



Shaun @ 475 Says “Happy Earth Day!” and this event has some rules:

1. Mute your microphone.
2. Share your camera. We want to see you! Big smiles please. Bonus, add a virtual background
3. If you speak, keep it short. Less than 30 seconds.
4. Message one another. Check out the private chat function.
5. Questions period will occur at the end of the presentation.
6. Ask questions in the chat box during the presentations
7. I will call you out so you can ask your question.
8. I will also let the next person know that they are on deck. Yes, that’s a baseball analogy for those who are in need of some sports talk!
9. The presentation is targeted at being 15-minutes on buildings and it will focus on a problem as well as sharing some of the successes and challenges that the team overcame.
10. We would love to add a 2 minute video of a tour of a passive house project, so refer to the passive house accelerator for details.
11. Have Fun AND INVITE ANYONE WHO YOU THINK MIGHT BE INTERESTED.

1) Hyperlinks. All have been tested and work. Some may take up to 5 seconds to load so be patient. They are also in the chat detail for more context. Searching for the time stamp will get you there.

Participant	Time	Comment
Shaun aka Zack @ Van	18:58:14	https://www.treehugger.com/are-epa-certified-wood-stoves-environmentally-friendly-5180801
Devon Basher	19:04:18	https://americanmadechallenges.org/EROBOT/ If anyone wants to team up on this, please Imk. https://www.linkedin.com/in/devon-basher-2512058/
Prudence Ferreira	19:05:23	https://www.herox.com/EROBOT
wyoming wille	19:12:25	https://www.linkedin.com/in/mark-build-small-casitas-wille/

wyoming wille	19:16:09	Mass Timber with VAAGEN on Friday at 10 Pacific: https://www.linkedin.com/events/engineeredwoodmasstimberwithva6776028224112721920/
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Through the Lens of LEAN.

32 Lincoln Street
Lexington, MA, 02421



Participant	Time	Comment
Derek Cowburn to Jeff Rhodin(Direct Message)	19:16:54	https://youtu.be/0pc6orAKRkY
wyoming wille	19:17:20	Shaun is on BS and Beer this Thursday: https://www.thebsandbeershow.com/
wyoming wille	19:28:05	ZACK SEMKE is LIVE May 7th for the 52nd Episode of Building Science LIVE at 10 Pacific: https://www.linkedin.com/events/architecture-engineering-constr6776033804659261440/
Derek Cowburn	19:31:12	a few people asking...here's the 3min LC big picture deck. I have one I'm making for Mark that's specifically about PH benefits. https://youtu.be/0pc6orAKRkY
Devon Basher	19:38:43	Awesome work and great presentation thank you so much! Sorry for repeated msg. Lost connection. Re: RFP for tools for safer, faster, more accurate and efficient tech and bots to help scale residential envelope retrofits, https://www.herox.com/EROBOT if anyone wants to team up, please lmk, due May 12th. https://www.linkedin.com/in/devon-basher-2512058/
wyoming wille	19:51:58	Connect with Zeina Talje on LinkedIn and Thank her for presenting: https://www.linkedin.com/in/zeinatalje/
Derek Cowburn	20:00:03	@michael, LC works with HA. look at all the chatter from dealers and system owners in http://smart-e.lighting under integrations forum
Prudence Ferreira	20:18:48	https://www.linkedin.com/in/zeinatalje/

wyoming wille	20:51:59	https://www.linkedin.com/events/engineeredwoodmasstimberwithva6776028224112721920/ VAAGAN on Friday at 10
wyoming wille	20:53:28	ZACK SEMKE is LIVE on May 7th at 10 Pacific for the 52nd Episode of BS: https://www.linkedin.com/events/architecture-engineering-constr6776033804659261440/
wyoming wille	20:54:31	https://www.thebsandbeershow.com/ with SHAUN tmrw

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2) Chat Summary



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1. Change of format for the new year (Getting busy now). The only edits that have been made are to remove all the “chit-chat” and pleasantries and verify that all the hyper links work. This week the main topics discussed in the chat are:
 - a. A whole bunch of topics.

