

APPLICABLE CODES & STANDARDS

ALL WORK SHALL BE IN FULL ACCORDANCE WITH APPLICABLE LOCAL, STATE, AND FEDERAL CODES, LAWS, AND REGULATIONS. ALL WORK AND MATERIALS SHALL BE IN FULL COMPLIANCE WITH, BUT NOT LIMITED TO:

1. 2022 CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 20
- 1.1. SECTION 1605.1 - FEDERALLY REGULATED APPLIANCES
2. 2022 CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24
- 2.1. CALIFORNIA ADMINISTRATIVE CODE (CAC) - CCR TITLE 24 PART 1
- 2.2. CALIFORNIA BUILDING CODE (CBC) - CCR TITLE 24 PART 2
- 2.3. CALIFORNIA ELECTRICAL CODE (CEC) - CCR TITLE 24 PART 3
- 2.4. CALIFORNIA MECHANICAL CODE (CMC) - CCR TITLE 24 PART 4
- 2.5. CALIFORNIA PLUMBING CODE (CPC) - CCR TITLE 24 PART 5
- 2.6. CALIFORNIA ENERGY CODE - CCR TITLE 24 PART 6 - (AKA CALIFORNIA ENERGY COMMISSION: BUILDING ENERGY EFFICIENCY STANDARDS (BEES))
- 2.7. CALIFORNIA FIRE CODE (CFC) - CCR TITLE 24 PART 9
- 2.8. CALIFORNIA GREEN BUILDING STANDARDS CODE (CBC) - CCR TITLE 24 PART 11
- 2.9. CALIFORNIA REFERENCED STANDARD CODE (CRSC) - CCR TITLE 24 PART 12
3. LATEST VERSION OF LOCAL CODES AND ORDINANCES APPLICABLE TO THE LOCATION AND TYPE OF THE PROJECT

ALL WORK SHALL BE IN ACCORDANCE WITH THE FOLLOWING ADDITIONAL GUIDELINES WHERE REQUIRED BY CODE:

1. SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION (SMACNA)
2. AMERICAN SOCIETY OF HEATING, REFRIGERATION AND AIR-CONDITIONING ENGINEERS (ASHRAE)
3. AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME)
4. AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE)
5. NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)
6. OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA)
7. LOCAL UTILITY GUIDELINES AND REGULATIONS
8. LOCAL AIR QUALITY MANAGEMENT DISCRETS

1. SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION (SMACNA)
2. AMERICAN SOCIETY OF HEATING, REFRIGERATION AND AIR-CONDITIONING ENGINEERS (ASHRAE)
3. AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME)
4. AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE)
5. NATIONAL FIRE PROTECTION AGENCY (NFPA)
6. OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA)
7. LOCAL UTILITY GUIDELINES AND REGULATIONS
8. LOCAL AIR QUALITY MANAGEMENT DISTRICTS

JURISDICTION REVIEW NOTES	
1.	NO HAZARDOUS MATERIALS AS PER THE TYPES LISTED IN 2022 CA FIRE CODE TABLE 5003.1.1, ARE PROPOSED TO BE USED AND/OR STORED WITHIN THE BUILDING.
2.	THIS IS NOT AN OSHDPD/HCAI PROJECT.

DEFINITIONS

1. PROVIDE:
 - 1.1. FURNISH AND INSTALL PRODUCT IN ACCORDANCE WITH ALL DESIGN DOCUMENTS AND COMMISSION SYSTEMS SUCH THAT THEY ARE FULLY FUNCTIONING, TESTED, AND READY FOR USE BY THE CLIENT. PRODUCTS SHALL BE NEW UNLESS NOTED OTHERWISE.
2. MECHANICAL:
 - 2.1. PERTAINING, BUT NOT LIMITED TO: HEATING; VENTILATING; AND AIR CONDITIONING (HVAC), AND PIPING REQUIRED FOR HVAC.
3. PIPING (SHOWN ON MECHANICAL DRAWINGS):
 - 3.1. PERTAINING, BUT NOT LIMITED TO: HVAC SYSTEMS.
4. PLUMBING:
 - 4.1. PERTAINING, BUT NOT LIMITED TO THE FOLLOWING SYSTEMS: WASTE, VENT, DOMESTIC COLD AND HOT WATER, NATURAL GAS, MEDICAL GASES, COMPRESSED AIR
5. REFER TO DEFINITIONS STATED IN 2022 CCR TITLE 24:
 - 5.1. PART 1 ADMINISTRATIVE CODE - CHAPTER 1
 - 5.2. PART 2 BUILDING CODE - CHAPTER 2
 - 5.3. PART 3 ELECTRICAL CODE - CHAPTER 1
 - 5.4. PART 4 MECHANICAL CODE - CHAPTER 2
 - 5.5. PART 5 PLUMBING CODE - CHAPTER 2
 - 5.6. PART 6 ENERGY CODE - SUBCHAPTER 1
 - 5.7. PART 11 CALGREEN - CHAPTER 2

