Wing Lee: Hi

Andus Brandt: Hi

Mike Wilson -AIA: Please raiser your hand OR put your questions for Dan here.

**ANDREW LEE:** Hi everyone...I'm having very spotty audio connection, is anyone else having this problem?

**Richard Morrison, AIA:** I'd love to know how many here are doing their own calculations, and if not, why not?

Wing Lee: I gave up doing my own calc.

Andus Brandt: I'm with Linda!

Wing Lee: same reason

claudia falconer: Never have done my own. My consultant charges \$300

**Daniel Guich AIA:** I encountered recently that a max. 16 SF of skylight area allowed when going prescriptive.

Wing Lee: Spotty audio for me too

**Cathy Roha:** I do them for projects because it's easy to run different scenarios about levels of insulation, different heating types, whether it's worth getting a HERS inspector to verify that there is NO insulation in the attic or underfloor, etc.

**Wing Lee:** I can't keep up with T24, Green Building code, and REACH requirements. I ve been hearing lots of rumors such as no way to pass for new single-family dwelling unless continuous insulation is applied. Is that correct generally?

**Kerstin:** I think Dan has spotty audio.

Joanna Bianchi: audio very spotty

Mike Wilson -AIA: Audio ok here...

**Jenn Hamrick:** What software is everyone using for calcs?

**Daniel Guich AIA:** How do you perform the calcs? Is there a software I can download? Any web sites you can point me to?

Richard Morrison, AIA: EnergyPro

**Carol McNeill:** When does the course start?

**Donald Wardlaw AIA:** Does Dan expect that the next version of the CEC will further hobble use of skylights?

**Cathy Roha:** I use CBECC-Res, don't care for it as much as EnergyPro, but it's free and I now do very few projects.

Richard Morrison, AIA: Maybe Dan can turn off his camera to have less bandwidth.

**Kerstin:** I got a note saying Dan Johnson's network bandwidth is low.

Wing Lee: Agree

Wing Lee: Dan, please call in

**Howard Blecher, Architect:** I use energy pro. helps me dial in the design without back and forth with a consultant

**jerri holan:** my audio is going out too. maybe we should all turn off videos?

Eliza Koshland: some times it helps to turn off camera

Rebecca Schnier: did not get Dan's suggestion for software...

**Daniel Guich AIA:** I missed the software Dan mentioned. IS it C-Bec??

Wing Lee: sorry I didn't hear dan's response for my question -

**Wing Lee:** I can't keep up with T24, Green Building code, and REACH requirements. I ve been hearing lots of rumors such as no way to pass for new single-family dwelling unless continuous insulation is applied. Is that correct generally?

Jenn Hamrick: @Daniel Guich http://www.bwilcox.com/BEES/BEES.html

**Andus Brandt:** Can we start the program and ask questions later?

Mike Wilson -AIA: Here is that link to CBEC Res

Mike Wilson -AIA: Download CBECC-Res 2019.1.3 setup (.exe file).

Mike Wilson -AIA:

https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2019 -building-energy-efficiency-2

Carol McNeill: Could we start the program?

**Carol McNeill:** I'm in New York, and I hear everyone. **Carol McNeill:** Isn't it good enough to get started

Richard Morrison, AIA: Try Zip-R sheathing from Huber Engineering. Insulation/bonded to OSB.

**Daniel Guich AIA:** I was told that it is ok to screw the cladding through the rigid insulation with long roofing screws to get back to studs. Its best not to use furring since it increases the thermal bridge.

Daniel Guich AIA: Just like attaching rigid over a roof deck.

**Daniel Guich AIA:** There is a webinar about this given by ROXUL

Daniel Guich AIA: Screws are recommended from Roxul

guylubroth: ZIP System

Linda Randolph: Rachel- Did you want to ask for ideas for next month's roundtable?

Rob Stiles: Zip makes a sheathing + insulation product but it doesn't work with shearwalls above a

fairly low shear value

Wing Lee: detached adu

T Rachel Slonicki: all

bdelgado6@horizon.csueastbay.edu: C

Charles Lee: What about Equation 105.1-C?

**Katy Hollbacher:** Daniel Guich- ideally, the rigid insulation (say 1-2" or even thicker) is installed in a truly continuous way with furring not penetrating that layer. Furring strips (e.g. 1x2s) go outboard of the rigid to provide a rainscreen/back-ventilated cladding detail and are anchored back to studs; then cladding attaches only to the furring. So in this case there's no thermal bridging from furring since it is entirely outboard of the rigid. This approach is good for thicker rigid (>2") where very long and beefy screws for cladding attachment could be challenging. The rainscreen gap is also ideal for long-term durability of the wall.