3) Chat Detail

Participant	Time	Comment
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Shaun aka Zack @ Van	18:58:14	https://www.treehugger.com/are-epa-certified-wood-stoves-environmentally-friendly-5180801
Dale N. Bickenbach	19:03:08	Why is this limited to the 'United States'?
Justin Taylor @ Tampa, FL	19:03:21	It's sponsored by the US DOE
Justin Taylor @ Tampa, FL	19:03:26	department of energy
Devon Basher	19:04:18	https://americanmadechallenges.org/EROBOT/ If anyone wants to team up on this, please lmk. https://www.linkedin.com/in/devon-basher-2512058/
Dale N. Bickenbach	19:04:22	We have international Departments within the Federal Government.
Derek Cowburn	19:04:41	happy to help with the wiring and utilities part
Justin Taylor @ Tampa, FL	19:04:51	What is the Lorax? I saw Trevor posting about it, but I have no clue what it is
Prudence Ferreira	19:05:23	https://www.herox.com/EROBOT
wyoming wille	19:12:25	https://www.linkedin.com/in/mark-build-small-casitas-wille/
Justin Taylor @ Tampa, FL	19:12:52	Did everyone get an e-mail reminder for today's presentation? I had to use an old one to log in
Luiz Bezerra	19:13:06	Justin, check the spam
Justin Taylor @ Tampa, FL	19:13:12	not there
Tommy Manuel	19:15:30	Go Lions!
Dale N. Tacoma Washington	19:15:46	Monadnock provided an excellent presentation on how to plan and manage construction of a multistory building. Hire them at whatever cost they want!

Participant	Time	Comment
wyoming wille	19:16:09	Mass Timber with VAAGEN on Friday at 10 Pacific: https://www.linkedin.com/events/engineeredwoodmasstimberwithva6776028224112721920/
Derek Cowburn to Jeff Rhodin(Direct Message)	19:16:54	https://youtu.be/0pc6orAKRkY
wyoming wille	19:17:20	Shaun is on BS and Beer this Thursday: https://www.thebsandbeershow.com/
Jeff Rhodin to Derek Cowburn(Direct Message)	19:18:03	THX!
Melissa Allen	19:18:08	presenter view is that bottom at the very bottom of the ppt
Justin Taylor @ Tampa, FL	19:27:09	thank you for sharing this information!
wyoming wille	19:28:05	ZACK SEMKE is LIVE May 7th for the 52nd Episode of Building Science LIVE at 10 Pacific: https://www.linkedin.com/events/architecture-engineering-constr6776033804659261440/
Andrew Peel	19:28:24	So interesting the differences in markets. In Toronto, (crappy) condos rule and there's a shortage of rentals.
Prudence Ferreira	19:29:57	Breathe better. Sleep better. Work better. Live better. This is great!
#ThinkPassiveHouse	19:30:18	hmmm sounds like Passive House Better For Challenge
Melissa Allen	19:30:19	love the marketing and the interior rendering looks awesome
Derek Cowburn	19:31:12	a few people asking...here's the 3min LC big picture deck. I have one I'm making for

		Mark that's specifically about PH benefits. https://youtu.be/0pc6orAKRkY
Kevin Brown	19:31:33	Cool!
Edie Dillman	19:31:40	Thanks Derek!
Kevin Brown	19:32:20	Looks like there's a new site - youtu.be...
Ilana Judah	19:32:55	Do you think the better air quality/health driver for buyers increased due to Covid?
Prudence Ferreira	19:32:56	Can you tell us more about the structure you used to get the solar done? How did that work exactly?
rick	19:33:17	I am trying to convince our local district to encourage Sustainable 'Green' buildings...low to no embodied carbon. Anyone know of jurisdictions that have rebates or other mechanisms to encourage builders to build better?

