

BACK-UP GENERATOR WORKSHEET-LOAD CALCULATION - 2014 N.E.C (ART.220)

JOB/PROJECT ADDRESS

DATE

CONTRACTOR INFORMATION:

NAME

Harry Bumbarger
(386) 732-1855

NAME:

PHONE:

PHONE:

E-MAIL:

None

E-MAIL:

SPECIFY FUEL SOURCE:

NAT.GAS

LP

OTHER:

SPECIFY/VERIFY ELECTRIC SERVICE VOLTAGE:

120/240- SINGLE PHASE

OTHER

SPECIFY ELECTRIC SERVICE AMPERAGE:

100 AMP

200 AMP

100 AMP

800 AMP

OTHER:

NET SQUARE FOOTAGE (OF RESIDENCE):

2400

SQUARE FEET

GENERAL LOADS:		QUANTITY:	RATING (LOAD) (VA)	FACTOR:	LOADS (VA)	LOADS (KW) (VA/1,000)
1	GENERAL LIGHTING & GENERAL USE RECEPTACLES	2400	3 VA/ft	100%	7200	7.2
2	BRANCH CIRCUITS (1500 VA/ft)					
2.1	SMALL APPLIANCE CIRCUITS (20 AMP)	2	1500	100%	3000	3
2.2	LAUNDRY CIRCUITS	1	1500	100%	1500	1.5
3	FIXED APPLIANCES					
3.1	WELL	1	800	100%	800	.8
3.2	SUMP PUMP					
3.3	FREEZER	1	1500	100%	1500	1.5
3.4	MICROWAVES (BUILT IN, NOT COUNTERTOP MODELS)	1	1000	100%	1000	1
3.5	DISPOSAL					
3.6	DISHWASHER					
3.7	RANGE (SEE TABLE 220.56 FOR MULTIPLE COOKING APPLIANCES)	1	8000	100%	8000	8
3.8	WALL MOUNTED OVEN (BUILT IN)					
3.9	COUNTER MOUNTED COOKING SURFACE (BUILT IN)					
3.10	WATER HEATER	1	4500	100%	4500	4.5
3.11	CLOTHES DRYER	1	5000	100%	5000	5
3.12	GARAGE DOOR OPENER					
3.13	SEPTIC SYSTEM PUMP/GRINDER					
3.14	OTHER UNSPECIFIED LOADS (PLEASE SPECIFY / LIST BELOW)					
3.14.1	Fridge	1	1000	100%	1000	1
3.14.2				100%		
3.14.3				100%		
3.14.4				100%		
3.14.5				100%		
3.14.6				100%		
3.14.7				100%		
3.14.8				100%		
3.14.9				100%		
4	TOTAL GENERAL LOADS:				33500 VA	33.5 KW
5	HEAT - AIR CONDITIONING (AC) LOAD:					
5.1	A/C COOLING EQUIPMENT	1	5000	100%	5000	5
5.2	HEAT PUMP					
5.2.1	COMPRESSOR (IF NOT INCLUDED AS AC)			100%		
5.2.2	SUPPLEMENTAL ELECTRIC HEAT			65%		
5.3	ELECTRICAL SPACE HEATING EQUIPMENT					
5.3.1	LESS THAN FOUR (4) SEPARATELY CONTROLLED UNITS			65%		
5.3.2	FOUR (4) OR MORE SEPARATELY CONTROLLED UNITS			40%		
5.4	SYSTEM WITH A CONTINUOUS NAMEPLATE LOAD			100%		
5.5	LARGEST HEAT / AC LOAD (VA) KW				5000	5
6	GENERAL LOADS					
6.1	1st 10 KW OF GENERAL LOADS @ 100% KW			100%	10	10
6.2	REMAINING GENERAL LOADS @ 40% KW			40%	9.4	9.4
6.3	CALCULATED GENERAL LOADS KW					19.4
6.4	LARGEST HEAT / AC LOAD 100% KW					5
7	TOTAL CALCULATED LOAD (NET GENERAL LOADS + HEAT/AC LOAD)					24.4 KW

Whole House = 24KW

Recommended = 24KW

2283-527 (120)
2011

0045

2.7	0047		0045
2.8	0048		1
2.9	0049		1
2.	0050	0050	1
2.1	0051	0051	1
	0052		
2	0053	0053	1
2.4	0054	0054	1
2.5	0055	0055	1
1	0056	0056	1

0057

2.66	0058		
2	0059	0059	1
			1

2 0060

0061

0062

0063

2283-527 (120)

2283-527 (120)