COMMISSIONING NOTES

1. COMMISSIONING (Cx) AND A COMMISSIONING AUTHORITY (CxA) MAY BE REQUIRED ON THIS PROJECT. REFER TO THE FOLLOWING DOCUMENTS, IF APPLICABLE TO PROJECT, TO VERIFY IF Cx OR CxA ARE REQUIRED:
 - 1.1. REQUEST FOR PROPOSAL / QUOTE (RFP/RQO)
 - 1.2. OWNER'S PROJECT REQUIREMENTS (OPR)
 - 1.3. BASIS OF DESIGN (BOD)
 - 1.4. DIVISION 1 - SPECIFICATIONS
 - 1.5. CA TITLE 24 (I.E. PART 6 BEES 120.8)
2. IF Cx IS REQUIRED, COMPLY WITH ALL Cx REQUIREMENTS, BEGINNING AT PROJECT DESIGN CONCEPT THROUGH CONSTRUCTION CLOSE-OUT.
3. IF A CxA IS REQUIRED FOR THE PROJECT, COMPLY WITH ALL CxA REQUESTS, BEGINNING AT PROJECT DESIGN CONCEPT THROUGH CONSTRUCTION CLOSE-OUT.

SCOPE OF WORK	
1.	DEMO AND RENOVATE EXISTING COOLERS/FREEZERS CONDENSING UNITS AND REFRIGERANT LINESETS.

ARCHITECTURAL NOTES

1. ALL DOORS AND WINDOWS SHALL MEET THE MINIMUM INFILTRATION REQUIREMENTS PER SECTION 110.6 AND 110.7 OF THE 2022 BEES.
2. ROOF ACCESS LADDER SHALL COMPLY WITH SECTION 304 CMC.
3. REFER TO ARCHITECTURAL DRAWINGS FOR WALL TYPES.

GENERAL MECHANICAL NOTES

1. DRAWINGS ARE DIAGRAMMATIC. DO NOT SCALE FROM DRAWINGS. CONTRACTOR SHALL VERIFY AVAILABLE SPACE AND COORDINATE AND FIELD VERIFY ROUTING OF MECHANICAL SYSTEMS AND EQUIPMENT PRIOR TO ORDERING PRODUCTS.
2. THE DRAWINGS ARE BASED ON INFORMATION OBTAINED FROM EXISTING PLANS, SPECIFICATIONS AND FIELD OBSERVATIONS. THE EXACT LOCATION OF EXISTING DUCTWORK, PIPING AND EQUIPMENT MAY DEViate FROM THE LOCATION INDICATED ON THESE DRAWINGS. BE PREPARED TO MAKE ALTERATIONS TO NEW AND/OR EXISTING SERVICES TO ACCOMMODATE ACTUAL JOB CONDITIONS.
3. APPLY THE SCHEMATIC DIAGRAMS, DETAILS, SCHEDULES AND THE SPECIFICATIONS TO THE PLANS.
4. THE DRAWINGS ARE DIAGRAMMATIC, AND THUS ALL ELBOWS, FITTINGS, ETC., IN PIPING AND DUCTWORK REQUIRED TO CLEAR ALL OBSTRUCTIONS ARE NOT NECESSARILY INDICATED. ALL NECESSARY TRANSITIONS, FITTINGS, AND OFFSETS ARE REQUIRED AS PART OF BASE BID, WHETHER SHOWN OR NOT.
5. PROVIDE ALL MATERIALS AND EQUIPMENT AND PERFORM ALL LABOR REQUIRED TO INSTALL COMPLETE AND OPERABLE MECHANICAL SYSTEMS AS INDICATED ON THE DRAWINGS, AS SPECIFIED AND AS REQUIRED BY CODE.
6. INSTALL ALL MECHANICAL EQUIPMENT AND APPURTENANCES IN ACCORDANCE WITH MANUFACTURERS' RECOMMENDATIONS, CONTRACT DOCUMENTS, AND APPLICABLE CODES AND REGULATIONS.
7. THE LOCATIONS OF ALL ITEMS SHOWN ON THE DRAWINGS OR CALLED FOR IN THE SPECIFICATIONS THAT ARE NOT DEFINITELY FIXED BY DIMENSIONS ARE APPROXIMATE ONLY. THE EXACT LOCATIONS NECESSARY TO SECURE THE BEST CONDITIONS AND RESULTS MUST BE DETERMINED BY THE PROJECT SITE CONDITIONS AND SHALL HAVE THE APPROVAL OF THE ENGINEER BEFORE BEING INSTALLED. DO NOT SCALE DRAWINGS.
8. ALL MISCELLANEOUS STEEL REQUIRED TO ENSURE PROPER INSTALLATION AND AS SHOWN IN DETAILS FOR DUCTWORK AND EQUIPMENT (UNLESS OTHERWISE NOTED) SHALL BE FURNISHED AND INSTALLED BY THE MECHANICAL CONTRACTOR.
9. LOCATIONS AND SIZES OF ALL FLOOR, WALL, AND ROOF OPENINGS SHALL BE COORDINATED WITH ALL OTHER TRADES INVOLVED.
10. CERTAIN ITEMS SUCH AS RISERS AND DROPS IN DUCTWORK, ACCESS DOORS, VOLUME DAMPERS, ETC. ARE INDICATED ON THE CONTRACT DOCUMENT DRAWINGS FOR CLARITY FOR A SPECIFIC LOCATION REQUIREMENT AND SHALL NOT BE INTERPRETED AS THE EXTENT OF THE REQUIREMENTS FOR THESE ITEMS.
11. PRIOR TO STARTING ANY WORK, PROVIDE A THOROUGH REVIEW OF THE EXISTING CONDITIONS. WHERE CONDITIONS DIFFER FROM WHAT IS SHOWN HERE, NOTIFY THE PROJECT MANAGER IN WRITING WITH ANY DISCREPANCIES.
12. UNLESS SPECIFICALLY SHOWN ON THESE PLANS, NO STRUCTURAL MEMBERS SHALL BE CUT, DRILLED, OR NOTCHED WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE STRUCTURAL ENGINEER (AND THE DISTRICT STRUCTURAL ENGINEER FROM THE DIVISION OF THE STATE ARCHITECT WHEN DSA IS THE AHJ).

