TT 2021-11-09 Tiny Mobile PH Office, D.Welch

Dan Welch, Tiny Mobile Passive House Office: Community built, material salvage, details & more, 2021-11-09

In today's video, Dan Welch, founder and principal of [bundle] design studio will tell us the story of the smallest Phius-certified project, the design studio's tiny mobile office. Built principally of salvaged materials, it demonstrates high-performance sustainable design and Passive House construction techniques.

Summary of the Links in the chat:

11:07 AM Mark Wille — Dan is on LinkedIn: say hello: https://www.linkedin.com/in/bundledesign/

11:08 AM Zack Semke — I'll share the link to the Podcast episode in a moment. Here you go! https://passivehouseaccelerator.com/podcast/passive-house-podcast-ep-51-mackenzie-stickney-bundle-design-studio

11:09 AM Shannon | New Hope PA — Connect with Mackenzie ~https://www.linkedin.com/in/mackenziestickney/

11:47 AM Mark Wille — Be a part of the ASTM group for Tiny House: https://www.tinyhousealllianceusa.org/positive-vote-for-an-astm-tiny-house-standards-committee/;

11:54 AM Mark Wille — Human Health & Environmental Impacts 11/12 at 10 am Pacific on #BS Friday LIVE with Juanita Garcia: https://www.linkedin.com/events/humanhealthandenvironmentalimpa6859601661791485952/

11:59 AM Zack Semke — Link to register for Episode 2 of Building Performance Interactive: https://passivehouseaccelerator.com/event-announcements/mmc-offsite-tf-construction-from-start-to-finish-ep-2-of-building-performance-interactive

12:07 PM Shannon | New Hope PA — https://www.linkedin.com/company/hkp-architects/; https://www.linkedin.com/in/dan-whitmore-09611844/

12:10 PM Shaun St-Amour — one of my favorites: https://www.youtube.com/watch?v=KTKUSpk2118 pumpkin ridge PH from Hammer and Hand

12:19 PM Cameron Duncan — Beats straw bale… https://en.wikipedia.org/wiki/File:Don%27t-overload-your-trailer.jpg

12:35 PM Shaun St-Amour — https://www.efficiencycanada.org/retrofit-mission/?mc_cid=5ef5921bc9&mc_eid=2d5b176bb7. will do again tomorrow

12:39 PM Construction Rocket — we are at https://www.instagram.com/rocketconstruction/

12:45 PM Shannon | New Hope PA — Bring your projects to the Accelerator: email sgladu@passivehouseaccelerator.com

For the Global audience: Abbreviations, Acronyms, Products, Projects, Technical Terms; and Slang used in the chat:

aka – **a**lso **k**nown **a**s

ASTM – **A**merican **S**ociety for **T**esting and **M**aterials (now ASTM International) develops, tests, and publishes voluntary consensus technical standards for materials, products, systems, and services. (https://www.astm.org/)

Blueskin SA – A self-adhering air, vapour, and water-proof building wrap membrane made by Henry Company (https://henry.com/)

Bookmobile – A vehicle fitted out as a library to provide book lending services to isolated communities.

bucket list – the list of things a person most wants to do before dying (dying aka 'kicking the bucket')

CHAINSAW RETROFIT – a deep-energy retrofit beginning with the chainsaw removal of roof overhangs, followed by wrapping the building's exterior with an airtight membrane, adding a deep layer of insulation, then installing new siding, roofing, and windows: https://www.greenbuildingadvisor.com/article/the-history-of-the-chainsaw-retrofit

Disco ball - aka mirror ball; generally hung from the ceiling, the ball's surface consists of tiny, light-reflecting mirrors.

donkeys - 'How many donkeys does it take to pull this' – In the 1880s, US borax miners' teams of 20 mules hauled 11 tons of borax on the 10-day trip from the mines through Death Valley to the railroad; the *20 Mule Team Borax* brand popularised the 20 mule team's image. https://www.youtube.com/watch?v=CqPuBpClubs.

