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PHIUS 2021 MECHANICAL SUMMIT

APRIL 19 - 22

summit.phius.org

Tales from a PHIUS+ Rater/ Verifier



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Event Approved for
CPHC[®] Continuing
Education Credits

Tales from a PHIUS+ Rater/Verifier



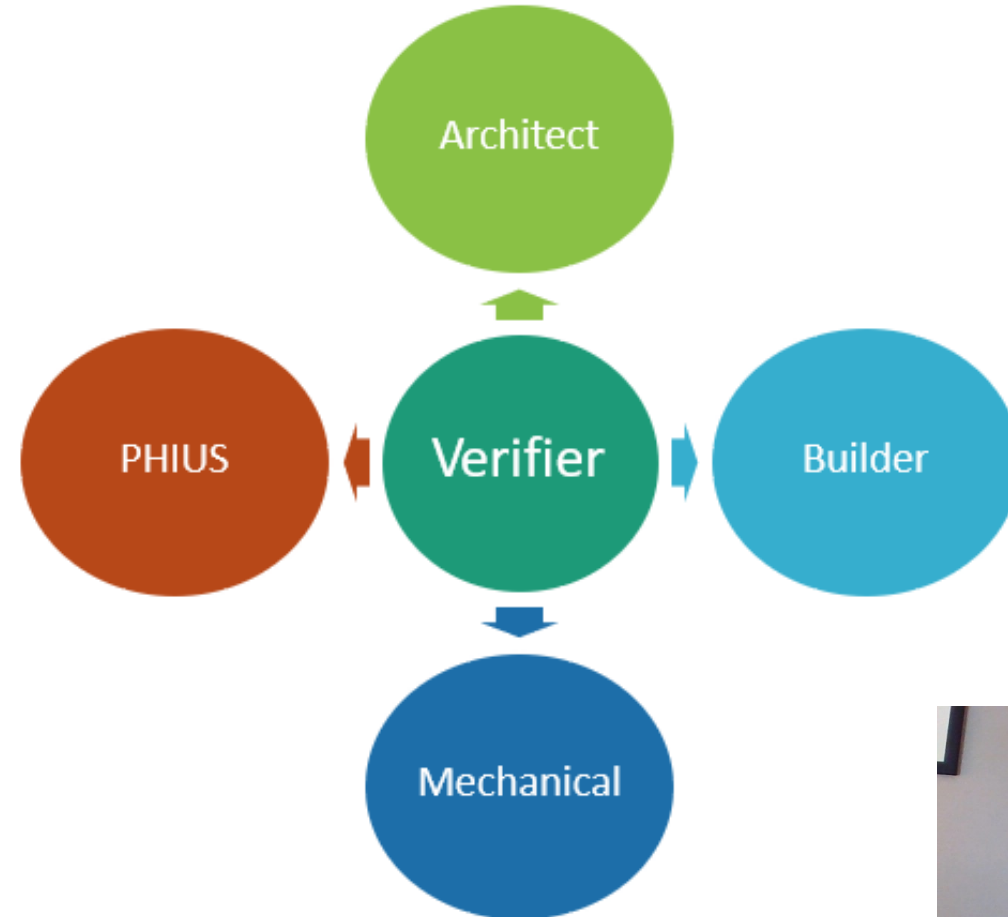
Earn X CPHC CEUs

Self-report
www.phius.org/cphc



Role of a PHIUS+ Rater/Verifier

Third Party Verification



Certification Overview



Certification Overview



PHIUS+ Certification

PHIUS+ Single Family

- Multiple Certifications
 - ENERGY STAR
 - Zero Energy Ready Homes
 - Indoor airPLUS
- SF PHIUS+ QA Workbook
 - Stay Tuned to PHIUS for new 2021 program details!
- Performance Testing
 - System Testing:
 - Duct Leakage Testing, Bedroom Pressures, DHW Efficiency, etc.
 - WB Blower Door
 - TAB – Space Conditioning + Ventilation



PHIUS+ Certification

PHIUS+ Multi-Family

- Multiple Certifications
 - ENERGY STAR
 - Zero Energy Ready Homes
 - Indoor airPLUS
- MF PHIUS+ QA Workbook
 - Stay Tuned to PHIUS for new 2021 program details!
- Performance Testing
 - Unit Testing:
 - Blower Door, Duct Test, Bedroom Pressures, DHW Efficiency, etc.
 - WB Blower Door
 - TAB – Space Conditioning + Ventilation



