

three inches = one foot  
one and one half inches = one foot  
one inch = one foot  
three quarters inch = one foot  
one half inch = one foot  
three eighths inch = one foot  
one quarter inch = one foot  
one eighth inch = one foot

PARALLEL GEAR LOAD SHEDDING PRIORITY											BUS CONNECTION PRIORITY [1]	LOAD SHEDDING PRIORITY [2]
<div><div>SWITCH TYPE: AUTO - AUTOMATIC B/I - AUTOMATIC WITH BYPASS ISOLATION MAN - MANUAL OPERATION CT - CLOSED TRANSITION DT - DELAY TRANSITION STAT - STATIC SOLID STATE</div><div>GROUNDING (GND): SN- SWITCHED NEUTRAL ON- OVERLAPPING SWITCHED NEUTRAL DN- SOLID NEUTRAL</div><div>PRIORITY ORDER (NFPA 700): LIFE SAFETY CRITICAL EQUIPMENT</div></div>												
NO.	IDENTIFICATION	SWITCH			NEMA ENCLOSUR	GND	PRIORITY ORDER	MAUFACTURER MODEL NUMBER	BUILDING SERVED			
1	(E) ATS-HELSEA	AUTO	460/3	4	400	1	DN	LIFE SAFETY BRANCH	ASCO 7000 SERIES	SERVES BLDG. 1D	1a	17
2	(E) ATS-LS	AUTO	460/3	4	600	1	DN	LIFE SAFETY BRANCH	ASCO 7000 SERIES	SERVES BLDG. 12	1b	16
3	(E) FIRE PUMP	AUTO	208/3	3	600	1	DN	LIFE SAFETY BRANCH	JOSLYN CLARK C30-152-413R	SERVES BLDG. 5	1c	15
4	(F) ATS-LVL	AUTO	208/3	4	1,200	1	SN	LIFE SAFETY BRANCH	(FUTURE)	SERVES BLDG. 1	1d	14
5	(F) ATS-MRILS	AUTO	460/3	4	100	1	SN	LIFE SAFETY BRANCH	(FUTURE)	SERVES BLDG. MRI	1e	13
6	(F) ATS-MRIC	AUTO	460/3	4	100	1	SN	CRITICAL BRANCH	(FUTURE)	SERVES BLDG. MRI	2a	12
7	(E) ATS-HECA	AUTO	460/3	4	600	1	SN	CRITICAL BRANCH	ASCO 7000 SERIES	SERVES BLDG. 1D	2b	11
8	(E) ATS-HECB	AUTO	460/3	4	100	1	DN	CRITICAL BRANCH	ASCO 7000 SERIES	SERVES BLDG. 1D	2c	10
9	(E) ATS-C	AUTO	460/3	4	800	1	SN	CRITICAL BRANCH	ASCO 7000 SERIES	SERVES BLDG. 12	2d	9
10	(E) ATS-HECRS	AUTO	460/3	4	400	1	DN	CRITICAL BRANCH	ASCO 7000 SERIES	SERVES BLDG. 1D	2e	8
11	(F) ATS-LVC	AUTO	208/3	4	1200	1	SN	CRITICAL BRANCH	(FUTURE)	SERVES BLDG. 1	2f	7
12	(E) ATS-E	AUTO	460/3	4	1,200	1	SN	EQUIPMENT BRANCH	ASCO 7000 SERIES	SERVES BLDG. 12	3	6
13	(E) ATS-HEEA	AUTO	460/3	4	400	1	SN	EQUIPMENT BRANCH	ASCO 7000 SERIES	SERVES BLDG. 1D	4	5
14	(E) ATS-MRI	AUTO	460/3	4	250	1	SN	EQUIPMENT BRANCH	ASCO 7000 SERIES ZENITH MX100	SERVES BLDG. MRI	5	4
15	(E) ATS-ME	AUTO	460/3	4	800	3R	SN	EQUIPMENT BRANCH	ASCO 7000 SERIES	SERVES BLDG. 1	6	3
16	(F) ATS-1A	AUTO	460/3	4	400	1	SN	EQUIPMENT BRANCH	(FUTURE)	SERVES BLDG. 1A	7	2
17	(F) ATS-LVE	AUTO	208/3	4	1,200	1	SN	EQUIPMENT BRANCH	(FUTURE)	SERVES BLDG. 1	8	1

[1] FINAL BUS CONNECTION PRIORITY ORDER SHALL BE VERIFIED WITH VA RESIDENT ENGINEER PRIOR TO PROGRAMMING.  
[2] FINAL LOAD SHED PRIORITY ORDER SHALL BE VERIFIED WITH VA RESIDENT ENGINEER PRIOR TO PROGRAMMING.

LOAD CALCULATION: (E) GELE							
LOAD DESCRIPTION	LIGHTING	RECEPTS.	EQUIP.	MOTOR	KITCHEN	HEAT	TOTAL
2EEB	500	1 080	4 000				5,580
(E) 4EEA			43,230				43,230
(E) 2EEA			43,230				43,230
Total Connected Load:							92,040
Largest Motor:							92,040
NEC Demand Factor:	100%	100%, 1st 10KW 50% for rest	100%	100% + 25% of Largest Load	65%	100%	92,040
NEC Code Reference	NEC 220.42	NEC 220.44	NEC 430.24	NEC 220.56	NEC 220.51		92,040
Total Demand Load:							92,040
NEC Load:							92,040
Existing 400A, 208/120 Distribution Board is Acceptable for Additional Loads							255.5 Amps
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LOAD CALCULATION - LIFE SAFETY EMERGENCY BRANCH						
AREA/ ITEM	PHASE A (AMPS)	PHASE B (AMPS)	PHASE C (AMPS)	TOTAL (AMPS)	PEAK DEMAND (VA)	TOTAL
(F) ATS-LVL (60%)	160	160	160	160.0	133,018	133,018
(E) ATS-HELSA	49.7	41.0	47.0	49.7	41,319	41,319
(E) ATS-LS	63	54	41	63.0	52,376	52,376
(E) FIRE PUMP (208V)	29.4	29.4	29.4	29.4	24,442	24,442
(F) ATS-MRILS	2.3	2.3	2.3	2.3	1,912	1,912
Total Connected Load:		287	280	304	253,066	253,066
NEC Demand Factor:					100%	
Total Demand Load:					253,066	253,066
Meter Demand Load:		253,066 VA	at 480/277V		304.4	
Spare Capacity 25%:		63,266 VA	at 480/277V		380.5	
Total Load:		316,332 VA	at 480/277V			
Existing 750 KW (937 KVA) Generators EG-4 or EG-8 are suitable for estimated life safety emergency branch loads						