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Participant	Time	Comment
Patrick Walmsley	19:33:25	+1 Is this a power -> grid; grid -> owner?
rick	19:33:28	that I might reference
Derek Cowburn	19:33:56	as long as you don't charge more than the utilities, most jurisdictions allow you to do shared solar. keeping it all DC adds about 10-20% free because the efficiency is higher.
#ThinkPassiveHouse	19:33:57	Q: was there discussion on \$/ft2 ie buildout cost
#ThinkPassiveHouse	19:34:33	the old structural "stub"
wyoming wille	19:34:34	Please remember, every time someone sends "IT DEPENDS" during Happy Hour you

		have we all take a drink.
#ThinkPassiveHouse	19:34:45	lol
Justin Taylor @ Tampa, FL	19:34:53	Q - How did your profit margin for this project compare to your previous work? Not sure if it is an apples to apples comparison
Prudence Ferreira	19:35:02	Can we see your Instagram marketing. Where can we follow your feed?
#ThinkPassiveHouse	19:35:06	Colorado wille, it depends what you mean?
Shaun aka Zack @ Van	19:35:15	Question Que: Rick, Patrick Walmsley, Harvey, Justin, Pru
#ThinkPassiveHouse	19:36:10	Q: what did the units sell for per sf
Derek Cowburn	19:36:11	for MDUs, just give everyone "free DC"-- lights, mobile device USB charging, fans, even TVs. Just put the extra \$5-10/mo into the lease or sale price.
Dale N. Tacoma Washington	19:36:53	How is the homeowners association configured?
#ThinkPassiveHouse	19:37:18	Q: how were the appraisers helping out with the banks?
Dale N. Tacoma Washington	19:37:48	Sound transmission within the structure?
Prudence Ferreira	19:38:12	Can you share Craig Foley's contact info re MLS line items?
#ThinkPassiveHouse	19:38:37	annoying is good!
Derek Cowburn	19:38:39	Really beautiful design and finishes
Andrew Peel	19:38:43	Conclusion. Be annoying :). Love it
Devon Basher	19:38:43	Awesome work and great presentation thank you so much! Sorry for repeated msg. Lost connection. Re: RFP for tools for safer, faster, more accurate and efficient tech and bots to help scale residential envelope retrofits, https://www.herox.com/EROBOT if anyone

Participant	Time	Comment
		wants to team up, please lmk, due May 12th. https://www.linkedin.com/in/devon-basher_2512058/
Rich	19:39:04	Can we slow the slide show down a bit please?
Prudence Ferreira	19:40:25	@Rich - its part of Zeina's ppt, so I don't think we can, since she would need to stop answering questions to reprogram her animations!
Jeff Rhodin	19:41:04	Q: As the developer about how much time did you spend on the high performance aspects and what did you "off load" to others to free up your time?
Wes in DFW	19:41:40	That's what we need to do in Texas.
Michael @ Bethlehem PA	19:42:07	tell that to the utilities in CA... solar costs them money- you produce power when the grid doesn't need it.
Edie Dillman	19:44:05	Go Boston! Glad to hear good movement and that the hard work of PH community has made progress.
Kevin Brown	19:44:15	Utilities are facing the issue of their big generator / many consumer model disappearing under their feet. The price of solar is going to be lower than the price of transmission - sooner than they would like. It's kind of a crazy time...
gillian rose	19:44:29	There were some pipes in one of the rooms. Can you explain what they are?
Dale N. Tacoma Washington	19:45:20	Why double stud wall?
Derek Cowburn	19:45:35	@kevin @michael That's right. They're fighting on one hand, on the other they're trying to find out how to be in the delivery and service business.
Michael @ Bethlehem PA	19:46:09	its a government mandated monopoly system- they will get their profits. If they keep subsidizing net-metering (people who can afford solar), they will get everyone

		else (the people who cant afford it) to pay for it
wyoming wille	19:46:24	How much for a bag of groceries.
Rich	19:47:21	Such an acute business mind!
Enrique Bueno - VTPH	19:47:21	Q: How integrated is the MLS with the Home Energy Labeling Information eXchange (HELIX) and how functional is that integration?
wyoming wille	19:47:55	20 Years to Normal. Let's put the ACCELERATOR on
Derek Cowburn	19:48:37	Policy Summit is good with this administration. It's not 100% pay-to-play.
Lindsay Klein, NYC	19:48:38	Thank you awesome project congratulations!

