

## Energy Code Basics Interactive Webinar Series

### Various days 8:00am -12:00pm





#### Bring Us Your Residential Energy Code Questions: September 8, 2020, 8:00am - 12:00pm

This session's topics will be determined by you! The focus of this training will be different than you may be accustom to with training in the past. We want you to provide us with the content. We understand that all of us have come across questions and challenges on how to get the energy code compliance we are all striving for. This is your opportunity to bring these questions and challenges to a group for us to work through them. Let's start the conversation and obtain more understanding through it. We are asking for you to submit your residential energy code questions to Gil Rossmiller and Hope Medina by September 3rd for adequate time for us to prepare the classes.

Here are the instructions:

Send specific questions you had during a plan review and send the plans also to display on the screen, or Send specific questions on items found while performing inspections and send the pictures, if taken, to display on the screen, or

Send in question you have when reading the energy code.

Registration Link: https://attendee.gotowebinar.com/register/7528055257757596688

### Bring Us Your Commercial Energy Code Questions: September 14, 2020, 8:00am-12:00pm

This session's topics will be determined by you! The focus of this training will be different than you may be accustom to with training in the past. We want you to provide us with the content. We understand that all of us have come across questions and challenges on how to get the energy code compliance we are all striving for. This is your opportunity to bring these questions and challenges to a group for us to work through them. Let's start the conversation and obtain more understanding through it. We are asking for you to submit your commercial energy code questions to Gil Rossmiller and Hope Medina by September 8th for adequate time for us to prepare the classes.

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Send specific questions you had during a plan review and send the plans also to display on the screen, or Send specific questions on items found while performing inspections and send the pictures, if taken, to display on the screen, or

Send in question you have when reading the energy code.

Registration Link: https://attendee.gotowebinar.com/register/3708400241375444240

#### Multi-Family Construction and the Energy Code: October 5, 2020, 8:00 -12:00pm

How do we provide housing for our growing population with the limited amount of space available? This is where one of the fasted growing types of construction becomes utilized, the multi-family projects. How does one apply the IECC to these types of projects? What if the project is required to comply with the residential provisions, or commercial provisions, or what if the project is required to comply with both the residential and commercial provisions? How does one determine what provisions need to be addressed? Join us as we dive into the energy code to discover the provisions multi-family projects must fulfill.

Registration Link: https://attendee.gotowebinar.com/register/1447957166784295184



## Energy Code Basics Interactive Webinar Series







#### The Commercial Energy Code for Unusual Energy Usage: October 12, 2020, 8:00am-12:00pm

The world is forever changing on how buildings are being utilized, and the great thing is the energy code is constantly evolving to acknowledge and address these new concepts. This session we are going to look at how to apply the energy code for some of the more unusual occupancies or function of spaces. How do you apply the energy code to grow facilities, or Data Centers? Does everything apply to these types of uses? How does the energy code deal with walk-in coolers or freezers? What about refrigerated warehouses? Join us to explore the more unusual side of the code.

Registration Link: https://attendee.gotowebinar.com/register/6005635174055380496

#### Demystifying the Residential Energy Code: October 19, 2020, 8:00am-12:00pm

The energy code contains many requirements that lead up to testing to verify the design and installation comply with these requirements. Have you ever had the opportunity to see what is involved to perform these tests, or had the opportunity to witness these tests in person? We have all read in the energy code about blower door testing, and duct testing, but what do these tests really involve. This training will give you the opportunity to view several videos where Robby demonstrates how these tests are performed. Witness a blower door test, total duct leakage test, duct leakage to the outside test, and as a bonus the new mechanical ventilation system testing that will be required in the 2021 IRC/IECC. That's not all we will also demonstrate the process to get a passing result for these tests. Join us to get the black and white of the code into living color.

