Casa Amor

Amor, Leiria

Construção nova – New construction

Concluído – Completed

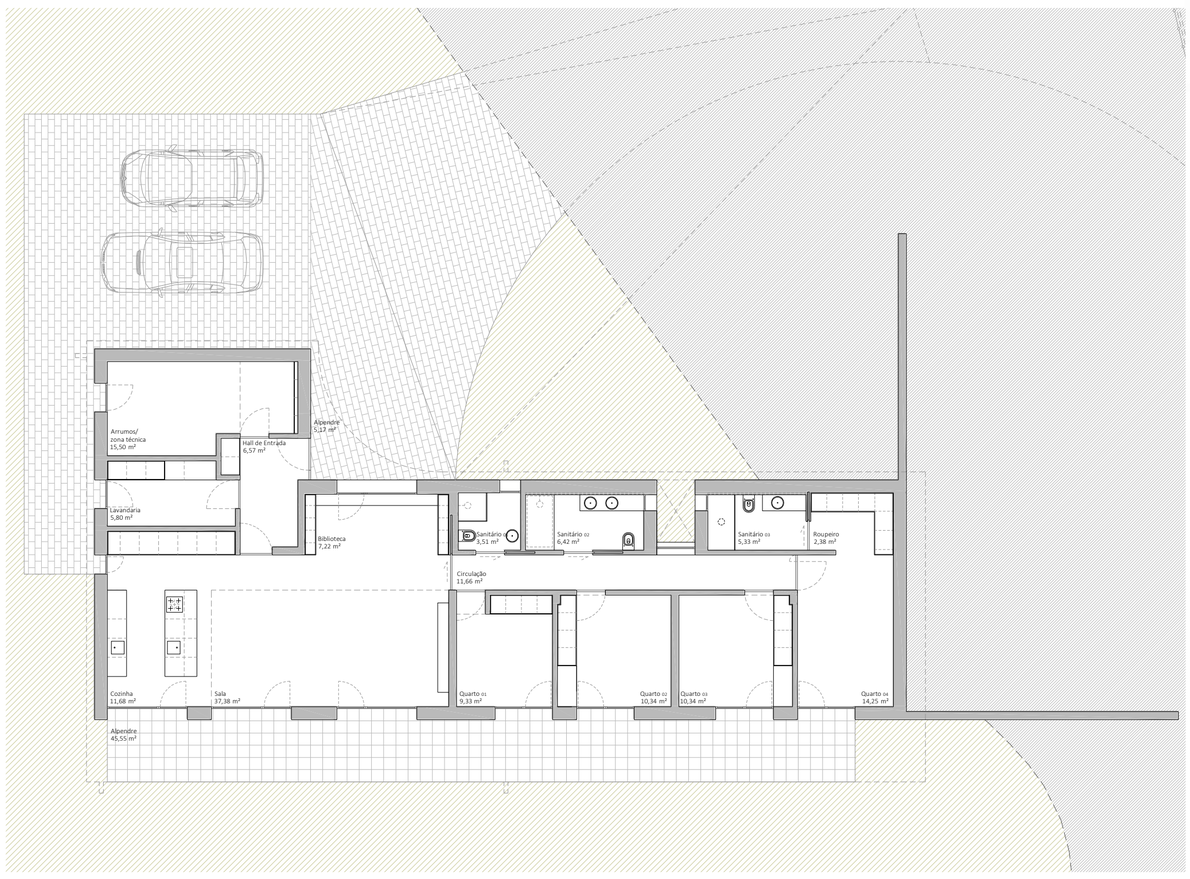
Este projeto refere-se à construção de uma moradia unifamiliar de piso térreo com 169 m² de área útil, localizada em Amor, Leiria. Desde o início que o objetivo foi de alcançar a certificação Passive House, conduzida pela Homegrid e o projeto de arquitetura, desenvolvido pela Contaminar, foi otimizado ao nível dos princípios da arquitetura solar passiva: exposição solar a sul, estratégias de sombreamento e do adequado rácio área de janelas/área útil. Esta casa tem estado a funcionar sem sistemas de climatização, apesar de haver a pré-instalação de ar condicionado.

