



POWER RISER DIAGRAM GENERAL NOTES

- HVAC CIRCUIT BREAKERS SHALL BE "HACR" TYPE WHERE REQUIRED BY EQUIPMENT NAMEPLATE PER N.E.C.
- PROPER CLEARANCE MUST BE MAINTAINED ABOUT ELECTRICAL EQUIPMENT PER N.E.C. FIELD VERIFY EXACT MOUNTING SPACE AVAILABLE IN ELECTRICAL ROOM/AREA PRIOR TO INSTALLATION OF ELECTRICAL EQUIPMENT.
- INSPECT AND TEST ALL EXISTING EQUIPMENT THAT WILL BE USED/REUSED. REPORT TO G.C. REGARDING ANY REQUIRED MAINTENANCE OR REPAIR ITEMS.
- INSTALL A MINIMUM OF 1/2" HIGH BLACK ENGRAVED LETTERING ON ALL ELECTRICAL ENCLOSURE COVER PLATE, INDICATING PANELBOARD DESIGNATION, RELAY CONTACTOR, AND LIGHTING CONTACTOR WITHIN ENCLOSURE. INSIDE EACH ELECTRICAL ENCLOSURE PROVIDE A MINIMUM OF 1/2" HIGH PERMANENT PEN INDICATING EQUIPMENT DESIGNATION.

NOTE TO ELECTRICAL CONTRACTOR

UPON DELIVERY THE ELECTRICAL CONTRACTOR SHALL BE ULTIMATELY RESPONSIBLE FOR THE EQUIPMENT AND ACCESSORIES, INCLUDING THEIR UNLOADING, STORAGE, INSTALLATION AND START UP ON THE PROJECT.

LEGEND:
 - - - - - DENOTES EXISTING WORK TO REMAIN
 _____ DENOTES NEW WORK

POWER RISER DIAGRAM AND NOTES

1/2"=1'-0"
100

EQUIPMENT WIRING SCHEDULE

| SYMBOL | ITEM | VOLTAGE | HP | KVA | AMPS | FEEDER | TYPE OF CONN. | NEMA RATING | DISCON. SWITCH | FUSES | REMARKS |
|--------|------------------------------|---------------|------|-----|-------|--|----------------|-------------|----------------|-------|--|
| 1 | INCOMING SERVICE PANEL A | 120/208V 3PH | | | 200.0 | 2"C.-4 # 3/0 & 1 # 6 GROUND | DIRECT | 1 | | | |
| 2 | PANEL A | 120V/208V 3PH | | | 197.4 | 2"C.-4 # 3/0 & 1 # 6 GROUND | 200A MCB | 1 | | | |
| 3 | INCOMING SERVICE PANEL B & C | 120/208V 3PH | | | 200.0 | 2"C.-4 # 3/0 & 1 # 6 GROUND & (1) # 6 IG | DIRECT | 1 | | | COORDINATE NEW SERVICE WITH LANDLORD AND UTILITY COMPANY |
| 4 | PANEL B | 120/208V 3PH | | | 117.6 | 2"C.-4 # 3/0 & 1 # 6 GROUND & (1) # 6 IG | 200A MCB | 1 | | | |
| 5 | PANEL C | 120/208V 3PH | | | 32.0 | 1-1/4"C.-4 # 3 & 1 # 8 GROUND & (1) # 8 IG | MLO | 1 | | | |
| 6 | ACCU-1 | 208V 3PH | | | 45.1 | 3/4"C.-3 # 6 & 1 # 10 GROUND | DISCON. SWITCH | 3R | 60A-3P | NON-F | |
| 7 | ACCU-2 | 208V 3PH | | | 21.0 | 3/4"C.-3 # 10 & 1 # 10 GROUND | DISCON. SWITCH | 3R | 30A-3P | NON-F | |
| 8 | AHU-1 | 208V 3PH | | | 7.8 | 3/4"C.-3 # 10 & 1 # 10 GROUND | DISCON. SWITCH | 1 | 30A-3P | NON-F | |
| 9 | AHU-2 | 208V 1PH | | | 10.0 | 3/4"C.-2 # 12 & 1 # 12 GROUND | TOGGLE SWITCH | 1 | 20A-1P | NON-F | |
| 10 | DH-1 | 208V 3PH | 35.0 | | | 1-1/2"C.-3 # 1 & 1 # 6 GROUND | DISCON. SWITCH | 1 | 125A-3P | NON-F | |
| 11 | DH-2 | 208V 3PH | 22.5 | | | 1"C.-3 # 3 & 1 # 8 GROUND | DISCON. SWITCH | 1 | 100A-3P | NON-F | |
| 12 | UH-1 | 208V 3PH | | | 5.0 | 3/4"C.-3 # 10 & 1 # 10 GROUND | DISCON. SWITCH | 1 | 30A-3P | NON-F | |
| 13 | HAC-1 | 208V 3PH | | | 12.0 | 3/4"C.-2 # 12 & 1 # 12 GROUND | TOGGLE SWITCH | 1 | 20A-1P | NON-F | |

