

BURNSIDE APARTMENTS																			
RESIDENTIAL LOAD SUMMARY 'MC1'																			
UNIT TYPE:	QTY PER FLOOR						TOTAL	AREA (SF)	LTG/RECEPT (3VA / SF)	SM APPL (1500VA X2)	LAUNDRY (1500VA)	COOKING (Gas Range) (CONNECTED)	MICROWAVE (CONNECTED)	DISHWASHER (CONNECTED)	ELECT DRYER (CONNECTED)	WATER HEATER (CONNECTED)	DISPOSAL (CONNECTED)	MOTORS (CONNECTED)	LARGEST OF: AC/HEATING (CONNECTED)
	LW 1	LW 2	LW 3	LW 4	LW 5	LW 6													
1 Bedroom					18	17	35	600	1800	3000	1500	8500	1500	1200	5400	0	900	0	3500
2 Bedroom					4	3	7	1000	3000	3000	1500	8500	1500	1200	5400	0	900	0	5000
3 Bedroom					1	1	2	1400	4200	3000	1500	8500	1500	1200	5400	0	900	0	6000
Townhouse							0	1100	3300	3000	1500	8500	1500	1200	5400	0	900	0	5000
TOTALS:	0	0	0	0	23	21	44	30800	92400	132000	66000	374000	66000	52800	237600	0	39600	0	169500
VOLTS:								208 3ph											
TOTAL CONNECTED:								1230 KVA											
DEMAND FACTOR:								0.27 Based on Total Number of Residential Units = 43-45 (See N.E.C. Article: 220.84)											
TOTAL CALCULATED:								332 KVA											
CALCULATED AMPS:								922 AMPS											
NOTE:																			

BURNSIDE APARTMENTS																			
RESIDENTIAL LOAD SUMMARY 'MC2'																			
UNIT TYPE:	QTY PER FLOOR						TOTAL	AREA (SF)	LTG/RECEPT (3VA / SF)	SM APPL (1500VA X2)	LAUNDRY (1500VA)	COOKING (Gas Range) (CONNECTED)	MICROWAVE (CONNECTED)	DISHWASHER (CONNECTED)	ELECT DRYER (CONNECTED)	WATER HEATER (CONNECTED)	DISPOSAL (CONNECTED)	MOTORS (CONNECTED)	LARGEST OF: AC/HEATING (CONNECTED)
	LW 1	LW 2	LW 3	LW 4	LW 5	LW 6													
1 Bedroom			21	22			43	600	1800	3000	1500	8500	1500	1200	5400	0	900	0	3500
2 Bedroom			4	6			10	1000	3000	3000	1500	8500	1500	1200	5400	0	900	0	5000
3 Bedroom			1	1			2	1400	4200	3000	1500	8500	1500	1200	5400	0	900	0	6000
Townhouse							0	1100	3300	3000	1500	8500	1500	1200	5400	0	900	0	5000
TOTALS:	0	0	26	29	0	0	55	38600	115800	165000	82500	467500	82500	66000	297000	0	49500	0	212500
VOLTS:								208		3ph									
TOTAL CONNECTED:								1538		KVA									
DEMAND FACTOR:								0.25		Based on Total Number of Residential Units = 51-55 (See N.E.C. Article: 220.84)									
TOTAL CALCULATED:								385		KVA									
CALCULATED AMPS:								1068		AMPS									
NOTE:																			

BURNSIDE APARTMENTS																				
RESIDENTIAL LOAD SUMMARY 'MC3'																				
UNIT TYPE:	QTY PER FLOOR						TOTAL	AREA (SF)	LTG/RECEPT	SM APPL	LAUNDRY	COOKING (Gas Range)	MICROWAVE	DISHWASHER	ELECT DRYER	WATER HEATER (CONNECTED)	DISPOSAL	MOTORS	LARGEST OF: AC/HEATING (CONNECTED)	
	LW 1	LW 2	LW 3	LW 4	LW 5	LW 6			(3VA / SF)	(1500VA X2)	(1500VA)	(CONNECTED)	(CONNECTED)	(CONNECTED)	(CONNECTED)	(CONNECTED)	(CONNECTED)	(CONNECTED)	(CONNECTED)	
1 Bedroom	4	4	1	0	0	0	9	600	1800	3000	1500	8500	1500	1200	5400	0	900	0	3500	
2 Bedroom	1	2	2	0	0	0	5	1000	3000	3000	1500	8500	1500	1200	5400	0	900	0	5000	
3 Bedroom	0	0	0	0	0	0	0	1400	4200	3000	1500	8500	1500	1200	5400	0	900	0	6000	
Townhouse (Loft)	6	0	0	0	0	0	6	1100	3300	3000	1500	8500	1500	1200	5400	0	900	0	5000	
TOTALS:	11	6	3	0	0	0	20	17000	51000	60000	30000	170000	30000	24000	108000	0	18000	0	86500	
VOLTS:								208	3ph											
TOTAL CONNECTED:								578	KVA											
DEMAND FACTOR:								0.38	Based on Total Number of Residential Units = 18-20 (See N.E.C. Article: 220.84)											
TOTAL CALCULATED:								219	KVA											
CALCULATED AMPS:								609	AMPS											
NOTE:																				