Registration Link: https://attendee.gotowebinar.com/register/6278996855222017551

### <u>The Future of the Residential Energy Code 2021 IECC – Residential Energy:</u>

#### November 2, 2020 and December 1, 2020, 8:00am - 12:00pm

What does the future hold for residential energy? The energy code is a forever moving target, and we truly want it to be with all of the new innovations of products, systems, and building science to assist with the design, construction, and implementation of the energy code. Join us to learn about some of the potentially new requirements of the upcoming 2021 IECC. What new options and innovations have been provided for all of us to comply with energy efficiency. Learn how the many black bars are actually a benefit to us in this code because the changes are assisting users to navigate the IECC easier and more proficiently.

#### **Registration Links:**

https://attendee.gotowebinar.com/register/3224902097689345037 - November 2nd class

https://attendee.gotowebinar.com/register/8834909489765284877 - December 1st class



### Energy Code Basics Interactive Webinar Series

Various days 8:00am -12:00pm





#### The Future of the Commercial Energy Code 2021 IECC – Commercial Energy:

November 9, 2020 and December 7, 2020, 8:00am -12:00pm

What does the future hold for commercial energy? The energy code is a forever moving target, and we truly want it to be with all of the new innovations of products, systems, and building science to assist with the design, construction, and implementation of the energy code. Join us to learn about some of the potentially new requirements of the upcoming 2021 IECC. What new options and innovations have been provided for all of us to comply with energy efficiency. Learn how the many black bars are actually a benefit to us in this code because the changes are assisting users to navigate the IECC easier and more proficiently.

### **Registration Links:**

https://attendee.gotowebinar.com/register/7602715395819104781 - November 9th class

https://attendee.gotowebinar.com/register/2536131730166859789 - December 7th class



# Xcel Energy\* Wednesday from 12:00pm -1:00pm MST



### April 1, 2020- September 16, 2020

**Mechanical Series the month of July** 

Webinar 1: Wednesday, April 1, 2020, 12-1pm: How the Energy Code Works with Your Community, Hope Medina, CCC

With the new energy code law in place how can you make it work for your community. What are the benefits of adopting the IECC? What do your future constituents of your community expect to find in a modern community? We will discuss these concepts in our first webinar of the series.

Register for webinar at <a href="https://attendee.gotowebinar.com/register/5562237315">https://attendee.gotowebinar.com/register/5562237315</a>059919372

Webinar 2: Wednesday, April 8, 2020, 12-1pm: How to Read IECC Reports, Robby Schwarz, Build Tank

There are many IECC reports that must be collected and reviewed before issuing building permits and/or the Certificate of Occupancy. This webinar will review the reports that you should be looking for and how to find the information that you need to demonstrate compliance.

Register for webinar at https://attendee.gotowebinar.com/register/4178621778271368460

Webinar 3: Wednesday, April 15, 2020, 12-1pm: Commercial Performance Path, Sue Reilly, Group 14

The Total Building Performance path in the Commercial Provisions, allows projects to energy model the whole building to achieve required minimum energy performance. While mandatory requirements must still be met, the team can effectively trade off elements such as more efficient lighting with difficult-to-detail foundation insulation. We will discuss this approach and its advantages, as well as the various compliance methods and common trade-offs.

Register for webinar at https://attendee.gotowebinar.com/register/8542592225007400972

Webinar 4: Wednesday, April 22, 2020, 12-1pm: Major Differences Between 90.1 and the IECC, Gil Rossmiller, CCC

Doesn't the IECC and 90.1 contain the same requirements? This webinar will highlight just a few of the major differences between the 2018 IECC to ASHRAE 90.1-2016. Which one requires the controlled receptacles?

Register for webinar at https://attendee.gotowebinar.com/register/6926734543665273612

Webinar 5: Wednesday, April 29, 2020, 12-1pm: Ventilation vs. Infiltration, Robby Schwarz, Build Tank

The IECC requires that dwelling units are air tight and ventilated correctly. Whole house controlled mechanical ventilation is specifically sized for the occupant load and size of the house. HVAC design is also required for a compliance IECC house. HVAC design takes into account the heat loss and gain from both ventilation and infiltration. As you can see its complicated and this webinar will describe the differences between ventilation and infiltration and why we need to account for both in the energy performance of a home.