REMARKS:

ELECTRICAL LOAD SUMMARY - 120/208V SYSTEM PANEL A

| LOAD DESCRIPTION | ACTUAL CONNECTED KVA | DEMAND FACTOR | ACTUAL DEMAND KVA | NEC CONNECTED KVA | DEMAND FACTOR | NEC DEMAND KVA |
|--------------------|----------------------|-------------------------------|-------------------|-------------------|-------------------------------|----------------|
| MOTORS | 4.891 | 100% + 25% OF LARGEST MOTOR** | 5.6 | 4.891 | 100% + 25% OF LARGEST MOTOR** | 5.591 |
| AIR CONDITIONING * | 57.501 | 100% + 25% OF LARGEST MOTOR** | 59.101 | 57.501 | 0% | 0.000 |
| ELECTRIC HEAT * | 66.150 | 100% | 66.2 | 66.150 | 100% | 66.150 |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | 128.5 | TOTAL KVA | 130.8 | | TOTAL KVA | 71.741 |

NOTES:
 * USE GREATER LOAD OF THE TWO CATEGORIES
 ** 125% OF THE LARGEST MOTOR OF COMPRESSOR IN SYSTEM (APPLIED ONLY ON ONE UNIT)

N.E.C. DEMAND KVA
 SYSTEM VOLTAGE x 1.732 = MINIMUM FEEDER AMPERAGE

$$\frac{71.74 \text{ KVA}}{208 \times 1.732} = 199 \text{ AMPS}$$

ELECTRICAL SERVICE @ 120/208V-3P-4W 200 AMPS

ELECTRICAL LOAD SUMMARY - 120/208V SYSTEM PANEL B

| LOAD DESCRIPTION | ACTUAL CONNECTED KVA | DEMAND FACTOR | ACTUAL DEMAND KVA | NEC CONNECTED KVA | DEMAND FACTOR | NEC DEMAND KVA |
|--------------------------|----------------------|----------------------------------|-------------------|-------------------|----------------------------------|----------------|
| TRACK LIGHTING | 1.992 | 125% | 2.5 | 170 FT | 150 W/2 FT | 12.750 |
| LIGHTING | 3.450 | 125% | 4.3 | 3,450 | 125% | 4.313 |
| SHOW WINDOW LIGHTING *** | 1.260 | 125% | 1.6 | 26 FT | 200 W/FT **** | 5.200 |
| SIGNAGE | 1.200 | 125% | 1.5 | 1,200 | 125% | 1.500 |
| RECEPTACLES | 15.500 | 1ST 10KVA @ 100% REMAINING @ 50% | 10.0 | 15.500 | 1ST 10KVA @ 100% REMAINING @ 50% | 12.750 |
| MOTORS | 0.876 | 100% + 25% OF LARGEST MOTOR** | 6.0 | 0.876 | 100% + 25% OF LARGEST MOTOR** | 6.000 |
| AIR CONDITIONING * | 0.000 | 100% + 25% OF LARGEST MOTOR** | 1.800 | 0.000 | 0% | 0.000 |
| ELECTRIC HEAT * | 16.500 | 100% | 16.5 | 16.500 | 100% | 16.500 |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | 43.8 | TOTAL KVA | 48.2 | 3.000 | 100% | 3.000 |
| | | | | | TOTAL KVA | 62.013 |

NOTES:
 * USE GREATER LOAD OF THE TWO CATEGORIES
 ** 125% OF THE LARGEST MOTOR OF COMPRESSOR IN SYSTEM (APPLIED ONLY ON ONE UNIT)
 *** ACTUAL SHOW WINDOW LIGHTING IS INCLUDED IN TRACK LIGHTING AND LIGHTING SECTIONS
 **** 200VA/FT REQUIREMENT MINUS ACTUAL INSTALLED SHOW WINDOW LIGHTING

N.E.C. DEMAND KVA
 SYSTEM VOLTAGE x 1.732 = MINIMUM FEEDER AMPERAGE

$$\frac{62.01 \text{ KVA}}{208 \times 1.732} = 172 \text{ AMPS}$$

ELECTRICAL SERVICE @ 120/208V-3P-4W 200 AMPS

NEW STORE

GAP INC.
 CORPORATE ARCHITECTURE
 1 HARRISON STREET
 SAN FRANCISCO, CA 94105

STORE NO.: 7641

STORE NAME: PORTLAND

STORE LOCATION:
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 PORTLAND, ME 04101

PROJ. I.D.: 0000053405

PROTOTYPE DATE: 09/4/15
 PROTOTYPE VERSION 4.1

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ISSUE TYPE:
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 PERMIT / BID
 LL APPROVAL

DRAWN BY: PR
 A&E JOB NO.: 16-5433

SHEET TITLE:
 POWER RISER
 & SCHEDULES

SHEET NUMBER:
E9-0