**Daniel Guich AIA:** 3 to 5kw **Andus Brandt:** 3.5 or so.

Rebecca Schnier: yup, 3.5 to 5

**Donald Wardlaw AIA:** I've heard that the life expectancy of PV panels is about 25 years, which is about the life expectancy of an asphalt shingle roof.

Andus Brandt: For an ADU though there's a limit to how much can fit.

**Daniel Guich AIA:** Are they only offsetting the natural gas with this chart?

**Andus Brandt:** How do we reconcile having to run a fan continuously and the requirement that it's on an occupancy sensor?

**Daniel Guich AIA:** If you use a bath exhaust fan to meet the IAQ requirement, does it need to be on a sensor? If it is not running continuously? How often would you need to run it?

T Rachel Slonicki: 7 %

Daniel Guich AIA: 0.048

**jerri holan:** what is heat pump water heater?

**Andus Brandt:** Does heat-pump mean heat exchanger?

**Ines Lejarraga:** Is the staggered stud solution more economical than the foam on the exterior

solution?

**Tom H:** Can we get a copy of the slide deck afterwards?

Mike Wilson -AIA: Slides will be shared

**Andus Brandt:** Can we maybe save audio questions until later? We can use the chat for questions now.

Dana + Lani Owyoung: how much attachment is required to constitute an attached ADU

**Donald Wardlaw AIA:** Can the exhaust be ducted from an interior closet to the exterior?

**Wing Lee:** Wonderful presentation Dan! **Andus Brandt:** Thank you Dan and Katy.

**Kurt Lavenson:** agreed! very helpful Dan!

Howard Blecher, Architect: thank you Dan

**Ines Lejarraga:** What advice would you have for a client interested in a project with as much glass

as possible to accommodate views?

**Chris Trujillo:** Really informative, covered so much.

Maria-Teresa Waldenmaier: Great presentation! Please e-mail me the slide presentation.

guylubroth: What are the best resources to get educated properly and not get into too much

technical detail?

Rebecca Schnier: wonderful presentation, Dan. Thank you,.

**Charles Lee:** Any suggestions on how to get mech and elec PV permits submittal design for small projects (ex 300sf ADU) if we can't defer as design/build by GC?

**Kerstin:** Can I use one condenser for a 3 unit project with heat pump space heating? I have problems finding a space on the site to locate the condenser.

**Maria-Teresa Waldenmaier:** What about a detached ADU that's built with CMU or a product like TREMCO?

**Wing Lee:** how do we know for sure which jurisdictions have adopted the REACH code? Some of them have not submitted the paperwork to CEC, some of are about to,......How the heck do we know other than keep following up with them? Or is there a website from CEC which states what cities/counties have enforcing it? THX

**Eliza Koshland:** Ive been finding some building science podcasts useful - they are based in Texas and East Coast so climates are different, but good for understanding basics - "Building Science Pocast" and E3: Energy and Efficiency with Emily Mottram

**Dana + Lani Owyoung:** You mentioned exhaust for WH heat pump. What is there to exhaust.

Richard Morrison, AIA: Advantage of EnergyPro is that it does system load calcs

**jerri holan**: he covered my question already

**Ines Lejarraga:** Can you get credits for installing solar panels when they are not required on your project to use against other items such as more windows?

**Jenn Hamrick**: Will you be sending everyone a copy of the presentation?

**Kerstin:** They will share it

**Ines Lejarraga:** Alpen Window? Is that spelling correct?

**Cathy Roha:** Thank you for excellent advice as I am starting on a small ADU in Oakland. I appreciate the clarity of your presentation.

Wing Lee: Thank you everybody! stay safe!

**Rebecca Schnier:** How about ADUs in Bay Area? Or has that been done already?

**M. Corbell:** The building department topic sounds interesting to me, and we could also collect code questions/ changes in 2019 code.

Ines Lejarraga: I like idea of building department topic as well.

Daniel Guich AIA: How do we deal with the effective R value? Is that come into consideration in the

performance calculations?

claudia falconer: Thank you Dan!

Tarry: Thank you Dan

waziuddin chowdhury: Wonderful Presentation. Thank you.

Ines Lejarraga: Thank you Dan!

**Kerstin:** Thank you all!

Wing Lee: Thank you Rachel!

**Dana + Lani Owyoung:** Thank you Dan, you were very informative.

Wing Lee: Thanks!

Wing Lee: <a href="https://localenergycodes.com/">https://localenergycodes.com/</a>

T Rachel Slonicki: wonderful presentation Dan

Chris Trujillo: Thank you

**Howard Blecher, Architect:** is this the website? <a href="https://localenergycodes.com/">https://localenergycodes.com/</a>

Jenn Hamrick: Thank you!

T Rachel Slonicki: Alpine windows

Dan Johnson: Alpen windows - high performance, credit in the energy code, not too expensive