

Passive House Verification



Building:	das BioHaus - the Environmental Living Center at the Waldsee		
Location and Climate:	Concordia Language Village	MN_Bemidji (Meteonorm 5.0.14)	
Street:	8659 Thorsonveien NE		
Postcode/City:	Bemidji, MN 56601		
Country:	Minnesota/USA		
Building Type:	House for living and teaching		
Home Owner(s) / Client(s):	Concordia Language Villages		
Street:	8659 Thorsonveien NE		
Postcode/City/Country:	Bemidji, MN 56601, Minnesota/USA		
Architect:	Intep, LLC		
Street:	301 White Street		
Postcode/City/Country:	Minneapolis/Watertown, MN 55388, Minnesota/USA		
Mechanical System Consultant:	Intep, GmbH		
Street:	Innere Wiener Strasse 11		
Postcode/City/Country:	D-81667 München, Germany		
Year of Construction:	2005 / 2006		
Number of Dwelling Units:	1		
Enclosed Volume V _e :	1984.9	m ³	
Number of Occupants:	28.0		
Indoor Temperature:	20.0	°C	
Internal Heat Sources:	3.5	W/m ²	

Specific requirements with reference to the treated floor area.			
Treated Floor Area:	401.33	m ²	
Applied:	Annual Method		PH Certificate: met?
Specific Space Heat Requirement:	13.7	kWh/(m²a)	15 kWh/(m²a) a
Pressurization Test Result:	0.18	h⁻¹	0.6 h ⁻¹ a
Specific Primary Energy Requirement (DHW, heating, aux. & household electricity):	83	kWh/(m²a)	120 kWh/(m ² a) a
Specific Primary Energy Requirement (heating and auxiliary electricity, WITHOUT DHW):	44.9	kWh/(m²a)	
Specific Primary Energy Requirement (just cooling):	0.7	kWh/(m²a)	
Heat Load:	16.9	W/m²	
Frequency of Overheating:	6.7%	over	25 °C

We certify that the values given here have been calculated according to the PHPP methodology and are based on the characteristics of the building. The PHPP calculations are enclosed with this application.

Issued on:

18/ April 2006

Signature:

Passivhaus Institut