

ENERGY CODE SUPPORT PROGRAM

news



April - May 2025

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www.MinnesotaEnergyCodeSupport.org

or Email our team at:
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PROGRAM OVERVIEW

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The Energy Codes Support Program was created to provide support and assistance to the construction industry and building safety professionals in their respective efforts to build safe structures that comply with the provisions of the state energy conservation and construction codes. The Circuit Rider is your source for FREE on-site assistance, training, and technical expertise to help your community navigate the Energy Code; best practices for implementing effective code compliant construction techniques; and details that will keep your team and building projects up to date with the latest in energy-efficient building codes.

Interested in hosting a local training or just to sit down and have a friendly visit to discuss the program, just contact one of our Circuit Riders.

You can visit our website for more contact information, upcoming trainings, and technical documents and videos to support your project and ensure safe, code compliant structures in your community.





BUILDING SAFETY MONTH 2025 GAME ON!

GET IN THE GAME AND CELEBRATE BUILDING SAFETY!

The 45th annual Building Safety Month will be celebrated internationally during the month of May to raise awareness about building safety. This celebration reinforces the need for the adoption of modern, regularly updated building codes, and helps individuals, families and businesses understand what it takes to create safe and sustainable structures. Everyone is encouraged to participate in the celebration and learn about the essential work of the building safety and construction community.

The 2025 Building Safety Month theme is “Game On.”

The hardworking members of our local building communities are the code officials, plan reviewers, fire inspectors, architects, builders, engineers, design professionals, contractors and others in the construction industry, including staff at the International Code Council, who work to ensure the safety of the buildings where we live, work and play. These professionals provide the first line of defense against building disasters; working vigilantly to ensure the safety of our communities.

BUILDING SAFETY MONTH WEEKLY THEMES

WEEK 1 THE WARM-UP

Discover how building safety impacts our daily lives including the places where we work, learn and play.

WEEK 2: BUILD YOUR OFFENSE

Create a plan to actively support building safety programs in your community.

WEEK 3: BUILD YOUR DEFENSE

Stay prepared for natural hazards such as severe weather, wildfires, earthquakes and more with our disaster toolkits.

WEEK 4: THE STARTING LINEUP

Meet building safety professionals and learn about rewarding careers in building safety.

WEEK 5: GOING INTO OVERTIME!

See what's next for the building safety industry, including global trends, artificial intelligence & more.

Learn more about Building Safety Month at www.buildingsafetymonth.org
or join the conversation on social media using #BuildingSafety365.

More Ways You Can Get Involved:

Join the various workshops and events organized throughout the month to enhance your understanding of building safety.

Spread the word! **Share** relevant information with your neighbors, friends, and colleagues. The more people that are informed, the safer our community becomes.

Participate in **discussions** about building safety within our community. Your input and ideas are valuable in creating a safer living environment for everyone.

HEATING & COOLING LOAD CALCULATIONS



When designing a commercial building, one of the most crucial yet often overlooked aspects is the accurate calculation of heating and cooling loads. Proper load calculations ensure that a site remains comfortable year-round, operates efficiently, and avoids unnecessary energy consumption and high utility costs. Understanding the significance of these calculations helps contractors, HVAC professionals, and building owners make informed decisions that enhance the longevity and performance of heating and cooling systems. Our Technical Resources aid in explaining the purpose and methodology for reviewing HVAC load calculations for code compliance and effective installation.

Understanding Heating & Cooling Load Calculations

Heating and cooling load calculations determine the amount of energy required to maintain a comfortable indoor temperature, considering factors such as climate, home size, insulation, window u-factors; solar heat gain, wall orientation, occupancy levels, and internal heat gains. These calculations are performed using approved engineering procedures specified in ASHRAE/ACCA Standard 183; a requirement found in both the Minnesota Commercial Energy Code (2024 MCEC § 6.4.2.1) and within the Mechanical code (2020 MMFGC § 312.1). It is important to review the report values against the proposed design to ensure the accuracy and efficacy of the proposed HVAC system is appropriately sized - neither too large nor too small - for the specific design and duct distribution system.