SHOP DRAWINGS/SUBMITTALS, AS-BUILT/RECORD DRAWINGS

1. DRAWINGS ARE DIAGRAMMATIC. CONTRACTOR TO VERIFY SUFFICIENT SPACE IS AVAILABLE FOR INSTALLATION OF SYSTEMS. CONTRACTOR SHALL NOTIFY EOR VIA RFI OF ANY SITUATIONS WHERE INSTALLATION OF SYSTEMS IS NOT POSSIBLE.
2. CONTRACTOR TO REVIEW ENGINEERED DRAWINGS AND PROVIDE CONTRACTOR'S OWN DETAILED "SHOP DRAWINGS" COORDINATED WITH OTHER TRADES THAT DETAIL ALL COMPONENTS OF ALL SYSTEMS PRIOR TO ORDERING SYSTEMS AND EQUIPMENT TO ENSURE PROPER COMPONENT SIZING AND FIT.
 - 2.1. CONTRACTOR IS RESPONSIBLE FOR: DIMENSIONS WHICH SHALL BE CONFIRMED AND CORRELATED AT THE JOB SITE; FABRICATION PROCESSES AND TECHNIQUES OF CONSTRUCTION; AND COORDINATION OF THEIR WORK WITH THAT OF ALL OTHER TRADES.
 - 2.2. CONTRACTOR'S PROPOSED CHANGES THAT STRAY FROM THE DIAGRAMMATIC DESIGN OF THE ENGINEERED DRAWINGS SHALL BE DOCUMENTED AND SUBMITTED TO EOR AS AN RFI PRIOR TO OR ALONG WITH SENDING OF SHOP DRAWINGS/SUBMITTALS.
 - 2.3. USE OF ENGINEER'S DRAWINGS IN LIEU OF CONTRACTOR'S OWN SHOP DRAWINGS DOES NOT RELIEVE CONTRACTOR OF RESPONSIBILITY TO ENSURE FIT OF SYSTEMS AND EQUIPMENT. SHOULD CONTRACTOR RELY ON ENGINEER'S DRAWINGS AS CONTRACTOR'S SHOP DRAWINGS, SUBMISSION OF SUCH DRAWINGS TO EOR IS NOT NECESSARY.
3. CONTRACTOR TO PROVIDE MANUFACTURER'S SUBMITTALS OF ALL EQUIPMENT TO EOR PRIOR TO ORDERING OF EQUIPMENT. EQUIPMENT SHALL NOT BE ORDERED PRIOR TO SUBMITTALS BEING APPROVED BY EOR.
4. ONCE WORK SHOWN ON ENGINEERED DRAWINGS HAS BEEN BUILT, CONTRACTOR TO PROVIDE AS-BUILT/RECORD DRAWING MARK-UP OF ENGINEER'S DESIGN DRAWINGS TO INDICATE AS-BUILT CONDITIONS.