This project refers to the construction of a single-family, single-story house with a gross floor area of 217 m², oriented North-South, with predominantly glazed openings facing South. From the outset, the objective was to achieve Passive House certification, conducted by Homegrid, and the architectural design, developed by Contaminar, was optimized according to the principles of passive solar design: southern solar exposure, shading strategies and the appropriate window area/usable area ratio. This house has been operating without air conditioning systems, despite having pre-installation for them.



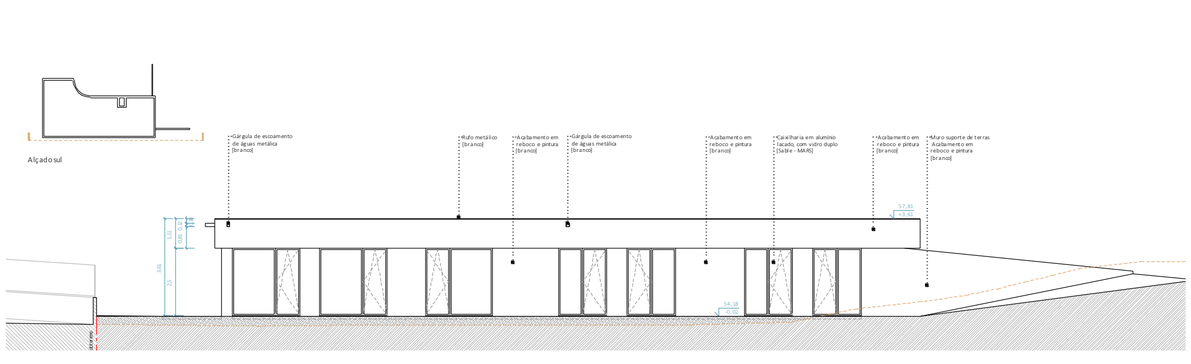
Specific building characteristics with reference to the treated floor area

					Criteria	Alternative criteria	Fullfilled?[2]
	Treated floor area	m²	169,3				
Space heating	Heating demand	kWh/(m²a)	**6**	≤	15	-	**Yes**
	Heating load	W/m²	**12**	≤	-	10	
Space cooling	Cooling & dehum. demand	kWh/(m²a)	**1**	≤	17		**Yes**
	Frequency of overheating (> 25 °C)	%	**-**	≤	-		**-**
	Frequency of excessively high humidity (> 12 g/kg)	%	**10**	≤	10		**Yes**
Airtightness	Pressurisation test result n_{50}	1/h	**0,6**	≤	0,6		**Yes**
Non-renewable Primary Energy (PE)	PE demand	kWh/(m²a)	**51**	≤	-		**-**
Primary Energy Renewable (PER)	PER demand	kWh/(m²a)	**29**	≤	60	60	**Yes**
	Renew. energy generation (in rel. to projected building footprint area)	kWh/(m²a)	**11**	≥	-	-	