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		Comment
Participant	Time	
Derek Cowburn	19:49:18	maybe 60-40% PTP
Peter H. Molenaar	19:49:57	... oPHPH !
wyoming wille	19:51:58	Connect with Zeina Talje on LinkedIn and Thank her for presenting: https://www.linkedin.com/in/zeinatalje/
#ThinkPassiveHouse	19:52:06	Wash Rinse Repeat
Kevin Brown	19:52:09	A real estate developer will do it again. That's a seal of approval.
Bo Green	19:52:29	Great info, thx!
#ThinkPassiveHouse	19:54:17	is there a place to see the presentation deck again?
Justin Taylor @	19:54:20	Who are the architect/MEP for this project?

Tampa, FL		
Bo Green	19:54:34	Sorry, had to step away. Question answered.
Luiz Bezerra	19:55:17	YES!
Luiz Bezerra	19:55:43	Thanks Shaun! Thank you PHA!
#ThinkPassiveHouse	19:56:04	woo hoo one more time Pru!!
PHloyd in Toronto	19:56:32	I have to run goodnight all
Kevin Brown	19:57:02	Hit play...
#ThinkPassiveHouse	19:57:18	gotta jump as well. great presentation and amazing project
Patrick Walmsley	19:57:20	Where/how did you distribute the marketing?
rick	19:57:45	Thanks Zeina.. Great presentation and great build
Justin Taylor @ Tampa, FL	19:57:48	Awesome selections!
#ThinkPassiveHouse	19:57:58	#ThinkPassivHaus #ThinkPassiveHouse...Who is going to accept to the Passive House Better For Challenge?
Ilana Judah	19:58:09	That is awesome!!
Kevin Brown	19:58:20	Sweet!
Dale N. Tacoma Washington	19:58:38	Did you pay royalties for using the song?
Kevin Brown	19:59:04	Thanks so much - gotta run!

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Participant	Time	Comment
Julie Blazek	19:59:07	A notice to all that NAPHN is looking for short videos to play between sessions at their upcoming conference in June. Contact Ken or Gael at Ken@naphnnetwork.org or Gael@naphnnetwork.org.
Celia-Calgary	19:59:20	Great presentation! See you all next week PHriends
Derek Cowburn	20:00:03	@michael, LC works with HA. look at all the chatter from dealers and system owners in http://smart-e.lighting under integrations forum
wyoming wille	20:00:56	I like the 2x8 with 2.25" of Thermal Break.
Patrick Walmsley	20:01:04	Is there insulation between floors?
Derek Cowburn	20:01:10	soundproofing is my my favorite part of PH
Rich	20:01:13	Rain screen lends itself to the "non leaky building" sales pitch, double stud and extra timber lends itself to the "carbon sequestering" sales pitch.
Peter H. Molenaar	20:02:53	There's no such thing as "Overbuilt" ! It's just built properly.
Shaun aka Zack @ Van	20:03:36	Question que; Jeff, gillian, marie
Patrick Walmsley	20:03:53	Very cool!
PHorest Borch (Vancouver)	20:04:11	Acoustical consultant here, let me know if you have any specific questions on sound isolation :)
Patrick Walmsley	20:06:00	Are the HRV and mini splits broken out? Boston being a mild heating climate, did you go with an ac centric mini split rather than co2 air heat pump?
Brian Keech in Pittsburgh	20:06:20	I think Zeina mentioned that the overall exterior wall cavity was 12". How else would you economically achieve that 12" cavity and the R-value it gives you without doing a double stud wall?
Prudence Ferreira	20:07:13	Zeina you have the perfect name to be a PH Super She-ro!!
Scott Kennedy	20:07:24	curious as to where the air barrier is in the assembly
Peter H. Molenaar	20:07:45	A blower-door test is not opinionated !

wyoming wille	20:07:49	Q-Where do you hear about and learn about passive house and how do you introduce it?
Patrick Walmsley	20:09:22	@Brian The big cost in a wall assembly its the insulation. Dense pack is by far the cheapest (around \$1 a sq ft). Wool or batt style costs slightly more per sq ft and if you start adding a thermal break/thermal board thats basically buying the insulation twiceish. So cavity is a cost savings opportunity. I was leaning towards plywood style I beams on end rather than double stud for simplicity.