# **Xcel** Energy\* Wednesday from 12:00pm -1:00pm MST



April 1, 2020- September 16, 2020

**Mechanical Series the month of July** 

Webinar 6: Wednesday, May 6, 2020, 12-1pm: COMcheck/REScheck Basics, Gil Rossmiller, CCC

This is one of the most familiar tools used to demonstrate compliance with some of the IECC provisions for both residential and commercial projects. This session will walk you through plan review basics along with the do and don'ts for COMcheck and REScheck.

Register for webinar at https://attendee.gotowebinar.com/register/4510978854581108492

Webinar 7: Wednesday, May 13, 2020, 12-1pm: How to Inspect Residential IECC Requirements, Robby Schwarz, Build Tank

There are many mandatory requirements of the IECC that need to be inspected in order to be able to determine if the house is compliant with the IECC. This session will review those requirements and how to best inspect for compliance.

Register for webinar at https://attendee.gotowebinar.com/register/3951243873159456780

Webinar 8: Wednesday, May 20, 2020, 12-1pm: What do I Need to Provide for a Residential Energy Submittal, Hope Medina, CCC

As a designer or a builder, you want to provide everything needed when submitting for a permit. As a building department you want to accept all permit submittals when brought to you. This webinar will discuss the various reports, documents, and information on construction documents needed for a residential energy submittal.

Register for webinar at https://attendee.gotowebinar.com/register/615875350300986892

Webinar 9: Wednesday, May 27, 220, 12-1pm: What do I Need to Provide for a Commercial Energy Submittal, Hope Medina, CCC

As a designer or a builder, you want to provide everything needed when submitting for a permit. As a building department you want to accept all permit submittals when brought to you. This webinar will discuss the various reports, documents, and information on construction documents needed for a commercial energy submittal.

Register for webinar at https://attendee.gotowebinar.com/register/3692109873213643020

Webinar 10: Wednesday, June 3, 2020, 12-1pm: Common Information that is Missing to Complete an **Energy Review, Gil Rossmiller, CCC** 

What items am I missing for a complete review? A suggested checklist of items will be provided and discussed at this session.



# Xcel Energy\* Wednesday from 12:00pm -1:00pm MST



### April 1, 2020- September 16, 2020

**Mechanical Series the month of July** 

Webinar 11: Wednesday, July 1, 2020, 12-1pm: Commercial Mechanical Provisions, Gil Rossmiller, CCC

The 2018 IECC mechanical provisions have left a forwarding address but have moved around. There are few provisions that changed or are new for the mechanical section. Let's review what exists for the commercial mechanical requirements of the 2018 IECC

Register for webinar at <a href="https://attendee.gotowebinar.com/register/8979714067746617612">https://attendee.gotowebinar.com/register/8979714067746617612</a>

Webinar 12: Wednesday, July 8, 2020, 12-1pm: Residential Mechanical; Going Beyond an Air Handler, Gil Rossmiller, CCC

Do we have to install an air handler in our residential project? What types of other mechanical equipment can be utilized for residential projects? Let's discuss the other types of HVAC systems one might see in a residential project.

Register for webinar at https://attendee.gotowebinar.com/register/6350948891501644812

Webinar 13: Wednesday, July 15, 2020, 12-1pm: Manual J 101, Gil Rossmiller, CCC

These reports look so technical how do I start to review Manual J's? This session we will discuss what heat gain and loss calculation are and other basics needed for review including the software allowed to be used for the reports.

Register for webinar at https://attendee.gotowebinar.com/register/3228047796571352076

Webinar 14: Wednesday, July 22, 2020, 12-1pm: Manual S 101, Gil Rossmiller, CCC

Now that we have the heating and cooling loads let discuss the residential equipment selection. This session will provide basic guidelines for review, and how to determine when is the equipment oversized or undersized.