PHIUS+ Certification

PHIUS+ Commercial

- Checklists – Mandatory, As Applicable
 - Select ESTAR checklists (Rev 06)
 - No ZERH
 - Modified IAP
 - Modified MF PHIUS+ QA Workbook
- Main Performance Testing
 - TAB – Space Conditioning + Ventilation
 - WB Blower Door
 - No Duct Testing
 - No DHW Efficiency Testing



PHIUS+ Certification



Inspections & Testing

- Framing Inspections
- Insulation
- Exterior
- Air
- Un
- Duct
- Pre-TAB Mechanical Verif

TIP: Test your Ventilation Ductwork at Rough. It's not a requirement, but it could make or break your final TAB process.



PHIUS+ Certification

TESTING & BALANCING

**TAB: STRAIGHT
FORWARD,
RIGHT?**



PHIUS+ Certification

TAB: Space Conditioning + Ventilation

- It's required and not always included in your sub-contractor's scope.
- Make sure you're clear on what equipment you need.
- Different contractors have different work conditions. Communicate smoothly.
- PHIUS TAB requirements are not the same as regular TAB specs. Know your guideline!

TIP: Bring your TAB contractor into the conversation early. Discuss specific requirements, equipment calibration, and timing.



PHIUS+ Certification

Heating & Cooling : SFH & MF
Units



PHIUS+ Certification

Ventilation: Single Family



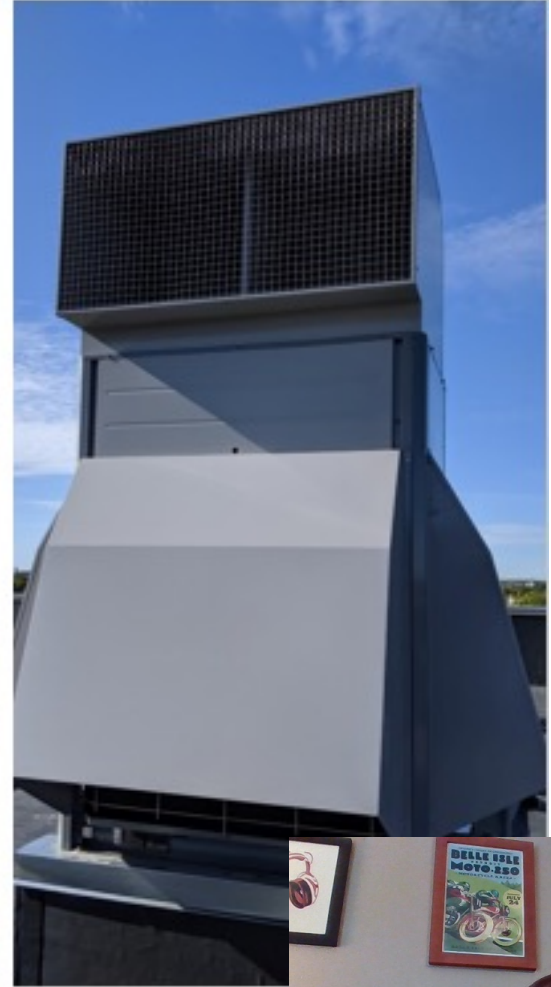
PHIUS+ Certification

Heating & Cooling:
Commercial



PHIUS+ Certification

Ventilation: MF & Commercial



PHIUS+ Certification



PHIUS+ Certification

Top 10ish Take Homes

Schedule Us In

→ Consider PHIUS verification sequencing from the beginning. It might alter the typical process, but that could be the difference between PASS or FAIL for your PHIUS project.

Efficient DHW Design

→ The most efficient process for your Efficient DHW Design is to tackle up front. Discuss options, fill-out the H2O calculator, make sure that you're in compliance.

Ventilation Intakes

→ Raise 'em Up! Must be at least 2-4' above grade/roof deck.

Combined Space Conditioning + Ventilation

→ Until the Standard changes, please don't. It makes verification a mess.

Dedicated Ventilation to Bedrooms

→ Gotta Happen.

PHIUS TAB Process: Let It be Known

→ Bring TAB contractors in early and plan multiple reviews of process and requirements. They need direct communication on what's required.

Mock-Ups, Mock-Ups, and More Mock-Ups

→ Create them, use them, and test them.

PHIUS Certification = Like a Building

→ What happens with one trade/system will affect another. We need all trades on each other. And for MC and Final testing, trades should be present (especially the m



Questions?



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