstrations, participants will be empowered to confidently specify appropriate building materials and matching mechanical systems to build homes that meet all of the technical and administrative requirements of EPA's ENERGY STAR NextGen Certification program.

Aaron Smith



Aaron Smith is the CEO of the Energy and Environmental Building Alliance (EEBA) which represents a community of over 50,000 builders and their stakeholders across North America that are truly the early adopters and innovators in driving sustainable transformation of the homebuilding industry.

Aaron has over 25 years of experience in home construction, building products, sustainability and non-profit board leadership. He has worked for companies including Kohler, Uponor and ASSA ABLOY as well as startups in Silicon Valley and his own building and remodeling company. Aaron previously served on non-profit Boards for Wolf Ridge Environmental Learning Center, Health Product Declaration Collaborative (HPDC), CT Sustainable Business Council, and co-founded the CT Collaborative - Living Building Challenge.

Aaron completed his undergraduate studies at West Point and St. Cloud State University and is a 2016 graduate of the Yale University MBA program with a focus on Sustainability. He loves green building and sustainability as well as hockey, hiking, skiing, gardening and spending time with his wife, Jennifer, 3 boys and 4 cats and chickens at their home in Minneapolis.



Special thanks to: Nancy Bakeman, Naomi Christenson, Martin Dean, DECC Staff, Rachel Good, Bill Gshwind, Suzanne Harmelink, Alyssa Harries, Trevor Hofkes, Hallie Jahr, Christina Makowsky, Lori Melton, Shawn McLaughlin, Jim Rich, Don Sivingny, Aaron Smith, Mary Sullivan, Randy Williams, Programs & Services team, and Office Services team at Minnesota Power.

Bill Gschwind



Bill Gschwind is the founder of Minnesota Construction Law Services and currently serves as the Principal Attorney. Bill attended the University of Wisconsin-Madison for undergrad then went on to graduate from the University of St. Thomas with an MBA while working in sales management. Later, Bill opened a general rental equipment store and bought a construction equipment rental franchise. After a successful 25-year career, Bill graduated from William Mitchell College of Law, passed the Minnesota Bar in 2010, and two years later opened Minnesota Construction Law Services.

Bill's determination lays the foundation of Minnesota Construction Law Services' dedication to not only build a successful construction law firm but to become a valued business partner for clients. His vast experience with small businesses allows Bill to advise clients on business operations that go beyond just the law. Bill listens to clients' goals and what they define as success, then he creates plans to get them there.

Bill's dissatisfaction with the way the legal system works for business owners motivated him to not just seek out a better option, but to create the best option. An option that redefines the preconception of 'lawyer' to be someone who treats you like a partner.

Jim Rich



Jim Rich brings over 15 years of experience as a general building contractor and has been a Certified Building Official since 1994. After retiring as the Building Official for the City of Hermantown two years ago, Jim continues to serve the cities of Proctor, Rice Lake, Silver Bay, Beaver Bay, and Two Harbors. His expertise extends to contract inspections for Minnesota State special projects, including schools and hospitals. Recently, Jim has taken on the role of Zoning Administrator for Lakewood Township. With a deep understanding of building codes, he enjoys helping contractors and homeowners achieve their vision.

Jim holds a BA in Business Administration from the College of St. Scholastica, an AA in Building Inspection and Technology from Inver Grove Technical College, and an AA in Accounting from Lake Superior College. His certifications include MN Certified Building Official, International Code Council (ICC), and BOCA Property Maintenance. Jim has been actively involved in various organizations, serving as President, Vice President, and Secretary of the Arrowhead Chapter of ICC Building Officials (NE Region of MN) since 1992. He also contributed to the MN Department of Labor and Education Committee for eight years and was a past member of the St. Louis County Community Block Grant Board.

2025 Energy Design Concepts

You can decide which sessions to attend each day based on your interest and the credits you need. At the end of the session, you must sign the sign-in sheet. This is how we document attendance at sessions so make sure to sign in! Continuing Education Credits (CEUs) will be reported to each accrediting organization based on session attendance and CEU information provided by the attendee during registration. If you indicated on the registration form you need credits for BPI, MN DLI, and/or WI DSPS (and you provided a valid ID number), the CEUs will be submitted on your behalf. Attendees seeking credits for NARI or other credits should self-report.

Continuing Education Credits Instructions

- Refer to the table on the next page to determine the types of CEUs offered for each session.
- Note, partial credit cannot be given; you must attend the full session to receive credits.
- Sign the sign-in sheet at the end of the session to record attendance for CEUs.
- CEUS for How to Build a Zero Energy Ready Home and ENERGY STAR NEXT Gen Certification Program will be facilitated by EEBA and BPI will be facilitated by Slipstream.
- Your attendance will be reported to the MN Department of Labor and Industry, WI Department of Safety and Professional Services, and Building Performance Institute based on the information provided during registration. Attendees seeking credits for NARI or other credits should self-report.
- Check the box on the CEU sign-in sheet if you'd like to receive a course completion certificate.
- For AIA and ICC credits, EEBA will report attendance on your behalf. For NARI and RESNET credits, you will be sent a certificate that you can use to self-report.

Course completion certificates will be emailed within a month to each attendee based on information provided during registration and the sign-in sheet for each session attended. A course completion certificate is your proof of course attendance. Please keep a copy of each course completion certificate for your records.

Please direct any questions about CEUs to:

Crystal Pelkey

cpelkey@mnpower.com | 218.355.3748

Minnesota Power | www.mnpower.com

Continuing Education Credits Guide

Tuesday, February 18, 2025

How to Build a Zero Energy Ready Home 8:30am - 4:30pm	AIA	7 LU HSW
	BPI	6 credits
	MN DLI	6 credits - Residential Energy 6 credits - Building Official
	WI DSPS	6 credits
	ICC	.6 hours
	NARI	6 credits
	RESNET	8 PD credits

Wednesday, February 19, 2025

MN Residential Energy Code Changes 7:00 - 8:15am	BPI	1 credit
	MN DLI	1 credit - Building Official 1 credit - Residential Energy
Employee Misclassification Law 8:30 - 9:30am	MN DLI	1 credit - Building Official 1 credit - Manufactured Home Installer 1 credit - Residential Building Contractor Business Mgmt
	WI DSPS	1 credit - Dwelling Contractor Qualifier
ENERGY STAR® NextGen Certification Program 10:00am - 4:00pm	AIA	6 LU HSW
	BPI	6 credits
	MN DLI	6 credits - Residential Energy 6 credits - Building Official
	WI DSPS	6 credits
	ICC	.6 hours
	NARI	6 credits
	RESNET	6 PD credits

AIA = The American Institute of Architects
BPI = Building Performance Institute
ICC = International Code Council
MN DLI = Minnesota Department of Labor and Industry

NARI = National Association of the Remodeling Industry
RESNET = Residential Energy Services Network
WI DSPS = Wisconsin Department of Safety and Professional Services

**Thank you for attending the
2nd Annual Energy Design Concepts**



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**ENERGY DESIGN
CONCEPTS**

Your feedback is
welcome. Scan this QR
code for a brief survey.

