

**Table 1 Dalarnas Villa building components and materials adapted from (Magnusson, 2020; Petrović et al., 2021) – (Source: the author)**

	<b>House Building Component</b>	<b>Material</b>
<b>Foundation</b>	Foundation	Reinforced concrete
	Foundation insulation	Expanded polystyrene (EPS) insulation boards
<b>House Structure</b>	Structure System	Wood framework
	Roof	Steel
<b>House Envelope</b>	Attic insulation	Cellulose (loose) insulation
	External Wall: Façade	Wood panels
	External Wall: Insulation	Cellulose (loose) insulation made from recycled newspapers
	External Wall: 3rd layer	Cross-laminated timber (CLT)
	External Wall: Indoor side layer	Gypsum
	Windows	Triple-glazed with U-value 1.0. W/m <sup>2</sup> K
	External doors	Glass-wooden doors
	Balconies	Thermo-wood (Heat-treated wood)
<b>House Interior</b>	Internal Walls	Gypsum
	Internal Walls insulation	Wood fiber insulation
	Indoor floor finishing	Parquet
	Internal doors	Wood
	Internal & external walls	Both included plastic layers
<b>Smart Energy and Water Systems</b>	Energy System 01	PV panels were installed on the south-west roof side
	Energy System 02	an exhaust ventilation system
	Energy System 03	ground source heat pump
	Water control system	Smart water system