



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

STORE NO.: 7641

STORE NAME: PORTLAND

STORE LOCATION: 152 MIDDLE STREET PORTLAND, ME 04101

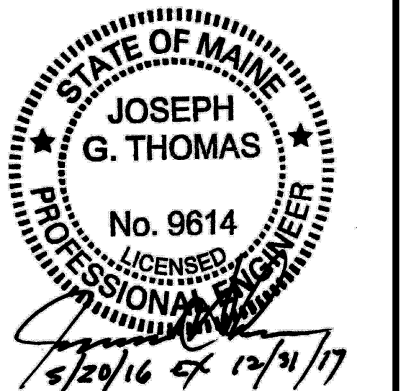
PROJ. I.D.: 0000053405

PROTOTYPE DATE: 09/4/15 PROTOTYPE VERSION 4.1

CONSULTANT INFO:



PROFESSIONAL STAMP:



ARCHITECT INFO:



HEREBY CERTIFY THAT THESE PLANS HAVE BEEN PREPARED BY MY OFFICE AND UNDER MY SUPERVISION AND THAT TO THE BEST OF MY KNOWLEDGE, THE SAME COMPLY WITH ALL LAWS, RULES, REGULATIONS AND ORDINANCES OF PORTLAND, ME RELATING TO STRUCTURES AND BUILDINGS.

ISSUE TYPE: 100% CD CHECKSET 5/20/16 PERMIT / BID LL APPROVAL

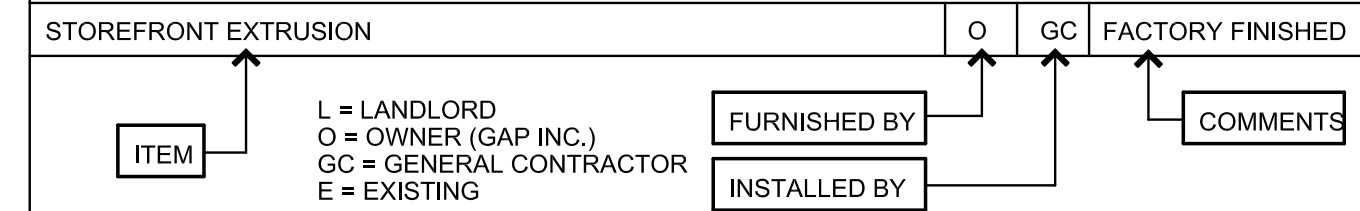
DRAWN BY: DG A&E JOB NO.: 16-5433

SHEET TITLE: MECHANICAL NOTES AND LEGENDS

SHEET NUMBER:

MO-1

RESPONSIBILITY MATRIX LEGEND



RESPONSIBILITY MATRIX

Table with columns: ITEM, FURNISHED BY, INSTALLED BY, COMMENTS. Rows include AIR HANDLING UNITS AND ASSOCIATED DUCT HEATERS AS SPECIFIED, HVAC CONTROLS PARTS, and AHU DUCT MOUNTED SMOKE DETECTOR DAMPER, WIRING, ETC.

REMARKS: 1. GENERAL CONTRACTOR TO COORDINATE SCHEDULE AND DELIVERY WITH VENDOR. STANDARD SHIPPING PROVIDED BY GAP INC. ANY EXPEDITED SHIPPING COSTS ARE RESPONSIBILITY OF THE GENERAL CONTRACTOR.

NOTE: A. THE RESPONSIBILITY MATRIX ONLY DELINEATES ITEMS SUPPLIED AND/OR INSTALLED BY OWNER AND/OR LANDLORD. ANY WORK SHOWN IN THE CONSTRUCTION DOCUMENTS NOT DEFINED AS RESPONSIBILITY OF OWNER OR LANDLORD IS FURNISHED AND INSTALLED BY THE CONTRACTOR. SEE BID CLARIFICATION LETTER FOR ANY VARIATION BY SCOPE OF WORK RESPONSIBILITY.

