

Panel Wiring Schedule (3-phase)														
Panelboard		"MDP"		Voltage		277/480		Phase		3		Wire		
Panel Type		WESCO		Mains		200A MCB		Mains Rating		400 A		A/C Rating		
NEMA Type Enclosure		1		Mounting		IFS		Options		Note		85,000		
Ckt. No.	Zone/Note	Load Description	Equip #	Brkr Opts	Brkr Size"	Actual KW	Phase	Actual KW	Brkr Size"	Brkr Opts	Equip #	Load Description	Zone/Note	Ckt. No.
1		AHU-1		H	350	8.540 8.540 8.540	A B C	0.000 0.000 0.000	---	---		SPACE		2
3		FPVAV-1		H	200	4.720 4.720 4.720	A B C	---	---	---		SPACE		4
5		SPACE		---	---	---	A B C	15.392 14.593 14.934	125/3	L		XFMR		6
Notes														
* All circuit breakers to be 20-Amp, 1-Pole unless otherwise noted.														
Actual Load Totals:														
Ph. A 28.652 kw														
Ph. B 27.853 kw														
Ph. C 28.194 kw														
Total 84.699 kw														
(All Phases to be balanced to within 7% using Actual Load Totals.)														
Zone/Note														
Zone - Lighting Control Zones														
Notes - IG = Isolated Ground Circuit														
Breaker Options														
L - Handle lock-on device														
H - Heating, A/C & Refrigeration														
G - Ground Fault Circuit Interrupter														

Panel Wiring Schedule (3-phase)														
Panelboard		"A"		Voltage		120/208		Phase		3		Wire		
Panel Type		WESCO		Mains		125A MCB		Mains Rating		225 A		A/C Rating		
NEMA Type Enclosure		1		Mounting		IFS		Options		Note		65,000		
Ckt. No.	Zone/Note	Load Description	Equip #	Brkr Opts	Brkr Size"	Actual KW	Phase	Actual KW	Brkr Size"	Brkr Opts	Equip #	Load Description	Zone/Note	Ckt. No.
1		STORE N/LEM LIGHTS		L	20/1	0.693	A	1.181	20/1	---		STOCKROOM LIGHTS/FAN		2
3	A	STORE FRONT LIGHTS		---	20/1	0.144	B	0.359	20/1	---	△	CASH WRAP LIGHTS	C	4
5	A	SPARE		---	20/1	0.000	C	0.785	20/1	---		SALES AREA LIGHTS	D	6
7	A	STOREFRONT SIGN		---	20/1	1.200	A	0.252	20/1	---		SALES AREA LIGHTS	C	8
9	C	CABINET LIGHTS		---	20/1	0.650	B	0.540	20/1	---		SALES AREA LIGHTS	C	10
11	C	CABINET LIGHTS		---	20/1	0.600	C	0.630	20/1	---		SALES AREA LIGHTS	D	12
13	C	CABINET LIGHTS		---	20/1	0.600	A	0.000	20/1	---		SPARE	D	14
15	C	CABINET LIGHTS		---	20/1	0.650	B	0.810	20/1	---		SALES AREA LIGHTS	C	16
17	C	CABINET LIGHTS		---	20/1	0.750	C	0.504	20/1	---		SALES AREA LIGHTS	D	18
19	C	CABINET LIGHTS		---	20/1	1.610	A	0.504	20/1	---		SALES AREA LIGHTS	D	20
21	C	CABINET LIGHTS		---	20/1	1.050	B	0.260	20/1	---		TRANSITION LIGHTS	D	22
23	D	FLOORBOX		---	20/1	0.540	C	0.494	20/1	---		PENDANT LIGHTS	C	24
25	D	FLOORBOX		---	20/1	0.540	A	0.216	20/1	---	△	BACKWRAP LIGHTS	C	26
27	D	FLOORBOX		---	20/1	0.540	B	0.504	20/1	---		LED GINGHAM	A	28
29	D	TV BACKWRAP		---	20/1	0.800	C	0.216	20/1	---		SALES AREA LIGHTS	C	30
31	D	SPARE		---	20/1	0.000	A	0.000	20/1	---		SPARE	C	32
33	D	SPARE		---	20/1	0.000	B	0.000	20/1	---		SPARE	D	34
35	D	TV BACKWRAP		---	20/1	0.800	C	0.000	20/1	---		SPARE	D	36
37	D	SPARE		---	20/1	0.000	A	0.216	20/1	---		STORE FRONT LIGHTS	A	38
39	A	STOREFRONT SIGN		---	20/1	1.200	B	0.000	20/1	---		SPARE	A	40
41	A	LED GINGHAM		---	20/1	0.400	C	0.505	20/1	L		STORE N/LEM LIGHTS	A	42
<div>Notes</div> <div>* All circuit breakers to be 20-Amp, 1-Pole (unless otherwise noted)</div> <div>Actual Load Totals:</div> <div>Ph. A 7.012 kw</div> <div>Ph. B 6.793 kw</div> <div>Ph. C 6.174 kw</div> <div>Total 19.979 kw</div> <div>(All Phases to be balanced to within 7% using Actual Load Totals.)</div>														
<div>Breaker Options</div> <div>L - Handle lock-on device</div> <div>H - Heating, A/C &amp; Refrigeration</div> <div>G - Ground Fault Circuit Interrupter</div>														
<div>Zone/Note</div> <div>Zone: Lighting Control Zones</div> <div>Notes: IG = Isolated Ground Circuit</div>														