EWP – **E**levated **W**ork **P**latform, e.g. scissor lift, cherry picker.

lid – slang for roof

PFS TECO – independent materials testing and accreditation company: accredited to test adhesives, structural panels (e.g. OSB, plywood), EWP, wood and gas hearths and hearth products (https://www.pfsteco.com/)

sf – **s**quare **f**eet

SIP – **S**tructurally-**I**nsulated **P**anels – SIPs are typically made with a core of rigid Expanded Polystyrene (EPS) sandwiched between two structural skins of **O**riented **S**trand **B**oard (OSB).

spline / splining – an edge-to-edge join between two panels: a thin, narrow strip of panelling inserted between the panels' edges is overlapped by the panels' outer skins. May be glued or screwed in place.

standing-seam – metal panel roof system held down with hidden clips: raised seams (aka standing seams; vertical legs) between adjacent panels hide the overlapping folded and crimped panel edges which join them to one another.

Tiny House / **Tiny homes** – Typical tiny homes on wheels are usually less than 8 X 20ft {2.4 X 6.1m} to enable towing and building permit exemption; they optimize vertical space, multi-functional fittings, and compact appliances.

woot – the sound of a cheer

The chat: (Note: time signatures are Australian Eastern Daylight Savings Time)

11:02 AM Shannon | New Hope PA Welcome Everyone! Thanks for joining us for tonight's presentation with Dan Welch from Bundle Design Studio!

11:04 AM Reid Rowlands Show us the badge she gets:-)

11:04 AM Mark Wille https://www.tinyhouseallianceusa.org/positive-vote-for-an-astm-tiny-house-standards-committee/

11:06 AM Chris (Soukup America) So excited about Tiny! Thank you for hosting / presenting!

11:07 AM Mark Wille Dan is on LinkedIn.... say hello: https://www.linkedin.com/in/bundledesign/

11:07 AM Janet thome Did you say certified by PFS TECO?

11:07 AM Shannon | New Hope PA Connect with Dan & Bundle Studio online: https://www.bundledesignstudio.com/projects/; https://www.linkedin.com/in/bundledesign/; Great to have the Bundle Crew here!

11:08 AM Zack Semke I'll share the link to the Podcast episode in a moment. Here you go! https://passivehouseaccelerator.com/podcast/passive-house-podcast-ep-51-mackenzie-stickney-bundle-design-studio

11:09 AM Mary James Congrats to Mackenzie!

11:09 AM Zack Semke "To kick off Season 2 of the Passive House Podcast, Mary James and Ilka Cassidy interview Mackenzie Stickney, Project Manager at [bundle] Design Studio, a leader of sustainable design that works out of a PHIUS-certified Passive House tiny trailer in Bellingham, Washington. She's a Passive House practitioner, woodworker, and dynamic young innovator in climate-wise building design."

11:09 AM Natalia C. ✋

11:09 AM Shannon | New Hope PA Connect with Mackenzie ~https://www.linkedin.com/in/mackenziestickney/

11:11 AM Shaun St-Amour nothing beats a CHAINSAW RETROFIT

11:11 AM Mary James here here! And it was gorgeous

11:11 AM Reid Rowlands Chainsaw retro on my bucket list

11:12 AM Shannon | New Hope PA Good Phun!

11:12 AM Shaun St-Amour second @Reid

11:12 AM Peter Molenaar | Oshawa ON Smart to install standing-seam steel rooPH under the PV-array on the retroPHit project!

11:18 AM Peter Molenaar | Oshawa ON Did the trailer get sent to sand-blasting?

11:19 AM Zack Semke I love this slide.

11:21 AM Shannon | New Hope PA The Bookmobile of Passive House

11:21 AM Mark Wille https://www.linkedin.com/in/bundledesign/

11:22 AM Reid Rowlands I believe different states [*have different*] width limits. Some are 8' and none that I know of are over 8'-6"

11:22 AM Shannon | New Hope PA & You can never forget something back at the oPHPHice ;) 197.5sf!

11:30 AM Hans Eich | SIGA Q: Why did you chose to use a central HRV, rather than decentralizing it?

11:30 AM Hans Eich | SIGA (answered :-))

11:38 AM Jason Wen Q: why Blueskin SA over SIP walls? Why not Blueskin VP100/160, which are vapour-permeable?

11:39 AM Hans Eich | SIGA At Jason, it appears they used VP100 on the outside. SA appeared to be underneath the deck

11:39 AM Hans Eich | SIGA confirmed :-)

11:39 Jordan Frazin ^ correct

11:39 Jason Wen ah makes sense, ignore my question

11:40 AM Shannon | New Hope PA What windows were used?

11:40 AM Hans Eich | SIGA SIGA Fentrim: woot woot :-) Sorry, I got excited for a second

11:40 AM Shannon | New Hope PA :) Love the wool!