FIRE LIFE SAFETY NOTES

1. PROVIDE SMOKE DETECTOR(S) IN THE SUPPLY AIR DUCT OF ANY "AIR-MOVING SYSTEMS SUPPLYING AIR IN EXCESS OF 2,000 CFM TO ENCLOSED SPACES TO SHUT OFF THE EQUIPMENT FOR SMOKE CONTROL. SEE 2022 CMC 609.1. AN "AIR-MOVING SYSTEM" IS A SYSTEM DESIGNED FOR HEATING, COOLING, OR VENTILATION IN WHICH ONE OR MORE AIR-HANDLING UNITS ARE USED TO SUPPLY AIR TO A COMMON SPACE OR TO DRAW AIR FROM A COMMON PLenum OR DUCT.
- 1.1. EXCEPTION: THE ABOVE IS NOT NECESSARY WHEN THE SPACE IS SERVED BY A TOTAL COVERAGE SMOKE DETECTION SYSTEM IN ACCORDANCE WITH THE CALIFORNIA FIRE CODE.
- 1.2. EXCEPTION: THE ABOVE IS NOT NECESSARY WHEN THE OCCUPIED ROOMS HAVE A DIRECT EXIT TO THE EXTERIOR AND THE TRAVEL DISTANCE DOES NOT EXCEED 100 FT.
2. WHEN AIR-HANDLING UNITS SHARE COMMON AREAS, THE AGGREGATE CFM RATE MUST BE TAKEN, IF THE AGGREGATE CFM EXCEEDS 200 CFM, THEN ALL AIR HANDLING UNITS WITHIN THE COMMON AREA ARE REQUIRED TO HAVE SMOKE DETECTORS WITHIN THE SUPPLY DUCTS AS PER 2022 CMC 609.1.
3. ALL MATERIALS EXPOSED WITHIN DUCTS OR PLENUMS SHALL BE NONCOMBUSTIBLE OR SHALL HAVE A FLAME SPREAD INDEX NOT TO EXCEED 25 AND A SMOKE DEVELOPED INDEX NOT TO EXCEED 50 AS PER CMC 602.2.
4. FIRE/SMOKE DAMPERS: REVIEW BOTH THE MECHANICAL AND ARCHITECTURAL PLANS FOR FIRE/SMOKE DAMPER REQUIREMENTS. FIRE/SMOKE DAMPERS SHALL BE INSTALLED AND BE READILY ACCESSIBLE FOR SERVICING IN THE LOCATIONS LISTED IN CBC SECTION 713 AND SHALL BE IN ACCORDANCE WITH CMC SECTION 605.
5. ALL OPENINGS IN FIRE-RATED WALLS AND PARTITIONS DUE TO DUCTWORK, PIPING, CONDUIT, ETC., SHALL BE FIRE STOPPED.
6. FIRE/SMOKE DAMPER ASSEMBLIES, INCLUDING SLEEVES, AND INSTALLATION PROCEDURES SHALL BE APPROVED BY THE BUILDING INSPECTOR PRIOR TO INSTALLATION.
7. ALL PENETRATIONS THROUGH RATED WALLS SHALL BE FIRESTOPPED. FIRESTOP AROUND OUTSIDE OF CONDUITS AND FIRESTOP INSIDE OF CONDUIT SLEEVES. FIRESTOPPING APPLIES BUT IS NOT LIMITED TO DUCTWORK, PIPING, AND CONDUIT.
8. NO DUCTS SHALL CROSS RATED WALLS WITHOUT FIRE/SMOKE DAMPERS. CORRIDORS SHALL NOT BE USED TO CONVEY AIR TO OR FROM ROOMS WHERE THE CORRIDOR IS REQUIRED TO BE OF FIRE RESISTIVE CONSTRUCTION. CORRIDORS SHALL NOT SERVE AS SUPPLY, RETURN, OR RELIEF DUCTS. (CMC 602.8; CBC 1020.5)
9. WHERE NONMETALLIC PIPING PENETRATES AREA SEPARATION WALLS, THE PIPE SECTION PASSING THROUGH THE WALLS AND THE FIXTURE CONNECTIONS THERETO SHALL BE METAL ONLY. FIRE STOPPING SHALL BE APPLIED.