Panel Wiring Schedule (3-phase)														
Panelboard		"B"		Voltage		120/208		Phase		3		Wire		
Panel Type		WESCO		Mains		125A MCB		Mains Rating		225 A		A/C Rating		
NEMA Type Enclosure		1		Mounting		IFS		Options		Note		ISOLATED GROUND BAR		
Ckt. No.	Zone/Note	Load Description	Equip #	Brkr Opts	Brkr Size"	Actual KW	Phase	Actual KW	Brkr Size"	Brkr Opts	Equip #	Load Description	Zone/Note	Ckt. No.
1		S PARE		---	20/1	0.000	A	2.100	20/2	---	1	DEMO WATER HEATER/WH-1		2
3		MANAGER'S RECEPTACLE		---	20/1	0.360	B	2.100	20/2	---				4
5	IG	MANAGER'S IG RECEPTACLE		L	20/1	0.540	C	0.360	20/1	---		SALES AREA RECEPTACLE		6
7		BACKWRAP RECEPTACLE		---	20/1	1.080	A	0.000	20/1	---		S PARE		8
9		WALKIE TALKIE		---	20/1	0.360	B	1.080	20/1	---		SALES AREA RECEPTACLE		10
11		MUSIC/SOUND SYSTEM		---	20/1	0.500	C	0.500	20/1	L		IP CAMERA POWER		12
13	(WR)	TEMP. CONTROLS		L	20/1	0.500	A	0.500	20/1	L		SECURITY PANEL/MONITOR		14
15	IG	CASHWRAP IG		L	20/1	0.900	B	0.500	20/1	L		SURV. ALARM		16
17		CASHWRAP RECEPTACLE		L	20/1	0.720	C	1.500	20/2	---	4	DEMO WATER HEATER/WH-2		18
19		NONSALES RECEPTACLE		---	20/1	1.080	A	1.500	20/2	---				20
21		S PARE		L	20/1	0.000	B	0.600	20/1	---		DRINKING FOUNTAIN		22
23		MICROWAVE		---	20/1	1.200	C	0.000	20/1	---				24
25	IG	CASHWRAP IG		L	20/1	0.900	A	0.360	20/1	---		HVAC RECEPTACLE		26
27	(WR)	TELEPHONE BOARD		L	20/1	0.360	B	0.000	20/1	---	⚠	S PARE		28
29	A	L L L SYSTEM		L	20/1	0.180	C	1.000	20/1	---		SENSORMATIC		30
31		S PARE		---	20/1	0.000	A	0.000	20/1	---		S PARE		32
33		REFRIGERATOR		---	20/1	1.000	B	0.000	20/1	---		S PARE		34
35		BACKWRAP RECEPTACLE		---	20/1	0.540	C	1.000	20/1	---		SENSORMATIC		36
37		BACKWRAP RECEPTACLE		---	20/1	0.360	A	0.000	20/1	---		S PARE		38
39		BACKWRAP RECEPTACLE		---	20/1	0.540	B	0.000	20/1	---		S PARE		40
41		CASHWRAP RECEPTACLE		L	20/1	0.720	C	0.000	20/1	---		S PARE		42
Notes														
* All circuit breakers to be 20-Amp, 1-Pole unless otherwise noted.														
Actual Load Totals:														
Ph. A 8.380 kw														
Ph. B 7.800 kw														
Ph. C 8.760 kw														
Total 24.940 kw														
(All Phases to be balanced to within 7% using Actual Load Totals.)														
Breaker Options														
L - Handle lock-on device														
H - Heating, A/C & Refrigeration														
G - Ground Fault Circuit Interrupter														
Zone/Note														
Zone - Lighting Control Zones														
Notes - IG = Isolated Ground Circuit														