Impacts of Improper Load Calculations

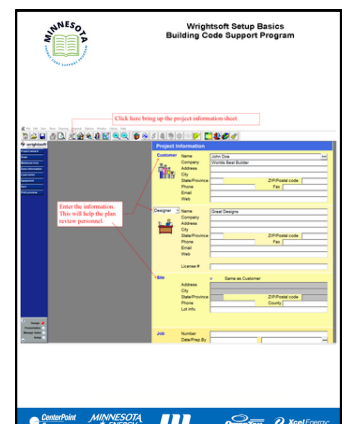
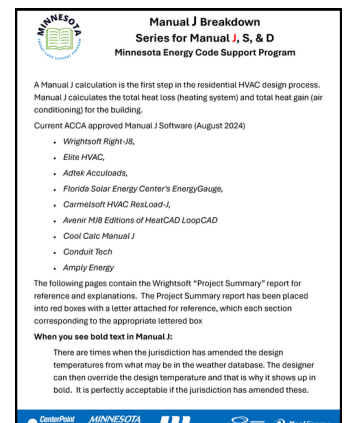
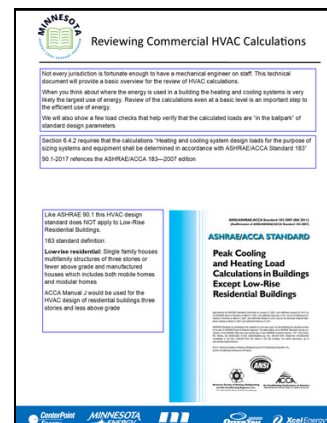
While many owners and builders assume that “bigger is better” when it comes to HVAC systems, this misconception often leads to inefficiency. Oversized units tend to short-cycle, meaning they turn on and off frequently, which leads to unnecessary wear and tear, inconsistent temperatures, and increased energy consumption. Conversely, undersized units struggle to maintain desired temperatures, leading to excessive operation and discomfort.

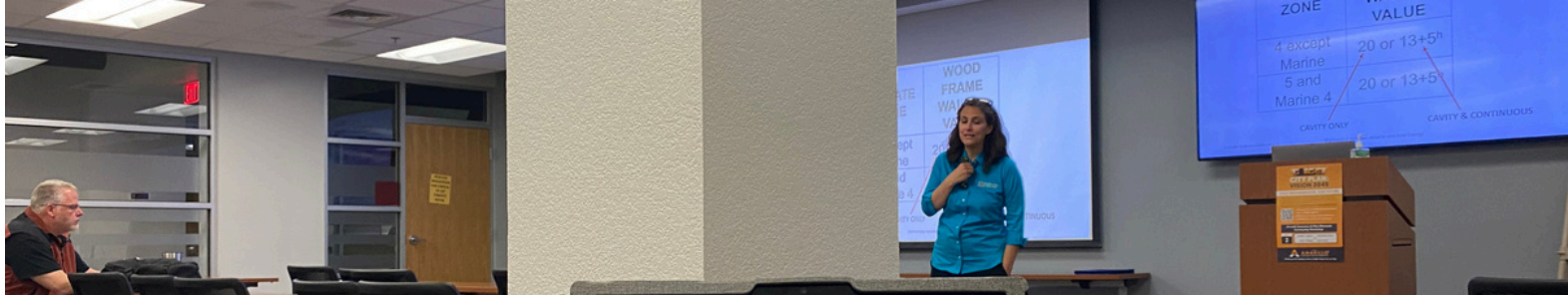
Incorrect load calculations can result in humidity control issues, poor indoor air quality, and an overall reduction in system lifespan. These problems not only affect the occupant's comfort but also lead to higher maintenance costs and premature system replacement.

By conducting proper heating and cooling load calculations, builders and HVAC professionals can optimize system performance, reduce energy costs, and improve indoor air quality.

Furthermore, right-sizing the equipment and duct systems will contribute to sustainability by improving cost savings and reducing energy waste.

Our Resources To Help





Upcoming Trainings

Monthly Webinar Series

Thursdays, 10:30am-11:30am CT

AIA-HSW, ICC & DLI continuing education credits will be provided for completed trainings

WEBINAR



Register Online

This free training will provide builders, designers, inspection staff, and plan reviewers a regular opportunity to gain a comprehensive understanding of energy code requirements, offering insight into compliance strategies and best practices. Through interactive discussions and case examples, attendees will gain the knowledge and tools necessary to optimize energy efficiency in their projects while complying with the code.



Click or Scan to Register

GENERAL TRAINING TOPICS

- 4/17 - Understanding & Using COMCheck
- 4/24 - Commercial Mechanical System Design
- 5/15 - Commercial Energy Compliance Paths
- 5/22 - Interior Commercial Lighting Design

MEET OUR TEAM



Hope Medina



Andre Jaen



Joshua Harmon



Jim Williamette

Email our team at:
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INSPECTION WEBINAR SERIES

Mastering on-site success - reviewing design details, best practices, and more...

- January 9th -- Energy Code Overview
- February 13th -- Insulation Details
- March 13th -- Air Barrier Details
- April 10th -- Fenestration & Door Details
- May 8th -- Mechanical Systems
- June 12th - Power & Lighting Systems

PLAN REVIEW WEBINAR SERIES

Creating a Blueprint for Success: reviewing proper design, plan review best practices, and more...

- January 2nd -- Energy Code Overview
- February 6th -- Insulation Details
- March 6th -- Air Barrier Details
- April 3rd -- Fenestration & Door Details
- May 1st -- Mechanical Systems
- June 5th - Power & Lighting Systems