

The Emma Family Backyard Deck – Thousand Oaks, CA

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Framing Removable Housing Unit Structure



This paper outlines the planning, design, and construction of an 80 square foot deck/outdoor patio. The main purpose of this project was to assist an elder couple fund and construct a new deck in their backyard. Due to the current world pandemic, COVID-19 the Emma Family was practicing social distancing and adhering to the State and County wide stay at home order. The project plan was to design a deck for Emma family in the design, construction it and receive funding. The deck was a rectangular 8’ x 10’ and raised 6” off the ground. In addition to the deck the project also consisted of a removable housing unit for the main sprinkler and water line. This paper will focus on the preconstruction phase, construction phase, lessons learned, and how this knowledge will be applied to the construction industry.

Key Words: Deck, Patio, Backyard, Construction, Trex

Item	Size	# of Units	Cost Per Unit	Total Cost
Treated Redwood	2 x 6 x 16	8	\$17.98	\$143.84
	2 x 6 x 12	4	\$12.03	\$48.12
	2 x 4 x 8	6	\$5.88	\$35.28
Trex Decking	1 x 5.6 x 8	32	\$16.18	\$517.76
Joist Hangers	2 x 6	20	\$0.88	\$17.60
	2 x 4	10	\$0.78	\$7.80
Joist Hanger Nails	1-1/2-in 9-Gauge Galvanized Steel Exterior Joist Hanger Nails (1-lb)	5	\$4.98	\$24.90
Wood Decking Screws	Exterior #10 x 3 1/2	3	\$26.98	\$80.94
Concrete Deck Blocks	7-in x 11-in x 11-in	20	\$6.43	\$128.60
TOTAL COST				\$1,004.84

Finished Water Line Housing Unit



Site Prior to Construction



Finished Deck and Housing Unit