TRANSFORMER SUMMARY				
DESCRIPTION	ACTUAL CONNECTED KW/KVA	N.E.C. CONNECTED KW/KVA	N.E.C. DEMAND FACTOR	N.E.C. DEMAND KW/KVA
LIGHTING	17.159	17.159	1.25	21.449
TRACK LIGHTING ***	0.000	0.000	0 Amps x 120V	0.000
SHOW WINDOW LIGHTING **	0.000	0.000	0" x 200w / FT	0.000
RECEPTACLES	11.520	11.520	1.0x 10 KW + 0.5 REMAINING KW	10.760
ELECTRIC WATER HEATER	7.200	7.200	1.0	7.200
MISCELLANEOUS	9.040	9.040	1.0	9.040
MOTORS	0.000	0.000	1.0	0.000
FIXED ELECTRIC HEATING	0.000	0.000	1.0	0.000
HVAC SYSTEM	0.000	0.000	125% OF LARGEST	0.000
TOTAL	44.919	44.919	<b>CALCULATED PER 2011 NEC</b>	48.449
NOTES * USE GREATER LOAD OF THE TWO CATEGORIES ** NEC ARTICLE 220-43 REQUIREMENT (200VA / FT OR ACTUAL CONNECTED) *** NEC ARTICLE 220-43(B) EXCEPTION-TOTAL OF ALL CURRENT LIMITING DEVICES **** 125% OF THE LARGEST MOTOR OR COMPRESSOR ALREADY INCLUDED IN ACTUAL & NEC CONNECTED KW/KVA TOTAL				
N.E.C. DEMAND KVA x 1000 SYSTEM VOLTAGE x Y <sup>3</sup> = MINIMUM FEEDER AMPERAGE 48.449 x 1000 208 x 1.73 134.6 AMPS				

ELECTRICAL LOAD SUMMARY				
DESCRIPTION	ACTUAL CONNECTED KW/KVA	N.E.C. CONNECTED KW/KVA	N.E.C. DEMAND FACTOR	N.E.C. DEMAND KW/KVA
LIGHTING	17.159	17.159	1.25	21.449
TRACK LIGHTING ***	0.000	0.000	0 Amps x 120V	0.000
SHOW WINDOW LIGHTING **	0.000	0.000	0" x 200w / FT	0.000
RECEPTACLES	11.520	11.520	1.0x 10 KW + 0.5 REMAINING KW	10.760
ELECTRIC WATER HEATER	7.200	7.200	1.0	7.200
MISCELLANEOUS	9.040	9.040	1.0	9.040
MOTORS	0.000	0.000	1.0	0.000
FIXED ELECTRIC HEATING	39.780	39.780	1.0	39.780
HVAC SYSTEM	0.000	0.000	125% OF LARGEST	0.000
TOTAL	84.699	84.699	<b>CALCULATED PER 2011 NEC</b>	88.229
NOTES * USE GREATER LOAD OF THE TWO CATEGORIES ** NEC ARTICLE 220-43 REQUIREMENT (200VA / FT OR ACTUAL CONNECTED) *** NEC ARTICLE 220-43(B) EXCEPTION-TOTAL OF ALL CURRENT LIMITING DEVICES **** 125% OF THE LARGEST MOTOR OR COMPRESSOR ALREADY INCLUDED IN ACTUAL & NEC CONNECTED KW/KVA TOTAL				
N.E.C. DEMAND KVA x 1000 SYSTEM VOLTAGE x Y <sup>3</sup> = MINIMUM FEEDER AMPERAGE 88.229 x 1000 480 x 1.73 106.2 AMPS				

ELECTRICAL LANDLORD'S COMMENTS:  
PRIOR TO BID, TENANT IS REQUIRED TO VERIFY THAT THE LANDLORD'S EXISTING AVAILABLE ELECTRICAL SERVICE MEETS THE TENANT'S TOTAL CONNECTED LOAD.

COORDINATE ALL NEW ROUTING OF CONDUIT, FEEDER CABLES AND CONNECTIONS TO LANDLORD'S MAIN ELECTRICAL GEAR WITH MALL OPERATIONS.