FOR INFORMATION REGARDING PRICING, ORDERING AND DELIVERY INFORMATION ON THE TRANE EQUIPMENT PACKAGE CONTACT NICOLE CROFFOOT AT:

(408) 481-3600 OFFICE E-MAIL: NICOLE.CROFFOOT@TRANE.COM

FOR GENERAL ISSUES CONTACT GARY L. RICH GAP'S NATIONAL ACCOUNT EXECUTIVE.

(408) 481-3620 OFFICE OR (415) 317-2822 MOBILE E-MAIL: GLRICH@TRANE.COM

CONTROLS SEQUENCE AND REQUIREMENTS

1.1 GENERAL

A. SMOKE CONTROL, FIRE AND LIFE SAFETY SEQUENCES SHALL OVERRIDE OTHER AUTOMATIC CONTROL SEQUENCES INCLUDING HARDWIRED SAFETY DEVICES.

1.2 HVAC SYSTEM

A. GENERAL: 1. THE SYSTEM CONSISTS OF THE FOLLOWING EQUIPMENT: A. AHU-1 AND AHU-2 WITH ELECTRIC DUCT HEATER (AIR HANDLING UNIT) B. ACCU-1 AND ACCU-2 (AIR COOLED CONDENSING UNIT) C. DH-1 (ELECTRIC DUCT HEATER) D. DH-2 (ELECTRIC DUCT HEATER) E. MD-1, MD-2 - (MOTORIZED DAMPERS FOR OUTSIDE AIR/ECONOMIZER OPERATION). MD-3, MD-4, (MOTORIZED DAMPER FOR RETURN AIR/ECONOMIZER OPERATION).

B. SYSTEM OFF:

- 1. OUTSIDE AIR DAMPERS CLOSED. 2. SUPPLY FANS OFF. 3. ELECTRIC DUCT HEATERS OFF.

C. SYSTEM START:

- 1. OPERATOR ENTERED COMMAND AT THE PROGRAMMABLE THERMOSTAT. 2. AUTOMATICALLY BY THE THERMOSTAT BASED ON PREPROGRAMMED OPTIMIZED START/STOP SCHEDULE.

D. OCCUPIED MODE:

- 1. OCCUPIED PERIODS (NORMAL OPERATING MODE FOR AHU): OPERATE THE SYSTEM ON A PROGRAMMED OCCUPANCY SCHEDULE BASED ON STORE OPERATING HOURS. THESE PERIODS ARE CONSIDERED "OCCUPIED PERIODS". DURING OCCUPIED PERIODS, RUN THE SYSTEM IN "OCCUPIED MODE".

E. UNOCCUPIED MODE:

- 1. UNOCCUPIED PERIODS: (NORMAL OPERATING MODE FOR AHU) ALL HOURS NOT INCLUDED IN AN OCCUPIED PERIOD ARE PART OF AN "UNOCCUPIED PERIOD". DURING THESE PERIODS, THE SYSTEM IS AVAILABLE FOR HEATING/COOLING AS NEEDED, BUT IS NOT RUNNING UNLESS COMMANDED.

F. SYSTEM SETPOINTS:

- 1. AHU SHALL HAVE A SETPOINT ADJUSTABLE WITHIN THE FOLLOWING RANGES: A. OCCUPIED HEATING: 66°F TO 70°F DURING OCCUPIED HOURS. THE DEFAULT IS 68°F. SAME FOR FAN POWERED BOX. B. OCCUPIED COOLING: 72°F TO 76°F DURING OCCUPIED HOURS. THE DEFAULT IS 74°F. C. MAINTAIN A DEADBAND OF AT LEAST 4°F BETWEEN HEATING AND COOLING SETPOINTS. D. DURING UNOCCUPIED HOURS, SET THE HEATING SETPOINT DEFAULT TO 60°F (ADJUSTABLE) AND THE COOLING SETPOINT DEFAULT TO 80°F (ADJUSTABLE). MAINTAIN 68°F FOR HEATING AND 74°F FOR COOLING FOR FAN POWERED BOXES.