DWELLING UNIT LOAD CALCULATION	
Project:	Burnside Mixed Use
Unit Type:	1Bedroom
Area:	665 square feet(average)
Minimum Size Feeder (NEC 220.40):	
General lighting load at 3 VA / SF	1,995 VA
Small Appliance load (2 ckt at 1500VA each)	3,000 VA
Laundry Load (1 ckt at 1500VA)	1,500 VA
Range (GAS)	8,500 VA
Other Cooking Appliance Load (Microwave Oven)	1,500 VA
Dishwasher Load	1,200 VA
Electric Dryer Load	5,400 VA
Electric Water Heater Load	0 VA
Disposal load	900 VA
Other motor loads	0 VA
Total "General Loads"	21,995 VA
First 10 kVA of "general loads" at 100%	10,000 VA
Remainder of "general loads" at 40%	5,998 VA
Net "general load"	15,998 VA
Largest of:	
-or- VA of electric space heating (less than 4) at 65%	0 VA
-or- VA of electric space heating (4 or more) at 40%	0 VA
-or- VA of air conditioning/cooling/heat pumps at 100%	5,000 VA

TOTAL LOAD 20,598 VA

For 120/208-volt, 3-wire, single-phase service or feeder,
20,598 VA / 208 volts = 99 Amps

Therefore, this dwelling unit shall be permitted to be served by a 125 amp service.

DWELLING UNIT LOAD CALCULATION	
Project:	Burnside Mixed Use
Unit Type:	2Bedroom
Area:	985 square feet(average)
Minimum Size Feeder (NEC 220.40):	
General lighting load at 3 VA / SF	2,955 VA
Small Appliance load (2 ckt at 1500VA each)	3,000 VA
Laundry Load (1 ckt at 1500VA)	1,500 VA
Range (GAS)	8,500 VA
Other Cooking Appliance Load (Microwave Oven)	1,500 VA
Dishwasher Load	1,200 VA
Electric Dryer Load	5,400 VA
Electric Water Heater Load	0 VA
Disposal load	900 VA
Other motor loads	0 VA
Total "General Loads"	24,955 VA
First 10 kVA of "general loads" at 100%	10,000 VA
Remainder of "general loads" at 40%	5,982 VA
Net "general load"	15,982 VA
Largest of:	
-or- VA of electric space heating (less than 4) at 65%	0 VA
-or- VA of electric space heating (4 or more) at 40%	0 VA
-or- VA of air conditioning/cooling/heat pumps at 100%	5,500 VA

TOTAL LOAD 21,482 VA

For 120/208-volt, 4-wire, single-phase service or feeder,
21,482 VA / 208 volts = 103 Amps

Therefore, this dwelling unit shall be permitted to be served by a 125 amp service.

DWELLING UNIT LOAD CALCULATION	
Project:	Burnside Mixed Use
Unit Type:	3 Bedroom
Area:	1,400 square feet(average)
Minimum Size Feeder (NEC 220.40):	
General lighting load at 3 VA / SF	4,200 VA
Small Appliance load (2 ckt at 1500VA each)	3,000 VA
Laundry Load (1 ckt at 1500VA)	1,500 VA
Range (GAS)	8,500 VA
Other Cooking Appliance Load (Microwave Oven)	1,500 VA
Dishwasher Load	1,200 VA
Electric Dryer Load	5,400 VA
Electric Water Heater Load	0 VA
Disposal load	900 VA
Other motor loads	0 VA
Total "General Loads"	26,200 VA
First 10 kVA of "general loads" at 100%	10,000 VA
Remainder of "general loads" at 40%	6,480 VA
Net "general load"	16,480 VA
Largest of:	
-or- VA of electric space heating (less than 4) at 65%	0 VA
-or- VA of electric space heating (4 or more) at 40%	0 VA
-or- VA of air conditioning/cooling/heat pumps at 100%	11,000 VA

TOTAL LOAD 27,480 VA

For 120/208-volt, 4-wire, single-phase service or feeder,
27,480 VA / 208 volts = 132 Amps

Therefore, this dwelling unit shall be permitted to be served by a 150 amp service.