11:43 AM Sy Safi Awesome projects and office! What kind of composting toilet did you use?

11:43 AM Peter Molenaar | Oshawa ON PHarmers Markets

11:43 AM Chris (Soukup America) Are these slider, fixed, or inswing windows?

11:43 AM Shannon | New Hope PA QUEUE: Phirst questions up: Janet thome; Peter Molenaar | Oshawa ON

11:43 AM Jordan Frazin Some fixed, some tilt turn

11:43 AM Mary James I know there was a discussion about moving it to a shadier site during the summer. Are you going to do that next summer?

11:45 AM John Thanks for designing and building a passive house tiny home on wheels -- very needed these days.

11:45 AM Timothy Spitler Q. How do you handle phone calls while working so close to others in the space? Great project!

11:46 AM andy mroczek.seattle what was the reasoning for splining the smaller panels together for the floor and lid and full 30' length for the sides?

11:46 AM Mackenzie We actually really like using speaker phone so everyone can stay in the loop/learn from work calls

11:46 AM andy mroczek.seattle why not full length for all?

11:47 AM Mark Wille Be a part of the ASTM group for Tiny House: https://www.tinyhousealliancеusa.org/positive-vote-for-an-astm-tiny-house-standards-committee/;

11:49 AM Mark Wille PHarmers Market

11:50 AM Tom Phillips, Davis, CA re: shading: can you build in exterior brackets over windows to attach shades on site? Also, do a cool roof & walls make sense, esp. in hotter climates?

11:51 AM Moe Sorry coming in late. Was this presentation about Tiny homes

11:52 AM Hans Eich | SIGA Are there any concerns with the SIP panels when moving this building (as far as shear strength)? I would have thought that a metal frame should have been used for stability. Then again, that's usually not a challenge we have in stationary buildings.

11:52 AM Shannon | New Hope PA Hi Moe ~ Yes, the tiniest of the tiny :) and now a mobile office PH

11:54 AM Barbara in Oz Could Dan please add the names of the 2 best composting toilets to the chat?

11:54 AM Mark Wille Human Health & Environmental Impacts 11/12 at 10 am Pacific on #BS Friday LIVE with Juanita Garcia: https://www.linkedin.com/events/humanhealthandenvironmentalimpa6859601661791485952/

11:55 AM Construction Rocket separett and nature's head

11:55 AM Barbara in Oz Cheers!

11:55 AM Sara Bayer (MAP) Would it be tough to make mobile homes passive house? do you know of any?

11:56 AM dan welch- [bundle] Sure you could make mobile home passive house.... I don't know of any. Method Homes does some High performance projects....but that is more modular building.....

11:57 AM Sara Bayer (MAP) thank you! I actually am in the market for one!

11:57 AM Mark Wille @Sara love to hear your ideas

11:58 AM Shaun St-Amour Indeed

11:59 AM Zack Semke Link to register for Episode 2 of Building Performance Interactive: https://passivehouseaccelerator.com/event-announcements/mmc-offsite-tf-construction-from-start-to-finish-ep-2-of-building-performance-interactive

11:59 AM Shannon | New Hope PA Next questions from: Timothy Spitler; Andy Mroczek in seattle; Tom Phillips, Davis, CA

11:59 AM Shawn Rose thank you, great presentation!

12:00 PM Neil Barman – Vectorworks Thank you! Great presentation on a very unique project. I hope to get over from Victoria to see it sometime… If I can find you!

12:02 PM Peter Molenaar | Oshawa ON Keeping all the ducts in a row!

12:03 PM Shaun St-Amour quit working so hard, that will lower the temp

12:03 PM Rich Awesome, thank you!

12:04 PM Shannon | New Hope PA up next ~ andy mroczek.seattle; Tom Phillips, Davis, CA; Hans Eich | SIGA

12:05 PM Shaun St-Amour you need a telephone booth for outside

12:05 PM Rich Are there PH certified Disco balls?

12:07 PM Shannon | New Hope PA https://www.linkedin.com/company/hkp-architects/; https://www.linkedin.com/in/dan-whitmore-09611844/

12:10 PM Shaun St-Amour one of my favorites: https://www.youtube.com/watch?v=KTKUSpk2118 : pumpkin ridge PH from Hammer and Hand

12:10 PM Shannon | New Hope PA Two more questions left from: Tom Phillips, Davis, CA; Hans Eich | SIGA. add more if you have them while we have Dan and Mackenzie here to share :)

12:12 PM Franics Need to head home for dinner. Thanks for the presentation today. Many Thanks.