EQUIPMENT NOTES

1. HVAC EQUIPMENT AND APPLIANCES SHALL MEET THE REQUIREMENTS OF SECTIONS, 110.1-110.3, 110.5 & 120.1-120.9 OF THE 2022 BEES.
2. HVAC SYSTEMS SHALL MEET THE VENTILATION REQUIREMENTS OF SECTION 120.1 OF THE 2022 BEES.
3. ALL PROPOSED MECHANICAL EQUIPMENT AND/OR APPLIANCES SHALL BE ACCOMPANIED BY A LISTING LABEL/REPORT OF A NATIONALLY RECOGNIZED TESTING LABORATORY, DEMONSTRATING THAT THE EQUIPMENT MEETS ALL APPLICABLE NATIONALLY RECOGNIZED STANDARDS AND ALL REQUIREMENTS OF 2022 CMC 301.3.
4. EQUIPMENT INSTALLED ON THE ROOF OR WITHIN A BUILDING SHALL BE PERMANENTLY IDENTIFIED AS TO THE AREA OR SPACE IT SERVES AS PER CMC 303.6. PROVIDE 2" ENGRAVED NAMEPLATES WITH 0.5" TALL LETTERING THAT IDENTIFIES EACH PIECE OF MECHANICAL EQUIPMENT. IDENTIFICATION SHALL INCLUDE UNIQUE EQUIPMENT NUMBERING, I.E. "HP-1", "HP-2", ETC. NUMBERING SHALL MATCH AS-BUILT DRAWINGS PROVIDED TO OWNER. IDENTIFICATION SHALL ALSO INCLUDE A SECOND LINE THAT STATES THE ZONE NUMBER AND THE DOMINANT SPACE SERVED, I.E. "ZONE-1 SOUTH WEST OFFICE".

DEMOLITION NOTES	
1.	DEMOLISH MECHANICAL SYSTEMS WHERE SHOWN ON DEMOLITION PLANS.
2.	PATCH DUCTWORK WITH IN-KIND SHEET-METAL TO SMACNA STANDARDS. SEAL DUCTWORK WITH MASTIC, INSULATE TO MATCH EXISTING SURROUNDING DUCT INSULATION.
3.	WHERE EQUIPMENT IS SHOWN AS DEMOLISHED, REMOVE EQUIPMENT AND ALL APPURTENANCE ITEMS RELATING TO DEMOLISHED EQUIPMENT AND CAP CONNECTIONS TO SERVICES UNLESS NOTED OTHERWISE.

BRACING AND SUPPORT NOTES

1. ALL EQUIPMENT, PIPING, DUCTWORK, ETC., SHALL BE SUPPORTED AS DETAILED, SPECIFIED, AND REQUIRED TO PROVIDE A VIBRATION FREE INSTALLATION.

PIPING NOTES

1. ALL NEW PIPES SHALL BE BRACED AND SUPPORTED IN ACCORDANCE WITH THE 2022 CALIFORNIA MECHANICAL CODE AND SMACNA GUIDELINES FOR SEISMIC RESTRAINTS OF MECHANICAL AND PLUMBING PIPING.
2. ALL NEW PIPING SHALL BE INSULATED CONSISTENT WITH THE REQUIREMENTS OF THE 2022 BEES 120.3.