Register for webinar at https://attendee.gotowebinar.com/register/1997034578113360140

Webinar 15: Wednesday, July 29, 2020, 12-1pm: Manual D 101, Gil Rossmiller, CCC

How dumb is air? This session will open your eyes and discuss the components of a residential duct design for review. We will discus flows, static pressure, total equivalent length, frictions rates, and details. All the things needed for a Manual D review.

Register for webinar at https://attendee.gotowebinar.com/register/4159368230158127116

Webinar 16: Wednesday, August 5, 2020, 12-1pm: The New Look of the 2018 IgCC, Hope Medina, CCC

The 2018 IgCC has had some cosmetic surgery done, but during this webinar you will be able to see that things just moved around. Let's review the changes made with the 2018 IgCC as it relates to the merging of the two documents.



# Xcel Energy\* Wednesday from 12:00pm -1:00pm MST



### April 1, 2020- September 16, 2020

**Mechanical Series the month of July** 

Webinar 17: Wednesday, August 12, 2020, 12-1pm: Service Water Heating Provisions, Gil Rossmiller, CCC

For a few cycles the IECC has had provisions that deal with Service Water Heating, but it isn't a topic that is discussed very often. This webinar will discuss the provisions found for both the commercial and residential energy code. Why does location matter?

Register for webinar at <a href="https://attendee.gotowebinar.com/register/6450055571094626060">https://attendee.gotowebinar.com/register/6450055571094626060</a>

Webinar 18: Wednesday, August 19, 2020, 12-1pm: Chapter 5: What Do You Do with Existing Commercial **Buildings**, Gil Rossmiller, CCC

The 2018 IECC has provided some guidance on how to treat existing commercial buildings. This session is going to review the commercial requirements of chapter 5 including topics for additions, alternations, repairs, and change of occupancy.

Register for webinar at https://attendee.gotowebinar.com/register/1038767313553211916

Webinar 19: Wednesday, August 26, 2020, 12-1pm: Chapter 5: What Do with Existing Residential **Buildings**, CCC Gil Rossmiller/Hope Medina, CCC

2018 IECC has provided some guidance on how to treat existing residential buildings. This session is going to review the residential requirements of chapter 5 including topics for additions, alternations, repairs, and change of occupancy.

Register for webinar at https://attendee.gotowebinar.com/register/6932424516339539212

Webinar 20: Wednesday, September 2, 2020, 12-1pm: Commercial Air Barriers and Testing, Sue Reilly, Group 14

Review, verification and testing of the thermal envelope is required in some jurisdictions and testing is an alternative to meeting the air barrier requirements in other jurisdictions. Through the tightening of the thermal envelope, buildings may realize energy cost savings and will be easier to balance and operate. We will discuss compliance with the air leakage requirements as well as the testing alternative.

Register for webinar at https://attendee.gotowebinar.com/register/5553194931434109708

Webinar 21: Wednesday, September 9, 220, 12-1pm: Commissioning, Matt Cooper, Group 14

Commissioning of mechanical systems and electrical power and lighting systems is required for most commercial buildings and for the non-residential spaces in multifamily buildings. Commissioning is intended to make sure systems are working as designed when the building is delivered. Studies have shown median energy savings of over 10% and simple paybacks of less than 5 years with commissioning. We will present on the commissioning process and some common issues we have seen over the years.



# Xcel Energy® Wednesday from 12:00pm -1:00pm MST



April 1, 2020- September 16, 2020

Mechanical Series the month of July

Webinar 22: Wednesday, September 16, 2020, 12-1pm: Electric Vehicles and the Codes, SWEEP

Local governments around Colorado have begun to adopt EV-ready building codes, which include electrical capacity and pre-wiring requirements to enable the quick and affordable installation of future EV charging stations. Join us to learn more about what cities and counties are doing to support EV adoption with their building codes.

Register for webinar at https://attendee.gotowebinar.com/register/1532246823810188043

Funding for this webinar series was provided by Xcel Energy, and provided by Colorado Code Consulting.