MFA CIRCUIT DIRECTORY										13-Oct-20
Loadcenter Name LC-1BR (TYPICAL)	mounting				location					
	RECESSED									
voltage		phase		bus & main		(SCCR: 22K)				
208/120		1		100A MLO						
service		a/p	no.	L1	L2	no.	a/p	service		
LIGHTS-KITCHEN/LIVING		20/1(A)	1	*	2	20/1(A)	1	APPLIANCE CIRCUIT		
LTS & RECEPT - BATH		20/1	3	*	4	20/1(A)	1	APPLIANCE CIRCUIT		
LTS & RECEPT - BEDROOM		20/1(A)	5	*	6	20/1	1	REFRIGERATOR		
RECEPT - LIVING		20/1(A)	7	*	8	20/1	1	MICRO/HOOD		
SPARE		20/1(A)	9	*	10	20/1	1	RANGE (GAS)		
SPARE		20/1(A)	11	*	12	20/1	1	SPARE		
WASHER		20/1(G)	13	*	14	20/1	1	DISHWASHER (WHERE USED)		
DRYER		40/2	15	*	16	20/1	1	DISPOSAL		
		*	17	*	18	20/2		HEAT		
WATER METER		20/1	19	*	20					
DRYER BOOSTER (OPT)		20/1	21	*	22	20/2		HEAT		
SMART PANEL		20/1	23	*	24	*	*			
BLANK		-----	25	*	26	20/1	1	SPARE		
BLANK		-----	27	*	28	-----		BLANK		
BLANK		-----	29	*	30	-----		BLANK		
NOTES:										
1. (A) DENOTES: ARC-FAULT INTERRUPTER CIRCUIT BREAKER. INSTALL PER NEC 210.12										
2. LOADS FOR THIS PANEL ARE INDICATED ON THE "DWELLING UNIT LOAD CALCULATION".										
3. BREAKER & WIRE SHALL BE SIZED FOR EQUIPMENT INSTALLED.										
4. (G) DENOTES GFCI RATED BREAKER.										

MFA CIRCUIT DIRECTORY										22-Jun-20
Loadcenter Name LC-2BR (TYPICAL)	mounting				location					
	RECESSED									
	voltage				bus & main					
	208/120				100A MLO (SCOR: 22K)					
service	a/p	no.	L1	L2	a/p	service				
LIGHTS-KITCHEN/LIVING	20/1(A)	1	*	2	20/1(A)	APPLIANCE CIRCUIT				
LTS & RECEPT - BATH	20/1	3	*	4	20/1(A)	APPLIANCE CIRCUIT				
RECEPT - LIVING	20/1(A)	5	*	6	20/1	REFRIGERATOR				
RECEPT - LIVING	20/1(A)	7	*	8	20/1	MICRO/HOOD				
LTS & RECEPT - BEDROOM	20/1(A)	9	*	10	20/1	RANGE (GAS)				
LTS & RECEPT - BEDROOM	20/1(A)	11	*	12	20/1	SPARE				
WASHER	20/1(G)	13	*	14	20/1	DISHWASHER				
DRYER	40/2	15	*	16	20/1	DISPOSAL				
	*	17	*	18	50/2	HEAT				
DRYER BOOSTER (OPT)	20/1	19	*	20	20/2	HEAT				
WATER METER (OPT)	20/1	21	*	22	20/2	HEAT				
SMART PANEL	20/1	23	*	24	*	HEAT				
BLANK	-----	25	*	26	20/2	HEAT				
BLANK	-----	27	*	28	*	HEAT				
BLANK	-----	29	*	30	-----	BLANK				
NOTES:										
1. (A) DENOTES: ARC-FAULT INTERRUPTER CIRCUIT BREAKER. INSTALL PER NEC 210.12.										
2. LOADS FOR THIS PANEL ARE INDICATED ON THE "DWELLING UNIT LOAD CALCULATION".										
3. BREAKER & WIRE SHALL BE SIZED FOR EQUIPMENT INSTALLED.										
4. (G) DENOTES GFCI RATED BREAKER.										