DUCT & PLENUM NOTES

1. DUCTWORK SHOWN IS DIAGRAMMATIC. CONTRACTOR SHALL COORDINATE AND FIELD VERIFY ALL DUCT RUNS PRIOR TO ORDERING DUCTWORK.
2. DUCT SIZES SHOWN ARE NET INSIDE DIMENSIONS.
3. NEW FLEXIBLE DUCT SHALL BE A MAXIMUM OF 5 FT. IN LENGTH. FLEXIBLE DUCT SHALL NOT BE USED AS AN ELBOW UNLESS DIRECTLY CONNECTED TO AN AIR TERMINAL DEVICE SUCH AS A DIFFUSER OR REGISTER. COMPLY WITH 2022 CMC SECTION 603 4.1.
4. PROVIDE FLEXIBLE CONNECTION WITH PRESSURE RATING GREATER THAN OR EQUAL TO THE CONNECTED DUCTWORK AT INLETS AND OUTLETS OF FANS AT LOCATIONS WHERE FANS CONNECT TO DUCTWORK.
5. COORDINATE FINAL LOCATIONS OF AIR DISTRIBUTION WITH REFLECTED CEILING PLAN, INCLUDING BUT NOT LIMITED TO LIGHTS, SPEAKERS, TILES, AND SPRINKLER HEADS.
6. ALL NEW DUCTWORK SHALL BE BRACED AND SUPPORTED IN ACCORDANCE WITH THE 2022 CALIFORNIA MECHANICAL CODE AND THE SMACNA GUIDELINES FOR SEISMIC RESTRAINTS OF MECHANICAL AND PLUMBING PIPING.
7. ALL DUCTWORK SHALL BE CONSTRUCTED, ERECTED AND TESTED IN ACCORDANCE WITH THE STANDARDS ADOPTED BY SMACNA AND 2022 CMC CHAPTER 6.
8. ALL NEW SUPPLY AND RETURN DUCTS AND PLENUMS SHALL BE INSULATED CONSISTENT WITH THE REQUIREMENTS OF 2022 BEES 120.4.
9. MATERIAL EXPOSED WITHIN A DUCT OR PLENUM SHALL COMPLY WITH SECTION 602.2 CMC.
10. ALL MATERIAL EXPOSED WITHIN PLENUMS SHALL HAVE A MOLD-HUMIDITY AND EROSION-RESISTANT FACE THAT MEETS U.L. 181.
11. COORDINATE DIFFUSER, REGISTER, AND GRILLE LOCATIONS WITH ARCHITECTURAL REFLECTED CEILING PLANS, LIGHTING, AND OTHER CEILING ITEMS AND MAKE MINOR DUCT MODIFICATIONS TO SUIT.
12. ALL DUCTWORK SHALL BE COORDINATED WITH ALL TRADES INVOLVED. OFFSETS IN DUCTS, INCLUDING DIVIDED DUCTS AND TRANSITIONS AROUND OBSTRUCTIONS, SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.
13. PROVIDE ACCESS DOORS IN DUCTWORK FOR OPERATION, ADJUSTMENT, AND MAINTENANCE OF ALL FANS AND MECHANICAL EQUIPMENT.
14. PROVIDE DUCT LEAKAGE TESTING TO ENSURE THAT THE MEASURED LEAKAGE IS EQUAL TO OR LESS THAN 15% OF THE SYSTEM AIR HANDLER AIRFLOW AS CONFIRMED BY FIELD VERIFICATION AND DIAGNOSTIC TESTING UTILIZING THE PROCEDURES IN THE BEES NONRESIDENTIAL APPENDIX SECTION NA2.1.4.2.1.
15. ALL BRANCH DUCTS TO HAVE BALANCE DAMPERS WITH QUADRANT LOCKS.
16. EXHAUST DUCTS SHALL BE EQUIPPED WITH BACKDRAFT DAMPERS PER SECTION 504 OF THE 2022 CMC.
17. DUCT OPENINGS AND OTHER RELATED AIR DISTRIBUTION OPENINGS SHALL BE COVERED DURING CONSTRUCTION.
18. NO RANGE HOOD VENTS, DRYER VENTS, COMBUSTION VENTS OR HEATING DUCTS ARE PERMITTED IN AREA SEPARATION WALLS.
19. ASHRAE 90.1 6.4.4.2. ALL DUCTWORK SHALL BE SEALED TO SMACNA SEAL CLASS A. ALL SEALANT SHALL BE UL RATED WITH NFPA FLAME SPREAD OF NO MORE THAN 5 AND SMOKE DEVELOPED OF 0.

CONTROLS NOTES

1. HVAC SYSTEMS SHALL MEET THE CONTROLS REQUIREMENTS OF THE 2022 BEES 110.2 AND 120.2.
2. HVAC SYSTEMS SHALL MEET THE CONTROLS REQUIREMENTS OF THE 2022 BEES 140.4 (APPLICABLE TO PRESCRIPTIVE APPROACH; REFER TO TITLE 24 DOCUMENTS TO DETERMINE IF PRESCRIPTIVE OR PERFORMANCE APPROACH EMPLOYED ON PROJECT.)
3. ALL CONTROL WIRE AND CONDUIT SHALL COMPLY WITH THE NATIONAL ELECTRIC CODE AND SPECIFICATIONS.
4. UNLESS OTHERWISE SHOWN, LOCATE ALL ROOM THERMOSTATS AND HUMIDISTATS 4'-0" (CENTERLINE) ABOVE FINISHED FLOOR. NOTIFY THE ENGINEER OF ANY ROOMS WHERE THE ABOVE LOCATION CANNOT BE MAINTAINED OR WHERE THERE IS A QUESTION ON LOCATION.
5. WHERE APPLICABLE, MECHANICAL CONTRACTOR TO COORDINATE WITH UTILITY OR THIRD PARTY REMOVAL AND REPLACEMENT OF DAMPED RESPONSE MODULES.
6. OBSTRUCTIONS IN FRONT OF WALL MOUNTED CONTROLS: WALL CONTROLS SHALL BE LOCATED AT 48" ABOVE FINISHED FLOOR UNLESS NOTED OTHERWISE. COMPLY WITH ARCHITECTURAL BARRIERS ACT ACCESSIBILITY STANDARD (ABAA) SECTION 308.3.2 OBSTRUCTED HIGH REACH: "WHERE A CLEAR FLOOR OR GROUND SPACE ALLOWS A PARALLEL APPROACH TO AN ELEMENT AND THE HIGH SIDE REACH IS OVER AN OBSTRUCTION, THE HEIGHT OF THE OBSTRUCTION SHALL BE 34 INCHES (865 MM) MAXIMUM AND THE DEPTH OF THE OBSTRUCTION SHALL BE 24 INCHES (610 MM) MAXIMUM. THE HIGH SIDE REACH SHALL BE 48 INCHES (1230 MM) MAXIMUM FOR A REACH DEPTH OF 10 INCHES (255 MM) MAXIMUM. WHERE THE REACH DEPTH EXCEEDS 10 INCHES (255 MM), THE HIGH SIDE REACH SHALL BE 46 INCHES (1170 MM) MAXIMUM FOR A REACH DEPTH OF 24 INCHES (610 MM) MAXIMUM."