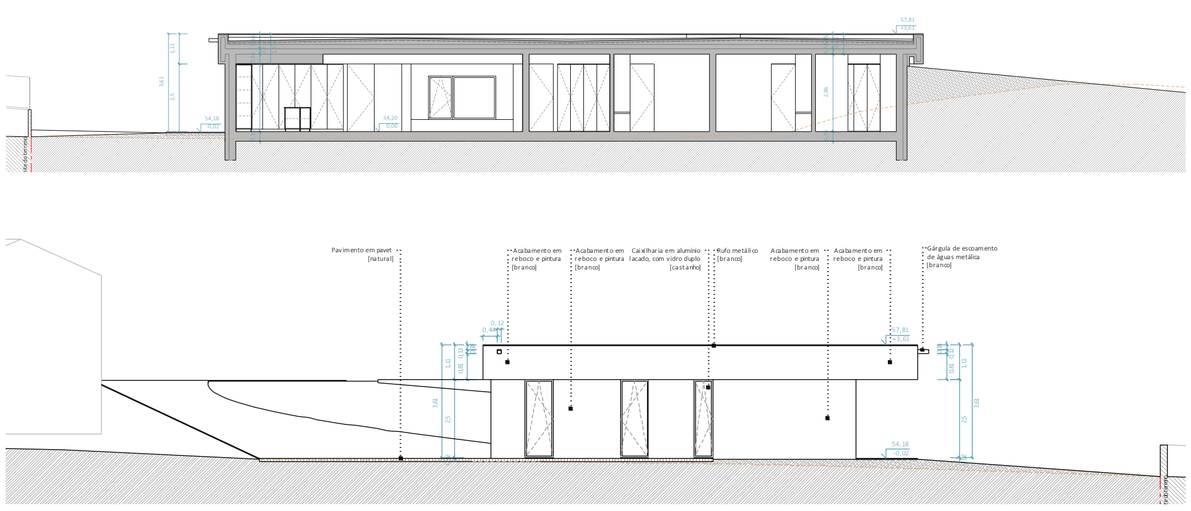


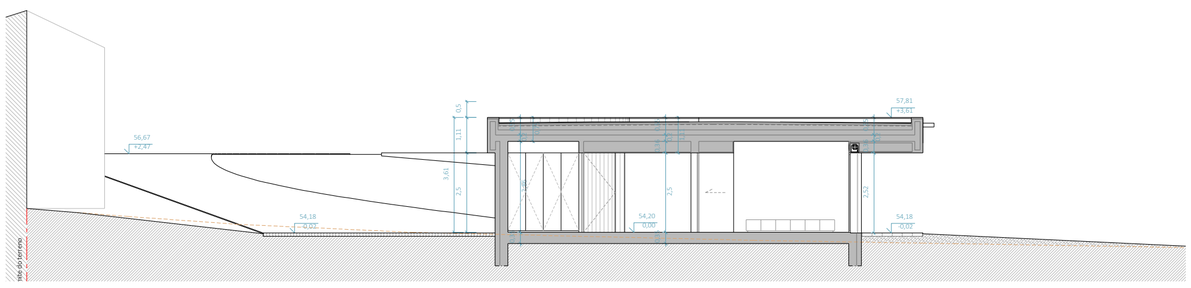




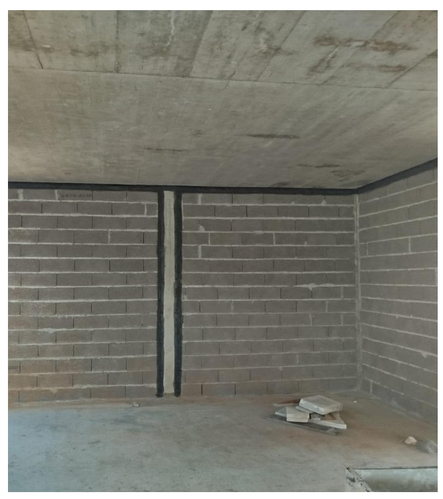


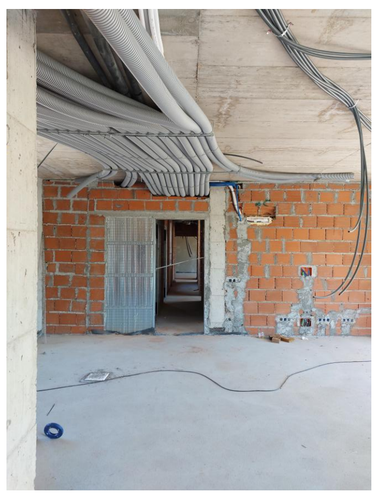












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Organização: