

# Passive House Certification

## Through the Passive House Institute US

Specific Demands with Reference to the Treated Floor Area			
Treated Floor Area:	<input type="text" value="1725"/> ft <sup>2</sup>		
	Applied:	Monthly Method	PH Certificate:
			Fulfilled?
<b>Specific Space Heat Demand:</b>	<b>4.12</b>	<b>kBTU/(ft<sup>2</sup>yr)</b>	<b>4.75 kBTU/(ft<sup>2</sup>yr)</b> <b>Yes</b>
<b>Pressurization Test Result:</b>	<b>0.5</b>	<b>ACH<sub>50</sub></b>	0.6 ACH <sub>50</sub> <b>Yes</b>
<b>Specific Primary Energy Demand</b> (DHW, Heating, Cooling, Auxiliary and Household Electricity):	<b>36.7</b>	<b>kBTU/(ft<sup>2</sup>yr)</b>	38.0 kBTU/(ft <sup>2</sup> yr) <b>Yes</b>
Specific Primary Energy Demand (DHW, Heating and Auxiliary Electricity):	<b>24</b>	<b>kBTU/(ft<sup>2</sup>yr)</b>	
Specific Primary Energy Demand Energy Conservation by Solar Electricity:	<b>0</b>	<b>kBTU/(ft<sup>2</sup>yr)</b>	
Heating Load:	<b>4.9</b>	<b>BTU/(ft<sup>2</sup>hr)</b>	
Frequency of Overheating:		<b>%</b>	over <input type="text" value="77.0"/> °F
Specific Useful Cooling Energy Demand:	<b>1</b>	<b>kBTU/(ft<sup>2</sup>yr)</b>	4.75 kBTU/(ft <sup>2</sup> yr) <b>Yes</b>
Cooling Load:	<b>2</b>	<b>BTU/(ft<sup>2</sup>hr)</b>	

  

<p><i>We confirm that the values given herein have been determined following the PHPP methodology and based on the characteristic values of the building. The calculations with PHPP are attached to this application.</i></p>	<b>Issued on:</b>
	<input type="text"/>
	<b>signed:</b>
<input type="text"/>	

# OUTLINE

- **PROCESS**
- **REQUIRED DOCUMENTATION**
- **COMMON MISTAKES**
- **QUESTIONS**

# PROCESS

- **PLANNING**
- **PRE-CERTIFICATION**
- **CERTIFICATION**
- **CELEBRATION**

# PLANNING

- **NEW PROJECT?**
  - **LET PHIUS KNOW**
  - **TYPE / TIMELINE / LOCATION**
- **COST ESTIMATE**
- **ACCURATE CLIMATE DATA**
- **PRE-CERTIFICATION PACKET**

# **PRE-CERTIFICATION**

- **WHEN TO SUBMIT?**
  - **PERMIT DRAWINGS COMPLETE**
  - **PHPP IS COMPLETE**
- **WHAT TO SUBMIT?**
  - **PHPP**
  - **DRAWING SET – PDF FORMAT**
  - **SPECS, PICTURES, AND OTHER INFORMATION TO DATE**

# PRE-CERTIFICATION

- **FEEDBACK**
  - **PRELIMINARY EVALUATION CRITERIA.XLS**
- **ACCEPTABLE CLIMATE DATA**
  - **GENERATED BY PHIUS**
  - **ALREADY ENTERED INTO THE PHPP**

# CERTIFICATION

- **2.0 PHPP**
- **2.1 DRAWINGS**
- **2.2 SPECIFICATIONS**
- **2.3 AIRTIGHTNESS TEST**
- **2.4 VENTILATION COMMISSIONING**
- **2.5 CONTRACTOR DECLARATION**
- **2.6 PHOTOGRAPHS**

