

MECHANICAL SPECIFICATIONS – CONTINUED:

HYDRONIC PIPING

1. PROVIDE ALL PIPING COMPLETE WITH FITTINGS, VALVES, STRAINERS, STRAINERS, HANGERS, SUPPORTS, GUIDES, SLEEVES, AND ACCESSORIES.
2. ALL PRESSURIZED PIPING TO BE TESTED HYDROSTATICALLY TO 150 PSI OR 150% OF OPERATING PRESSURE, WHICHEVER IS GREATER, BUT NEVER EXCEED TEST PRESSURE ANSI B16.1 BASIS. TEST DURATION TO BE 2 HOURS WITH NO PRESSURE CHANGE CORRECTED FOR TEMPERATURE CHANGE.
3. REPAIR OR REPLACE LEAKS OR DEFECTS WITHOUT ADDITIONAL COST.
4. PROVIDE DIELECTRIC NIPPLES WHERE DISSIMILAR METALS ARE TO BE JOINED. DIELECTRIC UNIONS ARE NOT ACCEPTABLE.
5. PROVIDE ADEQUATE SUPPORT FOR PIPE AND CONTENTS TO PREVENT SAGGING, VIBRATION, OR SWAYING AND ALLOW FOR EXPANSION AND CONTRACTION. PROVIDE SUPPLEMENTAL STEEL AS REQUIRED WHERE STRUCTURE CANNOT SUPPORT POINT LOADS.
6. HYDRONIC PIPING SHALL BE COPPER, TYPE L, HARD DRAWN IN ACCORDANCE WITH ASTM B88, AND LEAD-FREE SOLDER JOINTS, OR SCHEDULE 40 THREADED STEEL.
7. INSPECTIONS AND TESTS SHALL BE PERFORMED ON THE PIPING INSTALLATION AS REQUIRED BY CODE.

FIRE SPRINKLER

1. THE EXISTING SPRINKLER SYSTEM SHALL BE MODIFIED IN ACCORDANCE WITH NFPA 13, STATE, AND LOCAL CODE REQUIREMENTS TO PROVIDED FULL AREA PROTECTION.

MECHANICAL IDENTIFICATION

1. PROVIDE PIPE LABELS ON ALL PIPING.
2. PROVIDE DUCT LABELS ON ALL SUPPLY AND RETURN DUCTWORK.
3. PROVIDE VALVE TAGS ON ALL VALVES.

TESTING, ADJUSTING, AND BALANCING

1. OWNER PROVIDED, CONTRACTOR TO COORDINATE AND SUPPORT OWNER EFFORTS.
2. TESTING, ADJUSTING, AND BALANCING FOR ALL AIR SYSTEMS AND HYDRONIC SYSTEMS SHALL BE PROVIDED.
3. ADJUST ALL AIRFLOWS TO PLUS/MINUS 5% OF VALVES SHOWN ON THE DRAWINGS.
4. TAB SHALL CONFIRM THAT ALL EQUIPMENT IS INSTALLED CORRECTLY AND STARTED UP CORRECTLY PRIOR TO BALANCING.
5. TAB SHALL CONFIRM THAT ALL CONTROLS AND TERMINAL BOXES ARE CALIBRATED PRIOR TO BALANCING.
6. TAB SHALL SUBMIT A TAB REPORT AT THE COMPLETION OF WORK.

TERMINAL BOXES

1. PROVIDE AND INSTALL TERMINAL BOXES WITH HOT WATER REHEAT COILS AS SCHEDULED.
2. TERMINAL BOXES SHALL BE DOUBLE WALLED, WITH SOLID SHEET METAL INTERIOR LINER COVERING ALL INSULATION.
3. BASIS OF DESIGN: TRANE MODEL VCWF.

POLYVINYLIDENE(PVDF) ULTRA-HIGH PURITY PIPING SYSTEM

1. RO WATER PIPING SHALL BE POLYVINYLIDENE(PVDF). ASTM D3222 SDR SERIES, EXTRUDED, NATURAL, UN-PIGMENTED VIRGIN POLYVINYLIDENE(PVDF) HOMOPOLYMER. THE PRESSURE RATING FOR ALL PIPING SHALL BE 232 PSIG AT 68F.
 - a. FITTINGS: PVDF, BEADLESS FUSION TYPE FITTINGS WITH MOLDED LOCATING RINGS DESIGNED FOR USE WITH FUSION EQUIPMENT AND COMPATIBLE WITH VALVES AND PIPE.
 - b. JOINTS: BEADLESS FUSION.

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