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Participant	Time	Comment
Patrick Walmsley	20:10:11	Anyone know how high an I beam wall can go?
Justin Taylor @ Tampa, FL	20:11:52	BIM is a must in all of these projects
Shannon New Hope	20:12:40	barrier vs retarder
Patrick Walmsley	20:12:48	Assuming you used dense pack, did you use permeable barriers on both side? Assuming
Patrick Walmsley	20:13:11	Sheer wasn't an issue due to the steel, I could see skipping the sheathing for fabric
Derek Cowburn	20:13:13	big fan of BIM being as most projects are already in 3D CAD. plus we can go from design directly to operation and monitoring
Patrick Walmsley	20:13:24	Any bim software recommendations?
Brett Sagert, PGL, Vancovuer	20:13:31	Thanks for the amazing presentation.
Justin Taylor @ Tampa, FL	20:13:43	We use ArchiCAD

Ivan Lee - Vancouver	20:13:49	Thermal bridging and embodied carbon should be considered in early design since they have a big impact in thermal bridging and carbon that can be difficult to fix down the road
Shannon New Hope	20:14:32	great question
Peter H. Molenaar	20:14:51	Q ; what about creating a 3-D model of each project to determine the red-line vapour control-zone ?
gillian rose	20:16:12	LOVE that you want to make a difference!
Rich	20:16:38	Can we clone Zeina?
Brian Keech in Pittsburgh	20:16:43	Patrick: Revit software has both a "full" package (more \$) and a Revit LT (a lot less \$). Both are offered on a subscription basis. Revit LT does not have shared model capabilities or allow rendering add-ons like Rhino, but has just about all other features.
gillian rose	20:17:00	the communication of Sustainability is everything!
Derek Cowburn	20:17:26	@michael, the gyll factory is about a 15min bike ride from my apartment. We're asking them to ODM a wall mount battery with same BMS. We're using it to integrate with the LC gateway so we can do Demand management and optimize battery use in overcast days, etc, so you're never out of power.
Prudence Ferreira	20:18:48	https://www.linkedin.com/in/zeinatalje/

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Participant	Time	Comment
Justin Taylor @ Tampa, FL	20:18:59	ArchiCAD is available as either a subscription or full pay model. It has great connections to other software such as Rhino/Grasshopper, Sketchup, and other live rendering software

Tommy Manuel	20:19:04	Thank you, Zeina!
Shannon New Hope	20:19:10	so modest thank you
Scott Kennedy	20:20:07	Time for dinner. Always enjoy the evenings here. Great work moving the dial Zeina.
Devon Basher	20:20:51	tend to run hot and cold, in both my solid and vapor forms, always working to solve(nt) and share to areas w less, says water :)
Patrick Walmsley	20:21:10	"Developer grade windows"
Michael @ Bethlehem PA	20:22:46	@Derek - that's exciting. a 5kw-h battery with a 2kw solar system and LC- eternal lights and device charging- just need to run the fridge. That challenges enphase and tesla type systems that are AC coupled
gillian rose	20:22:53	cant wait for great windows to be available locally and not imported
Derek Cowburn	20:24:36	in a Hawaii 46 unit condo we're running all DC 380V feeds to the units then small inverter (\$900) makes AC for plugs and cheap fridge, etc.
Derek Cowburn	20:24:59	can do same with 48VDC and small solar. so easy today!
Patrick Walmsley	20:25:19	Q. Interested in hearing more about your path. How did you get your funding? What sort of seed money did you need to bring?
Brian Keech in Pittsburgh	20:25:54	Zeina: you said it regarding architecture school - you learn a lot about design and theory, but virtually nothing regarding codes, budget, building performance, etc.
Derek Cowburn	20:26:24	instead of focusing on AC as the primary source, we can install small AC inverters from a DC source (solar and battery)
Justin Taylor @ Tampa, FL	20:28:18	Who was the team for this project?
Shannon New Hope	20:31:40	quote of the night!
Derek Cowburn	20:31:44	haha that's great. "let them be angry early"
Justin Taylor @ Tampa, FL	20:32:30	Thank you for the wonderful input!!
Peter H. Molenaar	20:32:37	One with many hats !