# CELEBRATION

- **CERTIFICATE**
- **BUILDING PLAQUE**

# DOCUMENTATION

## ▪ 2.0 - PHPP

- MOSTLY DONE DURING PRE-CERT
- UPDATE WITH ACH50 AND ANY OUTSTANDING CHANGES (TYPICALLY APPLIANCE SPECS AND ON SITE CONSTRUCTION CHANGES)
- A SIGNED PDF OF THE VERIFICATION PAGE IS RETURNED WITH THE CERTIFICATE

# DOCUMENTATION

- **2.1 - DRAWINGS**
  - **COMPLETE CD SET**
  - **DUPLICATE PLANS AND ELEVATIONS: TAG AND LABEL THE DRAWINGS TO COINCIDE WITH THE NAMING CONVENTIONS IN THE PHPP.**
  - **DIMENSIONED PLANS, SECTIONS, AND ELEVATIONS ARE NEEDED**
  - **TFA PLAN COLOR CODED OR SOMEHOW DISTINGUISHED TO MATCH UP WITH THE PHPP**

# DOCUMENTATION

- **2.2 - SPECIFICATIONS**
  - **ALL PROJECTS NEED:**
    - **INSULATION**
    - **WINDOWS AND DOORS**
    - **APPLIANCES**
    - **HEATING**
    - **VENTILATION**

# DOCUMENTATION

- **2.3 - ACH 50 TEST RESULTS**
  - **TWO WAYS TO MEET REQUIREMENT**
    - **PHIUS PROTOCOL SHEET**
    - **DIRECT OUTPUT OF RESULTS FROM BLOWER DOOR TEST SOFTWARE – MOST COMMONLY TECTITE**
  - **SHOULD BE PERFORMED BY THIRD PARTY OR SIGNED BY INDEPENDENT WITNESS.**
  - **THE ACH50 IS THE AVERAGE BETWEEN PRESSURIZATION AND DEPRESSURIZATION**

# DOCUMENTATION

- **2.4 - VENTILATION COMMISSIONING**
  - **DESCRIPTION, LOCATION, ADDRESS, NAME AND ADDRESS OF THE TESTER, TIME OF ADJUSTMENT, MANUFACTURER AND MODEL OF VENTILATION UNIT, ADJUSTED VOLUMETRIC FLOWS PER VALVE AND TOTAL FLOW RATES.**
  - **THE TOTAL SUPPLY AND EXHAUST AIR SHOULD BE BALANCED WITHIN 10%**
  - **FAN ENERGY SHOULD ALSO BE MEASURED AND REPORTED**

# DOCUMENTATION

- **2.5 - CONTRACTOR DECLARATION**

- **SAMPLE:**

**I CERTIFY THAT THE BUILDING NAME  
DESIGNED BY FIRM NAME AT  
LOCATION WAS BUILT ACCORDING TO  
THE PROJECT DOCUMENTS  
SUBMITTED TO PHIUS ON DATE.**

- **ADD CHANGES, SIGN AND DATE**

- **PDF IS THE BEST FORMAT**

# DOCUMENTATION

## ▪ 2.6 - PHOTOGRAPHS

- DOCUMENT THE CONSTRUCTION
- SUBMIT DIGITAL IMAGES IN A READABLE FORMAT - .JPG OR .PDF
- INCLUDE FINAL FINISHED PHOTOGRAPHS OF BOTH THE INTERIOR AND EXTERIOR

# COMMON MISTAKES

## ▪ PHPP

- ENTER RADIATION BALANCES ON THE AREAS SHEET
- SHADING NEEDS TO BE ENTERED AND ALL WINDOWS HAVE OVERHANGS
- SUMMER PAGE: VENTILATION RATES AND THERMAL MASS

# COMMON MISTAKES

- **PHPP**

- **DHW LENGTHS**

- **EXAMPLE**

- **PE VALUE: VALUES ADD UP TO 100% FOR BOTH DHW AND HEATING**
  - **CHECK TO MAKE SURE ALL GREEN CELLS ARE CHECKED THROUGHOUT THE PHPP**

# QUESTIONS

• EMAIL:

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