

TEAM 365 DAYS OF SOLAR

University of California, Los Angeles Urban Single-Family



Project Summary

Fig. : Overall View of Casa Mas

Casa Más is an affordable, adaptable modular accessory dwelling unit (ADU) designed to serve the residents of Southern California. Located in South Los Angeles, it is a prototype that can be used to pioneer the adoption of ADUs in one of the most underserved areas of the city.

The City of Los Angeles has been on the lookout for solutions to address severe urban housing shortages. In their official findings they identified 140,000 available lots that could accommodate ADUs in the South Los Angeles region. By leveraging ADU construction subsidies, our goal is to create a resilient future for the South LA community, where local residents will be able to invest in their land.

Casa Más does not only benefit its own residents. Through a strong commitment to adaptability and affordability, our design allows any homeowner to obtain a reliable source of income, serving as an equalizer of wealth between the diverse citizens of the city. Income stays with local residents rather than going to developers, preventing displacement and further gentrification of the city.

Design Strategy

Casa Más is a prefabricated modular accessory dwelling unit (ADU) that can be modified to fit a range of backyards and budgets. The kit-of-parts design strategy and strip footing foundation reduces site impact and construction time. Casa Más can be updated over time to accommodate additional solar panels, a second bedroom, and an electric vehicle charger. The design takes advantage of the mild California climate through passive heating and cooling.

Address	9636 La Salle. Ave. Los Angeles, CA 90047		Insulation	Wall: R20 (6" EPS SIPS) Floor: R20 Roof: R40 (12" loose-fill cellulose)
Backyard Clear	2900 SF (46' x 63')			
opace		١	Windows	U-value 0.5 (Vinyl-framed argon- filled double-glazing)
Rental Accessory Dwelling Unit	720SF/900SF, 1BD/2BD, 1 Bathroom, 2/3 Occupants			
Home Energy Ratings Score (HERS)	-5/-20		HVAC	24000BTU Mini Split system, Ceiling fans, ERV
Total Utility Costs	\$101/mo Electricity: \$101/mo; Electricity: \$0 or negative (garbage/ water/sewage: \$30/\$40/\$31)		Renewable Energy	Grid-connected High Efficiency 6W Photovoltaic Panel Array 16 x 375W, Battery Capable



Fig. : Design Highlights

Introduction

Energy Performance

Engineering

Financial

Resilience

Architecture