

Certificate

Certified retrofit
'EnerPHit Classic'
(Climate zone: Cool-temperate)



Dr. Wolfgang Feist
64283 Darmstadt
Germany

Hotel Marcel New Haven, Tapestry Collection by Hilton 500 Sargent Drive, 06511 New Haven, United States of America



Client	Becker & Becker 21 Bridge Square 06880 Westport, USA
Architect	Becker & Becker 21 Bridge Square 06880 Westport, USA
Building Services	LN Consulting 208 Flynn Ave. 05401 Burlington, USA
Energy Consultant	Steven Winter Associates, Inc. 61 Washington St 06854 Norwalk, USA

Buildings retrofitted to the EnerPHit Standard offer excellent thermal comfort and very good air quality all year round. Due to their high energy efficiency, energy costs as well as greenhouse gas emissions are extremely low.

The design of the above-mentioned building meets the criteria defined by the Passive House Institute for modernization to the 'EnerPHit Classic' standard:

Building quality				This building		Criteria	Alternative criteria
Airtightness	Pressurization test result	(n ₅₀)	[1/h]	0,9	≤	1	
Renewable primary energy (PER)	PER-demand		[kBTU/(ft²yr)]	47,9	≤		49,1
Component quality							
	Building envelope to ambient air (U-value)		[hr.ft².°F/BTU]	51,19	≥	37,86	
	Building envelope to ground (U-value)		[hr.ft².°F/BTU]	1,70	≥	9,50	Exemption
	Wall with interior insulation to ambient air (U-value)		[hr.ft².°F/BTU]	17,80	≤	16,22	
	Windows/Exterior doors (U _{w,installed})		[BTU/hr.ft²°F]	0,17	≤	0,15	Exemption
	Windows (U _{w,installed})		[BTU/hr.ft²°F]	0,11	≤	0,20	
	Glazing (g-value)		[-]	0,49	≥	0,33	
	Ventilation (effect. heat recovery efficiency)		[%]	84	≥	75	

The associated certification booklet contains more characteristic values for this building.

Darmstadt
08.09.2023

Certifier: Dragos Arnautu, PHI