



Mini Modular Factory Prefab House Specification

Compliant to 2022 California Building Standard Code (Title 24)

Element	Specification Requirements	Mini Modular Product Spec Test Result	California Building Standard Code
Architecture and Structure		Comply. Brand new structure has no cracks, deformation or damages following the architecture design and construction drawing. The surface of the wall was complete and smooth.	Complies with California Building Standards Code (Title 24)
	Thorough review of design and materials		
Doors and windows	Engress Requirements: The windows must have minimum net clear opening of at least 5.7 SQF, and unobstructed height of at least 24 inches, and a width of at least 20 inches. The window sill should be no more than 44 inches above the floor.	Comply. (different windows /doors for different models)	Complies with California Building Standards Code (Title 24)
	Energy Efficiency: U-factor and Solar Heat Gain Coefficient (SHGC) ratings to minimize heat loss and gain. New windows must be dual-glazed and meet the Low-E2 standard. Residential windows and doors must have a U-factor of 0.30 and a SHGC (Solar Heat Gain Coefficient) of 0.23.	Comply. (different windows /doors for different models)	Complies with California Building Standards Code (Title 24)
	Coastal Safety: Windows and doors need to withstand high wind and potential flooding with impact-resistant glazing or shutters. Windload of 85mph (3-second gust) is required in Los Angeles Coastal Area.	Compy. 150mph (3-second gust)	Complies with California Building Standards Code (Title 24)

	Acessibility: handles should be easy to use and can be open without special tools	Comply.	Complies with California Building Standards Code (Title 24)
Structure Bearing Capacity		Comply. Roof Slop=180 deg , Balance Snow Load =36 psf	Follows California Building Code for snow load requirements
	Snow Load: Compliant with ASCE/SEI 7-22	Comply. Roof Slop=20.5deg , Balance Snow Load =40.70psf	Follows California Building Code for wind load requirement
	Wind Load: Supports up to 150 MPH with 3-second gusts, the value requirement is 2.76kN/sqm	Comply. 4.18kN/sqm, which means it can bear 150mph wind speed and gust comfortably	Meets California Building Code for wind load requirements
	Earthquake Resistance -Seismic Performance:Engineered to Risk Category DII	Comply. Calculated according to EN1998-3, allowable inplane shear V(lbs)=1,220. The Seismic fortification intensity is 8 degrees, and the seismic acceleration value is 0.2g. This means the building is designed and built to be able to withstand significant seismic activity and provide safety to its occupants during an earthquake of 8 degrees. However, the homeowner must anchor it effectively with regular maintenance and inspection after use.	Complies with California Seismic
Cold Resistance	Built to withstand low temperatures	Comply. -40 degree F	Must meet California Energy Code for thermal performance
High Temperature Resistance	Materials rated for high heat tolerance	Comply. 185 degree F	Complies with California Building Code for high-temperature materials. Specific tolerance required: (in degrees Fahrenheit)

Insulation Performance	Thermal Insulation:** ASTM C518 and ANSI/ASHRAE/IES Standard 90.1 compliant	Comply	Must meet California Energy Code for insulation performance. R-Value Requirements
	Wall: Minimum R-13 for 2x4 inch wood framing, R-20 for 2x6 inch wood framing	Comply	
	Ceiling: Minimum R-22 inwood-frame ceiling	Comply	
	Floor: 2025/1/13 Specific R-value not provided	Comply	must meet California Energy Code requirements
Fire Resistance Grade	ASTM E119 compliant	Comply 1-3 hours fire resistance	Complies with California Fire Code for fire resistance. Typical requirement: 1 hour for exterior walls
Moisture Resistance	ASTM D1970 compliant	Comply (See test report)	Must meet California Building Code
Ceiling Height Requirements	Habitable Spaces and Hallways: Min 6 feet 8 inches	Comply. Mini Modular provides 2 different models for foldable house: 8 feet & 9feet-2.4 inch; Regular residential prebab modular home is 17feet from floor to roof ridge.	Follows California Building Code for ceiling height requirements
	Bathrooms, Toilets, Kitchens:** Min 6 feet 4 inches	Comply. provides 2 different models for foldable house: 8 feet & 9feet-2.4 inch; Regular residential prebab modular home is 17feet from floor to roof ridge.	Complies with California Building Code for ceiling height in specific areas
Material Durability	ASTM C447-15 compliant for maximum use temperature of thermal insulations	Comply.	Must meet California Building Code for material durability