

RESIDENTIAL LOAD CALCULATIONS		
CALCULATED LOADS NEC 120.84		
TOTAL SQ FOOTAGE (4,500 SQ FT X 2 VA) =	9,000 VA	
APPLIANCE CIRCUITS (6 X 1,500 VA) =	9,000 VA	
LAUNDRY CIRCUITS (3 X 1,500 VA) =	4,500 VA	
RANGES - NEC 120.84(C)(3)(B)		
RANGES (3 X 3 X 12,000 VA) =	36,000 VA	
DRYERS - NEC 120.84(C)(3)(C)		
DRYERS (3 X 5,000 VA) =	15,000 VA	
WATER HEATERS - NEC 120.84(C) (3)(D)		
WATER HEATERS (3 X 2,500 VA) =	7,500 VA	
HEATING OR COOLING LOADS - NEC 120.84(C) (3)(A)		
HEATING & COOLING (3 X 3 X 6,000 VA) =	18,000 VA	
EV CHARGERS - NEC 120.84(C)(3)(A)		
EV CHARGERS (3 X 7,200 VA) =	21,600 VA	
MISC LOADS	1,800 VA	
TOTAL CONNECTED LOAD	122,400 VA	
CONNECTED AMPS (122,400 VA ÷ 240 V) =510 A		
DEMAND FACTOR NEC TABLE 220.84 = 45%		
ADJUSTED AMPS (510 A X 0.45) =	230A	
NON-RESIDENTIAL LOAD	0A	
SUBTOTAL	230A	
FUTURE FACTOR (230 A X 0.00) =	0A	
SERVICE SIZE	230A	

PROJECT NAME	SAMPLE PROJECT
ADDRESS	123 MAIN ST
CITY/STATE/ZIP	SOMEWHERE, CA 95620
CODE TEAR	2026
PHASE	1
HIGH VOLTAGE	240V
LOW VOLTAGE	120V
MAIN BREAKER	YES
MINIMUM SERVICE SIZE	100A
HOUSE PANEL	YES
VOLTAGE DROP CALCS	YES
FAULT CURRENT CALCS	YES
SHOW UFER GROUND	YES
DWELLING UNITS	3
COMMERCIAL PANELS	0

KEY
A - Amps
V - Volts
VA - Volt Amps

NON RESIDENTIAL LOAD CALCULTIONS		
BASED ON THE 2026 NEC SECTION 120.84		
	L1	L2
CALCULATED LOAD	0 VA	0 VA
CALCULATED LOAD WITH DEMAND FACTORS		
GENERAL LOAD	0 VA	0 VA
RECEPTACLE LOAD - NEC TABLE 120.47		
1ST 10,000W	0 VA	0 VA
CONTINUOUS LOAD - NEC 215.4(A)(1)	0 VA	0 VA
PLUS 25%	0 VA	0 VA
MOTOR LOAD (NEC 430.24)	0 VA	0 VA
PLUS 25% OF LARGEST MOTOR	0 VA	0 VA
5 - KITCHEN LOADS - NEC 120.56		
L1 (0 VA X 1) =	0 VA	
L2 (0 VA X 1) =		0 VA
TOTAL BALANCED LOAD (1-PHASE)	0 VA	0 VA
TOTAL UNBALANCED LOAD (1-PHASE)	0 VA	0 VA
LINE AMPS BALANCED (1-PHASE)	0.0 A	0.0 A
LINE AMPS UNBALANCED (1-PHASE)	0.0 A	0.0 A
NON RESIDENTIAL LOAD	0.0 A	0.0 A