12:12 PM Shannon | New Hope PA Thx for joining us Franics ;)

12:13 PM Construction Rocket maybe a standalone deck with a gazebo top for shading. wouldn't make the building any wider on the road

12:14 PM Shannon | New Hope PA Surface to volume ratio. Any more questions out there Phriends?

12:18 PM Louisa Bradford in VA Thanks for another interesting presentation.

12:19 PM Shannon | New Hope PA Dan made it easy!

12:19 PM Peter Molenaar | Oshawa ON Q : Would the trailer / office ever travel out of state to serve in a warmer climate zone where interior cooling might be more necessary ?

12:19 PM Cameron Duncan Beats straw bale https://en.wikipedia.org/wiki/File:Don%27t-overload-your-trailer.jpg

12:20 PM Shannon | New Hope PA Great question Peter!

12:20 PM D'Arcy Dunal Toronto Thanks Dan! That was great!

12:20 PM Rich @Cameron Duncan How many donkeys does it take to pull this PH office I wonder?

12:21 PM Shannon | New Hope PA @Cameron, I think that's a home depot parking lot :). Don't underestimate the power of the budget target!

12:27 PM Nick Lane, Melb Aust. I came in late…what was the budget target?

12:29 PM Neil Barman – Vectorworks I'm supposed to head off… but this is way too interesting and fun 🙂

12:30 PM Rich Those are wine racks!!

12:32 PM Tom Phillips, Davis, CA the paper holders will hold wine bottles

12:33 PM Construction Rocket vetta rocks!

12:33 PM Bob in Chicago I couldn't watch all the presentation. Is there accommodation for roof venting? In this structure, I imagine if you vented the roof, the vapor in the walls with wool insulation is handled through a single roof vent?

12:35 PM Shaun St-Amour https://www.efficiencycanada.org/retrofit-mission/?mc_cid=5ef5921bc9&mc_eid=2d5b176bb7. will do again tomorrow

12:38 PM Nina 😂

12:39 PM Construction Rocket we are at https://www.instagram.com/rocketconstruction/

12:41 PM Barbara in Oz There have been clapping hands in the past. I've got it - they will show up

12:41 PM Neil Barman – Vectorworks 🤪

12:41 PM Rich 😇

12:41 PM Nick Lane, Melb Aust. 👍👍

12:43 PM Cameron Duncan Quite creative labor of love project. Thank you. Everyone, stay well!

12:43 PM Tom Phillips, Davis, CA Get a small wind turbine for surf trips to the coast!

From12:43 PM Hans Eich | SIGA 🚚 PH150

12:45 PM Peter Molenaar | Oshawa ON Good PHolks to know !

12:45 PM Shannon | New Hope PA Bring your projects to the Accelerator: email sgladu@passivehouseaccelerator.com

12:45 PM Shaun St-Amour want to present sgladu@passivehouseaccelerator.com

12:46 PM Sy Safi My battery is about up Dan excellent work love what y'all are doing we look forward to seeing more!

12:46 PM dan [bundle] thanks sy!

12:46 PM Shannon | New Hope PA Thx Sy have a great nite!

12:46 PM Peter Molenaar | Oshawa ON rePHramed !

12:47 PM Shaun St-Amour https://www.efficiencycanada.org/retrofit-mission/?mc_cid=5ef5921bc9&mc_eid=2d5b176bb7

12:49 PM Tom Phillips, Davis, CA thanks for great discussion.

12:49 PM Rich Great presentation, thanks so much!!

12:49 PM Construction Rocket thanks everyone! way to go Dan

12:50 PM Peter Molenaar | Oshawa ON seven PHiPHty ml glasses

12:52 PM Eric Reinhard Thanks everyone - good nite!

12:52 PM kurtwaldenberg Big Thanks to Dan and to all for the welcome !

12:52 PM Nina Thank you all for a great presentation and a entertaining meeting everyone! 😄

12:53 PM Peter Molenaar | Oshawa ON Nice oPHPHice !

12:53 PM Nick Lane, Melb Aust. Great work everyone 👍👍

12:53 PM dan [bundle] Thanks Rocket!

12:54 PM Barbara in Oz Thanks Great talk!