TENANT'S GC TO SURVEY ALL EXISTING ELECTRICAL EQUIPMENT AND VERIFY ANY ADDITIONAL WORK TO BE COMPLETED.

ANY AND ALL UPGRADES TO EXISTING EQUIPMENT SHALL BE BY TENANT'S GC AT TENANT'S EXPENSE.

MOUNT ALL PANELS SURFACE MOUNTED ON PLYWOOD BACKERS. DO NOT MOUNT RECESSED WITHIN LANDLORD'S DEMISING WALL.

TENANT'S GC TO SURVEY ALL EXISTING ELECTRICAL EQUIPMENT AND VERIFY THAT THEY ARE IN GOOD WORKING CONDITION, MEETS ALL CODES AND MATCHED THE CAPACITIES AND CHARACTERISTICS OF THE EQUIPMENT INDICATED ON THESE DRAWINGS AND SPECIFICATIONS.

MAXIMUM SIZE OF TRANSFORMER SUSPENDED FORM STRUCTURE SHALL BE 30KVA.

TRANSFORMER TO BE:  
1. FLOOR SUPPORTED.  
2. BUILT UP ON A PLATFORM SUPPORTED BY TENANT INTERIOR WALLS, NOT ATTACHED TO THE LANDLORDS DEMISING WALL.  
3. PROVIDED STRUCTURAL DRAWINGS APPROVED BY A STRUCTURAL ENGINEER TO SUPPORT FROM CEILING.

#### LIGHTING TIME CONTROL LEGEND:

A1 - EXTERIOR SIGNAGE BLADE SIGN INTERNALLY ILLUMINATED TRANSOMS STOREFRONT DOWNLIGHTING

A - MARKETING LEVEL LIGHTING SHOW WINDOW LIGHTS SHOW WINDOW RECEPTACLES

B - STOCKING STOCKROOM (NON-SALES) LIGHTING

C - TASK LEVEL 1/2 SALES FLOOR LIGHTING EVENLY DISTRIBUTED (BBW, PINK & BEN) - INCLUDING CABINET LIGHTING GENERAL SALES FLOOR RECEPTACLES DISPLAY CABINET LIGHTING RECEPTACLES

D - SALES LEVEL LIGHTING BALANCE OF SALES FLOOR LIGHTING INTERIOR DISPLAY LIGHTING (CHANDELIERS, NEON, ETC)

NOTE:  
ALL LIGHTING CIRCUITS CONNECTED TO LIGHTING ZONES ARE CONNECTED AND CONTROLLED AUTOMATICALLY THROUGH THE H.V.A.C BUILDING CONTROL TIME CLOCK. REFER TO ELECTRICAL POWER GENERAL NOTE #13 ON THIS SHEET.

ELECTRICAL EQUIPMENT DATA												
SYM.	ITEM	VOLTAGE	HP.	KW.	M.C.A.	FEEDERS		TYPE OF CONN.	BRANCH BREAKER	DISC. SW.	BUS/ FUSES	REMARKS
						WIRE	COND.					
①	WATER HEATER WH-1	208V, 1#	--	4.2	--	2#12 THHN 1#12 G	1/2"	'AC' TOGGLE SWITCH	20A-2P	---	---	SEE NOTE NO. 1 BELOW
②	FPVAV-1 (WITH HEATING)	277/480V, 3# 4W	△ 1/3	10.0 ELEC. HEAT	17.54	4#12 THHN 1#12 G	3/4"	THRU UNIT DISC. SW.	20A-3P	△ ---	---	SEE NOTE NO. 2 BELOW
③	AHU-1	480V, 3#	5	15.0 ELEC. HEAT	32.33	3#8 THHN 1#10 G	3/4"	THRU UNIT DISC. SW.	35A-3P	---	---	SEE NOTE NO. 2 BELOW
④	WATER HEATER WH-2	208V, 1#	--	3.0	--	2#12 THHN 1#12 G	1/2"	'AC' TOGGLE SWITCH	20A-2P	---	---	SEE NOTE NO. 1 BELOW
NOTE: 1. 'AC' TOGGLE SWITCH TO BE FURNISHED BY LSD&C AND INSTALLED BY ELECTRICAL CONTRACTOR. 2. DISCONNECT SWITCH TO BE FURNISHED AND INSTALLED BY MECHANICAL SUPPLIER.												