AIR & WATER BALANCE NOTES

1. UNO, THE BUILDING SHALL MAINTAIN A POSITIVE PRESSURE OF BETWEEN 0.05" AND 0.08"WC.
2. UNO, HEATING, VENTILATING, AND AIR-CONDITIONING SYSTEMS SHALL BE BALANCED IN ACCORDANCE WITH ONE OF THE FOLLOWING METHODS (CMC 314.1):
 - AABC NATIONAL STANDARDS FOR TOTAL SYSTEM BALANCE
 - ACCA MANUAL B
 - ASHRAE 111
 - NEBB PROCEDURAL STANDARDS FOR TESTING ADJUSTING BALANCING OF ENVIRONMENTAL SYSTEMS
 - SMACNA HVAC SYSTEMS TESTING, ADJUSTING, AND BALANCING

MEP ANCHORAGE (DSA REVIEW)

THE FOLLOWING ADDITIONAL NOTE PERTAINS TO DIVISION OF THE STATE ARCHITECT (DSA) SUBMITTED PROJECTS AND DOES NOT SUPERCEDE AFOREMENTIONED STRUCTURAL ANCHORAGE NOTES.

ALL MECHANICAL, PLUMBING, AND ELECTRICAL COMPONENTS SHALL BE ANCHORED AND INSTALLED PER THE DETAILS ON THE DSA APPROVED CONSTRUCTION DOCUMENTS. WHERE NO DETAIL IS INDICATED, THE FOLLOWING COMPONENTS SHALL BE ANCHORED OR BRACED TO MEET THE FORCE AND DISPLACEMENT REQUIREMENTS PRESCRIBED IN THE 2022 CBC SECTIONS 1617A.1.18 THROUGH 1617A.1.26 AND ASCE 7-16 CHAPTERS 13, 26, AND 30.

1. ALL PERMANENT EQUIPMENT AND COMPONENTS.
2. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT THAT IS PERMANENTLY ATTACHED (E.G. HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRICITY, GAS OR WATER, "PERMANENTLY ATTACHED" SHALL INCLUDE ALL ELECTRICAL CONNECTIONS EXCEPT PLUGS FOR 110/220 VOLT RECEPTACLES HAVING A FLEXIBLE CABLE.
3. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT WHICH IS HEAVIER THAN 400 POUNDS OR HAS A CENTER OF MASS LOCATED 4 FEET OR MORE ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT IS REQUIRED TO BE RESTRAINED IN A MANNER APPROVED BY DSA.

THE FOLLOWING MECHANICAL AND ELECTRICAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE BUT NEED NOT DEMONSTRATE DESIGN COMPLIANCE WITH THE REFERENCES NOTED ABOVE. THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED OUTWORK, PIPING, AND CONDUIT. FLEXIBLE CONNECTIONS MUST ALLOW MOVEMENT IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTIONS.

- A. COMPONENTS WEIGHING LESS THAN 400 POUNDS AND HAVING A CENTER OF MASS LOCATED 4 FEET OR LESS ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT COMPONENT.
- B. COMPONENTS WITHIN LESS THAN 20 POUNDS, OR IN THE CASE OF DISTRIBUTED SYSTEMS, LESS THAN 5 POUNDS PER FOOT, WHICH ARE SUSPENDED FROM A ROOF OR FLOOR OR HUNG FROM A WALL.