G. SYSTEM OPERATION:

- 1. OUTSIDE AIR DAMPERS AT AHU SHALL OPEN. 2. MOTORIZED DAMPERS SHALL OPEN FOR MINIMUM VENTILATION PER CODE TO ACHIEVE A 55°F MIXED AIR TEMPERATURE AT THE INLET OF AHU. WHEN THE MIXED AIR TEMPERATURE AT THE AHU INLET IS BELOW 55°F, OUTSIDE AIR SHALL CLOSE DAMPERS TO ACHIEVE 55°F AT MIXED AIR TEMPERATURE SENSOR AT AHU INLET. 3. SUPPLY FAN IN AHU SHALL START. 4. COOLING MODE: ACCU COMPRESSOR SHALL CYCLE TO MAINTAIN SPACE COOLING TEMPERATURE. 5. HEATING MODE: ELECTRIC DUCT HEATER TO MAINTAIN SPACE HEATING TEMPERATURE. DUCT HEATERS SHALL NOT OPERATE DURING AHU COOLING MODE.

H. SYSTEM STOP:

- 1. OPERATOR COMMAND AT THE THERMOSTAT BASED ON A PREPROGRAMMED OPTIMIZED SCHEDULE. 2. WHEN THE SYSTEM IS CALLED TO STOP, THE SYSTEM SHALL REVERT TO THAT "OFF" STATE AS DESCRIBED ABOVE.

I. NIGHT SETBACK/SETUP:

- 1. UPON SENSING A TEMPERATURE BELOW THE UNOCCUPIED HEATING SETPOINT: A. ENERGIZE THE SUPPLY FAN FOR AHU SERVING THE ZONE B. ENERGIZE THE ELECTRIC DUCT HEATER 2. UPON SENSING A TEMPERATURE ABOVE THE UNOCCUPIED COOLING SETPOINT: A. ENERGIZE THE SUPPLY FAN FOR AHU SERVING THE ZONE. B. SET AHU TO COOLING MODE C. ENERGIZE THE COMPRESSORS

J. AIR ECONOMIZER CONTROL.

- 1. PROVIDE AIR-SIDE ECONOMIZER WITH DRY BULB CONTROL AND FREEZE-STAT. 2. DURING THE OCCUPIED MODE OF OPERATION, WHEN THE OUTDOOR AIR TEMPERATURE IS BETWEEN 50°F AND 68°F (BOTH SET POINTS ADJUSTABLE), THE UNIT SHALL MODULATE THE OUTSIDE AIR AND RETURN AIR DAMPERS TO MAINTAIN THE DESIRED MIXED AIR TEMPERATURE AT AIR HANDLING UNIT INLET OF 55°F (ADJUSTABLE).

REQUIRED SUBMITTALS

Table with columns: TYPE OF EQUIPMENT / SYSTEMS, DESCRIPTION, and various submittal categories like Piping Diagrams, Landlord Hydronic System Pre-Test, Landlord Air System Pre-Test, Ductwork, Control Diagrams, Lighting Panel, and Test and Balance Report.

TAB REQUIREMENTS BY EQUIPMENT TYPE

Table with columns: TYPE OF EQUIPMENT, DESCRIPTION, COMPONENT, and TAB REQUIREMENTS. Rows include AHU/ACCU Split System or Mini-Split, DH, WUH, UH Electric Duct Heater, and Ductwork.

DRAWING SCHEDULE

Table with columns: NUMBER and TITLE. Lists drawing numbers and titles such as M0-1 MECHANICAL NOTES AND LEGENDS, MD1-0 MECHANICAL DEMOLITION PLANS, etc.

MECHANICAL ABBREVIATIONS

Table listing mechanical abbreviations and their corresponding symbols. Includes AHU, AI, AO, AUX, AWG, CD, COM, CU, CV, etc.

NOTE TO CONTRACTOR: REFER TO SPECIFICATION BOOK FOR ADDITIONALLY INFORMATION AND REQUIREMENTS AS IT RELATES TO TESTING AND BALANCING.

MECHANICAL SYMBOLS

Large table of mechanical symbols and their descriptions. Includes symbols for switches, valves, dampers, fans, heaters, diffusers, and ductwork.