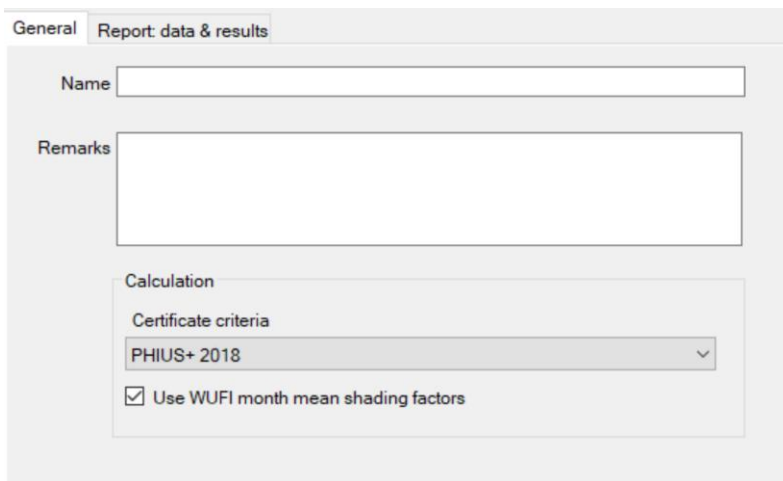


New Modeling Protocol for Phius CORE and Phius ZERO certifications

In 2022, a new version of WUFI Passive will be released that includes all Phius CORE and Phius Zero updates. Until then, follow instructions in this document to model your project under either path.

Accepted WUFI Passive Versions: v3.2.0.1 and later

0. Case 1> Certificate Criteria: Use PHIUS+ 2018 until the Phius CORE / Phius ZERO mode is available.



General Report data & results

Name

Remarks

Calculation

Certificate criteria
PHIUS+ 2018

Use WUFI month mean shading factors

1. Localization/Climate> Source Energy/CO2 Factor> Selection: Using the dropdown menu, select 'user defined'

Localization			Climate			Source energy/CO2-Factor		
Selection			Standard USA					
N			Standard USA					
			Standard Canada					
			Standard Germany					
			Standard Italy					
			User defined					
Oil			1.1			90.86		
Natural Gas			1.1			73.28		
LPG			1.1			79.14		
Hard Coal			1.1			128.96		
Wood			0.2			14.66		
Electricity Mix			2.8			199.31		
Electricity from photovoltaics			0.7			73.28		
Hard Coal CGS 70% CHP			0.8			70.34		
Hard Coal CGS 35% CHP			1.1			93.79		
Hard Coal HS 0% CHP			1.5			120.17		
Gas CGS 70% CHP			0.7			-20.52		
Gas CGS 35% CHP			1.1			38.1		
Gas HS 0% CHP			1.5			93.79		
Oil CGS 70% CHP			0.8			29.31		
Oil CGS 35% CHP			1.1			73.28		
Oil HS 0% CHP			1.5			120.17		

2. Localization/Climate> Source Energy/CO2 Factor: Manually input the following values into the blank cells. (They match the US defaults except for the Source Energy Factor for Electricity mix which has been updated to 1.8 for Phius 2021)

Localization Climate Source energy/CO2-Factor		
Selection User defined		
Name	Source energy factor [Btu/Btu]	CO2 emission factor [g/kBtu]
Oil	1.1	90.86
Natural Gas	1.1	73.28
LPG	1.1	79.14
Hard Coal	1.1	128.96
Wood	0.2	14.66
Electricity Mix	1.8	199.31
Electricity from photovoltaics	0.7	73.28
Hard Coal CGS 70% CHP	0.8	70.34
Hard Coal CGS 35% CHP	1.1	93.79
Hard Coal HS 0% CHP	1.5	120.17
Gas CGS 70% CHP	0.7	-20.52
Gas CGS 35% CHP	1.1	38.1
Gas HS 0% CHP	1.5	93.79
Oil CGS 70% CHP	0.8	29.31
Oil CGS 35% CHP	1.1	73.28
Oil HS 0% CHP	1.5	120.17

3. Internal Loads/Occupancy: Please note that the energy star mean values have also been updated. If using Energy Star mean values as placeholders for pre-certification, please refer to the Certification guidebook section 6.6.1.2: Devices / Appliances for appropriate values.