THE ANCHORAGE OF ALL MECHANICAL, ELECTRICAL AND PLUMBING COMPONENTS SHALL BE SUBJECT TO THE APPROVAL OF THE DESIGN PROFESSIONAL IN GENERAL. RESPONSIBLE CHARGE OR STRUCTURAL ENGINEER DELEGATED RESPONSIBILITY AND ACCEPTANCE BY DSA. THE PROJECT INSPECTOR WILL VERIFY THAT ALL COMPONENTS AND EQUIPMENT HAVE BEEN ANCHORED IN ACCORDANCE WITH THE ABOVE REQUIREMENTS.

BRACING NOTE (DSA REVIEW)

THE FOLLOWING ADDITIONAL NOTE PERTAINS TO DIVISION OF THE STATE ARCHITECT (DSA) SUBMITTED PROJECTS AND DOES NOT SUPERCEDE AFOREMENTIONED STRUCTURAL BRACING NOTES.

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEMS SHALL BE BRACED TO COMPLY WITH THE FORCES AND DISPLACEMENTS PRESCRIBED IN ASCE 7-16 SECTION 13.3 AS DEFINED IN ASCE 7-16 SECTIONS 13.6.5, 13.6.6, 13.6.7, 13.6.8, AND 2022 CBC, SECTIONS 1617A.1.24, 1617A.1.25, AND 1617A.1.26.

THE METHOD OF SHOWING BRACING AND ATTACHMENTS TO THE STRUCTURE FOR THE IDENTIFIED DISTRIBUTION SYSTEM ARE AS NOTED BELOW. WHEN BRACING AND ATTACHMENTS ARE BASED ON A PREAPPROVED INSTALLATION GUIDE (E.G. SMACNA OR OSHPD OPM FOR 2013 CBC OR LATER), COPIES OF THE BRACING SYSTEM INSTALLATION GUIDE OR MANUAL SHALL BE AVAILABLE ON THE JOBSITE PRIOR TO THE START OF AND DURING THE HANGING AND BRACING OF THE DISTRIBUTION SYSTEMS. THE STRUCTURAL ENGINEER OF RECORD SHALL VERIFY THE ADEQUACY OF THE STRUCTURE TO SUPPORT THE HANGER AND BRACE LOADS.

MECHANICAL PIPING (MP), MECHANICAL DUCTS (MD), PLUMBING PIPING (PP), ELECTRICAL DISTRIBUTION SYSTEMS (E):


MP | MD | PP | E |] - OPTION 1: DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS.

MP | MD | PP | E |] - OPTION 2: SHALL COMPLY WITH THE APPLICABLE OSHPD PRE-APPROVAL (OPM)# .

ASHRAE 15:8.10.1 (DSA REVIEW)

THE FOLLOWING ADDITIONAL NOTE PERTAINS TO DIVISION OF THE STATE ARCHITECT (DSA) SUBMITTED PROJECTS AND DOES NOT SUPERCEDE AFOREMENTIONED MECHANICAL NOTES.

[ASHRAE 15:8.10.1] CMC 1109.1 PROTECTION FROM MECHANICAL DAMAGE. PASSAGES SHALL NOT BE OBSTRUCTED BY REFRIGERANT PIPING. REFRIGERANT PIPING SHALL NOT BE LOCATED IN AN ELEVATOR, DUMBWAITER, OR OTHER SHAFT CONTAINING A MOVING OBJECT, OR IN A SHAFT THAT HAS OPENINGS TO LIVING QUARTERS, OR TO MEANS OF EGRESS. REFRIGERANT PIPING SHALL NOT BE INSTALLED IN AN ENCLOSED PUBLIC STAIRWAY, STAIR LANDING, OR MEANS OF EGRESS. [ASHRAE 15:8.10.2]5418

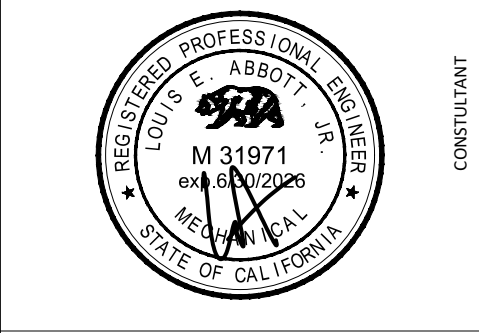


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oB/ARCHITECTURE

2419 EL CAJON BLVD, SAN DIEGO, CA 92104

<p>NOTES</p>	<p>SAN DIEGO UNIFIED SCHOOL DISTRICT KITCHEN MODIFICATIONS GROUP 6</p> <p>BELL MIDDLE SCHOOL 620 BRIARWOOD RD, SAN DIEGO, CA 92139 DSA SUBMITTAL SET</p>
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