Participant	Time	Comment
Justin Taylor @ Tampa, FL	20:32:41	it was a fantastic presentation
Andrew Peel	20:33:01	Amazing job. Great insights. Thank you
Derek Cowburn	20:33:01	thank you!!
Shannon New Hope	20:33:17	save the chat!
Brian Keech in Pittsburgh	20:33:48	Excellent presentation - thanks!
Peter H. Molenaar	20:34:18	May I a PHree ticket, please ?
Michael @ Bethlehem PA	20:34:22	wait, are CPHC certs finally going out for the February class????
Peter H. Molenaar	20:35:40	Need more PHibre in our systems !
Jeff Rhodin	20:36:31	Q: have another shout out
Derek Cowburn	20:36:37	congratulations!
Trevor Fedyna	20:36:37	You guys got plaques???
Peter H. Molenaar	20:37:15	I'll have to wait until June for the Tradesman exam.
Derek Cowburn	20:37:33	@rich There's a few good reviewer sites I've found. So many inverters available now so we kind of have to rely on them
Patrick Walmsley	20:37:42	That is some pretty solar!

Derek Cowburn	20:39:15	@rich connect via LinkedIn and I'll send
Daniel Levy	20:43:19	Too bad Christina Assman isn't still on—her husband Kyle is an architect in historic preservation who I believe grew up there.
Trevor Fedyna	20:43:19	Justin Taylor don't think he's in here anymore: this kinda thing is his jam
Daniel Levy	20:44:43	Good night all—great presentation and project
Trevor Fedyna	20:45:55	Seconding the mental health accessibility
Patrick Walmsley	20:46:10	“Tech school fab lab” == Makerspace
Peter H. Molenaar	20:46:18	... made for a PHleet of PHood trucks !
Trevor Fedyna	20:46:30	tech school phab lab == Phunk space!
Michael @ Bethlehem PA	20:46:31	i work in the Northampton Community College Fab Lab... it doesn't translate to real skills as well as you'd hope...
Devon Basher	20:46:34	A makers space!

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Participant	Time	Comment
Peter H. Molenaar	20:48:20	... a job PHorce !
Devon Basher	20:48:21	Great idea! I have thought that would work great on Governors Island in NYC. Teach and bring back the barrack there!
Michael @ Bethlehem PA	20:49:48	sounds like you need rental rooms... preferably by the hour?
Patrick Walmsley	20:50:34	Music space might get people there? Esp if you can leverage the buildings existing

		mass to trap the bass.
Shannon New Hope	20:50:48	@Michael for shame darlin!
Michael @ Bethlehem PA	20:51:26	@shannon, what? it supports existing business infrastructure!
Marie Mattinson	20:51:48	Thankyou everyone-I really enjoyed my first PH Happy hour- A Great community
wyoming wille	20:51:59	https://www.linkedin.com/events/engineeredwoodmasstimberwithva6776028224112721920/ VAAGAN on Friday at 10
wyoming wille	20:53:28	ZACK SEMKE is LIVE on May 7th at 10 Pacific for the 52nd Episode of BS: https://www.linkedin.com/events/architecture-engineering-constr6776033804659261440/
wyoming wille	20:54:31	https://www.thebsandbeershow.com/ with SHAUN tmrw
Jeff Rhodin	20:56:21	Don't miss family dinner EVER!!
Devon Basher	20:56:48	Could we leave the room open?
Patrick Walmsley	20:57:02	+1 leaving it open/public link
Eric	20:57:28	Check out the BARI -Boston Area Research Initiative conference begins Friday morning - free online 9 am till 12pm -- "Building Back Smarter"

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